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Water Resources Data New York Water Year 2004

Volume 3
Western New York

Water-Data Report NY-04-3

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

Calendar for Water Year 2004

2003

October

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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November

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December

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2004

January

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February

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March

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April

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May

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30	31					

June

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July

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25	26	27	28	29	30	31

August

S	M	T	W	T	F	S
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September

S	M	T	W	T	F	S
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Water Resources Data New York Water Year 2004

Volume 3. Western New York

By J.F. Hornlein, C.O. Szabo, H.J. Zajd, and M.J. Welsh

Water-Data Report NY-04-3

In cooperation with the State of New York and other agencies

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U.S. Geological Survey

U.S. Department of the Interior
Gale A. Norton, Secretary

U.S. Geological Survey
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PREFACE

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

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

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

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Water resources data for the 2004 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 71 gaging stations; stage only at 15 gaging stations; stage and contents at 6 gaging stations; water quality at 12 gaging stations, 29 wells, and 22 partial record stations; water levels at 29 observation wells; daily precipation totals at 1 site, and chemical quality of precipitation at 1 site. Also included are data for 38 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, Sediment, Water analysis, Water temperature, Water levels, Water wells, Data collection sites, Precipitation.

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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, (n) nutrient, (p) pesticide, (pr) precipitation, (t) water temperature, (s) sediment, (e) elevation, gage heights, or contents]

NORTH ATLANTIC SLOPE BASINS	Station number	Page
SUSQUEHANNA RIVER BASIN		
Susquehanna River:		
Ouleout Creek at East Sidney (d)	01500000	44
Unadilla River:		
Unadilla River at Rockdale (d)	01502500	46
Susquehanna River at Conklin (d)	01503000	48
Chenango River at Sherburne (d)	01505000	50
Tioughnioga River at Cortland (d)	01509000	52
Otselic River at Cincinnatus (d)	01510000	54
Chenango River near Chenango Forks (d)	01512500	56
Susquehanna River near Waverly (d)	01515000	58
Canisteo River at Hornell (d)	01521500	60
Canacadea Creek near Hornell (d)	01523500	62
Canisteo River below Canacadea Creek, at Hornell (d)	01524500	64
Tuscarora Creek above South Addison (d)	01525981	66
Tioga River near Erwins (d)	01526500	68
Cohocton River:		70
Cohocton River at Avoca (d)	01527500	70
Cohocton River at Campbell (d)	01529500	72
Chemung River at Corning (d)	01529950	74
Newtown Creek at Elmira (d)	01530500	76
Chemung River at Chemung (d)	01531000	78
Lakes and reservoirs in Susquehanna River basin (e)		80
* * * * * * * *		
OHIO RIVER BASIN		
ALLEGHENY RIVER BASIN		
Allegheny River at Salamanca (d)	03011020	83
Cassadaga Creek		
Chautauqua Lake (head of Chadakoin River) at Bemus Point (e)	03013946	85
Chadakoin River at Falconer (d)	03014500	86
Lakes in Allegheny River basin		88
ST. LAWRENCE RIVER BASIN		
Lake Erie:		
STREAMS TRIBUTARY TO LAKE ERIE		
Cattaraugus Creek at Gowanda (d)	04213500	89
Buffalo Creek (head of Buffalo River) at Gardenville (d)	04214500	90
Cayuga Creek near Lancaster (d)	04215000	93
Buffalo River:		
Cazenovia Creek at Ebenezer (d)	04215500	95
Lake Erie at Buffalo (e)	04215900	97
Niagara River at Buffalo (d)	04216000	98
Black Rock Canal at Black Rock Lock, Buffalo (e)	04216218	100
Niagara River at Black Rock Lock, Buffalo (e)	04216220	101
STREAMS TRIBUTARY TO NIAGARA RIVER		
Tonawanda Creek at Attica (d)	04216418	102
Tonawanda Creek at Batavia (d)	04217000	104
Tonawanda Creek at Rapids (d)	04218000	106
Ellicott Creek below Williamsville (d)	04218518	108
Erie Barge Canal at Lock 30, Macedon (d)	04219000	110
ST. LAWRENCE RIVER MAIN STEM		
Lake Ontario:		
STREAMS TRIBUTARY TO LAKE ONTARIO		
Northrup Creek at North Greece (d,c,n,t)	0422026250	111
Genesee River at Wellsville (d)	04221000	116
Genesee River at Portageville (d)	04223000	118

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

ST. LAWRENCE RIVER BASIN--Continued
ST. LAWRENCE RIVER MAIN STEM--Continued
Lake Ontario:--Continued
STREAMS TRIBUTARY TO LAKE ONTARIO--Contined
Mount Morris Lake near Mount Morris (e) 04224000 120
Canaseraga Creek at Dansville (d) 04224775 121
Canaseraga Creek at Shakers Crossing (d) 04227000 123
Genesee River near Mount Morris (d) 04227500 125
Conesus Lake near Lakeville (e) 04227980 127
Conesus Creek near Lakeville (d) 04227995 128
Genesee River at Avon (d,p,c) 04228500 130
Honeoye Creek at Honeoye Falls (d,n,c) 04229500 132
Oatka Creek at Warsaw (d) 04230380 135
Oatka Creek at Garbutt (d,n,c) 04230500 137
Genesee River at Ballantyne Bridge near Mortimer (e) 04230650 140
Black Creek at Churchville (d,n,c) 04231000 141
Genesee River at Rochester (d) 04232000 144
Irondequoit Creek at Railroad Mills near Fishers (d,c,n,t) 04232034 146
Allen Creek near Rochester (d) 04232050 151
Irondequoit Creek above Blossom Road (d,c,n,t) 0423205010 155
Irondequoit Creek at Empire Boulevard, Rochester (e,c,n,t) 0423205025 158
Seneca River (head of Oswego River):
Seneca Lake at Watkins Glen (e) 04232400 160
Keuka Lake Outlet at Dresden (d) 04232482 161
Cayuga Inlet near Ithaca (d) 04233000 163
Sixmile Creek at Brooktondale (d) 04233286 165
Sixmile Creek at Bethel Grove (d,s) 04233300 172
Cayuga Inlet (Cayuga Lake) at Ithaca (e) 04233500 176
Virgil Creek at State Highway 13 at Dryden (d) 0423368620 177
Fall Creek near Ithaca (d) 04234000 181
Clyde River:
Great Brook below Victor (d) 04234232 183
Canandaigua Lake at Canandaigua (e) 04234500 185
Canandaigua Outlet at Chapin (d) 04235000 186
Flint Creek at Phelps (d) 04235250 188
Owasco Outlet at Genesee Street, Auburn (d) 04235440 191
Seneca River near Port Byron (d) 04235600 194
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Seneca River at Baldwinsville (d) 04237500 197
Onondaga Creek (head of Onondaga Lake Outlet): 199
Tributary #6 below main mudboil depression area (d,s) 04237946 199
Onondaga Creek near Cardiff (d) 04237962 202
Onondaga Creek at Dorwin Avenue, Syracuse (d) 04239000 204
Onondaga Creek at Spencer Street, Syracuse (d) 04240010 206
Onondaga Lake:
Harbor Brook at Syracuse (d) 04240100 208
Harbor Brook at Hiawatha Boulevard, Syracuse (d) 04240105 210
Ley Creek at Park Street, Syracuse (d) 04240120 212
Otisco Lake:
Ninemile Creek near Marietta (d) 04240180 214
Ninemile Creek at Lakeland (d) 04240300 216
Onondaga Lake at Liverpool (e) 04240495 218
Oneida River (Oneida Lake):
Oneida Creek at Oneida (d) 04243500 219
Oswego River:
Meadow Brook at Hurlburt Road, Syracuse (d) 04245236 221
Oneida Lake at Brewerton (e) 04246000 223
Oneida River near Euclid (d) 04247000 224
Oswego River at Lock 7, Oswego (d) 04249000 226
Lakes and reservoirs in streams tributary to Lake Ontario (d,e) 228

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

NORTH ATLANTIC SLOPE BASINS	Station number	Page
SUSQUEHANNA RIVER BASIN		
Susquehanna River:		
Little Elk Creek at Westford	01497805	229
Susquehanna River at Unadilla	01500500	229
Susquehanna River at Bainbridge	01502632	229
Susquehanna River at Windsor	01502731	229
Chenango River at Eaton	01503980	230
Chenango River at Greene	01507000	230
Tioughnioga River at Lisle	01509520	230
Otselic River:		
Merrill Creek Tributary near Texas Valley	01510610	230
Tioughnioga River at Itaska	01511500	230
Susquehanna River at Vestal	01513500	231
Susquehanna River at Owego	01513831	231
Owego Creek near Owego	01514000	231
Catatonk Creek near Owego	01514801	231
Chemung River:		
Tioga River at Lindley	01520500	231
Canisteo River:		
Big Creek near Howard	01521596	232
Canadadea Creek at Alfred	01522075	232
Canisteo River at West Cameron	01525500	232
Cohocton River at Bath	01528320	232
Cuthrie Run near Big Flats	01530301	232
Chemung River at Elmira	01530332	233
* * * * * * * *		
OHIO RIVER BASIN		
ALLEGHENY RIVER BASIN		
Allegheny River (head of Ohio River):		
Olean Creek:		
Ischua Creek:		
Ischua Creek tributary near Machias	03010734	233
Cassadaga Creek:		
Ball Creek at Stow	03013800	233
* * * * * * * *		
ST. LAWRENCE RIVER BASIN		
Lake Erie:		
STREAMS TRIBUTARY TO LAKE ERIE		
Canadaway Creek at Fredonia	04213376	233
STREAMS TRIBUTARY TO NIAGARA RIVER		
Niagara River:		
Tonawanda Creek:		
Little Tonawanda Creek at Linden	04216500	233

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

	Station number	Page
ST. LAWRENCE RIVER MAIN STEM		
Lake Ontario:		
STREAMS TRIBUTARY TO LAKE ONTARIO		
Eighteenmile Creek at Newfane	04219767	234
Genesee River:		
Canaseraga Creek:		
Stony Brook tributary at South Dansville	04224807	234
Bear Creek at Ontario	042320578	234
Seneca River (head of Oswego River):		
Catharine Creek at Montour Falls	04232200	234
Seneca Lake:		
Kendig Creek near MacDougall	04232630	234
Cayuga Lake:		
Cayuga Inlet at Ithaca	04233255	235
Coy Glen Creek at Ithaca	04233258	235
Trumansburg Creek near Trumansburg	0423403092	235
Clyde River:		
Mud Creek:		
Schaeffer Creek near Canandaigua	04234138	235
Mud Creek at East Victor	04234200	235
Canandaigua Outlet:		
Canandaigua Outlet tributary near Alloway	04235255	236
Oneida River (Oneida Lake):		
Oneida Creek		
Chittenango Creek:		
Limestone Creek:		
Butternut Creek near Jamesville	04245200	236
Scriba Creek near Constantia	04245840	236
Catfish Creek at New Haven	04249050	236

* * * * * * * *

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

GROUND-WATER LEVELS

	Station number	Page
Allegany County		
Local well number Ag 261	421512077472801	266
Local well number Ag 262	421544078021301	268
Broome County		
Local well number Bm 128	421138075511301	270
Local well number Bm 129	421157075535401	272
Cattaraugus County		
Local well number Ct 121	420530078445201	274
Cayuga County		
Local well number Cy 7	424158076251901	276
Chautauqua County		
Local well number Cu 10	420815079121401	278
Chemung County		
Local well number Cm 622	420828076484601	280
Chenango County		
Local well number Cn 12	421556075281602	282
Cortland County		
Local well number C 998	424452076081902	284
Erie County		
Local well number E 1196	425704078360601	286
Genesee County		
Local well number Gs 190	425913078085501	288
Livingston County		
Local well number Lv 330	425833077503901	290
Madison County		
Local well number M 178	430056075354102	292
Monroe County		
Local well number Mo 11	430252077283402	294
Niagara County		
Local well number Ni 869	430739078502701	296
Onondaga County		
Local well number Od 1833	430243076180402	298
Ontario County		
Local well number Ot 900	425840077133901	300
Local well number Ot 1133	425803077151201	301
Orleans County		
Local well number Ol 20	431045078160401	303
Oswego County		
Local well number Ow 5013	432148076225101	305
Local well number Ow 5014	432148076225102	307
Otsego County		
Local well number Og 23	424136075025101	309
Schuyler County		
Local well number Sy 706	422710076462901	311
Steuben County		
Local well number Sb 472	422445077203301	313
Tioga County		
Local well number Ti 891	421213076313301	315
Wayne County		
Local well number Wn 592	430403077190201	317
Wyoming County		
Local well number Wo4	423743078070802	319
Yates County		
Local well number Ya 180	423143076582601	321

* * * * * * * *

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Quantity of precipitation at miscellaneous sites 338
Quality of precipitation at miscellaneous sites 339

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

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

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

Discontinued surface-water discharge or stage-only stations

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
SUSQUEHANNA RIVER BASIN			
Canadarago Lake at Schuyler Lake, NY (e)	01496450	65.0	1969-79
Oaks Creek at Index, NY (d)	01496500	102.0	1930-32, 1937-95
Cherry Valley Creek at Westville, NY (d)	01497000	81.4	1930-31, 1938-41
Susquehanna River at Colliersville, NY (d)	01497500	349.0	1907-09, 1924-68
Charlotte Creek at Davenport Center, NY (d)	01498000	164.0	1938-56
Charlotte Creek at West Davenport, NY (d)	01498500	167.0	1938-76
Otego Creek near Oneonta, NY (d)	01499000	108.0	1940-68
Flax Island Creek near Otego, NY (d)	01499050	4.22	1966-68
East Branch Handsome Brook at Franklin, NY (d)	01499470	9.12	1966-68
Susquehanna River at Unadilla, NY (d)	01500500 *	982.0	1938-95
Unadilla River near New Berlin, NY (d)	01501000	199.0	1924-68
Mill Brook at New Berlin, NY (d)	01501015	4.64	1974-81‡
Sage Brook near South New Berlin, NY (d)	01501500	#0.61	1932-68
Butternut Creek at Morris, NY (d)	01502000	59.7	1938-95
Chenango River at Sherburne, NY (d)	01505000 *	263.0	1938-95
Canasawacta Creek near South Plymouth, NY (d)	01505500	57.9	1945-75
Chenango River at Greene, NY (d)	01507000 *	593.0	1937-70
Red Brook at Smithville Flats, NY (d)	01507470	7.06	1966-68
Genegantslet Creek at Smithville Flats, NY (d)	01507500	82.3	1938–70
Muller Gulf Creek near Cuyler, NY (d)	01507975	2.67	1966-68
Shackham Brook near Truxton, NY (d)	01508000	#3.16	1932-68
Albright Creek at East Homer, NY (d)	01508500	6.81	1938-68
West Branch Tioughnioga River at Homer, NY (d)	01508803	71.5	1967-68, 1973-86
Otter Creek at mouth at Cortland, NY (d)	01508962	14.3	1976-77
Gridley Creek above East Virgil, NY (d)	01509150	10.4	1974-81
Dudley Creek at Lisle, NY (d)	01509500	30.0	1938-40
Otselic River near Upper Lisle, NY (d)	01510500	217.0	1937-69
Tioughnioga River at Itaska, NY (d)	01511500 *	730.0	1930-67
Susquehanna River at Vestal, NY (d)	01513500 *	3,941.0	1937-67
East Branch Nanticoke Creek above Glen Aubrey, NY (d)	01513719	12.8	1976-78
East Branch Nanticoke Creek at Glen Aubrey, NY (d)	01513720	15.4	1976
Nanticoke Creek at Union Center, NY (d)	01513790	90.7	1975-78
Pumpelly Creek at Owego, NY (d)	01513840	8.59	1966-68
Owego Creek near Owego, NY (d)	01514000 *	185.0	1930-79
Dean Creek at Spencer, NY (d)	01514500	8.03	1954-60
Cayuta Creek near Alpine, NY (d)	01515500	17.6	1930-31
Tioga River at Lindley, NY (d)	01520500 *	771.0	1930-95
Canisteo River at Hornell, NY (d)	01522000	93.7	1938-43

‡ No winter record.
# Corrected.

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			
Karr Valley Creek at Almond, NY (d)	01522500	27.4	1937-68, 1973-86
Canacadea Creek at Hornell, NY (d)	01524000	58.5	1925-29, 1938-40, 1942-44
Bennett Creek at Canisteo, NY (d)	01525000	95.3	1938-47
Canisteo River at West Cameron, NY (d)	01525500 *	340.0	1930-31, 1937-70
Tuscarora Creek Tributary near Woodhull, NY (d)	01525750	9.43	1966-68
Tuscarora Creek near South Addison, NY (d)	01526000	114.0	1937-70
Mulholland Creek near Erwins, NY (d)	01526495	5.06	1966-68
Kirkwood Creek near Atlanta, NY (d)	01526980	4.65	1966-68
Cohocton River at Cohocton, NY (d)	01527000	52.2	1951-82
Switzer Creek near Cohocton, NY (d)	01527050	3.45	1979-81
Fivemile Creek near Kanona, NY (d)	01528000	66.8	1937-95
Diversion from Waneta Lake to Keuka Lake at Keuka, NY (d)	01528700	45.5	1967-96
Mud Creek near Savona, NY (d)	01529000	76.6	1918-20, 1937-82
Newtown Creek at Breesport, NY (d)	01530380	20.6	1975-79‡
ALLEGHENY RIVER BASIN			
Olean Creek near Olean, NY (d)	03010800	198.0	1958-68‡,
Great Valley Creek near Salamanca, NY (d)	03011000	137.0	1951-68
Quaker Run near Quaker Bridge, NY (d)	03011550	28.5	1963-64‡
Conewango Creek below South Dayton, NY (d)	03012834	63.3	1975-78‡
Conewango Creek at Waterboro, NY (d)	03013000	290.0	1938-93
Ball Creek at Stow, NY (d)	03013800 *	9.06	1974
Chautauqua Lake at Celeron, NY (e)	03013980	189.0	1973
Chautauqua Lake near Mayville, NY (e)	03013990	189.0	1950-77
STREAMS TRIBUTARY TO LAKE ERIE			
Cattaraugus Creek near Arcade, NY (d)	04213410	79.0	1963-68
Franks Creek near West Valley, NY (d)	04213440	.28	1976-80
Franks Creek Tributary No. 4 near West Valley, NY (d)	04213441	.12	1976
Franks Creek Trib. No. 2 to Tributary No. 4 near West Valley, NY (d)	04213442	.002	1976-77
Franks Creek Trib. No. 3 to Tributary No. 4 near West Valley, NY (d)	04213443	.004	1976-77
Buttermilk Creek near Springville, NY (d)	04213450	30.0	1962-68
South Branch Cattaraugus Creek near Cattaraugus, NY (d)	04213492	70.4	1969, 1980-82
Cattaraugus Creek at Versailles, NY (d)	04214000	466.0	1915-23
Cattaraugus Creek below Irving, NY (e)	0421402001	554	1985-93
Eighteenmile Creek at North Boston, NY (d)	04214200	37.2	1963-68
Buffalo Creek near Wales Hollow, NY (d)	04214400	76.9	1963-68
ST. LAWRENCE MAINSTEM			
Black Rock Canal at Porter Avenue, Buffalo, NY (e)	04216052	263,700.0	1984-94
Niagara Riverl at Anderson Park, Buffalo, NY (e)	04216060	263,700.0	1985-2002

‡ 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 NIAGARA RIVER			
Scajaquada Creek at Buffalo, NY (d)	04216200	15.4	1957-94
Little Tonawanda Creek at Linden, NY (d)	04216500 *	22.1	1912-19, 1920-68, 1977-92
Tonawanda Creek near Alabama, NY (d)	04217500	231.0	1956-89
Murder Creek near Akron, NY (d)	04217750	58.8	1983-99
Black Creek near Swormville, NY (d)	04218190	12.9	1978-80
Ellicott Creek at Milgrove, NY (d)	04218450	40.8	1963-68
Ellicott Creek at Williamsville, NY (d)	04218500	76.2	1956-73
Donner Brook near Lockport, NY (d)	04218592	3.84	1978-79‡
STREAMS TRIBUTARY TO LAKE ONTARIO			
Oak Orchard Creek near Elba, NY (d)	04219930	21.9	1974-79‡
Manning Muckland Creek near Barre Center, NY (d)	04219940	5.80	1974-79‡
West Creek near Hilton, NY (d)	04220250 *	31.0	1957-64
Dyke Creek near Andover, NY (d)	04220470	38.0	1964-68
Dyke Creek at Wellsville, NY (d)	04220500	72.1	1955-60
Genesee River at Scio, NY (d)	04221500	308.0	1916-72
Van Campen Creek at Friendship, NY (d)	04221600	45.9	1964-68
Angelica Creek at Transit Bridge, NY (d)	04221720	86.7	1964-68
Genesee River at Belfast, NY (d)	04221820	644.0	1964-67
Caneadea Creek at Caneadea, NY (d)	04222000	62.0	1949-68
Lost Nation Brook near Centerville, NY (d)	04222500	1.21	1934-35
East Koy Creek at East Koy, NY (d)	04222900	46.5	1964-68
Genesee River at St. Helena, NY (d)	04223500	1,019.0	1909-50
Canaseraga Creek near Canaseraga, NY (d)	04224650	58.4	1964-68
Canaseraga Creek near Dansville, NY (d)	04225000	152.0	1919-68 , 1970-77
Canaseraga Creek at Cumminsville, NY (d)	04225005	155.0	1910-13, 1915-17, 1918-19
Canaseraga Creek at Groveland, NY (d)	04225500	180.0	1915-20 , 1956-64
Keshequa Creek at Craig Colony, Sonyea, NY (d)	04226000	68.3	1917-32, 1975-78
Keshequa Creek near Sonyea, NY (d)	04226500	68.4	1915-17
Keshequa Creek at mouth at Sonyea, NY (d)	0422660005	69.0	1911-14
Conesus Creek near Lakeville, NY (d)	04228000	72.0	1920-34
Honeoye Lake near Honeoye, NY (e)	04228845	41.0	1962-63, 1965-95
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
East Branch Allen Creek at Pittsford, NY (d)	0423204920	9.5	1990-2003
Irondequoit Creek at Wetland Narrows at Rochester, NY (d)	0423205023	144.0	1981-84
Irondequoit Creek at Empire Boulevard, Rochester, NY (d)	0423205025	151.0	1990-2003

‡ 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			
Sterling Creek at Sterling, NY (d)	04232100	44.4	1957-95
Catharine Creek at Montour Falls, NY (d)	04232200 *	41.1	1975-78‡
Keuka Inlet (Keuka Lake) at Hammondsport, NY (e)	04232450	182.0	1960-96
Kendig Creek near MacDougall, NY (d)	04232630 *	13.8	1965-68
Dryden Lake Inlet near Harford, NY (d)	04233678	2.73	1973-74
Virgil Creek at Freeville, NY (d)	04233700	40.3	1973-76
Salmon Creek at Ludlowville, NY (d)	04234018	81.7	1965-68
Canoga Creek at Canoga, NY (d)	04234055	3.20	1965-68
Mud Creek at East Victor, NY (d)	04234200 *	64.2	1958-68
Red Creek near Walworth, NY (d)	04234270	23.8	1965-69
Flint Creek at Potter, NY (d)	04235150	31.0	1964-68 , 1971-79
Black Brook at Tyre, NY (d)	04235276	19.0	1985-95
Owasco Inlet at Moravia, NY (d)	04235300	106.0	1960-68
Owasco Outlet near Auburn, NY (d)	04235500	206.0	1913-98
Grout Brook Trib. southeast of Fair Haven, NY (d)	04235820	0.27	1996-99
Skaneateles Lake at Skaneateles, NY (e)	04236000	72.7	1968-95
Skaneateles Creek at Willow Glen, NY (d)	04236500	75.8	1895-1908
Onondaga Creek Trib. #6 above main mudboil depression area (d)	04237944	0.32	1991-94
Onondaga Reservoir near Nedrow, NY (e)	04238500	67.7	1949-98
Onondaga Creek at Syracuse, NY (d)	04239500	95.0	1940-49
Onondaga Creek at Temple Street Syracuse, NY (d)	04240000	104.0	1949-51
Spafford Creek at Bromley Road near Spafford, NY (d)	04240145	3.14	1982-84
Spafford Creek Tributary near Sawmill Road, near Spafford, NY (d)	0424014980	0.11	1998-2003
Spafford Creek at Sawmill Road near Spafford, NY (d)	04240150	8.06	1982-83, 1986
Rice Brook at Rice Grove, NY (d)	0424015305	2.64	1982-83
Willow Brook at Lader Point, NY (d)	0424016205	3.73	1982-83
Amber Brook at Amber, NY (d)	0424016825	3.75	1982-83
Van Benthuysen Brook near Amber, NY (d)	0424016975	5.84	1982-83
Ninemile Creek at Camillus, NY (d)	04240200	84.3	1958-82, 1988-98
West Branch Fish Creek at Blossvale, NY (d)	04241200	204.0	1966-68
East Branch Fish Creek at Fish Creek near Constableville, NY (d)	04241500	74.3	1924-32
East Branch Fish Creek at Taberg, NY (d)	04242500	188.0	1923-95
Chittenango Creek near Chittenango, NY (d)	04244000	66.3	1950-68
Limestone Creek at Fayetteville, NY (d)	04245000	85.5	1940-86
Butternut Creek at Jamesville, NY (d)	04245200 *	32.2	1958-99
Butternut Creek below Dewitt, NY (d)	04245250	58.6	1964-66
Scriba Creek near Constantia, NY (d)	04245840 *	38.4	1966-68
Oneida River at Caughdenoy, NY (d)	04246500	1,382.0	1948-98
Lake Ontario at Oswego, NY (e)	04249010	295,800.0	1860-1995

‡ No winter record.

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

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

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

Discontinued continuous-record surface-water-quality stations

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

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

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

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS

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

Discontinued crest-stage partial record stations

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

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of documented record (water years)
ALLEGHENY RIVER BASIN			
Johnson Creek near Franklinville, NY	03010743	5.25	1977-78, 1982-86
Olean Creek near Olean, NY	03010800 *	198.0	1970-95
Great Valley Creek Trib. near Great Valley, NY	03010997	3.91	1977-78
Great Valley Creek near Salamanca, NY	03011000 *	137.0	1977-92
West Branch Conewango Creek Trib. near Hamlet, NY	03012837	6.84	1977-81
Conewango Creek at Waterboro, NY	03013000 *	290.0	1994
STREAMS TRIBUTARY TO LAKE ERIE			
Walnut Creek Trib. near Arcade, NY	04213399	1.02	1979, 1981-86
Franks Creek Tributary No. 4 near West Valley, NY	04213441	.12	1976
South Branch Cattaraugus Creek near Otto, NY	04213490	25.1	1963-99
Delaware Creek near Angola, NY	04214040	8.32	1963-86
Eighteenmile Creek at North Boston, NY	04214200 *	37.2	1971-76
Smoke Creek at Lackawanna, NY	04214250	14.3	1955, 1963-68, 1970-74, 1976
South Branch Smoke Creek at Lackawanna, NY	04214260	13.0	1953, 1955, 1967-76
Buffalo Creek near Wales Hollow, NY	04214400 *	76.9	1970-74
Hunter Creek at Colegrave, NY	04214410	14.0	1964-86
Little Buffalo Creek near East Lancaster, NY	04214980	24.0	1963, 1966-73, 1976-80
West Branch Cazenovia Creek near East Aurora, NY	04215250	58.7	1963, 1965-68, 1970
East Branch Cazenovia Creek at South Wales, NY	04215350	38.1	1963, 1966-70
STREAMS TRIBUTARY TO NIAGARA RIVER			
Tonawanda Creek near Johnsonburg, NY	04216400	23.7	1962-86
Delaware Park Lake at Buffalo, NY	04216212	1.14	1985-02
Scajaquada Creek below Delaware Park Lake at Buffalo, NY	04216214	25.7	1985-02
Little Tonawanda Creek Trib. near Batavia, NY	04216875	1.02	1976-86
Murder Creek at Pembroke, NY	04217700	43.6	1962-72, 1974-86
Fourmile Creek near Youngstown, NY	04219645	4.88	1970-73, 1976-80, 1982-86

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of documented record (water years)
STREAMS TRIBUTARY TO LAKE ONTARIO			
Eighteenmile Creek Trib. near Lockport, NY	04219738	2.53	1977-86
Johnson Creek near Lyndonville, NY	04219900	95.1	1962-70, 1972-73, 1976-2003
Johnson Creek Trib. near Lyndonville, NY	04219905	4.95	1970, 1972-73, 1977-79
Oak Orchard Creek at Barryville Rd. near Elba, NY	04219922	6.48	1976-86
Oak Orchard Creek near Elba, NY	04219925	7.49	1976-78
Oak Orchard Creek at Medina, NY	04220150	157.0	1962-70, 1972, 1975-76
West Creek near Hamlin, NY	04220245	4.56	1978-81, 1983-86
West Creek near Hilton, NY	04220250 *	31.0	1971-72, 1986-2002
Quig Hollow Brook near Andover, NY	04220455	4.24	1964-72
Genesee River at Transit Bridge near Angelica, NY	04221725	579.0	1975-76
Black Creek at Hyde Flats Road at Black Creek, NY	04221769	10.7	1978-93
Wiscoy Creek at Bliss, NY	04222600	22.0	1962-86
Sugar Creek near Ossian, NY	04224700	10.0	1964-86
Sugar Creek near Canaseraga, NY	04224740	16.9	1977
Stony Brook at Stony Brook State Park, NY	04224848	21.4	1977
Mill Creek at Patchinville, NY	04224900	4.22	1964-86
Mill Creek at Dansville, NY	04224978	35.9	1977
Canaseraga Creek at Groveland, NY	04225500 *	180.0	1975-77
Bradner Creek near Dansville, NY	04225600	9.68	1976
Keshequa Creek at Nunda, NY	04225915	32.7	1975-77
Keshequa Creek at Tuscarora, NY	04225950	58.5	1976-77
Little Conesus Creek near South Lima, NY	04228370	7.38	1975-76
Little Conesus Creek near East Avon, NY	04228380	8.02	1975-76
Springwater Creek at Springwater, NY	04228900 *	10.1	1970-72
Oatka Creek at Rock Glen, NY	04230320	14.5	1977
Oatka Creek at Pearl Creek, NY	04230400	78.4	1975-76
Pearl Creek at Pearl Creek, NY	04230410	10.8	1975-77
Oatka Creek near Pavillion Center, NY	04230423	110.0	1975-77
Mud Creek near LeRoy, NY	04230470	10.2	1975-76
Hotel Creek at Griffin Road near Churchville, NY	04231040	4.57	1976-86
Irondequoit Creek near Pittsford, NY	04232040 *	44.4	1962-63, 1965-66, 1968-70, 1972
Irondequoit Creek at Bushnell Basin, NY	04232042	52.6	1962-64, 1966, 1968-70

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
STREAMS TRIBUTARY TO LAKE ONTARIO--continued			
Mill Creek Trib. near Webster, NY	042320527	2.12	1971-72, 1976-86
Second Creek Trib. at Alton, NY	04232071	1.07	1970, 1973, 1976-86
Red Creek Trib. No. 16 near Red Creek, NY	04232087	2.90	1969, 1976-86
Hector Falls Creek at Burdett, NY	04232406	11.8	1971-74
Sugar Creek at Guyanoga, NY	04232460	28.9	1966-2000
Sixmile Creek near Ithaca, NY	04233310	42.0	1967-69, 1971-73, 1976-86
Webster Brook at Summer Hill, NY	04233624	2.59	1975
Fall Creek Trib. No. 7 at Stevens Corners, NY	04233632	0.52	1975-76
Fall Creek at Freeville, NY	04233648	55.9	1975
Virgil Creek at Mill Street, Dryden, NY	04233676	20.7	1966-70, 1972, 1975-86
Dryden Lake Inlet near Harford, NY	04233678 *	2.73	1975-76
Virgil Creek at Freeville, NY	04233700 *	40.3	1976-86
Salmon Creek at Ludlowville, NY	04234018 *	81.7	1971-72
Cayuga Lake Trib. No. 8 near Jacksonville, NY	042340202	1.36	1977-86
Yawger Creek Trib. near Auburn, NY	042340588	1.76	1976-86
Ganargua Creek above Macedon, NY	04234250	104.0	1965-69
Marbletown Creek Trib. near Newark, NY	04234363	0.58	1976-86
West River near Middlesex, NY	04234400	29.3	1965-72, 1975-77
Black Brook at Tyre, NY	04235276 *	19.0	1966-73, 1975-84
Owasco Inlet at Moravia, NY	04235300 *	106.0	1970
Canada Creek Trib. near Lee Center, NY	04242795	1.34	1977-86
Chittenango Creek near Chittenango, NY	04244000 *	66.3	1978
Limestone Creek at Fayetteville, NY	04245000 *	85.5	1987-95
Negro Brook near Bridgeport, NY	04245405	1.53	1976-79
Wine Creek at Oswego, NY	04249011	3.11	1976-78

INTRODUCTION

Water resources data for the 2004 water year for Western New York consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; ground-water levels and water quality; and precipitation quality. This volume contains records for water discharge at 71 gaging stations; stage only at 15 gaging stations; stage and contents at 6 gaging stations; water quality at 12 gaging stations, 29 wells, and 22 partial-record stations; water levels at 29 observation wells; daily precipitation totals at 1 site, and chemical quality of precipitation at 1 site. Also included are data for 38 crest-stage partial-record stations. Locations of these sites are shown on figure 1. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as measurements made at miscellaneous sites. Surface-water, ground-water, and water-quality data at all sites are listed in Eastern Standard Time (EST), unless otherwise noted. These data together with the data in Volumes 1 and 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

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

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

Streamflow and water-quality data beginning with the 1971 water year, and ground-water data beginning with the 1975 water year are published only in reports on a State-boundary basis. Beginning with the 1975 water year, these Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY–04–3." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (518) 285–5602.

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 2004, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation

New York State Department of Transportation

New York State Thruway Authority

County of Chautauqua, Planning Department

County of Monroe, Department of Health

County of Onondaga, Department of Water Environment Protection

County of Onondaga, Water Authority Commission

County of Onondaga, Soil and Water Conservation District

City of Auburn

City of Ithaca

Town of Amherst, Erie County

Town of Cheektowaga, Erie County

Irondequoit Bay Pure Waters District

Village of Victor

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

The following organizations aided in collecting records:

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

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS[1]

Surface Water

Streamflow in western New York during the 2004 water year was characterized by above-average annual mean discharges at all index sites (table 1). The greatest departures from normal occurred during July, August, and September (table 2), when monthly mean discharges averaged 381, 543, and 1,208 percent, respectively, of the normal monthly means. Daily discharge hydrographs showing departures from the median discharges at two unregulated index stations—Susquehanna River at Conklin and Allegheny River at Salamanca—are presented in figures 1 and 2 respectively. Daily streamflow at both sites was well above the 25-percent exceedence level (percentage of time that a given discharge is equaled or exceeded) during most of the fall and early winter. Cold temperatures in January and February caused precipitation to be primarily in the form of snow, which in turn resulted in below-normal discharges for the last part of January and all of February at both index sites. A thaw at the beginning of March melted the snowpack, and near-normal precipitation caused discharges at both index sites to be at or near the median levels throughout June. Above-average precipitation in July and August and the effects of two tropical storms in September caused daily streamflows to rise well above the 25-percent exceedence levels at both sites from July through September.

The summer rains of 2003 continued into the 2004 water year. The monthly average precipitation for the State was 152 percent of normal calculated for October 2003. The only part of the State that reported a deficit was the Western Plateau, where precipitation was 98 percent of normal. Streamflow was excessive (upper 25 percent of the record) at most index sites in western New York (table 3).

Air temperatures in November were 3.4 degrees F warmer than normal throughout the State, and precipitation continued to be above normal. Some of the precipitation in parts of western New York fell as snow; Syracuse and Allegheny State Park received more than 10 inches and Morrisville received 25 inches. November streamflow was in the excessive range at all index sites. Genesee River at Wellsville and Oneida Creek at Oneida both had their third highest monthly mean discharges on record for November.

Warm weather continued into December. Air temperatures averaged 1.4 degrees warmer than normal. The greatest departure was along the Great Lakes, where monthly air temperatures averaged 3.2 degrees above normal. December was New York's sixth consecutive month with above-normal precipitation. Oneida Creek at Oneida had its second highest monthly mean discharge on record, and Flint Creek at Phelps and Fall Creek near Ithaca had their third highest monthly mean discharges on record for December. Large amounts of snow fell during the month; totals ranged from 11 inches in Allegheny State Park to 43 inches in Oswego.

Air temperatures in January 2004 averaged 7.3 degrees below normal and periodically dropped below zero throughout western New York. Regions southeast of Lake Ontario received heavy lake-effect snow during the last few days of the month; monthly total snowfall at Oswego was 105 inches. As a result of the cold temperatures, streamflow decreased to normal at all index sites.

Below normal air temperatures continued through February. Temperatures remained below zero throughout much of the State. Precipitation for the month was below normal; thus, streamflow either remained normal or decreased to the deficient range (lower 25 percent of the record) at all index sites.

