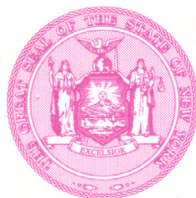
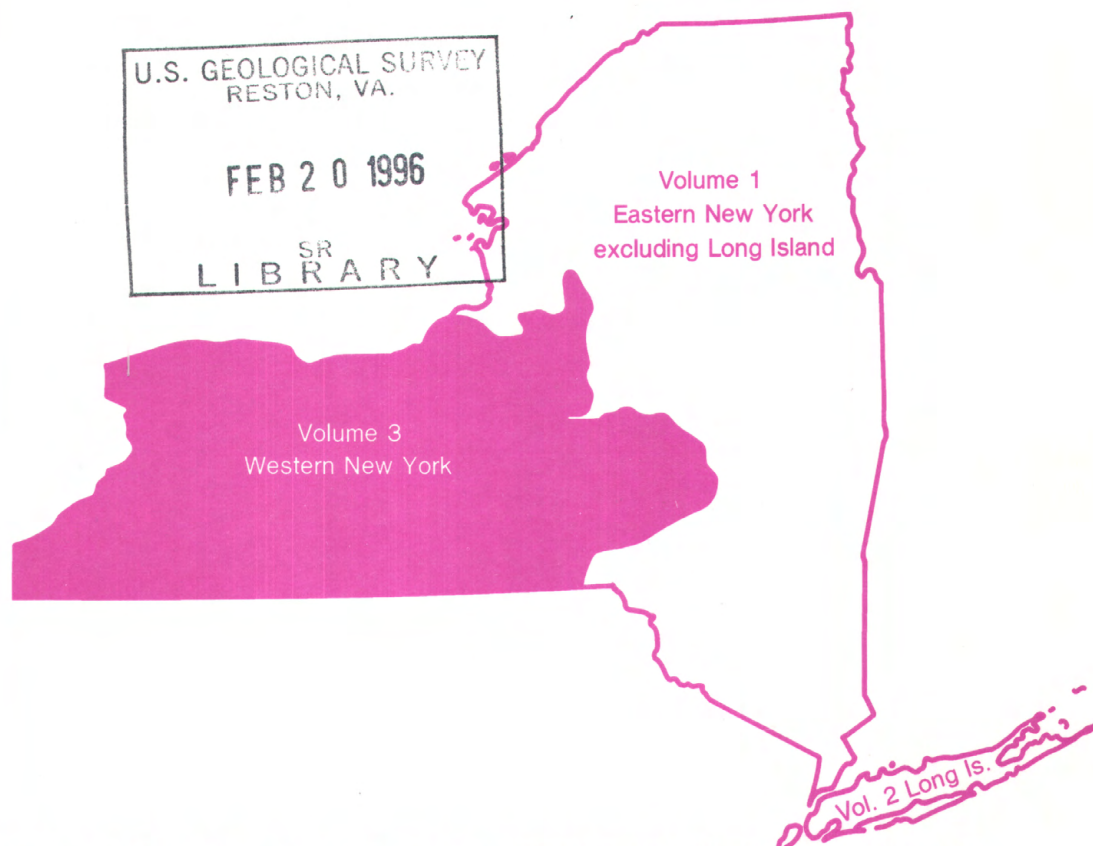


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Water Resources Data New York Water Year 1994

Volume 3. Western New York



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-94-3
Prepared in cooperation with the State of New York
and with other agencies

CALENDAR FOR WATER YEAR 1994

1993

[illegible]

1994

[illegible]

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
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Water Resources Data New York Water Year 1994

Volume 3. Western New York

by J.F. Hornlein, C.O. Szabo, and H.J. Zajd, Jr.



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-94-3
Prepared in cooperation with the State of New York
and with other agencies

U.S. DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Gordon P. Eaton, 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
1995

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

The data contained in these three volumes were collected, computed, and processed from three subdistrict offices and one area field office. The offices, and personnel in charge, are:

- Volume 1. Albany, Ward O. Freeman, Associate District Chief
Potsdam, Howard G. Lent, Jr., Technician-in-charge
- Volume 2. Syosset, Bronius Nemickas, Acting Subdistrict Chief
- Volume 3. Ithaca, Edward F. Bugliosi, Subdistrict Chief

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:

W. F. Coon	J. E. Kaplan	R. L. Mulks	J. M. Surface
R. Corson	S. K. McInnes	D. A. Sherwood	M. J. Welsh
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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	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 1995		3. REPORT TYPE AND DATES COVERED Annual: 1 October 1993 to 30 September 1994
4. TITLE AND SUBTITLE Water Resources Data - New York, Water Year 1994 Volume 3. Western New York			5. FUNDING NUMBERS	
6. AUTHOR(S) J. F. Hornlein C. O. Szabo H. J. Zajd, Jr.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U. S. Geological Survey, Water Resources Division 903 Hanshaw Road Ithaca, New York 14850-1573			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-NY-94-3	
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 USGS/WRD/HD-96/231	
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 1994 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 78 gaging stations; stage only at 20 gaging stations; stage and contents at 6 gaging stations; water quality at 3 gaging stations; water levels at 31 observation wells; and precipitation records for 1 site. Also included are data for 43 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 341	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED		18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED
				20. LIMITATION OF ABSTRACT UL

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**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, (t) water temperature, (s) sediment, (e) elevation, gage heights, or contents]

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NORTH ATLANTIC SLOPE BASINS		
SUSQUEHANNA RIVER BASIN		
Susquehanna River:		
Oaks Creek at Index (d)	01496500	28
Ouleout Creek at East Sidney (d)	01500000	30
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Unadilla River:		
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Buffalo Creek (head of Buffalo River) at Gardenville (d)	04214500	82
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Buffalo River:		
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
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Niagara River at Black Rock Lock, Buffalo (e)	04216220	96
Tonawanda Creek at Attica (d)	04216418	97
Tonawanda Creek at Batavia (d)	04217000	99
Murder Creek near Akron (d)	04217750	101
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Erie (Barge) Canal at Lock 30, Macedon (d)	04219000	107
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STREAMS TRIBUTARY TO LAKE ONTARIO		
Northrup Creek at North Greece (d)	0422026250	111
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Canaseraga Creek above Dansville (d)	04224775	123
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Keuka Inlet (Keuka Lake) at Hammondsport (e)	04232450	180
Keuka Lake Outlet at Dresden (d)	04232482	181
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Cayuga Inlet (Cayuga Lake) at Ithaca (e)	04233500	185
Fall Creek near Ithaca (d)	04234000	186
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Canandaigua Lake at Canandaigua (e)	04234500	188
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

(Continued)

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ST. LAWRENCE RIVER BASIN--Continued		
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STREAMS TRIBUTARY TO LAKE ONTARIO--Continued		
Seneca River at Baldwinsville (d)	04237500	199
Onondaga Creek (head of Onondaga Lake Outlet):		
Tributary #6 above main mudboil depression area (dcs)	04237944	201
Tributary #6 below main mudboil depression area (dcs)	04237946	204
Onondaga Reservoir near Nedrow (e)	04238500	210
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GROUND-WATER WELLS, BY COUNTY OR INDEPENDENT CITY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVELS

Broome County		
Local well number Bm 100	420646075531201	273
Local well number Bm 121	420657075583501	275
Local well number Bm 128	421138075511301	277
Local well number Bm 129	421157075535401	278
Cattaraugus County		
Local well number Ct 121	420530078445201	279
Cayuga County		
Local well number Cy 7	424158076251901	281
Chautauqua County		
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Local well number Cu 10	420815079121401	284
Local well number Cu 104	420748079062701	285
Chemung County		
Local well number Cm 46	420829076484801	287

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

GROUND-WATER LEVELS

(Continued)

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Local well number Cn 13.....	423849075315701	291
Cortland County		
Local well number C 102.....	423541076114701	292
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Local well number M 178.....	430056075354102	293
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Local well number Mo 664.....	430912077313302	298
Local well number Mo 665.....	430928077313802	299
Local well number Mo 666.....	430928077313803	300
Local well number Mo 667.....	430928077314001	301
Local well number Mo 668.....	430928077314002	302
Niagara County		
Local well number Ni 69.....	430655079022001	303
Local well number Ni 70.....	431308078544501	304
Ontario County		
Local well number Ot 900.....	425840077133901	305
Otsego County		
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Steuben County		
Local well number Sb 472.....	422445077203301	307
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Quality of precipitation at miscellaneous sites.....		314
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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
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

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			
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
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	.70	1932-68
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	2.95	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
Canisteo River at Hornell, NY (d)	01522000	93.7	1938-43
Karr Valley Creek at Almond, NY (d)	01522500	27.4	1937-68
Canacadea Creek at Hornell, NY (d)	01524000	58.5	1925-29
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
Cohocton River at Avoca, NY (d)	01527500	157.0	1938-45
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‡, 1976-81

‡ 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)
ALLEGHENY RIVER BASIN--continued			
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	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 Tributary No. 2 to Tributary No. 4 near West Valley, NY (d)	04213442	.002	1976-77
Franks Creek Tributary 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
STREAMS TRIBUTARY TO NIAGARA RIVER			
Little Tonawanda Creek at Linden, NY (d)	04216500	22.1.0	1912-19 1920-68, 1977-92
Tonawanda Creek near Alabama, NY (d)	04217500	231.0	1956-89
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

‡ 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			
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
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
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
Catharine Creek at Montour Falls, NY (d)	04232200 *	41.1	1975-78‡
Kendig Creek near MacDougall, NY (d)	04232630 *	13.8	1965-68
Seneca River at Lock 4, Waterloo, NY (d)	04232650	742.0	1931-67, 1969-79
Dryden Lake Inlet near Harford, NY (d)	04233678	2.73	1973-75
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
Clyde River at Lock 26 Clyde, NY (d)	04235271	845.0	1935-67
Owasco Inlet at Moravia, NY (d)	04235300	106.0	1960-68
Skaneateles Creek at Willow Glen, NY (d)	04236500	75.8	1895-1908
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 Benthuyssen Brook near Amber, NY (d)	0424016975	5.84	1982-83
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
Chittenango Creek near Chittenango, NY (d)	04244000	66.3	1950-68
Limestone Creek at Fayetteville, NY (d)	04245000 *	85.5	1940-86
Butternut Creek below Dewitt, NY (d)	04245250	58.6	1964-66
Scriba Creek near Constantia, NY (d)	04245840 *	38.4	1966-68

‡ 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	Temp. S.C.	1956-92
Susquehanna River at Johnson City, NY	01513110	3,891	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	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	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
Seneca River at Baldwinsville, NY	04237500	3,138.0	Temp.	1958-75
Spafford Creek at Bromley Road near Spafford, NY	04240145	3.14	Sed.	1981-83
Spafford Creek at Sawmill Road near Spafford, NY	04240150	8.06	Sed.	1981-83

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				
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 Benthuyssen 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	Temp., S.C.	1975-81

WATER RESOURCES DATA - NEW YORK, 1994

Volume 3.--Western New York

INTRODUCTION

Water resources data for the 1994 water year for New York consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 79 gaging stations; stage only at 20 gaging stations; stage and contents at 6 gaging stations; water quality at 11 gaging stations, 2 wells, and 11 partial-record stations; water levels at 31 observation wells; and daily precipitation totals at 3 sites. Also included are data for 45 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. 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-94-3." 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. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc-Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

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) 431-0137. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

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 1994, through cooperative agreement with the Survey are:

- New York State Department of Environmental Conservation
- New York State Department of Transportation
- 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 Drainage and Sanitation
- County of Onondaga, Water Authority Commission
- City of Auburn
- City of Syracuse
- 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, 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; Rochester Gas and Electric Corporation.

Organizations that supplied data are acknowledged in station descriptions.

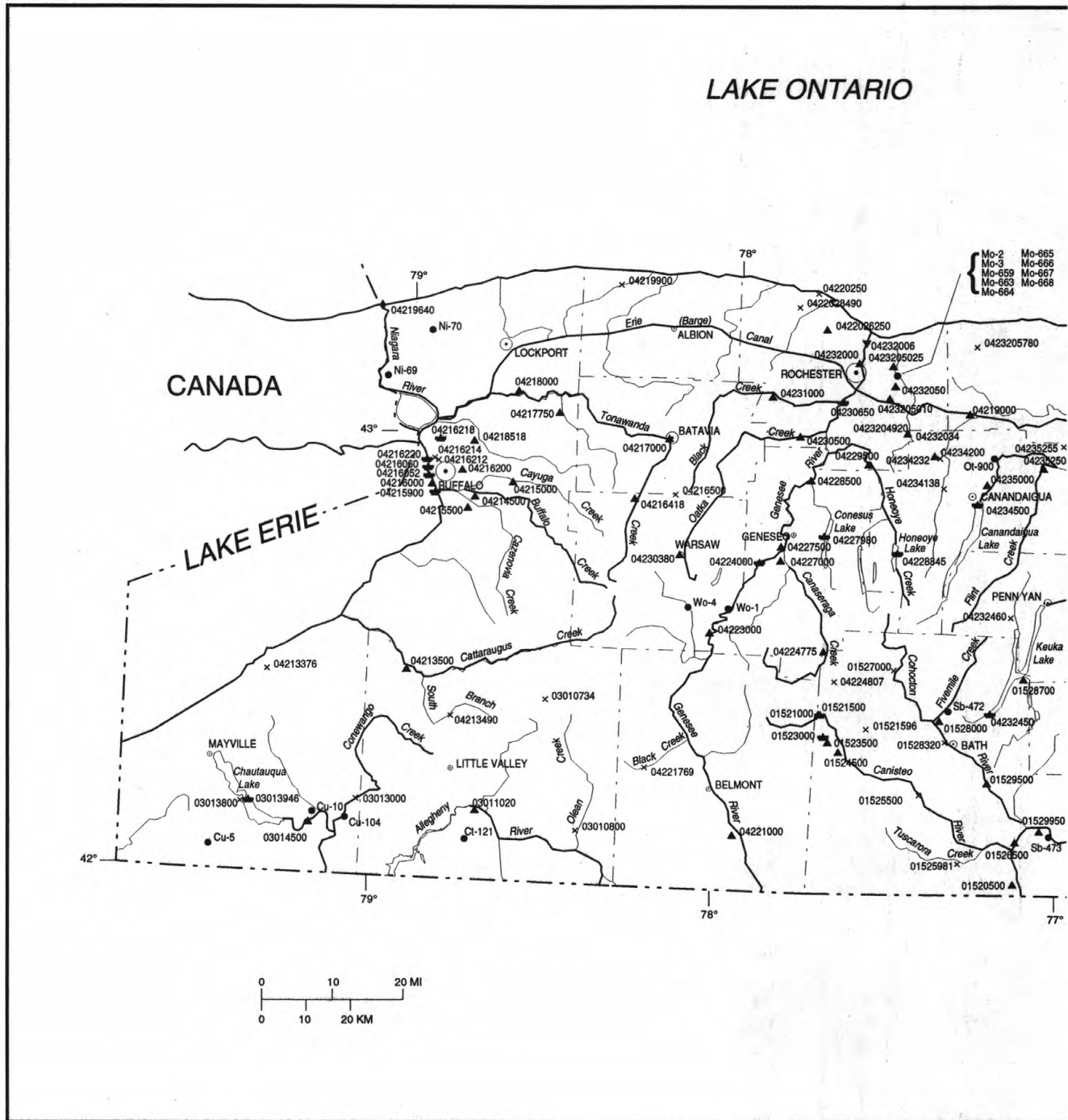
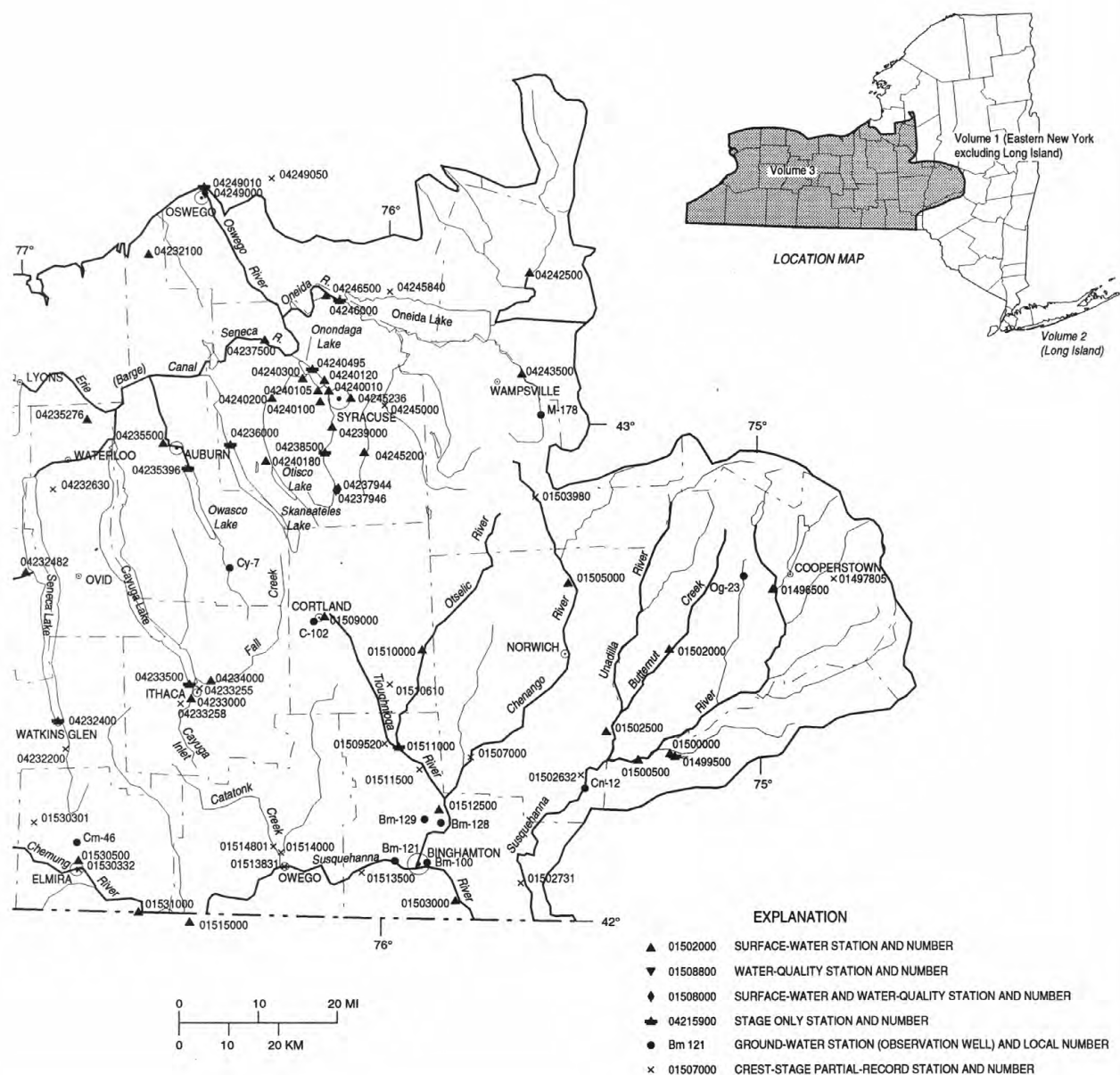


FIGURE 1. LOCATION OF GAGING STATIONS AND



OBSERVATION WELLS IN WESTERN NEW YORK

WATER RESOURCES DATA - NEW YORK, 1994

SUMMARY OF HYDROLOGIC CONDITIONS¹Surface Water

Streamflow throughout western New York during the 1994 water year was characterized by above-average annual mean discharges (table 1) at the majority of monitored sites. The greatest departures from normal streamflow conditions occurred in January, when monthly mean flow averaged about 50 percent of the normal monthly discharge, and in August, when monthly mean flow was over 500 percent of the normal discharge at most monitored sites (table 2). Departures from median discharges at two index stations—Susquehanna River at Conklin and Allegheny River at Salamanca—are shown in figures 2 and 3.

Table 1.--Comparison of annual mean discharges of the 1994 water year with annual mean discharges for the period of record for selected streams
[Locations are shown in fig. 1. Discharges are in cubic feet per second.]

	Station	Period of record	Annual mean discharge for period of record	1994 Water year mean discharge	Percent difference
01503000	Susquehanna River at Conklin	1914-93	3,584	4,373	+ 22.0
01531000	Chemung River at Chemung	1906-13, 1915-93	2,545	3,628	+ 42.6
03011020	Allegheny River at Salamanca	1904-93	2,780	3,605	+ 29.7
04213500	Cattaraugus Creek at Gowanda	1941-93	743	800	+ 7.7
04217000	Tonawanda Creek at Batavia	1945-93	213	194	- 8.9
04221000	Genesee River at Wellsville	1956-58, 1973-93	389	504	+ 29.6
04234000	Fall Creek near Ithaca	1926-93	186	245	+ 31.7
04242500	East Branch Fish Creek at Taberg	1924-93	541	579	+ 7.0

The 1994 water year began with low temperatures, average precipitation, and normal streamflow during October throughout most of western New York. Precipitation for November was slightly above average in western New York and well above average in the Western Plateau. As a result, streamflow was excessive (upper 25 percent of the record) for most of the Western Plateau. The third highest monthly mean discharge on record for November was recorded for Genesee River at Wellsville.

Table 2.--Comparison of monthly mean discharges for water year 1994 at selected sites with normal monthly discharges.
[Locations are shown in fig. 1.]

	Station	Period of record used	Monthly discharge as a percentage of normal monthly discharges		
			Jan.	Aug.	Sep.
01503000	Susquehanna River at Conklin	1914-93	52	511	169
01531000	Chemung River at Chemung	1915-93	65	1232	269
03011020	Allegheny River at Salamanca	1904-93	51	639	226
04213500	Cattaraugus Creek at Gowanda	1941-93	58	198	122
04217000	Tonawanda Creek at Batavia	1945-93	49	107	913
04221000	Genesee River at Wellsville	1956-58, 1973-93	52	1090	160
04234000	Fall Creek near Ithaca	1930-93	45	745	331
04242500	East Branch Fish Creek at Taberg	1924-93	95	153	185

December brought near-average precipitation to most of western New York. Streamflow remained in or decreased to the normal range throughout most of the State. Lake-effect snowstorms resulted in above-average snowfall accumulations in parts of the Lake Erie and Lake Ontario snowbelts.

The new year began with below-average temperatures and above-average precipitation. Precipitation was mostly snow and several significant snowstorms occurred. Oswego reported 90 inches of snow during January. Streamflow in January fell into the deficient range (lower 25 percent of the record) at many monitoring sites (table 2). Cold and snowy weather continued until February 18-21, when temperatures in many parts of the State rose, reaching 15 to 25 degrees F above normal. The warming caused many ice jams which resulted in flooding in parts of western New York. The winter season (December through February) ranked as the fifth coldest in New York in the last 99 years. Streamflow for February returned to the normal range.

March snowfall was near or above-average, and some locations on the Western Plateau received more than 3 times the normal March accumulation. New seasonal snowfall records were reached at several locations, including Binghamton, with 130.3 inches. Streamflow throughout western New York ranged from normal to excessive during March.

Temperatures in April were above-average for the first time in 7 months. Above-average precipitation in the form of rain, along with snowmelt, caused streamflow to rise into the excessive range at most monitoring sites. The third highest monthly mean discharge for April was recorded for Genesee River at Wellsville and the fourth highest April monthly mean discharge was recorded for Fall Creek near Ithaca.

Cold weather and near average precipitation prevailed throughout western New York during May. Streamflow at most monitored sites returned to normal.

Warm weather returned to western New York in June. By mid-month, hot and humid conditions created record-high temperatures across the state. Precipitation in western New York was well above normal for the month and averaged 7.91 inches for the month on the Western Plateau, making it the second wettest June on record. Streamflow at many western New York monitoring sites rose into the excessive range. For July, precipitation was near or above-average in most of western New York and streamflow continued in the normal to excessive range.

Abundant rain again fell in western New York in August. The wettest August on record was recorded on the Western Plateau. Rainfall from the remnants of tropical storm Beryl flooded parts of central New York, resulting in evacuations along the Unadilla and Susquehanna Rivers. The highest August monthly mean discharges were recorded at the Chemung River at Chemung, Genesee River at Wellsville, and Fall Creek near Ithaca; flows at the Chemung River at Chemung were more than 1,200 percent of the normal monthly average (table 2). The second-highest August monthly mean discharges on record were recorded at Susquehanna River at Conklin and Allegheny River at Salamanca. Maximum instantaneous peak flows for the water year were recorded at many monitoring sites throughout western New York during August.

September temperatures and precipitation returned to normal in most of western New York. Streamflow receded to the normal range at most sites, although, it remained in the excessive range at some streams.

Surface-Water Quality

Analyses of stream-water samples and associated discharge data from the three National Stream Quality Accounting Network (NASQAN) stations in western New York indicated no significant changes in chemical or biological quality from previous years. Nearly all values of the constituents analyzed were within the historical extremes for each site. Water samples were analyzed by the USGS National Water Quality Laboratory at Arvada, Colo., and the USGS Pennsylvania District sediment laboratory at LeMoyne, Pa.

Ground Water

Ground-water levels, which were below average at the end of the 1993 water year, continued to decline through October 1993 in response to below-average precipitation. The lowest water levels of the 1994 water year were recorded at 15 of the 31 observation wells during October. Above-average precipitation, along with the decline of evapotranspiration at the end of the growing season, raised ground-water levels to above average through November and December. Water levels declined during January in response to the low temperatures, and all precipitation fell as snow. Unseasonably warm temperatures during the latter half of February produced snowmelt, causing water levels to rise. Water levels continued to rise during March in response to above-average precipitation. More rainfall and snowmelt in April caused water levels to rise significantly. The highest water levels of the 1994 water year were recorded at 23 of the 31 observation wells during March and April. Low temperatures and near-average precipitation in May, along with an increase in evapotranspiration caused a decline in ground-water levels at the start of the growing season. June was the second wettest on record in western New York, but water levels did not rise, possibly because evapotranspiration was increasing with the unseasonably hot, humid weather. Continued warm, dry weather in July and early August caused ground water levels to decline steadily. Heavy rains during the latter part of August caused water levels to rise sharply. Normal precipitation during September sustained the above-average water levels that prevailed throughout most of the State at the end of the water year.

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

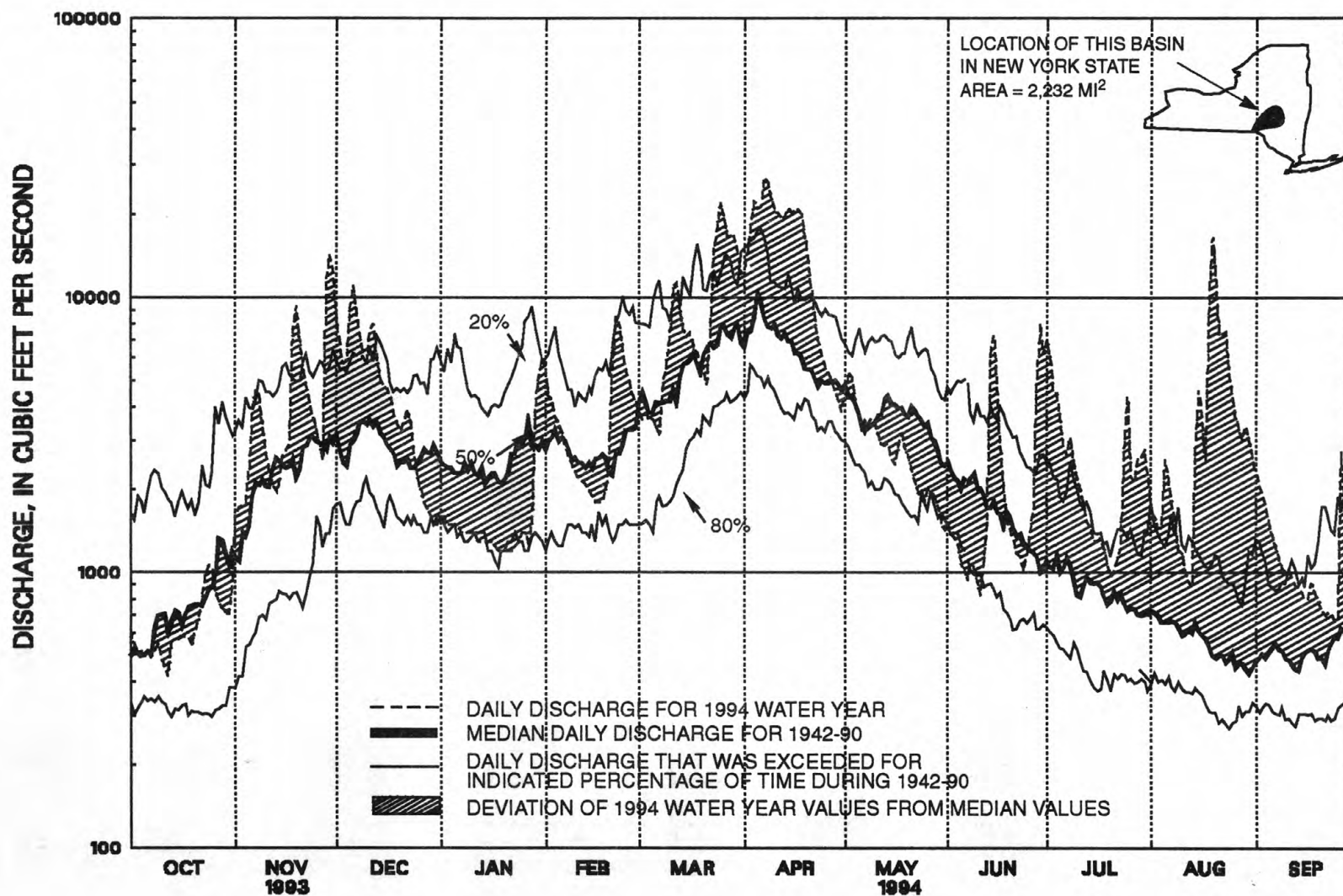


Figure 2.--Comparison of discharge at Susquehanna River at Conklin during 1994 water year with median discharge for 1942-90.

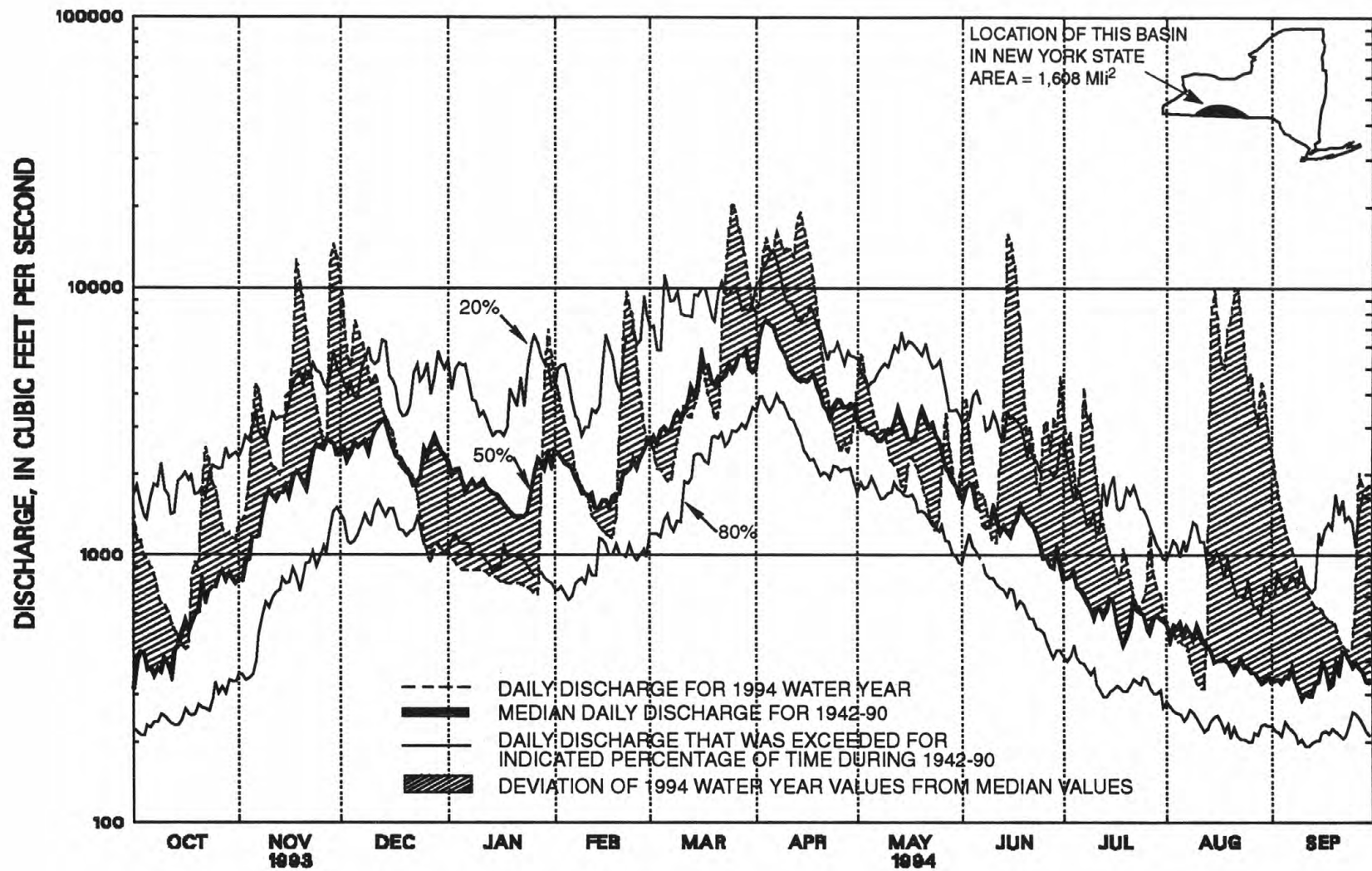


Figure 3.--Comparison of discharge at Allegheny River at Salamanca during 1994 water year with median discharge for 1942-90.

WATER RESOURCES DATA - NEW YORK, 1994 SPECIAL NETWORKS AND PROGRAMS

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. The 284 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U. S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

EXPLANATION OF THE RECORDS

The surface-water and ground-water data published in this report are for the water year that began October 1, 1993, and ended September 30, 1993. 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 1. 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 indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation 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.

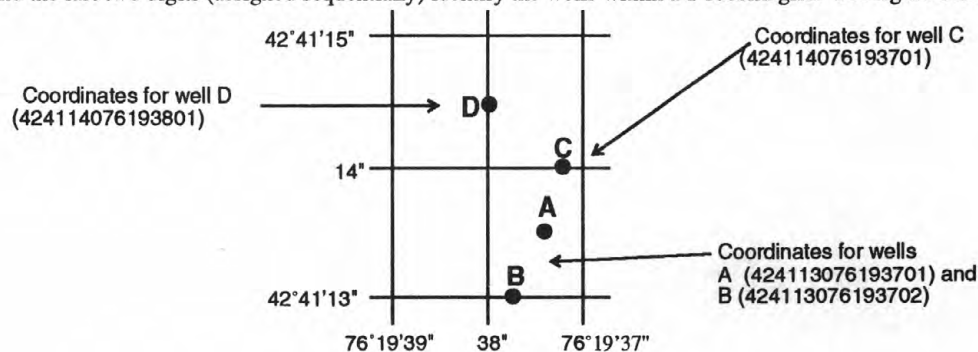


Figure 4. System for numbering wells (latitude and longitude)

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 1.

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 nonrecording 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 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 1993 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the 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; 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 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.

PEAK DISCHARGES 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 day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

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, EXTREMES FOR PERIOD OF RECORD, and EXTREMES FOR CURRENT YEAR have been depleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges and the PEAK DISCHARGES FOR CURRENT YEAR 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.

Data table of daily mean values

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.

Statistics of monthly mean data

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, unless 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 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. These repeated occurrences are identified with a letter symbol and printed in the footnotes. 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 may 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.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Secondary instantaneous peak discharges above a selected base discharge, along with the peak discharge, are given in the station manuscript under the heading "PEAK DISCHARGES FOR CURRENT YEAR."

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

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.

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 called 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.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for discharges of less than $\frac{1}{3}$ ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/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.

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 district 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 1.

Historical and current (1993) 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 1.

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.

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 onsite measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. 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.

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.

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., or Doraville, Ga. 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 precedes 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.--Published data are occasionally revised in light of new information, and appropriate revisions are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. 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 the appropriate computer file to insure the most recent updates.

Following information on station history are tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily. Following these are tables of daily mean temperatures.

Remark Codes

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

PRINTED OUTPUT

E
>
<
K

REMARK

Estimated value
Actual value is known to be greater than the value shown
Actual value is known to be less than the value shown
Results based on colony count outside the acceptance range
(non-ideal colony count)

NOTE: In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias.

Dissolved Trace-Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) 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 $\mu\text{g/L}$ 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.

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 nitrogen 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. | (d) 10 to 20 samples per year. |
| (b) 3 to 5 samples per year. | (e) more than 20 samples per year. |
| (c) 6 to 9 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 five additional years.

Records of Ground-Water Levels

Ground-water level data consist of water-level measurements made in observation wells. Ground-water records are presented by county, in alphabetical order. Locations of observation wells are shown on figure 1.

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 well. This entry reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted. An equivalent well is one that was in operation at a time that the present well was not, and whose location was such that water-level records from it can reasonably be considered equivalent with records from the present observation well.

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 ordinarily 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 WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperature, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- Water-Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 6-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. 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's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-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.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

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.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, 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.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 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.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

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 the mass per unit area or volume of habitat.

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. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, 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.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

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

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from 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 only 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.

Total in bottom material is the total 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."

Cells/volume refers to the number of cells of any organism which 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, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

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 natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

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

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.

Continuing-record station is a specified site that meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.
3. When sediment discharge records include periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, 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 salt water.

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 that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s , ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

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

Instantaneous discharge is the discharge at a particular instant of time.

Annual 7-day minimum is 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 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 statistics.)

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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

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

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. Diversity 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, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

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

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter ($\mu\text{g/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Organic carbon (OC) is a measure of the organic matter present in aqueous solution and (or) suspension. May be reported in any of three categories (DOC, dissolved organic carbon; SOC, suspended organic carbon; TOC, total organic carbon).

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

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 meters (m^2), acres, or hectares. 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 milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

Particle-size classification used in this report agrees with recommendations 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.....	.004 – .062	Sedimentation.
Sand.....	.062 – 2.0	Sedimentation or Sieve.
Gravel.....	2.0 – 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. The sample is subjected to mechanical and chemical dispersion in distilled water before analysis.

Percent composition 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, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 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.

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 are commonly known as algae.

Blue-green algae 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.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

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.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often 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.

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.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic 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 by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2 \cdot \text{time})$ for periphyton and macrophytes and $\text{mg C}/(\text{m}^3 \cdot \text{time})$ for phytoplankton] are units for expressing primary productivity. They define 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 in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2 \cdot \text{time})$ for periphyton and macrophytes and $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ for phytoplankton] are the units for expressing primary productivity. They define 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.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it 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 influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

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 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (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.

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

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 "run-off" 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 lived.

Natural substrates refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lived.

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

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

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

Suspended (as used in table of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that 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 water-suspended 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 would be 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended 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. A 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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	<u>Hexagenia</u>
Species	<u>Hexagenia limbata</u>

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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment 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, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment 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 determines all of the constituent in the sample.)

Water year in U.S. Geological Survey 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 that includes 9 of the 12 months. Thus, the year ending September 30, 1985 is called the "1985 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to state annual basic-data reports published beginning in 1975.

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.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material 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. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 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, Chapter D1. 1974. 116 pages.
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- 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, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
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- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
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- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

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- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
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- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
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- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 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, Chapter B4. 1993. 8 pages.
- 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, Chapter B5. 1987. 15 pages.
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- 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, Chapter B7. 1992. 190 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
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- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
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- 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, Chapter A1. 1989. 545 pages.
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- 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, Chapter A4. 1989. 363 pages.
- 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, Chapter A5. 1977. 95 pages.
- 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, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 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, Chapter A2. 1991. 68 pages.
- 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, Chapter A3. 1993. 136 pages.
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- 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, Chapter A5, 1993. 243 pages.
- 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, Chapter C1. 1976. 116 pages.
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- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

SUSQUEHANNA RIVER BASIN
01496500 OAKS CREEK AT INDEX, NY

LOCATION.--Lat 42°39'56", long 74°57'36", Otsego County, Hydrologic Unit 02050101, on right bank 200 ft upstream from bridge on State Highway 28 at Index, 0.5 mi upstream from mouth, and 3.0 mi southwest of Cooperstown.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--November 1929 to September 1932, March 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,174.47 ft above sea level. Prior to Sept. 30, 1932, nonrecording gage at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to June 1964 and since October 1979 flow regulated by natural storage in Canadamarago Lake. June 1964 to September 1979 flow regulated by gates at Panther Mountain Dam at outlet. Satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 7	1800	1,250	5.30	Apr. 16	2130	*1,530	*5.64

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	69	304	e130	e109	e183	545	383	92	233	50	160
2	12	69	295	e126	e109	e178	593	364	77	224	49	150
3	16	67	312	e111	e108	e172	693	330	68	242	61	138
4	15	75	311	e96	e109	e174	811	310	59	213	51	129
5	19	101	420	e88	e113	e180	787	291	54	197	53	121
6	19	162	376	e93	e105	e187	908	276	50	184	54	113
7	16	149	358	e92	e97	e182	1150	263	46	172	50	107
8	14	137	e337	e86	e85	e184	1030	266	45	163	47	101
9	12	135	e318	e85	e77	e187	962	249	41	154	45	100
10	12	133	e331	e84	e79	e185	1000	231	36	149	43	95
11	12	131	e394	e95	e80	e203	1020	216	34	143	42	88
12	14	132	e335	e99	e85	e243	977	210	40	130	39	84
13	16	130	e324	e95	e82	e270	1060	145	38	120	38	79
14	15	129	e303	e88	e84	e280	1220	122	131	108	66	81
15	15	144	e296	e79	e81	e279	1150	116	93	85	69	82
16	15	135	e289	e74	e83	e270	1250	153	65	79	58	76
17	16	156	e266	e77	e89	e264	1340	148	57	72	55	75
18	17	276	251	e68	e95	e261	1170	141	52	67	311	76
19	18	227	242	e64	e99	e257	1020	134	46	64	344	73
20	21	223	e228	e64	e114	e246	901	125	41	61	236	69
21	61	218	e226	e64	187	e243	773	115	37	60	268	64
22	67	213	e219	e65	e229	e342	676	107	33	56	299	62
23	62	208	e206	e64	e199	e384	592	99	30	54	261	62
24	59	204	e181	e63	e185	e441	535	91	34	52	243	63
25	57	195	e190	e64	e184	e507	491	90	43	49	228	60
26	55	181	e160	e63	e182	e478	454	91	36	51	215	58
27	54	178	e144	e64	e185	e482	428	89	34	46	204	62
28	53	318	e142	e102	e187	552	395	78	167	75	191	65
29	51	378	e134	e143	---	540	368	74	126	66	196	64
30	51	320	e133	e127	---	533	341	67	279	59	182	60
31	56	---	e124	e116	---	520	---	60	---	54	168	---
TOTAL	934	5193	8149	2729	3421	9407	24640	5434	1984	3482	4216	2617
MEAN	30.1	173	263	88.0	122	303	821	175	66.1	112	136	87.2
MAX	67	378	420	143	229	552	1340	383	279	242	344	160
MIN	12	67	124	63	77	172	341	60	30	46	38	58
CFSM	.30	1.70	2.58	.86	1.20	2.98	8.05	1.72	.65	1.10	1.33	.86
IN.	.34	1.89	2.97	1.00	1.25	3.43	8.99	1.98	.72	1.27	1.54	.95

e Estimated

SUSQUEHANNA RIVER BASIN
01496500 OAKS CREEK AT INDEX, NY--Continued

29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)

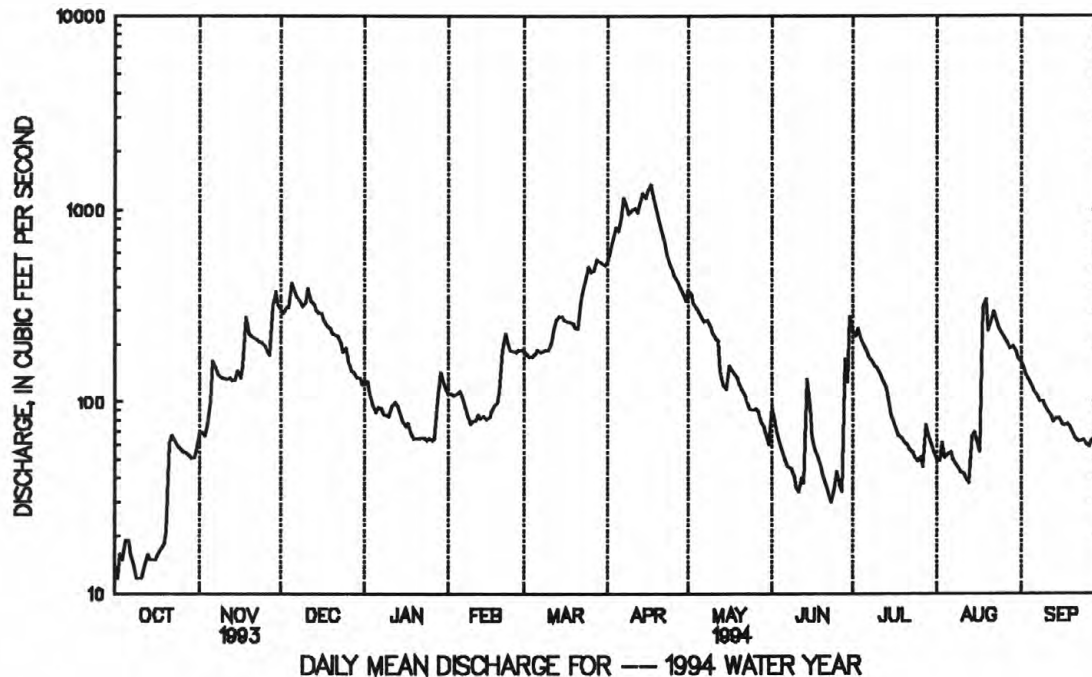
MEAN	80.8	144	187	171	183	339	489	223	105	54.8	35.6	48.8
MAX	597	374	465	388	522	777	1151	501	288	186	217	314
(WY)	1978	1973	1973	1952	1981	1977	1940	1983	1943	1976	1992	1977
MIN	2.32	3.03	19.6	17.9	25.4	97.7	128	56.5	10.8	5.19	2.71	1.71
(WY)	1965	1965	1965	1931	1980	1941	1946	1985	1964	1962	1965	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1930 - 1994	
ANNUAL TOTAL	69639.6		72206			
ANNUAL MEAN	191		198		172	
HIGHEST ANNUAL MEAN					263	
LOWEST ANNUAL MEAN					83.6	
HIGHEST DAILY MEAN	2160	Apr 11	1340	Apr 17	2280	Mar 22 1948
LOWEST DAILY MEAN	8.5	Sep 25	12	a	1.4	Sep 21 1964
ANNUAL SEVEN-DAY MINIMUM	9.2	Sep 19	14	Oct 8	1.5	Sep 18 1964
INSTANTANEOUS PEAK FLOW			1530	Apr 16	b3320	Oct 17 1977
INSTANTANEOUS PEAK STAGE			5.64	Apr 16	7.62	Oct 17 1977
INSTANTANEOUS LOW FLOW			10	Oct 2	1.3	c
ANNUAL RUNOFF (CFSM)	1.87		1.94		1.68	
ANNUAL RUNOFF (INCHES)	25.40		26.33		22.88	
10 PERCENT EXCEEDS	429		405		410	
50 PERCENT EXCEEDS	68		121		102	
90 PERCENT EXCEEDS	13		43		14	

a Oct. 2, 9, 10, 11.

b From rating extended above 1,700 ft³/s.

c Aug. 4, 5, 1962.



SUSQUEHANNA RIVER BASIN

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 mi².

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 sea level. Prior to June 13, 1947, water-stage recorder at site 0.5 mi upstream at datum 27.30 ft higher.

REMARKS.--No estimated daily discharges. Records good. 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 OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft³/s, in July 1935, was determined by computation of flow over dam and from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	65	1020	89	279	170	589	144	46	171	26	90
2	21	68	542	70	176	180	654	135	36	139	30	79
3	22	52	411	66	151	178	774	79	36	369	79	79
4	22	44	402	54	154	178	19	70	30	238	66	63
5	22	60	666	60	154	178	830	71	25	182	72	53
6	22	162	482	54	159	135	1310	72	25	145	101	30
7	24	219	331	48	161	142	264	72	82	110	41	21
8	26	195	289	48	133	257	533	72	92	88	30	21
9	27	134	247	48	96	269	1770	73	49	76	30	43
10	27	100	276	55	90	356	1680	94	35	130	34	53
11	28	82	474	59	90	427	1560	103	35	88	36	35
12	28	74	253	59	101	430	1140	114	63	45	36	23
13	28	74	276	59	104	427	698	148	101	28	36	23
14	27	74	238	51	92	551	336	140	548	29	175	29
15	27	110	223	48	76	434	653	109	310	43	279	32
16	28	107	222	48	70	396	552	145	147	57	157	32
17	29	135	173	48	80	306	19	206	131	57	136	32
18	29	797	150	48	97	291	901	214	130	42	767	32
19	29	331	150	48	87	260	1610	173	110	30	1010	34
20	29	327	141	59	119	244	967	118	79	58	663	34
21	49	266	153	59	384	214	372	102	69	47	441	33
22	68	179	135	42	258	524	276	102	43	31	476	32
23	64	148	105	35	16	696	218	102	32	32	311	24
24	64	124	79	34	241	641	175	102	77	92	210	20
25	41	124	59	51	450	16	166	102	101	80	183	19
26	32	105	106	50	437	738	180	83	77	43	183	19
27	32	97	88	79	415	1670	156	72	80	19	145	20
28	32	239	71	51	247	1550	136	71	371	31	108	20
29	32	632	66	202	---	1140	105	71	269	52	132	20
30	32	1080	66	310	---	519	74	70	236	38	108	20
31	44	---	89	308	---	489	---	70	---	27	97	---
TOTAL	1005	6204	7983	2340	4917	14006	18717	3299	3465	2617	6198	1065
MEAN	32.4	207	258	75.5	176	452	624	106	115	84.4	200	35.5
MAX	68	1080	1020	310	450	1670	1770	214	548	369	1010	90
MIN	20	44	59	34	16	16	19	70	25	19	26	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	96.2	180	217	179	204	344	384	197	103	55.3	41.8	56.4
MAX	618	404	517	487	604	690	1117	483	370	305	200	408
(WY)	1978	1973	1960	1979	1981	1977	1993	1983	1968	1973	1994	1977
MIN	3.35	4.46	45.0	28.3	33.3	86.2	91.6	35.4	16.2	6.95	3.86	2.45
(WY)	1965	1965	1961	1961	1980	1960	1946	1987	1964	1965	1964	1964

SUSQUEHANNA RIVER BASIN

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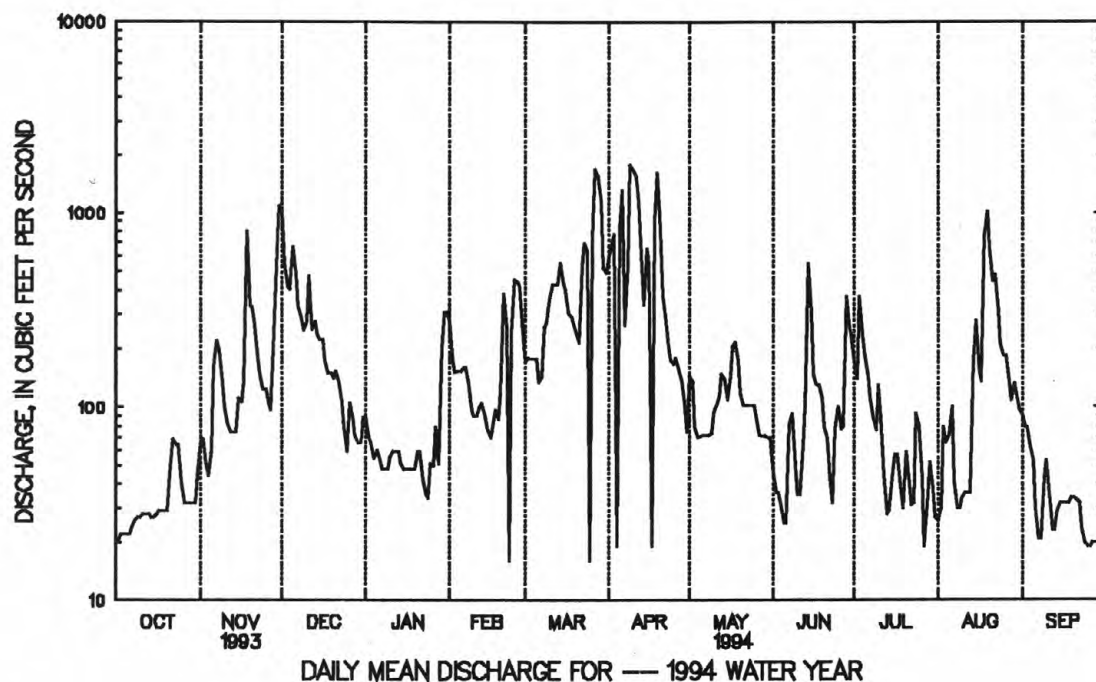
01500000 OULEOUT CREEK AT EAST SIDNEY, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	64716.9		71816		171	
ANNUAL MEAN	177		197		242	
HIGHEST ANNUAL MEAN					77.9	
LOWEST ANNUAL MEAN					1.2	
HIGHEST DAILY MEAN	2510	Apr 4	1770	Apr 9	3820	Dec 30 1942
LOWEST DAILY MEAN	4.1	Aug 25	16	a	1.8	Aug 13 1949
ANNUAL SEVEN-DAY MINIMUM	4.7	Aug 24	20	Sep 24	1.8	Nov 5 1973
INSTANTANEOUS PEAK FLOW			1880	Apr 9	b7250	Dec 30 1942
INSTANTANEOUS PEAK STAGE			4.69	Apr 9	c7.62	Dec 30 1942
10 PERCENT EXCEEDS	477		485		403	
50 PERCENT EXCEEDS	44		92		85	
90 PERCENT EXCEEDS	9.0		28		13	

a Feb. 23, Mar. 25.

b From rating curve extended above 4,000 ft³/s.

c Site and datum then in use.



SUSQUEHANNA RIVER BASIN

01500500 SUSQUEHANNA RIVER AT UNADILLA, NY

LOCATION.--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.

DRAINAGE AREA.--982 mi².

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 2103: 1966(M); Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 997.25 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Regulation at times by upstream lakes and reservoirs. Satellite and telephone gage-height telemeters at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Mar. 18, 1936, reached a stage of 16.6 ft, from floodmarks, discharge, 31,300 ft³/s from publications of the Corps of Engineers, Baltimore District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	468	3490	e700	e2100	e1680	5210	2220	691	2140	419	1040
2	183	524	2760	e700	e1800	e1600	5890	2530	731	1580	395	972
3	143	500	2630	e690	e1700	e1700	7270	2040	661	1800	518	844
4	214	487	2760	e680	e1650	e1600	8190	1810	619	1480	558	692
5	226	629	4230	e680	e1600	e1600	8260	1690	571	1310	464	630
6	226	1360	4390	e670	e1500	e1550	9040	1560	530	1260	504	578
7	226	1650	3400	e650	e1400	e1500	10400	1480	619	1080	439	530
8	206	1290	3030	e640	e1300	e2100	11600	1550	601	929	371	504
9	191	1030	2660	e630	e1200	e2600	10200	1660	491	652	345	497
10	175	887	2640	e630	e1100	e3200	8900	1470	425	890	338	492
11	158	809	3550	e620	e1050	e4800	9390	1330	391	640	319	458
12	169	782	2870	e620	e1000	e4500	8320	1290	491	696	304	417
13	211	835	2320	e600	e950	e4100	7820	1460	600	563	321	397
14	256	797	2180	e600	e900	3920	9330	1230	1990	481	858	390
15	247	986	2130	e600	e850	3520	8890	1110	1790	473	1200	355
16	220	1090	2110	e580	e800	3480	8550	1300	1020	522	745	417
17	209	1020	1890	e560	e800	3010	9650	1660	632	492	599	391
18	211	3440	1620	e550	e800	2770	8870	1450	604	435	3790	383
19	209	2870	1510	e550	e900	2590	7970	1360	583	386	5900	360
20	228	2450	1450	e550	e1200	2370	6520	1230	673	406	3440	353
21	268	2260	1470	e550	e2500	2210	4970	1120	461	428	2780	350
22	427	1910	1510	e560	e3900	4290	4210	1040	494	368	3810	314
23	514	1770	e1270	e580	e3300	5490	3630	986	412	395	2780	306
24	410	1570	e900	e580	e3000	6720	3180	932	454	512	2130	305
25	376	1380	e850	e600	e3400	7560	2900	896	578	433	1820	319
26	326	1250	e800	e600	e2500	7130	2720	904	637	368	1640	307
27	312	1150	e700	e560	e2200	7320	2460	935	625	457	1500	345
28	306	2630	e680	e620	e1900	7620	2370	849	1810	561	1310	328
29	297	4850	e680	e1200	---	7150	2080	747	1820	780	1460	333
30	299	4190	e670	e2500	---	5630	1890	791	2000	594	1310	324
31	344	---	e670	e2400	---	4940	---	829	---	482	1130	---
TOTAL	7948	46864	63820	23250	47300	120250	200680	41459	24004	23593	43497	13931
MEAN	256	1562	2059	750	1689	3879	6689	1337	800	761	1403	464
MAX	514	4850	4390	2500	3900	7620	11600	2530	2000	2140	5900	1040
MIN	143	468	670	550	800	1500	1890	747	391	368	304	305
CFSM	.26	1.59	2.10	.76	1.72	3.95	6.81	1.36	.81	.78	1.43	.47
IN.	.30	1.78	2.42	.88	1.79	4.56	7.60	1.57	.91	.89	1.65	.53

e Estimated

SUSQUEHANNA RIVER BASIN
01500500 SUSQUEHANNA RIVER AT UNADILLA, NY--Continued

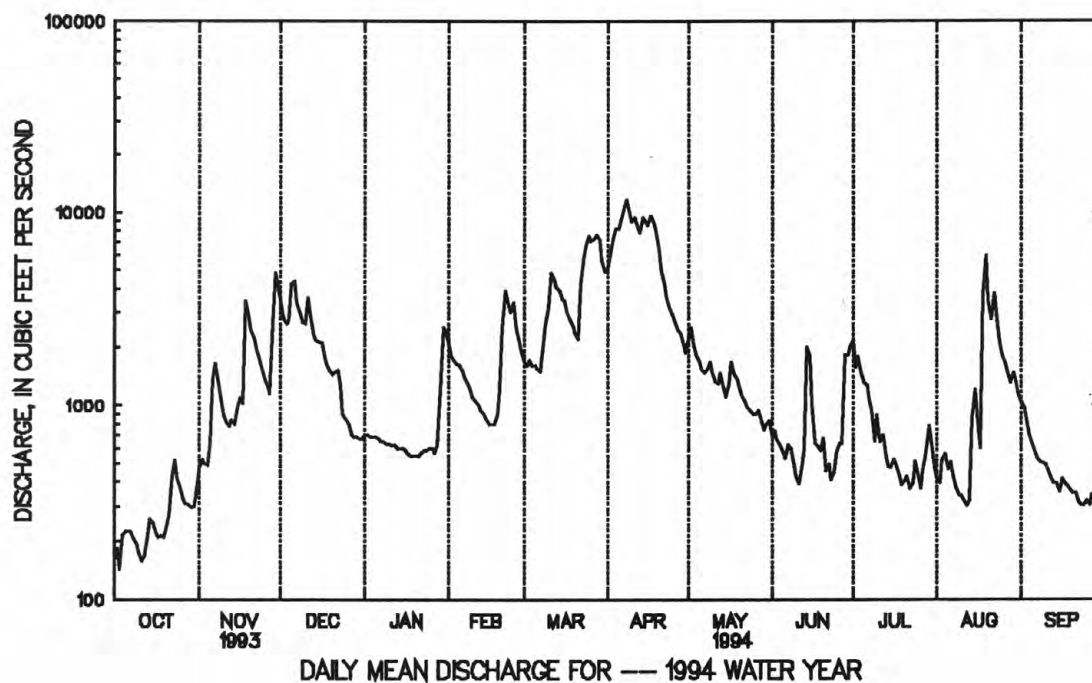
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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	769	1410	1786	1601	1770	3170	3908	1992	1034	523	396	511
MAX	5747	3191	4066	3652	4772	7113	9496	4520	3065	1568	1403	3778
(WY)	1978	1960	1973	1949	1976	1977	1940	1943	1972	1947	1994	1977
MIN	58.9	75.5	304	335	345	1130	999	543	250	136	93.1	69.2
(WY)	1965	1965	1965	1961	1980	1965	1946	1985	1964	1962	1965	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	618941		656596			
ANNUAL MEAN	1696		1799		1566	
HIGHEST ANNUAL MEAN					2280	
LOWEST ANNUAL MEAN					748	
HIGHEST DAILY MEAN	19500	Mar 31	11600	Apr 8	21000	Mar 15 1977
LOWEST DAILY MEAN	84	Aug 26	143	Oct 3	45	Oct 18 1964
ANNUAL SEVEN-DAY MINIMUM	112	Aug 28	191	Oct 7	50	Oct 17 1964
INSTANTANEOUS PEAK FLOW			12000	Apr 8	23500	Mar 14 1977
INSTANTANEOUS PEAK STAGE			10.56	Apr 8	14.64	Mar 14 1977
INSTANTANEOUS LOW FLOW			129	a	39	Oct 17 1964
ANNUAL RUNOFF (CFSM)	1.73		1.83		1.59	
ANNUAL RUNOFF (INCHES)	23.45		24.87		21.67	
10 PERCENT EXCEEDS	4770		4250		3650	
50 PERCENT EXCEEDS	574		935		900	
90 PERCENT EXCEEDS	146		331		186	

a Oct 3, 4.



SUSQUEHANNA RIVER BASIN

01502000 BUTTERNUT CREEK AT MORRIS, NY

LOCATION.--Lat 42°32'43", long 75°14'22", Otsego County, Hydrologic Unit 02050101, on right bank 15 ft upstream from bridge on State Highway 23 at Morris, and 0.2 mi upstream from Calhoun Creek.

DRAINAGE AREA.--59.7 mi².

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 921: 1939. WSP 2103: Drainage area. WRD NY 1974: 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 1096.21 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Several measurements of water temperature were made during the year. Satellite gage-height telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--No peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr 07	1100	*1,300	*6.38				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	50	163	47	e75	e90	395	148	45	303	27	57
2	7.1	52	150	46	e74	e87	499	127	38	195	26	54
3	6.6	52	175	44	e73	e84	759	106	32	178	31	50
4	8.2	55	169	e40	e73	e90	730	98	29	118	27	48
5	8.5	75	363	e38	79	e80	593	92	26	98	28	45
6	11	142	210	e37	75	e70	771	88	25	93	27	43
7	9.2	93	172	39	71	e70	1050	88	24	85	24	41
8	7.2	68	148	38	e65	e110	627	98	23	77	22	39
9	6.1	61	125	e36	e63	e110	523	93	21	66	21	40
10	4.8	55	151	36	e60	195	620	83	20	61	20	39
11	5.1	51	264	34	60	262	584	76	19	58	18	36
12	6.0	52	142	34	59	e170	511	79	25	49	18	34
13	13	53	122	34	58	e160	709	78	24	43	17	33
14	14	51	115	34	e54	e180	780	70	110	39	33	33
15	13	67	113	e28	53	e185	573	64	68	39	33	33
16	13	59	109	e28	55	e190	845	82	43	37	25	32
17	15	96	91	e29	52	e155	632	79	36	34	22	30
18	21	330	82	e29	52	e150	386	71	32	32	270	30
19	25	161	81	e28	55	e140	315	66	28	30	158	29
20	28	135	77	e26	70	134	265	62	26	28	97	28
21	32	110	82	e26	126	133	213	57	25	27	159	26
22	39	100	81	e26	158	379	180	52	28	26	170	25
23	35	89	65	27	124	421	152	47	23	27	110	25
24	35	84	e47	28	134	530	136	42	25	28	89	24
25	35	76	e47	27	e115	668	131	40	34	25	81	24
26	33	67	e46	26	e105	444	127	42	27	30	76	23
27	35	69	e46	25	e100	427	120	40	38	32	69	30
28	37	408	e45	e35	97	514	111	36	559	53	64	35
29	37	333	e45	e76	---	431	102	35	228	45	70	31
30	37	210	e47	e80	---	373	96	33	746	33	62	28
31	41	---	47	e76	---	327	---	30	---	30	58	---
TOTAL	628.8	3304	3620	1157	2235	7359	13535	2202	2427	2019	1952	1045
MEAN	20.3	110	117	37.3	79.8	237	451	71.0	80.9	65.1	63.0	34.8
MAX	41	408	363	80	158	668	1050	148	746	303	270	57
MIN	4.8	50	45	25	52	70	96	30	19	25	17	23
CFM	.34	1.84	1.96	.63	1.34	3.98	7.56	1.19	1.36	1.09	1.05	.58
IN.	.39	2.06	2.26	.72	1.39	4.59	8.43	1.37	1.51	1.26	1.22	.65

e Estimated

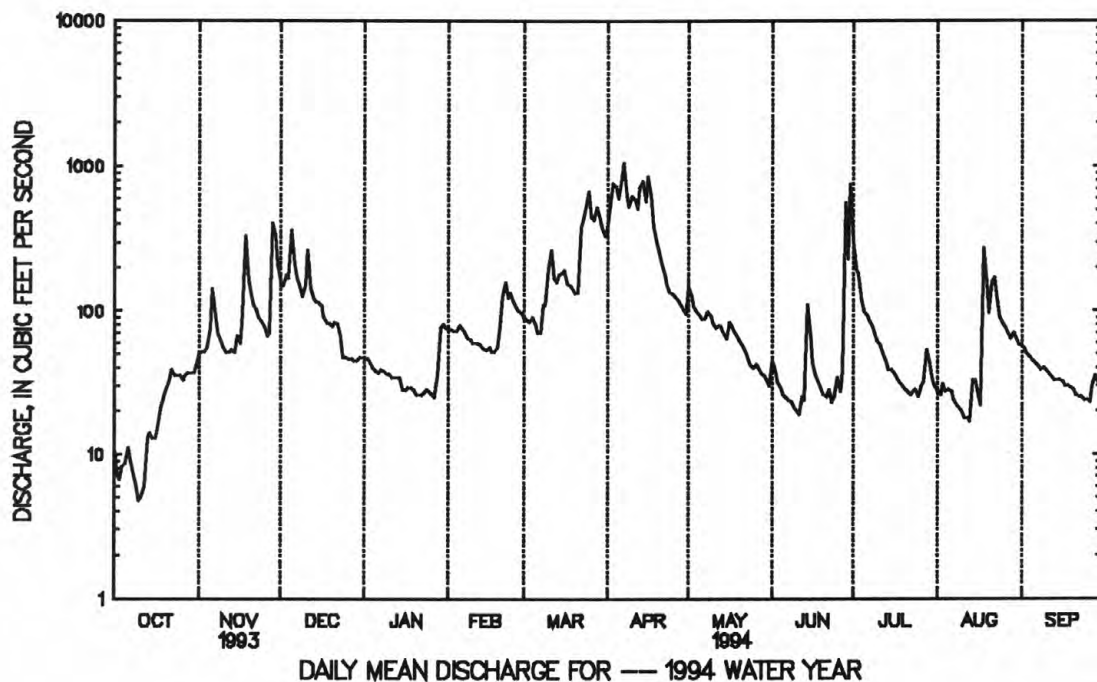
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	56.8	95.4	116	96.8	111	220	240	116	63.8	30.4	21.6	32.6
MAX	486	260	267	222	351	638	589	262	234	99.5	95.0	331
(WY)	1978	1960	1973	1978	1976	1977	1940	1943	1972	1972	1986	1977
MIN	3.51	5.17	16.4	18.9	21.5	61.4	55.4	33.3	13.3	6.80	4.57	3.46
(WY)	1965	1965	1965	1961	1980	1941	1946	1985	1964	1962	1964	1964

SUSQUEHANNA RIVER BASIN
01502000 BUTTERNUT CREEK AT MORRIS, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	34492.2		41483.8		99.8	
ANNUAL MEAN	94.5		114		174	
HIGHEST ANNUAL MEAN					47.7	
LOWEST ANNUAL MEAN					1978	
HIGHEST DAILY MEAN	1830	Mar 30	1050	Apr 7	3700	Oct 17 1977
LOWEST DAILY MEAN	4.8	Oct 10	4.8	Oct 10	1.3	Sep 24 1939
ANNUAL SEVEN-DAY MINIMUM	6.7	Sep 20	7.1	Oct 6	2.7	Oct 9 1964
INSTANTANEOUS PEAK FLOW			1300	Apr 7	5980	Oct 17 1977
INSTANTANEOUS PEAK STAGE			6.38	Apr 7	9.44	Oct 17 1977
ANNUAL RUNOFF (CFSM)	1.58		1.90		1.67	
ANNUAL RUNOFF (INCHES)	21.49		25.85		22.72	
10 PERCENT EXCEEDS	256		283		220	
50 PERCENT EXCEEDS	35		55		52	
90 PERCENT EXCEEDS	8.7		25		10	



SUSQUEHANNA RIVER BASIN
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 mi².

PERIOD OF RECORD.--November 1929 to September 1933, January 1937 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 992.25 ft above sea level. 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 08	0130	*7,440	*9.33	Apr. 17	1100	7,330	9.28

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	226	1600	e370	e1000	e860	2940	1170	385	3100	403	510
2	96	278	1290	e370	e900	e840	3520	1530	492	1900	366	482
3	92	279	1330	e360	e840	e880	4800	1100	392	1730	367	438
4	88	288	1420	e360	e800	e800	5990	934	334	1380	479	395
5	102	444	2670	e360	e780	e800	5110	847	299	1030	446	364
6	109	1160	2450	e360	e740	e780	5090	798	277	869	480	337
7	119	1300	1790	e350	e700	e760	6770	806	271	787	398	316
8	122	887	1500	e340	e660	e1100	6560	899	258	1030	334	303
9	99	675	1290	e330	e640	e1300	4500	953	247	927	302	301
10	89	569	1350	e320	e600	1640	4030	842	232	729	280	306
11	81	506	2430	e310	e560	2360	4450	743	215	720	261	298
12	84	492	1760	e300	e550	2080	4050	724	262	585	247	270
13	93	505	e1150	e300	e530	1720	4360	778	314	499	237	254
14	103	485	e1100	e290	e520	1670	5880	692	1040	442	608	246
15	108	605	1150	e290	e490	1650	5840	610	1060	428	757	252
16	104	629	1100	e290	e480	1710	5510	677	600	456	501	274
17	104	664	969	e280	e440	1530	6950	831	421	434	373	254
18	109	2390	830	e270	e440	1400	5230	735	348	375	2120	249
19	131	1990	797	e270	e440	1310	3320	664	301	347	3080	237
20	143	1400	780	e270	e500	1200	2670	616	266	356	1640	223
21	152	1130	806	e280	e1000	1120	2130	559	248	314	1390	207
22	195	950	e840	e310	e1900	2320	1800	508	253	288	2120	197
23	207	837	e600	e320	e1700	3250	1560	468	245	304	1420	195
24	189	764	e520	e320	e1440	3900	1390	439	245	395	1050	192
25	162	696	e460	e300	e1300	4860	1310	414	338	352	863	195
26	145	589	e420	e290	e1100	4050	1260	445	377	365	767	196
27	136	548	e380	e280	e950	3320	1140	493	347	482	731	427
28	131	1780	e370	e340	e880	3680	1060	512	2060	667	643	887
29	128	3690	e370	e690	---	3590	932	422	2440	958	671	607
30	131	2320	e360	e1200	---	3100	877	384	3070	646	669	433
31	152	---	e360	e1100	---	2680	---	351	---	473	541	---
TOTAL	3815	29076	34242	11820	22880	62260	111029	21944	17637	23368	24544	9845
MEAN	123	969	1105	381	817	2008	3701	708	588	754	792	328
MAX	207	3690	2670	1200	1900	4860	6950	1530	3070	3100	3080	887
MIN	81	226	360	270	440	760	877	351	215	288	237	192
CFSM	.24	1.86	2.12	.73	1.57	3.86	7.12	1.36	1.13	1.45	1.52	.63
IN.	.27	2.08	2.45	.85	1.64	4.45	7.94	1.57	1.26	1.67	1.76	.70

e Estimated

SUSQUEHANNA RIVER BASIN
01502500 UNADILLA RIVER AT ROCKDALE, NY--Continued

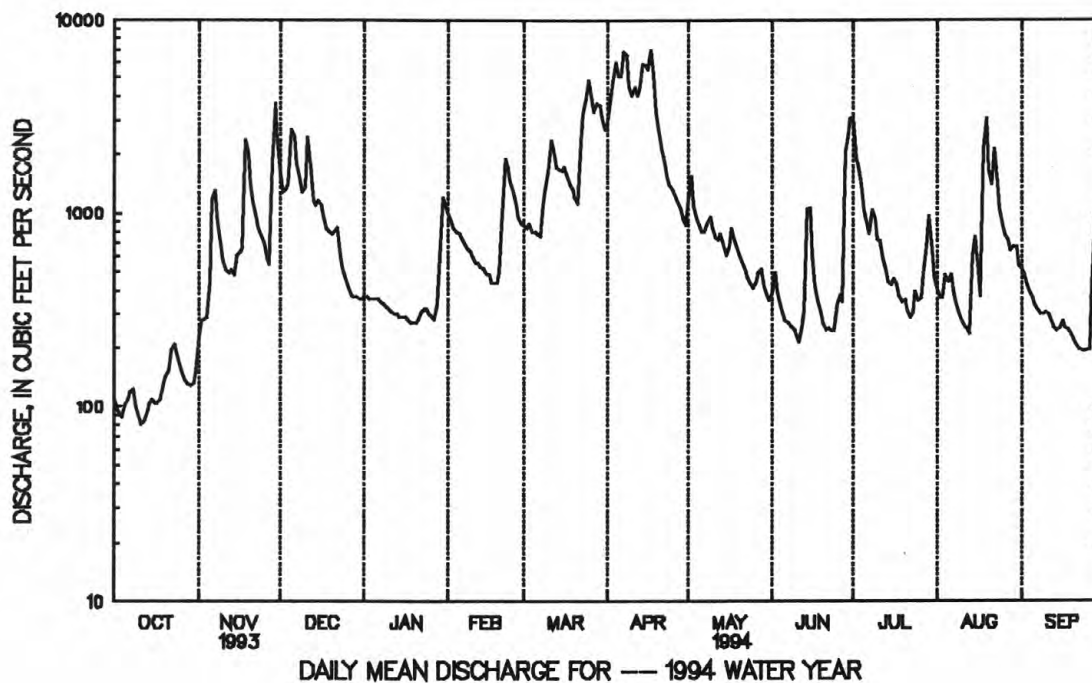
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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)

MEAN	443	797	975	860	985	1794	2059	956	514	289	200	281
MAX	2944	2223	2104	1931	2857	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1930 - 1933 1938 - 1994	
ANNUAL TOTAL	322588		372460			
ANNUAL MEAN	884		1020		846	
HIGHEST ANNUAL MEAN					1294	
LOWEST ANNUAL MEAN					447	
HIGHEST DAILY MEAN	11900	Mar 31	6950	Apr 17	15400	Mar 6 1979
LOWEST DAILY MEAN	62	Aug 31	81	Oct 11	27	a
ANNUAL SEVEN-DAY MINIMUM	69	Sep 19	94	Oct 9	27	Sep 20 1964
INSTANTANEOUS PEAK FLOW			7440	Apr 8	17400	Dec 31 1942
INSTANTANEOUS PEAK STAGE			9.33	Apr 8	12.98	Dec 31 1942
ANNUAL RUNOFF (CFSM)	1.70		1.96		1.63	
ANNUAL RUNOFF (INCHES)	23.08		26.65		22.11	
10 PERCENT EXCEEDS	2310		2430		1980	
50 PERCENT EXCEEDS	311		569		453	
90 PERCENT EXCEEDS	84		207		96	

a Sept. 20-27, 1964.



SUSQUEHANNA RIVER BASIN

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 mi².

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 sea level. 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft³/s and maximum (*);

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 25	1000	22400	11.74	Apr. 16	1530	22100	11.64
Apr. 07	1230	*28300	*13.42				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	606	1610	8430	e1600	e5600	e3800	12300	4400	1520	6990	1710	2350
2	546	1720	6690	e1600	e4400	e3600	14500	5330	1380	6160	1580	2110
3	525	1740	5740	e1500	e4200	e3800	18400	5150	1350	4550	1450	1930
4	519	1800	5850	e1500	e3700	e3600	22000	4240	1270	4480	1450	1750
5	495	2420	8920	e1500	e3500	e3600	20900	3760	1080	3590	2580	1510
6	514	3850	11000	e1500	e3200	e3400	21200	3440	1030	2880	2220	1370
7	494	4600	8820	e1400	e2900	e3200	26900	3200	942	2660	1830	1250
8	516	4410	7000	e1400	e2600	e4700	25800	3410	1080	3080	1510	1130
9	548	3350	6050	e1400	e2500	e5800	22900	3640	1040	2580	1210	1040
10	493	2690	5650	e1400	e2300	e7000	20100	3570	921	2200	1180	1010
11	445	2300	7650	e1400	e2200	e11000	20100	3170	825	2030	1010	1020
12	420	2090	7970	e1300	e2150	e11300	19000	2930	1140	1790	926	965
13	557	1970	6040	e1300	e2100	e9000	19600	2910	1510	1530	889	891
14	575	2140	5030	e1300	e2000	e7600	20900	2930	6350	1470	2810	878
15	572	2700	4780	e1300	e1900	e7200	20100	2600	7220	1300	4610	845
16	584	2790	4650	e1300	e1800	e7400	20500	2470	4640	1310	3610	800
17	587	2960	4360	e1250	e1800	e6700	20700	2780	2920	1330	2520	806
18	575	7640	3870	e1200	e1800	e6300	19700	3200	2030	1220	10100	914
19	545	9320	3480	e1200	e2000	e5800	16600	2870	1620	1090	16400	845
20	617	6910	3270	e1200	e2600	e5400	13200	2650	1430	964	11700	795
21	678	5570	3510	e1200	e5400	e4800	10400	2400	1320	1010	7250	737
22	803	4780	3940	e1200	e8500	e8000	8250	2160	1180	1130	7320	702
23	991	4120	e3500	e1250	e8000	e14500	7020	1980	1140	1230	7510	714
24	1060	3720	e2700	e1300	e6500	17900	6170	1840	1020	2890	5480	709
25	1040	3310	e2200	e1400	e5400	21900	5570	1810	1140	4350	4340	666
26	858	2900	e2000	e1400	e5000	19000	5310	2010	1380	2250	3690	694
27	776	2570	e1800	e1300	e4400	16600	4970	1960	1680	2140	3290	2750
28	739	11700	e1700	e1500	e4200	16600	4560	1890	4980	2580	3050	1850
29	712	14200	e1600	e3800	---	16900	4240	1780	7990	2640	3410	1940
30	704	11900	e1500	e5300	---	14600	3860	1550	6220	2800	3050	1700
31	918	---	e1500	e6000	---	12200	---	1420	---	2230	2680	---
TOTAL	20012	133780	151200	53200	102650	283200	455750	89450	69348	78454	122365	36671
MEAN	646	4459	4877	1716	3666	9135	15190	2885	2312	2531	3947	1222
MAX	1060	14200	11000	6000	8500	21900	26900	5330	7990	6990	16400	2750
MIN	420	1610	1500	1200	1800	3200	3860	1420	825	964	889	666
CFSM	.29	2.00	2.19	.77	1.64	4.09	6.81	1.29	1.04	1.13	1.77	.55
IN.	.33	2.23	2.52	.89	1.71	4.72	7.60	1.49	1.16	1.31	2.04	.61

e Estimated

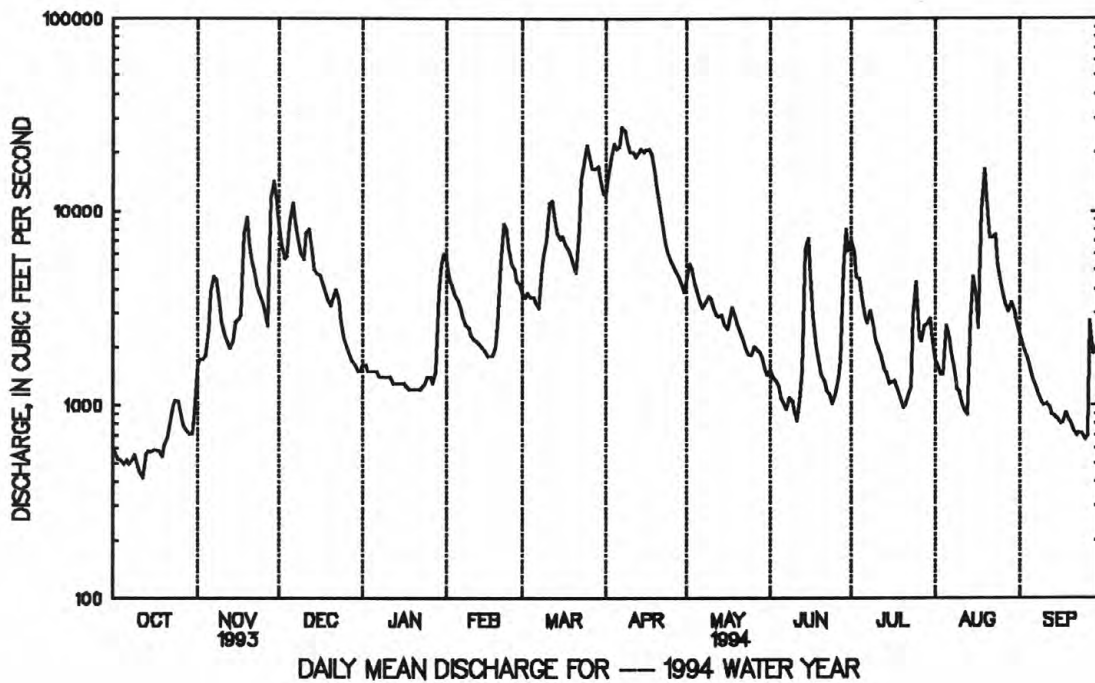
SUSQUEHANNA RIVER BASIN
01503000 SUSQUEHANNA RIVER AT CONKLIN, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1994, BY WATER YEAR (WY)

MEAN	1891	3414	3947	3794	3916	7612	8547	4207	2227	1426	1006	1198
MAX	12860	9281	9665	10110	11150	18540	21340	10590	8122	7929	5033	8783
(WY)	1978	1928	1921	1913	1981	1936	1940	1943	1917	1915	1915	1977
MIN	130	140	641	476	724	2808	2000	1300	509	267	171	142
(WY)	1965	1965	1931	1931	1980	1965	1946	1985	1964	1936	1964	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1913 - 1994	
ANNUAL TOTAL	1426462		1596080			
ANNUAL MEAN	3908		4373		3594	
HIGHEST ANNUAL MEAN					5667	
LOWEST ANNUAL MEAN					1690	
HIGHEST DAILY MEAN	47100	Apr 1	26900	Apr 7	57800	Mar 19 1936
LOWEST DAILY MEAN	265	Sep 2	420	Oct 12	105	Oct 24 1964
ANNUAL SEVEN-DAY MINIMUM	292	Aug 28	490	Oct 6	114	Oct 19 1964
INSTANTANEOUS PEAK FLOW			28300	Apr 7	61600	Mar 18 1936
INSTANTANEOUS PEAK STAGE			13.42	Apr 7	20.83	Mar 22 1948
INSTANTANEOUS LOW FLOW			411	Oct 12	85	Oct 14 1964
ANNUAL RUNOFF (CFSM)	1.75		1.96		1.61	
ANNUAL RUNOFF (INCHES)	23.77		26.60		21.88	
10 PERCENT EXCEEDS	11300		11000		8450	
50 PERCENT EXCEEDS	1200		2580		2000	
90 PERCENT EXCEEDS	351		837		431	



SUSQUEHANNA RIVER BASIN

01505000 CHENANGO RIVER AT SHERBURNE, NY

LOCATION.--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.

DRAINAGE AREA.--263 mi².

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 1502: 1955. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft above sea level. July 22 to Dec. 9, 1953, nonrecording gage or reference point and Dec. 10, 1953 to Jan. 26, 1955, water-stage recorder at temporary site 1.5 mi downstream, at datum approximately 11.9 ft lower, during period of construction of highway bridge.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow from 82 mi² of drainage area formerly may have been diverted into Mohawk River basin through abandoned Chenango Canal; no diversion from this cause known during period of record. Telephone gage-height telemeter and satellite gage-height, temperature, and precipitation telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 10.6 ft, from records of National Weather Service.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 07	1215	3,670	8.38	Apr. 16	1630	*4,540	*8.91

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	152	683	e240	e300	e450	1680	784	193	655	116	188
2	52	178	591	e230	e290	e420	1960	693	185	551	108	178
3	54	177	628	e220	e280	e390	2610	594	163	606	169	162
4	57	198	613	e210	e270	e390	2710	531	146	448	174	150
5	61	321	1210	e190	e260	e390	2450	476	135	363	189	140
6	67	794	857	e190	e260	e390	2650	454	129	311	154	131
7	61	561	732	e190	e260	e390	3340	466	129	323	127	124
8	57	459	648	e180	e260	e400	2820	518	126	329	108	121
9	55	400	562	e180	e250	e430	2330	498	118	261	97	129
10	51	358	602	e180	e250	531	2440	453	110	279	92	136
11	50	325	843	e180	e250	664	2510	405	104	227	87	121
12	49	321	590	e180	e250	566	2350	402	137	187	84	112
13	51	327	574	e180	e250	551	2910	399	134	167	82	107
14	52	323	509	e180	e250	553	3830	358	322	152	203	107
15	52	395	496	e180	e240	564	3240	328	254	166	163	113
16	51	352	480	e170	e240	657	3790	364	190	165	122	113
17	54	489	418	e170	e240	572	3560	357	173	147	102	106
18	68	1270	386	e170	e240	561	2610	336	165	136	1350	103
19	71	780	e380	e170	e250	531	2080	301	165	128	977	100
20	67	685	e370	e170	e280	503	1690	273	160	123	590	97
21	70	570	e360	e170	e480	496	1300	246	158	114	632	91
22	121	491	e340	e160	e800	1100	1030	220	162	112	695	86
23	114	435	e330	e160	e620	1460	849	204	148	121	512	87
24	92	399	e300	e150	e580	1930	734	183	169	131	408	98
25	75	368	e290	e150	e540	2580	722	181	265	114	337	93
26	67	333	e280	e150	e500	2180	689	207	204	144	295	93
27	62	335	e270	e160	e490	1940	645	266	253	144	265	211
28	61	1190	e260	e170	e450	2140	588	200	1000	253	232	227
29	63	1210	e250	e210	---	1960	542	177	737	224	284	181
30	84	830	e240	e340	---	1770	520	164	929	174	232	163
31	100	---	e250	e320	---	1550	---	151	---	138	197	---
TOTAL	2047	15026	15342	5900	9630	29009	61179	11189	7263	7393	9183	3868
MEAN	66.0	501	495	190	344	936	2039	361	242	238	296	129
MAX	121	1270	1210	340	800	2580	3830	784	1000	655	1350	227
MIN	49	152	240	150	240	390	520	151	104	112	82	86
CFSM	.25	1.90	1.88	.72	1.31	3.56	7.75	1.37	.92	.91	1.13	.49
IN.	.29	2.13	2.17	.83	1.36	4.10	8.65	1.58	1.03	1.05	1.30	.55

e Estimated

SUSQUEHANNA RIVER BASIN
01505000 CHENANGO RIVER AT SHERBURNE, NY--Continued

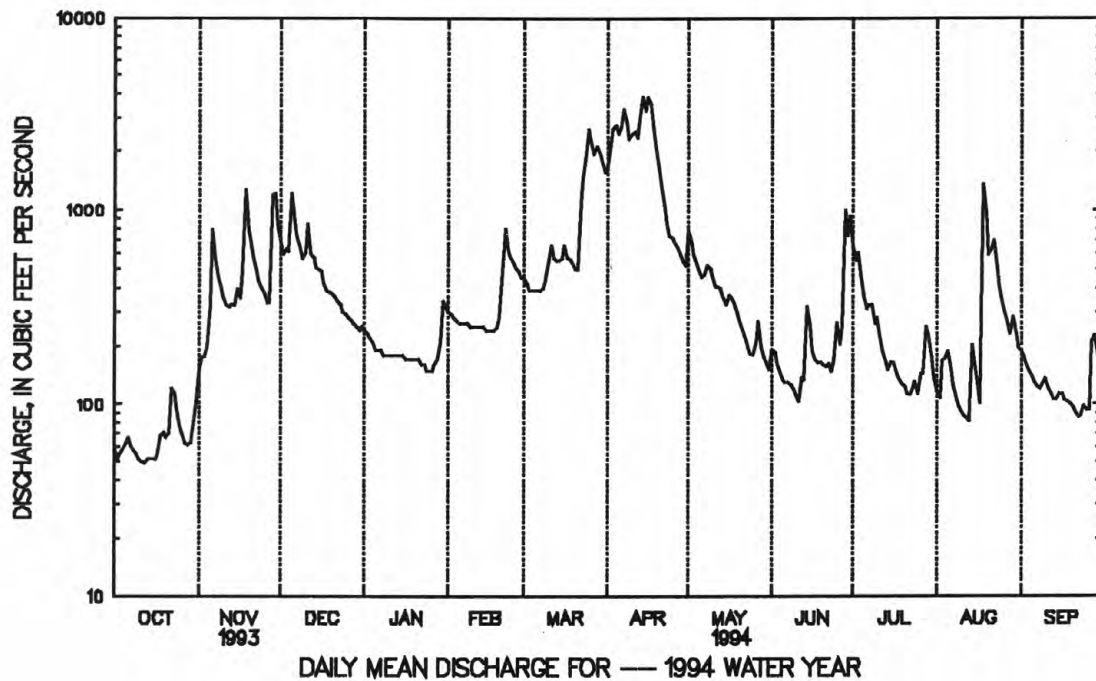
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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	209	341	456	411	465	876	1009	443	253	141	102	136
MAX	1227	792	994	912	1497	2059	2596	989	1190	447	445	853
(WY)	1978	1969	1973	1952	1981	1977	1940	1947	1972	1947	1992	1977
MIN	20.2	33.9	97.3	82.9	102	315	222	144	64.1	28.9	31.3	21.4
(WY)	1964	1965	1961	1961	1980	1941	1946	1941	1941	1962	1939	1939

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	158380		177029			
ANNUAL MEAN	434		485		403	
HIGHEST ANNUAL MEAN					640	
LOWEST ANNUAL MEAN					200	
HIGHEST DAILY MEAN	6110	Apr 11	3830	Apr 14	8570	Mar 6 1979
LOWEST DAILY MEAN	32	Sep 22	49	Oct 12	14	Sep 24 1964
ANNUAL SEVEN-DAY MINIMUM	34	Sep 20	51	Oct 10	15	Sep 21 1964
INSTANTANEOUS PEAK FLOW			4540	Apr 16	10400	Mar 6 1979
INSTANTANEOUS PEAK STAGE			8.91	Apr 16	a9.99	Dec 30 1942
INSTANTANEOUS LOW FLOW			48	Oct 12	12	Sep 25 1964
ANNUAL RUNOFF (CFSM)	1.65		1.84		1.53	
ANNUAL RUNOFF (INCHES)	22.40		25.04		20.80	
10 PERCENT EXCEEDS	1060		1060		939	
50 PERCENT EXCEEDS	177		253		222	
90 PERCENT EXCEEDS	44		93		52	

a Ice jam.



SUSQUEHANNA RIVER BASIN
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. Water-quality sampling site at Cortland Sewage Treatment Plant, 0.4 mi downstream from discharge station.

DRAINAGE AREA.--292 mi², including 14.0 mi², 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. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft above sea level. 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 14	0945	5,910	9.61	Apr. 17	0215	*6,490	*10.00

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	116	565	e250	e340	e480	1710	932	297	536	150	330
2	86	128	485	e240	e330	e450	2100	914	273	397	152	309
3	87	127	594	e230	e320	e410	3320	707	237	486	158	282
4	88	162	671	e210	e310	e430	3610	615	218	404	151	259
5	91	365	1590	e210	e300	e440	3110	564	202	326	146	237
6	95	896	1220	e200	e300	e430	3360	526	193	318	143	217
7	91	577	938	e190	e300	e420	4170	520	189	284	135	209
8	88	398	765	e180	e300	e440	3460	629	184	267	129	210
9	86	329	631	e180	e290	e480	2590	605	174	247	125	219
10	83	287	733	e190	e290	e520	2880	566	165	266	121	221
11	81	270	1300	e190	e290	e740	3210	526	159	229	118	201
12	82	275	921	e190	e280	679	3020	521	165	201	118	189
13	110	272	750	e180	e280	617	3770	513	188	187	120	182
14	108	270	660	e180	e280	579	5540	441	395	179	227	188
15	98	377	628	e180	e280	572	4480	415	331	180	213	191
16	89	326	599	e180	e270	717	5410	448	249	184	165	182
17	94	506	503	e170	e270	610	5360	428	201	171	146	174
18	117	1480	454	e170	e270	594	3230	404	178	164	1890	176
19	108	1020	e440	e170	e280	546	2270	378	164	156	2150	172
20	98	728	e420	e170	e310	505	1820	351	161	151	1040	165
21	102	556	e400	e160	635	504	1430	323	164	143	1150	159
22	137	472	e380	e160	934	1110	1170	303	153	139	1500	152
23	125	417	e370	e160	738	1540	978	284	144	135	905	165
24	114	378	e330	e160	e660	2140	871	260	155	134	625	169
25	108	343	e310	e160	e590	3180	986	277	276	148	521	160
26	104	308	e290	e160	e570	2840	945	301	234	365	542	179
27	102	301	e280	e160	e520	2320	808	317	199	221	463	665
28	103	825	e270	e180	e490	2510	693	274	646	197	399	503
29	100	1190	e260	e250	---	2190	613	256	509	186	390	417
30	93	785	e250	e360	---	1870	572	238	687	176	376	354
31	95	---	e260	e350	---	1580	---	227	---	164	338	---
TOTAL	3054	14484	18267	6120	11027	32443	77486	14063	7490	7341	14806	7236
MEAN	98.5	483	589	197	394	1047	2583	454	250	237	478	241
MAX	137	1480	1590	360	934	3180	5540	932	687	536	2150	665
MIN	81	116	250	160	270	410	572	227	144	134	118	152
CFSM	.34	1.65	2.02	.68	1.35	3.58	8.85	1.55	.86	.81	1.64	.83
IN.	.39	1.85	2.33	.78	1.40	4.13	9.87	1.79	.95	.94	1.89	.92

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
MEAN	256	426	570	495	551	1060	1284	573	328	179	132	157
MAX	1553	1119	1307	1038	1469	2432	3487	1352	1674	539	480	1125
(WY)	1978	1969	1973	1979	1976	1945	1993	1943	1972	1976	1992	1977
MIN	33.2	44.3	86.7	112	127	359	305	212	88.7	43.5	34.6	23.8
(WY)	1965	1965	1961	1961	1963	1941	1946	1985	1939	1962	1939	1939

SUSQUEHANNA RIVER BASIN
01509000 TIOUGHNIAGA RIVER AT CORTLAND, NY--Continued

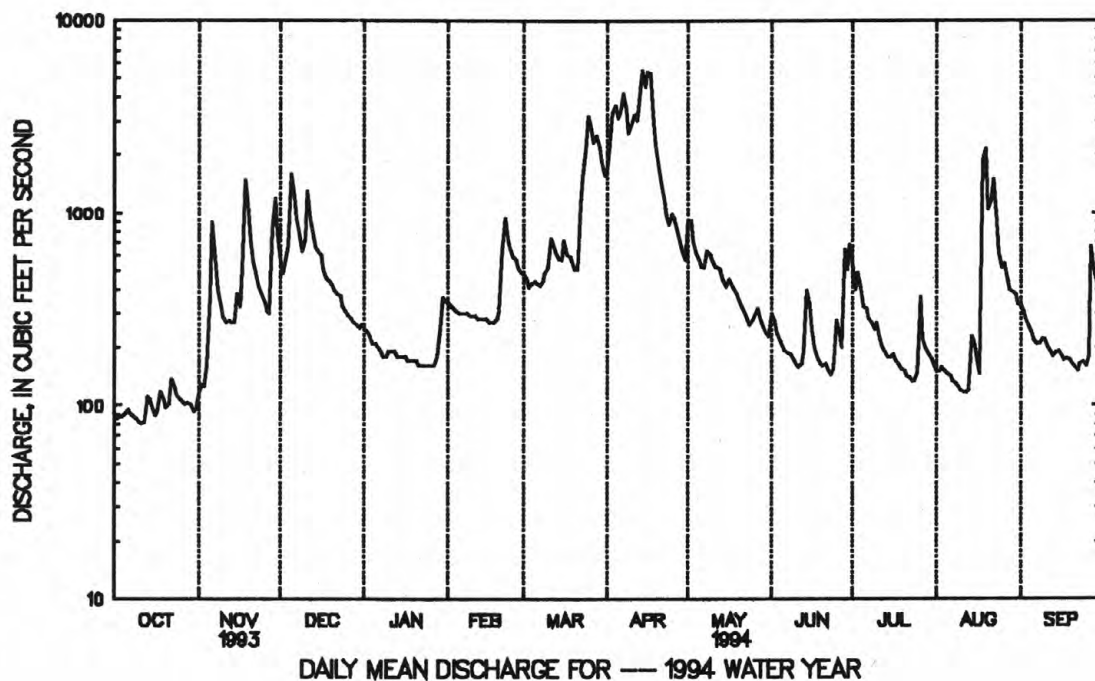
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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	224600		213817			
ANNUAL MEAN	615		586		500	
HIGHEST ANNUAL MEAN					723	
LOWEST ANNUAL MEAN					303	
HIGHEST DAILY MEAN	9490	Apr 11	5540	Apr 14	11500	Mar 6 1979
LOWEST DAILY MEAN	75	Sep 1	81	Oct 11	17	a
ANNUAL SEVEN-DAY MINIMUM	77	Sep 18	87	Oct 6	21	Sep 19 1939
INSTANTANEOUS PEAK FLOW			6490	Apr 17	13000	Mar 5 1964
INSTANTANEOUS PEAK STAGE			10.00	Apr 17	13.82	Apr 5 1950
INSTANTANEOUS LOW FLOW			80	b	9.8	c
ANNUAL RUNOFF (CFSM)	2.11		2.01		1.71	
ANNUAL RUNOFF (INCHES)	28.61		27.24		23.25	
10 PERCENT EXCEEDS	1520		1250		1120	
50 PERCENT EXCEEDS	256		297		282	
90 PERCENT EXCEEDS	84		126		69	

a Sept. 26, 27, 1959.

b Oct. 11, 12.

c Sept. 20 1939, Sept. 29, 1959.



SUSQUEHANNA RIVER BASIN

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 Cincinnati.

DRAINAGE AREA.--147 mi².

PERIOD OF RECORD.--June 1938 to September 1964, October 1969 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft above sea level.

REMARKS.--Records poor. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 07	0745	2,660	5.93	Apr. 16	1600	*4,500	*7.68
Apr. 14	0300	3,580	6.91	Apr. 18	1200	4,010	7.20

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	83	390	e96	e230	e220	824	559	107	409	34	106
2	32	87	346	e94	e210	e200	1150	416	100	324	105	95
3	34	89	483	e92	e190	e190	1940	323	81	342	193	85
4	37	108	484	e90	e180	e180	1760	285	69	244	71	78
5	39	316	1160	e88	e170	e180	1490	258	62	194	106	73
6	41	830	644	e88	e170	e170	1950	243	58	177	74	68
7	36	437	523	e86	e160	e170	2420	238	56	153	57	65
8	30	295	439	e86	e160	e210	1520	319	54	141	48	63
9	27	233	369	e84	e150	272	1170	273	50	123	43	66
10	25	200	484	e82	e150	350	1630	255	47	124	39	65
11	25	178	819	e80	e140	454	1690	227	46	105	36	58
12	26	193	478	e78	e130	354	1570	238	71	84	35	54
13	26	201	410	e78	e130	333	2350	224	83	75	34	52
14	25	217	372	e76	e120	323	3030	192	601	67	311	54
15	24	350	354	e74	e120	330	2330	181	256	78	170	53
16	22	258	333	e72	e120	404	3650	213	149	74	91	53
17	28	587	272	e70	e110	323	2770	190	115	63	71	50
18	52	1350	e240	e70	e110	309	1370	177	96	56	2480	50
19	50	598	e230	e70	e110	286	963	167	85	53	1180	46
20	45	464	e200	e68	e160	264	788	155	76	48	434	44
21	55	353	e190	e68	e340	262	590	140	76	45	661	43
22	107	296	e180	e68	e550	756	467	129	71	42	599	41
23	76	254	e170	e68	e380	927	386	120	58	41	361	46
24	63	229	e160	e68	e320	1300	343	111	74	43	255	48
25	55	196	e150	e68	e290	1920	429	112	159	40	204	45
26	51	163	e140	e68	e260	1140	390	122	98	45	189	48
27	47	163	e130	e68	e240	976	324	149	240	43	161	79
28	47	1040	e120	e88	e230	1130	268	114	862	51	140	89
29	48	784	e110	e160	---	906	231	104	490	54	154	75
30	46	502	e100	e340	---	780	211	91	517	45	127	70
31	54	---	e98	e280	---	688	---	78	---	38	112	---
TOTAL	1313	11054	10578	2966	5630	16307	40004	6403	4907	3421	8575	1862
MEAN	42.4	368	341	95.7	201	526	1333	207	164	110	277	62.1
MAX	107	1350	1160	340	550	1920	3650	559	862	409	2480	106
MIN	22	83	98	68	110	170	211	78	46	38	34	41
CFSM	.29	2.51	2.32	.65	1.37	3.58	9.07	1.41	1.11	.75	1.88	.42
IN.	.33	2.80	2.68	.75	1.42	4.13	10.12	1.62	1.24	.87	2.17	.47

e Estimated

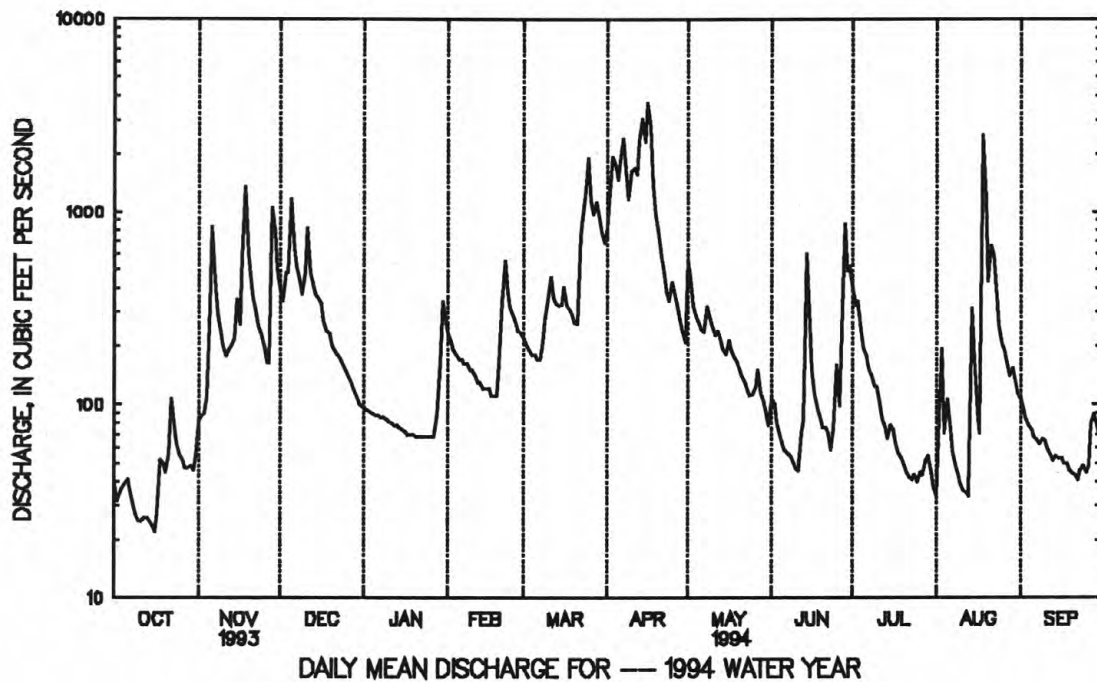
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
MEAN	150	247	328	258	280	592	694	287	157	83.2	57.1	89.2
MAX	713	628	677	587	764	1302	1693	687	773	299	277	706
(WY)	1978	1960	1991	1952	1976	1945	1940	1947	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

SUSQUEHANNA RIVER BASIN
01510000 OTSELIC RIVER AT CINCINNATUS, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	102368		113020		268	
ANNUAL MEAN	280		310		391	
HIGHEST ANNUAL MEAN					168	
LOWEST ANNUAL MEAN					1985	
HIGHEST DAILY MEAN	5300	Apr 11	3650	Apr 16	6200	Mar 20 1948
LOWEST DAILY MEAN	18	Sep 22	22	Oct 16	4.1	Sep 24 1939
ANNUAL SEVEN-DAY MINIMUM	19	Sep 19	25	Oct 10	4.3	Sep 19 1939
INSTANTANEOUS PEAK FLOW			4500	Apr 16	8390	Dec 30 1942
INSTANTANEOUS PEAK STAGE			7.68	Apr 16	10.68	Apr 4 1950
INSTANTANEOUS LOW FLOW			22	Oct 16	3.8	Sep 25 1939
ANNUAL RUNOFF (CFSM)	1.91		2.11		1.82	
ANNUAL RUNOFF (INCHES)	25.91		28.60		24.77	
10 PERCENT EXCEEDS	692		782		612	
50 PERCENT EXCEEDS	92		149		138	
90 PERCENT EXCEEDS	24		45		23	



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 mi².

PERIOD OF RECORD.--November 1912 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 871.63 ft above sea level. 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 01511000). 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 17	0100	*18,700	*9.58	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	554	1060	3890	e1500	e3000	e4700	9940	3450	1000	4450	734	1400
2	432	1120	3700	e1400	e2700	e4700	11600	4250	1090	3360	691	1250
3	439	1120	4120	e1400	e2500	e4500	15000	3330	914	2650	854	1020
4	434	1290	4580	e1300	e2400	e4500	15500	2800	823	2410	856	942
5	446	2120	8420	e1200	e2300	e4500	15600	2370	752	1890	811	901
6	457	5280	7550	e1150	e1800	e4500	16400	2310	703	1560	844	845
7	432	4850	5900	e1100	e1600	e4600	16400	2370	715	1320	743	790
8	414	3180	4870	e1100	e1400	e5000	14800	2790	678	1720	638	749
9	389	2480	4030	e1100	e1300	6730	14400	2990	625	1450	546	746
10	397	2070	4050	e1000	e1200	7660	14200	2740	567	1170	507	751
11	436	1760	7640	e1000	e1200	10400	14700	2440	558	1010	476	751
12	401	1730	5960	e980	e1200	10200	14300	2140	704	886	460	714
13	417	1790	3950	e980	e1200	8920	15800	2320	798	817	483	686
14	446	1810	3930	e980	e1100	8660	16400	2170	7110	781	2570	685
15	435	2780	3910	e980	e1100	8710	17100	1930	4650	779	2510	707
16	414	2960	3740	e980	e1100	8950	17600	2010	2300	1190	1500	689
17	442	2970	3140	e980	e1100	7800	18300	2130	1600	946	1090	658
18	547	9890	2480	e980	e1100	6330	16200	2010	1010	769	7440	640
19	579	7400	2350	e980	e1500	5200	13200	1850	872	708	10700	615
20	597	4760	2370	e980	e2500	3840	11000	1690	773	717	6870	594
21	714	3910	e2400	e960	e5000	3370	9310	1430	735	679	4480	575
22	948	3160	e2600	e960	e8000	6870	8030	1190	745	599	7230	557
23	886	2640	e2300	e960	e7800	10300	7060	1100	682	539	4350	567
24	802	2390	e2000	e960	e6400	12200	6270	1030	687	631	2960	595
25	727	2210	e1800	e960	e5600	13400	5680	987	1170	631	2410	585
26	671	1960	e1700	e960	e5200	12700	4860	1050	1270	636	2180	592
27	598	1740	e1650	e960	e4900	12300	3530	1250	1200	780	1880	1710
28	600	5920	e1600	e1100	e4800	12400	3020	1230	7260	934	1700	1990
29	600	9260	e1600	e2200	---	11800	2500	1070	5930	1100	1840	1640
30	596	6040	e1500	e3800	---	10600	2350	958	4730	855	1640	1350
31	700	---	e1600	e3400	---	9470	---	859	---	757	1450	---
TOTAL	16950	101650	111330	39290	81000	245810	351050	62244	52651	38724	73443	26294
MEAN	547	3388	3591	1267	2893	7929	11700	2008	1755	1249	2369	876
MAX	948	9890	8420	3800	8000	13400	18300	4250	7260	4450	10700	1990
MIN	389	1060	1500	960	1100	3370	2350	859	558	539	460	557

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1994, BY WATER YEAR (WY)

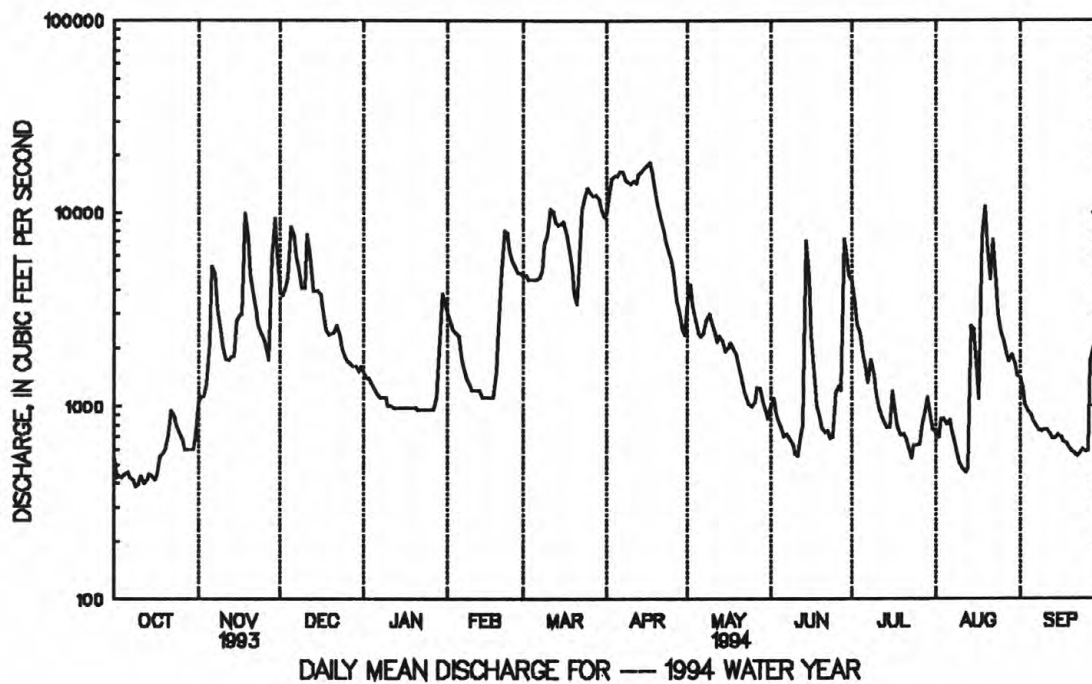
MEAN	1316	2274	2707	2547	2617	5375	5831	2601	1476	919	650	790
MAX	7210	6167	6102	7361	7688	12560	15330	6485	7439	5713	3138	5766
(WY)	1978	1928	1973	1913	1976	1936	1993	1943	1917	1935	1915	1977
MIN	155	168	525	445	472	1977	1317	770	346	175	145	107
(WY)	1940	1965	1961	1961	1980	1937	1946	1985	1939	1939	1913	1939

SUSQUEHANNA RIVER BASIN
01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1913 - 1994	
ANNUAL TOTAL	1041478		1200436		2424	
ANNUAL MEAN	2853		3289		3618	
HIGHEST ANNUAL MEAN					1307	
LOWEST ANNUAL MEAN					1943	
HIGHEST DAILY MEAN	32000	Apr 11	18300	Apr 17	55400	Jul 8 1935
LOWEST DAILY MEAN	250	Sep 1	389	Oct 9	88	Sep 19 1939
ANNUAL SEVEN-DAY MINIMUM	270	Sep 20	412	Oct 7	94	Sep 19 1939
INSTANTANEOUS PEAK FLOW			18700	Apr 17	a96000	Jul 8 1935
INSTANTANEOUS PEAK STAGE			9.58	Apr 17	20.3	Jul 8 1935
INSTANTANEOUS LOW FLOW			374	Oct 10	84	b
10 PERCENT EXCEEDS	7950		8930		6000	
50 PERCENT EXCEEDS	1000		1600		1300	
90 PERCENT EXCEEDS	328		598		302	

a From floodmarks, from rating curve extended above 32,000 ft³/s on basis of slope-area measurement of peak flow.
b Sept. 19, 25, 1939.



SUSQUEHANNA RIVER BASIN

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 mi².

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft above sea level (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 OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 21.4 ft, from flood profile (discharge, 128,000 ft³/s).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 52,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 25	1045	*55,000	*13.53	Apr. 07	2145	53,000	13.21

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1730	2760	17500	e3400	e10300	e7100	29500	8470	3730	13600	3640	5180
2	1550	4000	13600	e3400	e8800	e6900	34000	11100	3980	13100	3300	4690
3	1370	4050	12200	e3200	e8500	e5500	42700	11000	3770	10000	3220	4260
4	1250	4140	12300	e3200	e7500	e6500	48300	9500	3450	8390	3230	3750
5	1260	5390	19400	e2900	e7000	e6500	45600	8140	3160	7730	3180	3410
6	1230	9830	23200	e2900	e6300	e6500	45000	7380	2780	6310	4350	3080
7	1210	12100	20100	e2900	e5600	e6000	49900	7100	2620	5520	3840	2830
8	1170	10500	15800	e2800	e5200	e7000	49400	7380	2480	5450	3230	2660
9	1160	8360	13500	e2800	e4800	e9800	43800	8210	2490	5810	2720	2480
10	1130	6890	12200	e2800	e4500	e11500	40700	8170	2430	5500	2260	2340
11	1080	5880	17000	e2800	e4100	e16000	41100	7800	2180	4490	2130	2270
12	1050	5220	18200	e2700	e3900	e17500	39600	7050	2640	3980	1920	2230
13	1040	5050	14600	e2700	e3800	e16300	43600	6790	3330	3490	1770	2150
14	1080	4930	11500	e2700	e3700	e14500	47600	6690	16700	3120	4360	2060
15	1180	6050	10900	e2700	e3600	e14000	43300	6390	22600	3060	10200	2010
16	1190	7400	10600	e2700	e3500	e15000	44200	5940	12800	2800	8230	2000
17	1220	7230	9910	e2600	e3400	e13000	46600	6070	9230	3190	5920	1960
18	1240	18700	8710	e2600	e3400	e12000	41600	6390	6260	3120	22500	1920
19	1230	22200	7820	e2500	e3400	e11000	36100	6470	4600	2910	32500	1960
20	1420	17100	7520	e2400	e4000	e10200	29500	5960	3760	2480	26800	1900
21	1530	13000	7510	e2400	e9500	e9700	24300	5540	3220	2380	16900	1810
22	1900	10800	8610	e2500	e14200	18800	19900	5030	2940	2320	15800	1720
23	2300	9200	e8300	e2600	e14500	32300	17100	4570	2720	2290	15700	1730
24	2350	8130	e6800	e2700	e12000	43200	15000	4250	2690	2790	11900	1740
25	2320	7430	e5800	e2700	e11000	53100	13500	4090	3730	5180	9210	1740
26	2200	6750	e4700	e2700	e9200	42900	12500	4350	3750	5210	7880	1930
27	1960	6050	e4200	e2600	e8500	38000	11300	4560	4950	3610	6990	8590
28	1790	14700	e4000	e3000	e7800	37700	9760	4540	16100	4040	6420	8960
29	1730	30900	e3400	e7500	---	37100	8720	4320	19300	4960	7300	6250
30	1710	24700	e3200	e11000	---	34100	8020	4040	15400	4760	6730	5470
31	1850	---	e3200	e12000	---	29600	---	3670	---	4450	5830	---
TOTAL	46520	299440	336280	108400	192000	589300	982200	200960	189790	156040	259960	95080
MEAN	1501	9981	10850	3497	6857	19010	32740	6483	6326	5034	8386	3169
MAX	2350	30900	23200	12000	14500	53100	49900	11100	22600	13600	32500	8960
MIN	1040	2760	3200	2400	3400	5500	8020	3670	2180	2290	1770	1720
CFSM	.31	2.09	2.27	.73	1.44	3.98	6.86	1.36	1.33	1.05	1.76	.66
IN.	.36	2.33	2.62	.84	1.50	4.59	7.66	1.57	1.48	1.22	2.03	.74

e Estimated

SUSQUEHANNA RIVER BASIN
01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY--Continued

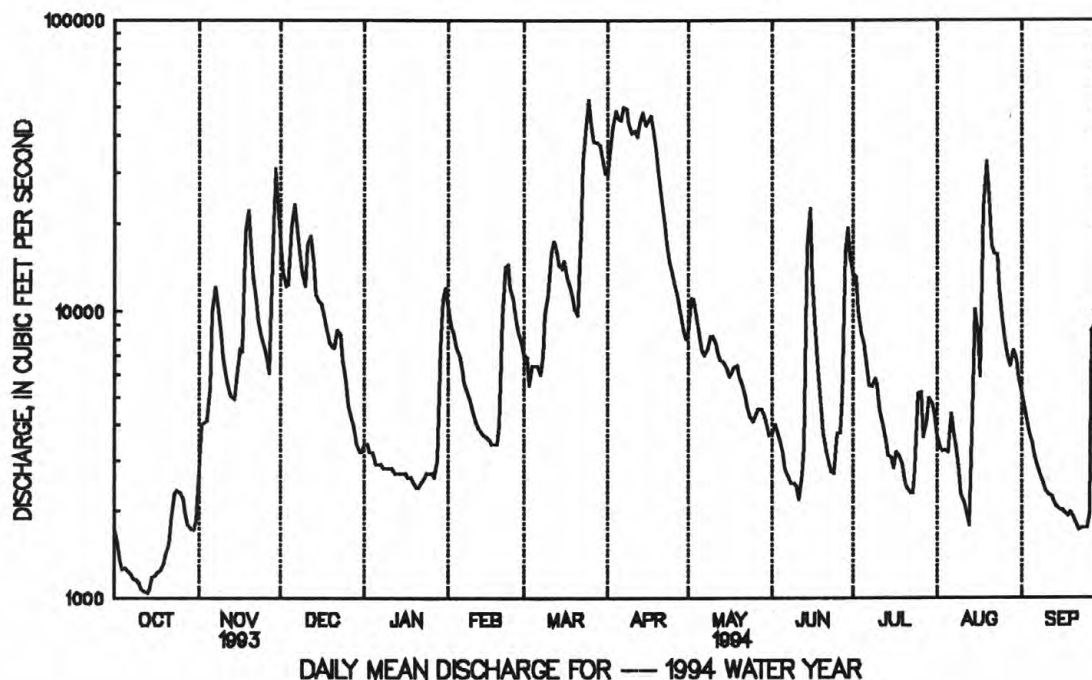
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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

MEAN	3940	6929	8773	7560	8724	16010	18400	9127	4877	2516	1864	2488
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1937 - 1994	
ANNUAL TOTAL	3210141		3455970			
ANNUAL MEAN	8795		9468		7593	
HIGHEST ANNUAL MEAN					11490	1978
LOWEST ANNUAL MEAN					3745	1965
HIGHEST DAILY MEAN	88800	Apr 2	53100	Mar 25	117000	Jun 23 1972
LOWEST DAILY MEAN	604	Aug 30	1040	Oct 13	237	a
ANNUAL SEVEN-DAY MINIMUM	654	Aug 28	1100	Oct 8	248	Sep 17 1964
INSTANTANEOUS PEAK FLOW			55000	Mar 25	121000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			13.53	Mar 25	21.24	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.84		1.98		1.59	
ANNUAL RUNOFF (INCHES)	25.02		26.94		21.60	
10 PERCENT EXCEEDS	24100		22500		18000	
50 PERCENT EXCEEDS	3000		5500		4200	
90 PERCENT EXCEEDS	835		1950		844	

a Sept. 22, 23, 1964.



SUSQUEHANNA RIVER BASIN

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--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.

DRAINAGE AREA.--771 mi².

PERIOD OF RECORD.--January 1930 to current year.

REVISED RECORDS.--WSP 871: 1938. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft above sea level. Prior to Feb. 9, 1937, nonrecording gage on bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since March 1979, flood flows regulated by detention in upstream reservoirs. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	211	2380	321	934	876	4370	1100	503	1090	456	759
2	174	250	1580	313	965	925	6100	986	502	608	364	558
3	168	262	1200	307	717	937	8910	746	284	486	436	487
4	158	282	1380	e270	749	1040	8110	737	246	386	538	435
5	158	340	1860	e300	698	871	5270	722	173	316	566	377
6	139	712	1630	e300	699	865	5150	650	201	419	402	359
7	142	638	1180	311	615	879	5040	590	304	2210	210	299
8	165	658	987	313	548	1080	3130	683	239	3440	210	235
9	165	582	896	e310	510	1400	2380	692	162	1150	214	232
10	168	462	927	e280	493	1600	2730	590	156	896	209	236
11	185	318	1070	261	461	2200	3370	581	213	626	201	252
12	183	279	978	247	418	2680	4100	526	1190	443	201	249
13	167	275	742	251	413	2570	5640	487	1390	498	232	241
14	121	270	712	283	423	2700	4860	430	8380	2080	4420	225
15	100	452	769	e260	429	3150	3150	380	5570	1350	4360	209
16	94	597	714	e260	425	4060	3130	423	1530	594	1230	181
17	99	569	666	e270	420	3980	3020	496	1450	478	1070	180
18	100	2630	616	e270	421	2670	2020	399	1100	388	7380	177
19	110	1490	591	e290	451	1690	1560	317	697	332	9150	177
20	154	1160	628	e310	1280	1640	1110	335	573	262	10200	174
21	204	952	620	e310	5210	1700	896	283	440	217	9890	170
22	217	731	633	e340	5530	4070	950	277	374	205	8960	158
23	216	602	532	e330	4020	7200	883	267	285	890	6600	161
24	208	555	416	336	2380	9860	796	229	365	770	4980	163
25	175	492	341	345	1860	6520	756	225	3130	592	1970	183
26	144	438	e320	377	1420	9640	659	706	1420	440	2990	244
27	139	430	e340	411	1230	11000	647	364	877	354	1270	1710
28	139	7340	e240	e600	912	10300	617	350	3440	854	1080	961
29	139	7580	e290	e2300	---	7720	598	307	1910	892	2140	645
30	142	5060	e290	2430	---	4640	677	239	1060	872	1600	337
31	160	---	325	1310	---	3810	---	216	---	801	924	---
TOTAL	4856	36617	25853	14816	34631	114273	90629	15333	38164	24939	84453	10774
MEAN	157	1221	834	478	1237	3686	3021	495	1272	804	2724	359
MAX	223	7580	2380	2430	5530	11000	8910	1100	8380	3440	10200	1710
MIN	94	211	240	247	413	865	598	216	156	205	201	158
CFSM	.20	1.58	1.08	.62	1.60	4.78	3.92	.64	1.65	1.04	3.53	.47
IN.	.23	1.77	1.25	.71	1.67	5.51	4.37	.74	1.84	1.20	4.07	.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)

	MEAN	353	633	785	714	875	1989	1974	1118	604	244	236	204
MAX	2730	2476	2275	2413	2818	7157	8379	3077	4304	1032	2724	2821	
(WY)	1991	1978	1978	1937	1981	1936	1993	1943	1972	1984	1994	1975	
MIN	17.3	27.4	52.0	59.5	86.1	445	270	184	76.0	36.8	19.3	13.1	
(WY)	1965	1965	1931	1931	1934	1981	1946	1934	1991	1966	1966	1964	

e Estimated

SUSQUEHANNA RIVER BASIN
01520500 TIOGA RIVER AT LINDLEY, NY--Continued

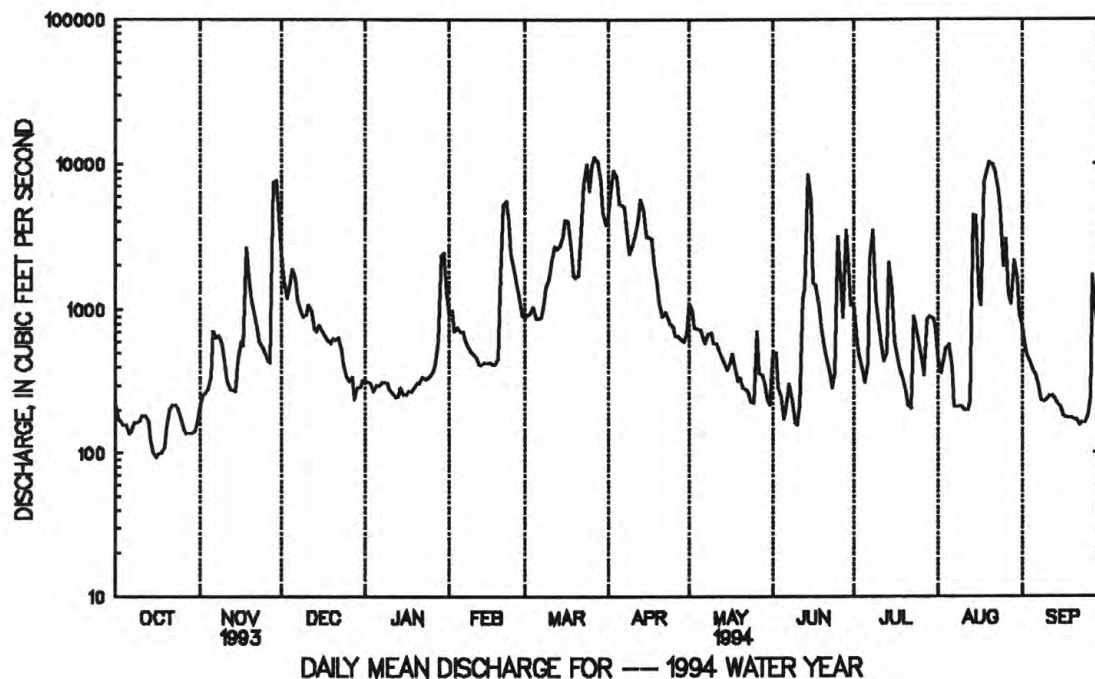
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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1930 - 1994	
ANNUAL TOTAL	450830		495338		812	
ANNUAL MEAN	1235		1357		1451	
HIGHEST ANNUAL MEAN					360	
LOWEST ANNUAL MEAN					63000	
HIGHEST DAILY MEAN	12400	Apr 4	11000	Mar 27		Jun 23 1972
LOWEST DAILY MEAN	50	Aug 9	94	Oct 16	7.2	Sep 1 1939
ANNUAL SEVEN-DAY MINIMUM	53	Aug 3	111	Oct 14	9.5	Aug 28 1939
INSTANTANEOUS PEAK FLOW			13900	Aug 18	a128000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			13.38	Aug 18	b26.27	Jun 23 1972
INSTANTANEOUS LOW FLOW			93	c	6.1	Sep 1 1939
ANNUAL RUNOFF (CFSM)	1.60		1.76		1.05	
ANNUAL RUNOFF (INCHES)	21.75		23.90		14.32	
10 PERCENT EXCEEDS	3700		4040		1930	
50 PERCENT EXCEEDS	290		573		300	
90 PERCENT EXCEEDS	57		182		55	

a From rating curve extended above 31,000 ft³/s on basis of velocity-area and slope-area studies at gage height 19.2 ft and conveyance study and slope-area measurements at gage heights 22.87 ft and 26.27 ft.

b From flood mark in gage house.

c Oct. 16, 17.