March brought warmer temperatures across the State. Air temperatures averaged 3.1 degrees warmer than normal, and in some areas, rose into the low 70's toward the end of the month. March was the third consecutive month with below-normal precipitation. State precipitation totals ranged from less than 1 inch at a few locations to 4.44 inches at Bridgehampton in eastern New York. The warmer air temperatures caused rapid snowmelt, which in turn caused streamflow to increase into the normal range or just into the excessive range at all index sites.

Table 1.--Mean discharges for selected streams for water year 2004 and mean annual discharges for the period of record.
[Locations are shown in fig. 4. Discharges are in cubic feet per second.]

Station no.	Name	Period of record	Mean annual discharge for period of record	Mean discharge for 2004 water year	Percent difference
01502500	Unadilla River at Rockdale	1930-33, 37-95, 2003	844	1,151	+ 36.4
01503000	Susquehanna River at Conklin	1913–2003	3,582	4,924	+ 37.5
01512500	Chenango River near Chenango Forks	1913–2003	2,420	3,576	+ 47.8
01531000	Chemung River at Chemung	1906–13, 1915–2003	2,623	4,763	+ 81.6
03011020	Allegheny River at Salamanca	1904–2003	2,773	4,032	+ 45.4
04213500	Cattaraugus Creek at Gowanda	1940-97, 2003	746	1,020	+ 36.7
04217000	Tonawanda Creek at Batavia	1944–2003	213	305	+ 43.2
04221000	Genesee River at Wellsville	1955-58, 1973-2003	388	623	+ 60.6
04230500	Oatka Creek at Garbutt	1946-2003	215	301	+ 40.0
04234000	Fall Creek near Ithaca	1926–2003	186	304	+ 63.4
04235250	Flint Creek at Phelps	1960–1995, 2003	89.8	158	+ 75.9
04243500	Oneida Creek at Oneida	1950–2003	168	251	+ 49.4

Table 2.--Monthly mean discharge for water year 2004 at selected sites, as percentage of period-of-record monthly median discharge.
[Locations are shown in fig. 4.]

Station no.	Name	Period of record	Monthly mean discharge, as percentage of monthly median discharge		
			July	Aug	Sep
01502500	Unadilla River at Rockdale	1930-33, 1937-95, 2003	368	757	762
01503000	Susquehanna River at Conklin	1913–2003	290	557	972
01512500	Chenango River near Chenango Forks	1913–2003	456	801	788
01531000	Chemung River at Chemung	1906–13, 1915–2003	506	769	2,647
03011020	Allegheny River at Salamanca	1904–2003	239	356	1,363
04213500	Cattaraugus Creek at Gowanda	1940-97, 2001-03	292	177	565
04217000	Tonawanda Creek at Batavia	1944-2003	447	323	1,335
04221000	Genesee River at Wellsville	1955-58, 1973-2003	307	635	1,447
04230500	Oatka Creek at Garbutt	1946–2003	221	208	886
04234000	Fall Creek near Ithaca	1926–2003	529	793	800
04235250	Flint Creek at Phelps	1960-95, 2003	572	308	2,491
04243500	Oneida Creek at Oneida	1950–2003	345	830	442

April was warmer than normal, and precipitation was above-normal. Streamflow either decreased into the normal range, or remained normal at all index sites, however.

May was the third consecutive month with a statewide average air temperature above normal, and precipitation was above normal throughout the State. The wettest region was the Central Lakes, where precipitation was 205 percent of normal for the month. Streamflow responded by increasing slightly at all index sites. Flint Creek at Phelps had its third highest monthly mean discharge on record for the month of May.

June began with cooler-than-normal beginning air temperatures; the statewide temperature average was 1.4 degrees below normal and dipped to as low as 32 degrees in several parts of the Western and Northern Plateaus. Precipitation was also below normal throughout the State in June. Streamflow decreased accordingly but remained in the normal range at all index sites.

Cool weather continued through July. Precipitation was abundant during the month; the State received an average of 5.77 inches of rain; 151 percent of normal for July. Waverly received more than 10 inches of rain during the month. This was the 7th wettest July since records began in 1895. Streamflow increased sharply and was in the excessive range at all index sites. Three streams—Unadilla River at Rockdale, Fall Creek near Ithaca, and Flint Creek at Phelps had their third highest monthly mean discharges for July, and Chenango River near Chenango Forks, Oatka Creek at Garbutt, and Oneida Creek at Oneida had their fourth highest.

August was cool and wet. The State received an average of 5.86 inches of rain—152 percent of normal for August, making this the 5th wettest August on record. Streamflow at all index sites remained in the excessive range. Four streams—Unadilla River at Rockdale, Chenango River near Chenango Forks, Fall Creek near Ithaca, and Oneida Creek at Oneida—had their highest monthly mean August discharges on record (table 3). Susquehanna River at Conklin had the second highest monthly mean August discharge on record, and Oatka Creek at Garbutt had the third highest.

September brought warm weather to New York. Air temperatures for the State averaged 3.6 degrees warmer than normal. Precipitation was abundant throughout the State as two tropical storms passed through during the month. The first one, tropical storm Frances, dumped heavy rains on central Pennsylvania and western New York during September 8-10. Salamanca received 3.65 inches and Jamestown received 3.70 inches on the 9th. On September 18-19 an interaction between a strong, slow-moving cold front and remnants of Hurricane Ivan produced heavy rain and moderate to major flooding throughout the Susquehanna River basin. Many areas were still saturated from the previous storm. Waverly and Rockdale received the most rain, with 3.89 inches and 4.59 inches respectively. Streamflow at all index sites was in the excessive range (table 4.). Monthly mean discharges at all index sites equaled either the first, second, or third highest monthly mean on record for September.

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

Table 3.--Monthly mean discharge for water year 2004 at selected sites, as percentage of period-of-record monthly median discharge.
[Locations are shown in fig. 4.]

Station no.	Name	Period of record	Monthly mean discharge, as percentage of monthly median discharge		
			Oct	Nov	Dec
01502500	Unadilla River at Rockdale	1930-33, 1937-95, 2003	443	222	198
01503000	Susquehanna River at Conklin	1913–2003	426	236	221
01512500	Chenango River near Chenango Forks	1913–2003	404	235	241
01531000	Chemung River at Chemung	1906–13, 1915–2003	443	364	359
03011020	Allegheny River at Salamanca	1904–2003	319	239	174
04213500	Cattaraugus Creek at Gowanda	1940-97, 2001-03	202	193	140
04217000	Tonawanda Creek at Batavia	1944-2003	327	339	150
04221000	Genesee River at Wellsville	1955-58, 1973-2003	407	268	211
04230500	Oatka Creek at Garbutt	1946–2003	156	371	186
04234000	Fall Creek near Ithaca	1926–2003	388	219	263
04235250	Flint Creek at Phelps	1960-95, 2003	263	308	417
04243500	Oneida Creek at Oneida	1950–2003	313	252	294

Water Quality

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

Suspended-sediment samples from the Tully Valley mudboil/depression area (MDA) for water year 2004 indicated highly variable sediment concentrations due to mudboil activity within the MDA and another mudboil area downstream from the MDA. Sediment loading to Onondaga Creek averaged about 1.0 tons per day, which is about the same as last years and reflects several months of mudboil activity and some land subsidence within the MDA, as well as sediment discharge at the downstream mudboil-containment area. The increased sediment dischareg is attributed to higher-than-average artesian pressures in the aquifer system.

Chemical analyses of springs within the Onondaga Lake basin, from the headwaters to Onondaga Lake, in the 2004 water year indicate that (1) fresh water and brackish water discharge from the glacial aquifer system in the Tully and West Branch valleys, (2) fresh water discharges from bedrock springs in the central part of the Onondaga Valley (southern part of the city of Syracuse), and (3) while a mixture of fresh to briny springs discharge to Onondaga Lake from the glacial aquifer system in the northern part of the Onondaga Valley near Onondaga Lake.

Water samples were collected for pesticide analyses from selected lakes, reservoirs, and wells that serve as sources of drinking water throughout upstate New York, as part of the Statewide Pesticide Monitoring Project in cooperation with the New York State Department of Environmental Conservation. More than 12 samples fromeach of 6 surface-water and 2 ground-water sites in western New York were analyzed for 60 or more pesticides and degradates. The analytical detection limits ranged from 0.001 to 0.05 µg/L. Trace levels of a few pesticides—mainly atrazine, metolachlor, and their degradates—were detected at several sites, but the concentrations did not exceed any Federal or New York State standards for drinking water.

Water samples were collected from selected streams in the towns of Dryden and Caroline in Tompkins County to characterize the hydrologic framework, ground-water flow system, and quality of water in the valley. The results provide information to be used for a comprehensive water-management strategy for continued availability of safe drinking water for these towns. Samples were analyzed for nutrients, major ions, and pesticides. Nitrogen concentrations were less than 5 µg/L and chloride concentrations were less than 35 µg/L. The Secondary Maximum Contaminant Level (SCML) for chloride is 250 µg/L. Traces of atrazine and metolachlor were found in some samples, but the concentrations did not exceed federal or New York State drinking-water standards. Analytical detection limits for pesticides ranged from 0.001 to 0.05 µg/L.

Ground Water

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

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

The minimum, maximum, median long-term monthly, and current water levels at three observation wells during the 2004 water year are shown in the hydrographs in figure 3. The hydrograph for well Ct-121 in Cattaraugus County (western New York) illustrates the water-level fluctuations under natural (nonpumping) conditions in a confined sand and gravel aquifer; the hydrograph for well Og-23 in Otsego County (central New York) illustrates seasonal water-level fluctuations under natural conditions in a shallow, unconfined till aquifer; and the hydrograph for well Cm-622 in Chemung County (south-central New York) illustrates water-level fluctuations under natural conditions in an unconfined sand and gravel aquifer.

Water levels under confined conditions at well Ct-121 were near the median from October through December 2003. From January to August 2004, water levels were below the median and from August through September, they were at or just above the median. Water levels at well Og-23 were above the median from October through December, just above or below the median from January through mid July, and well above the median throughout the remainder of the water year reflecting the abundant summer rainfall. Water levels were at and near their maximum values late in July. Water levels at well Cm-622 were well above the median throughout the 2004 water year except for parts of February, June, and July, when they were near or just above the median. Water levels at this well were affected by water-level changes in Newtown Creek.

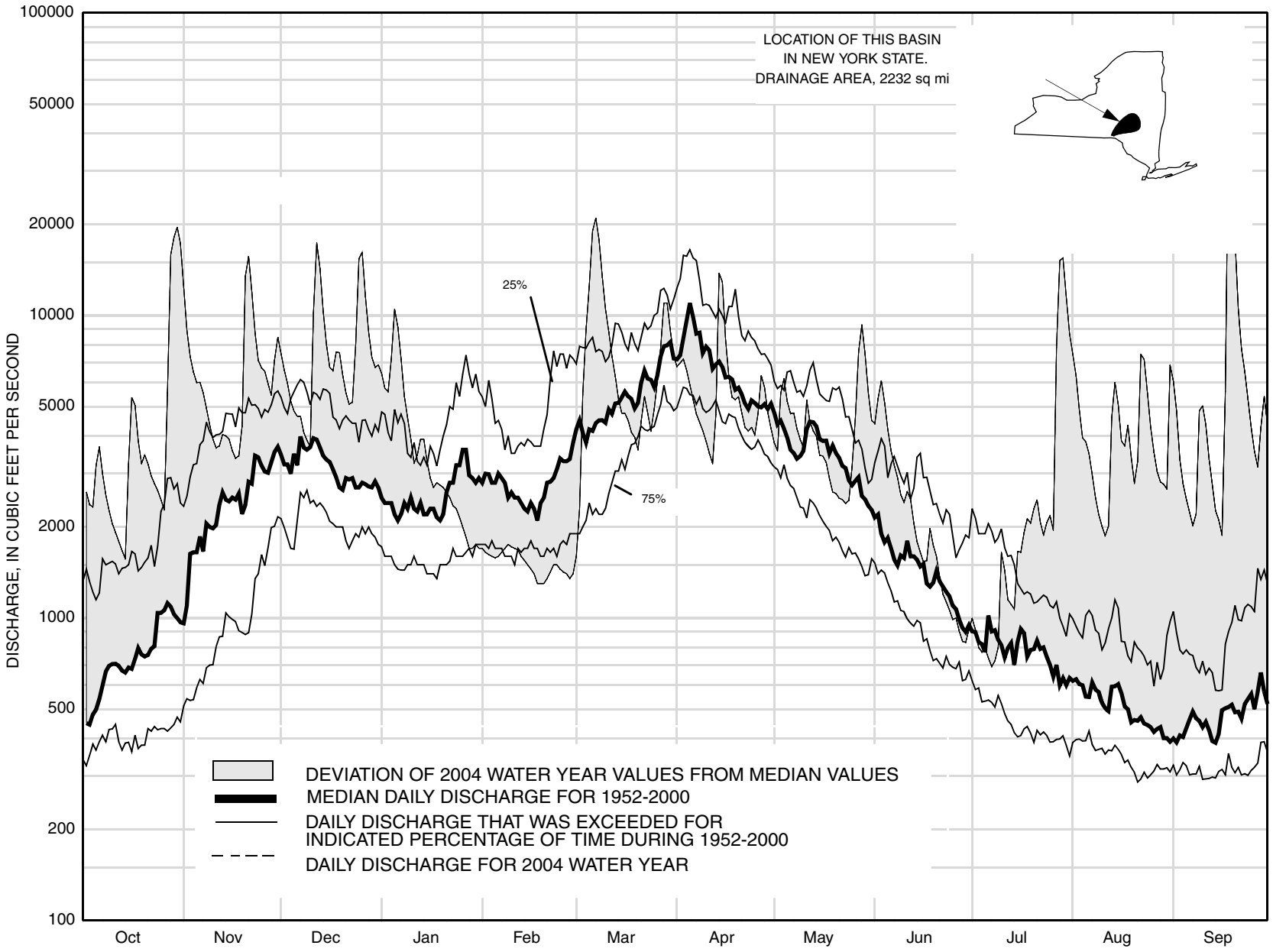

Figure 1.--Hydrographic Comparisons, Susquehanna River at Conklin, N.Y.

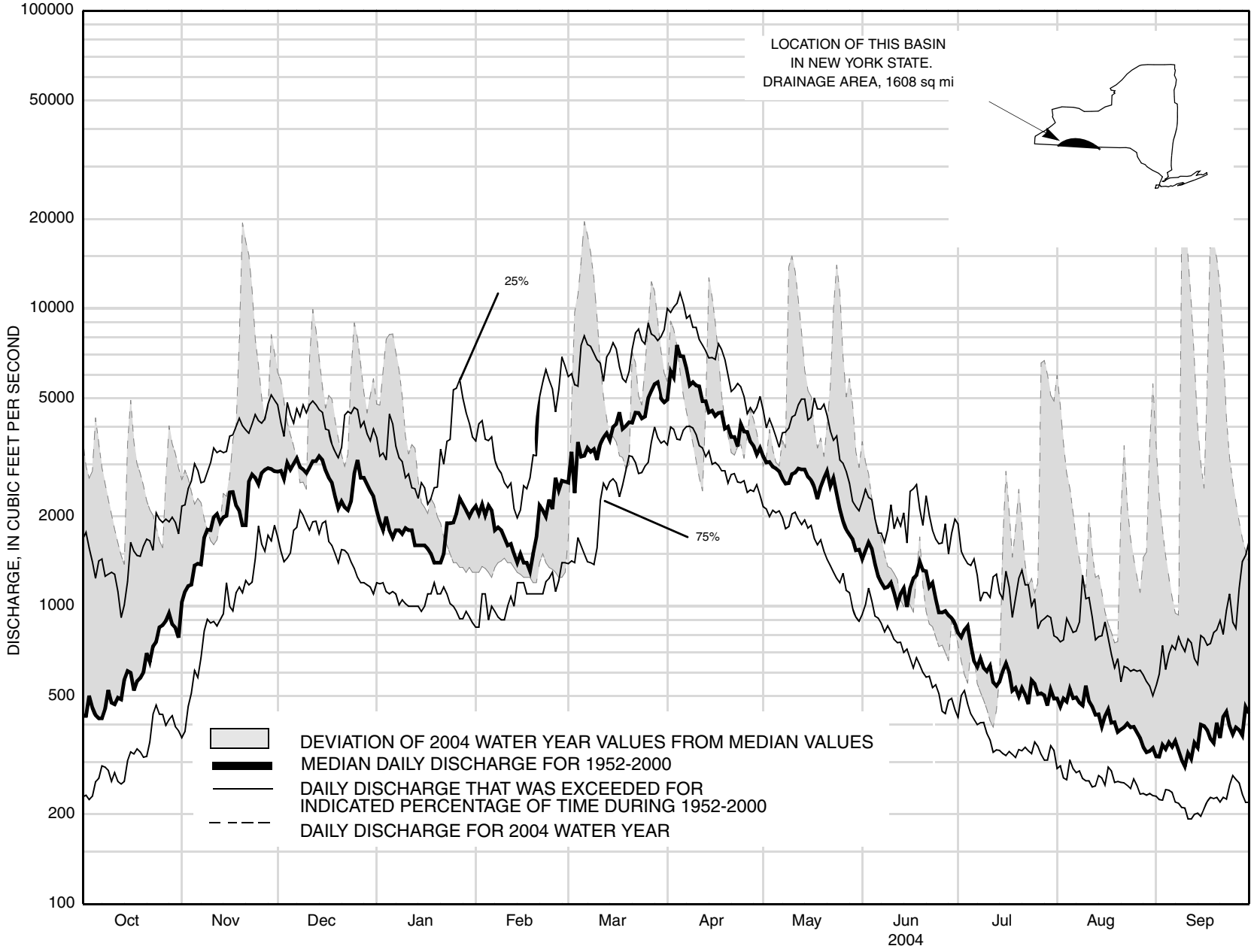

Figure 2.--Hydrographic Comparisons, Allegheny River at Salamanca, N.Y.

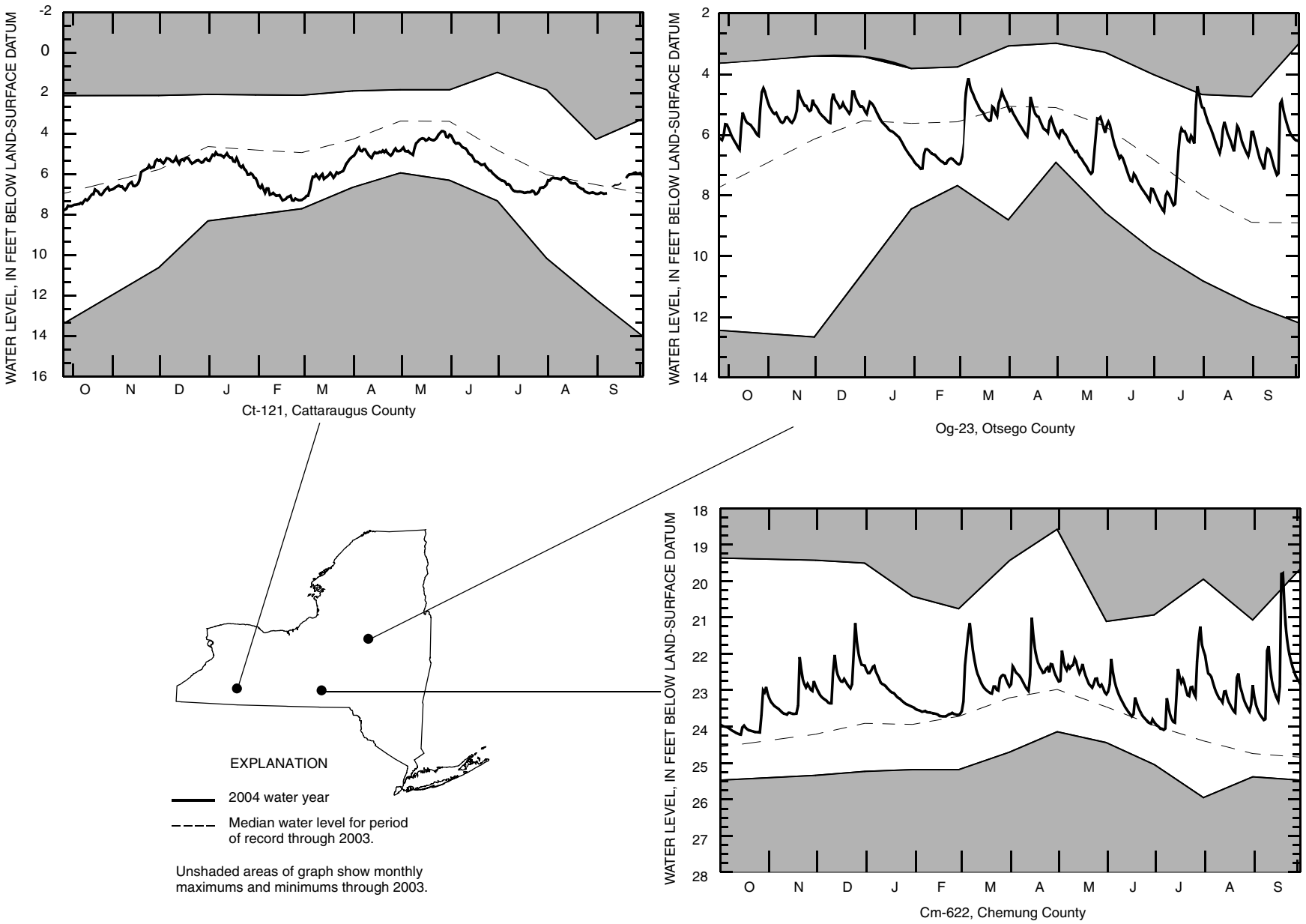

Figure 3.-Ground-water levels at selected observation wells in New York during the 2004 water year, with median, maximum, and minimum levels for period of record.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of 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 entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indention in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of all three types of stations. Gaps are consecutive. The complete 8-digit number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit downstream order number "004100." In areas of high station density, an additional one or two digits may be added to the station identification number to yield a 9- or 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers. Downstream order station numbers are not assigned to wells and often not to miscellaneous sites where only random water-quality samples are taken.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well system is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 4). This system may also be used for random water-quality miscellaneous sites. (A local well-numbering system is also used. It is a 2-part identifier, consisting of the abbreviation of county name and the serial number within the county.).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from *http://water.usgs.gov/hbn/*.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado

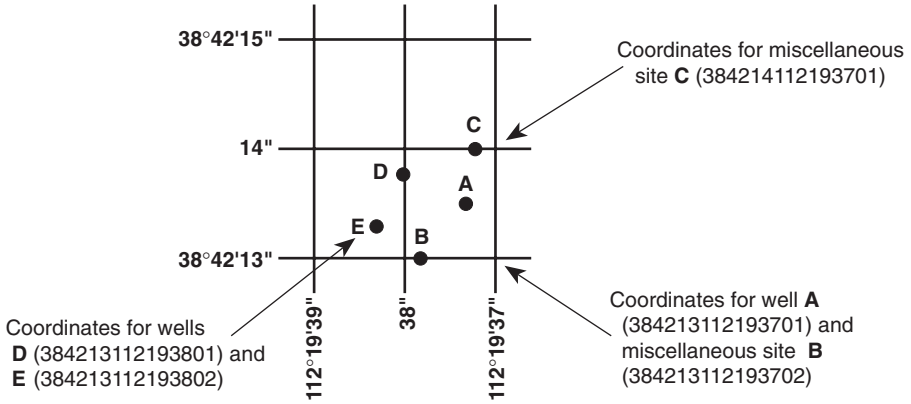

Figure 4. System for numbering wells and miscellaneous sites (latitude and longitude).

and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from *http://water.usgs.gov/nasqan/*.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provide continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from *http://bqs.usgs.gov/acidrain/*.

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

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from *http://water.usgs.gov/nsip/*.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig.5) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters 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, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect

measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence 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 at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, 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 in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or 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 changes are computed.

If the stage-capacity curve is subject to 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 stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) 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; and (5) a hydrograph of discharge.

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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station 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 only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

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.—This term indicates the time period for which records have been published 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

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

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

EXTREMES FOR CURRENT YEAR.—Extremes given here are similar to those for the period of record, except the peak discharges listed may include secondary peaks. 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. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial human control. The time of occurrence for peaks is expressed in 24-hour Eastern Standard Time at all sites unless otherwise noted. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://water.usgs.gov/nwis/nwis*). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

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 arithmetic 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 is 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). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect 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 volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of 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 values. 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. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are 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 and daily, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, if any, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in 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 the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that 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.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

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 date shown in the summary statistics table is the initial date of the 7-day period. This value should not be confused with the 7-day 10-year low-flow statistic.

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 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) indicate 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.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a 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. This identification is shown either by flagging individual daily values with the letter "e" and noting in a table footnote, "e–Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data 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 degree of accuracy of the records is stated in the REMARKS in the station description. "Excellent" indicates that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair," within 15 percent. "Poor" indicates that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to the nearest tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values 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, values 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 Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of records.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from http://water.usgs.gov/pubs/twri/.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data is useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one 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 continuous- or partial-record station, where samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 5, 7 and 8.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ ±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	> ±0.8 °C
Specific conductance	≤ ±3%	> ±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	≤ ±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤ ±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤ ±5%	> ±5 to 10%	> ±10 to 15%	> ±15%

Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

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 water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with 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.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from http://water.usgs.gov/pubs/twri/. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

Water Temperature

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

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

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. 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 is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. 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 record, 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 USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://waterdata.usgs.gov/nwis*). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

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

Frequency-of-Sampling Notation

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

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

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

Remark Codes

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

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

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

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

Blank Samples

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

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

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

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

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

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

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

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

Reference Samples

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

Replicate Samples

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

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

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

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

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

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation.

Data Collection and Computation

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.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure 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.

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 elevation of the land-surface datum above sea level 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 for every fifth day and the end of each month (EOM).

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 of 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 or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figures 5, 6, 7, and 9; each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), 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 National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder’s float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRIs, which may be accessed from http://water.usgs.gov/pubs/twri/. Procedures for on-site measurements and for collecting, treating, and shipping samples

are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4, which may be accessed from *http://water.usgs.gov/pubs/twri/*.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

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

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

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

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton"and "Periphyton")

Bottom material (See "Bed material")

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

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

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

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

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

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

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

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

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

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

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

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

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

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

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

Green algae *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

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

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

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

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

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

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

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

Horizontal datum (See "Datum")

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

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

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

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

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

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

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term 'nondetection value' (NDV).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

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

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

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

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

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

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

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

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

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

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

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

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

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

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

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

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

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was

derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

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

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

Nonfilterable refers to the portion of the total residue retained by a filter.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and United States first-order terrestrial leveling networks.

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

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

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

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

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

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

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

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

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

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

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

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

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary

peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic

forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

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

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Bed material")

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

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

Return period (See "Recurrence interval")

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

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

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

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

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

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

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

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

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

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

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

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

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

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

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

Stage (See "Gage height")

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to 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 filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Suspended")

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of

water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacte-

ria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

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

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

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

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

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

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

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

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

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

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 ± 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30±15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

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

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

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

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

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

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

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

Watershed (See "Drainage basin")

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

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

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

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

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

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

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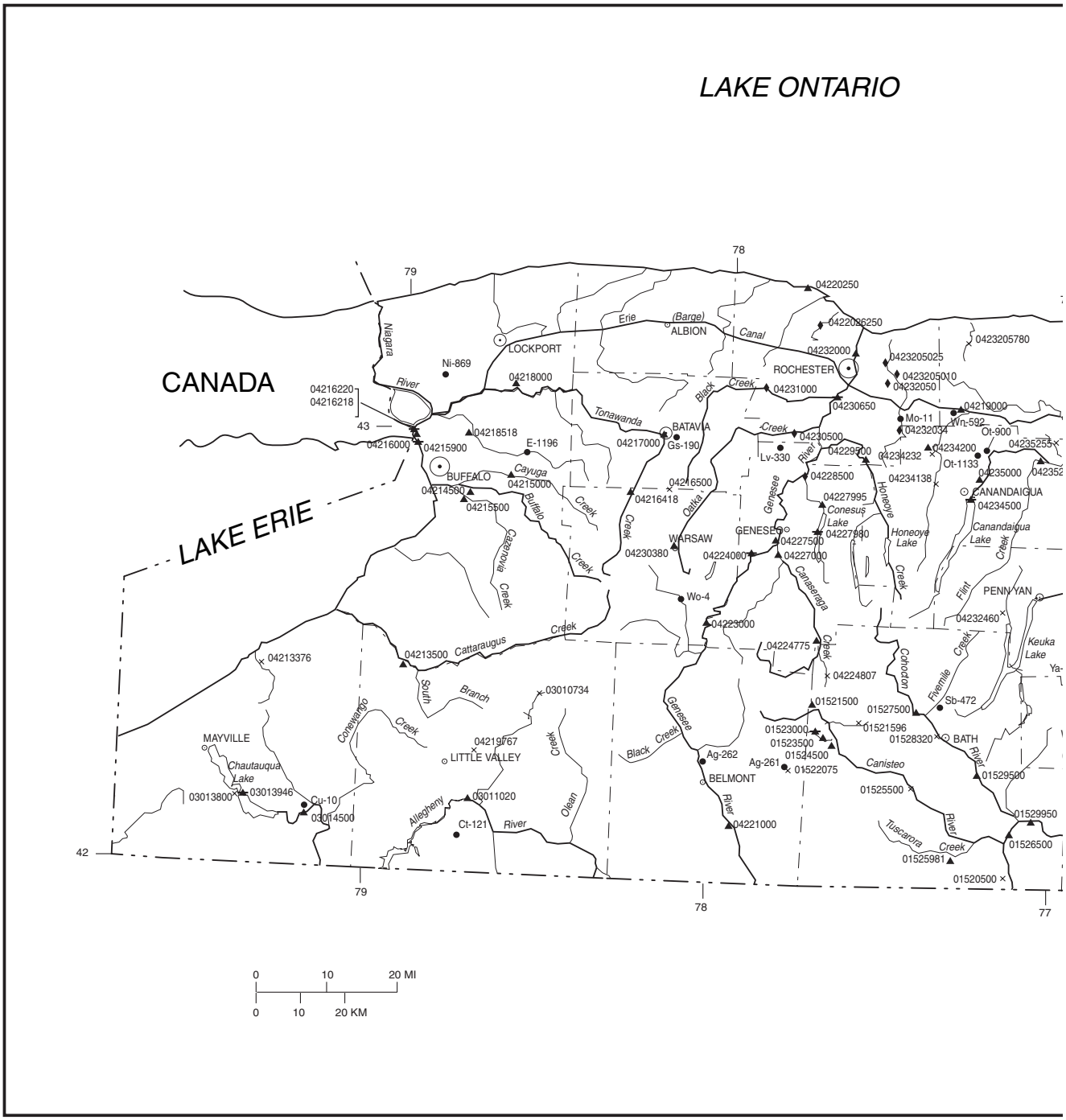
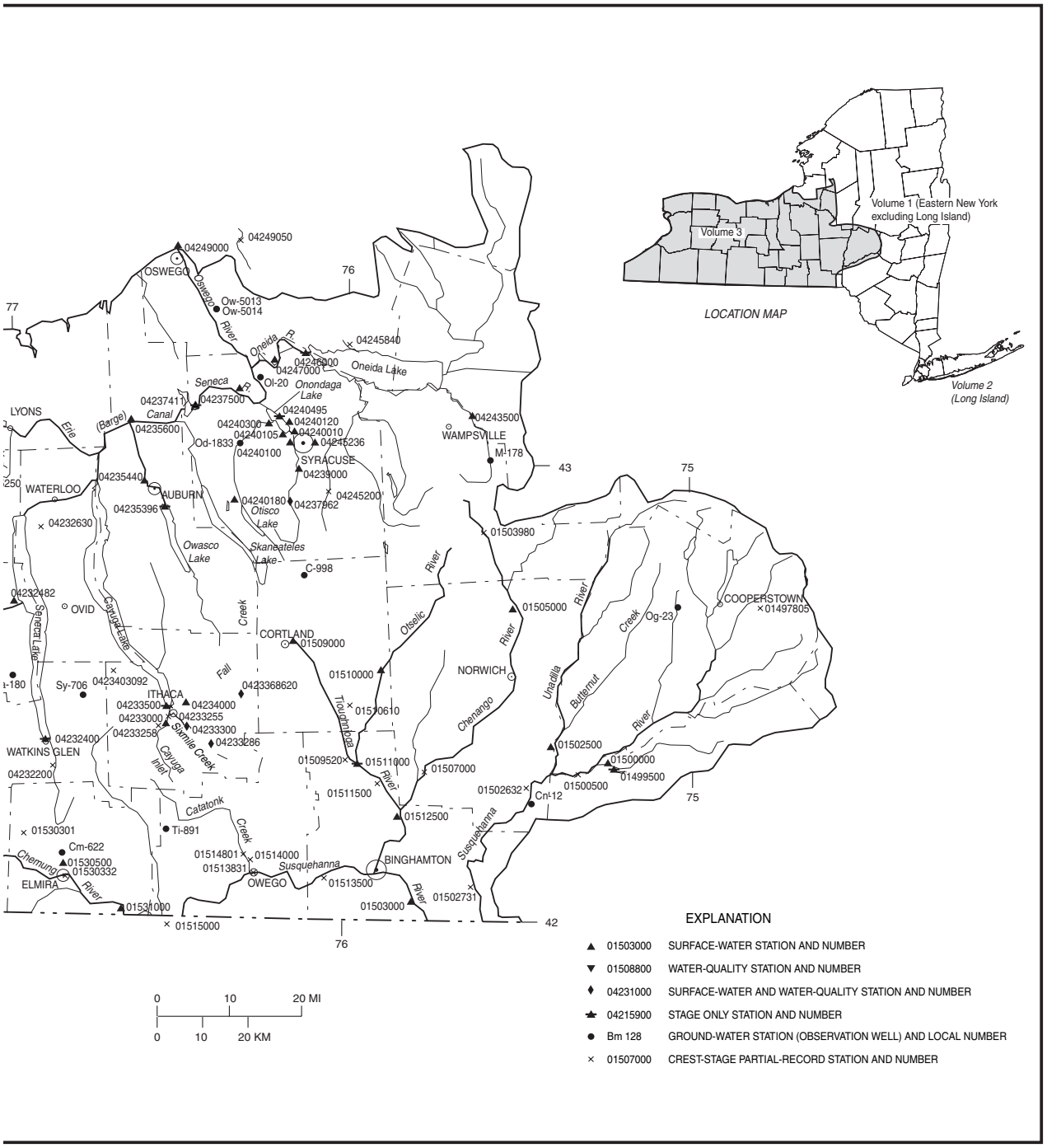
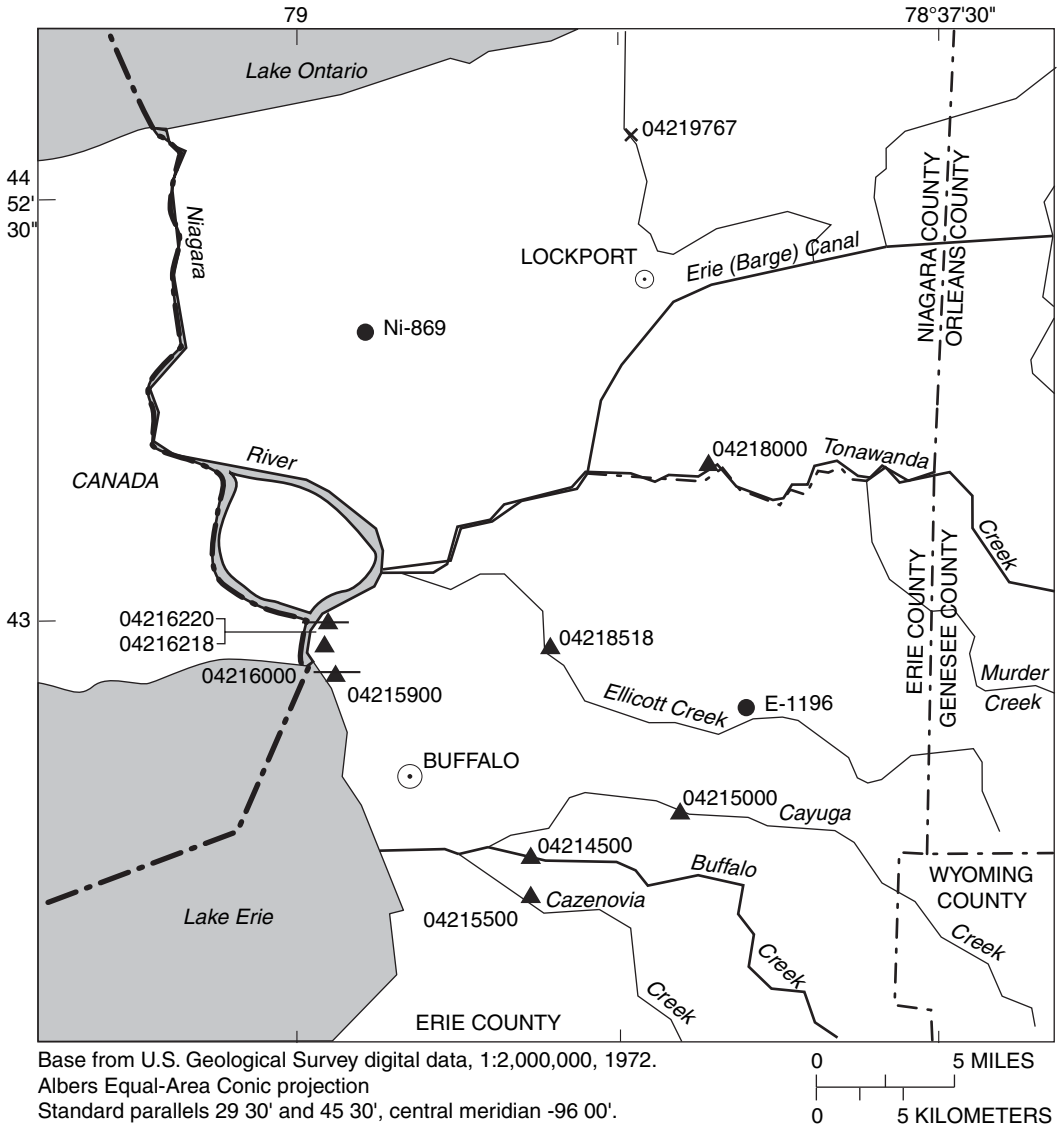


Base from U.S. Geological Survey digital data, 1:2,000,000, 1972.
Albers Equal-Area Conic projection
Standard parallels 29°30' and 45°30', central meridian -96°00'.

FIGURE 5. LOCATION OF GAGING STATIONS AND



OBSERVATION WELLS IN WESTERN NEW YORK



EXPLANATION

▲04215500	SURFACE-WATER STATION AND NUMBER
▲04215900	STAGE ONLY STATION AND NUMBER
● Ni-869	GROUND-WATER STATION(OBSERVATION WELL) AND LOCAL NUMBER
×04219767	CREST-STATE PARTIAL-RECORD STATION AND NUMBER

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

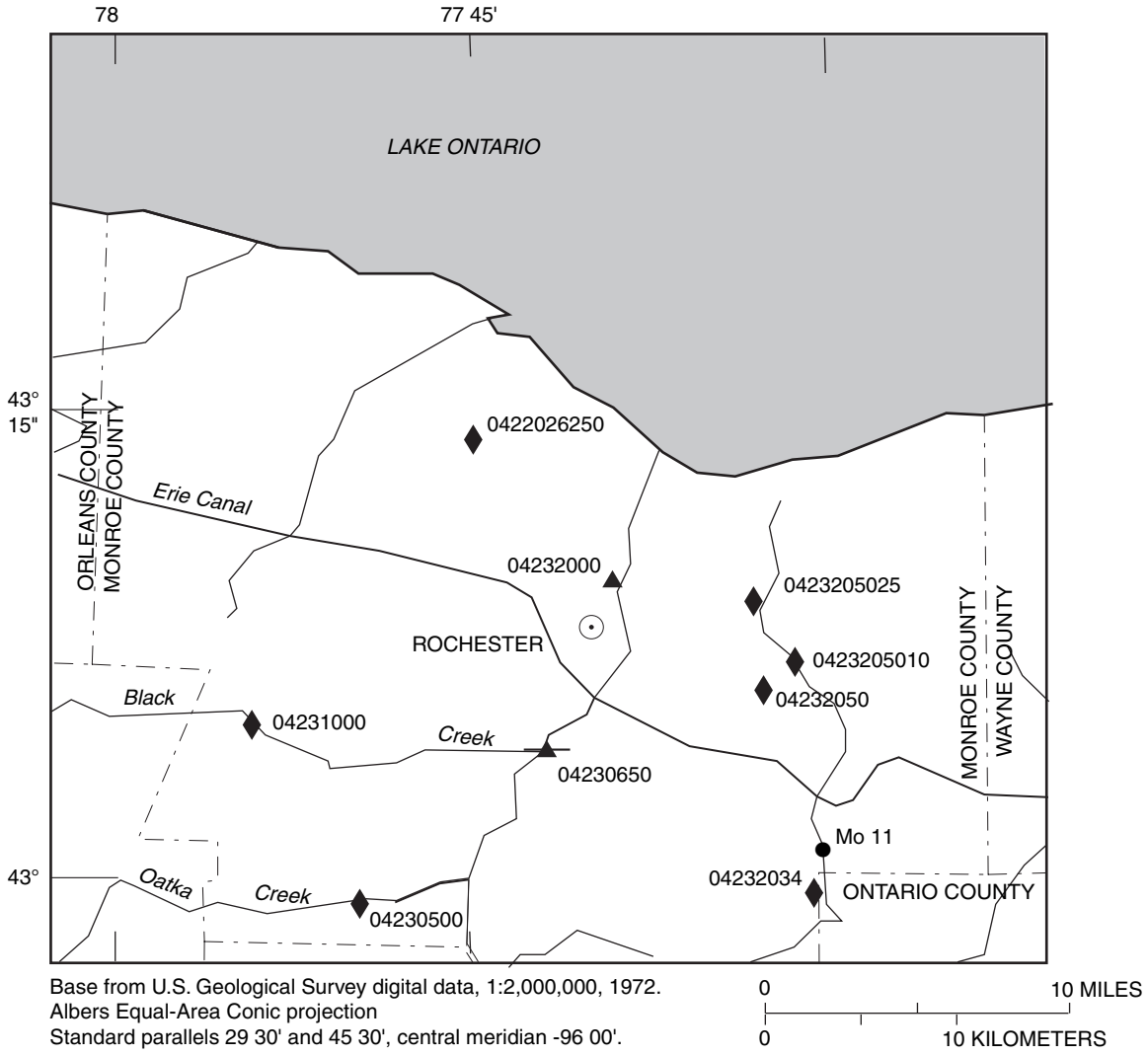
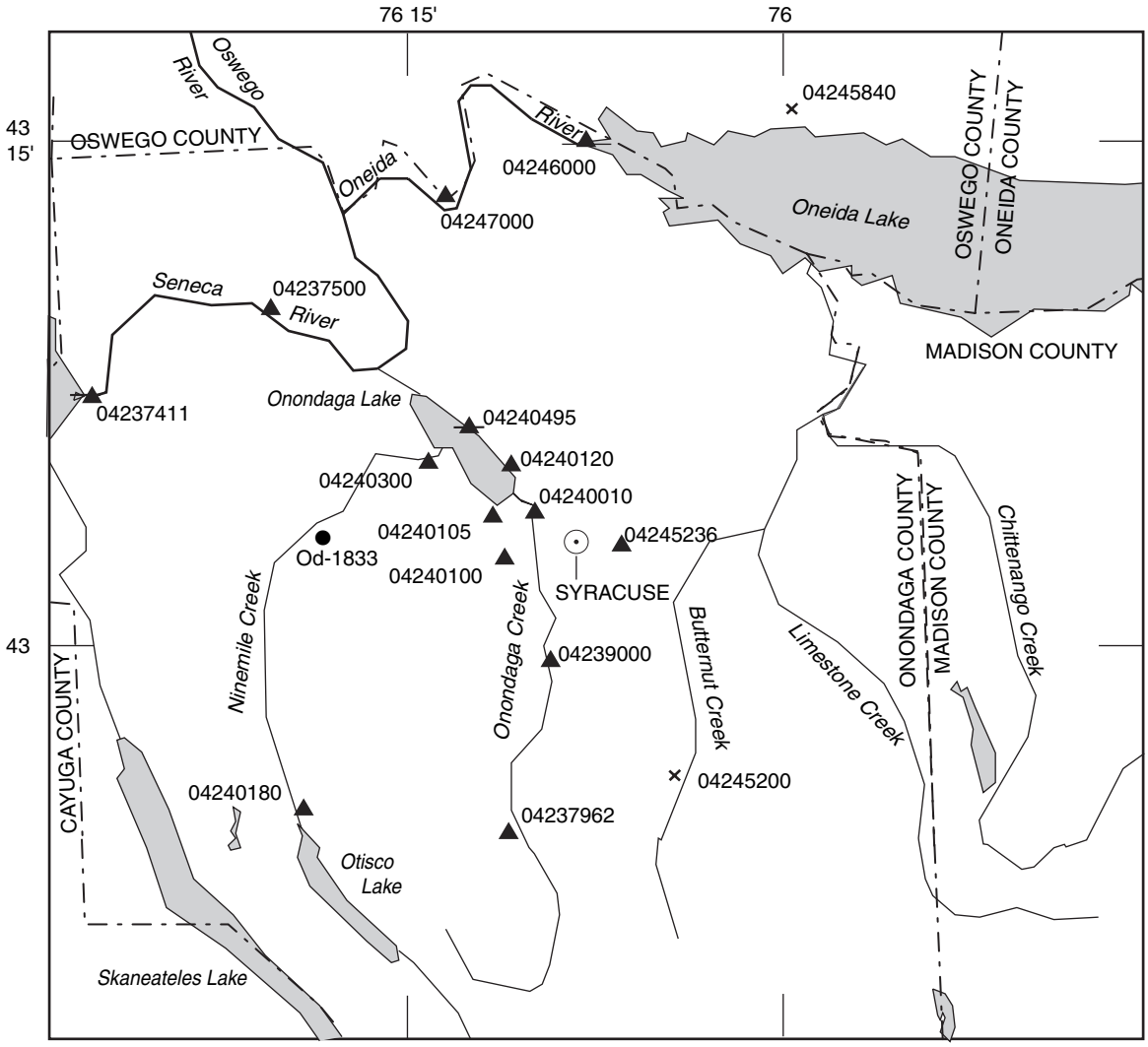


FIGURE 7 . LOCATION OF GAGING STATIONS AND OBSERVATION WELLS IN MONROE COUNTY, NY.



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

0 5 MILES
0 5 KILOMETERS

EXPLANATION

- ▲ 04245200 — SURFACE-WATER STATION AND NUMBER
- ▲ 04240495 — STAGE ONLY STATION AND NUMBER
- × 04245840 — CREST-STAGE PARTIAL-RECORD STATION AND NUMBER
- ◆ 0424014980 — SURFACE-WATER AND WATER-QUALITY STATION AND NUMBER
- ● Od-1833 — GROUND-WATER STATION (OBSERVATION WELL) AND LOCAL NUMBER

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

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01500000 OULEOUT CREEK AT EAST SIDNEY, NY

LOCATION.--Lat 42°20'00", long 75°14'07", Delaware County, Hydrologic Unit 02050101, on right bank 0.2 mi downstream from bridge on County Highway 44, 0.4 mi downstream from East Sidney Dam, at East Sidney, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--103 mi^2.

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,086.23 ft above NGVD of 1929. Prior to June 13, 1947, water-stage recorder at site 0.5 mi upstream at datum 27.30 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since November 1949, flow regulated by East Sidney Lake (see station 01499500). Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of East Sidney Reservoir in 1950, 7,250 ft^3/s, Dec. 30, 1942, gage height, 7.62 ft, site and datum then in use, from rating curve extended above 4,000 ft^3/s; minimum daily discharge, 1.2 cfs, gage height, 0.32 ft, Aug. 13, 14, 17, 1949, result of construction, minimum instantaneous discharge not determined. Maximum discharge, since construction of East Sidney Reservoir in 1950, 4,000 ft^3/s, Apr. 7, 1960, gage height, 6.19 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft^3/s, in July 1935, was determined by computation of flow over dam and from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,000 ft^3/s, Mar. 8, gage height, 4.68 ft; minimum discharge, 10 ft^3/s, June 29, 30, July 1, gage height, 1.03 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	867	482	323	53	59	290	186	339	16	199	273
2	178	507	478	262	49	129	290	179	352	27	199	151
3	163	418	380	237	48	487	249	425	352	30	143	114
4	169	314	329	508	48	480	226	479	327	29	79	99
5	241	282	323	440	52	584	200	350	261	27	90	77
6	229	282	287	345	55	210	173	364	142	24	94	69
7	212	245	264	320	57	18	164	344	98	16	94	69
8	147	208	e260	307	57	923	166	281	110	13	94	71
9	100	155	e210	307	57	1,840	153	199	139	13	73	319
10	100	128	e180	307	57	1,750	146	171	150	13	65	379
11	100	129	332	307	57	1,040	112	192	127	18	65	248
12	100	180	362	251	53	392	94	218	96	21	65	142
13	100	216	1,170	203	52	248	206	205	76	27	531	141
14	100	215	1,100	177	52	202	478	198	72	30	428	149
15	325	179	650	147	52	212	365	157	72	34	163	120
16	312	143	400	145	47	208	261	140	56	34	168	85
17	170	133	410	124	33	189	226	140	45	34	247	110
18	162	164	459	113	42	189	192	140	56	34	212	22
19	162	190	330	114	47	180	179	140	57	34	145	690
20	163	859	298	95	47	148	197	140	45	67	114	1,890
21	181	1,010	257	86	47	183	205	140	38	81	345	1,810
22	189	734	227	86	47	210	197	123	37	81	350	1,810
23	189	484	277	70	54	157	192	111	37	85	255	1,320
24	120	416	1,020	63	e57	165	192	111	37	105	236	636
25	69	388	1,330	63	e53	250	177	172	37	47	140	319
26	88	343	682	63	50	330	303	250	36	37	114	179
27	629	272	544	63	50	506	351	1,540	28	214	107	139
28	990	237	410	73	50	567	251	1,110	20	393	104	271
29	894	396	344	81	50	410	222	467	12	697	104	323
30	983	494	333	76	---	364	206	352	10	522	87	203
31	1,360	---	333	63	---	290	---	310	---	231	325	---
TOTAL	9,137	10,588	14,461	5,819	1,473	12,920	6,663	9,334	3,264	3,034	5,435	12,228
MEAN	295	353	466	188	50.8	417	222	301	109	97.9	175	408
MAX	1,360	1,010	1,330	508	57	1,840	478	1,540	352	697	531	1,890
MIN	69	128	180	63	33	18	94	111	10	13	65	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	98.2	182	229	192	205	341	387	187	105	57.3	42.5	65.4
MAX	618	411	531	517	604	690	1,117	483	370	305	200	408
(WY)	(1978)	(1997)	(1997)	(1996)	(1981)	(1977)	(1993)	(1983)	(1968)	(1973)	(1994)	(1977)
MIN	3.35	4.46	45.0	28.3	33.3	86.2	118	35.4	16.2	6.95	3.86	2.45
(WY)	(1965)	(1965)	(1961)	(1961)	(1980)	(1960)	(1985)	(1987)	(1964)	(1965)	(1964)	(1964)

01500000 OULEOUT CREEK AT EAST SIDNEY, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	97,977		94,356			
ANNUAL MEAN	268		258		174	
HIGHEST ANNUAL MEAN					258	2004
LOWEST ANNUAL MEAN					77.9	1965
HIGHEST DAILY MEAN	1,880	Mar 25	1,890	Sep 20	2,800	Apr 7, 1960
LOWEST DAILY MEAN	25	Aug 27	10	Jun 30	1.4	Apr 1, 1989
ANNUAL SEVEN-DAY MINIMUM	26	Aug 24	17	Jul 6	1.8	Nov 5, 1973
10 PERCENT EXCEEDS	535		498		410	
50 PERCENT EXCEEDS	174		179		88	
90 PERCENT EXCEEDS	52		46		12	

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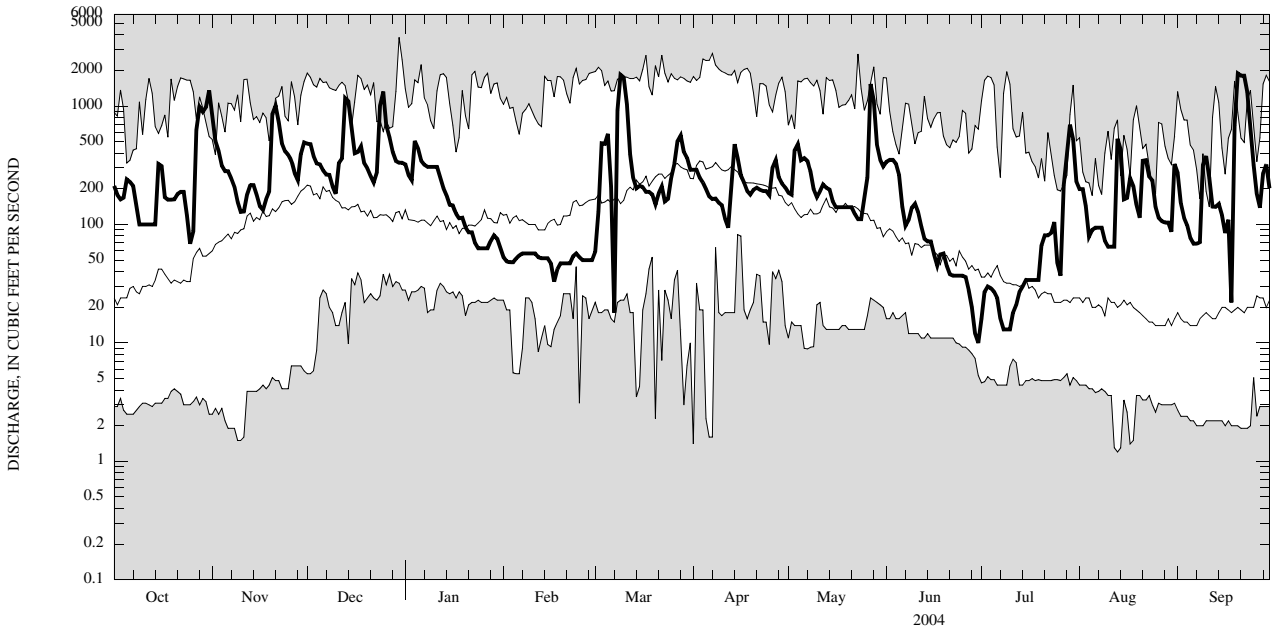

2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01502500 UNADILLA RIVER AT ROCKDALE, NY

LOCATION.--Lat 42°22'40", long 75°24'23", Chenango County, Hydrologic Unit 02050101, on right bank 400 ft downstream from Chenango-Otsego County highway bridge at Rockdale, and 0.7 mi downstream from Kent Brook.

DRAINAGE AREA.--520 mi^2.

PERIOD OF RECORD.--November 1929 to September 1933, January 1937 to March 1995, October 1995 to September 2000 (annual maximum only), October 2000 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 992.25 ft above NGVD of 1929. Prior to Sept. 30, 1933, nonrecording gage at bridge 400 ft upstream at datum 0.73 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s, Dec. 31, 1942, gage height, 12.98 ft; minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 6	2300	*6,920	*9.09			

Minimum discharge, 146 ft^3/s, July 7, gage height, 3.82 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	655	2,050	1,650	1,410	e410	e350	1,900	909	1,010	196	1,980	2,760
2	592	1,700	1,520	1,260	e380	e480	2,060	864	1,240	173	1,520	1,650
3	552	1,550	1,320	1,380	e370	e1,250	1,780	1,470	978	168	1,110	1,190
4	729	1,490	1,190	2,150	e370	2,160	1,540	1,280	755	178	947	971
5	1,040	1,340	1,120	1,940	e360	3,140	1,400	1,010	637	161	929	821
6	810	1,340	1,030	1,640	371	5,720	1,190	1,090	579	158	756	719
7	672	1,170	993	1,190	e390	6,200	1,120	983	539	153	632	629
8	591	1,030	887	e1,020	e440	4,110	1,040	876	487	532	559	592
9	536	917	902	e960	e420	2,750	957	796	430	927	507	1,070
10	507	840	928	e760	e410	2,220	846	832	675	568	452	1,340
11	464	824	2,230	e740	e400	1,930	767	836	615	355	448	901
12	427	929	4,660	e870	e360	1,830	717	758	464	274	659	686
13	401	965	3,160	921	e370	1,550	1,250	808	380	237	1,240	595
14	377	1,020	1,910	e770	e360	1,250	4,750	760	341	241	1,550	525
15	1,280	933	1,600	e700	e350	1,300	3,140	718	324	422	934	483
16	1,670	863	1,610	e660	e330	1,220	2,040	763	305	617	741	441
17	1,090	895	1,640	e650	e320	1,070	1,660	705	292	702	1,560	628
18	855	1,010	1,790	e640	e330	1,070	1,530	616	359	586	1,040	4,640
19	862	1,240	1,530	e620	e330	942	1,790	638	346	688	765	3,670
20	878	3,690	1,350	e590	334	899	1,460	579	286	833	865	1,940
21	786	3,350	1,150	e550	339	1,520	1,270	535	249	594	2,210	1,460
22	742	2,230	1,150	e510	397	1,490	1,190	503	225	521	2,940	1,180
23	694	1,770	1,210	e490	e370	1,090	1,270	538	228	527	2,000	983
24	653	1,530	2,060	e470	e350	1,190	1,250	e900	224	715	1,410	860
25	611	1,580	3,660	e450	e330	1,720	1,060	e1,400	204	551	1,100	770
26	585	1,460	2,690	e440	e310	2,180	1,590	1,490	189	403	924	732
27	1,800	1,290	2,020	e440	e310	3,290	1,720	1,290	183	1,730	802	646
28	4,150	1,260	1,680	e450	e300	3,920	1,310	1,530	187	4,360	713	648
29	3,720	2,070	1,500	e450	e310	3,140	1,130	1,220	248	3,840	924	637
30	4,400	2,020	1,530	e440	---	2,430	998	897	228	3,120	2,110	590
31	2,820	---	1,640	e440	---	2,070	---	769	---	1,910	3,010	---
TOTAL	35,949	44,356	53,310	26,001	10,421	65,481	45,725	28,363	13,207	26,440	37,337	34,757
MEAN	1,160	1,479	1,720	839	359	2,112	1,524	915	440	853	1,204	1,159
MAX	4,400	3,690	4,660	2,150	440	6,200	4,750	1,530	1,240	4,360	3,010	4,640
MIN	377	824	887	440	300	350	717	503	183	153	448	441
CFSM	2.23	2.84	3.31	1.61	0.69	4.06	2.93	1.76	0.85	1.64	2.32	2.23
IN.	2.57	3.17	3.81	1.86	0.75	4.68	3.27	2.03	0.94	1.89	2.67	2.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

MEAN	446	791	976	848	972	1,774	2,058	951	530	299	219	294
MAX	2,944	2,223	2,104	1,931	2,858	4,181	5,395	2,264	1,710	1,209	1,204	2,067
(WY)	(1978)	(1960)	(1973)	(1952)	(1981)	(1977)	(1940)	(1943)	(1972)	(1947)	(2004)	(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)

01502500 UNADILLA RIVER AT ROCKDALE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004	
ANNUAL TOTAL	431,962		421,347			
ANNUAL MEAN	1,183		1,151		849	
HIGHEST ANNUAL MEAN					1,294	1943
LOWEST ANNUAL MEAN					447	1965
HIGHEST DAILY MEAN	11,200	Mar 22	6,200	Mar 7	15,400	Mar 6, 1979
LOWEST DAILY MEAN	199	Aug 29	153	Jul 7	27	Sep 20, 1964
ANNUAL SEVEN-DAY MINIMUM	223	Aug 23	170	Jul 1	27	Sep 20, 1964
ANNUAL RUNOFF (CFSM)	2.28		2.21		1.63	
ANNUAL RUNOFF (INCHES)	30.90		30.14		22.19	
10 PERCENT EXCEEDS	2,080		2,120		1,970	
50 PERCENT EXCEEDS	840		900		468	
90 PERCENT EXCEEDS	331		344		97	

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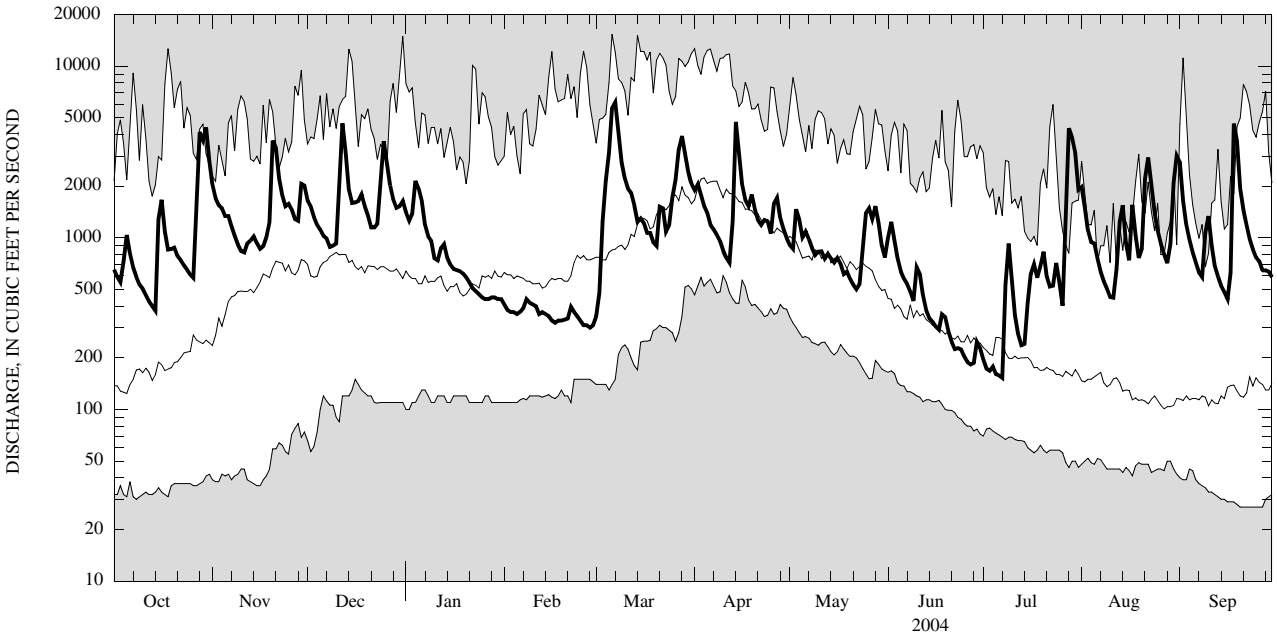

2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

LOCATION.--Lat 42°02'07", long 75°48'12", Broome County, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft upstream from bridge on County Highway 304 at Conklin, 0.7 mi downstream from Little Snake Creek, and 3.5 mi downstream from Pennsylvania-New York State line.

DRAINAGE AREA.--2,232 mi^2.

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

REVISED RECORDS.--WSP 1672: 1918(M, P). WSP 2103: Drainage area. WDR NY-81-3: 1918 (M, P).

GAGE.--Water-stage recorder. Datum of gage is 841.04 ft above NGVD of 1929. Prior to Oct. 4, 1914, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minor regulation by upstream lakes and reservoirs. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft^3/s, Mar. 18, 1936, gage height, 20.14 ft; maximum gage height, 20.83 ft, Mar. 22, 1948; minimum discharge, 85 ft^3/s, Oct. 14, 1964, gage height 1.30 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 29	1430	20,000	11.04	1915	26,000	12.76
Dec 12	0630	18,400	10.54	1200	*54,700	*19.01

Minimum discharge, 681 ft^3/s, July 7, gage height, 2.45 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,110	12,400	7,480	6,430	e1,700	e1,600	6,780	3,800	4,390	998	7,450	6,060
2	2,610	8,940	6,590	5,750	e1,650	e2,300	6,970	3,570	5,330	914	6,320	4,840
3	2,370	7,310	5,960	5,600	e1,620	e5,500	7,180	5,530	6,090	800	4,910	3,340
4	2,330	6,510	5,200	7,190	e1,600	e9,000	6,580	6,190	5,150	772	3,940	2,780
5	3,190	6,000	4,830	10,500	e1,580	e12,500	5,900	5,210	4,200	793	3,830	2,470
6	3,680	6,010	4,640	9,150	e1,600	e19,000	5,270	4,740	3,570	737	3,490	2,230
7	3,000	5,560	e4,640	7,190	e1,650	e21,000	4,730	4,760	3,200	691	2,980	2,020
8	2,550	4,930	e4,100	e5,400	e1,700	17,800	4,430	4,220	2,910	721	2,500	2,210
9	2,270	4,360	3,870	e4,600	e1,750	13,400	4,160	3,890	2,560	799	2,200	4,840
10	2,050	3,900	3,680	e3,900	e1,720	10,500	3,840	3,660	2,410	1,650	2,010	5,030
11	1,920	3,650	10,200	e3,250	e1,700	8,830	3,510	5,260	2,620	1,440	1,870	4,360
12	1,790	3,710	17,400	e3,460	e1,680	7,330	3,240	4,450	2,470	1,150	2,010	3,350
13	1,670	4,040	14,300	e3,900	e1,600	6,290	4,720	4,160	2,060	1,110	4,620	2,770
14	1,570	4,000	10,300	e3,900	e1,550	5,300	13,800	3,990	1,790	1,070	6,010	2,260
15	3,240	3,900	8,000	e3,300	e1,500	4,750	12,900	3,450	1,650	1,660	5,070	2,110
16	5,360	3,570	6,740	e2,900	e1,450	4,750	8,330	3,430	1,530	1,650	3,850	1,880
17	5,050	3,370	6,570	e2,700	e1,400	4,490	6,270	3,270	1,550	1,920	3,710	5,630
18	3,850	3,440	7,570	e2,800	e1,300	4,110	5,370	2,900	1,980	2,130	4,340	45,700
19	3,240	4,320	7,540	e2,750	e1,300	3,960	5,270	2,610	1,740	2,060	3,410	30,100
20	3,460	13,500	6,370	e2,700	e1,300	3,600	5,390	2,580	1,600	2,300	2,790	18,000
21	3,230	15,700	5,550	e2,600	e1,350	4,480	4,760	2,490	1,360	2,460	3,300	10,500
22	2,950	12,000	5,090	e2,500	e1,420	5,400	4,270	2,460	1,200	2,070	7,440	7,770
23	2,780	8,750	5,170	e2,350	e1,500	4,760	4,150	2,390	1,130	1,880	7,160	6,510
24	2,640	7,100	8,060	e2,300	e1,500	4,150	4,270	2,450	1,060	2,070	5,540	5,290
25	2,460	6,710	15,400	e2,150	e1,450	4,900	4,030	3,170	990	2,180	4,280	4,250
26	2,280	6,540	16,200	e2,000	e1,420	6,070	4,750	4,610	1,000	1,950	3,530	3,560
27	5,570	5,950	11,600	e1,850	e1,400	7,840	6,330	7,570	906	7,860	3,050	3,160
28	15,900	5,460	8,790	e1,700	e1,350	11,000	5,780	9,330	838	15,200	2,820	4,280
29	18,100	7,140	7,270	e1,700	e1,400	11,000	4,780	7,470	830	15,500	2,770	5,410
30	19,600	8,490	6,740	e1,750	---	8,880	4,230	5,540	916	11,500	2,670	4,340
31	17,300	---	6,870	e1,700	---	7,360	---	4,500	---	8,690	6,860	---
TOTAL	151,120	197,260	242,720	119,970	44,140	241,850	171,990	133,650	69,030	96,725	126,730	207,050
MEAN	4,875	6,575	7,830	3,870	1,522	7,802	5,733	4,311	2,301	3,120	4,088	6,902
MAX	19,600	15,700	17,400	10,500	1,750	21,000	13,800	9,330	6,090	15,500	7,450	45,700
MIN	1,570	3,370	3,680	1,700	1,300	1,600	3,240	2,390	830	691	1,870	1,880
CFSM	2.18	2.95	3.51	1.73	0.68	3.50	2.57	1.93	1.03	1.40	1.83	3.09
IN.	2.52	3.29	4.05	2.00	0.74	4.03	2.87	2.23	1.15	1.61	2.11	3.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2004, BY WATER YEAR (WY)

MEAN	1,859	3,358	3,962	3,903	3,922	7,572	8,403	4,249	2,291	1,440	1,014	1,242
MAX	12,860	9,281	10,680	10,110	11,150	18,540	21,340	10,590	8,122	7,929	5,033	8,783
(WY)	(1978)	(1928)	(1997)	(1913)	(1981)	(1936)	(1940)	(1943)	(1917)	(1915)	(1915)	(1977)
MIN	130	140	641	476	724	2,808	2,000	1,300	476	267	171	142
(WY)	(1965)	(1965)	(1931)	(1931)	(1980)	(1965)	(1946)	(1985)	(1999)	(1936)	(1964)	(1964)

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1913 - 2004	
ANNUAL TOTAL	1,890,139		1,802,235			
ANNUAL MEAN	5,178		4,924		3,597	
HIGHEST ANNUAL MEAN					5,667	1928
LOWEST ANNUAL MEAN					1,690	1965
HIGHEST DAILY MEAN	33,200	Mar 23	45,700	Sep 18	57,800	Mar 19, 1936
LOWEST DAILY MEAN	684	Aug 29	691	Jul 7	105	Oct 24, 1964
ANNUAL SEVEN-DAY MINIMUM	770	Aug 24	759	Jul 3	114	Oct 19, 1964
ANNUAL RUNOFF (CFSM)	2.32		2.21		1.61	
ANNUAL RUNOFF (INCHES)	31.50		30.04		21.90	
10 PERCENT EXCEEDS	10,900		8,960		8,400	
50 PERCENT EXCEEDS	3,650		3,900		2,040	
90 PERCENT EXCEEDS	1,450		1,500		425	

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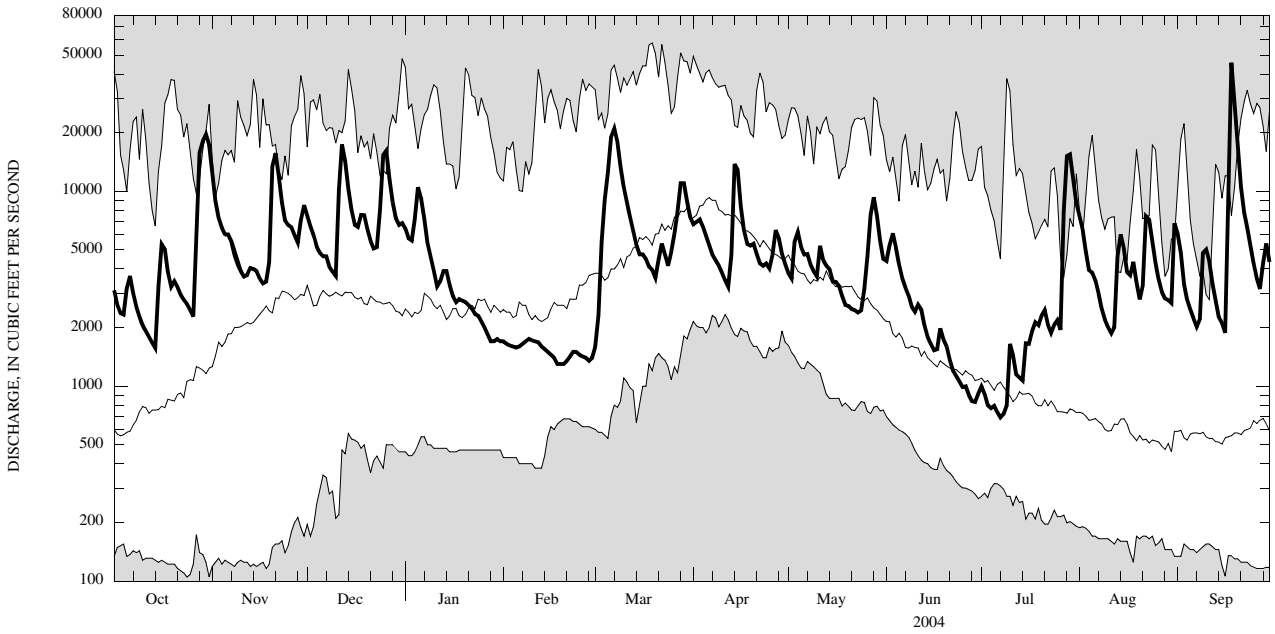


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

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 mi^2.

PERIOD OF RECORD.--May 1938 to March 1995, October 1995 to March 2004 (annual maximum only), and April 2004 to September 2004.

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 NGVD of 1929. 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.--No estimated daily discharges. Records good. Flow from 82 mi^2 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 and satellite gage-height telemeters at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s, Mar. 6, 1979, gage height, 9.94 ft; maximum gage height, 10.47 ft, Jan. 19, 1996 (ice jam); minimum discharge, 12 ft^3/s, Sept. 25, 1964.