SUSQUEHANNA RIVER BASIN

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 mi².

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 sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since November 1939, flows above 500 ft³/s controlled by detention in Arkport Reservoir (see station 01521000). Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft³/s, on basis of slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	7.0	37	e9.0	e36	e36	116	91	93	17	e1.7	13
2	4.4	7.2	30	e9.0	e30	e34	206	52	29	12	e1.7	9.8
3	4.7	9.5	29	e8.0	e26	e33	341	36	19	8.6	e1.6	7.9
4	4.6	14	52	e8.0	e23	e32	152	29	14	7.0	e1.6	6.1
5	6.5	55	100	e8.0	e21	e31	114	25	11	6.0	e1.8	5.0
6	6.0	41	56	e7.8	e19	e30	173	23	9.5	8.2	e1.6	4.4
7	4.9	21	52	e7.8	e18	e30	223	21	9.0	8.9	e1.5	3.9
8	4.1	14	42	e7.6	e17	e35	122	49	7.4	6.3	e3.0	3.4
9	3.9	11	33	e7.6	e16	e50	110	39	6.2	4.7	e2.6	4.4
10	4.2	9.0	32	e7.4	e14	e45	224	60	5.0	4.1	e2.0	4.9
11	5.0	7.6	35	e7.4	e13	e42	111	36	6.8	3.9	e1.9	3.6
12	4.1	11	24	e7.3	e13	e40	167	39	8.9	3.4	e1.7	3.1
13	3.8	12	22	e7.3	e12	e38	250	32	67	3.1	e4.5	3.0
14	3.4	18	20	e7.3	e12	49	175	25	632	2.8	e60	2.7
15	3.4	49	e18	e7.3	e11	77	87	25	260	2.7	19	2.2
16	3.4	26	e18	e7.3	e10	98	127	28	36	2.4	11	2.1
17	4.6	245	e15	e7.3	e10	e60	122	28	23	2.0	8.0	2.5
18	5.2	165	e15	e7.2	e13	e55	69	28	15	1.9	27	3.2
19	5.6	53	e16	e7.2	e28	e45	55	25	11	2.1	14	2.6
20	6.4	40	e18	e7.2	e400	e36	43	22	8.9	1.9	8.3	2.3
21	8.9	30	19	e7.1	e650	e50	34	18	8.8	1.8	47	2.1
22	12	27	18	e7.1	e210	188	28	15	7.0	1.9	23	2.0
23	8.1	25	e15	e7.1	e100	337	24	13	5.5	e1.9	12	2.5
24	6.3	21	e12	e7.1	e56	513	22	11	8.0	e1.9	7.2	2.7
25	5.2	18	e12	e7.1	e45	503	21	21	18	e2.0	97	2.5
26	4.7	15	e11	e7.1	e42	107	24	24	12	e2.1	69	3.8
27	4.6	18	e10	e7.1	e40	151	66	40	11	e1.8	23	5.6
28	4.6	630	e9.8	e12	e38	148	33	22	16	e2.0	107	5.8
29	4.6	154	e9.6	e90	---	95	33	16	12	e2.4	80	8.7
30	4.7	55	e9.2	e55	---	81	31	12	25	e2.0	27	11
31	5.8	---	e9.0	e44	---	76	---	11	---	e1.8	17	---
TOTAL	163.0	1808.3	798.6	403.7	1923	3145	3303	916	1395.0	130.6	683.7	136.8
MEAN	5.26	60.3	25.8	13.0	68.7	101	110	29.5	46.5	4.21	22.1	4.56
MAX	12	630	100	90	650	513	341	91	632	17	107	13
MIN	3.4	7.0	9.0	7.1	10	30	21	11	5.0	1.8	1.5	2.0

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
MEAN	16.4	28.4	39.0	34.9	44.9	87.3	84.2	39.6	26.8	8.04	6.39	10.2
MAX	98.4	106	132	100	195	188	205	144	245	46.2	58.6	151
(WY)	1977	1951	1973	1952	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	.82	.88	.81
(WY)	1942	1961	1961	1961	1958	1981	1946	1955	1955	1955	1966	1941

SUSQUEHANNA RIVER BASIN
01521500 CANISTEO RIVER AT ARKPORT, NY--Continued

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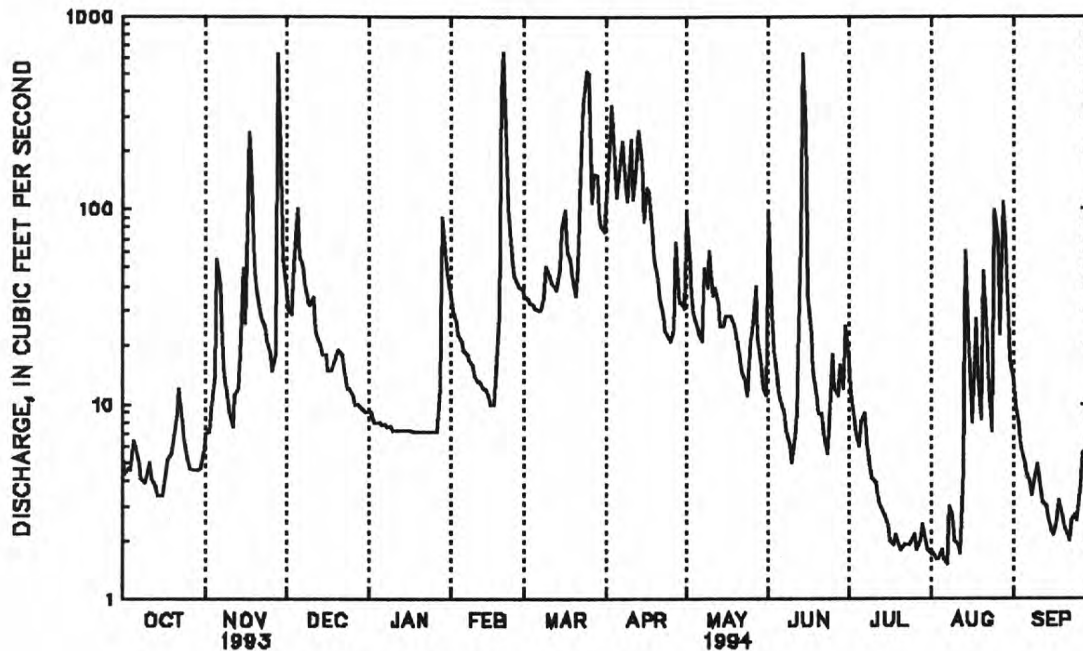
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1937 - 1994
ANNUAL TOTAL	15801.9	14806.7	
ANNUAL MEAN	43.3	40.6	35.5
HIGHEST ANNUAL MEAN			55.9
LOWEST ANNUAL MEAN			20.9
HIGHEST DAILY MEAN	814 Apr 1	650 Feb 21	1300 Feb 20 1939
LOWEST DAILY MEAN	1.2 Jul 25	1.5 Aug 7	.40 Sep 2 1939
ANNUAL SEVEN-DAY MINIMUM	1.4 Aug 9	1.6 Aug 1	.57 Sep 16 1941
INSTANTANEOUS PEAK FLOW		Unknown Feb 21	2000 a
INSTANTANEOUS PEAK STAGE		b4.73 Feb 20	b5.63 Feb 19 1939
INSTANTANEOUS LOW FLOW		.96 Aug 3	c.00 d
10 PERCENT EXCEEDS	83	97	77
50 PERCENT EXCEEDS	9.6	14	12
90 PERCENT EXCEEDS	1.8	2.7	1.7

a Mar. 5, 1938, Feb. 20, 1939.

b Ice jam.

c Practically no flow (result of construction operations).

d July 30, 1938, Sep. 30, 1939.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

SUSQUEHANNA RIVER BASIN

01523500 CANACADEA CREEK NEAR HORNEILL, 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 mi².

PERIOD OF RECORD.--October 1940 to December 1942, October 1944 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1971: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft above sea level. 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 OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft, discharge, 21,000 ft³/s, from floodmarks on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	26	106	20	62	39	242	197	199	67	10	25
2	28	33	66	20	49	e44	453	165	135	41	10	19
3	28	27	66	20	43	43	724	93	51	34	9.6	19
4	20	24	74	19	40	37	639	68	37	34	9.0	17
5	20	71	186	19	36	39	289	56	26	26	9.0	15
6	25	115	168	26	30	40	334	56	26	21	9.1	14
7	17	90	102	31	31	34	455	50	32	31	7.9	14
8	12	50	94	23	29	56	399	60	35	39	12	14
9	15	35	66	19	28	75	212	86	27	30	11	11
10	15	30	55	19	28	162	464	81	26	18	9.0	11
11	15	27	64	23	e24	137	315	54	25	14	7.9	12
12	21	29	50	26	23	55	302	45	28	14	7.4	12
13	22	34	40	21	22	58	547	45	50	14	9.3	13
14	13	35	44	17	e22	76	600	58	446	14	113	9.5
15	7.8	42	42	e17	e22	90	341	56	987	14	73	8.0
16	8.4	53	44	18	22	171	189	53	803	12	13	9.6
17	8.5	356	46	19	22	171	308	47	175	11	9.8	9.6
18	8.5	563	33	24	23	102	219	48	61	13	79	9.6
19	8.6	129	25	e40	36	76	124	45	34	15	52	9.6
20	16	74	40	e48	235	73	100	42	28	12	25	9.6
21	19	68	45	51	621	67	60	38	27	7.9	108	12
22	23	50	40	51	526	315	57	29	27	8.6	86	16
23	23	38	35	40	282	670	53	30	21	11	45	12
24	19	35	30	17	136	395	50	25	17	11	33	9.0
25	17	35	26	17	84	293	49	24	26	11	23	8.7
26	14	28	25	e17	57	972	57	68	32	11	79	13
27	14	25	25	e18	52	1250	83	101	32	9.6	79	21
28	14	502	25	20	43	802	94	72	45	11	59	15
29	14	791	25	128	---	267	75	48	39	15	90	12
30	14	273	25	112	---	210	77	31	73	14	50	15
31	14	---	22	76	---	156	---	23	---	10	34	---
TOTAL	521.8	3688	1734	1016	2628	6975	7911	1894	3570	594.1	1172.0	395.2
MEAN	16.8	123	55.9	32.8	93.9	225	264	61.1	119	19.2	37.8	13.2
MAX	28	791	186	128	621	1250	724	197	987	67	113	25
MIN	7.8	24	22	17	22	34	49	23	17	7.9	7.4	8.0

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	MEAN	33.1	54.8	70.8	62.3	77.1	154	145	73.3	56.9	23.5	19.3	25.8
MAX	139	193	218	153	278	341	470	215	547	111	128	198	
(WY)	1977	1951	1973	1952	1976	1945	1993	1984	1972	1972	1984	1977	
MIN	6.81	7.63	7.13	6.55	17.7	33.4	22.8	15.5	5.24	4.63	5.13	5.60	
(WY)	1942	1942	1961	1961	1980	1969	1946	1955	1965	1965	1965	1941	

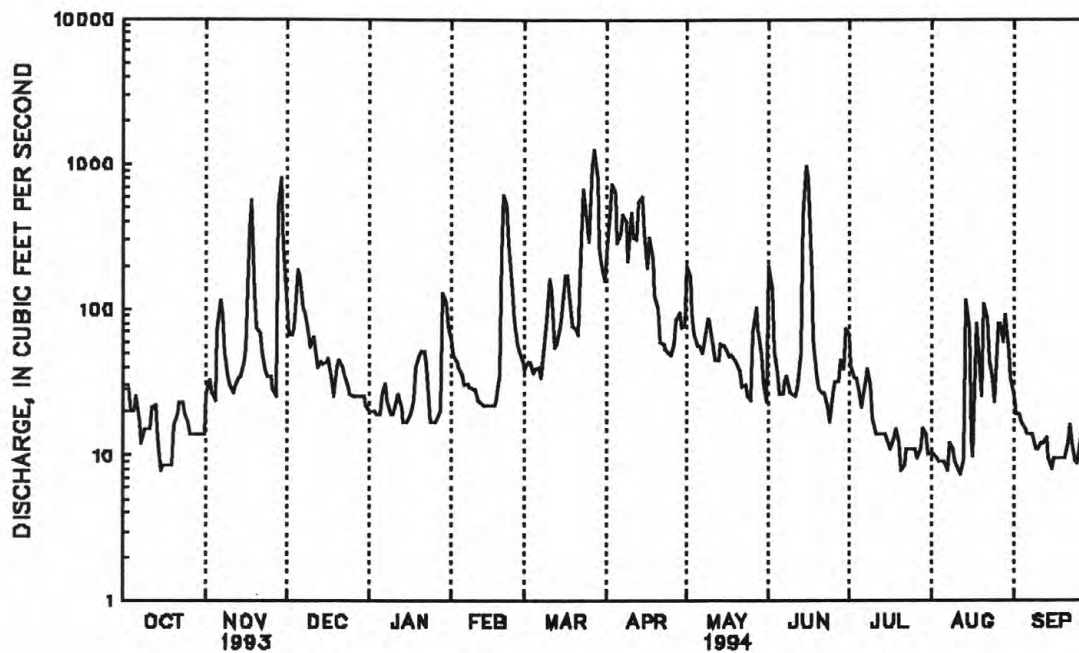
SUSQUEHANNA RIVER BASIN
01523500 CANACADEA CREEK NEAR HORNELLS, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1941 - 1994	
ANNUAL TOTAL	30407.6		32099.1		66.0	
ANNUAL MEAN	83.3		87.9		110	
HIGHEST ANNUAL MEAN					36.9	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	1590	Apr 5	1250	Mar 27	3970	Jun 23 1972
LOWEST DAILY MEAN	4.2	Aug 24	7.4	Aug 12	.60	a
ANNUAL SEVEN-DAY MINIMUM	7.8	Aug 23	9.2	Aug 6	.83	May 26 1965
INSTANTANEOUS PEAK FLOW			1370	Mar 26	b9430	May 17 1945
INSTANTANEOUS PEAK STAGE			3.12	Mar 26	6.65	Jun 3 1947
INSTANTANEOUS LOW FLOW			4.1	Sep 21	.50	May 29 1965
10 PERCENT EXCEEDS	186		215		145	
50 PERCENT EXCEEDS	26		34		26	
90 PERCENT EXCEEDS	10		11		8.2	

a May 30 to June 1, 1965.

b From rating curve extended above 3,400 ft³/s.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

SUSQUEHANNA RIVER BASIN

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNEILL, 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 mi².

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 sea level.

REMARKS.--Records fair. Diversion from Carrington Creek, a tributary upstream from station, by City of Hornell for municipal supply (1994 average 3.1 ft³/s); 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	59	224	57	e110	e110	550	381	e400	114	25	71
2	55	59	166	51	e95	e120	849	e300	e300	79	24	60
3	54	60	167	e48	e85	e120	1110	e200	e120	70	23	54
4	45	64	257	46	e80	e110	823	e150	e90	64	23	48
5	44	178	451	e56	e75	110	559	e120	e65	55	25	43
6	50	200	305	e65	e70	e100	714	e120	e60	45	23	42
7	41	138	252	e70	e72	131	865	e110	e70	e60	22	41
8	34	85	215	62	e70	222	642	e130	e75	e70	e28	39
9	37	68	159	60	e65	219	500	e180	e65	e60	e26	33
10	37	59	150	e58	e65	355	846	e170	59	44	e22	33
11	37	56	155	69	e58	254	500	e120	70	38	e20	34
12	43	58	119	83	e56	162	743	e95	73	36	e19	34
13	44	64	e110	58	e54	192	992	e95	473	35	e24	33
14	36	76	113	51	e54	234	904	e120	1550	34	e240	30
15	31	119	108	e55	53	319	519	e120	1150	35	e160	29
16	32	111	114	e55	58	409	558	e110	666	34	37	30
17	35	680	103	63	61	340	594	e100	227	31	42	30
18	35	622	87	e70	61	236	398	e100	133	37	168	31
19	34	278	86	e90	108	224	297	e100	95	e40	79	29
20	40	204	124	e98	669	202	227	e90	78	e35	55	28
21	46	170	116	e98	1170	267	177	e85	80	e27	248	30
22	53	130	101	e98	749	828	143	e70	74	25	131	34
23	52	129	81	e86	427	1380	127	e65	61	26	85	31
24	45	112	68	e60	307	1610	112	e56	72	26	62	28
25	40	102	e66	e58	226	1140	99	e54	92	27	181	27
26	37	83	e64	e58	162	1140	92	e150	81	27	216	62
27	38	199	e63	e60	e160	1330	e180	e200	85	26	131	56
28	40	1150	62	e72	e120	874	e160	e160	109	28	349	43
29	40	776	61	e200	---	528	e150	e100	93	33	253	41
30	40	396	60	e160	---	447	e140	e58	148	29	124	46
31	46	---	73	e130	---	408	---	e52	---	26	95	---
TOTAL	1295	6485	4280	2345	5340	14121	14570	3961	6714	1316	2960	1170
MEAN	41.8	216	138	75.6	191	456	486	128	224	42.5	95.5	39.0
MAX	55	1150	451	200	1170	1610	1110	381	1550	114	349	71
MIN	31	56	60	46	53	100	92	52	59	25	19	27

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

	76.5	122	160	148	186	365	350	195	141	56.1	48.0	60.8
MEAN	76.5	122	160	148	186	365	350	195	141	56.1	48.0	60.8
MAX	304	455	551	361	722	826	877	696	1226	249	303	498
(WY)	1977	1951	1973	1952	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

SUSQUEHANNA RIVER BASIN

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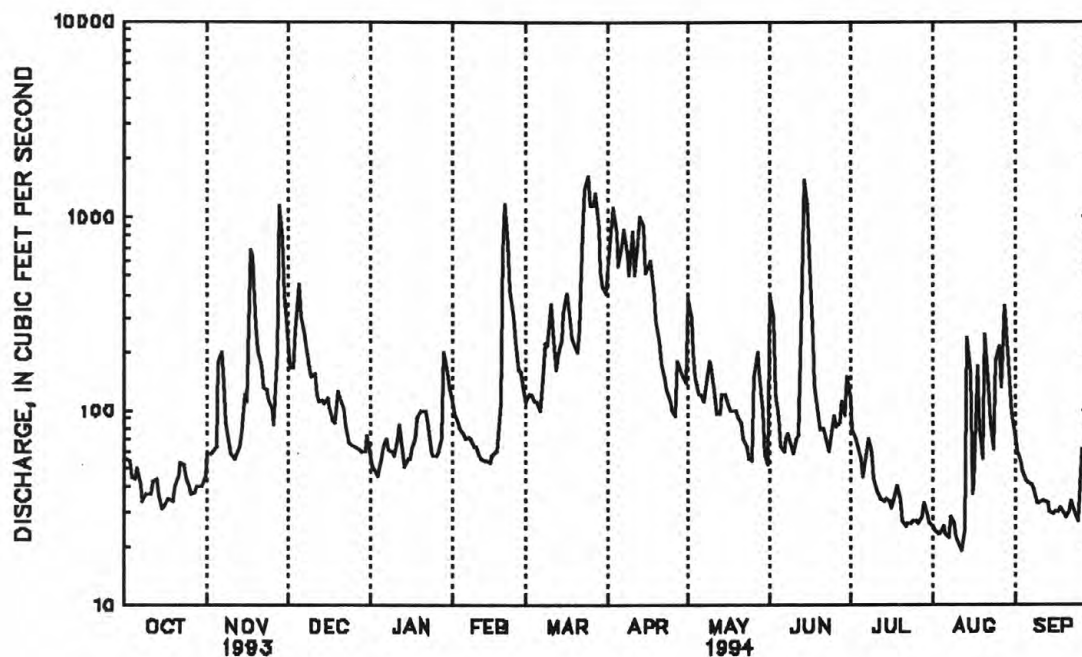
01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNE LL, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1942 - 1994	
ANNUAL TOTAL	72437		64557		159	
ANNUAL MEAN	198		177		79.8	
HIGHEST ANNUAL MEAN					255	
LOWEST ANNUAL MEAN					79.8	
HIGHEST DAILY MEAN	1830	Apr 5	1610	Mar 24	7440	Jun 23 1972
LOWEST DAILY MEAN	20	Aug 8	19	Aug 12	9.0	Sep 13 1955
ANNUAL SEVEN-DAY MINIMUM	23	Aug 5	23	Aug 6	10	Sep 8 1955
INSTANTANEOUS PEAK FLOW			2370	Jun 14	a9560	Jun 23 1972
INSTANTANEOUS PEAK STAGE			4.56	Jun 14	b13.45	Jun 23 1972
INSTANTANEOUS LOW FLOW			17	Aug 4	7.4	c
10 PERCENT EXCEEDS	500		460		349	
50 PERCENT EXCEEDS	82		80		69	
90 PERCENT EXCEEDS	31		32		22	

a From rating curve extended above 7,600 ft³/s on basis of critical-depth measurement of peak flow.

b From floodmark.

c Sept. 13, 14, 1955.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

SUSQUEHANNA RIVER BASIN

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 mi².

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 sea level. 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. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	334	301	3460	e460	1430	e1350	7090	2020	1120	1600	538	1230
2	278	358	2500	e450	1510	e1300	9330	2240	1410	966	439	907
3	257	381	1810	e450	1240	e1200	14000	1600	758	772	468	766
4	249	442	1970	e450	1190	1500	12700	1420	594	624	613	685
5	250	498	3210	e420	929	1460	8380	1320	465	535	642	586
6	225	1400	2930	e420	900	1320	7880	1200	419	635	500	552
7	228	1180	2150	e430	873	1360	9370	1080	744	2320	289	486
8	242	1020	1830	e430	e780	1620	6390	1230	591	3920	260	390
9	231	850	1590	e430	e710	2140	4700	1400	415	1510	261	371
10	223	696	1540	e400	e700	2370	5110	1220	360	1180	257	368
11	237	519	1730	e370	e690	3180	6160	1190	373	864	247	373
12	242	443	1470	e360	e680	3520	5870	1040	1600	596	242	366
13	223	444	1160	e360	e680	3350	10100	972	1620	566	271	356
14	201	450	1100	e400	e660	3750	9520	869	15300	2110	4540	335
15	160	557	1200	e370	e640	4280	6040	778	9640	1460	5560	322
16	144	916	1110	e375	613	5870	5560	850	3690	775	1670	276
17	146	747	1010	e390	613	5510	5740	950	2770	588	1160	271
18	151	4980	942	e380	626	3980	4040	842	1890	515	12400	272
19	151	2940	898	e410	693	2740	3010	729	1200	463	9720	264
20	201	1960	968	e430	1610	2500	2370	718	969	445	9810	255
21	252	1570	992	e430	9670	2560	1840	633	759	341	10200	247
22	287	1230	1020	e490	9800	5830	1730	581	669	304	10200	233
23	307	982	874	e460	6460	11500	1580	538	549	754	7340	258
24	305	914	659	e460	3990	19200	1400	494	520	948	5600	274
25	263	796	615	e480	3100	17900	1310	444	3780	695	2840	282
26	221	719	566	e540	2280	12400	1220	1070	2080	525	4040	388
27	209	638	e490	e700	e1800	14500	1270	1030	1210	458	2220	2410
28	207	12400	e450	e860	e1500	14700	1290	830	3720	750	1860	1560
29	204	11400	e440	e3000	---	11200	1140	682	2780	1080	2920	1050
30	207	7230	e460	3760	---	7600	1290	534	1470	837	2400	618
31	230	---	e460	2110	---	6160	---	458	---	952	1470	---
TOTAL	7065	58961	41604	21475	56367	177850	157430	30962	63465	30088	100977	16751
MEAN	228	1965	1342	693	2013	5737	5248	999	2115	971	3257	558
MAX	334	12400	3460	3760	9800	19200	14000	2240	15300	3920	12400	2410
MIN	144	301	440	360	613	1200	1140	444	360	304	242	233
CFM	.17	1.43	.97	.50	1.46	4.17	3.81	.73	1.54	.70	2.37	.41
IN.	.19	1.59	1.12	.58	1.52	4.80	4.25	.84	1.71	.81	2.73	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1994, BY WATER YEAR (WY)

	MEAN	586	1115	1310	1204	1490	3467	3355	1947	1031	444	361	353
MAX	4160	5296	4369	4002	5305	11350	11970	7043	8905	2310	3257	3992	
(WY)	1991	1928	1973	1937	1976	1936	1993	1919	1972	1935	1994	1975	
MIN	44.8	60.4	95.5	108	140	843	469	316	136	72.7	49.6	38.7	
(WY)	1965	1965	1931	1961	1934	1981	1946	1934	1955	1962	1966	1932	

e Estimated

SUSQUEHANNA RIVER BASIN

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01526500 TIOGA RIVER NEAR ERWINS, NY--Continued

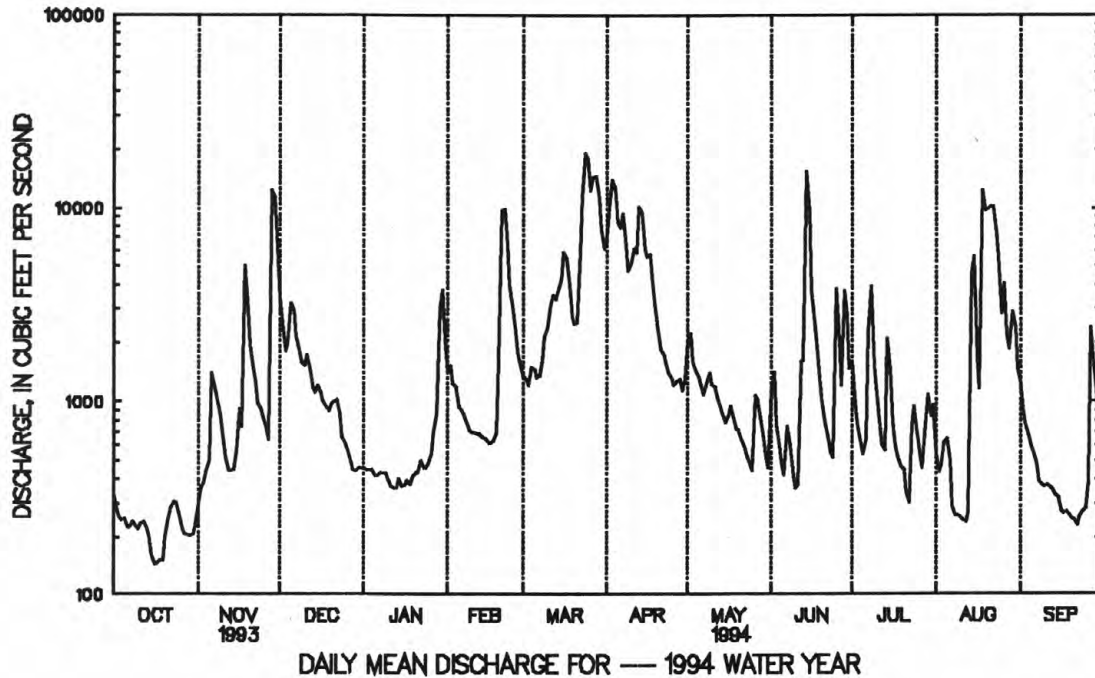
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1918 - 1994	
ANNUAL TOTAL	711224		762995			
ANNUAL MEAN	1949		2090		1387	
HIGHEST ANNUAL MEAN					2371	
LOWEST ANNUAL MEAN					634	
HIGHEST DAILY MEAN	19300		19200		110000	
LOWEST DAILY MEAN	84	Apr 17	144	Mar 24	20	Jun 23 1972
ANNUAL SEVEN-DAY MINIMUM	93	Aug 10	165	Oct 16	22	Sep 2 1939
INSTANTANEOUS PEAK FLOW			27800		a190000	
INSTANTANEOUS PEAK STAGE			13.21		b26.74	
INSTANTANEOUS LOW FLOW			138		18	
ANNUAL RUNOFF (CFSM)	1.42		1.52		1.01	
ANNUAL RUNOFF (INCHES)	19.21		20.61		13.68	
10 PERCENT EXCEEDS	7140		5870		3310	
50 PERCENT EXCEEDS	490		874		521	
90 PERCENT EXCEEDS	107		268		105	

a From rating curve extended above 90,000 ft³/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.

b From floodmarks.

c Oct. 16, 17.

d Sept. 2, 3, 1939.



SUSQUEHANNA RIVER BASIN
01528000 FIVEMILE CREEK NEAR KANONA, NY

LOCATION.--Lat 42°23'18", long 77°21'29", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from town of Wheeler highway bridge, 1.3 mi upstream from mouth and Kanona.

DRAINAGE AREA.--66.8 mi².

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft above sea level (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 880 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	1115	896	4.13	Mar. 24	2230	*1,410	4.92
Mar. 22	1900	ice jam	*5.85				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	9.5	125	e34	e52	e48	394	141	68	55	5.4	12
2	5.4	11	93	e34	e52	e45	494	124	55	34	4.6	7.9
3	5.6	12	85	e33	e48	e42	668	85	39	31	4.2	7.4
4	5.2	17	115	e33	e44	e38	589	68	30	26	4.3	7.0
5	5.6	39	309	e33	e39	e36	393	60	25	23	4.0	6.3
6	5.3	84	203	e32	e36	e36	358	56	23	104	3.8	5.8
7	5.3	53	134	e33	e35	e35	453	51	21	94	4.2	4.8
8	5.2	36	103	e33	e34	e35	385	100	18	45	3.6	4.5
9	5.0	28	83	e33	e33	e35	309	97	16	30	2.9	5.2
10	4.8	23	78	e33	e32	e35	323	127	13	23	3.0	4.4
11	4.9	22	81	e32	e32	e36	289	105	14	19	2.8	3.9
12	4.6	22	65	e32	e32	e38	264	81	17	15	2.6	4.0
13	4.5	22	e60	e32	e32	e39	436	67	26	13	2.9	3.9
14	4.5	24	e52	e32	e32	e41	492	56	362	12	20	3.9
15	4.1	38	50	e32	e32	e45	296	50	147	13	11	3.9
16	4.0	39	e48	e31	e33	e50	295	52	57	12	8.2	3.9
17	5.1	164	e46	e31	e34	e58	304	46	38	10	6.8	4.3
18	8.8	417	41	e31	e36	e70	197	46	28	9.2	25	4.2
19	5.2	202	43	e31	e42	e82	152	46	23	8.3	23	3.6
20	5.1	104	51	e31	e50	e105	120	42	19	8.1	13	3.2
21	5.9	70	52	e31	e62	e160	96	37	20	8.0	17	3.0
22	6.8	55	51	e30	e80	e200	82	33	15	7.6	18	3.1
23	6.4	46	e44	e30	e76	e400	71	30	12	8.0	15	4.2
24	6.1	41	e40	e30	e68	e900	64	27	16	8.1	11	4.6
25	6.1	36	e38	e30	e62	1300	62	36	41	8.1	9.6	3.9
26	6.0	32	e37	e31	e56	821	66	42	25	8.1	8.8	4.8
27	5.8	33	e36	e32	e52	560	94	58	32	7.7	8.3	5.8
28	6.2	658	e35	e36	e50	619	65	39	208	7.5	15	5.1
29	6.3	596	e35	e42	---	443	62	32	80	7.0	24	5.9
30	6.3	256	e35	e45	---	363	68	29	116	6.9	12	5.4
31	7.3	---	e35	e51	---	313	---	26	---	6.1	12	---
TOTAL	173.1	3189.5	2303	1034	1266	7028	7941	1889	1604	667.7	306.0	149.9
MEAN	5.58	106	74.3	33.4	45.2	227	265	60.9	53.5	21.5	9.87	5.00
MAX	8.8	658	309	51	80	1300	668	141	362	104	25	12
MIN	4.0	9.5	35	30	32	35	62	26	12	6.1	2.6	3.0
CFSM	.08	1.59	1.11	.50	.68	3.39	3.96	.91	.80	.32	.15	.07
IN.	.10	1.78	1.28	.58	.71	3.91	4.42	1.05	.89	.37	.17	.08

e Estimated

SUSQUEHANNA RIVER BASIN
01528000 FIVEMILE CREEK NEAR KANONA, NY--Continued

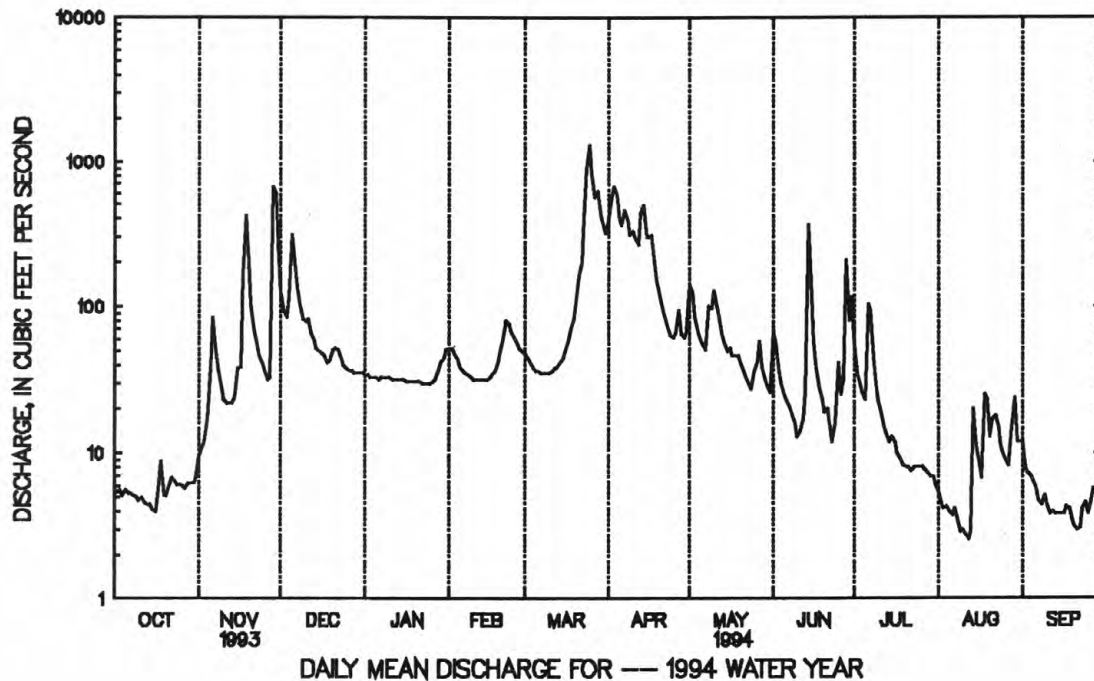
61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

MEAN	31.2	54.7	77.3	69.8	96.8	200	195	84.8	53.4	17.3	12.1	21.7
MAX	251	193	264	235	465	449	611	281	537	107	97.3	297
(WY)	1956	1993	1973	1979	1976	1945	1940	1943	1972	1972	1992	1977
MIN	.75	1.40	3.23	3.46	9.02	54.9	23.9	13.4	4.33	1.75	1.19	.48
(WY)	1942	1942	1961	1961	1958	1965	1946	1941	1939	1955	1965	1941

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1937 - 1994	
ANNUAL TOTAL	32764.4		27551.2			
ANNUAL MEAN	89.8		75.5		75.8	
HIGHEST ANNUAL MEAN					131	
LOWEST ANNUAL MEAN					33.8	
HIGHEST DAILY MEAN	1650	Apr 2	1300	Mar 25	4180	Jun 23 1972
LOWEST DAILY MEAN	1.0	Jul 24	2.6	Aug 12	.10	Sep 19 1941
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 9	3.1	Aug 7	.14	Sep 24 1941
INSTANTANEOUS PEAK FLOW			1410	Mar 24	5110	Jun 23 1972
INSTANTANEOUS PEAK STAGE			a5.85	Mar 22	a7.10	Mar 31 1940
INSTANTANEOUS LOW FLOW			2.5	b	.04	c
ANNUAL RUNOFF (CFSM)	1.34		1.13		1.14	
ANNUAL RUNOFF (INCHES)	18.25		15.34		15.43	
10 PERCENT EXCEEDS	253		198		180	
50 PERCENT EXCEEDS	22		33		28	
90 PERCENT EXCEEDS	3.1		4.8		2.6	

a Ice jam.
b Aug. 12, 13, Sept. 21.
c Sept. 27, 29, 1941.



SUSQUEHANNA RIVER BASIN
01528700 DIVERSION FROM WANETA LAKE TO KEUKA
LAKE AT KEUKA, NY

LOCATION.--Lat 42°29'06", long 77°06'39",
Steuben County, Hydrologic Unit 02050105, at
entrance to conduit on Diversion Canal, 0.8 mi
east of Keuka, and 1.0 mi north of Wayne.

DRAINAGE AREA.--45.5 mi².

PERIOD OF RECORD.--October 1966 to current
year.

GAGE.--Daily power generation records.

REMARKS.--Records for March 1931 (when diversion and
power generation began) to September 1966 on file.
Sketch indicates diversion from Lamoka-Waneta Lakes
(Susquehanna River Basin) to Keuka Lake (Oswego River
Basin).

COOPERATION.--Records furnished by New York State Electric
and Gas Corp.

AVERAGE DISCHARGE.--28 years, 19.9 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily
discharge, 73 ft³/s, June 23, 1972; no flow
for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily
discharge, 71 ft³/s, Dec 3; no flow for many
days.

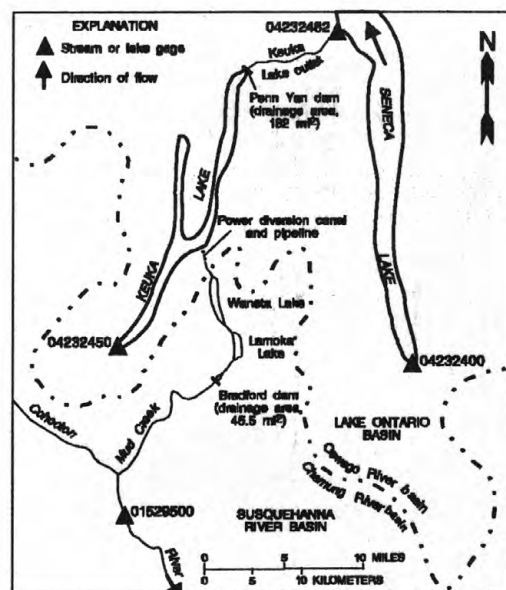


Figure 5.--Gaging stations and transbasin
diversion, Cohocton River-Keuka Lake area.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	71	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	5.2
8	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	33	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	33	.00	.00	.00	.00	.00	.00	.00	.00	11
16	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	69	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	39	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.2
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.8
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	39	.00	.00	---	.00	.00	.00	.00	.00	.00	7.6
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	39.00	935.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.80
MEAN	.000	1.30	30.2	.000	.000	.000	.000	.000	.000	.000	.000	1.13
MAX	.00	39	71	.00	.00	.00	.00	.00	.00	.00	.00	11
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1993 TOTAL 1176.00 MEAN 3.22 MAX 71 MIN .00
WTR YR 1994 TOTAL 1007.80 MEAN 2.76 MAX 71 MIN .00

SUSQUEHANNA RIVER BASIN

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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 mi².

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 sea level. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.

REMARKS.--Records good except those for periods of estimated daily discharges, which are fair. During each year since March 1931, a large part of flow from 45.5 mi² of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, is diverted into Keuka Lake (Oswego River basin), for power development. For table of diversion, see station 01528700. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	1230	5,920	5.65	Apr. 3	2200	4,450	4.77
Feb. 21	2300	4,820	5.02	Jun.14	1000	8,470	6.79
Mar. 25	0130	*9,510	*7.19				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	119	1120	e280	e350	e520	2620	819	537	341	93	249
2	79	122	896	e260	e290	e500	3040	721	422	264	89	223
3	89	130	772	e260	e270	e450	3890	589	351	259	109	166
4	85	147	710	e260	e260	e420	3540	531	300	224	97	135
5	86	234	1380	e240	e250	e420	2740	500	270	198	89	124
6	85	471	1020	e240	e240	e400	2620	471	251	348	85	118
7	84	346	816	e240	e240	e400	3220	450	251	895	82	107
8	79	259	687	e240	e230	e440	2660	617	204	636	77	99
9	73	215	600	e240	e220	e500	2290	592	172	436	73	98
10	69	189	570	e240	e220	e450	2370	614	156	364	71	95
11	66	170	569	e220	e210	e400	2250	574	167	319	70	88
12	66	171	467	e220	e210	e550	2170	527	230	229	70	87
13	65	171	446	e220	e210	e650	3020	485	387	187	74	91
14	62	164	e410	e220	e200	e850	3380	437	5740	170	414	83
15	62	230	393	e220	e200	e1000	2470	410	1990	173	256	84
16	60	225	397	e210	e200	1170	2530	431	979	174	155	78
17	65	512	345	e210	e200	951	2430	409	810	159	128	74
18	79	1900	328	e210	e200	868	1850	404	715	147	715	80
19	73	997	340	e210	e220	861	1560	385	585	188	381	78
20	79	698	365	e210	e360	730	1310	367	410	145	225	72
21	84	538	432	e210	e1400	749	1070	364	273	131	553	66
22	92	448	458	e200	e2000	1570	917	340	239	121	499	66
23	87	374	425	e200	e1500	3100	825	316	208	117	280	97
24	80	328	346	e200	e1200	5780	741	298	307	115	206	118
25	77	291	e330	e200	e1000	7490	694	308	687	111	193	97
26	74	247	e300	e200	e800	4250	604	351	344	109	299	192
27	71	247	e260	e210	e650	3700	712	431	295	111	220	442
28	80	3970	e280	e260	e550	3770	566	355	767	111	216	230
29	77	2470	e280	e440	---	3000	539	320	465	109	539	191
30	77	1510	e280	e550	---	2660	540	290	456	106	317	182
31	90	---	e280	e400	---	2380	---	269	---	102	265	---
TOTAL	2384	17893	16302	7720	13880	50979	59168	13975	18968	7099	6940	3910
MEAN	76.9	596	526	249	496	1644	1972	451	632	229	224	130
MAX	92	3970	1380	550	2000	7490	3890	819	5740	895	715	442
MIN	60	119	260	200	200	400	539	269	156	102	70	66

e Estimated

SUSQUEHANNA RIVER BASIN
01529500 COHOCTON RIVER NEAR CAMPBELL, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1994, BY WATER YEAR (WY)

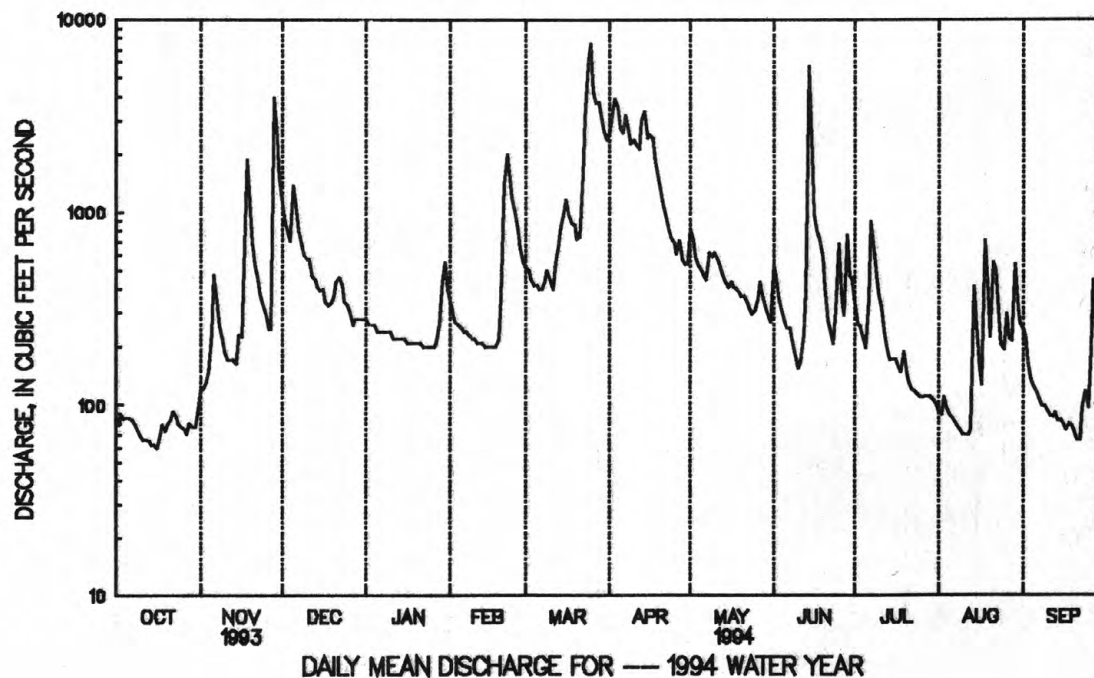
MEAN	183	324	420	388	484	1124	1142	602	339	182	122	136
MAX	1284	1611	1861	943	2059	3793	3579	2074	3167	2278	649	1204
(WY)	1956	1928	1928	1952	1976	1936	1993	1919	1972	1935	1992	1977
MIN	25.7	33.0	42.5	32.5	75.1	312	201	143	59.2	31.1	25.0	15.5
(WY)	1942	1942	1961	1961	1920	1965	1946	1934	1955	1955	1934	1934

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1918 - 1994	
ANNUAL TOTAL	234706		219218			
ANNUAL MEAN	643		601		453	
HIGHEST ANNUAL MEAN					766	1956
LOWEST ANNUAL MEAN					210	1965
HIGHEST DAILY MEAN	9990	Apr 2	7490	Mar 25	24400	Jul 8 1935
LOWEST DAILY MEAN	43	Aug 15	60	Oct 16	8.0	Sep 6 1934
ANNUAL SEVEN-DAY MINIMUM	45	Aug 10	64	Oct 11	11	Sep 3 1934
INSTANTANEOUS PEAK FLOW			9510	Mar 25	a41100	Jul 8 1935
INSTANTANEOUS PEAK STAGE			7.19	Mar 25	b11.6	Jul 8 1935
INSTANTANEOUS LOW FLOW			57	Oct 16	8.0	c
10 PERCENT EXCEEDS	1940		1500		1090	
50 PERCENT EXCEEDS	206		280		201	
90 PERCENT EXCEEDS	60		84		49	

a From rating curve extended above 24,200 ft³/s on basis of velocity-area and slope-area measurements of peak flow.

b From floodmark.

c Sept. 6, 7, 1934.



SUSQUEHANNA RIVER BASIN

65

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 mi².

PERIOD OF RECORD.--Occasional discharge measurements water years 1941, 1968-69. October 1974 to current year.

REVISED RECORDS.--WRD NY-78-1: 1976, 1977(M). WDR NY-83-3: 1982(M).

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above sea level.

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 mi² of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft, from floodmark; discharge 228,000 ft³/s, from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	422	4430	1070	e820	e2000	10500	2720	1560	2140	772	1450
2	402	488	3390	e980	e720	e1600	13200	3140	2080	1420	661	1210
3	368	518	2560	e780	e740	e1400	18700	2380	1260	1220	650	1020
4	367	598	2500	e660	e940	e1600	17400	2060	1020	1040	803	909
5	353	739	3760	e600	e1600	e1700	12300	1900	847	908	809	801
6	334	2020	3690	e700	e1700	e1800	11300	1750	749	984	716	751
7	331	1650	2900	e660	e1100	e2000	13300	1580	1040	3120	524	677
8	331	1360	2450	e620	e900	e2200	9920	1760	901	4630	e360	596
9	326	1130	2080	e600	e800	e2600	7760	2030	679	2130	e310	e480
10	315	941	1910	e600	e700	e3400	7930	1780	606	1650	e280	e450
11	319	748	2010	e620	e800	e4000	8860	1750	612	1330	e270	e420
12	325	652	1770	e680	e720	e4400	8450	1560	1810	997	e260	e410
13	305	654	1440	e700	e700	e4600	13600	1460	1860	898	e250	e410
14	288	644	1270	e760	e640	e5000	13600	1340	20600	2230	4280	e400
15	247	771	1280	e720	e700	e6000	9130	1220	12200	1630	6120	e380
16	234	1160	1230	e720	e900	7690	8450	1320	4940	1100	2020	e370
17	237	1140	1110	e700	e1000	7530	8530	1410	3630	872	1350	e330
18	241	5420	1010	e680	e900	6250	6390	1320	2760	803	14400	e330
19	249	3140	950	e600	e1000	4990	5100	1180	1890	759	9260	e320
20	291	2010	963	e500	e1700	4460	4180	1140	1510	731	8840	e330
21	353	1480	1010	e520	e4000	4480	3400	1050	1170	610	9750	e320
22	387	1140	1090	e600	e8000	8420	3050	962	1020	547	10200	e320
23	404	879	996	e1200	e7000	14900	2770	889	899	791	7260	e340
24	401	729	845	e1000	e6000	25000	2450	817	892	1140	5530	e380
25	373	602	818	e600	e4800	29100	2240	793	4450	858	3290	e420
26	332	513	797	e660	e3600	18400	2030	1290	2790	698	4310	e450
27	310	424	689	e800	e2800	19300	2020	1420	1630	675	2600	2670
28	303	11900	797	e1200	e2400	19700	1980	1220	4360	772	2010	1880
29	304	11700	846	e2800	---	15500	1720	1050	3660	1270	2800	1260
30	299	7640	875	e2200	---	11400	1860	871	2040	915	2670	907
31	329	---	991	e1100	---	9420	---	757	---	1170	1680	---
TOTAL	10134	63212	52457	26630	57680	250840	232120	45919	85465	40038	105035	20991
MEAN	327	2107	1692	859	2060	8092	7737	1481	2849	1292	3388	700
MAX	476	11900	4430	2800	8000	29100	18700	3140	20600	4630	14400	2670
MIN	234	422	689	500	640	1400	1720	757	606	547	250	320
CFSM	.16	1.05	.84	.43	1.03	4.04	3.86	.74	1.42	.64	1.69	.35
IN.	.19	1.17	.97	.49	1.07	4.65	4.31	.85	1.59	.74	1.95	.39

e Estimated

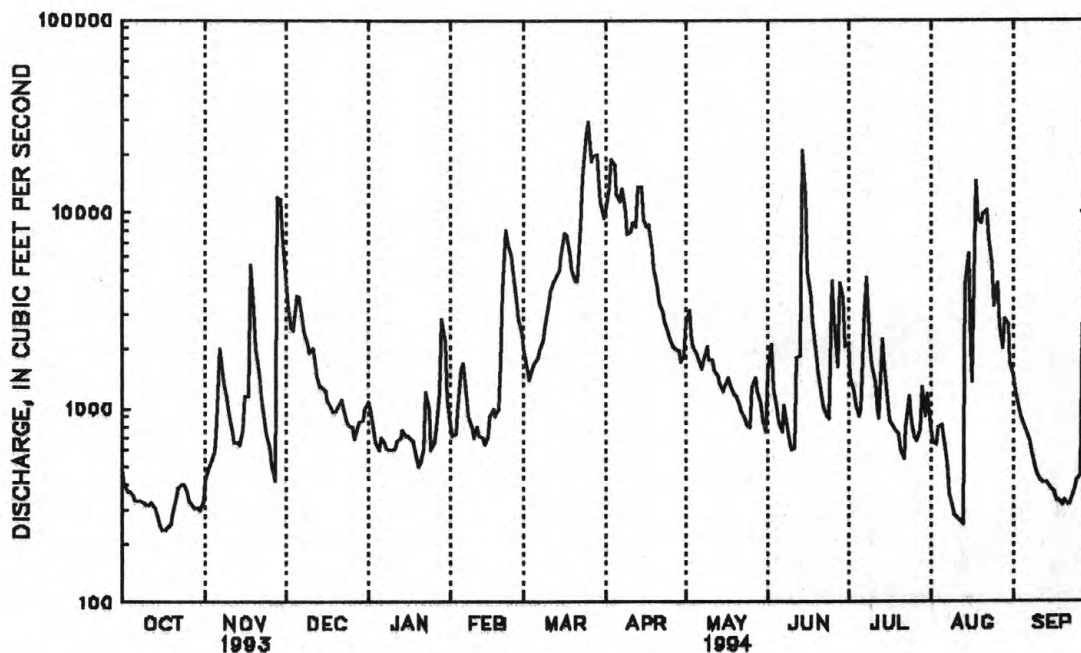
SUSQUEHANNA RIVER BASIN
01529950 CHEMUNG RIVER AT CORNING, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

MEAN	1234	1679	2262	1823	2728	4475	4855	2463	1693	758	725	963
MAX	5478	5111	5246	4544	7993	9533	16150	6692	5835	1851	3388	5569
(WY)	1991	1978	1978	1979	1976	1979	1993	1989	1989	1984	1994	1975
MIN	157	341	389	328	537	1284	1599	549	244	173	184	141
(WY)	1992	1992	1989	1981	1980	1981	1981	1985	1991	1991	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1975 - 1994	
ANNUAL TOTAL	967862		990521			
ANNUAL MEAN	2652		2714		2132	
HIGHEST ANNUAL MEAN					3284	
LOWEST ANNUAL MEAN					1287	
HIGHEST DAILY MEAN	29600	Apr 1	29100	Mar 25	87100	Sep 26 1975
LOWEST DAILY MEAN	152	Aug 15	234	Oct 16	105	Oct 3 1980
ANNUAL SEVEN-DAY MINIMUM	159	Aug 9	255	Oct 14	108	Oct 2 1980
INSTANTANEOUS PEAK FLOW			36800	Mar 25	127000	Sep 26 1975
INSTANTANEOUS PEAK STAGE			24.08	Mar 25	32.46	Sep 26 1975
INSTANTANEOUS LOW FLOW			221	Oct 17	95	a
ANNUAL RUNOFF (CFSM)	1.32		1.35		1.06	
ANNUAL RUNOFF (INCHES)	17.96		18.38		14.45	
10 PERCENT EXCEEDS	8850		7830		4990	
50 PERCENT EXCEEDS	689		1140		973	
90 PERCENT EXCEEDS	197		364		239	

a Sept. 9, 10, 23, 24, 1991.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

SUSQUEHANNA RIVER BASIN

67

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 mi².

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1502: 1956. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft above sea level.

REMARKS.--Records 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	23	123	e30	e100	e60	613	132	62	48	27	47
2	11	28	101	e30	e78	e49	744	109	45	39	24	43
3	12	36	95	e30	e68	e41	986	82	33	34	27	37
4	12	40	127	e29	e58	e40	667	71	30	32	25	33
5	14	68	441	e29	e48	e52	487	64	28	29	35	31
6	13	133	204	e29	e45	e50	524	58	28	51	e22	29
7	13	70	154	e28	e42	e50	622	55	34	82	e17	30
8	13	45	126	e28	e40	e64	410	96	28	44	e16	28
9	13	34	105	e28	e39	e78	332	83	25	38	e15	26
10	13	28	144	e28	e38	e110	363	73	25	35	e14	24
11	13	25	239	e27	e38	e120	334	71	28	30	e14	21
12	13	24	130	e27	e38	e110	380	66	57	28	e14	19
13	14	23	105	e27	e38	e100	570	61	46	27	e15	20
14	13	23	98	e26	e37	e130	448	51	1200	28	378	21
15	13	34	96	e26	e37	e160	296	47	407	52	157	21
16	14	34	98	e26	e39	e200	500	87	171	47	73	20
17	16	82	80	e26	e39	e155	344	73	115	26	57	20
18	15	424	70	e26	e42	e140	230	65	81	e20	1990	19
19	14	153	75	e25	e60	e120	190	59	61	e17	1090	16
20	13	111	85	e25	e100	e110	153	54	50	e17	331	14
21	15	83	93	e25	e400	e140	124	48	44	e16	e170	13
22	16	71	e90	e24	e270	e600	106	42	40	e15	e130	13
23	17	59	e70	e24	e170	874	90	40	36	e16	e100	26
24	15	52	e56	e24	e120	1210	78	39	41	e17	e80	23
25	14	47	e47	e24	e92	1560	74	40	110	e17	e60	18
26	15	43	e40	e24	e72	591	78	40	58	26	e120	21
27	15	42	e36	e24	e62	590	91	38	44	27	71	339
28	12	736	e33	e60	e60	658	73	34	58	60	e60	161
29	14	310	e32	e280	---	512	71	30	57	38	84	93
30	16	171	e31	e180	---	495	69	27	51	49	e56	60
31	20	---	e31	e120	---	447	---	26	---	34	e42	---
TOTAL	434	3052	3255	1359	2270	9616	10047	1861	3093	1039.0	5314	1286
MEAN	14.0	102	105	43.8	81.1	310	335	60.0	103	33.5	171	42.9
MAX	20	736	441	280	400	1560	986	132	1200	82	1990	339
MIN	11	23	31	24	37	40	69	26	25	15	14	13
CFSM	.18	1.31	1.35	.57	1.05	4.00	4.32	.77	1.33	.43	2.21	.55
IN.	.21	1.46	1.56	.65	1.09	4.62	4.82	.89	1.48	.50	2.55	.62

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

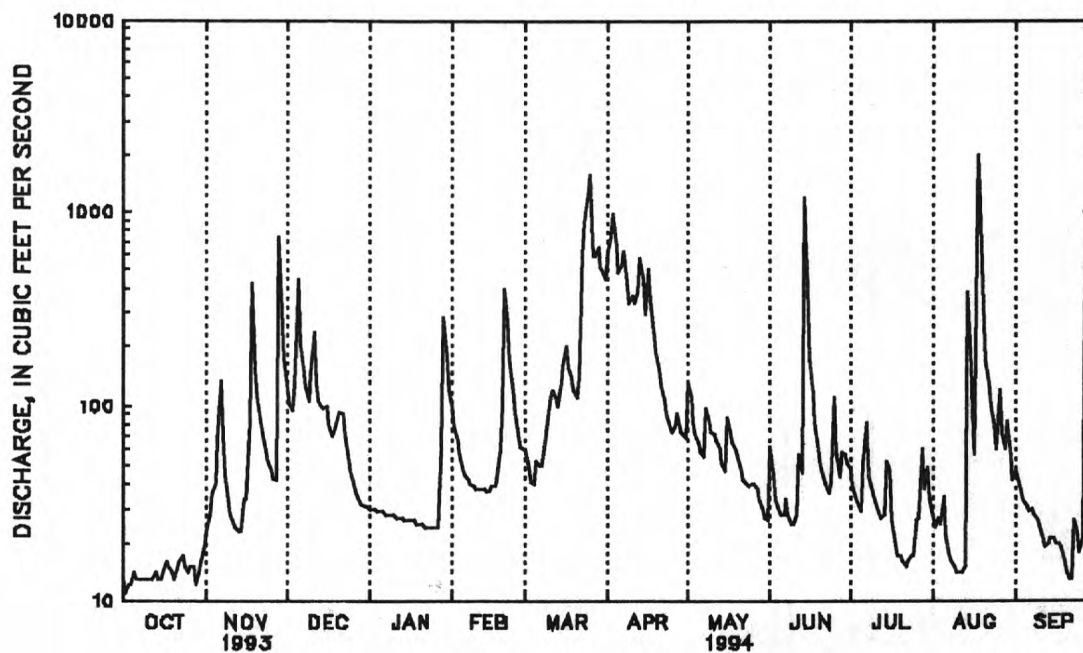
	MEAN	50.5	72.5	91.7	73.0	98.1	193	188	110	62.5	35.7	32.6	32.8
MAX	365	258	238	186	274	364	747	313	297	111	171	232	
(WY)	1956	1978	1943	1952	1976	1945	1993	1943	1972	1958	1994	1975	
MIN	7.32	8.23	12.3	9.32	18.9	43.0	36.8	20.1	12.8	7.30	5.49	6.22	
(WY)	1942	1942	1961	1981	1980	1981	1946	1985	1985	1991	1980	1985	

SUSQUEHANNA RIVER BASIN
01530500 NEWTOWN CREEK AT ELMIRA, NY

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1938 - 1994	
ANNUAL TOTAL	44872.1		42626.0			
ANNUAL MEAN	123		117		86.5	
HIGHEST ANNUAL MEAN					140	
LOWEST ANNUAL MEAN					38.2	
HIGHEST DAILY MEAN	2070	Apr 17	1990	Aug 18	3030	Sep 26 1975
LOWEST DAILY MEAN	7.1	Sep 12	11	Oct 2	1.7	Sep 16 1985
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 8	13	Oct 1	2.8	Sep 13 1985
INSTANTANEOUS PEAK FLOW			2820	Aug 18	a4000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			14.90	Aug 18	b19.28	Jun 23 1972
ANNUAL RUNOFF (CFPM)	1.59		1.51		1.12	
ANNUAL RUNOFF (INCHES)	21.54		20.45		15.17	
10 PERCENT EXCEEDS	311		331		188	
50 PERCENT EXCEEDS	28		46		39	
90 PERCENT EXCEEDS	11		16		12	

a About (backwater from Chemung River).

b From floodmarks (backwater from Chemung River).



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

SUSQUEHANNA RIVER BASIN

69

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 mi².

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. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft above sea level (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 mi² of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700. Telephone and satellite gage-height telemeters at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	2400	33,400	13.78	June 14	2300	35,300	14.15
Feb. 22	0845	ice jam	*18.97	Aug. 18	1900	42,400	15.41
Mar. 25	1100	*48,600	16.45				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	504	7160	e1400	e2400	e2400	13100	2630	1640	2570	1110	2360
2	566	601	5090	e1300	e2000	e2100	16300	4340	3120	2150	787	1930
3	500	682	3640	e1200	e1800	e1800	23300	3380	2580	1610	757	1600
4	450	747	3490	e860	e1700	e1900	24500	2750	1820	1350	720	1390
5	462	889	6100	e840	e1600	e2100	17000	2470	1510	1140	828	1240
6	444	1910	6280	e840	e1600	e2200	14400	2270	1270	1080	820	1130
7	423	2550	4680	e840	e1500	e2300	17100	2050	1350	2490	673	998
8	414	1910	3840	e820	e1400	e2700	14000	2080	1400	4750	485	837
9	401	1580	3290	e820	e1300	e3200	10000	2570	1120	3630	412	644
10	397	1320	3010	e820	e1300	e3800	9350	2450	863	2390	377	597
11	375	1160	3740	e800	e1400	e4700	11300	2320	763	1850	357	561
12	381	977	3120	e800	e1300	e5000	9960	2180	1260	1420	339	545
13	391	895	2470	e800	e1300	e5000	16300	1990	2420	1130	321	539
14	364	889	2210	e850	e1300	e5400	17900	1780	18100	1390	2530	525
15	346	922	2210	e900	e1200	e6200	13100	1560	22500	1850	8410	499
16	310	1210	2220	e860	e1200	8380	10200	1540	8490	1910	4030	480
17	298	1450	2080	e820	e1200	8500	11500	1700	5370	1170	1800	435
18	304	6250	1850	e800	e1300	e6400	8880	1700	4220	1090	25400	432
19	296	6920	1800	e780	e1400	e5200	6610	1580	2970	1290	17800	421
20	305	4070	1850	e740	e2000	e4400	5590	1440	2250	1040	12300	429
21	355	3130	1960	e740	e5000	e4400	4390	1360	1750	907	11400	421
22	423	2540	e2000	e760	e9000	9810	3740	1230	1400	794	13900	413
23	476	2110	e1700	e900	e10000	17900	3370	1160	1200	765	9990	441
24	502	1820	e1400	e840	e7400	30800	2990	1120	1080	1130	7240	493
25	495	1640	e1300	e800	e5800	43100	2710	1110	3540	1080	5280	545
26	449	1450	e1200	e800	e4200	23800	2560	1410	4810	950	6470	589
27	397	1330	e1100	e900	e3400	21900	2430	2090	2430	840	4700	4000
28	381	11900	e1100	e1200	e2800	24200	2560	2060	2940	897	3810	3600
29	368	22500	e1200	e3000	---	20400	2190	1790	5390	1230	4310	1920
30	370	12300	e1200	e3500	---	15500	2270	1590	3050	1260	4670	1280
31	413	---	e1300	e3000	---	12000	---	1470	---	1210	3000	---
TOTAL	12706	98156	85590	34330	77800	307490	299600	61170	112606	48363	155026	31294
MEAN	410	3272	2761	1107	2779	9919	9987	1973	3754	1560	5001	1043
MAX	650	22500	7160	3500	10000	43100	24500	4340	22500	4750	25400	4000
MIN	296	504	1100	740	1200	1800	2190	1110	763	765	321	413
CFSM	.16	1.31	1.10	.44	1.11	3.96	3.99	.79	1.50	.62	2.00	.42
IN.	.19	1.46	1.27	.51	1.15	4.56	4.45	.91	1.67	.72	2.30	.46

e Estimated

SUSQUEHANNA RIVER BASIN
01531000 CHEMUNG RIVER AT CHEMUNG, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 1994, BY WATER YEAR (WY)

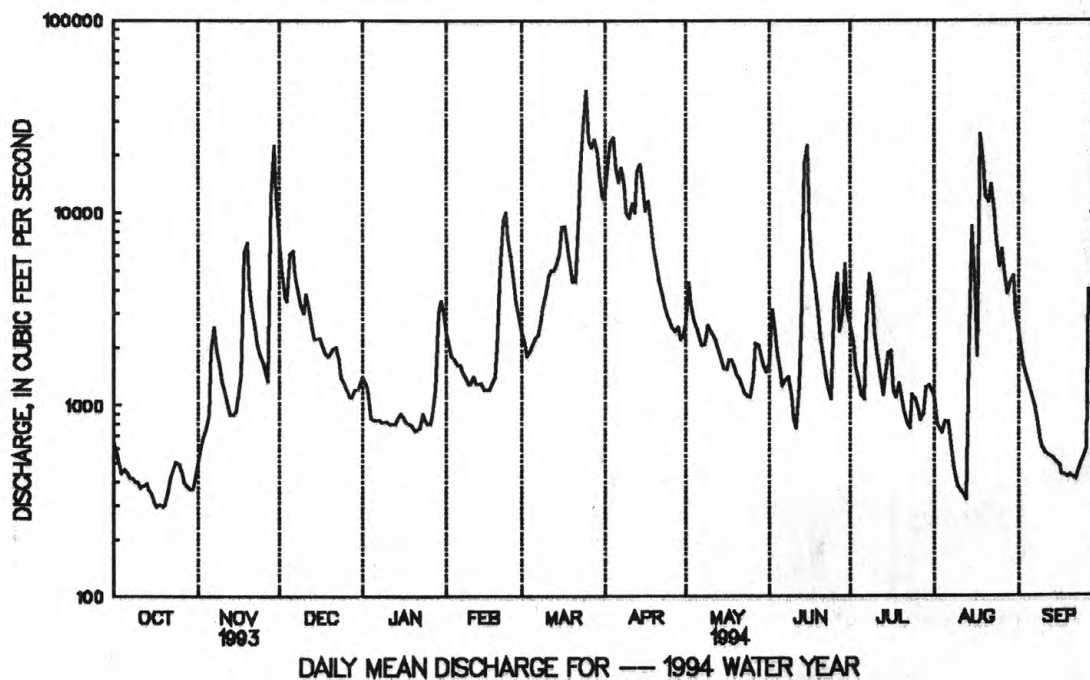
MEAN	1123	1875	2322	2261	2765	6339	6256	3631	1953	911	749	669
MAX	8408	9126	8752	7223	10090	20910	21600	11500	15720	5885	5001	7247
(WY)	1956	1928	1928	1913	1915	1936	1993	1919	1972	1935	1994	1975
MIN	101	114	137	207	327	1674	925	660	275	130	124	97.3
(WY)	1965	1931	1909	1931	1934	1965	1946	1934	1955	1911	1965	1932

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1906 - 1994	
ANNUAL TOTAL	1322090		1324131			
ANNUAL MEAN	3622		3628		2577	
HIGHEST ANNUAL MEAN					4416	1978
LOWEST ANNUAL MEAN					1120	1965
HIGHEST DAILY MEAN	41500	Apr 2	43100	Mar 25	159000	Jun 23 1972
LOWEST DAILY MEAN	185	Aug 15	296	Oct 19	52	Aug 14 1911
ANNUAL SEVEN-DAY MINIMUM	198	Aug 10	316	Oct 15	75	Aug 10 1911
INSTANTANEOUS PEAK FLOW			48600	Mar 25	a189000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			b18.97	Feb 22	c31.62	Jun 23 1972
INSTANTANEOUS LOW FLOW			290	Oct 19	49	Aug 14 1911
ANNUAL RUNOFF (CFSM)	1.45		1.45		1.03	
ANNUAL RUNOFF (INCHES)	19.63		19.66		13.97	
10 PERCENT EXCEEDS	11900		9970		6100	
50 PERCENT EXCEEDS	950		1640		1020	
90 PERCENT EXCEEDS	251		457		220	

a From rating curve extended above 65,000 ft³/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 ft and 31.62 ft.

b Ice jam.

c From floodmark.



SUSQUEHANNA RIVER BASIN

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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 mi². 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 sea level. 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, 8,490 acre-ft, Apr. 8, elevation, 1,167.27 ft; minimum, 1,510 acre-ft, Dec. 6, elevation, 1,139.01 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 mi². 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 sea level (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, 43,830 acre-ft, Apr. 18, elevation, 992.58 ft; minimum, 4,830 acre-ft, Mar. 21, elevation, 965.60 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01499500 East Sidney Lake				01511000 Whitney Point Lake		
Sept. 30	1,150.55	3,397	--	973.23	12,977	--
Oct. 31	1,150.46	3,378	- 0.3	973.11	12,825	- 2.5
Nov. 30	1,152.83	3,909	+ 8.9	972.92	12,589	- 4.0
Dec. 31	1,140.20	1,656	- 36.6	966.44	5,648	- 113
CAL YR 1993	--	--	- 0.4	--	--	- 2.7
Jan. 31	1,142.52	1,974	+ 5.2	966.43	5,638	- 0.2
Feb. 28	1,140.74	1,726	- 4.5	966.19	5,402	- 4.2
Mar. 31	1,141.13	1,778	+ 0.8	966.74	5,944	+ 8.8
Apr. 30	1,141.38	1,812	+ 0.6	969.85	9,114	+ 53.3
May 31	1,150.31	3,346	+ 24.9	973.13	12,850	+ 60.8
June 30	1,150.52	3,391	+ 0.8	973.30	13,066	+ 3.6
July 31	1,150.53	3,393	0	973.20	12,939	- 2.1
Aug. 31	1,150.72	3,433	+ 0.7	973.13	12,850	- 1.4
Sept. 30	1,150.09	3,300	- 2.2	973.07	12,774	- 1.3
WTR YR 1994	--	--	- 0.1	--	--	- 0.3

SUSQUEHANNA RIVER BASIN

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 mi². PERIOD OF RECORD, November 1979 to current year. GAGE, water-stage recorder. Datum of gage is sea level (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 1,131.0 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 satellite and landline telemeters 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, 59,700 acre-ft, Aug. 18, elevation, 1,106.76 ft; minimum, 6,900 acre ft, Mar. 23, elevation, 1,074.96 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 mi². PERIOD OF RECORD, November 1979 to current year. GAGE, water-stage recorder. Datum of gage is sea level (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 1,131.0 ft. Storage began in November 1979. Capacity at elevation 1,131.0 ft is 63,000 acre-ft. Recreation lake elevation is 1,086.0 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 satellite and landline telemeters 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, 26,680 acre-ft, Aug. 18, elevation, 1,105.85 ft; minimum, 5,800 acre-ft, Mar. 23, elevation, 1,081.21 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01517900 Tioga Lake				01518498 Hammond Lake		
Sept. 30	1,081.10	9,550	--	1,084.95	8,070	--
Oct. 31	1,079.24	8,710	- 13.7	1,083.89	7,390	- 11.1
Nov. 30	1,084.94	11,470	+ 46.4	1,088.64	10,650	+ 54.8
Dec. 31	1,082.57	10,280	- 19.4	1,086.24	9,000	- 26.8
CAL YR 1993.....	--	--	- 2.6	--	--	- 2.1
Jan. 31	1,081.22	9,610	- 10.9	1,085.78	8,680	- 5.2
Feb. 28	1,081.01	9,500	- 2.0	1,085.58	8,540	- 2.5
Mar. 31	1,177.39	7,900	- 26.0	1,085.11	8,180	- 5.9
Apr. 30	1,080.96	9,480	+ 26.6	1,085.54	8,500	+ 5.4
May 31	1,081.31	9,650	+ 2.8	1,086.16	8,950	+ 7.3
June 30	1,081.80	9,890	+ 4.0	1,086.63	9,170	+ 3.7
July 31	1,081.05	9,520	- 6.0	1,086.10	8,910	- 4.2
Aug. 31	1,081.17	9,580	+ 1.0	1,085.84	8,730	- 2.9
Sept. 30	1,080.87	9,440	- 2.4	1,086.14	8,940	+ 3.5
WTR YR 1994.....	--	--	- 0.2	--	--	+ 1.2

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 mi². PERIOD OF RECORD, December 1979 to current year. GAGE, water-stage recorder. Datum of gage is sea level (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 satellite and landline telemeters 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, 49,840 acre-ft, Aug. 18, elevation 1,094.17 ft; minimum, 18,550 acre-ft, Mar. 18, elevation, 1,064.81 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 mi². 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 sea level (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, 5,505 acre-ft, Mar. 25, elevation, 1,276.55 ft; minimum, 1,599 acre-ft, Mar. 23, elevation, 1,258.99 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01519995 Cowanesque Lake				01523000 Almond Lake		
Sept. 30	1,080.25	32,850	--	1,260.61	1,848	--
Oct. 31	1,080.23	32,830	- 0.3	1,260.28	1,795	- 0.9
Nov. 30	1,081.04	33,650	+ 13.8	1,260.75	1,870	+ 1.3
Dec. 31	1,080.31	32,910	- 12.0	1,260.08	1,763	- 1.7
CAL YR 1993	--	--	- 2.9	--	--	- 1.5
Jan. 31	1,080.17	32,770	- 2.3	1,260.66	1,856	+ 1.5
Feb. 28	1,080.24	32,840	+ 1.3	1,260.28	1,795	- 1.1
Mar. 31	1,065.23	19,070	- 224	1,260.60	1,846	+ 0.8
Apr. 30	1,080.35	32,950	+ 233	1,260.22	1,785	- 1.0
May 31	1,080.47	33,070	+ 2.0	1,260.12	1,769	- 0.3
June 30	1,080.57	33,170	+ 1.7	1,260.67	1,857	+ 1.5
July 31	1,080.41	33,010	- 2.6	1,260.12	1,769	- 1.4
Aug. 31	1,080.08	32,680	- 5.4	1,260.02	1,753	- 0.3
Sept. 30	1,080.11	32,710	+ 0.5	1,260.03	1,755	0
WTR YR 1994	--	--	- 0.2	--	--	- 0.1

DIVERSION OF WATER AFFECTING THE SUSQUEHANNA RIVER BASIN

01528700 Diversion from Waneta Lake to Keuka Lake at Keuka, NY (see station for daily discharge).

OHIO RIVER MAIN STEM
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 mi².

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 sea level (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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 25	0915	*21,200	*11.28	June 14	1600	17,800	10.23
Apr. 13	2245	20,000	10.93				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	1320	10500	e1050	e4500	e2600	8060	4400	3810	3410	566	2450
2	1140	1350	7480	e960	e4100	e2500	9090	5700	3830	2600	520	2070
3	1140	1440	5470	e940	e3500	e2100	13300	4870	2680	2870	527	1710
4	986	1860	5080	e900	e3100	e2100	15400	4200	2210	2120	470	1470
5	964	3130	7540	e880	e2800	e2000	13800	3690	1890	1660	478	1290
6	897	4340	6910	e880	e2500	e1900	13800	3300	1690	2070	463	1140
7	841	4090	6380	e880	e2100	1880	16100	2940	1690	4300	459	1050
8	722	3390	5650	e880	e1900	2270	15300	2930	1510	3160	398	962
9	659	2840	4770	e880	e1800	2760	13700	2960	1270	3330	354	889
10	646	2440	4290	e880	e1700	3100	14000	2520	1110	2350	331	839
11	612	2150	4750	e880	e1600	e3700	13900	2250	1110	1850	316	777
12	559	2110	4240	e860	e1400	e3300	12900	2170	2320	1510	315	713
13	522	2010	3460	e840	e1350	3270	17600	2090	3370	1280	500	667
14	486	2080	3280	e840	e1300	3610	19100	1830	15900	1110	7830	636
15	462	3940	3040	e820	e1250	4000	16400	1730	14800	1020	9840	633
16	442	4060	2860	e800	e1200	5390	14500	2210	12600	979	7300	624
17	458	5140	2510	e800	e1180	4640	13100	2340	9650	862	5300	590
18	843	12700	2200	e780	e1150	3940	10400	2220	6700	797	4970	565
19	939	10700	2100	e780	1380	3660	8160	2020	4030	1060	7080	564
20	894	8780	2130	e780	2800	3200	6200	1840	2820	953	7850	542
21	1680	7060	2030	e780	e6600	3290	4910	1660	3020	815	9950	488
22	2530	5280	1970	e780	e9700	7520	4050	1490	2490	708	9790	458
23	2290	4170	e1700	e760	e8500	10700	3440	1350	1870	646	7340	442
24	1880	3520	e1400	e760	e7400	16100	2970	1240	1680	644	5560	438
25	1770	3090	e1200	e740	e5200	20700	2640	1370	3100	673	4160	445
26	1520	2630	e1000	e720	e4000	18700	2410	2350	3120	764	4790	660
27	1280	2590	e940	e710	e3100	16500	2740	3400	2420	1240	3540	2040
28	1180	12300	e1050	e1800	e2700	15100	2450	2540	3210	850	3030	1830
29	1210	14600	e1100	e4600	---	12300	2600	2060	3030	753	4450	1770
30	1160	12800	e1000	e7000	---	10200	3400	1790	4670	719	3930	1820
31	1140	---	e1000	e5500	---	8510	---	1610	---	637	2850	---
TOTAL	33312	147910	109030	41460	89810	201540	296420	79070	123600	47740	115257	30572
MEAN	1075	4930	3517	1337	3207	6501	9881	2551	4120	1540	3718	1019
MAX	2530	14600	10500	7000	9700	20700	19100	5700	15900	4300	9950	2450
MIN	442	1320	940	710	1150	1880	2410	1240	1110	637	315	438
CFSM	.67	3.07	2.19	.83	1.99	4.04	6.14	1.59	2.56	.96	2.31	.63
IN.	.77	3.42	2.52	.96	2.08	4.66	6.86	1.83	2.86	1.10	2.67	.71

e Estimated

OHIO RIVER MAIN STEM
03011020 ALLEGHENY RIVER AT SALAMANCA, NY--Continued

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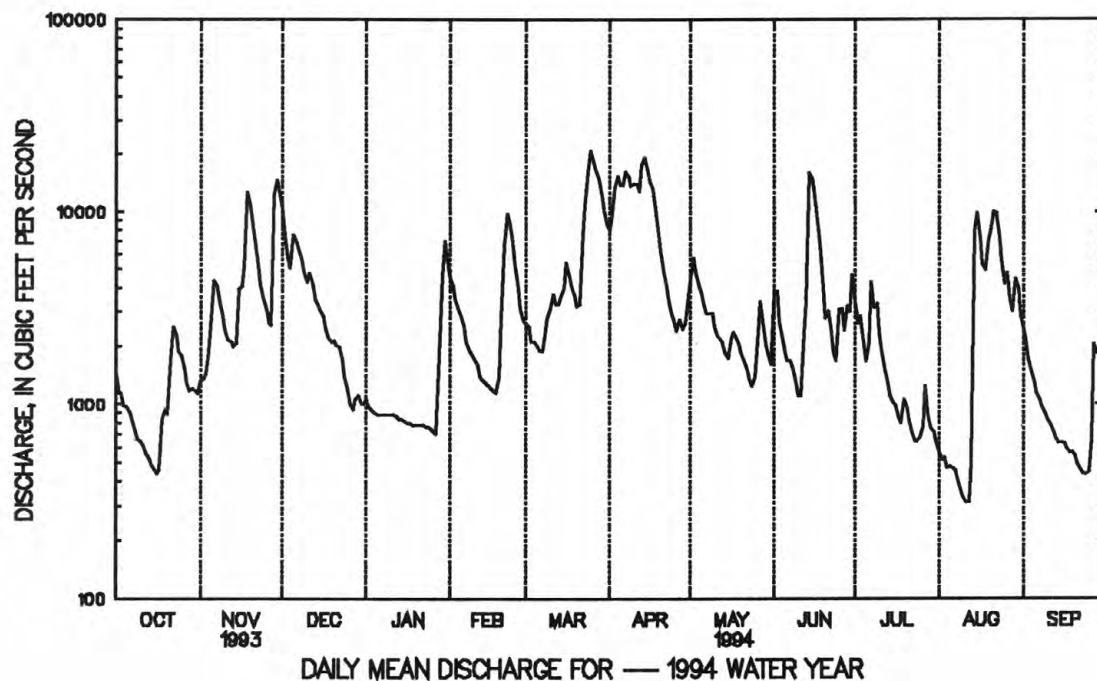
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1994, BY WATER YEAR (WY)

MEAN	1336	2494	3092	3286	3168	6039	5907	3466	2039	1109	732	843
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1904 - 1994	
ANNUAL TOTAL	1047693		1315721			
ANNUAL MEAN	2870		3605		2789	
HIGHEST ANNUAL MEAN					4174	
LOWEST ANNUAL MEAN					1784	
HIGHEST DAILY MEAN	29400	Apr 2	20700	Mar 25	67900	Jun 23 1972
LOWEST DAILY MEAN	164	Aug 30	315	Aug 12	79	a
ANNUAL SEVEN-DAY MINIMUM	185	Aug 25	377	Aug 6	84	Dec 11 1908
INSTANTANEOUS PEAK FLOW			21200	Mar 25	73000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			11.28	Mar 25	b24.01	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.79		2.24		1.73	
ANNUAL RUNOFF (INCHES)	24.24		30.44		23.57	
10 PERCENT EXCEEDS	7700		9740		6790	
50 PERCENT EXCEEDS	1070		2130		1510	
90 PERCENT EXCEEDS	282		654		287	

a Sep. 10, 11, 1971.

b From floodmarks.



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 mi².

PERIOD OF RECORD.--October 1972 to September 1973; November 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. 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 mi². Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft, Mar. 5, 1976; minimum, 1,306.34 ft, Feb. 27-28, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,310.29 ft, Apr. 14; minimum, 1,306.62 ft, Feb. 17,18,19.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1307.79	1307.54	1307.99	1307.27	1306.93	1307.40	1308.88	1308.41	1308.37	1308.64	1308.22	1308.24
2	1307.81	1307.50	1307.92	1307.27	1306.93	1307.37	1308.95	1308.34	1308.32	1308.55	1308.22	1308.20
3	1307.80	1307.49	1307.90	1307.23	1306.93	1307.35	1309.17	1308.35	1308.29	1308.46	1308.20	1308.17
4	1307.78	1307.50	1307.95	1307.21	1306.91	1307.31	1309.24	1308.38	1308.25	1308.36	1308.20	1308.15
5	1307.80	1307.60	1308.18	1307.17	1306.90	1307.29	1309.23	1308.39	1308.20	1308.25	1308.24	1308.13
6	1307.80	1307.65	1308.19	1307.15	1306.88	1307.26	1309.32	1308.40	1308.17	1308.20	1308.24	1308.11
7	1307.79	1307.69	1308.23	1307.14	1306.86	1307.26	1309.50	1308.41	1308.18	1308.19	1308.23	1308.11
8	1307.80	1307.67	1308.22	1307.11	1306.86	1307.28	1309.50	1308.44	1308.17	1308.19	1308.22	1308.10
9	1307.81	1307.63	1308.18	1307.09	1306.87	1307.28	1309.46	1308.44	1308.15	1308.18	1308.20	1308.10
10	1307.83	1307.61	1308.16	1307.06	1306.83	1307.32	1309.56	1308.38	1308.15	1308.16	1308.19	1308.10
11	1307.82	1307.57	1308.17	1307.03	1306.79	1307.29	1309.59	1308.31	1308.14	1308.14	1308.18	1308.09
12	1307.81	1307.57	1308.12	1307.02	1306.77	1307.28	1309.62	1308.27	1308.15	1308.13	1308.17	1308.08
13	1307.79	1307.56	1308.06	1306.97	1306.74	1307.27	1310.05	1308.21	1308.21	1308.11	1308.24	1308.07
14	1307.79	1307.57	1308.00	1306.96	1306.72	1307.26	1310.27	1308.21	1308.62	1308.11	1308.85	1308.08
15	1307.80	1307.70	1307.94	1306.95	1306.69	1307.27	1310.17	1308.25	1308.61	1308.10	1308.99	1308.09
16	1307.80	1307.73	1307.87	1306.94	1306.67	1307.36	1310.09	1308.32	1308.52	1308.09	1308.87	1308.09
17	1307.89	1307.83	1307.81	1306.94	1306.64	1307.38	1309.97	1308.39	1308.41	1308.08	1308.75	1308.09
18	1307.99	1308.14	1307.75	1306.90	1306.63	1307.39	1309.81	1308.40	1308.32	1308.07	1308.63	1308.09
19	1307.99	1308.15	1307.73	1306.87	1306.63	1307.39	1309.68	1308.39	1308.23	1308.08	1308.51	1308.08
20	1307.99	1308.11	1307.67	1306.86	1306.69	1307.38	1309.53	1308.37	1308.15	1308.07	1308.41	1308.07
21	1308.06	1308.07	1307.66	1306.85	1307.00	1307.39	1309.38	1308.33	1308.15	1308.07	1308.42	1308.06
22	1308.09	1308.00	1307.64	1306.84	1307.22	1307.59	1309.24	1308.29	1308.13	1308.05	1308.37	1308.05
23	1308.01	1307.92	1307.61	1306.79	1307.31	1307.85	1309.10	1308.25	1308.12	1308.04	1308.27	1308.04
24	1307.92	1307.87	1307.56	1306.75	1307.39	1308.26	1308.97	1308.25	1308.15	1308.03	1308.25	1308.03
25	1307.84	1307.82	1307.52	1306.76	1307.42	1308.74	1308.86	1308.26	1308.24	1308.06	1308.34	1308.03
26	1307.77	1307.76	1307.50	1306.73	1307.45	1308.78	1308.77	1308.29	1308.27	1308.07	1308.33	1

ALLEGHENY RIVER BASIN

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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 mi².

PERIOD OF RECORD.--November 1934 to current year.

REVISED RECORDS.--WSP 803: 1936(M).

GAGE.--Water-stage recorder, crest-stage gages, and concrete control. Datum of gage is 1,256.41 ft above sea level.

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. U.S. Army Corps of Engineers satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	450	691	438	323	472	1030	902	147	870	54	104
2	49	437	672	439	340	465	1050	656	354	839	54	106
3	50	296	689	432	320	466	1160	73	351	819	53	106
4	55	443	712	430	352	459	1190	70	347	799	60	106
5	49	457	773	428	317	454	1180	71	345	794	56	106
6	47	464	770	412	315	446	1220	71	235	373	41	93
7	47	467	798	388	313	451	1290	69	60	86	39	53
8	47	475	791	386	310	457	1270	70	58	86	43	49
9	48	510	474	391	322	451	1240	325	57	82	59	49
10	43	503	723	382	332	468	1310	582	56	82	54	46
11	40	493	746	375	312	463	1320	574	59	82	52	45
12	40	512	722	373	304	456	1330	581	55	72	52	45
13	38	479	703	370	302	453	1490	337	375	63	87	46
14	36	510	689	367	303	452	1550	61	998	64	886	49
15	36	532	676	367	298	467	1510	70	952	63	1110	46
16	37	521	667	367	296	480	1520	63	891	61	1030	46
17	50	670	646	379	287	475	1520	234	821	63	983	46
18	111	771	627	367	275	473	1410	377	803	65	951	44
19	163	756	623	329	278	478	1350	375	780	65	885	42
20	217	827	607	197	296	472	1300	372	321	65	851	41
21	448	745	614	330	309	511	1240	370	64	61	870	40
22	554	710	613	329	326	586	1180	367	57	55	835	40
23	605	677	588	326	381	696	1120	194	55	55	596	46
24	577	664	550	318	460	846	1080	60	75	64	66	57
25	504	632	522	306	443	995	1020	63	64	65	494	59
26	455	602	520	306	482	1010	984	71	50	66	760	733
27	453	620	515	295	483	1040	967	60	390	55	757	813
28	453	731	495	320	478	1100	920	58	735	54	783	771
29	444	733	476	317	---	1090	906	57	756	54	765	815
30	437	729	453	318	---	1080	873	57	912	70	568	773
31	435	---	447	325	---	1050	---	69	---	55	106	---
TOTAL	6614	17416	19592	11107	9557	19262	36530	7359	11223	6147	14000	5415
MEAN	213	581	632	358	341	621	1218	237	374	198	452	180
MAX	605	827	798	439	483	1100	1550	902	998	870	1110	815
MIN	36	296	447	197	275	446	873	57	50	54	39	40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1994, BY WATER YEAR (WY)

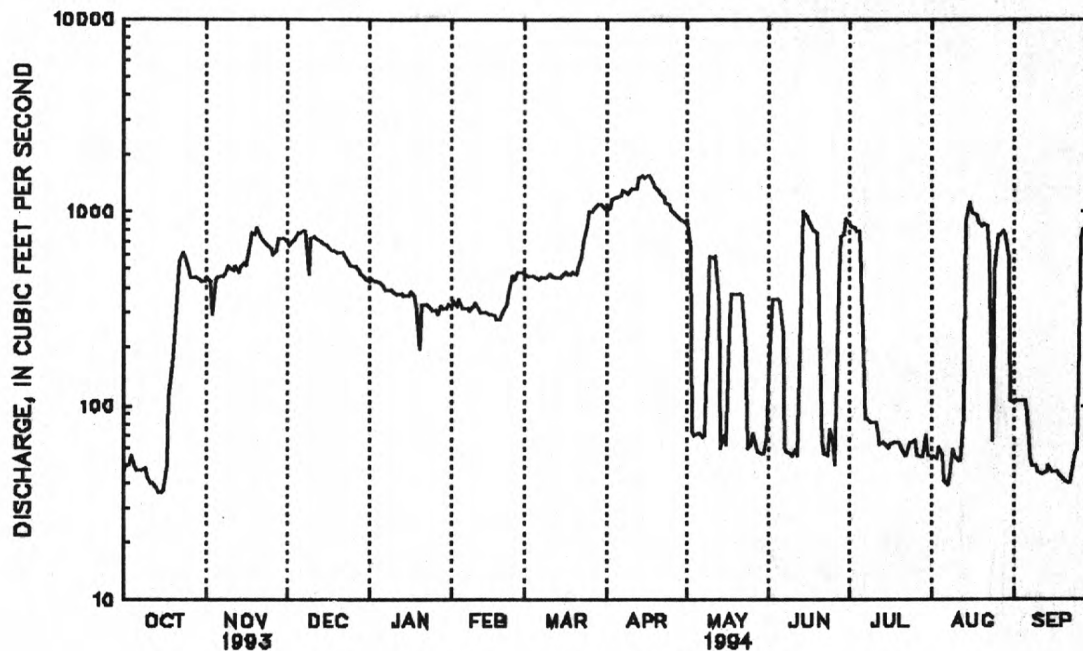
MEAN	211	360	505	511	516	685	647	296	204	119	109	156
MAX	751	997	997	955	989	1358	1305	974	852	729	540	705
(WY)	1946	1986	1951	1993	1990	1976	1947	1943	1986	1986	1977	1977
MIN	8.12	5.69	6.38	36.3	195	282	53.1	58.5	15.1	8.55	7.44	17.8
(WY)	1964	1961	1961	1961	1963	1983	1946	1941	1954	1954	1954	1941

ALLEGHENY RIVER BASIN
03014500 CHADAKOIN RIVER AT FALCONER, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1935 - 1994	
ANNUAL TOTAL	132847		164222		361	
ANNUAL MEAN	364		450		527	
HIGHEST ANNUAL MEAN					228	
LOWEST ANNUAL MEAN					1986	
HIGHEST DAILY MEAN	1230	Apr 2	1550	Apr 14	2020	Mar 6 1976
LOWEST DAILY MEAN	12	Jun 3	36	a	3.0	Nov 20 1960
ANNUAL SEVEN-DAY MINIMUM	30	Jul 7	39	Oct 10	3.7	Nov 18 1960
INSTANTANEOUS PEAK FLOW			1580	Apr 17	2250	Sep 14 1979
INSTANTANEOUS PEAK STAGE			3.63	Apr 17	4.93	Sep 14 1979
INSTANTANEOUS LOW FLOW			23	Nov 3	2.7	b
10 PERCENT EXCEEDS	852		983		831	
50 PERCENT EXCEEDS	340		412		273	
90 PERCENT EXCEEDS	40		51		36	

a Oct. 14, 15..

b Nov. 20, 21, 1960.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

ALLEGHENY RIVER BASIN
LAKES IN ALLEGHENY RIVER BASIN

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

STREAMS TRIBUTARY TO LAKE ERIE
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 mi².

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 1912;WDR NY-82-3: Drainage area. WRD NY 1971: 1956(M). WRD NY 1974: 1940-42 (M, P).

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft above sea level. Prior to Oct. 1, 1969, at datum 0.11 ft lower.

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 gage-height telemeter at station. .

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 17	1830	8,000	6.83	Mar. 24	2045	*13,400	8.53
Feb. 20	1830	Ice jam	*13.45	Apr. 13	2215	9,420	7.34

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	510	878	e300	e1000	e600	2120	1140	1050	779	172	e200
2	339	494	760	e340	e900	e520	3060	989	541	487	175	e320
3	316	675	1120	e380	e800	e480	5070	763	401	390	182	e270
4	259	1050	1960	e330	e600	e440	3210	651	335	316	185	e210
5	370	1600	3090	e310	e540	e400	2480	614	305	279	209	e180
6	292	1360	1410	e300	e500	e380	3280	633	288	264	211	e170
7	234	960	1630	e290	e440	e500	3850	596	284	264	204	e150
8	206	657	1210	e290	e400	e1000	2560	921	262	252	191	e140
9	210	516	935	e300	e360	e850	2560	833	243	225	178	e140
10	253	442	885	e290	e350	e750	4150	650	229	215	180	e200
11	204	391	1340	e300	e340	e650	2820	564	224	214	182	e170
12	185	535	e880	e320	e300	e560	2780	558	254	199	185	e140
13	183	554	e700	e300	e280	e550	7020	516	396	413	201	e130
14	176	569	699	e300	e270	686	5480	449	3730	283	1350	e220
15	176	1230	675	e280	e260	1020	2570	576	1140	242	474	e180
16	176	909	670	e280	e250	1410	2390	1080	593	214	272	e170
17	246	3110	541	e280	e240	967	2400	1110	437	197	e240	e160
18	455	3670	495	e270	e300	847	1590	994	353	191	e220	e150
19	299	1440	512	e260	e500	779	1330	742	305	217	e200	e140
20	256	1100	554	e260	e1000	677	1130	607	267	211	e180	135
21	768	832	e530	e260	e5000	888	974	514	257	216	796	132
22	703	695	e510	e260	3020	3090	866	466	257	197	514	133
23	419	588	e500	e250	1670	5240	783	415	228	180	305	122
24	327	526	e400	e250	1360	8620	713	385	381	182	e230	127
25	281	e480	e440	e240	1010	7330	698	385	652	186	e200	129
26	248	430	e340	e230	863	2840	749	422	421	193	293	308
27	233	521	e300	e240	735	3200	1240	478	493	204	e300	320
28	390	4460	e340	e500	e620	3470	846	371	934	192	410	290
29	427	1970	e300	e1800	---	2090	898	328	836	188	1170	651
30	310	1150	e300	e2200	---	1720	922	315	1250	187	411	814
31	327	---	e300	e1400	---	1640	---	306	---	184	300	---
TOTAL	9696	33424	25204	13610	23908	54194	70539	19371	17346	7961	10320	6601
MEAN	313	1114	813	439	854	1748	2351	625	578	257	333	220
MAX	768	4460	3090	2200	5000	8620	7020	1140	3730	779	1350	814
MIN	176	391	300	230	240	380	698	306	224	180	172	122
CFSM	.72	2.56	1.86	1.01	1.96	4.01	5.39	1.43	1.33	.59	.76	.50
IN.	.83	2.85	2.15	1.16	2.04	4.62	6.02	1.65	1.48	.68	.88	.56

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE
04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

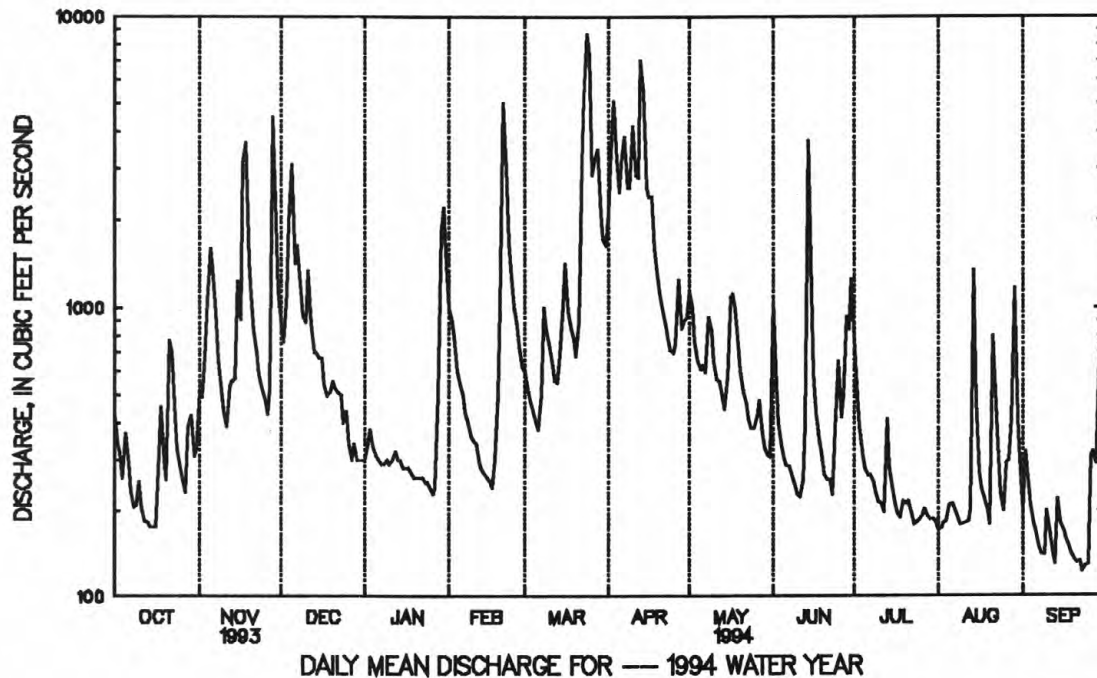
MEAN	405	704	965	809	934	1611	1472	726	492	292	242	315
MAX	1573	1772	2089	1727	2819	3824	3686	1948	1436	867	1225	2423
(WY)	1946	1986	1991	1952	1976	1945	1947	1943	1989	1986	1977	1977
MIN	81.8	118	111	136	222	799	279	283	143	78.3	79.5	85.8
(WY)	1964	1961	1961	1961	1963	1981	1946	1941	1955	1955	1941	1960

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	256039		292174			
ANNUAL MEAN	701		800		744	
HIGHEST ANNUAL MEAN					1030	
LOWEST ANNUAL MEAN					536	
HIGHEST DAILY MEAN	8630	Mar 29	8620	Mar 24	22900	Mar 17 1942
LOWEST DAILY MEAN	80	Aug 30	122	Sep 23	52	a
ANNUAL SEVEN-DAY MINIMUM	88	Aug 26	131	Sep 19	57	Sep 7 1945
INSTANTANEOUS PEAK FLOW			13400	Mar 24	34600	Mar 7 1956
INSTANTANEOUS PEAK STAGE			b13.45	Feb 20	14.03	Mar 7 1956
INSTANTANEOUS LOW FLOW			78	Sep 23	c6.0	Aug 21 1941
ANNUAL RUNOFF (CFSM)	1.61		1.84		1.71	
ANNUAL RUNOFF (INCHES)	21.85		24.93		23.20	
10 PERCENT EXCEEDS	1430		1750		1620	
50 PERCENT EXCEEDS	330		421		417	
90 PERCENT EXCEEDS	128		186		125	

a Sept. 13, 1945, Aug. 1, 1955.

b Ice jam.

c About, result of regulation.



STREAMS TRIBUTARY TO LAKE ERIE
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 mi².

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1337: 1939-52. WSP 1912; WDR NY-82-3: Drainage area. WRD NY-78-1: 1939-1976 (P).

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft above sea level. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft downstream at same datum.

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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,750 ft³/s and maximum (*);

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 20	1715	ice jam	*9.57	Mar. 25	0015	*4,180	5.84

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	e150	214	e120	e280	e160	459	219	187	76	17	54
2	34	e140	204	e120	e220	e140	512	188	107	58	20	34
3	31	e180	498	e120	e190	e130	904	130	72	46	17	26
4	e40	e300	576	e130	e170	e120	632	109	59	37	18	21
5	e120	452	1430	e120	e150	e110	471	99	50	33	51	19
6	e80	367	446	e110	e110	e110	898	95	48	30	29	17
7	e48	214	520	e98	e98	e200	853	106	43	28	23	17
8	e39	126	338	e92	e96	e500	705	260	41	27	18	17
9	e47	91	219	e90	e100	e300	886	223	35	35	15	19
10	e50	73	200	e90	e100	e210	814	184	32	35	14	20
11	e47	65	527	e92	e100	e190	509	140	30	29	14	18
12	e42	85	284	e92	e100	e140	366	125	31	25	14	16
13	e38	128	190	e90	e98	e187	1620	117	35	25	17	15
14	e36	106	192	e90	e96	228	1160	90	78	45	252	20
15	e34	319	189	e88	e96	537	469	117	74	33	121	18
16	e33	230	210	e84	e94	679	357	349	51	28	49	19
17	e80	220	152	e80	e92	e306	405	424	38	24	30	17
18	e250	787	122	e72	e110	e233	264	403	32	22	24	15
19	e100	255	119	e80	e200	e196	218	201	28	20	21	15
20	e76	328	141	e96	e580	e175	186	150	26	19	20	14
21	e100	190	155	e100	e2600	363	156	115	25	19	42	17
22	e130	134	170	e100	1100	1670	138	95	26	21	59	16
23	e84	104	142	e100	495	2220	129	82	23	20	33	13
24	e68	91	e130	e92	537	2450	121	74	131	17	23	12
25	e58	102	e130	e82	358	1820	126	70	474	17	26	12
26	e52	91	e130	e78	e250	557	129	102	151	26	75	39
27	e50	111	e140	e130	e200	940	136	169	110	27	56	55
28	e62	1360	e140	e300	e180	972	135	105	137	35	40	59
29	e130	581	e130	e290	---	533	131	75	132	31	43	65
30	e88	306	e130	e270	---	480	177	62	111	24	48	120
31	e78	---	e120	e300	---	428	---	67	---	18	31	---
TOTAL	2168	7686	8288	3796	8800	17284	14066	4745	2417	930	1260	819
MEAN	69.9	256	267	122	314	558	469	153	80.6	30.0	40.6	27.3
MAX	250	1360	1430	300	2600	2450	1620	424	474	76	252	120
MIN	31	65	119	72	92	110	121	62	23	17	14	12
CFSM	.49	1.80	1.88	.86	2.21	3.93	3.30	1.08	.57	.21	.29	.19
IN.	.57	2.01	2.17	.99	2.31	4.53	3.68	1.24	.63	.24	.33	.21

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE
04214500 BUFFALO CREEK AT GARDENVILLE, NY--Continued

83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

MEAN	91.0	200	293	242	298	506	381	175	102	50.4	47.1	70.2
MAX	381	685	706	512	835	1048	950	495	531	354	376	827
(WY)	1987	1986	1991	1969	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

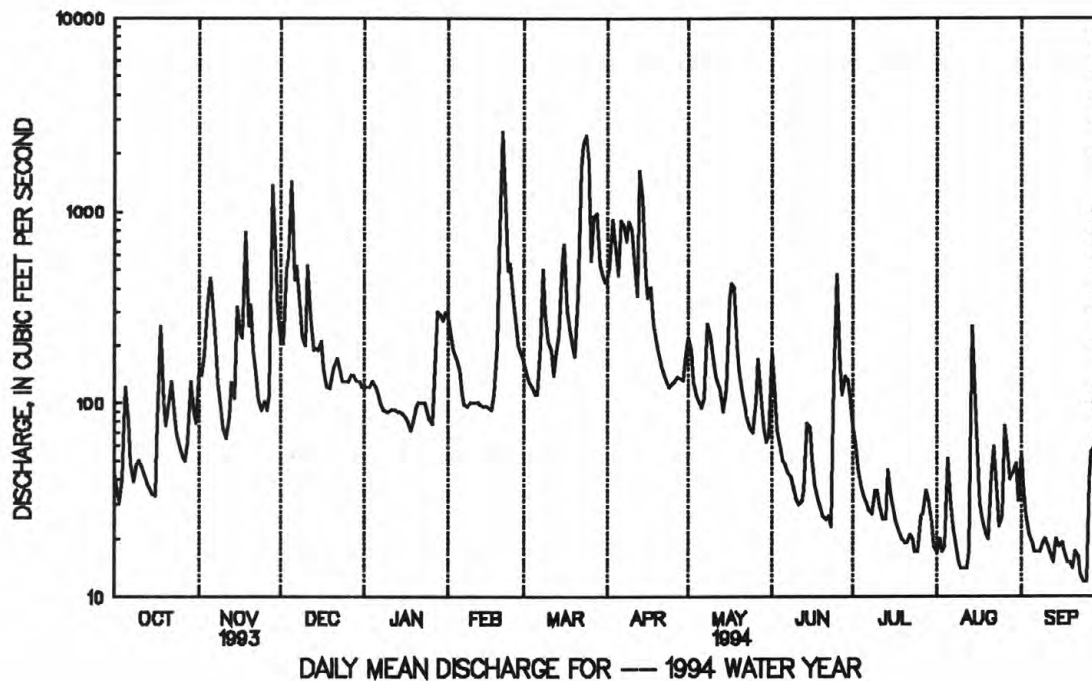
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1939 - 1994	
ANNUAL TOTAL	74368		72259			
ANNUAL MEAN	204		198		204	
HIGHEST ANNUAL MEAN					301	
LOWEST ANNUAL MEAN					128	
HIGHEST DAILY MEAN	2950		Mar 29		7650	
LOWEST DAILY MEAN	10		Aug 15		a	
ANNUAL SEVEN-DAY MINIMUM	11		Aug 11		1.0	
INSTANTANEOUS PEAK FLOW			4180		Mar 25	
INSTANTANEOUS PEAK STAGE			d9.57		Feb 20	
INSTANTANEOUS LOW FLOW			12		Sep 24	
ANNUAL RUNOFF (CFSM)	1.43		1.39		1.44	
ANNUAL RUNOFF (INCHES)	19.48		18.93		19.53	
10 PERCENT EXCEEDS	455		476		462	
50 PERCENT EXCEEDS	108		100		86	
90 PERCENT EXCEEDS	16		20		15	

a Sept. 24, 25.

b From rating curve extended above 3,200 ft³/s on basis of slope-area measurement at gage-height 7.07 ft.

c Mar. 1, 1955, Mar. 7, 1956.

d Ice jam.



STREAMS TRIBUTARY TO LAKE ERIE
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 mi².

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 sea level.

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 gage-height telemeter at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 20	2000	ice jam	*7.84	Mar. 23	2015	*2490	6.60

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	56	135	e50	e190	e90	200	131	181	46	4.9	24
2	19	66	132	e80	e160	e75	211	108	73	30	4.9	19
3	21	103	304	126	e130	e75	357	71	44	23	5.4	8.0
4	29	238	536	e80	e85	e77	291	56	33	18	5.2	5.8
5	124	333	888	e76	e50	e80	226	50	27	16	18	5.4
6	51	244	258	e68	e47	e85	668	47	24	14	11	5.9
7	29	141	331	e62	e44	e100	534	47	22	13	8.2	5.1
8	20	82	189	e60	e42	433	504	259	19	12	6.2	4.6
9	18	57	139	e58	e42	297	587	170	17	23	6.1	4.2
10	27	46	164	e60	e49	147	411	153	13	25	5.9	4.3
11	24	41	429	62	e78	128	239	101	14	16	5.4	5.8
12	17	76	e90	e64	e70	112	213	81	13	12	5.5	4.3
13	16	88	e65	e62	e58	142	1250	69	13	11	6.3	3.5
14	14	68	e75	e60	e54	209	597	52	37	12	61	4.4
15	13	215	e70	e48	e54	513	245	95	27	12	31	5.5
16	12	158	e65	e38	e56	610	202	211	17	10	12	5.0
17	80	129	e58	e30	e60	255	217	347	13	9.2	7.2	4.2
18	213	316	e50	e26	e75	198	151	249	11	8.5	6.1	3.8
19	72	144	e52	e28	e90	163	128	135	10	7.7	5.4	3.6
20	42	240	e85	e38	e560	148	105	96	9.4	6.9	4.9	3.3
21	42	141	e110	e48	e1900	339	87	69	8.7	6.4	12	3.0
22	58	90	e92	e58	e560	1430	76	53	8.1	6.2	13	2.5
23	39	68	e73	e70	e280	1530	68	45	7.6	6.3	7.9	1.5
24	29	60	e40	e65	e210	1450	61	39	71	5.6	5.7	1.6
25	24	66	e39	e46	e180	819	74	39	400	5.4	7.6	1.8
26	20	52	e38	e60	e140	272	83	62	101	7.8	9.9	14
27	19	85	e38	e80	e120	567	78	142	84	6.0	9.8	18
28	19	1220	e37	e137	e100	495	74	69	130	6.1	17	19
29	21	345	e36	e210	---	267	79	46	72	6.4	9.7	24
30	21	192	e35	e195	---	250	83	35	77	7.4	7.2	29
31	23	---	e34	e195	---	207	---	37	---	7.7	5.9	---
TOTAL	1183	5160	4687	2340	5484	11563	8099	3164	1576.8	396.6	326.3	244.1
MEAN	38.2	172	151	75.5	196	373	270	102	52.6	12.8	10.5	8.14
MAX	213	1220	888	210	1900	1530	1250	347	400	46	61	29
MIN	12	41	34	26	42	75	61	35	7.6	5.4	4.9	1.5
CFSM	.40	1.78	1.57	.78	2.03	3.87	2.80	1.06	.55	.13	.11	.08
IN.	.46	1.99	1.81	.90	2.12	4.46	3.13	1.22	.61	.15	.13	.09

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE
04215000 CAYUGA CREEK NEAR LANCASTER, NY--Continued

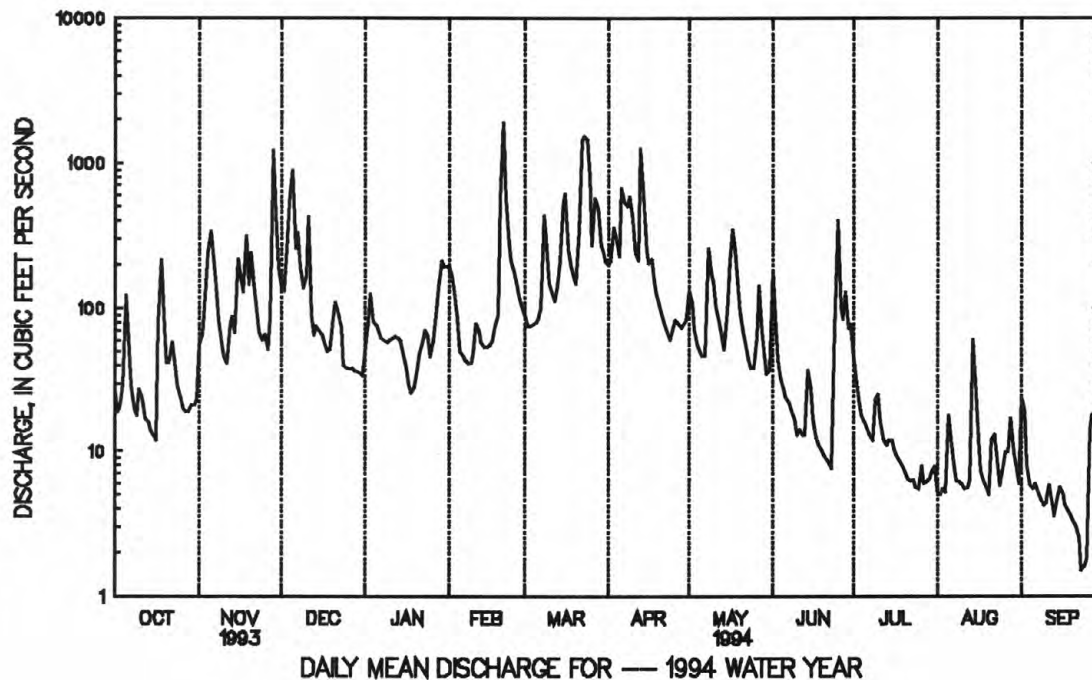
85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

MEAN	59.1	126	189	161	208	349	252	105	53.2	22.7	30.3	47.8
MAX	252	601	505	386	457	680	623	330	338	163	323	572
(WY)	1987	1986	1978	1979	1976	1942	1940	1947	1989	1992	1977	1977
MIN	2.90	4.34	5.60	9.85	25.1	146	36.5	18.7	5.88	1.06	1.87	.80
(WY)	1967	1961	1961	1961	1963	1981	1946	1941	1955	1955	1939	1960

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1939 - 1994	
ANNUAL TOTAL	46221.49		44223.8			
ANNUAL MEAN	127		121		133	
HIGHEST ANNUAL MEAN					206	
LOWEST ANNUAL MEAN					78.5	
HIGHEST DAILY MEAN	2090	Mar 29	1900	Feb 21	5830	Feb 24 1985
LOWEST DAILY MEAN	.75	Aug 28	1.5	Sep 23	.10	Aug 9 1939
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 25	2.5	Sep 19	.19	Jul 11 1955
INSTANTANEOUS PEAK FLOW			2490	Mar 23	9440	Sep 14 1979
INSTANTANEOUS PEAK STAGE			a7.84	Feb 20	a12.58	Mar 30 1960
INSTANTANEOUS LOW FLOW			1.3	Sep 23	b.00	c
ANNUAL RUNOFF (CFSM)	1.31		1.26		1.38	
ANNUAL RUNOFF (INCHES)	17.84		17.07		18.79	
10 PERCENT EXCEEDS	266		269		307	
50 PERCENT EXCEEDS	50		57		46	
90 PERCENT EXCEEDS	3.2		6.1		3.8	

- a Ice jam.
b Practically no flow when stop logs were installed in the dam.
c Aug. 8, 9, 1939.



STREAMS TRIBUTARY TO LAKE ERIE

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 mi².

PERIOD OF RECORD.--June 1940 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1973: 1972 (M). WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft above sea level. 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 fair. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 20	1845	ice jam	*9.70	Mar. 24	2300	*4,530	8.28

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e52	160	249	e130	e300	e170	579	293	178	74	17	88
2	e31	152	235	e130	e240	e150	793	214	90	52	24	43
3	e35	216	727	e130	e200	e140	1350	152	66	39	18	33
4	e50	392	1180	e140	e180	e130	724	126	57	33	30	27
5	e190	823	1650	e130	e170	e120	596	116	51	29	74	24
6	e100	694	508	e120	e130	e120	1140	115	47	28	33	21
7	e55	331	706	e110	e105	e190	867	117	44	27	20	20
8	43	185	376	e100	e100	e560	688	340	40	26	16	22
9	49	135	254	e95	e106	e320	835	232	36	41	14	21
10	56	109	302	e95	e106	e250	1150	198	34	38	14	21
11	54	96	e778	e98	e106	e210	649	148	32	29	14	17
12	45	151	e277	e98	e106	e160	531	145	32	26	14	16
13	45	163	e183	e95	e103	e210	1850	133	46	45	18	16
14	43	147	e180	e95	e100	e400	1050	107	116	69	642	17
15	41	493	e189	e92	e100	594	519	205	83	38	156	17
16	40	324	e175	e90	e98	577	485	452	50	33	53	17
17	201	643	151	e85	e96	299	488	609	39	28	33	16
18	366	981	137	e78	e120	253	305	408	33	26	26	16
19	129	322	141	e92	e210	226	255	237	29	26	22	15
20	84	443	165	e100	e1380	192	210	178	26	24	23	16
21	112	231	174	e105	e2400	423	174	141	26	27	69	19
22	176	172	e160	e105	966	1500	154	118	25	25	77	14
23	91	140	e144	e105	484	1880	139	102	24	23	37	13
24	73	128	e138	e96	e400	2550	129	92	252	18	25	13
25	63	139	e138	e88	e350	1950	136	90	448	19	41	13
26	57	114	e138	e80	e280	625	138	145	104	37	130	62
27	54	169	e142	e120	e220	1030	163	204	101	40	399	81
28	73	1770	e142	e320	e190	1010	157	107	117	28	178	53
29	161	583	e136	e312	---	577	174	82	143	26	584	144
30	96	342	e136	e300	---	511	200	66	127	25	131	215
31	90	---	e130	e320	---	492	---	85	---	19	67	---
TOTAL	2755	10748	10141	4054	9346	17819	16628	5757	2496	1018	2999	1110
MEAN	88.9	358	327	131	334	575	554	186	83.2	32.8	96.7	37.0
MAX	366	1770	1650	320	2400	2550	1850	609	448	74	642	215
MIN	31	96	130	78	96	120	129	66	24	18	14	13
CFSM	.66	2.65	2.42	.97	2.47	4.26	4.11	1.38	.62	.24	.72	.27
IN.	.76	2.96	2.79	1.12	2.58	4.91	4.58	1.59	.69	.28	.83	.31

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE
04215500 CAZENOVIA CREEK AT EBENEZER, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	111	245	353	286	330	562	423	201	107	51.7	48.8	79.9
MAX	410	705	868	576	859	1062	1005	585	473	381	371	977
(WY)	1946	1986	1991	1957	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

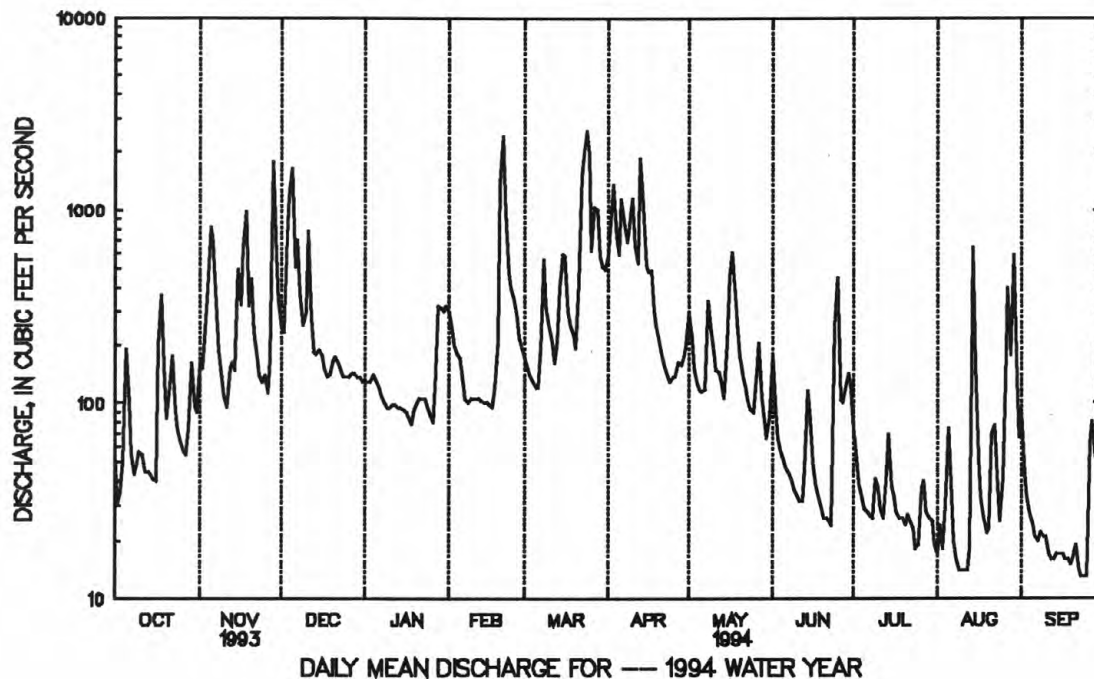
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1940 - 1994	
ANNUAL TOTAL	78689.5		84871		233	
ANNUAL MEAN	216		233		332	
HIGHEST ANNUAL MEAN					163	
LOWEST ANNUAL MEAN					7560	
HIGHEST DAILY MEAN	2930	Mar 29	2550	Mar 24	3.1	Jul 20 1955
LOWEST DAILY MEAN	8.0	Aug 30	13	d	3.5	Jul 17 1955
ANNUAL SEVEN-DAY MINIMUM	9.4	Aug 11	15	Sep 19	a13500	Mar 1 1955
INSTANTANEOUS PEAK FLOW			4530	Mar 24	c15.82	Mar 1 1955
INSTANTANEOUS PEAK STAGE			b9.70	Feb 20	2.6	Nov 7 1953
INSTANTANEOUS LOW FLOW			12	d	1.72	
ANNUAL RUNOFF (CFSM)	1.60		1.72		23.43	
ANNUAL RUNOFF (INCHES)	21.68		23.39		548	
10 PERCENT EXCEEDS	503		583		97	
50 PERCENT EXCEEDS	110		120		15	
90 PERCENT EXCEEDS	14		24			

a From rating curve extended above 7,700 ft³/s.

b Ice jam.

c Present datum.

d Sept. 23, 24, 25.



LOCATION.--Lat 42°52'39", long 78°53'26", Erie County, Hydrologic Unit 04120200, near outer end of Buffalo River South Pier, at Buffalo.

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. Prior to Feb. 5, 1899, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 581.34 ft, Dec. 2, 1985; minimum, 564.86 ft, Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 576.12 ft, Oct. 21; minimum elevation, 569.03 ft, Feb. 23.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572.40	571.97	571.64	572.20	571.64	571.39	572.04	573.16	572.76	572.82	572.71	572.59
2	572.31	571.78	571.93	571.47	571.37	571.11	572.04	572.74	572.72	572.87	572.71	572.39
3	573.11	572.46	571.87	570.94	571.97	571.48	572.07	572.50	572.55	572.52	572.65	572.23
4	572.85	571.92	571.38	571.24	571.42	571.52	572.04	572.52	572.47	572.61	573.02	572.04
5	572.04	572.54	571.55	572.33	571.46	571.52	571.99	572.58	572.38	572.82	572.42	572.11
6	571.91	571.77	572.42	570.88	571.33	571.41	571.66	572.95	572.59	572.79	572.42	572.38
7	572.04	572.24	572.11	570.76	571.30	571.56	572.40	572.41	572.47	572.77	572.46	572.71
8	571.96	572.13	571.87	572.89	570.47	571.75	572.03	572.75	572.20	572.77	572.59	572.76
9	571.83	571.87	572.00	572.09	571.28	571.23	572.36	572.86	572.46	573.15	572.60	572.48
10	571.86	571.59	572.21	571.44	571.21	571.74	572.25	572.63	572.30	573.02	572.45	572.15
11	571.83	572.08	571.82	571.92	571.30	571.63	572.08	572.85	572.34	572.78	572.47	572.14
12	572.32	571.39	571.85	571.50	571.19	571.61	571.95	572.78	572.53	573.06	572.43	572.37
13	571.77	571.74	571.68	571.65	571.64	571.66	572.62	572.59	572.51	572.78	573.09	572.50
14	571.69	571.58	571.09	571.76	571.19	571.66	572.53	572.42	572.50	572.58	573.13	572.32
15	571.75	571.98	571.21	571.99	571.56	571.82	572.53	572.63	572.52	572.90	572.93	572.13
16	571.83	571.59	571.36	571.61	571.29	572.02	573.13	572.94	572.53	572.79	572.63	572.27
17	572.23	571.48	571.75	571.98	571.24	571.80	572.82	572.71	572.51	572.65	572.57	572.30
18	571.84	571.51	571.87	572.30	571.21	571.63	572.47	572.55	572.52	572.76	572.63	572.28
19	571.63	572.43	572.10	571.70	571.22	571.93	572.69	572.54	572.45	572.69	572.58	572.17
20	571.62	572.81	571.98	571.41	571.32	571.71	572.53	572.56	572.47	572.68	572.68	572.12
21	573.76	572.40	572.51	571.44	571.39	571.77	572.57	572.53	572.68	572.80	572.71	572.05
22	572.28	572.08	572.58	571.38	571.09	571.93	572.51	572.54	572.55	572.89	572.39	571.97
23	571.92	571.49	571.68	571.31	570.44	571.87	572.55	572.62	572.41	573.00	572.51	571.73
24	572.34	571.13	572.78	571.28	572.32	572.00	572.78	572.38	572.17	572.91	572.56	571.78
25	571.47	570.67	572.45	570.56	571.27	572.00	572.51	572.54	573.30	572.84	572.77	571.93
26	571.76	571.44	572.64	570.03	571.54	571.76	572.47	572.51	572.84	572.94	572.67	572.02
27	572.00	571.68	571.92	570.83	571.51	571.94	572.67	572.76	572.55	572.66	572.61	572.58
28	572.29	572.03	571.78	572.04	571.45	571.92	572.07	572.72	572.78	572.69	573.06	573.06
29	572.											

CAL YR 1993 MEAN 572.58 MAX 574.55 MIN 570.67

WTR YR 1994 MEAN 572.16 MAX 573.76 MIN 570.03

ST. LAWRENCE RIVER MAIN STEM

89

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 mi².

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.

COOPERATION.--Records of daily discharge furnished by Detroit District Corps of Engineers and Canada Department of the Environment.