EXTREMES FOR CURRENT PERIOD.--April to September 2004: Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Jul 29	0245	*4,250	*8.80			

Minimum discharge, 58 ft^3/s, July 6, 7, gage height, 1.97 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

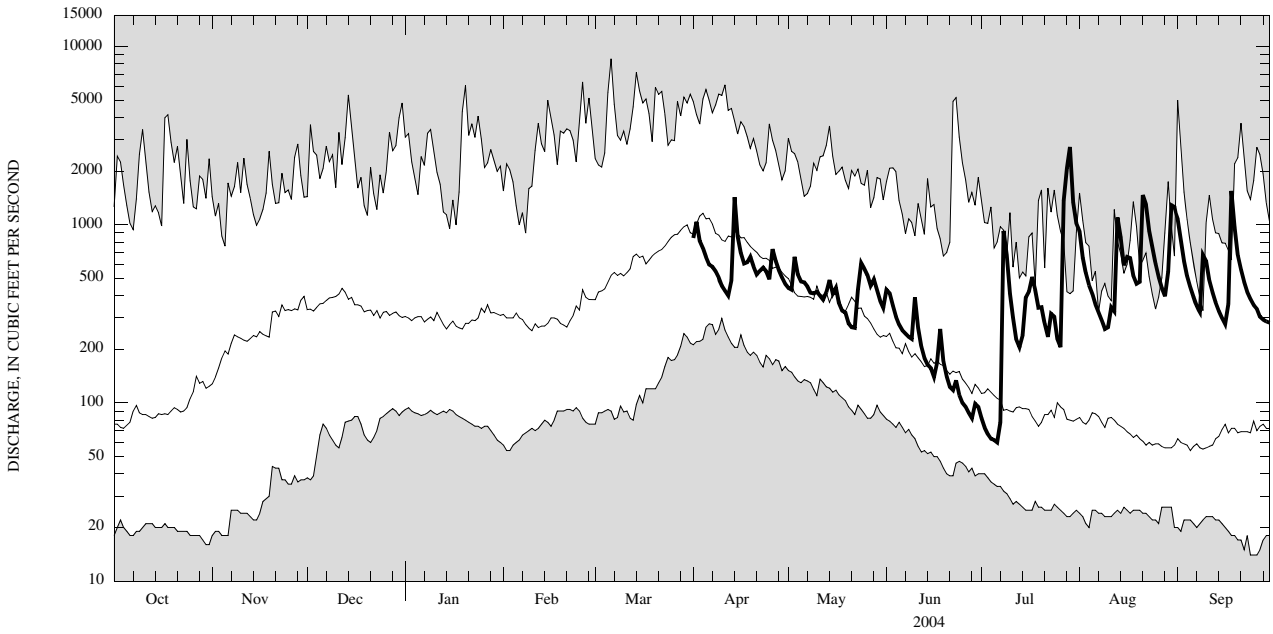
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	844	443	432	82	921	1,080
2	---	---	---	---	---	---	1,040	433	413	73	655	818
3	---	---	---	---	---	---	811	662	352	67	536	626
4	---	---	---	---	---	---	739	527	306	63	459	515
5	---	---	---	---	---	---	660	481	275	62	412	445
6	---	---	---	---	---	---	598	476	256	60	358	393
7	---	---	---	---	---	---	582	451	245	78	323	350
8	---	---	---	---	---	---	549	416	235	924	292	325
9	---	---	---	---	---	---	506	412	229	677	260	678
10	---	---	---	---	---	---	456	421	391	412	266	626
11	---	---	---	---	---	---	427	399	264	302	344	486
12	---	---	---	---	---	---	401	380	207	228	326	417
13	---	---	---	---	---	---	489	418	179	206	1,100	367
14	---	---	---	---	---	---	1,430	490	164	240	849	329
15	---	---	---	---	---	---	862	411	157	392	593	300
16	---	---	---	---	---	---	694	445	140	422	662	277
17	---	---	---	---	---	---	607	364	170	510	652	359
18	---	---	---	---	---	---	616	330	260	429	518	1,550
19	---	---	---	---	---	---	662	322	171	343	467	969
20	---	---	---	---	---	---	584	280	141	345	479	674
21	---	---	---	---	---	---	527	266	123	278	1,470	559
22	---	---	---	---	---	---	553	264	118	235	1,300	476
23	---	---	---	---	---	---	576	434	134	317	926	420
24	---	---	---	---	---	---	549	610	111	305	755	383
25	---	---	---	---	---	---	495	567	100	229	604	355
26	---	---	---	---	---	---	730	522	95	206	510	338
27	---	---	---	---	---	---	625	456	88	1,370	442	305
28	---	---	---	---	---	---	557	495	82	2,080	398	294
29	---	---	---	---	---	---	507	431	99	2,740	548	287
30	---	---	---	---	---	---	466	374	95	1,340	1,290	282
31	---	---	---	---	---	---	---	342	---	1,020	1,260	---
TOTAL	---	---	---	---	---	---	19,142	13,322	6,032	16,035	19,975	15,283
MEAN	---	---	---	---	---	---	638	430	201	517	644	509
MAX	---	---	---	---	---	---	1,430	662	432	2,740	1,470	1,550
MIN	---	---	---	---	---	---	401	264	82	60	260	277

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	207	338	451	433	462	872	998	450	254	147	110	143
MAX	1,227	792	994	1,111	1,497	2,059	2,596	989	1,190	517	644	853
(WY)	(1978)	(1969)	(1973)	(1996)	(1981)	(1977)	(1940)	(1947)	(1972)	(2004)	(2004)	(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)

01505000 CHENANGO RIVER AT SHERBURNE, NY—Continued

SUMMARY STATISTICS	WATER YEARS 1938 - 2004	
ANNUAL MEAN	403	
HIGHEST ANNUAL MEAN	640	1943
LOWEST ANNUAL MEAN	200	1965
HIGHEST DAILY MEAN	8,570	Mar 6, 1979
LOWEST DAILY MEAN	14	Sep 24, 1964
ANNUAL SEVEN-DAY MINIMUM	15	Sep 21, 1964
10 PERCENT EXCEEDS	940	
50 PERCENT EXCEEDS	224	
90 PERCENT EXCEEDS	52	



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi downstream from confluence of East and West Branches.

DRAINAGE AREA.--292 mi^2, including 14.0 mi^2, the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.

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

REVISED RECORDS.--WSP 2103: Drainage area. WDR NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft above NGVD of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. Slight diversion from Gate House Pond on West Branch 17 mi upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Linden Chlorine Process Co. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s, Mar. 5, 1964, gage height, 12.49 ft; maximum gage height, 13.82 ft, present datum, Apr. 5, 1950; minimum discharge, 9.8 ft^3/s, Sept. 20, 1939, Sept. 29, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 6	1915	*5,310	*9.19	0045	4,530	8.61

Minimum discharge, 113 ft^3/s, July 6, 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	1,050	1,250	994	253	217	1,330	607	469	129	910	1,840
2	238	849	1,080	867	e240	317	1,500	604	443	126	691	1,150
3	240	798	912	1,040	e250	817	1,220	1,100	377	122	559	858
4	277	730	805	1,470	255	1,130	1,080	897	329	117	481	702
5	523	657	746	1,260	e240	2,090	958	783	295	117	436	603
6	378	621	700	1,040	246	4,310	841	787	270	115	373	530
7	322	557	638	811	e260	4,250	812	695	256	141	330	461
8	287	489	591	e650	e260	2,600	749	623	244	641	300	448
9	258	432	561	e580	e255	1,760	676	590	226	505	273	1,420
10	236	394	536	e520	252	1,340	608	581	253	302	245	1,530
11	217	387	1,890	e490	236	1,140	557	546	243	227	260	1,030
12	203	439	3,760	e480	228	1,080	512	512	221	200	256	776
13	189	590	2,510	e460	221	906	851	478	203	206	1,050	658
14	181	618	1,530	e440	213	765	2,000	443	195	300	808	568
15	554	571	1,190	e420	e200	765	1,470	478	200	542	498	476
16	843	543	1,050	e390	e195	693	1,070	494	190	480	399	425
17	530	617	972	e390	e195	632	902	433	190	617	430	536
18	417	781	972	e380	e190	610	866	359	234	636	396	2,030
19	411	1,120	859	e360	e185	544	991	368	218	474	340	1,840
20	422	2,850	772	e350	181	564	872	332	194	435	339	1,170
21	404	2,700	691	e330	199	999	781	349	178	333	1,010	863
22	407	1,610	656	e320	234	834	936	312	176	291	1,250	695
23	368	1,180	694	e310	e210	686	945	463	181	604	775	591
24	363	962	1,480	e300	e200	729	885	746	167	400	584	504
25	364	1,030	2,530	e290	e190	1,130	800	744	150	299	468	453
26	352	896	1,870	e290	e190	1,540	1,170	665	147	275	393	415
27	1,160	792	1,340	280	e190	3,580	1,020	550	141	1,770	343	375
28	2,290	822	1,080	280	e190	3,790	857	599	135	2,760	327	356
29	2,030	1,690	932	e270	e200	2,610	758	504	137	2,010	445	336
30	2,180	1,500	1,150	e270	---	1,890	668	414	133	1,210	2,360	315
31	1,450	---	1,260	261	---	1,480	---	378	---	961	3,020	---
TOTAL	18,350	28,275	37,007	16,593	6,358	45,798	28,685	17,434	6,795	17,345	20,349	23,954
MEAN	592	942	1,194	535	219	1,477	956	562	226	560	656	798
MAX	2,290	2,850	3,760	1,470	260	4,310	2,000	1,100	469	2,760	3,020	2,030
MIN	181	387	536	261	181	217	512	312	133	115	245	315
CFSM	2.03	3.23	4.09	1.83	0.75	5.06	3.27	1.93	0.78	1.92	2.25	2.73
IN.	2.34	3.60	4.71	2.11	0.81	5.83	3.65	2.22	0.87	2.21	2.59	3.05

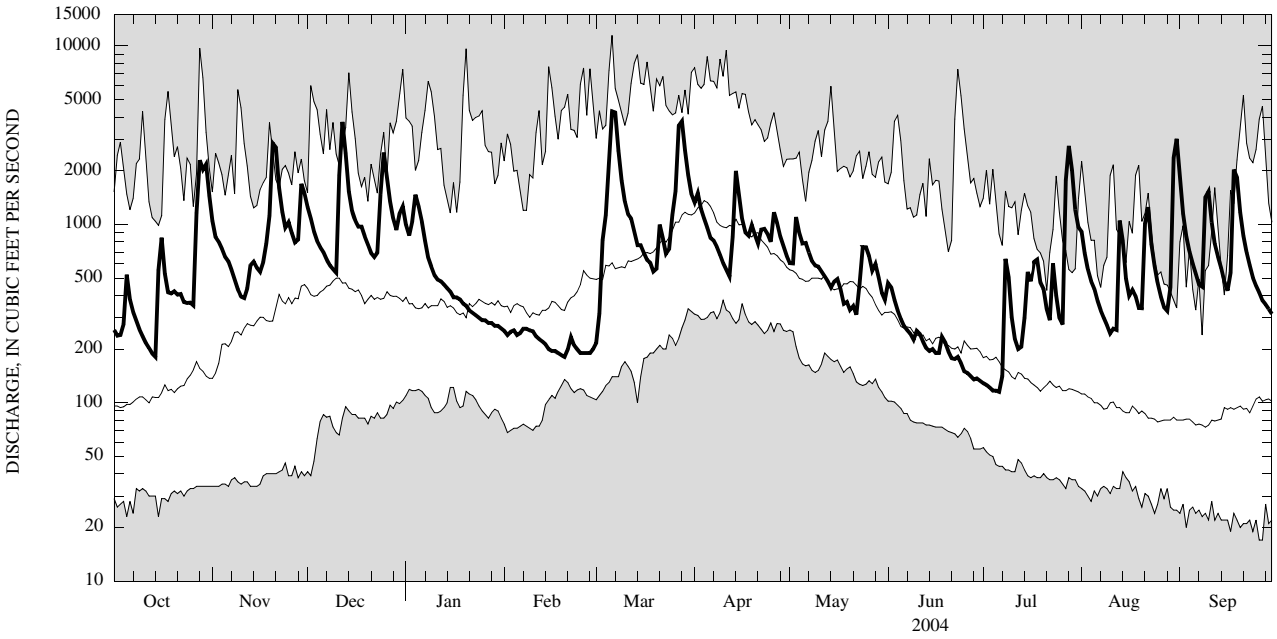
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	250	430	578	523	560	1,053	1,245	583	336	190	141	163
MAX	1,553	1,119	1,537	1,415	1,469	2,432	3,487	1,539	1,674	560	656	1,125
(WY)	(1978)	(1969)	(1997)	(1998)	(1976)	(1945)	(1993)	(2000)	(1972)	(2004)	(2004)	(1977)
MIN	33.2	44.3	86.7	112	127	359	305	205	77.7	43.5	34.6	23.8
(WY)	(1965)	(1965)	(1961)	(1961)	(1963)	(1941)	(1946)	(1999)	(1999)	(1962)	(1939)	(1939)

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	250,776		266,943			
ANNUAL MEAN	687		729		503	
HIGHEST ANNUAL MEAN					729	2004
LOWEST ANNUAL MEAN					303	1965
HIGHEST DAILY MEAN	5,330	Mar 22	4,310	Mar 6	11,500	Mar 6, 1979
LOWEST DAILY MEAN	118	Sep 22	115	Jul 6	17	Sep 26, 1959
ANNUAL SEVEN-DAY MINIMUM	135	Sep 16	123	Jun 30	21	Sep 19, 1939
ANNUAL RUNOFF (CFSM)	2.35		2.50		1.72	
ANNUAL RUNOFF (INCHES)	31.95		34.01		23.41	
10 PERCENT EXCEEDS	1,490		1,480		1,120	
50 PERCENT EXCEEDS	432		539		290	
90 PERCENT EXCEEDS	184		200		71	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01510000 OTSELIC RIVER AT CINCINNATUS, NY

LOCATION.--Lat 42°32'28", long 75°54'00", Cortland County, Hydrologic Unit 02050102, on right bank 150 ft upstream from Mead Brook, and 300 ft downstream from bridge on County Highway 159 at Cincinnatus.

DRAINAGE AREA.--147 mi^2.

PERIOD OF RECORD.--June 1938 to September 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 NGVD of 1929.

REMARKS.--Records good except those for esimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft^3/s, Dec. 30, 1942; maximum gage height, 10.89 ft, Jan. 19, 1996 (ice jam); minimum discharge, 3.8 ft^3/s, Sept. 25, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 27	2000	2,640	5.62	1630	3,320	6.35
Nov 20	0245	2,890	5.90	0845	2,970	5.98
Dec 11	1815	*3,690	*6.73	0915	2,640	5.62

Minimum discharge, 32 ft^3/s, July 6, 7, gage height, 0.62 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	612	672	408	102	e105	693	268	269	45	524	356
2	151	511	572	369	100	191	864	266	242	40	354	277
3	155	485	483	602	96	528	602	546	198	37	280	234
4	220	425	431	832	98	667	529	354	167	34	243	204
5	355	379	389	628	94	1,420	448	333	150	34	215	179
6	241	341	360	512	95	2,830	384	354	139	33	179	162
7	207	303	330	e380	114	1,970	364	311	130	46	158	147
8	180	268	298	e340	104	1,090	331	271	117	378	141	154
9	163	236	285	e280	96	722	296	259	105	382	126	594
10	148	216	274	e240	107	571	261	249	145	163	126	489
11	135	229	2,010	e230	e100	521	234	231	120	116	133	319
12	127	273	2,210	e230	e98	506	216	249	98	e99	129	255
13	120	410	965	e220	e96	402	356	235	87	102	1,220	220
14	111	380	664	e200	e90	339	1,030	412	82	171	508	192
15	651	340	574	e195	e86	354	534	298	77	336	325	171
16	620	320	494	e180	e84	314	418	306	70	323	454	156
17	382	380	482	e180	85	285	363	229	73	572	524	303
18	311	499	492	e175	85	276	393	208	108	567	342	1,940
19	338	935	414	167	e82	236	458	204	82	332	290	899
20	322	2,440	371	154	84	263	376	169	69	339	298	508
21	308	1,200	324	e140	98	589	326	162	62	232	1,550	386
22	291	752	316	e130	114	387	353	149	61	186	982	318
23	261	579	348	e115	e95	323	377	238	66	264	532	265
24	252	497	888	e120	e90	371	342	437	58	249	390	230
25	230	572	1,140	e110	e85	629	318	366	52	170	310	207
26	211	454	690	113	e85	975	685	337	50	152	261	191
27	1,390	412	543	115	e82	2,620	490	283	46	1,270	222	166
28	1,730	547	457	117	e80	1,930	405	368	46	1,490	211	158
29	1,570	1,400	412	e110	e85	1,310	343	258	53	927	211	149
30	1,350	809	520	e105	---	925	299	216	52	512	728	140
31	804	---	500	105	---	731	---	200	---	483	611	---
TOTAL	13,495	17,204	18,908	7,802	2,710	24,380	13,088	8,766	3,074	10,084	12,577	9,969
MEAN	435	573	610	252	93.4	786	436	283	102	325	406	332
MAX	1,730	2,440	2,210	832	114	2,830	1,030	546	269	1,490	1,550	1,940
MIN	111	216	274	105	80	105	216	149	46	33	126	140
CFSM	2.96	3.90	4.15	1.71	0.64	5.35	2.97	1.92	0.70	2.21	2.76	2.26
IN.	3.42	4.35	4.78	1.97	0.69	6.17	3.31	2.22	0.78	2.55	3.18	2.52

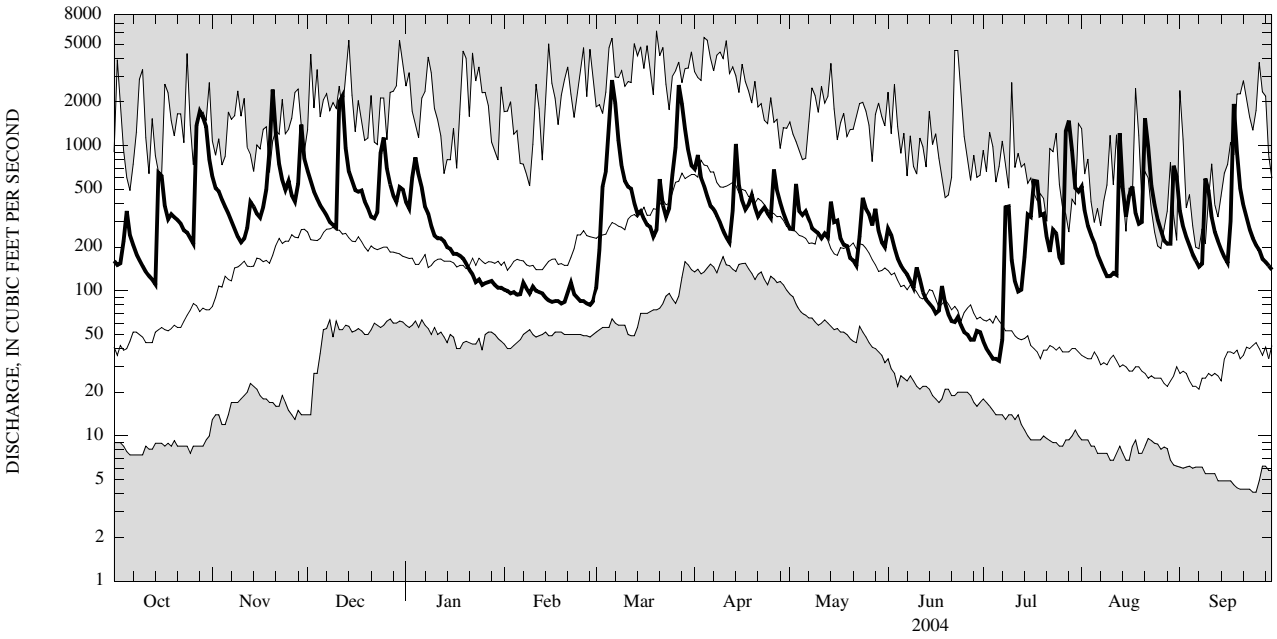
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	149	249	330	273	287	591	672	297	162	90.8	62.5	91.6
MAX	713	628	841	716	764	1,302	1,693	927	773	325	406	706
(WY)	(1978)	(1960)	(1997)	(1998)	(1976)	(1945)	(1940)	(2000)	(1972)	(2004)	(2004)	(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)

01510000 OTSELIC RIVER AT CINCINNATUS, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	146,583		142,057			
ANNUAL MEAN	402		388		271	
HIGHEST ANNUAL MEAN					391	1943
LOWEST ANNUAL MEAN					151	1995
HIGHEST DAILY MEAN	3,490	Mar 21	2,830	Mar 6	6,200	Mar 20, 1948
LOWEST DAILY MEAN	51	Aug 29	33	Jul 6	4.1	Sep 24, 1939
ANNUAL SEVEN-DAY MINIMUM	61	Aug 23	38	Jul 1	4.3	Sep 19, 1939
ANNUAL RUNOFF (CFSM)	2.73		2.64		1.84	
ANNUAL RUNOFF (INCHES)	37.09		35.95		25.02	
10 PERCENT EXCEEDS	806		737		616	
50 PERCENT EXCEEDS	254		282		140	
90 PERCENT EXCEEDS	96		90		24	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY

LOCATION.--Lat 42°13'05", long 75°50'55", Broome County, Hydrologic Unit 02050102, on left bank in Chenango Valley State Park, and 1.2 mi downstream from Tioughnioga River and village of Chenango Forks.

DRAINAGE AREA.--1,483 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 871.63 ft above NGVD of 1929. Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, water-stage recorder at site 300 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 01511000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft^3/s, July 8, 1935, gage height, 20.3 ft, from floodmarks, from rating curve extended above 32,000 ft^3/s on basis of slope-area measurement of peak flow; minimum discharge, 79 ft^3/s, Sept. 3, 4, 5, 6, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,600 ft^3/s, Sept. 18, gage height 9.78 ft; minimum discharge, 422 ft^3/s, July 7, gage height 2.79 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,700	5,800	6,320	4,740	e1,320	e1,300	6,240	2,690	2,620	558	5,210	5,310
2	1,560	4,840	5,590	4,040	e1,300	e1,900	6,600	2,630	2,790	510	3,990	3,970
3	1,490	4,240	4,900	4,300	e1,280	e4,500	5,750	5,110	2,540	476	2,960	3,030
4	1,670	3,930	4,300	6,750	e1,260	e7,500	4,840	4,520	1,960	450	2,720	2,490
5	2,540	3,520	4,070	6,520	e1,270	10,800	4,270	3,380	1,610	440	2,520	2,170
6	2,260	3,360	3,810	5,440	e1,280	15,400	3,780	3,320	1,460	441	2,000	1,930
7	1,890	3,000	3,550	4,160	e1,320	14,900	3,400	3,060	1,370	456	1,650	1,720
8	1,580	2,620	3,080	e3,400	e1,350	12,700	3,190	2,780	1,270	3,760	1,480	1,760
9	1,350	2,330	2,730	e3,300	e1,370	9,720	2,880	2,590	1,180	3,460	1,340	7,190
10	1,230	2,100	2,670	3,010	e1,330	7,870	2,580	2,540	1,130	2,300	1,190	6,710
11	1,240	2,030	8,740	e2,900	e1,300	6,940	2,350	2,610	1,190	1,280	1,200	4,220
12	1,150	2,290	14,300	e2,600	e1,250	6,500	2,140	2,470	1,020	977	1,440	3,030
13	1,060	2,530	12,300	e2,500	e1,220	5,480	2,690	2,640	900	877	5,840	2,470
14	947	3,060	8,530	e2,400	e1,200	4,070	9,340	2,510	834	1,090	6,390	2,090
15	3,030	2,880	7,040	e2,100	e1,150	3,610	7,000	2,420	810	3,090	3,440	1,800
16	5,230	2,620	5,660	e2,100	e1,100	3,390	4,810	2,840	783	2,750	2,680	1,620
17	3,490	2,760	4,950	e2,000	e1,050	3,030	3,920	2,470	748	2,530	3,790	2,670
18	2,430	3,330	5,020	e2,000	e1,020	2,850	3,520	1,970	873	3,550	3,020	16,600
19	2,430	4,150	4,520	e1,950	e1,020	2,600	4,090	1,950	946	2,530	2,290	10,800
20	2,830	11,800	4,000	e1,900	e1,050	2,480	3,690	1,750	798	2,080	2,320	8,080
21	2,710	11,300	3,430	e1,800	e1,100	4,320	3,250	2,010	709	1,820	8,930	6,440
22	2,340	8,070	3,190	e1,750	e1,150	4,450	3,330	1,700	671	1,490	9,400	4,680
23	2,100	5,800	3,430	e1,650	e1,200	3,530	3,570	1,790	664	1,780	5,940	2,910
24	2,060	4,700	6,250	e1,600	e1,200	3,360	3,640	3,050	655	3,070	3,900	2,520
25	2,000	4,740	10,300	e1,500	e1,150	5,160	3,280	3,940	603	2,110	3,050	2,220
26	1,860	4,660	8,540	e1,450	e1,120	6,830	5,210	3,670	505	1,510	2,510	2,070
27	6,500	3,950	6,650	e1,450	e1,100	11,600	5,450	3,430	477	4,950	2,160	1,830
28	12,700	3,690	5,360	e1,420	e1,100	12,900	4,060	4,340	460	11,200	2,120	1,760
29	12,300	8,060	4,490	e1,400	e1,150	10,700	3,410	3,490	631	11,800	2,560	1,750
30	12,300	7,990	4,530	e1,380	---	8,520	2,890	2,500	586	7,900	7,040	1,640
31	8,300	---	5,370	e1,350	---	7,150	---	2,100	---	5,470	7,670	---
TOTAL	106,277	136,150	177,620	84,860	34,710	206,060	125,170	88,270	32,793	86,705	112,750	117,480
MEAN	3,428	4,538	5,730	2,737	1,197	6,647	4,172	2,847	1,093	2,797	3,637	3,916
MAX	12,700	11,800	14,300	6,750	1,370	15,400	9,340	5,110	2,790	11,800	9,400	16,600
MIN	947	2,030	2,670	1,350	1,020	1,300	2,140	1,700	460	440	1,190	1,620
CFSM	2.31	3.06	3.86	1.85	0.81	4.48	2.81	1.92	0.74	1.89	2.45	2.64
IN.	2.67	3.42	4.46	2.13	0.87	5.17	3.14	2.21	0.82	2.17	2.83	2.95

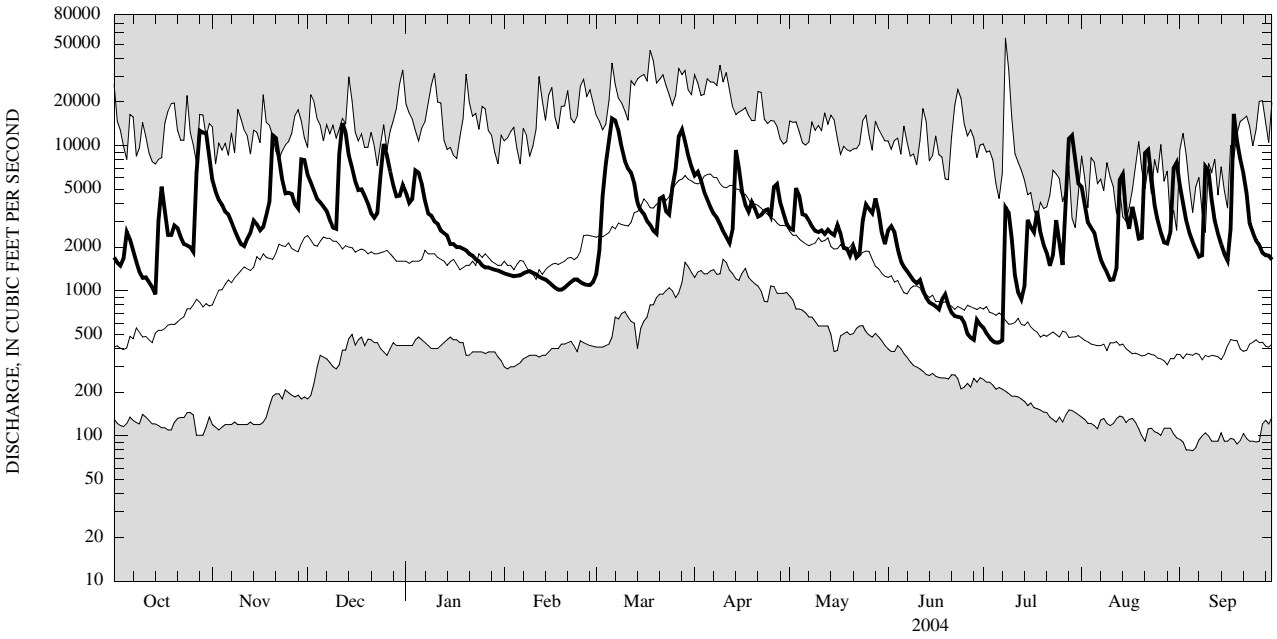
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2004, BY WATER YEAR (WY)

MEAN	1,299	2,255	2,750	2,622	2,643	5,339	5,712	2,646	1,516	943	674	809
MAX	7,210	6,167	7,534	7,361	7,688	12,560	15,330	6,836	7,439	5,713	3,637	5,766
(WY)	(1978)	(1928)	(1997)	(1913)	(1976)	(1936)	(1993)	(2000)	(1917)	(1935)	(2004)	(1977)
MIN	155	168	525	445	472	1,977	1,317	770	312	175	133	107
(WY)	(1940)	(1965)	(1961)	(1961)	(1980)	(1937)	(1946)	(1985)	(1999)	(1939)	(1999)	(1939)

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1913 - 2004	
ANNUAL TOTAL	1,242,548		1,308,845			
ANNUAL MEAN	3,404		3,576		2,433	
HIGHEST ANNUAL MEAN					3,618	1943
LOWEST ANNUAL MEAN					1,307	1965
HIGHEST DAILY MEAN	19,300	Mar 22	16,600	Sep 18	55,400	Jul 8, 1935
LOWEST DAILY MEAN	511	Aug 29	440	Jul 5	79	Sep 5, 1999
ANNUAL SEVEN-DAY MINIMUM	577	Aug 23	476	Jul 1	86	Sep 1, 1999
ANNUAL RUNOFF (CFSM)	2.30		2.41		1.64	
ANNUAL RUNOFF (INCHES)	31.17		32.83		22.29	
10 PERCENT EXCEEDS	8,020		7,280		6,000	
50 PERCENT EXCEEDS	2,300		2,680		1,320	
90 PERCENT EXCEEDS	852		1,100		303	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

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

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

PERIOD OF RECORD.--February 1937 to March 1995, April 1995 to September 2000 (annual maximum only), October 2000 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

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

REMARKS.--Records good except those for estimated daily discharges (ice effect), 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.

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

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

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

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Sep 18	2245	*89,400	*18.63			

Minimum discharge, 1,610 ft^3/s, July 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,870	26,700	20,400	16,400	e4,300	3,980	18,200	9,620	9,330	2,090	21,800	16,600
2	6,540	20,800	17,500	14,800	e4,200	5,780	19,300	9,140	10,700	2,210	17,000	13,600
3	5,870	16,900	15,900	13,800	e4,100	14,700	18,400	15,300	14,300	2,010	13,300	10,400
4	5,500	15,200	14,000	16,600	e4,100	22,600	17,000	16,400	11,500	1,800	11,100	8,100
5	6,330	13,800	12,700	22,800	e4,000	33,400	15,100	14,200	9,410	1,680	10,400	6,990
6	8,130	13,600	12,000	23,000	e3,850	45,300	13,600	12,500	7,900	1,700	9,220	6,220
7	7,640	12,700	11,200	18,100	4,080	49,600	12,100	12,100	7,030	1,660	7,780	5,610
8	6,490	11,400	10,800	14,300	e4,100	41,700	11,100	11,300	6,390	3,030	6,670	5,410
9	5,670	10,100	9,710	11,900	e4,400	33,000	10,400	10,400	5,810	6,310	5,830	18,800
10	5,070	9,040	9,150	e9,700	e4,300	26,100	9,540	9,880	5,360	5,610	5,230	21,200
11	4,600	8,330	19,500	e7,800	e4,300	21,800	8,730	13,300	5,120	5,010	4,750	15,500
12	4,400	8,170	43,100	e7,600	e4,250	19,500	8,040	12,400	5,320	3,690	4,680	11,400
13	4,110	8,600	36,400	e8,800	e4,150	17,100	9,670	11,300	4,750	3,020	12,500	8,920
14	3,820	9,260	28,500	e9,000	e3,950	14,500	26,200	10,100	4,120	2,970	18,800	7,400
15	5,210	9,530	22,200	e7,850	e3,900	12,100	29,900	9,400	3,680	4,890	15,200	6,320
16	11,800	9,000	19,000	6,250	e3,650	11,400	21,800	9,120	3,400	6,970	10,900	5,660
17	13,100	8,500	16,500	6,550	e3,500	11,000	16,200	8,810	3,230	6,420	10,100	8,570
18	10,200	8,710	17,200	e6,600	e3,300	10,200	13,600	7,980	4,610	7,280	10,400	72,900
19	8,060	10,300	17,400	e6,700	e3,200	9,520	12,500	6,950	4,440	8,910	9,390	72,900
20	8,370	27,500	15,700	e6,500	3,280	8,990	13,000	6,510	3,880	7,320	7,680	41,400
21	8,550	33,800	13,800	e6,300	3,250	11,200	11,900	6,310	3,360	6,400	15,900	26,800
22	7,920	30,000	11,900	e6,100	e3,500	14,000	10,900	6,520	2,930	5,910	23,300	19,900
23	7,170	21,800	12,400	e5,700	e3,700	13,000	11,000	6,090	2,650	7,220	21,200	15,200
24	6,730	17,900	19,300	e5,500	e3,800	11,400	11,300	6,670	2,490	8,490	16,300	12,500
25	6,460	16,200	33,800	e5,100	e3,650	14,000	10,800	9,160	2,350	7,490	12,200	10,400
26	6,120	15,900	33,700	e4,850	e3,600	17,400	12,100	9,960	2,180	6,250	9,840	9,040
27	10,700	14,900	27,600	e4,500	e3,650	22,100	16,300	12,700	2,050	18,700	8,320	7,980
28	33,500	13,500	21,400	e4,250	3,480	28,700	15,300	16,400	1,940	39,000	7,760	7,670
29	37,900	19,100	17,800	e4,150	3,530	28,600	12,600	16,600	2,010	39,700	8,040	10,400
30	42,400	22,400	16,100	e4,400	---	24,300	10,800	12,600	2,100	30,100	9,520	9,570
31	35,900	---	17,000	e4,400	---	20,300	---	9,990	---	24,500	16,500	---
TOTAL	342,130	463,640	593,660	290,300	111,070	617,270	427,380	329,710	154,340	278,340	361,610	493,360
MEAN	11,040	15,450	19,150	9,365	3,830	19,910	14,250	10,640	5,145	8,979	11,660	16,450
MAX	42,400	33,800	43,100	23,000	4,400	49,600	29,900	16,600	14,300	39,700	23,300	72,900
MIN	3,820	8,170	9,150	4,150	3,200	3,980	8,040	6,090	1,940	1,660	4,680	5,410
CFSM	2.31	3.24	4.01	1.96	0.80	4.17	2.98	2.23	1.08	1.88	2.44	3.45
IN.	2.67	3.61	4.63	2.26	0.87	4.81	3.33	2.57	1.20	2.17	2.82	3.85

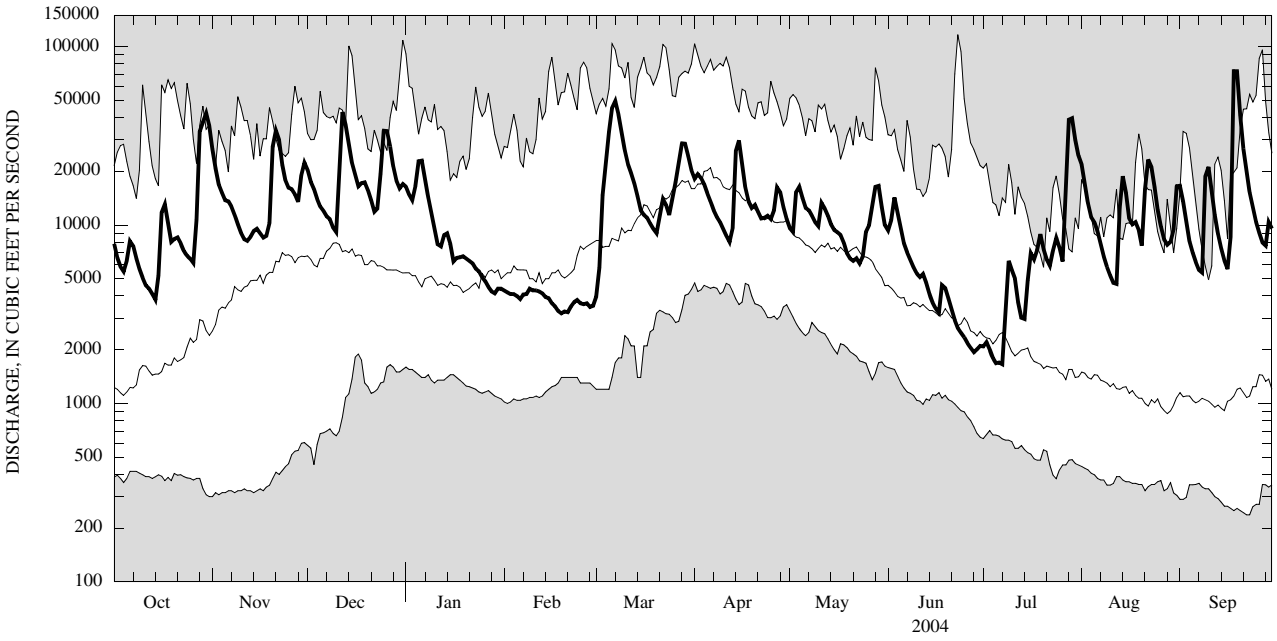
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY)

MEAN	4,022	6,966	8,962	7,559	8,678	16,070	18,360	9,194	5,194	2,654	2,041	2,765
MAX	25,090	17,130	19,820	18,670	23,870	33,430	46,500	22,140	22,550	8,979	11,660	17,800
(WY)	(1978)	(1973)	(1973)	(1979)	(1976)	(1945)	(1993)	(1943)	(1972)	(2004)	(2004)	(1977)
MIN	392	382	1,835	1,319	1,472	6,763	3,962	2,418	1,155	589	384	326
(WY)	(1965)	(1965)	(1965)	(1961)	(1980)	(1941)	(1946)	(1985)	(1939)	(1962)	(1964)	(1964)

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1937 - 2004	
ANNUAL TOTAL	4,500,020		4,462,810			
ANNUAL MEAN	12,330		12,190		7,709	
HIGHEST ANNUAL MEAN					12,190	2004
LOWEST ANNUAL MEAN					3,745	1965
HIGHEST DAILY MEAN	61,300	Mar 23	72,900	Sep 18	117,000	Jun 23, 1972
LOWEST DAILY MEAN	1,600	Aug 29	1,660	Jul 7	237	Sep 22, 1964
ANNUAL SEVEN-DAY MINIMUM	1,760	Aug 25	1,880	Jul 1	248	Sep 17, 1964
MAXIMUM PEAK FLOW					121,000	Jun 23, 1972
MAXIMUM PEAK STAGE					21.24	Jun 23, 1972
ANNUAL RUNOFF (CFSM)	2.58		2.55		1.62	
ANNUAL RUNOFF (INCHES)	35.07		34.78		21.95	
10 PERCENT EXCEEDS	26,600		22,700		18,100	
50 PERCENT EXCEEDS	9,300		9,640		4,340	
90 PERCENT EXCEEDS	3,680		3,700		850	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01521500 CANISTEO RIVER AT ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°42'42", Steuben County, Hydrologic Unit 02050104, on left bank 0.2 mi downstream from Arkport Dam, and 0.9 mi west of Arkport.