AVERAGE DISCHARGE.--134 years, 205,900 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218000	210000	208000	218000	214000	204000	220000	242000	234000	227000	222000	225000
2	219000	208000	213000	208000	212000	199000	216000	236000	233000	231000	222000	219000
3	231000	224000	215000	189000	217000	202000	218000	228000	228000	221000	221000	216000
4	237000	215000	205000	190000	215000	206000	218000	228000	227000	223000	230000	212000
5	213000	219000	208000	204000	208000	206000	215000	229000	224000	225000	215000	212000
6	210000	218000	222000	166000	206000	204000	210000	237000	226000	225000	216000	216000
7	214000	216000	223000	158000	204000	206000	222000	227000	224000	225000	219000	222000
8	211000	219000	216000	207000	191000	211000	221000	231000	215000	224000	220000	227000
9	209000	213000	216000	194000	208000	201000	226000	237000	218000	232000	220000	221000
10	210000	205000	216000	174000	209000	208000	226000	234000	217000	226000	218000	211000
11	209000	215000	217000	202000	205000	208000	219000	234000	216000	225000	219000	214000
12	221000	206000	213000	201000	203000	208000	215000	237000	219000	229000	218000	216000
13	207000	208000	211000	210000	210000	210000	228000	231000	216000	225000	232000	218000
14	208000	210000	196000	209000	205000	207000	231000	227000	218000	218000	237000	216000
15	207000	213000	195000	215000	208000	211000	229000	230000	214000	225000	231000	213000
16	209000	208000	203000	213000	204000	217000	234000	240000	215000	226000	226000	213000
17	217000	203000	207000	215000	203000	215000	220000	233000	212000	222000	223000	216000
18	215000	206000	214000	208000	202000	208000	214000	232000	213000	221000	225000	213000
19	205000	218000	216000	197000	202000	215000	217000	228000	211000	223000	222000	214000
20	203000	238000	218000	194000	208000	210000	214000	230000	208000	222000	226000	213000
21	248000	224000	220000	201000	209000	210000	215000	230000	214000	222000	227000	209000
22	226000	222000	234000	204000	209000	221000	217000	229000	211000	226000	218000	207000
23	211000	204000	209000	203000	185000	220000	222000	231000	210000	230000	220000	202000
24	221000	199000	227000	203000	227000	224000	221000	226000	206000	226000	220000	203000
25	203000	183000	221000	189000	210000	224000	220000	228000	232000	225000	226000	204000
26	205000	203000	236000	173000	205000	217000	219000	231000	227000	228000	222000	210000
27	213000	210000	214000	185000	211000	219000	216000	228000	219000	220000	223000	219000
28	217000	220000	210000	220000	210000	218000	215000	234000	224000	220000	234000	241000
29	229000	223000	216000	225000	---	221000	224000	230000	227000	221000	224000	233000
30	203000	213000	230000	205000	---	220000	221000	227000	231000	224000	220000	216000
31	193000	---	226000	209000	---	216000	---	232000	---	222000	224000	---
TOTAL	6642000	6373000	6675000	6189000	5800000	6566000	6603000	7177000	6589000	6959000	6920000	6471000
MEAN	214300	212400	215300	199600	207100	211800	220100	231500	219600	224500	223200	215700
MAX	248000	238000	236000	225000	227000	224000	234000	242000	234000	232000	237000	241000
MIN	193000	183000	195000	158000	185000	199000	210000	226000	206000	218000	215000	202000

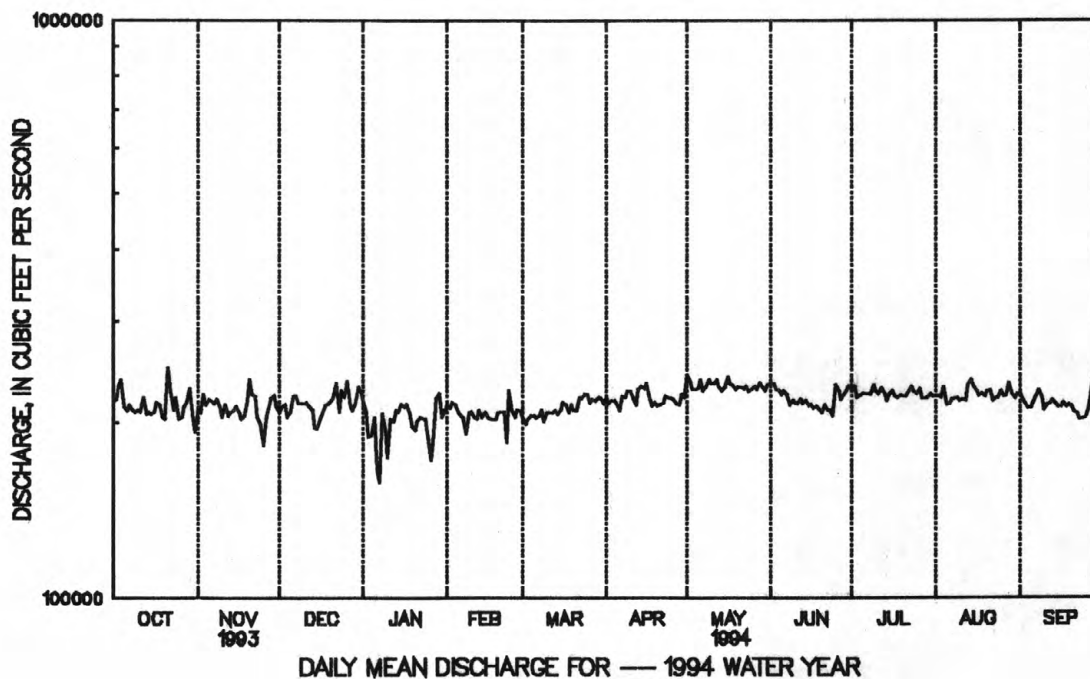
ST. LAWRENCE RIVER MAIN STEM
04216000 NIAGARA RIVER AT BUFFALO, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

MEAN	200100	200300	200800	194600	192000	198100	207500	216100	216100	211900	208300	204000
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1926 - 1994	
ANNUAL TOTAL	82858000		78964000			
ANNUAL MEAN	227000		216300		204700	
HIGHEST ANNUAL MEAN					249600	
LOWEST ANNUAL MEAN					155300	
HIGHEST DAILY MEAN	277000	Jan 31	248000	Oct 21	a347000	Dec 2 1985
LOWEST DAILY MEAN	183000	Nov 25	158000	Jan 7	90000	Jan 13 1964
ANNUAL SEVEN-DAY MINIMUM	206000	Dec 12	185000	Jan 4	105000	Feb 6 1936
10 PERCENT EXCEEDS	244000		230000		238000	
50 PERCENT EXCEEDS	228000		217000		205000	
90 PERCENT EXCEEDS	208000		203000		169000	

a Result of high, storm-generated Lake Erie level.



ST. LAWRENCE RIVER MAIN STEM

91

04216052 BLACK ROCK CANAL AT PORTER AVENUE, BUFFALO, NY

LOCATION.--Lat 42°53'52", long 78°54'07", Erie County, Hydrologic Unit 04120104, on right bank at U. S. Navy Installation at Porter Avenue, Buffalo and 0.6 mi upstream from Peace bridge.

DRAINAGE AREA.--263,700 mi².

PERIOD OF RECORD.--October 1984 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 579.57 ft, Dec. 2, 1985; minimum recorded 567.98 ft, Dec. 3, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 575.93 ft, Oct. 21; minimum recorded, 569.02 ft, Feb. 23.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572.55	572.03	571.72	572.26	571.70	---	---	573.25	572.87	572.93	572.81	572.75
2	572.51	571.88	572.03	571.58	571.43	---	---	572.86	572.86	573.00	572.82	572.49
3	573.13	572.54	572.13	571.02	572.02	---	---	572.62	572.67	572.65	572.76	572.37
4	573.09	572.13	---	571.27	571.50	---	---	572.64	572.60	572.72	573.11	572.19
5	572.15	572.52	---	572.37	571.53	---	---	572.68	572.52	572.94	572.55	572.22
6	572.09	572.06	---	570.98	571.39	---	---	573.06	572.71	572.89	572.51	572.48
7	572.17	572.35	---	570.79	571.37	---	---	572.51	572.62	572.89	572.59	572.80
8	572.06	572.39	---	572.90	570.54	---	---	572.86	572.33	572.90	572.69	572.90
9	571.97	572.12	---	572.16	571.32	---	---	572.96	572.58	573.24	572.73	572.66
10	572.00	571.74	572.28	571.48	571.28	---	---	572.75	572.45	573.14	572.55	572.25
11	572.04	572.16	571.88	571.97	571.36	---	---	572.93	572.47	572.90	572.59	572.28
12	572.53	571.68	571.92	571.54	571.25	---	---	572.92	572.68	573.15	572.53	572.50
13	571.87	571.84	571.77	571.72	571.69	---	---	572.72	572.62	572.97	573.15	572.59
14	571.88	571.87	571.17	571.81	571.28	---	572.67	572.54	572.68	572.68	573.23	572.48
15	571.95	572.08	571.26	572.02	571.62	---	572.58	572.71	572.65	573.00	573.03	572.27
16	571.93	571.77	571.42	571.67	571.35	---	573.29	573.09	572.65	572.91	572.76	572.40
17	572.30	571.55	571.80	572.01	571.32	---	572.87	572.80	572.64	572.78	572.69	572.45
18	572.03	571.81	571.92	572.34	571.28	---	572.54	572.66	572.65	572.87	572.75	572.38
19	571.80	572.33	572.17	571.30	571.28	---	572.76	572.67	572.56	572.82	572.69	572.29
20	571.76	573.08	572.05	571.33	571.38	---	572.60	572.68	572.56	572.79	572.81	572.27
21	573.66	572.48	572.54	571.51	571.47	---	572.64	572.65	572.82	572.89	572.84	572.20
22	572.64	572.28	572.65	571.45	571.19	---	572.59	572.66	572.68	572.99	572.51	572.10
23	572.10	571.60	571.73	571.37	570.45	---	572.63	572.74	572.57	573.14	572.66	571.88
24	572.52	571.38	572.83	571.36	572.37	---	572.88	572.53	572.25	573.01	572.66	571.92
25	571.74	570.77	572.45	570.65	571.36	---	572.63	572.68	573.38	572.93	572.91	572.00
26	571.79	571.52	572.73	570.09	571.58	---	572.58	572.69	572.99	573.09	572.80	572.16
27	572.09	571.83	571.98	570.88	571.58	---	572.78	572.79	572.65	572.77	572.73	572.63
28	572.39	572.13	571.85	572.06	571.52	---	572.22	572.85	572.88	572.80	573.19	573.21
29	572.87	572.22	572.35	571.77	---	---	572.70	572.71	573.01	572.70	572.83	573.01
30	571.62	571.80	572.83	571.31	---	---	572.39	572.66	573.11	572.83	572.59	572.35
31	571.26	---	572.56	571.43	---	---	---	572.85	---	572.80	572.84	---
MEAN	572.21	572.00	---	571.56	571.41	---	---	572.77	572.69	572.91	572.77	572.42
MAX	573.66	573.08	---	572.90	572.37	---	---	573.25	573.38	573.24	573.23	573.21
MIN	571.26	570.77	---	570.09	570.45	---	---	572.51	572.25	572.65	572.51	571.88

ST. LAWRENCE RIVER MAIN STEM

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 mi².

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 572.72 ft, Dec. 2, 1985; minimum recorded, 564.81 ft, Oct. 28, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation (June 3 to Sep. 29), 568.00 ft, Aug. 4, but may have been higher during periods of questionable or no gage-height record; minimum recorded (June 3 to Sep. 29), 565.60 ft, Sep. 6, but may have been lower during periods of questionable or no gage-height record.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	567.13	567.05	567.04
2	---	---	---	---	---	---	---	---	---	567.13	567.06	566.80
3	---	---	---	---	---	---	---	---	---	566.87	567.01	566.72
4	---	---	---	---	---	---	---	---	566.89	566.85	567.31	566.55
5	---	---	---	---	---	---	---	---	566.82	567.00	566.97	566.51
6	---	---	---	---	---	---	---	---	566.99	566.98	566.86	566.63
7	---	---	---	---	---	---	---	---	566.95	566.95	566.90	566.97
8	---	---	---	---	---	---	---	---	---	566.95	566.95	567.06
9	---	---	---	---	---	---	---	---	566.77	567.25	567.01	566.89
10	---	---	---	---	---	---	---	---	566.93	567.24	566.93	566.59
11	---	---	---	---	---	---	---	---	566.92	567.09	566.89	566.61
12	---	---	---	---	---	---	---	---	567.08	567.20	566.82	566.71
13	---	---	---	---	---	---	---	---	567.13	567.08	567.31	566.76
14	---	---	---	---	---	---	---	---	567.22	566.86	567.43	566.73
15	---	---	---	---	---	---	---	---	567.17	567.07	567.28	566.60
16	---	---	---	---	---	---	---	---	567.18	567.01	567.07	566.60
17	---	---	---	---	---	---	---	---	567.19	566.89	566.99	566.72
18	---	---	---	---	---	---	---	---	567.21	567.00	567.02	566.74
19	---	---	---	---	---	---	---	---	567.12	566.99	567.00	566.59
20	---	---	---	---	---	---	---	---	567.06	566.95	567.01	566.53
21	---	---	---	---	---	---	---	---	567.22	567.02	567.05	566.45
22	---	---	---	---	---	---	---	---	567.04	567.10	566.84	566.37
23	---	---	---	---	---	---	---	---	566.90	567.20	566.95	566.21
24	---	---	---	---	---	---	---	---	566.60	567.14	566.89	566.26
25	---	---	---	---	---	---	---	---	567.47	567.08	567.07	566.34
26	---	---	---	---	---	---	---	---	567.13	567.23	566.97	566.49
27	---	---	---	---	---	---	---	---	566.87	567.02	566.96	566.83
28	---	---	---	---	---	---	---	---	567.09	567.05	567.30	567.41
29	---	---	---	---	---	---	---	---	567.15	566.99	567.05	567.24
30	---	---	---	---	---	---	---	---	567.25	567.04	566.86	---
31	---	---	---	---	---	---	---	---	---	567.02	567.07	---
MEAN	---	---	---	---	---	---	---	---	---	567.04	567.03	---
MAX	---	---	---	---	---	---	---	---	---	567.25	567.43	---
MIN	---	---	---	---	---	---	---	---	---	566.85	566.82	---

NIAGARA RIVER BASIN

93

04216200 SCAJAQUADA CREEK AT BUFFALO, NY

LOCATION.--Lat 42°54'41", long 78°47'45", Erie County, Hydrologic Unit 04120104, on right bank 58 ft upstream from point where stream goes underground in concrete-lined tunnel, 86 ft upstream from Pine Ridge Road, 0.2 mi east of boundary line of city of Buffalo, and 6.2 mi upstream from mouth.

DRAINAGE AREA.--15.4 mi².

PERIOD OF RECORD.--February 1957 to current year.

REVISED RECORDS.--WSP 1912; WDR NY-82-3; Drainage area. WRD NY 1974; 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 626.26 ft above sea level (city of Buffalo bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to July 1982 discharge included flow diverted from Lake Erie and Niagara River as sewage-plant effluent entering basin upstream from station. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.

COOPERATION.--Town of Cheektowaga maintains records of sewage-plant discharge.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 21	1715	733	5.83	June 24	2015	*813	*6.24

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	29	18	e11	e20	e6.0	8.0	15	38	7.9	2.8	28
2	14	18	24	e30	e15	e5.8	7.6	7.1	11	4.8	9.9	5.9
3	4.5	44	49	e15	e10	e10	51	5.1	5.3	4.3	7.2	1.8
4	71	30	146	e9.8	e6.8	e12	27	5.1	3.8	3.0	38	1.4
5	34	26	73	e8.8	e5.6	e15	16	4.4	3.3	2.8	31	1.7
6	7.8	14	28	e8.8	e5.0	e16	146	3.9	3.7	2.8	6.6	1.2
7	4.4	6.8	24	e8.2	e4.8	e47	109	3.5	3.1	4.1	2.2	1.3
8	3.4	4.8	13	e7.6	e4.5	e44	59	71	2.7	12	1.6	1.1
9	31	3.9	9.3	e7.0	e4.5	e17	32	31	2.4	27	1.6	4.7
10	10	3.2	31	e7.2	e5.3	e9.0	18	30	2.5	4.7	1.5	1.5
11	4.3	2.8	e27	e7.8	e9.0	e9.0	10	15	2.6	3.5	1.4	1.1
12	2.8	4.8	e10	e8.0	e8.0	e9.7	31	15	2.8	3.2	1.4	1.0
13	2.2	2.8	e6.8	e6.4	e6.5	55	200	6.4	29	4.3	25	1.2
14	1.9	21	8.7	e5.7	e6.0	38	44	4.7	21	4.0	119	15
15	1.9	28	e8.6	e5.2	e6.0	159	19	82	5.2	2.4	7.5	2.5
16	10	11	e7.0	e4.5	e6.2	e55	19	37	3.7	2.3	3.0	2.6
17	85	36	e6.0	e3.6	13	e23	10	33	3.7	2.0	2.1	1.5
18	32	24	e5.4	e3.2	e31	e15	6.8	17	3.2	2.1	1.9	1.3
19	8.6	14	e5.0	e3.5	e90	e13	7.0	8.7	2.9	2.2	1.6	1.2
20	7.4	18	e13	e4.3	e278	e14	5.0	6.6	3.4	2.1	6.8	1.1
21	18	8.0	e43	e4.9	e148	e188	4.3	5.5	4.3	2.3	65	1.8
22	5.7	5.7	e27	e5.7	e43	135	4.5	4.3	6.4	2.4	13	2.0
23	3.2	4.8	e7.0	e7.7	e20	88	3.7	3.8	6.7	3.5	3.6	1.1
24	2.5	12	e4.8	e7.0	e11	63	3.5	3.7	331	2.3	2.4	4.8
25	2.2	7.4	e4.5	e5.8	e8.7	31	17	4.1	129	2.3	11	1.8
26	1.9	4.3	e4.4	e6.8	e7.3	15	6.9	88	25	25	3.2	52
27	1.9	125	e4.2	e14	e6.8	54	27	34	43	4.1	2.8	150
28	2.2	153	e4.0	e235	e6.3	36	8.5	9.4	24	29	4.0	128
29	1.9	31	e4.0	e104	---	20	18	5.4	29	20	2.7	29
30	1.7	24	e3.9	e48	---	14	9.7	4.2	12	26	1.7	8.6
31	18	---	e3.9	e34	---	10	---	56	---	5.0	4.2	---
TOTAL	400.0	717.3	623.5	638.5	786.3	1226.5	928.5	619.9	763.7	223.4	385.7	456.2
MEAN	12.9	23.9	20.1	20.6	28.1	39.6	30.9	20.0	25.5	7.21	12.4	15.2
MAX	85	153	146	235	278	188	200	88	331	29	119	150
MIN	1.7	2.8	3.9	3.2	4.5	5.8	3.5	3.5	2.4	2.0	1.4	1.0

e Estimated

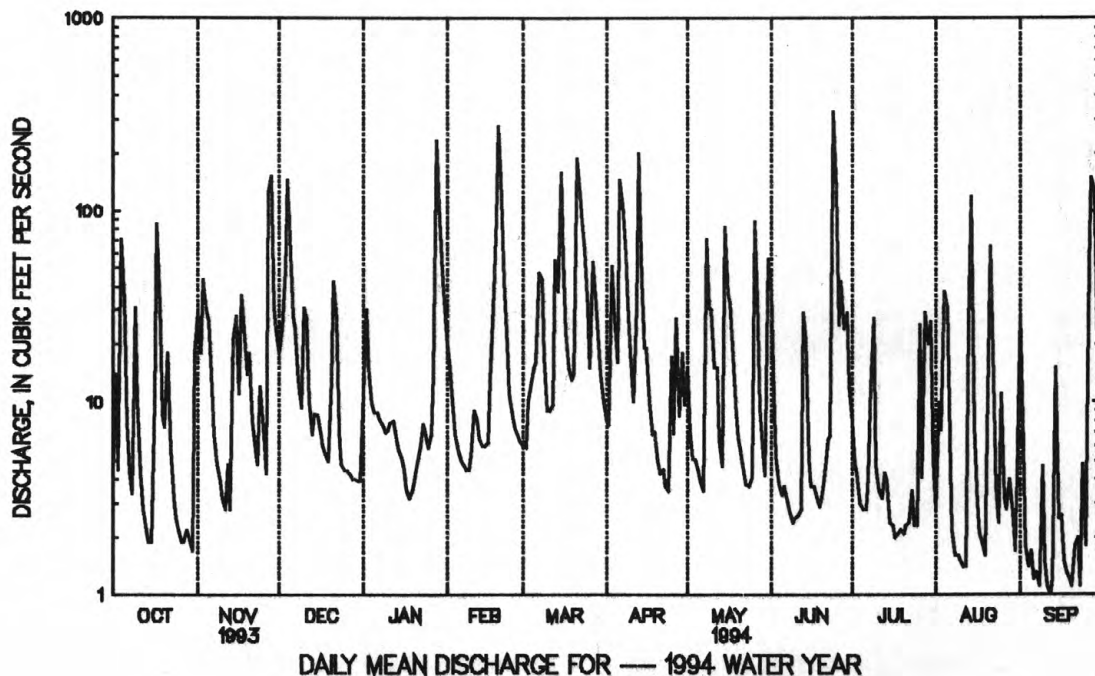
NIAGARA RIVER BASIN
04216200 SCAJAQUADA CREEK AT BUFFALO, NY--continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

MEAN	22.1	37.0	40.6	30.4	39.3	51.9	35.9	24.5	22.5	16.7	23.2	23.1
MAX	64.7	89.1	98.2	74.2	81.8	111	75.6	52.3	57.5	50.6	103	105
(WY)	1968	1986	1978	1969	1961	1972	1961	1978	1972	1992	1977	1977
MIN	3.66	10.2	2.38	7.18	4.62	13.9	16.0	4.40	2.48	3.42	3.99	5.09
(WY)	1985	1991	1990	1983	1993	1990	1988	1987	1991	1989	1989	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1957 - 1994
ANNUAL TOTAL	6712.19	7769.5	
ANNUAL MEAN	18.4	21.3	30.6
HIGHEST ANNUAL MEAN			47.6
LOWEST ANNUAL MEAN			14.9
HIGHEST DAILY MEAN	315 Jan 5	331 Jun 24	1370 Sep 14 1979
LOWEST DAILY MEAN	.99 Aug 13	1.0 Sep 12	.45 Sep 2 1991
ANNUAL SEVEN-DAY MINIMUM	1.2 Aug 9	1.4 Sep 17	.65 Aug 28 1991
INSTANTANEOUS PEAK FLOW		813 Jun 24	2820 Jun 22 1987
INSTANTANEOUS PEAK STAGE		6.24 Jun 24	15.17 Jun 22 1987
INSTANTANEOUS LOW FLOW		.72 a	.16 Sep 11 1991
10 PERCENT EXCEEDS	44	48	63
50 PERCENT EXCEEDS	5.0	7.2	16
90 PERCENT EXCEEDS	1.7	2.2	3.6

a Sept. 11,12 13,18,19,20.



ST. LAWRENCE RIVER MAIN STEM

95

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 mi².

PERIOD OF RECORD.--October 1984 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 579.93 ft, Dec. 2, 1985; minimum recorded, 568.34 ft, Oct. 19, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 574.63 ft, June 25; minimum recorded, 568.76 ft, Feb. 23.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572.38	---	571.67	572.23	571.71	571.37	571.93	573.14	572.81	572.87	572.75	572.66
2	572.32	571.77	571.94	571.60	571.45	571.13	571.59	572.80	572.79	572.94	572.76	572.40
3	572.78	572.39	571.89	571.04	572.01	571.50	571.97	572.56	572.63	572.58	572.69	572.28
4	572.51	---	571.47	571.31	571.50	571.55	571.99	572.57	572.55	572.64	573.04	572.09
5	572.02	---	571.60	572.27	571.53	571.54	571.80	572.62	572.46	572.88	572.47	572.12
6	---	---	572.50	571.00	571.39	571.43	571.66	572.99	572.66	572.85	572.44	572.39
7	---	572.17	573.09	570.83	571.36	571.59	572.14	572.44	572.55	572.81	572.52	572.70
8	571.92	---	572.53	572.58	570.52	571.78	571.88	572.73	572.26	572.83	572.62	572.81
9	571.78	---	572.31	572.19	571.29	571.24	571.68	572.89	572.53	573.17	572.65	572.56
10	571.81	---	572.05	571.52	571.26	571.75	571.62	572.66	572.38	573.08	572.47	572.15
11	---	572.01	571.89	572.01	571.32	571.66	571.85	572.74	572.39	572.84	572.52	572.18
12	---	571.52	571.95	571.58	571.21	571.62	571.78	572.85	572.63	573.08	572.45	572.41
13	571.70	571.74	571.80	571.76	571.65	571.69	571.96	572.66	572.58	572.90	573.08	572.50
14	571.67	571.65	571.17	571.84	571.24	571.69	572.25	572.41	572.61	572.61	573.16	572.39
15	571.75	571.81	571.30	572.06	571.56	571.83	571.88	572.63	572.56	572.93	572.95	572.18
16	571.81	571.64	571.45	571.71	571.31	572.04	572.67	572.99	572.59	572.84	572.68	572.31
17	---	571.41	571.83	572.05	571.27	571.83	572.79	572.73	572.58	572.71	572.62	572.36
18	---	571.57	571.96	572.38	571.21	571.66	572.45	572.59	572.59	572.80	572.67	572.29
19	---	572.22	572.10	571.83	571.22	571.97	572.52	572.60	572.50	572.76	572.61	572.20
20	571.60	572.83	572.07	571.51	571.32	571.74	572.51	572.53	572.49	572.73	572.72	572.18
21	---	572.48	572.21	571.55	571.39	571.75	572.53	572.57	572.76	572.83	572.75	572.10
22	---	572.21	572.40	571.49	571.11	571.90	572.49	572.54	572.62	572.92	572.42	572.00
23	---	571.52	571.76	571.41	570.37	571.75	572.55	572.65	572.51	573.08	572.57	571.78
24	---	571.35	572.59	571.40	572.14	571.68	572.62	572.47	572.18	572.96	572.58	571.83
25	---	570.65	572.36	570.69	571.28	572.04	572.39	572.61	573.31	572.86	572.83	571.90
26	571.73	571.42	572.45	570.12	571.48	571.78	572.26	572.62	572.93	573.02	572.72	572.08
27	571.96	571.69	572.01	570.90	571.48	571.90	572.53	572.73	572.57	572.70	572.64	572.55
28	572.16	572.02	571.88	571.88	571.42	571.93	572.14	572.79	572.83	572.73	573.07	573.14
29	---	---	572.33	571.72	---	572.02	572.64	572.65	572.93	572.64	572.74	572.93
30	---	---	572.71	571.32	---	572.02	572.31	572.60	573.05	572.76	572.50	572.27
31	---	---	572.58	571.45	---	571.95	---	572.77	---	572.73	572.76	---
MEAN	---	---	572.06	571.59	571.36	571.72	572.18	572.68	572.63	572.84	572.69	572.32
MAX	---	---	573.09	572.58	572.14	572.04	572.79	573.14	573.31	573.17	573.16	573.14
MIN	---	---	571.17	570.12	570.37	571.13	571.59	572.41	572.18	572.58	572.42	571.78

ST. LAWRENCE RIVER MAIN STEM

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 mi².

PERIOD OF RECORD.--October 1984 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 571.15 ft, Dec. 2, 1985; minimum recorded, 563.34 ft, Dec. 3, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 568.04 ft, Oct. 21; minimum recorded, 564.19 ft, Jan. 25, but may have been lower during periods of missing gage-height record.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	565.85	565.46	---	565.85	566.51	566.25	566.10	566.09	566.16
2	---	---	---	565.49	565.19	---	565.74	566.20	566.24	566.06	566.10	565.94
3	---	---	---	565.05	565.80	565.32	565.82	566.08	566.06	565.84	566.06	565.88
4	---	---	---	565.19	565.49	565.32	565.75	566.06	565.94	565.83	566.33	565.71
5	---	---	---	566.34	565.54	565.36	565.77	566.06	565.90	565.96	566.03	565.68
6	565.70	---	566.13	565.14	565.27	565.26	565.63	566.41	566.02	565.94	565.93	565.84
7	565.82	---	565.82	564.89	565.28	565.34	566.06	566.01	566.00	565.90	565.97	566.11
8	565.74	---	565.47	566.42	564.74	565.66	565.92	566.32	565.83	565.89	566.02	566.19
9	565.77	---	565.57	566.07	565.16	565.19	566.02	566.40	566.06	566.18	566.06	566.03
10	565.75	---	565.65	565.19	565.14	565.47	565.98	566.15	565.99	566.19	566.00	565.76
11	565.71	---	565.60	566.16	565.35	565.47	565.80	566.26	565.98	566.07	565.97	565.78
12	566.14	---	565.39	565.70	564.95	565.39	565.68	566.34	566.12	566.17	565.89	565.89
13	565.69	---	565.27	---	---	565.39	566.21	566.09	566.17	566.06	566.35	565.92
14	565.66	---	564.88	---	---	565.47	566.25	565.95	566.27	565.86	566.45	565.90
15	565.72	---	564.93	---	---	565.74	566.05	566.06	566.21	566.04	566.35	565.80
16	565.77	---	565.08	---	---	565.99	566.39	566.40	566.19	565.99	566.16	565.78
17	565.95	---	565.30	---	---	565.73	566.05	566.23	566.17	565.89	566.08	565.90
18	565.86	---	565.40	---	---	565.53	565.80	566.07	566.18	565.99	566.09	565.94
19	565.57	---	565.54	---	---	565.76	565.80	566.11	566.09	565.99	566.10	565.77
20	565.49	---	565.59	---	---	565.68	565.84	566.14	566.02	565.94	566.09	565.72
21	566.77	---	565.86	---	---	565.55	565.93	566.04	566.14	566.01	566.14	565.63
22	566.22	---	566.18	---	---	565.88	566.04	566.06	565.96	566.09	565.95	565.56
23	565.70	---	565.29	---	---	565.86	566.19	566.13	565.82	566.18	566.06	565.41
24	566.00	---	566.14	---	---	565.97	566.53	565.97	565.54	566.13	565.99	565.46
25	565.45	---	565.86	564.73	---	566.00	566.33	566.10	566.33	566.07	566.17	565.54
26	565.56	---	566.39	564.52	---	565.80	566.01	566.13	566.05	566.22	566.08	565.67
27	565.74	---	565.44	565.35	---	565.83	566.16	566.15	565.81	566.03	566.07	565.96
28	565.88	---	565.34	565.81	---	565.86	565.99	566.21	566.04	566.06	566.38	566.51
29	566.12	---	565.76	565.63	---	566.01	566.11	566.07	566.09	566.03	566.15	566.37
30	---	---	566.32	565.09	---	565.93	566.04	566.04	566.18	566.06	565.99	565.84
31	---	---	566.20	565.37	---	565.83	---	566.21	---	566.06	566.18	---
MEAN	---	---	---	---	---	---	565.99	566.16	566.05	566.03	566.11	565.85
MAX	---	---	---	---	---	---	566.53	566.51	566.33	566.22	566.45	566.51
MIN	---	---	---	---	---	---	565.63	565.95	565.54	565.83	565.89	565.41

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 mi².

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 weir. Datum of gage is 954.63 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft³/s, June 23, 1972, gage height, about 12.0 ft, from information supplied by Village of Attica.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 24	2000	2,080	6.75	Apr. 13	2100	*2,230	*6.92

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	33	e80	e38	e75	e90	242	127	99	35	8.0	34
2	21	35	e80	e42	e64	e80	328	96	57	28	11	18
3	21	49	144	e38	e60	e66	541	74	46	24	12	15
4	19	101	389	e36	e58	e66	324	64	39	21	10	13
5	35	191	448	e34	e54	e54	266	60	35	19	17	12
6	27	122	187	e34	e50	e54	453	60	32	18	15	11
7	22	73	262	e32	e47	e80	348	63	30	17	10	11
8	20	52	148	e32	e44	e200	320	203	28	17	7.9	11
9	20	41	112	e30	e40	e100	456	128	26	22	7.1	18
10	23	37	137	e32	e36	e96	529	123	24	21	8.4	17
11	23	35	253	e34	e34	e85	305	88	23	19	7.8	13
12	20	55	120	e34	e36	e74	285	87	23	15	7.5	11
13	20	51	104	e34	e34	e70	1170	73	23	22	9.9	8.7
14	18	49	99	e32	e30	80	647	61	49	22	115	13
15	16	133	103	e30	e30	181	315	90	32	19	38	15
16	16	86	109	e29	e30	201	264	133	24	17	21	13
17	22	219	67	e28	e30	e100	291	258	22	16	16	11
18	46	247	60	e28	e34	e94	190	184	20	16	14	11
19	30	106	61	e27	e60	e84	160	120	19	16	14	10
20	24	123	67	e27	e460	e72	130	95	17	14	12	8.7
21	28	76	e66	e26	e800	e170	110	76	17	15	35	8.2
22	37	63	e52	e26	e400	642	98	64	18	14	30	7.8
23	26	53	e44	e26	e200	903	88	54	16	13	18	7.9
24	20	e50	e30	e28	e240	1170	80	48	41	12	15	8.7
25	18	e40	e36	e26	e150	708	82	51	68	11	19	10
26	18	e35	e30	e24	e120	283	90	66	39	12	39	23
27	18	72	e30	e24	e100	452	90	87	36	14	24	46
28	25	644	e32	e46	e90	417	77	57	50	11	20	26
29	29	198	e30	e180	---	250	90	47	42	9.7	20	48
30	24	122	e32	e130	---	224	86	41	45	8.3	16	46
31	24	---	e34	e100	---	205	---	40	---	8.5	16	---
TOTAL	735	3191	3446	1287	3406	7351	8455	2818	1040	526.5	613.6	506.0
MEAN	23.7	106	111	41.5	122	237	282	90.9	34.7	17.0	19.8	16.9
MAX	46	644	448	180	800	1170	1170	258	99	35	115	48
MIN	16	33	30	24	30	54	77	40	16	8.3	7.1	7.8
CFSM	.31	1.38	1.45	.54	1.58	3.08	3.66	1.18	.45	.22	.26	.22
IN.	.36	1.54	1.67	.62	1.65	3.56	4.09	1.36	.50	.25	.30	.24

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1994, BY WATER YEAR (WY)

MEAN	71.1	131	167	121	138	235	218	99.2	62.6	39.0	38.0	48.8
MAX	182	353	329	258	293	459	366	264	278	179	192	172
(WY)	1987	1986	1978	1979	1981	1979	1978	1984	1989	1992	1992	1992
MIN	10.8	16.6	34.5	41.5	34.4	122	127	37.4	18.8	10.1	7.28	6.73
(WY)	1992	1992	1990	1994	1980	1981	1980	1987	1991	1983	1991	1991

NIAGARA RIVER BASIN

04216418 TONAWANDA CREEK AT ATTICA, NY--Continued

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1978 - 1994

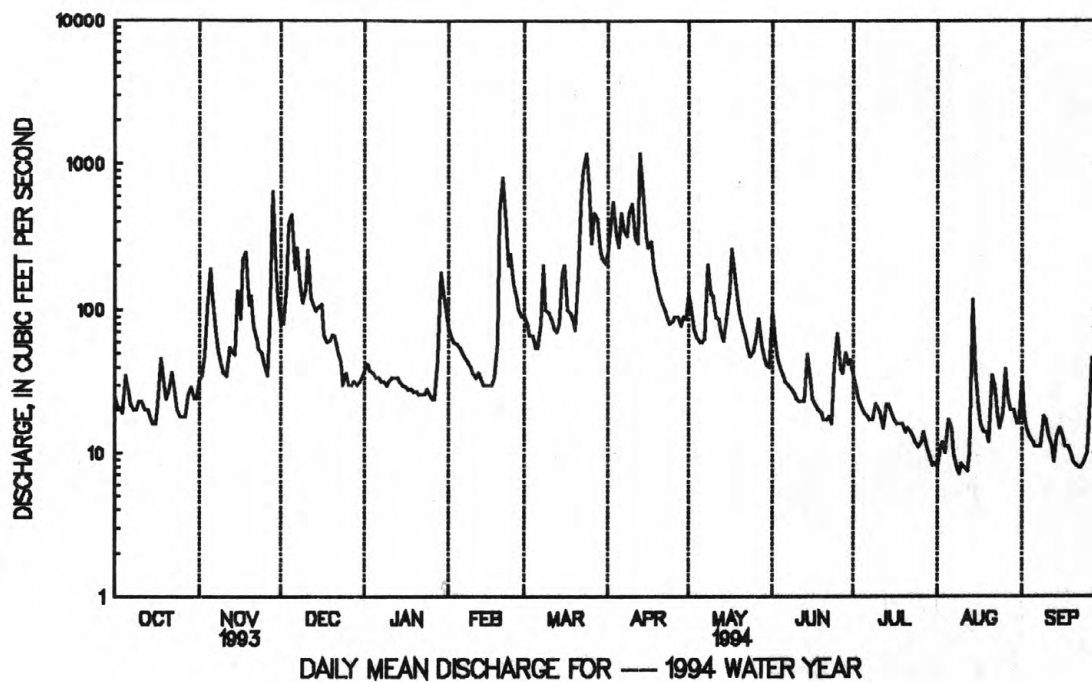
ANNUAL TOTAL	35158.3		33375.1			
ANNUAL MEAN	96.3		91.4		114	
HIGHEST ANNUAL MEAN					157	1978
LOWEST ANNUAL MEAN					88.9	1988
HIGHEST DAILY MEAN	988	Mar 30	1170	Mar 24	2630	Feb 24 1985
LOWEST DAILY MEAN	9.5	Aug 11	7.1	Aug 9	4.4	a
ANNUAL SEVEN-DAY MINIMUM	11	Aug 10	8.4	Aug 7	4.4	Aug 25 1991
INSTANTANEOUS PEAK FLOW			2230	Apr 13	4700	Dec 29 1984
INSTANTANEOUS PEAK STAGE			6.92	Apr 13	b12.40	Feb 18 1979
INSTANTANEOUS LOW FLOW			7.1	c	4.4	d
ANNUAL RUNOFF (CFSM)	1.25		1.19		1.48	
ANNUAL RUNOFF (INCHES)	17.01		16.15		20.10	
10 PERCENT EXCEEDS	208		230		255	
50 PERCENT EXCEEDS	44		38		61	
90 PERCENT EXCEEDS	13		13		15	

a Aug. 18, 19, 26-31, 1991.

b Ice jam.

c Aug. 1, 2, 4, 8-13, Sept. 13, 20-23.

d Aug. 17-20, 24-31, Sept. 1, 3, 4, 9, 12-14, 1991.



NIAGARA RIVER BASIN

99

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 mi².

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1627: 1956-57. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 876.33 ft above sea level.

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 gage-height telemeter at station. Several measurements of water temperature were made during the year.

COOPERATION.--City of Batavia maintains records of diversion.

EXTREMES OUTSIDE PERIOD OF RECORD.--From records of city of Batavia, maximum stage, 14.5 ft, in March 1942.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 22	0200	2,100	6.77	Apr. 14	1430	2,180	6.93
Mar. 25	1630	*2,360	*7.30				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	57	279	e80	e260	212	455	209	175	69	13	32
2	38	76	222	e90	e210	188	485	240	157	52	13	48
3	37	86	250	e100	e180	e170	644	169	104	41	17	28
4	36	176	295	e90	e150	e160	804	142	84	34	17	22
5	69	363	817	e85	e135	e160	603	129	72	29	18	18
6	71	355	816	83	e120	e150	589	120	62	26	25	17
7	46	223	527	83	e110	e160	875	122	57	27	21	15
8	36	135	424	84	e100	e420	780	297	52	26	16	15
9	34	101	296	79	e95	e400	818	459	46	e36	14	14
10	40	86	255	80	e95	e280	926	300	43	e44	12	21
11	41	76	480	82	e90	e240	860	240	40	e40	13	21
12	34	92	e320	82	e90	e200	519	188	37	e35	12	15
13	31	138	e220	e80	e85	e190	796	176	38	e35	14	13
14	30	105	e220	e78	e80	e230	1830	144	53	e30	60	22
15	29	189	e210	e76	e80	e330	1150	140	72	e27	132	18
16	30	245	e240	e74	e80	e670	616	278	46	e24	44	17
17	33	154	e180	e72	e80	449	562	334	38	e22	29	15
18	69	492	e150	e72	e85	310	445	497	34	e22	22	14
19	76	297	154	e70	e110	269	340	296	30	e22	19	12
20	51	247	160	e70	e360	237	284	238	27	e21	18	13
21	41	217	e160	e68	1210	253	239	190	26	e20	21	11
22	60	146	e150	e68	1900	830	206	159	24	e18	52	10
23	60	124	e130	e68	1140	1340	183	133	24	e16	35	9.9
24	46	109	e80	e68	674	1810	167	112	40	e15	23	12
25	38	109	e110	e65	538	2100	165	107	102	e13	20	13
26	34	92	e100	e60	384	1300	184	116	100	12	33	17
27	33	98	e80	e64	295	780	170	206	63	15	42	46
28	33	551	e90	e78	234	911	169	159	94	21	29	55
29	43	895	e80	e260	---	779	153	117	87	19	26	35
30	45	489	e80	e420	---	549	183	99	79	15	24	65
31	43	---	e80	e320	---	464	---	86	---	14	20	---
TOTAL	1357	6523	7655	3149	8970	16541	16200	6202	1906	840	854	663.9
MEAN	43.8	217	247	102	320	534	540	200	63.5	27.1	27.5	22.1
MAX	76	895	817	420	1900	2100	1830	497	175	69	132	65
MIN	29	57	80	60	80	150	153	86	24	12	12	9.9

e Estimated

NIAGARA RIVER BASIN
04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

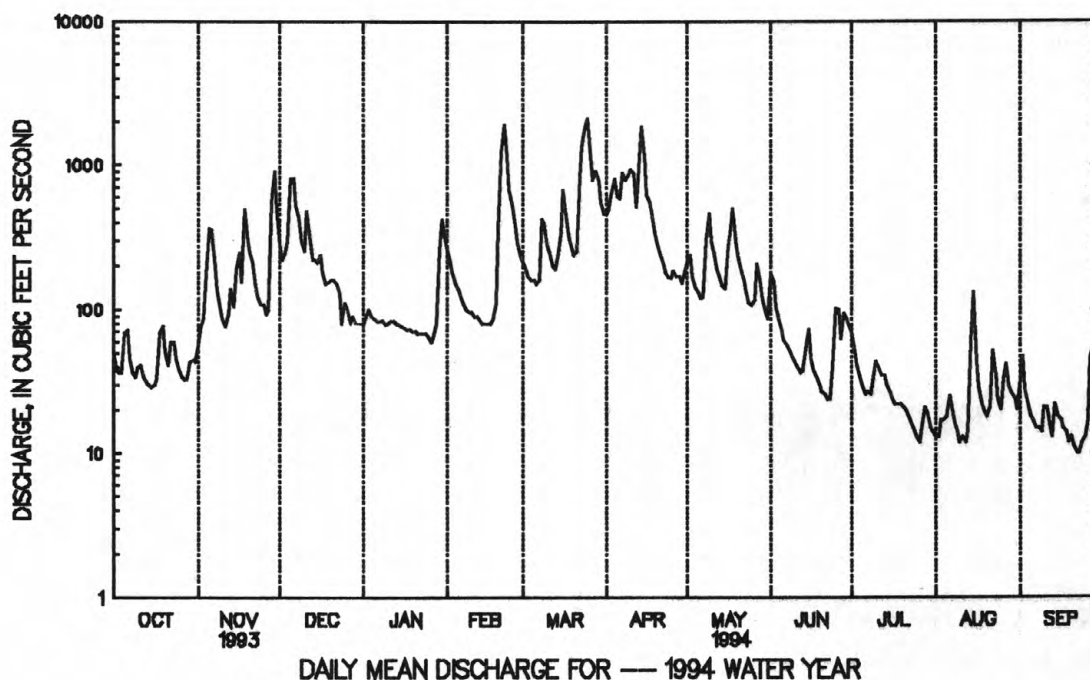
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

MEAN	81.3	170	266	248	307	547	464	201	105	53.2	50.0	64.5
MAX	344	653	718	546	903	1206	1100	544	722	247	451	873
(WY)	1946	1986	1978	1979	1976	1945	1947	1984	1989	1992	1977	1977
MIN	9.03	15.3	13.6	17.5	50.9	244	82.1	68.2	20.1	6.17	7.91	5.63
(WY)	1965	1961	1961	1961	1963	1965	1946	1965	1965	1955	1944	1955

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1944 - 1994	
ANNUAL TOTAL	77743		70860.9			
ANNUAL MEAN	213		194		213	
HIGHEST ANNUAL MEAN					311	
LOWEST ANNUAL MEAN					124	
HIGHEST DAILY MEAN	3200	Mar 30	2100	Mar 25	6660	Mar 31 1960
LOWEST DAILY MEAN	11	Jul 25	9.9	Sep 23	.60	Aug 2 1955
ANNUAL SEVEN-DAY MINIMUM	13	Aug 25	12	Sep 19	1.1	Jul 31 1955
INSTANTANEOUS PEAK FLOW			2360	Mar 25	7200	Mar 31 1960
INSTANTANEOUS PEAK STAGE			7.30	Mar 25	13.85	Apr 6 1947
INSTANTANEOUS LOW FLOW			9.7	a	.40	b
10 PERCENT EXCEEDS	488		494		510	
50 PERCENT EXCEEDS	90		85		96	
90 PERCENT EXCEEDS	18		18		14	

a Sep 22, 23, 24.

b Aug. 5-7, 1955.



NIAGARA RIVER BASIN

101

04217750 MURDER CREEK NEAR AKRON, NY

LOCATION.--Lat 43°02'49", long 78°30'47", Erie County, Hydrologic Unit 04120104, on left bank at downstream side of bridge on State Highway 93, 2.0 mi northwest of Akron and 5.7 mi upstream from mouth.

DRAINAGE AREA.--58.8 mi².

PERIOD OF RECORD.--Occasional low flow discharge measurements, water years 1964-65. November 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 623.78 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 23	-	*790	* (a) 5.05	Mar. 25	0415	770	4.58

a Result of ice jam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e18	e29	e90	e33	e55	e70	105	76	47	49	5.6	6.2
2	e17	e38	e82	e38	e50	e69	87	85	57	38	5.4	5.2
3	e16	e45	e88	e34	e46	e60	86	82	43	28	20	4.4
4	e16	e90	e110	e33	e42	e58	106	71	28	21	32	4.1
5	e28	e171	e280	e30	e39	e56	115	64	22	17	35	4.1
6	e22	e204	e300	e29	e36	e57	153	60	20	15	37	4.9
7	e18	e113	e185	e27	e34	e64	242	57	17	16	25	5.3
8	e16	76	e160	e26	e31	e85	334	73	15	14	19	5.4
9	e16	54	e110	e24	e29	e90	301	126	13	18	15	6.0
10	e18	41	92	e26	e26	e70	278	166	12	15	12	5.2
11	e18	33	e96	e30	e24	e60	213	126	11	12	9.2	4.3
12	e17	29	e100	e30	e23	e66	150	101	9.1	12	8.1	5.0
13	e16	29	e88	e28	e22	e70	256	85	10	11	9.2	5.5
14	e15	40	84	e24	e21	e74	384	73	11	9.8	25	11
15	e14	56	70	e23	e20	e110	384	70	10	9.1	51	6.8
16	e13	90	70	e22	e19	e150	241	105	12	8.2	32	6.7
17	e13	84	68	e22	e25	e100	173	131	11	6.6	22	6.2
18	e15	e144	63	e22	e30	e90	139	156	9.7	7.2	17	5.3
19	e40	e204	55	e21	e43	e72	118	158	8.6	6.9	14	6.0
20	e36	e160	56	e21	e127	e79	101	92	8.5	6.5	11	6.2
21	e22	e100	e62	e20	e360	e111	89	59	8.2	6.9	13	5.8
22	e28	e70	e52	e20	e648	225	81	43	7.8	6.8	13	6.0
23	e24	e57	e47	e20	e703	432	74	36	7.6	6.1	12	5.6
24	e20	e49	e44	e22	e400	725	68	30	25	5.3	9.7	5.5
25	e17	e40	e32	e20	e225	659	68	27	213	5.4	8.3	5.5
26	e15	e36	e27	e18	e149	417	70	33	199	6.8	7.5	11
27	e14	e117	e26	e19	e109	259	76	58	133	5.8	6.2	8.7
28	e14	e295	e26	e24	e80	236	70	66	84	6.0	5.4	15
29	e22	e178	e26	e70	---	232	70	48	88	7.6	5.9	16
30	e23	e108	e28	e100	---	175	70	34	67	8.3	5.8	14
31	e22	---	e30	e70	---	128	---	34	---	5.5	5.8	---
TOTAL	603	2780	2647	946	3416	5149	4702	2425	1207.5	390.8	497.1	206.9
MEAN	19.5	92.7	85.4	30.5	122	166	157	78.2	40.2	12.6	16.0	6.90
MAX	40	295	300	100	703	725	384	166	213	49	51	16
MIN	13	29	26	18	19	56	68	27	7.6	5.3	5.4	4.1
CFSM	.33	1.58	1.45	.52	2.07	2.82	2.67	1.33	.68	.21	.27	.12
IN.	.38	1.76	1.67	.60	2.16	3.26	2.97	1.53	.76	.25	.31	.13

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

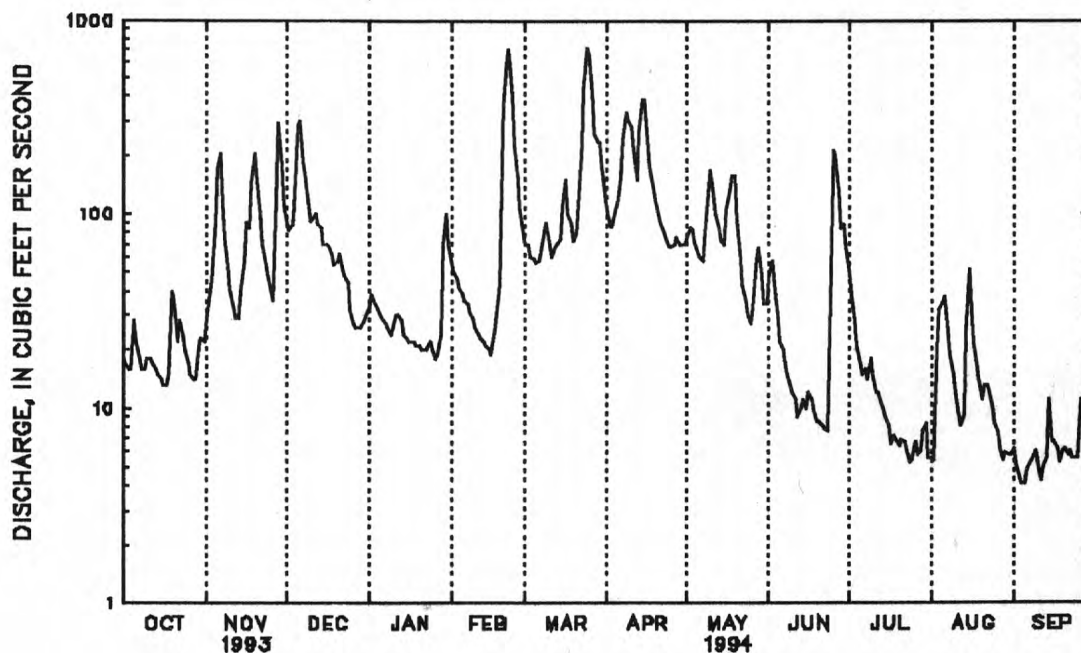
MEAN	25.8	73.7	110	80.0	112	138	143	71.0	39.2	15.3	15.8	16.9
MAX	87.3	183	222	186	243	214	191	157	183	58.8	96.2	109
(WY)	1987	1986	1984	1993	1985	1991	1992	1989	1989	1992	1992	1992
MIN	5.33	6.63	15.0	30.5	29.0	88.6	79.7	22.5	9.99	4.54	2.18	2.88
(WY)	1992	1992	1990	1994	1987	1983	1988	1985	1991	1983	1991	1991

NIAGARA RIVER BASIN
04217750 MURDER CREEK NEAR AKRON, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1983 - 1994	
ANNUAL TOTAL	26587.6		24970.3		70.6	
ANNUAL MEAN	72.8		68.4		81.7	
HIGHEST ANNUAL MEAN					58.5	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	1200	Mar 30	725	Mar 24	2710	Feb 25 1985
LOWEST DAILY MEAN	2.8	Sep 22	4.1	a	.86	Aug 24 1991
ANNUAL SEVEN-DAY MINIMUM	3.3	Sep 17	4.8	Sep 2	1.4	Aug 23 1991
INSTANTANEOUS PEAK FLOW			792	Feb 23	3000	Feb 25 1985
INSTANTANEOUS PEAK STAGE			b5.05	Feb 23	7.16	Feb 25 1985
INSTANTANEOUS LOW FLOW			3.4	Sep 4	.53	Aug 24 1991
ANNUAL RUNOFF (CFSM)	1.24		1.16		1.20	
ANNUAL RUNOFF (INCHES)	16.82		15.80		16.32	
10 PERCENT EXCEEDS	174		160		173	
50 PERCENT EXCEEDS	31		32		36	
90 PERCENT EXCEEDS	5.4		6.6		4.7	

a Sept. 4, 5.

b Ice jam.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

NIAGARA RIVER BASIN

103

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 mi², includes 0.76 mi² 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 sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 24	----	Unknown	Unknown	Apr. 16	0130	2,630	8.83
Mar. 26	0430	*3,450	*10.65				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	110	1150	e180	e670	e560	900	355	469	243	44	49
2	128	149	711	e190	e540	e480	792	378	431	200	37	47
3	95	209	538	e200	e420	e440	800	431	377	168	46	52
4	87	330	544	e180	e320	e420	1010	344	265	139	108	69
5	164	396	909	e180	e280	e390	1160	286	212	112	89	53
6	185	539	1180	e180	e250	e370	1150	253	177	97	106	45
7	188	573	1310	e180	e230	e420	1450	234	162	88	92	41
8	146	434	1040	e180	e210	e600	1810	273	144	84	71	39
9	110	296	823	e170	e200	e880	1830	538	132	107	62	39
10	105	225	604	e170	e200	992	1640	784	119	120	52	40
11	98	189	556	e170	e190	e800	1570	610	108	110	45	38
12	89	167	691	e160	e190	e630	1410	502	100	98	40	37
13	87	161	640	e160	e180	e540	1430	396	93	82	39	42
14	77	209	490	e160	e170	e570	1900	340	98	70	51	47
15	70	244	468	e160	e170	e810	2360	295	106	66	121	58
16	67	302	435	e150	e170	e1230	2370	369	116	66	186	69
17	79	408	442	e150	e170	e1400	1430	515	112	66	133	52
18	147	360	393	e150	e180	e1330	987	616	90	59	89	44
19	196	564	326	e140	e240	e1040	800	757	77	56	71	40
20	216	574	318	e140	563	e840	611	572	69	52	59	37
21	180	430	352	e140	1700	e750	521	439	65	50	54	36
22	152	395	445	e140	2620	e1300	439	360	60	49	59	34
23	129	292	410	e140	3210	2160	385	302	56	48	67	33
24	134	245	e260	e140	e2600	2670	344	264	75	44	75	32
25	126	219	e180	e140	e1600	3260	319	232	373	43	68	30
26	105	203	e240	e130	e1100	3420	331	220	586	41	59	34
27	92	226	e220	e120	e800	3030	352	304	433	42	57	51
28	84	705	e180	e150	e620	2030	361	383	306	40	58	85
29	79	1080	e200	e300	---	1660	338	359	279	35	69	111
30	76	1350	e180	e800	---	1500	324	274	285	41	58	98
31	86	---	e180	e900	---	1130	---	238	---	54	52	---
TOTAL	3766	11584	16415	6450	19793	37652	31124	12223	5975	2570	2217	1482
MEAN	121	386	530	208	707	1215	1037	394	199	82.9	71.5	49.4
MAX	216	1350	1310	900	3210	3420	2370	784	586	243	186	111
MIN	67	110	180	120	170	370	319	220	56	35	37	30
CFSM	.35	1.11	1.52	.60	2.03	3.48	2.97	1.13	.57	.24	.20	.14
IN.	.40	1.23	1.75	.69	2.11	4.01	3.32	1.30	.64	.27	.24	.16

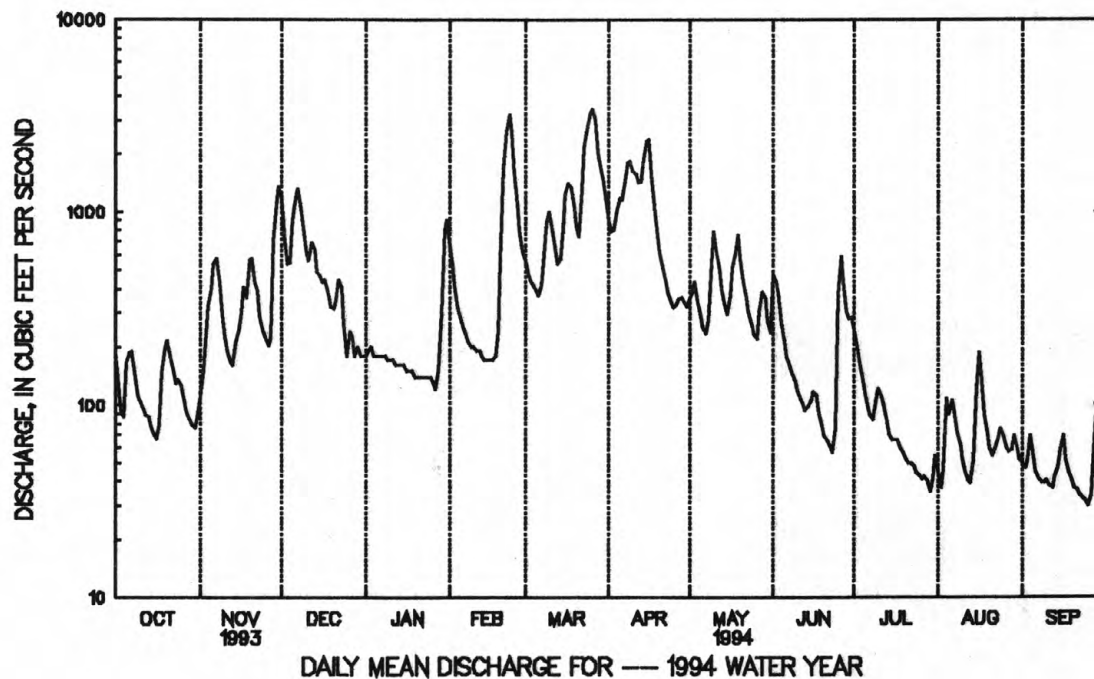
e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

MEAN	142	311	490	460	620	969	949	396	204	93.8	90.9	99.2
MAX	642	1239	1116	1067	1363	1650	1533	1046	1372	463	601	613
(WY)	1987	1986	1987	1993	1981	1956	1960	1956	1989	1992	1992	1992
MIN	14.8	25.7	23.3	29.4	103	452	422	144	45.6	26.1	15.9	10.0
(WY)	1965	1961	1961	1961	1963	1981	1981	1993	1965	1991	1991	1991

NIAGARA RIVER BASIN
04218000 TONAWANDA CREEK AT RAPIDS, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1955 - 1994	
ANNUAL TOTAL	154978		151251		401	
ANNUAL MEAN	425		414		556	
HIGHEST ANNUAL MEAN					1956	
LOWEST ANNUAL MEAN					255	
HIGHEST DAILY MEAN	5400	Apr 2	3420	Mar 26	6130	Apr 1 1960
LOWEST DAILY MEAN	28	Aug 29	30	Sep 25	4.8	Jul 28 1983
ANNUAL SEVEN-DAY MINIMUM	34	Aug 26	34	Sep 20	6.8	Sep 1 1991
INSTANTANEOUS PEAK FLOW			3450	Mar 26	6280	Apr 1 1960
INSTANTANEOUS PEAK STAGE			10.65	Mar 26	16.96	Apr 1 1960
INSTANTANEOUS LOW FLOW			29	Sep 25	4.5	Jul 28 1983
ANNUAL RUNOFF (CFSM)	1.22		1.19		1.15	
ANNUAL RUNOFF (INCHES)	16.52		16.12		15.61	
10 PERCENT EXCEEDS	1060		1090		1050	
50 PERCENT EXCEEDS	200		196		190	
90 PERCENT EXCEEDS	43		51		29	



NIAGARA RIVER BASIN

105

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 mi².

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 sea level.

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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 22	1100	*1,570	*6.76	Apr. 14	1300	1,060	5.44
Mar. 24	1500	1,130	5.61				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	82	181	e98	e223	e115	e260	115	139	78	22	22
2	71	103	120	e98	e196	e107	e270	143	168	68	21	18
3	59	121	159	e103	e165	e97	e380	109	102	53	22	21
4	76	192	248	e106	e135	e97	e460	72	79	46	36	20
5	135	227	530	e90	e115	e97	e380	76	68	32	41	21
6	126	214	524	86	e94	e97	e360	72	62	21	29	18
7	78	161	255	e79	e83	e100	e600	69	54	34	32	15
8	66	115	202	e76	e83	e320	e550	143	55	31	24	15
9	72	94	141	e75	e89	e280	e580	290	52	45	14	15
10	67	83	e117	e77	e92	e180	e630	201	49	27	13	16
11	61	69	225	e84	e94	e160	e540	179	45	25	17	18
12	48	68	e216	e84	e90	e140	e380	134	45	24	18	14
13	42	76	e108	e83	e85	e150	e780	121	55	28	23	14
14	39	89	e117	e79	e87	e240	e1000	101	53	27	86	18
15	36	118	e110	e81	e81	e380	406	134	44	26	52	15
16	40	173	e107	e77	e81	e460	223	238	46	33	31	15
17	75	140	110	e72	e77	e360	185	231	38	35	28	15
18	174	171	94	e57	e88	e240	156	296	43	31	24	14
19	167	182	90	e63	e115	e200	123	197	42	26	22	13
20	110	149	93	e82	e325	e170	110	142	38	25	27	13
21	96	165	134	e90	e860	e160	99	119	31	23	57	14
22	92	129	168	e91	1410	e480	89	103	24	23	41	20
23	78	114	e125	e93	647	e890	82	92	20	25	28	20
24	60	105	e117	e83	e351	e1150	76	84	191	22	38	14
25	53	94	e117	e66	e256	e1320	83	79	378	29	28	14
26	62	92	e115	e73	e195	e700	90	129	401	31	17	34
27	54	135	e121	e104	e163	e500	101	182	153	27	28	89
28	50	401	e124	e230	e156	e560	92	166	148	35	32	136
29	49	744	e124	e237	---	e460	93	111	145	27	25	56
30	65	332	e117	e218	---	e380	109	89	105	24	15	38
31	67	---	104	e240	---	e280	---	110	---	17	15	---
TOTAL	2346	4938	5113	3175	6436	10870	9287	4327	2873	998	906	765
MEAN	75.7	165	165	102	230	351	310	140	95.8	32.2	29.2	25.5
MAX	174	744	530	240	1410	1320	1000	296	401	78	86	136
MIN	36	68	90	57	77	97	76	69	20	17	13	13
CFSM	.93	2.02	2.02	1.26	2.82	4.30	3.79	1.71	1.17	.39	.36	.31
IN.	1.07	2.25	2.33	1.45	2.93	4.96	4.23	1.97	1.31	.45	.41	.35

e Estimated

NIAGARA RIVER BASIN

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

MEAN	69.3	141	208	145	178	280	214	110	75.1	41.9	56.8	71.1
MAX	175	342	441	315	377	519	310	258	275	144	397	425
(WY)	1987	1986	1978	1993	1990	1977	1994	1989	1989	1976	1977	1977
MIN	11.2	27.1	40.6	39.2	56.0	119	115	47.5	24.2	11.8	13.5	9.76
(WY)	1975	1979	1990	1977	1980	1981	1983	1977	1988	1978	1974	1973

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

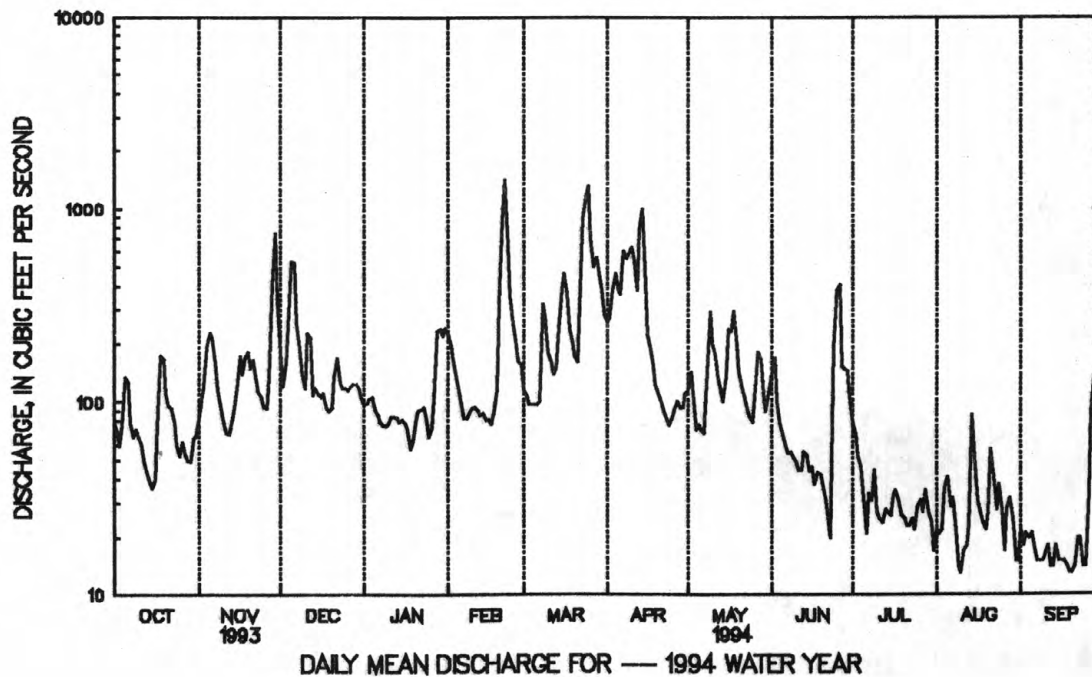
FOR 1994 WATER YEAR

WATER YEARS 1973 - 1994

ANNUAL TOTAL	49619			52034								
ANNUAL MEAN	136			143						132		
HIGHEST ANNUAL MEAN										177		1977
LOWEST ANNUAL MEAN										102		1988
HIGHEST DAILY MEAN	1590	Mar 29		1410	Feb 22					3280	Feb 25	1985
LOWEST DAILY MEAN	13	Jul 25		13	a					2.7	Aug 15	1978
ANNUAL SEVEN-DAY MINIMUM	16	Aug 10		14	Sep 15					3.6	Jul 15	1978
INSTANTANEOUS PEAK FLOW				1570	Feb 22					3640	Feb 25	1985
INSTANTANEOUS PEAK STAGE				6.76	Feb 22					11.19	Feb 25	1985
INSTANTANEOUS LOW FLOW				1.3	Aug 26					b.00	Jul 27	1976
ANNUAL RUNOFF (CFSM)	1.67			1.75						1.62		
ANNUAL RUNOFF (INCHES)	22.62			23.72						22.04		
10 PERCENT EXCEEDS	249			328						303		
50 PERCENT EXCEEDS	80			90						72		
90 PERCENT EXCEEDS	20			22						17		

a Aug. 10, Sept. 19, 20.

b Result of pipeline construction.



NIAGARA RIVER BASIN

107

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 sea level. 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 Department of Transportation.

AVERAGE DISCHARGE.--27 years (water years 1951-77), 200 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft³/s, Dec. 3, 1969; no significant flow at times in many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	213	---	---	---	---	---	85	188	215	256	205
2	235	214	---	---	---	---	---	90	199	226	259	221
3	235	217	---	---	---	---	---	97	186	241	265	224
4	242	213	---	---	---	---	---	99	194	237	258	216
5	237	209	---	---	---	---	---	120	214	215	262	210
6	235	211	---	---	---	---	---	129	201	216	268	202
7	247	213	---	---	---	---	---	127	197	229	273	202
8	244	210	---	---	---	---	---	126	198	236	260	202
9	234	268	---	---	---	---	---	162	204	222	272	206
10	233	282	---	---	---	---	---	175	204	238	269	207
11	250	233	---	---	---	---	---	176	197	230	259	207
12	233	176	---	---	---	---	---	172	205	221	267	201
13	220	134	---	---	---	---	---	171	214	237	262	207
14	221	110	---	---	---	---	---	174	195	240	255	200
15	223	87	---	---	---	---	---	174	212	269	251	211
16	234	31	---	---	---	---	---	175	206	270	259	202
17	223	---	---	---	---	---	---	186	196	294	239	225
18	230	---	---	---	---	---	---	181	214	270	224	206
19	227	---	---	---	---	---	---	183	236	275	221	189
20	228	---	---	---	---	---	---	186	213	275	213	200
21	222	---	---	---	---	---	---	189	206	274	204	210
22	221	---	---	---	---	---	---	181	202	275	235	201
23	221	---	---	---	---	---	---	192	213	284	235	206
24	224	---	---	---	---	---	---	185	214	269	210	204
25	224	---	---	---	---	---	---	186	210	269	205	198
26	217	---	---	---	---	---	---	184	224	277	214	201
27	226	---	---	---	---	---	20	187	219	275	237	196
28	219	---	---	---	---	---	50	187	216	267	209	191
29	214	---	---	---	---	---	63	199	214	273	207	202
30	216	---	---	---	---	---	79	223	226	268	210	195
31	209	---	---	---	---	---	---	186	---	283	209	---
TOTAL	7073	---	---	---	---	---	---	5087	6217	7870	7467	6147
MEAN	228	---	---	---	---	---	---	164	207	254	241	205
MAX	250	---	---	---	---	---	---	223	236	294	273	225
MIN	209	---	---	---	---	---	---	85	186	215	204	189

ST. LAWRENCE RIVER MAIN STEM
04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY
(National stream-quality accounting network station)

WATER QUALITY RECORDS

LOCATION.--Lat 43°16'10", long 79°03'52", Niagara County, Hydrologic Unit 04120104, water samples collected about 2 mi upstream from Coast Guard wharf, at Fort Niagara and 1.5 mi south of Youngstown.

DRAINAGE AREA.--265,000 mi².

PERIOD OF RECORD.--Water years 1971 to current year.

CHEMICAL DATA: 1971 (a), 1973-74 (b), 1975-82 (c), 1983-86 (b), 1987-89 (d), 1990-91 (c), 1992-94 (b).

MINOR ELEMENT DATA: 1971 (a), 1972 (b), 1987-89 (d), 1990-91 (c), 1992-94 (b).

ORGANIC DATA: OC--1973 (a), 1974-75 (b), 1978-80 (c), 1981 (b).

NUTRIENT DATA: 1971 (a), 1973-74 (b), 1975-82 (c), 1983-87 (b), 1988-89 (c), 1990-94 (b).

BIOLOGICAL DATA:

Bacteria--1973 (b), 1974 (d), 1975-82 (c), 1983-94 (b).

Phytoplankton--1973 (b), 1974 (d), 1975-77 (c), 1978-81 (c).

Periphyton--1974 (a), 1975-80 (b).

SEDIMENT DATA: 1975-77 (c), 1978 (b), 1979-82 (c), 1983-86 (b), 1987-89 (d), 1990-91 (c), 1992-94 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1973 to June 1980.

WATER TEMPERATURE: September 1973 to June 1980.

REMARKS.--Published in 1971 as "at Youngstown." Discharge is the daily mean reported by Detroit District Corps of Engineers for the Niagara River at Queenstown.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 03...	1500	224000	284	8.0	10.0	1.0	757	11.3	100	290	33
MAY 04...	1500	228000	268	8.0	5.0	1.4	762	14.6	115	K4	K1
JUN 15...	1400	214000	274	8.0	17.5	1.0	761	9.8	102	30	K2
AUG 11...	1300	219000	272	8.1	22.5	0.30	762	8.6	99	K7	58

DATE	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 03...	120	34	8.5	9.4	1.4	92	24	15	0.20	0.73	155
MAY 04...	110	31	8.0	8.1	1.4	85	22	15	0.10	0.08	141
JUN 15...	100	29	7.8	9.6	1.5	87	23	16	0.10	0.28	158
AUG 11...	120	33	8.4	11	1.5	85	24	16	0.10	0.48	147

K Results based on colony count outside the ideal range (non-ideal colony count).

ST. LAWRENCE RIVER MAIN STEM
04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 03...	143	0.31	0.05	<0.01	0.20	<0.01	<0.01	<0.01	<10	20
MAY 04...	149	0.78	0.14	0.03	0.50	<0.01	<0.01	<0.01	<10	19
JUN 15...	129	0.36	0.03	<0.01	0.20	<0.01	<0.01	<0.01	<10	18
AUG 11...	144	0.27	0.03	<0.01	<0.20	0.02	0.02	<0.01	<10	20

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 03...	<3	4	<4	1	<10	1	<1	<1.0	160	<6
MAY 04...	<3	7	<4	2	<10	2	<1	<1.0	140	<6
JUN 15...	<3	3	5	1	<10	1	<1	<1.0	150	<6
AUG 11...	<3	<3	<4	2	<10	<1	<1	<1.0	190	<6

ST. LAWRENCE RIVER MAIN STEM
04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
MAY								
04...	1505	1000	43.0	3.0	267	7.9	5.0	14.7
04...	1510	1000	43.0	10.0	262	8.0	5.0	14.6
04...	1515	1000	43.0	25.0	266	8.0	5.0	14.6
04...	1520	1000	43.0	40.0	271	8.0	5.0	14.6
04...	1525	1700	40.0	3.0	269	8.0	5.0	13.9
04...	1530	1700	40.0	10.0	262	8.0	5.0	13.7
04...	1535	1700	40.0	20.0	267	8.0	5.0	13.8
04...	1540	1700	40.0	35.0	267	8.0	5.0	13.8
JUN								
15...	1405	1000	40.0	3.0	272	8.0	17.5	9.6
15...	1410	1000	40.0	10.0	275	8.0	17.5	9.6
15...	1415	1000	40.0	25.0	279	8.0	17.5	9.8
15...	1420	1000	40.0	40.0	254	8.0	17.5	9.9
15...	1425	1700	50.0	3.0	275	8.0	17.5	9.4
15...	1430	1700	50.0	10.0	274	8.0	17.5	9.5
15...	1435	1700	50.0	25.0	291	8.0	17.5	9.6
15...	1440	1700	50.0	40.0	273	8.0	17.5	9.8
AUG								
11...	1305	1000	42.0	3.0	266	8.2	22.5	8.7
11...	1310	1000	42.0	12.0	272	8.1	22.5	8.7
11...	1315	1000	42.0	25.0	272	8.1	22.5	8.8
11...	1320	1000	42.0	40.0	285	8.1	22.5	8.8
11...	1325	1700	47.0	3.0	272	8.1	22.5	8.6
11...	1330	1700	47.0	12.0	265	8.1	22.5	8.5
11...	1335	1700	47.0	25.0	271	8.1	22.5	8.6
11...	1340	1700	47.0	45.0	273	8.1	22.5	8.7

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, DIS- SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
03...	1500	224000	4	2420	74
MAY					
04...	1500	228000	3	1850	97
JUN					
15...	1400	214000	2	1160	90
AUG					
11...	1300	219000	3	1770	78

STREAMS TRIBUTARY TO LAKE ONTARIO

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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.--11.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 306 ft above sea level, from topographic map.

REMARKS.--Records fair. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health.

COOPERATION.--Gage-height record and 9 discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 758 ft³/s, May 17, 1974, from rating curve extended above 15 ft³/s on basis of contracted-opening measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	8.2	15	e3.2	e16	e11	15	13	20	3.3	1.7	1.6
2	2.1	4.8	9.4	e5.2	e12	e10	13	9.6	8.6	2.7	3.2	1.5
3	2.1	3.9	9.2	e4.3	e10	e12	17	7.8	6.0	2.4	4.7	1.3
4	2.9	4.7	13	e3.6	e8.5	e13	19	7.9	5.3	2.1	2.4	1.4
5	4.4	4.2	22	e4.0	e7.0	e13	16	7.5	4.3	2.2	9.9	1.3
6	1.8	3.1	14	e3.6	e6.7	e14	50	7.7	3.7	2.3	3.3	1.3
7	2.0	2.4	13	e2.8	e5.4	e24	53	7.6	3.5	5.0	2.6	1.3
8	1.8	2.1	11	e2.6	e4.8	e29	55	32	3.2	3.2	2.1	1.6
9	3.1	1.9	9.9	e2.4	e5.0	e23	49	19	2.9	7.8	2.3	1.9
10	3.4	1.9	e9.2	e2.8	e4.8	e21	28	13	2.6	3.1	2.2	1.3
11	2.1	1.9	e9.0	e3.4	e4.6	e13	19	9.0	2.4	2.5	2.1	1.3
12	2.1	1.9	e8.8	e3.4	e5.2	e11	20	7.7	2.5	2.3	1.9	1.4
13	1.9	1.9	e10	e3.1	e4.9	e15	197	6.1	2.5	1.7	2.2	1.3
14	2.0	2.0	e8.7	e2.4	e4.6	e22	109	5.4	4.0	1.9	7.0	3.3
15	2.1	5.9	e7.7	e2.0	e4.2	51	46	9.9	2.5	2.3	3.0	1.9
16	2.1	3.2	e7.7	e2.6	e4.8	e50	41	12	2.1	2.3	2.3	1.6
17	6.9	11	e7.1	e3.2	e7.0	e26	37	26	2.2	2.1	2.2	1.5
18	5.0	28	e7.0	e2.6	e30	e20	28	19	2.0	1.9	1.9	1.6
19	2.5	27	e7.3	e2.4	e43	e17	14	12	2.0	3.8	1.8	1.6
20	2.1	26	e7.0	e2.5	e112	e15	11	9.1	1.7	2.3	2.0	1.5
21	2.2	24	e11	e3.2	e216	e42	9.4	7.9	1.9	1.9	5.0	1.4
22	2.6	22	e16	e4.2	e108	e118	8.3	6.9	1.9	2.1	3.4	1.4
23	2.2	21	e10	e4.2	e44	e97	7.5	6.0	1.6	2.1	2.3	1.5
24	2.3	19	e9.2	e4.4	e29	68	6.9	5.0	11	2.1	2.1	1.9
25	2.2	17	e7.8	e4.4	e20	e38	13	5.1	7.4	1.7	e3.4	1.8
26	2.1	16	e6.3	e3.6	e16	e21	13	11	3.7	2.2	e3.5	3.3
27	2.1	19	e4.7	e16	e15	e39	11	20	3.6	2.0	e1.9	6.7
28	2.1	50	e4.0	e44	e12	36	8.3	9.4	4.0	1.7	e2.8	2.7
29	2.1	26	e3.6	e39	---	24	8.7	6.9	4.7	2.0	e2.9	3.3
30	1.9	20	e3.1	e27	---	24	8.1	5.3	5.0	2.1	e1.5	2.1
31	3.3	---	e2.8	e21	---	19	---	4.5	---	2.1	e1.5	---
TOTAL	79.5	380.0	284.5	233.1	760.5	936	931.2	329.3	128.8	79.2	91.1	57.6
MEAN	2.56	12.7	9.18	7.52	27.2	30.2	31.0	10.6	4.29	2.55	2.94	1.92
MAX	6.9	50	22	44	216	118	197	32	20	7.8	9.9	6.7
MIN	1.8	1.9	2.8	2.0	4.2	10	6.9	4.5	1.6	1.7	1.5	1.3
CFSM	.22	1.08	.78	.64	2.32	2.58	2.65	.91	.37	.22	.25	.16
IN.	.25	1.21	.90	.74	2.42	2.98	2.96	1.05	.41	.25	.29	.18

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

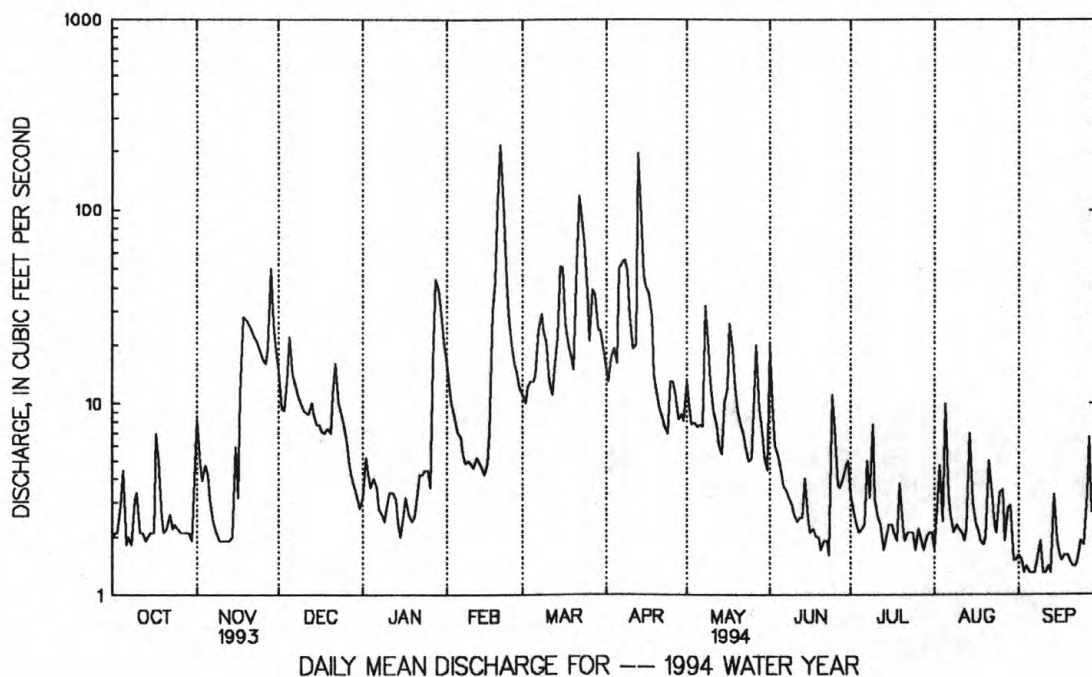
MEAN	6.81	10.8	12.6	15.7	21.0	30.1	28.8	13.0	4.28	3.54	3.64	2.88
MAX	14.7	18.8	23.1	25.0	38.9	40.7	31.7	27.1	5.12	6.31	7.43	5.33
(WY)	1990	1993	1991	1993	1990	1993	1991	1990	1990	1992	1992	1992
MIN	2.54	2.49	3.65	7.52	7.82	17.1	26.7	4.77	3.06	1.96	1.60	1.10
(WY)	1992	1992	1992	1994	1993	1990	1993	1993	1991	1993	1993	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1989 - 1994	
ANNUAL TOTAL	4246.8		4290.8			
ANNUAL MEAN	11.6		11.8		12.8	
HIGHEST ANNUAL MEAN					15.0	1990
LOWEST ANNUAL MEAN					10.8	1992
HIGHEST DAILY MEAN	229	Apr 1	216	Feb 21	420	Apr 22 1991
LOWEST DAILY MEAN	1.1	Aug 19	1.3	a	.89	Aug 18 1989
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 22	1.4	Sep 1	1.0	Aug 18 1989
INSTANTANEOUS PEAK FLOW			328	Apr 13	573	Apr 22 1991
INSTANTANEOUS PEAK STAGE			b3.27	Feb 21	3.89	Apr 22 1991
INSTANTANEOUS LOW FLOW			.90	c	.39	Aug 19 1993
ANNUAL RUNOFF (CFSM)	.99		1.00		1.09	
ANNUAL RUNOFF (INCHES)	13.50		13.64		14.81	
10 PERCENT EXCEEDS	21		26		25	
50 PERCENT EXCEEDS	4.8		4.7		6.0	
90 PERCENT EXCEEDS	1.7		1.9		2.0	

a Sep. 3, 5, 6, 7, 11, 10, 13.

b Ice jam

c July 21, 25.



STREAMS TRIBUTARY TO LAKE ONTARIO
0422026250 NORTHROP CREEK AT NORTH GREECE, NY--Continued

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1989 to current year.

CHEMICAL DATA: 1989-94 (e).

NUTRIENT DATA: 1989-94 (e).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)
OCT							
04-05	1725	0425	6.5	24	507	--	--
05-08	0525	0825	2.2	10	531	--	--
09-10	1325	0425	5.0	13	593	--	--
10-12	0525	0825	2.1	7.4	533	--	--
16-17	2110	1610	5.1	5.2	772	--	--
17-18	1710	0810	8.3	13	474	--	--
18-21	0925	0625	2.6	7.6	589	--	--
OCT 31-							
NOV 01	0115	0815	5.5	4.8	664	--	--
01-04	0950	0850	5.0	4.7	729	--	--
04-08	0915	0815	3.3	2.2	754	--	--
14-15	0025	0825	2.8	1.8	785	--	--
15-17	0915	1415	3.9	2.8	700	--	--
17-18	1515	0815	27	65	657	278	41
18-22	0935	0835	26	20	594	--	--
22-24	0930	0830	21	13	782	--	--
27-28	1220	1220	40	130	496	380	49
28-29	1320	0820	37	95	591	188	24
NOV 29-							
DEC 02	0940	0840	18	14	737	--	--
04-05	0915	0415	18	33	710	82	12
05-06	0515	0815	19	40	676	64	9
06-09	0935	0835	12	11	752	--	--
JAN							
14-18	0940	0840	2.6	5.6	978	--	--
28-29	0440	0340	42	19	1270	--	--
29-31	0440	0740	33	6.6	1060	--	--
JAN 31-							
FEB 03	0900	0800	15	6.6	1090	--	--
20...	1220	--	112	29	745	--	--
20-21	1225	0725	164	28	588	241	31
21-22	0825	0125	162	25	579	168	22
22...	0830	--	108	23	621	--	--
22-24	0840	0740	76	15	674	--	--
24-28	0850	0750	18	4.8	883	--	--
MAR							
07-08	0850	0450	26	16	794	--	--
08-10	0550	0750	24	15	805	--	--
10-12	0935	0835	15	4.2	914	--	--
12-14	0935	0835	16	6.4	921	--	--
14-15	0850	2250	41	30	736	111	8
15-17	2350	0750	46	31	653	68	8
17-21	0910	0810	20	5.7	837	--	--
21-22	0845	2245	94	80	551	250	31
22-24	2345	0745	92	75	440	214	21
24-26	0855	2355	38	28	528	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
0422026250 NORTHROP CREEK AT NORTH GREECE, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT							
04-05	<0.01	1.0	3.0	0.810	0.690	57	55
05-08	0.04	0.87	2.2	0.560	0.520	57	65
09-10	<0.01	0.88	2.2	0.650	0.600	67	78
10-12	<0.01	0.80	2.0	0.560	0.510	59	61
16-17	<0.01	0.84	2.6	0.780	0.735	94	74
17-18	<0.01	0.84	1.4	0.660	0.555	69	50
18-21	<0.01	0.79	1.3	0.600	0.535	65	62
OCT 31-							
NOV 01	<0.01	0.89	1.8	0.680	0.610	80	66
01-04	0.05	0.89	1.3	0.410	0.365	110	62
04-08	<0.01	0.88	1.5	0.380	0.370	100	68
14-15	<0.01	0.93	2.4	0.500	0.450	99	76
15-17	0.01	0.83	1.7	0.470	0.405	85	71
17-18	0.05	2.2	1.3	0.750	0.195	66	92
18-22	0.05	0.82	0.75	0.255	0.082	56	84
22-24	0.10	0.87	0.91	0.210	0.097	100	100
27-28	0.14	2.6	0.98	0.770	0.120	64	54
28-29	0.12	2.0	1.1	0.540	0.100	76	64
NOV 29-							
DEC 02	0.22	1.2	1.3	0.180	0.098	99	78
04-05	0.39	1.5	1.7	0.280	0.140	91	75
05-06	0.18	1.3	1.5	0.230	0.110	86	70
06-09	0.19	0.93	1.7	0.210	0.120	99	70
JAN							
14-18	0.36	1.8	2.4	0.280	0.215	150	92
28-29	0.64	1.9	2.3	0.340	0.190	280	76
29-31	0.26	0.94	1.6	0.200	0.115	220	61
JAN 31-							
FEB 03	0.24	1.2	1.9	0.180	0.096	210	70
20...	0.34	0.89	1.2	0.860	0.083	120	49
20-21	0.18	1.4	1.1	0.550	0.077	110	39
21-22	0.13	1.2	0.98	0.400	0.070	100	30
22...	0.29	1.1	1.2	0.570	0.094	110	45
22-24	0.17	0.94	1.5	0.170	0.076	120	50
24-28	0.28	0.88	1.7	0.130	0.080	160	64
MAR							
07-08	0.34	1.2	1.5	0.200	0.020	130	57
08-10	0.30	0.0	1.7	0.190	0.018	130	56
10-12	0.37	1.2	2.0	0.180	0.106	160	65
12-14	0.35	0.88	1.8	0.240	0.108	160	65
14-15	0.19	1.1	1.3	0.290	0.082	120	51
15-17	0.18	1.2	1.4	0.250	0.091	100	45
17-21	0.22	0.69	1.8	0.150	0.086	140	58
21-22	0.11	1.1	1.2	0.410	0.071	81	39
22-24	0.10	0.81	1.0	0.410	0.092	57	34
24-26	0.11	0.90	1.3	0.180	0.075	70	39

STREAMS TRIBUTARY TO LAKE ONTARIO

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0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLATILE, SUS- PENDE (MG/L)
MAR--continued							
26-27	0055	1955	38	27	582	--	--
27-28	2055	0755	47	40	514	81	9
28-31	0845	0745	25	6.6	522	--	--
APR							
05-06	2400	1700	39	5.9	622	--	--
06-07	1800	0800	60	40	478	111	11
07-09	1005	0505	57	29	538	--	--
09-11	0605	0905	32	7.2	620	--	--
11-13	1030	2130	77	55	593	188	21
13-14	2230	0930	186	180	419	490	50
14-18	1010	0910	45	25	664	--	--
18-21	0920	0820	15	3.8	720	--	--
24-25	2115	0815	9.8	2.1	761	--	--
MAY							
01-01	0045	1145	14	4.9	671	--	--
01-02	1245	0745	12	3.7	638	--	--
02-05	0855	0755	8.1	1.8	718	--	--
08-08	0045	1545	31	40	599	142	22
08-09	1645	0745	29	35	531	132	20
09-11	0940	0540	14	3.3	647	--	--
15-15	1235	2335	15	18	643	--	--
16-16	0035	0735	14	21	575	--	--
16-17	0840	0340	10	36	637	--	--
17-17	0440	1940	30	23	574	--	--
17-19	2040	0740	18	37	582	244	32
27...	0815	--	24	21	548	--	--
MAY 31-							
JUN 01	1525	0425	15	73	728	--	--
01-02	0525	0825	14	88	601	--	--
02-06	0925	0825	5.4	4.4	751	--	--
09-13	0840	0740	2.6	4.0	771	--	--
13-14	1720	0720	3.5	4.7	740	--	--
14-16	0820	0720	2.9	4.2	693	--	--
24-24	0500	1600	14	38	620	140	26
24-27	1700	0800	5.9	21	650	--	--
29-29	1210	2310	6.2	12	729	--	--
30-30	0010	0810	6.5	24	592	--	--
JUN 30-							
JUL 01	0920	0920	4.0	16	619	--	--
08-09	2030	0430	9.0	12	751	--	--
09-10	0530	0130	6.2	19	601	--	--
18-19	1710	0810	3.9	15	597	--	--
19-21	0910	0810	2.4	6.3	551	--	--
AUG							
02-03	1250	0250	5.9	16	523	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
MAR--continued							
26-27	0.12	0.90	1.3	0.180	0.071	81	43
27-28	0.09	0.75	1.1	0.200	0.066	67	38
28-31	0.12	1.1	1.4	0.140	0.072	80	43
APR							
05-06	0.02	0.66	1.3	0.140	0.044	85	48
06-07	0.05	1.3	1.0	0.250	0.053	58	39
07-09	0.02	0.87	0.93	0.170	0.042	71	39
09-11	<0.01	0.78	1.2	0.130	0.040	140	43
11-13	0.01	1.3	1.1	0.260	0.039	75	42
13-14	0.03	1.0	0.89	0.550	0.050	55	32
14-18	0.04	0.79	1.1	0.130	0.047	85	50
18-21	<0.01	0.83	1.4	0.100	0.055	98	51
24-25	<0.01	0.91	1.9	0.170	0.024	120	46
MAY							
01-01	0.03	0.93	1.7	0.200	0.125	89	42
01-02	0.02	0.90	1.2	0.140	0.098	80	40
02-05	<0.01	1.0	1.5	0.190	0.140	92	48
08-08	0.04	1.1	1.5	0.420	0.140	71	46
08-09	<0.01	0.69	0.74	0.330	0.080	57	38
09-11	<0.01	0.87	0.96	0.190	0.092	73	45
15-15	<0.01	0.83	1.8	0.330	0.175	71	46
16-16	0.02	1.3	1.5	0.340	0.145	65	39
16-17	0.01	0.90	1.4	0.270	0.150	69	45
17-17	0.06	1.8	1.2	1.00	0.145	61	38
17-19	<0.01	1.1	1.0	0.630	0.115	59	40
27...	0.06	1.5	0.97	0.280	0.160	61	35
MAY 31-							
JUN 01	0.01	1.4	1.6	0.950	0.330	97	49
01-02	0.02	1.2	1.1	0.770	0.240	65	45
02-06	<0.01	1.3	1.7	0.370	0.290	96	57
09-13	<0.01	1.2	2.5	0.670	0.560	100	59
13-14	<0.01	1.2	2.3	0.630	0.560	97	60
14-16	<0.01	1.1	1.9	0.620	0.540	93	51
24-24	0.01	1.2	0.75	0.950	0.460	76	59
24-27	<0.01	1.1	1.6	0.570	0.390	72	85
29-29	<0.01	1.0	1.7	0.580	0.460	85	66
30-30	<0.01	0.74	1.8	0.660	0.480	74	50
JUN 30-							
JUL 01	<0.01	0.91	1.8	0.520	0.460	69	59
08-09	<0.01	1.1	1.8	0.660	0.580	88	91
09-10	0.03	0.92	1.6	0.690	0.540	75	59
18-19	<0.01	1.1	1.6	0.720	0.610	72	60
19-21	<0.01	0.94	1.6	0.600	0.560	65	51
AUG							
02-03	0.01	0.73	1.8	0.940	0.770	59	54

STREAMS TRIBUTARY TO LAKE ONTARIO

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0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)
AUG--continued							
03-04	0350	0850	3.2	33	430	39	8
04-05	2110	1210	11	74	436	160	24
05-08	1310	0810	3.4	28	626	--	--
14-14	0100	1600	8.0	29	548	--	--
14-15	1700	0800	4.5	31	446	42	7
15-17	0845	0145	2.5	8.2	625	--	--
20-21	2100	1200	3.8	12	571	--	--
21-22	1300	0800	5.2	13	514	--	--
22-23	0855	0455	2.7	7.0	568	--	--
28-29	1245	0745	2.8	14	597	--	--
29-31	0850	0750	2.4	6.1	604	--	--
SEP							
13-14	2045	1545	2.4	6.2	574	--	--
14-15	1645	0845	3.2	8.0	479	--	--
19-22	0920	0820	1.5	3.8	612	--	--
26-27	1025	0625	6.0	29	526	--	--
27-29	0725	0925	3.9	14	530	--	--
SEP 29-							
OCT 03	0940	0840	2.0	3.5	658	--	--

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE TOTAL (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG--continued							
03-04	0.01	0.74	1.6	0.630	0.510	43	53
04-05	<0.01	0.56	1.3	0.820	0.500	52	59
05-08	<0.01	0.87	1.4	0.570	0.405	65	86
14-14	<0.01	0.70	1.6	ND	0.600	65	59
14-15	0.01	0.46	1.1	ND	0.370	46	56
15-17	<0.01	0.72	1.6	0.610	0.530	69	79
20-21	<0.01	0.34	1.3	0.780	0.690	68	53
21-22	<0.01	0.61	1.2	0.670	0.585	60	52
22-23	<0.01	0.56	1.2	0.545	0.510	58	78
28-29	<0.01	0.56	1.3	0.710	0.630	64	60
29-31	<0.01	0.54	1.3	0.670	0.560	63	56
SEP							
13-14	<0.01	0.64	2.1	0.760	0.705	70	58
14-15	<0.01	0.61	2.0	0.700	0.675	55	45
19-22	0.35	1.3	2.8	0.790	0.730	75	57
26-27	<0.01	0.78	1.9	0.880	0.290	65	46
27-29	<0.01	1.0	1.2	0.560	0.185	59	60
SEP 29-							
OCT 03	<0.01	0.78	2.0	0.590	0.570	77	66

STREAMS TRIBUTARY TO LAKE ONTARIO

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 mi².

PERIOD OF RECORD.--August 1955 to September 1958, October 1972 to current year.

REVISED RECORDS.--WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft above sea level. 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. Record for station 04221500 Genesee River at Scio, 5.2 mi downstream, published for June 1916 to September 1972. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since June 1916, 38,500 ft³/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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	0930	6,190	9.57	June 14	0900	6,620	9.82
Mar. 24	2300	*7,080	*10.08	Aug. 14	1400	3,680	8.00
Apr. 3	1900	3,910	8.15	Aug. 18	1500	5,580	9.21
Apr. 13	2200	4,350	8.43	Aug. 21	1500	4,210	8.34

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	122	842	e160	e330	e390	1540	982	674	187	49	326
2	79	123	684	e150	e300	e380	2220	618	343	160	68	275
3	91	147	629	e145	e280	e330	3300	513	272	153	128	242
4	82	199	709	e145	e260	e330	2560	464	234	135	64	215
5	100	517	976	e140	e240	e320	2000	432	207	125	61	193
6	93	687	674	e140	e230	e300	2180	398	199	171	60	176
7	78	435	649	e135	e225	e290	2930	364	234	172	52	163
8	69	339	570	e135	e220	e320	1830	429	177	142	46	147
9	63	279	501	e130	e210	e360	1480	371	154	115	42	137
10	63	242	498	e130	e200	e500	2050	372	138	107	41	132
11	59	214	538	e130	e190	e440	1680	325	298	98	39	117
12	56	211	e380	e125	e180	e430	2070	320	588	87	41	110
13	55	197	e360	e125	e170	425	2980	294	681	80	93	103
14	51	216	e350	e125	e160	530	2870	259	4870	74	2510	96
15	48	394	356	e120	e150	580	1810	247	1550	73	701	94
16	47	293	348	e120	e150	753	2040	325	1150	72	388	91
17	52	1040	286	e115	e140	577	1650	290	781	68	330	84
18	66	1900	270	e115	e140	518	1190	270	579	79	3810	86
19	66	904	277	e110	e170	513	1020	254	451	136	1750	82
20	69	745	279	e110	e500	450	836	232	360	81	883	72
21	100	586	268	e110	e2000	525	694	207	322	68	2550	67
22	156	503	255	e105	e1700	1240	594	189	278	63	1570	64
23	109	426	e240	e105	1140	2110	519	169	232	61	920	66
24	93	380	e210	e100	e880	4150	463	156	226	58	668	80
25	84	344	e190	e100	e660	4830	409	184	437	70	685	71
26	75	295	e160	e98	e500	2380	383	472	247	99	693	75
27	72	327	e165	e96	e440	2380	427	415	209	74	508	123
28	80	4500	e180	e140	e400	2280	341	270	249	67	512	91
29	88	1950	e160	e580	---	1740	369	223	213	64	630	102
30	82	1150	e160	e500	---	1450	381	190	230	57	403	95
31	93	---	e160	e360	---	1300	---	174	---	54	354	---
TOTAL	2408	19665	12324	4899	12165	33121	44816	10408	16583	3050	20649	3775
MEAN	77.7	655	398	158	434	1068	1494	336	553	98.4	666	126
MAX	156	4500	976	580	2000	4830	3300	982	4870	187	3810	326
MIN	47	122	160	96	140	290	341	156	138	54	39	64
CFSM	.27	2.28	1.38	.55	1.51	3.71	5.19	1.17	1.92	.34	2.31	.44
IN.	.31	2.54	1.59	.63	1.57	4.28	5.79	1.34	2.14	.39	2.67	.49

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04221000 GENESEE RIVER AT WELLSVILLE, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

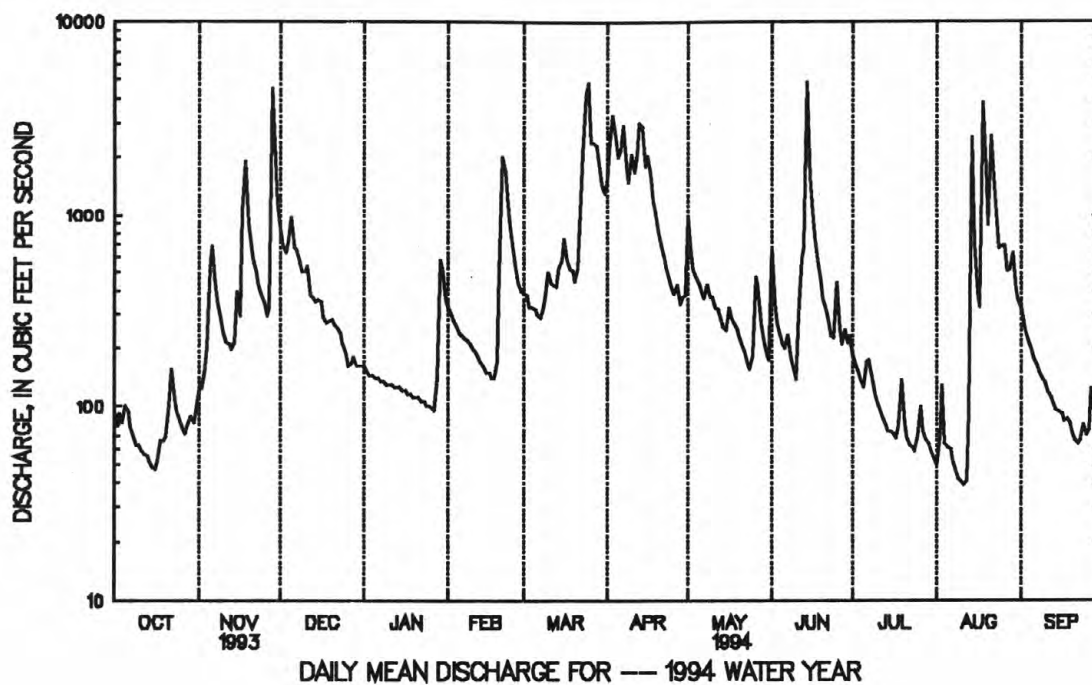
MEAN	232	335	464	333	461	788	883	453	290	167	132	183
MAX	784	773	1016	919	1443	1689	1925	1115	1262	656	666	1246
(WY)	1991	1993	1973	1979	1976	1956	1958	1989	1989	1977	1994	1977
MIN	25.0	37.3	104	52.1	94.4	320	361	113	45.3	27.5	25.0	22.1
(WY)	1958	1958	1990	1981	1958	1981	1976	1985	1991	1993	1957	1991

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1955 - 1958
1973 - 1994

ANNUAL TOTAL	155876		183863									
ANNUAL MEAN	427		504							393		
HIGHEST ANNUAL MEAN										564		1956
LOWEST ANNUAL MEAN										261		1981
HIGHEST DAILY MEAN	7410	Apr 1	4870	Jun 14	11700	Mar 8	1956					
LOWEST DAILY MEAN	17	Jul 26	39	Aug 11	13	a						
ANNUAL SEVEN-DAY MINIMUM	19	Jul 23	46	Aug 6	15	Aug 28	1991					
INSTANTANEOUS PEAK FLOW			7080	Mar 24	15800	b						
INSTANTANEOUS PEAK STAGE			10.08	Mar 24	13.60	Oct 28	1981					
ANNUAL RUNOFF (CFSM)	1.48		1.75		1.37							
ANNUAL RUNOFF (INCHES)	20.13		23.75		18.56							
10 PERCENT EXCEEDS	1110		1460		883							
50 PERCENT EXCEEDS	145		240		207							
90 PERCENT EXCEEDS	25		70		41							

a Sep. 2, 3, 1991.

b Mar. 8, 1956, from graph based on stage readings, and Oct. 28, 1981.



STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi².

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. WRD 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 sea level (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 good 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	1630	16,600	16.10	June 14	1600	17,900	16.52
Mar. 25	0530	*23,500	*18.42				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	916	583	2070	e500	e600	e1200	4310	2400	2400	1070	184	652
2	547	629	1700	e490	e560	e1100	5910	2450	1490	723	183	555
3	503	639	1640	e480	e540	e1000	9440	1650	882	595	183	483
4	501	648	1830	e480	e520	e920	8260	1350	716	512	231	429
5	508	1380	4060	e470	e500	e900	5490	1120	615	500	208	392
6	495	2260	2470	e450	e470	e920	5510	1060	557	513	191	363
7	307	1640	2250	e430	e430	984	7310	1050	596	540	183	352
8	312	1230	2010	e420	e400	1350	5710	1450	599	528	184	331
9	531	1030	1720	e410	e380	1610	4720	1560	518	432	214	305
10	525	916	1620	e400	e370	1570	6080	1360	467	362	183	287
11	518	769	1910	e390	e360	e1950	5290	1150	434	336	183	273
12	513	577	1530	e380	e340	e1500	4460	1020	644	304	183	252
13	458	643	e1300	e370	e330	1570	8400	1030	745	294	182	238
14	213	596	e1250	e370	e330	1800	9130	825	12400	292	2280	232
15	232	1210	1230	e360	e340	2040	4870	780	4230	359	2350	227
16	439	1150	1230	e360	e360	3070	4770	983	2200	337	901	315
17	443	2620	1100	e350	e340	2030	5200	1170	1460	253	560	246
18	434	7590	1020	e340	e340	1750	3330	1190	1120	238	1930	210
19	477	2860	1000	e340	e360	1900	2630	1010	907	237	3400	201
20	434	1900	1060	e330	e800	1760	2100	889	757	292	1370	194
21	334	1580	1060	e330	e7400	1820	1770	737	694	243	3690	179
22	556	1360	1040	e320	7490	4530	1530	656	667	213	3640	172
23	688	1190	970	e320	e3900	7410	1320	611	560	202	1670	170
24	595	1030	e700	e310	e2900	13500	1180	597	562	193	1100	170
25	537	929	e650	e310	e1900	17800	1090	610	1080	188	923	180
26	519	809	e600	e310	e1500	7320	1040	790	977	227	1310	287
27	451	788	e570	e300	e1400	6550	1670	1310	728	259	972	536
28	268	11800	e550	e360	e1250	6930	1280	919	1890	261	852	496
29	320	6760	e540	e800	---	5100	1160	714	911	303	1580	479
30	507	3400	e520	e850	---	4390	1420	613	1380	218	1120	782
31	512	---	e510	e700	---	3760	---	562	---	192	792	---
TOTAL	14593	60516	41710	13030	36410	110034	126380	33616	43186	11216	32932	9988
MEAN	471	2017	1345	420	1300	3549	4213	1084	1440	362	1062	333
MAX	916	11800	4060	850	7490	17800	9440	2450	12400	1070	3690	782
MIN	213	577	510	300	330	900	1040	562	434	188	182	170

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04223000 GENESEE RIVER AT PORTAGEVILLE, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1994, BY WATER YEAR (WY)

MEAN	626	1055	1330	1360	1446	2937	2812	1506	891	446	326	417
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1908 - 1994	
ANNUAL TOTAL	498166		533611			
ANNUAL MEAN	1365		1462		1262	
HIGHEST ANNUAL MEAN					2038	
LOWEST ANNUAL MEAN					766	
HIGHEST DAILY MEAN	18300	Apr 2	17800	Mar 25	72000	Jun 23 1972
LOWEST DAILY MEAN	82	Jul 25	170	a	20	Oct 5 1913
ANNUAL SEVEN-DAY MINIMUM	94	Jul 23	181	Sep 19	34	Jul 25 1934
INSTANTANEOUS PEAK FLOW			23500	Mar 25	b90000	Jun 23 1972
INSTANTANEOUS PEAK STAGE			18.42	Mar 25	c35.25	Jun 23 1972
INSTANTANEOUS LOW FLOW			169	d	18	f
10 PERCENT EXCEEDS	3490		3720		2900	
50 PERCENT EXCEEDS	510		700		600	
90 PERCENT EXCEEDS	124		245		133	

a Sept. 23, 24.

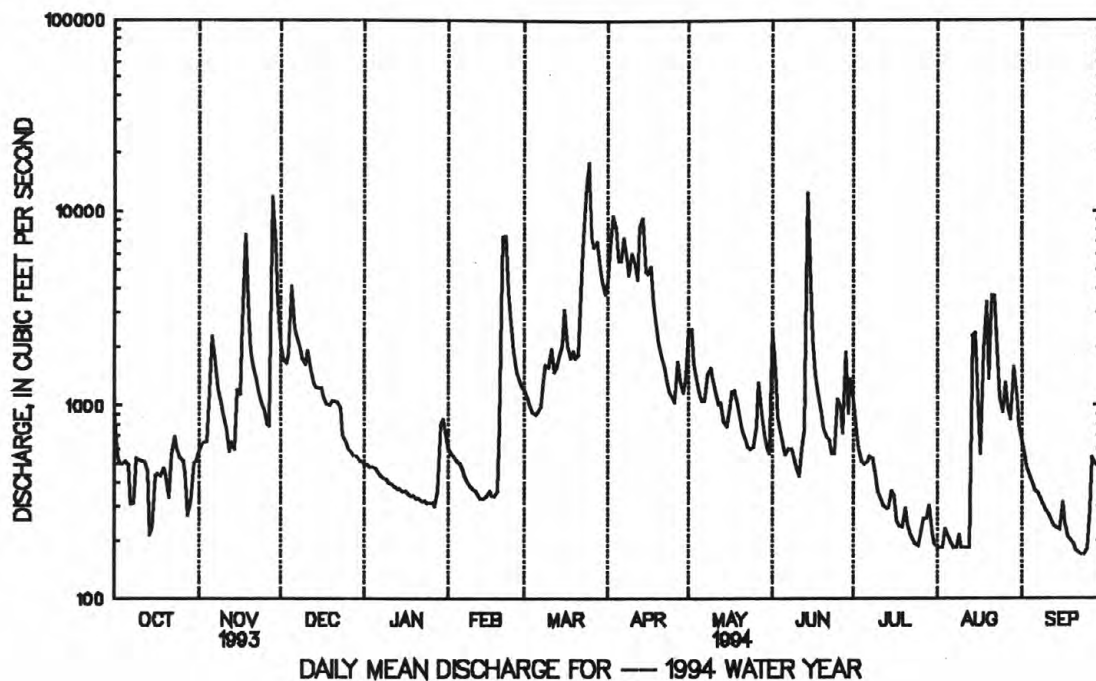
b About, from rating curve extended above 25,000 ft³/s on basis of contracted-opening measurement of 71,000 ft³/s,

at highway bridge 0.4 mi upstream and contracted-opening measurement of 98,200 ft³/s, 0.7 mi downstream from gage.

c From high-water mark, site and datum then in use.

d Sept. 21, 22, 23, 24.

f Oct. 5, 17, 1913.



STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi².

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 sea level (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, 700.19 ft, Apr. 15, contents, 166,800 acre-ft; minimum, 585.67 ft, Sep. 23, contents 725 acre-ft.

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 ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	594.89	592.42	642.54	590.72	593.15	639.43	683.67	644.26	638.76	594.33	588.16	589.47
2	592.31	592.80	643.02	591.45	593.06	638.00	682.12	647.60	640.83	592.10	588.02	588.85
3	591.56	593.17	643.12	590.50	593.06	636.39	683.67	650.18	638.64	590.52	587.94	588.40
4	591.48	592.74	640.90	589.96	592.38	634.67	689.00	651.73	633.65	589.99	587.96	588.06
5	591.54	595.10	640.27	588.86	592.15	633.05	690.69	652.86	627.48	589.60	588.52	587.78
6	591.71	604.05	641.24	588.77	591.94	631.21	689.35	653.84	619.70	589.88	588.36	587.58
7	590.09	606.51	642.14	588.70	591.78	629.12	691.68	654.78	608.82	589.85	588.21	587.41
8	589.09	604.08	640.72	588.02	591.03	627.33	693.56	655.89	592.50	589.96	588.00	587.40
9	591.08	597.09	638.28	588.49	590.09	626.48	692.17	657.57	589.71	589.56	588.00	588.01
10	591.71	594.48	635.41	588.26	589.99	625.77	691.86	658.90	589.26	588.88	588.14	588.17
11	591.63	594.31	632.58	588.59	590.10	625.65	691.49	659.98	588.96	588.61	587.73	587.46
12	591.55	592.37	628.90	588.84	589.82	625.71	688.82	660.24	589.51	588.72	587.72	586.54
13	591.59	592.65	623.67	589.00	589.64	624.97	689.90	659.89	593.77	589.50	587.96	586.13
14	589.28	592.29	617.13	588.69	589.38	624.42	696.78	659.76	617.58	589.42	593.09	586.04
15	588.24	594.86	608.35	588.36	589.07	624.77	700.00	659.92	639.62	589.71	612.20	586.12
16	590.11	597.73	595.02	587.83	589.20	626.72	698.47	660.10	639.77	590.00	611.30	586.06
17	591.03	596.14	592.93	587.83	589.20	628.60	697.30	660.00	636.72	589.28	600.13	586.27
18	590.98	621.38	592.32	588.27	589.33	628.53	695.90	660.00	632.44	588.83	592.48	586.10
19	591.19	628.55	592.19	587.63	589.76	628.25	692.68	659.89	627.21	588.68	611.08	585.88
20	591.38	627.43	592.42	587.17	592.43	628.19	688.75	658.10	620.52	589.05	605.05	585.78
21	590.08	624.77	592.53	586.94	610.77	627.93	684.44	652.51	610.88	589.07	597.60	585.85
22	591.03	620.97	592.49	586.83	634.31	630.22	679.82	646.54	593.88	588.61	613.67	585.79
23	593.31	616.11	592.15	586.93	642.40	637.99	674.48	641.31	591.02	588.59	609.27	585.73
24	592.77	609.45	590.90	588.58	644.60	650.98	668.81	636.15	590.90	588.25	593.59	585.74
25	592.19	597.73	590.73	588.64	645.09	668.99	662.98	633.67	593.20	588.19	591.24	585.74
26	591.99	592.25	589.70	588.12	644.27	678.94	657.09	634.10	594.15	588.28	592.48	587.17
27	591.77	593.32	588.65	587.61	642.37	682.45	651.39	635.50	591.78	588.65	591.94	589.79
28	589.88	616.70	589.51	588.13	640.92	686.59	646.08	637.12	598.55	588.97	590.30	589.48
29	589.21	639.57	588.76	590.73	---	688.07	642.39	638.00	593.40	589.06	593.05	588.88
30	591.28	643.04	589.61	600.02	---	687.88	642.74	638.55	594.80	589.21	592.20	591.02
31	591.86	---	589.25	597.90	---	686.19	---	638.67	---	588.56	590.34	---
MEAN	591.22	605.47	612.18	589.24	604.33	642.37	681.27	650.25	610.60	589.42	594.38	587.29
MAX	594.89	643.04	643.12	600.02	645.09	688.07	700.00	660.24	640.83	594.33	613.67	591.02
MIN	588.24	592.25	588.65	586.83	589.07	624.42	642.39	633.67	588.96	588.19	587.72	585.73

CAL YR 1993 MEAN 610.12 MAX 745.15 MIN 586.38
WTR YR 1994 MEAN 613.15 MAX 700.00 MIN 585.73

MEAN	55.4	87.2	111	87.8	135	209	212	113	70.9	39.0	31.9	45.8
MAX	175	194	252	217	432	419	519	292	270	128	77.1	331
(WY)	1991	1993	1978	1975	1976	1979	1993	1984	1989	1992	1992	1977
MIN	10.7	19.5	38.9	24.4	31.4	70.6	81.8	26.2	16.8	10.8	7.52	7.24
(WY)	1984	1992	1989	1984	1980	1984	1981	1985	1991	1985	1985	1985

STREAMS TRIBUTARY TO LAKE ONTARIO
04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1974 - 1994	
ANNUAL TOTAL	45127		41966		99.2	
ANNUAL MEAN	124		115		135	
HIGHEST ANNUAL MEAN					65.5	
LOWEST ANNUAL MEAN					1980	
HIGHEST DAILY MEAN	1680	Apr 1	1390	Nov 28	Sep 20 1977	
LOWEST DAILY MEAN	10	Jul 25	14	a	Sep 7 1985	
ANNUAL SEVEN-DAY MINIMUM	11	Aug 26	14	Aug 6	Sep 17 1985	
INSTANTANEOUS PEAK FLOW			2110	Nov 28	b4050	
INSTANTANEOUS PEAK STAGE			c3.84	Mar 24	5.70	
INSTANTANEOUS LOW FLOW			13	d	6.7	
ANNUAL RUNOFF (CFSM)	1.39		1.29		1.12	
ANNUAL RUNOFF (INCHES)	18.88		17.56		15.16	
10 PERCENT EXCEEDS	261		294		220	
50 PERCENT EXCEEDS	48		50		53	
90 PERCENT EXCEEDS	14		18		13	

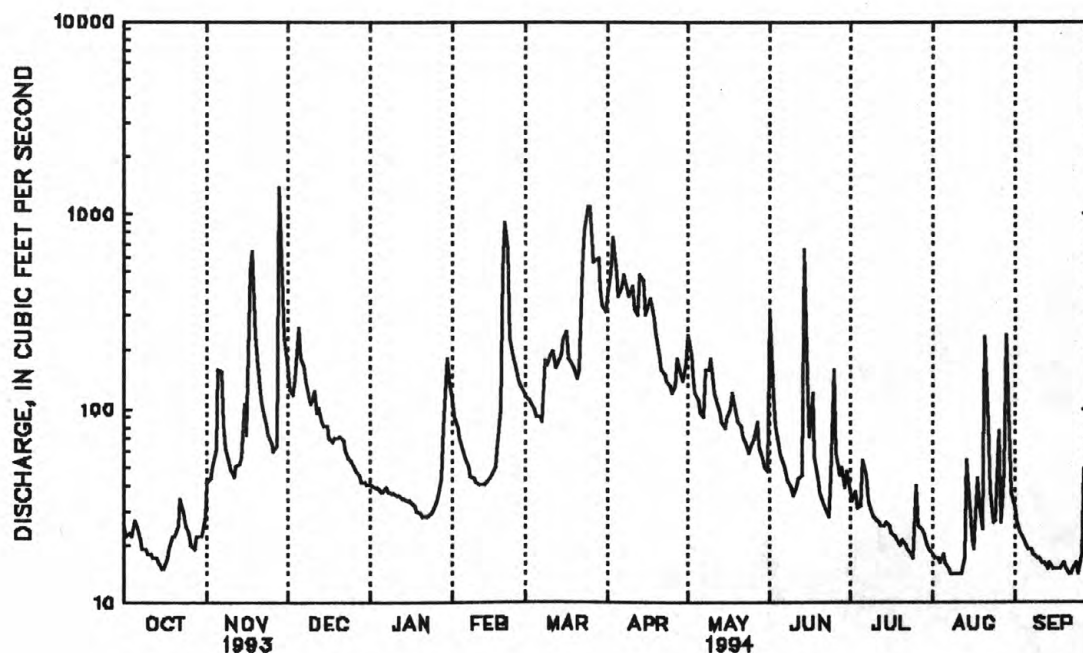
a Aug. 8-12, Sep. 21, 22, 25.

b From rating curve extended above 1,400 ft³/s.

c Ice jam.

d Aug. 8, 9, Sep. 22.

f Aug. 27, Sep. 7, 8, 1985.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

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 sea level. 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.--Records good except those for estimated daily discharges, which are fair. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached an estimated discharge of 11,200 ft³/s from U. S. Army Corps of Engineers publication (Tropical Storm Agnes, June 1972).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	1130	3,410	10.65	Mar. 24	2200	*3,450	10.68
Feb. 21	1000	ice jam	11.51	Apr. 9	0830	(a)	*12.67

(a) Backwater from Genesee River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	111	709	e89	e300	320	713	462	447	135	48	92
2	62	115	479	e88	e260	e300	792	438	288	110	47	78
3	68	125	428	e88	e230	e280	1150	343	163	116	57	69
4	63	164	523	e87	e200	267	1280	297	124	94	47	63
5	87	273	1060	e86	e180	275	878	272	110	85	52	59
6	79	393	659	e85	e170	244	1020	267	99	132	49	56
7	66	237	497	e82	e150	e200	1740	288	108	128	46	53
8	59	171	410	e82	e140	e720	1540	550	120	106	44	51
9	56	138	337	e80	e130	e660	1400	514	109	89	42	51
10	65	123	319	e78	e120	828	1110	467	102	78	43	51
11	59	113	348	e76	e120	872	909	369	100	74	43	48
12	55	116	e200	e75	e110	583	826	328	120	69	44	47
13	54	135	229	e74	e110	512	1780	299	109	65	47	47
14	53	121	e200	e74	e110	670	1730	253	805	64	147	48
15	52	219	e200	e72	e120	1050	1020	250	400	69	116	50
16	52	199	201	e72	e125	1290	860	280	218	66	61	48
17	58	517	195	e71	130	696	967	318	465	63	50	47
18	67	1440	189	e70	e150	545	614	380	144	62	115	49
19	67	733	192	e70	e330	484	496	316	103	56	105	48
20	64	411	203	e70	e1200	432	444	e220	78	53	46	46
21	81	292	210	e65	e2200	696	371	e200	59	51	330	45
22	88	250	224	e65	1840	1900	e350	e185	89	49	238	44
23	79	213	189	e65	1240	2420	e330	e175	88	48	89	45
24	68	194	e115	e65	913	2960	e310	e180	118	47	86	47
25	63	186	e110	e70	643	3010	e290	185	277	46	85	48
26	62	160	e105	e70	421	1890	e300	192	195	80	142	54
27	60	168	99	e80	430	1660	283	231	142	84	93	132
28	70	2610	e98	e90	265	1670	249	190	165	68	74	103
29	72	1700	e94	e200	---	1270	295	165	140	63	300	79
30	68	1120	e90	e500	---	1000	340	149	149	57	154	85
31	72	---	e90	e400	---	812	---	139	---	51	105	---
TOTAL	2040	12747	9002	3239	12337	30516	24387	8902	5634	2358	2945	1783
MEAN	65.8	425	290	104	441	984	813	287	188	76.1	95.0	59.4
MAX	88	2610	1060	500	2200	3010	1780	550	805	135	330	132
MIN	52	111	90	65	110	200	249	139	59	46	42	44
CFSM	.20	1.27	.87	.31	1.32	2.94	2.43	.86	.56	.23	.28	.18
IN.	.23	1.42	1.00	.36	1.37	3.39	2.71	.99	.63	.26	.33	.20

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1994, BY WATER YEAR (WY)

MEAN	149	220	308	278	409	671	678	336	208	106	86.4	112
MAX	601	647	906	886	1452	1575	1537	1009	913	454	297	1162
(WY)	1978	1993	1978	1979	1976	1979	1993	1984	1989	1992	1992	1977
MIN	24.4	31.3	29.9	30.9	74.6	209	234	115	48.1	22.9	19.9	22.6
(WY)	1965	1965	1961	1961	1963	1965	1981	1985	1965	1965	1965	1965

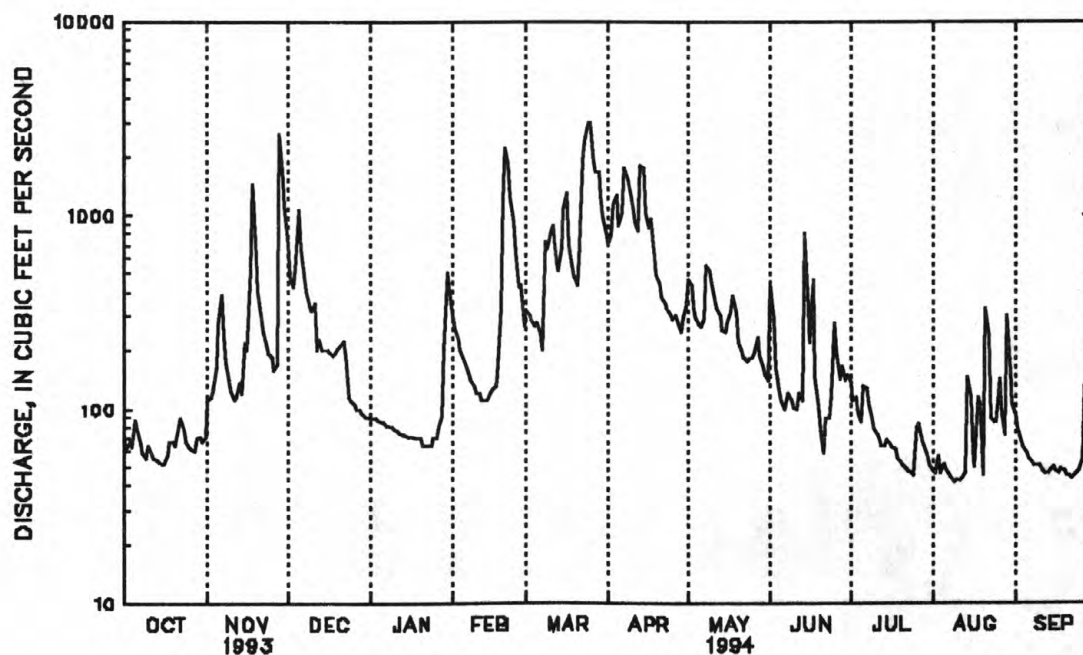
SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1959 - 1970
1975 - 1994

ANNUAL TOTAL	136080			115890								
ANNUAL MEAN	373			318						297		
HIGHEST ANNUAL MEAN										461		1978
LOWEST ANNUAL MEAN										137		1965
HIGHEST DAILY MEAN	4160	Apr 2		3010	Mar 25					4970	Mar 4	1976
LOWEST DAILY MEAN	38	Jul 24		42	Aug 9					8.5	Aug 18	1970
ANNUAL SEVEN-DAY MINIMUM	41	Jul 19		44	Aug 7					15	Jul 26	1965
INSTANTANEOUS PEAK FLOW				3450	Mar 24					5270	Mar 4	1976
INSTANTANEOUS PEAK STAGE				a12.67	Apr 9					b13.33	Mar 4	1976
INSTANTANEOUS LOW FLOW				40	Aug 9					c4.3	Aug 19	1970
ANNUAL RUNOFF (CFSM)	1.11			.95						.89		
ANNUAL RUNOFF (INCHES)	15.11			12.87						12.05		
10 PERCENT EXCEEDS	1000			841						704		
50 PERCENT EXCEEDS	160			132						147		
90 PERCENT EXCEEDS	52			51						38		

a Backwater from Genesee River.

b Maximum gage height, 23.62 ft, present datum, May 17, 1916 (backwater from Genesee River).

c Result of temporary regulation.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

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).