DRAINAGE AREA.--30.6 mi^2.

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

REVISED RECORDS.--WSP 1552: 1952-57. WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since March 1940, flows above 500 ft^3/s controlled by detention in Arkport Reservoir. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Arkport Reservoir in 1940, 2,000 ft^3/s, Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft, Feb.19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations). Maximum discharge, since construction of Arkport Reservoir in 1940, 1,740 ft^3/s, Feb. 11, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft^3/s, on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 754 ft^3/s, Sept. 9, gage height, 3.14 ft; minimum discharge, 3.1 ft^3/s, July 11, 12, 13, 14, gage height, 0.72 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	25	61	48	e14	e30	199	23	81	6.5	28	23
2	20	24	48	58	e13	279	351	74	113	5.7	15	14
3	18	24	36	99	e13	279	140	77	101	4.7	10	10
4	67	21	31	80	e12	242	105	40	47	4.1	8.7	8.2
5	50	19	30	64	e12	517	75	41	33	4.2	8.8	7.0
6	30	18	27	e50	e12	365	59	35	31	3.9	7.0	6.1
7	21	16	e23	e40	e14	105	55	136	24	4.3	6.5	5.3
8	17	14	e20	e35	e16	77	45	58	19	4.4	6.1	14
9	14	12	e20	e30	e18	53	38	200	25	4.6	5.1	679
10	12	11	30	e25	e16	43	32	79	45	3.8	6.0	474
11	10	12	386	e25	e15	38	27	74	22	3.3	13	47
12	9.5	13	98	e27	e15	36	25	50	15	3.2	7.9	27
13	8.7	18	54	e30	e14	27	288	46	13	3.3	16	19
14	8.5	19	41	e23	e14	25	432	175	12	17	11	15
15	47	20	40	e22	e13	35	84	138	14	43	7.5	12
16	28	33	38	e21	e13	23	53	81	11	30	6.3	10
17	18	35	83	e20	e14	26	43	49	31	25	5.2	423
18	15	27	65	e19	e15	e26	40	37	43	13	4.3	696
19	14	314	48	e20	e15	25	38	31	21	39	4.7	187
20	13	543	40	e20	14	54	42	23	15	33	6.5	41
21	12	79	35	e18	18	182	37	117	11	16	133	27
22	13	50	36	e17	21	e70	114	58	10	12	29	19
23	13	38	154	e18	e20	e40	120	e274	11	9.1	15	16
24	11	45	349	e17	e18	e60	67	e337	8.0	7.8	11	13
25	10	61	139	e17	e17	260	52	e250	7.6	6.4	8.4	12
26	12	39	71	e16	e18	145	62	110	9.5	26	6.8	11
27	119	35	49	e15	e19	201	49	110	7.3	194	6.0	9.3
28	62	152	39	e16	e17	81	39	190	7.0	59	5.8	8.8
29	51	136	40	e16	e17	53	31	61	13	30	5.5	8.2
30	41	68	131	e15	---	42	25	39	8.0	18	231	7.6
31	29	---	72	e14	---	42	---	82	---	29	65	---
TOTAL	819.7	1,921	2,334	935	447	3,481	2,767	3,095	808.4	663.3	700.1	2,849.5
MEAN	26.4	64.0	75.3	30.2	15.4	112	92.2	99.8	26.9	21.4	22.6	95.0
MAX	119	543	386	99	21	517	432	337	113	194	231	696
MIN	8.5	11	20	14	12	23	25	23	7.0	3.2	4.3	5.3

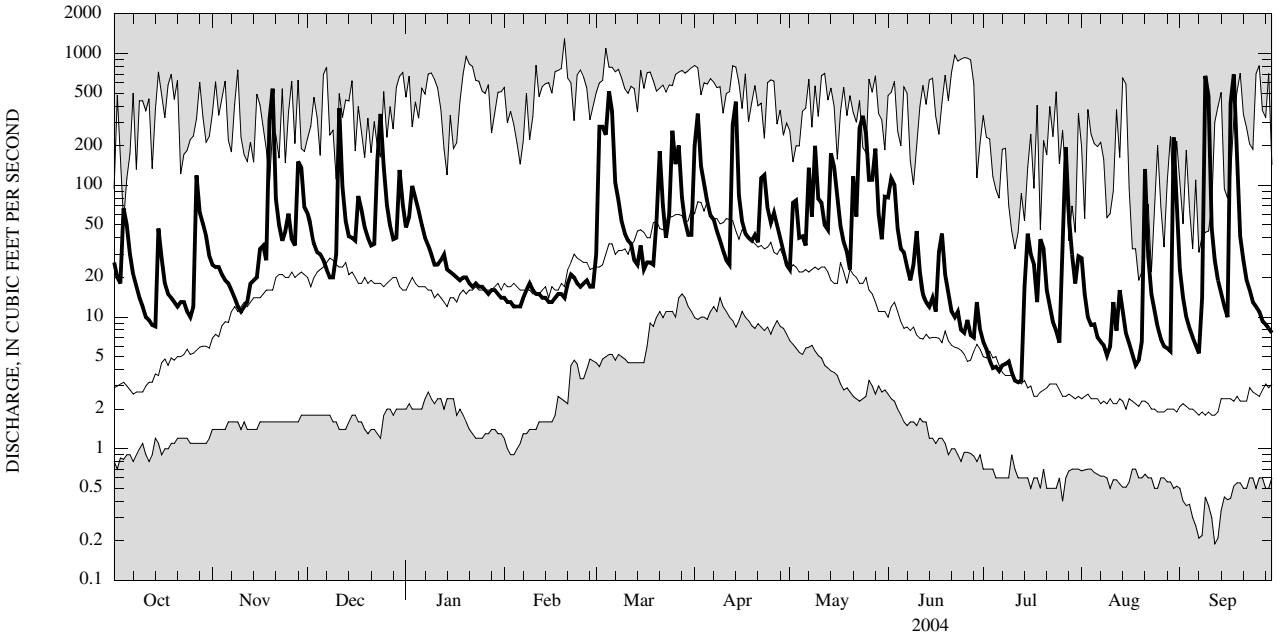
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY)

MEAN	16.3	29.9	39.0	37.5	45.3	85.3	82.7	41.4	27.2	8.73	7.00	11.3
MAX	98.4	106	132	121	195	188	205	144	245	56.3	58.6	151
(WY)	(1977)	(1951)	(1973)	(1998)	(1976)	(1942)	(1993)	(1943)	(1972)	(2003)	(1984)	(1977)
MIN	1.09	1.62	1.67	1.85	8.28	24.9	10.9	5.81	1.57	0.82	0.67	0.59
(WY)	(1942)	(1961)	(1961)	(1961)	(1958)	(1981)	(1946)	(1955)	(1955)	(1955)	(2001)	(1995)

01521500 CANISTEO RIVER AT ARKPORT, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1937 - 2004	
ANNUAL TOTAL	18,727.7		20,821.0			
ANNUAL MEAN	51.3		56.9		35.9	
HIGHEST ANNUAL MEAN					56.9	2004
LOWEST ANNUAL MEAN					20.9	1955
HIGHEST DAILY MEAN	554	Mar 18	696	Sep 18	1,300	Feb 20, 1939
LOWEST DAILY MEAN	2.0	Jul 5	3.2	Jul 12	0.19	Sep 12, 1995
ANNUAL SEVEN-DAY MINIMUM	2.2	Jul 2	3.8	Jul 7	0.28	Sep 7, 1995
10 PERCENT EXCEEDS	99		136		78	
50 PERCENT EXCEEDS	25		25		12	
90 PERCENT EXCEEDS	6.4		7.7		1.8	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01523500 CANACADEA CREEK NEAR HORNELL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft downstream from bridge on State Highway 21, 1.2 mi west of Hornell, 1.5 mi downstream from Almond Dam, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--57.9 mi^2.

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft above NGVD of 1929. Oct. 23, 1940 to Dec. 31, 1942, at site 185 ft upstream at different datum.

REMARKS.--Records fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Almond Reservoir in 1949, 9,430 ft^3/s, May 17, 1945, gage height, 5.14 ft, from rating curve extended above 3,400 ft^3/s; maximum gage height, 6.65 ft, June 3, 1947; minimum discharge, 3.4 ft^3/s, Oct. 2, 1941. Maximum discharge, since construction of Almond Reservoir in 1949, 5,880 ft^3/s, June 23, 1972, gage height 6.14 ft; minimum discharge, 0.37 ft^3/s, July 23, 2004.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft, from floodmarks, discharge, 21,000 ft^3/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,370 ft^3/s, Sept. 19, gage height, 3.23 ft; minimum discharge, 0.37 ft^3/s, July 23, gage height, 0.63 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	59	52	106	e30	35	226	38	137	31	74	49
2	42	29	81	83	e32	306	531	41	113	31	32	32
3	40	32	94	140	e32	576	323	102	127	26	23	28
4	70	39	63	179	e23	456	197	123	106	15	23	23
5	131	40	48	131	e20	491	145	92	69	11	20	18
6	65	40	70	108	34	501	98	74	47	7.0	18	13
7	42	33	61	84	39	658	97	128	47	5.0	18	14
8	36	29	47	72	e40	368	97	129	47	20	13	16
9	27	29	47	73	40	138	95	144	47	19	9.6	47
10	22	22	56	e60	34	108	67	189	37	13	10	623
11	19	18	360	e50	24	85	39	173	29	6.3	40	765
12	19	18	513	e70	e30	74	44	149	29	13	59	414
13	19	32	200	e70	44	74	179	94	29	24	62	106
14	30	39	122	50	31	57	665	93	29	27	41	57
15	54	39	92	e45	e22	68	611	177	26	75	19	27
16	78	39	80	e45	e22	78	137	248	24	69	15	15
17	45	62	89	e45	e24	59	89	117	79	51	15	106
18	33	56	103	e45	e24	56	65	69	223	41	14	51
19	33	209	78	42	e24	72	58	59	45	37	15	828
20	33	704	97	40	e24	57	72	52	33	37	20	686
21	32	485	72	e35	e24	252	81	183	28	73	291	156
22	23	181	72	e32	24	234	117	194	28	36	155	62
23	18	84	202	e32	38	100	149	481	35	15	37	47
24	18	75	479	e32	53	115	142	425	23	21	22	43
25	18	103	340	e32	61	373	122	491	16	20	22	23
26	19	115	169	e32	60	311	122	211	22	22	22	14
27	162	78	100	e32	60	331	79	110	22	296	22	15
28	150	107	88	e30	36	177	66	198	22	172	22	16
29	45	252	73	e30	24	94	66	166	22	52	22	11
30	67	168	189	e30	---	90	52	75	26	24	89	12
31	77	---	165	e30	---	97	---	56	---	71	149	---
TOTAL	1,512	3,216	4,302	1,885	973	6,491	4,831	4,881	1,567	1,360.3	1,393.6	4,317
MEAN	48.8	107	139	60.8	33.6	209	161	157	52.2	43.9	45.0	144
MAX	162	704	513	179	61	658	665	491	223	296	291	828
MIN	18	18	47	30	20	35	39	38	16	5.0	9.6	11

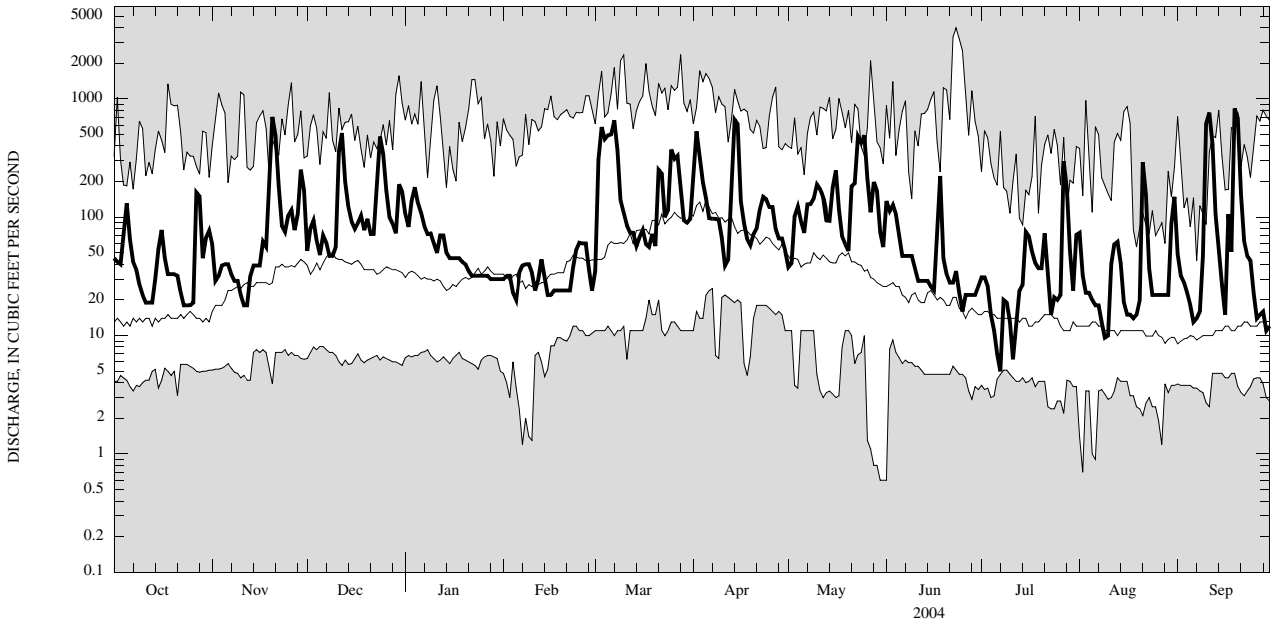
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)

MEAN	33.5	59.1	71.2	68.4	80.7	146	145	72.9	58.2	24.1	20.9	28.0
MAX	139	193	218	215	278	306	470	215	547	111	128	198
(WY)	(1977)	(1951)	(1973)	(1996)	(1976)	(1956)	(1993)	(1984)	(1972)	(1972)	(1984)	(1977)
MIN	7.07	9.16	7.13	6.55	17.7	33.4	46.0	15.5	5.24	4.63	5.13	6.09
(WY)	(1950)	(1961)	(1961)	(1961)	(1980)	(1969)	(1955)	(1955)	(1965)	(1965)	(1965)	(1955)

01523500 CANACADEA CREEK NEAR HORNELL, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1949 - 2004	
ANNUAL TOTAL	35,492.2		36,728.9			
ANNUAL MEAN	97.2		100		67.2	
HIGHEST ANNUAL MEAN					110	1972
LOWEST ANNUAL MEAN					36.9	1965
HIGHEST DAILY MEAN	1,230	Mar 23	828	Sep 19	3,970	Jun 23, 1972
LOWEST DAILY MEAN	3.6	Jul 4	5.0	Jul 7	0.60	May 30, 1965
ANNUAL SEVEN-DAY MINIMUM	12	Jul 3	12	Jul 5	0.83	May 26, 1965
10 PERCENT EXCEEDS	209		215		149	
50 PERCENT EXCEEDS	49		52		27	
90 PERCENT EXCEEDS	19		19		8.2	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY

LOCATION.--Lat 42°18'50", long 77°39'05", Steuben County, Hydrologic Unit 02050104, on right bank 235 ft upstream from Erie Railroad bridge in Hornell, 0.3 mi upstream from Crosby Creek, and 1.5 mi downstream from Canacadea Creek.

DRAINAGE AREA.--158 mi^2.

PERIOD OF RECORD.--August 1942 to current year.

REVISED RECORD--WDR NY-86-3: 1971 (including minimum daily).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion from Carrington Creek, a tributary upstream from station, by City of Hornell for municipal supply; effluent from wastewater treatment plant enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to affect figures of monthly runoff. Telephone and satellite gage-height telemeters at station.

COOPERATION.--Records of diversion from Carrington Creek furnished by City of Hornell.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Almond Reservoir in 1949, 9,340 ft^3/s, May 26, 1943, gage height 13.30 ft, from rating curve extended above 7,600 ft^3/s on the basis of critical-depth measurement of peak flow; minimum discharge, 9.3 ft^3/s, Mar. 4, 1947. Maximum discharge, since construction of Almond Reservoir, 9,560 ft^3/s, June 23, 1972, gage height, 13.45 ft, from floodmark, from rating curve extended above 7,600 ft^3/s on the basis of critical-depth measurement of peak flow; minimum discharge, 7.4 ft^3/s, Sept. 13, 14, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,220 ft^3/s, Sept. 9, gage height, 4.94 ft; minimum discharge, 33 ft^3/s, July 12, gage height, 0.66 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	157	207	267	68	146	628	141	388	77	159	154
2	126	117	213	247	e70	e600	1,440	190	384	72	92	104
3	112	119	206	356	91	e800	771	325	515	64	77	82
4	178	123	170	384	e85	e1,000	540	252	293	52	67	69
5	238	118	153	323	e70	1,030	401	219	221	47	66	57
6	160	114	168	269	86	1,230	306	192	189	44	56	50
7	116	101	157	e200	e80	985	292	459	170	41	53	47
8	105	90	e125	e190	e80	663	261	332	153	48	49	68
9	85	84	135	e160	e100	328	241	644	146	50	43	1,920
10	76	74	148	e130	94	264	198	488	166	39	49	1,540
11	68	69	1,210	e140	69	222	159	434	125	38	91	976
12	64	72	897	e170	97	202	156	356	109	38	105	533
13	62	98	401	169	104	180	1,040	263	101	48	124	203
14	72	109	283	e140	e85	157	1,760	437	97	97	96	148
15	141	105	239	e140	e65	180	1,020	572	97	172	58	103
16	163	119	215	e130	e60	179	372	553	86	155	61	81
17	117	150	277	e130	e60	157	271	324	134	122	48	762
18	90	141	283	e125	e65	155	253	224	351	100	45	1,490
19	88	815	224	e100	92	167	227	204	124	135	44	1,410
20	86	1,780	225	e120	80	177	227	176	101	125	55	949
21	84	816	194	e100	93	618	224	459	82	137	630	300
22	77	358	190	e80	93	442	382	399	85	90	274	181
23	69	219	532	e85	100	251	454	1,080	89	54	113	148
24	65	208	1,250	e95	122	285	362	e1,330	75	54	78	135
25	62	280	838	e90	e120	882	296	1,060	65	50	67	113
26	65	240	428	e80	123	713	310	640	80	76	60	97
27	361	196	290	e90	118	756	242	390	72	649	56	89
28	321	309	245	e80	94	425	200	720	77	339	56	85
29	185	568	229	e80	86	271	184	409	88	154	54	80
30	196	349	457	e95	---	232	162	247	77	94	612	77
31	181	---	377	e75	---	248	---	264	---	144	404	---
TOTAL	3,953	8,098	10,966	4,840	2,550	13,945	13,379	13,783	4,740	3,405	3,842	12,051
MEAN	128	270	354	156	87.9	450	446	445	158	110	124	402
MAX	361	1,780	1,250	384	123	1,230	1,760	1,330	515	649	630	1,920
MIN	62	69	125	75	60	146	156	141	65	38	43	47

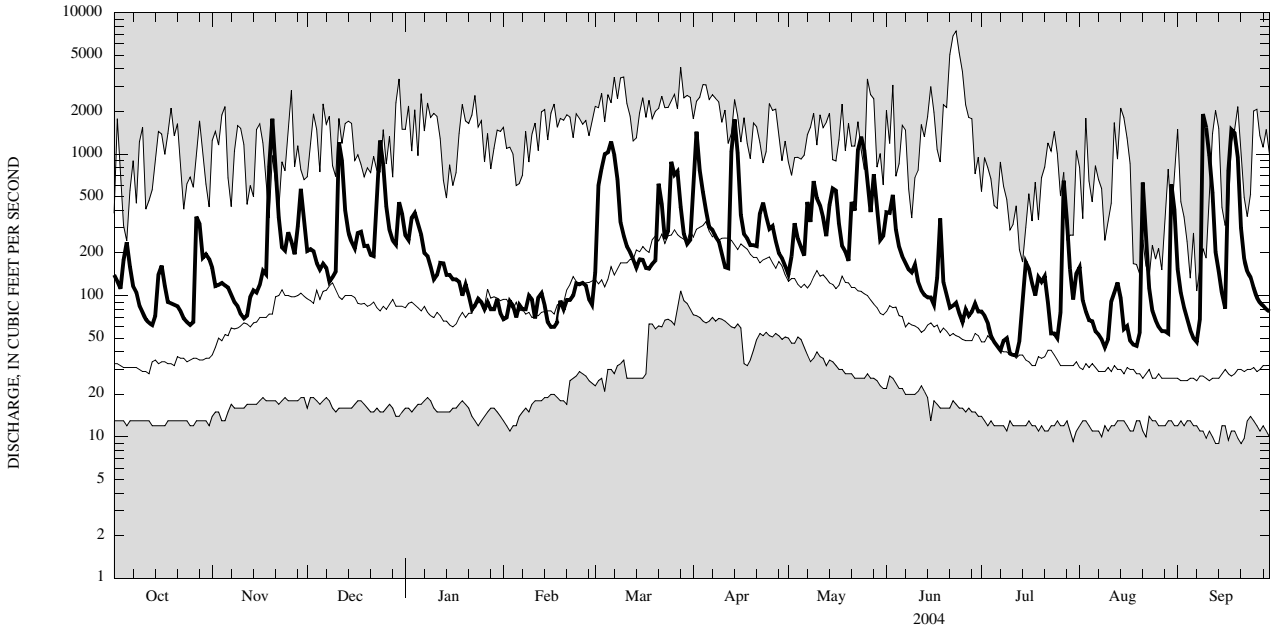
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2004, BY WATER YEAR (WY)

MEAN	76.4	128	161	158	186	358	347	201	144	59.1	51.6	65.2
MAX	304	455	551	499	722	826	877	696	1,226	249	303	498
(WY)	(1977)	(1951)	(1973)	(1998)	(1976)	(1945)	(1993)	(1943)	(1972)	(1972)	(1984)	(1977)
MIN	13.5	17.9	16.6	15.6	35.6	111	66.6	42.4	20.1	13.8	13.2	11.7
(WY)	(1965)	(1965)	(1961)	(1961)	(1963)	(1969)	(1946)	(1955)	(1955)	(1955)	(1965)	(1955)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1942 - 2004	
ANNUAL TOTAL	91,596		95,552			
ANNUAL MEAN	251		261		161	
HIGHEST ANNUAL MEAN					261	2004
LOWEST ANNUAL MEAN					79.8	1965
HIGHEST DAILY MEAN	2,250	Mar 18	1,920	Sep 9	7,440	Jun 23, 1972
LOWEST DAILY MEAN	25	Jul 4	38	Jul 11	9.0	Sep 13, 1955
ANNUAL SEVEN-DAY MINIMUM	32	Jul 2	43	Jul 6	10	Sep 8, 1955
10 PERCENT EXCEEDS	469		629		355	
50 PERCENT EXCEEDS	136		152		70	
90 PERCENT EXCEEDS	56		64		22	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01525981 TUSCARORA CREEK ABOVE SOUTH ADDISON, NY

LOCATION.--Lat 42°04'20", long 77°17'57", Steuben County, Hydrologic Unit 02050104, on right bank 500 ft downstream from bridge on State Highway 417, 200 ft upstream from Elk Creek, and 1.7 mi southwest of South Addison.

DRAINAGE AREA.--102 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1989-2000. October 2000 to current year.

REVISED RECORDS.--WDR NY-01-3: 1991(M).

GAGE.--Water-stage recorder. Datum of gage is 1,079.00 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft^3/s, Sept. 9, 2004, gage height, 13.54 ft, from floodmark, from rating curve extended above 3,700 ft^3/s, on basis of slope-area measurement of peak flow; minimum discharge, 0.17 ft^3/s, Aug. 15, 16, 2001, gage height 1.52 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1730	6,380	8.56	0530	*17,800	*13.54
Dec 11	0830	7,960	9.23	0300	9,340	9.82
Apr 13	2015	4,830	7.80			

Minimum discharge, 3.4 ft^3/s, July 7, 11, 12, gage height, 1.35 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	122	99	142	e40	e90	789	49	140	7.0	193	128
2	80	108	90	152	e40	e850	990	149	66	6.3	107	75
3	67	100	80	269	e40	e1,220	396	267	87	5.2	67	52
4	107	85	e78	277	e40	1,060	264	120	40	4.6	57	40
5	125	79	e74	333	e35	1,360	181	110	31	4.8	80	33
6	74	90	e66	237	e35	1,000	134	89	35	4.2	44	28
7	55	71	e60	140	e35	409	121	348	27	3.8	35	24
8	44	57	e60	e150	e32	309	103	150	22	4.6	30	270
9	37	46	e64	e120	e30	194	87	494	19	5.1	25	7,180
10	32	42	70	e100	e35	150	69	289	17	4.5	44	585
11	29	42	2,530	e105	e32	123	59	563	16	3.8	126	247
12	26	46	443	e110	e30	114	56	224	15	4.0	42	148
13	24	80	224	e100	e35	85	1,340	204	13	5.7	190	98
14	24	67	160	e80	e32	68	753	393	12	322	91	73
15	197	58	160	e70	e32	89	256	414	11	175	49	57
16	105	66	139	e65	e30	72	159	259	10	73	84	46
17	60	67	165	e60	e30	77	126	160	11	246	43	2,290
18	46	58	171	e70	e30	75	103	139	25	648	32	2,900
19	41	1,690	137	e65	e30	69	84	105	18	661	26	344
20	36	858	116	e60	e35	87	78	75	13	338	24	190
21	32	305	102	e50	e45	370	67	558	11	140	681	129
22	31	198	104	e50	e45	189	167	228	9.7	89	178	92
23	32	152	576	e45	e40	141	254	284	8.9	68	91	68
24	29	137	1,310	e40	e38	225	157	248	7.9	53	85	55
25	25	178	576	e40	e35	490	127	136	7.3	38	55	47
26	26	120	267	e40	e35	313	201	105	7.2	140	41	42
27	815	100	184	e40	e35	301	134	107	6.5	1,960	32	36
28	322	111	145	e40	e35	194	99	157	6.6	1,180	40	32
29	305	191	135	e40	e40	144	77	76	9.4	510	33	30
30	218	113	332	e38	---	116	58	48	8.3	236	598	27
31	149	---	194	e36	---	120	---	84	---	355	369	---
TOTAL	3,295	5,437	8,911	3,164	1,026	10,104	7,489	6,632	710.8	7,295.6	3,592	15,366
MEAN	106	181	287	102	35.4	326	250	214	23.7	235	116	512
MAX	815	1,690	2,530	333	45	1,360	1,340	563	140	1,960	681	7,180
MIN	24	42	60	36	30	68	56	48	6.5	3.8	24	24
CFSM	1.05	1.79	2.85	1.01	0.35	3.23	2.47	2.12	0.23	2.33	1.15	5.07
IN.	1.21	2.00	3.28	1.17	0.38	3.72	2.76	2.44	0.26	2.69	1.32	5.66

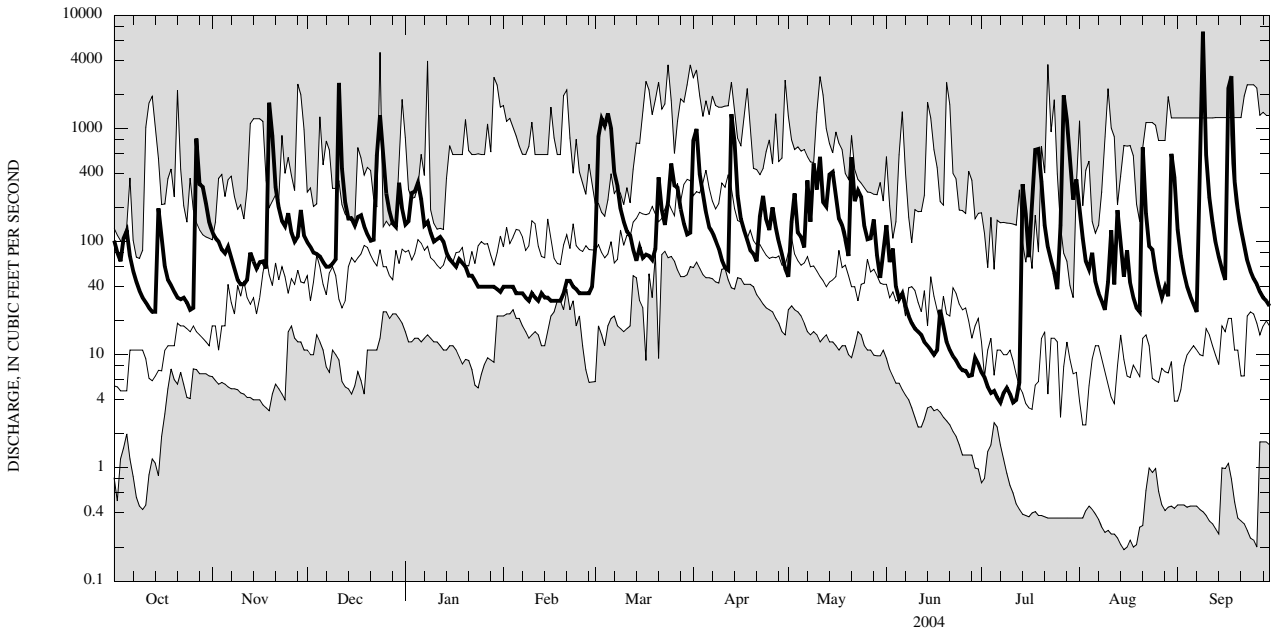
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	40.3	60.6	116	57.3	63.0	300	258	109	107	126	99.3	164
MAX	106	181	287	102	92.7	594	454	214	235	257	279	512
(WY)	(2004)	(2004)	(2004)	(2004)	(2002)	(2003)	(2001)	(2004)	(2002)	(2003)	(2003)	(2004)
MIN	5.85	9.60	43.6	17.8	35.4	127	117	22.9	23.7	1.30	0.87	1.98
(WY)	(2002)	(2002)	(2002)	(2001)	(2004)	(2002)	(2002)	(2001)	(2004)	(2001)	(2001)	(2002)

01525981 TUSCARORA CREEK ABOVE SOUTH ADDISON, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	73,081.1		73,022.4			
ANNUAL MEAN	200		200		125	
HIGHEST ANNUAL MEAN					200	2004
LOWEST ANNUAL MEAN					68.1	2002
HIGHEST DAILY MEAN	3,680	Jul 22	7,180	Sep 9	7,180	Sep 9, 2004
LOWEST DAILY MEAN	9.3	Aug 28	3.8	Jul 7	0.19	Aug 15, 2001
ANNUAL SEVEN-DAY MINIMUM	10	Aug 25	4.3	Jul 6	0.21	Aug 13, 2001
ANNUAL RUNOFF (CFSM)	1.98		1.98		1.24	
ANNUAL RUNOFF (INCHES)	26.92		26.90		16.85	
10 PERCENT EXCEEDS	403		377		259	
50 PERCENT EXCEEDS	69		80		38	
90 PERCENT EXCEEDS	23		24		2.4	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01526500 TIOGA RIVER NEAR ERWINS, NY

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

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

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

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,800 ft^3/s, Sept. 18, gage height, 14.14 ft; minimum discharge, 227 ft^3/s, July 4, gage height, 0.87 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,910	2,160	2,390	2,850	e660	e1,100	3,180	1,450	1,940	335	3,830	1,710
2	1,630	2,030	2,080	2,620	e660	3,050	8,450	1,620	1,700	314	2,290	1,030
3	1,490	1,870	1,770	2,950	e640	11,200	5,850	4,940	1,900	246	1,560	856
4	1,370	1,570	1,540	4,080	e670	10,200	4,270	2,860	1,550	232	1,460	751
5	1,730	1,420	1,450	5,810	e640	13,000	3,330	2,380	988	250	1,570	694
6	1,620	1,470	1,450	5,140	e640	14,100	2,610	2,330	1,090	246	1,220	612
7	1,210	1,340	1,340	3,140	e680	9,380	2,500	3,410	967	e250	862	577
8	1,020	1,200	1,090	e2,300	e720	6,020	2,110	2,800	788	e300	642	817
9	841	1,100	1,270	e2,100	e740	4,100	1,940	6,390	708	408	678	22,600
10	788	991	1,430	e1,650	e720	3,020	1,690	8,190	664	260	688	12,300
11	762	968	11,000	e1,450	e750	2,670	1,450	8,040	751	241	941	12,500
12	744	944	11,900	e1,600	e730	2,280	1,430	4,620	597	264	932	10,800
13	627	1,120	6,010	e1,800	e710	2,040	4,440	3,920	512	329	1,920	7,030
14	676	1,230	4,660	e1,300	e660	1,750	14,700	3,810	493	948	1,540	2,860
15	1,520	1,080	3,560	e950	e650	1,720	8,270	4,450	471	2,220	922	1,930
16	2,040	1,080	3,240	e950	e640	1,720	4,230	3,800	454	1,110	796	1,260
17	1,060	1,130	2,860	e950	e630	1,590	3,050	2,610	465	901	795	6,110
18	808	1,130	2,920	e1,000	e630	1,530	2,570	2,130	843	3,240	611	20,600
19	739	4,070	2,650	e950	e620	1,490	2,160	1,900	1,010	3,110	555	6,880
20	752	15,500	2,220	e950	e600	1,460	2,000	1,380	692	2,370	532	11,600
21	736	10,000	1,980	e950	e600	2,810	1,850	4,230	492	1,100	6,510	11,900
22	653	5,220	1,900	e900	e650	3,180	2,350	3,910	432	789	5,190	11,500
23	644	3,750	2,940	e800	e650	2,320	2,880	3,840	421	730	2,050	10,200
24	619	3,330	8,750	e750	e680	2,480	3,050	4,240	348	1,090	1,390	6,860
25	641	3,070	10,500	e730	e670	3,970	2,520	3,330	315	844	1,180	5,040
26	636	2,620	5,300	e700	e650	5,160	3,030	2,310	276	1,090	934	2,630
27	3,660	2,220	3,950	e680	e680	4,330	2,810	2,010	281	13,200	639	1,520
28	6,070	2,130	3,140	e660	e700	4,160	2,080	2,300	280	11,700	686	1,010
29	3,530	3,500	2,900	e640	e710	3,150	1,790	1,920	342	8,860	845	991
30	3,770	2,990	3,430	e700	---	2,540	1,640	1,340	371	3,590	3,030	870
31	2,550	---	3,670	e680	---	2,320	---	1,170	---	4,490	5,350	---
TOTAL	46,846	82,233	115,290	52,730	19,380	129,840	104,230	103,630	22,141	65,057	52,148	176,038
MEAN	1,511	2,741	3,719	1,701	668	4,188	3,474	3,343	738	2,099	1,682	5,868
MAX	6,070	15,500	11,900	5,810	750	14,100	14,700	8,190	1,940	13,200	6,510	22,600
MIN	619	944	1,090	640	600	1,100	1,430	1,170	276	232	532	577

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	695	1,213	1,510	1,340	1,693	2,852	3,462	1,800	1,251	590	561	620
MAX	4,160	4,401	3,719	4,870	4,219	5,737	11,970	4,689	4,579	2,099	3,257	5,868
(WY)	(1991)	(1997)	(2004)	(1996)	(1981)	(1994)	(1993)	(1989)	(1989)	(2004)	(1994)	(2004)
MIN	96.5	139	155	165	340	843	1,320	371	142	95.9	102	72.0
(WY)	(1992)	(1999)	(1999)	(1981)	(1980)	(1981)	(1981)	(1985)	(1999)	(1991)	(2001)	(1980)

01526500 TIOGA RIVER NEAR ERWINS, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	867,073		969,563			
ANNUAL MEAN	2,376		2,649		1,462	
HIGHEST ANNUAL MEAN					2,649	2004
LOWEST ANNUAL MEAN					786	1999
HIGHEST DAILY MEAN	16,800	Mar 18	22,600	Sep 9	28,000	Jan 19, 1996
LOWEST DAILY MEAN	240	Jul 15	232	Jul 4	52	Oct 1, 1980
ANNUAL SEVEN-DAY MINIMUM	333	Jul 4	263	Jul 2	55	Sep 30, 1980
10 PERCENT EXCEEDS	5,270		6,010		3,500	
50 PERCENT EXCEEDS	1,280		1,560		633	
90 PERCENT EXCEEDS	486		617		135	

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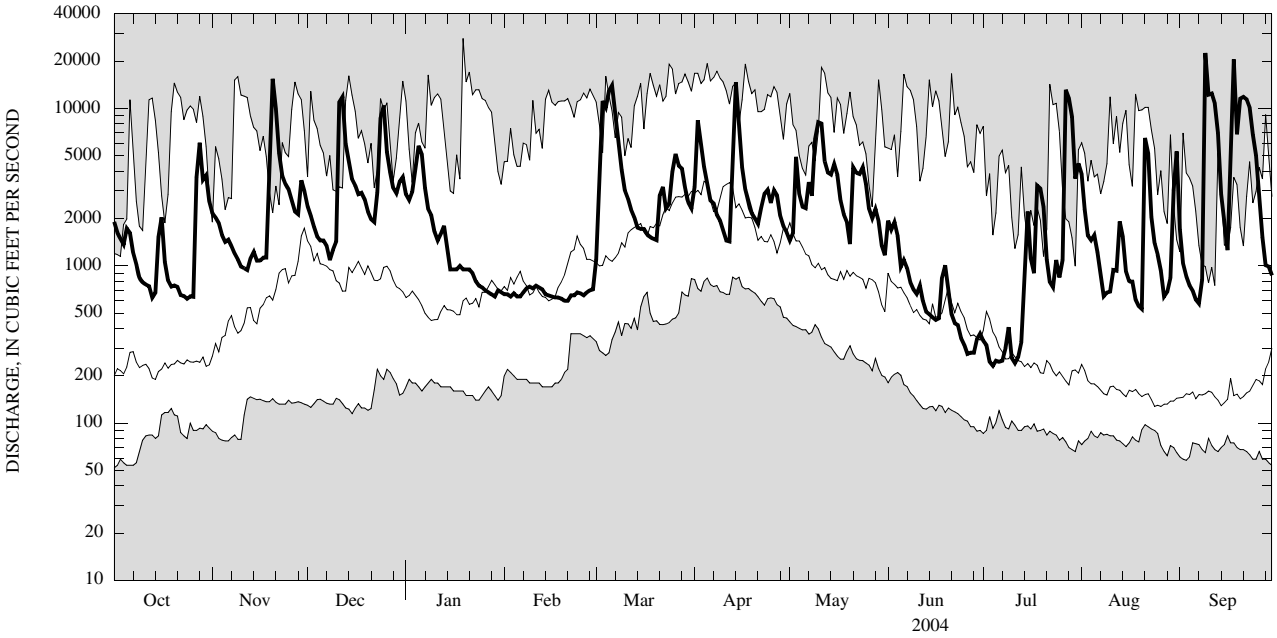

2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01527500 COHOCTON RIVER AT AVOCA, NY

LOCATION.--Lat 42°23'52", long 77°25'04", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on State Highway 415, 0.2 mi north of Avoca, 1.6 mi upstream from Goff Creek, and 6.4 mi north of Bath.