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft above sea level. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	706	3590	e630	e1600	e2200	7660	1250	1780	1710	225	849
2	694	766	1950	e600	e1400	e2100	7730	1150	2070	1100	218	709
3	575	829	2600	e580	e1200	e2000	7490	793	3590	794	223	614
4	558	823	4040	e560	e1050	e1900	6590	808	4210	688	206	540
5	587	1210	4490	e550	e950	e1800	6670	783	3990	595	264	484
6	593	2090	2940	e540	e900	e1900	8010	774	3670	675	238	442
7	430	2100	2820	e540	e850	e2000	6320	795	3010	658	217	413
8	340	1960	4050	e530	e800	e2100	7580	1090	1410	670	210	392
9	483	1590	3930	e520	e750	e2200	8930	1080	742	601	203	367
10	587	1130	3810	e520	e700	e2400	7270	986	654	485	223	338
11	569	1040	4030	e510	e670	e2800	8530	1100	602	430	200	322
12	558	786	4120	e500	e640	e2600	8960	1680	660	398	166	299
13	558	807	3860	e520	e600	e2800	7670	1970	1000	375	173	285
14	364	772	3590	e510	e580	e3000	4910	1310	2080	359	600	275
15	252	1080	3180	e490	e570	e3600	5770	1090	2820	395	2270	275
16	384	1520	2180	e480	e560	3850	8030	1430	4100	416	2200	294
17	494	1580	1790	e500	e550	2980	8360	1820	4670	361	1900	346
18	500	3560	e1500	e500	e500	2760	7310	1920	4220	304	842	261
19	516	3500	e1400	e480	e700	2710	7660	1910	3940	283	3060	241
20	542	3520	e1400	e480	e1900	2590	7780	4130	3670	310	3350	232
21	452	3320	e1450	e470	e4000	2780	7560	6430	3260	321	2450	221
22	486	3130	e1470	e450	e3600	4100	7390	5490	1680	270	3860	211
23	792	2920	e1300	e450	e3400	4730	7780	4610	799	261	3820	203
24	727	2660	e1100	e460	e3200	5150	7640	3810	756	239	2150	202
25	638	2060	e900	e440	e3000	5030	7390	1590	1250	224	1260	202
26	606	1140	e700	e420	e2800	5060	7140	629	1690	253	1550	249
27	576	992	e650	e410	e2600	5110	6860	654	1060	317	1480	584
28	439	3560	e720	e600	e2300	5460	6370	617	2020	320	997	638
29	339	3870	e660	e1500	---	6340	3520	590	1590	334	1940	520
30	494	3730	e700	e2200	---	6440	1180	577	1570	315	1640	837
31	596	---	e660	e1900	---	7080	---	1050	---	244	1050	---
TOTAL	16959	58751	71580	19840	42370	107570	212060	53916	68563	14705	39185	11845
MEAN	547	1958	2309	640	1513	3470	7069	1739	2285	474	1264	395
MAX	1230	3870	4490	2200	4000	7080	8960	6430	4670	1710	3860	849
MIN	252	706	650	410	500	1800	1180	577	602	224	166	202

e Estimated

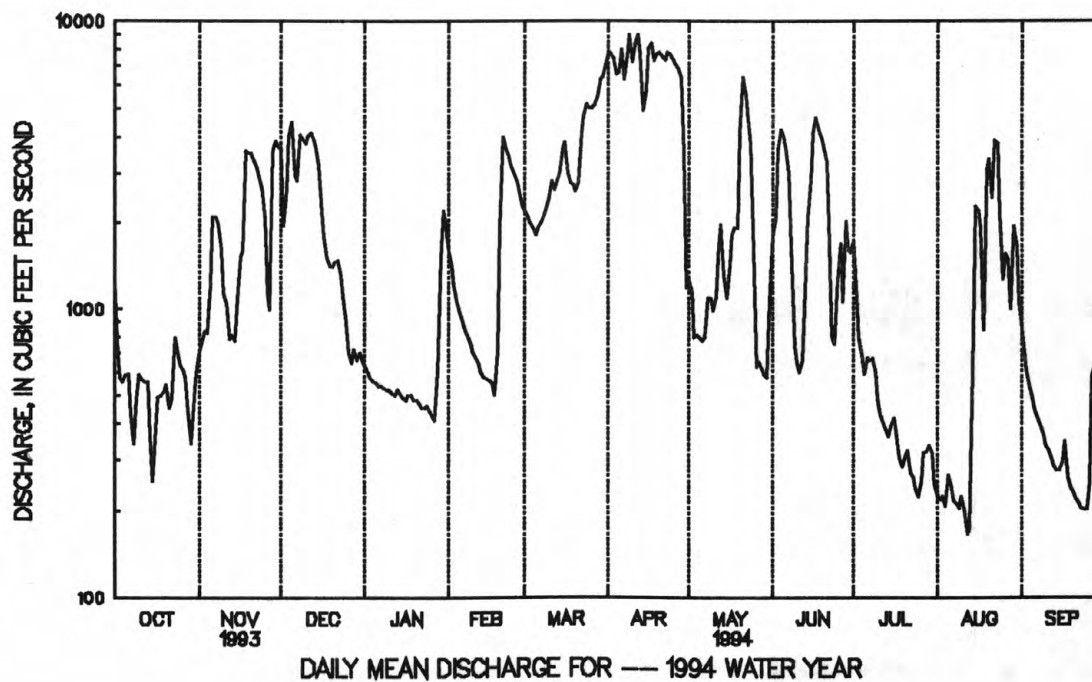
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1994, BY WATER YEAR (WY)

MEAN	821	1301	1734	1797	1875	3953	3947	2100	1137	656	434	475
MAX	4743	5447	6319	5903	5194	10010	9914	6545	4305	6801	2205	4130
(WY)	1978	1928	1928	1913	1925	1936	1940	1919	1989	1972	1977	1977
MIN	107	152	230	135	356	1289	636	410	146	84.3	82.8	105
(WY)	1961	1965	1909	1961	1920	1937	1946	1934	1934	1934	1934	1955

STREAMS TRIBUTARY TO LAKE ONTARIO
04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1903 - 1906	
					1908 - 1914	
					1915 - 1994	
ANNUAL TOTAL	698666		717344		1687	
ANNUAL MEAN	1914		1965		2641	1916
HIGHEST ANNUAL MEAN					972	1934
LOWEST ANNUAL MEAN					45700	May 17 1916
HIGHEST DAILY MEAN	9150	Apr 22	8960	Apr 12	15	Oct 9 1980
LOWEST DAILY MEAN	85	Aug 29	166	Aug 12	54	Sep 2 1934
ANNUAL SEVEN-DAY MINIMUM	139	Aug 26	199	Aug 7	55100	May 17 1916
INSTANTANEOUS PEAK FLOW			9710	Apr 9	a25.80	Mar 13 1920
INSTANTANEOUS PEAK STAGE			16.60	Apr 9	12	Jul 23 1955
INSTANTANEOUS LOW FLOW			106	Aug 12	4330	
10 PERCENT EXCEEDS	6510		5040		811	
50 PERCENT EXCEEDS	786		1050		190	
90 PERCENT EXCEEDS	194		308			

a Ice jam.



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EXTREMES FOR CURRENT YEAR.--Maximum elevation, 819.03 ft. June 1; minimum, 816.72 ft, Feb. 17, 18, 19.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	817.41	817.17	817.74	817.09	816.83	817.46	817.49	818.84	819.00	818.74	818.31	818.38
2	817.38	817.16	817.76	817.07	816.83	817.43	817.54	818.81	818.92	818.72	818.32	818.36
3	817.36	817.15	817.78	817.04	816.84	817.43	817.62	818.78	818.83	818.70	818.31	818.35
4	817.35	817.14	817.83	817.05	816.83	817.45	817.73	818.77	818.77	818.69	818.30	818.33
5	817.35	817.14	817.93	817.07	816.82	817.45	817.80	818.77	818.74	818.68	818.30	818.31
6	817.34	817.15	817.99	817.05	816.81	817.44	817.90	818.78	818.74	818.67	818.27	818.29
7	817.32	817.14	818.05	817.05	816.80	817.33	818.10	818.79	818.75	818.67	818.24	818.27
8	817.31	817.13	818.07	817.05	816.80	817.26	818.27	818.86	818.75	818.65	818.22	818.27
9	817.31	817.12	818.08	817.03	816.82	817.19	818.44	818.91	818.74	818.65	818.21	818.27
10	817.30	817.11	818.11	817.01	816.81	817.17	818.57	818.93	818.75	818.63	818.19	818.26
11	817.28	817.10	818.13	816.99	816.80	817.11	818.68	818.94	818.75	818.60	818.17	818.24
12	817.26	817.11	818.08	816.97	816.79	817.03	818.76	818.93	818.75	818.58	818.15	818.22
13	817.25	817.11	818.03	816.95	816.78	816.97	818.87	818.91	818.76	818.57	818.17	818.20
14	817.23	817.12	817.99	816.95	816.77	816.94	818.93	818.88	818.82	818.54	818.27	818.23
15	817.21	817.15	817.94	816.94	816.76	816.97	818.86	818.88	818.83	818.53	818.25	818.20
16	817.21	817.15	817.90	816.92	816.75	817.06	818.84	818.88	818.84	818.51	818.23	818.16
17	817.22	817.18	817.85	816.90	816.74	817.07	818.79	818.89	818.84	818.49	818.22	818.12
18	817.22	817.25	817.81	816.88	816.73	817.06	818.74	818.91	818.84	818.48	818.25	818.07
19	817.21	817.27	817.76	816.87	816.73	817.05	818.75	818.91	818.83	818.46	818.24	818.02
20	817.20	817.28	817.72	816.85	816.84	817.00	818.78	818.90	818.81	818.45	818.23	817.99
21	817.22	817.27	817.70	816.82	817.13	816.99	818.80	818.88	818.80	818.45	818.37	817.97
22	817.20	817.27	817.65	816.80	817.30	817.20	818.83	818.87	818.77	818.43	818.38	817.94
23	817.18	817.27	817.58	816.78	817.40	817.45	818.84	818.85	818.75	818.41	818.36	817.93
24	817.17	817.28	817.51	816.76	817.50	817.70	818.86	818.83	818.76	818.38	818.35	817.91
25	817.15	817.28	817.45	816.74	817.55	817.84	818.89	818.86	818.79	818.36	818.39	817.89
26	817.14	817.28	817.39	816.75	817.56	817.79	818.93	818.88	818.77	818.38	818.43	817.90
27	817.13	817.29	817.32	816.76	817.53	817.73	818.95	818.90	818.78	818.37	818.42	817.94
28	817.14	817.51	817.26	816.77	817.50	817.70	818.90	818.91	818.77	818.38	818.42	817.93
29	817.12	817.64	817.20	816.80	---	817.61	818.87	818.91	818.76	818.36	818.41	817.90
30	817.11	817.70	817.15	816.82	---	817.56	818.84	818.91	818.76	818.35	818.39	817.87
31	817.12	---	817.11	816.83	---	817.52	---	818.92	---	818.33	818.38	---
MEAN	817.24	817.23	817.74	816.91	816.98	817.32	818.54	818.87	818.79	818.52	818.30	818.12
MAX	817.41	817.70	818.13	817.09	817.56	817.84	818.95	818.94	819.00	818.74	818.43	818.38
MIN	817.11	817.10	817.11	816.74	816.73	816.94	817.49	818.77	818.74	818.33	818.15	817.87
CAL YR 1993	MEAN 817.82		MAX 819.41		MIN 816.78							
WTR YR 1994	MEAN 817.88		MAX 819.00		MIN 816.73							

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.

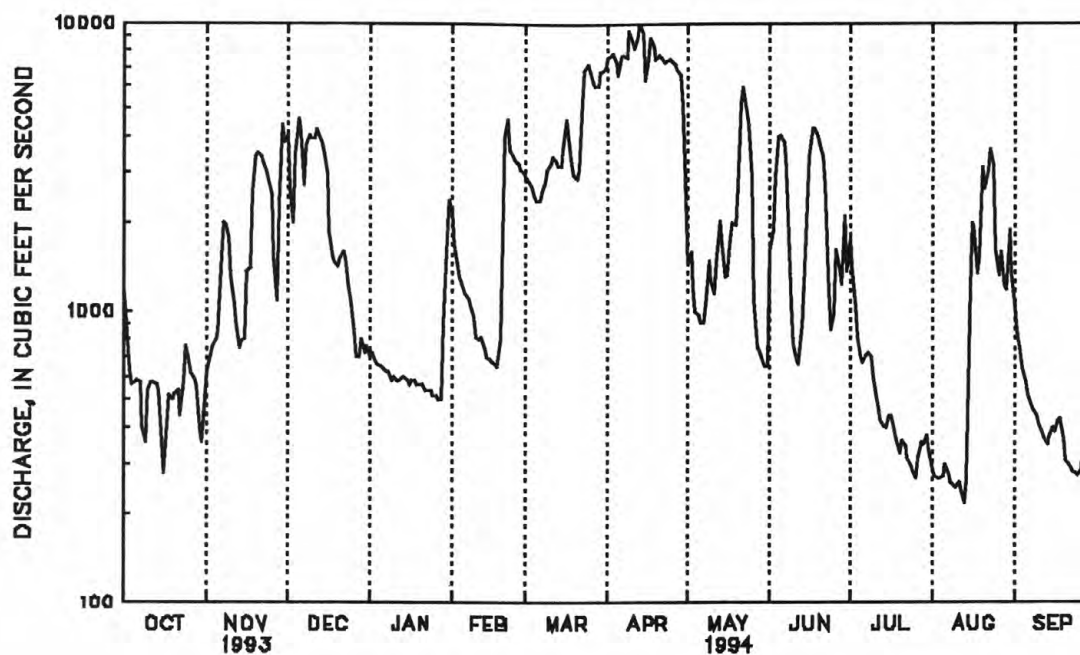
MEAN	1033	1574	2274	1931	2263	4163	4709	2330	1353	845	531	619
MAX	5146	3637	5942	4781	6036	8916	7846	5761	4906	7032	2408	4569
(WY)	1978	1971	1973	1979	1990	1956	1993	1984	1989	1972	1992	1977
MIN	145	182	325	155	397	1813	1912	613	334	172	142	111
(WY)	1964	1965	1961	1961	1958	1960	1981	1985	1991	1962	1965	1955

STREAMS TRIBUTARY TO LAKE ONTARIO
04228500 GENESEE RIVER AT AVON, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1955 - 1994	
ANNUAL TOTAL	774002		769566		1967	
ANNUAL MEAN	2121		2108		1130	
HIGHEST ANNUAL MEAN					2846	
LOWEST ANNUAL MEAN					1978	
HIGHEST DAILY MEAN	9530	Apr 23	9940	Apr 13	16200	Jun 25 1972
LOWEST DAILY MEAN	132	Aug 30	219	Aug 13	49	Oct 10 1980
ANNUAL SEVEN-DAY MINIMUM	171	Aug 27	250	Aug 8	88	Aug 1 1955
INSTANTANEOUS PEAK FLOW			11500	Apr 14	16500	Jun 25 1972
INSTANTANEOUS PEAK STAGE			34.59	Apr 14	40.67	Jun 25 1972
INSTANTANEOUS LOW FLOW			211	Aug 13	47	a
10 PERCENT EXCEEDS	6910		6000		5370	
50 PERCENT EXCEEDS	920		1150		1100	
90 PERCENT EXCEEDS	215		357		216	

a Oct. 10, 11, 1980.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

04228845 HONEOYE LAKE NEAR HONEOYE, NY

LOCATION.--Lat 42°45'44", long 77°30'26", Ontario County, Hydrologic Unit 04130003, on east shore of Honeoye Lake, at Trident Marina on East Lake Road, 1.9 mi south of U.S. Highway 20A, and 2.0 mi southeast of Honeoye.

DRAINAGE AREA.--41.0 mi².

PERIOD OF RECORD.--July to December 1963. Occasional readings January to August 1964. October 1964 to current year.

REVISED RECORD.--WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. July 10, 1963 to Sept. 28, 1967, nonrecording gage and Sept. 29, 1967 to Sept. 30, 1969, recording gage at datum 800.35 ft higher. Oct. 1, 1969 to Sept. 30, 1975, at datum 800.00 ft higher.

REMARKS.--Area of water surface, 2.71 mi².

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 806.91 ft, June 23, 1972; minimum observed, 802.15 ft present datum, Oct. 5, 1965, Oct. 1, 2, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 804.36 ft, Mar. 25,; minimum, 802.70 ft, Oct 13, 14, 15, 16, 27.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802.72	802.85	803.76	803.58	---	---	804.02	803.61	803.77	803.31	803.04	803.34
2	802.71	802.82	803.76	803.57	---	---	803.98	803.59	803.70	803.30	803.09	803.34
3	802.71	802.84	803.73	803.56	---	---	803.98	803.57	803.66	803.28	803.11	803.33
4	802.71	802.85	803.75	803.58	---	---	804.01	803.55	803.63	803.26	803.08	803.31
5	802.73	802.86	803.81	803.60	---	---	803.99	803.54	803.61	803.26	803.15	803.30
6	802.72	802.89	803.84	803.59	---	---	803.99	803.54	803.59	803.30	803.09	803.29
7	802.72	802.89	803.84	803.59	---	---	804.07	803.53	803.57	803.35	803.05	803.29
8	802.72	802.90	803.84	803.60	---	---	804.07	803.65	803.56	803.36	803.01	803.31
9	802.73	802.89	803.85	803.58	---	803.61	804.07	803.67	803.52	803.35	803.02	803.31
10	802.73	802.89	803.85	803.57	---	803.67	804.04	803.67	803.50	803.33	802.99	803.29
11	802.73	802.90	803.84	803.56	---	803.68	804.02	803.66	803.50	803.31	802.96	803.28
12	802.72	802.94	803.83	803.55	---	803.66	804.00	803.64	803.46	803.29	802.96	803.27
13	802.70	802.93	803.81	803.54	---	803.66	804.09	803.61	803.50	803.28	803.06	803.26
14	802.70	802.98	803.80	803.54	---	803.67	804.18	803.60	803.59	803.29	803.44	803.33
15	802.70	803.03	803.79	803.54	---	803.71	804.18	803.60	803.54	803.27	803.36	803.33
16	802.70	803.05	803.77	---	---	803.80	804.16	803.61	803.51	803.26	803.29	803.33
17	802.72	803.18	803.76	---	---	803.80	804.15	803.66	803.49	803.23	803.22	803.33
18	802.72	803.35	803.74	---	---	803.78	804.08	803.66	803.44	803.22	803.41	803.32
19	802.72	803.40	803.73	---	---	803.76	804.01	803.66	803.40	803.19	803.30	803.30
20	802.73	803.40	803.73	---	---	803.73	803.94	803.65	803.38	803.18	803.26	803.29
21	802.75	803.38	803.74	---	---	803.72	803.88	803.64	803.37	803.17	803.52	803.28
22	802.73	803.39	803.75	---	803.66	803.81	803.81	803.63	803.33	803.15	803.43	803.28
23	802.72	803.40	803.72	---	803.85	803.96	803.76	803.62	803.29	803.11	803.36	803.28
24	802.73	803.42	803.71	---	803.93	804.17	803.72	803.60	803.36	803.08	803.34	803.28
25	802.71	803.43	803.69	---	803.93	804.34	803.69	803.65	803.37	803.07	803.35	803.28
26	802.73	803.44	803.68	---	---	804.33	803.67	803.64	803.34	803.13	803.37	803.30
27	802.70	803.44	803.65	---	---	804.31	803.64	803.66	803.35	803.12	803.37	803.35
28	802.71	803.75	803.63	---	---	804.30	803.59	803.64	803.37	803.16	803.37	803.34
29	802.71	803.77	803.62	---	---	804.23	803.58	803.61	803.33	803.14	803.36	803.33
30	802.71	803.77	803.60	---	---	804.17	803.57	803.58	803.33	803.11	803.35	803.31
31	802.79	---	803.59	---	---	804.09	---	803.61	---	803.06	803.35	---
MEAN	802.72	803.17	803.75	---	---	---	803.93	803.62	803.48	803.22	803.23	803.31
MAX	802.79	803.77	803.85	---	---	---	804.18	803.67	803.77	803.36	803.52	803.35
MIN	802.70	802.82	803.59	---	---	---	803.57	803.53	803.29	803.06	802.96	803.26

CAL YR 1993 MEAN 803.39 MAX 805.41 MIN 802.68

STREAMS TRIBUTARY TO LAKE ONTARIO
04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

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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 mi².

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 sea level. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Outlet of Honeoye Lake not controlled (see station 04228845). 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 ft³/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 OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 6.3 ft, current datum; discharge, about 6,600 ft³/s, from rating curve extended above 2,700 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 21	1400	Ice jam	*3.81	Mar. 23	2300	*1,380	3.56

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	9.5	82	e28	e85	e130	329	132	201	30	3.0	11
2	3.5	11	66	e28	e75	e120	293	175	245	26	7.4	12
3	2.7	12	62	e28	e65	e110	295	146	158	20	14	12
4	3.1	14	64	e26	e55	e105	376	124	123	17	9.1	9.8
5	3.2	24	173	e25	e50	e100	339	113	103	15	8.4	7.8
6	2.4	23	178	e24	e46	e100	329	104	88	13	6.4	6.3
7	2.7	25	119	e24	e43	100	495	104	81	11	5.3	5.6
8	3.1	19	90	e24	e40	142	608	157	69	10	4.1	5.7
9	3.6	14	77	e23	e38	e240	561	272	58	12	3.0	6.8
10	3.3	11	71	e23	e36	e210	439	223	50	11	2.4	7.0
11	2.6	9.2	e70	e22	e34	e200	409	195	44	9.1	2.0	7.2
12	2.5	8.7	e60	e24	e32	e200	336	177	46	7.8	1.8	6.3
13	2.2	8.4	e66	e24	e30	e210	615	156	46	6.6	1.8	5.3
14	2.1	11	e65	e22	e30	e220	900	134	47	5.6	6.5	7.3
15	1.7	14	e55	e22	e28	e260	654	123	58	5.2	16	16
16	1.5	18	e56	e21	e28	e500	491	131	45	5.0	15	17
17	2.7	20	e50	e20	e26	e450	453	142	36	4.6	9.4	13
18	2.9	58	e55	e20	e28	e300	374	195	32	4.1	7.7	9.7
19	2.5	65	e50	e17	e70	e220	306	188	29	4.8	14	7.9
20	2.4	43	e48	e16	e220	e200	266	168	26	4.5	15	6.9
21	3.7	30	e56	e16	e700	e240	225	148	23	3.5	41	5.6
22	4.0	21	e50	e16	e600	e600	195	132	21	2.7	61	4.8
23	3.5	17	e40	e18	e340	e1180	168	121	19	2.5	38	4.2
24	3.2	15	e34	e20	e220	1210	154	110	23	2.1	20	3.7
25	3.1	12	e30	e18	e200	944	177	105	30	2.1	17	4.0
26	3.1	12	e28	e18	e180	588	198	120	31	2.4	43	7.1
27	3.2	12	e28	e20	e160	465	167	141	32	2.5	27	25
28	3.7	147	e27	e24	e140	554	141	138	36	5.2	17	32
29	3.6	274	e26	e36	---	479	120	119	35	4.9	12	23
30	4.4	151	e26	e130	---	426	124	104	32	4.4	11	18
31	6.0	---	e28	e100	---	379	---	92	---	3.9	8.8	---
TOTAL	97.1	1108.8	1930	877	3599	11182	10537	4489	1867	258.5	448.1	308.0
MEAN	3.13	37.0	62.3	28.3	129	361	351	145	62.2	8.34	14.5	10.3
MAX	6.0	274	178	130	700	1210	900	272	245	30	61	32
MIN	1.5	8.4	26	16	26	100	120	92	19	2.1	1.8	3.7

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

	MEAN	42.5	77.0	132	123	162	298	337	171	79.5	32.9	24.5	23.1
	MAX	443	345	493	369	664	685	1146	500	344	377	336	538
	(WY)	1978	1978	1946	1979	1976	1976	1993	1984	1989	1992	1992	1977
	MIN	.45	2.06	2.04	2.15	10.3	107	50.0	55.8	9.13	1.04	.75	.64
	(WY)	1964	1961	1961	1961	1958	1965	1946	1950	1955	1955	1949	1964

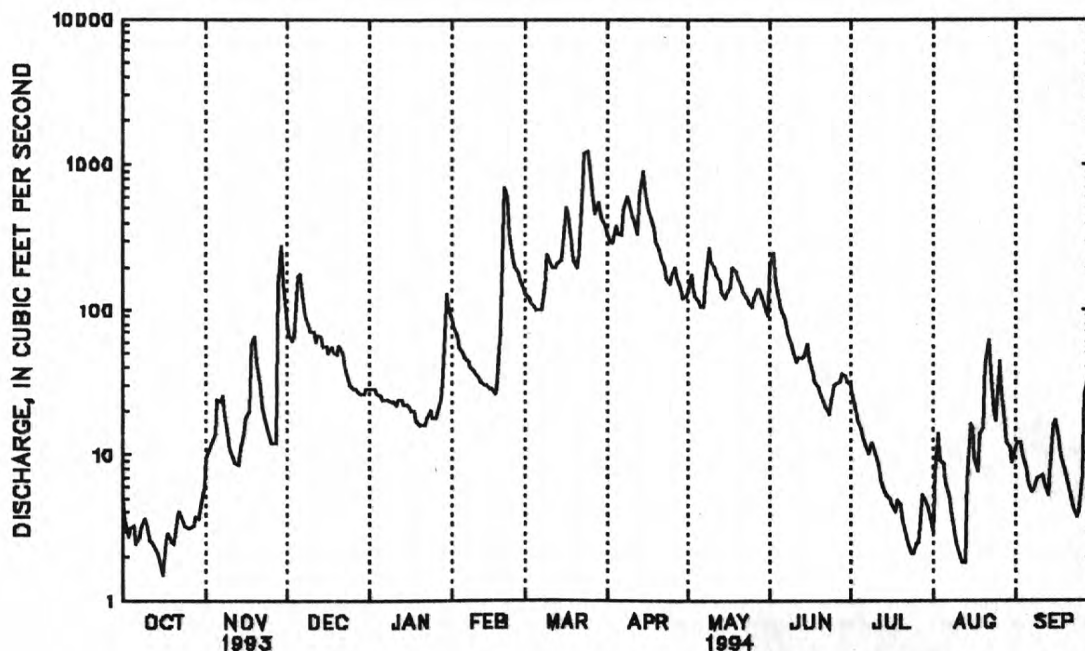
STREAMS TRIBUTARY TO LAKE ONTARIO
04229500 HONEOYE CREEK AT HONEOYE FALLS, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1946 - 1994
ANNUAL TOTAL	69839.67	36701.5	
ANNUAL MEAN	191	101	125
HIGHEST ANNUAL MEAN			238
LOWEST ANNUAL MEAN			46.4
HIGHEST DAILY MEAN	3820 Apr 2	1210 Mar 24	3820 Apr 2 1993
LOWEST DAILY MEAN	.81 Aug 30	1.5 Oct 16	.10 Aug 24 1949
ANNUAL SEVEN-DAY MINIMUM	.81 Aug 30	2.2 Oct 11	.13 Aug 22 1949
INSTANTANEOUS PEAK FLOW		1380 Mar 23	a4630 Mar 28 1950
INSTANTANEOUS PEAK STAGE		b3.81 Feb 21	c6.42 Mar 28 1950
INSTANTANEOUS LOW FLOW		1.5 Oct 16	.06 Aug 28 1949
10 PERCENT EXCEEDS	534	273	326
50 PERCENT EXCEEDS	44	28	53
90 PERCENT EXCEEDS	1.3	3.6	2.5

a From rating curve extended above 2,700 ft³/s.

b Ice jam.

c Datum then in use.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
04230380 OATKA CREEK AT WARSAW, NY

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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 mi².

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 sea level (levels by Corps of Engineers).

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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 690 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 24	1945	1,400	5.29	Apr. 13	1900	*1,440	*5.38

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	20	46	e41	e56	e52	176	78	51	13	4.1	7.3
2	9.1	17	43	e31	e50	e48	218	e53	30	10	6.3	6.0
3	9.2	23	60	e27	e44	e46	313	e42	24	9.3	5.2	5.3
4	9.0	35	186	e26	e38	e44	192	41	18	8.3	4.7	5.1
5	13	62	208	e24	e34	e42	e150	e35	16	7.8	7.2	4.9
6	10	47	90	e24	e30	e42	e230	39	15	7.2	5.7	4.7
7	8.9	29	124	e24	e28	e53	e200	e37	15	7.4	5.0	4.7
8	8.1	22	73	e23	e27	e98	209	127	14	7.4	4.3	4.4
9	8.8	18	56	e22	e26	e71	252	71	14	8.4	4.2	15
10	10	16	65	e22	e25	e70	290	64	13	7.2	4.6	6.7
11	8.8	14	87	e22	e24	e59	e170	52	13	6.9	4.2	5.2
12	8.9	30	e49	e22	e23	e54	186	49	14	6.1	4.4	4.9
13	9.4	24	e43	e22	e22	e53	705	e38	17	9.3	6.2	4.5
14	8.8	25	e42	e20	e21	e59	371	e31	36	7.2	64	6.3
15	8.5	52	e45	e18	e21	e110	185	43	18	7.7	13	6.1
16	8.6	34	e48	e16	e20	e90	185	53	14	6.5	6.9	5.2
17	14	136	e35	e15	e19	e75	197	66	12	6.1	5.3	4.6
18	16	114	e32	e14	e27	e65	115	52	10	7.4	8.6	4.6
19	11	52	37	e13	e41	e60	99	e40	9.0	7.4	5.9	4.2
20	10	52	37	e13	e66	56	e75	e33	8.2	6.8	9.5	3.9
21	20	35	39	e13	e350	104	67	32	9.3	6.0	83	3.7
22	15	30	e34	e13	e236	324	e55	28	7.8	5.2	24	3.7
23	12	27	e32	e15	e112	618	e50	24	7.1	5.0	11	3.9
24	11	27	e30	e15	e104	780	e46	e21	33	4.5	7.6	4.4
25	10	25	e29	e14	e75	466	e53	28	37	4.6	27	4.4
26	10	22	e26	e14	e71	210	58	30	18	7.4	21	12
27	9.9	40	e25	e16	e65	316	e49	35	22	5.9	11	21
28	14	392	e24	e24	e58	267	e44	27	e24	5.4	9.1	10
29	13	106	e24	e40	---	176	66	21	18	5.0	10	28
30	11	62	e33	e80	---	157	e52	20	e16	4.9	7.3	17
31	14	---	e50	e65	---	152	---	20	---	4.6	7.4	---
TOTAL	339.6	1588	1752	748	1713	4817	5058	1330	553.4	215.9	397.7	221.7
MEAN	11.0	52.9	56.5	24.1	61.2	155	169	42.9	18.4	6.96	12.8	7.39
MAX	20	392	208	80	350	780	705	127	51	13	83	28
MIN	8.1	14	24	13	19	42	44	20	7.1	4.5	4.1	3.7
CFSM	.28	1.35	1.45	.62	1.56	3.97	4.31	1.10	.47	.18	.33	.19
IN.	.32	1.51	1.67	.71	1.63	4.58	4.81	1.27	.53	.21	.38	.21

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

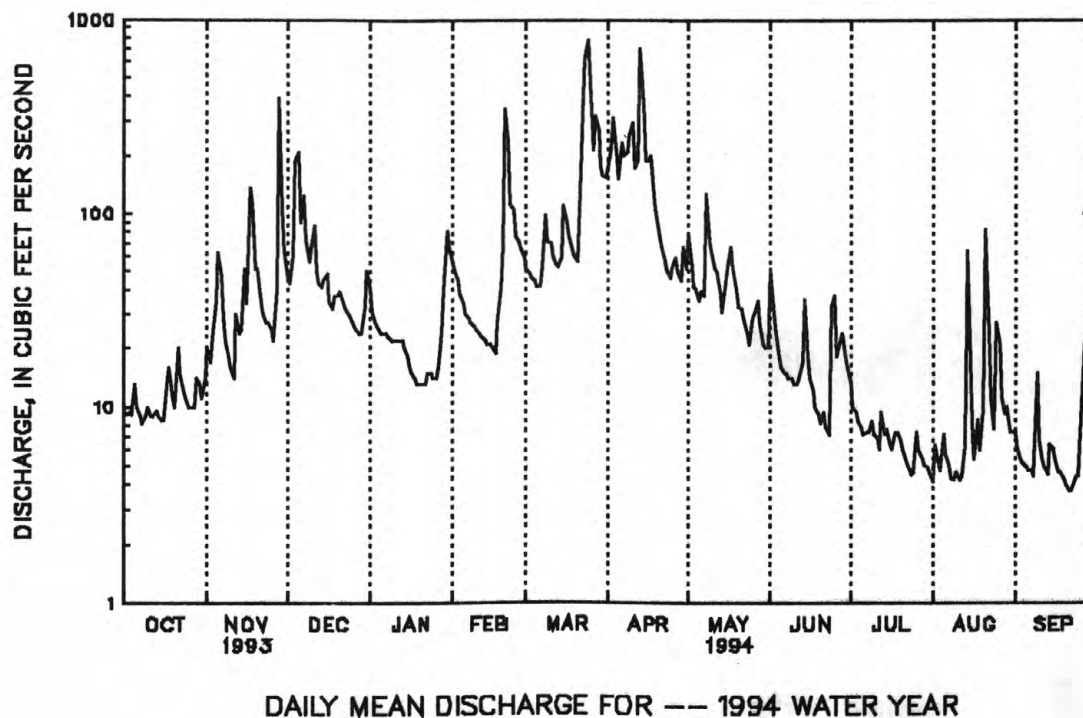
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
MEAN	24.2	50.1	70.0	61.2	73.7	127	114	50.1	31.0	17.0	14.1	19.0
MAX	76.7	131	130	234	235	228	183	129	165	116	86.8	166
(WY)	1978	1986	1978	1979	1976	1979	1993	1984	1989	1992	1992	1977
MIN	2.76	5.09	17.2	15.1	22.5	49.2	53.1	19.2	6.36	2.52	2.36	1.81
(WY)	1965	1965	1965	1981	1980	1981	1981	1987	1965	1965	1965	1964

STREAMS TRIBUTARY TO LAKE ONTARIO
04230380 OATKA CREEK AT WARSAW, NY--continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1964 - 1994	
ANNUAL TOTAL	20303.0		18734.3			
ANNUAL MEAN	55.6		51.3		54.4	
HIGHEST ANNUAL MEAN					73.8	
LOWEST ANNUAL MEAN					29.6	
HIGHEST DAILY MEAN	846	Mar 30	780	Mar 24	1600	Jan 26 1979
LOWEST DAILY MEAN	4.5	Aug 15	3.7	a	1.0	Aug 1 1965
ANNUAL SEVEN-DAY MINIMUM	5.0	Aug 9	4.0	Sep 19	1.4	Jul 26 1965
INSTANTANEOUS PEAK FLOW			1440	Apr 13	b4010	Jun 23 1972
INSTANTANEOUS PEAK STAGE			5.38	Apr 13	9.75	Jun 23 1972
INSTANTANEOUS LOW FLOW			3.2	Sep 21	.90	Aug 1 1965
ANNUAL RUNOFF (CFSM)	1.42		1.31		1.39	
ANNUAL RUNOFF (INCHES)	19.32		17.82		18.89	
10 PERCENT EXCEEDS	111		114		122	
50 PERCENT EXCEEDS	28		24		28	
90 PERCENT EXCEEDS	6.5		5.4		4.8	

a Sept. 21, 22.

b From rating curve extended above 1,770 ft³/s on basis of slope-area measurement of peak discharge.



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MEAN	75.8	138	224	221	291	560	515	245	134	72.8	59.0	62.0
MAX	400	567	798	505	868	1048	1069	581	760	249	294	748
(WY)	1978	1986	1978	1993	1976	1956	1947	1984	1989	1972	1992	1977
MIN	18.0	17.2	20.1	22.9	33.4	244	117	113	45.6	31.8	22.5	19.2
(WY)	1966	1965	1961	1961	1958	1965	1946	1985	1949	1965	1965	1965

STREAMS TRIBUTARY TO LAKE ONTARIO
04230500 OATKA CREEK AT GARBUTT, NY--Continued

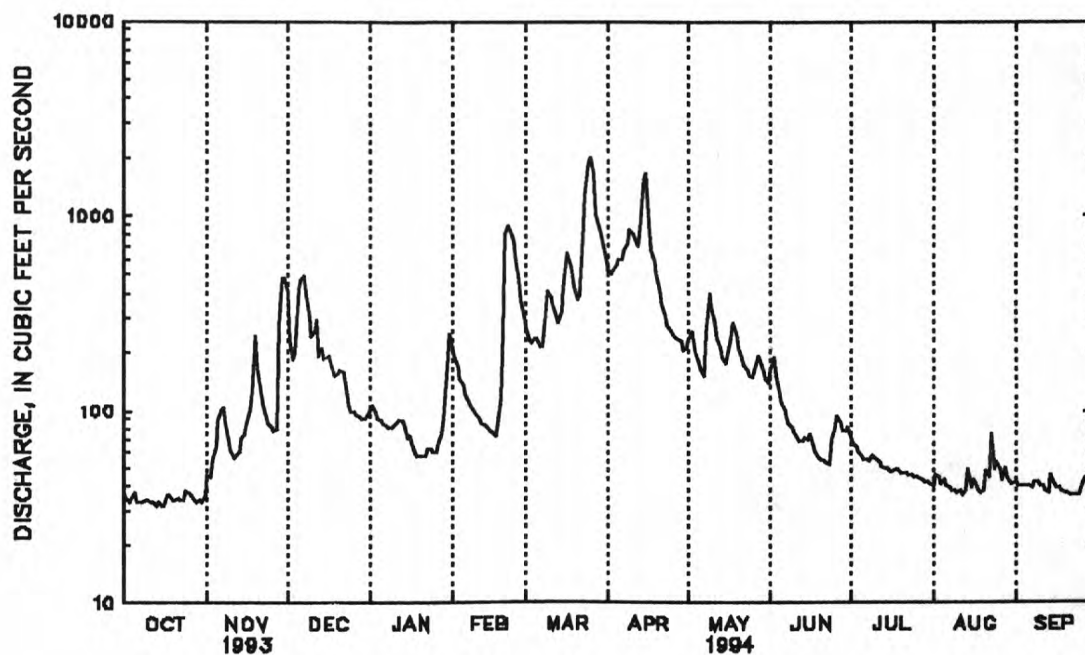
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1946 - 1994	
ANNUAL TOTAL	86682		70859			
ANNUAL MEAN	237		194		216	
HIGHEST ANNUAL MEAN					371	1978
LOWEST ANNUAL MEAN					117	1965
HIGHEST DAILY MEAN	3790	Mar 31	1970	Mar 25	6500	Mar 31 1960
LOWEST DAILY MEAN	31	Sep 22	32	a	13	b
ANNUAL SEVEN-DAY MINIMUM	32	Sep 19	33	Oct 10	14	Oct 26 1966
INSTANTANEOUS PEAK FLOW			2070	Mar 25	7050	Mar 31 1960
INSTANTANEOUS PEAK STAGE			6.18	Mar 25	8.64	Mar 31 1960
INSTANTANEOUS LOW FLOW			31	c	3.3	d
ANNUAL RUNOFF (CFSM)	1.19		.97		1.08	
ANNUAL RUNOFF (INCHES)	16.12		13.18		14.68	
10 PERCENT EXCEEDS	462		505		520	
50 PERCENT EXCEEDS	108		85		107	
90 PERCENT EXCEEDS	34		37		30	

a Oct 13, 15, 16.

b Oct. 30, 31, Nov. 1, 1966.

c Oct. 7, 8, 13, 14, 15, 16, 17.

d Sep. 11, 12, 1958.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

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 sea level.

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, 19.93 ft, Apr. 2-3, 1993; minimum recorded, 8.20 ft, Nov. 9, 1979, result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.11 ft, Apr. 14; minimum, 10.01 ft, Feb. 18.

GAGE HEIGHT, (FEET ABOVE DATUM), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.57	11.07	11.92	11.63	12.09	11.46	14.26	11.70	11.37	11.36	11.09	10.66
2	11.59	11.27	11.41	11.75	11.61	11.60	14.30	11.90	11.59	11.25	11.05	10.61
3	11.49	11.14	11.44	11.53	11.59	11.43	14.32	11.71	11.82	11.24	10.81	10.59
4	11.51	11.16	11.50	11.40	11.59	10.98	14.26	11.38	12.40	10.94	11.05	10.68
5	11.47	11.14	12.63	11.35	11.68	10.71	13.81	11.37	12.51	11.10	10.96	10.64
6	11.54	11.38	12.79	10.95	11.50	10.45	14.17	11.54	12.29	11.07	11.04	10.58
7	11.46	11.55	11.77	11.15	11.47	10.54	14.83	11.57	11.97	11.08	11.10	10.59
8	11.26	11.62	12.30	11.67	11.22	11.00	14.83	11.76	11.63	11.13	11.05	10.63
9	11.33	11.42	12.54	11.29	11.46	11.89	15.75	11.85	11.11	10.99	10.89	10.59
10	11.57	11.04	12.32	11.28	11.43	11.87	15.68	11.46	11.20	11.13	10.95	10.65
11	11.63	11.22	12.21	11.18	11.56	11.85	15.05	11.29	11.11	11.02	10.99	10.66
12	11.43	11.15	12.50	11.45	11.35	11.84	15.18	11.31	11.08	11.04	11.05	10.64
13	11.54	10.89	12.41	11.33	11.44	11.66	15.86	11.54	11.05	11.06	11.11	10.63
14	11.54	11.18	12.26	11.41	11.56	11.75	16.92	11.27	10.91	10.99	11.00	10.62
15	11.71	11.04	12.19	11.34	11.45	12.25	15.58	10.94	11.60	11.04	11.15	10.56
16	11.73	11.47	11.83	11.42	10.82	13.23	15.16	11.30	11.88	11.06	11.38	10.59
17	11.75	11.67	11.37	11.41	10.48	13.11	15.41	11.47	12.40	11.07	11.20	10.53
18	11.34	11.77	11.55	11.45	10.26	12.31	15.05	11.58	12.60	11.15	11.24	10.60
19	10.90	12.11	11.65	11.31	10.27	11.92	14.36	11.70	12.33	11.20	11.24	10.52
20	11.11	11.91	11.50	11.08	11.27	11.74	14.24	11.80	12.25	11.13	11.85	10.57
21	11.03	11.81	11.67	11.08	13.76	11.75	14.10	12.96	12.10	11.10	11.69	10.59
22	11.14	11.97	11.77	11.23	15.02	13.59	13.84	13.49	11.73	11.06	11.75	10.68
23	11.03	11.75	11.72	11.13	13.51	15.18	13.72	12.90	11.21	10.97	11.97	10.61
24	11.18	11.89	11.57	10.80	12.85	16.02	13.80	12.62	11.06	11.10	11.79	10.61
25	11.18	11.84	11.54	11.44	12.98	16.14	13.77	12.05	11.10	11.04	11.24	10.56
26	11.11	11.45	11.24	11.55	12.48	15.43	13.65	11.33	11.39	10.88	11.12	10.55
27	11.32	11.15	11.37	11.18	12.29	14.53	13.56	11.19	11.27	10.99	11.40	10.65
28	11.09	11.27	11.50	10.75	11.81	14.21	13.50	11.12	11.08	11.15	11.10	10.68
29	10.94	12.51	11.37	11.18	---	14.32	12.98	11.07	11.54	11.03	11.10	10.66
30	11.22	12.13	11.39	11.97	---	14.35	11.75	11.16	11.21	11.06	11.29	10.62
31	11.13	---	11.30	12.34	---	14.19	---	11.09	---	11.09	10.82	---
MEAN	11.35	11.50	11.82	11.36	11.81	12.69	14.46	11.66	11.63	11.08	11.21	10.61
MAX	11.75	12.51	12.79	12.34	15.02	16.14	16.92	13.49	12.60	11.36	11.97	10.68
MIN	10.90	10.89	11.24	10.75	10.26	10.45	11.75	10.94	10.91	10.88	10.81	10.52

CAL YR 1993 MEAN 12.16 MAX 19.75 MIN 10.88

WTR YR 1994 MEAN 11.76 MAX 16.92 MIN 10.26

STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi².

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 551.88 ft above sea level.

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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 22	2030	1,140	5.63	Apr. 14	2230	1,090	5.49
Mar. 24	2030	*1,430	*6.31				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	34	246	e32	e110	e180	261	109	76	72	6.1	15
2	20	45	125	e35	e95	e160	218	117	106	56	16	15
3	18	48	89	e36	e80	e140	206	105	85	40	21	12
4	19	55	95	e34	e70	e120	224	86	65	31	18	9.9
5	26	71	145	e32	e60	e106	239	76	58	26	31	9.1
6	34	70	216	e32	e54	e108	272	70	47	23	33	8.5
7	27	64	246	e32	e50	e111	417	68	38	20	18	8.7
8	21	48	166	e31	e46	e142	591	113	33	25	13	10
9	20	38	120	e31	e44	e176	560	213	29	36	11	21
10	19	31	100	e31	e40	e205	538	264	25	32	10	22
11	20	29	99	e32	e38	e220	407	179	23	26	9.6	15
12	18	29	100	e35	e37	e213	307	129	23	22	9.1	11
13	17	30	76	e34	e36	172	550	103	24	18	11	9.0
14	16	34	88	e33	e35	167	982	85	32	15	23	18
15	15	43	79	e30	e34	e220	929	89	34	15	38	35
16	15	50	79	e27	e33	e300	516	144	27	14	26	30
17	25	50	78	e25	e32	e400	318	181	24	12	18	22
18	35	48	70	e24	e30	e440	242	195	22	16	14	15
19	41	54	67	e23	e32	e330	198	196	19	16	11	14
20	32	56	67	e23	e100	e250	159	146	18	11	9.7	11
21	29	46	75	e23	e400	e271	129	110	17	12	15	9.6
22	22	42	e88	e23	e1000	488	106	89	16	11	16	8.7
23	21	37	e73	e25	e800	1010	93	78	15	10	14	9.5
24	20	34	e50	e25	e500	1360	85	66	43	8.5	10	9.4
25	17	33	e45	e24	e350	1190	131	60	117	7.3	30	9.9
26	17	31	e40	e24	e300	729	161	68	152	6.7	44	18
27	16	38	e38	e27	e250	514	145	109	104	5.8	24	48
28	15	142	e35	e30	e210	466	116	127	75	5.6	20	54
29	15	221	e32	e40	---	469	101	95	69	4.9	24	44
30	14	340	e31	e60	---	380	97	70	75	5.8	20	37
31	20	---	e31	e140	---	315	---	56	---	6.0	15	---
TOTAL	667	1891	2889	1053	4866	11352	9298	3596	1491	609.6	578.5	559.3
MEAN	21.5	63.0	93.2	34.0	174	366	310	116	49.7	19.7	18.7	18.6
MAX	41	340	246	140	1000	1360	982	264	152	72	44	54
MIN	14	29	31	23	30	106	85	56	15	4.9	6.1	8.5
CFSM	.17	.48	.72	.26	1.34	2.82	2.38	.89	.38	.15	.14	.14
IN.	.19	.54	.83	.30	1.39	3.25	2.66	1.03	.43	.17	.17	.16

e Estimated

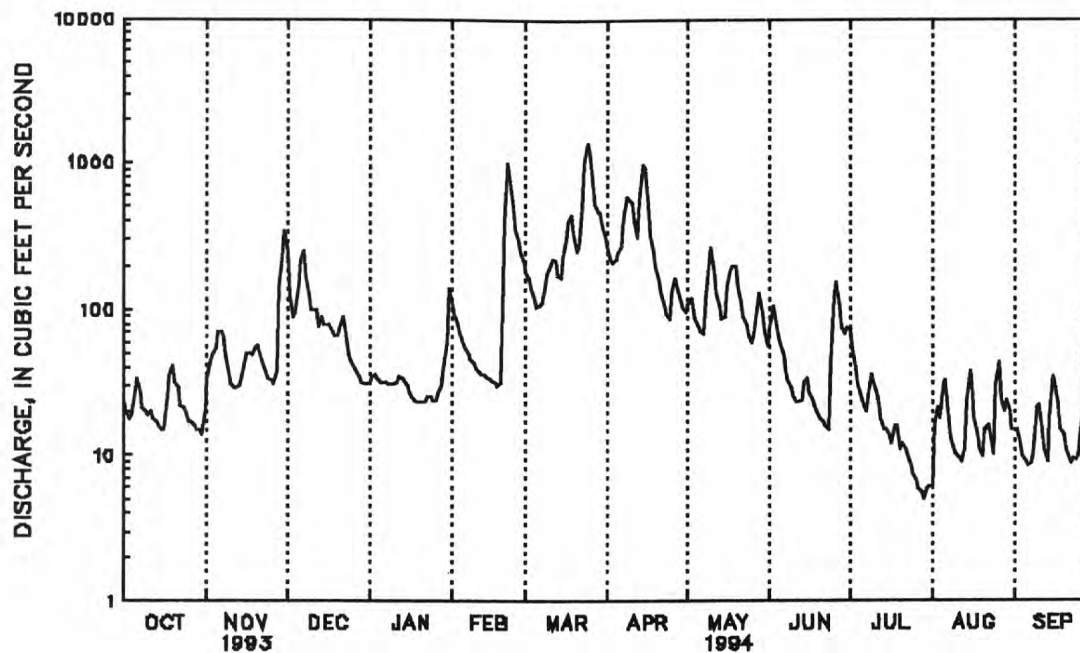
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
MEAN	38.2	75.6	125	120	183	337	259	124	60.4	25.8	21.7	25.8
MAX	235	405	497	375	460	664	497	325	348	143	201	284
(WY)	1946	1971	1978	1993	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	2.55	1.66
(WY)	1964	1965	1961	1961	1958	1989	1946	1949	1949	1965	1965	1959

STREAMS TRIBUTARY TO LAKE ONTARIO
04231000 BLACK CREEK AT CHURCHVILLE, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1946 - 1994
ANNUAL TOTAL	50893.4	38850.4	
ANNUAL MEAN	139	106	116
HIGHEST ANNUAL MEAN			207
LOWEST ANNUAL MEAN			52.3
HIGHEST DAILY MEAN	2420 Mar 31	1360 Mar 24	4120 Mar 31 1960
LOWEST DAILY MEAN	4.9 Aug 29	4.9 Jul 29	.30 Aug 5 1959
ANNUAL SEVEN-DAY MINIMUM	6.2 Aug 25	5.8 Jul 26	.47 Aug 3 1959
INSTANTANEOUS PEAK FLOW		1430 Mar 24	4880 Mar 31 1960
INSTANTANEOUS PEAK STAGE		6.31 Mar 24	9.44 Mar 31 1960
INSTANTANEOUS LOW FLOW		4.4 Jul 29	.22 Aug 19 1970
ANNUAL RUNOFF (CFSM)	1.07	.82	.89
ANNUAL RUNOFF (INCHES)	14.56	11.12	12.12
10 PERCENT EXCEEDS	278	254	290
50 PERCENT EXCEEDS	55	38	47
90 PERCENT EXCEEDS	11	13	6.7



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
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 Corp. plant 5,100 ft upstream from bridge on Driving Park Avenue in Rochester, and 6.4 mi upstream from mouth.

DRAINAGE AREA.--2,467 mi².

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 (revised) above sea level (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 2.00 ft higher. June 20, 1956 to Sept. 30, 1986, at present site at datum 2.00 ft higher.

REMARKS.--Records 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 OUTSIDE PERIOD OF RECORD.--Peak discharge on Mar. 18, 1865, was about 54,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	1240	4920	1000	2850	3720	9520	2400	2160	e2120	e700	1640
2	1360	1190	3660	1230	2330	3650	9570	2540	3150	e2120	e860	e1470
3	e1000	1450	2750	1500	2070	3520	9440	2530	3660	e1570	e690	e1230
4	e860	1410	3410	1240	1960	3370	9240	e2110	4670	e1330	e600	e1040
5	1170	1460	4920	e1050	1820	3290	8900	e2080	4990	e1150	e770	e1140
6	e940	1830	5520	975	1750	3210	9230	e1800	4720	e1080	e530	e1170
7	e1020	2440	3970	785	1620	3330	10300	e1830	4290	e1180	e570	e950
8	e750	2430	3940	891	1640	3670	10200	e2020	3300	e1140	e680	e1090
9	e700	2410	4800	794	1290	4090	11600	3220	e1900	e1140	e630	e1040
10	e700	1900	4480	875	1220	4170	11700	2890	e1300	e1010	e640	e840
11	1030	e1100	4180	e800	1110	4180	10700	2720	e1340	e1070	e520	e850
12	1150	1320	4470	e850	1190	4230	10800	e2620	e1260	e850	e520	e820
13	e900	984	4550	e950	1010	4090	12000	3100	e1400	e940	e530	e800
14	e850	e950	4190	e920	966	4090	14000	3100	e2000	e780	e930	e950
15	e680	1100	4070	e900	1170	4780	11600	e2410	2510	e700	e1250	e860
16	e650	e1400	3670	e800	1070	6820	10800	e2220	3610	e720	2550	e940
17	928	1650	2530	e800	963	6570	11200	2910	4450	e730	2410	e940
18	1460	2210	1980	e840	1090	5060	10800	3150	4710	e640	2030	e880
19	1050	3660	1860	e860	1070	4440	9600	3180	4460	e600	e1500	e810
20	e1050	3620	1900	e780	1900	4220	9420	3290	4050	e620	3260	e690
21	e1050	3570	1740	e720	5790	4360	9210	5660	3940	e600	3910	e680
22	e850	3330	2060	e660	7420	7740	8740	7120	3450	e690	3230	e690
23	967	3200	2060	e920	5620	10600	8580	6420	e2120	e600	4510	e770
24	1070	3020	1570	e660	4970	12300	8660	5350	e1500	e520	4240	e780
25	1140	2660	1450	e700	5090	12400	7590	4050	e1720	e570	2570	e810
26	1230	2150	1150	830	4760	11000	7180	e2460	e2100	e530	2150	e780
27	e950	1330	880	e800	4630	9490	7690	e1880	2480	e520	1990	959
28	1190	2580	931	928	4220	8970	8200	e1720	e1860	e600	2180	1340
29	965	5500	1220	1020	---	9130	6940	e1900	2450	e650	e1410	1340
30	e750	5200	1030	1910	---	9300	4050	e1520	e2220	e700	2500	1260
31	1090	---	1120	2930	---	9410	---	e1520	---	e570	2190	---
TOTAL	31200	68294	90981	30918	72589	189200	287460	91720	87770	28040	53050	29559
MEAN	1006	2276	2935	997	2592	6103	9582	2959	2926	905	1711	985
MAX	1700	5500	5520	2930	7420	12400	14000	7120	4990	2120	4510	1640
MIN	650	950	880	660	963	3210	4050	1520	1260	520	520	680

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1994, BY WATER YEAR (WY)

MEAN	1446	2129	2771	2818	3194	6267	6066	3525	2078	1321	988	1019
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

STREAMS TRIBUTARY TO LAKE ONTARIO
04232000 GENESEE RIVER AT ROCHESTER, NY--Continued

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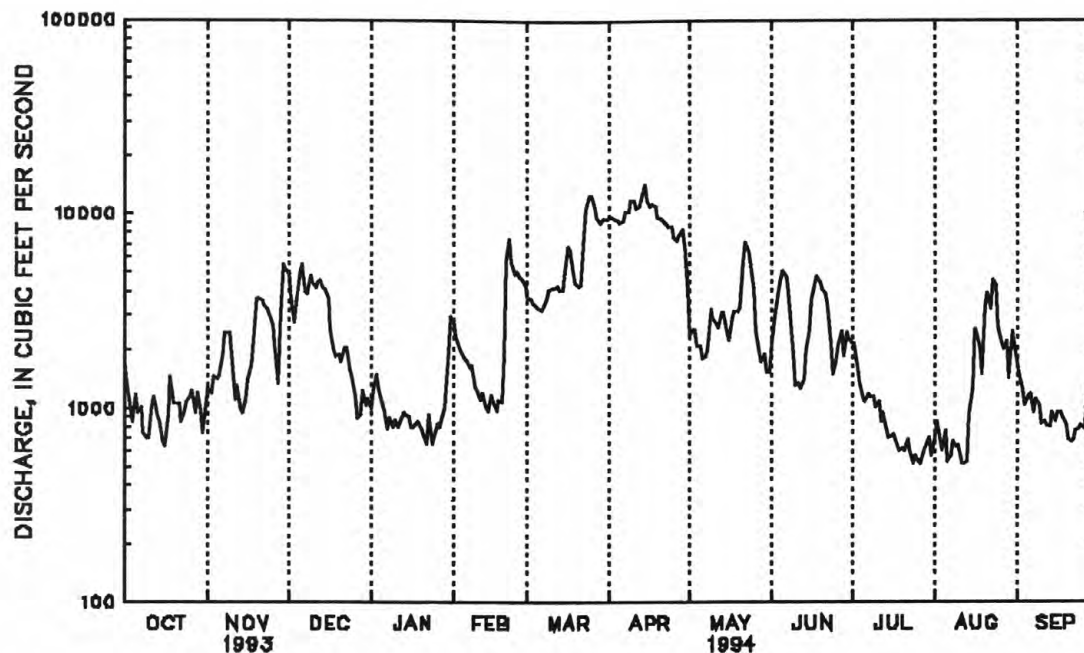
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1904 - 1918 1920 - 1994	
ANNUAL TOTAL	1109682		1060781			
ANNUAL MEAN	3040		2906		2805	
HIGHEST ANNUAL MEAN					4426	
LOWEST ANNUAL MEAN					1666	
HIGHEST DAILY MEAN	19800	Apr 2	14000	Apr 14	46300	Mar 31 1916
LOWEST DAILY MEAN	200	Aug 30	520	a	91	b
ANNUAL SEVEN-DAY MINIMUM	273	Aug 27	570	Jul 23	104	Jan 26 1961
INSTANTANEOUS PEAK FLOW			14900	Apr 13	c48300	Mar 30 1916
INSTANTANEOUS PEAK STAGE			13.44	Apr 13	17.08	Apr 2 1940
INSTANTANEOUS LOW FLOW			Unknown		d	
10 PERCENT EXCEEDS	9300		7630		6790	
50 PERCENT EXCEEDS	1360		1820		1570	
90 PERCENT EXCEEDS	340		712		580	

a July 24, Aug. 11, 12.

b Jan. 9, 29, Feb. 1, 8, 1961.

c Site and datum then in use; maximum at present site, 34,400 ft³/s, Mar. 19, 1942.

d Minimum discharge, less than 10 ft³/s, occurred during low-water periods in some years when powerplant was shut down.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY

(National stream-quality accounting network station)

WATER QUALITY RECORDS

LOCATION.--Lat 43°13'26", long 77°36'59", Monroe County, Hydrologic Unit 04130003, at Charlotte Docks, at the Rochester Cement Corp., in Rochester, 0.4 mi upstream from Rattlesnake Point, 1.6 mi upstream from Stutson Street Bridge, and 3.6 mi downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,467 mi² at station 04232000.

PERIOD OF RECORD.--Water years 1971 to current year.

CHEMICAL DATA: 1971-72 (a), 1974 (b), 1975-82 (c), 1983-87 (b), 1988 (c), 1989-90(d), 1991 (c), 1992-94 (b).

MINOR ELEMENTS DATA: 1971-73 (a), 1974-87 (b), 1988 (c), 1989-90 (d), 1991 (c), 1992-94 (b).

ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-80 (c), 1981 (b).

NUTRIENT DATA: 1971 (a), 1974 (b), 1975-82 (c), 1983-90 (b), 1991 (c), 1992-94 (b).

BIOLOGICAL DATA:

Bacteria--1974 (b), 1975-82 (c), 1983-94 (b).

Phytoplankton--1974 (b), 1975-77 (c), 1978-81 (b).

Periphyton--1975-80 (b).

SEDIMENT DATA:1974 (b), 1975-82 (c), 1983-87 (b), 1988 (c), 1989-90 (d), 1991 (c), 1992-94 (b).

REMARKS.--Water-discharge data are based on records for station 04232000 Genesee River at Rochester.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
03...	1100	1340	874	7.6	7.5	1.3	758	12.0	101	K180	400
MAY											
04...	1030	2020	654	7.8	12.0	8.4	764	11.3	104	K32	K26
JUN											
15...	1000	2420	714	7.8	22.0	5.4	761	7.4	85	42	K18
AUG											
11...	0900	520	757	7.9	23.5	3.1	763	7.6	89	110	210

DATE	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV											
03...	230	70	13	77	3.2	126	100	130	0.20	2.2	490
MAY											
04...	230	68	15	38	2.5	142	78	61	0.10	2.9	373
JUN											
15...	230	67	14	52	2.8	140	89	84	0.20	2.4	453
AUG											
11...	230	70	14	57	3.3	126	110	94	0.10	2.2	451

K Results based on colony count outside the ideal range (non-ideal colony count).

STREAMS TRIBUTARY TO LAKE ONTARIO

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04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 03...	476	0.59	0.22	0.04	0.60	0.06	0.02	0.03	20	39
MAY 04...	358	0.27	0.06	<0.01	0.30	<0.01	<0.01	<0.01	<10	35
JUN 15...	393	0.90	0.17	0.05	0.60	0.05	0.02	0.02	<10	50
AUG 11...	430	0.50	0.09	0.02	0.40	0.05	0.03	0.01	<10	48

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 03...	<3	24	15	56	<10	2	<1	<1.0	830	<6
MAY 04...	<3	51	<4	19	<10	1	<1	<1.0	700	<6
JUN 15...	<3	4	10	36	<10	2	<1	<1.0	760	<6
AUG 11...	<3	5	5	15	<10	<1	<1	<1.0	930	<6

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
MAY								
04...	1035	20	22.5	3.0	655	7.8	12.0	11.3
04...	1040	20	22.5	7.0	652	7.9	11.5	11.3
04...	1045	20	22.5	14.0	651	7.9	11.5	11.3
04...	1050	20	22.5	21.0	654	7.9	11.5	11.3
04...	1055	100	17.5	3.0	654	7.8	11.5	11.3
04...	1100	100	17.5	7.0	655	7.8	11.5	11.2
04...	1110	100	17.5	16.0	651	7.8	11.5	11.2
04...	1115	180	15.5	3.0	650	7.8	12.0	11.1
04...	1120	180	15.5	7.0	647	7.8	12.0	11.1
04...	1125	180	15.5	10.0	648	7.8	12.0	11.1
04...	1130	180	15.5	15.0	652	7.8	12.0	11.1

STREAMS TRIBUTARY TO LAKE ONTARIO
04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
JUN								
15...	1005	20	23.0	3.0	716	7.8	22.0	7.6
15...	1010	20	23.0	7.0	710	7.8	22.0	7.4
15...	1015	20	23.0	14.0	717	7.8	22.0	7.4
15...	1020	20	23.0	21.0	718	7.8	22.0	7.3
15...	1025	100	17.0	3.0	716	7.8	22.0	7.4
15...	1030	100	17.0	7.0	710	7.8	22.0	7.4
15...	1035	100	17.0	10.0	710	7.8	22.0	7.4
15...	1040	100	17.0	15.0	707	7.8	22.0	7.3
15...	1045	180	14.0	3.0	708	7.8	22.0	7.4
15...	1050	180	14.0	7.0	714	7.8	22.0	7.1
15...	1055	180	14.0	12.0	706	7.8	22.0	7.2
AUG								
11...	0905	20	22.5	3.0	756	7.9	23.5	7.6
11...	0910	20	22.5	7.0	760	7.9	23.5	7.4
11...	0915	20	22.5	14.0	760	7.9	23.5	7.4
11...	0920	20	22.5	21.0	759	7.9	23.5	7.6
11...	0925	100	17.0	3.0	755	7.9	23.5	7.5
11...	0930	100	17.0	7.0	760	7.9	23.5	7.5
11...	0935	100	17.0	12.0	764	7.9	23.5	7.5
11...	0940	100	17.0	16.0	761	7.9	23.5	7.6
11...	0945	180	14.5	3.0	760	7.9	23.0	7.6
11...	0950	180	14.5	7.0	761	7.9	23.0	7.5
11...	0955	180	14.5	10.0	756	7.9	23.0	7.6
11...	1000	180	14.5	14.0	761	7.9	23.5	7.6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
03...	1100	1340	8	29	87
MAY					
04...	1030	2020	15	82	99
JUN					
15...	1000	2420	20	131	100
AUG					
11...	0900	520	14	17	99

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 450 ft above sea level, 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. Several measurements of water temperature were made during the year.

COOPERATION.--Gage-height record and 9 discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.

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

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 21	0900	311	7.32	Mar. 22	1730	*375	*7.84

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	40	37	e22	e33	e31	63	69	60	19	12	19
2	21	32	33	e21	e30	e31	56	58	36	17	28	19
3	23	32	33	e22	e26	e33	71	48	31	17	37	19
4	25	33	46	e21	e25	e33	92	43	28	16	19	18
5	31	31	94	e20	e22	e33	66	40	25	15	20	18
6	23	28	55	e20	e22	e33	91	40	25	16	17	18
7	21	25	42	e20	e21	e39	135	41	24	16	15	17
8	19	24	36	e21	e21	e52	140	98	24	15	14	18
9	20	23	32	e21	e19	e56	148	81	23	15	14	e25
10	23	22	e32	e22	e19	e63	94	58	21	14	14	e26
11	21	22	e27	e22	e19	e62	74	49	20	14	13	e26
12	19	25	e27	e23	e22	e56	66	45	20	14	13	e25
13	19	25	e28	e22	e19	e56	197	42	19	13	14	e24
14	18	25	e27	e20	e20	e71	179	39	25	13	36	e29
15	18	33	e27	e18	e23	e116	85	45	21	14	24	e27
16	18	28	e28	e23	e22	e184	86	55	19	14	18	e25
17	22	29	e26	e23	e23	e101	80	61	18	13	16	e24
18	25	36	e26	e23	e22	e66	64	70	17	13	19	e23
19	21	28	e26	e22	e30	e52	59	54	16	13	18	e17
20	20	27	e27	e22	e110	e50	55	45	16	13	15	15
21	22	25	e31	e23	e244	e105	49	38	16	12	64	15
22	21	24	e36	e24	e124	e311	46	34	15	12	39	e14
23	20	23	e32	e25	e61	e259	43	31	15	12	27	15
24	19	23	e27	e24	e56	e190	42	29	32	12	23	16
25	19	23	e24	e23	e51	e125	86	29	30	12	25	17
26	19	22	e24	e23	e38	e76	77	32	24	13	28	33
27	19	31	e23	e28	e35	110	61	41	23	14	25	42
28	20	150	e24	e32	e33	124	50	32	25	14	22	e27
29	20	94	e25	e66	---	84	51	30	21	14	20	e24
30	20	49	e26	e52	---	93	50	28	19	13	19	e22
31	24	---	e25	e38	---	75	---	33	---	13	18	---
TOTAL	651	1032	1006	786	1190	2770	2456	1438	708	435	686	657
MEAN	21.0	34.4	32.5	25.4	42.5	89.4	81.9	46.4	23.6	14.0	22.1	21.9
MAX	31	150	94	66	244	311	197	98	60	19	64	42
MIN	18	22	23	18	19	31	42	28	15	12	12	14
CFSM	.54	.88	.83	.65	1.08	2.28	2.09	1.18	.60	.36	.56	.56
IN.	.62	.98	.95	.75	1.13	2.63	2.33	1.36	.67	.41	.65	.62

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO

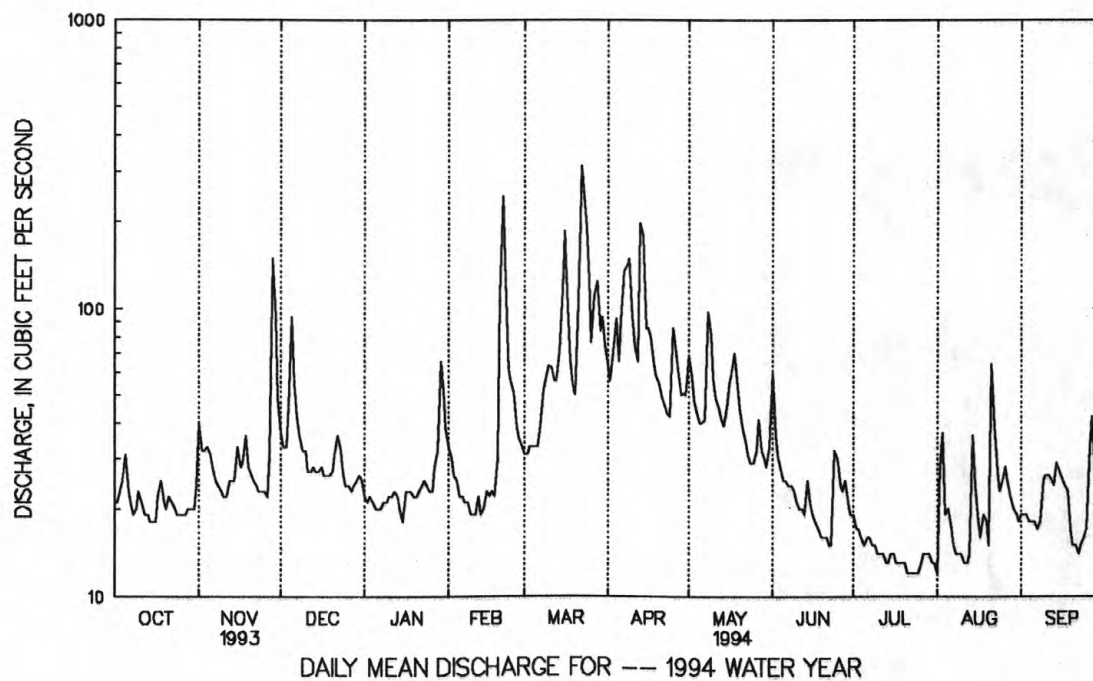
04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	24.9	39.8	41.0	42.1	35.3	83.7	94.4	41.3	25.0	24.3	27.1	22.2
MAX	39.5	67.5	66.1	74.6	42.5	98.0	143	46.4	26.9	52.5	58.0	35.8
(WY)	1993	1993	1993	1993	1994	1993	1993	1994	1993	1992	1992	1992
MIN	14.1	17.6	24.4	25.4	29.0	63.9	58.2	38.6	23.6	13.4	12.5	12.3
(WY)	1992	1992	1992	1994	1992	1992	1992	1992	1994	1991	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1991 - 1994	
ANNUAL TOTAL	16908		13815			
ANNUAL MEAN	46.3		37.8		42.8	
HIGHEST ANNUAL MEAN					53.5	
LOWEST ANNUAL MEAN					37.0	
HIGHEST DAILY MEAN	553	Apr 2	311	Mar 22	553	Apr 2 1993
LOWEST DAILY MEAN	13	Aug 26	12	a	9.5	Aug 2 1991
ANNUAL SEVEN-DAY MINIMUM	13	Aug 24	12	Jul 19	9.9	Jul 27 1991
INSTANTANEOUS PEAK FLOW			375	Mar 22	588	Apr 2 1993
INSTANTANEOUS PEAK STAGE			7.84	Mar 22	9.36	Apr 2 1993
INSTANTANEOUS LOW FLOW			11	Jul 24	8.5	Aug 2 1991
ANNUAL RUNOFF (CFSM)	1.18		.97		1.09	
ANNUAL RUNOFF (INCHES)	16.05		13.11		14.82	
10 PERCENT EXCEEDS	93		72		77	
50 PERCENT EXCEEDS	29		25		26	
90 PERCENT EXCEEDS	16		15		13	

a July 21, 22, 23, 24, 25, Aug. 1.



04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY,--Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1991-94 (e).

NUTRIENT DATA: 1991-94 (e).

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

WATER QUALITY DATA, WATER YEARS OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
04-05	1045	0145	30	41	135	13	--
NOV							
27-28	0935	1435	87	65	212	36	<0.01
28-29	1535	1035	144	80	227	37	<0.01
NOV 29-							
DEC 02	1115	1015	47	20	--	--	<0.01
05-06	0715	1015	80	38	81	15	--
JAN							
18-20	1130	1030	22	3.8	--	--	<0.01
28-29	1200	1900	32	23	--	--	--
29-31	2000	0700	52	8.5	--	--	--
FEB							
18-21	1200	1100	95	35	117	18	<0.01
21-22	1200	1100	184	37	91	6	<0.01
22-24	1115	1015	80	5.7	--	--	0.01
24-28	1200	1100	43	2.5	--	--	--
MAR							
14-16	1110	0710	124	28	--	--	--
16-17	1300	1100	142	29	--	--	--
17-19	1155	1055	73	5.8	--	--	<0.01
19-21	1155	1055	69	4.4	--	--	<0.01
21-22	1130	1930	208	85	242	26	--
22-24	2030	1030	253	65	154	15	--
24-27	1125	0635	125	31	79	10	--
APR							
03-04	0705	1005	89	8.1	--	--	--
04-06	1045	0045	71	5.9	--	--	--
06-07	0145	0945	109	25	--	--	--
12-14	1105	1005	171	80	210	23	<0.01
14-15	1050	1350	110	36	78	12	<0.01
MAY							
07-08	2250	2150	91	40	178	28	--
08-09	2250	0950	101	50	172	25	--
09-12	1155	0855	55	19	--	--	--
15...	1055	--	38	2.3	--	--	--
MAY 31-							
JUN 01	1815	1315	59	82	238	28	--
01-02	1415	1015	46	39	--	--	--
24-25	1020	0120	40	45	157	29	--
25-25	0220	0920	34	37	117	21	--
25-27	1020	0920	25	21	--	--	--
AUG							
02-02	0640	2040	31	120	314	43	--
02-04	2140	1140	38	110	225	34	--
13-14	1900	1000	30	95	272	42	<0.01
14-15	1100	0600	32	45	146	23	<0.01
15-17	1110	0410	19	18	--	--	<0.01
SEP							
08-09	1840	1340	23	32	76	14	--
09-12	1440	0940	27	17	--	--	--
19-22	1100	1000	15	6.2	--	--	<0.01
26-27	1050	0650	49	100	280	36	--
27-29	0750	0950	31	26	--	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
 04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY,--Continued
 WATER QUALITY DATA, WATER YEARS OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOSOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
04-05	--	--	0.095	0.006	61	230
NOV						
27-28	1.7	1.3	0.190	0.011	64	180
28-29	1.9	1.8	0.280	0.008	39	100
NOV 29-						
DEC 02	0.81	1.5	0.095	0.008	53	170
05-06	--	--	0.120	0.008	41	130
JAN						
18-20	0.32	1.4	0.025	0.005	65	260
28-29	--	--	0.160	0.005	240	180
29-31	--	--	0.085	0.007	110	140
FEB						
18-21	1.5	1.2	0.140	0.007	110	160
21-22	0.59	1.2	0.160	0.016	45	87
22-24	0.46	1.3	0.070	0.009	86	130
24-28	--	--	0.030	0.007	120	160
MAR						
14-16	--	--	0.130	0.024	74	97
16-17	--	--	0.110	0.011	40	67
17-19	0.60	1.3	0.050	0.008	54	130
19-21	0.41	1.2	0.050	0.008	96	150
21-22	--	--	0.220	0.016	51	67
22-24	--	--	0.180	0.015	31	50
24-27	--	--	0.080	0.008	65	85
APR						
03-04	--	--	0.060	<0.002	58	130
04-06	--	--	0.045	0.002	70	120
06-07	--	--	0.095	0.004	59	110
12-14	0.51	0.60	0.150	0.007	59	93
14-15	0.77	0.60	0.110	0.008	58	86
MAY						
07-08	--	--	0.190	0.005	70	140
08-09	--	--	0.190	0.005	48	86
09-12	--	--	0.070	0.004	55	140
15...	--	--	0.002	0.003	68	140
MAY 31-						
JUN 01	--	--	0.180	0.005	65	180
01-02	--	--	0.140	0.005	50	150
02...	--	--	0.035	0.003	62	190
24-25	--	--	0.200	0.011	68	220
25-25	--	--	0.180	0.013	72	200
25-27	--	--	0.120	0.009	70	240
AUG						
02-02	--	--	0.310	0.006	150	300
02-04	--	--	0.250	0.008	51	200
13-14	0.34	1.1	0.260	0.007	70	250
14-15	0.60	0.91	0.220	0.007	66	210
15-17	0.45	1.1	0.100	0.007	84	260
SEP						
08-09	--	--	0.160	0.005	72	270
09-12	--	--	0.060	0.004	66	260
19-22	0.32	1.2	0.030	0.006	64	310
26-27	--	--	0.290	0.011	68	220
27-29	--	--	0.100	0.008	58	220

STREAMS TRIBUTARY TO LAKE ONTARIO

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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.--6.96 mi², revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above sea level.

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. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	24	7.2	e2.8	e9.0	e3.4	e8.3	19	12	3.0	5.6	2.3
2	3.0	12	6.1	e2.8	e8.0	e4.3	e7.6	11	4.0	5.2	15	1.9
3	2.6	8.4	5.7	e2.6	e5.8	e5.4	e15	9.0	3.0	5.1	4.7	1.7
4	6.6	7.4	21	e2.9	e4.4	e6.0	16	8.2	2.4	5.2	4.2	1.7
5	4.4	7.1	26	e2.5	e3.9	e5.9	11	8.0	1.9	5.3	6.4	1.6
6	3.4	6.9	12	e2.5	e3.6	7.2	e26	8.2	1.9	5.2	3.3	1.6
7	3.1	5.6	8.4	e2.4	e3.1	e10	35	7.8	2.2	4.3	3.1	1.6
8	3.0	5.4	6.5	e2.5	e3.2	e8.3	43	30	2.5	3.6	3.0	19
9	7.2	5.2	e5.5	e2.5	e2.4	e7.2	36	16	2.5	3.7	3.2	8.6
10	4.9	4.9	e5.9	e2.6	e2.7	e6.3	21	13	3.3	4.1	3.1	4.2
11	4.6	4.7	e5.7	e2.6	e2.6	e6.7	13	11	3.4	4.6	3.0	3.8
12	4.7	5.8	e5.2	e2.7	e2.6	e8.8	15	9.9	3.4	4.8	3.0	3.6
13	4.5	4.7	e4.6	e2.4	e2.8	15	e104	7.5	7.8	4.9	3.6	3.5
14	4.3	6.2	e4.3	e2.0	e2.4	e22	46	6.7	5.3	5.2	33	13
15	4.1	7.5	e4.5	e1.4	e2.0	e52	17	13	3.8	5.4	4.3	4.9
16	4.1	5.0	e4.3	e1.5	e2.4	e33	17	11	3.6	5.0	2.9	4.1
17	13	6.9	e3.9	e1.7	e3.7	e14	12	18	3.5	4.7	2.4	3.9
18	7.7	4.6	e3.7	e1.6	e4.3	e7.9	8.2	14	3.5	4.0	2.6	4.1
19	6.1	3.6	e4.0	e1.5	e14	e7.9	7.4	11	3.1	3.2	2.0	3.7
20	5.9	3.6	e4.0	e1.6	e88	e10	5.9	9.3	2.9	4.0	1.9	3.6
21	7.0	3.6	e8.5	e1.7	e94	e59	5.6	7.7	3.1	5.5	28	3.5
22	5.6	3.4	11	e1.8	e28	e97	5.5	6.9	2.4	5.5	4.1	3.5
23	5.5	3.0	e5.3	e2.1	e14	59	6.2	6.3	1.6	5.5	2.1	3.8
24	5.4	3.4	e3.8	e2.4	e11	38	7.9	5.5	20	5.5	1.8	4.4
25	5.4	3.1	e3.6	e2.2	e6.5	24	17	5.7	31	5.5	4.6	3.8
26	5.4	2.9	e3.5	e2.4	e4.7	e13	11	13	5.3	5.6	2.3	8.2
27	5.5	e18	e3.5	e4.4	e3.6	e30	9.3	11	5.6	5.6	1.9	8.4
28	5.8	e84	e3.2	e27	e3.7	24	9.8	6.8	4.4	5.7	4.9	6.6
29	5.6	21	e3.3	e25	---	e14	8.6	6.0	3.9	5.6	2.6	5.2
30	5.6	11	e3.0	e13	---	e17	8.3	5.0	2.6	5.7	1.9	4.4
31	13	---	e2.8	e10	---	e11	---	19	---	5.6	2.3	---
TOTAL	169.8	292.9	200.0	137.1	336.4	627.3	553.6	334.5	155.9	151.8	166.8	144.2
MEAN	5.48	9.76	6.45	4.42	12.0	20.2	18.5	10.8	5.20	4.90	5.38	4.81
MAX	13	84	26	27	94	97	104	30	31	5.7	33	19
MIN	2.6	2.9	2.8	1.4	2.0	3.4	5.5	5.0	1.6	3.0	1.8	1.6
CFSM	.79	1.40	.93	.64	1.73	2.91	2.65	1.55	.75	.70	.77	.69
IN.	.91	1.57	1.07	.73	1.80	3.35	2.96	1.79	.83	.81	.89	.77

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued

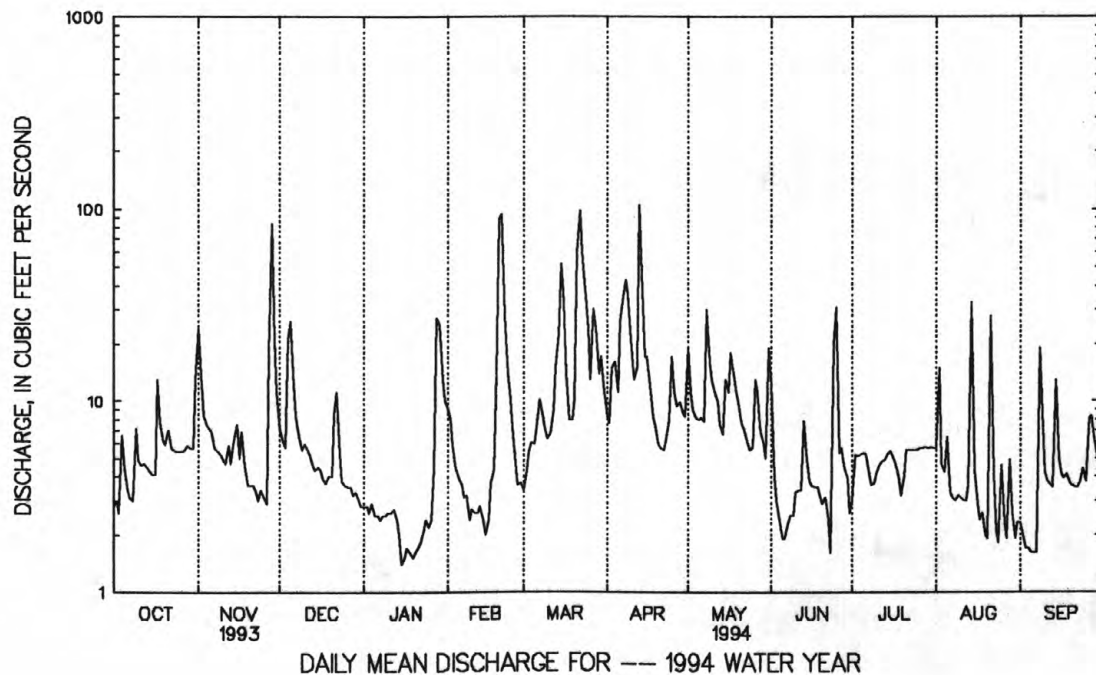
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

MEAN	5.72	8.09	10.4	7.95	7.83	22.9	19.2	8.95	5.09	5.80	7.82	4.84
MAX	10.3	13.3	18.1	13.4	12.0	26.7	23.4	16.4	7.52	12.3	21.7	6.76
(WY)	1991	1993	1991	1993	1994	1991	1993	1990	1993	1992	1992	1992
MIN	3.38	2.23	2.97	3.57	3.60	18.1	16.4	2.39	3.96	3.67	2.97	3.25
(WY)	1993	1992	1992	1992	1993	1992	1992	1993	1991	1991	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	3412.82	3270.3	
ANNUAL MEAN	9.35	8.96	9.54
HIGHEST ANNUAL MEAN			10.1 1993
LOWEST ANNUAL MEAN			8.96 1994
HIGHEST DAILY MEAN	163 Apr 1	104 Apr 13	230 Mar 4 1991
LOWEST DAILY MEAN	.85 May 30	1.4 Jan 15	.85 May 30 1993
ANNUAL SEVEN-DAY MINIMUM	1.3 May 24	1.6 Jan 15	1.2 Nov 17 1991
INSTANTANEOUS PEAK FLOW		179 Apr 13	319 Aug 27 1992
INSTANTANEOUS PEAK STAGE		a5.09 Feb 20	7.18 Aug 27 1992
INSTANTANEOUS LOW FLOW		1.2 Jun 9	.81 b
ANNUAL RUNOFF (CFM)	1.34	1.29	1.37
ANNUAL RUNOFF (INCHES)	18.24	17.48	18.63
10 PERCENT EXCEEDS	15	18	18
50 PERCENT EXCEEDS	4.8	5.2	4.6
90 PERCENT EXCEEDS	2.1	2.4	2.1

a Ice jam.

b May 30, 31, 1993.



STREAMS TRIBUTARY TO LAKE ONTARIO
0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1990 to current year.

CHEMICAL DATA: 1990-94 (e).

NUTRIENT DATA: 1990-94 (e).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLATILE TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
NOV							
27-28	0710	0710	55	70	145	23	0.02
28-29	0810	0810	52	60	85	14	0.01
NOV 29-							
DEC 02	1205	1105	9.9	10	--	--	<0.01
04-05	0810	0710	32	30	51	11	--
JAN							
18-19	1210	0210	1.6	9.1	--	--	0.07
27-28	2030	2330	3.4	7.0	--	--	--
29-31	0030	1130	6.0	4.4	--	--	--
FEB							
19-21	0425	0325	65	26	178	22	0.11
21-22	0425	1125	61	34	107	12	0.07
22-24	1155	1055	18	5.8	--	--	0.06
24-28	1240	1140	5.9	2.6	--	--	--
MAR							
07-08	1210	1710	9.1	7.8	--	--	--
08-10	1810	1110	7.3	7.3	--	--	--
10-12	1250	1150	7.3	4.7	--	--	--
12-14	1250	1050	15	5.3	--	--	--
14-15	1445	2245	37	37	112	13	--
15-17	2345	0805	24	21	--	--	--
17-19	1230	0730	9.9	3.0	--	--	0.04
19-21	0830	1130	12	4.3	--	--	0.02
21-22	1210	2310	105	110	281	33	--
23-24	0010	1110	52	21	--	--	--
24-27	1200	0300	22	6.4	--	--	--
APR							
03-03	0335	1835	17	6.5	--	--	--
03-04	1935	1035	19	6.3	--	--	--
04-05	1135	2235	13	4.2	--	--	--
05-06	2335	1935	27	7.6	--	--	--
06-07	2035	1035	31	17	--	--	--
MAY							
07-08	2245	0945	29	21	--	--	--
08-09	1045	1245	23	6.6	--	--	--
09-12	1300	1200	12	1.8	--	--	--
15-15	1140	2240	19	8.7	--	--	--
15-16	2340	1040	13	2.8	--	--	--
16-19	1145	1045	14	2.8	--	--	--
26-26	1110	2210	20	44	110	18	0.14
26-27	2310	0910	15	14	--	--	0.04

STREAMS TRIBUTARY TO LAKE ONTARIO
0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV						
27-28	1.4	0.82	0.230	0.023	72	63
28-29	1.6	2.8	0.270	0.058	67	57
NOV 29-						
DEC 02	0.95	3.0	0.065	0.021	110	77
04-05	--	--	0.160	0.032	89	63
JAN						
18-19	0.85	1.5	0.075	0.013	200	86
27-28	--	--	0.220	0.011	900	110
29-31	--	--	0.250	0.011	280	76
FEB						
19-21	1.1	1.5	0.200	0.034	210	57
21-22	0.57	1.9	0.190	0.038	120	45
22-24	0.76	2.1	0.080	0.021	150	72
24-28	--	--	0.042	0.012	190	94
MAR						
07-08	--	--	0.080	0.022	280	68
08-10	--	--	0.070	0.022	250	72
10-12	--	--	0.065	0.017	300	75
12-14	--	--	0.070	0.018	240	76
14-15	--	--	0.220	0.030	130	46
15-17	--	--	0.140	0.034	120	46
17-19	0.76	2.3	0.055	0.019	190	76
19-21	0.73	2.2	0.055	0.020	170	86
21-22	--	--	0.470	0.034	73	35
23-24	--	--	0.120	0.035	71	39
24-27	--	--	0.065	0.020	77	52
APR						
03-03	--	--	0.110	0.003	110	70
03-04	--	--	0.055	0.008	120	63
04-05	--	--	0.045	0.005	130	69
05-06	--	--	0.060	0.010	110	60
06-07	--	--	0.080	0.015	110	50
MAY						
07-08	--	--	0.110	0.006	77	72
08-09	--	--	0.025	0.008	100	68
09-12	--	--	0.030	0.006	110	97
15-15	--	--	0.090	0.009	80	79
15-16	--	--	0.055	0.007	100	90
16-19	--	--	0.045	0.006	120	93
26-26	1.2	0.79	0.120	0.021	70	84
26-27	1.1	0.78	0.090	0.017	84	90

STREAMS TRIBUTARY TO LAKE ONTARIO

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0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
MAY--continued							
27-29	1000	0100	7.7	2.8	--	--	<0.01
JUN							
09-13	1300	1100	3.3	4.2	--	--	0.03
13-14	1735	0435	15	23	--	--	<0.01
14-16	0535	1035	4.0	6.2	--	--	0.03
18-20	1610	1110	3.0	59	79	9	--
20-23	1305	1205	2.6	60	75	9	--
24-24	0125	0825	18	30	--	--	--
24-25	0925	0025	20	25	--	--	--
25-25	0125	1625	39	190	417	49	--
25-27	1725	0025	5.9	27	--	--	--
AUG							
02-03	1310	0010	26	85	176	22	--
03-04	0110	0810	4.1	22	--	--	--
13-14	2330	1030	51	90	215	27	0.06
14-15	1130	1030	11	40	71	10	0.02
15-17	1145	0445	3.1	8.0	--	--	<0.01
SEP							
07-08	2315	1015	6.3	23	50	8	--
08-09	1520	1020	26	120	194	19	--
19-22	1150	1050	3.6	6.0	--	--	<0.01

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOSOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
MAY						
27-29	0.96	0.72	0.055	0.014	110	140
JUN						
09-13	0.0	0.60	0.055	0.020	84	140
13-14	0.90	0.81	ND	0.007	66	95
14-16	0.92	0.74	ND	0.023	95	140
18-20	--	--	0.120	0.028	80	120
20-23	--	--	0.130	0.025	56	120
24-24	--	--	0.150	0.020	54	110
24-25	--	--	0.260	0.028	43	59
25-25	--	--	0.670	0.039	53	56
25-27	--	--	0.280	0.043	97	110
AUG						
02-03	--	--	0.300	0.033	39	83
03-04	--	--	0.120	0.035	64	110
13-14	0.40	0.53	0.350	0.039	38	62
14-15	0.68	0.89	0.210	0.054	72	79
15-17	0.73	0.67	0.090	0.034	91	130
SEP						
07-08	--	--	0.140	ND	58	120
08-09	--	--	0.320	0.030	47	69
19-22	0.38	0.51	0.055	0.026	69	140

STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi², flow from 3.5 mi² noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WRD 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 sea level.

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. Discharge prior to January 1980 included undetermined diversion (maximum 20 ft³/s) from Erie (Barge) Canal upstream from station. January 1980 to present, diversion reduced to a maximum of 3 ft³/s for use by several golf courses adjacent to stream. Several measurements of water temperature were made during the year.

COOPERATION.--Gage-height record and 9 discharge measurements were provided by the Monroe County Health Laboratory at Rochester, N.Y.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 28	0615	502	4.23	Mar. 21	2115	497	4.22
Feb. 20	2115	558	4.33	Apr. 13	2045	*630	*4.45

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	67	20	e6.0	e22	e17	30	55	47	12	8.6	16
2	9.8	35	16	9.3	e17	e17	26	26	15	14	34	13
3	8.9	28	14	7.4	e14	e17	52	18	11	13	27	12
4	22	22	61	e6.5	e12	e18	48	16	9.4	12	13	14
5	21	18	78	e6.9	e10	e20	34	14	8.2	11	28	17
6	11	16	34	e6.5	e10	e20	87	15	8.1	11	12	13
7	8.4	12	26	e6.2	e9.2	e38	109	13	6.9	12	11	11
8	7.7	11	18	e6.2	e8.4	e55	125	77	7.4	14	9.6	54
9	23	9.6	15	e6.0	e8.7	e39	104	36	6.5	15	10	40
10	17	8.8	19	e6.0	e8.3	e42	61	25	7.3	12	10	16
11	10	8.3	20	6.4	e7.9	e39	39	19	7.4	11	9.5	12
12	8.7	14	e13	e6.4	e9.1	e34	47	17	7.6	9.8	9.5	11
13	7.9	9.8	e11	e6.2	e8.5	e42	341	14	20	9.5	13	9.7
14	7.2	16	e11	e5.9	e8.1	62	166	12	26	11	81	47
15	6.9	29	e12	e5.6	e7.5	e137	58	38	11	10	21	19
16	7.4	14	e12	e6.3	e8.4	e112	56	28	9.1	10	16	13
17	38	19	e10	e6.5	e10	e49	38	45	8.1	10	15	11
18	22	19	e9.6	e6.9	e16	e33	27	31	8.0	13	13	12
19	12	11	10	e6.4	e44	e29	23	22	7.4	12	e12	10
20	9.8	10	10	e6.7	e243	e33	18	17	7.0	9.9	e11	9.6
21	14	9.0	35	e7.4	e272	153	16	15	8.0	9.8	e90	9.1
22	9.9	9.8	47	e7.4	e80	e214	14	13	6.5	9.7	e51	9.2
23	7.6	7.5	22	e8.6	e42	142	13	12	6.3	9.5	e19	11
24	7.1	8.0	e13	e8.6	e36	98	12	11	85	9.1	e12	13
25	6.7	9.9	e12	e8.0	e29	e61	46	11	89	9.4	e26	11
26	6.8	6.8	e11	e8.4	e24	e37	24	29	23	9.5	29	26
27	6.9	54	e8.3	e11	e18	83	20	28	25	9.6	15	33
28	7.2	321	e7.6	e54	e18	e64	17	14	20	11	22	21
29	6.6	64	e7.0	e84	---	44	16	12	17	9.3	23	19
30	6.4	32	e6.3	e43	---	55	16	9.3	14	9.7	14	13
31	23	---	e5.7	e30	---	38	---	24	---	8.9	14	---
TOTAL	370.9	899.5	594.5	400.7	1001.1	1842	1683	716.3	532.2	337.7	679.2	525.6
MEAN	12.0	30.0	19.2	12.9	35.8	59.4	56.1	23.1	17.7	10.9	21.9	17.5
MAX	38	321	78	84	272	214	341	77	89	15	90	54
MIN	6.4	6.8	5.7	5.6	7.5	17	12	9.3	6.3	8.9	8.6	9.1

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued

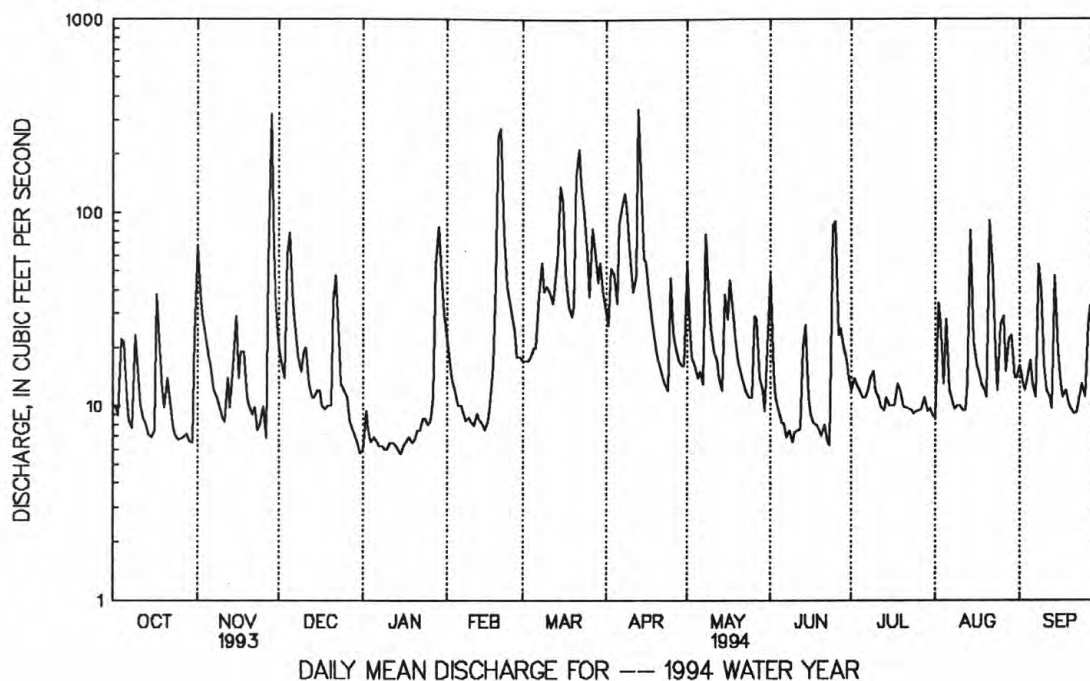
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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

MEAN	25.8	32.3	31.5	22.4	35.0	58.4	48.0	33.8	28.2	22.2	25.2	23.8
MAX	74.8	102	89.7	50.4	94.9	131	80.7	103	78.4	63.0	50.7	60.5
(WY)	1978	1973	1978	1969	1981	1960	1969	1974	1972	1976	1992	1977
MIN	7.99	7.42	4.80	4.40	10.4	22.6	17.8	10.1	11.2	7.18	8.84	6.07
(WY)	1962	1961	1961	1963	1989	1981	1981	1993	1991	1960	1961	1961

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1960 - 1994	
ANNUAL TOTAL	10293.7		9582.7			
ANNUAL MEAN	28.2		26.3		31.9	
HIGHEST ANNUAL MEAN					50.6	
LOWEST ANNUAL MEAN					16.9	
HIGHEST DAILY MEAN	482 Apr 2		341 Apr 13		1970 Mar 30 1960	
LOWEST DAILY MEAN	4.8 Aug 28		5.6 Jan 15		1.7 Jan 24 1963	
ANNUAL SEVEN-DAY MINIMUM	5.3 Aug 24		6.1 Jan 9		2.3 Feb 15 1962	
INSTANTANEOUS PEAK FLOW			630 Apr 13		a3280 May 17 1974	
INSTANTANEOUS PEAK STAGE			4.45 Apr 13		7.42 May 17 1974	
10 PERCENT EXCEEDS	56		54		57	
50 PERCENT EXCEEDS	12		13		21	
90 PERCENT EXCEEDS	6.5		7.3		8.0	

a From rating curve extended above 1,000 ft³/s on basis of contracted-opening measurement of peak discharge and step-backwater analysis.



STREAMS TRIBUTARY TO LAKE ONTARIO
04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

CHEMICAL DATA: 1983-94 (e).

NUTRIENT DATA: 1983-94 (e).

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 1984-88, U. S. Geological Survey open-file report 93-370.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
04-05	1005	0105	33	30	56	11	--
NOV							
27-28	0905	0905	218	70	247	35	<0.01
28-29	1005	1005	170	40	88	15	<0.01
NOV 29-							
DEC 02	1040	0640	30	13	--	--	<0.01
JAN							
28-29	1350	0050	56	45	--	--	--
29-29	0150	1850	84	21	--	--	--
JAN 31-							
FEB 03	1100	1000	16	4.6	--	--	ND
12-14	2305	1005	7.5	2.7	--	--	<0.01
18-21	1100	0200	81	43	139	21	0.09
21-22	0300	1000	210	41	129	18	0.05
22-24	1030	1030	52	8.0	--	--	0.05
24-28	1105	1005	25	3.8	--	--	--
MAR							
07-08	1040	0140	40	7.1	--	--	--
10-11	1115	2215	40	4.5	--	--	--
11-14	2315	1015	44	5.2	--	--	--
14-15	1035	2135	46	30	72	11	--
15-17	2235	0935	99	25	--	--	--
17-19	1305	0805	37	3.8	--	--	0.02
19-21	0905	1005	56	3.8	--	--	<0.01
21-22	1035	2135	226	75	214	27	--
22-24	2235	0935	134	25	--	--	--
24-27	1035	0535	58	6.1	--	--	--
APR							
03-03	0625	2125	62	5.5	--	--	--
03-04	2235	0925	56	9.0	--	--	--
04-05	1005	2105	38	3.1	--	--	--
05-06	2205	1805	72	5.8	--	--	--
06-07	1905	0905	97	25	--	--	--
12-14	1320	0920	242	85	245	36	<0.01
14-18	1000	0900	54	17	--	--	<0.01
MAY							
07-08	2215	1315	74	19	--	--	--
08-09	1415	0915	57	12	--	--	--
09-12	1120	1020	23	2.4	--	--	--
15-15	1020	2120	58	8.0	--	--	--
16-19	1015	0915	33	4.2	--	--	--
JUN							
09-13	1100	0900	7.4	4.8	--	--	0.02

STREAMS TRIBUTARY TO LAKE ONTARIO

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04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
04-05	--	--	0.120	0.023	120	76
NOV						
27-28	1.9	0.69	0.390	0.022	130	53
28-29	1.3	1.4	0.200	0.036	84	44
NOV 29-						
DEC 02	1.1	1.6	0.090	0.016	150	75
JAN						
28-29	--	--	0.330	0.011	1300	59
29-29	--	--	0.150	0.018	530	56
JAN 31-						
FEB 03	0.0	1.6	0.070	0.014	440	80
12-14	0.66	1.3	0.040	0.008	360	94
18-21	0.85	1.1	0.190	0.013	620	63
21-22	0.72	1.2	0.220	0.024	270	46
22-24	0.84	1.5	0.095	0.019	270	64
24-28	--	--	0.050	0.017	460	80
MAR						
07-08	--	--	0.065	0.010	600	72
10-11	--	--	0.050	0.009	540	71
11-14	--	--	0.055	0.007	500	73
14-15	--	--	0.140	0.014	310	55
15-17	--	--	0.140	0.023	220	47
17-19	0.72	1.6	0.050	0.016	360	71
19-21	0.75	1.5	0.050	0.010	330	73
21-22	--	--	0.330	0.026	170	40
22-24	--	--	0.140	0.026	130	41
24-27	--	--	0.060	0.014	150	54
APR						
03-03	--	--	0.090	0.003	200	62
03-04	--	--	0.080	0.004	220	58
04-05	--	--	0.055	0.002	230	64
05-06	--	--	0.075	0.003	210	62
06-07	--	--	0.130	0.007	180	49
12-14	0.71	0.84	0.220	0.010	100	40
14-18	0.91	1.2	0.130	0.006	170	54
MAY						
07-08	--	--	0.085	0.003	140	61
08-09	--	--	0.070	0.006	140	--
09-12	--	--	0.030	0.004	190	70
15-15	--	--	0.075	0.008	130	48
16-19	--	--	0.045	0.006	170	64
JUN						
09-13	0.86	0.93	0.090	0.019	170	98

STREAMS TRIBUTARY TO LAKE ONTARIO
04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
JUN							
13-14	1600	0300	48	87	249	38	0.01
14-16	0400	0900	15	19	--	--	0.03
24...	1115	--	238	36	--	--	0.25
24-25	1350	0350	94	120	435	56	--
AUG							
02-03	1505	0205	74	90	273	36	--
03-04	0305	1105	19	28	--	--	--
13-14	1030	0930	52	33	116	17	<0.01
14-15	1030	0930	47	45	92	14	0.01
15-17	1025	0925	16	8.7	--	--	<0.01
SEP							
07-08	2400	0900	31	33	87	14	--
08-09	1010	0110	71	110	274	32	--
09-11	0210	0910	24	29	--	--	--
22-23	1005	0905	9.1	3.5	--	--	0.01

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
JUN						
13-14	1.3	0.92	0.460	0.014	110	86
14-16	1.0	0.88	ND	0.031	150	73
24...	1.0	0.81	0.550	0.075	51	27
24-25	--	--	0.680	0.029	97	45
AUG						
02-03	--	--	0.400	0.028	62	62
03-04	--	--	0.140	0.030	100	58
13-14	0.51	0.64	0.220	0.027	87	76
14-15	0.44	0.58	0.220	0.039	78	45
15-17	0.58	0.67	0.110	0.051	130	81
SEP						
07-08	--	--	0.200	ND	69	70
08-09	--	--	0.385	0.022	57	41
09-11	--	--	0.130	0.020	96	53
22-23	0.52	0.54	0.050	0.018	110	96

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi², flow from 8.45 mi² 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 sea level (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. Several measurements of water temperature were made during the year.

COOPERATION.--Gage-height record and 8 discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 21	1200	966	8.15	Apr. 14	0100	*1,290	*8.70
Mar. 22	2200	1,110	8.45				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	213	143	e64	e152	e105	211	213	195	68	38	67
2	64	134	115	e72	e137	e109	191	167	115	65	75	62
3	67	111	105	e67	e119	e105	237	132	93	63	134	58
4	85	106	182	e55	e105	e104	269	118	83	59	65	57
5	112	103	305	e56	e93	e110	216	110	77	56	98	55
6	72	92	198	e56	e80	e114	298	108	75	55	61	54
7	60	82	e147	e55	e72	e148	431	106	73	56	53	54
8	57	72	e119	e52	e67	e196	491	254	72	58	51	120
9	84	70	e103	e51	e66	e181	527	244	68	59	50	121
10	85	58	e108	e57	e67	e192	378	178	66	55	48	75
11	64	49	e108	e59	e67	e181	275	146	64	53	48	60
12	61	57	e96	e59	e72	e166	242	132	64	48	48	55
13	58	52	e87	e56	e69	e180	761	123	77	43	53	53
14	55	57	e80	e54	e65	e227	899	112	107	43	238	132
15	55	83	e83	e49	e70	e388	379	157	72	45	97	90
16	55	68	e88	e62	e71	e535	315	167	65	44	67	66
17	116	77	e81	e62	e75	e357	272	196	61	43	60	59
18	100	99	e76	e64	e83	e234	214	196	58	45	65	58
19	74	112	e76	e60	e138	e184	211	158	57	46	62	55
20	77	115	e76	e63	e450	e172	206	135	55	42	57	52
21	90	85	123	e67	e923	e346	166	117	56	40	266	50
22	66	75	e170	e70	e620	e879	143	107	54	39	171	49
23	62	66	e120	e75	e299	1010	129	96	52	39	89	49
24	58	69	e86	e74	e230	776	121	88	212	38	72	54
25	57	71	e72	e70	e183	e564	199	89	213	39	95	53
26	57	64	e64	e71	e162	e348	192	123	93	40	96	131
27	56	131	e63	e75	e143	e385	160	139	90	42	70	171
28	58	719	e60	e178	e126	428	133	104	83	43	75	96
29	64	396	e60	e362	---	316	125	91	77	41	89	84
30	58	206	e59	e262	---	305	125	84	72	41	63	70
31	85	---	e59	e176	---	258	---	100	---	39	62	---
TOTAL	2179	3692	3312	2653	4804	9603	8516	4290	2599	1487	2616	2210
MEAN	70.3	123	107	85.6	172	310	284	138	86.6	48.0	84.4	73.7
MAX	116	719	305	362	923	1010	899	254	213	68	266	171
MIN	55	49	59	49	65	104	121	84	52	38	38	49

e Estimated

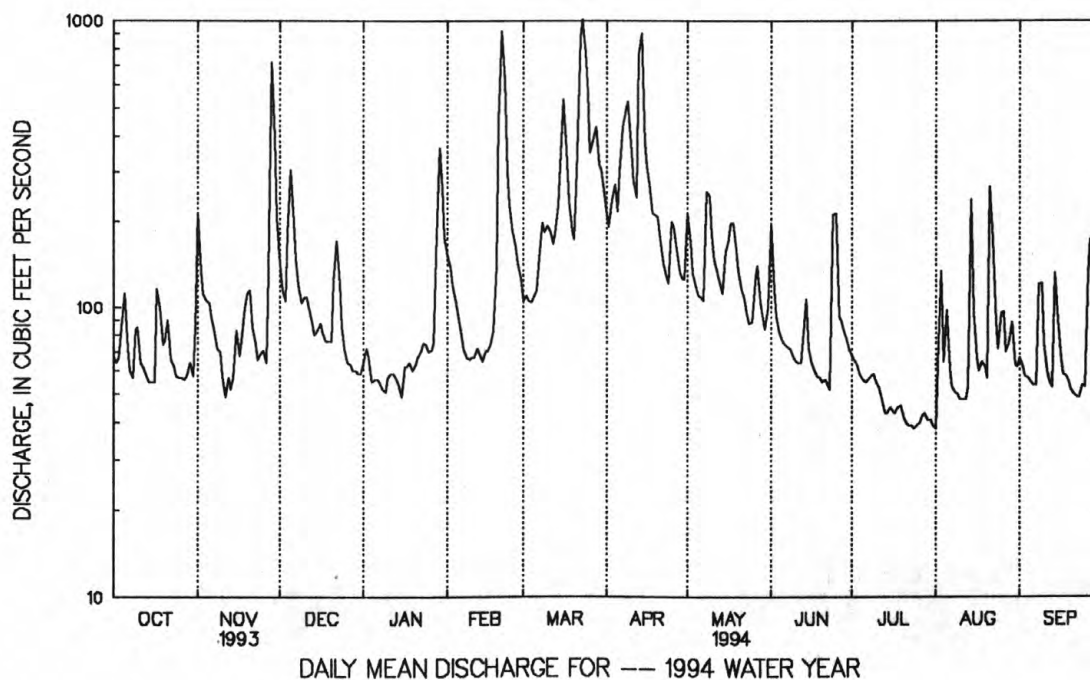
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

MEAN	86.6	123	145	128	172	218	242	148	93.2	70.6	85.8	73.9
MAX	188	224	242	279	347	348	468	292	186	181	253	132
(WY)	1987	1986	1987	1993	1981	1993	1993	1984	1989	1992	1992	1992
MIN	39.5	54.5	49.5	60.8	67.1	122	90.8	67.8	46.9	42.2	40.8	44.6
(WY)	1983	1992	1990	1989	1989	1988	1981	1982	1988	1983	1985	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1981 - 1994	
ANNUAL TOTAL	59295		47961			
ANNUAL MEAN	162		131		134	
HIGHEST ANNUAL MEAN					182	
LOWEST ANNUAL MEAN					98.2	
HIGHEST DAILY MEAN	1630	Apr 2	1010	Mar 23	1630	Apr 2 1993
LOWEST DAILY MEAN	42	Aug 28	38	a	29	Aug 20 1985
ANNUAL SEVEN-DAY MINIMUM	44	Aug 24	40	Jul 20	30	Aug 17 1985
INSTANTANEOUS PEAK FLOW			1290	Apr 14	1710	Apr 2 1993
INSTANTANEOUS PEAK STAGE			8.70	Apr 14	9.12	Apr 2 1993
INSTANTANEOUS LOW FLOW			37	Jul 31	28	b
10 PERCENT EXCEEDS	304		256		259	
50 PERCENT EXCEEDS	106		82		90	
90 PERCENT EXCEEDS	53		53		46	

a July 24, Aug. 1.

b Sept. 11, 14, 1982.



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0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

CHEMICAL DATA: 1983-94 (e).

NUTRIENT DATA: 1983-94 (e).

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 1984-88. U.S. Geological Survey Open-File Report 93-370.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLATILE SUS- PENDED (MG/L)
OCT									
04-05	0900	0400	111	24	--	--	--	--	--
05-08	0500	0800	74	18	--	--	--	--	--
08-09	0915	1215	56	8.7	--	--	--	--	--
09-10	1315	0415	117	19	--	--	--	--	--
10-12	0515	1215	68	12	--	--	--	--	--
14...	1030	--	54	2.2	--	--	--	--	--
15-17	1615	0355	55	5.9	--	--	--	--	--
17-17	0455	2155	130	16	--	--	--	--	--
17-18	2255	0955	122	16	--	--	--	--	--
18-19	0915	0815	82	4.3	--	--	--	--	--
20...	1013	--	76	--	--	--	--	--	--
20...	1014	--	76	--	--	--	--	--	--
20...	1015	--	76	--	--	--	--	--	--
20...	1016	--	76	--	--	--	--	--	--
20...	1017	--	76	--	--	--	--	--	--
20...	1018	--	76	--	--	--	--	--	--
20...	1019	--	76	--	--	--	--	--	--
20...	1020	--	76	--	--	--	--	--	--
20-21	1430	0830	82	5.7	--	--	--	--	--
21-25	0940	0840	66	4.7	--	--	--	--	--
25-27	0925	1425	57	4.3	--	--	--	--	--
28-31	0915	0015	60	4.5	--	--	--	--	--
OCT 31-									
NOV 01	0115	0815	128	8.8	--	--	--	--	--
01-03	0940	0540	153	14	--	--	--	--	--
04-08	0915	0815	93	6.3	--	--	--	--	--
08-12	0925	0825	61	4.8	--	--	--	--	--
15-17	0915	1415	71	5.4	--	--	--	--	--
17-18	1515	0815	105	7.6	--	--	--	--	--
18-22	0855	0755	100	6.6	--	--	--	--	--
22-24	0905	0805	68	4.8	--	--	--	--	--
24-27	1005	0705	68	3.6	1160	<10	246	22	<9
27-28	0805	1305	431	70	824	37	179	370	45
28-29	1405	0905	580	130	633	33	158	377	46
NOV 29-									
DEC 02	0905	0805	203	29	852	16	195	83	<18
02-04	0910	0810	106	8.2	--	--	--	--	--
04-05	0910	0410	262	30	--	--	--	81	12
05-06	0510	0110	288	32	--	--	--	78	15
06-07	0930	2030	164	18	--	--	--	--	--
JAN									
06-10	1210	0810	53	4.4	--	--	--	--	--
10-14	0915	0815	57	4.3	--	--	--	--	--
14-18	0950	0850	58	3.5	1380	--	262	--	--
18-20	0925	0825	63	5.7	--	--	--	--	--
20-21	0930	2030	64	3.9	--	--	--	--	--
24-26	0950	0550	71	6.3	--	--	--	--	--
27-29	0920	0420	159	22	--	--	--	--	--
29-31	0520	0820	286	23	--	--	--	--	--
JAN 31-									
FEB 03	0945	0845	152	6.0	--	--	--	--	--
03-07	0940	0840	95	6.9	--	--	--	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT								
04-05	<0.01	0.87	0.86	0.120	0.023	--	100	170
05-08	<0.01	0.79	0.79	0.090	0.015	--	100	170
08-09	<0.01	0.71	0.80	0.070	0.013	--	100	190
09-10	<0.01	0.85	0.78	0.120	0.019	--	100	160
10-12	<0.01	0.88	0.80	0.090	0.013	--	110	180
14...	<0.01	0.55	0.78	0.030	0.011	--	120	210
15-17	<0.01	0.85	0.66	0.055	0.010	--	130	210
17-17	<0.01	0.81	0.55	0.095	0.012	--	100	160
17-18	<0.01	0.85	0.40	0.100	0.013	--	81	140
18-19	<0.01	0.64	0.44	0.060	0.014	--	95	150
20...	--	0.20	--	0.010	--	--	--	--
20...	--	0.20	--	0.010	--	--	--	--
20...	--	0.20	--	0.010	--	--	--	--
20...	--	0.20	--	0.010	--	--	--	--
20...	--	0.30	--	0.010	--	--	--	--
20...	--	0.40	--	0.030	--	--	--	--
20...	--	0.40	--	0.030	--	--	--	--
20...	--	0.40	--	0.030	--	--	--	--
20-21	<0.01	0.55	0.46	0.050	0.011	--	97	160
21-25	0.04	0.69	0.47	0.050	0.012	--	110	85
25-27	<0.01	0.63	0.51	0.045	0.011	--	120	190
28-31	<0.01	0.62	0.59	0.040	0.007	--	120	210
OCT 31-								
NOV 01	<0.01	0.73	0.61	0.075	0.011	--	120	190
01-03	0.01	1.1	0.69	0.110	0.060	--	140	110
04-08	<0.01	0.75	0.68	0.060	0.011	--	110	170
08-12	<0.01	0.69	0.73	0.045	0.017	--	120	190
15-17	<0.01	0.76	0.77	0.060	0.009	--	110	170
17-18	<0.01	0.87	0.69	0.070	0.010	--	110	150
18-22	<0.01	0.79	0.72	0.050	0.013	--	120	160
22-24	<0.01	0.74	0.88	0.040	0.012	--	150	190
24-27	<0.01	0.73	1.1	0.035	0.008	3.5	150	190
27-28	<0.01	1.9	0.86	0.440	0.014	4.9	100	120
28-29	<0.01	1.9	1.1	0.450	0.022	6.7	73	84
NOV 29-								
DEC 02	<0.01	1.1	1.4	0.150	0.016	6.6	95	130
02-04	<0.01	0.78	1.4	0.065	0.013	--	110	210
04-05	<0.01	1.2	1.1	0.170	0.015	--	97	100
05-06	0.04	1.0	1.3	0.160	0.016	--	78	100
06-07	0.02	0.74	1.5	0.120	0.023	--	98	120
JAN								
06-10	0.03	0.54	1.3	0.040	0.008	--	140	190
10-14	0.05	0.50	1.3	0.035	0.011	--	160	120
14-18	<0.05	0.60	1.3	0.035	0.009	--	190	190
18-20	<0.01	0.50	1.3	0.050	0.017	--	170	200
20-21	0.05	0.50	1.4	0.035	0.008	--	160	210
24-26	0.09	0.50	1.4	0.220	0.008	--	250	180
27-29	0.08	0.82	1.2	0.130	0.008	--	510	150
29-31	0.10	0.99	1.3	0.170	0.013	--	400	100
JAN 31-								
FEB 03	0.05	0.79	1.5	0.075	0.012	--	250	120
03-07	0.01	0.77	1.4	0.065	0.007	--	220	140

STREAMS TRIBUTARY TO LAKE ONTARIO

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0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)
FEB--continued									
07-10	0905	0805	69	3.1	--	--	--	--	--
10-14	0945	0845	69	3.1	--	--	--	--	--
14-18	0910	0810	72	3.5	--	--	--	--	--
18-21	0920	0820	320	30	1580	35	196	297	37
21-22	0920	0820	818	29	801	--	138	--	--
22-24	0905	0905	392	36	881	38	171	107	14
24-28	0940	0840	169	5.2	--	--	--	--	--
FEB 28-									
MAR 03	0930	0830	106	4.7	--	--	--	--	--
03-05	0950	0450	106	4.0	--	--	--	--	--
07...	0930	--	148	3.5	--	--	--	--	--
07-08	1640	2140	184	8.5	--	--	--	--	--
10-11	0930	2030	186	6.2	--	--	--	--	--
11-14	2130	0830	181	6.6	--	--	--	--	--
14-16	0910	0110	350	38	--	--	--	168	16
17-20	0950	1650	227	4.2	--	--	--	--	--
21-23	0920	0220	735	80	830	53	184	352	40
23-24	0320	0820	959	70	579	31	146	264	25
24-24	0930	2030	724	39	600	22	141	193	21
31...	0925	--	263	4.0	--	--	--	--	--
MAR 31-									
APR 02	1435	0135	218	32	--	--	--	93	10
04-05	0900	2300	235	4.8	--	--	--	--	--
05-07	2400	0800	321	6.2	--	--	--	--	--
07-09	1005	0105	482	31	--	--	--	101	16
09-11	0205	0905	422	25	--	--	--	--	--
11-12	0920	1420	243	30	--	--	--	85	13
12-14	1820	0820	780	70	748	58	178	423	50
14-18	0900	0800	383	36	771	18	190	88	12
21-24	0920	2020	137	3.5	--	--	--	--	--
24-25	2120	0820	168	21	--	--	--	--	--
25-28	0940	0840	178	17	--	--	--	--	--
28-30	0930	1630	126	2.3	--	--	--	--	--
APR 30-									
MAY 01	1730	1230	184	3.8	--	--	--	--	--
01-02	1330	0830	198	6.2	--	--	--	--	--
02-05	1015	0815	130	3.0	--	--	--	--	--
05-08	0915	0015	108	2.9	--	--	--	--	--
08-08	0115	1615	252	5.2	--	--	--	--	--
08-09	1715	0815	276	33	--	--	--	94	17
09-12	1020	0820	171	19	--	--	--	--	--
12-15	0915	0815	119	16	--	--	--	--	--
15-16	2115	0815	194	21	--	--	--	--	--
16-19	0905	0825	184	7.1	--	--	--	--	--
19-23	0910	0810	123	17	--	--	--	--	--
23-26	0935	1235	89	6.7	--	--	--	--	--
26-27	1335	0835	163	35	--	--	--	158	23
27-31	0945	0845	97	6.9	--	--	--	--	--
31-31	1055	1755	77	12	--	--	--	--	--
MAY 31-									
JUN 01	1855	0355	235	85	--	--	--	260	36
01-02	0455	0755	157	60	--	--	--	142	24
02-06	0850	0750	87	18	--	--	--	--	--
06-09	0920	0820	72	1.9	--	--	--	--	--
09-13	0920	0820	65	4.7	1110	236	--	--	--
13-14	0905	0205	96	31	--	--	--	--	--
14-16	0305	0805	81	19	--	--	--	--	--
20-23	1010	0910	55	22	--	--	--	57	10

STREAMS TRIBUTARY TO LAKE ONTARIO

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB--continued								
07-10	0.05	0.66	1.4	0.040	0.009	--	210	170
10-14	0.02	0.74	1.3	0.045	0.007	--	170	180
14-18	0.06	0.53	1.3	0.050	0.008	--	240	170
18-21	0.07	0.82	1.2	0.430	0.023	--	350	100
21-22	0.08	1.1	1.2	0.490	0.020	--	130	56
22-24	0.04	0.84	1.4	0.200	0.015	--	140	75
24-28	0.05	0.53	1.4	0.085	0.012	--	200	120
FEB 28-								
MAR 03	0.02	0.52	1.4	0.055	0.009	--	160	140
03-05	0.02	0.56	1.4	0.060	0.008	--	210	140
07...	0.04	0.66	1.3	0.030	0.006	--	280	140
07-08	0.02	0.89	1.4	0.065	0.006	--	250	110
10-11	0.01	0.76	1.4	0.060	0.008	--	310	110
11-14	<0.01	0.70	1.3	0.070	0.005	--	250	110
14-16	0.02	0.67	1.3	0.200	0.013	--	160	80
17-20	<0.01	0.66	1.5	0.110	0.007	--	130	94
21-23	<0.01	1.2	1.2	0.380	0.013	--	130	68
23-24	<0.01	0.92	1.2	0.320	0.012	--	77	47
24-24	<0.01	0.67	1.2	0.200	0.011	--	75	53
31...	<0.01	0.97	1.2	0.045	0.008	--	110	86
MAR 31-								
APR 02	<0.01	0.77	1.1	0.150	0.007	--	110	96
04-05	<0.01	0.57	1.0	0.100	0.005	--	120	95
05-07	<0.01	0.55	1.2	0.110	0.004	--	120	89
07-09	<0.01	0.47	1.1	0.120	0.007	--	160	72
09-11	<0.01	0.62	1.1	0.090	0.007	--	120	71
11-12	<0.01	0.71	0.99	0.110	0.008	--	120	94
12-14	<0.01	1.8	0.93	0.310	0.007	--	93	69
14-18	<0.01	1.1	1.0	0.190	0.010	--	100	74
21-24	<0.01	0.70	1.1	0.095	0.012	--	120	120
24-25	<0.01	1.1	1.2	0.110	0.011	--	130	130
25-28	<0.01	0.68	1.0	0.075	0.008	--	92	110
28-30	0.01	0.76	0.96	0.060	0.011	--	120	120
APR 30-								
MAY 01	<0.01	0.73	0.94	0.080	0.008	--	120	120
01-02	<0.01	0.78	0.93	0.090	0.006	--	110	100
02-05	<0.01	0.85	0.85	0.070	0.008	--	110	120
05-08	<0.01	0.81	0.96	0.080	0.010	--	120	140
08-08	<0.01	0.79	0.92	0.120	0.008	--	99	110
08-09	<0.01	0.80	0.81	0.150	0.006	--	97	94
09-12	0.01	0.68	0.77	0.110	0.006	--	100	100
12-15	<0.01	0.84	0.88	0.140	0.011	--	100	130
15-16	<0.01	0.84	0.86	0.160	0.006	--	97	97
16-19	<0.01	0.80	0.86	0.120	0.010	--	100	110
19-23	<0.01	0.90	0.77	0.140	0.006	--	100	120
23-26	<0.01	0.82	0.91	0.110	0.006	--	110	160
26-27	<0.01	1.2	1.0	0.220	0.006	--	110	120
27-31	0.02	1.0	0.80	0.095	0.013	--	120	130
31-31	<0.01	0.96	0.89	0.110	0.008	--	120	110
MAY 31-								
JUN 01	<0.01	0.78	0.90	0.380	0.006	--	100	120
01-02	<0.01	0.79	0.85	0.280	0.007	--	92	110
02-06	<0.01	0.92	0.93	0.130	0.011	--	120	150
06-09	<0.01	0.78	1.0	0.085	0.013	--	120	180
09-13	<0.01	0.73	1.1	0.090	0.023	--	120	180
13-14	<0.01	0.81	1.1	0.130	0.014	--	110	170
14-16	<0.01	1.2	1.1	0.110	0.017	--	120	160
20-23	<0.01	0.87	1.1	0.130	0.026	--	120	190

STREAMS TRIBUTARY TO LAKE ONTARIO

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0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLATILE, SUS- PENDE (MG/L)
JUN--continued									
23-24	0930	0430	53	25	--	--	--	--	--
24-24	0530	1630	287	85	--	--	--	433	53
24-25	1730	0030	203	80	--	--	--	286	37
25-25	0130	1230	282	200	--	--	--	498	126
25-27	1330	0830	105	50	--	--	--	119	18
JUN 27-									
JUL 01	0930	0830	79	32	--	--	--	84	14
01-05	0915	0815	63	24	--	--	--	--	--
05-07	0920	0820	55	19	--	--	--	--	--
07-11	0930	0830	57	20	--	--	--	--	--
11-14	0910	0810	47	17	--	--	--	--	--
14-18	0910	0810	44	15	--	--	--	--	--
18-21	0935	0835	44	16	--	--	--	--	--
21-25	0950	0850	39	11	--	--	--	--	--
25-28	0925	0825	46	16	--	--	--	--	--
JUL 28-									
AUG 01	1030	0930	41	20	--	--	--	--	--
01-02	1135	1035	37	13	--	--	--	--	--
02-03	1135	0135	128	50	--	--	--	170	27
03-04	0235	0835	105	280	--	--	--	448	54
04-04	0935	2035	60	42	--	--	--	139	26
04-05	2135	1235	102	53	--	--	--	168	25
05-08	1335	0835	60	34	--	--	--	91	15
08-11	0905	0805	49	24	--	--	--	--	--
11-13	0925	0825	48	26	--	--	--	--	--
13-14	0925	1225	148	50	895	28	180	218	30
14-15	1325	0825	168	230	615	60	148	484	59
15-18	0900	0800	68	35	1170	14	199	112	25
18-18	0915	1515	67	31	--	--	--	74	19
21-22	0115	0815	261	34	--	--	--	486	83
22-22	0915	2215	141	120	--	--	--	267	29
25...	1010	--	101	24	--	--	--	--	--
25-26	1640	0540	112	110	--	--	--	419	73
28-29	2040	0340	119	100	--	--	--	354	70
AUG 29-									
SEP 02	0940	0840	65	15	--	--	--	--	--
02-06	0910	0810	57	6.8	--	--	--	--	--
06-08	0905	0005	54	6.7	--	--	--	--	--
08-08	0105	0805	100	23	--	--	--	--	--
08-08	0905	1605	73	16	--	--	--	--	--
08-09	1705	0805	168	88	--	--	--	235	28
09-12	0905	0005	78	22	--	--	--	--	--
12-14	0915	0215	53	N6.7	--	--	--	--	--
14-14	0315	1415	137	39	--	--	--	112	16
14-15	1515	0215	141	31	--	--	--	80	11
15-19	0935	0835	64	21	--	--	--	--	--
19-22	0915	0815	52	21	1030	26	210	--	--
22-26	0915	0815	51	6.2	--	--	--	--	--
26-26	0915	2315	176	70	--	--	--	292	34
27-29	0015	0815	127	110	--	--	--	231	26
SEP 29-									
OCT 03	0925	0825	75	31	--	--	--	72	13

STREAMS TRIBUTARY TO LAKE ONTARIO
0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
JUN--continued								
23-24	<0.01	0.79	1.1	0.130	0.025	--	120	200
24-24	<0.01	0.83	0.96	0.660	0.024	--	81	120
24-25	<0.01	0.90	0.68	0.600	0.018	--	65	89
25-25	<0.01	0.76	0.56	0.750	0.019	--	71	75
25-27	<0.01	1.0	1.0	0.240	0.021	--	110	120
JUN 27-								
JUL 01	<0.01	0.78	1.1	0.210	0.022	--	110	160
01-05	<0.01	0.81	1.1	0.140	0.024	--	120	180
05-07	<0.01	0.80	1.0	0.130	0.022	--	110	190
07-11	<0.01	0.74	1.0	0.150	0.031	--	110	190
11-14	<0.01	0.71	0.95	0.120	0.017	--	120	200
14-18	<0.01	0.80	0.95	0.140	0.018	--	120	210
18-21	<0.01	0.73	0.92	0.140	0.016	--	120	200
21-25	<0.01	0.60	0.84	0.120	0.014	--	120	210
25-28	<0.01	0.68	0.84	0.100	0.016	--	120	220
JUL 28-								
AUG 01	<0.01	0.72	0.76	0.110	0.011	--	100	210
01-02	<0.01	0.52	0.68	0.120	0.014	--	100	210
02-03	<0.01	0.51	0.79	0.280	0.013	--	94	190
03-04	<0.01	0.56	0.93	0.640	0.016	--	78	140
04-04	<0.01	0.58	0.86	0.220	0.022	--	95	150
04-05	<0.01	0.66	0.76	0.300	0.019	--	90	130
05-08	<0.01	0.40	0.79	0.190	0.018	--	97	170
08-11	<0.01	0.61	0.82	0.150	0.017	--	120	210
11-13	<0.01	0.46	0.80	0.160	0.020	--	100	210
13-14	<0.01	0.78	0.75	0.370	0.022	--	97	170
14-15	<0.01	0.56	0.55	0.740	0.046	--	78	100
15-18	<0.01	0.70	0.77	0.180	0.032	--	100	160
18-18	<0.01	0.52	0.77	0.170	0.026	--	100	180
21-22	<0.01	0.51	0.57	0.340	0.015	--	67	94
22-22	<0.01	0.45	0.54	0.440	0.026	--	78	100
25...	0.03	0.63	0.80	0.140	0.028	--	84	150
25-26	<0.01	0.64	0.85	0.920	0.120	--	86	110
28-29	<0.01	2.7	0.69	0.810	0.026	--	88	130
AUG 29-								
SEP 02	<0.01	0.39	0.82	0.110	0.017	--	96	170
02-06	<0.01	0.56	0.80	0.080	0.016	--	93	180
06-08	<0.01	0.43	0.75	0.070	0.015	--	100	190
08-08	<0.01	0.45	0.75	0.110	0.020	--	90	170
08-08	<0.01	0.45	0.68	0.110	0.015	--	82	140
08-09	0.01	0.45	0.74	0.380	0.018	--	67	98
09-12	<0.01	0.42	0.73	0.130	0.016	--	95	150
12-14	<0.01	0.38	0.69	0.080	0.014	--	100	190
14-14	<0.01	0.64	0.61	0.270	0.014	--	77	120
14-15	<0.01	0.54	0.63	0.190	0.014	--	74	140
15-19	<0.01	0.46	0.72	0.160	0.018	--	94	170
19-22	<0.01	0.61	0.77	0.170	0.025	--	100	190
22-26	<0.01	0.55	0.74	0.110	0.018	--	100	200
26-26	<0.01	0.70	0.67	0.480	0.021	--	77	150
27-29	<0.01	0.51	0.59	0.370	0.022	--	80	120
SEP 29-								
OCT 03	<0.01	0.47	0.75	0.210	0.026	--	100	170

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi², flow from 8.45 mi² noncontributing.