DRAINAGE AREA.--152 mi^2.

PERIOD OF RECORD.--May 1938 to September 1945; June 1996 to September 1997; June 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,182.75 ft above NGVD of 1929. May 16, 1938 to Sept. 30, 1945, at site 4,200 ft downstream at datum 2.75 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,880 ft^3/s Mar. 17, 1942, gage height, 8.88 ft, site and datum then in use, minimum discharge, 6.5 ft^3/s, Sept. 28, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached a discharge of 13,300 ft^3/s on basis of contracted opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	2200	1,750	4.42	1545	*3,060	*5.90
Apr 13	2300	1,720	4.54	0430	1,830	4.67
May 24	0745	1,620	4.43			

Minimum discharge, 66 ft^3/s, Aug. 19, gage height, 2.21 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	173	339	400	e105	110	568	240	495	95	149	383
2	168	168	316	388	e105	214	851	289	624	88	121	273
3	150	169	e300	423	e105	521	706	336	1,030	82	110	208
4	174	157	e270	406	e110	663	658	266	700	79	106	172
5	176	150	253	382	e105	1,220	585	261	574	78	104	147
6	150	142	239	e330	e100	1,290	516	239	471	75	93	126
7	138	135	e220	e280	e110	967	508	327	386	77	91	114
8	127	127	e205	e260	e115	817	454	272	313	95	85	131
9	120	119	212	e240	e120	627	409	388	268	94	80	2,360
10	114	116	205	e200	e110	455	369	338	240	85	85	1,650
11	106	118	851	e200	101	384	335	336	214	76	102	1,010
12	102	119	666	e220	e100	353	308	300	192	71	90	748
13	99	130	553	e210	99	301	761	275	177	71	116	526
14	96	122	471	e190	e95	259	1,130	499	166	129	98	389
15	147	117	417	e160	e95	261	792	588	159	137	86	307
16	120	124	362	e150	e95	238	635	496	144	136	84	249
17	106	133	358	e170	e90	233	535	410	246	128	76	773
18	101	133	330	e165	e90	233	530	356	320	128	70	1,450
19	100	554	293	e160	89	219	487	313	251	125	68	938
20	98	1,020	269	e150	89	223	414	268	210	117	73	742
21	94	670	244	e140	96	348	371	332	169	100	303	573
22	96	550	237	e135	99	276	402	296	163	88	153	439
23	99	454	345	e130	e95	262	442	600	147	85	131	348
24	92	399	743	e120	95	291	383	1,260	132	78	121	287
25	88	390	792	e115	e90	507	358	938	126	72	104	249
26	92	319	652	e110	e85	581	358	1,190	133	89	92	220
27	191	285	543	e110	e85	760	331	e840	119	346	84	195
28	183	327	459	e105	e85	636	295	e810	113	243	80	176
29	199	396	411	e100	e90	558	264	661	112	202	78	162
30	208	334	524	e100	---	481	248	520	101	153	927	152
31	180	---	445	e100	---	449	---	503	---	152	662	---
TOTAL	4,105	8,150	12,524	6,349	2,848	14,737	15,003	14,747	8,495	3,574	4,622	15,497
MEAN	132	272	404	205	98.2	475	500	476	283	115	149	517
MAX	208	1,020	851	423	120	1,290	1,130	1,260	1,030	346	927	2,360
MIN	88	116	205	100	85	110	248	239	101	71	68	114
CFSM	0.87	1.79	2.66	1.35	0.65	3.13	3.29	3.13	1.86	0.76	0.98	3.40
IN.	1.00	1.99	3.07	1.55	0.70	3.61	3.67	3.61	2.08	0.87	1.13	3.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	65.3	118	168	133	168	461	458	291	162	83.2	62.8	103
MAX	233	394	404	280	417	997	1,143	746	283	187	223	517
(WY)	(1997)	(1997)	(2004)	(1943)	(1939)	(1945)	(1940)	(1943)	(2004)	(1942)	(2003)	(2004)
MIN	15.2	19.2	34.5	43.8	68.4	206	242	84.1	38.9	25.8	17.4	13.5
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1998)	(1997)	(1941)	(1939)	(1941)	(2001)	(1941)

01527500 COHOCTON RIVER AT AVOCA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	91,034		110,651			
ANNUAL MEAN	249		302		194	
HIGHEST ANNUAL MEAN					302	2004
LOWEST ANNUAL MEAN					141	1941
HIGHEST DAILY MEAN	2,540	Mar 22	2,360	Sep 9	3,450	Mar 17, 1942
LOWEST DAILY MEAN	62	Jul 7	68	Aug 19	10	Sep 26, 1941
ANNUAL SEVEN-DAY MINIMUM	66	Jul 2	79	Aug 14	11	Sep 23, 1941
MAXIMUM PEAK FLOW					3,880	Mar 17, 1942
MAXIMUM PEAK STAGE					8.88	Mar 17, 1942
INSTANTANEOUS LOW FLOW					26	Sep 3, 1996
ANNUAL RUNOFF (CFSM)	1.64		1.99		1.28	
ANNUAL RUNOFF (INCHES)	22.28		27.08		17.33	
10 PERCENT EXCEEDS	487		654		460	
50 PERCENT EXCEEDS	163		209		100	
90 PERCENT EXCEEDS	80		90		27	

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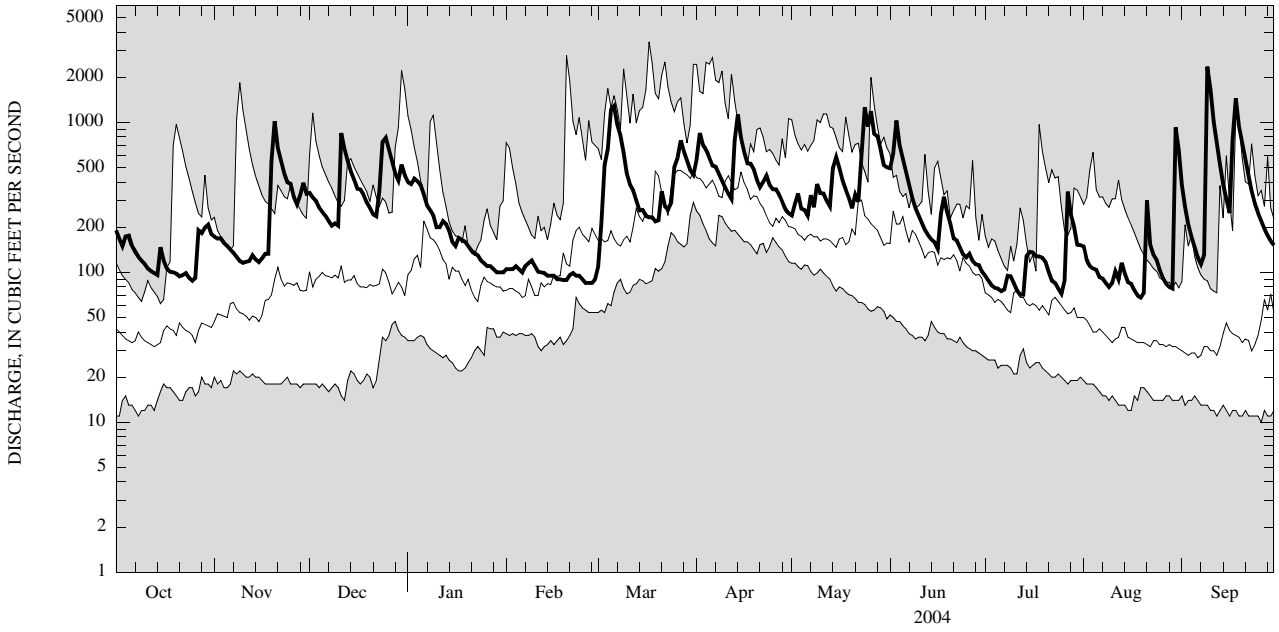


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'09", long 77°13'01", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi upstream from Michigan Creek, and 2.0 mi north of Campbell.

DRAINAGE AREA.--470 mi^2.

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

REVISED RECORDS.--WSP 891: 1935. WSP 1302: 1919-20(M), 1927-28(M), 1928-38 (monthly runoff). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,016.34 ft above NGVD of 1929. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.

REMARKS.--Records good except those for estimated daily discharges, which are fair. During each year since March 1931, a large part of flow from 45.5 mi^2 of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, has been diverted into Keuka Lake (Oswego River basin), for power development. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,100 ft^3/s, July 8, 1935, gage height, 11.6 ft, from floodmark, from rating curve extended above 24,200 ft^3/s on basis of velocity-area and slope-area measurements of peak flow; minimum discharge, 8 ft^3/s, Sep. 6, 7, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,200 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	0100	6,260	5.83	0200	6,790	6.07
Dec 11	1430	5,120	5.21	1500	*12,200	*8.09
Dec 24	2000	4,750	4.97	0630	8,200	6.68
Mar 6	0000	5,040	5.16			

Minimum discharge, 128 ft^3/s, July 12, 13, 14, gage height, 0.48 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	559	511	795	1,110	e260	356	1,440	561	1,290	179	603	1,120
2	495	452	754	1,030	e260	841	3,160	834	1,090	168	454	750
3	450	449	666	1,060	e260	2,420	2,240	1,580	2,180	156	310	601
4	437	414	625	1,080	e270	2,440	1,800	1,080	1,460	148	270	510
5	515	391	611	1,010	e260	4,230	1,500	1,000	1,080	147	270	458
6	436	407	520	925	e250	4,440	1,260	847	939	140	224	348
7	e370	365	480	e740	e280	2,890	1,150	1,090	806	138	205	256
8	e330	368	438	e720	e290	2,060	1,010	828	691	162	193	257
9	e300	384	465	e650	e320	1,560	918	1,250	603	160	175	8,140
10	286	357	441	e500	e320	1,120	839	1,050	574	155	170	5,160
11	254	308	3,060	e450	e310	896	772	1,020	518	140	241	2,450
12	237	295	2,330	e600	e320	814	721	851	401	130	209	1,620
13	227	375	1,540	556	e300	709	2,120	890	339	130	314	1,220
14	214	344	1,180	e440	e290	633	4,680	1,020	318	261	290	923
15	324	315	1,070	e370	e280	654	2,580	1,800	e300	421	222	768
16	320	322	929	e330	e280	602	1,760	1,500	e280	320	211	603
17	289	335	938	e420	e270	540	1,330	1,050	288	287	190	1,960
18	276	338	935	e410	e260	572	1,160	911	933	418	165	6,190
19	267	1,620	833	e400	e250	631	1,180	846	576	434	150	2,800
20	263	4,150	725	e370	e240	644	949	725	416	371	157	1,800
21	231	2,050	629	e350	274	1,240	835	949	324	247	1,270	1,370
22	218	1,380	617	e330	e270	994	1,100	985	296	199	702	1,060
23	224	1,060	1,060	e320	e270	834	1,270	1,680	289	195	395	825
24	219	913	2,980	e300	e280	943	1,120	e2,500	248	175	347	677
25	208	1,030	3,270	e290	e270	1,880	911	1,890	230	151	409	573
26	205	821	2,100	e280	e260	1,900	921	2,000	232	159	420	507
27	735	730	1,600	e270	e260	1,910	842	1,520	218	1,860	275	456
28	923	721	1,370	e260	e260	1,580	746	1,970	201	1,420	198	423
29	789	1,060	1,200	e250	e280	1,270	692	1,290	215	871	186	395
30	837	841	1,520	e250	---	1,060	640	983	193	575	1,550	379
31	648	---	1,420	e250	---	1,010	---	966	---	665	2,190	---
TOTAL	12,086	23,106	37,101	16,321	7,994	43,673	41,646	37,466	17,528	10,982	12,965	44,599
MEAN	390	770	1,197	526	276	1,409	1,388	1,209	584	354	418	1,487
MAX	923	4,150	3,270	1,110	320	4,440	4,680	2,500	2,180	1,860	2,190	8,140
MIN	205	295	438	250	240	356	640	561	193	130	150	256
CFSM	0.83	1.64	2.55	1.12	0.59	3.00	2.95	2.57	1.24	0.75	0.89	3.16
IN.	0.96	1.83	2.94	1.29	0.63	3.46	3.30	2.97	1.39	0.87	1.03	3.53

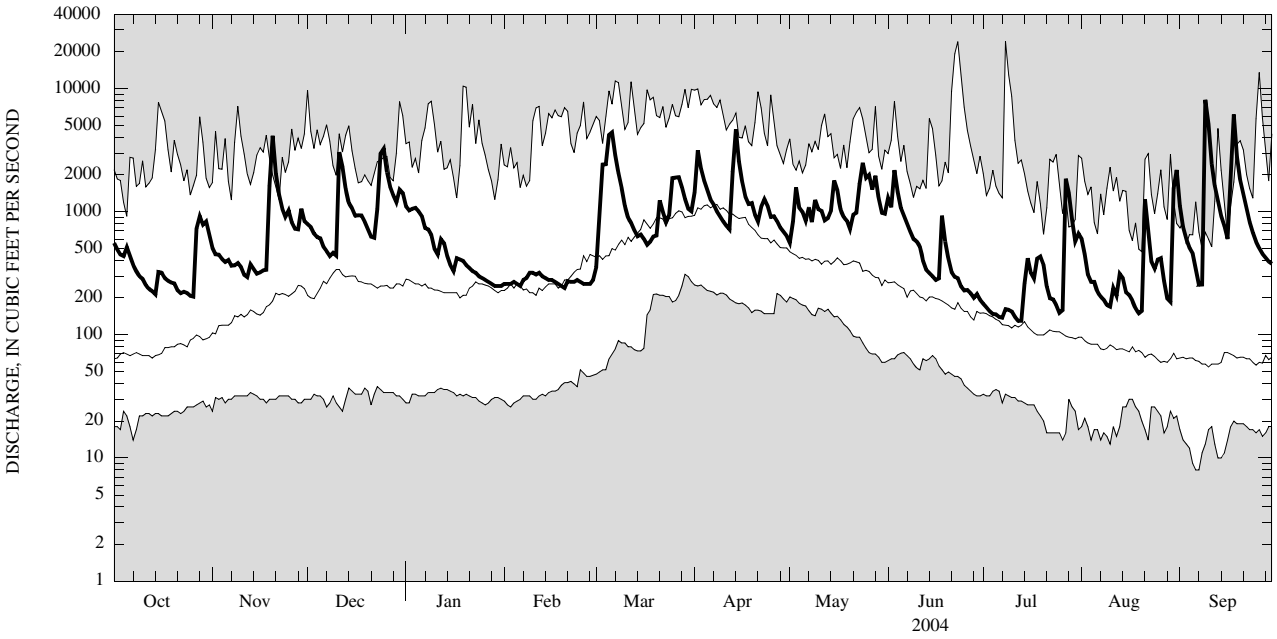
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2004, BY WATER YEAR (WY)

MEAN	188	335	431	417	491	1,112	1,139	614	348	188	129	151
MAX	1,284	1,611	1,861	1,586	2,059	3,793	3,579	2,074	3,167	2,278	695	1,487
(WY)	(1956)	(1928)	(1928)	(1998)	(1976)	(1936)	(1993)	(1919)	(1972)	(1935)	(2003)	(2004)
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)

01529500 COHOCTON RIVER NEAR CAMPBELL, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1918 - 2004	
ANNUAL TOTAL	262,920		305,467			
ANNUAL MEAN	720		835		461	
HIGHEST ANNUAL MEAN					835	2004
LOWEST ANNUAL MEAN					210	1965
HIGHEST DAILY MEAN	6,670	Mar 22	8,140	Sep 9	24,400	Jul 8, 1935
LOWEST DAILY MEAN	110	Jul 8	130	Jul 12	8.0	Sep 6, 1934
ANNUAL SEVEN-DAY MINIMUM	123	Jul 3	145	Jul 7	11	Sep 3, 1934
ANNUAL RUNOFF (CFSM)	1.53		1.78		0.982	
ANNUAL RUNOFF (INCHES)	20.81		24.18		13.34	
10 PERCENT EXCEEDS	1,600		1,800		1,110	
50 PERCENT EXCEEDS	387		572		210	
90 PERCENT EXCEEDS	183		217		50	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01529950 CHEMUNG RIVER AT CORNING, NY

LOCATION.--Lat 42°08'47", long 77°03'28", Steuben County, Hydrologic Unit 02050105, on right bank adjacent to Corning Glass Works power plant, 0.2 mi upstream from bridge on State Highway 414 (Centerway St.) at Corning, and 1.7 mi downstream from Cohocton River.

DRAINAGE AREA.--2,006 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above NGVD of 1929.

REMARKS.--Records fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Tioga Reservoir in 1979, 127,000 ft^3/s, Sep. 26, 1975, gage height, 32.46 ft; minimum discharge, 210 ft^3/s, Aug. 1978. Maximum discharge, since construction of Tioga Reservoir in 1979, about 61,000 ft^3/s, Jan. 19, 1996; minimum discharge, 95 ft^3/s, Sep. 9, 10, 23, 24, 1991, gage height, 14.30 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft, from floodmark; discharge 228,000 ft^3/s, from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,200 ft^3/s, Sept. 18, gage height, 24.77 ft; minimum discharge, 410 ft^3/s, July 7, 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,660	2,820	3,230	4,200	e1,000	e1,500	5,720	2,260	3,520	605	4,620	3,340
2	2,190	2,610	2,890	3,870	e1,000	e3,900	14,300	2,510	3,190	570	2,820	2,070
3	1,930	2,410	2,480	4,240	e990	16,000	9,560	7,400	4,670	492	1,920	1,670
4	1,770	2,000	2,100	5,520	e1,050	14,600	7,070	4,350	3,410	470	1,750	1,420
5	2,230	1,790	2,040	7,420	e1,000	19,500	5,580	3,680	2,380	484	1,880	1,280
6	2,050	1,880	1,930	6,550	e960	20,600	4,340	3,540	2,300	462	1,510	1,100
7	1,540	1,680	1,760	4,100	e1,050	14,000	4,070	4,920	2,020	441	1,150	931
8	1,290	1,500	1,450	3,300	e1,100	9,410	3,520	4,100	1,690	482	891	1,060
9	1,070	1,410	1,660	e2,900	e1,160	6,590	3,160	8,290	1,490	609	903	31,600
10	1,000	1,280	1,790	e2,300	e1,140	4,700	2,790	10,600	1,390	465	930	19,700
11	941	1,230	15,600	e2,000	e1,200	3,990	2,460	10,400	1,420	433	1,200	15,800
12	899	1,180	15,200	e2,400	e1,200	3,430	2,360	6,610	1,160	432	1,210	13,100
13	766	1,390	8,220	e2,500	e1,100	3,020	8,070	5,680	972	512	2,210	9,180
14	793	1,490	6,280	e1,900	e1,050	2,620	21,700	5,680	919	1,100	2,070	4,120
15	1,640	1,290	4,900	e1,400	e1,020	2,570	12,400	7,740	871	2,840	1,280	2,950
16	2,410	1,310	4,440	e1,400	e1,000	2,530	6,940	6,670	828	1,520	1,070	2,090
17	1,290	1,360	4,070	e1,500	e980	2,310	4,960	4,440	827	1,250	1,100	8,010
18	1,020	1,380	4,150	e1,500	e960	2,290	4,200	3,530	1,720	3,680	851	30,200
19	933	6,940	3,760	e1,420	e940	2,270	3,810	3,170	1,780	3,590	771	10,700
20	942	21,700	3,240	e1,500	e920	2,260	3,350	2,420	1,280	2,760	748	14,000
21	901	13,400	2,890	e1,420	e950	4,450	3,030	5,730	942	1,470	7,650	13,700
22	792	7,320	2,780	e1,350	e1,000	4,600	3,840	5,840	817	1,050	6,780	13,000
23	788	5,160	4,590	e1,200	e1,080	3,400	4,620	6,110	793	953	2,640	11,700
24	761	4,460	14,000	e1,130	e1,100	3,630	4,780	7,830	683	1,280	1,860	8,130
25	764	4,310	15,300	e1,100	e1,050	6,980	3,830	6,090	626	1,060	1,670	6,100
26	742	3,560	8,210	e1,050	e1,020	8,170	4,380	4,820	583	1,040	1,460	3,350
27	4,470	3,050	6,030	e1,000	e1,040	7,160	4,100	3,860	586	14,700	1,030	2,150
28	7,920	2,910	4,800	e1,000	e1,000	6,500	3,120	4,710	576	13,600	944	1,590
29	4,540	4,610	4,350	e980	e1,050	4,930	2,730	3,560	644	10,600	1,130	1,530
30	4,990	3,890	5,190	e1,050	---	3,980	2,500	2,580	657	4,410	5,530	1,390
31	3,410	---	5,460	e1,000	---	3,630	---	2,310	---	5,210	9,290	---
TOTAL	59,442	111,320	164,790	74,200	30,110	195,520	167,290	161,430	44,744	78,570	70,868	236,961
MEAN	1,917	3,711	5,316	2,394	1,038	6,307	5,576	5,207	1,491	2,535	2,286	7,899
MAX	7,920	21,700	15,600	7,420	1,200	20,600	21,700	10,600	4,670	14,700	9,290	31,600
MIN	742	1,180	1,450	980	920	1,500	2,360	2,260	576	432	748	931

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	1,146	1,758	2,264	2,126	2,570	4,439	4,777	2,624	1,740	850	753	1,100
MAX	5,478	6,124	5,316	6,879	7,993	9,533	16,150	6,692	5,835	3,039	3,699	7,899
(WY)	(1991)	(1997)	(2004)	(1996)	(1976)	(1979)	(1993)	(1989)	(1989)	(2003)	(2003)	(2004)
MIN	157	226	240	328	537	1,284	1,599	549	214	173	153	141
(WY)	(1992)	(1999)	(1999)	(1981)	(1980)	(1981)	(1981)	(1985)	(1999)	(1991)	(1999)	(1991)

01529950 CHEMUNG RIVER AT CORNING, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	1,252,652		1,395,245			
ANNUAL MEAN	3,432		3,812		2,174	
HIGHEST ANNUAL MEAN					3,812	2004
LOWEST ANNUAL MEAN					1,203	1999
HIGHEST DAILY MEAN	24,500	Mar 18	31,600	Sep 9	87,100	Sep 26, 1975
LOWEST DAILY MEAN	455	Jul 15	432	Jul 12	105	Oct 3, 1980
ANNUAL SEVEN-DAY MINIMUM	537	Jul 4	475	Jul 6	108	Oct 2, 1980
10 PERCENT EXCEEDS	8,110		8,180		5,070	
50 PERCENT EXCEEDS	1,830		2,300		1,000	
90 PERCENT EXCEEDS	755		897		231	

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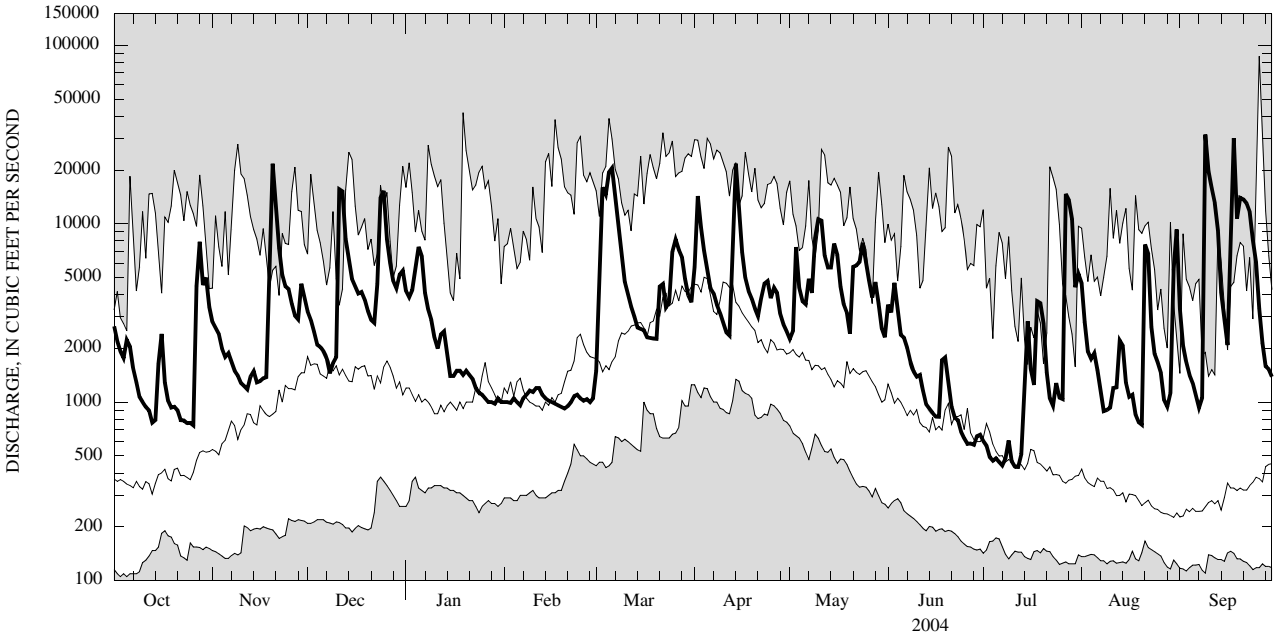


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01530500 NEWTOWN CREEK AT ELMIRA, NY

LOCATION.--Lat 42°06'16", long 76°47'54", Chemung County, Hydrologic Unit 02050105, on left bank 200 ft downstream from bridge on Linden Place in Elmira, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--77.5 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow caused by numerous industrial operations upstream. Since August 1989, high flows regulated by detention in upstream reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of upstream reservoir in August 1989, about 4,000 ft^3/s, June 23, 1972 (backwater from Chemung River), maximum gage height, 19.28 ft, June 23, 1972, from floodmarks (backwater from Chemung River). Maximum discharge, since construction of upstream reservoir in August 1989, 3,810 ft^3/s, Jan. 19, 1996, gage height 16.98 ft. Minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,910 ft^3/s, Sept. 18, gage height, 14.93 ft; minimum discharge, 19 ft^3/s, Oct. 14, gage height, 4.40 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	101	98	114	34	64	158	77	101	27	184	98
2	32	85	87	105	33	247	336	108	197	24	118	70
3	31	78	75	125	34	673	198	523	501	22	90	59
4	32	68	67	157	35	684	173	184	161	21	134	50
5	35	63	65	189	32	853	166	156	114	24	119	45
6	32	62	65	173	36	781	153	137	93	21	84	41
7	30	57	62	110	38	385	137	228	77	35	68	38
8	28	49	55	e100	e35	279	117	142	66	366	60	62
9	26	44	59	e75	e33	192	99	213	57	87	53	1,320
10	24	41	60	e65	e33	143	86	172	51	56	49	527
11	23	40	705	66	e33	120	76	293	47	43	55	193
12	23	40	381	72	e33	110	72	173	42	39	49	131
13	22	51	200	70	e32	91	465	131	38	46	166	98
14	22	50	142	60	e32	78	1,070	115	37	391	104	80
15	57	46	130	e58	e31	77	334	203	36	383	69	68
16	51	47	115	e55	30	75	203	207	33	200	55	61
17	37	49	123	55	32	73	151	123	47	149	48	429
18	31	49	149	54	e31	72	124	99	155	188	42	2,370
19	28	223	121	51	e31	67	117	84	67	137	39	1,080
20	27	763	104	48	e31	68	106	72	49	97	41	292
21	26	242	90	45	39	143	94	78	40	73	637	184
22	25	162	85	44	47	110	117	73	35	91	206	137
23	25	123	192	e40	46	85	165	109	32	132	125	111
24	24	106	717	e40	50	99	140	195	29	113	102	100
25	23	169	733	37	43	261	107	131	27	71	77	85
26	22	116	272	36	43	189	247	88	26	73	64	74
27	311	94	187	37	41	217	162	83	24	612	56	67
28	283	94	146	37	41	171	120	127	27	594	50	63
29	255	220	129	37	47	129	101	85	39	544	47	60
30	225	120	168	35	---	106	88	67	31	216	242	55
31	131	---	149	35	---	94	---	66	---	240	274	---
TOTAL	1,975	3,452	5,731	2,225	1,056	6,736	5,682	4,542	2,279	5,115	3,507	8,048
MEAN	63.7	115	185	71.8	36.4	217	189	147	76.0	165	113	268
MAX	311	763	733	189	50	853	1,070	523	501	612	637	2,370
MIN	22	40	55	35	30	64	72	66	24	21	39	38

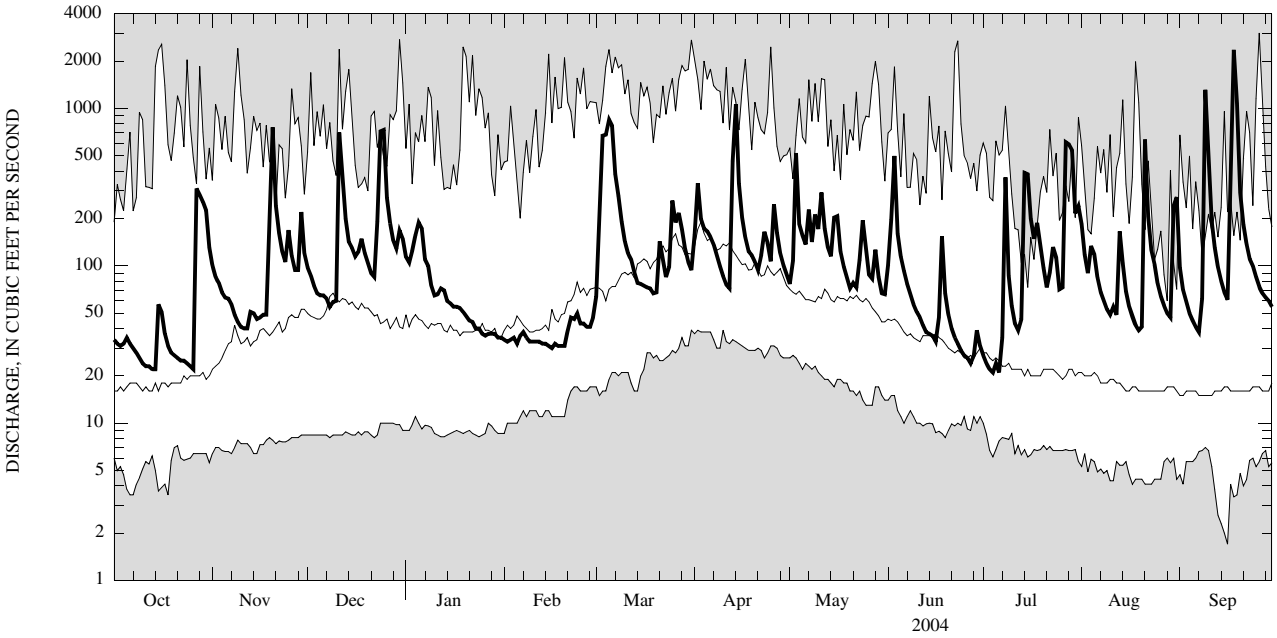
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	48.7	84.6	96.0	96.5	94.0	175	204	92.6	66.9	47.2	41.3	42.8
MAX	183	295	248	269	205	310	747	249	142	165	171	268
(WY)	(1991)	(1997)	(1997)	(1996)	(1990)	(1994)	(1993)	(1996)	(1996)	(2004)	(1994)	(2004)
MIN	9.21	9.34	11.8	12.6	23.2	63.5	87.5	22.0	11.1	7.30	7.25	8.28
(WY)	(2002)	(2002)	(1999)	(2001)	(1993)	(1990)	(1997)	(2001)	(1999)	(1991)	(1991)	(1991)

01530500 NEWTOWN CREEK AT ELMIRA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	39,909		50,348			
ANNUAL MEAN	109		138		90.6	
HIGHEST ANNUAL MEAN					138	2004
LOWEST ANNUAL MEAN					46.9	2001
HIGHEST DAILY MEAN	898	Mar 18	2,370	Sep 18	2,470	Jan 19, 1996
LOWEST DAILY MEAN	17	Jul 16	21	Jul 4	4.9	Aug 3, 1991
ANNUAL SEVEN-DAY MINIMUM	20	Jul 11	24	Oct 8	6.0	Aug 12, 1991
10 PERCENT EXCEEDS	229		257		190	
50 PERCENT EXCEEDS	60		78		41	
90 PERCENT EXCEEDS	26		32		10	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, Hydrologic Unit 02050105, on right bank 100 ft upstream from bridge on State Highway 427, 0.7 mi southwest of Chemung, and 10.0 mi upstream from mouth.

DRAINAGE AREA.--2,506 mi^2.

PERIOD OF RECORD.--September 1903 to current year (gage heights only for some winter periods).