PERIOD OF RECORD.--June 1990 to current year.

GAGE.--Ultrasonic velocity meter, water-stage recorder, and crest-stage gage. Datum of gage is 242.66 ft above sea level (levels by Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are fair. 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 21	-----	Unknown	Ice jam	Apr. 14	0745	*1,050	a4.19
Mar. 24	0245	949	a3.88	June 1	2045	(a)	*a4.88

a Backwater from Irondequoit Bay.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	240	163	54	e160	e130	224	214	e163	70	49	62
2	49	170	126	67	e140	e120	204	177	127	59	55	64
3	61	134	105	60	e130	e110	227	143	109	71	151	54
4	62	122	151	45	e120	e110	284	129	93	66	58	54
5	119	112	318	45	e100	e110	235	125	91	56	95	56
6	71	95	228	52	e90	e120	268	117	74	53	71	51
7	57	89	162	61	e80	155	420	114	68	51	60	44
8	49	80	129	e65	e74	219	491	261	84	63	56	98
9	61	71	111	e63	e72	208	558	267	67	56	40	135
10	94	61	109	e60	e72	216	435	200	75	50	56	e80
11	61	47	112	e61	e70	224	307	164	66	62	45	e60
12	50	57	108	e64	e72	200	249	125	63	51	50	e58
13	47	56	93	e64	e76	200	529	138	71	44	50	e55
14	46	56	87	e64	e70	240	908	128	117	56	212	e140
15	43	91	83	e56	e72	368	515	162	79	55	112	e100
16	45	74	97	e62	e74	529	323	190	76	53	72	e70
17	103	71	88	e71	e78	432	277	205	65	55	62	e64
18	104	112	78	e73	e90	294	224	224	63	55	65	e60
19	77	109	76	e66	e150	225	198	176	61	53	64	e58
20	82	123	77	e64	e380	204	217	154	56	48	50	e54
21	89	93	113	e63	e1000	284	171	133	49	45	239	e52
22	73	76	183	e66	e950	677	150	122	55	40	209	e50
23	67	67	134	e69	e450	903	135	106	49	41	93	e50
24	62	62	77	e76	e280	844	124	104	208	42	74	e56
25	57	78	92	e83	e230	660	199	e116	249	52	86	e60
26	59	66	50	e75	e190	424	206	107	99	41	94	96
27	52	96	56	e76	e160	373	164	e174	94	49	67	205
28	56	508	58	e130	e140	453	145	e113	89	53	63	100
29	60	494	52	e330	---	352	129	e100	82	52	85	77
30	55	253	57	e280	---	318	122	e91	72	42	65	70
31	66	---	51	e190	---	281	---	e78	---	51	55	---
TOTAL	2044	3763	3424	2655	5570	9983	8638	4657	2714	1635	2603	2233
MEAN	65.9	125	110	85.6	199	322	288	150	90.5	52.7	84.0	74.4
MAX	119	508	318	330	1000	903	908	267	249	71	239	205
MIN	43	47	50	45	70	110	122	78	49	40	40	44

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	90.9	130	161	164	153
MAX	124	208	226	286	199
(WY)	1991	1993	1991	1993	1994
MIN	54.9	63.3	88.6	85.6	109
(WY)	1992	1992	1992	1994	1992

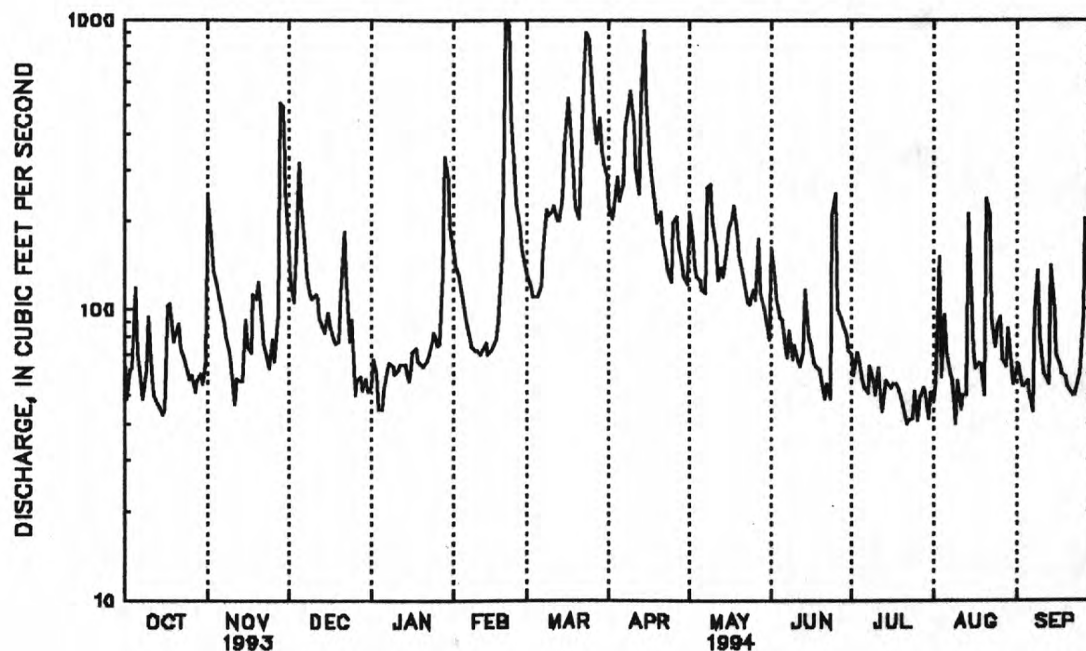
STREAMS TRIBUTARY TO LAKE ONTARIO

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1990 - 1994	
ANNUAL TOTAL	59265		49919		153	
ANNUAL MEAN	162		137		183	
HIGHEST ANNUAL MEAN					137	
LOWEST ANNUAL MEAN					1870	
HIGHEST DAILY MEAN	1870	Apr 2	1000	Feb 21	1870	Apr 2 1993
LOWEST DAILY MEAN	29	Aug 28	40	a	29	Aug 2 1991
ANNUAL SEVEN-DAY MINIMUM	43	Aug 24	44	Jul 20	37	Aug 27 1990
INSTANTANEOUS PEAK FLOW			1050	Apr 14	2130	Apr 3 1993
INSTANTANEOUS PEAK STAGE			b4.88	Jun 1	b6.64	Apr 23 1993
10 PERCENT EXCEEDS	314		272		284	
50 PERCENT EXCEEDS	98		83		99	
90 PERCENT EXCEEDS	51		51		48	

a July 22, Aug. 9.

b Backwater from Irondequoit Bay.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

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0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1989 to current year.

CHEMICAL DATA: 1989-94 (e)

NUTRIENT DATA: 1989-94 (e)

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)
OCT								
04-05	0930	0830	98	14	--	--	--	--
05-08	0930	0830	69	10	--	--	--	--
08-09	1025	1725	45	10	--	--	--	--
09-10	1825	0925	117	15	--	--	--	--
10-12	1025	0925	65	5.3	--	--	--	--
12-14	1005	0905	47	6.6	--	--	--	--
14-17	1125	0645	45	5.0	--	--	--	--
17-17	0745	2245	127	15	--	--	--	--
17-18	2345	0845	130	18	--	--	--	--
18-21	0950	0830	82	6.9	--	--	--	--
20...	1001	--	77	--	--	--	--	--
21-25	1000	0900	69	4.2	--	--	--	--
25-28	0945	0845	56	7.4	--	--	--	--
28-31	0945	0845	57	3.1	--	--	--	--
OCT 31-								
NOV 01								
01-03	1000	1800	177	8.4	--	--	--	--
04-08	1000	0900	100	4.3	--	--	--	--
08-12	0945	0845	62	3.7	--	--	--	--
12-14	1005	1505	56	4.2	--	--	--	--
14-15	1605	0905	80	7.0	--	--	--	--
15-17	0945	1745	75	6.6	--	--	--	--
17-18	1845	0845	108	5.8	--	--	--	--
18-22	0940	0840	106	4.7	--	--	--	--
22-24	0940	0840	67	5.3	--	--	--	--
24-27	1030	1230	69	3.8	1170	14	251	24
27-28	1330	1330	307	45	836	27	186	209
28-29	1430	0930	591	60	589	28	144	229
NOV 29-								
DEC 02	1000	0900	244	19	835	14	191	50
02-04	0935	1235	108	6.5	--	--	--	--
04-05	1335	0835	264	19	--	--	--	--
06-09	1005	0905	154	10	--	--	--	--
JAN								
06-10	1120	0910	61	3.0	--	--	--	--
10-14	0940	0840	63	2.6	--	--	--	--
14-18	1030	0930	64	3.4	1410	--	260	--
18-20	0955	0855	67	4.0	--	--	--	--
20-24	0950	0850	66	3.1	--	--	--	--
24-27	1025	0925	79	3.4	--	--	--	--
27-29	1000	1700	176	7.7	--	--	--	--
JAN 31-								
FEB 03								
03-07	1020	0920	105	4.0	--	--	--	--
10-14	1020	0920	72	3.0	--	--	--	--
14-18	0950	0850	75	2.7	--	--	--	--
18-21	1025	1325	362	25	1550	29	186	--
21-22	1425	0925	976	40	827	29	126	117
22-24	0945	0845	574	21	871	38	162	--
24-28	1015	0915	202	4.7	--	--	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT								
04-05	--	0.02	0.69	0.88	0.070	0.022	110	180
05-08	--	0.02	0.66	0.78	0.065	0.018	100	160
08-09	--	<0.01	0.75	0.77	0.070	0.018	120	180
09-10	--	<0.01	0.84	0.79	0.090	0.019	110	160
10-12	--	<0.01	0.78	0.77	0.055	0.017	110	160
12-14	--	<0.01	0.78	0.73	0.070	0.014	120	190
14-17	--	<0.01	0.66	0.69	0.040	0.011	130	200
17-17	--	<0.01	0.84	0.65	0.095	0.013	110	170
17-18	--	<0.01	0.81	0.50	0.110	0.015	83	130
18-21	--	<0.01	0.65	0.45	0.060	0.019	100	160
20...	--	--	0.30	--	0.020	--	--	--
21-25	--	<0.01	0.62	0.48	0.050	0.014	110	170
25-28	--	0.01	0.70	0.53	0.065	0.012	120	200
28-31	--	0.01	0.61	0.54	0.035	0.012	130	210
OCT 31-								
NOV 01	--	0.02	0.65	0.59	0.060	0.018	120	190
01-03	--	0.01	0.90	0.54	0.080	0.022	140	120
04-08	--	0.01	0.64	0.70	0.050	0.014	130	170
08-12	--	0.03	0.69	0.74	0.040	0.015	130	190
12-14	--	0.04	0.76	0.91	0.050	0.014	120	190
14-15	--	0.07	0.85	0.83	0.065	0.014	120	170
15-17	--	0.03	0.88	0.78	0.070	0.014	110	160
17-18	--	0.03	0.82	0.74	0.060	0.014	120	160
18-22	--	0.04	0.73	0.74	0.050	0.034	120	140
22-24	--	0.03	0.76	0.85	0.045	0.012	150	180
24-27	<10	0.04	0.79	1.0	0.045	0.012	150	180
27-28	29	0.06	1.6	0.82	0.190	0.016	100	110
28-29	29	0.04	1.5	0.94	0.310	0.024	64	70
NOV 29-								
DEC 02	<14	0.04	0.96	1.1	0.110	0.018	93	100
02-04	--	0.04	0.85	1.4	0.065	0.018	120	150
04-05	--	0.02	1.1	1.1	0.130	0.020	100	120
06-09	--	0.03	0.86	1.4	0.080	0.019	100	130
JAN								
06-10	--	0.09	0.60	1.4	0.035	0.012	150	170
10-14	--	0.06	0.60	1.4	0.025	0.010	160	120
14-18	--	0.05	0.56	1.4	0.030	0.013	210	190
18-20	--	0.07	0.67	1.4	0.035	0.010	180	200
20-24	--	0.06	0.57	1.4	0.030	0.008	170	200
24-27	--	0.08	0.64	1.4	0.140	0.008	260	180
27-29	--	0.05	0.64	1.3	0.070	0.010	480	150
JAN 31-								
FEB 03	--	0.06	0.80	1.4	0.050	0.012	280	120
03-07	--	0.05	0.81	1.5	0.045	0.010	230	140
10-14	--	0.05	0.63	1.4	0.030	0.009	180	180
14-18	--	0.06	0.50	1.3	0.030	0.009	240	180
18-21	--	0.09	0.84	1.2	0.170	0.024	310	110
21-22	18	0.09	0.69	1.2	0.190	0.020	170	66
22-24	--	0.07	0.68	1.3	0.140	0.019	150	74
24-28	--	0.06	0.66	1.4	0.050	0.015	210	110

STREAMS TRIBUTARY TO LAKE ONTARIO

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0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)
FEB 28-								
MAR 03	1005	0905	126	3.5	--	--	--	--
03-07	1025	0925	117	4.2	--	--	--	--
07-09	1005	0105	199	7.4	--	--	--	--
09-10	0205	0905	202	6.6	--	--	--	--
10-12	1005	0105	227	4.7	--	--	--	--
12-14	0205	0905	204	4.9	--	--	--	--
14-16	0950	0550	348	17	--	--	--	--
16-17	0650	0850	512	50	--	--	--	124
17-20	1020	1320	276	6.3	--	--	--	--
20-21	1420	0920	223	4.0	--	--	--	--
21-23	0950	0550	582	75	818	46	159	263
23-24	0650	0850	919	60	591	21	131	272
24-27	1000	0500	580	22	676	20	159	--
27-28	0600	0900	413	39	--	--	--	--
28-31	0950	0850	354	6.6	--	--	--	--
MAR 31-								
APR 03	0945	0845	198	3.8	--	--	--	--
03-04	0945	0845	268	6.2	--	--	--	--
04-06	0935	0235	248	5.2	--	--	--	--
06-07	0335	0835	313	8.7	--	--	--	--
07-09	1040	0540	483	21	--	--	--	--
09-11	0640	0940	457	22	--	--	--	--
11-12	0955	1455	266	25	--	--	--	--
12-14	1555	0855	563	40	777	21	178	163
14-18	0930	0830	438	28	803	22	191	--
18-21	0940	0840	206	31	--	--	--	93
21-24	0945	2045	142	34	--	--	--	120
24-25	2145	0845	154	50	--	--	--	203
25-28	1000	0900	185	30	--	--	--	130
28-30	1000	1700	135	36	--	--	--	44
APR 30-								
MAY 01	1800	1700	181	33	--	--	--	224
01-02	1800	0900	199	30	--	--	--	103
02-05	1040	0840	141	33	--	--	--	126
05-08	0935	0035	117	38	--	--	--	207
08-08	0135	2035	265	19	--	--	--	--
08-09	2135	0835	314	38	--	--	--	136
09-12	1045	0845	184	33	--	--	--	122
12-15	0950	0850	131	20	--	--	--	--
15-16	0950	0050	190	21	--	--	--	--
16-16	0150	0850	217	29	--	--	--	--
16-19	0930	0830	200	36	--	--	--	145
19-20	0940	1320	168	15	--	--	--	--
20-23	1420	0920	129	5.3	--	--	--	--
23-26	0935	1235	100	6.1	--	--	--	--
26-27	1335	0835	135	19	--	--	--	--
31-31	1025	1925	78	19	--	--	--	--
MAY 31-								
JUN 01	2025	0725	131	19	--	--	--	--
01-02	0825	0825	169	22	--	--	--	--
02-06	0915	0815	100	17	--	--	--	--
06-09	0945	0845	75	2.4	--	--	--	--
09-13	1035	0835	67	8.4	1130	<10	242	--
13-14	0935	0535	98	8.4	--	--	--	--
14-16	0635	0835	87	15	--	--	--	--
16-20	0945	1245	64	8.9	--	--	--	--
20-23	1030	0930	52	8.3	--	--	--	--
23-24	1015	0915	59	8.8	--	--	--	--
24-24	1015	2115	315	32	--	--	--	76
24-25	2215	0515	263	45	--	--	--	97
25-25	0615	1715	281	38	--	--	--	73
25-27	1815	0915	105	18	--	--	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB 28-								
MAR 03	--	0.06	0.48	1.4	0.035	0.011	180	130
03-07	--	0.06	0.47	1.4	0.045	0.010	250	140
07-09	--	0.05	0.83	1.3	0.055	0.009	310	120
09-10	--	0.04	0.89	1.3	0.055	0.009	210	110
10-12	--	0.04	0.71	1.3	0.060	0.008	230	110
12-14	--	0.03	0.73	1.3	0.055	0.009	260	110
14-16	--	0.03	--	1.3	0.110	0.010	220	86
16-17	12	0.06	--	1.3	0.180	0.017	150	61
17-20	--	0.03	0.90	1.4	0.060	0.011	170	92
20-21	--	0.02	0.57	1.3	0.050	0.008	180	110
21-23	31	<0.01	0.99	1.1	0.280	0.016	110	65
23-24	28	0.03	0.73	1.1	0.230	0.018	72	48
24-27	--	<0.01	0.82	1.1	0.130	0.016	82	62
27-28	--	0.30	1.4	0.59	0.210	0.014	100	56
28-31	--	0.01	0.74	1.2	0.070	0.012	110	79
MAR 31-								
APR 03	--	<0.01	0.91	1.1	0.075	0.008	120	100
03-04	--	0.02	0.31	1.1	0.100	0.006	130	97
04-06	--	0.02	0.45	0.97	0.060	0.005	120	96
06-07	--	0.03	0.68	1.1	0.085	0.006	130	91
07-09	--	<0.01	0.73	1.0	0.065	0.008	150	70
09-11	--	<0.01	0.62	1.0	0.100	0.008	130	71
11-12	--	<0.01	1.1	1.0	0.120	0.009	120	100
12-14	15	0.02	0.84	0.86	0.00	0.011	96	71
14-18	--	0.01	1.5	0.89	0.170	0.009	100	72
18-21	13	<0.01	0.59	0.93	0.140	0.007	120	99
21-24	16	0.01	0.98	1.0	0.180	0.007	120	120
24-25	22	0.04	1.0	1.1	0.260	0.009	130	130
25-28	15	0.06	0.99	0.97	0.170	0.008	120	110
28-30	27	0.04	1.1	0.82	0.290	0.009	120	120
APR 30-								
MAY 01	25	0.03	0.84	0.86	0.230	0.008	120	120
01-02	11	0.03	0.98	0.86	0.150	0.007	110	97
02-05	16	<0.01	0.89	0.78	0.190	0.009	120	110
05-08	30	0.02	0.80	0.80	0.290	0.009	130	130
08-08	--	<0.01	0.99	0.83	0.160	0.007	120	120
08-09	20	<0.01	0.75	0.73	0.180	0.008	90	89
09-12	19	<0.01	0.76	0.68	0.190	0.008	110	97
12-15	--	<0.01	0.71	0.78	0.330	0.010	120	120
15-16	--	<0.01	0.84	0.76	0.350	0.009	120	120
16-16	--	0.02	0.78	0.77	0.350	0.008	100	98
16-19	17	0.01	0.91	0.78	0.220	0.011	100	100
19-20	--	0.01	1.1	0.70	0.240	0.009	110	110
20-23	--	0.02	1.0	0.68	0.080	0.010	120	130
23-26	--	0.03	1.1	0.75	0.085	0.009	120	150
26-27	--	0.05	0.88	0.90	0.110	0.012	120	140
31-31	--	0.03	0.97	0.70	0.110	0.012	130	150
MAY 31-								
JUN 01	--	0.04	1.1	0.78	0.130	0.010	120	140
01-02	--	0.04	1.1	0.76	0.140	0.010	93	110
02-06	--	0.04	0.93	0.80	0.090	0.015	110	140
06-09	--	0.03	0.88	0.83	0.100	0.015	130	170
09-13	--	0.04	0.70	0.83	0.100	0.013	130	170
13-14	--	0.04	0.97	0.84	0.095	0.013	130	180
14-16	--	<0.01	1.2	1.1	0.120	0.022	130	190
16-20	--	0.08	1.0	0.83	0.120	0.023	130	180
20-23	--	0.03	0.81	0.72	0.110	0.020	130	180
23-24	--	0.05	1.0	0.83	0.110	0.026	120	180
24-24	12	0.05	1.0	0.85	0.190	0.022	67	84
24-25	18	0.06	0.96	0.73	0.230	0.027	72	82
25-25	11	0.06	0.96	0.66	0.200	0.032	75	75
25-27	--	0.07	0.87	0.87	0.140	0.033	110	120

STREAMS TRIBUTARY TO LAKE ONTARIO

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0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)
JUN 27-								
JUL 01	1005	0905	83	15	--	--	--	--
01-05	0940	0840	67	15	--	--	--	--
05-07	0950	0850	50	15	--	--	--	--
07-11	0905	0805	56	14	--	--	--	--
11-14	0950	0850	51	12	--	--	--	--
14-18	0940	0840	55	11	--	--	--	--
18-21	1005	0905	51	7.9	--	--	--	--
21-25	1015	0915	41	7.1	--	--	--	--
25-28	0945	0845	49	13	--	--	--	--
JUL 28-								
AUG 01	0940	0840	50	6.6	--	--	--	--
01-02	1110	1010	48	6.3	--	--	--	--
02-03	1110	0410	105	8.6	--	--	--	--
03-04	0510	1010	113	45	--	--	--	66
04-05	1000	0100	36	22	--	--	--	--
05-05	0200	1700	100	20	--	--	--	--
05-08	1800	0900	68	14	--	--	--	--
08-11	0840	0840	49	12	--	--	--	--
11-13	0955	0855	48	7.6	--	--	--	--
13-14	0955	1655	133	15	960	10	183	46
14-15	1755	0855	180	50	593	22	120	86
15-18	0930	0830	71	20	910	11	182	37
18-21	0950	0050	62	13	--	--	--	--
21-22	0150	0850	254	42	--	--	--	93
22-25	0945	0845	99	27	--	--	--	--
25-28	1035	1335	82	16	--	--	--	--
28-29	1435	0935	84	16	--	--	--	--
AUG 29-								
SEP 02	1010	0910	63	14	--	--	--	--
02-06	0935	0835	56	8.2	--	--	--	--
06-08	0930	0030	47	8.2	--	--	--	--
08-08	0130	0830	86	8.5	--	--	--	--
08-08	0930	2030	79	6.7	--	--	--	--
08-09	2130	0830	183	26	--	--	--	--
09-12	0930	0830	77	18	--	--	--	--
12-14	0945	0245	62	9.0	--	--	--	--
14-14	0645	1745	140	15	--	--	--	--
14-15	1845	0845	116	24	--	--	--	--
15-19	1000	0900	70	14	--	--	--	--
19-22	0940	0840	54	12	1020	15	203	--
22-26	0935	0835	54	8.7	--	--	--	--
26-27	0935	0235	150	31	--	--	--	79
27-29	0935	0835	123	36	--	--	--	70
SEP 29-								
OCT 03	0950	0850	68	9.4	--	--	--	--

STREAMS TRIBUTARY TO LAKE ONTARIO
0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
JUN 27-								
JUL 01	--	0.10	0.93	0.95	0.130	0.033	120	140
01-05	--	0.04	1.0	0.89	0.120	0.030	120	170
05-07	--	0.02	0.82	0.76	0.140	0.022	120	180
07-11	--	0.04	0.82	0.76	0.130	0.025	120	180
11-14	--	0.01	0.76	0.65	0.100	0.022	140	190
14-18	--	0.02	0.70	0.64	0.095	0.019	130	190
18-21	--	0.03	1.0	0.66	0.090	0.018	120	190
21-25	--	0.05	0.68	0.59	0.095	0.022	69	200
25-28	--	0.03	0.74	0.61	0.110	0.022	120	200
JUL 28-								
AUG 01	--	0.01	0.62	0.57	0.085	0.019	120	210
01-02	--	0.03	0.73	0.53	0.075	0.021	100	200
02-03	--	0.04	0.55	0.57	0.075	0.023	90	200
03-04	10	0.05	0.67	0.98	0.140	0.025	48	130
04-05	--	0.06	0.64	0.82	0.120	0.028	89	150
05-05	--	0.05	0.60	0.74	0.110	0.032	85	140
05-08	--	0.02	0.55	0.69	0.110	0.028	95	150
08-11	--	0.02	0.56	0.68	0.100	0.024	120	180
11-13	--	0.01	0.40	0.64	0.080	0.019	100	200
13-14	5	0.02	0.50	0.64	0.100	0.021	110	170
14-15	11	0.03	0.43	0.55	0.180	0.028	69	91
15-18	8	<0.01	0.50	0.65	0.160	0.027	94	140
18-21	--	<0.01	0.54	0.63	0.100	0.023	110	180
21-22	17	0.02	0.58	0.63	0.170	0.025	77	110
22-25	--	0.02	0.60	0.57	0.150	0.030	92	120
25-28	--	0.02	0.86	0.69	0.120	0.026	89	140
28-29	--	0.02	0.86	0.65	0.120	0.026	99	150
AUG 29-								
SEP 02	--	0.02	0.49	0.72	0.110	0.024	100	150
02-06	--	<0.01	0.46	0.71	0.095	0.020	110	180
06-08	--	<0.01	0.52	0.62	0.070	0.016	110	180
08-08	--	<0.02	0.46	0.50	0.080	0.013	110	150
08-08	--	0.02	0.47	0.63	0.075	0.021	88	160
08-09	--	0.03	0.45	0.71	0.120	0.018	76	120
09-12	--	0.02	0.61	0.66	0.095	0.018	89	130
12-14	--	<0.01	0.64	0.58	0.065	0.014	100	170
14-14	--	0.02	0.57	0.60	0.120	0.015	100	160
14-15	--	0.03	0.38	0.56	0.140	0.018	70	110
15-19	--	0.03	0.62	0.61	0.095	0.020	100	160
19-22	--	0.01	0.46	0.64	0.100	0.021	110	190
22-26	--	0.02	0.50	0.63	0.070	0.018	110	190
26-27	10	0.02	0.48	0.64	0.170	0.020	89	160
27-29	9	0.03	0.62	0.58	0.180	0.025	79	110
SEP 29-								
OCT 03	--	0.02	0.58	0.71	0.090	0.023	110	160

STREAMS TRIBUTARY TO LAKE ONTARIO
04232100 STERLING CREEK AT STERLING, NY

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LOCATION.--Lat 43°19'31", long 76°38'51", Cayuga County, Hydrologic Unit 04140101, on right bank at Sterling, 25 ft downstream from bridge on State Highway 104A, 1.8 mi southwest of Sterling Valley, and 1.9 mi upstream from Sterling Valley Creek.

DRAINAGE AREA.--44.4 mi².

PERIOD OF RECORD.--April 1957 to current year.

REVISED RECORDS.--WDR NY-85-3: 1960(M), 1979-80(M).

GAGE.--Water-stage recorder. Datum of gage is 264.69 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 630 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb.28	0745	ice jam	*5.02	Mar.25	0600	*806	4.15

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	21	139	e42	e120	e92	312	81	44	12	3.6	7.1
2	11	29	104	e40	e110	e82	318	99	36	12	3.3	5.8
3	13	32	94	e39	e96	e76	370	90	29	14	7.4	5.1
4	12	42	101	e36	e88	e70	353	71	32	9.0	7.7	4.2
5	14	54	173	e35	e76	e78	282	61	24	7.2	8.9	3.7
6	12	65	144	e34	e74	e72	275	60	19	6.5	6.8	3.2
7	9.8	57	130	e33	e70	e66	367	61	15	9.8	5.1	3.5
8	8.6	46	107	e33	e68	e72	365	76	13	9.6	4.2	3.4
9	7.9	37	86	e32	e66	e78	290	84	12	12	3.6	5.9
10	8.1	32	77	e32	e64	e82	225	99	11	15	3.3	21
11	7.1	29	96	e32	e62	e90	192	86	10	9.7	3.2	14
12	6.9	28	77	e31	e60	e100	152	78	11	7.5	2.8	5.4
13	6.2	26	75	e31	e59	94	330	90	9.8	6.4	2.8	3.6
14	6.0	28	72	e31	e58	107	390	64	14	5.6	9.5	3.5
15	6.0	43	59	e31	e58	145	293	62	12	5.1	6.0	3.6
16	6.7	40	60	e30	e62	203	236	68	10	5.7	4.1	3.2
17	11	38	51	e30	e60	223	211	75	8.8	5.0	3.4	3.2
18	20	43	55	e30	e58	173	159	81	7.3	4.4	9.7	2.9
19	15	40	46	e30	e82	133	124	82	6.3	4.3	7.6	2.7
20	12	41	45	e30	e120	123	105	88	6.1	3.8	5.9	2.5
21	17	43	70	e29	e200	147	90	79	6.0	3.3	14	2.5
22	19	51	e90	e29	e260	338	79	74	5.5	3.2	13	2.6
23	16	46	e82	e29	e220	456	72	71	4.8	2.9	11	2.5
24	15	41	e74	e29	e190	615	63	64	11	2.9	9.3	2.6
25	14	40	e66	e28	e180	772	63	61	12	3.3	7.6	2.8
26	12	31	e60	e28	e150	666	67	67	9.2	4.0	6.7	2.7
27	19	32	e57	e28	e130	577	74	77	13	4.1	5.2	4.3
28	22	256	e52	e50	e110	551	68	59	18	3.7	4.9	5.5
29	15	244	e50	e90	---	483	62	51	18	3.7	8.8	5.0
30	12	205	e47	e160	---	404	57	41	14	3.3	8.5	4.5
31	11	---	e44	e140	---	322	---	32	---	3.8	7.8	---
TOTAL	377.3	1760	2483	1302	2951	7490	6044	2232	441.8	202.8	205.7	142.5
MEAN	12.2	58.7	80.1	42.0	105	242	201	72.0	14.7	6.54	6.64	4.75
MAX	22	256	173	160	260	772	390	99	44	15	14	21
MIN	6.0	21	44	28	58	66	57	32	4.8	2.9	2.8	2.5
CFSM	.27	1.32	1.80	.95	2.37	5.44	4.54	1.62	.33	.15	.15	.11
IN.	.32	1.47	2.08	1.09	2.47	6.28	5.06	1.87	.37	.17	.17	.12

e Estimated

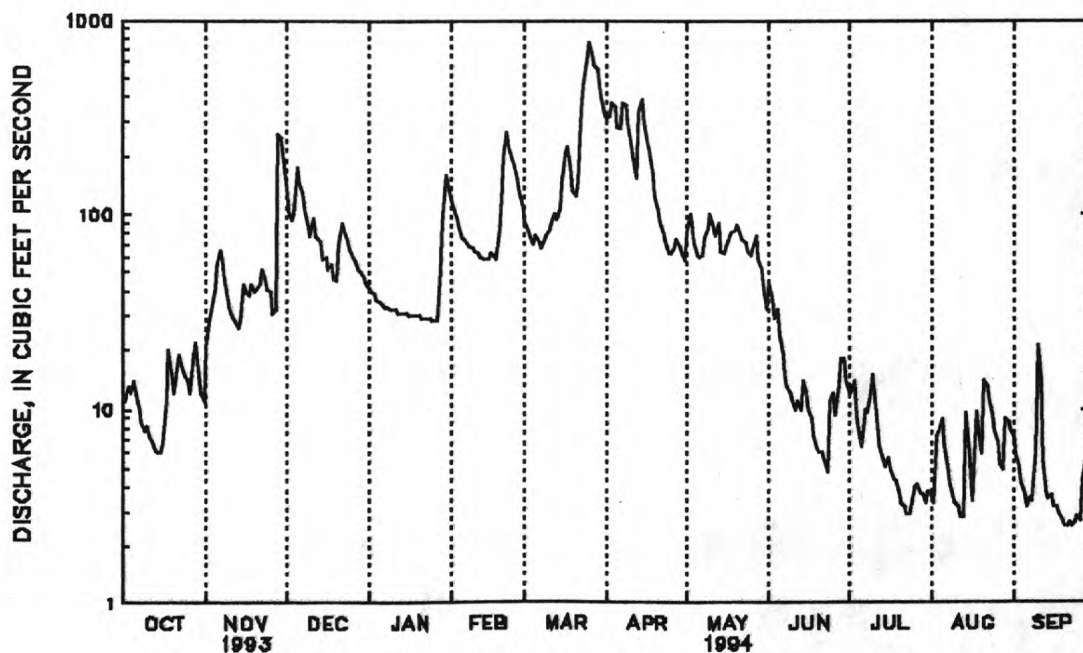
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

MEAN	27.0	59.1	80.7	74.1	101	180	145	61.8	29.2	15.3	11.4	15.7
MAX	125	168	186	152	299	387	357	170	160	96.9	120	100
(WY)	1987	1978	1960	1959	1981	1979	1993	1976	1992	1992	1992	1975
MIN	1.45	4.10	5.91	9.39	15.2	56.5	42.2	21.5	6.12	2.30	1.07	1.16
(WY)	1958	1961	1961	1961	1963	1981	1981	1987	1988	1963	1966	1964

STREAMS TRIBUTARY TO LAKE ONTARIO
04232100 STERLING CREEK AT STERLING, NY

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1957 - 1994	
ANNUAL TOTAL	27166.3		25632.1		66.6	
ANNUAL MEAN	74.4		70.2		114	
HIGHEST ANNUAL MEAN					1976	
LOWEST ANNUAL MEAN					36.1	
HIGHEST DAILY MEAN	1020	Apr 2	772	Mar 25	2170	Mar 22 1980
LOWEST DAILY MEAN	2.9	Aug 30	2.5	a	.37	b
ANNUAL SEVEN-DAY MINIMUM	3.2	Aug 27	2.6	Sep 19	.60	Sep 10 1966
INSTANTANEOUS PEAK FLOW			806	Mar 25	1760	Mar 22 1980
INSTANTANEOUS PEAK STAGE			c5.02	Feb 28	5.99	Mar 22 1980
INSTANTANEOUS LOW FLOW			2.5	d	.32	Sep 14 1966
ANNUAL RUNOFF (CFSM)	1.68		1.58		1.50	
ANNUAL RUNOFF (INCHES)	22.76		21.48		20.39	
10 PERCENT EXCEEDS	195		176		156	
50 PERCENT EXCEEDS	35		33		35	
90 PERCENT EXCEEDS	5.1		3.9		3.4	

a Sep. 20, 21, 23.
b Sep. 14, 15, 1966
c Result of ice jam.
d Many days in Sep.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

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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.

REVISED RECORDS.--WSP 2112: Drainage area.

REMARKS.--Area of water surface, 67.6 mi². Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. For table of diversion, see station 01528700. 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 CURRENT YEAR.--Maximum elevation, 445.30 ft, July 15; minimum, 443.46ft, Jan. 11,12..

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444.36	444.44	444.63	443.91	443.60	443.99	446.12	445.46	445.31	445.12	444.88	445.34
2	444.32	444.42	444.57	443.97	443.59	443.96	446.14	445.40	445.32	445.10	444.89	445.31
3	444.42	444.38	444.57	443.97	443.58	444.06	446.24	445.32	445.27	445.15	444.91	445.25
4	444.35	444.36	444.56	444.01	443.58	444.03	446.31	445.27	445.27	445.19	444.85	445.29
5	444.38	444.38	444.71	443.97	443.61	443.99	446.33	445.23	445.27	445.14	444.94	445.26
6	444.36	444.45	444.69	443.92	443.61	443.92	446.38	445.17	445.25	445.12	444.92	445.23
7	444.29	444.46	444.68	443.91	443.64	443.89	446.51	445.12	445.25	445.14	444.81	445.22
8	444.32	444.43	444.66	443.86	443.65	443.95	446.53	445.11	445.24	445.13	444.82	445.21
9	444.36	444.42	444.59	443.81	443.70	443.97	446.46	445.05	445.20	445.11	444.80	445.19
10	444.36	444.43	444.54	443.75	443.67	444.02	446.45	445.02	445.16	445.13	444.86	445.23
11	444.30	444.42	444.60	443.66	443.63	444.02	446.42	444.96	445.14	445.17	444.78	445.18
12	444.25	444.46	444.53	443.66	443.59	443.97	446.37	444.94	445.16	445.11	444.76	445.13
13	444.31	444.41	444.47	443.63	443.54	443.96	446.42	444.91	445.18	445.12	444.76	445.10
14	444.28	444.43	444.44	443.61	443.52	443.97	446.50	444.90	445.39	445.16	444.83	445.15
15	444.23	444.46	444.41	443.58	443.48	443.99	446.47	444.91	445.45	445.11	444.90	445.14
16	444.20	444.43	444.38	443.55	443.51	444.09	446.47	444.96	445.49	445.11	444.82	445.08
17	444.25	444.42	444.29	443.51	443.48	444.13	446.47	445.00	445.48	445.12	444.81	445.09
18	444.30	444.47	444.23	443.54	443.49	444.13	446.41	445.04	445.47	445.06	445.10	445.13
19	444.30	444.40	444.21	443.49	443.45	444.15	446.35	445.05	445.46	445.06	445.13	445.06
20	444.29	444.42	444.16	443.48	443.46	444.15	446.29	445.06	445.44	445.08	445.06	444.99
21	444.27	444.39	444.16	443.45	443.70	444.11	446.21	445.08	445.36	445.01	445.23	444.95
22	444.29	444.41	444.13	443.48	443.86	444.27	446.12	445.09	445.31	444.95	445.34	444.94
23	444.33	444.40	444.12	443.45	443.89	444.56	446.02	445.11	445.27	444.97	445.31	445.01
24	444.27	444.38	444.07	443.48	443.97	444.97	445.93	445.12	445.22	444.96	445.23	445.02
25	444.29	444.37	444.10	443.50	444.03	445.44	445.88	445.15	445.18	444.94	445.24	444.96
26	444.29	444.33	444.12	443.52	444.09	445.57	445.81	445.18	445.12	444.95	445.27	445.00
27	444.28	444.32	444.10	443.44	444.05	445.67	445.75	445.22	445.15	444.96	445.28	444.95
28	444.29	444.54	444.07	443.46	444.01	445.90	445.69	445.20	445.18	444.95	445.25	444.92
29	444.29	444.67	443.98	443.55	---	446.00	445.57	445.20	445.12	444.97	445.32	444.88
30	444.31	444.69	443.95	443.59	---	446.06	445.52	445.19	445.09	444.93	445.31	444.90
31	444.37	---	443.91	443.59	---	446.07	---	445.20	---	444.91	445.26	---
MEAN	444.31	444.43	444.34	443.65	443.68	444.48	446.20	445.12	445.27	445.06	445.02	445.10
MAX	444.42	444.69	444.71	444.01	444.09	446.07	446.53	445.46	445.49	445.19	445.34	445.34
MIN	444.20	444.32	443.91	443.44	443.45	443.89	445.52	444.90	445.09	444.91	444.76	444.88

CAL YR 1993	MEAN 445.04	MAX 448.89	MIN 443.80
WTR YR 1994	MEAN 444.73	MAX 446.53	MIN 443.44

STREAMS TRIBUTARY TO LAKE ONTARIO

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY

(Formerly published as Keuka Lake at Hammondsport)

LOCATION.--Lat 42°24'22", long 77°13'08", Steuben County, Hydrologic Unit 04140201, on left bank of Keuka Inlet at end of Liberty Street extension at Hammondsport, and 300 ft upstream from mouth.

DRAINAGE AREA.--Keuka Inlet 25.0 mi²; Keuka Lake at mouth 182 mi².

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to October 1, 1975, at datum 710.00 ft higher.

REMARKS.--Lake regulated by village of Penn Yan; prior to July 1962, by New York State Electric and Gas Corp. Area of water surface, 18.3 mi². During each year, a large part of flow from 45.5 mi² of drainage area of Mud Creek (Susquehanna River basin) is diverted into Keuka Lake for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 719.35 ft, June 24, 1972; minimum daily, 711.40 ft, Feb. 2, 3, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 715.04 ft, Apr. 20; minimum recorded, 712.39 ft, Mar. 13, but may have been lower during periods of no gage-height record.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	714.09	713.52	713.53	---	---	---	714.10	714.77	714.58	714.61	714.09	714.07
2	714.06	713.47	713.46	---	---	---	714.11	714.77	714.58	714.56	714.08	714.04
3	714.07	713.42	713.43	---	---	---	714.17	714.75	714.59	714.56	714.06	714.02
4	714.03	713.37	713.41	---	---	---	714.23	714.74	714.59	714.49	714.03	714.00
5	714.06	713.35	713.49	---	---	---	714.22	714.73	714.59	714.44	714.06	713.97
6	714.02	713.34	713.46	---	---	---	714.22	714.71	714.58	714.47	714.02	713.94
7	714.00	713.30	713.44	---	---	712.67	714.33	714.71	714.59	714.46	713.99	713.91
8	714.00	713.25	713.40	---	---	712.52	714.43	714.74	714.62	714.43	713.97	713.90
9	714.00	713.20	713.34	---	---	712.51	714.46	714.74	714.58	714.39	713.96	713.89
10	714.00	713.17	713.28	---	---	712.52	714.50	714.76	714.58	714.34	713.96	713.88
11	713.95	713.14	713.24	---	---	712.50	714.53	714.76	714.58	714.31	713.92	713.85
12	713.93	713.14	713.17	---	---	712.54	714.54	714.74	714.59	714.27	713.92	713.82
13	713.93	713.12	713.09	---	---	712.46	714.65	714.72	714.63	714.26	713.91	713.80
14	713.90	713.14	713.04	---	---	712.48	714.78	714.69	714.86	714.27	714.01	713.82
15	713.87	713.16	712.98	---	---	712.51	714.81	714.66	714.93	714.26	714.02	713.82
16	713.86	713.16	712.96	---	---	712.58	714.85	714.64	714.82	714.25	714.00	713.79
17	713.86	713.23	712.89	---	---	712.78	714.92	714.62	714.71	714.25	714.00	713.79
18	713.88	713.36	712.84	---	712.62	712.75	714.94	714.62	714.58	714.23	714.11	713.80
19	713.87	713.36	712.82	---	712.59	712.64	714.94	714.61	714.48	714.21	714.08	713.76
20	713.86	713.35	712.78	---	712.73	712.61	714.92	714.59	714.38	714.21	714.07	713.73
21	713.84	713.33	712.75	---	712.96	712.60	714.90	714.57	714.34	714.19	714.14	713.73
22	713.79	713.33	712.72	---	712.71	712.73	714.88	714.55	714.35	714.18	714.19	713.72
23	713.75	713.32	712.69	---	712.88	712.98	714.84	714.54	714.33	714.17	714.16	713.77
24	713.67	713.32	712.62	---	712.82	713.38	714.80	714.53	714.38	714.16	714.13	713.75
25	713.66	713.29	712.57	---	---	713.81	714.80	714.53	714.41	714.16	714.13	713.74
26	713.63	713.25	712.52	---	---	713.90	714.78	714.53	714.40	714.15	714.13	713.75
27	713.62	713.24	712.46	---	---	713.98	714.79	714.55	714.48	714.14	714.12	713.81
28	713.62	713.49	---	---	---	714.12	714.78	714.53	714.63	714.15	714.08	713.78
29	713.57	713.64	---	---	---	714.15	714.74	714.52	714.64	714.13	714.11	713.77
30	713.54	713.60	---	---	---	714.14	714.75	714.50	714.64	714.11	714.09	713.77
31	713.54	---	---	---	---	714.11	---	714.50	---	714.10	714.08	---
MEAN	713.85	713.31	---	---	---	---	714.62	714.64	714.57	714.29	714.05	713.84
MAX	714.09	713.64	---	---	---	---	714.94	714.77	714.93	714.61	714.19	714.07
MIN	713.54	713.12	---	---	---	---	714.10	714.50	714.33	714.10	713.91	713.72

STREAMS TRIBUTARY TO LAKE ONTARIO
04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

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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 mi².

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 (revised) above sea level. Prior to Sept. 6, 1991 at datum of 444.67 ft 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 mi² of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	243	468	e160	e52	354	754	263	77	328	24	61
2	46	217	463	e150	e50	355	671	272	62	322	24	61
3	46	200	431	e150	e48	371	714	228	59	316	24	60
4	46	198	445	e140	e47	369	733	165	54	305	23	61
5	46	195	525	e130	e46	351	683	163	54	222	23	61
6	45	191	480	e120	e46	342	589	161	53	151	22	54
7	45	187	459	e115	e45	341	571	162	54	240	22	44
8	45	198	461	e110	e45	350	379	167	53	229	22	45
9	46	212	468	e105	e44	344	338	166	53	247	22	44
10	45	171	467	e100	e43	374	333	169	51	245	21	44
11	45	68	433	e95	e42	376	327	202	49	142	21	44
12	51	60	409	e90	e42	364	343	237	48	71	20	44
13	64	26	388	e60	e42	365	453	229	54	59	21	44
14	64	27	373	39	e42	388	422	227	226	44	23	45
15	63	36	320	e39	e42	447	375	230	660	34	20	44
16	63	26	351	e39	e41	506	345	228	905	31	19	44
17	64	50	348	e39	e50	446	285	185	988	31	18	45
18	68	51	339	e40	e70	419	258	156	969	31	24	45
19	80	50	337	e40	e90	400	280	153	916	32	19	43
20	89	83	331	e40	e400	383	337	162	434	35	17	40
21	141	80	337	e40	e800	411	329	158	50	31	21	40
22	278	85	340	e40	e200	763	313	146	49	27	18	40
23	263	102	309	e40	e210	1110	309	143	48	26	17	43
24	254	102	305	e40	225	1060	311	138	52	26	16	41
25	120	108	290	e40	288	889	328	141	53	26	17	41
26	26	107	e270	e40	307	762	308	143	49	26	55	43
27	38	108	e260	e40	325	870	292	123	90	25	114	45
28	98	212	e250	e55	344	866	268	106	146	25	116	69
29	248	350	e240	e68	---	828	263	105	159	25	87	90
30	237	503	e200	e62	---	821	249	104	240	25	61	91
31	236	---	e160	e56	---	797	---	86	---	24	62	---
TOTAL	3046	4246	11257	2322	4026	16822	12160	5318	6755	3401	1013	1516
MEAN	98.3	142	363	74.9	144	543	405	172	225	110	32.7	50.5
MAX	278	503	525	160	800	1110	754	272	988	328	116	91
MIN	26	26	160	39	41	341	249	86	48	24	16	40

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

MEAN	119	182	236	203	208	309	337	251	196	112	86.5	89.4
MAX	404	534	532	465	421	601	737	629	676	892	450	256
(WY)	1978	1978	1978	1978	1978	1976	1993	1984	1972	1972	1972	1987
MIN	14.6	28.8	25.4	18.3	19.2	31.8	44.5	22.2	17.2	21.1	13.7	7.14
(WY)	1989	1979	1981	1966	1967	1989	1965	1988	1980	1985	1983	1982

TRIBUTARY TO LAKE ONTARIO
04232482 KEUKA LAKE OUTLET AT DRESDEN, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1965 - 1994	
ANNUAL TOTAL	90534		71882		196	
ANNUAL MEAN	248		197		362	
HIGHEST ANNUAL MEAN					81.1	
LOWEST ANNUAL MEAN					1978	
HIGHEST DAILY MEAN	1080	Mar 30	1110	Mar 23	2200	Jun 22 1972
LOWEST DAILY MEAN	18	Jun 3	16	Aug 24	3.2	a
ANNUAL SEVEN-DAY MINIMUM	21	Aug 7	18	Aug 19	3.4	Sep 4 1982
INSTANTANEOUS PEAK FLOW			1720	Mar 24	b4000	Jun 22 1972
INSTANTANEOUS PEAK STAGE			6.19	Feb 21	c10.37	Jun 22 1972
INSTANTANEOUS LOW FLOW			16	d	3.2	f
10 PERCENT EXCEEDS	626		445		445	
50 PERCENT EXCEEDS	194		107		140	
90 PERCENT EXCEEDS	24		26		22	

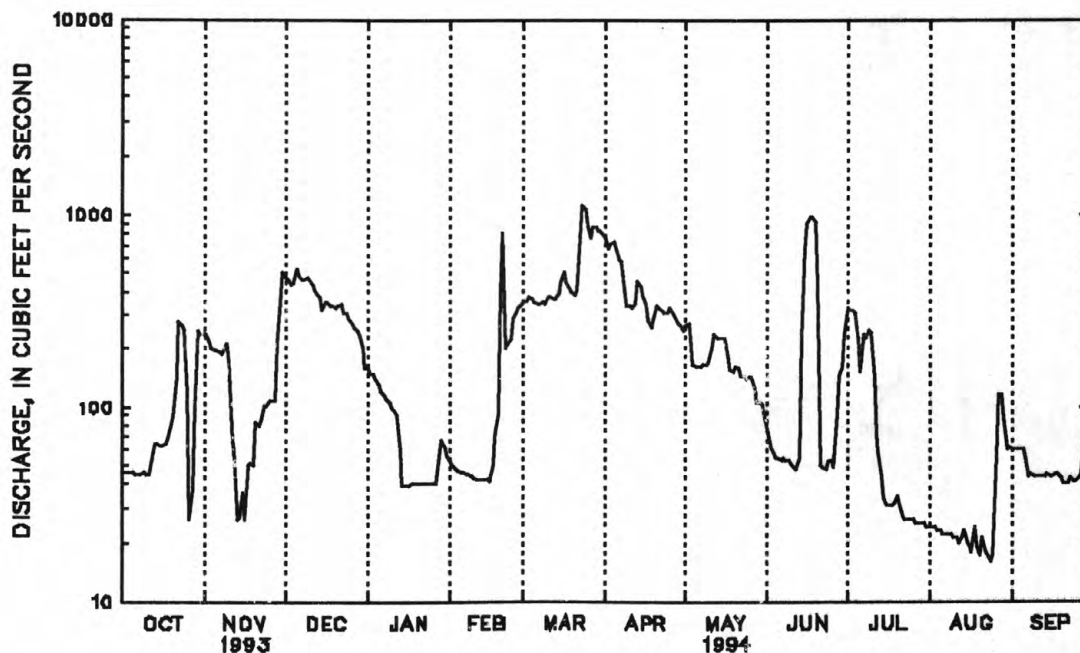
a Sep 9, 10, 1982.

b From rating curve extended above 730 ft³/s on basis of contracted-opening measurement at Mays Mill, adjusted for intervening area.

c Datum then in use.

d Aug 24, 25, 26

f Sep 6, 7, 8, 9, 10, 1982.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

183

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

MEAN	20.3	30.1	39.2	34.6	46.7	90.4	88.8	50.9	27.2	14.2	11.8	11.7
MAX	106	93.5	118	93.5	113	182	310	132	162	57.4	66.2	61.0
(WY)	1956	1978	1973	1978	1976	1945	1993	1984	1972	1972	1942	1975
MIN	3.76	4.56	6.09	6.32	11.8	25.0	21.8	16.7	5.47	3.77	3.24	2.98
(WY)	1965	1965	1961	1961	1980	1965	1946	1955	1955	1955	1966	1964

STREAMS TRIBUTARY TO LAKE ONTARIO

04233000 CAYUGA INLET NEAR ITHACA, NY--Continued

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

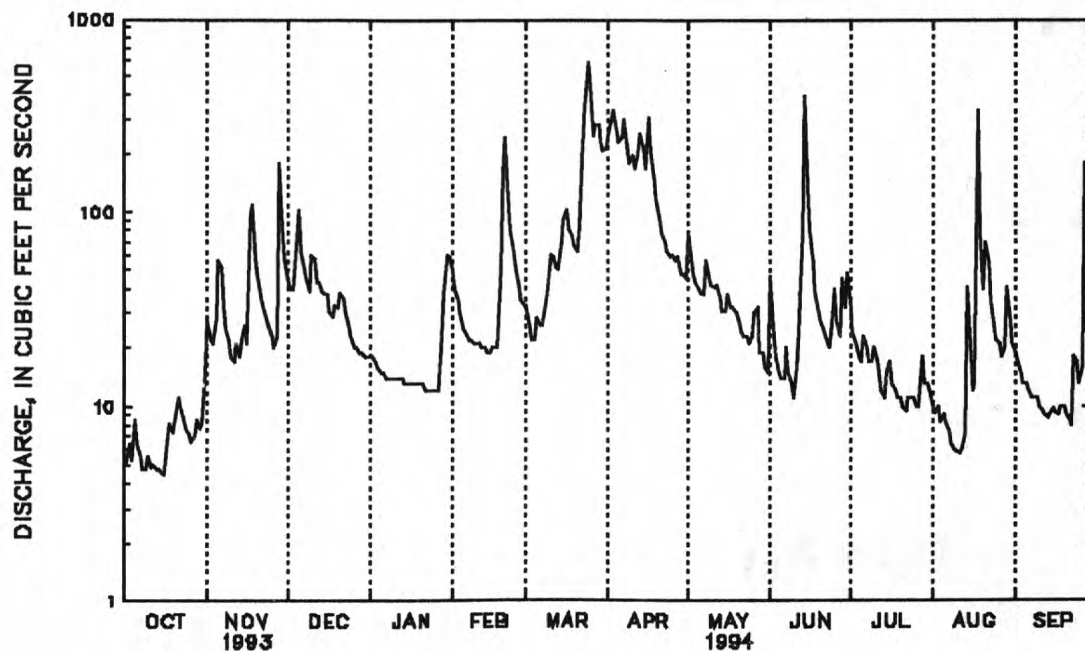
FOR 1994 WATER YEAR

WATER YEARS 1937 - 1994

ANNUAL TOTAL	20452.2	18115.7		
ANNUAL MEAN	56.0	49.6	38.6	
HIGHEST ANNUAL MEAN			61.7	1978
LOWEST ANNUAL MEAN			15.3	1965
HIGHEST DAILY MEAN	812 Apr 1	595 Mar 24	1690	Jun 22 1972
LOWEST DAILY MEAN	4.0 Aug 31	4.5 Oct 16	1.9	Jul 22 1955
ANNUAL SEVEN-DAY MINIMUM	4.5 Jul 23	4.9 Oct 10	2.2	Aug 28 1939
INSTANTANEOUS PEAK FLOW		1550 Aug 18	a4800	Jun 23 1972
INSTANTANEOUS PEAK STAGE		4.50 Aug 18	8.10	Jun 23 1972
INSTANTANEOUS LOW FLOW		4.3 b	1.7	Jul 22 1955
ANNUAL RUNOFF (CFSM)	1.59	1.41	1.10	
ANNUAL RUNOFF (INCHES)	21.61	19.15	14.90	
10 PERCENT EXCEEDS	122	118	85	
50 PERCENT EXCEEDS	22	23	20	
90 PERCENT EXCEEDS	5.0	8.6	5.3	

a From rating curve extended above 1,600 ft³/s on basis of slope-area measurements at gage heights 5.5 ft and 7.58 ft.

b Oct. 2, 7, 8, 9, 11, 16, 17.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

185

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 384.66 ft, Apr. 17; minimum, 378.77 ft, Jan 21, 22.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381.65	381.63	380.10	379.09	378.92	379.88	383.25	383.01	382.62	382.67	382.54	382.36
2	381.65	381.55	380.05	379.12	378.91	379.84	383.32	382.94	382.66	382.56	382.57	382.31
3	381.75	381.46	380.11	379.05	378.92	379.92	383.52	382.80	382.70	382.54	382.59	382.27
4	381.70	381.40	380.11	379.14	378.91	379.87	383.68	382.66	382.68	382.44	382.56	382.30
5	381.74	381.38	380.44	379.12	378.94	379.83	383.71	382.55	382.66	382.29	382.69	382.28
6	381.68	381.41	380.44	379.09	378.94	379.74	383.80	382.50	382.62	382.35	382.62	382.26
7	381.63	381.31	380.50	379.12	378.98	379.67	383.98	382.46	382.69	382.40	382.54	382.24
8	381.68	381.16	380.51	379.12	379.01	379.59	384.05	382.51	382.76	382.37	382.52	382.24
9	381.72	381.04	380.47	379.12	379.05	379.47	384.03	382.51	382.70	382.39	382.53	382.25
10	381.74	380.94	380.45	379.09	379.04	379.51	384.09	382.55	382.66	382.43	382.58	382.29
11	381.61	380.81	380.69	379.03	379.03	379.54	384.13	382.54	382.53	382.44	382.49	382.24
12	381.58	380.76	380.60	379.07	379.07	379.49	384.07	382.59	382.47	382.36	382.48	382.19
13	381.65	380.55	380.49	379.06	379.11	379.47	384.14	382.60	382.43	382.43	382.47	382.18
14	381.58	380.50	380.46	379.08	379.16	379.49	384.33	382.49	382.68	382.46	382.58	382.24
15	381.54	380.48	380.43	379.02	379.13	379.50	384.33	382.38	382.77	382.41	382.66	382.25
16	381.49	380.44	380.43	378.92	379.16	379.66	384.46	382.37	382.70	382.52	382.58	382.23
17	381.55	380.46	380.29	378.82	379.10	379.73	384.61	382.36	382.63	382.50	382.56	382.26
18	381.65	380.63	380.22	378.81	379.05	379.76	384.60	382.38	382.56	382.42	383.00	382.35
19	381.62	380.55	380.20	378.79	379.02	379.80	384.53	382.36	382.56	382.45	383.04	382.31
20	381.58	380.53	380.12	378.78	379.08	379.78	384.48	382.34	382.49	382.46	382.90	382.26
21	381.55	380.34	380.16	378.77	379.52	379.72	384.36	382.34	382.43	382.43	382.99	382.24
22	381.63	380.24	380.12	378.78	379.70	379.95	384.22	382.34	382.48	382.46	383.10	382.20
23	381.63	380.17	380.10	378.79	379.77	380.34	384.05	382.36	382.47	382.50	383.00	382.27
24	381.55	380.18	379.90	378.79	379.85	380.90	383.89	382.36	382.47	382.53	382.82	382.25
25	381.57	380.07	379.80	378.78	379.87	381.67	383.78	382.39	382.50	382.53	382.74	382.12
26	381.50	379.89	379.69	378.79	379.93	381.97	383.65	382.43	382.53	382.58	382.70	382.12
27	381.52	379.73	379.54	378.78	379.92	382.20	383.54	382.51	382.62	382.60	382.61	382.25
28	381.53	379.99	379.47	378.79	379.89	382.59	383.43	382.45	382.66	382.61	382.46	382.29
29	381.50	380.10	379.36	378.84	---	382.83	383.21	382.47	382.63	382.62	382.45	382.29
30	381.51	380.17	379.34	378.88	---	383.01	383.12	382.47	382.65	382.57	382.35	382.33
31	381.54	---	379.19	378.89	---	383.11	---	382.48	---	382.58	382.27	---
MEAN	381.61	380.66	380.12	378.95	379.25	380.38	383.95	382.50	382.60	382.48	382.64	382.26
MAX	381.75	381.63	380.69	379.14	379.93	383.11	384.61	383.01	382.77	382.67	383.10	382.36
MIN	381.49	379.73	379.19	378.77	378.91	379.47	383.12	382.34	382.43	382.29	382.27	382.12
CAL YR 1993	MEAN	381.57	MAX	386.36	MIN	378.60						
WTR YR 1994	MEAN	381.46	MAX	384.61	MIN	378.77						

STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi².

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 sea level. 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. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 25	0430	2,350	4.01	Apr. 16	1830	2,360	4.02
Apr. 3	2300	1,950	3.71	Aug. 18	1800	*2,930	*4.41

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	136	214	e80	e170	e170	931	553	185	152	45	130
2	36	120	188	e80	e150	e160	1110	413	147	106	167	114
3	46	117	221	e78	e140	e140	1790	265	104	87	140	99
4	43	174	243	e70	e120	e130	1390	224	89	77	87	92
5	51	347	950	e60	e100	176	1070	196	80	67	88	84
6	48	449	495	e62	e100	157	1210	182	76	91	88	81
7	37	245	332	e62	e98	154	1550	188	74	79	63	77
8	35	165	269	e60	e98	218	961	311	71	69	50	74
9	33	135	227	e60	e97	268	793	286	63	66	40	71
10	32	119	254	e60	e97	281	941	259	59	88	41	77
11	33	107	523	e58	e96	350	945	217	58	86	39	66
12	34	119	280	e58	e96	302	862	192	79	64	37	62
13	34	128	225	e58	e90	275	1430	181	110	54	37	60
14	33	116	e220	e58	e86	280	1460	155	1360	47	380	75
15	31	220	e210	e56	e86	312	977	145	449	51	319	94
16	31	160	221	e56	e92	398	1670	225	200	83	126	80
17	37	282	174	e56	e90	347	1380	195	143	61	91	73
18	86	980	160	e55	e82	307	728	194	113	49	1860	75
19	75	383	168	e55	e130	269	557	174	94	44	1080	62
20	60	283	185	e55	e300	e240	464	153	82	39	397	55
21	66	212	196	e54	e700	e240	373	134	77	36	635	49
22	80	180	e190	e54	e650	e600	322	122	79	34	756	51
23	64	160	e140	e52	426	e900	279	108	68	37	345	95
24	53	148	e92	e52	309	1580	251	100	76	37	233	98
25	45	133	e90	e51	257	2020	367	112	153	40	187	73
26	44	113	e88	e51	223	1110	358	147	110	153	217	110
27	41	115	e86	e52	e180	949	275	167	83	130	169	894
28	54	695	e86	e78	e170	1140	227	125	193	99	152	346
29	66	534	e84	e150	---	909	207	119	139	81	203	266
30	57	296	e82	e220	---	823	210	102	232	74	145	215
31	75	---	e80	e190	---	724	---	88	---	61	126	---
TOTAL	1499	7371	6973	2241	5233	15929	25088	6032	4846	2242	8343	3798
MEAN	48.4	246	225	72.3	187	514	836	195	162	72.3	269	127
MAX	86	980	950	220	700	2020	1790	553	1360	153	1860	894
MIN	31	107	80	51	82	130	207	88	58	34	37	49
CFSM	.38	1.95	1.79	.57	1.48	4.08	6.64	1.54	1.28	.57	2.14	1.00
IN.	.44	2.18	2.06	.66	1.54	4.70	7.41	1.78	1.43	.66	2.46	1.12

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04234000 FALL CREEK NEAR ITHACA, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1994, BY WATER YEAR (WY)

MEAN	104	175	206	183	215	416	418	210	118	71.7	52.0	66.2
MAX	594	497	540	417	595	1037	1313	529	615	608	269	561
(WY)	1982	1928	1973	1978	1981	1936	1993	1943	1972	1935	1994	1977
MIN	9.57	16.5	31.9	38.4	44.1	160	100	62.0	30.8	15.3	8.93	7.09
(WY)	1965	1965	1961	1961	1934	1965	1946	1934	1991	1962	1965	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1925 - 1994	
ANNUAL TOTAL	86246		89595			
ANNUAL MEAN	236		245		186	
HIGHEST ANNUAL MEAN					271	
LOWEST ANNUAL MEAN					83.6	
HIGHEST DAILY MEAN	3400	Apr 11	2020	Mar 25	8280	Jul 8 1935
LOWEST DAILY MEAN	18	Aug 31	31	a	3.6	Aug 17 1965
ANNUAL SEVEN-DAY MINIMUM	20	Aug 27	33	Oct 10	5.0	Sep 20 1964
INSTANTANEOUS PEAK FLOW			2930	Aug 18	b15500	Jul 8 1935
INSTANTANEOUS PEAK STAGE			4.41	Aug 18	c11.16	Feb 21 1971
INSTANTANEOUS LOW FLOW			30	d	f3.0	Aug 25 1927
ANNUAL RUNOFF (CFSM)	1.88		1.95		1.48	
ANNUAL RUNOFF (INCHES)	25.46		26.45		20.10	
10 PERCENT EXCEEDS	551		668		418	
50 PERCENT EXCEEDS	86		125		100	
90 PERCENT EXCEEDS	29		51		23	

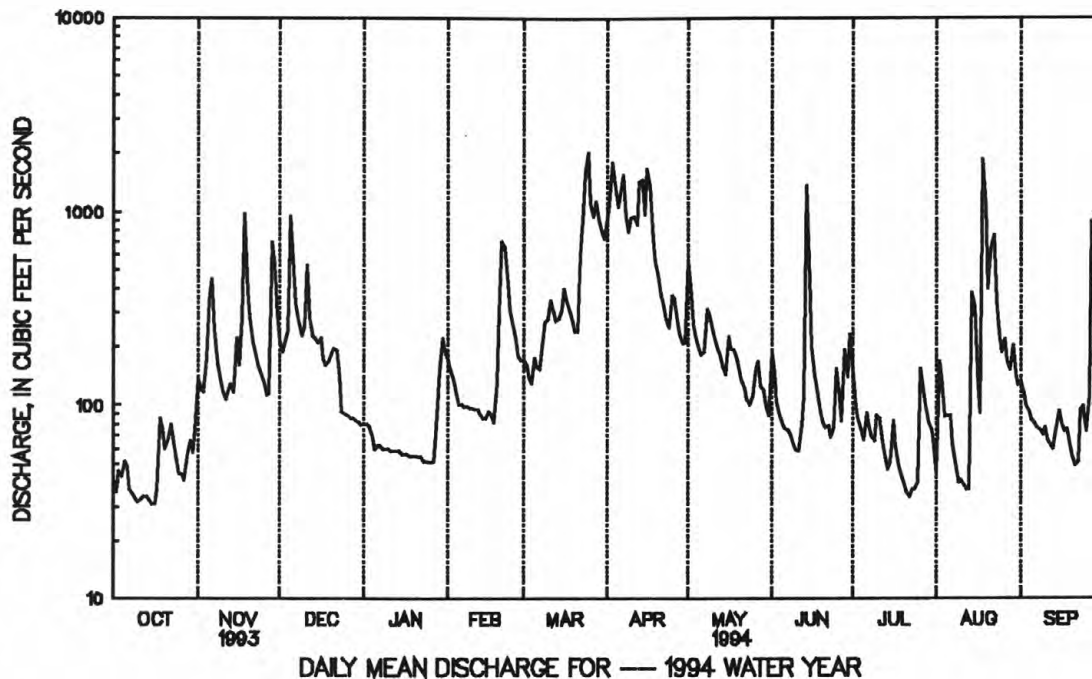
a Oct. 15, 16.

b From average of computed peak flow over each of four dams.

c Ice jam.

d Oct. 15-17.

f Approximate discharge, result of regulation.



STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi².

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. WRD NY 1971: 1970. WDR NY-86-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is sea level. 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 mi².

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft, June 24, 1972; minimum daily, 685.62 ft, Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 689.24 ft, Apr. 16; minimum, 686.71 ft, Jan. 23.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687.37	687.01	687.29	686.87	686.86	687.46	688.85	688.63	688.62	688.53	688.14	687.97
2	687.29	687.02	687.33	686.82	686.87	687.44	688.82	688.65	688.61	688.54	688.14	687.95
3	687.27	687.04	687.27	686.80	686.88	687.46	688.82	688.65	688.60	688.50	688.17	687.93
4	687.27	687.04	687.30	686.82	686.87	687.45	688.84	688.66	688.59	688.50	688.18	687.90
5	687.24	687.04	687.35	686.87	686.87	687.42	688.83	688.65	688.57	688.53	688.11	687.88
6	687.24	687.01	687.40	686.86	686.87	687.40	688.81	688.66	688.59	688.52	688.09	687.86
7	687.22	687.00	687.40	686.87	686.87	687.38	688.90	688.66	688.55	688.52	688.08	687.84
8	687.20	687.01	687.41	686.89	686.88	687.38	688.96	688.72	688.51	688.51	688.06	687.83
9	687.20	686.98	687.44	686.87	686.92	687.38	689.00	688.77	688.51	688.51	688.04	687.81
10	687.17	686.96	687.42	686.86	686.92	687.44	688.95	688.78	688.48	688.48	688.00	687.78
11	687.18	686.97	687.35	686.87	686.92	687.46	688.92	688.80	688.52	688.45	687.98	687.76
12	687.16	686.97	687.34	686.84	686.91	687.46	688.91	688.75	688.51	688.45	687.96	687.75
13	687.11	687.02	687.32	686.84	686.92	687.46	688.98	688.67	688.50	688.41	687.98	687.74
14	687.11	686.97	687.29	686.84	686.92	687.49	689.09	688.62	688.55	688.39	688.03	687.75
15	687.09	686.99	687.26	686.84	686.92	687.54	689.12	688.58	688.52	688.38	688.01	687.75
16	687.12	686.98	687.22	686.83	686.91	687.67	689.11	688.54	688.53	688.36	687.99	687.76
17	687.13	687.02	687.22	686.83	686.91	687.72	689.13	688.53	688.53	688.34	687.98	687.75
18	687.10	687.11	687.19	686.83	686.91	687.74	689.08	688.53	688.53	688.34	688.03	687.72
19	687.09	687.18	687.17	686.82	686.92	687.75	689.04	688.54	688.50	688.32	688.05	687.70
20	687.10	687.13	687.16	686.80	686.98	687.73	688.97	688.54	688.50	688.31	688.05	687.69
21	687.13	687.14	687.14	686.78	687.19	687.74	688.90	688.54	688.51	688.32	688.11	687.67
22	687.06	687.11	687.16	686.78	687.36	687.88	688.82	688.54	688.47	688.29	688.08	687.66
23	687.04	687.10	687.11	686.77	687.45	688.15	688.77	688.52	688.46	688.27	688.09	687.63
24	687.05	687.06	687.11	686.76	687.52	688.45	688.71	688.52	688.48	688.23	688.08	687.63
25	687.01	687.06	687.07	686.76	687.53	688.71	688.69	688.53	688.54	688.21	688.08	687.63
26	687.06	687.09	687.04	686.77	687.53	688.79	688.65	688.54	688.51	688.22	688.05	687.65
27	687.01	687.11	687.01	686.78	687.52	688.84	688.62	688.54	688.50	688.20	688.03	687.69
28	686.99	687.18	686.98	686.80	687.49	688.90	688.54	688.55	688.55	688.19	688.06	687.69
29	686.99	687.25	686.95	686.82	---	688.91	688.58	688.54	688.56	688.17	688.02	687.65
30	686.95	687.26	686.92	686.84	---	688.91	688.56	688.54	688.56	688.18	687.99	687.62
31	686.96	---	686.89	686.85	---	688.88	---	688.54	---	688.16	687.99	---
MEAN	687.13	687.06	687.21	686.83	687.06	687.88	688.87	688.61	688.53	688.37	688.05	687.75
MAX	687.37	687.26	687.44	686.89	687.53	688.91	689.13	688.80	688.62	688.54	688.18	687.97
MIN	686.95	686.96	686.89	686.76	686.86	687.38	688.54	688.52	688.46	688.16	687.96	687.62

CAL YR 1993 MEAN 688.07 MAX 690.85 MIN 686.89

WTR YR 1994 MEAN 687.78 MAX 689.13 MIN 686.76

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

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 sea level. Prior to June 25, 1974, at site 0.1 mi upstream at datum 676.90 ft above sea level.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	44	49	e92	e82	307	672	159	146	57	52	48
2	36	42	50	e88	e75	301	659	152	128	56	54	47
3	34	42	48	e85	e70	304	659	148	125	56	54	46
4	36	43	58	e82	e68	303	673	145	125	56	53	46
5	62	43	81	e78	e64	297	663	144	134	55	53	46
6	39	45	61	e75	e61	290	670	146	142	56	51	45
7	36	39	55	e72	e59	291	745	146	139	55	50	45
8	35	38	53	e70	e58	301	738	178	132	55	50	45
9	36	37	112	e68	e56	307	716	170	123	54	49	49
10	37	36	242	e67	e54	330	700	163	121	54	49	45
11	35	36	231	e66	e52	335	684	245	123	54	50	45
12	35	42	225	e64	e51	329	678	515	121	54	49	45
13	33	39	220	e62	e50	326	787	492	116	54	50	44
14	32	38	215	e62	e48	336	782	466	111	54	57	51
15	32	42	212	e62	e46	382	748	452	90	53	51	46
16	32	39	207	e62	e45	435	753	374	59	53	50	45
17	37	48	203	e64	e45	402	752	114	57	52	50	44
18	35	52	198	e64	45	378	730	109	57	53	59	44
19	33	45	195	e64	55	374	716	109	55	52	46	43
20	33	41	193	e63	168	368	694	108	56	52	45	43
21	34	40	195	e63	188	402	670	108	56	53	58	42
22	32	40	204	e63	183	615	651	108	56	53	48	42
23	31	101	188	e63	278	638	634	108	55	52	44	42
24	32	125	185	e64	305	631	619	108	61	52	49	42
25	32	42	e125	e65	327	650	618	111	59	52	52	41
26	37	41	e115	e65	322	655	602	114	57	54	49	46
27	37	42	e110	e68	320	695	593	117	61	52	43	46
28	36	91	e105	e78	313	708	494	118	60	54	41	36
29	36	64	e100	e90	---	700	150	118	58	52	41	35
30	35	52	e98	e95	---	705	135	118	58	52	40	38
31	36	---	e95	e88	---	689	---	124	---	52	46	---
TOTAL	1101	1469	4428	2212	3488	13784	19385	5787	2741	1663	1533	1322
MEAN	35.5	49.0	143	71.4	125	445	646	187	91.4	53.6	49.5	44.1
MAX	62	125	242	95	327	708	787	515	146	57	59	51
MIN	31	36	48	62	45	290	135	108	55	52	40	35

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04235000 CANANDAIGUA OUTLET AT CHAPIN, NY--continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	74.7	94.3	129	141	156	289	413	266	150	91.8	62.5	52.4
MAX	613	419	521	420	518	748	1036	725	566	852	483	363
(WY)	1978	1978	1973	1993	1976	1976	1993	1943	1972	1972	1992	1977
MIN	13.0	12.9	11.1	8.38	9.47	28.9	61.4	48.6	20.7	17.3	16.2	13.3
(WY)	1992	1964	1967	1967	1967	1967	1946	1981	1955	1963	1991	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

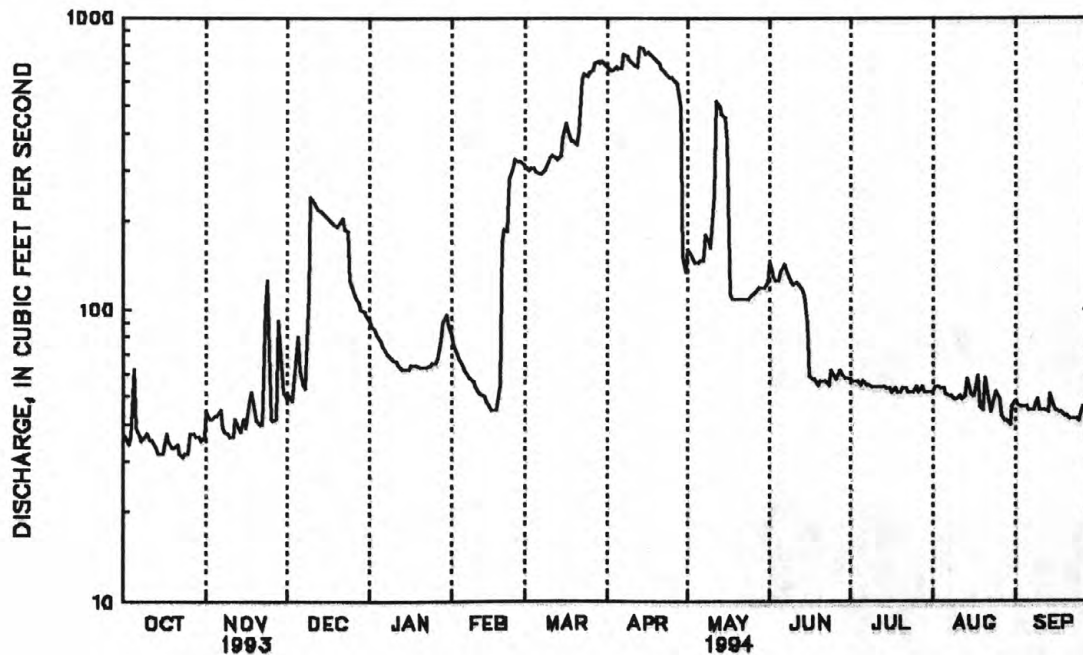
FOR 1994 WATER YEAR

WATER YEARS 1940 - 1994

ANNUAL TOTAL	92022	58913	159	
ANNUAL MEAN	252	161	302	1993
HIGHEST ANNUAL MEAN			57.7	1965
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	1150	Apr 2	787	Apr 13
LOWEST DAILY MEAN	28	Sep 23	31	Oct 23
ANNUAL SEVEN-DAY MINIMUM	32	Oct 19	32	Oct 19
INSTANTANEOUS PEAK FLOW			853	Apr 13
INSTANTANEOUS PEAK STAGE			5.77	Apr 13
INSTANTANEOUS LOW FLOW			30	b
10 PERCENT EXCEEDS	883	597	455	
50 PERCENT EXCEEDS	72	61	66	
90 PERCENT EXCEEDS	37	38	24	

a Present datum, at site then in use.

b Oct 23 and 25.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
04235250 FLINT CREEK AT PHELPS, NY

191

LOCATION.--Lat 42°57'28", long 77°04'06", Ontario County, Hydrologic Unit 04140201, on right bank 25 ft downstream from bridge on Eagle Street at Phelps, and 1.1 mi upstream from Canandaigua Outlet.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Small diversion (during periods of low ground-water level) by Phelps Cement Products, Inc., located about 0.2 mile upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft³/s. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar 23	1830	*1,900	*5.13	Mar 25	0400	1,410	4.69

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	12	103	e15	e45	e130	297	120	101	30	5.3	11
2	6.2	13	64	e15	e35	e125	281	135	104	24	5.2	9.0
3	5.7	14	52	e14	e28	e110	314	106	68	20	6.2	8.6
4	5.3	15	65	e14	e24	e100	404	86	50	22	5.4	8.1
5	6.0	19	160	e14	e22	89	352	77	41	19	6.7	7.8
6	6.4	26	151	e14	e22	e85	292	73	35	17	6.7	7.6
7	6.3	40	114	e14	e22	81	545	69	32	18	6.2	7.5
8	6.1	30	83	e14	e22	98	539	116	29	19	6.0	8.6
9	6.4	21	66	e13	e20	143	367	133	25	16	5.7	9.9
10	6.2	16	59	e13	e20	151	296	115	23	13	4.9	8.4
11	4.4	18	57	e14	e20	179	272	109	22	12	3.0	7.5
12	4.3	16	34	e14	e20	e180	237	93	22	11	2.4	7.1
13	4.4	13	e60	e14	e19	162	482	79	24	10	3.6	6.8
14	4.5	15	e50	e14	e18	179	627	69	38	8.7	7.5	9.0
15	4.4	16	41	e14	e18	e220	431	64	88	8.3	9.4	10
16	4.7	17	44	e14	e18	e320	338	68	56	8.4	13	8.6
17	6.4	28	38	e14	e18	e300	339	69	34	8.1	9.0	8.3
18	6.4	69	e38	e12	e18	e250	267	76	26	8.1	15	8.7
19	5.8	106	36	e12	e24	e190	201	72	22	7.3	19	8.0
20	5.2	64	34	e12	e60	e170	166	66	19	6.2	17	7.2
21	5.4	38	e38	e10	e450	185	139	59	18	6.1	18	7.1
22	5.2	28	e35	e10	528	660	118	53	16	6.7	20	6.8
23	5.1	22	e30	e10	418	1430	101	46	14	6.0	20	7.3
24	6.8	20	e25	e10	280	1230	91	43	18	6.8	14	7.4
25	6.0	16	e24	e10	210	1170	122	44	21	5.2	13	7.1
26	10	17	e22	e10	e170	768	129	52	20	7.4	11	9.6
27	5.6	18	e22	e12	e140	615	112	60	21	5.6	9.8	14
28	6.1	107	e20	e16	e130	646	91	56	88	6.1	9.9	11
29	5.7	197	e18	e30	---	503	81	45	70	6.4	10	12
30	6.2	186	e16	e60	---	429	80	40	41	6.8	10	10
31	7.9	---	e16	e55	---	348	---	37	---	6.1	10	---
TOTAL	181.1	1217	1615	507	2819	11246	8111	2330	1186	355.3	302.9	260.0
MEAN	5.84	40.6	52.1	16.4	101	363	270	75.2	39.5	11.5	9.77	8.67
MAX	10	197	160	60	528	1430	627	135	104	30	20	14
MIN	4.3	12	16	10	18	81	80	37	14	5.2	2.4	6.8
CFSM	.06	.40	.51	.16	.99	3.56	2.65	.74	.39	.11	.10	.08
IN.	.07	.44	.59	.18	1.03	4.10	2.96	.85	.43	.13	.11	.09

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

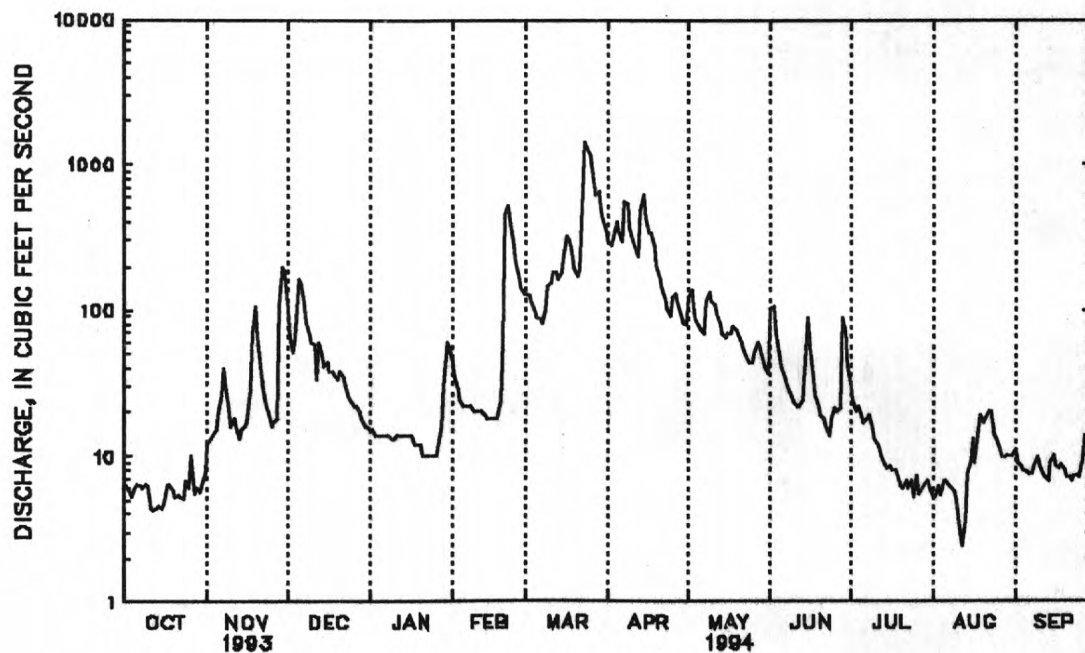
MEAN	39.0	69.5	100	76.1	116	232	223	101	61.2	23.7	15.9	21.7
MAX	257	249	330	189	455	484	618	259	502	167	131	249
(WY)	1978	1978	1973	1993	1976	1978	1993	1989	1972	1972	1992	1977
MIN	.16	2.85	4.08	3.66	19.1	69.0	52.1	31.1	8.73	.94	.023	.030
(WY)	1965	1965	1961	1961	1989	1965	1981	1987	1965	1965	1965	1965

STREAMS TRIBUTARY TO LAKE ONTARIO
04235250 FLINT CREEK AT PHELPS, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1960 - 1994	
ANNUAL TOTAL	38547.7		30130.3		89.9	
ANNUAL MEAN	106		82.5		162	
HIGHEST ANNUAL MEAN					32.2	
LOWEST ANNUAL MEAN					162	
HIGHEST DAILY MEAN	1780	Apr 2	1430	Mar 23	2670	Jun 24 1972
LOWEST DAILY MEAN	1.4	Aug 15	2.4	Aug 12	.00	Sep 16 1962
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 26	4.5	Aug 7	.00	Sep 16 1962
INSTANTANEOUS PEAK FLOW			1900	Mar 23	2940	Mar 30 1960
INSTANTANEOUS PEAK STAGE			5.13	Mar 23	a6.20	Mar 17 1963
INSTANTANEOUS LOW FLOW			2.1	Aug 12	.00	b
ANNUAL RUNOFF (CFSM)	1.04		.81		.88	
ANNUAL RUNOFF (INCHES)	14.06		10.99		11.97	
10 PERCENT EXCEEDS	262		214		230	
50 PERCENT EXCEEDS	29		20		36	
90 PERCENT EXCEEDS	3.5		6.2		3.5	

a Ice jam.

b No flow for many days 1962-65, 1969.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
04235276 BLACK BROOK AT TYRE, NY

193

LOCATION.--Lat 42°59'30", long 76°48'13", Seneca County, Hydrologic Unit 04140201, on right bank 25 ft upstream from bridge on County Highway 101 in village of Tyre, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--19.0 mi².

PERIOD OF RECORD.--Low-flow measurements, water years 1964-66, 1970-72, 1974, and annual maximum, water years 1965-73, 1975-85, November 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 391.12 ft above sea level. December 9, 1964 to November 21, 1985, crest-stage gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 22	----	Unknown	ice jam	Apr. 7	0930	173	2.06
Mar. 25	0015	*512	*3.75	Apr. 13	2145	182	2.12
Mar. 27	2315	268	2.62				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.4	27	3.4	e6.5	e30	87	26	16	6.2	1.5	1.3
2	1.3	2.5	19	3.5	e6.0	e30	69	34	15	3.9	1.4	1.8
3	1.2	4.0	18	3.2	e5.8	e26	63	21	7.7	2.9	1.4	1.8
4	1.2	6.1	34	2.9	e5.6	e24	66	15	4.2	2.2	2.5	1.3
5	1.3	5.3	138	5.3	e5.0	e35	48	12	2.6	2.5	3.2	1.1
6	1.1	5.3	90	6.8	e5.0	e30	50	11	2.1	2.3	2.0	1.0
7	.97	4.2	54	5.3	e5.0	e30	158	8.7	1.8	2.2	1.8	1.0
8	.90	3.1	35	3.8	e4.8	e40	106	17	1.6	2.0	1.5	1.0
9	1.0	2.6	26	3.1	e4.5	e50	57	28	1.5	1.8	1.4	1.1
10	1.2	2.0	22	2.9	e4.5	e54	45	21	1.4	1.6	1.3	1.0
11	.91	1.6	30	3.0	e4.5	e70	39	16	1.5	1.5	1.3	1.0
12	.84	1.9	24	3.4	e4.5	e60	32	12	1.4	1.5	1.2	1.0
13	.88	1.7	e18	5.0	e4.2	e52	106	9.9	1.4	1.4	1.3	1.0
14	.84	1.9	e15	5.8	e4.0	54	137	7.4	1.8	1.4	2.0	1.3
15	.78	3.7	14	3.9	e4.0	76	69	6.3	1.7	1.7	1.5	1.2
16	.80	4.3	17	3.2	e4.0	96	70	6.3	1.5	1.5	1.3	1.2
17	1.4	12	e15	3.3	e4.0	e85	64	6.5	2.3	1.4	1.3	1.2
18	1.8	29	e11	3.2	e4.0	e80	38	6.6	2.1	1.3	3.1	1.3
19	1.5	17	10	2.6	e5.5	e75	28	6.7	1.6	1.3	1.7	1.1
20	1.2	8.9	12	2.6	e9.0	e60	22	5.7	1.2	1.3	1.4	1.1
21	1.3	5.6	19	2.6	e130	e65	17	4.6	1.1	1.2	3.7	1.1
22	1.3	3.9	e18	e2.5	e150	159	14	3.9	2.1	1.2	2.8	1.1
23	1.2	3.0	e14	e2.5	e90	249	12	3.0	2.1	1.2	1.9	1.4
24	1.1	2.6	e10	e2.5	e60	350	11	2.5	2.7	1.5	2.3	1.3
25	1.1	2.3	e10	e2.5	e50	474	12	2.4	1.8	2.8	3.0	1.3
26	1.0	2.0	e9.0	e2.5	e40	320	15	3.4	1.4	3.4	2.5	1.3
27	2.1	2.0	e8.0	e2.5	e35	228	13	3.8	9.6	1.9	1.5	2.0
28	2.9	86	e7.0	e7.0	e30	217	11	4.8	26	2.1	1.2	1.9
29	2.6	89	e6.0	e12	---	143	9.4	3.5	21	1.8	1.2	1.8
30	1.8	48	4.3	e10	---	121	8.8	2.5	10	1.7	1.1	1.8
31	1.6	---	3.6	e7.0	---	96	---	2.6	---	1.5	1.1	---
TOTAL	40.32	363.9	737.9	129.8	685.4	3479	1477.2	314.1	148.2	62.2	56.4	38.8
MEAN	1.30	12.1	23.8	4.19	24.5	112	49.2	10.1	4.94	2.01	1.82	1.29
MAX	2.9	89	138	12	150	474	158	34	26	6.2	3.7	2.0
MIN	.78	1.6	3.6	2.5	4.0	24	8.8	2.4	1.1	1.2	1.1	1.0
CFSM	.07	.64	1.25	.22	1.29	5.91	2.59	.53	.26	.11	.10	.07
IN.	.08	.71	1.44	.25	1.34	6.81	2.89	.61	.29	.12	.11	.08

e Estimated

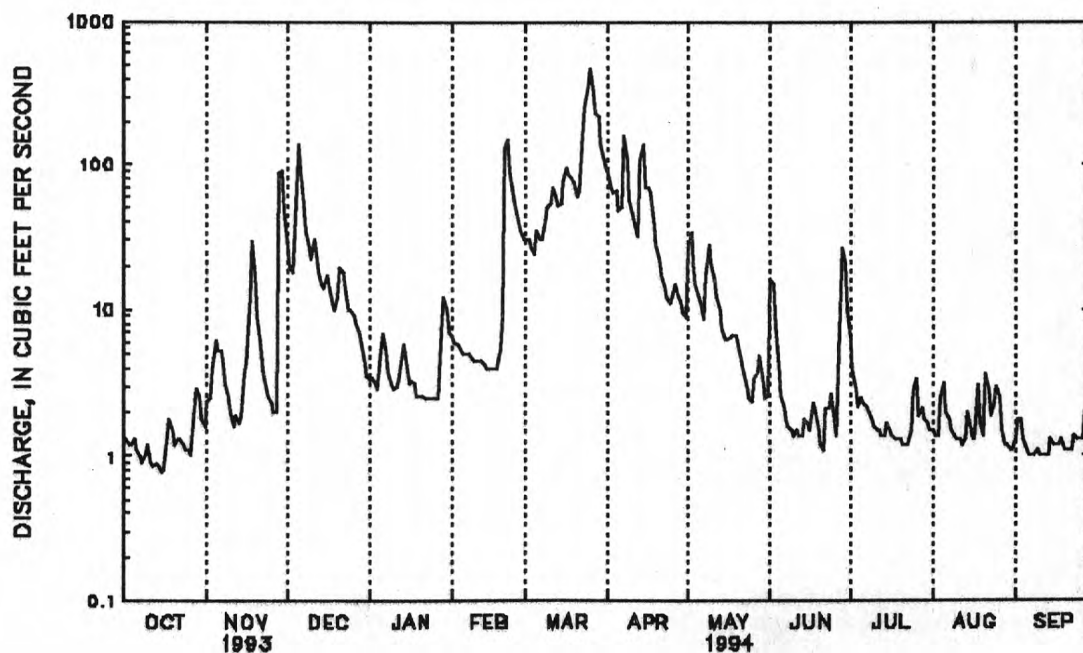
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1994, BY WATER YEAR (WY)

MEAN	10.4	20.8	27.6	22.8	25.5	47.0	49.4	16.6	6.69	8.01	5.34	4.68
MAX	23.6	46.4	61.5	41.5	65.6	112	140	51.2	19.4	43.8	27.5	24.7
(WY)	1991	1993	1991	1986	1990	1994	1993	1990	1989	1992	1992	1992
MIN	.81	1.87	2.22	2.74	5.01	22.3	11.8	2.79	1.19	1.33	.76	.56
(WY)	1992	1992	1989	1989	1989	1988	1988	1987	1988	1993	1988	1991

STREAMS TRIBUTARY TO LAKE ONTARIO
04235276 BLACK BROOK AT TYRE, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1986 - 1994
ANNUAL TOTAL	8760.79	7533.22	
ANNUAL MEAN	24.0	20.6	20.2
HIGHEST ANNUAL MEAN			29.9
LOWEST ANNUAL MEAN			9.58
HIGHEST DAILY MEAN	620 Apr 1	474 Mar 25	620 Apr 1 1993
LOWEST DAILY MEAN	.57 Aug 15	.78 Oct 15	.30 Sep 18 1991
ANNUAL SEVEN-DAY MINIMUM	.62 Aug 11	.89 Oct 10	.35 Sep 16 1991
INSTANTANEOUS PEAK FLOW		512 Mar 25	786 Dec 14 1977
INSTANTANEOUS PEAK STAGE		3.75 Mar 25	a6.68 Nov 5 1970
ANNUAL RUNOFF (CFSM)	1.26	1.09	1.06
ANNUAL RUNOFF (INCHES)	17.15	14.75	14.43
10 PERCENT EXCEEDS	56	60	51
50 PERCENT EXCEEDS	4.0	3.5	6.5
90 PERCENT EXCEEDS	.88	1.2	.96

a Discharge not determined.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
04235396 OWASCO LAKE NEAR AUBURN, NY

195

LOCATION.--Lat 42°53'56", long 76°32'17", Cayuga County, Hydrologic Unit 04140201, on east side of breakwater at city of Auburn water intake and pumping station, 1.0 mi south of city limits of Auburn, and 1.8 mi upstream from State dam.

DRAINAGE AREA.--205 mi².

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 sea level. 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 sea level.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi². Records for Jan. 3 to Apr. 20 computed from once-daily gage readings.

COOPERATION.--Records furnished by city of Auburn until April 30, 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.88 ft, June 25, 1972; minimum observed, 708.45 ft, Mar. 22, 23, 1993.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since 1912, 716.91 ft, Mar. 23, 1936, Apr. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 713.65 ft, Apr. 17; minimum observed, 709.44 ft, Jan. 21.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	710.88	710.67	711.89	710.83	709.76	710.62	712.72	713.24	712.93	712.46	712.51	712.50
2	710.87	710.70	711.91	710.70	709.80	710.58	712.94	713.17	712.98	712.50	712.52	712.50
3	710.86	710.75	711.98	710.50	709.86	710.54	713.24	713.16	712.98	712.50	712.52	712.49
4	710.87	710.79	711.98	710.42	709.87	710.50	713.41	713.14	712.92	712.51	712.57	712.49
5	710.82	710.82	712.18	710.42	709.88	710.40	713.40	713.11	712.83	712.51	712.50	712.47
6	710.87	710.92	712.27	710.35	709.89	710.31	713.36	713.07	712.77	712.55	712.50	712.46
7	710.83	711.00	712.16	710.28	709.91	710.22	713.45	713.04	712.66	712.55	712.48	712.45
8	710.82	711.09	712.03	710.21	709.91	710.18	713.48	713.06	712.57	712.56	712.48	712.45
9	710.78	711.11	711.95	710.14	709.96	710.13	713.42	713.08	712.49	712.57	712.46	712.48
10	710.74	711.09	711.84	710.08	709.96	710.14	713.32	713.10	712.48	712.55	712.42	712.48
11	710.78	711.16	711.83	710.02	709.96	710.10	713.24	713.09	712.49	712.55	712.39	712.46
12	710.76	711.12	711.80	709.92	709.97	710.05	713.23	713.06	712.54	712.53	712.38	712.45
13	710.67	711.16	711.75	709.95	709.97	709.99	713.42	713.02	712.54	712.53	712.37	712.44
14	710.70	711.21	711.72	709.89	709.88	709.93	713.62	712.97	712.67	712.52	712.46	712.47
15	710.69	711.25	711.71	709.80	709.97	709.94	713.57	712.92	712.77	712.53	712.51	712.46
16	710.65	711.29	711.70	709.70	709.95	710.00	713.52	712.90	712.79	712.54	712.48	712.45
17	710.70	711.42	711.68	709.63	709.93	709.99	713.65	712.86	712.80	712.52	712.48	712.45
18	710.66	711.76	711.68	709.56	709.91	709.96	713.48	712.81	712.80	712.50	712.74	712.41
19	710.68	711.97	711.54	709.52	709.88	709.89	713.29	712.77	712.78	712.52	713.25	712.39
20	710.69	712.06	711.52	709.47	709.90	709.81	713.14	712.72	712.78	712.54	713.18	712.43
21	710.71	712.16	711.48	709.44	710.16	709.76	713.26	712.66	712.78	712.57	713.04	712.40
22	710.66	712.21	711.49	709.48	710.40	709.90	713.24	712.59	712.72	712.55	713.09	712.40
23	710.65	712.23	711.44	709.50	710.53	710.17	713.22	712.54	712.64	712.52	713.08	712.37
24	710.69	712.19	711.41	709.48	710.66	710.58	713.20	712.55	712.58	712.48	713.03	712.40
25	710.63	712.09	711.36	709.45	710.70	711.37	713.23	712.58	712.61	712.49	713.00	712.42
26	710.66	712.08	711.22	709.46	710.67	711.82	713.27	712.62	712.49	712.55	712.94	712.49
27	710.64	712.02	711.16	709.46	710.67	711.98	713.36	712.69	712.37	712.53	712.87	712.60
28	710.62	712.02	711.05	709.65	710.65	712.49	713.34	712.74	712.33	712.53	712.82	712.68
29	710.66	712.05	711.00	709.57	---	712.67	713.27	712.78	712.32	712.53	712.75	712.64
30	710.60	711.96	710.90	709.64	---	712.76	713.20	712.81	712.43	712.53	712.66	712.63
31	710.62	---	710.88	709.71	---	712.76	---	712.84	---	712.53	712.58	---
MEAN	710.72	711.48	711.63	709.88	710.09	710.63	713.32	712.89	712.66	712.53	712.68	712.47
MAX	710.88	712.23	712.27	710.83	710.70	712.76	713.65	713.24	712.98	712.57	713.25	712.68
MIN	710.60	710.67	710.88	709.44	709.76	709.76	712.72	712.54	712.32	712.46	712.37	712.37

CAL YR 1993 MEAN 711.59 MAX 714.86 MIN 708.45
WTR YR 1994 MEAN 711.75 MAX 713.65 MIN 709.44

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04235500 OWASCO OUTLET NEAR AUBURN, NY

LOCATION.--Lat 42°56'48", long 76°35'56", Cayuga County, Hydrologic Unit 04140201, on left bank 2.5 mi downstream from center of Auburn, and 4 mi downstream from State dam at outlet of Owasco Lake.

DRAINAGE AREA.--206 mi².

PERIOD OF RECORD.--November 1912 to current year. Prior to October 1966, published as "Owasco Lake Outlet".

REVISED RECORDS.--WSP 824: 1913-14, 1916, 1920(M), 1922(M), 1928(M), 1929, 1932(M). WSP 2112: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 533.92 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation caused by mills in Auburn; regulation at State dam at outlet of lake. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	52	379	e440	e95	231	905	731	76	101	62	247
2	61	54	59	e440	e100	255	911	671	70	98	66	80
3	58	56	225	e440	e110	275	1330	391	278	95	62	75
4	65	58	559	e440	114	286	1740	385	410	93	59	71
5	61	57	906	e440	117	298	1760	388	407	95	62	72
6	58	53	995	e440	119	313	1740	392	398	88	58	75
7	57	50	1000	e440	124	323	1800	385	405	86	57	81
8	58	47	954	e440	128	331	1810	394	400	75	58	73
9	61	101	908	e440	131	353	1750	391	264	73	57	79
10	59	52	609	e440	134	379	1700	390	72	72	58	71
11	58	56	640	e440	137	410	1670	390	67	71	60	71
12	58	60	635	e440	140	459	913	385	62	70	62	71
13	59	47	496	e440	143	577	1330	386	67	70	65	72
14	59	56	406	e440	146	780	1740	387	81	72	78	80
15	58	53	294	e440	150	834	1740	387	128	82	61	71
16	57	50	415	e440	153	874	1730	390	86	79	61	72
17	69	71	459	e55	156	863	1730	403	94	78	60	70
18	59	50	475	e55	159	858	1650	402	96	78	86	69
19	57	53	446	e55	161	846	1420	396	96	135	458	69
20	56	52	456	e40	158	789	883	399	100	78	1070	67
21	59	47	468	e46	159	780	529	400	109	54	1030	67
22	59	48	353	e46	166	842	503	397	252	58	666	67
23	58	172	455	e55	178	915	470	226	410	60	421	74
24	58	484	451	e75	189	1010	462	72	411	80	414	67
25	56	460	445	e88	200	1120	455	83	404	71	412	67
26	54	426	440	e75	205	1160	429	75	409	66	402	68
27	53	407	442	e75	209	1220	406	74	417	67	400	74
28	50	685	e440	e75	222	1250	388	71	410	65	402	68
29	52	909	e440	e75	---	1260	402	67	199	64	409	65
30	52	875	e440	e75	---	1280	388	66	105	64	413	65
31	52	---	e440	e88	---	1160	---	77	---	62	407	---
TOTAL	1789	5641	16130	8018	4203	22331	34684	10051	6783	2400	8036	2318
MEAN	57.7	188	520	259	150	720	1156	324	226	77.4	259	77.3
MAX	69	909	1000	440	222	1280	1810	731	417	135	1070	247
MIN	50	47	59	40	95	231	388	66	62	54	57	65

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1994, BY WATER YEAR (WY)

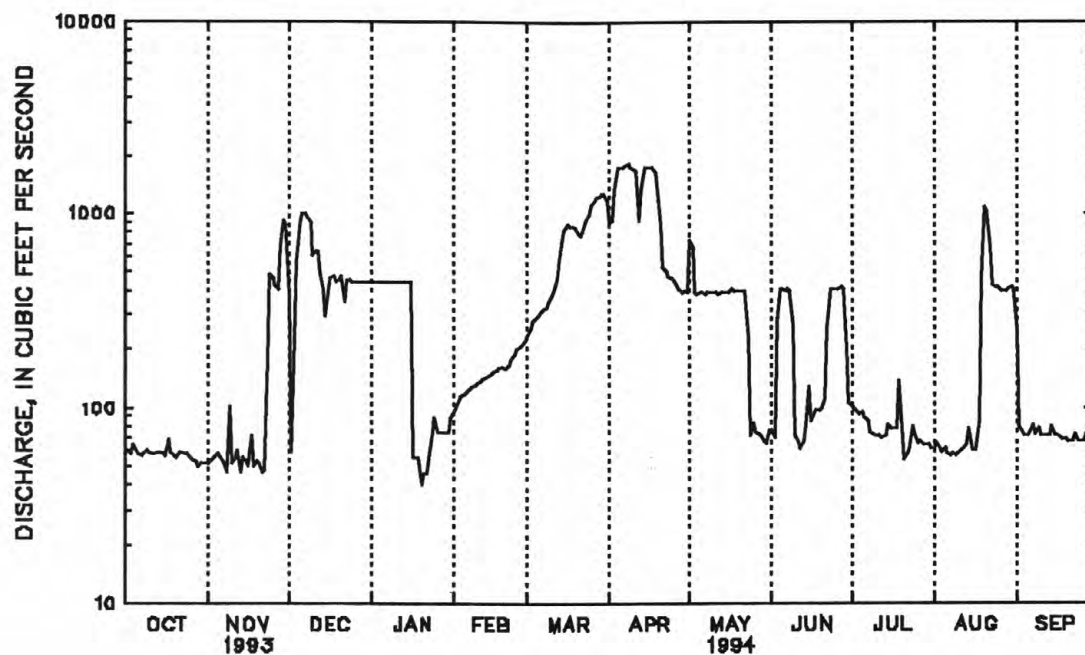
	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
MEAN	146	211	301	311	333	539	638	358	239	164	121	122
MAX	1013	773	1054	851	810	1255	1793	892	1066	620	366	597
(WY)	1978	1982	1928	1943	1990	1945	1993	1943	1972	1972	1992	1977
MIN	17.7	14.6	13.5	14.3	49.2	75.4	194	42.4	54.2	41.9	29.6	27.0
(WY)	1954	1954	1954	1961	1989	1989	1915	1985	1991	1987	1975	1983

STREAMS TRIBUTARY TO LAKE ONTARIO
04235500 OWASCO OUTLET NEAR AUBURN, NY--Continued

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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1913 - 1994	
ANNUAL TOTAL	133040		122384			
ANNUAL MEAN	364		335		290	
HIGHEST ANNUAL MEAN					436	
LOWEST ANNUAL MEAN					122	
HIGHEST DAILY MEAN	2020	Apr 26	1810	Apr 8	3200	Jun 24 1972
LOWEST DAILY MEAN	47	Nov 8	40	Jan 20	5.0	Nov 11 1934
ANNUAL SEVEN-DAY MINIMUM	52	Oct 26	50	Jan 17	11	Jan 29 1961
INSTANTANEOUS PEAK FLOW			1840	Apr 8	3250	Jun 23 1972
INSTANTANEOUS PEAK STAGE			4.15	Apr 8	6.28	Jun 23 1972
INSTANTANEOUS LOW FLOW			15	Jul 21	2.0	Dec 5 1936
10 PERCENT EXCEEDS	908		892		653	
50 PERCENT EXCEEDS	90		143		199	
90 PERCENT EXCEEDS	58		57		47	

a About.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

LOCATION.--Lat 42°56'42", long 76°25'46", Onondaga County, Hydrologic Unit 04140201, on east side of breakwater, enclosed in City of Syracuse boathouse, at Skaneateles.

PERIOD OF RECORD.--October 1967 to current year. Records since September 1890 collected by, and in files of, City of Syracuse.

REMARKS.--Lake elevation regulated by gates at outlet by Syracuse Water Division. Area of water surface, 13.6 mi.².

COOPERATION.--Records furnished by City of Syracuse.

EXTREMES FOR PERIOD OF RECORD.--(since 1890): Maximum observed elevation, 866.95 ft, June 25, 26, 1972; minimum observed, 858.90 ft, Nov. 15, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 864.72 ft, July 8; minimum observed, 862.20 ft, Nov.14.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	862.92	862.28	862.43	862.63	862.36	862.61	863.33	864.37	864.53	864.70	864.36	864.17
2	862.89	862.29	862.41	862.60	862.36	862.59	863.33	864.37	864.57	864.70	864.32	864.14
3	862.86	862.33	862.47	862.57	862.33	862.62	863.40	864.35	864.60	864.70	864.30	864.10
4	862.83	862.35	862.47	862.60	862.33	862.73	863.50	864.35	864.60	864.70	864.30	864.08
5	862.85	862.37	862.60	862.68	862.33	862.73	863.52	864.35	864.57	864.68	864.27	864.04
6	862.83	862.37	862.65	862.65	862.32	862.73	863.55	864.35	864.55	864.70	864.23	864.02
7	862.80	862.36	862.65	862.63	862.31	862.75	863.68	864.37	864.55	864.70	864.21	864.00
8	862.76	862.35	862.67	862.66	862.33	862.75	863.75	864.44	864.57	864.72	864.21	863.98
9	862.72	862.32	862.64	862.66	862.38	862.72	863.75	864.42	864.57	864.70	864.18	864.00
10	862.68	862.27	862.62	862.62	862.38	862.78	863.80	864.44	864.55	864.71	864.14	863.96
11	862.65	862.25	862.72	862.62	862.36	862.75	863.84	864.44	864.53	864.68	864.10	863.92
12	862.61	862.25	862.73	862.57	862.34	862.71	863.84	864.45	864.53	864.65	864.05	863.89
13	862.58	862.23	862.73	862.60	862.31	862.72	863.93	864.47	864.52	864.59	864.02	863.85
14	862.55	862.20	862.70	862.60	862.31	862.69	864.15	864.47	864.61	864.55	864.03	863.87
15	862.52	862.25	862.71	862.56	862.30	862.65	864.18	864.47	864.61	864.53	864.03	863.85
16	862.49	862.25	862.70	862.54	862.30	862.67	864.28	864.49	864.61	864.53	864.05	863.85
17	862.46	862.23	862.70	862.54	862.28	862.70	864.40	864.51	864.59	864.51	864.03	863.82
18	862.46	862.42	862.70	862.52	862.25	862.66	864.50	864.52	864.57	864.50	864.10	863.80
19	862.48	862.44	862.69	862.49	862.23	862.64	864.50	864.52	864.57	864.48	864.16	863.76
20	862.48	862.41	862.69	862.46	862.24	862.60	864.47	864.51	864.55	864.45	864.15	863.73
21	862.50	862.38	862.74	862.43	862.43	862.57	864.46	864.50	864.52	864.45	864.16	863.70
22	862.47	862.36	862.82	862.45	862.43	862.65	864.42	864.49	864.49	864.42	864.20	863.68
23	862.44	862.36	862.80	862.42	862.45	862.65	864.39	864.49	864.49	864.40	864.22	863.70
24	862.41	862.33	862.80	862.39	862.52	862.81	864.36	864.49	864.51	864.40	864.20	863.70
25	862.38	862.33	862.78	862.36	862.58	863.02	864.32	864.53	864.55	864.41	864.17	863.68
26	862.35	862.35	862.78	862.33	862.58	863.07	864.32	864.52	864.53	864.42	864.19	863.66
27	862.32	862.35	862.76	862.31	862.61	863.15	864.29	864.55	864.53	864.40	864.18	863.70
28	862.31	862.45	862.73	862.33	862.61	863.27	864.29	864.55	864.60	864.40	864.16	863.70
29	862.											

STREAMS TRIBUTARY TO LAKE ONTARIO
04237500 SENECA RIVER AT BALDWINVILLE, NY

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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 mi².

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 sea level (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. Telephone gage-height telemeter at base and auxiliary gages.

REMARKS.--Records fair. 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 mi² of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Several measurements of water temperature were made during the year.

COOPERATION.--Records of lockages at Lock 24 furnished by New York State Department Thruway Authority, Office of Canals.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	910	1490	5250	3620	2050	e5050	11400	8550	1480	4250	491	1140
2	619	1820	4690	2450	1850	e5050	10900	8540	1680	4300	298	764
3	959	1760	4390	1710	1730	e5350	10800	8430	1790	4280	586	556
4	1110	2350	4400	1820	2150	e5550	10600	8100	1840	4170	447	341
5	1010	3290	5190	2500	1580	5740	10500	7690	1840	4140	533	203
6	998	3950	5530	2730	1530	5820	10500	7000	1740	3550	450	207
7	817	3950	5680	2730	1160	5850	11000	6030	1770	2320	287	422
8	849	4060	5180	2630	1030	6020	11400	5400	1890	2070	300	705
9	1150	4160	4910	2620	1150	6100	11600	4970	2350	1900	528	664
10	1070	3910	4820	2550	1330	6370	11700	4830	2890	1700	681	638
11	1100	3680	4730	2520	1180	6550	11700	4750	2860	1720	400	618
12	739	3560	4660	2510	985	6750	11500	4740	2730	1210	220	312
13	492	3720	4750	2380	1030	6880	11700	4720	2800	736	281	207
14	600	4200	4650	2300	1020	6940	12200	4620	2950	708	742	272
15	748	3950	4680	2350	1000	7080	12500	4160	3260	1110	727	332
16	702	3130	4830	2410	995	7480	12900	4120	3820	1010	692	617
17	784	3610	5060	2400	1570	7760	13200	3980	4110	648	1070	761
18	680	4200	4990	2490	2130	7910	13000	3240	4270	887	1890	685
19	679	4470	4920	2580	2440	7860	12700	2260	4080	732	3710	534
20	679	4710	4860	1590	3180	7660	12100	2460	3580	714	3950	439
21	918	4640	4930	1020	3820	7440	11400	2430	2940	482	4640	575
22	746	4570	5090	1020	5010	7880	10600	2140	2700	335	4410	1160
23	946	4040	5070	1010	5660	8790	10000	2160	2110	373	4040	2220
24	893	3660	5010	969	5610	10000	9570	1730	2590	399	3920	2690
25	835	3640	4900	1010	5370	11500	9270	1350	3410	650	3680	1940
26	864	3610	4730	993	5530	12100	9150	1280	3370	582	3480	1840
27	826	3370	5440	996	e5750	12600	9070	981	3350	745	3390	2000
28	821	3470	4320	1100	e5250	13000	8880	1020	3740	892	3290	2060
29	834	4910	3940	1120	---	12800	8700	1060	3600	503	3220	2240
30	882	5440	4170	1070	---	12500	8440	1050	4240	364	3250	2550
31	903	---	3730	1490	---	11900	---	1360	---	552	1950	---
TOTAL	26163	111320	149500	60688	73090	250280	328980	125151	85780	48032	57553	29692
MEAN	844	3711	4823	1958	2610	8074	10970	4037	2859	1549	1857	990
MAX	1150	5440	5680	3620	5750	13000	13200	8550	4270	4300	4640	2690
MIN	492	1490	3730	969	985	5050	8440	981	1480	335	220	203

e Estimated

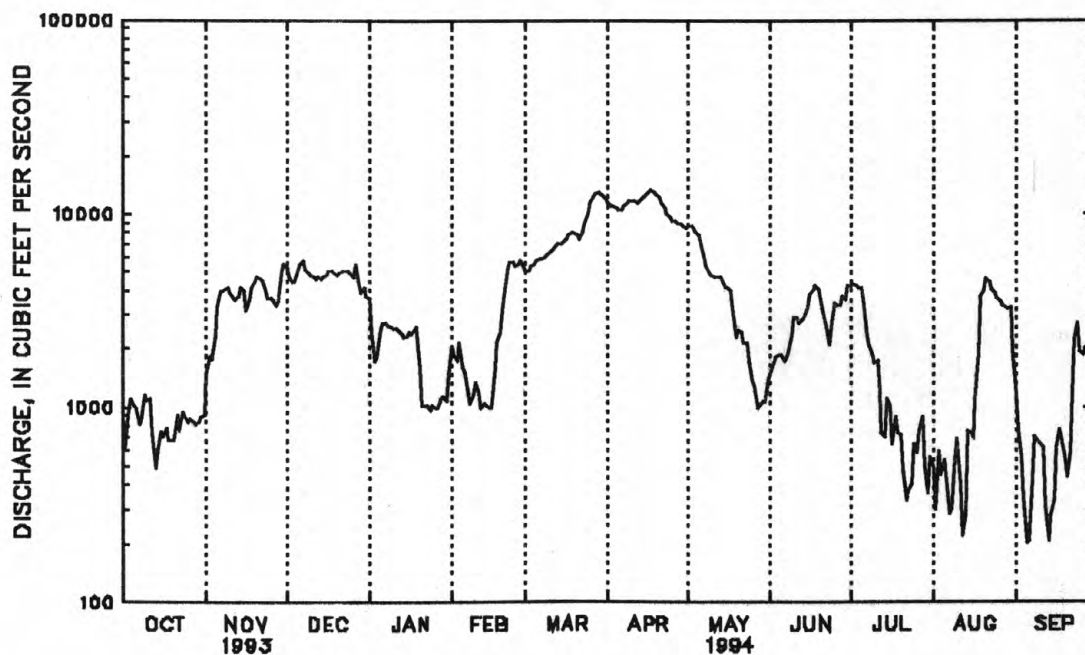
STREAMS TRIBUTARY TO LAKE ONTARIO
04237500 SENECA RIVER AT BALDWINVILLE, NY--continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	2204	3251	4390	3928	3845	5872	6226	4006	2643	1985	1587	1501
MAX	11020	9491	10330	8807	8313	11650	15610	8882	6456	12100	6214	4760
(WY)	1978	1978	1978	1978	1976	1956	1993	1983	1972	1972	1992	1977
MIN	572	675	778	805	965	1606	1317	772	957	621	588	528
(WY)	1986	1958	1961	1954	1980	1965	1981	1985	1977	1985	1985	1985

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1950 - 1994	
ANNUAL TOTAL	1608565		1346229			
ANNUAL MEAN	4407		3688		3448	
HIGHEST ANNUAL MEAN					5998	1978
LOWEST ANNUAL MEAN					1357	1965
HIGHEST DAILY MEAN	18100	Apr 27	13200	Apr 17	18100	Apr 27 1993
LOWEST DAILY MEAN	141	Jul 16	203	Sep 5	a34	Sep 17 1985
ANNUAL SEVEN-DAY MINIMUM	589	Jul 21	385	Aug 7	283	Sep 23 1988
10 PERCENT EXCEEDS	12300		8830		7650	
50 PERCENT EXCEEDS	2880		2730		2350	
90 PERCENT EXCEEDS	683		619		914	

a Result of extreme regulation.



DAILY MEAN DISCHARGE FOR — 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

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04237944 ONONDAGA CREEK TRIBUTARY NO. 6 ABOVE MAIN MUDBOIL DEPRESSION AREA, NEAR TULLY, NY

LOCATION.--Lat 42°51'13", long 76°08'34", Onondaga County, Hydrologic Unit 04140201, about 450 ft upstream of the main depression area caused by land subsidence, about 1,325 ft east of Tully Farms Road, 2,000 ft south of Otisco Road, 1,600 ft upstream from mouth and 4.2 mi northwest of Tully.

DRAINAGE AREA.--0.26 mi² (0.70 mi² diverted to Trib. No. 5 on June 12, 1992).

WATER-DISCHARGE RECORDS

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

GAGE.--Two water-stage recorders and Parshall flumes.

REMARKS.--Records good except those for periods of flume overflow and flow bypass of flumes, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.09	.30	e.30	e.37	e.55	1.4	.69	.51	.38	.13	.16
2	.06	.10	.30	e.28	e.34	e.50	1.4	.62	.37	.41	.15	.15
3	.05	.15	.31	e.26	e.33	e.49	1.5	.59	.36	.42	.13	.18
4	.07	.18	.41	e.26	e.30	e.46	1.4	.57	.36	.36	.12	.15
5	.07	.16	.64	e.23	e.29	e.40	1.3	.55	.35	.34	.12	.13
6	.05	.17	.49	e.23	e.29	e.39	1.3	.56	.37	.32	.11	.13
7	.04	.13	.43	e.22	e.27	e.44	1.8	.53	.36	.32	.10	.14
8	.04	.12	.40	e.22	e.26	e.73	1.5	.60	.35	.30	.10	.14
9	.05	.11	.39	e.20	e.24	e.58	1.3	.56	.32	.29	.10	.15
10	.04	.11	.49	e.21	e.23	e1.1	1.2	.55	.31	.29	.09	.13
11	.04	.10	.55	e.22	e.23	e.99	1.1	.49	.29	.28	.09	.13
12	.04	.11	.46	e.23	e.22	e.78	1.0	.52	.28	.27	.08	.13
13	.04	.10	.42	e.24	e.22	e.83	1.3	.49	.31	.26	.10	.12
14	.04	.14	.41	e.32	e.23	e.88	1.3	.49	.40	.27	.14	.13
15	.04	.18	.39	e.23	e.24	e1.1	1.2	.51	.40	.28	.09	.13
16	.04	.16	.36	e.23	e.24	1.4	1.7	.53	.38	.25	.09	.13
17	.07	.46	.34	.27	e.24	e1.0	1.5	.52	.32	.23	.09	.13
18	.06	.48	.35	e.26	e.27	e1.0	1.1	.48	.33	.22	.53	.13
19	.04	.36	.34	e.24	e.38	e.90	.99	.44	.32	.20	.25	.14
20	.04	.29	.33	e.24	e1.4	e.85	.87	.42	.32	.19	.18	.13
21	.05	.25	.40	e.24	e1.9	e1.0	.75	.43	.34	.18	.39	.12
22	.05	.23	e.42	e.24	e1.4	2.3	.65	.47	.30	.17	.29	.12
23	.04	.21	e.35	e.25	e1.1	3.0	.60	.50	.31	.17	.23	.17
24	.04	.21	e.35	e.25	e1.0	4.0	.61	.47	.36	.16	.20	.14
25	.04	.20	e.33	e.23	e.78	2.6	.68	.49	.42	.15	.23	.15
26	.04	.20	e.25	e.21	e.70	2.0	.66	.52	.33	.15	.21	.18
27	.04	.22	e.25	e.23	e.69	2.6	.66	.42	.43	.13	.20	.32
28	.04	.45	e.24	e.55	e.64	2.1	.62	.38	.46	.14	.21	.19
29	.04	.40	e.24	e.79	---	1.7	.60	.39	.36	.13	.20	.18
30	.04	.33	e.26	e.48	---	1.6	.59	.40	.46	.21	.17	.16
31	.06	---	e.28	e.42	---	1.4	---	.45	---	.14	.17	---
TOTAL	1.44	6.40	11.48	8.78	14.80	39.67	32.58	15.63	10.78	7.61	5.29	4.49
MEAN	.046	.21	.37	.28	.53	1.28	1.09	.50	.36	.25	.17	.15
MAX	.07	.48	.64	.79	1.9	4.0	1.8	.69	.51	.42	.53	.32
MIN	.04	.09	.24	.20	.22	.39	.59	.38	.28	.13	.08	.12
CFSM	.18	.82	1.42	1.09	2.03	4.92	4.18	1.94	1.38	.94	.66	.58
IN.	.21	.92	1.64	1.26	2.12	5.68	4.66	2.24	1.54	1.09	.76	.64
e Estimated												

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993
MEAN	.16	.35	.74	1.01	1.09	1.97	2.48	.88	.56	.30	.28	.20
MAX	.37	.58	1.32	2.17	2.36	3.85	4.04	1.58	1.11	.54	.60	.39
(WY)	1993	1993	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
MIN	.046	.21	.37	.28	.33	.77	1.09	.50	.22	.10	.063	.049
(WY)	1994	1994	1994	1994	1993	1993	1994	1994	1993	1993	1993	1993

STREAMS TRIBUTARY TO LAKE ONTARIO

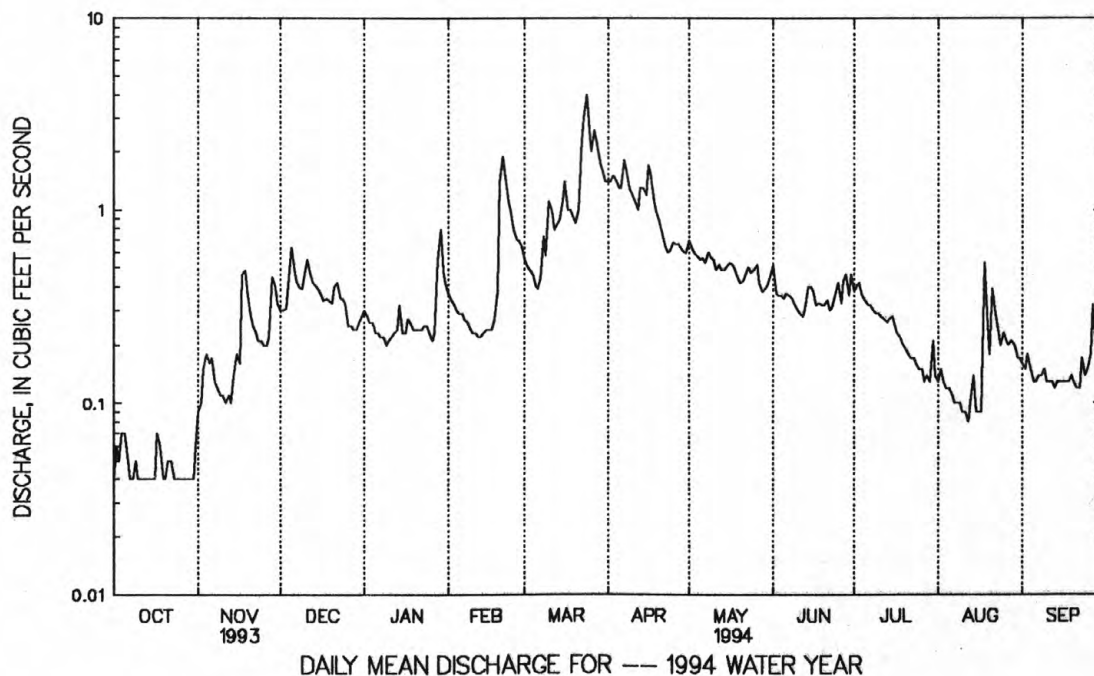
04237944 ONONDAGA CREEK TRIBUTARY NO. 6 ABOVE MAIN MUDBOIL DEPRESSION AREA, NEAR TULLY, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1992 - 1994
ANNUAL TOTAL	170.72	158.95	
ANNUAL MEAN	.47	.44	.83
HIGHEST ANNUAL MEAN			1.52 1992
LOWEST ANNUAL MEAN			.44 1994
HIGHEST DAILY MEAN	5.2 Apr 2	4.0 Mar 24	12 Mar 27 1992
LOWEST DAILY MEAN	.04 Aug 23	.04 a	.04 Oct 3 1991
ANNUAL SEVEN-DAY MINIMUM	.04 Sep 13	.04 Oct 10	.04 Sep 13 1993
INSTANTANEOUS PEAK FLOW		7.9 Mar 24	16 Mar 27 1992
INSTANTANEOUS PEAK STAGE		1.26 Mar 24	1.66 May 31 1992
INSTANTANEOUS LOW FLOW		.03 b	.03 c
ANNUAL RUNOFF (CFSM)	1.80	1.67	3.20
ANNUAL RUNOFF (INCHES)	24.43	22.74	43.46
10 PERCENT EXCEEDS	.99	1.0	2.4
50 PERCENT EXCEEDS	.24	.29	.39
90 PERCENT EXCEEDS	.04	.09	.07

a Oct. 1, 7, 8, 10-16, 19, 20, 23-30.

b Oct. 14, 30.

c Oct. 8, 1991, Oct. 14, 30, 1993.