REVISED RECORDS.--WSP 891: 1935-39. WSP 1432: 1904, 1907, 1915. WSP 2103: Drainage area. WDR NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Tioga Reservoir in 1979, 189,000 ft^3/s, June 23, 1972, gage height, 31.62 ft, from floodmark, from rating curve extended above 65,000 ft^3/s, on basis of slope-area and velocity-area studies at gage height 19.57 ft, and slope-area and contracted opening measurements at gage heights 23.97 and 31.62 ft; minimum discharge, 49 ft^3/s, Aug. 14, 1911, gage height, 1.47 ft. Maximum discharge, since construction of Tioga Reservoir in 1979, 77,800 ft^3/s, Jan. 20, 1996, gage height 19.71 ft; minimum discharge, 104 ft^3/s, Sept. 3, 1991, gage height, 2.82 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66,900 ft^3/s, Sept. 18, gage height, 18.45 ft; minimum discharge, 527 ft^3/s, July 7, gage height, 3.26 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,130	3,680	4,170	5,260	e1,350	1,750	5,110	2,890	3,680	723	6,600	4,910
2	2,570	3,300	3,650	4,660	e1,340	3,510	15,400	2,800	4,020	677	4,400	2,880
3	2,300	3,080	3,220	4,720	e1,320	17,600	12,000	8,830	5,860	639	2,900	2,170
4	2,120	2,710	2,760	6,070	e1,400	18,400	8,730	6,410	4,610	554	2,550	1,810
5	2,230	2,380	2,670	8,660	e1,300	22,200	7,040	4,790	3,280	557	2,670	1,600
6	2,500	2,460	2,590	8,750	e1,280	27,000	5,570	4,810	2,840	546	2,270	1,430
7	2,010	2,290	2,420	5,730	e1,400	19,200	4,930	5,550	2,570	544	1,780	1,210
8	1,670	2,040	2,060	4,150	e1,450	11,900	4,460	5,890	2,200	1,060	1,410	1,200
9	1,460	1,870	2,060	e3,750	e1,540	8,540	3,950	7,070	1,880	790	1,250	25,600
10	1,300	1,740	2,280	e2,750	e1,500	6,080	3,560	12,600	1,690	743	1,230	35,800
11	1,220	1,620	12,800	e2,200	e1,480	5,150	3,090	12,700	1,660	605	1,380	18,500
12	1,160	1,600	23,400	e2,900	e1,500	4,420	2,880	9,350	1,530	563	1,630	15,100
13	1,080	1,640	11,700	3,360	e1,420	3,890	6,250	6,560	1,270	605	2,740	12,400
14	993	1,990	7,930	2,640	e1,360	3,370	28,100	6,150	1,160	1,060	3,660	5,290
15	1,410	1,780	6,240	e1,550	e1,320	3,160	16,900	8,000	1,120	4,060	2,090	4,060
16	2,750	1,710	5,420	e1,700	e1,300	3,170	9,390	8,100	1,050	2,470	1,550	2,970
17	2,060	1,760	5,020	e2,000	e1,300	2,970	6,480	5,570	1,010	1,860	1,520	5,370
18	1,440	1,780	5,140	e1,950	e1,300	2,880	5,310	4,300	1,440	3,500	1,290	55,100
19	1,260	3,040	4,710	e1,900	e1,240	2,790	4,740	3,940	2,190	4,840	1,120	20,000
20	1,180	27,200	4,060	e1,850	e1,200	2,750	4,270	3,100	1,610	3,520	1,050	15,900
21	1,180	17,500	3,540	e1,800	e1,250	4,500	3,800	3,620	1,240	2,380	7,830	15,600
22	1,090	9,930	3,270	e1,750	e1,350	5,820	4,160	7,540	1,020	1,510	11,700	14,300
23	1,010	6,490	4,120	e1,700	e1,400	4,380	5,170	5,740	955	1,820	4,560	13,400
24	998	5,410	14,500	e1,550	e1,380	4,240	5,930	7,760	897	1,940	2,950	9,790
25	971	5,460	23,200	e1,500	e1,350	7,110	4,770	7,500	785	1,580	2,400	7,630
26	961	4,680	11,900	e1,450	e1,330	9,700	5,240	5,410	727	1,310	2,080	4,910
27	2,880	3,900	8,220	e1,400	e1,300	8,680	5,460	4,770	684	14,000	1,690	3,030
28	10,700	3,660	6,070	e1,350	e1,280	8,180	4,160	4,850	673	20,200	1,310	2,350
29	6,030	5,260	5,360	e1,300	e1,300	6,320	3,560	4,600	783	16,400	1,420	2,070
30	6,750	5,070	5,550	e1,400	---	5,080	3,230	3,320	759	7,510	1,920	1,860
31	4,710	---	6,940	e1,350	---	4,440	---	2,730	---	6,420	12,400	---
TOTAL	73,123	137,030	206,970	93,100	39,240	239,180	203,640	187,250	55,193	104,986	95,350	308,240
MEAN	2,359	4,568	6,676	3,003	1,353	7,715	6,788	6,040	1,840	3,387	3,076	10,270
MAX	10,700	27,200	23,400	8,750	1,540	27,000	28,100	12,700	5,860	20,200	12,400	55,100
MIN	961	1,600	2,060	1,300	1,200	1,750	2,880	2,730	673	544	1,050	1,200

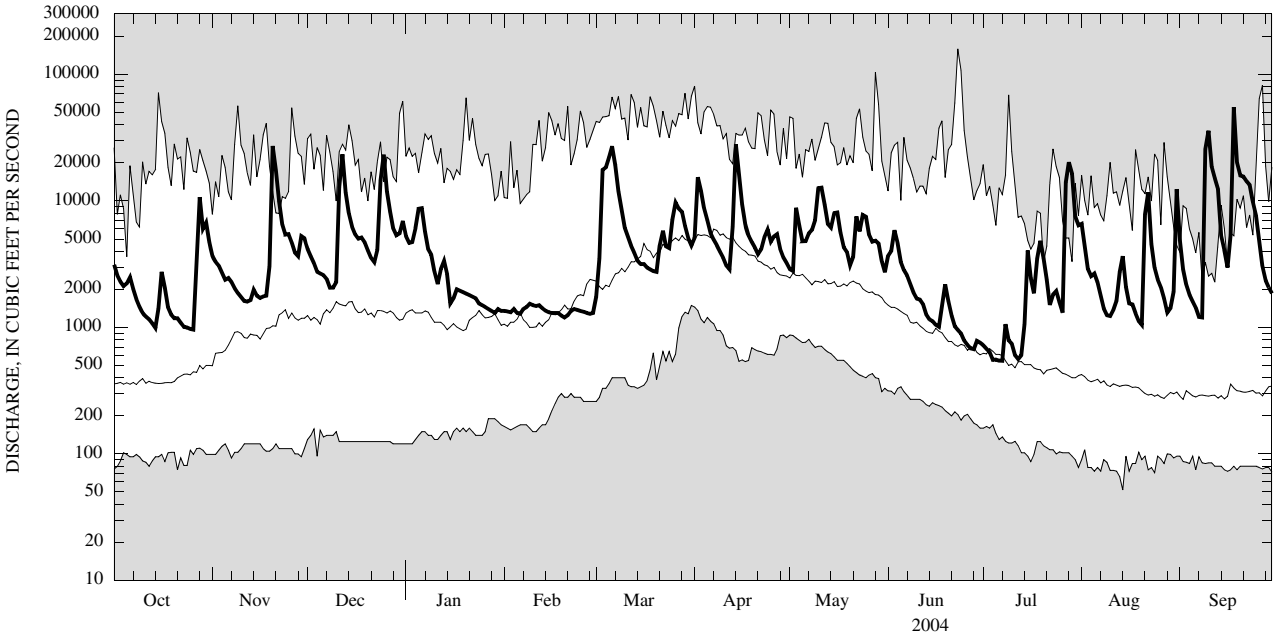
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	1,256	2,200	2,825	2,482	3,069	5,249	6,513	3,440	2,242	1,154	1,038	1,108
MAX	6,774	8,107	6,688	8,569	7,695	10,420	21,600	8,901	7,418	3,601	5,001	10,270
(WY)	(1991)	(1997)	(1997)	(1996)	(1981)	(2003)	(1993)	(1996)	(1989)	(2003)	(1994)	(2004)
MIN	199	266	282	459	631	1,750	2,214	696	280	196	161	169
(WY)	(1992)	(1999)	(1999)	(1981)	(1980)	(1981)	(1981)	(1985)	(1999)	(1991)	(1999)	(1991)

01531000 CHEMUNG RIVER AT CHEMUNG, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	1,558,064		1,743,302			
ANNUAL MEAN	4,269		4,763		2,709	
HIGHEST ANNUAL MEAN					4,763	2004
LOWEST ANNUAL MEAN					1,513	1999
HIGHEST DAILY MEAN	31,900	Mar 21	55,100	Sep 18	65,400	Jan 20, 1996
LOWEST DAILY MEAN	520	Jul 16	544	Jul 7	113	Sep 3, 1991
ANNUAL SEVEN-DAY MINIMUM	665	Jul 4	606	Jul 1	125	Sep 1, 1991
10 PERCENT EXCEEDS	9,420		11,000		6,210	
50 PERCENT EXCEEDS	2,340		2,880		1,250	
90 PERCENT EXCEEDS	880		1,160		277	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

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

REMARKS.--Lake is formed by concrete dam and rockfill dike, completed by Corps of Engineers in June 1950; regulation of outflow began in November 1949; first used for flood regulation on Mar. 28, 1950. Usable capacity, 33,550 acre-ft between elevations 1,115.0 ft (sill of conduits) and 1,203.0 ft (crest of spillway). Dead storage 56 acre-ft. Discharge is controlled by the operation of five gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation. Telephone 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, 14,534 acre-ft, Sept. 19, elevation, 1,179.87 ft; minimum, 1,522 acre-ft, Dec. 17, elevation, 1,139.12 ft.

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

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1942 for flood control; first used for flood regulation on Mar. 9, 1942. Usable capacity 86,440 acre-ft between elevations 950.0 ft (sill of gates) and 1,010.0 ft (crest of spillway). Dead storage, 28 acre-ft. Figures given herein represent total contents. Discharge is controlled by operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation. Telephone 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, 24,056 acre-ft, Sept. 19, elevation, 981.19 ft; minimum, 5,110 acre-ft, Dec. 21, elevation, 965.89 ft.

MONTHEND ELEVATION AND CONTENTS AT 0000, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equlivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01499500 East Sidney Lake			01511000 Whitney Point Lake		
Sept. 30	1,150.12	3,306	--	973.10	12,812	--
Oct. 31	1,154.58	4,343	+ 16.9	973.02	12,710	- 1.6
Nov. 30	1,151.18	3,532	- 13.6	973.06	12,761	+ 0.8
Dec. 31	1,140.64	1,713	- 29.6	966.79	5,993	- 110
CAL YR 2003	--	--	0	--	--	+ 06
Jan. 31	1,139.90	1,618	- 1.5	966.18	5,392	- 9.8
Feb. 29	1,140.14	1,648	+ 0.5	966.24	5,451	+ 1.0
Mar. 31	1,139.83	1,609	- 0.6	967.70	6,903	+ 23.6
Apr. 30	1,149.88	3,257	+ 27.7	973.35	13,129	+ 105
May 31	1,150.30	3,344	+ 1.4	973.02	12,710	- 6.8
June 30	1,150.96	3,484	+ 2.4	973.31	13,079	+ 6.2
July 31	1,150.56	3,399	- 1.4	973.30	13,066	- 0.2
Aug. 31	1,151.76	3,661	+ 4.3	973.09	12,799	- 4.3
Sept. 30	1,150.11	3,304	- 6.0	973.14	12,863	+ 1.1
WTR YR 2004	--	--	0	--	--	+ 0.1

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN--Continued

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 37,100 acre-ft, Sept. 19, elevation, 1,113.31 ft; minimum, 8,550 acre-ft, Mar. 2, elevation, 1,078.88 ft.

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 35,700 acre-ft, Sept. 19, elevation, 1,113.11 ft; minimum, 8,660 acre-ft, Mar. 1, elevation, 1,085.75 ft.

MONTHEND ELEVATION AND CONTENTS AT 0000, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equlivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01517900 Tioga Lake			01518498 Hammond Lake		
Sept. 30	1,081.12	9,560	--	1,086.45	9,120	--
Oct. 31	1,081.72	9,850	+ 4.7	1,086.55	9,190	+ 1.1
Nov. 30	1,082.80	10,400	+ 9.2	1,087.18	9,590	+ 6.7
Dec. 31	1,083.50	10,700	+ 4.9	1,087.19	9,600	+ 0.2
CAL YR 2003	--	--	+ 0.3	--	--	- 0.2
Jan. 31	1,081.42	9,710	- 16.1	1,087.22	9,620	+ 0.3
Feb. 29	1,079.23	9,700	- 17.6	1,085.79	8,690	- 16.2
Mar. 31	1,081.09	9,540	+ 13.7	1,086.66	9,250	+ 9.1
Apr. 30	1,081.00	9,500	- 0.7	1,086.58	9,200	- 0.8
May 31	1,081.18	9,590	+ 1.5	1,086.56	9,190	- 0.2
June 30	1,081.63	9,810	+ 3.7	1,086.48	9,140	- 0.8
July 31	1,082.06	10,000	+ 3.1	1,086.41	9,100	- 0.7
Aug. 31	1,080.91	9,460	- 8.8	1,086.50	9,150	+ 0.8
Sept. 30	1,081.03	9,510	+ 0.8	1,086.44	9,120	- 0.5
WTR YR 2004	--	--	- 0.1	--	--	0

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN--Continued

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 66,740 acre-ft, Sept. 19, elevation, 1,105.14 ft; minimum, 32,080 acre-ft, Mar. 7, elevation, 1,079.53 ft.

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

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in June 1949 for flood control; first used for flood regulation on Mar. 28, 1950. Usable capacity, 14,800 acre-ft between elevations 1,229.0 ft (sill of gates) and 1,300.0 ft (crest of spillway). No dead storage. Figures given herein represent usable contents. Discharge is controlled by the operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation. Telephone 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, 5,186 acre-ft, Sept. 10, elevation, 1,275.47 ft; minimum, 1,651 acre-ft, Feb. 28, elevation, 1,259.34 ft.

MONTHEND ELEVATION AND CONTENTS AT 0000, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	01519995 Cowanesque Lake Elevation (feet)	Contents (acre-feet)	Change in contents (equlivalent in cfs)	01523000 Almond Lake Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
Sept. 30	1,080.21	31,810	--	1,260.20	1,782	--
Oct. 31	1,080.49	33,090	+ 4.6	1,260.18	1,779	0
Nov. 30	1,080.37	32,970	- 2.0	1,260.08	1,763	- 0.3
Dec. 31	1,080.30	32,900	- 1.1	1,260.48	1,827	+ 1.0
CAL YR 2003	--	--	+ 0.1	--	--	0
Jan. 31	1,080.21	32,810	- 1.5	1,260.33	1,803	- 0.4
Feb. 29	1,080.12	32,720	- 1.6	1,260.02	1,753	- 0.9
Mar. 31	1,080.13	32,730	+ 0.2	1,260.12	1,769	+ 0.3
Apr. 30	1,080.19	32,790	+ 1.0	1,260.09	1,764	0
May 31	1,080.22	32,820	+ 0.5	1,261.19	1,942	+ 2.9
June 30	1,080.20	32,800	- 0.3	1,260.60	1,846	- 1.6
July 31	1,079.78	32,360	- 7.2	1,260.43	1,819	- 0.4
Aug. 31	1,080.14	32,740	+ 6.2	1,260.52	1,833	+ 0.2
Sept. 30	1,080.09	32,690	- 0.8	1,260.20	1,782	- 0.8
WTR YR 2004	--	--	- 0.2	--	--	0

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, Hydrologic Unit 05010001, on left bank 230 ft upstream from Main Street bridge in Salamanca, 1.3 mi downstream from Great Valley Creek, and 1.6 mi upstream from Little Valley Creek.

DRAINAGE AREA.--1,608 mi^2.

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1964, published as "at Red House."

REVISED RECORDS.--WSP 1385: 1907, 1909-12, 1913(M), 1914-15, 1916-17(M), 1925, 1927. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft above NGVD of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite and gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft^3/s, June 23, 1972, gage height, 24.01 ft, from floodmarks; minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	0800	20,100	10.95	1900	18,000	10.26
Jan 20	0115	21,500	11.38	1815	*24,600	*12.33
Mar 6	1300	20,000	10.92	1345	19,700	10.82

Minimum discharge, 392 ft^3/s, July 11, 12, gage height, 2.88 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,660	2,660	6,100	4,770	e1,300	e1,700	5,680	2,960	3,580	745	5,980	3,470
2	2,950	2,860	5,730	4,730	e1,300	e4,700	9,080	3,180	3,050	653	4,710	2,330
3	2,690	2,680	4,870	6,160	e1,360	9,740	8,510	3,930	2,780	589	3,520	1,800
4	2,840	2,430	4,150	7,880	e1,340	11,100	7,490	3,350	2,300	551	2,790	1,470
5	4,290	2,200	3,770	8,180	e1,300	14,400	6,130	3,040	1,960	712	2,490	1,250
6	3,530	2,300	3,450	8,210	e1,250	19,600	5,100	2,960	1,820	692	2,060	1,070
7	2,920	2,230	3,100	7,110	e1,350	17,600	4,490	3,600	1,680	549	1,660	948
8	2,570	1,970	2,600	6,200	e1,400	15,400	3,960	3,400	1,490	515	1,430	934
9	2,280	1,800	2,610	5,080	e1,420	12,600	3,530	13,800	1,360	483	1,240	16,700
10	2,030	1,660	2,470	3,720	e1,450	9,300	3,080	15,000	1,340	451	1,150	20,000
11	1,810	1,610	6,800	3,240	e1,400	6,510	2,700	13,300	1,290	413	2,060	14,800
12	1,630	1,670	9,940	3,490	e1,400	5,050	2,440	10,700	1,230	393	1,520	10,400
13	1,480	1,910	8,440	3,390	e1,350	4,270	4,610	8,300	1,050	448	1,250	6,610
14	1,380	2,390	6,810	2,640	e1,300	3,680	12,700	6,190	998	577	1,270	4,000
15	3,490	2,340	5,480	2,230	e1,280	3,710	10,900	5,300	1,050	1,660	1,110	3,000
16	4,920	2,730	4,620	e2,150	e1,250	3,570	8,970	5,070	1,010	2,840	956	2,490
17	3,550	3,620	5,100	e2,050	e1,250	3,200	6,870	3,940	957	2,070	872	5,550
18	3,000	4,010	4,960	e2,300	e1,250	3,160	5,090	3,390	1,270	1,460	817	18,500
19	2,790	7,890	4,180	e2,200	e1,200	2,900	4,200	3,670	1,710	1,830	753	16,600
20	2,540	19,400	3,650	e2,000	e1,200	2,990	3,740	3,180	1,180	2,470	760	14,700
21	2,260	16,800	3,220	e1,900	e1,400	7,140	3,280	4,030	960	1,860	2,100	11,700
22	2,110	15,100	2,950	e1,700	e1,500	6,560	3,220	5,460	872	1,380	3,460	7,370
23	2,020	11,500	3,250	e1,600	e1,400	5,080	3,430	9,970	853	1,170	2,160	4,290
24	1,840	7,890	6,210	e1,500	e1,350	4,730	3,490	14,000	788	1,240	1,680	3,140
25	1,660	6,420	8,960	e1,400	e1,330	6,360	3,140	11,300	732	1,110	1,440	2,600
26	1,570	5,020	7,920	e1,400	e1,300	8,850	3,720	6,820	740	1,200	1,250	2,220
27	2,650	4,200	6,480	e1,350	e1,250	12,300	4,590	5,040	699	6,560	1,110	1,920
28	4,040	4,660	5,210	e1,350	e1,250	11,400	4,230	5,820	656	6,690	1,460	1,690
29	3,510	8,180	4,450	e1,300	e1,300	9,010	3,820	4,740	894	5,990	1,520	1,530
30	3,250	7,090	5,100	e1,350	---	7,200	3,330	3,300	829	5,110	3,530	1,400
31	2,910	---	5,820	e1,300	---	6,050	---	2,920	---	4,890	5,590	---
TOTAL	84,170	157,220	158,400	103,880	38,430	239,860	155,520	191,660	41,128	57,301	63,698	184,482
MEAN	2,715	5,241	5,110	3,351	1,325	7,737	5,184	6,183	1,371	1,848	2,055	6,149
MAX	4,920	19,400	9,940	8,210	1,500	19,600	12,700	15,000	3,580	6,690	5,980	20,000
MIN	1,380	1,610	2,470	1,300	1,200	1,700	2,440	2,920	656	393	753	934
CFSM	1.69	3.26	3.18	2.08	0.82	4.81	3.22	3.84	0.85	1.15	1.28	3.82
IN.	1.95	3.64	3.66	2.40	0.89	5.55	3.60	4.43	0.95	1.33	1.47	4.27

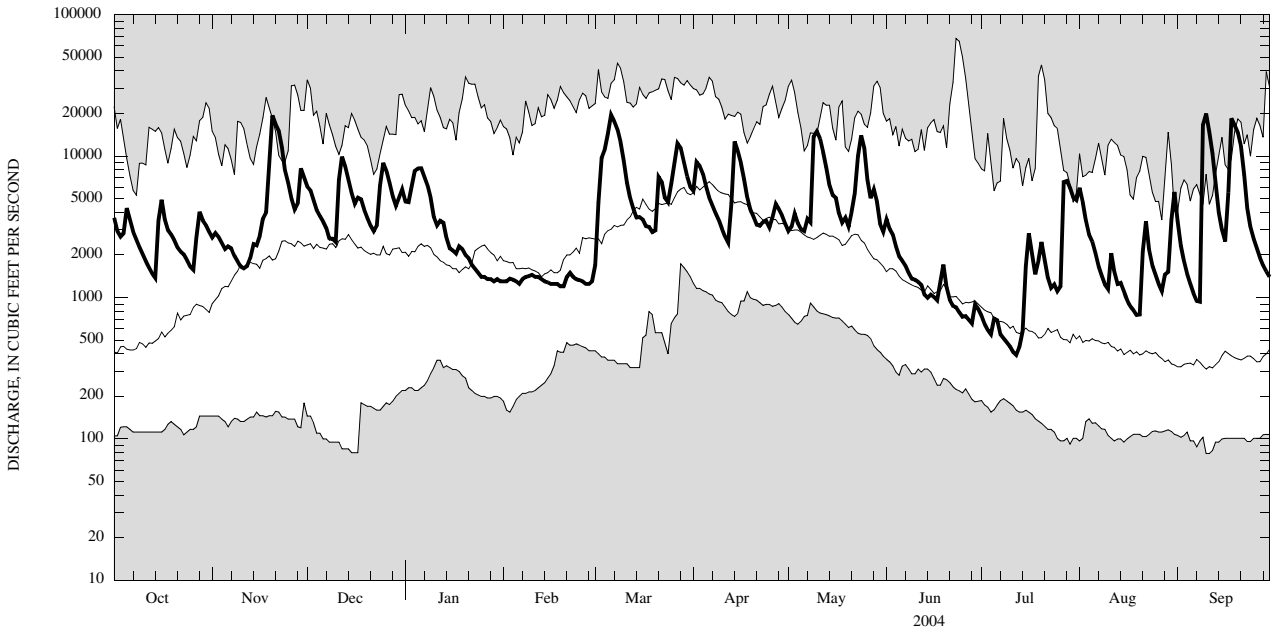
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2004, BY WATER YEAR (WY)

MEAN	1,336	2,529	3,091	3,312	3,159	5,937	5,808	3,482	2,030	1,121	770	890
MAX	5,801	8,605	9,147	10,200	9,683	14,850	15,540	9,574	11,520	6,074	5,108	7,477
(WY)	(1991)	(1928)	(1928)	(1913)	(1976)	(1936)	(1940)	(1943)	(1972)	(1942)	(2003)	(1977)
MIN	124	146	189	255	550	1,983	970	796	299	150	119	118
(WY)	(1931)	(1931)	(1961)	(1961)	(1905)	(1937)	(1946)	(1985)	(1934)	(1934)	(1930)	(1932)

03011020 ALLEGHENY RIVER AT SALAMANCA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1904 - 2004	
ANNUAL TOTAL	1,411,154		1,475,749			
ANNUAL MEAN	3,866		4,032		2,786	
HIGHEST ANNUAL MEAN					4,174	1916
LOWEST ANNUAL MEAN					1,777	1999
HIGHEST DAILY MEAN	23,100	Mar 22	20,000	Sep 10	67,900	Jun 23, 1972
LOWEST DAILY MEAN	622	Jul 15	393	Jul 12	79	Sep 10, 1971
ANNUAL SEVEN-DAY MINIMUM	694	Feb 14	465	Jul 7	84	Dec 11, 1908
ANNUAL RUNOFF (CFSM)	2.40		2.51		1.73	
ANNUAL RUNOFF (INCHES)	32.65		34.14		23.54	
10 PERCENT EXCEEDS	7,910		8,880		6,740	
50 PERCENT EXCEEDS	2,520		2,920		1,530	
90 PERCENT EXCEEDS	936		1,060		290	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

LOCATION.--Lat 42°09'23", long 79°23'39", Chautauqua County, Hydrologic Unit 05010002, 6 ft east of lake shore, 30 ft south of the intersection of Pauline Avenue and Lakeside Avenue, and 950 ft southeast of the ferry landing at Bemus Point.

DRAINAGE AREA.--189 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Nov. 1974 at site 950 ft northwest at same datum.

REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi^2. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft, Mar. 5, 1976; minimum elevation, 1,306.20 ft, Dec. 16, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,309.74 ft, May 24; minimum elevation, 1,306.81 ft, Feb. 20.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,308.52	1,308.37	1,308.69	1,308.61	1,307.37	1,307.25	1,308.66	1,308.44	1,308.86	1,308.13	1,308.81	1,308.30
2	1,308.59	1,308.34	1,308.69	1,308.61	1,307.32	1,307.50	1,308.83	1,308.50	1,308.74	1,308.12	1,308.79	1,308.29
3	1,308.61	1,308.31	1,308.64	1,308.70	1,307.29	1,307.89	1,308.89	1,308.55	1,308.62	1,308.11	1,308.70	1,308.28
4	1,308.67	1,308.28	1,308.59	1,308.74	1,307.26	1,308.04	1,308.87	1,308.51	1,308.51	1,308.11	1,308.62	1,308.27
5	1,308.81	1,308.28	1,308.54	1,308.73	1,307.22	1,308.31	1,308.81	1,308.42	1,308.40	1,308.17	1,308.55	1,308.26
6	1,308.81	1,308.25	1,308.49	1,308.70	1,307.20	1,308.64	1,308.75	1,308.34	1,308.31	1,308.16	1,308.44	1,308.23
7	1,308.76	1,308.20	1,308.43	1,308.67	1,307.20	1,308.67	1,308.69	1,308.35	1,308.25	1,308.20	1,308.34	1,308.21
8	1,308.72	1,308.14	1,308.36	1,308.63	1,307.17	1,308.66	1,308.63	1,308.34	1,308.24	1,308.31	1,308.25	1,308.28
9	1,308.67	1,308.09	1,308.30	1,308.57	1,307.14	1,308.61	1,308.56	1,308.87	1,308.24	1,308.31	1,308.23	1,309.38
10	1,308.61	1,308.04	1,308.26	1,308.49	1,307.12	1,308.54	1,308.48	1,308.96	1,308.24	1,308.30	1,308.24	1,309.68
11	1,308.56	1,308.01	1,308.45	1,308.42	1,307.10	1,308.47	1,308.39	1,309.01	1,308.23	1,308.29	1,308.25	1,309.56
12	1,308.50	1,307.99	1,308.52	1,308.37	1,307.07	1,308.43	1,308.31	1,308.98	1,308.21	1,308.33	1,308.24	1,309.41
13	1,308.44	1,308.01	1,308.50	1,308.32	1,307.04	1,308.37	1,308.36	1,308.91	1,308.20	1,308.37	1,308.24	1,309.26
14	1,308.40	1,308.05	1,308.47	1,308.26	1,307.02	1,308.30	1,308.56	1,308.83	1,308.21	1,308.39	1,308.25	1,309.12
15	1,308.70	1,308.05	1,308.44	1,308.21	1,306.99	1,308.26	1,308.58	1,308.79	1,308.24	1,308.52	1,308.24	1,308.97
16	1,308.80	1,308.06	1,308.40	1,308.15	1,306.96	1,308.26	1,308.52	1,308.76	1,308.24	1,308.83	1,308.23	1,308.86
17	1,308.77	1,308.07	1,308.48	1,308.08	1,306.92	1,308.24	1,308.45	1,308.68	1,308.26	1,308.82	1,308.22	1,309.02
18	1,308.72	1,308.07	1,308.52	1,308.03	1,306.89	1,308.18	1,308.38	1,308.63	1,308.28	1,308.72	1,308.22	1,309.46
19	1,308.67	1,308.11	1,308.50	1,307.98	1,306.86	1,308.12	1,308.30	1,308.57	1,308.28	1,308.63	1,308.21	1,309.37
20	1,308.60	1,308.19	1,308.49	1,307.93	1,306.84	1,308.10	1,308.26	1,308.48	1,308.25	1,308.54	1,308.21	1,309.23
21	1,308.54	1,308.19	1,308.42	1,307.87	1,306.94	1,308.22	1,308.22	1,308.53	1,308.23	1,308.46	1,308.25	1,309.10
22	1,308.56	1,308.17	1,308.38	1,307.81	1,307.06	1,308.23	1,308.30	1,308.75	1,308.22	1,308.43	1,308.24	1,309.00
23	1,308.56	1,308.14	1,308.41	1,307.76	1,307.12	1,308.20	1,308.35	1,308.92	1,308.22	1,308.35	1,308.23	1,308.96
24	1,308.51	1,308.13	1,308.71	1,307.71	1,307.15	1,308.18	1,308.35	1,309.58	1,308.20	1,308.26	1,308.22	1,308.85
25	1,308.45	1,308.15	1,308.80	1,307.66	1,307.17	1,308.30	1,308.36	1,309.69	1,308.19	1,308.23	1,308.21	1,308.74
26	1,308.43	1,308.14	1,308.77	1,307.62	1,307.18	1,308.48	1,308.42	1,309.59	1,308.18	1,308.25	1,308.19	1,308.62
27	1,308.49	1,308.13	1,308.71	1,307.58	1,307.19	1,308.71	1,308.44	1,309.46	1,308.15	1,308.34	1,308.19	1,308.50
28	1,308.50	1,308.31	1,308.63	1,307.54	1,307.20	1,308.77	1,308.42	1,309.36	1,308.14	1,308.37	1,308.24	1,308.39
29	1,308.47	1,308.61	1,308.56	1,307.50	1,307.21	1,308.75	1,308.40	1,309.23	1,308.15	1,308.37	1,308.29	1,308.28
30	1,308.43	1,308.67	1,308.64	1,307.45	---	1,308.71	1,308.40	1,309.09	1,308.14	1,308.38	1,308.31	1,308.21
31	1,308.39	---	1,308.67	1,307.41	---	1,308.69	---	1,308.97	---	1,308.50	1,308.31	---
MEAN	1,308.59	1,308.18	1,308.53	1,308.13	1,307.11	1,308.33	1,308.50	1,308.84	1,308.29	1,308.37	1,308.32	1,308.80
MAX	1,308.81	1,308.67	1,308.80	1,308.74	1,307.37	1,308.77	1,308.89	1,309.69	1,308.86	1,308.83	1,308.81	1,309.68
MIN	1,308.39	1,307.99	1,308.26	1,307.41	1,306.84	1,307.25	1,308.22	1,308.34	1,308.14	1,308.11	1,308.19	1,308.21

CAL YR 2003 MEAN 1,308.23 MAX 1309.12 MIN 1306.99
WTR YR 2004 MEAN 1,308.34 MAX 1309.69 MIN 1306.84

03014500 CHADAKOIN RIVER AT FALCONER, NY

LOCATION.--Lat 42°06'45", long 79°12'15", Chautauqua County, Hydrologic Unit 05010002, on left bank 10 ft downstream from South Dow Street Bridge in Falconer, 1.8 mi upstream from mouth, and 6 mi downstream from Chautauqua Lake.

DRAINAGE AREA.--194 mi^2.

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

REVISED RECORDS.--WSP 803: 1936(M). WDR NY-98-3: 1997 (M).

GAGE.--Water-stage recorder, crest-stage gages, and concrete control. Datum of gage is 1,256.41 ft above NGVD of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft^3/s, Sept. 14, 1979, gage height, 4.93 ft; minimum discharge, 2.5 ft^3/s, Sept. 18, 1995; minimum gage height, 0.05 ft, Oct. 3, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,680 ft^3/s, May 24, gage height, 3.89 ft, maximum gage height, 4.09 ft, Jan. 17 (ice jam); minimum discharge, 7.7 ft^3/s, Aug. 27, gage height, 0.16 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	521	564	932	505	205	1,010	79	1,050	66	482	65
2	562	510	696	924	e480	276	1,080	210	1,000	65	753	63
3	543	507	683	949	474	549	1,100	365	945	66	745	42
4	585	498	668	984	474	703	1,130	761	804	75	738	66
5	615	495	653	995	e450	773	1,100	883	711	66	730	66
6	605	496	643	e980	457	910	1,020	677	698	61	717	66
7	593	487	633	e890	459	967	997	316	259	61	690	71
8	581	467	610	e880	e440	979	954	493	78	101	319	181
9	569	439	592	e880	e440	967	928	758	77	55	75	1,190
10	536	430	570	e870	437	941	877	891	74	55	77	1,400
11	541	419	655	e840	402	907	840	904	73	54	74	1,320
12	574	418	665	806	385	909	807	891	73	60	74	1,250
13	543	520	649	799	383	875	855	881	72	54	75	1,170
14	539	511	623	e800	380	840	903	868	80	188	74	1,100
15	665	455	635	e780	378	826	892	884	71	376	74	973
16	634	439	612	e760	e370	778	868	858	70	745	73	842
17	643	449	641	e720	e370	777	853	843	76	991	73	1,040
18	628	435	661	e700	e360	763	828	839	71	960	75	1,270
19	624	466	694	e660	363	754	829	823	72	934	72	1,230
20	598	488	713	e650	369	649	794	800	70	753	79	1,160
21	605	469	705	e620	301	699	403	962	70	693	76	1,110
22	598	466	686	e610	205	692	359	886	71	683	69	442
23	604	458	686	e600	204	686	253	918	70	679	68	579
24	597	454	838	e590	204	689	354	1,410	75	421	68	920
25	624	469	993	e580	204	707	358	1,450	71	75	68	897
26	615	395	999	e570	200	727	258	1,410	69	86	68	866
27	632	398	963	e560	197	749	277	1,330	68	75	39	828
28	387	469	928	e550	198	747	288	1,300	72	72	77	801
29	614	580	904	e540	200	742	242	1,220	64	71	69	764
30	544	545	940	e530	---	820	152	1,140	65	73	68	281
31	522	---	940	e520	---	987	---	1,070	---	113	66	---
TOTAL	18,070	14,153	22,442	23,069	10,289	23,593	21,609	27,120	7,119	8,827	6,805	22,053
MEAN	583	472	724	744	355	761	720	875	237	285	220	735
MAX	665	580	999	995	505	987	1,130	1,450	1,050	991	753	1,400
MIN	387	395	564	520	197	205	152	79	64	54	39	42

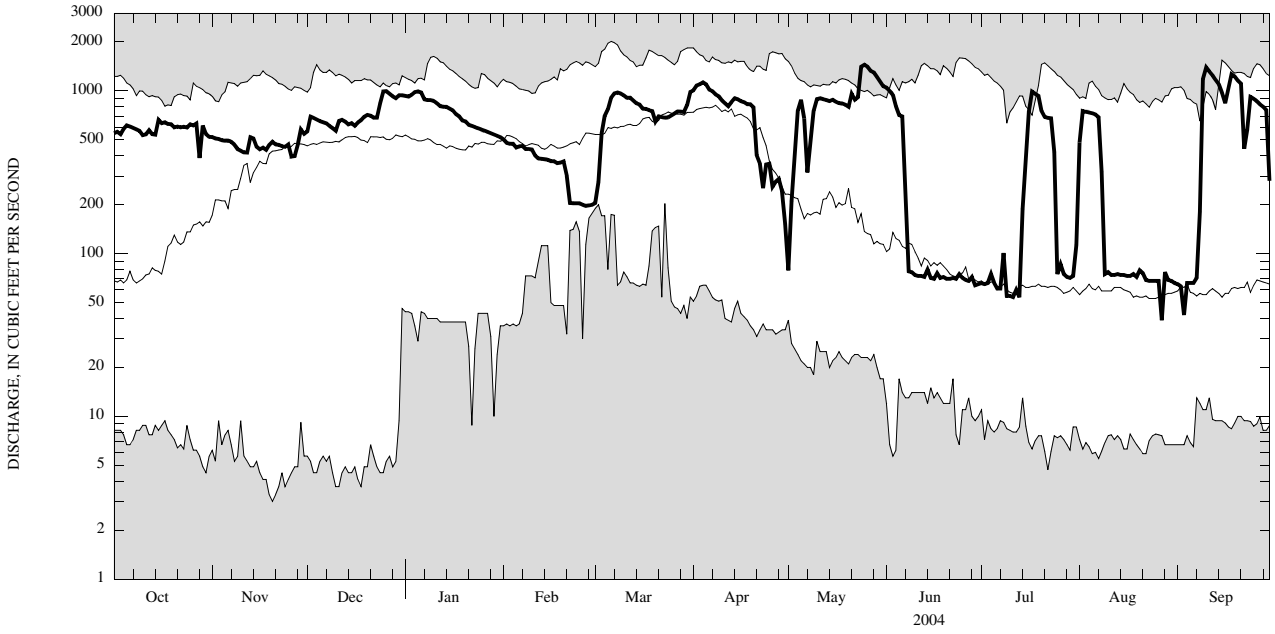
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

MEAN	213	378	505	521	519	678	633	318	209	121	109	158
MAX	751	997	997	1,120	989	1,358	1,305	974	852	729	540	735
(WY)	(1946)	(1986)	(1951)	(1998)	(1990)	(1976)	(1947)	(1943)	(1986)	(1986)	(1977)	(2004)
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)

LAKES IN ALLEGHENY RIVER BASIN

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1935 - 2004	
ANNUAL TOTAL	169,920		205,149			
ANNUAL MEAN	466		561		364	
HIGHEST ANNUAL MEAN					561	2004
LOWEST ANNUAL MEAN					222	1999
HIGHEST DAILY MEAN	999	Dec 26	1,450	May 25	2,020	Mar 6, 1976
LOWEST DAILY MEAN	68	May 9	39	Aug 27	3.0	Nov 20, 1960
ANNUAL SEVEN-DAY MINIMUM	80	Aug 22	62	Aug 31	3.7	Nov 18, 1960
10 PERCENT EXCEEDS	833		975		832	
50 PERCENT EXCEEDS	469		588		292	
90 PERCENT EXCEEDS	95		71		37	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

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

04213500 CATTARAUGUS CREEK AT GOWANDA, NY

LOCATION.--Lat 42°27'50", long 78°56'07", Erie County, Hydrologic Unit 04120102, on right bank 380 ft downstream from bridge on State Highways 39 and 62 at Gowanda, 4.2 mi downstream from South Branch, and 17.8 mi upstream from mouth.