STREAMS TRIBUTARY TO LAKE ONTARIO

04237944 ONONDAGA CREEK TRIBUTARY NO. 6 ABOVE MAIN MUDBOIL DEPRESSION AREA, NEAR TULLY, NY--Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1992-94 (d).

SEDIMENT DATA: 1992-94 (d).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)
OCT												
19...	0815	0.05	383	7.8	8.0	757	7.2	62	290	86	19	17
NOV												
16...	0830	0.15	628	7.5	7.5	760	10.9	92	320	97	19	9.2
JAN												
11...	0830	0.22	632	7.9	0.0	--	--	--	300	89	18	11
FEB												
17...	0800	0.24	710	8.3	1.0	--	--	--	290	88	17	9.4
MAR												
24...	0800	2.1	429	7.8	5.0	--	--	--	190	58	12	7.1
APR												
28...	0800	0.58	561	7.8	7.5	761	13.8	115	270	81	16	6.9
MAY												
27...	0830	0.38	564	7.7	9.0	760	13.4	116	270	80	16	7.1
JUN												
30...	0900	0.58	469	7.5	16.0	740	10.5	110	280	84	16	8.4
JUL												
26...	0800	0.15	568	7.7	18.0	741	8.9	97	290	87	17	9.6
SEP												
07...	0830	0.15	503	7.6	14.0	747	10.3	103	300	89	18	9.6

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALKA- LINITY WAT DIS TOT IT (MG/L AS CaCO3)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	BROMIDE DIS- SOLVED (MG/L AS BR)	SEDI- MENT, DIS- SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT												
19...	2.6	35	35	262	320	6.9	505	26	91	0.050	24	0.00
NOV												
16...	1.9	15	37	272	332	6.5	372	17	45	0.030	2	0.00
JAN												
11...	1.3	23	26	263	332	6.0	432	8	70	0.080	242	--
FEB												
17...	1.2	18	28	302	369	6.6	355	17	73	0.050	188	--
MAR												
24...	2.5	9.8	21	198	242	5.1	236	18	13	0.010	14	0.08
APR												
28...	1.3	13	21	248	303	4.5	252	18	31	0.010	62	0.10
MAY												
27...	1.1	13	22	244	298	5.5	308	14	51	0.030	8	0.01
JUN												
30...	1.6	14	21	248	303	7.1	342	61	76	0.020	13	0.02
JUL												
26...	1.5	13	23	256	312	7.4	323	16	73	0.040	11	0.00
SEP												
07...	1.5	25	24	260	317	7.2	333	13	55	0.060	--	--

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO

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.

DRAINAGE AREA.--0.32 mi² (0.70 mi² diverted to Trib. No. 5 on June 12, 1992).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and Parshall flume.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

PEAK DISCHARGES FOR CURRENT YEAR.--Maximum discharge 23.0 ft³/s, Mar 24, gage height 1.96 ft.

REVISIONS.--The maximum discharge for water year 1992 has been revised to 45 ft³/s. Mar. 27, 1992, gage height, 2.08 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.49	.65	e.61	e.75	e.73	3.2	1.4	1.2	1.0	.60	.58
2	.34	.41	.62	e.59	e.68	e.70	3.2	1.1	.97	1.1	.81	.55
3	.32	.46	.62	e.56	e.66	e.85	3.6	1.1	.92	1.1	.45	.55
4	.36	.49	.76	e.58	e.67	e.81	3.0	1.0	.89	.86	.45	.53
5	.37	.40	1.3	e.53	e.64	e.63	2.7	1.0	.90	.83	.48	.52
6	.31	.47	.92	e.54	e.60	e.63	2.6	1.2	.98	.76	.41	.53
7	.27	.40	.83	e.52	e.54	e.78	4.8	1.1	.97	.73	.44	.51
8	.27	.36	.78	e.50	e.51	1.2	3.3	1.3	.91	.67	.42	.51
9	.28	.34	e.76	e.48	e.54	.96	2.7	1.2	.87	.68	.42	.54
10	.33	.34	e.94	e.49	e.52	2.1	2.4	1.2	.85	.68	.44	.46
11	.29	.31	e1.1	e.51	e.52	1.6	2.0	1.1	.86	.68	.34	.45
12	.30	.36	e.94	e.53	e.52	1.4	2.0	1.2	.86	.63	.20	.44
13	.31	.33	e.85	e.55	e.50	1.4	2.6	1.1	1.0	.59	.27	.44
14	.30	.35	e.85	e.77	e.51	1.4	2.4	1.0	1.2	.65	.40	.49
15	.26	.41	e.79	e.70	e.46	2.4	2.0	1.1	.79	.70	.24	.43
16	.22	.37	e.74	e.65	e.46	3.0	3.7	1.1	.70	.67	.24	.41
17	.33	.98	e.71	e.62	e.47	2.1	2.9	1.1	.68	.66	.28	.49
18	.28	.95	e.71	e.77	e.47	1.9	2.3	1.1	.68	.66	3.0	.41
19	.27	.63	e.71	e.68	e.68	1.7	2.1	1.1	.65	.66	.60	.41
20	.25	.61	e.69	e.67	e2.4	1.5	1.7	1.0	.41	.65	.47	.40
21	.26	.56	e.82	e.66	3.6	2.2	1.6	.98	.64	.60	1.4	.39
22	.26	.49	e.91	e.66	e2.2	7.7	1.5	.96	.60	.59	.78	.38
23	.26	.49	e.76	e.66	e1.6	9.8	1.4	.92	.57	.61	.58	.61
24	.22	.51	e.72	e.57	e1.4	13	1.3	.91	.92	.59	.53	.45
25	.23	.52	e.70	.52	e1.0	9.6	1.5	1.0	.98	.59	.66	.43
26	.22	.51	e.60	.51	e.91	5.6	1.2	1.1	.64	.57	.54	.55
27	.23	.52	e.56	.52	e.87	8.4	1.2	1.0	1.0	.56	.57	1.2
28	.26	.85	e.54	1.3	e.81	7.1	1.1	.95	1.2	.64	.59	.59
29	.24	.75	e.53	1.7	---	4.3	1.1	.91	1.1	.59	.61	.58
30	.32	.67	e.57	e.94	---	3.8	1.1	.86	1.3	1.0	.55	.53
31	.41	---	e.60	e.87	---	3.3	---	.95	---	.64	.60	---
TOTAL	8.88	15.33	23.58	20.76	25.49	102.59	68.2	33.04	26.24	21.94	18.37	15.36
MEAN	.29	.51	.76	.67	.91	3.31	2.27	1.07	.87	.71	.59	.51
MAX	.41	.98	1.3	1.7	3.6	13	4.8	1.4	1.3	1.1	3.0	1.2
MIN	.22	.31	.53	.48	.46	.63	1.1	.86	.41	.56	.20	.38
CFSM	.90	1.60	2.38	2.09	2.84	10.3	7.10	3.33	2.73	2.21	1.85	1.60
IN.	1.03	1.78	2.74	2.41	2.96	11.93	7.93	3.84	3.05	2.55	2.14	1.79

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
MEAN	.49	.73	1.21	1.59	1.62	3.34	3.30	1.52	1.10	.88	.75	.53
MAX	.78	1.03	1.90	2.82	3.05	5.20	4.49	2.56	1.76	1.47	1.32	.77
(WY)	1993	1993	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
MIN	.29	.51	.76	.67	.85	1.51	2.27	.92	.66	.45	.35	.30
(WY)	1994	1994	1994	1994	1993	1993	1994	1993	1993	1993	1993	1993

STREAMS TRIBUTARY TO LAKE ONTARIO

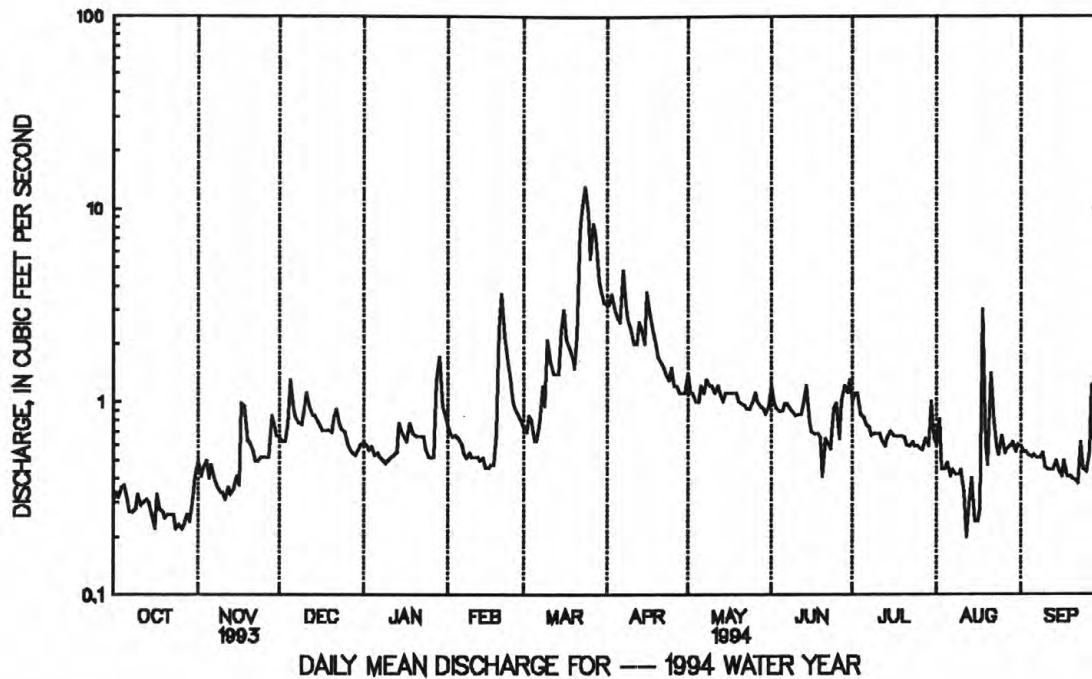
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04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1992 - 1994
ANNUAL TOTAL	334.29	379.78	
ANNUAL MEAN	.92	1.04	1.42
HIGHEST ANNUAL MEAN			2.20 1992
LOWEST ANNUAL MEAN			1.02 1993
HIGHEST DAILY MEAN	6.7 Mar 30	13 Mar 24	23 Mar 27 1992
LOWEST DAILY MEAN	.15 Jul 29	.20 Aug 12	.15 Jul 29 1993
ANNUAL SEVEN-DAY MINIMUM	.24 Oct 23	.24 Oct 23	.24 Oct 23 1993
INSTANTANEOUS PEAK FLOW		23 Mar 24	45 Mar 27 1992
INSTANTANEOUS PEAK STAGE		1.96 Mar 24	2.08 Mar 27 1992
INSTANTANEOUS LOW FLOW		a .00 Jun 20	a .00 b
ANNUAL RUNOFF (CFSM)	2.86	3.25	4.44
ANNUAL RUNOFF (INCHES)	38.86	44.15	60.27
10 PERCENT EXCEEDS	1.7	2.0	3.3
50 PERCENT EXCEEDS	.63	.66	.88
90 PERCENT EXCEEDS	.29	.34	.37

a Result of dam construction.

b Jul 29, 1993 and Jun 20, 1994.



WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1992-94 (d).

SEDIMENT DATA: 1992-94 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1991 to current year.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean 17,900 mg/L, July 29; minimum daily mean 22 mg/L, Aug.19.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean 36 tons, Dec. 3; minimum daily mean 0.02 tons, on many days during August and September.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE,	SPE-	PH	TEMPER-	BARO-	OXYGEN,	OXYGEN,	HARD-	CALCIUM	MAGNE-	SODIUM,		
		INST.	CIFIC	WATER		METRIC		DIS-					NESS	SIUM,
		CUBIC	CON-	WHOLE		PRES-		SOLVED					TOTAL	DIS-
		FEET	DUCT-	(STAND-	ATURE	(MM	DIS-	CENT	(MG/L	SOLVED	SOLVED	SOLVED		
		PER	ANCE	ARD	WATER	OF	SOLVED	SATUR-	AS	(MG/L	(MG/L	(MG/L		
		SECOND	(US/CM)	UNITS)	(DEG C)	HG)	(MG/L)	ATION)	CACO3)	AS CA)	AS MG)	AS NA)		
OCT														
19...	0845	0.31	7310	7.5	8.0	757	7.4	65	820	180	90	1400		
NOV														
16...	0900	0.37	6750	7.8	8.5	760	11.0	96	800	190	80	1100		
JAN														
11...	0900	e0.51	6790	7.8	1.0	--	--	--	560	130	58	820		
FEB														
17...	0830	0.46	6810	8.0	2.0	--	--	--	670	150	71	1000		
MAR														
24...	0730	7.8	1840	7.9	5.0	--	--	--	170	64	2.1	210		
APR														
28...	0830	1.1	5370	7.9	8.5	761	12.3	107	600	140	60	800		
MAY														
27...	0800	1.0	6040	7.9	8.5	760	12.6	111	650	150	67	900		
JUN														
30...	0830	1.3	4860	7.6	17.0	740	10.6	115	550	130	54	710		
JUL														
26...	0730	0.58	2750	7.6	16.5	741	10.2	108	770	170	84	1300		
SEP														
07...	0800	0.54	6990	7.6	13.5	747	11.4	115	940	210	100	1200		
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	BROMIDE DIS- SOLVED (MG/L AS BR)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	
OCT														
19...	5.0	2300	280	154	188	10	4360	90	240	3.2	37	0.03		
NOV														
16...	4.1	1900	260	192	234	9.6	3750	20	200	2.7	1270	1.3		
JAN														
11...	2.6	1700	190	178	217	8.8	3640	40	140	2.2	2570	e3.5		
FEB														
17...	3.4	1800	200	182	222	10	3540	30	180	2.5	1310	1.6		
MAR														
24...	2.5	420	64	148	181	5.5	978	55	42	0.55	667	14		
APR														
28...	3.0	1500	170	196	239	6.9	2860	<10	140	2.1	473	1.4		
MAY														
27...	3.3	1600	190	184	225	8.4	3340	10	200	2.2	364	0.98		
JUN														
30...	3.3	1300	150	184	225	8.9	2720	20	210	1.8	48	0.17		
JUL														
26...	4.4	2200	240	152	185	9.7	4540	20	190	3.1	770	1.2		
SEP														
07...	4.1	2100	220	156	190	9.3	4090	<10	190	2.8	--	--		
e Estimated														

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO

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04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	227	370	439	542	140	266	311	398	37	173	45
2	45	125	306	304	519	152	401	278	500	27	202	81
3	56	118	595	334	540	127	244	286	817	37	400	96
4	90	147	541	1470	598	88	153	371	1050	45	366	115
5	56	100	1300	937	786	87	326	313	1400	50	193	129
6	48	1030	1940	981	694	110	434	311	1000	56	141	164
7	43	1230	1960	542	623	244	376	397	666	59	162	157
8	40	1350	2840	1070	566	401	327	880	565	61	143	144
9	43	1010	2480	1240	636	469	373	912	588	69	109	145
10	44	1370	1900	1340	591	617	252	445	630	138	82	190
11	37	1250	1090	1770	748	230	414	784	549	165	50	175
12	41	683	1020	1700	955	161	285	1180	586	145	42	127
13	42	1350	680	1360	837	197	434	1010	872	147	66	115
14	38	1420	300	1030	760	474	687	813	678	153	68	118
15	42	1150	181	2040	367	354	840	663	643	181	67	113
16	47	1320	492	2580	682	224	493	534	589	255	55	127
17	61	1030	304	6360	978	164	622	745	723	283	45	138
18	57	773	171	7480	411	184	668	1280	959	320	82	100
19	62	670	158	7620	318	213	672	1150	903	415	75	62
20	49	1150	141	2630	333	180	619	779	141	1150	71	117
21	50	1340	207	1770	256	781	505	881	54	1350	102	74
22	61	1200	365	2760	283	604	467	792	65	825	103	135
23	42	1060	593	1360	175	488	618	452	49	334	92	92
24	37	1480	286	774	331	468	544	392	81	181	71	72
25	34	428	293	325	290	301	345	421	61	494	95	88
26	37	349	445	670	333	305	326	306	76	801	87	74
27	37	909	439	511	402	428	382	439	85	795	89	57
28	39	855	398	348	244	348	379	810	40	493	102	64
29	49	589	945	287	---	404	219	651	59	275	83	92
30	103	328	1280	310	---	382	361	699	53	416	59	145
31	179	---	1530	473	---	223	---	640	---	453	53	---
MEAN	53	868	824	1700	528	308	434	643	496	329	114	112
MAX	179	1480	2840	7620	978	781	840	1280	1400	1350	400	190
MIN	23	100	141	287	175	87	153	278	40	27	42	45

STREAMS TRIBUTARY TO LAKE ONTARIO

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.30	.65	.72	1.1	.28	2.3	1.2	1.3	.10	.28	.07
2	.04	.14	.51	.48	.95	.29	3.4	.85	1.3	.08	.49	.12
3	.05	.15	.99	.51	.96	.29	2.3	.83	2.0	.11	.49	.14
4	.09	.19	1.1	2.3	1.1	.19	1.3	1.0	2.5	.10	.44	.16
5	.06	.11	4.2	1.3	1.4	.15	2.3	.87	3.4	.11	.25	.18
6	.04	1.3	4.8	1.4	1.1	.19	3.0	.98	2.6	.11	.15	.23
7	.03	1.3	4.4	.76	.91	.51	4.9	1.2	1.7	.12	.19	.22
8	.03	1.3	6.0	1.5	.78	1.3	2.9	3.1	1.4	.11	.16	.20
9	.03	.92	5.1	1.6	.93	1.2	2.7	2.8	1.4	.13	.12	.21
10	.04	1.2	4.8	1.8	.83	3.6	1.7	1.4	1.4	.25	.10	.24
11	.03	1.0	3.2	2.4	1.0	1.0	2.2	2.4	1.3	.30	.05	.21
12	.03	.66	2.6	2.4	1.3	.61	1.5	3.9	1.4	.25	.02	.15
13	.03	1.2	1.6	2.0	1.1	.73	3.2	3.0	2.4	.23	.05	.14
14	.03	1.3	.69	2.2	1.0	1.8	4.4	2.3	2.2	.27	.08	.16
15	.03	1.3	.39	3.9	.46	2.1	4.6	2.0	1.4	.34	.04	.13
16	.03	1.3	.98	4.5	.85	1.8	4.8	1.6	1.1	.46	.04	.14
17	.05	2.5	.58	11	1.2	.93	4.8	2.2	1.3	.50	.04	.18
18	.04	2.0	.33	16	.52	.94	4.2	3.7	1.7	.57	.63	.11
19	.04	1.2	.30	14	.58	.96	3.7	3.3	1.6	.73	.12	.07
20	.03	1.9	.26	4.7	2.2	.74	2.9	2.1	.18	2.0	.09	.12
21	.04	2.0	.46	3.2	2.5	5.1	2.2	2.3	.09	2.2	.40	.08
22	.04	1.6	.90	4.9	1.7	12	1.8	2.1	.10	1.3	.22	.14
23	.03	1.4	1.2	2.4	.76	13	2.3	1.1	.08	.55	.14	.15
24	.02	2.0	.56	1.2	1.2	14	2.0	.96	.21	.29	.10	.09
25	.02	.60	.55	.46	.78	7.8	1.4	1.2	.17	.80	.17	.10
26	.02	.47	.72	.92	.82	4.6	1.1	.92	.13	1.2	.13	.11
27	.02	1.3	.66	.72	.94	10	1.2	1.2	.23	1.2	.14	.19
28	.03	1.9	.58	1.2	.53	6.8	1.1	2.1	.14	.86	.16	.10
29	.03	1.2	1.3	1.3	---	4.7	.64	1.6	.19	.44	.14	.14
30	.09	.60	2.0	.79	---	3.9	1.1	1.6	.20	1.1	.09	.20
31	.20	---	2.5	1.1	---	2.0	---	1.6	---	.79	.08	---
TOTAL	1.31	34.34	54.91	93.66	29.50	103.51	77.94	57.41	35.12	17.60	5.60	4.48
MEAN	.04	1.1	1.8	3.0	1.1	3.3	2.6	1.9	1.2	.57	.18	.15
MAX	.20	2.5	6.0	16	2.5	14	4.9	3.9	3.4	2.2	.63	.24
MIN	.02	.11	.26	.46	.46	.15	.64	.83	.08	.08	.02	.07

STREAMS TRIBUTARY TO LAKE ONTARIO

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WATER-QUALITY DATA

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
02...	1830	0.49	54	0.07	--	97
JAN						
28...	2350	2.4	301	2.0	--	100
FEB						
06...	1745	0.37	645	0.64	--	100
16...	1600	--	807	1.0	66	99
21...	1315	3.5	234	2.2	--	100
24...	1730	1.4	437	1.7	68	96
MAR						
22...	1600	11	468	14	83	100
23...	1800	15	483	20	--	100
24...	1735	21	307	17	48	88
27...	1900	11	498	15	--	100
APR						
08...	1400	3.1	310	2.6	--	99
MAY						
21...	1601	0.91	952	2.3	--	100

STREAMS TRIBUTARY TO LAKE ONTARIO
04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY

LOCATION.--Lat 42°55'51", long 76°10'24", Onondaga County, Hydrologic Unit 04140201, at Onondaga Dam on Onondaga Creek, 3.5 mi southwest of Nedrow, 4.0 mi south of Syracuse, and 10.5 mi upstream from Onondaga Lake.

DRAINAGE AREA.--67.7 mi².

PERIOD OF RECORD.--June 1949 to September 1952 (monthly elevations and contents), October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by a rolled earthfill dam, completed by Corps of Engineers in August 1949 for flood control; first used for flood regulation about a year prior to completion. Usable capacity, 18,200 acre-ft between elevations 457.0 ft, conduit invert at intake, and 504.5 ft crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually. Storage includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Figures published as contents, in acre-ft, in the 1993 annual report were actually the change in contents, in sec-ft days. Corrected values for contents for the 1993 water year are included below.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 485.9 ft, Apr. 1, 1960, contents, 5,960 acre-ft; no contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 475.37 ft, Mar. 26, contents, 2,090 acre-ft; minimum elevation, 459.42 ft, Aug. 12-14, no contents many days.

Capacity table (elevation, in feet, and contents, in acre-feet)

460.00	0	470.00	700
461.00	5	473.00	1,420
462.00	15	478.00	2,880
464.00	50	482.00	4,230
467.00	225	486.00	6,010

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460.38	462.44	464.65	461.45	463.55	463.34	466.58	463.64	462.06	463.71	459.62	459.90
2	460.34	462.99	465.18	461.55	463.28	463.10	466.82	464.09	462.17	462.57	459.59	459.85
3	460.45	463.11	464.36	461.59	462.96	463.14	468.07	463.20	461.59	463.17	459.57	459.81
4	460.55	462.80	463.71	461.53	462.68	462.93	469.14	462.71	461.24	462.44	459.56	459.76
5	461.17	462.57	463.42	461.40	462.46	463.24	468.18	462.46	461.02	461.66	459.54	459.73
6	461.24	462.43	---	461.39	462.31	462.97	467.37	462.37	460.90	461.50	459.53	459.69
7	461.10	462.35	---	461.40	462.21	463.02	468.00	462.57	460.88	461.35	459.51	459.66
8	460.95	462.33	---	461.40	462.10	463.66	468.72	462.94	460.86	461.24	459.50	459.64
9	460.84	462.41	463.33	461.40	462.01	463.83	467.50	463.16	460.77	461.13	459.48	459.62
10	460.89	462.35	463.16	461.39	461.95	464.18	466.90	462.88	460.67	461.31	459.47	459.62
11	460.97	462.66	463.94	461.38	461.87	465.29	467.01	462.64	460.56	461.22	459.44	459.60
12	461.03	462.82	463.71	461.40	461.81	465.13	466.34	462.48	460.51	461.00	459.43	459.58
13	461.15	462.67	463.27	461.48	461.78	464.67	466.80	462.44	460.49	460.79	459.42	459.57
14	461.22	464.40	462.92	461.53	461.75	464.64	468.54	462.06	461.57	460.60	459.44	459.55
15	461.40	464.75	462.78	461.50	461.66	464.84	468.21	461.73	461.75	460.47	459.47	459.55
16	461.57	463.77	462.73	461.43	461.65	465.92	467.27	461.82	461.15	460.41	459.47	459.54
17	461.78	463.23	462.61	461.38	461.62	465.80	468.62	461.82	460.83	460.34	459.46	459.53
18	462.16	462.86	462.41	461.38	461.64	465.31	467.65	461.80	460.61	460.27	460.93	459.52
19	462.24	462.72	462.31	461.36	461.84	464.85	466.15	461.68	460.44	460.21	461.35	459.51
20	462.20	462.64	462.29	461.30	462.74	464.46	465.54	461.50	460.30	460.14	460.81	459.50
21	462.19	462.59	462.30	461.24	465.32	464.30	465.12	461.26	460.21	460.07	460.93	459.49
22	462.26	462.45	462.62	461.22	467.94	465.98	464.75	461.09	460.19	460.01	461.26	459.48
23	462.27	462.45	462.71	461.21	467.37	468.25	464.24	460.97	460.13	459.96	460.80	459.47
24	462.23	463.26	462.26	461.23	465.84	470.39	463.78	460.88	460.34	459.93	460.51	459.50
25	462.18	464.20	462.11	461.30	464.95	473.48	464.08	460.98	461.71	459.90	460.34	459.50
26	462.16	463.58	462.03	461.32	464.33	475.02	464.25	461.46	461.27	459.85	460.37	459.51
27	462.12	463.12	461.79	461.28	463.74	473.21	463.55	462.15	460.90	459.79	460.28	460.15
28	462.09	462.90	461.61	461.32	463.37	472.14	462.99	461.76	463.21	459.73	460.16	460.53
29	462.07	463.03	461.49	462.25	---	471.27	462.74	461.41	462.67	459.69	460.11	460.37
30	462.03	463.22	461.44	463.38	---	469.41	462.60	461.17	464.27	459.66	460.05	460.25
31	462.16	---	461.44	463.75	---	467.50	---	461.00	---	459.65	459.96	---
MEAN	461.53	462.97	---	461.55	463.10	466.30	466.25	462.07	461.18	460.77	459.98	459.70
MAX	462.27	464.75	---	463.75	467.94	475.02	469.14	464.09	464.27	463.71	461.35	460.53
MIN	460.34	462.33	---	461.21	461.62	462.93	462.60	460.88	460.13	459.65	459.42	459.47
†	19.4	43.4	9.40	43.2	38.2	199	22.4	4.75	58.7	0	0	1.00
††	+0.28	+0.40	-0.55	+0.55	-0.09	+2.62	-2.97	-0.29	+0.91	-0.95	0	+0.02
†††	15.6	28.8	46.0	23.2	11.9	1640	97.0	8.10	2.05	0	0	2.05

† Contents, in acre-ft, at end of month.

†† Change in contents, equivalent in cubic feet per second

††† Contents, in acre-ft, at end of month, 1993 water year.

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 414.19 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	59	89	e70	e110	e130	477	235	159	208	38	51
2	28	60	83	e70	e100	e120	523	202	106	152	38	49
3	39	61	105	e65	e90	e120	662	159	84	200	43	44
4	34	88	124	e55	e85	e120	674	143	73	121	38	41
5	55	107	312	e57	e80	125	577	133	68	94	42	38
6	41	146	246	e60	e76	e115	544	137	67	96	40	37
7	34	89	157	e60	e74	114	661	142	71	87	37	37
8	30	68	125	e60	e70	164	625	182	67	82	35	35
9	29	58	108	e58	e70	151	534	167	61	85	34	45
10	30	53	111	e55	e66	233	509	176	57	93	33	40
11	31	49	192	e55	e65	283	493	146	54	77	32	36
12	29	55	e135	e56	e66	214	421	154	55	65	31	34
13	30	53	e110	e56	e65	200	523	139	55	60	36	33
14	29	57	e105	e56	e64	208	617	122	131	56	64	35
15	28	103	105	e48	e63	245	550	113	84	60	46	37
16	29	78	106	e48	e63	378	556	127	62	59	37	34
17	42	156	87	e46	e64	295	604	122	55	56	34	33
18	54	343	82	e44	e80	250	503	121	53	53	218	37
19	41	196	85	e46	e95	211	368	114	49	51	94	33
20	36	130	86	e44	e230	187	304	106	46	48	53	31
21	36	100	96	e44	584	196	263	97	48	45	130	30
22	39	85	121	e45	623	523	235	91	48	43	107	29
23	36	77	e95	e46	438	724	212	86	44	41	61	40
24	33	74	e70	e47	e260	880	196	81	73	42	48	41
25	32	70	e85	e49	e195	943	234	99	117	46	83	35
26	29	60	e75	e47	e170	853	227	129	69	63	85	38
27	29	65	e64	e45	e140	825	187	138	80	46	59	105
28	32	168	e65	e80	e130	811	161	95	311	46	49	61
29	32	182	e64	e130	---	745	155	86	161	45	70	51
30	31	115	e68	e140	---	653	149	77	386	55	53	50
31	39	---	e68	e130	---	517	---	71	---	44	48	---
TOTAL	1066	3005	3424	1912	4216	11533	12744	3990	2794	2319	1816	1240
MEAN	34.4	100	110	61.7	151	372	425	129	93.1	74.8	58.6	41.3
MAX	55	343	312	140	623	943	674	235	386	208	218	105
MIN	28	49	64	44	63	114	149	71	44	41	31	29

e Estimated

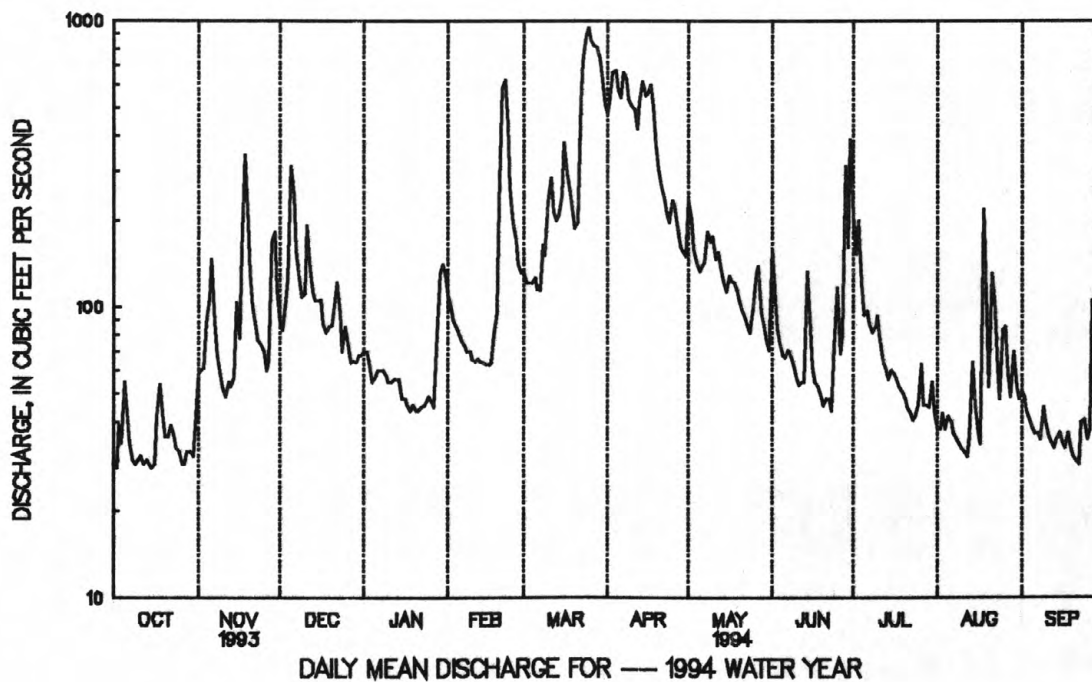
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	66.4	105	142	131	165	265	272	140	94.7	59.5	41.8	45.4
MAX	328	312	365	309	390	535	758	301	563	166	125	216	
(WY)	1978	1969	1973	1979	1990	1979	1993	1990	1972	1992	1992	1975	
MIN	15.3	19.3	31.7	33.7	40.8	93.3	112	62.0	34.8	19.5	10.7	13.2	
(WY)	1965	1965	1961	1961	1963	1983	1981	1985	1962	1962	1965	1964	

STREAMS TRIBUTARY TO LAKE ONTARIO
04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1951 - 1994	
ANNUAL TOTAL	53998		50059		127	
ANNUAL MEAN	148		137		198	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					58.8	
HIGHEST DAILY MEAN	1030	Apr 1	943	Mar 25	1710	Mar 31 1960
LOWEST DAILY MEAN	24	Sep 15	28	a	5.5	Aug 17 1965
ANNUAL SEVEN-DAY MINIMUM	27	Sep 14	29	Oct 9	7.4	Aug 11 1965
INSTANTANEOUS PEAK FLOW			1120	Mar 24	3260	Jul 3 1974
INSTANTANEOUS PEAK STAGE			4.43	Mar 24	6.48	Jul 3 1974
10 PERCENT EXCEEDS	333		311		259	
50 PERCENT EXCEEDS	75		74		80	
90 PERCENT EXCEEDS	30		35		25	

a Oct 2, 15.



STREAMS TRIBUTARY TO LAKE ONTARIO

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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 mi².

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WRD NY 1972: 1971(M). WRD NY 1975: 1972(M), 1974(M). WDR NY-81-3: Drainage area. WRD 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 sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.75 ft. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	89	133	100	e160	176	e562	292	195	243	62	76
2	49	88	125	102	150	159	e626	249	144	284	63	73
3	55	91	145	99	140	166	e770	206	122	229	65	66
4	74	116	189	85	128	157	e800	177	112	149	63	62
5	71	140	365	90	123	169	e694	164	104	145	76	58
6	61	171	296	95	120	149	e670	188	102	122	65	55
7	54	115	204	95	117	159	e830	169	106	130	62	54
8	48	93	169	95	110	204	e768	214	101	106	59	53
9	47	82	151	93	109	191	e652	201	97	216	59	65
10	46	78	159	92	105	287	e601	205	91	120	58	59
11	47	73	229	92	103	335	e567	176	89	104	56	53
12	47	83	176	93	105	264	e500	187	90	96	55	51
13	46	76	147	94	105	252	e627	169	92	87	65	50
14	46	84	146	94	102	261	e731	150	159	82	114	52
15	46	124	144	85	100	311	e660	142	124	83	74	52
16	46	104	146	e85	103	447	e660	155	103	85	62	51
17	66	229	129	e85	101	355	e700	148	92	82	58	49
18	76	398	124	e80	108	307	e633	148	87	79	272	53
19	61	249	124	e85	128	268	e455	141	84	77	133	51
20	57	173	126	81	306	242	e372	134	81	73	86	49
21	56	143	138	81	729	295	e320	125	83	71	182	48
22	56	126	167	83	704	659	e300	121	82	67	149	46
23	56	116	142	84	485	929	e260	116	76	66	94	62
24	54	111	102	85	333	e1150	e250	112	109	64	79	59
25	53	108	121	86	252	e1150	e250	129	159	70	163	52
26	50	95	108	82	218	e1000	e260	155	112	93	120	59
27	47	107	96	77	183	e980	e230	172	131	70	89	161
28	51	211	97	132	175	e950	e200	129	335	68	107	84
29	53	234	95	176	---	e880	e195	121	269	68	97	70
30	54	162	100	e180	---	e800	e190	113	409	75	78	69
31	65	---	99	e160	---	e618	---	150	---	69	71	---
TOTAL	1686	4069	4692	3046	5602	14270	15333	5058	3940	3373	2836	1842
MEAN	54.4	136	151	98.3	200	460	511	163	131	109	91.5	61.4
MAX	76	398	365	180	729	1150	830	292	409	284	272	161
MIN	46	73	95	77	100	149	190	112	76	64	55	46

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1994, BY WATER YEAR (WY)

MEAN	122	162	207	179	216	335	375	206	151	108	81.7	92.1
MAX	424	324	452	381	457	653	935	379	617	237	171	275
(WY)	1978	1978	1973	1979	1976	1979	1993	1976	1972	1974	1992	1975
MIN	39.2	60.3	102	73.6	70.4	123	166	89.1	67.4	46.2	37.0	38.7
(WY)	1984	1972	1989	1981	1980	1983	1981	1987	1988	1981	1987	1980

STREAMS TRIBUTARY TO LAKE ONTARIO
04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY--Continued

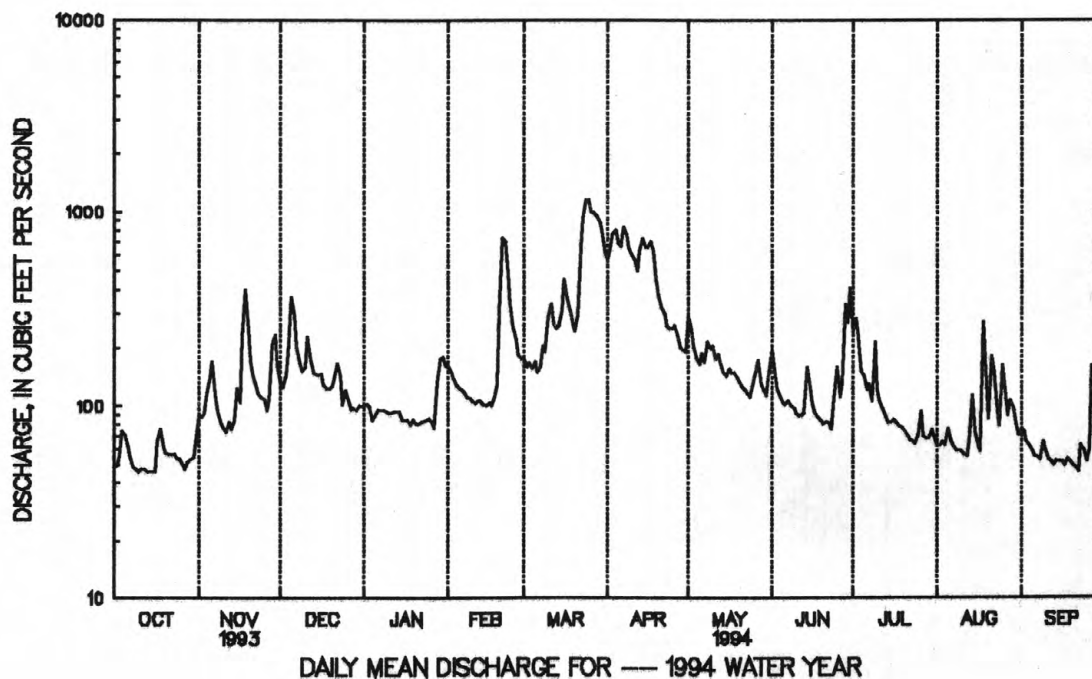
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1970 - 1994	
ANNUAL TOTAL	70999		65747			
ANNUAL MEAN	195		180		186	
HIGHEST ANNUAL MEAN					273	
LOWEST ANNUAL MEAN					109	
HIGHEST DAILY MEAN	1320	Apr 1	1150	a	2040	Mar 5 1979
LOWEST DAILY MEAN	44	Sep 14	46	b	23	Sep 26 1985
ANNUAL SEVEN-DAY MINIMUM	44	Sep 14	46	Oct 10	27	Aug 26 1981
INSTANTANEOUS PEAK FLOW			1660	Jul 9	c4050	Jul 3 1974
INSTANTANEOUS PEAK STAGE			d6.74	Mar 24	8.73	Jul 3 1974
INSTANTANEOUS LOW FLOW			32	Jan 4	20	Sep 26 1985
10 PERCENT EXCEEDS	396		368		369	
50 PERCENT EXCEEDS	108		110		130	
90 PERCENT EXCEEDS	51		55		52	

a Mar. 24, 25.

b Oct. 10, 13, 14, 15, 16, Sep. 22.

c From rating curve extended above 1,600 ft³/s on basis of runoff comparisons with nearby stations.

d Affected by backwater from Onondaga Lake.



STREAMS TRIBUTARY TO LAKE ONTARIO
04240100 HARBOR BROOK AT SYRACUSE, NY

215

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 Velasco Road Detention Basin, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--10.0 mi².

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 sea level. Prior to Sept. 30, 1978, 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 except those for estimated daily discharges, which are poor. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flows can be regulated at detention basin by Onondaga County. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.6	e3.8	3.7	e4.0	8.0	39	20	10	5.2	e3.4	e3.8
2	4.2	3.8	e4.0	3.7	e3.8	7.4	43	12	7.1	24	e4.1	e3.6
3	3.6	4.9	4.5	3.8	e3.6	7.4	53	11	6.6	8.7	e4.1	e3.5
4	5.6	3.9	10	4.8	e3.6	7.4	38	11	6.4	5.5	e4.0	e3.6
5	3.8	3.7	18	4.1	e3.6	7.4	35	10	6.5	8.0	e6.7	e3.6
6	3.4	4.7	7.7	3.7	e3.6	7.4	38	15	6.6	5.1	e3.9	e3.6
7	3.4	4.0	5.8	3.7	e3.6	8.0	62	11	6.6	8.7	e3.8	e3.5
8	3.6	3.8	5.3	3.8	e3.5	8.2	38	15	6.5	5.2	e3.8	e3.3
9	3.7	e3.6	4.7	3.8	e3.5	7.9	35	11	6.5	21	e3.7	e3.8
10	3.6	e3.6	6.4	3.8	e3.4	12	37	11	6.4	7.8	e3.9	e3.2
11	3.7	e3.8	8.5	5.3	e3.4	12	30	10	6.2	6.2	e3.7	e3.2
12	3.7	e5.0	5.1	4.1	e3.4	10	29	11	6.2	5.5	e3.7	e3.1
13	3.6	e3.2	5.1	4.2	e3.4	11	47	e9.0	6.7	5.3	e5.0	e3.1
14	3.7	e4.0	4.7	4.0	e3.4	12	36	e8.5	7.0	5.1	e12	e3.4
15	4.0	e4.0	4.7	3.8	e3.4	19	28	e8.5	6.2	4.8	e4.0	e3.2
16	3.9	e3.6	4.6	3.9	e3.4	26	42	e9.0	6.0	4.5	e3.7	e3.1
17	6.3	e23	4.5	4.1	e3.6	17	30	e8.0	e5.2	4.3	e3.7	e3.0
18	4.4	e10	4.2	e3.5	e3.8	15	25	e8.0	e5.0	4.5	e16	e3.1
19	4.1	e5.0	3.9	e3.6	e5.0	13	24	e7.8	e4.8	4.5	e4.7	e3.2
20	4.2	e4.5	3.9	e4.0	e19	11	21	e7.5	e4.8	4.4	e3.8	e3.0
21	4.4	e4.2	4.7	e3.6	e48	19	19	e7.5	e5.5	4.5	e14	e3.0
22	3.8	e4.0	5.6	e3.6	e26	59	17	e7.4	e5.0	e4.0	e4.6	e3.0
23	3.6	e3.8	4.5	e3.6	16	79	16	e7.2	e4.8	e3.8	e4.2	5.6
24	3.6	e3.8	4.1	e3.6	13	99	15	e7.0	7.5	e3.8	e3.9	3.9
25	4.6	e3.6	4.1	e3.6	10	78	16	e7.2	6.7	e4.2	e23	3.7
26	3.0	e3.6	3.9	e3.4	9.4	40	14	8.1	5.1	e4.4	e4.6	4.2
27	3.0	e5.0	3.8	e3.4	8.7	59	13	7.4	8.7	e3.8	e3.8	7.7
28	3.0	e9.0	3.9	e8.5	8.4	58	12	7.2	6.3	e4.1	e11	4.3
29	3.1	e5.2	3.8	e5.5	---	42	12	7.2	13	e3.8	e4.8	4.1
30	3.2	e4.0	3.7	e4.5	---	41	12	7.2	11	e3.7	e4.0	4.2
31	4.8	---	3.7	e4.0	---	37	---	12	---	e3.4	e3.9	---
TOTAL	120.2	153.9	165.2	126.7	227.5	838.1	876	299.7	200.9	191.8	183.5	110.6
MEAN	3.88	5.13	5.33	4.09	8.12	27.0	29.2	9.67	6.70	6.19	5.92	3.69
MAX	6.3	23	18	8.5	48	99	62	20	13	24	23	7.7
MIN	3.0	3.2	3.7	3.4	3.4	7.4	12	7.0	4.8	3.4	3.4	3.0
CFSM	.39	.51	.53	.41	.81	2.70	2.92	.97	.67	.62	.59	.37
IN.	.45	.57	.61	.47	.85	3.12	3.26	1.11	.75	.71	.68	.41

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1994, BY WATER YEAR (WY)

MEAN	5.83	6.68	8.29	8.03	10.5	17.6	18.3	9.78	7.26	6.00	4.81	5.06
MAX	21.7	21.6	26.0	16.2	33.5	39.6	59.4	22.6	32.2	13.5	11.4	20.7
(WY)	1978	1969	1978	1969	1976	1979	1993	1976	1972	1974	1990	1975
MIN	2.24	2.74	2.76	3.07	3.48	5.14	5.07	4.39	3.95	2.81	2.55	2.35
(WY)	1967	1967	1962	1961	1963	1983	1967	1981	1979	1965	1965	1959

STREAMS TRIBUTARY TO LAKE ONTARIO
04240100 HARBOR BROOK AT SYRACUSE, NY--Continued

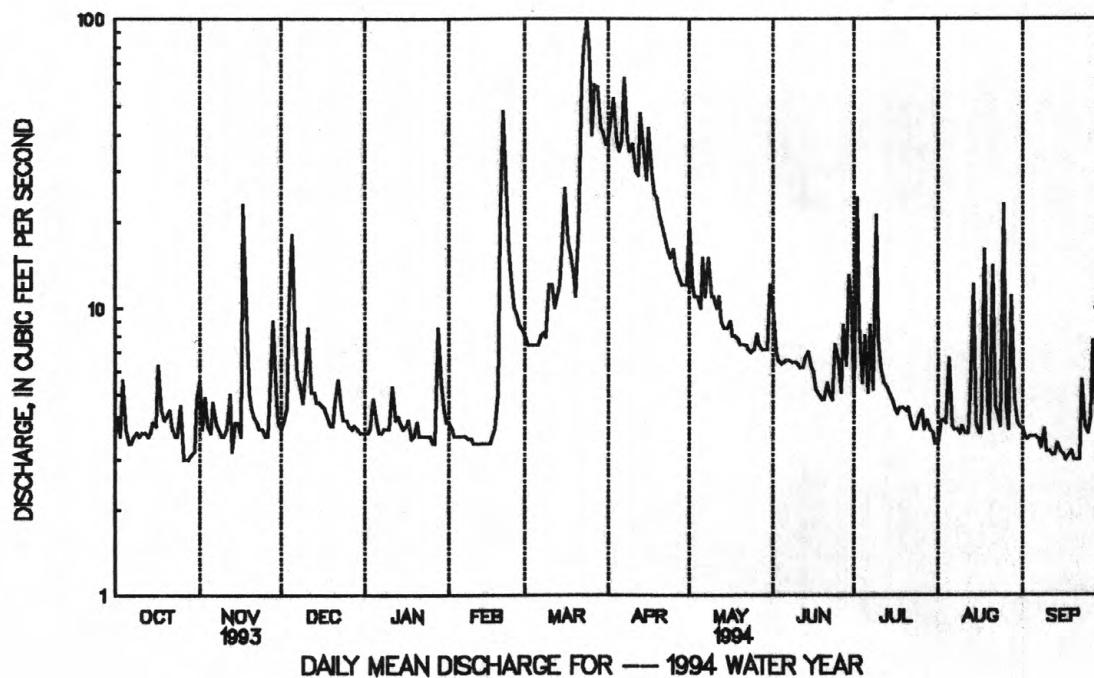
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1959 - 1994
ANNUAL TOTAL	4184.4	3494.1	
ANNUAL MEAN	11.5	9.57	9.01
HIGHEST ANNUAL MEAN			15.7 1976
LOWEST ANNUAL MEAN			4.53 1967
HIGHEST DAILY MEAN	121 Apr 1	99 Mar 24	248 Mar 30 1960
LOWEST DAILY MEAN	3.0 Oct 26	3.0 a	.51 Jun 15 1984
ANNUAL SEVEN-DAY MINIMUM	3.4 Oct 24	3.1 Sep 16	1.6 Nov 10 1988
INSTANTANEOUS PEAK FLOW		212 Mar 31	b726 Jul 3 1974
INSTANTANEOUS PEAK STAGE		4.60 Mar 31	c8.34 Jul 3 1974
INSTANTANEOUS LOW FLOW		d.28 Aug 2	d.11 Aug 8 1980
ANNUAL RUNOFF (CFSM)	1.15	.96	.90
ANNUAL RUNOFF (INCHES)	15.57	13.00	12.25
10 PERCENT EXCEEDS	23	21	17
50 PERCENT EXCEEDS	5.5	4.8	5.6
90 PERCENT EXCEEDS	3.8	3.5	3.1

a Oct. 26, 27, 28, Sep. 17, 20, 21, 22.

b From rating curve extended above 180 ft³/s on basis of slope-area measurements of peak flow.

c From datum then in use.

d Result of regulation.



STREAMS TRIBUTARY TO LAKE ONTARIO

217

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.--11.3 mi².

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 365.86 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flow can be regulated at Velasco Road Detention Basin 2.1 mi upstream. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	7.1	5.2	5.4	5.4	10	44	25	16	6.4	4.0	4.5
2	5.1	5.3	5.3	6.1	5.3	9.7	48	12	7.9	46	4.9	4.1
3	4.6	6.1	6.0	5.2	5.1	9.7	e60	12	7.4	11	4.9	4.1
4	8.6	5.1	12	4.3	5.1	9.7	43	11	7.4	6.4	4.7	4.2
5	4.9	4.8	e20	5.1	5.1	9.5	38	11	7.4	e12	8.3	4.2
6	4.2	5.1	8.8	5.1	5.1	9.1	40	20	7.4	e7.0	4.5	4.2
7	4.2	4.4	7.0	5.1	5.0	10	e70	11	7.4	e14	4.5	4.2
8	4.2	4.4	6.4	5.1	4.9	11	e40	e15	7.1	e7.0	4.4	3.9
9	4.4	4.4	5.8	5.2	4.9	9.8	37	12	6.9	e60	4.4	4.5
10	4.5	4.4	7.4	5.2	4.8	15	39	12	7.2	9.9	4.5	3.7
11	4.4	4.8	10	6.2	4.7	14	e30	10	7.3	6.5	4.4	3.7
12	4.4	6.1	6.4	5.2	4.7	12	30	11	7.1	7.5	4.4	3.7
13	4.4	3.9	6.1	5.2	4.7	12	55	10	7.3	5.7	6.0	3.7
14	4.2	5.1	6.0	5.2	4.7	14	e39	10	8.4	5.4	16	4.1
15	4.2	5.0	5.8	5.1	4.7	23	29	9.8	6.9	5.4	4.4	3.8
16	4.2	4.5	5.8	4.7	4.7	32	e50	11	7.8	5.4	4.3	3.7
17	7.0	29	5.5	4.7	4.9	20	e32	9.4	6.4	5.2	4.2	3.6
18	4.7	14	5.4	4.6	5.1	17	27	9.4	6.3	5.0	21	3.7
19	4.4	6.6	5.4	4.8	6.8	15	24	9.0	6.0	4.9	5.0	3.8
20	4.5	6.1	5.4	e5.0	25	14	22	8.8	5.8	4.9	4.5	3.6
21	5.2	5.7	6.2	4.9	64	29	19	8.6	6.7	4.8	19	3.6
22	4.4	5.4	7.5	4.9	32	73	17	8.6	6.1	4.7	5.1	3.6
23	4.4	5.1	e6.2	4.9	18	99	16	8.4	5.9	4.5	4.7	7.2
24	4.4	5.1	5.8	4.9	15	128	15	8.3	10	4.5	4.5	4.2
25	4.3	4.7	5.8	4.9	12	103	18	8.5	9.0	5.0	31	4.2
26	4.2	4.7	5.6	4.7	12	52	14	9.7	6.0	5.2	4.7	6.0
27	4.2	6.6	5.3	4.6	11	78	13	8.9	12	4.5	4.4	13
28	4.3	12	5.2	11	10	66	13	8.9	7.9	4.9	13	5.1
29	4.2	6.9	5.2	7.5	---	48	13	8.8	21	4.4	5.5	e5.0
30	4.4	5.4	5.2	5.8	---	46	14	8.6	15	4.3	4.4	e5.1
31	5.7	---	5.2	5.5	---	40	---	20	---	4.0	4.5	---
TOTAL	145.0	197.8	208.9	166.1	294.7	1038.5	949	346.7	251.0	286.4	224.1	136.0
MEAN	4.68	6.59	6.74	5.36	10.5	33.5	31.6	11.2	8.37	9.24	7.23	4.53
MAX	8.6	29	20	11	64	128	70	25	21	60	31	13
MIN	4.2	3.9	5.2	4.3	4.7	9.1	13	8.3	5.8	4.0	4.0	3.6
CFSM	.41	.58	.60	.47	.93	2.96	2.80	.99	.74	.82	.64	.40
IN.	.48	.65	.69	.55	.97	3.42	3.12	1.14	.83	.94	.74	.45

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

MEAN	9.21	9.51	12.3	11.4	13.6	23.9	25.1	13.5	11.2	9.88	7.32	8.45
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	3.77	3.78	5.13	4.43	6.28	6.04	6.09	4.80	4.57	4.29	3.50	4.15
(WY)	1983	1979	1989	1983	1980	1983	1981	1981	1981	1981	1982	1982

STREAMS TRIBUTARY TO LAKE ONTARIO
04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY--continued

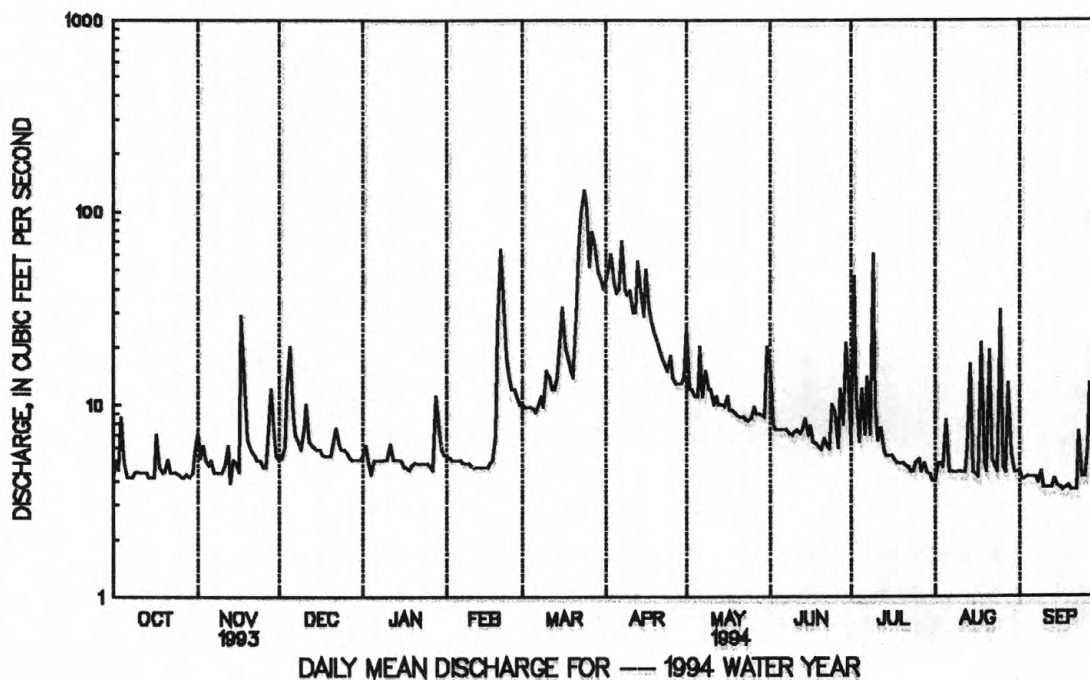
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1971 - 1994	
ANNUAL TOTAL	4868.2		4244.2		12.9	
ANNUAL MEAN	13.3		11.6		21.3	
HIGHEST ANNUAL MEAN					6.73	
LOWEST ANNUAL MEAN					567	
HIGHEST DAILY MEAN	130	Apr 11	128	Mar 24	1.3	Mar 5 1979
LOWEST DAILY MEAN	3.9	Aug 26	3.6	a	1.8	Nov 4 1988
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 13	3.7	Sep 16	b824	Jul 3 1974
INSTANTANEOUS PEAK FLOW			604	Jul 9	c8.15	Sep 26 1975
INSTANTANEOUS PEAK STAGE			6.86	Jul 9	d	
INSTANTANEOUS LOW FLOW			1.2	Jun 23	.00	
ANNUAL RUNOFF (CFSM)	1.18		1.03		1.14	
ANNUAL RUNOFF (INCHES)	16.03		13.97		15.56	
10 PERCENT EXCEEDS	28		26		24	
50 PERCENT EXCEEDS	6.7		5.9		8.1	
90 PERCENT EXCEEDS	4.3		4.3		4.3	

a Sep. 17, 20-22.

b From rating curve extended above 76 ft³/s on basis of step-backwater computations.

c Backwater from debris jam.

d Oct. 26, 27, 1987, result of regulation for maintenance work in the channel.



STREAMS TRIBUTARY TO LAKE ONTARIO

219

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.--29.9 mi².

PERIOD OF RECORD.--Occasional discharge measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M).

GAGE.--Water-stage recorder, crest-stage gage, and, since July 9, 1984, steel "I" beam control. Datum of gage is 362.76 ft above sea level. 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 poor. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.0 ft. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	86	33	20	39	e48	e95	e55	105	22	11	e9.0
2	22	68	26	26	33	e46	e100	e30	24	64	16	e8.0
3	25	66	44	22	31	e46	e150	e26	18	36	14	e8.0
4	40	71	93	e16	27	e46	e95	e24	15	16	11	e7.5
5	71	51	184	e18	26	e45	e80	e24	13	21	33	e7.5
6	26	59	83	e18	25	e45	e85	e45	13	23	10	e7.5
7	19	36	e50	e18	23	e55	e160	e24	12	22	9.4	e7.5
8	16	28	e35	e18	21	e60	e110	e35	12	15	9.0	e7.0
9	16	24	32	e17	21	e50	e85	e26	12	154	9.6	e8.5
10	16	22	48	e17	21	110	e80	e24	12	179	9.7	e7.0
11	14	19	e50	e17	20	93	e70	e23	12	45	9.1	e6.5
12	15	28	e32	e17	20	79	e70	e22	11	25	13	e6.5
13	14	22	e30	e17	20	87	e130	21	12	28	18	e6.5
14	14	35	e28	e17	20	116	e90	19	23	14	131	e7.5
15	14	54	27	e15	20	156	e70	20	13	13	19	e7.0
16	13	34	28	e15	21	e170	e120	31	12	12	11	e6.5
17	96	123	26	e14	21	e120	e75	e25	12	11	8.9	e6.5
18	45	129	23	e14	27	e100	e60	e23	12	11	135	e6.5
19	25	58	23	e14	e38	e70	e55	18	11	11	24	e6.5
20	20	40	23	e15	e110	e55	e48	16	11	10	12	e6.5
21	37	39	38	e14	e260	e100	e40	15	11	10	84	e6.5
22	25	41	94	e14	e170	e340	e38	14	10	10	e28	e6.5
23	20	32	64	e14	e100	e310	e34	14	9.8	9.9	e12	e15
24	17	27	39	e14	e80	e350	e32	14	36	9.8	e14	e10
25	17	23	32	e14	e60	e200	e38	16	33	10	e90	e8.0
26	15	20	e25	e13	e56	e110	e32	21	11	15	e28	e14
27	16	44	22	e13	e54	e160	e30	17	40	11	e14	e30
28	18	159	21	e60	e50	e150	e26	13	46	15	e38	e14
29	17	94	20	e105	---	e120	e28	13	67	11	e12	e12
30	17	51	19	e58	---	e100	e30	12	68	12	e9.0	e12
31	40	---	19	e44	---	e90	---	18	---	9.9	e9.0	---
TOTAL	776	1583	1311	708	1414	3627	2156	698	696.8	855.6	851.7	272.0
MEAN	25.0	52.8	42.3	22.8	50.5	117	71.9	22.5	23.2	27.6	27.5	9.07
MAX	96	159	184	105	260	350	160	55	105	179	135	30
MIN	13	19	19	13	20	45	26	12	9.8	9.8	8.9	6.5
CFSM	.84	1.76	1.41	.76	1.69	3.91	2.40	.75	.78	.92	.92	.30
IN.	.97	1.97	1.63	.88	1.76	4.51	2.68	.87	.87	1.06	1.06	.34

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

MEAN	38.8	49.0	56.7	38.4	51.9	76.2	79.3	40.0	32.0	28.9	24.3	32.0
MAX	129	102	145	70.9	125	154	334	88.7	71.4	61.6	46.7	99.1
(WY)	1978	1978	1978	1973	1976	1978	1993	1976	1973	1992	1976	1975
MIN	7.01	17.3	18.5	11.0	16.1	25.0	22.5	12.7	13.0	10.9	8.22	9.07
(WY)	1983	1979	1989	1977	1993	1981	1981	1987	1981	1981	1987	1994

STREAMS TRIBUTARY TO LAKE ONTARIO
04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1973 - 1994	
ANNUAL TOTAL	23402.6		14949.1			
ANNUAL MEAN	64.1		41.0		44.9	
HIGHEST ANNUAL MEAN					69.8	
LOWEST ANNUAL MEAN					26.1	
HIGHEST DAILY MEAN	600	Apr 11	350	Mar 24	831	Sep 26 1975
LOWEST DAILY MEAN	9.4	Sep 20	6.5	a	1.9	b
ANNUAL SEVEN-DAY MINIMUM	10	Aug 13	6.5	Sep 16	2.3	Feb 2 1977
INSTANTANEOUS PEAK FLOW			c		d1310	Sep 26 1975
INSTANTANEOUS PEAK STAGE			d4.88	Apr 17	f7.02	Apr 26 1993
ANNUAL RUNOFF (CFSM)	2.14		1.37		1.50	
ANNUAL RUNOFF (INCHES)	29.12		18.60		20.42	
10 PERCENT EXCEEDS	184		98		100	
50 PERCENT EXCEEDS	26		23		25	
90 PERCENT EXCEEDS	13		10		11	

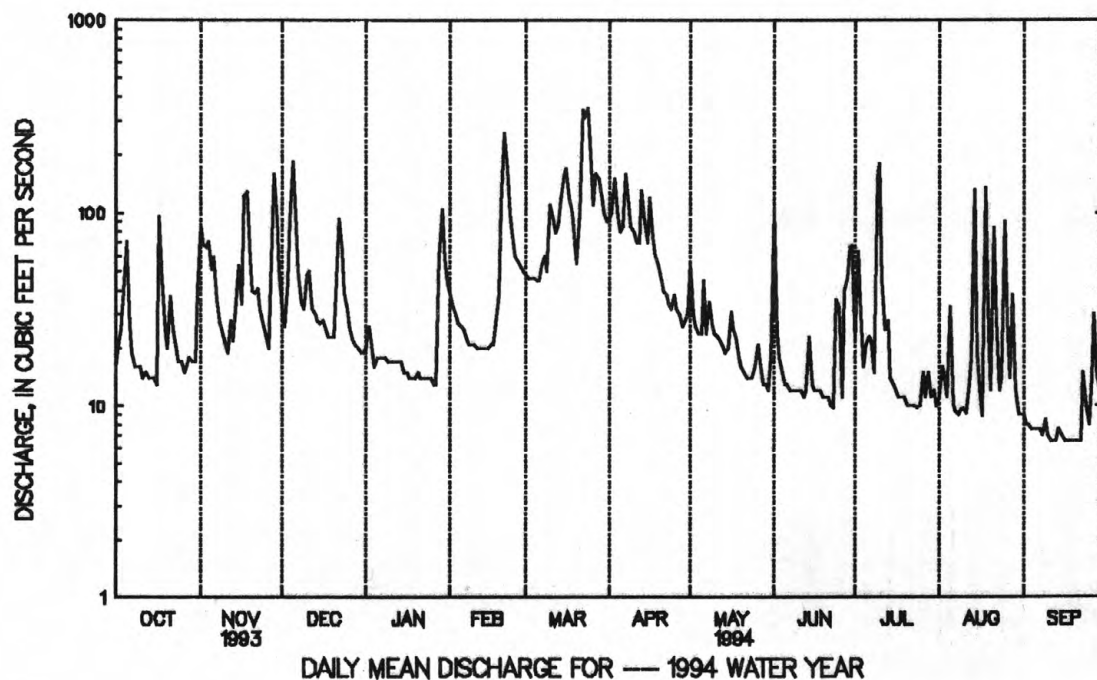
a Sep. 11-13, 16-22.

b Feb. 6, 7, 1977.

c Discharge not determined.

d From rating curve extended above 530 ft³/s

f Backwater from Onondaga Lake.



STREAMS TRIBUTARY TO LAKE ONTARIO

221

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 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WRD NY 1971: 1966(M), 1968, 1969. WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.25 ft above sea level.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	8.7	e7.5	42	38	70	125	62	17	15	9.3	e9.0
2	7.3	7.0	e7.0	41	e38	70	134	53	14	16	9.3	e8.5
3	7.6	9.5	7.7	41	37	81	143	48	14	15	9.4	e8.2
4	8.2	12	17	48	36	90	131	43	13	14	9.2	e8.0
5	8.6	13	30	48	36	121	138	36	12	14	8.5	e8.0
6	6.0	10	e12	42	36	119	153	34	12	13	8.2	e7.5
7	e6.0	e7.5	e9.0	42	37	119	206	32	12	13	7.9	e7.5
8	e6.0	e7.0	e8.5	42	37	118	207	40	11	12	7.8	e7.0
9	e6.0	e6.8	e8.0	42	e50	115	207	40	10	12	7.8	7.6
10	e7.0	e6.5	e30	41	75	128	223	44	10	12	8.0	e7.4
11	e6.5	e6.5	50	41	75	118	224	41	10	11	8.0	e7.0
12	e6.2	e7.5	46	41	73	116	223	39	10	11	8.0	e7.0
13	e6.2	e7.0	45	41	71	117	267	32	9.6	10	8.4	e7.0
14	e6.0	e7.5	45	41	70	118	283	29	12	9.9	9.4	e7.5
15	e6.0	e10	44	e40	70	126	274	26	11	10	8.3	e7.4
16	e7.0	e8.0	44	e42	69	126	296	25	10	10	8.2	e7.2
17	e9.0	e29	43	41	69	120	286	23	10	10	8.0	e7.2
18	e6.5	e17	43	e40	70	117	257	21	9.9	10	11	e7.0
19	e6.2	e12	43	e42	72	104	231	19	9.6	10	8.3	e6.8
20	e6.0	e10	43	41	91	104	199	17	9.6	10	8.1	e6.8
21	e6.5	e9.0	45	41	111	110	148	16	10	10	9.6	e7.0
22	e6.5	e8.0	44	40	84	135	99	15	10	10	8.5	e6.8
23	e6.2	e7.5	43	39	75	143	88	15	10	9.6	7.9	e7.5
24	e6.0	e7.5	42	38	75	169	78	14	12	9.4	7.7	e8.0
25	e6.0	e7.0	43	38	72	145	84	15	12	10	9.8	e7.0
26	e6.0	e7.0	42	e38	72	117	77	16	12	9.9	8.4	e7.0
27	e6.5	e7.6	42	e40	71	131	68	15	18	9.7	7.7	e11
28	e7.0	e21	43	44	70	135	57	15	13	10	7.7	e9.0
29	6.2	e11	42	46	---	121	52	14	19	9.7	7.9	e8.0
30	6.3	e9.0	42	41	---	118	43	14	16	9.7	7.8	e7.5
31	8.6	---	42	e40	---	118	---	13	---	9.5	8.2	---
TOTAL	206.4	297.1	1052.7	1284	1780	3639	5001	866	358.7	345.4	262.3	228.4
MEAN	6.66	9.90	34.0	41.4	63.6	117	167	27.9	12.0	11.1	8.46	7.61
MAX	9.0	29	50	48	111	169	296	62	19	16	11	11
MIN	6.0	6.5	7.0	38	36	70	43	13	9.6	9.4	7.7	6.8

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

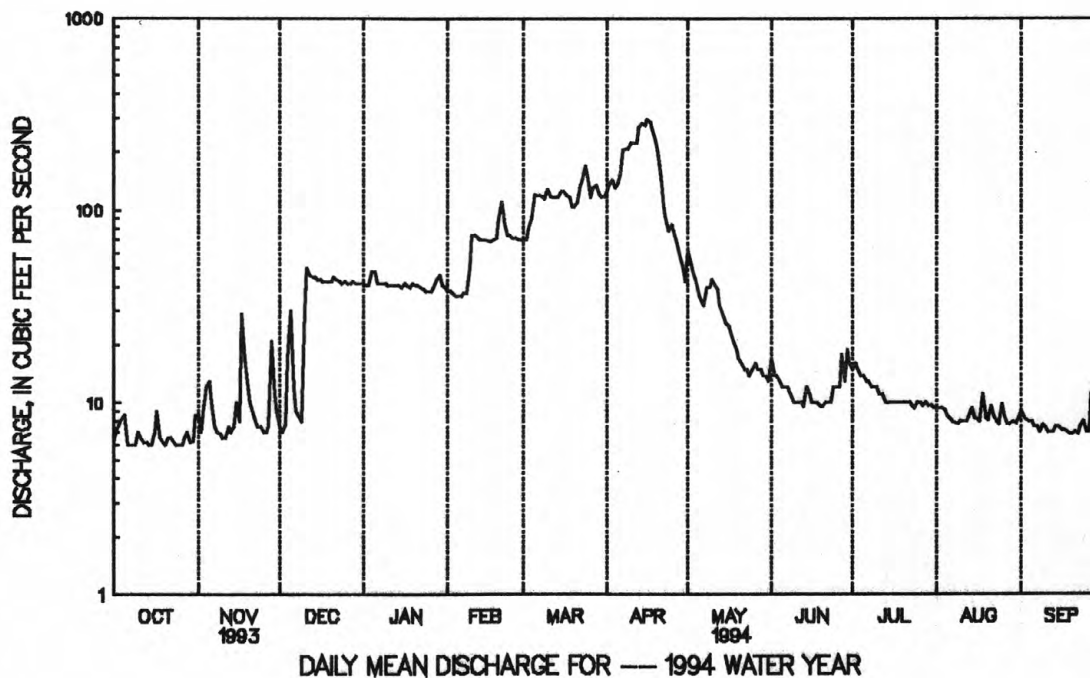
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
MEAN	24.3	32.4	44.1	49.9	52.9	61.7	103	48.3	30.1	17.8	11.9	12.2
MAX	147	125	160	157	143	159	352	134	278	74.0	76.2	36.3
(WY)	1978	1978	1973	1973	1990	1976	1993	1983	1972	1972	1992	1989
MIN	1.52	2.47	3.42	2.75	3.10	5.23	5.80	3.24	2.17	1.65	1.28	1.16
(WY)	1967	1967	1966	1981	1967	1965	1965	1965	1965	1981	1966	1966

STREAMS TRIBUTARY TO LAKE ONTARIO
04240180 NINEMILE CREEK NEAR MARIETTA, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1964 - 1994
ANNUAL TOTAL	20810.2	15321.0	
ANNUAL MEAN	57.0	42.0	40.7
HIGHEST ANNUAL MEAN			76.3
LOWEST ANNUAL MEAN			3.95
HIGHEST DAILY MEAN	512 Apr 26	296 Apr 16	931 Jun 23 1972
LOWEST DAILY MEAN	4.7 Aug 23	6.0 a	.80 Sep 13 1966
ANNUAL SEVEN-DAY MINIMUM	5.1 Aug 22	6.2 Oct 20	.89 Sep 13 1966
INSTANTANEOUS PEAK FLOW		334 Apr 16	1030 Jun 23 1972
INSTANTANEOUS PEAK STAGE		5.29 Apr 16	8.65 Jun 23 1972
INSTANTANEOUS LOW FLOW			.80 b
10 PERCENT EXCEEDS	132	118	105
50 PERCENT EXCEEDS	12	14	16
90 PERCENT EXCEEDS	6.1	7.0	3.2

a Oct 6-9, 14, 15, 20, 24-26.

b Sept. 13, 18, 19, 1966.



STREAMS TRIBUTARY TO LAKE ONTARIO
04240200 NINEMILE CREEK AT CAMILLUS, NY

223

LOCATION.--Lat 43°02'20", long 76°18'30", Onondaga County, Hydrologic Unit 04140201, on right bank 150 ft downstream from highway bridge on State Highway 5 (Main Street) in Camillus, 7.2 mi upstream from Onondaga Lake.

DRAINAGE AREA.--84.3 mi².

PERIOD OF RECORD.--July 1958 to September 1982, June 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 398.56 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Otisco Lake from which water is diverted by the Onondaga County Water Authority for water supply. Telephone gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	55	65	e78	e95	e140	357	194	131	102	44	47
2	38	52	62	e85	e90	e135	370	162	97	81	48	46
3	41	55	68	e80	e88	e130	458	145	88	91	48	43
4	40	75	86	e80	e86	e135	392	135	83	68	46	42
5	52	85	238	e80	e85	e165	352	126	81	66	48	41
6	42	80	110	e80	e85	e170	374	129	80	59	45	40
7	40	62	83	e80	e85	178	528	122	79	95	43	40
8	38	52	74	e80	e80	196	484	143	75	70	42	39
9	38	48	68	e82	e80	186	437	128	71	62	42	42
10	41	45	72	e82	e80	247	446	139	70	60	42	40
11	40	44	131	e90	e78	240	434	121	68	51	42	39
12	40	48	e100	e85	e78	207	402	120	69	47	42	39
13	39	47	e92	e82	e78	203	509	110	66	45	45	39
14	38	48	e90	e82	e78	219	611	100	78	45	59	41
15	38	71	e90	e80	e78	259	509	97	65	46	45	41
16	39	57	e90	e80	e78	362	553	100	60	46	42	40
17	52	111	89	e78	e80	257	565	98	57	45	40	40
18	53	208	88	e78	e90	225	488	103	54	45	77	40
19	43	92	91	e80	e120	209	445	111	52	46	52	38
20	41	78	91	e80	e220	199	391	104	51	45	44	38
21	43	67	99	e80	556	218	333	97	50	45	59	39
22	43	62	e100	e80	373	489	209	92	48	45	54	38
23	41	58	e92	e80	206	594	192	89	47	44	45	41
24	40	58	e85	e80	e180	697	181	87	54	44	42	43
25	40	56	e88	e80	e160	724	194	96	60	50	60	40
26	40	54	e80	e78	e150	390	186	96	49	57	55	41
27	42	57	e77	e76	e145	423	172	97	55	46	45	60
28	44	109	e78	e95	e140	521	159	90	191	46	44	48
29	41	106	e80	e130	---	393	152	88	99	45	52	45
30	40	74	e78	e120	---	361	142	86	180	45	44	44
31	45	---	e78	e110	---	331	---	86	---	44	42	---
TOTAL	1289	2114	2813	2631	3742	9203	11025	3491	2308	1726	1478	1254
MEAN	41.6	70.5	90.7	84.9	134	297	367	113	76.9	55.7	47.7	41.8
MAX	53	208	238	130	556	724	611	194	191	102	77	60
MIN	37	44	62	76	78	130	142	86	47	44	40	38

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	66.9	97.1	118	126	142	206	251	130	94.5	67.9	49.2	49.5
MAX	263	259	320	331	361	398	655	273	503	190	162	136
(WY)	1978	1978	1973	1973	1990	1979	1993	1976	1972	1972	1992	1975
MIN	20.0	22.2	25.0	23.8	28.3	63.3	82.4	51.0	36.6	30.5	24.3	21.0
(WY)	1967	1965	1963	1963	1963	1965	1965	1965	1962	1981	1966	1962

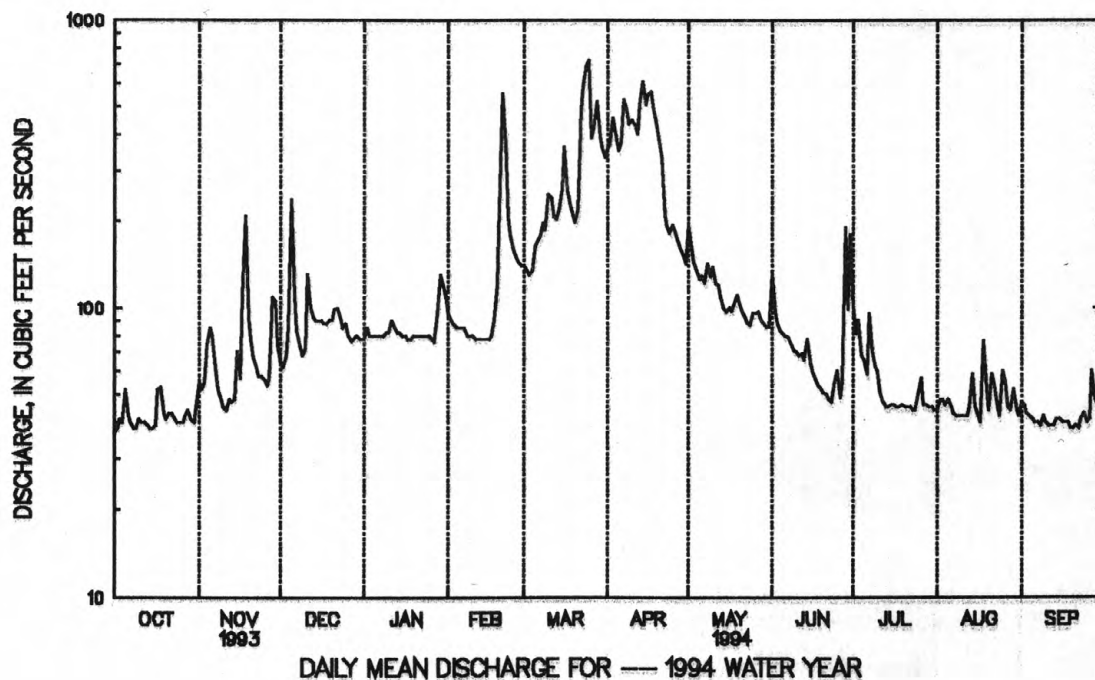
STREAMS TRIBUTARY TO LAKE ONTARIO
04240200 NINEMILE CREEK AT CAMILLUS, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994	
ANNUAL TOTAL	50679		43074			
ANNUAL MEAN	139		118		116	
HIGHEST ANNUAL MEAN					182	
LOWEST ANNUAL MEAN					41.9	
HIGHEST DAILY MEAN	1150	Apr 11	724	Mar 25	1660	Jun 23 1972
LOWEST DAILY MEAN	35	Sep 14	37	Oct 1	16	Oct 1 1961
ANNUAL SEVEN-DAY MINIMUM	36	Sep 14	39	Sep 16	17	Oct 15 1988
INSTANTANEOUS PEAK FLOW			966	Mar 25	2760	Mar 30 1960
INSTANTANEOUS PEAK STAGE			6.38	Mar 25	a10.83	Sep 26 1975
INSTANTANEOUS LOW FLOW			36	b	16	c
10 PERCENT EXCEEDS	328		251		242	
50 PERCENT EXCEEDS	76		78		72	
90 PERCENT EXCEEDS	40		41		30	

a Backwater from construction activities.

b Oct 2, Sep 17.

c Sep 30, Oct 1, 2, 1961.



STREAMS TRIBUTARY TO LAKE ONTARIO
04240300 NINEMILE CREEK AT LAKELAND, NY

225

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 mi².

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).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 360.67 ft above sea level.

REMARKS.--Records poor. 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. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e54	e82	e96	e108	e130	e193	e482	e258	e173	e158	e64	e62
2	e56	e80	e90	e110	e125	e184	e500	e234	e145	e120	e69	e60
3	e59	e83	e97	e110	e120	e184	e600	e208	e128	e128	e70	e56
4	e59	e105	e119	e110	e120	e184	e548	e192	e120	e102	e68	e54
5	e72	e122	e280	e110	e115	e228	e490	e180	e116	e96	e70	e52
6	e64	e119	e177	e110	e115	e232	e506	e182	e115	e87	e66	e50
7	e59	e98	e145	e110	e115	e246	e695	e174	e114	e125	e63	e50
8	e56	e83	e130	e110	e110	e270	e675	e196	e108	e106	e62	e50
9	e56	e75	e110	e115	e110	e262	e600	e184	e103	e91	e60	e54
10	e59	e72	e120	e115	e110	e326	e600	e194	e101	e87	e60	e52
11	e58	e71	e166	e125	e105	e334	e592	e175	e98	e75	e60	e50
12	e59	e76	e140	e115	e105	e295	e554	e170	e99	e72	e60	e50
13	e57	e76	e130	e115	e105	e284	e663	e158	e96	e70	e65	e50
14	e56	e76	e130	e115	e105	e300	e800	e145	e109	e70	e82	e54
15	e55	e100	e130	e110	e105	e348	e710	e138	e96	e71	e69	e54
16	e57	e92	e130	e105	e105	e469	e736	e142	e88	e71	e62	e52
17	e72	e147	e126	e105	e110	e375	e760	e140	e83	e70	e59	e52
18	e76	e262	e123	e100	e120	e319	e676	e145	e79	e70	e100	e52
19	e65	e147	e127	e105	e140	e294	e650	e155	e76	e70	e80	e50
20	e60	e111	e127	e105	e200	e280	e580	e150	e74	e68	e63	e50
21	e63	e96	e136	e105	e650	e298	e468	e140	e73	e64	e76	e50
22	e64	e88	e142	e105	e542	e582	e313	e132	e70	e64	e70	e50
23	e62	e82	e134	e105	e315	e775	e270	e128	e68	e62	e60	e52
24	e60	e81	e114	e105	e270	e960	e255	e125	e76	e62	e56	e56
25	e60	e80	e120	e105	e224	e1000	e267	e134	e85	e70	e77	e52
26	e60	e77	e110	e100	e212	e550	e262	e137	e74	e80	e73	e54
27	e64	e80	e110	e100	e200	e568	e243	e138	e78	e66	e58	e80
28	e66	e140	e106	e120	e195	e681	e225	e130	e218	e66	e56	e70
29	e64	e150	e108	e175	---	e560	e215	e126	e156	e66	e67	e66
30	e62	e111	e106	e165	---	e500	e202	e124	e228	e66	e58	e65
31	e68	---	e106	e150	---	e460	---	e123	---	e65	e55	---
TOTAL	1902	3062*	3985	3543	4978	12541	15137	4957	3247	2538	2058	1649
MEAN	61.4	102	129	114	178	405	505	160	108	81.9	66.4	55.0
MAX	76	262	280	175	650	1000	800	258	228	158	100	80
MIN	54	71	90	100	105	184	202	123	68	62	55	50

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

MEAN	144	182	228	209	232	331	369	214	159	111	96.6	103
MAX	529	439	623	492	549	669	807	385	676	289	216	308
(WY)	1978	1978	1973	1973	1990	1979	1993	1983	1972	1972	1992	1975
MIN	43.6	56.0	97.3	81.8	86.0	112	150	88.6	52.6	44.2	28.6	33.0
(WY)	1986	1992	1983	1984	1989	1983	1985	1987	1981	1981	1985	1985

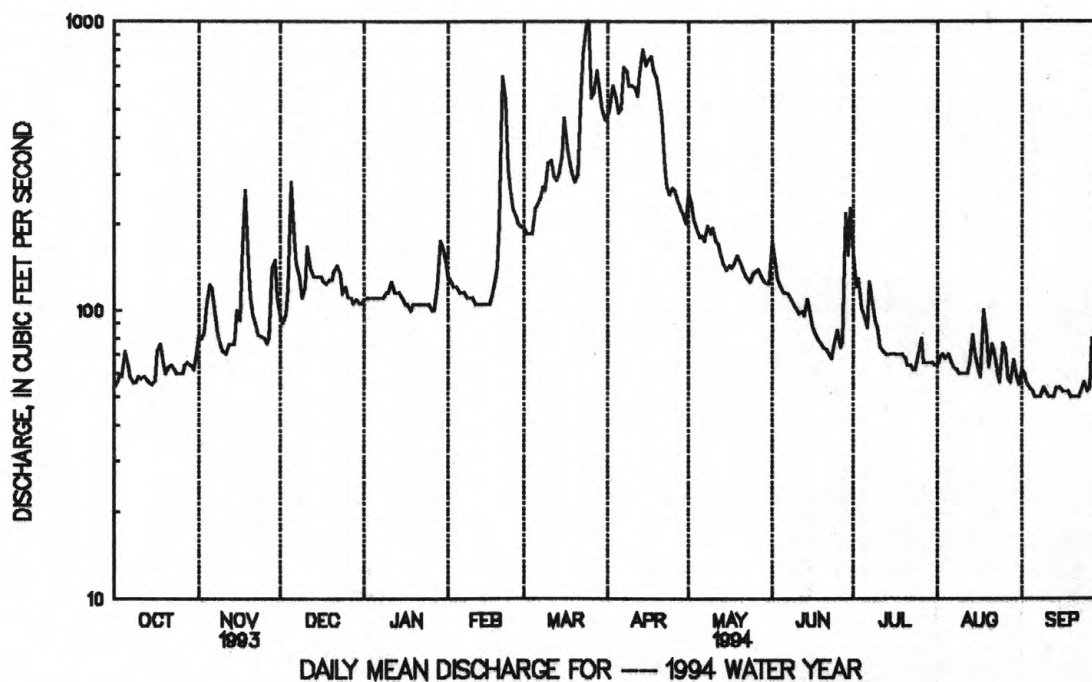
STREAMS TRIBUTARY TO LAKE ONTARIO
04240300 NINEMILE CREEK AT LAKELAND, NY--Continued

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1971 - 1994	
ANNUAL TOTAL	66933		59597			
ANNUAL MEAN	183		163		193	
HIGHEST ANNUAL MEAN					310	
LOWEST ANNUAL MEAN					95.7	
HIGHEST DAILY MEAN	1400	Apr 11	1000	Mar 25	2960	Mar 5 1979
LOWEST DAILY MEAN	52	a	50	b	13	Aug 18 1985
ANNUAL SEVEN-DAY MINIMUM	55	Sep 16	51	Sep 6	16	Sep 20 1985
INSTANTANEOUS PEAK STAGE			c7.17	Apr 17	c9.63	Apr 27 1993
10 PERCENT EXCEEDS	410		340		393	
50 PERCENT EXCEEDS	110		108		141	
90 PERCENT EXCEEDS	59		58		58	

a Sep 10, 22.

b Sep 6, 7, 8, 11, 12, 13, 19, 20, 21, 22.

c Backwater from Onondaga Lake.



STREAMS TRIBUTARY TO LAKE ONTARIO
04240495 ONONDAGA LAKE AT LIVERPOOL, NY

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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 mi².

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 sea level.

REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi².

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.78 ft, Apr. 26, 27, 1993; minimum, 361.54 ft, Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 367.55 ft, Apr. 17-18; minimum, 362.44 ft, Aug. 12.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362.98	e363.04	363.87	363.74	363.26	363.91	366.70	364.97	363.03	363.60	362.80	363.06
2	362.87	363.24	363.77	363.59	363.29	363.85	366.51	364.90	363.14	363.63	362.63	362.89
3	362.87	363.12	363.75	363.28	363.26	363.86	366.46	364.78	363.15	363.70	362.66	362.71
4	e362.92	e363.20	363.74	e363.35	e363.24	363.93	366.48	364.59	363.19	363.58	362.60	362.58
5	e363.03	e363.37	363.83	e363.42	e363.22	364.04	366.35	364.40	363.20	363.59	362.64	362.62
6	e362.95	363.43	364.05	e363.40	e363.20	364.05	366.25	364.54	363.17	363.45	362.69	362.65
7	e362.91	363.45	364.08	e363.42	363.19	364.04	366.52	364.35	363.09	363.31	362.61	362.61
8	362.90	363.45	364.07	e363.40	363.14	364.04	366.70	364.19	363.09	363.03	362.63	362.92
9	362.88	363.46	363.95	e363.40	363.13	364.04	366.71	364.05	363.11	363.08	362.70	362.85
10	362.82	363.48	363.85	e363.40	363.13	364.15	366.74	363.97	363.16	363.05	362.64	362.72
11	362.88	363.38	363.93	363.43	363.14	364.30	366.76	363.94	363.26	363.01	362.70	362.68
12	362.92	e363.40	363.94	363.39	363.11	364.33	366.70	363.90	363.18	363.00	362.51	362.64
13	362.82	363.40	363.89	363.40	363.11	364.37	366.79	363.89	363.19	362.85	362.72	362.58
14	362.64	363.54	363.86	363.39	363.11	364.43	367.11	363.84	363.25	362.79	362.88	362.68
15	362.56	363.56	363.84	363.38	363.11	364.49	367.19	363.74	363.32	362.81	362.75	362.69
16	362.55	363.44	363.84	363.35	363.11	364.57	367.31	363.63	363.37	362.94	362.63	362.66
17	e362.62	363.42	363.87	e363.34	363.16	364.57	367.50	363.53	363.45	362.95	362.67	362.69
18	362.67	363.66	363.85	363.37	363.27	364.55	367.52	363.47	363.48	362.94	363.01	362.66
19	362.63	363.73	363.84	363.36	363.34	364.09	367.42	363.20	363.45	362.87	363.44	362.79
20	362.63	363.75	363.84	363.29	363.45	363.84	367.23	363.15	363.37	362.77	363.55	362.74
21	362.71	363.75	363.84	363.16	363.84	363.71	366.99	363.21	363.18	362.73	363.77	362.61
22	e362.88	363.71	363.84	363.20	363.99	363.90	366.69	363.23	363.18	362.84	363.78	362.97
23	363.11	363.68	363.89	363.21	364.17	364.41	366.39	363.07	363.10	362.85	363.73	363.12
24	363.01	363.58	363.90	363.15	364.10	365.17	366.10	363.09	363.18	362.86	363.61	363.25
25	e363.08	363.55	363.88	363.23	363.96	366.14	365.91	362.98	363.35	362.89	363.66	363.04
26	e362.97	363.48	363.78	363.23	363.89	366.54	365.73	362.91	363.25	362.97	363.61	362.96
27	362.94	363.48	363.80	363.19	364.02	366.79	365.60	362.86	363.24	363.00	363.56	363.21
28	e362.89	e363.57	363.76	363.20	364.01	367.08	365.43	362.76	363.44	363.10	363.39	363.19
29	e362.85	363.66	363.72	363.29	---	367.16	365.23	362.76	363.45	362.95	363.46	363.15
30	362.87	363.82	363.69	363.27	---	367.09	365.06	362.75	363.51	362.86	363.43	363.31
31	e362.90	---	363.77	363.26	---	366.89	---	362.77	---	362.81	363.21	---
MEAN	362.85	363.49	363.86	363.34	363.43	364.78	366.54	363.66	363.25	363.06	363.05	362.84
MAX	363.11	363.82	364.08	363.74	364.17	367.16	367.52	364.97	363.51	363.70	363.78	363.31
MIN	362.55	363.04	363.69	363.15	363.11	363.71	365.06	362.75	363.03	362.73	362.51	362.58

CAL YR 1993 MEAN 363.92 MAX 369.77 MIN 362.55

WTR YR 1994 MEAN 363.68 MAX 367.52 MIN 362.51

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO

04242500 EAST BRANCH FISH CREEK AT TABERG, NY

LOCATION.--Lat 43°18'06", long 75°37'09", Oneida County, Hydrologic Unit 04140202, on left bank at downstream side of bridge on Main Street at Taberg, just downstream from Furnace Creek, 300 ft upstream from bridge on State Highway 69, and 2.8 mi upstream from confluence of East and West Branches near Blossvale.

DRAINAGE AREA.--188 mi².

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1034: 1944. WSP 1054: 1923-45. WDR NY-83-3: 1980 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 490.12 ft above sea level. Prior to May 20, 1969, at datum 1.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversion upstream from station for municipal water supply by cities of Rome and Oneida. Diurnal fluctuation at low flow caused by power-generating operations upstream. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,900 ft³/s and maximum (*):

Discharge				Gage Height				Discharge				Gage Height			
Date	Time	(ft ³ /s)	(ft)	Date	Time	(ft ³ /s)	(ft)	Date	Time	(ft ³ /s)	(ft)	Date	Time	(ft ³ /s)	(ft)
Apr. 16	1700	*5,880	*6.84	No other peak greater than base discharge.											

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	374	399	782	e400	e850	e280	473	1930	482	678	133	157
2	305	375	636	e390	e800	e290	534	1780	439	440	100	173
3	601	370	800	e370	e700	e290	816	1010	364	468	92	135
4	547	410	903	e320	e650	e280	945	711	292	305	84	118
5	678	644	1770	e330	e600	e300	943	596	233	225	172	118
6	501	1630	1140	e340	e500	e280	1230	825	212	630	157	94
7	371	1160	868	e340	e450	e270	1680	1110	272	401	116	119
8	285	693	723	e340	e400	e290	1440	961	283	331	115	456
9	245	533	556	e330	e360	e320	1280	846	224	368	137	766
10	286	443	660	e330	e330	e330	1740	689	178	552	81	495
11	290	393	1720	e330	e300	e380	2220	572	150	386	43	285
12	248	410	901	e340	e270	e360	2140	542	149	258	42	199
13	236	425	592	e340	e250	e340	3190	524	170	204	41	165
14	216	396	544	e320	e260	e340	3460	428	175	165	269	191
15	197	658	535	e300	e250	e320	3240	384	186	148	464	194
16	191	918	521	e290	e240	e340	4930	792	154	143	274	163
17	505	651	396	e290	e230	e320	4100	764	194	133	207	149
18	1790	592	375	e280	e210	e300	2580	587	244	120	300	136
19	947	481	373	e280	e210	e280	2620	489	161	115	398	123
20	572	571	367	e290	e350	e270	2880	405	122	106	264	115
21	1170	648	476	e290	e600	e280	2050	353	107	97	322	108
22	1900	561	e420	e300	e750	406	1580	313	104	90	515	102
23	995	500	e360	e300	e600	531	1560	281	96	87	297	112
24	658	464	e360	e310	e500	702	1860	244	102	94	189	109
25	515	372	e400	e320	e350	874	2940	217	139	100	148	113
26	409	314	e350	e310	e250	830	3490	286	153	88	139	120
27	366	364	e340	e300	e140	773	3130	440	191	119	157	582
28	380	2780	e340	e350	e220	721	2540	348	737	117	160	1730
29	350	2840	e340	e600	---	616	1620	307	785	107	217	1700
30	334	1380	e360	e750	---	549	1300	285	1650	104	198	2290
31	323	---	e400	e800	---	478	---	243	---	148	146	---
TOTAL	16785	22375	19308	11180	11620	12940	64511	19262	8748	7327	5977	11317
MEAN	541	746	623	361	415	417	2150	621	292	236	193	377
MAX	1900	2840	1770	800	850	874	4930	1930	1650	678	515	2290
MIN	191	314	340	280	140	270	473	217	96	87	41	94

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1994, BY WATER YEAR (WY)

	416	616	576	460	411	811	1637	681	287	183	157	260
MEAN	416	616	576	460	411	811	1637	681	287	183	157	260
MAX	1164	1322	1499	1424	1496	2158	2734	2073	1232	632	570	901
(WY)	1946	1926	1974	1937	1981	1945	1960	1947	1972	1947	1986	1975
MIN	30.8	126	183	108	102	217	591	164	52.9	33.1	31.5	28.9
(WY)	1965	1931	1961	1931	1934	1940	1946	1941	1941	1933	1944	1948

STREAMS TRIBUTARY TO LAKE ONTARIO
04242500 EAST BRANCH FISH CREEK AT TABERG, NY--Continued

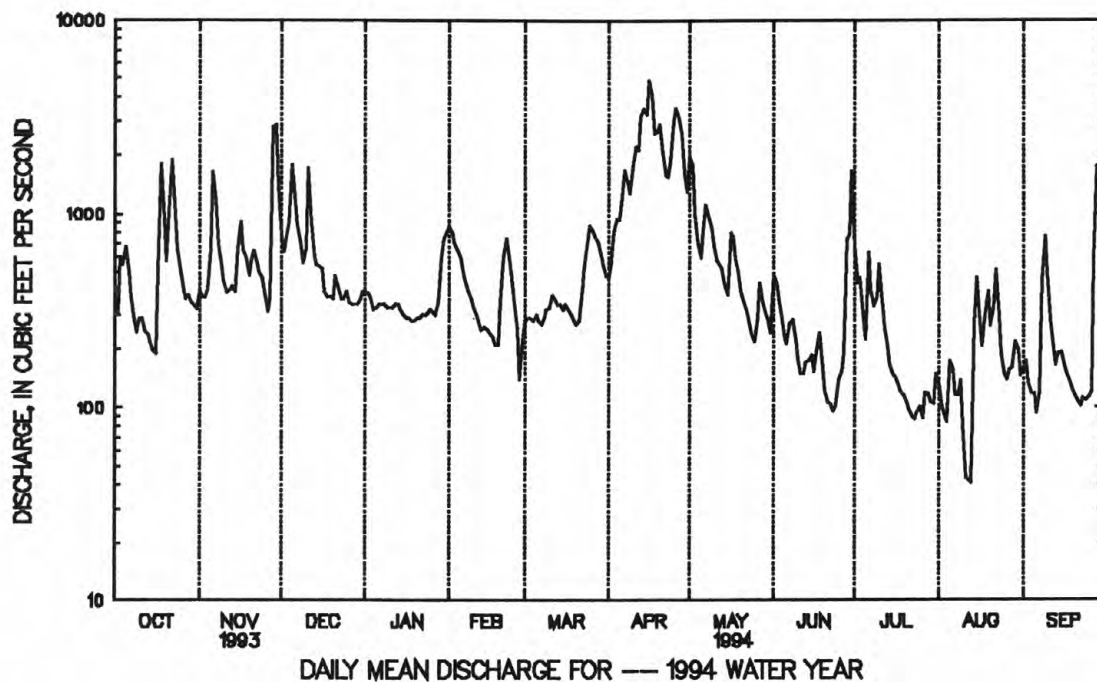
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SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1923 - 1994	
ANNUAL TOTAL	223202		211350		a542	
ANNUAL MEAN	612		579		909	
HIGHEST ANNUAL MEAN					357	
LOWEST ANNUAL MEAN					10900	
HIGHEST DAILY MEAN	7350	Apr 11	4930	Apr 16	5.2	Jun 22 1972
LOWEST DAILY MEAN	60	Aug 1	41	Aug 13	6.3	Aug 15 1949
ANNUAL SEVEN-DAY MINIMUM	78	Jul 29	82	Aug 7	13.81	Aug 11 1949
INSTANTANEOUS PEAK FLOW			5880	Apr 16	b21600	Dec 29 1984
INSTANTANEOUS PEAK STAGE			6.84	Apr 16	4.9	Dec 29 1984
INSTANTANEOUS LOW FLOW			21	Aug 10	c	
10 PERCENT EXCEEDS	1540		1330		1290	
50 PERCENT EXCEEDS	350		350		290	
90 PERCENT EXCEEDS	106		120		68	

a Unadjusted.

b From slope-area indirect measurement of peak flow and result of release of upstream debris jam (constructed maximum discharge, about 16,000 ft³/s on same date at earlier time when adjusted for storage effects).

c Aug. 15, 16, 1949.



STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi².

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 sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional regulation by small mills upstream from station. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 25	0500	*2,680	*9.77	Apr. 07	1030	1,970	8.24
Apr. 13	2000	1,910	8.09				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	151	182	e102	e280	e130	791	277	134	272	41	67
2	41	152	153	e101	e260	e130	870	216	92	179	42	59
3	53	152	216	e100	e240	e120	1440	173	83	274	42	54
4	49	306	298	e100	e220	e130	1040	153	75	151	41	52
5	96	639	783	e99	e220	e180	835	140	72	114	55	47
6	64	645	350	e99	e200	e200	981	163	80	100	48	44
7	52	305	253	e98	e160	e220	1550	174	78	113	43	47
8	45	187	208	e97	e150	e240	878	236	76	165	40	47
9	42	140	170	e96	e140	e260	729	197	69	108	38	50
10	42	117	178	e95	e120	e270	901	168	65	90	39	48
11	40	103	e280	e94	e110	e300	792	142	62	79	38	44
12	40	110	e140	e93	e110	e290	688	159	63	71	37	43
13	46	102	e140	e93	e120	e280	1320	145	65	67	39	42
14	43	105	e130	e92	e120	e230	1160	124	147	62	64	62
15	41	212	e125	e90	e116	e270	790	121	100	65	51	52
16	40	140	e120	e88	e120	e270	1150	180	75	64	43	46
17	104	419	e100	e86	e130	e255	894	163	66	60	41	45
18	94	796	e90	e84	e140	e250	617	150	61	57	834	43
19	64	322	99	e82	e220	e245	496	131	57	55	325	41
20	58	234	102	e80	e400	e240	417	117	53	52	148	40
21	86	182	e110	e80	e1300	e235	346	104	53	50	430	38
22	107	183	e110	e78	e1100	1040	306	97	53	56	321	36
23	76	163	e108	e90	e700	1130	269	90	49	54	164	42
24	63	140	e108	e90	e600	1400	242	85	79	50	111	42
25	55	e115	e106	e94	e300	2030	248	102	94	49	96	37
26	51	e90	e106	e90	e200	1020	239	150	63	52	96	41
27	49	101	e104	e96	e180	975	216	150	91	47	83	126
28	52	765	e104	e110	e150	1120	184	107	713	51	73	99
29	52	555	e102	e400	---	864	176	100	379	52	92	74
30	48	275	e102	e380	---	770	167	86	599	46	70	92
31	64	---	e108	e300	---	650	---	80	---	42	66	---
TOTAL	1799	7906	5285	3677	8106	15744	20732	4480	3746	2747	3651	1600
MEAN	58.0	264	170	119	289	508	691	145	125	88.6	118	53.3
MAX	107	796	783	400	1300	2030	1550	277	713	274	834	126
MIN	40	90	90	78	110	120	167	80	49	42	37	36
CFSM	.51	2.33	1.51	1.05	2.56	4.49	6.12	1.28	1.11	.78	1.04	.47
IN.	.59	2.60	1.74	1.21	2.67	5.18	6.83	1.47	1.23	.90	1.20	.53

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04243500 ONEIDA CREEK AT ONEIDA, NY--Continued

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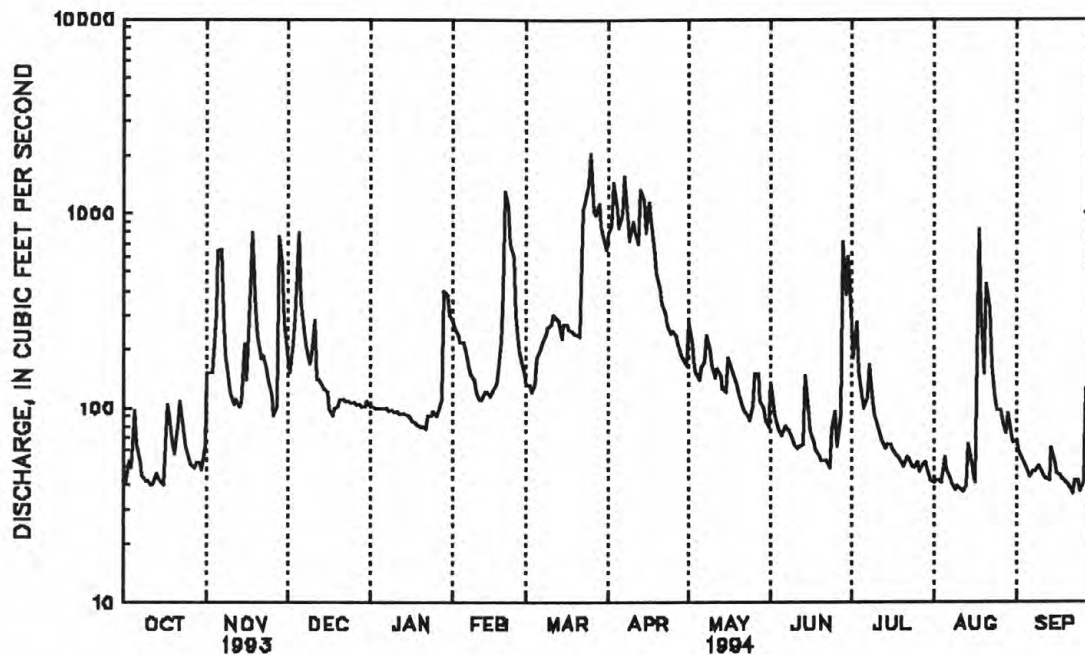
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	91.0	152	193	186	218	373	351	162	102	66.4	54.5	63.2
MAX	472	382	481	443	589	781	915	361	539	225	253	297
(WY)	1978	1973	1974	1979	1976	1977	1993	1990	1972	1951	1976	1977
MIN	21.5	30.5	39.6	38.9	50.5	131	109	66.3	38.3	23.2	22.5	18.0
(WY)	1964	1965	1961	1981	1980	1981	1981	1985	1955	1962	1987	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1950 - 1994	
ANNUAL TOTAL	73676		79473			
ANNUAL MEAN	202		218		167	
HIGHEST ANNUAL MEAN					284	
LOWEST ANNUAL MEAN					89.7	
HIGHEST DAILY MEAN	2870	Apr 11	2030	Mar 25	5210	Mar 5 1979
LOWEST DAILY MEAN	31	Aug 11	36	Sep 22	13	Oct 28 1964
ANNUAL SEVEN-DAY MINIMUM	35	Aug 9	39	Aug 7	15	Sep 15 1964
INSTANTANEOUS PEAK FLOW			2680	Mar 25	9100	Oct 9 1976
INSTANTANEOUS PEAK STAGE			9.77	Mar 25	15.01	Oct 9 1976
INSTANTANEOUS LOW FLOW			30	a	12	b
ANNUAL RUNOFF (CFSM)	1.79		1.93		1.48	
ANNUAL RUNOFF (INCHES)	24.25		26.16		20.12	
10 PERCENT EXCEEDS	508		641		360	
50 PERCENT EXCEEDS	95		107		96	
90 PERCENT EXCEEDS	39		45		30	

a Sep. 24,25.

b Aug. 5, 6, 1962, Oct. 28, 1964.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY

LOCATION.--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.

DRAINAGE AREA.--32.2 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-58. July 1958 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.93 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 24	2000	*986	*7.95	Apr. 07	0600	592	7.44
Apr. 16	1500	573	7.41				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	23	36	e30	e70	e65	207	89	55	69	12	23
2	8.3	21	34	e25	e68	e60	280	66	31	64	11	20
3	11	23	43	e22	e62	e55	505	53	27	84	12	18
4	11	33	48	e22	e58	e50	295	48	24	50	10	16
5	19	57	104	e21	e56	e48	243	44	21	41	14	15
6	11	63	64	e21	e54	e48	283	49	21	39	12	14
7	8.4	36	51	e20	e50	e60	439	47	24	34	9.7	15
8	7.6	26	45	e20	e45	e80	238	62	22	30	9.0	14
9	7.7	22	41	e20	e42	e65	213	53	19	28	9.1	20
10	9.8	20	49	e21	e40	e110	278	55	17	27	9.2	16
11	9.1	19	78	e23	e38	e100	227	45	17	24	8.6	14
12	8.6	23	e45	e23	e35	e70	210	54	18	22	8.3	13
13	9.1	21	e45	e21	e28	e60	375	47	19	21	11	12
14	8.2	28	e40	e20	e26	e62	347	41	58	20	23	14
15	8.5	42	e40	e20	e24	e70	218	40	27	23	14	14
16	8.2	28	e39	e19	e24	e85	390	45	19	21	10	12
17	17	82	e30	e19	e22	e70	273	43	19	20	9.7	13
18	18	103	e32	e18	e26	e65	169	41	17	18	177	15
19	12	52	e32	e18	e35	e60	140	38	15	17	80	12
20	10	44	e30	e17	e60	e55	116	34	13	15	29	11
21	12	35	e29	e17	e80	e65	100	31	15	14	77	12
22	14	31	e29	e19	e100	207	89	30	14	13	78	10
23	10	28	e28	e24	e90	272	79	28	12	14	37	18
24	9.5	27	e28	e26	e88	516	73	26	29	14	25	17
25	8.9	25	e27	e26	e85	643	92	35	34	17	38	14
26	8.5	22	e26	e28	e80	274	79	50	20	20	33	17
27	8.4	26	e26	e30	e75	282	66	49	44	15	25	114
28	10	84	e26	e40	e70	318	57	32	128	18	22	53
29	9.3	72	e27	e80	---	223	55	29	77	15	33	34
30	8.9	46	e30	e75	---	194	52	25	116	17	25	29
31	14	---	e32	e72	---	173	---	24	---	14	22	---
TOTAL	323.5	1162	1234	857	1531	4505	6188	1353	972	838	893.6	619
MEAN	10.4	38.7	39.8	27.6	54.7	145	206	43.6	32.4	27.0	28.8	20.6
MAX	19	103	104	80	100	643	505	89	128	84	177	114
MIN	7.5	19	26	17	22	48	52	24	12	13	8.3	10
CFSM	.32	1.20	1.24	.86	1.70	4.51	6.41	1.36	1.01	.84	.90	.64
IN.	.37	1.34	1.43	.99	1.77	5.20	7.15	1.56	1.12	.97	1.03	.72

e Estimated

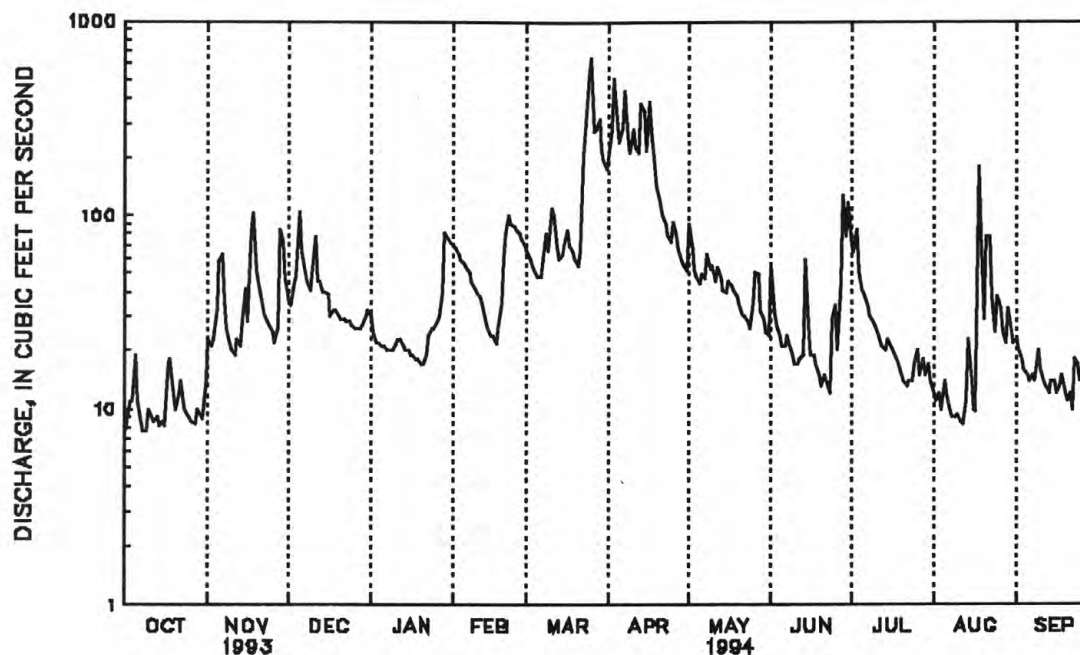
STREAMS TRIBUTARY TO LAKE ONTARIO
04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	29.2	45.0	56.2	52.7	67.2	103	113	52.6	32.6	20.9	14.0	17.4
MAX	138	124	145	127	191	198	377	106	200	71.6	45.7	66.6
(WY)	1978	1973	1973	1979	1976	1977	1993	1990	1972	1974	1992	1975
MIN	5.30	7.49	11.1	13.5	18.5	37.2	48.3	23.1	11.6	5.89	4.84	3.85
(WY)	1965	1965	1961	1961	1963	1983	1981	1987	1964	1964	1965	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994	
ANNUAL TOTAL	22483.3		20476.1			
ANNUAL MEAN	61.6		56.1		50.1	
HIGHEST ANNUAL MEAN					82.6	
LOWEST ANNUAL MEAN					24.2	
HIGHEST DAILY MEAN	1010	Apr 11	643	Mar 25	1260	Oct 28 1981
LOWEST DAILY MEAN	5.8	Aug 27	7.5	Oct 1	3.0	Sep 27 1959
ANNUAL SEVEN-DAY MINIMUM	6.4	Aug 26	8.6	Oct 8	3.4	Sep 17 1964
INSTANTANEOUS PEAK FLOW			986	Mar 24	2820	Jul 3 1974
INSTANTANEOUS PEAK STAGE			7.95	Mar 24	8.46	Oct 28 1981
INSTANTANEOUS LOW FLOW			6.3	Oct 2	2.0	Sep 27 1959
ANNUAL RUNOFF (CFSM)	1.91		1.74		1.56	
ANNUAL RUNOFF (INCHES)	25.97		23.66		21.16	
10 PERCENT EXCEEDS	114		103		103	
50 PERCENT EXCEEDS	26		29		30	
90 PERCENT EXCEEDS	8.0		11		7.7	



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO

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.--2.90 mi².

PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (annual maximum only), October 1978 to current year.

REVISED RECORDS.--WDR NY-75-1: 1974 (M). WDR NY-78-1: 1977 (M). WDR-NY-90-3: 1971-89 (P).

GAGE.--Water-stage recorder, crest-stage gage, and artificial control. Datum of gage is 511.50 ft above sea level.

REMARKS.--Records fair. Flow includes storm sewer inflow, some originating outside the basin. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jul. 2	1630	*137	*3.47	Aug. 25	1030	104	3.03
Jul. 9	1745	*137	*3.47				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	2.6	e1.1	1.1	2.0	1.7	4.3	4.8	5.9	1.4	.76	.91
2	2.0	1.4	e.90	1.2	e1.8	1.7	4.2	1.5	1.9	15	1.0	.78
3	1.1	2.2	e1.5	1.0	1.6	e1.7	6.5	1.5	1.8	e6.5	1.3	.76
4	4.2	1.2	e7.0	e.80	1.5	e1.7	4.2	1.5	1.9	e2.2	1.8	.76
5	1.6	1.3	e3.0	e1.0	1.3	e1.6	3.8	1.5	1.6	e2.8	2.3	.76
6	.71	1.6	e2.0	e1.0	1.3	e1.6	4.9	4.8	2.0	e1.6	2.3	.76
7	.64	.73	e1.4	e1.0	1.2	2.7	13	1.6	2.2	e4.0	4.2	.76
8	.72	.59	e1.2	e1.0	e1.1	3.0	4.0	4.2	2.0	e2.5	2.4	.81
9	.79	.58	e1.0	e1.0	e1.1	2.1	3.5	2.1	1.9	e10	1.1	1.7
10	.73	.65	3.6	e1.0	e1.1	7.7	3.4	1.9	2.1	e1.8	.90	.78
11	.68	.63	2.1	e1.4	e1.0	3.2	2.1	1.5	2.2	e1.1	.83	.74
12	.75	1.7	1.1	e1.0	e1.0	2.8	2.9	3.3	2.1	e1.3	.75	.68
13	.76	.68	1.0	e1.0	e1.0	3.5	10	1.7	2.4	.90	2.4	.71
14	.68	2.2	1.2	e1.0	e1.0	3.9	3.3	1.6	3.4	.86	3.2	1.2
15	.68	1.2	.93	e.95	e1.2	8.8	2.4	1.8	1.9	.99	.88	.76
16	.65	.56	.93	e.95	1.5	5.9	9.0	2.2	1.9	.93	.84	.76
17	3.6	11	.85	e.90	1.7	3.1	2.8	1.6	1.7	.93	.94	.76
18	.91	1.8	.84	e.90	1.8	2.8	2.3	1.6	e1.6	.94	8.6	.96
19	.69	.71	.84	e.90	4.9	2.6	2.5	1.6	1.5	1.0	.93	.84
20	.90	e1.3	.84	e1.1	22	2.7	2.2	1.6	1.3	.98	.81	.73
21	1.3	e1.2	1.4	e.90	12	9.7	2.1	1.6	1.5	1.0	5.4	.72
22	.69	e1.5	1.8	e.90	3.6	19	2.0	1.5	1.4	1.0	.90	.79
23	.68	e1.1	1.2	e.90	2.8	14	1.9	1.4	1.4	1.6	.79	2.3
24	.65	e.90	1.0	e.90	2.6	13	2.0	1.4	4.5	1.2	.68	.75
25	.68	e.80	.94	e.90	1.9	7.2	2.6	2.0	3.5	1.5	8.8	.68
26	.68	e.70	1.3	e.93	e1.8	4.4	1.9	3.4	1.6	1.5	.94	1.9
27	.64	e1.5	1.5	e1.0	e1.8	9.1	1.8	1.5	6.2	.97	.74	6.1
28	.64	e6.0	1.1	e9.0	e1.8	6.3	1.6	1.5	4.8	1.3	3.0	1.0
29	.61	e2.0	.91	5.3	---	4.4	1.7	1.6	11	.96	1.8	.77
30	.86	e1.3	.99	e2.5	---	5.8	1.8	1.6	2.6	1.4	.78	.77
31	2.0	---	1.0	2.2	---	4.5	---	5.0	---	.83	1.1	---
TOTAL	32.95	51.63	46.47	45.63	79.4	162.2	110.7	66.4	81.8	70.99	63.17	32.70
MEAN	1.06	1.72	1.50	1.47	2.84	5.23	3.69	2.14	2.73	2.29	2.04	1.09
MAX	4.2	11	7.0	9.0	22	19	13	5.0	11	15	8.8	6.1
MIN	.61	.56	.84	.80	1.0	1.6	1.6	1.4	1.3	.83	.68	.68
CFSM	.37	.59	.52	.51	.98	1.80	1.27	.74	.94	.79	.70	.38
IN.	.42	.66	.60	.59	1.02	2.08	1.42	.85	1.05	.91	.81	.42

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO
04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY--Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

MEAN	1.64	1.95	2.20	1.90	2.46	3.95	3.30	2.58	2.33	1.85	1.33	1.59
MAX	4.73	2.82	4.66	4.26	4.37	6.93	7.51	5.21	6.12	5.04	5.16	3.03
(WY)	1982	1989	1991	1979	1990	1972	1993	1990	1972	1988	1990	1989
MIN	.19	.71	1.04	.67	1.12	1.38	1.34	1.08	.86	.48	.32	.31
(WY)	1972	1979	1971	1981	1993	1981	1981	1971	1981	1980	1971	1971

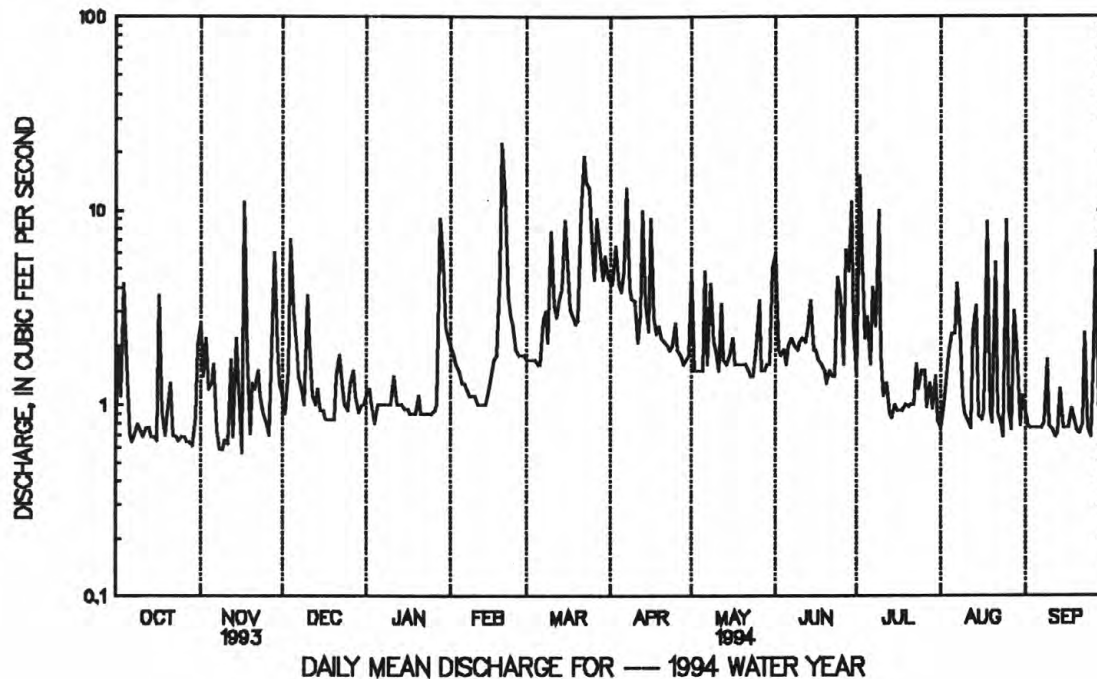
SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1971 - 1994	
ANNUAL TOTAL	873.27		844.04			
ANNUAL MEAN	2.39		2.31		2.28	
HIGHEST ANNUAL MEAN					3.27	
LOWEST ANNUAL MEAN					1.27	
HIGHEST DAILY MEAN	21	Apr 23	22	Feb 20	84	Oct 28 1981
LOWEST DAILY MEAN	.56	Nov 16	.56	Nov 16	.04	a
ANNUAL SEVEN-DAY MINIMUM	.65	Oct 23	.65	Oct 23	.04	Oct 13 1971
INSTANTANEOUS PEAK FLOW			137	b	c418	Jul 3 1974
INSTANTANEOUS PEAK STAGE			3.47	b	6.51	Jul 3 1974
INSTANTANEOUS LOW FLOW			.34	Jan 4	.02	d
ANNUAL RUNOFF (CFSM)	.83		.80		.79	
ANNUAL RUNOFF (INCHES)	11.20		10.83		10.70	
10 PERCENT EXCEEDS	4.5		4.8		4.2	
50 PERCENT EXCEEDS	1.4		1.5		1.4	
90 PERCENT EXCEEDS	.74		.75		.45	

a Oct. 13-21, Nov. 8, 1971.

b Jul 2, 9.

c From rating curve extended above 47 ft³/s on basis of computation of peak flow through culvert at gage heights 5.31 ft and 6.51 ft.

d Sept. 11, 1972, Aug. 24, 1990.



STREAMS TRIBUTARY TO LAKE ONTARIO
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 mi², 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 sea level (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 sea level, 1.135 million acre-ft. Area of water surface, 79.8 mi²; 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, 372.80 ft, Apr. 19; minimum, 367.19 ft, Feb. 19, 20, and 21.

ELEVATION (FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.67	369.54	369.37	368.24	367.42	367.73	370.11	371.05	370.07	370.28	369.71	369.55
2	369.57	369.59	369.32	368.16	367.44	367.72	370.20	370.92	370.02	370.23	369.69	369.58
3	369.47	369.60	369.24	368.12	367.45	367.74	370.32	370.88	370.10	370.16	369.69	369.60
4	369.42	369.58	369.34	368.10	367.46	367.77	370.50	370.75	370.10	370.11	369.68	369.60
5	369.40	369.61	369.34	368.11	367.45	367.74	370.62	370.54	370.08	370.01	369.67	369.57
6	369.47	369.56	369.49	368.07	367.44	367.73	370.71	370.35	370.04	369.92	369.70	369.54
7	369.44	369.68	369.43	368.03	367.42	367.72	370.91	370.33	369.93	369.87	369.71	369.50
8	369.44	369.73	369.46	367.99	---	367.69	371.10	370.26	369.89	369.88	369.73	369.51
9	369.38	369.72	369.44	367.95	---	367.70	371.19	370.15	369.90	369.88	369.67	369.55
10	369.35	369.64	369.39	367.91	---	367.76	371.22	370.05	369.92	369.89	369.66	369.58
11	369.38	369.56	369.25	367.86	---	367.79	371.29	370.02	369.96	370.00	369.67	369.58
12	369.36	369.45	369.33	367.81	---	367.83	371.37	369.75	369.93	370.04	369.69	369.59
13	369.24	369.52	369.30	367.77	367.34	367.86	371.50	369.69	369.94	370.03	369.67	369.60
14	369.32	369.34	369.22	367.73	367.32	367.89	371.77	369.68	369.95	370.05	369.68	369.63
15	369.31	369.21	369.14	---	367.31	367.94	372.01	369.69	369.97	370.06	369.72	369.68
16	369.33	369.26	369.03	---	367.27	368.00	372.16	369.57	369.99	369.93	369.78	369.69
17	369.40	369.29	369.01	---	367.26	368.06	372.44	369.62	369.98	369.94	369.83	369.65
18	369.35	369.28	368.94	---	367.24	368.11	372.64	369.61	369.98	369.98	369.87	369.62
19	369.62	369.37	368.81	---	367.22	368.13	372.65	369.67	369.95	370.02	369.91	369.59
20	369.84	369.01	368.74	---	367.21	368.14	372.47	369.71	370.00	370.04	369.88	369.62
21	369.75	369.19	368.64	---	367.25	368.18	372.47	369.76	369.92	370.04	369.83	369.63
22	369.64	369.16	368.55	---	367.36	368.26	372.28	369.80	369.87	369.97	369.81	369.73
23	369.79	369.15	368.71	---	367.51	368.41	372.13	369.81	369.90	369.93	369.78	369.65
24	369.81	369.03	368.71	---	367.61	368.62	371.91	369.84	370.15	369.91	369.76	369.60
25	369.83	369.02	368.62	367.36	367.68	368.89	371.82	369.88	370.07	369.87	369.69	369.62
26	369.99	369.06	368.49	367.34	367.71	369.19	371.74	369.90	369.97	369.82	369.63	369.72
27	369.84	369.09	368.46	367.30	367.73	369.47	371.60	369.88	370.04	369.80	369.57	369.81
28	369.71	368.91	368.43	367.33	367.73	369.68	371.49	369.97	370.07	369.78	369.58	369.80
29	369.68	369.10	368.40	367.34	---	369.85	371.44	370.05	370.18	369.75	369.52	369.72
30	369.62	369.25	368.36	367.36	---	369.97	371.20	370.05	370.24	369.73	369.52	369.83
31	369.60	---	368.30	367.39	---	370.05	---	370.06	---	369.72	369.61	---
MEAN	369.55	369.35	368.98	---	---	368.31	371.51	370.04	370.00	369.96	369.71	369.63
MAX	369.99	369.73	369.49	---	---	370.05	372.65	371.05	370.24	370.28	369.91	369.83
MIN	369.24	368.91	368.30	---	---	367.69	370.11	369.57	369.87	369.72	369.52	369.50

CAL YR 1993 MEAN 369.39 MAX 373.04 MIN 366.98

STREAMS TRIBUTARY TO LAKE ONTARIO
04246500 ONEIDA RIVER AT CAUGHDENY, NY

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LOCATION.--Lat 43°14'49", long 76°10'12", Oswego County, Hydrologic Unit 04140202, on left bank at point of diversion to New York State Erie (Barge) Canal, 1.6 mi downstream from Oneida Lake, and 2.6 mi upstream from navigation dam at Caughdeny.

DRAINAGE AREA.--1,382 mi²; 1902-9, 1,439 mi².

PERIOD OF RECORD.--September 1902 to December 1909 (published as "near Euclid"), January 1910 to December 1912, and October 1947 to current year in reports of Geological Survey. September 1902 to December 1909 and January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Base gage: Water-stage recorder. Datum of gage is 360.98 ft above sea level (362.00 ft Barge Canal datum). Prior to June 5, 1907, headwater readings, and June 5, 1907 to Dec. 31, 1909, nonrecording gage readings at former Oak Orchard State Dam 5.5 mi downstream at different datum. Jan. 1, 1910 to Dec. 31, 1912, nonrecording gage at site 2.5 mi downstream from present site at different datum. From Oct. 9, 1947 to Nov. 7, 1951, water-stage recorder at site 2.5 mi downstream at present datum.

Auxiliary gage: Water-stage recorder at site 2.5 mi downstream, 350 ft upstream from navigation dam at present datum (base gage site 1947-51).

Supplementary gage: Water-stage recorder at site 2.6 mi downstream, 180 ft downstream from navigation dam at present datum.

REMARKS.--Records fair. Jan. 1, 1910 to Dec. 31, 1912: Flow over dam computed on basis of coefficient determined for model of dam of same general type; flow through gate and diversion through lock culverts estimated by theoretical calculations.

1947 to current year: Record represents total discharge at Caughdeny, including flow in Oneida and Erie (Barge) Canals. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Occasional large diurnal fluctuations caused by seiche 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 mi² of Tloughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin. 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 Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2790	2820	4220	3060	e1970	2360	6110	7890	1190	4270	831	239
2	2720	3300	4190	2950	e1960	2350	6280	7670	1720	4470	358	219
3	2710	3280	4160	2910	e1950	2380	6510	7630	1940	4410	270	206
4	2670	3280	4200	2860	e1940	2410	6850	7410	1910	4400	266	186
5	2670	3300	4200	2860	e1930	2380	7040	7070	1860	4290	275	383
6	2680	3260	4600	2840	e1920	2380	7170	6710	1770	4240	288	489
7	1990	3310	4730	2780	e1910	2370	7540	6670	1720	3270	280	474
8	1600	3340	4760	2730	e1910	2320	7960	6530	1480	1790	271	501
9	1570	3550	4740	2670	e1910	2340	8160	6330	999	700	256	498
10	1560	3810	4680	2620	e1900	2420	8200	6070	881	693	258	489
11	1580	3770	4510	2560	e1890	2440	8290	5960	902	709	264	497
12	1210	3720	4610	2480	e1880	2510	8430	5450	885	715	264	489
13	990	3730	4650	2430	e1880	2560	8640	5050	869	1160	281	479
14	852	3630	4530	2370	1870	2600	9060	4490	869	1500	285	480
15	757	3580	4390	e2350	1870	2670	9500	4470	840	1530	259	486
16	771	3600	4210	e2330	1830	2740	9780	2890	831	1550	264	499
17	748	3600	4190	e2310	1830	2830	10200	2100	827	1550	258	495
18	746	3610	4060	e2290	1810	2900	10600	2080	829	1060	1490	493
19	758	3990	3860	e2270	1800	2920	10600	1390	812	767	2630	483
20	979	3970	3770	e2250	1760	2940	10300	852	793	763	2830	489
21	1090	4110	3580	e2100	1780	2990	10400	706	749	1250	2800	485
22	1730	4100	3500	e2000	1890	3090	9990	718	765	1580	2770	513
23	1940	4110	3730	e1950	2080	3290	9730	694	548	1590	2750	495
24	1950	4020	3710	e1940	2210	3560	9360	735	534	1580	2720	510
25	1930	4010	3580	e1800	2280	3930	9200	744	542	1570	2680	492
26	1950	4040	3380	e1750	2330	4420	9090	792	461	1570	2380	472
27	1920	4040	3430	e1750	2350	4910	8840	773	736	1580	1770	810
28	1880	3850	3340	e1800	2360	5270	8660	826	1440	1400	1080	905
29	2170	4050	3270	e1950	---	5580	8580	873	2150	1190	1100	1350
30	2340	4160	3180	e2000	---	5820	8160	877	3230	1170	602	1960
31	2330	---	3130	e1980	---	5980	---	912	---	1170	258	---
TOTAL	53581	110940	125090	72940	55000	99660	259230	113362	35082	59487	33088	16566
MEAN	1728	3698	4035	2353	1964	3215	8641	3657	1169	1919	1067	552
MAX	2790	4160	4760	3060	2360	5980	10600	7890	3230	4470	2830	1960
MIN	746	2820	3130	1750	1760	2320	6110	694	461	693	256	186

e Estimated

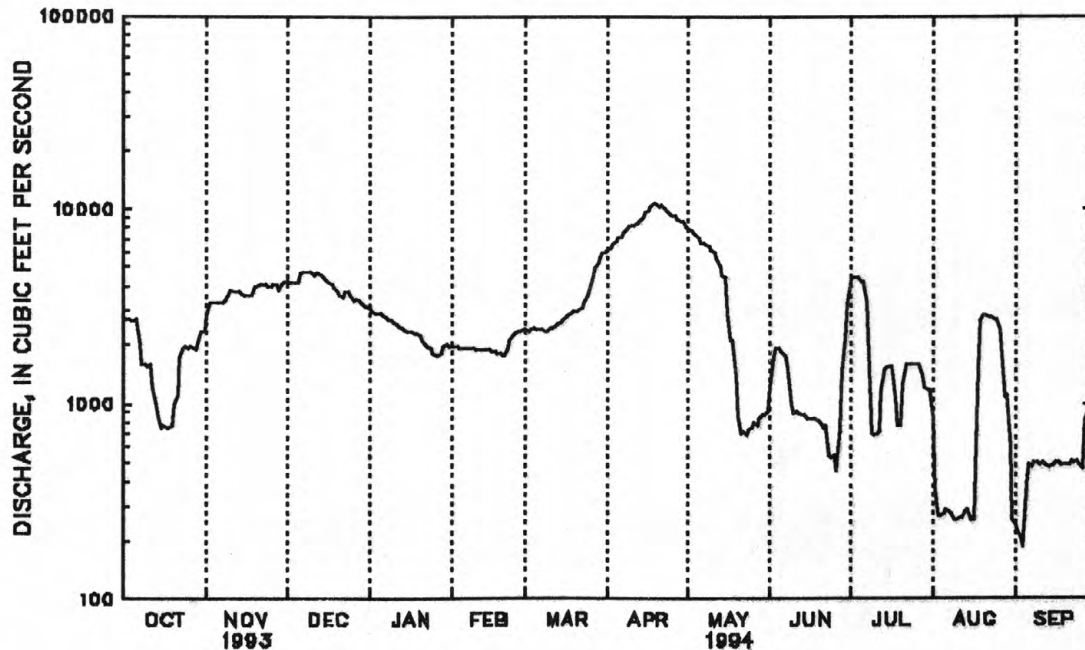
STREAMS TRIBUTARY TO LAKE ONTARIO
04246500 ONEIDA RIVER AT CAUGHDENY, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

MEAN	1563	2602	3745	2937	2655	3613	5305	3008	1585	1121	795	1117
MAX	5591	5635	5686	5206	4442	6325	9264	7427	5710	5151	2066	3524
(WY)	1978	1982	1978	1950	1951	1979	1993	1972	1972	1972	1986	1977
MIN	113	260	2093	1397	1048	1122	2122	815	366	281	133	129
(WY)	1965	1965	1961	1963	1963	1983	1981	1987	1988	1979	1965	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1948 - 1994	
ANNUAL TOTAL	1070496		1034026			
ANNUAL MEAN	2933		2833		2501	
HIGHEST ANNUAL MEAN					3777	
LOWEST ANNUAL MEAN					1600	
HIGHEST DAILY MEAN (1903-1912)					13800	
HIGHEST DAILY MEAN (1948-1994)	11300	Apr 24	10600	Apr 18	11300	Apr 24 1993
LOWEST DAILY MEAN (1903-1912)					52	
LOWEST DAILY MEAN (1948-1994)	222	Aug 20	290	Sep 4	62	Jul 29 1950
ANNUAL SEVEN-DAY MINIMUM	270	Aug 18	398	Aug 7	72	Jul 28 1950
10 PERCENT EXCEEDS	6820		6400		5280	
50 PERCENT EXCEEDS	2010		2290		2100	
90 PERCENT EXCEEDS	659		494		314	

a Mar. 25, 26, 27, 1903.



DAILY MEAN DISCHARGE FOR --- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY

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(National stream-quality accounting network station)

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. Water-quality sampling site at discharge station.

DRAINAGE AREA.--5,100 mi².

WATER-DISCHARGE RECORDS

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 sea level. Prior to 1933, nonrecording gage at site about 6 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharge, 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 mi² 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 mi² 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4360	4650	11300	7800	4720	8510	23400	19300	e3630	8590	e2180	2190
2	3520	6170	10400	7780	5420	7710	23100	19000	e4450	8560	e1080	1890
3	3650	6070	9660	6350	4920	8460	23500	18600	5040	8880	e1080	1720
4	4100	6230	9680	5680	4640	8220	23400	18100	5350	8340	e1700	1150
5	3970	7050	11200	5790	5140	9170	23000	16400	5680	8250	e925	897
6	4130	7770	12100	6630	4230	9290	23000	15500	5030	7830	e1110	1650
7	3460	7990	12200	6760	4450	9360	23900	15100	5340	7120	e1110	e1070
8	2270	7960	12000	6840	3310	9600	24500	14000	4730	3980	e648	1530
9	3290	7980	11300	6840	4030	9680	24300	13000	e4170	e2800	e1190	2020
10	2540	8600	10600	6830	3920	10100	24300	11900	e3850	e2580	e1120	2020
11	2690	8200	10700	6600	4120	11000	24400	11300	4710	e1720	e1370	1840
12	2720	7940	10700	6450	3730	10900	24100	10700	4150	e2250	e870	2000
13	1980	7900	10600	6000	3540	11000	24900	10300	3970	e2030	e520	785
14	2320	8160	10400	5820	3670	11200	26300	9740	4550	e2560	e1370	1560
15	1420	8670	10200	5660	3530	11700	26500	9590	4400	e2190	2350	1200
16	1820	7890	10100	5620	3510	12800	26800	8610	4990	e2480	e1420	1630
17	2180	8010	10300	5060	2810	13200	27400	7340	5530	e2210	e1250	1840
18	2360	9100	10100	5610	4680	14000	27500	6970	5450	e2340	2570	1650
19	2290	9340	9740	5280	4860	14400	27300	5040	5210	e2100	5610	1380
20	2250	9270	9850	5120	6120	12500	26600	e3850	5270	e2020	6910	1880
21	2510	9360	9990	3400	7820	12900	25800	e3010	4350	e2120	7560	1150
22	2500	9270	10500	3310	9230	14400	24900	e3190	3820	e1720	7940	1660
23	3780	9260	10800	3680	10300	16500	23900	e3280	e2540	e2140	7390	2220
24	3640	8390	10300	3940	9780	18400	22900	e3030	e2560	e2290	7710	3570
25	3170	8350	9930	3380	9120	21300	22200	e2420	3740	e2120	7190	3200
26	3820	8190	9110	3510	8410	22500	21600	e2560	3840	e2500	6660	2440
27	3390	8160	7600	3370	7910	23200	21300	e2680	3980	e2120	6360	3380
28	3670	10100	8890	3410	8450	24000	20400	e2480	5430	e2250	5360	3370
29	3300	10700	8770	4550	---	24400	20200	e2140	6760	2440	5100	3610
30	3830	11300	8300	4030	---	24200	19500	e2360	7390	e1930	4640	4500
31	3790	---	8190	4320	---	23600	---	e2580	---	e1700	2930	---
TOTAL	94720	248030	315510	165420	156370	438200	720900	274070	139910	112160	105223	61002
MEAN	3055	8268	10180	5336	5585	14140	24030	8841	4664	3618	3394	2033
MAX	4360	11300	12200	7800	10300	24400	27500	19300	7390	8880	7940	4500
MIN	1420	4650	7600	3310	2810	7710	19500	2140	2540	1700	520	785

e Estimated

STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

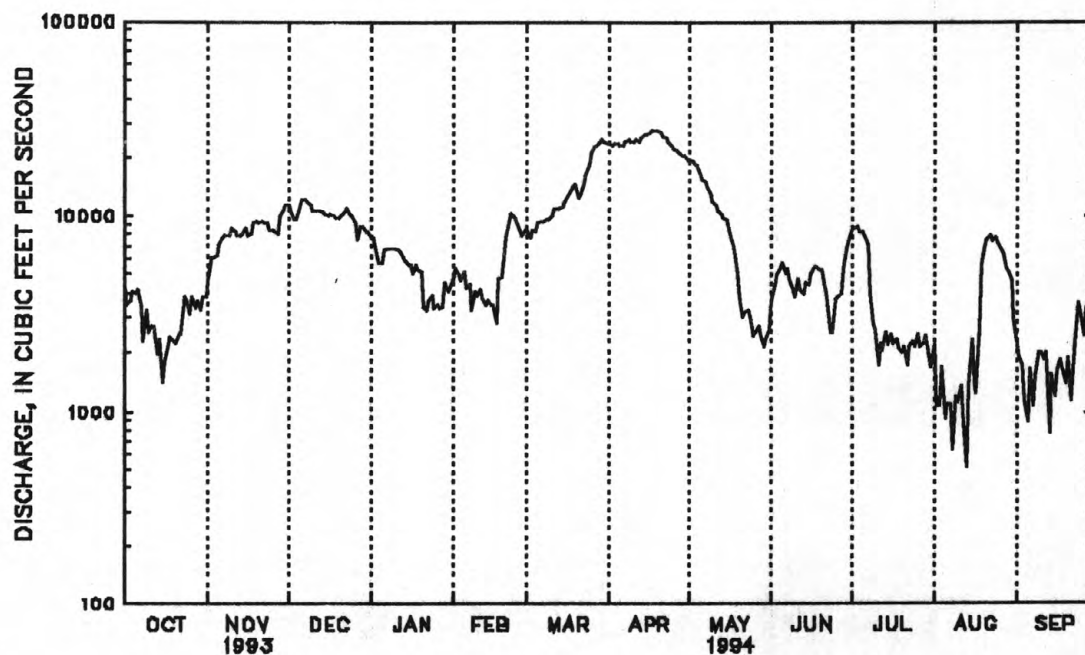
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1994, BY WATER YEAR (WY)

MEAN	3851	5956	8362	7822	7752	11630	13480	8257	5083	3482	2551	2743
MAX	17950	16070	17920	16370	15130	21720	30250	20350	17000	19660	8951	8702
(WY)	1978	1978	1978	1943	1976	1979	1993	1943	1947	1972	1992	1977
MIN	1173	1167	2917	2610	2547	3914	3782	2302	1396	1234	836	1048
(WY)	1940	1965	1940	1963	1963	1983	1946	1987	1988	1991	1934	1939

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1934 - 1994		
ANNUAL TOTAL	3190112			2831515					
ANNUAL MEAN	8740			7758			6734		
HIGHEST ANNUAL MEAN							11030		
LOWEST ANNUAL MEAN							3433		
HIGHEST DAILY MEAN	34600	Apr 27		27500	Apr 18		37000	Mar 28	1936
LOWEST DAILY MEAN	654	Aug 21		520	Aug 13		261	Sep 18	1985
ANNUAL SEVEN-DAY MINIMUM	1280	Aug 17		975	Aug 7		709	Sep 2	1934
INSTANTANEOUS PEAK FLOW				30300	Apr 14		a37500	Mar 28	1936
INSTANTANEOUS PEAK STAGE				11.76	Apr 14		13.46	Apr 10	1940
INSTANTANEOUS LOW FLOW				258	Aug 13		b30	Nov 6	1944
10 PERCENT EXCEEDS	23600			19800			14300		
50 PERCENT EXCEEDS	5960			5610			5100		
90 PERCENT EXCEEDS	1810			1860			1630		

a Includes daily mean discharge of canals.

b River only.



DAILY MEAN DISCHARGE FOR -- 1994 WATER YEAR

STREAMS TRIBUTARY TO LAKE ONTARIO
04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1964-66, 1971 to current year.
 CHEMICAL DATA: 1957 (a), 1958-60 (a) unpublished, 1984 (b), 1965 (c), 1966 (a), 1971-72 (a), 1974 (a), 1975 (c), 1976-81 (d), 1982 (c), 1983-94 (b).
 MINOR ELEMENTS DATA: 1971-73 (a), 1975 (b), 1976 (a), 1977-94 (b).
 ORGANIC DATA: OC--1975 (b), 1978-81 (d).
 NUTRIENT DATA: 1971 (a), 1974 (a), 1975 (c), 1976-81 (d), 1982 (c), 1983-94 (b).
 BIOLOGICAL DATA:
 Bacteria--1974 (a), 1975 (c), 1976-81 (d), 1982 (c), 1983-94 (b).
 Phytoplankton--1974 (a), 1975 (c), 1976 (d), 1977-81 (c).
 Periphyton--1975-80 (a).
 SEDIMENT DATA: 1974 (a), 1975 (c), 1976 (d), 1977 (b), 1978-79 (c), 1980-81 (d), 1982 (c), 1983-94 (b).
 PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: September 1975 to September 1981.
 WATER TEMPERATURES: July 1975 to September 1981.
 EXTREMES FOR PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE (Water years 1975-78, 1981): Maximum recorded, 2,290 microsiemens Oct. 25, 1980; minimum recorded, 430 microsiemens Apr. 19, 1976.
 WATER TEMPERATURES (Water years 1975-78, 1981): Minimum, 0.0° C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED CENT SATUR- ATION	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
02...	1000	5820	630	7.6	7.5	0.90	769	7.6	63	K70	K16
MAY											
03...	0900	17500	553	7.8	10.5	3.8	767	12.3	110	K10	K10
JUN											
14...	0900	2800	696	7.7	21.0	1.2	755	8.0	91	53	K7
AUG											
12...	0900	1600	951	7.9	24.0	1.0	761	8.6	103	K20	K10

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV											
02...	190	57	12	45	2.4	104	69	90	0.20	3.2	360
MAY											
03...	180	55	11	36	2.0	116	50	65	0.10	0.64	313
JUN											
14...	210	60	14	52	2.3	134	72	90	0.10	1.0	411
AUG											
12...	240	71	15	89	3.4	110	91	180	0.10	3.4	554

K Results based on colony count outside the ideal range (non-ideal colony count).

STREAMS TRIBUTARY TO LAKE ONTARIO
04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 02...	347	0.47	0.17	0.02	0.60	0.04	0.02	0.03	10	40
MAY 03...	298	0.67	0.12	0.01	0.50	<0.01	<0.01	0.01	<10	34
JUN 14...	375	0.71	0.14	0.03	0.60	0.04	0.03	0.02	<10	40
AUG 12...	519	1.00	0.11	0.04	0.60	0.07	0.05	0.04	<10	49

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 02...	<3	14	10	12	<10	2	<1	<1.0	780	<6
MAY 03...	<3	17	<4	14	<10	<1	<1	<1.0	560	<6
JUN 14...	<3	6	10	28	<10	1	<1	<1.0	690	<6
AUG 12...	<3	5	13	19	<10	1	<1	<1.0	890	<6

STREAMS TRIBUTARY TO LAKE ONTARIO
04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV								
02...	1005	50	11.5	3.0	633	7.6	7.5	11.8
02...	1010	50	11.5	7.0	630	7.6	7.5	11.5
02...	1015	50	11.5	10.0	634	7.6	7.5	11.3
02...	1020	80	12.0	3.0	630	7.6	7.5	10.8
02...	1025	80	12.0	7.0	628	7.7	7.5	11.0
02...	1030	80	12.0	10.0	624	7.7	7.5	11.0
02...	1035	110	11.5	3.0	619	7.7	7.5	11.1
02...	1040	110	11.5	7.0	617	7.7	7.5	11.2
02...	1045	110	11.5	10.0	633	7.7	7.5	11.2
02...	1050	150	4.0	3.0	623	7.7	7.5	11.6
MAY								
03...	0905	50	16.0	3.0	554	7.8	10.5	12.4
03...	0910	50	16.0	7.0	550	7.8	10.5	12.4
03...	0915	50	16.0	12.0	554	7.8	10.5	12.4
03...	0920	80	17.0	3.0	552	7.8	10.5	12.3
03...	0925	80	17.0	7.0	560	7.8	10.5	12.3
03...	0930	80	17.0	12.0	559	7.8	10.5	12.3
03...	0935	110	16.0	3.0	552	7.8	10.5	12.1
03...	0940	110	16.0	7.0	551	7.8	10.5	12.2
03...	0945	110	16.0	12.0	547	7.8	10.5	12.3
03...	0950	150	9.0	3.0	554	7.8	10.5	12.4
03...	0955	150	9.0	7.0	552	7.8	10.5	12.3
JUN								
14...	0905	150	3.5	3.0	695	7.8	21.0	8.3
14...	0910	110	11.0	3.0	694	7.7	21.0	8.0
14...	0915	110	11.0	7.0	696	7.7	21.0	8.0
14...	0920	110	11.0	10.0	696	7.7	21.0	8.0
14...	0925	80	11.5	3.0	698	7.7	21.0	8.0
14...	0930	80	11.5	7.0	696	7.7	21.0	8.1
14...	0935	80	11.5	10.0	696	7.7	21.0	8.1
14...	0940	50	11.0	3.0	697	7.6	21.0	8.0
14...	0945	50	11.0	7.0	699	7.6	21.0	8.0
14...	0950	50	11.0	10.0	694	7.6	21.0	8.0
AUG								
12...	0905	50	9.5	3.0	955	7.9	24.0	8.7
12...	0910	50	9.5	6.0	953	7.9	24.0	8.7
12...	0915	50	9.5	9.0	950	7.9	24.0	8.7
12...	0920	80	10.0	3.0	950	7.9	24.0	8.5
12...	0925	80	10.0	6.0	949	7.9	24.0	8.6
12...	0930	80	10.0	9.0	953	7.9	24.0	8.6
12...	0935	110	9.5	3.0	951	7.9	24.0	8.5
12...	0940	110	9.5	6.0	950	7.9	24.0	8.4
12...	0945	110	9.5	9.0	954	7.9	24.0	8.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER .062 MM
NOV					
02...	1000	5820	3	47	74
MAY					
03...	0900	17500	12	567	90
JUN					
14...	0900	2800	3	23	99
AUG					
12...	0900	1600	3	13	91

STREAMS TRIBUTARY TO LAKE ONTARIO
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).
04228845	HONEOYE LAKE NEAR HONEOYE, NY (see station for daily mean elevation).
04232400	SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).
04232450	KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, 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).
04236000	SKANEATELES LAKE AT SKANEATELES, NY (see station for daily elevation).
04238500	ONONDAGA RESERVOIR NEAR NEDROW, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
04240495	ONONDAGA LAKE AT LIVERPOOL, NY (see station for daily mean elevation).
04246000	ONEIDA LAKE AT BREWERTON, NY (see station for daily mean elevation).

LAKE ONTARIO

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04249010 LAKE ONTARIO AT OSWEGO, NY

LOCATION.--Lat 43°27'51", long 76°30'42" Oswego County, Hydrologic Unit 04150200, in southwest corner of Port of Oswego Authority building at mouth of Oswego River at Oswego.

DRAINAGE AREA.--295,800 mi².

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

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. Prior to Jan. 1, 1933, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 249.49 ft, June 6, 1952; minimum observed, 241.47 ft, Dec. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 246.95 ft, May 31; minimum, 243.94 ft, Nov. 27.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244.82	244.66	244.46	244.56	244.59	244.44	244.93	246.25	246.49	246.24	245.98	245.75
2	244.91	244.49	244.44	244.65	244.50	244.40	244.89	246.22	246.53	246.26	245.97	245.68
3	244.92	244.46	244.60	244.55	244.65	244.45	245.07	246.20	246.48	246.27	245.94	245.65
4	244.96	244.46	244.56	244.68	244.58	244.47	245.07	246.22	246.45	246.20	245.99	245.58
5	244.95	244.46	244.68	244.77	244.59	244.47	245.08	246.24	246.42	246.19	246.09	245.51
6	244.83	244.62	244.60	244.55	244.53	244.39	245.22	246.32	246.39	246.19	246.02	245.51
7	244.82	244.54	244.73	244.58	244.59	244.40	245.34	246.28	246.44	246.22	245.94	245.60
8	244.81	244.45	244.64	244.73	244.44	244.52	245.28	246.33	246.43	246.20	245.87	245.55
9	244.88	244.45	244.61	244.80	244.51	244.41	245.24	246.33	246.41	246.23	245.94	245.57
10	244.85	244.43	244.62	244.58	244.44	244.51	245.39	246.36	246.37	246.29	245.90	245.54
11	244.74	244.42	244.85	244.61	244.42	244.50	245.40	246.32	246.30	246.28	245.86	245.49
12	244.75	244.50	244.71	244.60	244.40	244.46	245.34	246.46	246.31	246.23	245.81	245.45
13	244.77	244.34	244.66	244.62	244.57	244.48	245.46	246.44	246.28	246.28	245.81	245.41
14	244.69	244.43	244.64	244.68	244.60	244.49	245.59	246.37	246.31	246.21	246.02	245.40
15	244.65	244.51	244.64	244.77	244.47	244.51	245.64	246.35	246.29	246.20	246.00	245.35
16	244.61	244.45	244.65	244.61	244.50	244.70	245.74	246.44	246.28	246.22	245.92	245.32
17	244.69	244.44	244.58	244.58	244.39	244.67	245.83	246.49	246.30	246.15	245.86	245.35
18	244.81	244.44	244.56	244.83	244.58	244.58	245.84	246.46	246.27	246.13	245.85	245.30
19	244.71	244.36	244.61	244.77	244.36	244.71	245.93	246.47	246.27	246.10	245.79	245.32
20	244.62	244.68	244.55	244.65	244.35	244.57	245.97	246.44	246.23	246.06	245.78	245.27
21	244.75	244.41	244.74	244.63	244.43	244.46	245.98	246.43	246.24	246.06	245.84	245.23
22	244.84	244.40	244.86	244.69	244.44	244.64	246.01	246.41	246.22	246.09	245.77	245.16
23	244.68	244.39	244.66	244.47	244.23	244.65	245.99	246.43	246.18	246.08	245.68	245.13
24	244.65	244.44	244.57	244.58	244.59	244.68	246.00	246.42	246.13	246.07	245.67	245.06
25	244.63	244.32	244.66	244.45	244.61	244.82	246.02	246.42	246.17	246.08	245.71	245.03
26	244.52	244.23	244.90	244.41	244.57	244.76	246.05	246.48	246.19	246.09	245.75	245.04
27	244.59	244.27	244.61	244.26	244.57	244.72	246.11	246.48	246.26	246.07	245.75	245.08
28	244.60	244.61	244.59	244.47	244.49	244.85	246.11	246.43	246.24	246.03	245.78	245.12
29	244.59	244.57	244.50	244.62	---	244.86	246.11	246.42	246.22	246.01	245.83	245.43
30	244.56	244.56	244.77	244.55	---	244.91	246.16	246.41	246.24	246.03	245.80	245.31
31	244.53	---	244.61	244.54	---	244.92	---	246.44	---	246.00	245.74	---
MEAN	244.73	244.46	244.64	244.61	244.49	244.59	245.63	246.38	246.31	246.15	245.86	245.37
MAX	244.96	244.68	244.90	244.83	244.65	244.92	246.16	246.49	246.53	246.29	246.09	245.75
MIN	244.52	244.23	244.44	244.26	244.23	244.39	244.89	246.20	246.13	246.00	245.67	245.03

CAL YR 1993 MEAN 246.20 MAX 248.20 MIN 244.23

WTR YR 1994 MEAN 245.27 MAX 246.53 MIN 244.23

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	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 Green- bush Road, 1.2 mi south of Westford, and 2.2 mi upstream from mouth. Drainage area is 3.73 mi ² .	1978-94	4- 7-94	16.30	90	10-17-77	18.54	202
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. Drainage area is 1,610 mi ² .	1988-94	4- 8-94	15.04	22,500	3-31-93	20.17	36,600
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. Drainage area is 1,820 mi ² .	1988-94	4- 7-94	15.01	24,100	4- 1-93	19.45	37,200
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. Drainage area is 24.3 mi ² .	1964-65, 1967-94	4-16-94	7.18	768	3- 6-64	8.12	2,350
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. Drainage area is 593 mi ² .	1937-70†, 1971-94	4-17-94	12.29	8,520	12-31-42	18.33	18,900

† Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
SUSQUEHANNA RIVER BASIN--Continued								
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. Drainage area is 453 mi ² .	1988-94	4-16-94	7.02	8,340	4-10-93	9.31	12,100
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. Drainage area is 5.32 mi ² .	1976-81, 1983-94	8-18-94	2.21	446	11-11-90	4.65	1,120
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 up- stream from mouth. Drainage area is 730 mi ² .	1930-67‡, 1968-94	4-16-94	7.50	9,260	7- 8-35	16.61	61,100
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. Drainage area is 3,941 mi ² .	1936, 1937-67‡, 1968-72, 1974-94	4- 7-94	19.39	44,700	e3-18-36	30.50	107,000
Susquehanna River at Owego, NY (01513831)	Lat 42°06'05", long 76°15'41", Tioga County, Hydrologic Unit 02050103, on right bank at the upstream side of bridge on State Highway 96 over the Susquehanna River, at Owego. Drainage area is 4,216 mi ² .	1988-94	4- 7-94	25.80	46,300	3-18-36 4-11-93	31.97 ^g	107,000 76,300
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. Drainage area is 185 mi ² .	1930-78‡, 1979-94	8-18-94	7.08	5,230	7- 8-35	11.50	23,500
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. Drainage area is 151 mi ² .	1988-94	8-18-94	9.80	3,750	10-24-90	12.41	5,560

‡ Operated as a continuous-record gaging station.

e Estimated

g None available.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (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 Butch Comer, 3.4 mi west of Howard, and 6.2 mi upstream from mouth. Drainage area is 6.32 mi ² .	1977-94	6-14-94	14.36	c	9-13-87	16.04	580
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. Drainage area is 340 mi ² .	1930-31‡, 1937-70‡, 1971-72, 1974-94	6-14-94	13.27	8,610	6-23-72	23.48	43,000
Tuscarora Creek above South Addison, NY (01525981)	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 is 102 mi ² .	1989-94	3-24-94	8.74	6,710	10-23-91	10.96	11,800
Cohocton River at Cohocton, NY (01527000)	Lat 42°30'00", long 77°30'02", Steuben County, Hydrologic Unit 02050105, on left bank 450 ft downstream from bridge on State Highway 415 at Cohocton, 800 ft downstream from small tributary, and 1.4 mi upstream from Reynolds Creek. Drainage area is 52.2 mi ² .	1951-81‡, 1982-94	3-24-94	5.58	538	6-23-72	9.82	2,260
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 down- stream from Harrisburg Hollow Creek. Drainage area is 340 mi ² .	1988-94	2-21-94 3-24-94	9.90 9.76	a 6,490	4- 1-93	10.18	7,000
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 Eachers Hollow Road and Breed Hollow Road, 2.3 mi north of State Highway 17, and 3.0 mi north of Big Flats. Drainage area is 5.39 mi ² .	1976, 1979-81, 1983-94	6-14-94	15.51	388	6-19-76	18.52	800

‡ Operated as a continuous-record gaging station.

a Ice jam.

c Discharge not determined.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
SUSQUEHANNA RIVER BASIN--Continued								
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. Drainage area is 2,162 mi ² .	1988-94	3-25-94	14.06	41,600	3-25-94	14.06	41,600
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. Drainage area is 5.12 mi ² .	1978-81, 1983-94	3-24-94	8.90	122	9-14-79	10.59	570
Olean Creek near Olean, NY (03010800)	Lat 42°07'12", long 78°25'12", Cattaraugus County, Hydrologic Unit 05010001, on left bank at upstream side of highway bridge, 1,000 ft west of State Highway 16, 1.4 mi northeast of Olean, and 4.6 mi upstream from mouth. Drainage area is 198 mi ² .	1958-68‡, 1969-94	3-24-94	8.91	4,460	9-29-67	16.06	18,200
Conewango Creek at Waterboro, NY (03013000)	Lat 42°10'15", long 79°04'10", Chautauqua County, Hydrologic Unit 05010002, on right bank 300 ft downstream from bridge on State Highway 394 at Waterboro, 0.2 mi downstream from Davis Brook, 0.4 mi upstream from Harris Brook, and 1.9 mi northeast of Kennedy. Drainage area is 290 mi ² .	1938-93‡, 1994	3-28-94	10.67	4,570	4- 7-47	11.35	8,600
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. Drainage area is 9.06 mi ² .	1955-64§, 1965, 1967-68b, 1974‡, 1975-94	8-14-94	16.86	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 04120102, at bridge on Van Buren Road (Matteson Street), 0.8 mi northwest of Fredonia corporate boundary, and 1.2 mi upstream from Beaver Creek. Drainage area is 32.9 mi ² .	1962-63b, 1987-94	1-29-94 7-13-94	5.60 4.53	a c	1-29-94 12-30-90	5.60 5.33	a c
South Branch Cattaraugus Creek near Otto, NY (04213490)	Lat 42°21'54", long 78°48'04", Cattaraugus County, Hydrologic Unit 04120102, at highway bridge, 0.2 mi upstream from Mansfield Creek, 1.7 mi northeast of Otto, and 5.5 mi upstream from mouth. Drainage area is 25.1 mi ² .	1963-94	3-24-94	6.74	1,940	9-14-79	11.18	4,350

‡ Operated as a continuous-record gaging station.

§ Operated as a low-flow partial-record station.

a Ice jam.

b Miscellaneous measurements made.

c Discharge not determined.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (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 down- stream side of bridge on Scajaquada Expressway (SH 198), and 1.7 mi upstream from mouth of Scajaquada Creek. Drainage area is 1.14 mi ² .	1985-94	3-21-94	9.79	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. Drainage area is 25.7 mi ² .	1985-94	10-21-93	5.55	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 041201041, on right bank at upstream side of bridge on, County Highway 13A (Depot Road) in Linden and 9.3 mi upstream from mouth. Drainage area is 22.1 mi ² .	1913-68‡, 1970-72‡, 1977-92‡, 1994	4-13-94	6.63	770	6-23-89	16.99	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 down- stream from dam at Lyndonville, and 4.4 mi upstream from mouth. Drainage area is 87.7 mi ² .	1962-70, 1972-73, 1976-94	2-22-94 3-24-94	7.80 6.54	a 1,650	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. Drainage area is 31.0 mi ² .	1989-94	2-21-94 4-13-94	5.43 5.08	a 636	4-22-91	6.47	1,030
Slater Creek near Greece, NY (0422028490)	Lat 43°15'10", long 77°38'54", Monroe County, Hydrologic Unit, 04130001, on left bank about 25 ft upstream from bridge on Latta Road near Mt. Read Blvd., 4.3 mi east of North Greece, and 1.7 mi above mouth. Drainage area is 1.52 mi ² .	1989-94	4-12-94	2.82	55.0	4- 1-93	3.80	126
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. Drainage area is 3.15 mi ² .	1977-82, 1984-91, 1994	2-20-94 3-24-94	9.73 <8.98	a <74	8- 3-81	15.89	790

‡ Operated as a continuous-record gaging station.

a Ice jam.

d No stage-discharge relationship defined at this site.

g None available.

< Less than.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (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. Drainage area is 6.74 mi ² .	1971-73, 1975-94	2-20-94 3- 7-94	13.26 12.88	a 184	4- 2-93 12-29-84	12.97 13.33	199 c
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. Drainage area is 41.1 mi ² .	1957-62§, 1964-66§, 1970§, 1976-77‡, 1987-94	9-27-94	6.48	1,260	9-26-75 12-19-75	6.40 7.52	1,680 c
Sugar Creek at Guyanoga, NY (04232460)	Lat 42°37'23", long 77°09'30", Yates County, Hydrologic Unit 04140201, at bridge on Sid White Road, 0.4 mi east of Guyanoga, and 2.3 mi upstream from mouth. Drainage area is 28.9 mi ² .	1966-94	3-23-94	4.75	532	7-31-92 3-23-94	4.97 4.75	511 532
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 Burr 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. Drainage area is 86.7 mi ² .	1971-72, 1975-94	8-18-94	9.17	3,140	6-23-72	14.60	11,800
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. Drainage area is 3.56 mi ² .	1983-94	8-18-94	19.74	313	10-23-90	20.87	530
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. Drainage area is 7.84 mi ² .	1980-94	2-21-94 3-23-94	11.55 11.25	a 208	3- 5-79 3-30-93	g 12.84	520 332
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 down- stream from bridge on State Highway 96 at East Victor, 0.3 mi upstream from Fish Creek, and 0.5 mi upstream from mouth. Drainage area is 64.2 mi ² .	1958-68‡, 1972, 1976-94	4-13-94	5.99	1,240	6-22-72 4-21-91	7.85 7.22	1,800 1,880

‡ Operated as a continuous-record gaging station.

§ Operated as a low-flow partial-record station.

a Ice jam.

c Discharge not determined.

g None available.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ONTARIO--Continued								
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. Drainage area is 2.94 mi ² .	1978-94	2-21-94 3-23-94 3- 4-91 7-31-92	6.99 6.44 6.97 7.22	a 65 R85 R96	1-20-86	7.22	97
Limestone Creek at Fayetteville, NY (04245000)	Lat 43°01'48", long 76°00'49", Onondaga County, Hydrologic Unit 04140202, on left bank, 100 ft downstream from bridge on Genesee Street at Fayetteville, and 8 mi upstream from mouth. Drainage area is 85.5 mi ² .	1940-86‡, 1987-94	3-24-94	5.05	1,760	10-28-81	10.14	7,490
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. Drainage area is 38.4 mi ² .	1966-68‡, 1969, 1971-94	4-14-94	6.64	1,030	9-26-75	7.33	1,310
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. Drainage area is 31.7 mi ² .	1962-66, 1968-94	4-14-94	5.45	553	3-18-73	7.85	1,350

Discharge measurements made at miscellaneous sites during water year 1994

Discharge measurements made at indicated sites during water year 1994						
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SUSQUEHANNA RIVER BASIN						
* 01503980 Chenango River	Susquehanna River	Lat 42°51'02", long 76°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.	24.3	1964-65, 1970-72, 1974, 1977-81, 1983, 1990, 1993	3-25-94	347
01516000 Cayuta	Susquehanna River	Lat 42°00'32", long 76°31'37", Tioga County, Hydrologic Unit 02050103, at bridge on Ithaca Street, at Waverly, and 2.4 mi up-stream from mouth.	137	1937, 1953-76, 1978-80, 1983, 1988-93	3-24-94 7-27-94	1,750 28
* 01530332 Chemung River	Susquehanna River	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.	2,162	1988-93	12- 3-93	2,990

‡ Operated as a continuous-record gaging station.

* Also a crest-stage partial-record station.

a Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Discharge measurements made at miscellaneous sites during water year 1994--Continued

Discharge measurements made at miscellaneous sites during water year 1994 - continued						
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO NIAGARA RIVER						
04217650 Murder Creek	Ledge Creek	Lat 42°57'52", long 78°24'22", Genesee County, Hydrologic Unit 04120104, at culvert on state highway 77, at Corfu, 20.1 mi upstream from mouth.	35.0	---	9-12-94	0.296
04217700 Murder Creek	Ledge Creek	Lat 42°59'37", long 78°26'08", Genesee County, Hydrologic Unit 04120104, at bridge on Lake road, 0.3 mi south of Pem- broke, 12.5 mi west of Batavia, and, 14.1mi upstream from mouth.	43.6	---	9-12-94	0.408
04217730 Murder Creek	Ledge Creek	Lat 43°01'10", long 78°30'13", Erie County, Hydrologic Unit 04120104, at bridge on state highway 93, at Akron, and 8.4 mi upstream from mouth.	55.8	---	9-12-94	0.784
STREAMS TRIBUTARY TO LAKE ONTARIO						
0422450020 Genesee River	Lake Ontario	Lat 42°44'24", long 77°52'43", Livingston County, Hydrologic Unit 04130003, at the downstream end of Brooks Island, 200 ft up- stream of the railroad bridge, and 1.1 mi north of the village of Mount Morris.	---	---	7-14-94	280
0422450200 Genesee River	Lake Ontario	Lat 42°44'42", long 77°51'57", Livingston County, Hydrologic Unit 04130003, 0.9 mi down- stream of Brooks Island, 1.1 mi northwest of Shakers Crossing, and 1.5 mi northeast of the village of Mount Morris.	---	---	7-14-94	276
0422450303 Genesee River	Lake Ontario	Lat 42°44'42", long 77°51'57", Livingston County, Hydrologic Unit 04130003, 0.9 mi down- stream of Brooks Island, 1.1 mi northwest of Shakers Crossing, and 1.5 mi northeast of the village of Mount Morris.	---	---	7-14-94	286
04227510 Genesee River	Lake Ontario	Lat 42°44'42", long 77°51'57", Livingston County, Hydrologic Unit 04130003, 0.9 mi down- stream of Brooks Island, 1.1 mi northwest of Shakers Crossing, and 1.5 mi northeast of the village of Mount Morris.	---	---	7-14-94	344
04227560 Beards Creek	Genesee River	Lat 42°46'50", long 77°53'52", Livingston County, Hydrologic Unit 04130003, at the upstream side of highway bridge, 1,000 ft west of State Highway 16, 1.4 mi northeast of Olean, and 4.6 mi upstream from mouth.	---	---	7-14-94	0.065

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1994--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ONTARIO--Continued						
04227582 Little Beards Creek	Beards Creek	Lat 42°47'16", long 77°53'49", Livingston County, Hydrologic Unit 04130003, at the Route 36 culvert, 1.6 mi north of Leicester, and 1.8 mi northwest of Cuylerville.	---	---	7-14-94	0.012
04227587 Cloverdale Brook	Beards Creek	Lat 42°47'50", long 77°53'52", Livingston County, Hydrologic Unit 04130003, at Route 36 culvert, 1.6 mi north of Leicester, and 1.2 mi west of Cuylerville.	---	---	7-14-94	0.096
04227591 Beards Creek	Genesee River	Lat 42°46'15", long 77°53'04", Livingston County, Hydrologic Unit 04130003, at the Route 20A bridge, 0.6 mi east of Leicester, and 0.7 mi southwest of Cuylerville.	---	---	5- 3-94 7-14-94	12.4 0.227
0422759150 Beards Creek	Genesee River	Lat 42°46'03", long 77°52'28", Livingston County, Hydrologic Unit 04130003, at the River road bridge, 0.7 mi south of Cuylerville, and 1.1 mi east of Leicester.	---	---	5- 3-94 7-14-94	12.1 0.155
04227594 Perry Creek	Beards Creek	Lat 42°45'23", long 77°52'55", Livingston County, Hydrologic Unit 04130003, at the Perry road culvert, 1.3 mi southeast of Leicester, and 1.5 mi southwest of Cuylerville.	---	---	5- 3-94 7-14-94	1.34 0.160
04227596 Jones Brook	Beards Creek	Lat 42°45'50", long 77°52'59", Livingston County, Hydrologic Unit 04130003, at the Wheelock road culvert, 0.9 mi southeast of Leicester, and 1.0 mi southwest of Cuylerville.	---	---	5- 3-94 7-14-94	0.614 0.000
04227597 Perry Creek	Beards Creek	Lat 42°45'58", long 77°52'12", Livingston County, Hydrologic Unit 04130003, at the Jones Bridge road culvert, 0.2 mi east of River road, and 0.7 mi south of Cuylerville.	---	---	5- 3-94 7-14-94	2.34 0.000
04227599 Beards Creek	Genesee River	Lat 42°46'07", long 77°51'45", Livingston County, Hydrologic Unit 04130003, upstream of salt mine collapse area, 0.2 mi north of Jones Bridge road, 0.7 mi south- east of Cuylerville, and 1.4 mi east of Cuylerville.	---	---	5- 3-94	16.4
0422760050 Beards Creek	Genesee River	Lat 42°46'45", long 77°51'25", Livingston County, Hydrologic Unit 04130003, downstream of the salt mine collapse area, 0.2 mi north of the Route 20A bridge, and 0.8 mi east of Cuylerville.	---	---	5- 3-94 7-14-94	18.4 0.384

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Discharge measurements made at miscellaneous sites during water year 1994--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ONTARIO--Continued						
04227601 Beards Creek	Genesee River	Lat 42°47'01", long 77°51'16", Livingston County, Hydrologic Unit 04130003, 0.5 mi north of Route 20A bridge and the salt mine collapse area, and 1.0 mi northeast of Cuylerville.	---	---	5- 3-94	18.8
04227620 Genesee River	Lake Ontario	Lat 42°48'20", long 77°49'33", Livingston County, Hydrologic Unit 04130003, 750 ft downstream of the Route 63 bridge, 0.4 mi west of Geneseo, and 3.1 mi northeast of Cuylerville.	---	---	7-14-94	359
* 04232200 Catharine Creek	Seneca Lake	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.	41.1	1957-62§, 1964-66§, 1970§, 1975, 1976-77‡, 1990-93	3-25-94	585
0423590005 Grout Brook	Skaneateles Lake	Lat 42°45'52", long 76°16'23", Cortland County, Hydrologic Unit 04140201, at bridge over State Ditch branch of Seneca R. on Plainville Road, 1.3 mi northwest of Jacks Reef, 1.6 mi downstream from Cross Lake, and 3.8 mi northwest of Memphis.	10.2	---	8- 9-94 8-25-94 9- 8-94	9.92 24.9 12.1
0423590705 Randall Gulf Brook	Skaneateles Lake	Lat 42°47'10", long 76°16'30", Onondaga County, Hydrologic Unit 04140201, 1.3 mi south- west of Spafford and at mouth (Spafford Landing).	---	---	8- 9-94 9- 8-94	0.906 0.447
0423590905 Glen Cove Brook	Skaneateles Lake	Lat 42°48'38", long 76°18'42", Cayuga County, Hydrologic Unit 04140201, 2.0 mi south- east of New Hope and at mouth (Gregory Landing).	---	---	8- 9-94 9- 8-94	0.879 0.302
0423591705 Tenmile Point Brook	Skaneateles Lake	Lat 42°49'26", long 76°18'43", Onondaga County, Hydrologic Unit 04140201, 2.8 mi south- east of Borodino and at mouth (at Tenmile Point).	---	---	8- 9-94 9- 8-94	0.950 0.210
0423592705 Bear Swamp Creek	Skaneateles Lake	Lat 42°49'23", long 76°19'48", Cayuga County, Hydrologic Unit 04140201, 1.9 mi north- east of New Hope and at mouth (at Carpenter Landing).	---	---	8- 9-94 9- 8-94	9.011 4.590

§ Operated as low-flow partial-record station.

‡ Operated as a continuous-record gaging station.

* Also a crest-stage partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Discharge measurements made at miscellaneous sites during water year 1994--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ONTARIO--Continued						
0423593005 Fall Brook	Skaneateles Lake	Lat 42°49'55", long 76°20'41", Cayuga County, Hydrologic Unit 04140201, 2.4 mi north of New Hope and at mouth (at Fallbrook Point).	---	---	8- 9-94 9- 8-94	1.009 0.210
0423594005 Hardscrabble Brook	Skaneateles Lake	Lat 42°51'44", long 76°21'38", Onondaga County, Hydrologic Unit 04140201, 1.2 mi north- west of Borodino and at mouth (at Hardscrabble).	---	---	8- 9-94 9- 8-94	0.964 0.035
0423595005 Fivemile Point Brook	Skaneateles Lake	Lat 42°52'33", long 76°22'43", Onondaga County, Hydrologic Unit 04140201, 2.2 mi north- west of Borodino and at mouth (at Fivemile Point).	---	---	8- 9-94 9- 8-94	1.164 0.416
0423598505 Harold Brook	Skaneateles Lake	Lat 42°53'51", long 76°24'56", Onondaga County, Hydrologic Unit 04140201, 2.4 mi north of Mandana and at mouth (at Fivemile Point).	---	---	8- 9-94 9- 8-94	1.950 0.123
0423599005 Shotwell Point Brook	Skaneateles Lake	Lat 42°47'10", long 76°16'30", Onondaga County, Hydrologic Unit 04140201, 1.9 mi south- east of Skaneateles and at mouth (at Shotwell Point).	---	---	8- 9-94 9- 8-94	3.530 0.444
04237404 Seneca River	Oswego River	Lat 43°07'48", long 76°26'23", Onondaga County, Hydrologic Unit 04140201, at bridge over State Ditch branch of Seneca R. on Plainville Road, 1.3 mi northwest of Jacks Reef, 1.6 mi downstream from Cross Lake, and 3.8 mi northwest of Memphis.	3,068	---	10-26-93 11- 4-93 11- 9-93 12- 3-93 1-10-94 2-18-94 3-15-94 3-24-94 3-28-94 4-19-94	730 1,760 3,320 3,780 2,320 2,030 6,050 8,430 10,000 9,870
04237410 Seneca River	Oswego River	Lat 43°05'55", long 76°25'24", Onondaga County, Hydrologic Unit 04140201, at bridge on Plainville Road, 200 ft from intersection with old Route 31, 2.3 mi downstream from Cross Lake, and 2.6 mi northwest of Memphis.	3,091	---	10-26-93 11- 4-93 11- 9-93 12- 3-93 1-10-94 2-18-94 3-15-94 3-24-94 3-28-94 4-19-94	57.4 162 395 532 211 230 1,220 2,230 2,980 2,790
04237936 Onondaga Creek	Onondaga Lake	Lat 42°51'18", long 76°08'15", Onondaga County, Hydrologic Unit 04140201, 1600 ft upstream of the collapsed Otisco Road bridge, 860 ft east of the main depression area, 1100 ft west of State Route 11A, and 0.3 mi southwest of Tully Valley.	14.2	1992-93	10-14-93	3.77

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Discharge measurements made at miscellaneous sites during water year 1994--Continued

Discharge measurements made at miscellaneous sites during water year 1994--Continued						
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ONTARIO--Continued						
0423794605 Onondaga Creek Tributary No. 6	Onondaga Creek	Lat 42°51'22", long 76°08'20", Onondaga County, Hydrologic Unit 04140201, at mouth of Onondaga Creek Tributary No. 6, 860 ft east of main depression area, 1100 ft west of State Route 11A, and 1500 ft upstream of the collapsed Otisco Road bridge.	0.33	1992-93	10-14-93	0.333
0423794905 Onondaga Creek Tributary No. 7	Onondaga Creek	Lat 42°51'27", long 76°08'19", Onondaga County, Hydrologic Unit 04140201, 375 ft upstream of the collapsed Otisco Road bridge, 1150 west of State Route 11A, 325 ft west-southwest of the Bailey Cemetery, at Tully Valley.	1.04	1992-93	10-14-93	0.072
04237950 Onondaga Creek	Onondaga Lake	Lat 42°51'31", long 76°08'19", Onondaga County, Hydrologic Unit 04140201, 25 ft north (downstream) of the collapsed Otisco Road bridge, 1100 ft west of State Route 11A, and 450 ft west-northwest of the Bailey Cemetery, at Tully Valley.	16.4	1992-93	10-14-93	4.10
0423795620 Onondaga Creek Tributary No. 9	Onondaga Creek	Lat 42°52'29", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, 35 ft west (upstream) of 2, 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.	0.56	1992-93	10- 8-93 11-19-93 12-20-93 1-24-94 2-22-94 3-19-94 4-15-94 7-16-94	0.137 0.188 0.237 0.323 0.772 1.05 2.36 0.433
0423795630 North Branch of South Diversion Channel	Onondaga Creek Tributary No. 9	Lat 42°52'33", long 76°09'15", Onondaga County, Hydrologic Unit 04140201, 10 ft north (upstream) of 2 ft PVC culvert pipe, 625 ft west of Tully Farms Road, and 1.1 mi southwest of the village of Cardiff.	0.03	1992-93	10- 8-93 11-19-93 12-20-93 1-24-94 2-22-94 3-19-94 4-15-94 7-16-94	0.263 0.260 0.270 0.273 0.355 0.340 0.630 0.334
0423795631 West Branch of South Diversion Channel	Onondaga Creek Tributary No. 9	Lat 42°52'33", long 76°09'15", Onondaga County, Hydrologic Unit 04140201, 10 ft west (upstream) of 2 ft PVC culvert pipe, 625 ft west of Tully Farms Road, and 1.1 mi southwest of the village of Cardiff.	---	1992-93	10- 8-93 11-19-93 12-20-93 1-24-94 2-22-94 3-19-94 4-15-94 7-16-94	0.139 0.154 0.186 0.205 0.238 0.271 0.576 0.158
0423795670 Onondaga Creek Tributary No. 10	Onondaga Creek	Lat 42°52'45", long 76°09'17", Onondaga County, Hydrologic Unit 04140201, 10 ft south (upstream) of logging road culvert, 225 ft west of Tully Farms Road and 0.9 mi south- west of the village of Cardiff.	0.10	1992-93	10- 8-93 11-19-93 12-20-93 1-24-94 2-22-94 3-19-94 4-15-94 7-16-94	0.078 0.103 0.102 0.097 0.152 0.153 0.459 0.144

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
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.-- December 1984 to current year.

CHEMICAL DATA: 1984-86 (a), 1988-94 (c).

NUTRIENT DATA: 1984-86 (a), 1988-94 (c).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
06...	0830	7.3	3.4	10.6	--	--	<0.01
27...	1100	3.8	2.1	10.8	2	<2	0.01
APR							
27...	1015	1.7	26	9.7	34	4	0.06
MAY							
04...	0920	1.9	7.4	11.0	18	2	0.03
25...	0940	6.5	14	9.0	23	4	0.03
JUN							
08...	0930	6.1	7.2	8.8	18	2	0.02
JUL							
20...	1010	9.0	12	7.7	23	3	0.02
AUG							
24...	0950	8.3	30	8.4	35	3	0.03
SEP							
07...	0935	8.7	8.8	8.9	18	<2	0.01
21...	0940	8.8	4.8	8.8	11	<1	0.02

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
06...	0.49	0.66	0.045	0.033	100	61
27...	0.54	0.55	0.045	0.028	110	93
APR						
27...	0.52	0.77	0.080	0.016	36	42
MAY						
04...	0.81	0.73	0.050	0.016	67	80
25...	0.42	0.59	0.055	0.011	37	42
JUN						
08...	0.64	0.44	0.065	0.017	37	46
JUL						
20...	0.65	0.61	0.080	0.028	68	85
AUG						
24...	0.41	0.52	0.100	0.033	30	51
SEP						
07...	0.39	0.52	0.060	0.029	37	70
21...	0.34	0.53	0.060	0.030	45	74

STREAMS TRIBUTARY TO LAKE ONTARIO

430526077315201 EAST BRANCH ALLEN CREEK ABOVE 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.--December 1984 to current year.

CHEMICAL DATA: 1984-86 (a), 1988-94 (c).

NUTRIENT DATA: 1984-86 (a), 1988-94 (c).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST.	TUR- BID- ITY	OXYGEN, DIS- SOLVED	RESIDUE TOTAL AT 105	RESIDUE VOLA- TILE, SUS- SUS- PENDED	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
		CUBIC FEET PER SECOND			DEG. C, SUS- PENDED (MG/L)	(MG/L)	
OCT							
06...	0930	--	4.3	10.4	--	--	ND
27...	1035	--	2.8	8.8	2	2	<0.01
JUN							
08...	1035	0.40	2.7	10.2	4	<1	<0.01
JUL							
20...	1140	--	6.2	6.6	6	2	0.08
AUG							
11...	1140	--	7.1	7.4	12	2	0.04
24...	1050	--	3.0	9.6	3	<1	<0.01
SEP							
07...	1020	--	4.2	8.4	6	<1	<0.01
21...	1030	0.10	4.3	8.2	6	<2	<0.01

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 1993						
06...	0.93	0.62	0.050	0.024	130	87
27...	0.72	<0.01	0.040	0.018	130	82
JUN 1994						
08...	1.1	0.89	0.050	0.018	120	52
JUL						
20...	1.0	0.49	0.095	0.052	96	42
AUG						
11...	0.66	0.23	0.075	ND	97	53
24...	0.74	0.77	0.065	0.041	120	46
SEP						
07...	0.52	0.22	0.050	0.019	110	49
21...	0.76	0.25	0.070	0.031	120	49

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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.--December 1984 to current year.

CHEMICAL DATA: 1984-86(a), 1988-94 (c).

NUTRIENT DATA: 1984-86 (a), 1988-94 (c).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST.	TUR- BID- ITY	OXYGEN, DIS- SOLVED	RESIDUE	RESIDUE VOLA- TILE, SUS- PENDE	NITRO- GEN, AMMONIA DIS- SOLVED
		CUBIC FEET PER SECOND			AT 105 DEG. C, SUS- PENDE		(MG/L)
OCT							
06...	0925	--	9.0	10.6	--	--	<0.01
27...	1030	--	5.0	9.6	6	<1	0.03
JUN							
08...	1030	1.7	5.4	9.5	16	2	<0.01
JUL							
20...	1120	2.5	20	7.6	38	4	0.01
AUG							
11...	1130	--	12	8.3	22	2	0.03
24...	1045	2.8	23	8.3	19	<2	0.03
SEP							
07...	1015	--	9.0	8.9	11	<2	0.02
21...	1025	2.6	8.9	8.7	18	2	0.02

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
06...	0.72	0.65	0.055	0.029	110	66
27...	0.68	0.51	0.050	0.028	120	81
JUN						
08...	0.86	0.70	0.055	0.018	86	48
JUL						
20...	0.62	0.58	0.095	0.018	78	87
AUG						
11...	0.33	0.50	0.060	ND	67	160
24...	0.60	0.59	0.095	0.033	48	44
SEP						
07...	0.31	0.54	0.055	0.026	44	66
21...	0.41	0.54	0.075	0.028	55	74

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.--December 1984 to current year.

CHEMICAL DATA: 1984-86 (a), 1988-94 (c).

NUTRIENT DATA: 1984-86 (a), 1988-94 (c).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
06...	0935	--	11	10.8	--	--	<0.01
27...	1040	--	5.5	10.9	7	<2	0.02
JUN							
08...	1040	1.3	9.4	8.9	23	3	0.02
JUL							
20...	1145	--	14	8.6	26	3	<0.01
AUG							
11...	1145	--	12	9.3	23	2	0.03
24...	1055	--	33	8.9	40	3	0.05
SEP							
07...	1025	--	8.9	11.0	18	1	0.02
21...	1035	2.5	7.9	10.0	15	1	0.03

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
06...	0.51	0.65	0.055	0.031	110	63
27...	0.63	0.53	0.045	0.031	110	89
JUN						
08...	0.52	0.43	0.055	0.011	32	40
JUL						
20...	0.51	0.57	0.065	0.015	78	88
AUG						
11...	0.45	0.50	0.060	<0.001	66	81
24...	0.42	0.54	0.100	0.033	23	43
SEP						
07...	0.31	0.57	0.055	0.026	56	66
21...	0.34	0.57	0.035	0.027	60	77

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.--December 1984 to current year.

CHEMICAL DATA: 1984-86 (a), 1988-94 (d).

NUTRIENT DATA: 1984-86 (a), 1988-94 (d).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST.	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
		CUBIC FEET PER SECOND					
OCT							
06...	1000	3.3	10	10.6	--	--	ND
27...	0930	--	6.4	9.8	7	<1	0.01
APR							
27...	1110	5.6	5.8	10.5	8	2	0.02
MAY							
04...	1025	--	7.7	11.7	13	<2	0.02
25...	1050	2.6	7.5	8.8	12	2	0.05
JUN							
08...	1145	--	8.6	9.2	21	<3	0.10
JUL							
20...	1200	--	13	7.2	24	3	0.03
AUG							
24...	1150	--	30	7.3	39	3	0.03
SEP							
07...	1050	--	14	7.9	24	2	0.05
21...	1130	--	9.1	7.9	17	2	0.04

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
06...	0.69	0.43	0.045	0.014	120	57
27...	0.76	0.45	0.050	0.024	130	87
APR						
27...	0.84	0.24	0.045	0.002	270	55
MAY						
04...	0.98	0.36	0.040	0.006	180	72
25...	0.0	0.37	0.040	0.006	130	51
JUN						
08...	1.0	0.37	0.200	0.170	120	53
JUL						
20...	0.92	0.66	0.075	0.014	99	84
AUG						
24...	0.42	0.62	0.090	0.018	56	42
SEP						
07...	0.47	0.55	0.065	0.027	45	69
21...	0.46	0.50	0.040	0.024	51	68

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.--December 1984 to current year.

CHEMICAL DATA: 1984-86 (a), 1988-94 (d).

NUTRIENT DATA: 1984-86 (a), 1988-94 (d).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
06...	1010	1.9	10	--	--	--	<0.01
27...	0940	--	7.9	--	12	2	0.03
APR							
27...	1120	0.87	40	9.8	39	3	0.05
MAY							
04...	1035	--	15	--	16	2	0.07
25...	1100	1.2	9.6	--	14	2	0.02
JUN							
08...	1155	--	9.9	--	32	3	0.03
JUL							
20...	1220	--	17	--	28	3	0.02
AUG							
24...	1200	--	37	--	50	4	0.03
SEP							
07...	1100	--	16	--	27	2	0.05
21...	1140	--	12	--	79	2	0.04

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
06...	0.55	0.62	0.055	0.028	88	70
27...	0.69	0.62	0.060	0.033	93	93
APR						
27...	0.42	0.80	0.065	0.010	34	36
MAY						
04...	0.68	0.78	0.045	0.012	120	80
25...	0.34	0.51	0.045	0.004	37	41
JUN						
08...	0.49	0.41	0.050	0.022	43	42
JUL						
20...	0.70	0.71	0.080	0.009	80	87
AUG						
24...	0.29	0.74	0.090	0.020	26	40
SEP						
07...	0.47	0.57	0.070	0.028	33	68
21...	0.29	0.54	0.035	0.025	68	68

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD AND MISCELLANEOUS SITES

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.-- December 1984 to current year.

CHEMICAL DATA: 1984-86 (a), 1988-94 (c).

NUTRIENT DATA: 1984-86 (a), 1988-94 (c).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
06...	0805	--	1.4	5.6	--	--	0.02
APR							
27...	0940	0.08	11	9.0	12	4	0.09
MAY							
04...	0850	--	4.9	8.9	25	10	0.02
25...	0910	--	3.2	7.7	11	2	0.05
JUN							
08...	0910	--	1.8	5.2	4	2	0.01
JUL							
20...	0930	0.20	0.85	4.4	<1	<1	0.04
AUG							
24...	0930	--	2.5	4.7	3	<1	0.11
SEP							
07...	0910	--	2.1	5.3	17	4	0.04
21...	0915	--	2.2	4.3	52	20	0.05

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- ORTHOPHOS- DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
06...	0.49	0.50	0.045	0.021	95	100
APR						
27...	0.92	0.67	0.070	0.010	24	110
MAY						
04...	0.94	0.97	0.100	0.011	66	68
25...	0.58	0.59	0.050	0.012	86	92
JUN						
08...	0.75	0.43	0.170	0.036	88	110
JUL						
20...	0.77	0.32	0.070	0.043	72	94
AUG						
24...	0.50	0.51	0.080	0.056	58	79
SEP						
07...	0.51	0.39	0.080	0.042	56	99
21...	0.40	0.34	0.110	0.049	46	86

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES 265
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 mi² at station 04232000.

PERIOD OF RECORD.--Water years 1990 to current year.

CHEMICAL DATA: 1990-94 (e).

NUTRIENT DATA: 1990-94 (e).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLATILE TILE, SUS- PENDE (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT							
01-02	0001	0850	1380	3.9	--	--	0.16
02-04	0950	0850	1060	5.6	--	--	0.10
04-06	0950	0850	936	6.4	--	--	0.08
06-08	0950	0850	E720	4.5	--	--	0.18
08-10	0950	0850	E640	5.7	--	--	0.26
10-12	0950	0850	861	3.5	--	--	0.11
12-14	0940	0840	904	4.4	--	--	0.06
14-14	0935	1635	722	3.2	--	--	0.13
15-17	1735	0035	637	3.5	--	--	0.23
17-18	0135	0835	869	4.1	--	--	0.21
18-19	0950	2050	1190	4.3	--	--	0.07
19-21	2150	0850	866	4.7	--	--	0.11
21-23	0950	0850	E767	3.5	--	--	0.13
23-25	0950	0850	964	2.6	--	--	0.10
25-26	0955	2055	1020	5.1	--	--	0.08
26-28	2155	0855	898	4.1	--	--	0.09
28-30	0945	0845	852	3.7	--	--	0.15
OCT 30-							
NOV 01	0945	0845	1580	8.7	--	--	0.19
01-02	1020	2120	1120	4.7	--	--	0.12
02-04	2220	0920	1180	2.8	--	--	0.15
04-06	0940	0840	1390	2.3	--	--	0.15
06-08	0940	0840	2280	3.6	--	--	0.10
08-10	0950	0850	2290	17	--	--	0.07
10-12	0950	0850	1190	13	--	--	0.10
12-13	0955	2055	1100	7.1	--	--	0.12
13-15	2155	0855	865	4.8	--	--	0.19
15-16	0945	2045	1130	4.3	--	--	0.14
16-18	2145	0845	1480	5.1	--	--	0.17
18-20	1010	0910	3300	50	47	6	0.09
20-22	1010	0910	3420	240	254	20	0.08
22-24	0955	0855	3110	95	98	<10	0.08
24-26	0950	0050	2780	28	--	--	0.09
26-27	0150	1650	1620	18	--	--	0.06
27-29	1750	0850	2860	12	--	--	0.07
29-30	1005	2105	5310	130	255	20	0.04
NOV 30-							
DEC 02	2205	0905	4760	180	266	19	0.05
02-04	0940	0840	2710	190	220	17	0.07
04-06	0940	0840	4650	120	160	13	0.05
06-07	0950	2050	4440	80	--	--	0.05
07-09	2150	0850	3980	50	--	--	0.06
JAN							
06-07	1035	2135	755	6.5	--	--	0.35
09-10	1435	0935	660	6.7	--	--	0.32
10-12	1025	0925	721	4.7	--	--	0.32
12-14	1025	0825	826	4.0	--	--	0.32
14-16	0850	0750	825	4.0	--	--	0.60
16-18	0850	0850	738	2.7	--	--	0.55
18-20	0840	0740	757	5.7	--	--	<0.01

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT						
01-02	0.84	0.78	0.050	0.027	160	120
02-04	0.70	0.69	0.045	0.025	130	71
04-06	0.74	0.69	0.055	0.029	140	65
06-08	0.91	0.78	0.040	0.024	150	75
08-10	0.95	0.82	0.050	0.024	210	100
10-12	0.87	0.76	0.045	0.029	180	110
12-14	0.70	0.80	0.055	0.027	120	100
14-14	0.67	0.81	0.050	0.026	120	97
15-17	0.91	0.78	0.070	0.033	91	96
17-18	0.82	0.76	0.065	0.033	120	90
18-19	0.66	0.68	0.060	0.031	99	92
19-21	0.72	0.74	0.055	0.026	120	110
21-23	0.80	0.65	0.045	0.024	120	100
23-25	0.68	0.63	0.050	0.032	97	95
25-26	0.68	0.61	0.055	0.029	130	99
26-28	0.80	0.71	0.045	0.027	140	96
28-30	0.78	0.61	0.050	0.032	110	100
OCT 30-						
NOV 01	0.96	0.57	0.070	0.030	100	100
01-02	0.94	0.64	0.050	0.025	150	96
02-04	0.95	0.65	0.040	0.021	150	100
04-06	0.82	0.61	0.035	0.017	130	100
06-08	0.73	0.54	0.035	0.019	140	95
08-10	0.51	0.50	0.045	0.017	63	68
10-12	0.51	0.57	0.040	0.015	61	67
12-13	0.62	0.62	0.035	0.014	62	70
13-15	0.69	0.60	0.035	0.014	71	76
15-16	0.56	0.58	0.030	0.013	81	84
16-18	0.69	0.69	0.035	0.014	110	95
18-20	0.88	0.67	0.070	0.014	56	70
20-22	1.2	0.63	0.240	0.016	40	59
22-24	0.76	0.64	0.140	0.018	39	46
24-26	0.57	0.78	0.075	0.015	44	46
26-27	0.53	0.82	0.055	0.014	48	50
27-29	0.52	0.87	0.055	0.016	58	66
29-30	1.2	1.4	0.110	0.025	56	63
NOV 30-						
DEC 02	1.2	1.2	0.100	0.019	42	60
02-04	1.1	1.1	0.240	0.019	42	61
04-06	0.98	1.0	0.250	0.017	51	59
06-07	0.84	1.2	0.170	0.022	40	51
07-09	0.77	1.3	0.100	0.019	47	51
JAN						
06-07	0.83	1.5	0.070	0.027	93	88
09-10	0.76	1.4	0.050	0.016	100	94
10-12	0.82	1.3	0.035	0.015	110	100
12-14	0.80	1.4	0.040	0.017	120	110
14-16	0.93	1.4	0.040	0.015	130	110
16-18	0.92	1.4	0.030	0.015	130	110
18-20	0.52	1.3	0.050	0.017	170	200

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES 267
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
JAN--continued							
20-22	1025	0925	668	3.7	--	--	0.23
22-24	1025	0725	730	3.9	--	--	0.34
24-25	0805	1905	609	3.9	--	--	0.39
25-27	2005	0705	711	4.8	--	--	0.43
27-29	0805	0705	737	2.6	--	--	0.40
29-31	0805	0705	1660	3.3	--	--	0.35
JAN 31-							
FEB 01	0825	1925	2890	13	--	--	0.18
01-03	2025	0725	2240	28	--	--	0.13
03-05	0820	0720	1900	19	--	--	0.15
05-07	0820	0720	1630	12	--	--	0.17
07-08	0815	1915	1510	6.6	--	--	0.16
08-10	2015	0715	1180	7.7	--	--	0.17
10-12	0810	0710	994	6.1	--	--	0.24
12-14	0810	0710	986	6.4	--	--	0.30
14-16	0820	0720	941	4.1	--	--	0.18
16-18	0820	0720	897	4.0	--	--	0.26
18-20	0805	0705	983	4.0	--	--	0.25
20-22	0805	0705	4710	2.0	--	--	0.28
22-23	0750	0650	6800	90	155	16	0.18
23-24	0750	0650	5070	65	109	9	0.16
24-25	0815	0715	4870	55	75	6	0.14
25-26	0815	0715	4890	85	109	7	0.13
27-28	0815	0715	4550	80	102	6	0.11
FEB 28-							
MAR 01	0815	1915	3780	70	103	7	0.12
01-03	2015	0715	3540	50	71	<5	0.13
03-04	0820	1520	3340	38	48	<5	0.13
04-05	1620	2320	3220	33	38	<5	0.13
06-07	0020	0720	3140	26	--	--	0.13
07-08	0815	1915	3400	19	--	--	0.12
08-10	2015	0715	3990	18	--	--	0.12
10-12	0850	0750	4080	16	--	--	0.12
12-14	0850	0750	4020	12	--	--	0.11
14-15	0815	1915	4220	17	--	--	0.09
15-17	2015	0715	6560	35	71	<10	0.13
17-18	0835	1535	5600	34	87	8	0.11
18-19	1635	2335	4440	20	--	--	0.08
20-21	0035	0735	4100	21	--	--	0.08
21-22	0810	0710	4750	37	60	6	0.06
22-23	0810	0710	8940	75	116	11	0.09
23-24	0810	0710	10800	160	294	26	0.11
24-25	0825	0725	12300	110	164	11	0.07
25-26	0825	0725	11700	85	124	11	0.07
26-27	0825	0725	10200	90	85	7	0.08
27-28	0825	0725	9020	40	43	<5	0.08
28-29	0815	0715	8620	40	43	<5	0.08
29-30	0815	0715	9060	45	46	<5	0.09
30-31	0815	0715	9050	50	51	6	0.14
MAR 31-							
APR 01	1035	0935	9160	130	236	13	0.05
02-03	1035	0935	7290	110	215	13	0.05
03-04	1035	0635	9070	100	238	13	0.04
04-05	0825	0725	8970	85	186	11	0.02
05-06	0825	0925	8530	95	186	11	0.04
07-08	1050	1350	9860	60	100	<11	0.02
08-09	1450	1550	10600	65	96	<13	0.01
11...	0735	--	9660	60	108	8	0.05
11-12	0845	0145	10300	60	118	11	0.25
12-12	0245	2245	10500	70	152	12	0.03
14-15	1040	0940	13000	110	184	16	<0.01

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
JAN--continued						
20-22	0.83	1.3	0.040	0.017	120	110
22-24	0.93	1.5	0.050	0.018	130	130
24-25	0.92	1.5	0.040	0.015	120	120
25-27	1.0	1.6	0.045	0.016	140	130
27-29	0.94	1.7	0.050	0.014	160	130
29-31	1.4	1.6	0.055	0.019	210	130
JAN 31-						
FEB 01	0.85	1.5	0.085	0.032	140	80
01-03	0.63	1.4	0.085	0.020	81	61
03-05	0.79	1.5	0.065	0.021	86	70
05-07	0.82	1.5	0.060	0.020	95	74
07-08	0.70	1.3	0.050	0.018	78	84
08-10	0.68	1.3	0.045	<0.002	90	84
10-12	0.68	1.3	0.045	0.015	91	86
12-14	0.41	1.3	0.050	0.016	100	96
14-16	0.74	1.1	0.040	0.014	120	90
16-18	0.69	1.4	0.045	0.015	120	110
18-20	0.96	1.2	0.050	0.002	130	100
20-22	0.95	1.4	0.110	0.028	140	92
22-23	1.2	1.6	0.240	0.035	65	51
23-24	0.78	1.6	0.190	0.028	59	53
24-25	--	1.5	0.100	0.023	65	56
25-26	--	1.4	0.130	0.022	61	55
27-28	0.60	1.2	0.110	0.019	58	54
FEB 28-						
MAR 01	0.64	1.1	0.150	0.020	54	55
01-03	0.73	1.2	0.095	0.017	56	58
03-04	0.68	1.2	0.075	0.017	57	60
04-05	0.38	1.3	0.070	0.018	58	60
06-07	0.47	1.3	0.060	0.017	62	61
07-08	0.56	1.3	0.050	0.014	76	61
08-10	0.69	1.3	0.060	0.015	75	61
10-12	0.77	1.4	0.060	0.019	73	61
12-14	0.64	1.3	0.050	0.016	75	62
14-15	--	1.0	0.060	0.014	80	50
15-17	0.72	1.3	0.120	0.019	70	53
17-18	--	1.3	0.130	0.030	56	52
18-19	--	1.3	0.080	0.020	60	56
20-21	0.51	1.3	0.080	0.017	60	61
21-22	0.72	1.2	0.075	0.017	68	60
22-23	0.74	1.2	0.190	0.028	63	52
23-24	0.67	1.3	0.310	0.030	45	43
24-25	0.55	1.3	0.200	0.025	37	39
25-26	0.57	1.3	0.140	0.024	34	39
26-27	0.60	1.2	0.120	0.026	32	40
27-28	0.64	1.2	0.095	0.025	41	42
28-29	0.61	1.3	0.100	0.030	41	43
29-30	0.71	1.4	0.110	0.028	39	44
30-31	0.88	1.5	0.130	0.025	37	41
MAR 31-						
APR 01	0.88	1.1	0.200	0.015	34	38
02-03	0.37	1.1	0.200	0.014	27	36
03-04	0.39	1.1	0.190	0.015	32	37
04-05	0.43	1.0	0.170	0.013	33	38
05-06	0.52	1.0	0.160	0.014	36	40
07-08	0.65	1.1	0.100	0.007	47	42
08-09	0.44	1.2	0.110	0.012	46	42
11...	0.48	1.1	0.120	0.019	36	39
11-12	0.58	1.1	0.105	0.002	35	40
12-12	0.46	0.97	0.110	0.009	31	36
14-15	0.56	1.1	0.240	0.008	32	39

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES 269
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
APR--continued							
15-16	1040	0940	10700	65	146	12	0.04
18-19	0955	0855	9960	55	109	12	0.01
19-20	0955	0855	9200	55	99	9	0.03
20-21	0955	0755	9080	60	116	10	0.03
21-22	0840	0740	8850	60	74	6	<0.01
22-23	0840	0740	8380	55	88	7	0.04
23-24	0840	0740	8370	55	55	<5	0.04
24-25	0840	0040	8430	65	123	8	0.04
25...	0820	--	8590	55	76	6	0.07
25-26	0930	0830	6680	60	132	9	0.05
26-27	0930	0830	7200	50	103	6	0.05
27-28	0930	0730	7690	65	170	12	0.03
MAY							
02...	0815	--	2410	19	--	--	0.16
02-03	0925	0825	2520	19	--	--	0.08
03-04	0925	0825	2340	17	--	--	0.10
04-05	0925	0725	1990	14	--	--	0.10
05-06	0815	0715	1830	5.6	--	--	0.03
06-07	0815	0715	1770	6.4	--	--	0.10
07-08	0815	0315	1870	8.4	--	--	0.09
09-10	0920	2020	3080	6.5	--	--	0.05
10-12	2120	0720	2640	8.9	--	--	0.05
12-13	0755	0655	2600	7.6	--	--	0.04
13-14	0755	0655	3180	5.8	--	--	0.04
14-15	0755	0655	2880	6.0	--	--	0.03
15-16	0755	0655	2120	6.7	--	--	0.06
16-17	0805	1905	2530	5.2	--	--	0.06
17-19	2005	0705	3070	7.6	--	--	0.06
19-21	0800	0700	3340	4.4	--	--	0.05
21-23	0800	0700	6610	14	--	--	0.04
23-24	0805	1905	5600	18	--	--	0.02
24-26	2005	0705	3900	7.6	--	--	0.04
26...	0745	--	2720	50	225	12	0.13
26-26	0810	1210	2610	33	82	<8	0.02
27-29	0745	0645	E1680	1.6	--	--	0.11
29-31	0745	0645	E1480	4.9	--	--	0.10
MAY 31-							
JUN 01	0955	0855	1570	7.4	--	--	0.07
01-02	0955	0855	2660	7.1	--	--	0.06
02-04	0945	0845	3550	7.4	--	--	0.06
04-06	0945	0745	4800	9.7	--	--	0.05
06-09	0840	0740	3770	3.8	--	--	0.05
09-11	0805	0705	1400	5.7	--	--	0.10
11-13	0805	0705	E1220	6.3	--	--	0.11
13-14	0750	1850	1690	3.4	--	--	0.07
14-16	1950	0650	2410	2.8	--	--	0.06
16-18	0815	0715	4190	180	214	14	0.04
18-19	0815	2315	4440	220	282	17	0.04
20-21	0840	0740	3960	95	112	9	0.05
21-22	0840	0740	3770	56	79	<10	0.02
22-23	0840	0740	3000	35	--	--	0.05
23-24	0820	1320	1630	37	66	6	0.04
27...	0815	--	2420	34	63	7	0.11
27-27	0830	1630	2360	20	--	--	0.09
30...	0835	--	2440	22	--	--	0.08
JUN 30-							
JUL 01	0840	0740	1880	20	--	--	0.06
01-03	0920	0820	2030	25	--	--	0.06
03-05	0920	0730	E1240	20	--	--	0.05
05-07	0820	0720	E1000	14	--	--	0.06
07-08	0850	2350	E1010	7.3	--	--	0.04
10-11	0450	0750	E885	7.2	--	--	0.04
11-12	0850	1950	E825	7.6	--	--	0.03
12-14	2050	0750	E717	7.8	--	--	0.04
14-18	0825	0725	E551	5.7	--	--	<0.01

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
APR--continued						
15-16	0.46	0.88	0.130	0.014	28	35
18-19	0.70	0.86	0.110	0.055	30	37
19-20	0.52	0.87	0.120	0.009	30	37
20-21	0.50	0.85	0.130	0.010	26	35
21-22	0.36	0.89	0.130	0.002	53	34
22-23	0.72	0.89	0.140	0.009	150	35
23-24	0.84	0.83	0.140	0.010	140	34
24-25	0.76	0.84	0.140	0.010	160	33
25...	0.79	0.85	0.090	0.012	130	33
25-26	0.71	0.79	0.130	0.008	86	36
26-27	0.31	0.80	0.110	0.011	29	36
27-28	0.28	0.76	0.130	0.003	25	36
MAY						
02...	0.46	0.91	0.060	0.014	44	65
02-03	0.62	0.89	0.065	0.004	51	72
03-04	0.72	0.91	0.045	0.006	70	75
04-05	0.83	0.82	0.040	0.009	66	79
05-06	0.54	0.80	0.045	0.002	62	86
06-07	0.67	0.79	0.055	0.002	67	96
07-08	0.41	0.82	0.055	0.005	73	95
09-10	0.85	0.97	0.050	0.006	79	94
10-12	0.60	0.89	0.060	0.010	69	85
12-13	0.62	0.82	0.045	0.007	60	86
13-14	0.60	0.82	0.035	0.006	66	83
14-15	0.52	0.79	0.035	0.007	58	72
15-16	0.44	0.81	0.040	0.007	51	67
16-17	0.68	0.85	0.045	0.008	56	77
17-19	0.66	0.83	0.045	0.013	63	80
19-21	0.80	0.79	0.035	0.010	51	72
21-23	0.68	0.69	0.045	0.010	37	47
23-24	0.40	0.60	0.045	0.008	29	42
24-26	0.46	0.58	0.045	0.009	34	44
26...	0.87	0.65	0.290	0.011	41	57
26-26	0.68	0.57	0.140	0.014	39	52
27-29	0.59	0.66	0.050	0.019	60	72
29-31	0.79	0.89	0.050	0.018	59	98
MAY 31-						
JUN 01						
01-02	0.80	0.87	0.060	0.019	71	97
02-04	0.86	0.88	0.065	0.015	66	99
04-06	0.72	0.75	0.075	0.016	68	77
06-09	0.54	0.53	0.055	0.013	37	48
09-11	0.46	0.54	0.050	0.014	35	46
11-13	0.65	0.58	0.045	0.015	41	53
13-14	0.78	0.80	0.050	0.019	48	69
14-16	0.83	1.0	0.045	0.021	61	83
16-18	0.68	0.97	0.040	0.021	79	88
18-19	0.64	0.77	0.020	0.017	38	46
20-21	0.64	0.61	0.200	0.022	18	31
21-22	0.46	0.71	0.200	0.032	21	35
22-23	0.64	0.66	0.140	0.034	21	32
23-24	0.72	0.74	0.090	0.020	31	41
27...	0.56	0.86	0.100	0.023	36	47
27-27	0.76	0.92	0.080	0.026	52	97
30...	0.82	0.92	--	0.015	51	93
JUN 30-	0.72	0.88	--	0.025	46	70
JUL 01						
01-03	0.53	0.89	0.100	0.020	43	62
03-05	0.47	0.81	0.075	0.030	49	69
05-07	0.66	0.83	0.095	0.023	36	63
07-08	0.69	0.98	0.085	0.034	55	83
10-11	0.80	1.1	0.060	0.024	63	94
11-12	0.71	0.86	0.060	0.019	74	83
12-14	0.53	0.70	0.040	0.015	68	84
14-18	0.65	0.77	0.055	0.013	67	86
	0.90	2.0	0.680	0.630	81	61

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES 271
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	ENDING TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	TUR- BID- ITY (NTU)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
JUL--continued							
18-21	0825	0725	E496	3.8	--	--	0.06
21-23	0840	0740	E549	2.8	--	--	0.06
23-25	0840	0740	E471	4.4	--	--	0.11
25-27	0825	1025	E439	5.7	--	--	<0.01
28-29	0850	1950	E500	0.80	--	--	0.07
29-31	2050	0750	E531	7.8	--	--	0.11
AUG							
01-02	1030	2130	E716	3.0	--	--	0.07
02-04	2230	0930	E632	4.3	--	--	0.28
04-06	1010	0910	E501	3.8	--	--	0.06
06-08	1010	0810	E484	2.9	--	--	0.08
08-09	0820	1920	E590	2.6	--	--	0.10
09-11	2020	0720	E520	5.3	--	--	0.07
11-13	0835	0735	E454	2.7	--	--	0.05
13-15	0835	0135	799	5.2	--	--	0.09
15-16	0810	1910	2020	6.5	--	--	0.07
16-18	2010	0710	2320	26	--	--	0.06
18-20	0825	2125	2140	32	30	<6	0.08
25...	0940	--	2810	95	140	10	0.07
25-27	0940	0840	2030	25	--	--	0.03
27-28	0940	1840	2120	22	--	--	0.08
29-30	0820	1920	1180	22	--	--	0.05
AUG 30-							
SEP 01	2020	0720	2150	31	45	<5	0.05
01-01	0820	1020	1580	75	126	<14	0.06
02...	0815	--	1580	25	--	--	0.10
02-04	0820	0720	1200	17	--	--	0.09
04-06	0820	0720	968	17	--	--	0.09
06-07	0825	0725	980	5.6	--	--	0.05
07-08	0825	0725	899	6.2	--	--	0.02
08-10	0840	0740	941	9.0	--	--	0.08
10-12	0840	0740	758	8.0	--	--	0.13
12-13	0815	1915	746	4.8	--	--	0.10
13-15	2015	0715	867	6.7	--	--	0.07
15-17	0905	0805	807	5.5	--	--	0.11
17-18	0905	0005	888	6.7	--	--	0.18
19-20	0840	1940	670	5.3	--	--	0.10
21-22	1640	0740	616	4.3	--	--	0.04
22-23	0825	1525	678	8.1	--	--	0.10
26-27	0955	2055	764	5.2	--	--	0.19
27-29	2155	0855	1220	5.8	--	--	0.12
SEP 29-							
OCT 01	1005	0905	1170	6.3	--	--	0.11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)
JUL--continued						
18-21	0.97	0.65	0.040	0.012	76	90
21-23	0.59	0.65	0.050	0.017	79	84
23-25	0.78	0.69	0.065	0.024	80	89
25-27	0.89	1.5	0.820	0.730	64	60
28-29	0.58	0.72	0.055	0.022	90	96
29-31	0.60	0.79	0.045	0.027	83	96
AUG						
01-02	0.52	0.78	0.050	0.027	46	95
02-04	0.77	0.91	0.050	0.029	55	92
04-06	0.50	0.86	0.052	0.026	74	88
06-08	0.52	0.91	0.045	0.028	76	110
08-09	0.63	0.95	0.055	0.033	78	120
09-11	0.68	0.80	0.055	0.027	96	130
11-13	0.55	0.61	0.040	0.019	82	120
13-15	0.64	0.60	0.045	0.021	84	110
15-16	0.65	0.73	0.055	0.021	98	110
16-18	0.51	0.69	0.090	0.024	58	78
18-20	0.42	0.69	0.110	0.027	21	51
25...	0.30	0.58	0.210	0.031	27	39
25-27	0.64	0.56	0.080	0.024	27	45
27-28	0.47	0.68	0.080	0.024	32	66
29-30	0.40	0.77	0.090	0.033	25	57
AUG 30-						
SEP 01	0.40	0.71	0.090	0.030	29	57
01-01	0.39	0.66	0.170	0.024	28	51
02...	0.40	0.69	0.085	0.030	21	53
02-04	0.46	0.73	0.065	0.026	28	59
04-06	0.48	0.78	0.070	0.033	40	67
06-07	0.46	0.76	0.050	0.032	45	71
07-08	0.38	0.75	0.050	0.028	47	74
08-10	0.42	0.72	0.065	0.023	37	81
10-12	0.45	0.79	0.055	0.023	39	87
12-13	0.48	0.64	0.045	0.030	39	89
13-15	0.58	0.63	0.065	0.027	40	91
15-17	0.57	0.65	0.060	0.025	38	88
17-18	0.52	0.70	0.050	0.025	41	91
19...	0.37	0.66	0.050	0.027	43	97
19-20	0.64	0.63	0.090	0.029	41	96
21-22	0.42	0.56	0.045	0.020	62	98
22-23	0.62	0.60	0.070	0.023	55	93
26-27	0.64	0.64	0.055	0.029	47	82
27-29	0.46	0.65	0.055	0.031	44	81
SEP 29-						
OCT 01	0.51	0.67	0.065	0.035	52	110

GROUND-WATER LEVELS
BROOME COUNTY

273

420646075531201. Local number, Bm 100.

LOCATION.--Lat 42°06'46", long 75°53'12", Hydrologic Unit 02050103, at Moeller and Frederick Streets, Binghamton.
Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 52 ft, cased to 52 ft, slotted 40 ft to 45 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 851.05 ft above sea level. Measuring point: Top of shelter base, 2.87 ft above land-surface datum.

REMARKS.--Lowest water level recorded on June 25, 1985 due to water-level decline for several hours, possibly due to nearby pumping.

PERIOD OF RECORD.--October 1946 to July 1955, April 1966 to current year. Records for October 1946 to July 1955 (intermittent), April 1966 to April 1968 (intermittent) and May 1968 to September 1977 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.13 ft below land-surface datum, Apr. 28-29, 1993; lowest, 13.18 ft below land-surface datum, June 25, 1985.

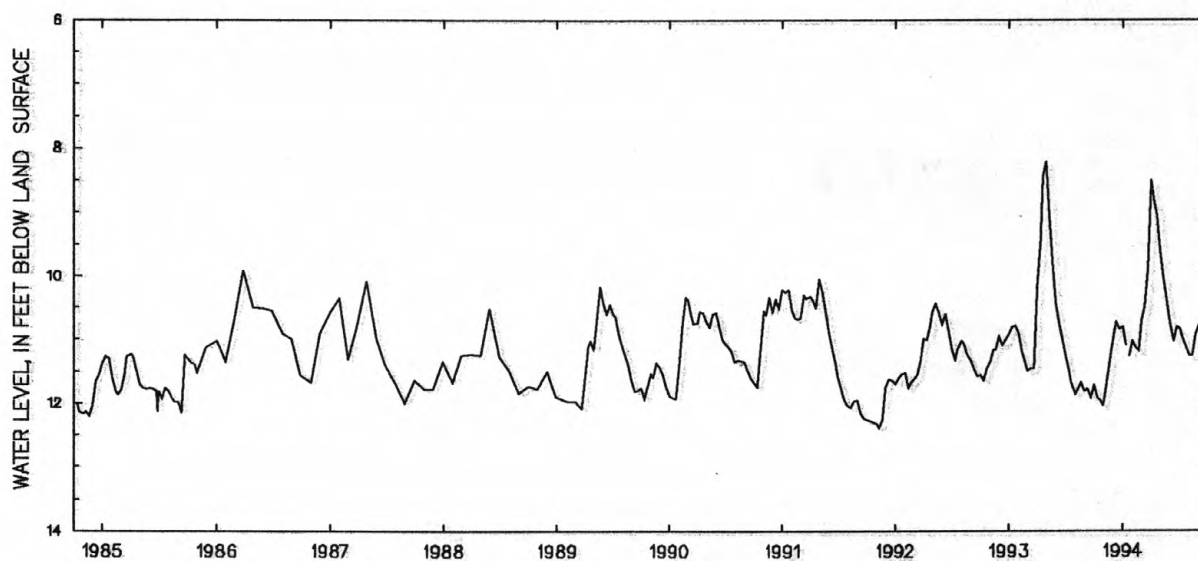
EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 8.50 ft below land-surface datum, Apr. 1; lowest recorded, 12.04 ft below land-surface datum, Oct. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.73	11.88	10.99	10.83	11.00	10.71	8.51	9.60	10.73	10.83	11.22	10.77
2	11.73	---	10.93	10.86	11.00	10.69	8.55	9.69	10.79	10.83	11.25	10.79
3	11.75	---	10.92	10.89	10.98	10.60	8.56	9.73	10.83	10.83	11.23	10.81
4	11.81	---	10.89	10.83	11.02	10.65	8.62	9.76	10.85	10.84	11.21	10.84
5	11.81	---	10.84	10.93	10.98	10.72	8.66	9.78	10.87	10.84	11.19	10.84
6	11.80	---	10.83	10.98	11.02	10.75	8.70	9.84	10.87	10.85	11.20	10.85
7	11.80	---	10.83	10.96	11.05	10.71	8.77	9.90	10.90	10.88	11.20	10.89
8	11.81	---	10.81	10.96	11.06	10.66	8.86	9.90	10.95	10.90	11.20	10.94
9	11.89	---	10.80	11.05	11.03	10.61	8.85	9.97	10.99	10.94	11.21	10.97
10	11.91	---	10.74	11.09	11.13	10.49	8.86	10.03	11.03	10.95	11.25	11.02
11	11.89	---	10.75	11.07	11.12	10.45	8.97	10.05	11.05	10.98	11.26	11.05
12	11.94	---	10.78	11.07	11.13	10.37	8.97	10.06	11.01	10.99	11.29	11.07
13	11.96	---	10.78	11.07	11.12	10.26	8.91	10.13	11.01	11.02	11.29	11.09
14	11.96	---	10.75	11.08	11.16	10.21	8.91	10.17	10.92	11.05	11.27	11.11
15	11.96	---	10.74	11.15	11.17	10.12	8.93	10.18	10.85	11.05	11.24	11.14
16	11.95	---	10.79	11.21	11.23	10.07	8.90	10.21	10.80	11.05	11.24	11.17
17	11.97	---	10.83	11.15	11.23	10.00	8.92	10.27	10.78	11.06	11.22	11.18
18	12.01	---	10.80	11.17	11.24	9.90	8.96	10.31	10.78	11.06	11.08	11.22
19	11.99	---	10.80	11.25	11.24	9.90	8.96	10.34	10.80	11.08	10.99	11.26
20	11.96	---	10.83	11.26	11.18	9.91	9.04	10.37	10.81	11.10	10.92	11.28
21	11.98	---	10.74	11.26	11.07	9.87	9.08	10.42	10.82	11.11	10.87	11.29
22	11.99	---	10.78	11.25	10.94	9.78	9.13	10.45	10.87	11.12	10.87	11.31
23	11.97	---	10.76	11.27	10.80	9.54	9.19	10.47	10.90	11.16	10.87	11.32
24	11.97	---	10.70	11.28	10.68	9.26	9.21	10.52	10.90	11.17	10.88	11.36
25	12.00	---	10.64	11.32	10.72	9.03	9.28	10.53	10.92	11.17	10.88	11.38
26	11.99	---	10.68	11.33	10.70	8.88	9.35	10.56	10.96	11.18	10.89	11.39
27	11.97	---	10.76	11.33	10.73	8.72	9.41	10.63	10.96	11.21	10.91	11.34
28	12.00	---	10.75	11.24	10.72	8.65	9.52	10.66	10.93	11.21	10.89	11.26
29	---	---	10.72	11.19	---	8.60	9.55	10.69	10.85	11.21	10.83	11.22
30	12.02	11.03	10.76	11.10	---	8.57	9.60	10.73	10.84	11.21	---	11.24
31	11.96	---	10.81	11.02	---	8.53	---	10.78	---	11.24	10.79	---
MEAN	11.92	---	10.79	11.11	11.02	9.91	8.99	10.22	10.89	11.04	11.08	11.11
MAX	12.02	---	10.99	11.33	11.24	10.75	9.60	10.78	11.05	11.24	11.29	11.39
MIN	11.73	---	10.64	10.83	10.68	8.53	8.51	9.60	10.73	10.83	10.79	10.77

GROUND-WATER LEVELS
BROOME COUNTY

420646075531201. Local number, Bm 100--Continued.



GROUND-WATER LEVELS
BROOME COUNTY

275

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 in., depth 53 ft, cased to 53 ft, open end.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 833.62 ft above sea level. 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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.69 ft below land-surface datum, Apr. 12, 1993; lowest, 33.47 ft below land-surface datum, Sept. 23, 1965.

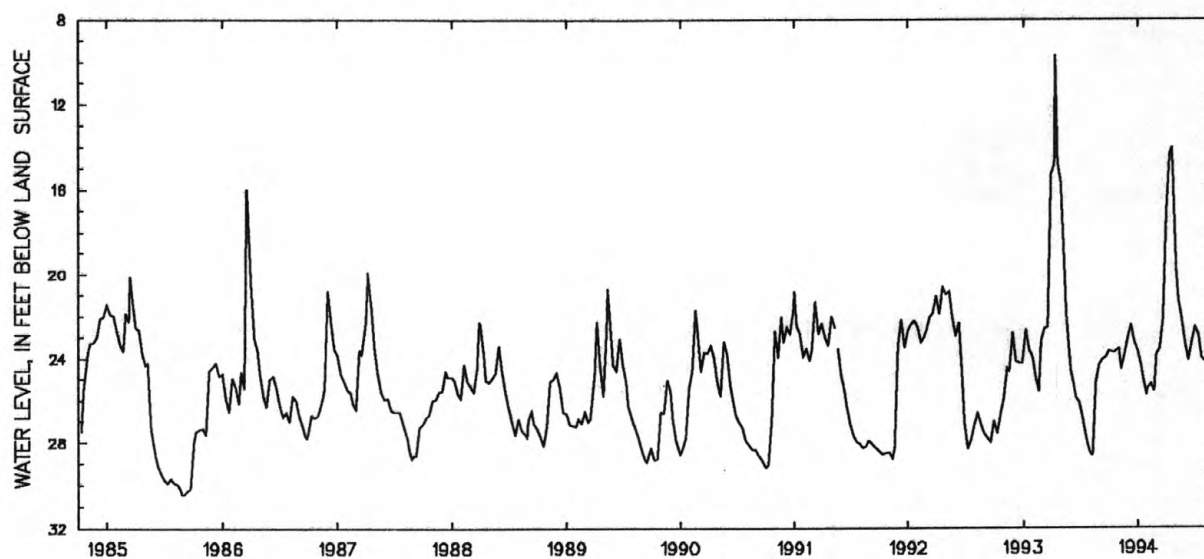
EXTREMES FOR CURRENT YEAR.--Highest water level, 14.06 ft below land-surface datum, Apr. 17; lowest, 25.77 ft below land-surface datum, Jan. 28, 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.61	23.46	22.83	23.62	25.27	23.79	17.26	20.04	23.36	22.26	24.20	---
2	23.60	23.37	22.86	23.59	25.14	23.74	17.25	20.14	23.41	22.10	24.26	---
3	23.61	23.27	22.91	23.61	25.06	23.70	16.90	20.24	23.47	22.12	24.08	---
4	23.61	23.24	23.00	23.71	25.03	23.76	16.27	20.38	23.54	22.20	23.61	---
5	23.64	23.51	22.86	23.90	25.03	23.79	15.62	20.54	23.63	22.28	23.29	---
6	23.66	23.78	22.50	24.01	25.05	23.84	15.32	20.72	23.72	22.39	23.33	---
7	23.64	23.92	22.33	24.11	25.09	23.79	14.87	20.91	23.82	22.53	23.49	---
8	23.64	24.06	22.32	24.17	25.13	23.76	14.31	21.02	23.92	22.64	23.67	---
9	23.63	24.26	22.36	24.23	25.15	23.69	14.22	21.11	24.01	22.74	23.86	---
10	23.68	24.50	22.43	24.29	25.23	23.56	14.37	21.22	24.11	22.85	24.04	---
11	23.70	24.72	22.48	24.38	25.27	23.27	14.57	21.32	24.22	22.96	24.22	---
12	23.69	24.87	22.32	24.48	25.32	22.91	14.76	21.41	24.25	23.08	24.37	---
13	23.72	24.95	22.30	24.54	25.34	22.64	14.57	21.53	24.25	23.22	24.50	---
14	23.73	24.98	22.49	24.59	25.39	22.49	14.37	21.64	23.95	23.36	24.52	---
15	23.73	25.00	22.66	24.71	25.42	22.36	14.36	21.73	23.23	23.48	24.28	---
16	23.73	25.05	22.76	24.79	25.47	22.18	14.32	21.82	22.93	23.60	24.14	---
17	23.71	25.12	22.84	24.84	25.51	22.07	14.10	21.93	22.88	23.69	24.13	---
18	23.72	24.89	22.99	24.97	25.56	22.00	14.19	22.01	22.95	23.77	23.94	---
19	23.72	24.25	23.13	25.11	25.59	22.04	14.56	22.09	23.08	23.87	23.12	---
20	23.69	23.87	23.23	25.23	25.59	22.11	15.25	22.17	23.21	23.98	22.26	---
21	23.64	23.75	23.35	25.33	25.50	22.15	15.94	22.28	23.34	24.06	21.98	---
22	23.61	23.75	23.40	25.33	25.15	21.99	16.60	22.41	23.47	24.15	21.92	---
23	23.57	23.91	23.38	25.34	24.64	21.38	17.17	22.53	23.59	24.23	21.85	---
24	23.53	24.07	23.45	25.43	24.26	20.41	17.65	22.65	23.70	24.26	21.95	---
25	23.51	24.17	23.57	25.53	24.03	19.19	18.09	22.77	23.76	24.18	22.12	---
26	23.50	24.23	23.66	25.62	23.84	18.15	18.49	22.89	23.80	24.12	22.32	---
27	23.50	24.30	23.73	25.70	23.78	17.64	18.88	22.99	23.82	24.17	22.53	---
28	23.52	24.31	23.59	25.76	23.78	17.39	19.28	23.06	23.55	24.18	22.72	---
29	23.54	23.65	23.44	25.75	---	17.11	19.58	23.14	22.91	24.14	22.84	25.19
30	23.56	23.01	23.49	25.61	---	16.95	19.86	23.22	22.52	24.12	---	25.12
31	23.53	---	23.62	25.43	---	17.10	---	23.30	---	24.14	---	---
MEAN	23.63	24.14	22.98	24.76	25.02	21.64	16.10	21.78	23.55	23.38	---	---
MAX	23.73	25.12	23.73	25.76	25.59	23.84	19.86	23.30	24.25	24.26	---	---
MIN	23.50	23.01	22.30	23.59	23.78	16.95	14.10	20.04	22.52	22.10	---	---

GROUND-WATER LEVELS
BROOME COUNTY

420657075583501. Local number, Bm 121.--Continued



GROUND-WATER LEVELS
BROOME COUNTY

277

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 in, depth 53 ft, cased to 48.5 ft, screened 48.5 to 53 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 908.58 ft above sea level. 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.

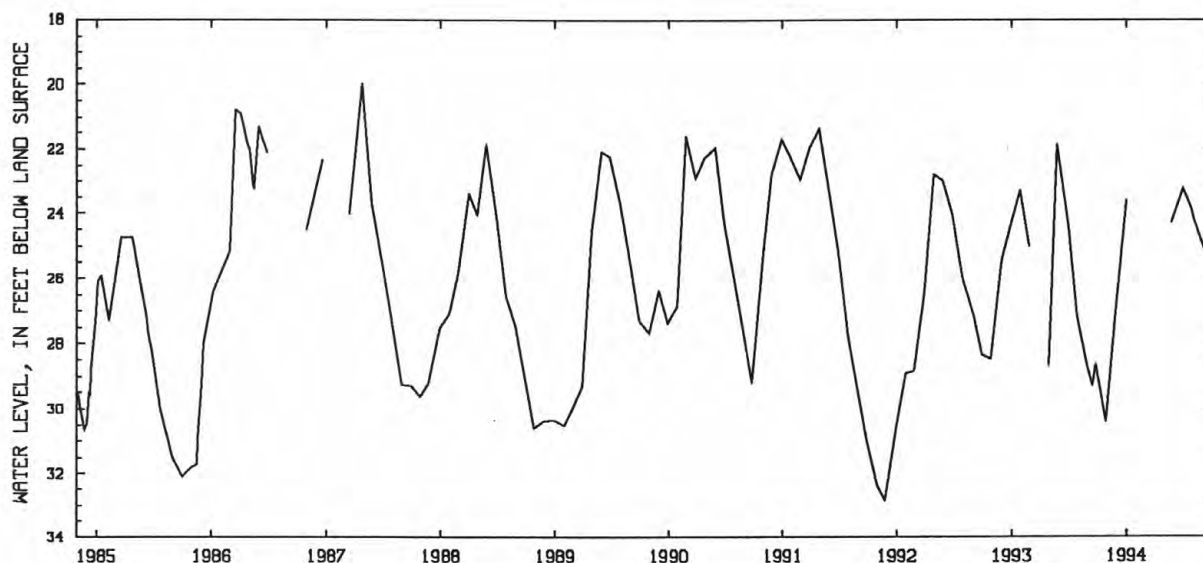
PERIOD OF RECORD.-- September 1980 to current year. Records for September 1980 to February 1982 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.17 ft below land-surface datum, Apr. 16, 1984; lowest measured, 32.84 ft below land-surface datum, Nov. 26, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 21.78 ft below land-surface datum, Mar. 22; lowest measured, 30.41 ft below land-surface datum, Oct. 29.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	30.41	JAN 03	23.60	MAY 25	24.29	JUL 25	23.89	SEP 09	25.28
NOV 29	27.07	MAR 22	21.78	JUN 29	23.23	AUG 01	24.24	28	25.28



GROUND-WATER LEVELS
BROOME COUNTY

421157075535401. Local number, Bm 129.

LOCATION.--Lat 42°11'57", long 75°53'54", Hydrologic Unit 02050102, near Castle Creek. Owner: New York State Department of Transportation.

AQUIFER.--Shales of Middle to Upper Devonian age.

WELL CHARACTERISTICS.--Drilled water supply-well, diameter 6 in, depth approximately 252 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 1105.75 ft above sea level. 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.

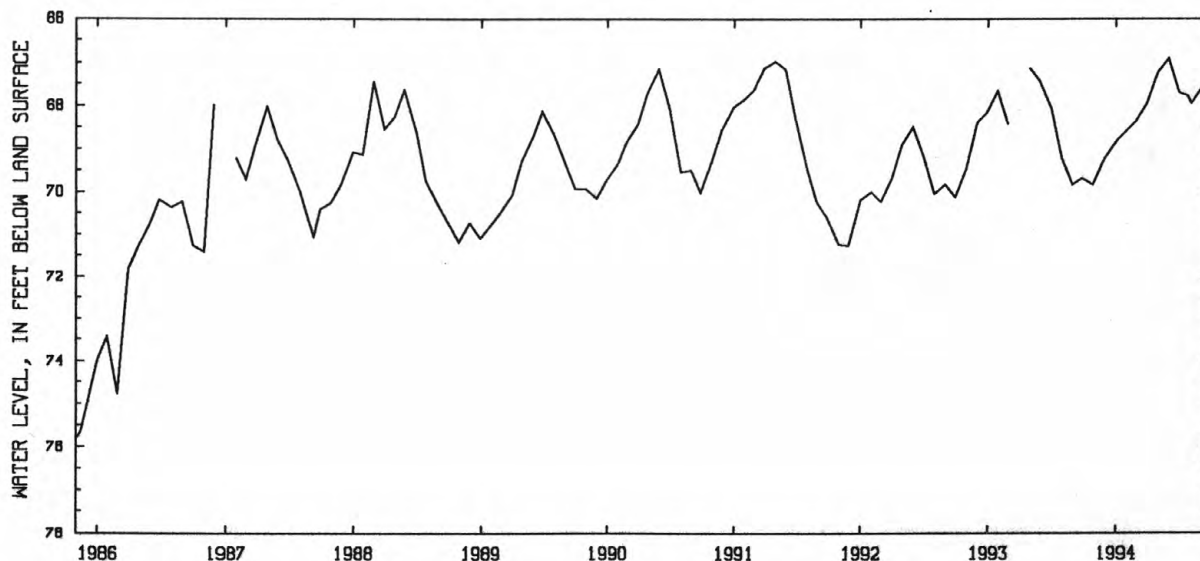
PERIOD-OF-RECORD.--November 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.93 ft below land-surface datum, May 31, 1994; lowest measured, 75.83 ft below land-surface datum, Nov. 1, 1985.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 66.93 ft below land-surface datum, May 31; lowest measured, 69.84 ft below land-surface datum, Oct. 29.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	69.84	FEB 28	68.36	MAY 31	66.93	AUG 01	67.94
NOV 29	69.26	MAR 31	67.95	JUN 29	67.69	SEP 28	67.29
JAN 03	68.79	APR 29	67.23	JUL 25	67.78		



GROUND-WATER LEVELS
CATTARAUGUS COUNTY

279

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 in, depth 53 ft, cased to 53 ft, open end.

INSTRUMENTATION.--Electronic data recorder--60-minute average. Prior to Mar. 5, 1990, weekly float tape readings by observer; periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,467.08 ft above sea level. Measuring point: Top of casing, 0.28 ft above land-surface datum.

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.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land-surface datum, June 26, 1989; lowest measured, 34.87 ft below land-surface datum, Nov. 21, 1972.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 2.44 ft below land-surface datum, Apr. 13; lowest recorded, 8.27 ft below land-surface datum, Oct. 1, 5, 6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

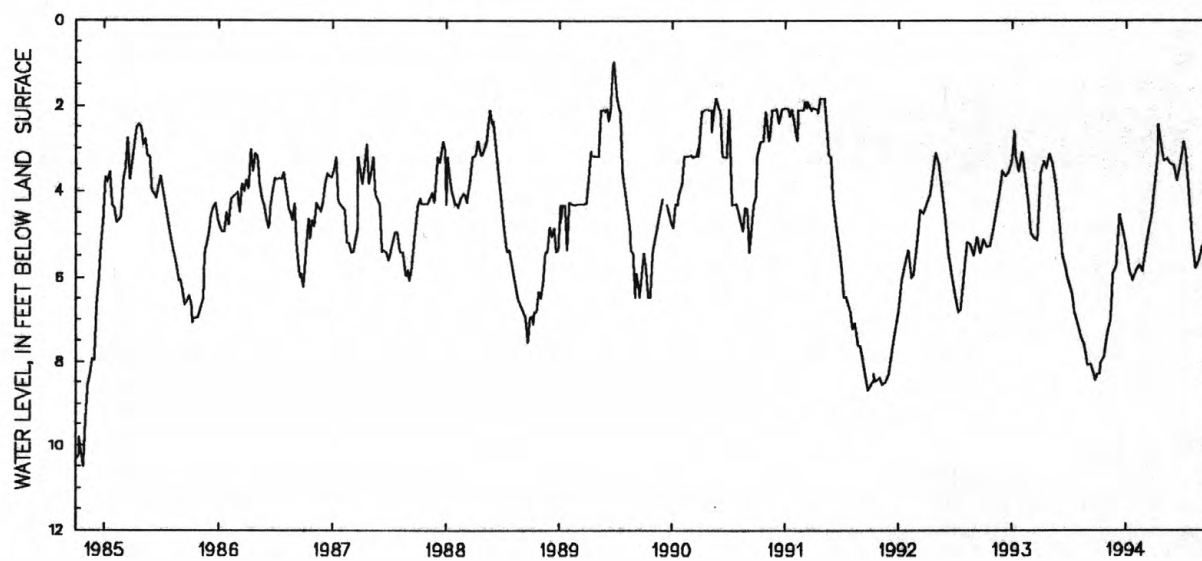
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.11	7.49	5.64	5.20	5.75	5.38	3.65	3.12	3.33	2.92	5.11	5.36
2	8.08	7.65	5.36	5.26	5.58	5.18	3.57	3.28	3.41	2.88	5.16	5.45
3	8.05	7.36	5.31	5.32	5.44	4.93	3.39	3.26	3.47	2.99	5.25	5.44
4	7.96	7.24	5.03	5.08	5.50	4.90	3.39	3.12	3.43	3.02	5.23	5.43
5	8.21	6.95	4.96	5.41	5.40	5.19	3.20	2.99	3.42	2.97	5.37	5.36
6	8.15	7.04	4.93	5.48	5.53	e5.32	3.15	3.01	3.32	2.95	5.53	5.28
7	7.97	7.17	5.08	5.40	5.65	5.24	3.29	3.02	3.39	2.97	5.55	5.37
8	7.86	7.22	4.99	5.48	5.54	5.24	3.44	2.98	3.56	3.00	5.59	5.46
9	7.79	7.13	4.88	5.81	5.44	5.22	3.14	3.07	3.66	3.02	5.68	5.50
10	8.02	7.01	4.55	5.84	5.71	4.97	3.06	3.24	3.74	3.11	5.80	5.66
11	7.91	6.86	4.73	5.62	5.55	5.23	3.31	3.17	3.76	3.21	5.83	5.75
12	7.74	6.91	4.81	5.51	5.49	5.23	3.04	3.10	3.81	3.21	5.83	5.79
13	7.95	6.79	4.93	5.37	5.41	4.91	2.58	3.30	e3.85	3.31	e5.76	5.77
14	7.94	6.67	4.73	5.34	5.64	4.77	2.56	3.30	e3.62	3.41	e5.65	5.80
15	7.95	6.65	4.65	5.54	5.69	4.52	2.63	3.14	3.63	3.48	5.73	5.88
16	7.83	6.76	4.91	5.80	6.05	4.62	2.57	3.19	3.58	3.67	5.76	5.92
17	7.69	6.39	5.01	5.44	5.98	4.65	2.67	3.36	3.46	3.76	5.72	5.90
18	7.94	6.40	4.85	5.59	6.02	4.33	2.73	3.38	3.38	3.81	5.68	6.06
19	7.95	5.93	4.84	6.02	5.98	4.53	2.61	3.37	3.38	3.97	5.68	6.19
20	7.88	5.90	4.89	6.06	5.85	4.60	2.83	3.37	3.37	4.09	5.62	6.26
21	7.75	6.08	4.65	5.95	5.82	4.42	2.89	3.39	3.19	4.12	e5.54	6.29
22	7.92	6.08	4.87	5.91	5.83	4.40	2.96	3.35	3.28	4.17	5.61	6.30
23	7.88	6.00	5.08	5.82	5.41	4.27	2.97	3.28	3.23	4.30	5.69	6.30
24	7.69	5.86	4.96	5.96	5.17	4.10	2.86	3.31	3.06	4.40	5.64	6.39
25	7.66	6.03	4.72	6.11	5.42	4.10	2.97	3.21	e3.07	4.45	5.53	6.36
26	7.57	5.87	4.97	6.27	5.44	4.06	3.07	3.19	3.14	4.49	5.50	e6.35
27	7.42	5.72	5.34	6.18	5.56	3.71	3.16	3.45	e3.00	4.64	5.49	e6.31
28	7.38	5.42	5.38	5.70	5.48	3.75	3.43	3.46	3.00	4.74	5.37	e6.30
29	7.40	5.52	4.99	5.92	---	3.81	3.33	3.47	2.82	4.91	5.39	e6.31
30	7.46	5.74	5.14	6.03	---	3.94	3.28	3.47	2.85	4.99	5.42	6.40
31	7.34	---	5.28	5.85	---	3.81	---	3.39	---	5.10	5.26	---
MEAN	7.82	6.53	4.98	5.69	5.62	4.62	3.06	3.25	3.37	3.74	5.55	5.90
MAX	8.21	7.65	5.64	6.27	6.05	5.38	3.65	3.47	3.85	5.10	5.83	6.40
MIN	7.34	5.42	4.55	5.08	5.17	3.71	2.56	2.98	2.82	2.88	5.11	5.28

WTR YR 1994 MEAN 5.01 HIGH 2.56 LOW 8.21

e Estimated

GROUND-WATER LEVELS
CATARAUGUS COUNTY

420530078445201. Local number, Ct 121--Continued.



GROUND-WATER LEVELS
CAYUGA COUNTY

281

424158076251901. Local number, Cy 7.

LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia. Owner: Earl Van Pelt.

AQUIFER.--Unconfined aquifer in clayey gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2.5 inch, depth 28 ft, cased to 26 ft, screened 26 ft to 28 ft with 1.25-inch well point.

INSTRUMENTATION.--Electronic data recorder--60-minute average. Periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 760.70 ft above sea level. Measuring point: Top of shelter base, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--December 1965 to current year. Records for December 1965 to September 1976 are unpublished and available in files of the Geological Survey. Prior to Feb. 22, 1989, weekly measurements with chalked tape by observer.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft below land-surface datum, June 26, 1972; lowest measured, 25.00 ft below land-surface datum, Sept. 19, 1983.

EXTREMES FOR CURRENT YEAR.--Highest water level, 13.70 ft below land-surface datum, Apr. 3; lowest, 22.72 ft below land-surface datum, Oct. 1.

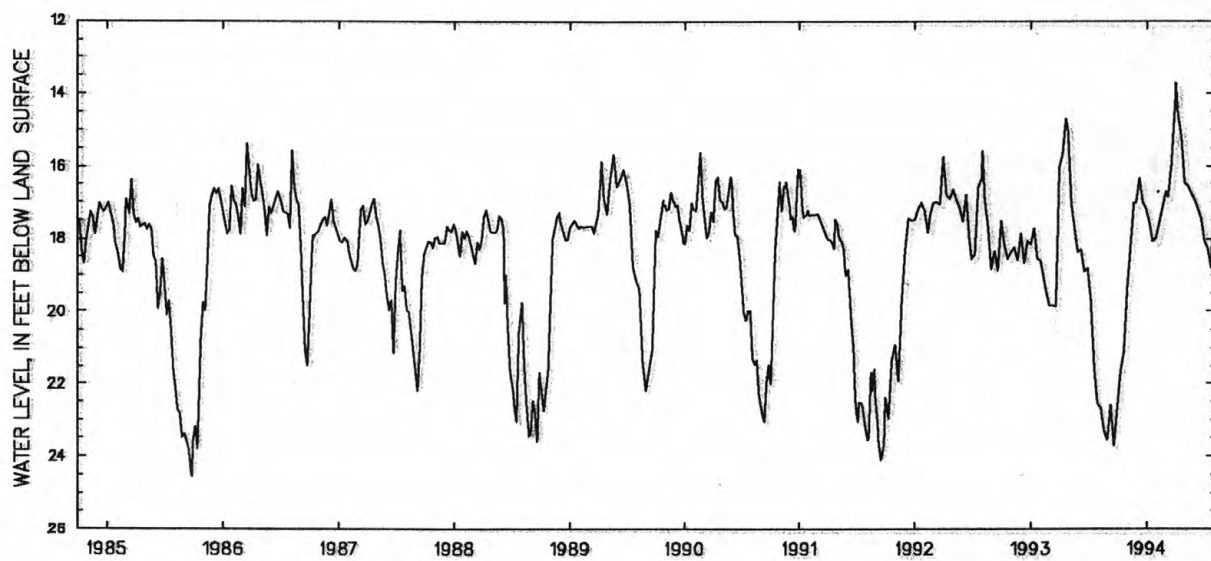
WATER LEVEL IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.57	19.28	17.03	17.25	---	16.76	13.99	16.49	16.94	17.99	---	---
2	22.42	19.20	16.99	17.31	---	16.76	13.92	16.47	16.91	17.93	---	---
3	22.42	19.08	16.98	17.31	---	16.80	13.74	16.50	16.92	17.90	---	---
4	22.38	18.95	16.96	17.30	---	16.87	13.77	16.50	16.94	17.98	---	---
5	22.24	18.79	16.82	17.37	---	16.96	13.91	16.50	16.96	18.19	---	---
6	22.04	18.63	16.56	17.46	---	17.04	14.06	16.51	16.96	18.55	---	---
7	21.76	18.50	16.38	17.49	---	17.12	14.22	16.55	16.99	18.58	---	---
8	21.59	18.40	16.33	17.52	---	17.11	14.42	16.54	17.02	18.60	---	---
9	21.56	18.31	16.33	17.52	---	17.02	14.52	16.54	17.09	18.70	---	---
10	21.66	18.23	16.35	17.57	---	16.88	14.59	16.56	17.17	18.28	---	---
11	21.75	18.15	16.39	17.64	---	16.72	14.74	16.55	17.28	18.13	---	---
12	21.71	18.08	16.46	17.67	---	16.58	14.87	16.56	17.42	18.03	---	---
13	21.70	18.02	16.55	17.69	---	16.52	14.96	16.59	17.50	18.05	---	---
14	21.72	17.96	16.59	17.71	---	16.43	15.00	16.64	17.49	18.24	---	---
15	21.76	17.89	16.63	17.71	---	16.38	15.03	16.66	17.44	18.50	---	---
16	21.85	17.85	16.70	17.76	---	16.16	15.05	16.67	17.38	18.67	---	---
17	21.93	17.76	16.80	17.84	---	15.92	14.95	16.71	17.30	18.60	---	---
18	21.92	17.57	16.86	17.88	---	15.80	14.91	16.73	17.30	18.50	---	---
19	21.59	17.27	16.91	17.95	---	15.84	14.95	16.74	17.36	18.62	---	---
20	21.13	17.03	17.00	18.07	---	15.97	15.16	16.76	17.45	18.82	---	---
21	20.74	16.96	17.05	18.06	---	16.07	15.33	16.77	17.60	19.07	---	---
22	20.45	16.94	17.13	18.06	---	15.94	15.52	16.78	17.78	19.31	---	---
23	20.18	16.93	17.21	18.06	---	15.40	15.72	16.78	17.93	19.43	---	---
24	19.96	16.93	17.17	18.18	16.79	14.84	15.90	16.80	18.57	19.22	---	---
25	19.81	17.00	17.17	18.27	16.76	14.11	16.04	16.82	18.73	18.98	---	---
26	19.69	17.05	17.18	18.28	16.74	13.90	16.15	16.82	18.60	18.60	---	---
27	19.61	17.09	17.18	18.25	16.78	13.90	16.21	16.85	18.42	18.21	---	---
28	19.61	17.07	17.20	18.34	16.72	13.82	16.31	16.78	18.31	17.45	---	---
29	19.60	17.04	17.09	18.36	---	13.79	16.37	16.88	18.20	17.03	---	---
30	19.51	17.03	17.09	18.25	---	13.86	16.45	16.92	18.08	16.59	---	---
31	19.39	---	17.18	17.99	---	13.96	---	16.94	---	---	---	---
MEAN	21.17	17.83	16.85	17.81	---	15.85	15.03	16.67	17.53	---	---	---
MAX	22.57	19.28	17.21	18.36	---	17.12	16.45	16.94	18.73	---	---	---
MIN	19.39	16.93	16.33	17.25	---	13.79	13.74	16.47	16.91	---	---	---

282

GROUND-WATER LEVELS
CAYUGA COUNTY

424158076251901. Local number, Cy 7--Continued.



GROUND-WATER LEVELS
CHAUTAUQUA COUNTY

283

420326079295801. Local number, Cu 5.

LOCATION.--Lat 42°03'26", long 79°29'58", Hydrologic Unit 05010002, near Panama. Owner: New York State Department of Environmental Conservation.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in, depth 33 ft, stone lined.

INSTRUMENTATION.--Prior to Apr. 17, 1990 and after Sep. 30, 1992, periodic measurement with chalked tape by USGS personnel. Electronic data recorder--60-minute average, Apr. 17, 1990 through Sep. 30, 1992.

DATUM.--Elevation of land surface datum is 1,752.51 ft above sea level. Measuring point: Top of 0.25-in steel-plate well cover, inside shelter door, 0.44 ft below land-surface datum.

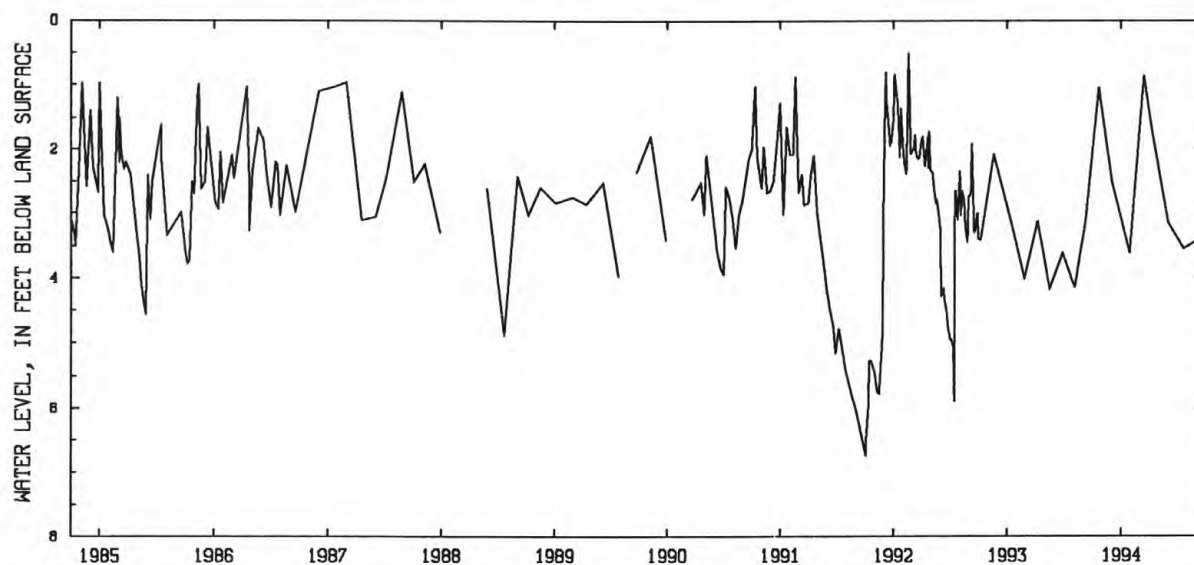
PERIOD OF RECORD.--May 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.43 ft below land-surface datum, July 17, 1992; lowest measured, 9.41 ft below land-surface datum, May 24, 1949.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.85 ft below land-surface datum, Mar. 15; lowest measured, 3.63 ft below land-surface datum, Jan. 27.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	1.05	JAN 27	3.63	APR 08	1.68	JUL 19	3.55	SEP 13	3.38
DEC 02	2.52	MAR 15	0.85	MAY 31	3.14				



GROUND-WATER LEVELS
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 in to 10 in, depth 232 ft, filled in from original depth of 240 ft, diameter 12 in from 0 ft to 130 ft, diameter 10 in from 130 ft to 240 ft, slotted 130 ft to 144 ft, open end.

INSTRUMENTATION.--Weekly measurements by City of Jamestown personnel. 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. Periodic measurements by USGS personnel

DATUM.--Elevation of land-surface datum is 1,252.52 ft above sea level. Measuring point: Top of well casing, 5.48 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 current year. Records for November 1939 to September 1943, August 1946 to September 1976 are unpublished and available in files of the Geological Survey.

REVISED RECORD.--WDR NY-87-3: 1983-86. WDR NY-91-3: 1988-90.

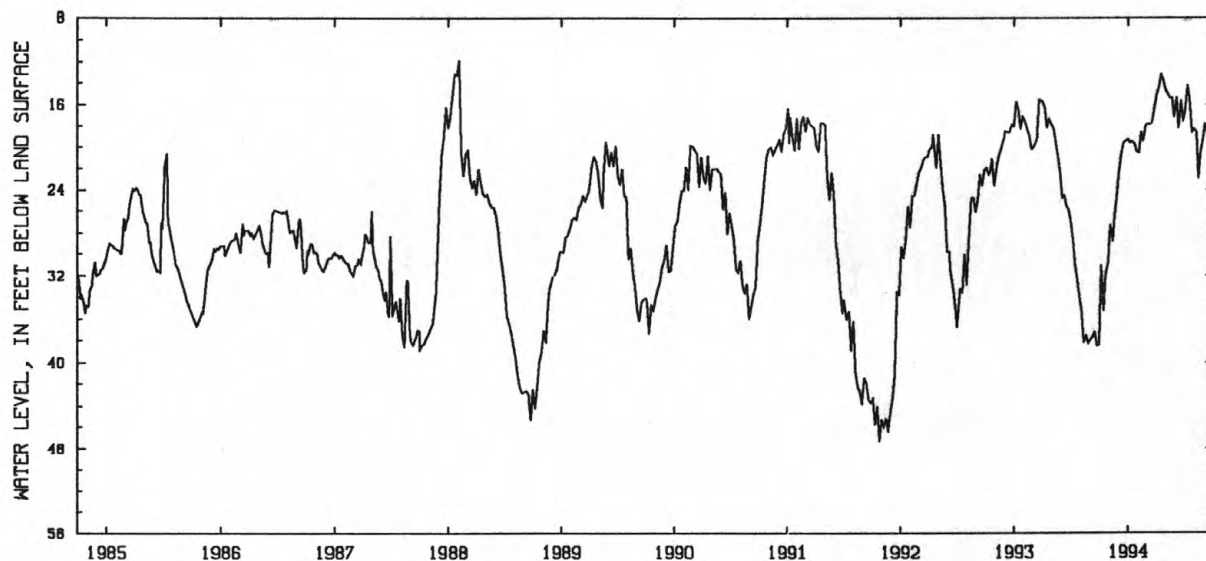
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.2 ft above land-surface datum, Mar. 14, 1942; lowest measured, 66.6 ft below land-surface datum, Nov. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 13.27 ft below land-surface datum, Apr. 15; lowest measured, 38.37 ft below land-surface datum, Oct. 1.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	38.37	NOV 24	24.72	JAN 28	20.45	APR 08	14.49	JUN 17	15.57	AUG 19	20.74
08	31.10	DEC 02	22.07	FEB 04	20.53	15	13.27	24	17.52	26	19.22
15	35.29	03	22.19	11	18.52	22	13.62	JUL 01	16.72	SEP 02	17.71
21	231.70	10	20.75	18	19.42	29	14.52	08	14.14	09	18.92
22	32.03	17	19.50	25	18.00	MAY 13	15.38	15	15.35	16	17.95
29	30.77	29	19.17	MAR 04	17.79	20	15.31	22	18.54	23	19.02
NOV 05	27.25	JAN 07	19.56	11	17.88	27	17.12	29	18.27	30	17.58
12	28.86	14	19.34	18	17.67	JUN 03	15.31	AUG 05	18.55		
19	26.40	21	19.71	31	15.07	09	18.13	12	22.88		

z Measured by USGS personnel



GROUND-WATER LEVELS
CHAUTAUQUA COUNTY

285

420748079062701. Local number, Cu 104.

LOCATION.--Lat 42°07'48", long 79°06'27", Hydrologic Unit 05010002, 59 ft west of Conewango Creek, 20 ft north of County Highway 325 and 1 mi southeast of Poland Center. Owner: City of Jamestown.

AQUIFER.--Aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 79 ft, screened 69 ft to 79 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 1,247.62 ft above sea level. Measuring point: Chisled marks at top of metal shelter base, 6.22 ft above land-surface datum.

REMARKS.--Well drilled by the U.S.Geological Survey. The water level is affected by pumping from municipal well field and by stage of Conewango Creek, which is within 100 ft of the well.

PERIOD OF RECORD.--March 1983 to current year.

REVISED RECORDS.--WDR NY-88-3: 1987.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.80 ft above land-surface datum, Apr. 3, 1993; lowest, 19.35 ft below land-surface datum, Oct. 16, 1985.

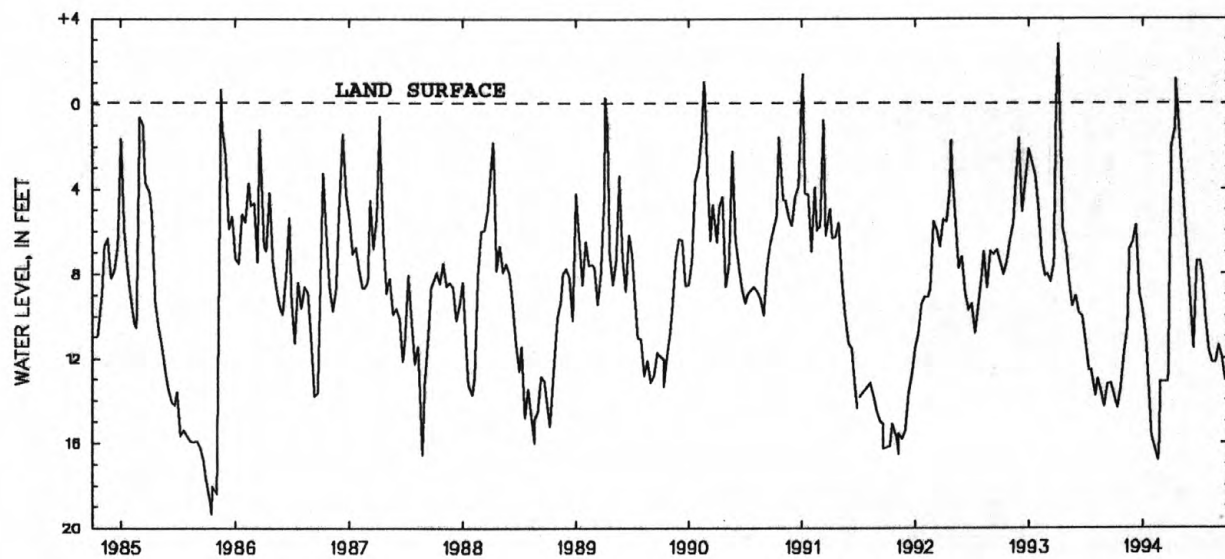
EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 1.16 ft above land-surface datum, Apr. 16; lowest recorded, 16.83 ft below land-surface datum, Feb. 19.

WATER LEVEL, IN FEET ABOVE (+) OR BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.51	11.80	6.51	9.86	13.95	12.63	1.14	---	---	7.06	11.65	11.47
2	12.65	12.00	5.61	10.07	---	12.62	.74	---	11.35	6.84	11.77	11.48
3	12.90	12.06	6.02	10.13	---	12.38	1.53	---	11.28	6.91	11.80	11.65
4	13.93	11.26	6.19	10.14	---	13.07	1.63	---	11.33	5.76	11.88	11.93
5	14.74	10.98	6.09	10.33	---	12.00	1.73	---	11.32	6.12	11.98	11.87
6	14.64	11.07	6.08	10.61	---	12.73	1.63	---	11.36	6.88	12.03	11.50
7	14.40	11.00	4.93	10.67	---	13.68	1.29	---	11.42	7.06	12.15	11.69
8	14.33	10.19	5.29	10.83	---	13.78	1.25	---	11.51	7.52	11.81	11.81
9	14.28	10.32	5.49	10.92	---	13.69	1.19	---	11.51	7.76	12.07	11.90
10	14.35	10.55	5.67	11.09	---	13.11	1.18	---	11.55	7.98	12.21	11.96
11	13.80	10.61	5.69	11.12	---	12.86	---	---	11.65	8.47	12.29	11.25
12	13.95	10.74	4.29	11.28	---	12.65	---	---	11.70	8.61	12.35	11.35
13	14.04	10.93	4.89	11.74	---	12.60	---	---	11.47	8.82	12.45	11.64
14	14.07	9.89	5.74	11.67	---	13.47	---	---	8.36	9.01	12.00	11.82
15	14.11	9.72	6.31	11.90	---	13.80	.21	---	7.46	9.21	11.59	12.07
16	14.21	9.83	6.74	12.44	---	12.97	---	---	8.17	9.42	11.96	12.68
17	13.33	9.78	6.97	---	---	12.64	---	---	7.69	9.61	12.16	12.68
18	13.41	9.00	7.25	---	16.50	12.39	---	---	7.24	9.77	11.88	13.19
19	13.38	8.43	8.18	---	16.51	12.35	---	---	7.27	9.91	12.40	13.07
20	13.42	6.84	8.91	---	15.94	13.14	---	---	7.37	10.09	12.22	13.06
21	13.23	5.55	8.65	---	15.10	12.91	---	---	7.95	10.27	12.07	13.08
22	12.99	6.26	8.85	---	14.28	12.04	---	---	9.17	10.41	11.81	13.16
23	12.87	6.52	9.16	---	13.30	11.06	---	---	8.82	10.78	11.76	13.18
24	12.18	6.94	9.30	13.98	13.14	9.25	---	---	8.59	10.90	11.73	13.23
25	12.02	7.20	9.24	---	---	6.90	---	---	8.91	10.99	11.71	13.27
26	12.24	6.56	8.54	---	---	4.65	---	---	8.72	11.07	11.64	13.30
27	12.40	7.15	8.93	---	---	3.20	---	---	8.20	11.13	11.64	13.18
28	12.53	6.86	9.16	15.69	---	2.25	---	---	7.98	11.19	11.59	13.05
29	12.54	6.38	9.39	---	---	2.19	---	---	7.83	11.34	11.48	12.78
30	12.61	6.52	9.56	---	---	2.02	---	---	7.38	11.47	11.42	12.46
31	11.75	---	9.76	---	---	1.97	---	---	---	11.65	11.38	---
MEAN	13.35	9.10	7.21	---	---	10.55	---	---	---	9.16	11.90	12.36
MAX	14.74	12.06	9.76	---	---	13.80	---	---	---	11.65	12.45	13.30
MIN	11.75	5.55	4.29	---	---	1.97	---	---	---	5.76	11.38	11.25

GROUND-WATER LEVELS
CHAUTAUQUA COUNTY

420748079062701. Local number, Cu 104--Continued.



GROUND-WATER LEVELS
CHEMUNG COUNTY

287

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 in, depth 34 ft, cased to 34 ft, open end.

INSTRUMENTATION.--Electronic data recorder--60-minute average.

DATUM.--Elevation of land-surface datum is 885.69 ft above sea level. 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 current year. Records for October 1955 to September 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.93 ft below land-surface datum, April 25, 1961; lowest measured, 26.30 ft below land-surface datum, July 18, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level recorded, 19.81 ft below land-surface datum, Mar. 25; lowest water level recorded, 25.19 ft below land-surface datum, Oct. 1,4.

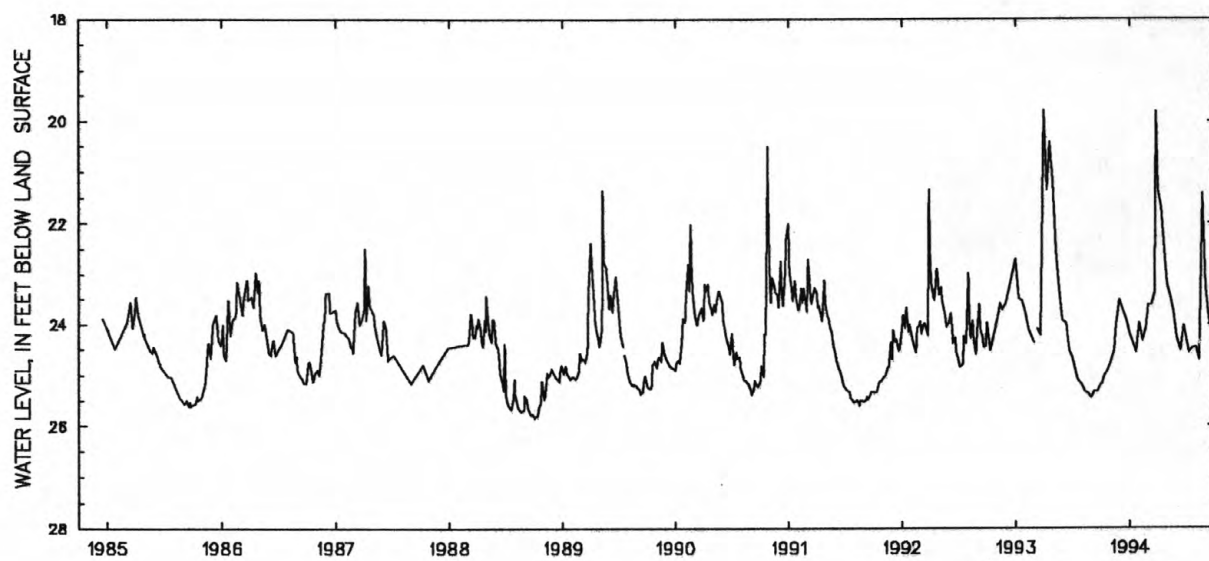
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.16	24.67	23.70	24.23	24.05	23.68	21.19	23.10	24.13	24.41	24.52	23.36
2	25.17	24.63	23.83	24.23	24.12	23.75	20.93	23.08	24.11	24.48	24.57	23.43
3	25.15	24.59	23.91	24.24	24.15	23.78	20.45	23.20	24.22	24.53	24.57	23.51
4	25.16	24.55	23.90	24.26	24.14	23.83	20.63	23.27	24.30	24.58	24.61	23.58
5	25.12	24.46	23.28	24.29	24.19	23.81	21.03	23.34	24.34	24.63	24.52	23.63
6	25.12	24.22	23.36	24.31	24.23	23.87	21.18	23.39	24.38	24.62	24.54	23.69
7	25.13	24.26	23.54	24.31	24.25	23.90	21.11	23.46	24.37	24.38	24.61	23.74
8	25.12	24.37	23.65	24.33	24.28	23.82	21.33	23.38	24.41	24.47	24.65	23.80
9	25.09	24.46	23.74	24.35	24.29	23.71	21.59	23.39	24.47	24.55	24.68	23.84
10	25.04	24.51	23.75	24.37	24.32	23.62	21.69	23.44	24.52	24.57	24.70	23.88
11	25.03	24.55	23.43	24.40	24.33	23.42	21.76	23.47	24.52	24.62	24.72	23.92
12	25.02	24.58	23.57	24.41	24.34	23.48	21.83	23.51	24.37	24.66	24.75	23.96
13	25.01	24.59	23.70	24.42	24.34	23.50	21.51	23.55	24.37	24.71	24.76	24.01
14	25.00	24.63	23.76	24.42	24.34	23.38	21.51	23.62	22.54	24.72	24.03	24.04
15	25.00	24.57	23.81	24.44	24.36	23.27	21.80	23.67	22.60	24.71	23.88	24.08
16	25.00	24.53	23.83	24.46	24.36	23.11	21.71	23.60	23.24	24.51	24.15	24.12
17	24.97	24.48	23.86	24.47	24.36	23.15	21.67	23.59	23.54	24.58	24.28	24.15
18	24.94	23.65	23.92	24.48	24.34	23.25	21.99	23.63	23.76	24.60	20.86	24.16
19	24.93	23.83	23.95	24.51	24.29	23.30	22.19	23.68	23.90	24.40	20.48	24.20
20	24.91	24.00	23.91	24.55	24.10	23.36	22.35	23.74	24.03	24.47	21.42	24.23
21	24.89	24.13	23.89	24.57	23.43	23.36	22.50	23.80	24.12	24.52	21.94	24.26
22	24.86	24.22	23.86	24.60	23.07	22.44	22.63	23.86	24.20	24.56	22.14	24.29
23	24.86	24.30	23.89	24.61	23.20	21.68	22.76	23.91	24.29	24.54	22.46	24.26
24	24.87	24.35	23.96	24.63	23.31	20.82	22.87	23.95	24.33	24.57	22.71	24.28
25	24.85	24.40	23.97	24.64	23.40	19.90	22.95	23.99	24.14	24.60	22.88	24.31
26	24.83	24.44	24.01	24.64	23.47	20.60	23.02	24.00	24.19	24.61	22.86	24.32
27	24.82	24.49	24.07	24.66	23.57	21.00	23.03	24.02	24.29	24.58	22.99	23.63
28	24.80	23.40	24.10	24.58	23.63	20.95	23.08	24.08	24.32	24.46	23.07	23.59
29	24.80	23.15	24.13	23.88	---	21.11	23.15	24.15	24.33	24.45	23.09	23.81
30	24.79	23.51	24.16	23.81	---	21.20	23.19	24.22	24.37	24.44	23.18	23.95
31	24.74	---	24.20	23.99	---	21.36	---	24.27	---	24.46	23.28	---
MEAN	24.97	24.28	23.83	24.39	24.01	22.76	21.95	23.66	24.09	24.55	23.55	23.93
MAX	25.17	24.67	24.20	24.66	24.36	23.90	23.19	24.27	24.52	24.72	24.76	24.32
MIN	24.74	23.15	23.28	23.81	23.07	19.90	20.45	23.08	22.54	24.38	20.48	23.36

WTR YR 1994 MEAN 23.83 HIGH 19.90 LOW 25.17

GROUND-WATER LEVELS
CHEMUNG COUNTY

420829076484801. Local number, Cm 46--Continued.



GROUND-WATER LEVELS
CHENANGO COUNTY

289

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: Ilse Maehlman.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 13 ft, cased to 13 ft, open end.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 979.28 ft above sea level. 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.--Highest water level, 2.45 ft below land-surface datum, Apr. 3-4, 1993; lowest, 11.81 ft below land-surface datum, Sept. 26-29, 1982.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.00 ft below land-surface datum, Mar. 29; lowest, 10.18 ft below land-surface datum, Sep. 27, 28.

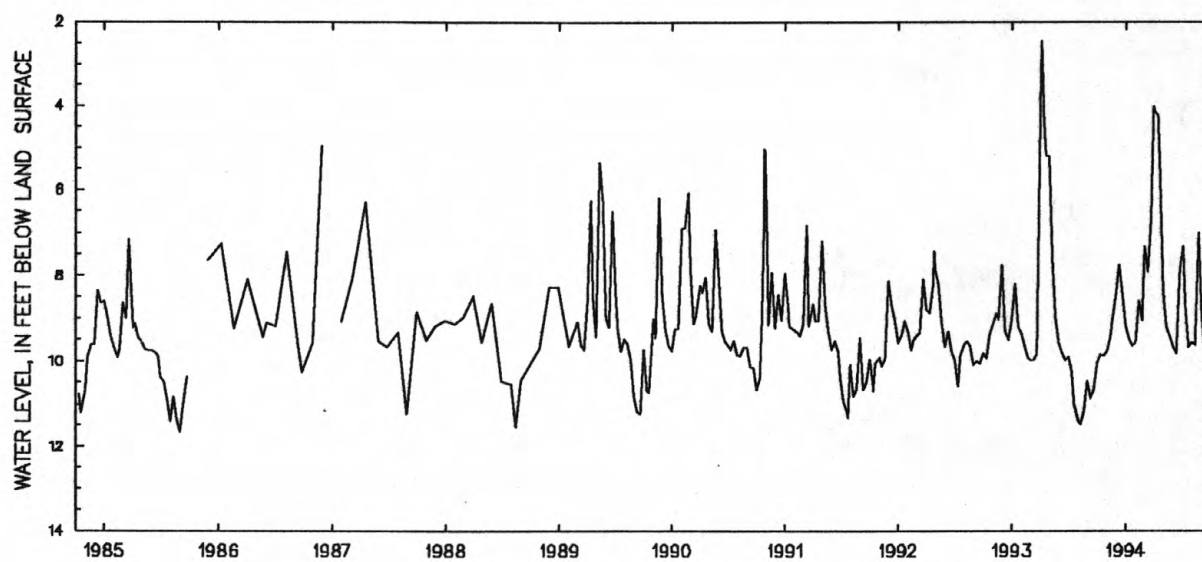
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.01	9.78	7.95	9.19	9.26	7.33	4.20	8.58	9.71	6.82	9.56	9.12
2	9.97	9.77	7.65	9.22	8.98	7.36	4.23	8.73	9.73	6.70	9.57	9.23
3	9.94	9.74	7.59	9.25	8.79	7.42	4.19	8.83	9.74	6.80	9.58	9.33
4	9.92	9.71	7.61	9.28	8.68	7.49	4.13	8.90	9.76	7.03	9.60	9.43
5	9.90	9.68	7.67	9.32	8.61	7.58	4.10	8.95	9.78	7.32	9.60	9.52
6	9.89	9.64	7.72	9.35	8.57	7.67	4.12	9.00	9.80	7.63	9.60	9.59
7	9.87	9.59	7.73	9.39	8.55	7.76	4.16	9.06	9.82	7.94	9.59	9.66
8	9.86	9.54	7.71	9.42	8.54	7.84	4.16	9.11	9.83	8.23	9.59	9.72
9	9.86	9.49	7.71	9.45	8.55	7.90	4.17	9.16	9.82	8.49	9.59	9.78
10	9.85	9.45	7.74	9.48	8.58	7.92	4.23	9.20	9.82	8.71	9.61	9.83
11	9.86	9.41	7.80	9.50	8.62	7.86	4.36	9.23	9.82	8.90	9.64	9.88
12	9.87	9.40	7.84	9.52	8.66	7.58	4.55	9.26	9.82	9.05	9.68	9.91
13	9.89	9.39	7.86	9.54	8.70	7.19	4.79	9.29	9.83	9.18	9.72	9.94
14	9.92	9.39	7.87	9.55	8.75	6.84	5.00	9.31	9.79	9.29	9.76	9.98
15	9.92	9.40	7.90	9.56	8.80	6.60	5.17	9.33	9.25	9.39	9.77	10.01
16	9.91	9.41	7.96	9.57	8.86	6.49	5.31	9.36	8.39	9.49	9.71	10.03
17	9.90	9.41	8.05	9.60	8.91	6.46	5.40	9.39	7.82	9.56	9.64	10.05
18	9.89	9.40	8.17	9.62	8.97	6.48	5.46	9.40	7.66	9.60	9.47	10.07
19	9.88	9.32	8.30	9.63	9.02	6.53	5.54	9.42	7.71	9.64	8.37	10.08
20	9.87	9.02	8.43	9.64	9.06	6.63	5.66	9.44	7.87	9.68	7.01	10.07
21	9.87	8.68	8.56	9.65	9.09	6.77	5.85	9.46	8.08	9.73	6.17	10.06
22	9.86	8.52	8.68	9.66	9.06	6.92	6.10	9.48	8.31	9.77	5.99	10.08
23	9.85	8.48	8.78	9.67	8.86	6.98	6.41	9.50	8.50	9.80	6.17	10.10
24	9.83	8.50	8.86	9.68	8.39	6.57	6.75	9.53	8.65	9.82	6.53	10.14
25	9.81	8.54	8.93	9.69	7.90	5.66	7.09	9.55	8.78	9.79	6.99	10.16
26	9.80	8.61	8.99	9.70	7.55	4.84	7.42	9.58	8.87	9.72	7.45	10.17
27	9.79	8.70	9.04	9.72	7.38	4.31	7.72	9.61	8.94	9.66	7.89	10.18
28	9.78	8.78	9.08	9.73	7.32	4.07	7.99	9.63	8.87	9.62	8.26	10.17
29	9.78	8.79	9.12	9.73	---	4.00	8.22	9.64	8.18	9.60	8.57	10.14
30	9.78	8.47	9.14	9.69	---	4.05	8.41	9.66	7.32	9.58	8.80	10.10
31	9.78	---	9.17	9.57	---	4.13	---	9.68	---	9.56	8.98	---
MEAN	9.87	9.20	8.25	9.53	8.61	6.56	5.50	9.30	9.01	8.91	8.72	9.88
MAX	10.01	9.78	9.17	9.73	9.26	7.92	8.41	9.68	9.83	9.82	9.77	10.18
MIN	9.78	8.47	7.59	9.19	7.32	4.00	4.10	8.58	7.32	6.70	5.99	9.12

CAL YR 1993 MEAN 9.17 HIGH 2.45 LOW 11.54
WTR YR 1994 MEAN 8.61 HIGH 4.00 LOW 10.18

GROUND-WATER LEVELS
CHENANGO COUNTY

421556075281602. Local number, Cn 12--Continued.



GROUND-WATER LEVELS
CHENANGO COUNTY

291

423849075315701. Local number, Cn 13.

LOCATION.--Lat 42°38'49", long 75°31'57", Hydrologic Unit 02050102, at junction of Chenango County Road 23 and Erie-Lackawanna Railroad tracks, 2.1 mi north of North Norwich, and 2.7 mi south of NYS Rt. 80 near Sherburne. Owner: U. S. Geological Survey.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 125 ft, cased to 123 ft, screened 123 ft to 125 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 1065.77 ft above sea level. Measuring point: Double file mark on top of coupling, 4.01 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping from nearby farm well.

PERIOD OF RECORD.--April 1984 to April 1994.

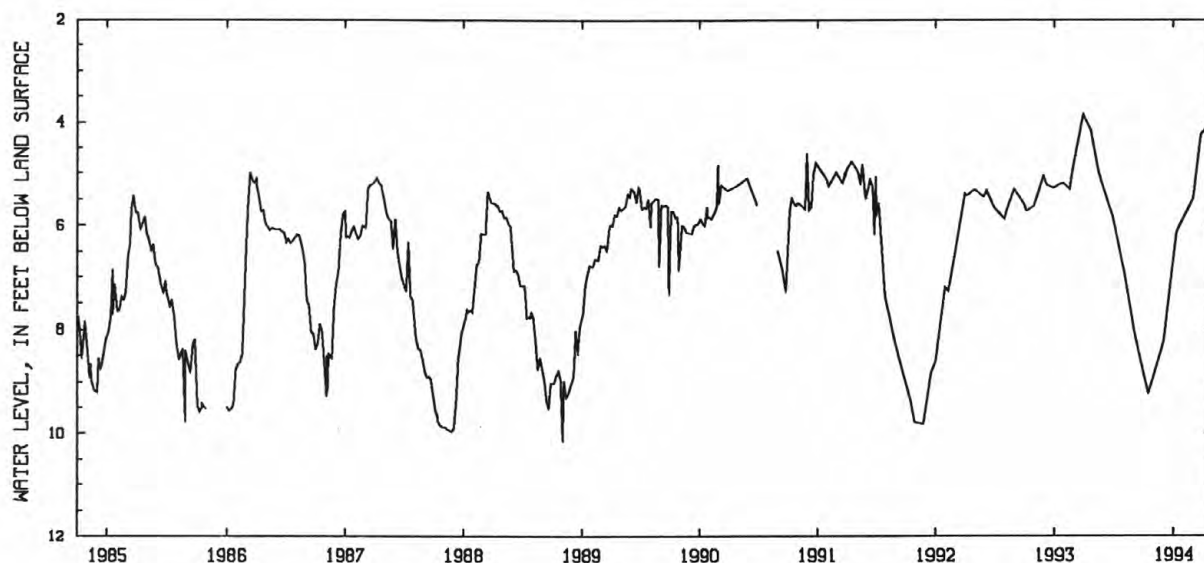
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.86 ft below land-surface datum, Mar. 31, 1993; lowest measured, 10.17 ft below land-surface datum, Nov. 1, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Lowest water level measured, 10.61 ft below land-surface datum, Jan. 27, 1981.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.11 ft below land-surface datum, Apr. 11; lowest measured, 9.24 ft below land-surface datum, Oct. 14.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	9.24	NOV 30	8.24	JAN 10	6.15	FEB 28	5.50	MAR 25	4.24	APR 11	4.11



GROUND-WATER LEVELS
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 in, depth 45 ft, 1.25 in well point.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 1136.59 ft above sea level. 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.

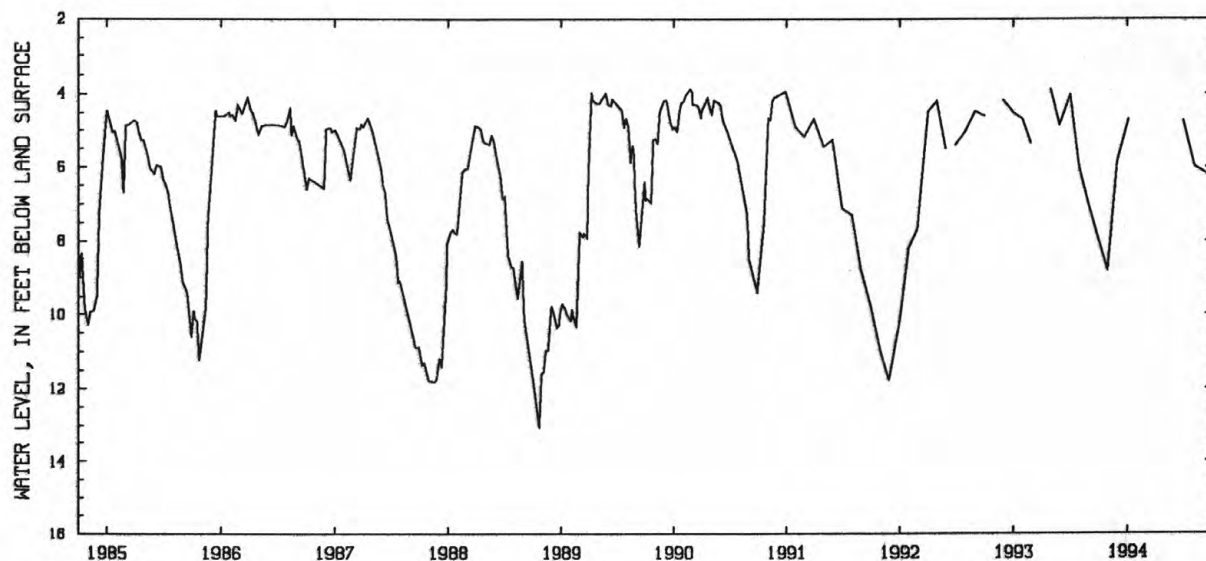
PERIOD OF RECORD.--October 1975 to current year. Records for October 1975 to September 1977 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft below land-surface datum, Sept. 25, 1977; lowest measured, 14.50 ft below land-surface datum, Dec. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.69 ft below land-surface datum, Jan. 3; lowest measured, 8.83 ft below land-surface datum, Oct. 29.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	8.83	NOV 29	5.86	JAN 03	4.69	JUN 29	4.76	AUG 01	5.99	SEP 28	6.29



GROUND-WATER LEVELS
MADISON COUNTY

293

430056075354102. Local number, M 178.

LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills. Owner: Donald L. Greene.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 16 ft, cased to 16 ft, open end.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel. April 1975 to May 1986, digital recorder at same site and datum. Weekly observer readings May 1986 to Dec. 1988. Dec. 1988 to Feb. 1991, electronic data recorder at same site and datum.

DATUM.--Elevation of land-surface datum is 573.76 ft above sea level. 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 current year. Records for April 1975 to September 1976 are unpublished and available in files of the Geological Survey.

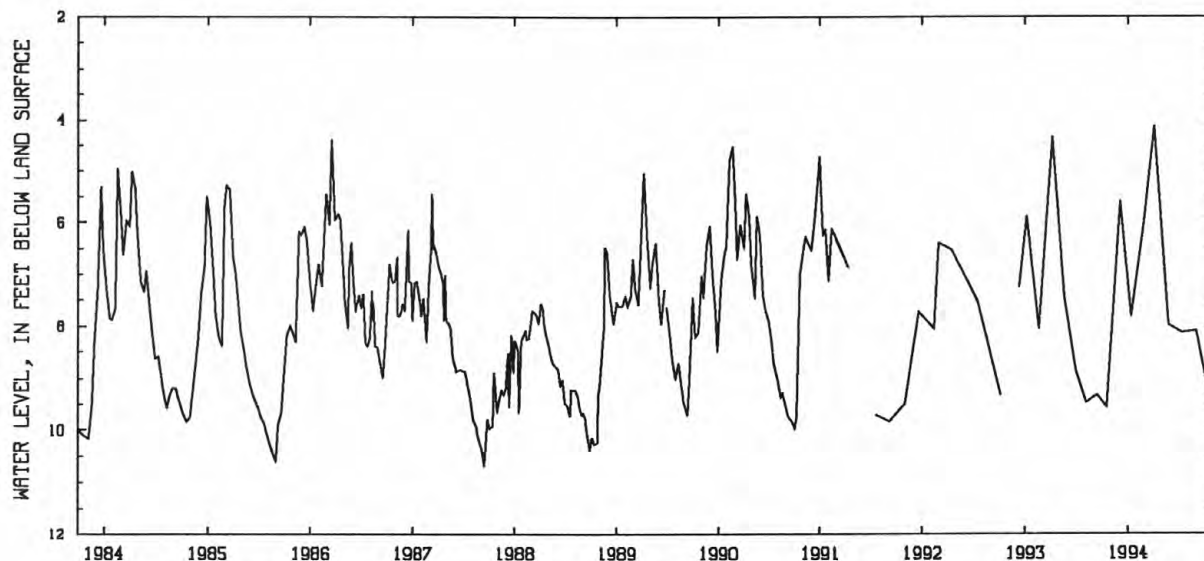
REVISED RECORDS.--WDR NY-91-3: 1990 water level.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.60 ft below land-surface datum, Mar. 5, 1979; lowest, 10.97 ft below land-surface datum, Oct. 24, 25, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.14 ft below land-surface datum, Apr. 4; lowest measured, 9.57 ft below land-surface datum, Oct. 20.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	9.57	JAN 12	7.81	APR 04	4.14	JUL 11	8.13	AUG 29	8.09
DEC 06	5.61	MAR 02	6.00	MAY 23	7.98				



GROUND-WATER LEVELS

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 in, 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 sea level. 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 Health Laboratory at Rochester, NY.

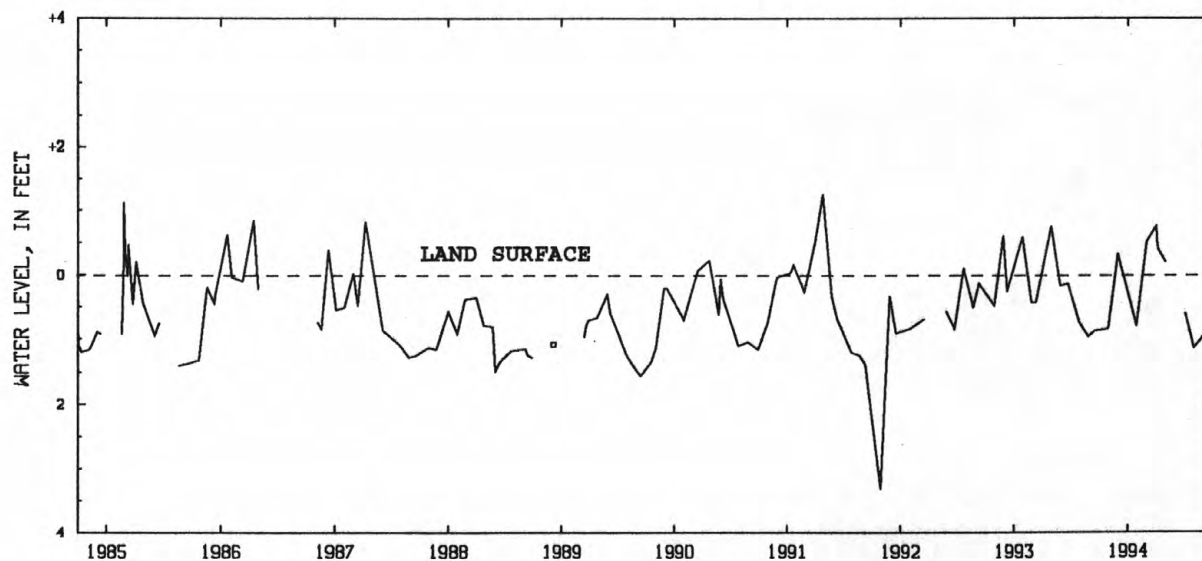
PERIOD OF RECORD.--September 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +1.24 ft above land-surface datum, Apr. 26, 1991; lowest measured, 3.32 ft below land-surface datum, Oct. 29, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, +0.75 ft above land-surface datum, Mar. 31; lowest measured, 1.13 ft below land-surface datum, July 29.

WATER LEVEL, IN FEET ABOVE (+) OR BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	0.84	JAN 27	0.78	MAR 31	+0.75	APR 29	+0.20	JUL 29	1.13	SEP 30	0.93
NOV 29	+0.32	FEB 28	+0.51	APR 6	+0.41	JUN 30	0.60	AUG 31	0.94		



GROUND-WATER LEVELS

295

MONROE COUNTY

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 in, 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 sea level. 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 Health Laboratory at Rochester, NY.

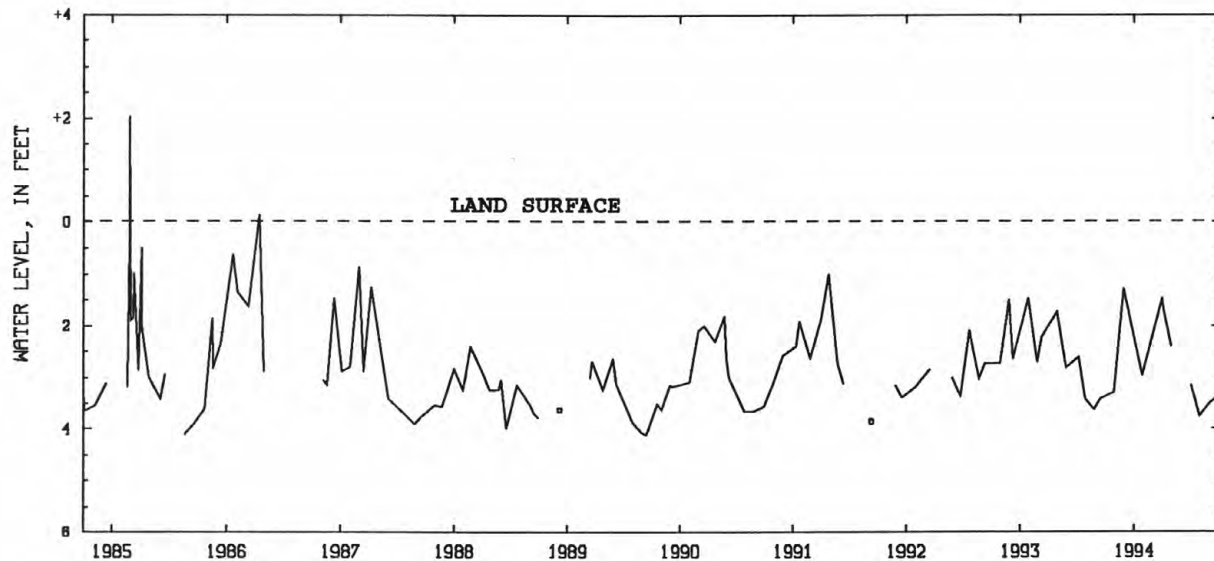
PERIOD OF RECORD.--September 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.03 ft above land-surface datum, Feb. 27, 1985; lowest measured, 4.11 ft below land-surface datum, Sept. 13, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.28 ft above land-surface datum, Nov. 29; lowest measured, 3.76 ft below land-surface datum, July 29.

WATER LEVEL, IN FEET ABOVE (+) OR BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	3.28	JAN 27	2.96	MAR 31	1.48	APR 29	2.40	JUL 29	3.76	SEP 30	3.35
NOV 29	1.28	FEB 28	2.20	APR 6	1.69	JUN 30	3.16	AUG 31	3.50		



GROUND-WATER LEVELS

MONROE COUNTY

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 in, depth 215 ft, cased to 215 ft, perforated 80 to 90 ft and 160 to 170 ft, openended 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 sea level. 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 Health Laboratory at Rochester, NY.

PERIOD OF RECORD.--December 1986 to current year.

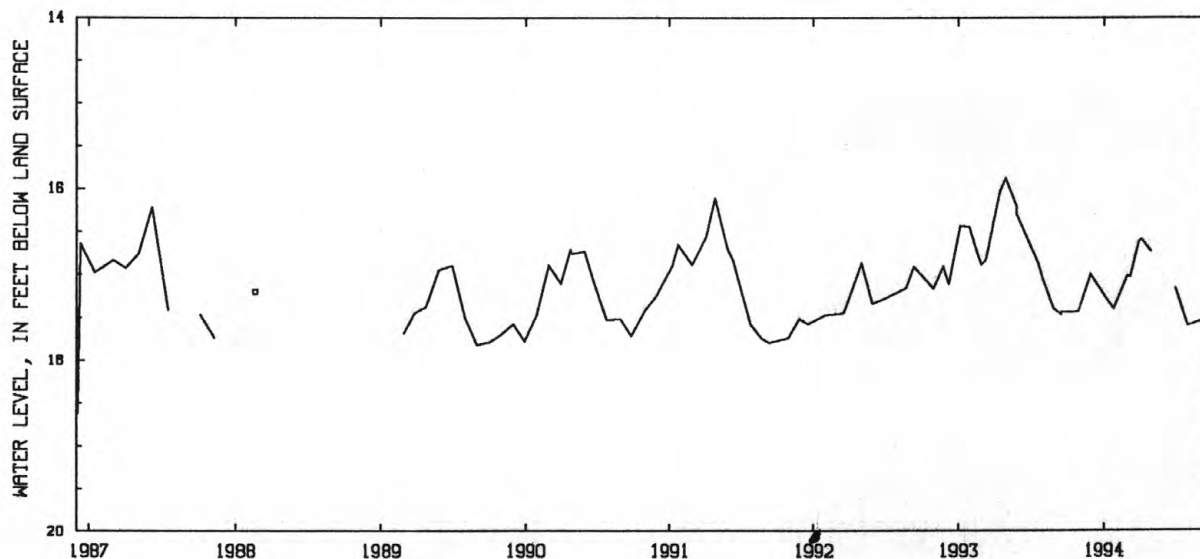
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.89 ft below land-surface datum, Apr. 30, 1993; lowest measured, 17.82 ft below land-surface datum, Aug. 31, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 16.59 ft below land-surface datum, Apr. 6; lowest measured, 17.67 ft below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	z17.44	JAN 12	z17.31	MAR 09	z17.02	APR 29	16.73	AUG 31	17.54
29	17.42	27	17.40	31	16.61	JUN 30	17.16	SEP 30	17.67
NOV 29	17.00	FEB 28	17.01	APR 06	z16.59	JUL 29	17.59		

z Measured by USGS personnel.



GROUND-WATER LEVELS

297

MONROE COUNTY

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 fluvial sediments of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 10 ft, cased to 10 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 sea level. 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 Health Laboratory at Rochester, NY.

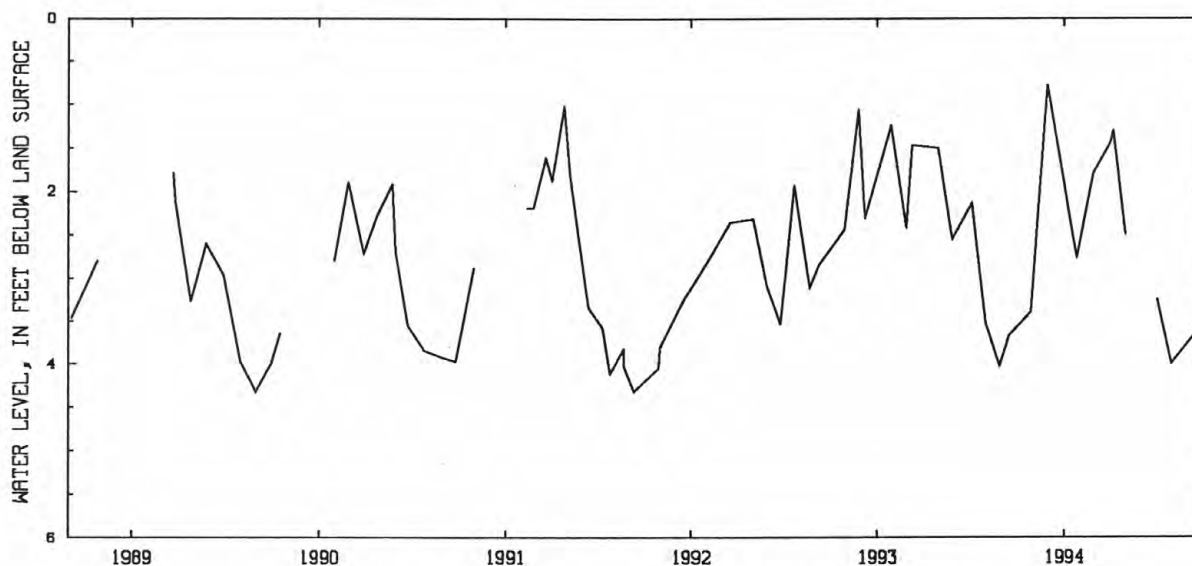
PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.78 ft below land-surface datum, Nov. 29, 1993; lowest measured, 4.32 ft below land-surface datum, Aug. 31, 1989, Sept. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.78 ft below land-surface datum, Nov. 29; lowest measured, 4.00 ft below land-surface datum, July 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	3.40	JAN 27	2.77	MAR 31	1.45	APR 29	2.50	JUL 29	4.00	SEP 30	3.52
NOV 29	0.78	FEB 28	1.80	APR 6	1.31	JUN 30	3.24	AUG 31	3.73		



GROUND-WATER LEVELS

MONROE COUNTY

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 fluvial sediments of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 27 ft, cased to 27 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 sea level. 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 Health Laboratory at Rochester, NY.

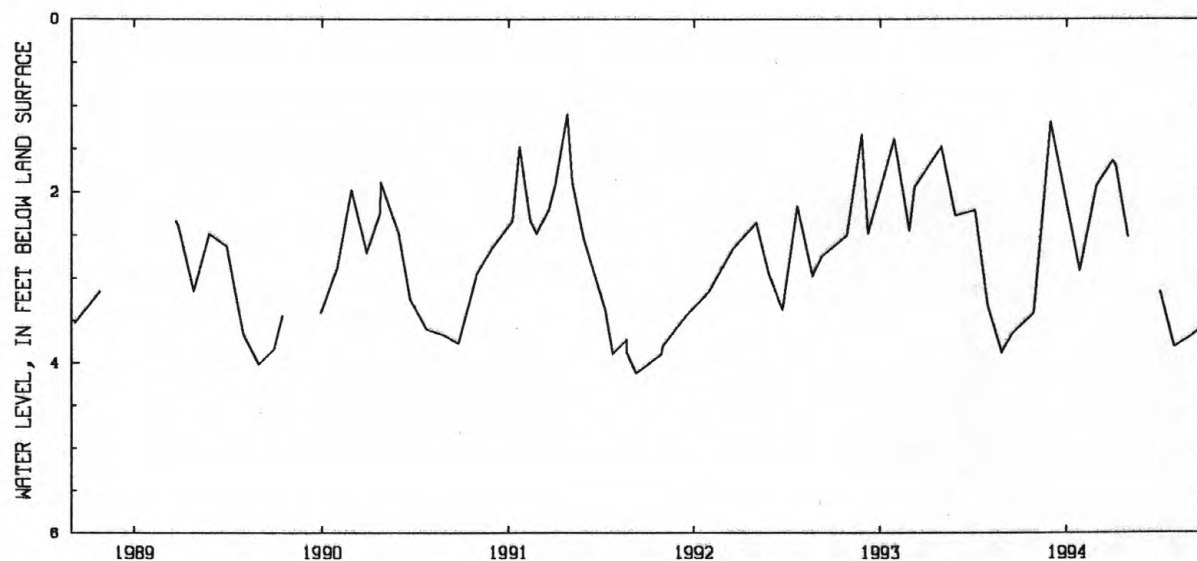
PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.10 ft below land-surface datum, Apr. 26, 1991; lowest measured, 4.11 ft below land-surface datum, Sept. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.19 ft below land-surface datum, Nov. 29; lowest measured, 3.81 ft below land-surface datum, July 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	3.41	JAN 27	2.91	MAR 31	1.64	APR 29	2.51	JUL 29	3.81	SEP 30	3.52
NOV 29	1.19	FEB 28	1.92	APR 6	1.69	JUN 30	3.15	AUG 31	3.67		



GROUND-WATER LEVELS

299

MONROE COUNTY

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 fluvial sediments of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 17 ft, cased to 17 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 sea level. 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 Health Laboratory at Rochester, NY.

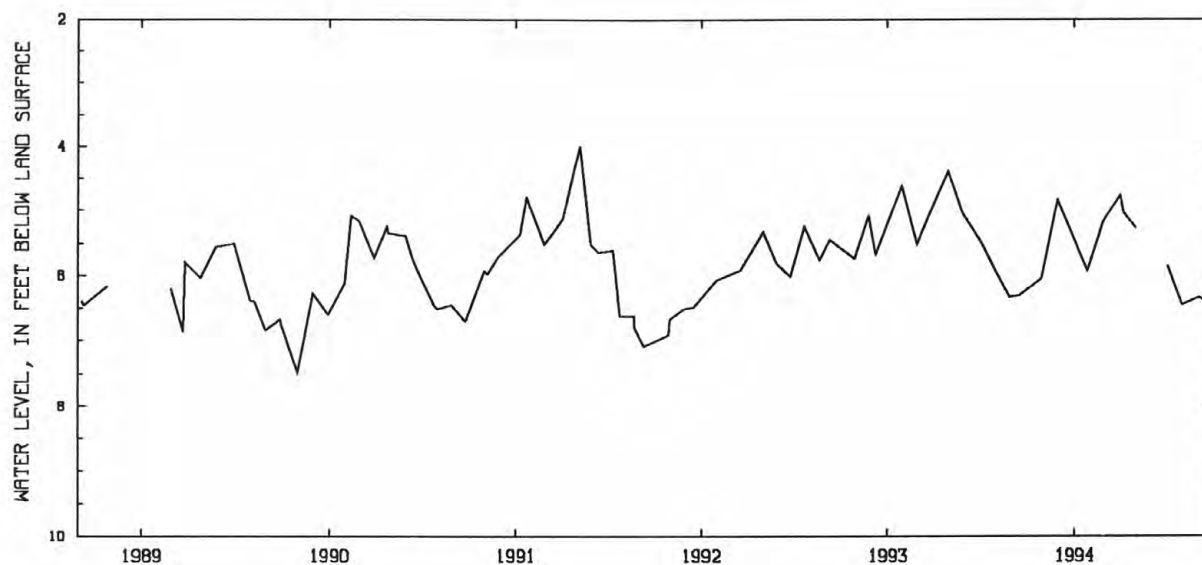
PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.00 ft below land-surface datum, May 7, 1991; lowest measured, 7.48 ft below land-surface datum, Oct. 31, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.77 ft below land-surface datum, Mar.31; lowest measured, 6.49 ft below land-surface datum, Sept 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	6.05	JAN 27	5.93	MAR 31	4.77	APR 29	5.27	JUL 29	6.45	SEP 30	6.49
NOV 29	4.83	FEB 28	5.16	APR 6	5.03	JUN 30	5.87	AUG 31	6.35		



GROUND-WATER LEVELS

MONROE COUNTY

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 fluvial sediments of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 27 ft, cased to 27 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 sea level. 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 Health Laboratory at Rochester, NY.

PERIOD OF RECORD.--September 1988 to current year.

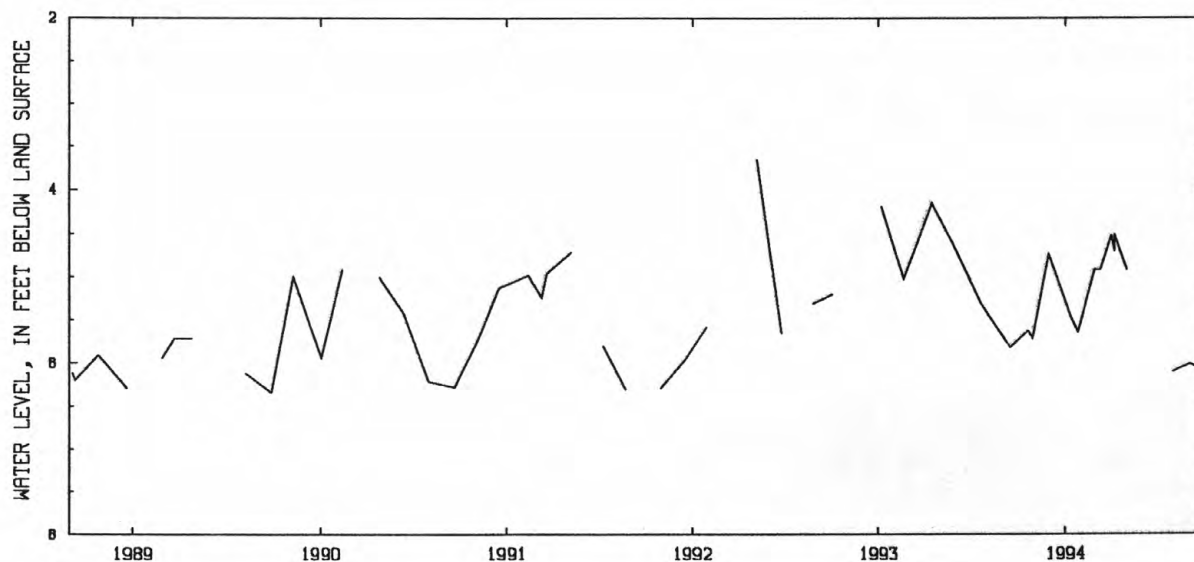
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.66 ft below land-surface datum, Mar 6, 1992; lowest measured, 6.35 ft below land-surface datum, Sept. 26, 1989.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.53 ft below land-surface datum, Mar. 31; lowest measured, 6.12 ft below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	z5.64	JAN 12	z5.48	MAR 09	z4.93	APR 29	4.93	SEP 30	6.12
29	5.72	27	5.64	31	4.53	JUL 29	6.10		
NOV 29	4.74	FEB 28	4.93	APR 06	z4.51	AUG 31	6.01		

z Measured by USGS personnel.



GROUND-WATER LEVELS

301

MONROE COUNTY

430928077314001. Local number Mo 667

LOCATION.--Lat 43°09'28", long 77°31'40", Hydrologic Unit 04140101, on west bank of Irondequoit Creek about 500 ft. north of Browncroft Boulevard and 100 ft west of Irondequoit Creek. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in fluvial sediments of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 15 ft, cased to 15 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 sea level. 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 Health Laboratory at Rochester, NY.

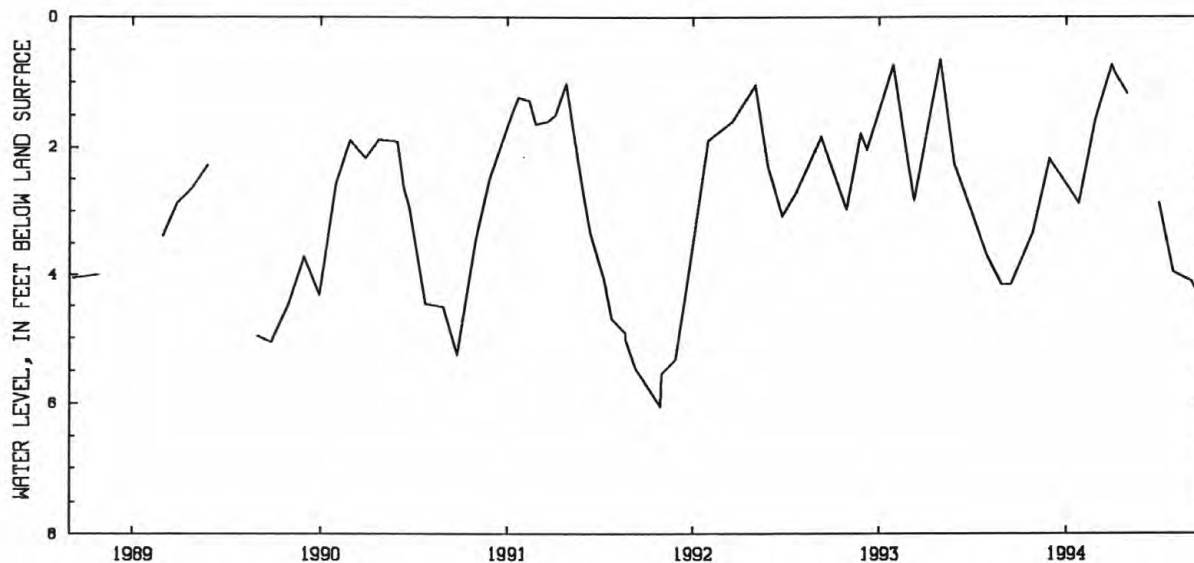
PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.65 ft below land-surface datum, Apr. 30, 1993; lowest measured, 6.06 ft below land-surface datum, Oct. 29, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.73 ft below land-surface datum, Mar. 31; lowest measured, 4.54 ft below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	3.34	JAN 27	2.87	MAR 31	0.73	APR 29	1.16	JUL 29	3.97	SEP 30	4.54
NOV 29	2.19	FEB 28	1.55	APR 6	0.87	JUN 30	2.88	AUG 31	4.10		



GROUND-WATER LEVELS

MONROE COUNTY

430928077314002. Local number Mo 668

LOCATION.--Lat 43°09'28", long 77°31'40", Hydrologic Unit 04140101, on west bank of Irondequoit Creek about 500 ft north of Browncroft Boulevard and 100 ft west of Irondequoit Creek. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in fluvial sediments of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 36 ft, cased to 36 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 sea level. 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 Health Laboratory at Rochester, NY.

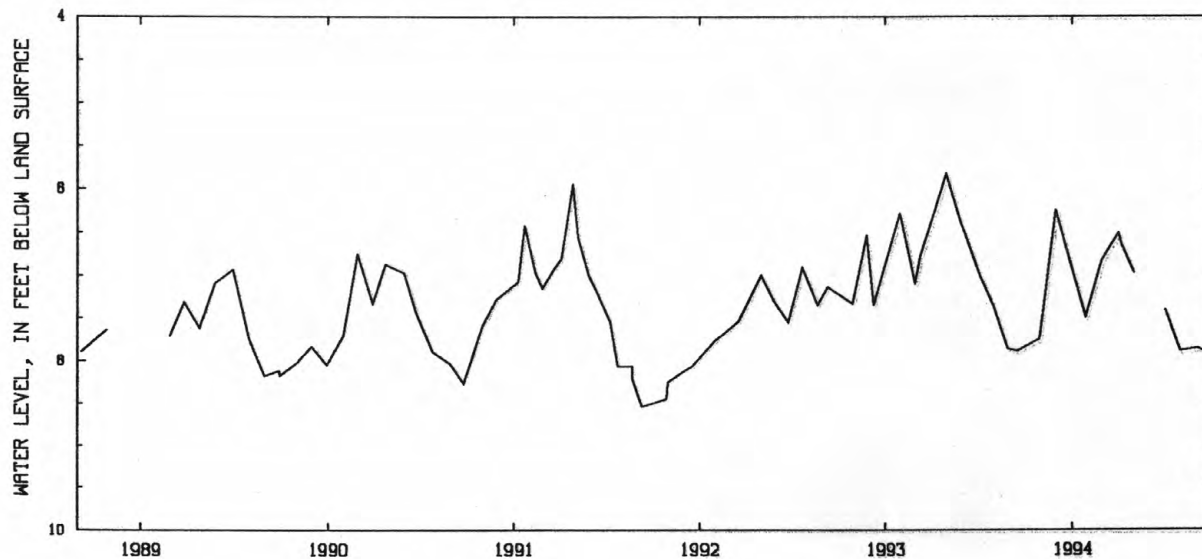
PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.83 ft below land-surface datum, Apr. 30, 1993; lowest measured, 8.54 ft below land-surface datum, Sept. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.25 ft below land-surface datum, Nov. 29; lowest measured, 7.94 ft below land-surface datum, Sept.30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	7.74	JAN 27	7.49	MAR 31	6.51	APR 29	6.97	JUL 29	7.89	SEP 30	7.94
NOV 29	6.25	FEB 28	6.83	APR 6	6.65	JUN 30	7.41	AUG 31	7.86		



GROUND-WATER LEVELS
NIAGARA COUNTY

303

430655079022001. Local number, Ni 69.

LOCATION.--Lat 43°06'55", long 79°02'20", Hydrologic Unit 04120104, 20th Street and Beech Avenue, Niagara Falls. Owner: City of Niagara Falls.

AQUIFER.--Confined and unconfined zones in Lockport Dolomite of Middle Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in to 6 in, depth 36 ft, cased 8 in from 0 to 17 ft, 6 in diameter hole from 17 to 36 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 595.61 ft sea level. Measuring point: top of 2 in plug in top of 8 in extended casing, 3.60 ft above land-surface datum.

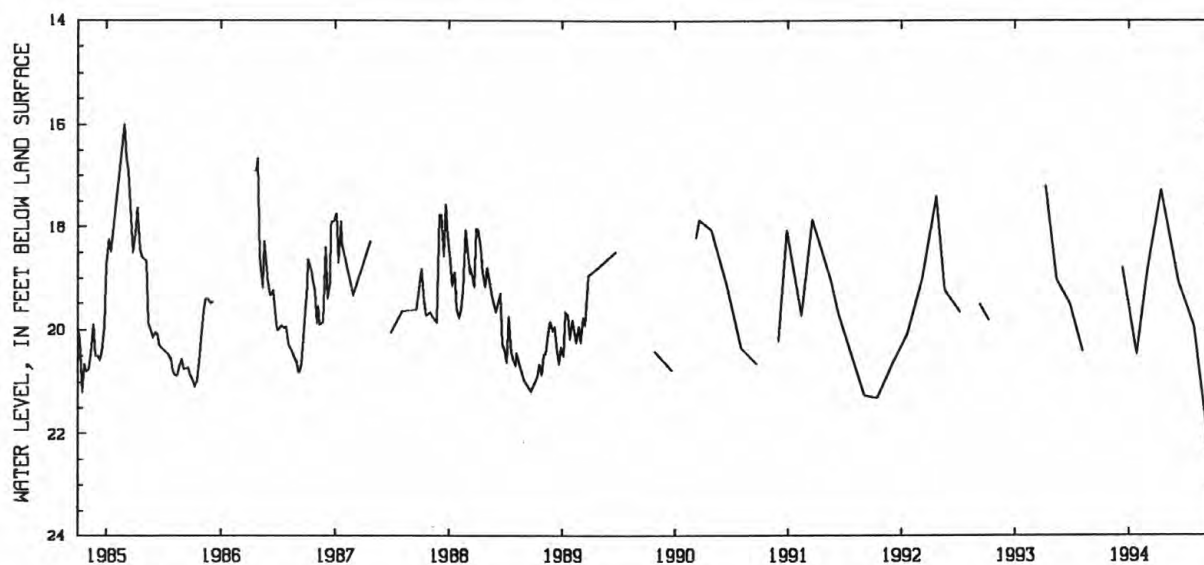
PERIOD OF RECORD.--October 1958 to current year. Records for October 1958 to September 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.00 ft below land-surface datum, Feb. 25, 1985; lowest measured, 22.32 ft below land-surface datum, Sep. 13, 1994.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 17.29 ft below land-surface datum, Apr. 12; lowest measured, 22.32 ft below land-surface datum, Sep. 13.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	20.15	JAN 25	20.47	APR 12	17.29	JUL 26	19.95	SEP 13	22.32
DEC 10	18.81	MAR 01	18.84	JUN 07	19.09				



GROUND-WATER LEVELS
NIAGARA COUNTY

431308078544501. Local number, Ni 70.

LOCATION.--Lat 43°13'08", long 78°54'45", Hydrologic Unit 04130001, near Ransomville. Owner: Calvin C. Schultz.

AQUIFER.--Unconfined aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 4 ft to 5 ft (reported), stone-lined, depth 24 ft.

INSTRUMENTATION.--Weekly measurement with chalked tape by observer; periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 335.95 ft above sea level. Measuring point: Top of 1 inch hole in steel cover, 0.72 ft above land-surface datum.

PERIOD OF RECORD.--August 1972 to current year. Records for August 1972 to September 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.90 ft below land-surface datum, Mar. 12, 1985; lowest measured, 13.88 ft below land-surface datum, Dec. 21, 1991.

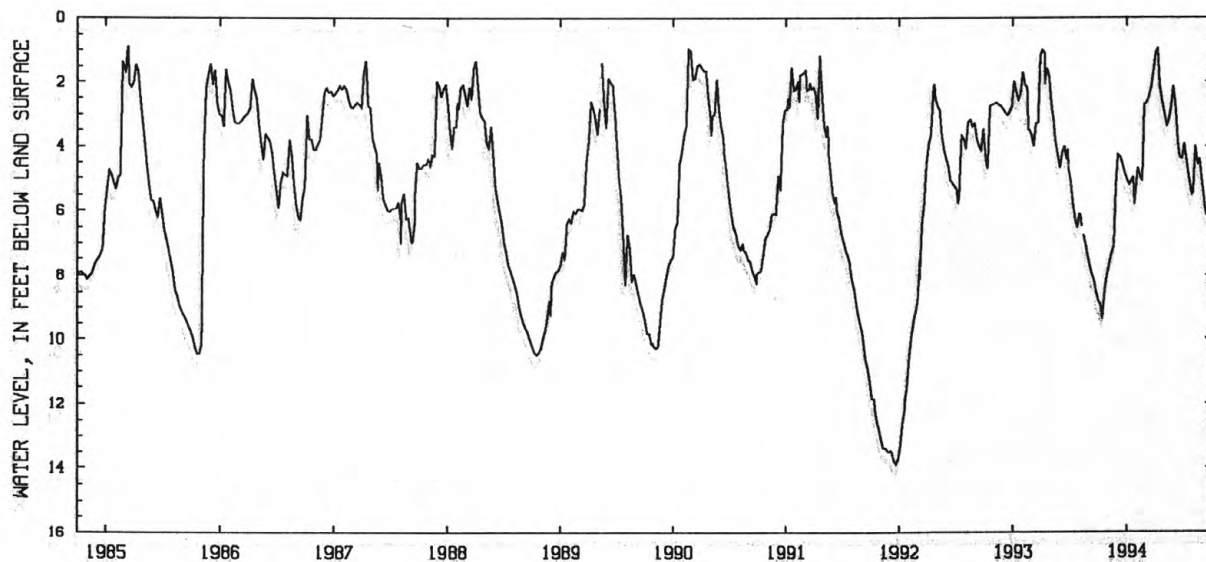
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.97 ft below land-surface datum, Apr. 9; lowest measured, 9.37 ft below land-surface datum, Oct. 16.

REVISIONS.--Water levels measured by USGS personnel reported for the 1983 to 1991 water years have been revised: subtract 0.72 ft.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	8.82	DEC 04	4.28	FEB 19	5.08	APR 23	2.65	JUN 25	4.39	SEP 03	5.66
06	z8.94	11	4.33	26	2.70	30	2.95	JUL 02	3.94	10	6.11
09	8.90	18	4.55	MAR 05	2.64	MAY 07	3.37	16	4.93	13	z6.07
16	9.37	25	4.87	12	2.50	14	3.22	23	5.32	17	6.00
23	8.45	JAN 01	5.03	19	2.17	21	2.72	26	z5.51	24	6.38
30	8.05	08	5.19	26	1.72	28	2.17	30	5.45		
NOV 09	7.57	22	4.97	APR 02	1.09	JUN 04	2.60	AUG 06	4.00		
13	7.35	25	z5.79	09	.97	07	z3.22	13	4.59		
20	7.10	FEB 05	4.68	12	z1.71	11	3.88	20	4.42		
27	5.25	12	4.95	16	2.17	18	4.34	27	4.98		

z Measured by USGS personnel.



GROUND-WATER LEVELS
ONTARIO COUNTY

305

425840077133901. Local number, Ot 900.

LOCATION.--Lat 42°58'40", long 77°13'39", Hydrologic Unit 04140201, at New York State Thruway Interchange 43, near Manchester.
Owner: New York State Thruway Authority.

AQUIFER.--Confined zones in Camillus Shale of the Salina Group of Late Silurian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 139 ft, cased to 11 ft, open hole.

INSTRUMENTATION.--Float tape read weekly by observer; periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 556.70 ft above sea level. Measuring point: Top of instrument shelf, 11.63 ft above land-surface datum.

REMARKS.--Water in well casing above land surface is subject to freezing during extreme cold periods.

PERIOD OF RECORD.--May 1955 to current year.

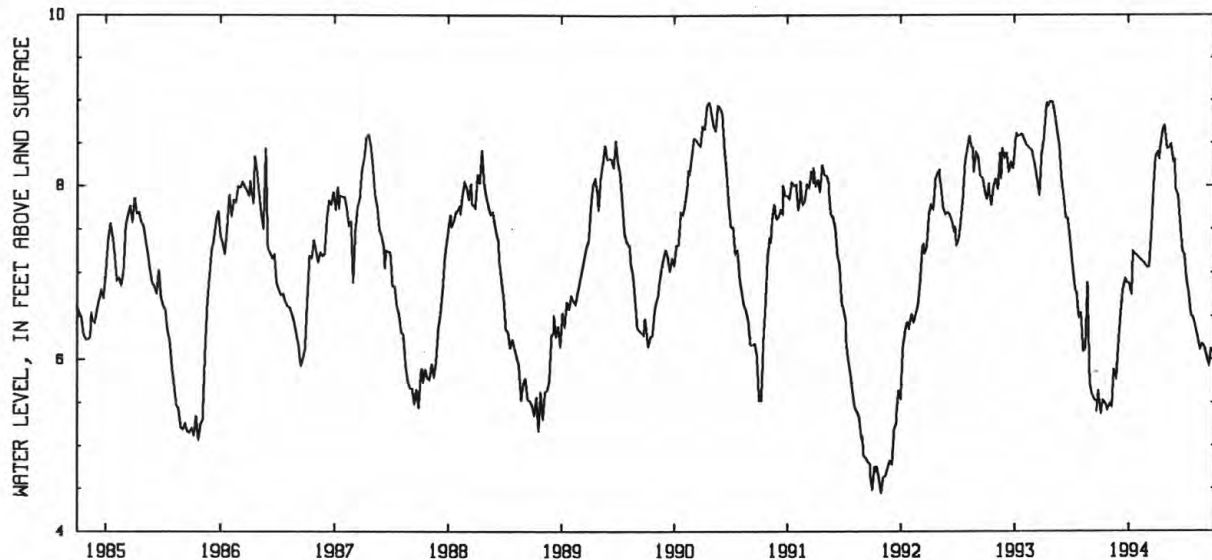
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.14 ft above land-surface datum, Mar. 15, 1976; lowest observed, 4.44 ft above land-surface datum, Oct. 28, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level observed, 8.71 ft above land-surface datum, Apr. 25; lowest observed, 5.37 ft above land-surface datum, Oct. 4.

WATER LEVELS IN FEET ABOVE LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	5.37	NOV 29	6.13	FEB 28	7.06	APR 25	8.71	JUN 20	7.24	AUG 22	6.18
11	5.53	DEC 06	6.54	MAR 07	7.06	MAY 02	8.42	27	7.21	29	6.14
18	5.49	13	z6.80	14	7.53	09	8.43	JUL 04	6.92	31	z6.13
20	z5.47	20	6.92	21	7.99	16	8.47	08	z6.85	SEP 05	6.04
25	5.42	27	6.89	28	8.33	23	8.27	11	6.74	12	5.92
NOV 01	5.49	JAN 03	6.88	APR 04	8.38	26	z8.31	18	6.51	19	6.12
08	5.45	10	6.74	08	z8.31	30	7.96	25	6.48	26	6.08
15	5.88	14	z7.24	12	8.42	JUN 06	7.88	AUG 08	6.23		
22	5.77	FEB 21	7.10	18	8.64	13	7.59	15	6.11		

z Measured by USGS personnel.



GROUND-WATER LEVELS
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: Thomas Kallan.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in, depth 15 ft, stone-lined.

INSTRUMENTATION.--Weekly measurement with chalked tape by observer; periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,432.44 ft above sea level. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.

PERIOD OF RECORD.--May 1953 to current year. Records for May 1953 to September 1976 are unpublished and available in files of the Geological Survey.

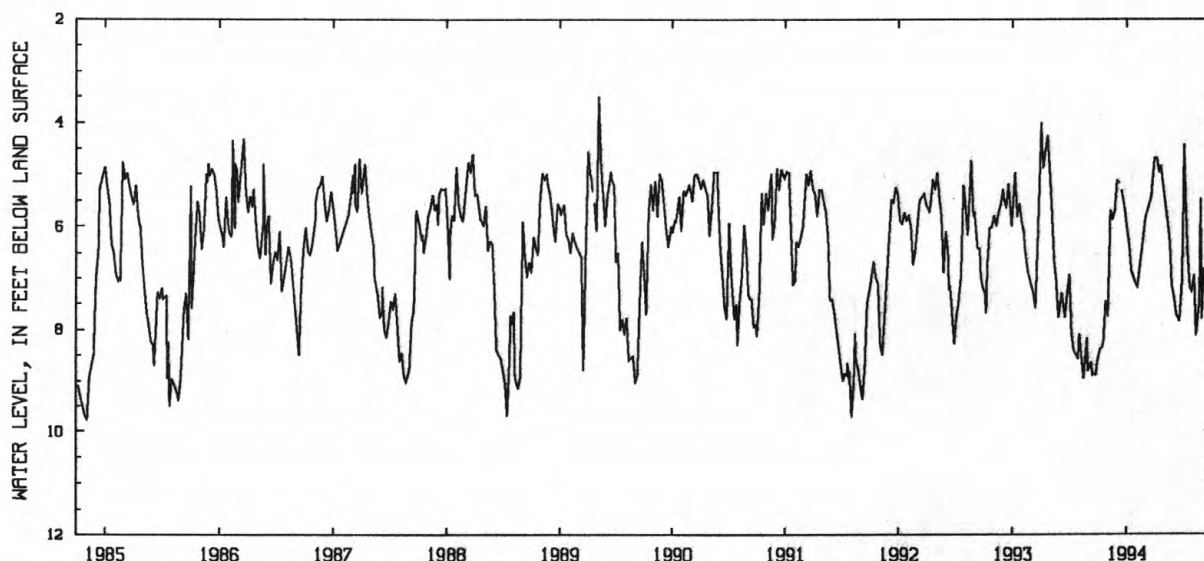
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft below land-surface datum, Nov. 14, 1964.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.43 ft below land-surface datum, June 30; lowest measured, 8.40 ft below land-surface datum, Oct. 7.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	8.40	NOV 30	z5.13	JAN 21	7.00	APR 19	4.85	JUN 24	7.05	AUG 10	8.12
13	z8.35	DEC 07	5.17	28	7.10	MAY 02	5.60	30	4.43	17	7.52
17	8.23	14	5.32	FEB 04	7.18	09	5.95	JUL 04	5.40	24	z5.49
24	7.46	22	5.67	MAR 01	z5.84	16	6.34	11	6.38	SEP 02	6.82
31	7.74	30	6.00	18	5.44	24	z7.14	12	z6.46	09	7.20
NOV 07	5.70	JAN 07	6.37	29	4.69	31	7.40	19	7.20	19	7.81
14	5.90	12	z6.84	APR 06	4.69	JUN 07	7.70	26	7.27	30	7.68
21	5.69	14	6.86	12	z4.98	16	7.83	AUG 01	6.95		

z Measured by USGS personnel.



GROUND-WATER LEVELS
STEBEN COUNTY

307

422445077203301. Local number, Sb 472.

LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona. Owner: David Owens.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation well, diameter 2.5 in, depth 17 ft, filled in from original depth of 18 ft, cased to 16 ft, 1.25 in well point (60-gauze screen 16 ft to 18 ft, damaged during well installation).

INSTRUMENTATION.--Weekly measurement with chalked tape by observer; periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,209.78 ft above sea level. 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.

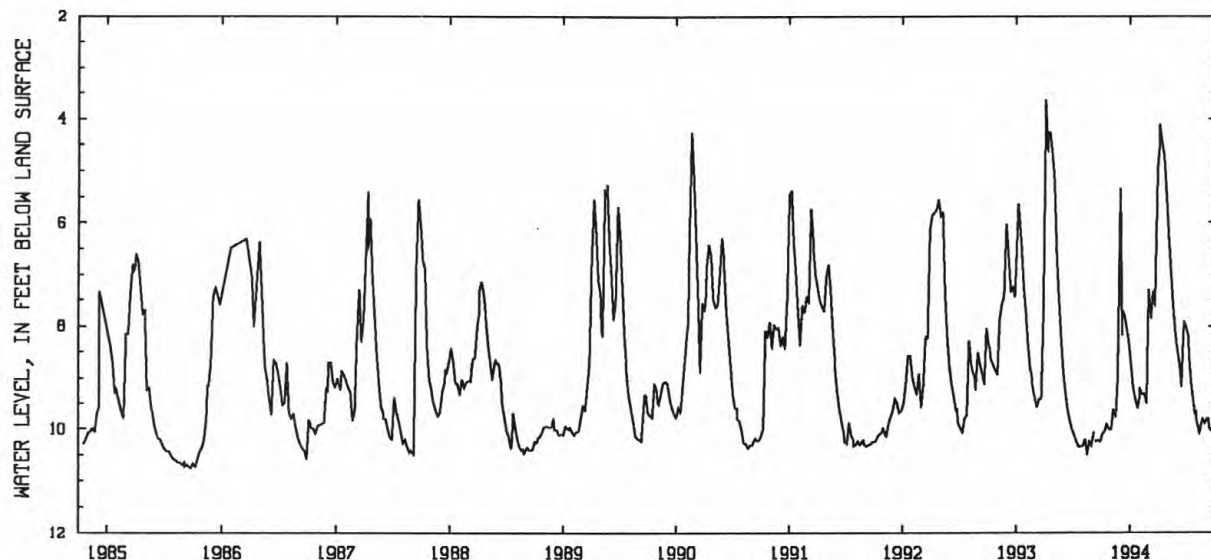
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft below land-surface datum, June 25, 1972; lowest measured, 10.84 ft below land-surface datum, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.11 ft below land-surface datum, Apr. 4; lowest measured, 10.11 ft below land-surface datum, Oct. 3.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	10.11	DEC 05	8.17	FEB 02	z9.21	APR 03	4.53	JUN 05	8.74	AUG 10	10.09
10	10.03	06	z7.70	06	9.34	04	z4.11	12	9.19	15	9.90
17	9.91	12	7.78	13	9.30	10	4.47	20	7.93	21	9.82
18	z9.92	19	8.04	20	9.50	17	4.71	26	8.01	28	9.90
24	10.02	26	8.29	27	7.30	24	5.50	JUL 03	8.21	SEP 04	9.80
31	10.01	JAN 02	8.80	MAR 06	7.85	MAY 01	6.21	10	8.63	06	z9.79
NOV 07	9.63	09	9.20	07	z7.81	15	7.60	17	9.20	11	10.00
14	9.77	16	9.45	13	7.35	22	8.07	26	9.71	18	10.06
21	9.00	23	9.61	20	7.61	23	z8.07	28	z9.65	25	10.10
28	5.35	30	9.40	27	4.98	29	8.50	31	9.81		

z Measured by USGS personnel.



GROUND-WATER LEVELS
STEUBEN COUNTY

420811077021501. Local number, Sb 473.

LOCATION.--Lat 42°08'11", long 77°02'15", Hydrologic Unit 02050105, Denison Park, at Corning. Owner: City of Corning.

AQUIFER.--Unconfined aquifer in outwash sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in, depth 83 ft, cased to 83 ft, open end.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 914.31 ft above sea level. Measuring point: Top of well casing, 3.20 ft above land-surface datum.

REMARKS.--Water level affected by stage of Chemung River.

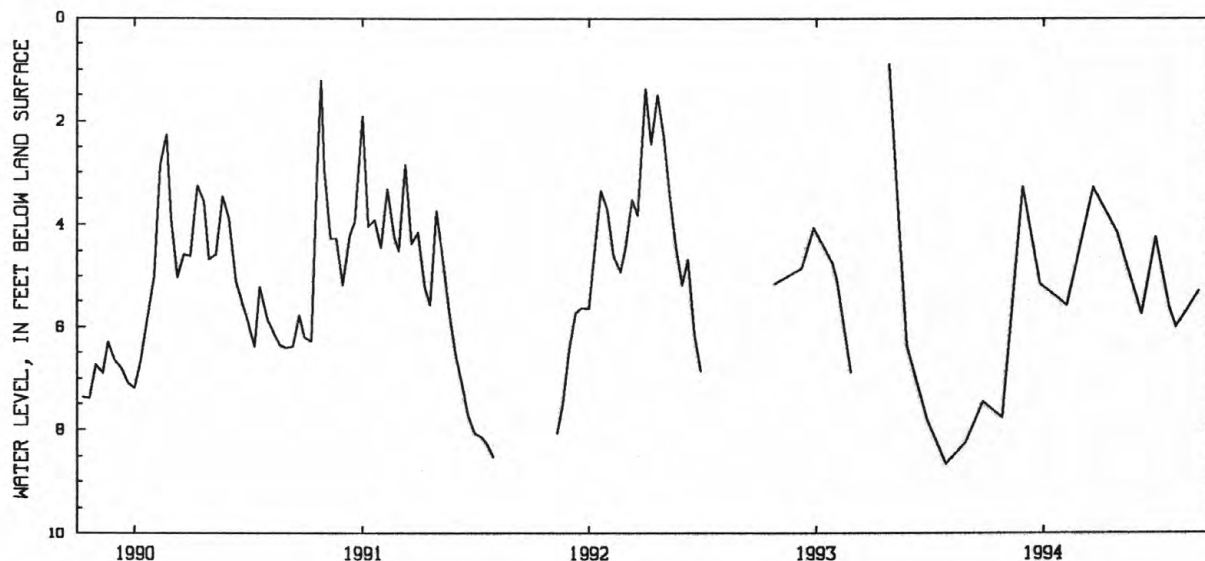
PERIOD OF RECORD.--September 1989 to current year. Records for December 1985 to August 1987 are published and available in files of the Susquehanna River Basin Commission.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.90 ft below land-surface datum, Apr. 29, 1993; lowest measured, 8.66 ft below land-surface datum, July 30, 1993.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 3.26 ft below land-surface datum, Nov. 29; lowest measured, 7.77 ft below land-surface datum, Oct. 27.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	7.77	DEC 28	5.14	MAR 22	3.30	JUN 07	5.74	JUL 20	5.63	SEP 07	5.29
NOV 29	3.26	FEB 07	5.58	APR 29	4.14	30	4.26	AUG 01	6.01		



GROUND-WATER LEVELS
WYOMING COUNTY

309

423739077595501. Local number, Wo 1.

LOCATION.--Lat 42°37'39", long 77°59'55", Hydrologic Unit 04130002, Letchworth State Park, near Castile. Owner: New York State Department of Environmental Conservation.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Driven unused well, diameter 2 inch, depth 15 ft, well point (60-gauze screen 13 ft to 15 ft).

INSTRUMENTATION.--Monthly measurement with chalked tape by observer; periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,045.44 ft above sea level. Measuring point: Top of 2 inch by 1 inch reducing coupling, 3.30 ft above land-surface datum.

PERIOD OF RECORD.--November 1942 to current year.

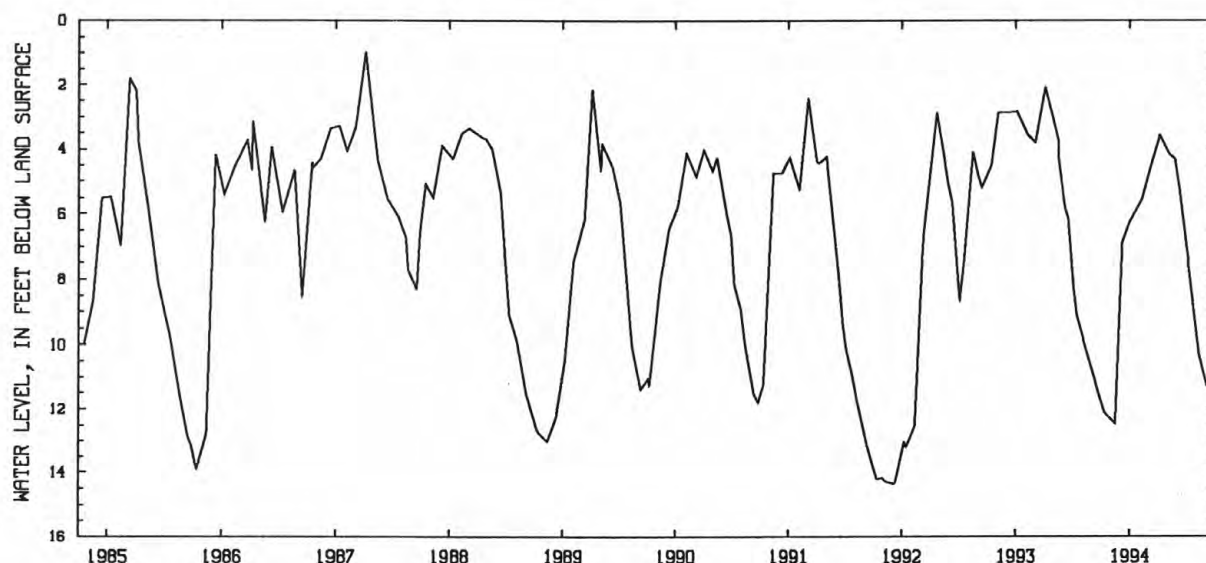
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft below land-surface datum, Apr. 5, 1947; lowest measured, dry, Dec. 6-27, 1964, Jan. 2, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 3.57 ft below land-surface datum, Apr. 5; lowest measured, 12.49 ft below land-surface datum, Nov. 15.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	12.09	DEC 07	z6.90	MAR 05	4.68	MAY 06	4.16	JUL 05	z7.40	SEP 03	11.27
NOV 15	12.49	JAN 01	6.26	APR 04	3.64	25	z4.31	06	7.52	08	z11.31
DEC 05	7.15	FEB 06	5.56	05	z3.57	JUN 05	5.19	AUG 10	10.34		

z Measured by USGS personnel.



GROUND-WATER LEVELS
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 in, depth 20 ft, cased to 20 ft, open end.

INSTRUMENTATION.--Digital recorder--60-minute punch; periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,606.76 ft above sea level. Measuring point: Top of casing 2.59 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.--Highest water level, 7.89 ft, below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft, below land-surface datum, Nov. 3, 1974.

EXTREMES FOR CURRENT YEAR.--Highest water level observed, 9.54 ft, below land-surface datum, Apr. 15, 16; lowest observed, 13.75 ft, below land-surface datum, Sep. 25, 26.

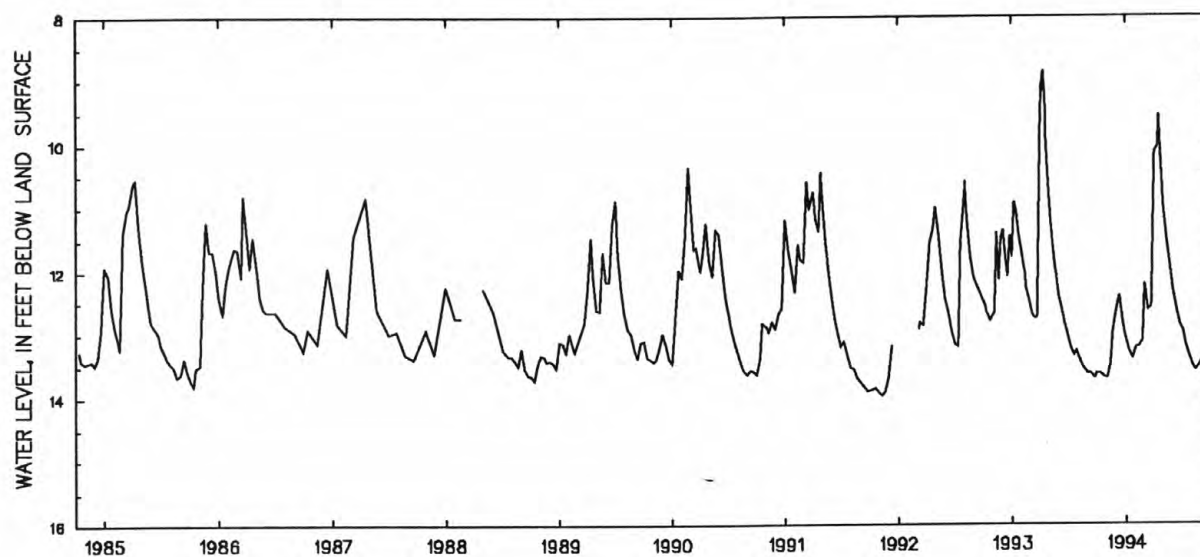
WATER LEVEL IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.52	13.70	12.63	---	13.20	12.23	10.13	11.02	12.35	12.96	13.49	13.42
2	13.54	13.68	12.66	13.15	13.19	12.29	10.13	11.08	12.37	12.97	13.51	13.44
3	13.56	13.66	12.69	13.16	13.19	12.32	10.08	11.15	12.40	12.99	13.52	13.46
4	13.57	13.63	12.69	13.18	13.19	12.37	10.11	11.21	12.43	13.02	13.54	13.48
5	13.56	13.57	12.57	13.21	13.19	12.44	10.14	11.28	12.46	13.05	13.55	13.50
6	13.56	13.50	12.45	13.23	13.19	12.48	10.17	11.35	12.49	13.08	13.55	13.51
7	13.57	13.45	12.39	13.24	13.20	12.58	10.17	11.41	12.52	13.11	13.55	13.54
8	13.59	13.43	12.36	13.25	13.20	12.61	10.20	11.43	12.55	13.14	13.56	13.56
9	13.61	13.43	12.38	13.27	13.20	12.61	10.13	11.44	12.58	13.16	13.57	13.58
10	13.62	13.45	12.40	13.28	13.20	12.61	10.03	11.49	12.62	13.16	13.58	13.60
11	13.64	13.46	12.43	13.29	13.20	12.63	10.02	11.54	12.66	13.18	13.60	13.61
12	13.65	13.47	12.47	---	13.20	12.66	10.02	11.59	12.70	13.20	13.62	13.63
13	13.66	13.46	12.52	---	13.20	12.67	9.96	11.64	12.73	13.22	13.62	13.64
14	13.67	13.46	12.55	---	13.20	12.68	9.73	11.70	12.71	13.22	13.51	13.65
15	13.68	13.45	12.59	---	13.20	12.66	9.56	11.74	12.72	13.24	13.46	13.66
16	13.69	13.43	12.64	---	13.20	12.54	9.55	11.77	12.75	13.26	13.46	13.66
17	13.69	13.39	12.68	---	13.21	12.51	9.60	11.82	12.77	13.28	13.47	13.67
18	13.66	13.17	12.72	13.36	13.23	12.51	9.69	11.85	12.79	13.29	13.49	13.68
19	13.66	12.99	12.76	13.37	13.22	12.53	9.78	11.88	12.83	13.32	13.49	13.69
20	13.67	12.95	12.80	13.38	13.12	12.56	9.91	11.92	12.86	13.34	13.51	13.69
21	13.66	12.95	12.83	13.39	12.62	12.56	10.04	11.96	12.88	13.36	13.47	13.70
22	13.63	12.98	12.85	13.39	12.27	12.30	10.17	12.01	12.90	13.38	13.42	13.72
23	13.62	13.01	---	13.39	12.08	11.72	10.31	12.05	12.94	13.39	13.41	13.73
24	13.64	13.04	---	13.40	12.02	10.82	10.43	12.10	12.94	13.40	13.42	13.74
25	13.66	13.08	---	13.40	12.04	10.11	10.55	12.14	12.90	13.42	13.44	13.74
26	13.67	13.12	12.98	13.40	12.09	10.06	10.67	12.17	12.90	13.43	13.42	13.73
27	13.68	13.15	13.01	13.40	12.15	10.04	10.77	12.20	12.93	13.43	13.42	13.64
28	13.69	12.97	---	13.40	12.20	9.94	10.87	12.24	12.93	13.45	13.42	13.61
29	13.68	12.74	---	13.30	---	9.98	10.94	12.28	12.94	13.46	13.41	13.59
30	13.69	12.64	---	13.24	---	10.08	10.98	12.32	12.96	13.47	13.40	13.52
31	13.70	---	---	13.21	---	10.12	---	12.35	---	13.48	13.40	---
MEAN	13.64	13.28	---	---	12.91	11.88	10.16	11.75	12.72	13.25	13.49	13.61
MAX	13.70	13.70	---	---	13.23	12.68	10.98	12.35	12.96	13.48	13.62	13.74
MIN	13.52	12.64	---	---	12.02	9.94	9.55	11.02	12.35	12.96	13.40	13.42

GROUND-WATER LEVELS
WYOMING COUNTY

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423743078070802. Local number, Wo 4--Continued.



QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR, OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER	DATE	TIME	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (US/CM)	OXYGEN, DIS-SOLVED (MG/L)	PH WATER WHOLE LAB (STANDARD UNITS)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
430854077304601	Mo 3	04-06-94	0941	0.55	1280	0.5	7.5	17
430855077304202	Mo 2	04-06-94	0937	1.1	888	1.6	7.6	11
430912077313301	Mo 663	04-06-94	1025	90	1610	<0.1	6.9	197
430912077313302	Mo 664	04-06-94	1026	32	19600	<0.1	6.8	101
430928077313802	Mo 665	04-06-94	1132	60	1960	<0.1	7.1	124
430928077313803	Mo 666	04-06-94	1133	130	1900	<0.1	7.2	200
430928077314001	Mo 667	04-06-94	1227	270	1880	1.3	7.2	154
430928077314002	Mo 668	04-06-94	1228	50	2710	<0.1	6.8	194
430932077311501	Mo 659	04-29-94	1118	7.8	863	--	8.2	1.1
		04-29-94	1146	80	1230	--	7.5	13

STATION NUMBER	DATE	ALKALINITY, CARBONATE FET-FLD (MG/L CACO3)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	HARDNESS, TOTAL (MG/L CACO3)	CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)
430854077304601	04-06-94	240	<0.01	0.46	0.32	0.015	0.002	390	130	28
430855077304202	04-06-94	170	<0.01	0.45	0.05	0.010	<0.002	320	79	23
430912077313301	04-06-94	610	0.22	5.2	<0.05	0.350	<0.002	1300	250	59
430912077313302	04-06-94	180	2.3	3.1	<0.05	0.300	0.026	5900	1300	420
430928077313802	04-06-94	790	1.8	5.3	<0.05	0.430	<0.002	690	180	38
430928077313803	04-06-94	850	8.4	11	<0.05	0.420	<0.002	1600	180	55
430928077314001	04-06-94	800	10	11	<0.05	3.65	<0.002	1000	210	51
430928077314002	04-06-94	660	5.0	--	<0.05	0.690	<0.002	1900	230	76
430932077311501	04-29-94	76	0.02	0.57	<0.05	<0.005	<0.002	--	22	51
	04-29-94	210	0.08	0.63	<0.05	<0.005	<0.002	--	88	52

STATION NUMBER	DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SULFATE, DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	HYDROGEN SULFIDE, TOTAL (MG/L AS H2S)
430854077304601	04-06-94	80	2.4	240	91	460	380	764	0.1
430855077304202	04-06-94	66	1.4	140	88	240	400	513	<0.0
430912077313301	04-06-94	57	<0.25	230	7.0	18000	1500	958	0.1
430912077313302	04-06-94	--	24	73000	690	27000	4800	14600	0.0
430928077313802	04-06-94	100	0.42	240	<1.0	13000	1900	1230	0.1
430928077313803	04-06-94	130	9.3	150	12	24000	1000	1030	0.1
430928077314001	04-06-94	180	13	190	24	33000	2000	1120	3.0
430928077314002	04-06-94	240	4.8	580	4.0	30000	1200	1540	0.1
430932077311501	04-29-94	62	N3.0	230	<1.0	2900	300	378	--
	04-29-94	71	N3.5	270	20	9800	200	622	--

QUANTITY OF PRECIPITATION
425129076082701 AT OTISCO ROAD NEAR TULLY, NY

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LOCATION.--Lat 42°51'29", long 76°08'27", Onondaga County, Hydrologic unit 04140201, in backyard of Stafford residence at 5445 Otisco Road.

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

INSTRUMENTATION.--Tipping bucket raingage with 8.214 in. diameter receiving funnel, mounted on a pedestal in the backyard of residence. Funnel is heated to facilitate melting of snow. Each tip of the raingage bucket is equivalent to .01 in. of precipitation. Tips of the raingage bucket are recorded and accumulated at hourly intervals on a Telog electronic data logger.

REMARKS.--Rain gage is operated in conjunction with streamflow stations 04237944 Onondaga Creek Tributary No. 6, upstream of main depression area, and 04237946 Onondaga Creek Tributary No. 6, downstream of main depression area, for the Tully mudboil project.

PERIOD OF RECORD MAXIMUM.--Maximum daily precipitation 2.07 in. (estimated) on August 18, 1994.

ANNUAL MAXIMUM.--Maximum daily precipitation 2.07 in. (estimated) on August 18.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.33	.01	.00	e.00	.02
2	.38	.28	.08	.00	.00	.13	.00	.00	.00	.48	e.42	.00
3	.00	.58	.06	.00	.00	1.39	.31	.79	.00	.00	e.00	.00
4	.47	.01	.59	1.18	.00	.04	.00	.00	.00	.00	e.06	.00
5	.00	.27	.10	.01	.00	.01	.02	.00	.11	.11	e.00	.00
6	.00	.01	.03	.08	.00	.00	.46	.20	.26	.00	e.06	.00
7	.00	.01	.04	.18	.00	.15	.23	.18	.06	.01	e.00	.07
8	.00	.00	.00	.04	.19	.00	.00	.22	.00	.00	e.00	.06
9	.19	.00	.00	.00	.20	.32	.01	.21	.01	.07	e.00	.16
10	.06	.00	.34	.00	.00	.65	.09	.05	.00	.00	e.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.03	.03	.00	e.00	.00
12	.06	.21	.01	.00	.00	.00	.23	.12	.08	.00	e.00	.00
13	.00	.00	.00	.00	.00	.12	.38	.00	.69	.00	e.38	.01
14	.00	.37	.00	.07	.01	.01	.00	.00	.27	.04	e.73	.14
15	.00	.01	.00	.00	.00	.38	.00	.12	.00	.15	e.00	.00
16	.04	.00	.00	.00	.03	.05	.92	.04	.00	e.02	e.00	.02
17	.52	1.22	.00	.00	.00	.00	.02	.08	.00	e.08	e.28	.23
18	.00	.00	.00	.00	.00	.17	.05	.00	.00	e.04	e2.07	.00
19	.03	.01	.03	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
20	.03	.12	.01	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
21	.17	.00	.76	.00	.01	.31	.00	.00	.11	e.00	e.97	.00
22	.00	.00	.01	.00	.00	.00	.00	.00	.00	e.00	e.00	.04
23	.00	.00	.00	.00	.10	.00	.00	.00	.00	e.04	.00	.61
24	.00	.05	.00	.03	.50	.00	.32	.04	.87	e.00	.00	.00
25	.00	.01	.00	.03	.00	.00	.26	.27	.30	e.00	.26	e.02
26	.00	.00	.00	.07	.07	.00	.01	.43	.00	e.00	.10	e.45
27	.08	.25	.00	.01	.00	.29	.00	.04	.96	e.00	.00	e.64
28	.03	.46	.00	.30	.00	.06	.00	.04	.11	e.16	.33	e.16
29	.00	.00	.00	.04	---	.01	.03	.00	.67	e.00	.01	e.10
30	.18	.07	.00	.00	---	.11	.28	.00	.32	e.80	.00	e.02
31	.28	---	.00	.00	---	.00	---	.72	---	e.00	.13	---
TOTAL	2.52	3.94	2.06	2.04	1.11	4.20	3.62	3.91	4.86	2.00	5.80	2.75

e Estimated

CHEMICAL QUALITY OF PRECIPITATION

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.--June 1980 to current year (monthly composite).

June 1980 to current year (monthly wetfall).

June 1980 to current year (monthly dustfall).

INSTRUMENTATION.-- The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. in diameter that drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene 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.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 301* wet/dry precipitation collector. 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 polyethylene and have a collection diameter of 11.26 in. and a capacity of about 3.4 gallons. The openings of the collectors are approximately 8 ft above ground level.

REMARKS.--Inches of precipitation are obtained from an onsite recording weighing-bucket rain gage.

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY DUSTFALL

DATE	RAIN FALL ACCUM (IN)	CALCIUM	MAGNE-	SODIUM,	POTAS-	CHLO-	SULFATE SOLVED (MG/L (MG/L AS SO4)	NITRO-	NITRO-
		DIS-	SIUM,	DIS-	SIUM,	RIDE,		GEN,	GEN,AM-
		SOLVED	DIS-	SOLVED	DIS-	DIS-		AMMONIA	MONIA +
		(MG/L (MG/L AS CA)	(MG/L (MG/L AS MG)	(MG/L (MG/L AS NA)	(MG/L (MG/L AS K)	(MG/L (MG/L AS CL)		DIS-	ORGANIC
OCT 01-NOV 03	--	1.9	0.51	0.16	1.4	0.51	6.0	0.31	0.96
NOV 03-DEC 02	--	1.9	0.34	0.38	0.05	1.2	5.4	0.69	0.91
DEC 02-JAN 12	--	1.5	0.27	2.0	0.07	5.2	5.0	0.69	0.85
JAN 12-31	--	0.62	0.17	1.7	0.11	2.5	3.0	0.80	1.1
JAN 31-MAR 01	--	1.4	0.39	3.7	0.27	3.9	3.3	0.31	0.98
MAR 01-APR 01	--	2.1	0.62	--	0.15	0.97	6.4	0.35	1.1
APR 01-MAY 02	--	3.5	0.70	0.29	0.27	0.60	8.8	0.48	1.1
MAY 02-JUN 01	--	2.2	<0.20	<0.20	--	0.50	5.9	0.15	0.89
JUN 01-30	--	0.53	0.46	0.10	0.45	1.2	5.5	0.19	0.96
JUN 30-JUL 29	--	1.5	0.32	0.10	0.90	0.70	3.5	0.32	2.4
JUL 29-AUG 31	--	1.1	0.14	0.02	0.14	0.50	2.3	0.05	0.18
AUG 31-OCT 03	--	1.6	0.62	0.09	0.82	1.8	6.7	0.02	0.97

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- ORTHO, DIS- SOLVED (MG/L AS P)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 01-NOV 03	0.78	0.160	0.091	31	5.6	3.6	9	<40
NOV 03-DEC 02	1.6	0.040	0.018	34	4.9	3.4	6	<40
DEC 02-JAN 12	2.0	0.035	0.017	69	4.2	7.5	9	<40
JAN 12-31	1.7	0.020	0.011	60	3.9	7.4	8	60
JAN 31-MAR 01	1.5	0.040	0.019	39	5.4	2.1	13	40
MAR 01-APR 01	1.8	0.025	0.006	41	5.4	2.6	10	40
APR 01-MAY 02	1.1	0.140	0.021	40	5.5	2.8	6	40
MAY 02-JUN 01	0.63	0.195	0.058	27	5.6	3.4	8	40
JUN 01-30	0.85	0.220	0.073	26	4.8	4.8	7	40
JUN 30-JUL 29	0.53	0.380	0.290	21	5.9	3.1	<5	<40
JUL 29-AUG 31	0.24	0.050	<0.002	11	6.1	1.3	<5	<40
AUG 31-OCT 03	<0.05	1.15	0.310	30	6.1	5.6	8	80

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U. S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

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GENESEE RIVER BASIN

430117077350101 AT MENDON PONDS, ROCHESTER, NY--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY WETFALL

DATE	RAIN FALL ACCUM (IN)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 01-NOV 03	--	0.97	0.18	0.16	0.10	1.3	4.0	0.58	0.98
NOV 03-DEC 02	--	0.38	0.10	0.19	<0.05	0.73	2.6	0.30	0.34
DEC 02-JAN 12	--	0.40	0.08	0.82	<0.01	1.1	2.0	0.22	0.44
JAN 12-31	--	0.29	0.07	0.81	0.02	0.90	<2.0	0.09	0.10
JAN 31-MAR 01	--	0.31	0.16	1.3	0.02	1.6	3.7	0.21	0.44
MAR 01-APR 01	--	0.83	0.25	--	0.02	1.4	4.9	0.40	0.59
APR 01-MAY 02	--	1.4	0.24	0.25	0.12	1.8	8.5	1.35	1.5
MAY 02-JUN 01	--	1.3	0.28	<0.20	--	0.90	9.6	1.50	2.0
JUN 01-30	--	0.60	<0.10	0.05	0.12	1.0	7.8	0.72	0.94
JUN 30-JUL 29	--	1.5	0.23	0.06	0.22	0.50	5.7	0.47	0.73
JUL 29-AUG 31	--	0.46	<0.10	<0.01	0.02	2.4	6.1	0.44	0.53
AUG 31-OCT 03	--	0.67	0.12	0.04	0.07	0.40	4.7	0.59	0.72

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 01-NOV 03	0.12	0.030	0.006	36	4.3	6.2	7	<40
NOV 03-DEC 02	0.58	0.010	0.004	21	4.5	4.3	5	40
DEC 02-JAN 12	0.63	0.010	0.006	29	4.4	5.6	8	<40
JAN 12-31	0.40	0.005	0.002	17	5.4	2.2	<5	40
JAN 31-MAR 01	1.1	0.010	0.004	37	4.3	7.1	9	40
MAR 01-APR 01	0.99	0.010	0.003	42	3.8	7.7	6	40
APR 01-MAY 02	1.65	0.065	0.005	62	3.9	11	6	40
MAY 02-JUN 01	1.20	0.075	0.010	58	4.0	8.9	7	40
JUN 01-30	0.77	0.070	0.017	54	3.4	12	7	<40
JUN 30-JUL 29	0.29	0.140	0.066	21	4.8	3.1	5	<40
JUL 29-AUG 31	0.76	0.034	<0.002	51	4.1	8.8	8	<40
AUG 31-OCT 03	0.74	0.020	<0.002	37	4.1	6.3	9	70

CHEMICAL QUALITY OF PRECIPITATION

GENESEE RIVER BASIN

430117077350101 AT MENDON PONDS, ROCHESTER, NY--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY COMPOSITE

DATE	RAIN FALL ACCUM (IN)	CALCIUM	MAGNE-	SODIUM,	POTAS-	CHLO-	SULFATE	NITRO-	NITRO-
		DIS-	SIUM,	DIS-	SIUM,	RIDE,	DIS-	GEN,	GEN,AM-
		SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	AMMONIA	MONIA +
		(MG/L AS CA)	(MG/L AS MG)	(MG/L AS NA)	(MG/L AS K)	(MG/L AS CL)	(MG/L AS SO4)	DIS- (MG/L AS N)	ORGANIC (MG/L AS N)
OCT 01-NOV 03	--	0.84	0.32	0.10	3.4	0.82	7.0	0.02	0.67
NOV 03-DEC 02	--	0.65	0.15	0.11	0.15	0.94	3.6	0.10	0.29
DEC 02-JAN 12	--	0.55	0.10	0.79	0.21	0.90	3.0	0.20	0.49
JAN 12-31	--	0.50	0.06	0.58	0.17	0.70	2.0	0.34	0.53
JAN 31-MAR 01	--	0.48	0.16	1.2	0.25	1.4	2.8	0.46	0.98
MAR 01-APR 01	--	0.91	0.26	--	0.09	1.3	5.5	0.59	1.4
APR 01-MAY 02	--	0.73	0.16	0.09	0.03	0.90	5.1	0.72	0.91
MAY 02-JUN 01	--	0.72	<0.10	<0.20	--	0.60	4.2	0.45	1.3
JUN 01-30	--	1.1	0.23	0.86	1.6	1.2	7.4	0.51	0.80
JUN 30-JUL 29	--	0.90	0.36	0.07	1.6	1.0	9.2	1.10	2.0
JUL 29-AUG 31	--	0.62	<0.10	0.01	0.14	0.50	4.5	0.03	0.50
AUG 31-OCT 03	--	0.76	0.21	0.02	0.79	0.20	3.9	0.03	0.22

DATE	NITRO-	PHOS-	PHOS-	SPE-	PH	ACIDITY (MG/L AS CACO3)	LEAD,	ZINC,
	GEN,	PHOS-	PHORUS	CON-	WATER		TOTAL	TOTAL
	NO2+NO3	PHORUS	ORTHO,	CIFIC	WHOLE		RECOV-	RECOV-
	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	SOLVED (MG/L AS P)	DUCT- ANCE (US/CM)	(STAND- ARD UNITS)		ERABLE (UG/L AS PB)	ERABLE (UG/L AS ZN)
OCT 01-NOV 03	0.06	0.550	0.470	25	5.3	6.0	<5	<40
NOV 03-DEC 02	0.55	0.020	0.010	25	4.5	4.3	<5	40
DEC 02-JAN 12	0.61	0.035	0.019	33	4.4	6.1	7	<40
JAN 12-31	0.54	0.030	0.019	20	4.5	2.5	<5	40
JAN 31-MAR 01	1.00	0.055	0.030	33	4.4	4.6	<5	40
MAR 01-APR 01	1.20	0.060	0.030	48	3.9	8.0	4	40
APR 01-MAY 02	0.99	0.040	0.003	41	4.2	7.5	<5	40
MAY 02-JUN 01	0.64	0.050	0.002	35	4.3	6.7	<5	40
JUN 01-30	0.69	0.150	0.081	51	3.5	15	<5	<40
JUN 30-JUL 29	0.32	0.460	0.340	34	5.3	7.3	7	60
JUL 29-AUG 31	0.32	0.100	<0.002	41	4.2	13	26	<40
AUG 31-OCT 03	0.11	0.010	<0.002	31	4.3	8.8	6	<40

CHEMICAL QUALITY OF PRECIPITATION

317

IRONDEQUOIT CREEK BASIN

431021077315902 AT EMPIRE BOULEVARD, ROCHESTER, NY

LOCATION.--Lat 43°10'21", long 77°31'59", Monroe County, Hydrologic Unit 04140101, in the Irondequoit wetlands 1,350 ft south of New York State Highway 404.

PERIOD OF RECORD.--October 1992 to current year (monthly wetfall).
October 1992 to current year (monthly wetfall).

INSTRUMENTATION.--The wetfall and dustfall sample collector is an Aerochem Metrics Model 301* wet/dry precipitation collector. 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 polyethylene and have a collection diameter of 11.26 in. 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 Health Laboratory at Rochester, NY.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY DUSTFALL

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 01-NOV 03	0.76	0.21	<0.02	<0.02	0.20	2.0	0.18	0.38
NOV 03-DEC 02	0.56	0.24	0.46	<0.05	0.94	3.6	0.31	0.31
DEC 02-JAN 12	0.74	0.20	2.0	0.03	4.8	4.0	0.53	0.53
JAN 12-31	0.41	0.13	2.0	0.03	3.1	4.0	0.68	0.64
JAN 31-MAR 01	1.3	0.41	6.0	0.06	8.0	6.0	0.48	0.65
MAR 01-APR 01	1.4	0.46	--	0.04	1.5	8.0	0.62	0.59
APR 01-MAY 02	0.87	0.14	0.09	0.03	0.30	<2.0	0.12	0.30
MAY 02-JUN 01	2.9	0.90	<0.20	--	0.80	18	2.10	3.9
JUN 01-30	0.66	0.73	1.1	1.1	1.9	8.1	0.33	1.7
JUN 30-JUL 29	1.4	0.29	0.10	0.64	0.50	3.4	0.19	0.84
JUL 29-AUG 31	1.9	0.66	0.25	0.80	0.50	14	1.50	2.5
AUG 31-OCT 03	2.0	0.69	0.30	0.24	0.80	8.1	0.79	1.4

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHODIS- SOLVED (MG/L AS P)	SPE- CIFIC DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 01-NOV 03	0.33	0.040	0.013	11	5.8	2.2	9	<40
NOV 03-DEC 02	0.69	0.030	0.013	28	4.6	4.7	5	40
DEC 02-JAN 12	1.20	0.030	0.022	65	4.4	6.6	13	<40
JAN 12-31	1.40	0.020	0.012	57	4.3	4.6	8	40
JAN 31-MAR 01	1.80	0.035	0.017	80	4.0	6.9	12	40
MAR 01-APR 01	1.40	0.025	0.014	63	4.0	8.7	9	40
APR 01-MAY 02	0.37	0.035	0.008	10	6.1	1.5	<5	40
MAY 02-JUN 01	1.60	0.353	0.084	87	4.0	11	19	40
JUN 01-30	1.00	0.460	0.255	39	5.4	3.6	7	60
JUN 30-JUL 29	0.45	0.290	0.210	20	5.8	3.6	7	60
JUL 29-AUG 31	1.00	0.450	0.305	72	3.9	9.8	6	40
AUG 31-OCT 03	1.00	0.140	0.038	41	4.8	5.1	11	<40

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U. S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

IRONDEQUOIT CREEK BASIN

431021077315902 AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY WETFALL

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 01-NOV 03	0.73	0.21	<0.02	0.05	0.41	4.0	0.45	0.61
NOV 03-DEC 02	0.75	0.20	0.31	0.06	0.97	5.0	0.90	1.0
DEC 02-JAN 12	0.48	0.12	1.5	0.01	2.2	2.0	0.31	0.36
JAN 12-31	0.08	0.03	0.11	<0.01	0.20	<2.0	0.11	0.14
JAN 31-MAR 01	0.40	0.05	1.8	0.01	2.6	<2.0	0.05	0.19
MAR 01-APR 01	0.56	0.09	--	<0.01	0.58	<2.0	0.07	0.23
APR 01-MAY 02	3.3	0.80	0.38	0.20	0.99	15	2.10	3.3
MAY 02-JUN 01	1.2	0.33	<0.20	--	0.80	6.5	0.88	1.3
JUN 01-30	0.30	<0.10	0.02	0.06	0.80	5.2	0.44	0.50
JUN 30-JUL 29	1.3	0.29	0.06	0.18	0.80	13	1.40	1.6
JUL 29-AUG 31	0.58	0.12	0.05	0.08	0.40	9.3	0.71	0.87
AUG 31-OCT 03	1.2	0.28	0.08	0.16	0.60	9.7	1.00	1.1

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 01-NOV 03	0.55	0.025	0.011	32	4.4	5.1	6	<40
NOV 03-DEC 02	1.30	0.020	0.006	41	4.4	6.0	<5	<40
DEC 02-JAN 12	0.72	0.010	0.009	42	4.9	5.7	8	<40
JAN 12-31	0.22	0.005	0.004	8	4.9	1.9	<5	--
JAN 31-MAR 01	0.31	0.005	0.004	13	6.0	1.2	6	40
MAR 01-APR 01	0.29	0.010	0.003	11	6.3	1.5	4	40
APR 01-MAY 02	2.30	0.140	0.038	89	3.9	10	9	40
MAY 02-JUN 01	0.68	0.095	0.013	37	4.2	5.0	5	40
JUN 01-30	0.58	0.025	0.002	44	3.6	9.4	6	<40
JUN 30-JUL 29	1.40	0.050	0.011	97	3.3	16	6	40
JUL 29-AUG 31	0.98	0.040	0.003	81	3.5	12	<5	<40
AUG 31-OCT 03	1.30	0.045	0.002	79	3.9	10	9	<40

CHEMICAL QUALITY OF PRECIPITATION

319

LAKE ONTARIO BASIN
431248077564601 AT SUNY BROCKPORT, NY

LOCATION.--Lat 43°12'48", long 77°56'46", Monroe County, Hydrologic Unit 04130001, at SUNY Brockport on roof of Lennon Hall, on Monroe Ave., 0.35 mi west of New York State Highway 19 and 31.

PERIOD OF RECORD.-- July 1989 to current year (monthly dustfall).

July 1989 to current year (monthly wetfall).

July 1989 to current year (monthly composite).

INSTRUMENTATION.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. in diameter that drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene 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 wetfall and dustfall sample collector is an Aerochem Metrics Model 301* wet/dry precipitation collector. 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 polyethylene and have a collection diameter of 11.26 in. and a capacity of about 3.4 gallons.

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

REMARKS.--Analytical results of samples from two sample collectors at this site (SUNY Brockport East and SUNY Brockport West) were combined to produce a complete record of chemical quality of precipitation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY DUSTFALL

DATE	RAIN FALL ACCUM (IN)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 01-NOV 03	--	0.75	0.48	0.39	0.24	0.66	6.0	0.30	1.2
NOV 03-DEC 02	--	2.0	0.54	0.46	0.05	1.2	6.1	0.51	0.76
DEC 02-JAN 12	--	2.9	0.83	2.4	0.11	5.1	8.0	1.20	3.4
JAN 13-FEB 01	--	0.90	0.22	1.6	0.04	2.5	5.0	0.83	1.1
FEB 01-MAR 01	--	1.8	0.48	3.0	0.05	3.6	4.2	0.34	0.71
MAR 01-APR 01	--	<5.0	0.56	--	0.08	3.1	7.2	0.45	0.76
APR 01-MAY 02	--	--	0.92	0.59	0.47	1.4	16	1.80	2.0
MAY 02-JUN 01	--	3.7	0.81	<0.20	--	0.80	8.9	0.33	1.1
JUN 01-30	--	0.79	0.68	0.09	0.48	0.80	6.6	0.50	1.2
JUN 30-JUL 29	--	1.6	0.30	0.09	0.21	0.70	3.5	0.08	0.60
JUL 29-AUG 31	--	3.1	0.79	0.11	0.17	0.70	7.5	0.22	0.84
AUG 31-OCT 03	--	3.3	0.66	0.11	0.17	0.50	5.7	0.36	0.72

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 01-NOV 03	1.40	0.100	0.018	39	6.6	2.2	9	<40
NOV 03-DEC 02	1.40	0.035	0.003	32	5.9	2.0	<5	50
DEC 02-JAN 12	2.10	0.065	0.006	69	4.9	6.6	19	80
JAN 13-FEB 01	1.70	0.025	0.007	59	4.1	6.4	14	50
FEB 01-MAR 01	1.30	0.065	0.006	40	6.2	1.7	18	50
MAR 01-APR 01	1.80	0.050	0.003	51	6.4	2.8	11	50
APR 01-MAY 02	2.30	0.240	0.046	76	6.4	3.8	12	130
MAY 02-JUN 01	1.90	0.210	0.035	40	6.2	2.0	<5	40
JUN 01-30	1.20	0.230	0.106	36	5.9	3.8	8	40
JUN 30-JUL 29	0.54	0.110	0.035	18	5.9	1.7	6	50
JUL 29-AUG 31	1.10	0.100	0.008	37	5.2	2.9	<5	60
AUG 31-OCT 03	1.20	0.080	0.003	34	6.6	2.1	10	<40

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U. S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN
431248077564601 AT SUNY BROCKPORT, NY-Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY WETFALL

DATE	RAIN FALL ACCUM (IN)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 01-NOV 03	--	3.4	0.19	0.05	0.06	0.41	3.0	0.28	0.47
NOV 03-DEC 02	--	0.34	0.10	0.10	<0.05	0.52	2.8	0.26	0.27
DEC 02-JAN 12	--	1.6	0.40	2.0	0.06	2.6	6.0	1.10	0.0
JAN 13-FEB 01	--	0.34	0.04	0.39	0.01	0.20	2.0	0.17	0.40
FEB 01-MAR 01	--	0.44	0.09	0.32	0.02	0.65	2.0	0.20	0.36
MAR 01-APR 01	--	0.21	0.05	--	0.01	1.2	2.6	0.32	0.58
APR 01-MAY 02	--	--	1.1	0.30	0.27	1.4	13	1.70	1.9
MAY 02-JUN 01	--	3.9	1.0	<0.20	--	1.1	9.9	0.19	0.73
JUN 01-30	--	1.4	0.40	0.04	0.08	0.80	6.0	0.41	1.0
JUN 30-JUL 29	--	1.5	0.39	0.11	0.24	0.70	7.9	0.89	0.92
JUL 29-AUG 31	--	0.49	<0.10	0.01	0.08	0.40	5.5	0.55	0.83
AUG 31-OCT 03	--	0.48	0.11	0.02	0.04	0.40	2.6	0.26	0.44

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 01-NOV 03	0.40	0.015	0.003	18	4.9	3.3	5	<40
NOV 03-DEC 02	0.59	0.005	0.003	21	4.4	4.0	<5	<40
DEC 02-JAN 12	1.30	0.030	0.011	49	4.6	6.3	14	40
JAN 13-FEB 01	0.42	0.005	<0.002	20	4.5	3.8	18	40
FEB 01-MAR 01	0.76	0.010	<0.002	28	4.3	5.2	8	40
MAR 01-APR 01	0.60	0.005	0.002	29	4.2	5.3	<5	40
APR 01-MAY 02	1.90	0.350	0.033	60	6.0	4.3	11	50
MAY 02-JUN 01	0.82	0.200	0.017	42	6.2	3.4	7	40
JUN 01-30	0.73	0.055	<0.002	35	3.8	5.4	<5	<40
JUN 30-JUL 29	1.00	0.035	0.005	48	3.7	7.1	<5	40
JUL 29-AUG 31	0.71	0.020	0.002	51	3.9	7.6	6	40
AUG 31-OCT 03	0.34	0.010	<0.002	18	4.8	2.7	4	<40

CHEMICAL QUALITY OF PRECIPITATION

321

LAKE ONTARIO BASIN
431248077564601 SUNY AT BROCKPORT, NY-ContinuedCHEMICAL ANALYSES, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MONTHLY COMPOSITE

DATE	RAIN FALL ACCUM (IN)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
DEC 02-JAN 12	--	0.20	0.04	0.12	<0.01	0.30	2.0	0.30	1.7
JAN 13-FEB 01	--	0.42	0.10	0.90	0.02	1.3	2.0	0.46	0.43
FEB 01-MAR 01	--	2.6	0.65	3.1	0.06	4.1	5.4	0.50	0.92
MAR 01-APR 01	--	2.9	0.85	--	0.04	1.7	7.2	0.63	0.79
APR 01-MAY 02	--	--	1.3	0.46	0.36	1.5	15	1.70	1.9
MAY 02-JUN 01	--	4.4	1.2	<0.20	--	0.90	13	1.25	2.3
JUN 01-30	--	1.0	0.60	0.05	0.13	0.80	7.4	0.51	0.65
JUN 30-JUL 29	--	1.2	1.0	0.43	0.52	0.80	11	0.19	1.1
JUL 29-AUG 31	--	1.4	0.34	0.05	0.08	0.40	9.4	0.78	1.0
AUG 31-OCT 03	--	1.4	0.39	0.06	0.07	0.40	4.1	0.34	0.41

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOSOLVED (MG/L AS P)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS CACO3)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
DEC 02-JAN 12	0.41	0.010	<0.002	--	4.4	5.2	12	<40
JAN 13-FEB 01	0.87	0.010	0.003	34	4.2	5.1	6	--
FEB 01-MAR 01	1.80	0.065	0.019	51	4.9	3.3	23	70
MAR 01-APR 01	1.50	0.025	0.003	44	5.7	4.1	10	40
APR 01-MAY 02	2.30	0.290	0.057	72	6.3	4.7	30	40
MAY 02-JUN 01	1.75	0.330	0.011	56	5.9	4.0	<5	40
JUN 01-30	0.94	0.060	0.009	36	4.0	5.7	7	40
JUN 30-JUL 29	1.30	0.130	0.017	44	5.8	1.9	10	40
JUL 29-AUG 31	1.20	0.055	<0.002	69	3.8	10	9	110
AUG 31-OCT 03	0.66	0.030	<0.002	20	5.5	2.7	6	<40

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1 2.54×10^{-2}	millimeter meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3 4.047×10^{-1}	square meter square hectometer
square mile (mi ²)	4.047×10^{-3} 2.590×10^0	square kilometer square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0 3.785×10^0 3.785×10^{-3}	liter cubic decimeter cubic meter
million gallons (Mgal)	3.785×10^3 3.785×10^{-3}	cubic meter cubic hectometer
cubic foot (ft ³)	2.832×10^1 2.832×10^{-2}	cubic decimeter cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3 2.447×10^{-3}	cubic meter cubic hectometer
acre-foot (acre-ft)	1.233×10^3 1.233×10^{-3} 1.233×10^{-6}	cubic meter cubic hectometer cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1 2.832×10^1 2.832×10^{-2}	liter per second cubic decimeter per second cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2} 6.309×10^{-2} 6.309×10^{-5}	liter per second cubic decimeter per second cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1 4.381×10^{-2}	cubic decimeter per second cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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