DRAINAGE AREA.--436 mi^2.

PERIOD OF RECORD.--November 1939 to March 1998, October 1999 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low and medium flow caused by powerplant 20 mi upstream from station. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft^3/s, Mar. 7, 1956, gage height, 14.03 ft; minimum discharge, about 6 ft^3/s, Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft, Oct. 26, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	2145	9,450	7.35	0930	*16,600	*9.40
Mar 5	2100	12,200	8.19	1030	15,500	9.11
May 23	1100	9,090	7.23			

Minimum discharge, 160 ft^3/s, Aug. 27, gage height, 1.43 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	348	508	1,700	1,310	e420	e700	1,310	583	1,260	248	667	346
2	457	569	1,360	1,620	e430	e3,000	3,450	678	856	232	423	264
3	453	882	1,010	2,610	e480	4,000	2,640	813	743	220	342	233
4	698	681	872	1,960	e510	3,390	2,460	643	654	221	319	205
5	1,190	696	810	1,440	e520	7,190	1,740	626	582	348	356	190
6	740	752	744	1,180	e540	6,890	1,580	597	556	271	295	177
7	518	577	665	e800	e660	2,840	1,730	930	525	486	269	168
8	407	494	593	e940	e620	2,240	1,390	746	474	832	255	300
9	345	432	618	897	e590	1,530	1,180	2,140	433	455	236	10,300
10	304	392	662	e550	e580	1,260	1,010	1,370	437	339	244	2,970
11	273	395	2,400	e660	e545	1,160	899	1,420	422	275	320	1,170
12	251	482	1,530	e770	e530	1,110	837	1,000	379	249	243	717
13	246	1,540	1,030	e720	e530	969	2,120	794	358	244	237	529
14	245	1,130	884	e550	e500	915	4,540	724	382	292	246	429
15	1,490	986	847	e550	e460	1,230	2,070	832	488	2,480	226	371
16	942	1,210	814	e480	e440	968	1,350	878	374	3,330	212	374
17	567	1,370	1,990	e500	e430	847	1,120	691	470	1,310	199	2,590
18	444	1,140	1,310	e610	e410	878	1,000	681	1,080	1,050	194	4,520
19	474	3,540	1,050	e560	e500	815	934	873	637	932	188	1,430
20	416	4,390	937	e510	593	949	998	611	549	1,150	200	847
21	368	1,760	843	e490	e750	2,470	863	1,760	395	669	283	639
22	424	1,190	818	e480	e950	1,440	950	1,280	373	589	254	531
23	477	961	1,680	e470	e780	1,150	871	5,050	358	516	203	450
24	386	911	3,190	e460	e700	1,150	799	10,600	311	437	186	400
25	345	1,150	2,160	e440	e600	3,260	754	3,170	311	363	177	367
26	443	897	1,430	e430	e540	3,180	857	2,030	319	391	169	344
27	1,350	847	1,170	e435	e520	4,920	797	1,540	281	641	215	316
28	1,210	3,540	1,020	e440	e500	2,510	711	2,590	272	608	388	299
29	781	3,800	1,160	e440	e540	1,690	653	1,330	314	435	864	281
30	661	1,940	2,830	e430	---	1,350	584	985	271	364	1,070	271
31	545	---	1,850	e420	---	1,320	---	1,000	---	617	540	---
TOTAL	17,798	39,162	39,977	24,152	16,168	67,321	42,197	48,965	14,864	20,594	10,020	32,028
MEAN	574	1,305	1,290	779	558	2,172	1,407	1,580	495	664	323	1,068
MAX	1,490	4,390	3,190	2,610	950	7,190	4,540	10,600	1,260	3,330	1,070	10,300
MIN	245	392	593	420	410	700	584	583	271	220	169	168
CFSM	1.32	2.99	2.96	1.79	1.28	4.98	3.23	3.62	1.14	1.52	0.74	2.45
IN.	1.52	3.34	3.41	2.06	1.38	5.74	3.60	4.18	1.27	1.76	0.85	2.73

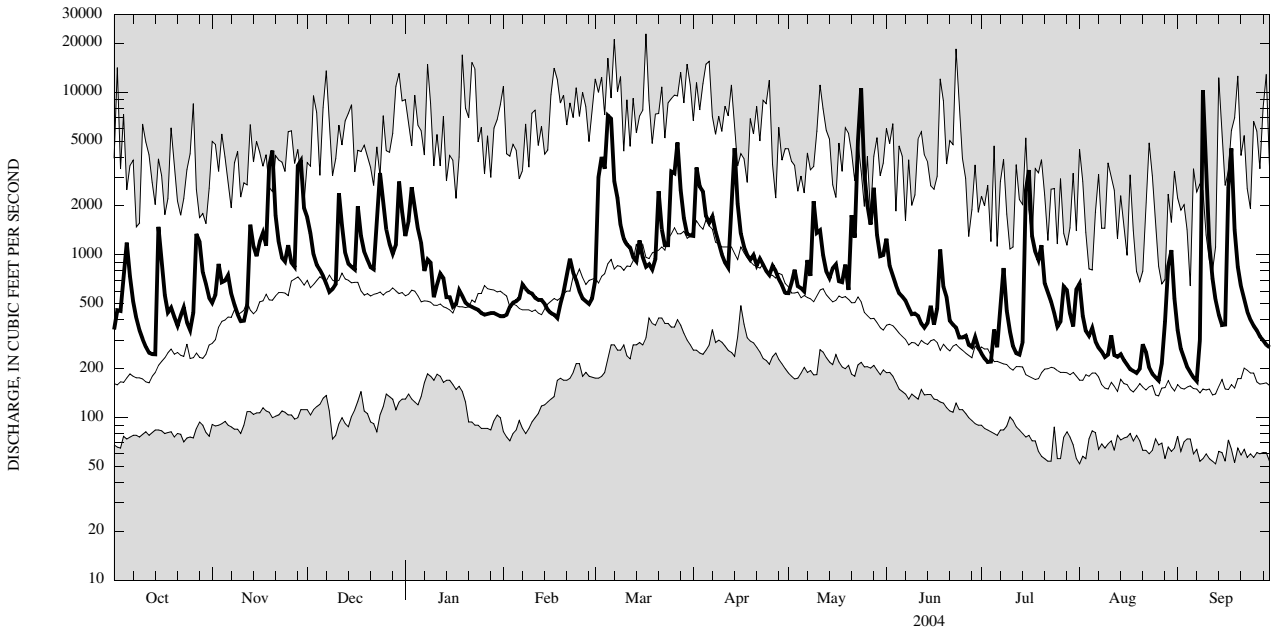
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	407	722	956	845	947	1,592	1,450	762	497	299	252	330
MAX	1,573	1,772	2,089	2,305	2,819	3,824	3,686	1,948	1,436	867	1,225	2,423
(WY)	(1946)	(1986)	(1991)	(1998)	(1976)	(1945)	(1947)	(1943)	(1989)	(1986)	(1977)	(1977)
MIN	81.8	118	111	136	222	790	279	283	143	78.3	79.5	85.8
(WY)	(1964)	(1961)	(1961)	(1961)	(1963)	(2001)	(1946)	(1941)	(1955)	(1955)	(1941)	(1960)

04213500 CATTARAUGUS CREEK AT GOWANDA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	318,744		373,246			
ANNUAL MEAN	873		1,020		750	
HIGHEST ANNUAL MEAN					1,030	1977
LOWEST ANNUAL MEAN					532	1995
HIGHEST DAILY MEAN	6,390	Mar 21	10,600	May 24	22,900	Mar 17, 1942
LOWEST DAILY MEAN	173	Sep 14	168	Sep 7	52	Sep 13, 1945
ANNUAL SEVEN-DAY MINIMUM	190	Sep 9	209	Aug 14	57	Sep 7, 1945
ANNUAL RUNOFF (CFSM)	2.00		2.34		1.72	
ANNUAL RUNOFF (INCHES)	27.20		31.85		23.37	
10 PERCENT EXCEEDS	1,720		2,130		1,600	
50 PERCENT EXCEEDS	567		660		427	
90 PERCENT EXCEEDS	239		271		127	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'17", long 78°45'19", Erie County, Hydrologic Unit 04120103, on left bank 300 ft downstream from bridge on Union Road in Gardenville, 2.0 mi upstream from Cayuga Creek, and 10.1 mi upstream from mouth.

DRAINAGE AREA.--142 mi^2.

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

REVISED RECORDS.--WSP 1337: 1939-52. WSP 1912; WDR NY-82-3: Drainage area. WDR NY-78-1: 1939-l976 (P).

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft above NGVD of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s, Mar. 1, 1955, Mar. 7, 1956, maximum gage height 14.34 ft, Mar. 21, 1978 (ice jam); minimum discharge, 0.2 ft^3/s, Sept. 1, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,750 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	2230	4,100	5.91	0800	4,650	6.27
Nov 28	2000	4,900	6.43	1100	4,660	6.28
Mar 5	2300	4,410	6.12	1130	*9,450	*8.71

Minimum discharge, 20 ft^3/s, July 4, gage height, 0.56 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	102	479	240	e86	e350	250	100	424	29	384	103
2	304	102	322	275	e86	e1,400	910	110	226	25	139	63
3	199	525	e190	714	e88	2,070	817	179	237	23	91	49
4	435	318	e150	456	e96	1,390	801	135	159	22	73	42
5	545	243	e140	298	e100	2,650	503	110	123	58	81	39
6	219	287	e130	e210	e110	2,110	430	106	107	53	66	35
7	124	166	110	e110	e120	623	576	406	100	85	55	31
8	82	122	82	e190	e140	709	384	265	86	320	51	48
9	63	94	124	e180	e130	390	282	787	74	142	47	5,460
10	53	77	130	e130	e130	315	224	514	78	79	42	940
11	48	78	500	e120	e120	299	188	280	72	53	43	284
12	45	113	309	e130	e120	276	165	194	63	39	48	162
13	42	349	e150	e140	e120	222	502	141	55	31	47	114
14	40	397	e100	e130	e110	207	1,810	136	55	41	51	90
15	113	240	e160	e120	e100	382	536	136	74	696	46	75
16	208	292	158	e110	e100	239	288	228	58	1,080	40	69
17	87	304	829	e110	e95	160	224	144	51	342	36	71
18	62	264	358	e110	e95	218	234	120	131	140	33	686
19	64	912	244	e110	e90	175	293	184	98	117	39	251
20	70	1,160	209	e100	e94	262	190	119	95	393	37	123
21	59	327	181	e100	e120	1,090	167	774	65	135	42	90
22	56	218	195	e95	e150	408	204	499	51	84	44	73
23	83	177	479	e95	e140	278	171	2,440	51	95	37	64
24	71	157	840	e95	e150	278	150	2,410	45	80	32	58
25	58	241	555	e90	e130	966	138	600	129	58	31	54
26	174	210	315	e90	e130	665	190	683	68	52	28	51
27	529	238	238	e90	e110	1,240	177	318	50	1,260	26	47
28	415	1,940	205	e90	e110	493	148	1,120	39	308	65	45
29	213	1,370	214	e88	e130	316	122	361	34	134	174	43
30	209	490	612	e88	---	241	105	212	34	96	636	41
31	138	---	385	e86	---	246	---	201	---	608	310	---
TOTAL	4,938	11,513	9,093	4,990	3,300	20,668	11,179	14,012	2,932	6,678	2,874	9,301
MEAN	159	384	293	161	114	667	373	452	97.7	215	92.7	310
MAX	545	1,940	840	714	150	2,650	1,810	2,440	424	1,260	636	5,460
MIN	40	77	82	86	86	160	105	100	34	22	26	31
CFSM	1.12	2.70	2.07	1.13	0.80	4.70	2.62	3.18	0.69	1.52	0.65	2.18
IN.	1.29	3.02	2.38	1.31	0.86	5.41	2.93	3.67	0.77	1.75	0.75	2.44

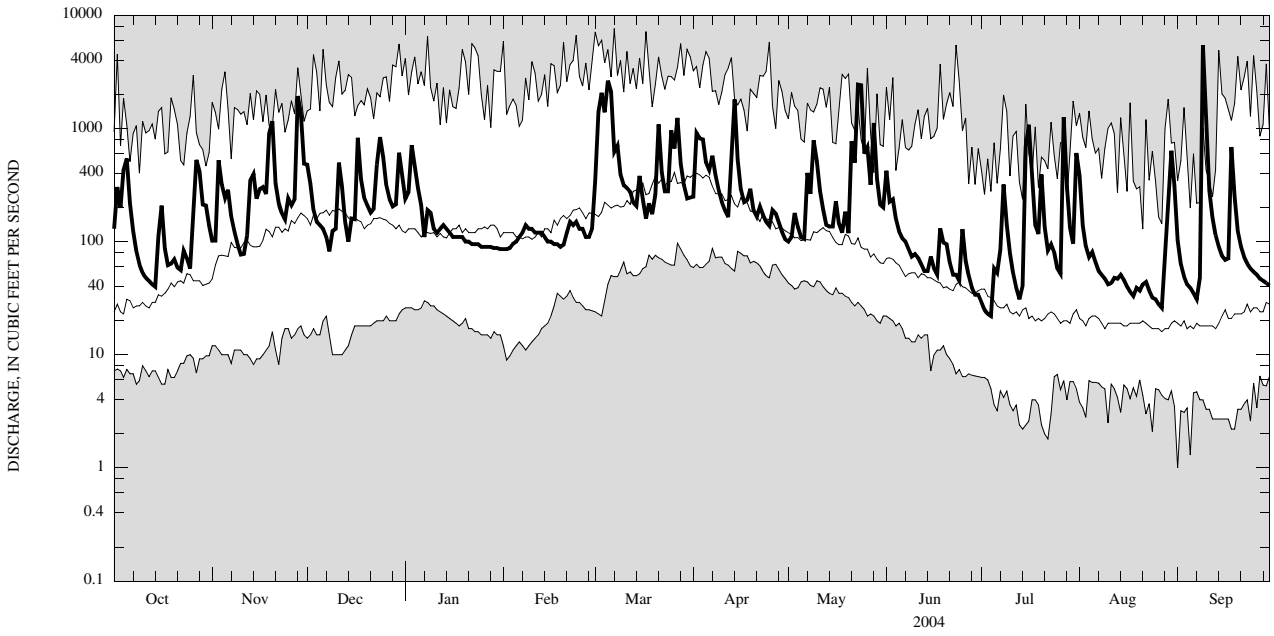
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	91.7	202	288	257	303	493	373	185	105	53.6	47.3	75.7
MAX	381	686	706	725	835	1,048	950	495	531	354	376	827
(WY)	(1987)	(1986)	(1991)	(1998)	(1976)	(1942)	(1947)	(1984)	(1989)	(1992)	(1992)	(1977)
MIN	9.32	18.2	17.4	27.4	40.2	197	68.8	38.5	15.6	6.89	10.8	6.25
(WY)	(1965)	(1961)	(1961)	(1961)	(1963)	(1981)	(1946)	(1941)	(1955)	(1955)	(1966)	(1964)

04214500 BUFFALO CREEK AT GARDENVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	85,127		101,478			
ANNUAL MEAN	233		277		206	
HIGHEST ANNUAL MEAN					301	1977
LOWEST ANNUAL MEAN					119	1999
HIGHEST DAILY MEAN	2,490	Mar 17	5,460	Sep 9	7,650	Mar 7, 1956
LOWEST DAILY MEAN	16	Sep 14	22	Jul 4	1.0	Sep 1, 1964
ANNUAL SEVEN-DAY MINIMUM	19	Sep 8	29	Jun 28	2.6	Sep 13, 1964
ANNUAL RUNOFF (CFSM)	1.64		1.95		1.45	
ANNUAL RUNOFF (INCHES)	22.30		26.58		19.67	
10 PERCENT EXCEEDS	494		609		461	
50 PERCENT EXCEEDS	140		134		89	
90 PERCENT EXCEEDS	30		47		15	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'43", Erie County, Hydrologic Unit 04120103, on right bank 150 ft upstream from low dam in Como Lake Park, 700 ft downstream from bridge on Bowen Road, 800 ft downstream from Little Buffalo Creek, 2.0 mi southeast of Lancaster, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--96.4 mi^2.

PERIOD OF RECORD.--September 1938 to September 1968, October 1971 to April 1974 (annual maximum only), May 1974 to current year.

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

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft^3/s, Sept. 14, 1979, gage height, 10.48 ft; maximum gage height 13.35 ft, Jan. 23, 1999 (ice jam);practically no flow part of Aug. 8, 9, 1939, when stop logs were installed in the dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	1630	4,050	7.52	1030	2,940	6.87
Mar 5	1845	3,470	7.19	1000	*7,820	*9.61

Minimum discharge, 6.9 ft^3/s, Aug. 27, 28, gage height, 2.76 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	51	328	144	e58	e160	250	64	301	13	274	54
2	125	64	203	161	e58	e400	944	75	138	11	97	30
3	63	349	e130	444	e60	1,510	805	140	129	9.7	57	22
4	141	172	e115	260	e68	1,080	599	87	82	9.5	45	17
5	141	140	e110	170	e72	2,180	356	72	62	36	44	14
6	64	130	e90	e120	e85	1,210	305	66	54	22	35	12
7	39	80	e70	e62	e100	408	345	167	49	87	30	10
8	28	58	e50	e76	e96	446	229	102	40	148	27	37
9	22	45	e70	e84	e92	256	175	335	35	64	24	4,440
10	18	38	116	e62	e90	226	140	187	39	33	21	612
11	15	45	408	e62	e84	224	122	119	36	22	20	187
12	13	65	200	e66	e78	193	106	83	29	17	19	118
13	12	216	91	e70	e76	153	629	61	26	15	19	83
14	12	180	67	e72	e74	150	1,260	78	31	24	22	65
15	54	120	89	e74	e68	245	322	81	49	222	19	53
16	69	159	98	e70	e64	e130	186	106	27	339	17	48
17	31	158	560	e68	e60	e90	149	63	25	144	15	53
18	23	134	240	e68	e58	e120	226	57	45	88	13	161
19	24	782	165	e66	e58	e120	227	66	39	311	15	73
20	26	617	135	e64	e62	e210	138	45	32	241	16	47
21	20	183	115	e62	e82	894	120	131	23	67	15	38
22	22	127	132	e62	e94	e290	148	98	23	40	14	34
23	38	102	340	e60	e96	e180	121	1,460	24	36	12	30
24	30	90	439	e60	e92	291	101	1,640	20	35	10	26
25	23	148	310	e60	e85	913	96	336	98	23	9.1	25
26	151	145	186	e59	e80	465	155	262	37	22	7.8	23
27	277	275	145	e58	e74	1,060	136	166	23	1,120	7.2	22
28	167	2,010	132	e60	e76	328	111	596	19	185	15	21
29	107	915	139	e60	e96	208	82	168	18	81	84	20
30	123	330	422	e62	---	163	66	110	15	57	422	18
31	72	---	232	e60	---	172	---	130	---	683	155	---
TOTAL	1,989	7,928	5,927	2,926	2,236	14,475	8,649	7,151	1,568	4,205.2	1,580.1	6,393
MEAN	64.2	264	191	94.4	77.1	467	288	231	52.3	136	51.0	213
MAX	277	2,010	560	444	100	2,180	1,260	1,640	301	1,120	422	4,440
MIN	12	38	50	58	58	90	66	45	15	9.5	7.2	10
CFSM	0.67	2.74	1.98	0.98	0.80	4.84	2.99	2.39	0.54	1.41	0.53	2.21
IN.	0.77	3.06	2.29	1.13	0.86	5.59	3.34	2.76	0.61	1.62	0.61	2.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	58.4	129	187	176	214	341	248	113	56.0	26.1	30.5	49.2
MAX	252	601	505	543	457	680	623	343	338	166	323	572
(WY)	(1987)	(1986)	(1978)	(1998)	(1976)	(1942)	(1940)	(2002)	(1989)	(1998)	(1977)	(1977)
MIN	2.90	4.34	5.60	9.85	25.1	146	36.5	18.7	5.88	1.06	1.87	0.80
(WY)	(1967)	(1961)	(1961)	(1961)	(1963)	(1981)	(1946)	(1941)	(1955)	(1955)	(1939)	(1960)

04215000 CAYUGA CREEK NEAR LANCASTER, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	52,682.4		65,027.3			
ANNUAL MEAN	144		178		135	
HIGHEST ANNUAL MEAN					206	1956
LOWEST ANNUAL MEAN					78.5	1962
HIGHEST DAILY MEAN	2,010	Nov 28	4,440	Sep 9	5,830	Feb 24, 1985
LOWEST DAILY MEAN	2.9	Sep 12	7.2	Aug 27	0.05	Aug 12, 2001
ANNUAL SEVEN-DAY MINIMUM	3.7	Sep 8	11	Aug 21	0.09	Aug 10, 2001
ANNUAL RUNOFF (CFSM)	1.50		1.84		1.40	
ANNUAL RUNOFF (INCHES)	20.33		25.09		19.07	
10 PERCENT EXCEEDS	331		342		312	
50 PERCENT EXCEEDS	71		82		49	
90 PERCENT EXCEEDS	8.1		20		4.0	

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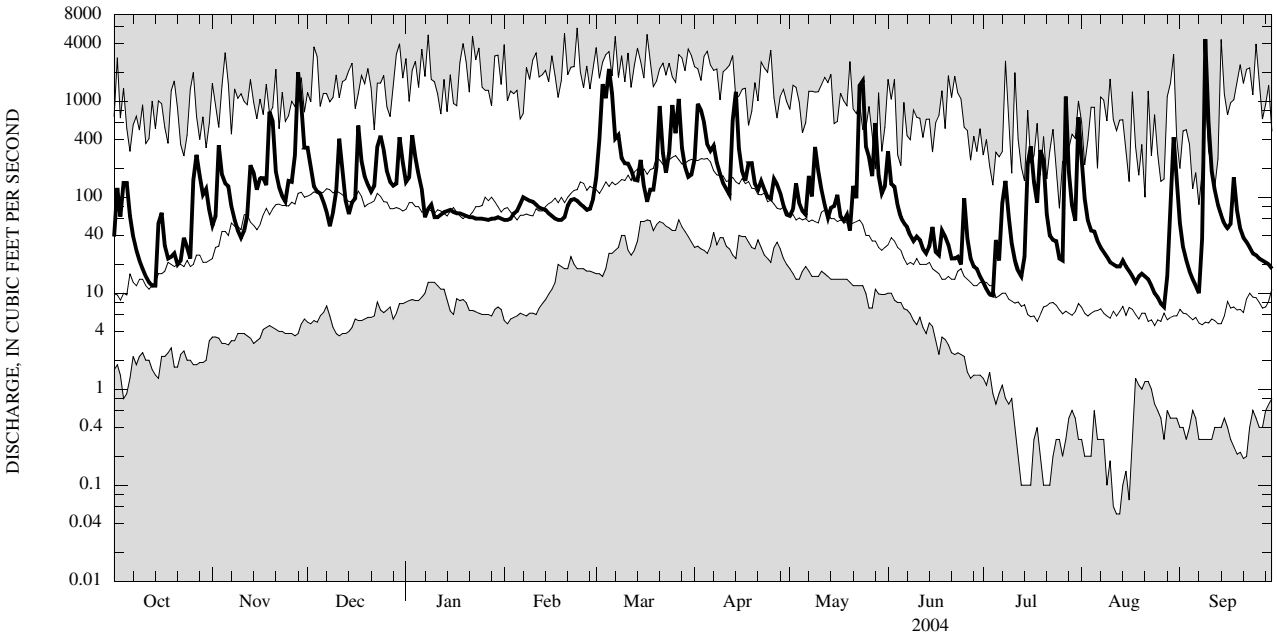


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'31", Erie County, Hydrologic Unit 04120103, on right bank 30 ft upstream from bridge on Ridge Road in Ebenezer, 4.0 mi upstream from mouth, and 5.0 mi southeast of Buffalo.

DRAINAGE AREA.--135 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft above NGVD of 1929. Prior to Apr. 4, 1955, at datum 2.00 ft higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi downstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s, Sept. 9, 2004, gage height, 14.85 ft, maximum gage height, 15.82 ft, present datum, Mar. 1, 1955; minimum discharge, 2.6 ft^3/s, Nov. 7, 1953; minimum gage height, 1.76 ft, Sept. 15, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1945	4,560	8.23	0300	6,060	9.44
Nov 28	1715	5,000	8.60	0930	5,270	8.82
Mar 5	2115	6,000	9.39	1200	*14,700	*14.85

Minimum discharge, 14 ft^3/s, Aug. 27, gage height, 2.31 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	122	653	337	e90	e280	417	94	531	24	522	137
2	691	220	388	516	e92	e1,000	1,610	119	266	21	159	75
3	277	840	200	1,310	e96	2,110	1,250	210	216	18	95	54
4	1,010	362	162	716	e110	1,680	1,100	119	142	23	74	45
5	886	320	147	421	e110	3,610	683	105	115	100	81	38
6	267	279	127	276	e120	3,030	573	103	104	50	61	31
7	133	171	99	e160	e140	1,090	731	607	95	314	50	27
8	91	131	e80	e170	e150	1,100	459	277	82	726	45	84
9	70	107	e120	e190	e160	551	315	1,580	73	180	39	8,950
10	58	93	e125	e140	e150	390	228	533	82	80	36	1,600
11	50	109	851	e130	e130	365	183	270	71	55	42	586
12	44	188	396	e150	e120	343	159	180	63	40	41	321
13	41	679	190	e150	e140	250	1,160	134	55	34	47	221
14	48	421	e130	e140	e120	228	2,090	164	60	87	58	169
15	474	265	e150	e130	e100	485	690	222	66	2,380	39	137
16	250	368	e160	e140	e98	e240	341	273	53	2,130	32	117
17	107	388	1,220	e120	e96	e915	243	141	51	510	27	330
18	81	295	445	e130	e94	e240	247	151	268	194	24	1,770
19	110	1,250	271	e120	e92	e160	233	235	163	334	26	390
20	93	1,380	213	e110	e110	389	168	168	109	373	40	e200
21	74	402	185	e100	e140	1,420	154	1,720	59	120	41	e120
22	99	248	201	e98	e170	e460	263	637	56	80	40	e88
23	177	188	790	e96	e150	e290	177	3,650	52	91	28	e70
24	99	174	1,440	e94	e160	e360	145	3,120	61	67	23	e64
25	79	e260	761	e92	e140	1,590	151	855	126	52	21	e58
26	559	211	404	e90	e140	1,330	207	1,280	51	48	17	e58
27	845	378	280	e88	e120	2,380	188	480	38	1,460	15	e56
28	599	2,720	225	e90	e120	850	139	1,760	32	289	329	e52
29	290	1,860	257	e92	e150	513	113	470	30	126	918	e48
30	235	707	1,480	e94	---	342	96	248	29	90	1,390	e44
31	152	---	635	e96	---	376	---	321	---	1,010	428	---
TOTAL	8,174	15,136	12,785	6,586	3,608	28,367	14,513	20,226	3,199	11,106	4,788	15,940
MEAN	264	505	412	212	124	915	484	652	107	358	154	531
MAX	1,010	2,720	1,480	1,310	170	3,610	2,090	3,650	531	2,380	1,390	8,950
MIN	41	93	80	88	90	160	96	94	29	18	15	27
CFSM	1.95	3.74	3.05	1.57	0.92	6.78	3.58	4.83	0.79	2.65	1.14	3.94
IN.	2.25	4.17	3.52	1.81	0.99	7.82	4.00	5.57	0.88	3.06	1.32	4.39

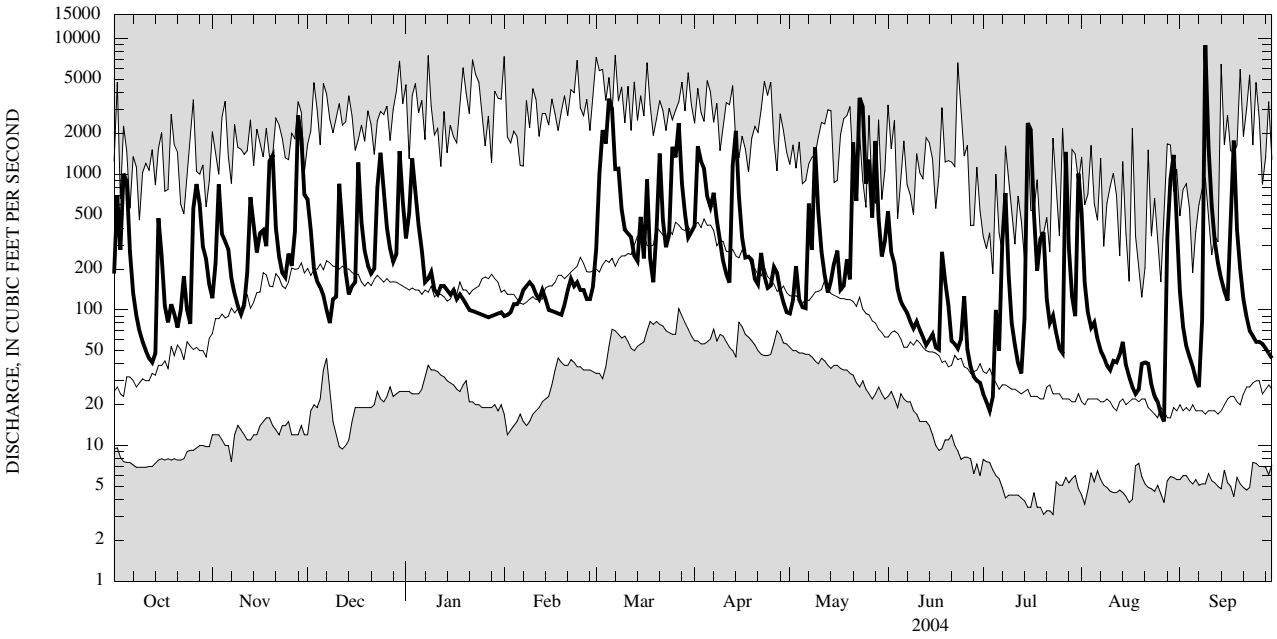
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	113	248	346	305	339	556	419	216	111	57.7	51.7	88.4
MAX	410	705	868	816	859	1,062	1,005	652	473	381	371	978
(WY)	(1946)	(1986)	(1991)	(1998)	(1976)	(1945)	(1947)	(2004)	(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)

04215500 CAZENOVIA CREEK AT EBENEZER, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	110,554		144,428			
ANNUAL MEAN	303		395		237	
HIGHEST ANNUAL MEAN					395	2004
LOWEST ANNUAL MEAN					145	1999
HIGHEST DAILY MEAN	3,000	Mar 17	8,950	Sep 9	8,950	Sep 9, 2004
LOWEST DAILY MEAN	17	Aug 25	15	Aug 27	3.1	Jul 20, 1955
ANNUAL SEVEN-DAY MINIMUM	22	Sep 8	25	Jun 28	3.5	Jul 17, 1955
ANNUAL RUNOFF (CFSM)	2.24		2.92		1.76	
ANNUAL RUNOFF (INCHES)	30.46		39.80		23.86	
10 PERCENT EXCEEDS	701		1,030		551	
50 PERCENT EXCEEDS	154		160		100	
90 PERCENT EXCEEDS	33		48		15	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04215900 LAKE ERIE AT BUFFALO, NY

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

DRAINAGE AREA.--263,700 mi^2.

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

REVISED RECORDS.--WDR NY-75-1: 1974.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, elevations are in feet (IGLD) of 1955, 0.67 ft lower. Prior to Feb. 5, 1899, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Oceanographic Products and Services Division, Silver Spring, Maryland.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 580.65 ft, datum then in use, Dec. 2, 1985; minimum elevation, 564.17 ft, datum then in use, Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 576.87 ft, Nov. 13; minimum elevation, 567.71 ft, Mar. 16.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571.59	570.47	571.86	570.59	570.28	570.25	570.84	571.18	572.15	572.05	571.97	571.66
2	571.11	570.36	570.78	570.66	570.04	570.56	571.01	571.40	572.01	571.86	571.91	571.50
3	571.54	570.20	570.37	570.84	570.68	570.41	571.21	571.39	572.00	571.78	572.02	571.66
4	571.42	570.00	570.14	570.29	570.71	570.31	571.41	571.31	571.70	571.91	571.83	571.56
5	570.96	570.56	569.39	570.51	569.89	570.50	571.26	571.50	571.78	572.23	571.67	571.54
6	570.61	570.34	570.27	572.42	570.41	570.67	571.08	571.26	571.85	571.81	571.86	571.64
7	570.61	571.09	570.37	572.40	570.52	570.65	571.25	571.30	571.85	572.06	571.91	571.75
8	570.72	570.30	570.35	571.03	570.44	570.73	571.04	571.01	571.87	572.12	572.04	570.46
9	570.54	570.34	570.27	570.25	570.49	570.59	571.24	571.09	572.01	572.06	571.90	571.48
10	570.49	570.32	570.18	570.69	570.56	570.53	571.20	571.39	571.56	571.87	572.26	571.69
11	570.45	570.60	571.39	571.42	570.29	570.66	570.87	571.25	571.45	571.80	572.18	571.65
12	570.71	570.60	571.08	571.08	570.31	571.45	570.60	571.33	571.60	571.89	571.74	571.73
13	570.61	573.92	570.37	571.42	570.82	570.63	570.76	571.35	571.80	571.88	571.81	571.53
14	570.55	571.46	570.22	570.18	570.50	570.77	571.20	571.39	572.11	572.19	571.77	571.60
15	572.07	570.34	570.63	570.64	570.09	570.73	571.12	571.53	571.87	572.43	571.72	571.63
16	570.93	570.28	570.59	570.77	570.14	569.21	571.03	571.41	571.86	572.22	571.74	571.76
17	570.60	570.26	571.67	570.63	570.19	570.43	571.16	571.36	572.01	571.98	571.70	571.13
18	570.73	570.04	571.17	571.19	570.23	570.53	571.09	571.58	572.21	571.81	571.92	571.13
19	570.60	570.61	570.66	571.15	570.27	570.59	571.53	571.33	572.22	571.98	571.88	571.20
20	570.70	570.44	570.75	570.87	570.04	570.73	570.96	571.46	572.21	571.98	571.76	571.38
21	571.06	570.44	571.39	570.88	571.12	571.08	571.23	571.42	572.08	571.93	571.75	571.59
22	570.44	569.97	570.93	571.79	570.30	570.81	571.19	571.61	572.27	572.01	571.63	571.54
23	570.44	570.31	570.45	571.16	570.12	571.11	571.10	571.64	572.10	571.87	571.82	571.42
24	570.44	571.87	570.77	570.52	570.14	570.70	571.15	572.15	572.26	571.49	571.22	571.45
25	570.44	571.11	571.44	570.19	570.27	570.77	571.01	571.72	571.96	571.51	571.63	571.62
26	570.55	570.48	571.30	569.43	570.14	570.80	571.48	571.82	572.25	571.35	571.66	571.39
27	570.69	570.26	570.59	570.80	570.13	570.77	571.46	571.83	572.24	571.71	571.76	571.37
28	570.56	570.70	570.54	571.79	570.28	570.52	571.19	571.98	572.08	571.98	571.65	571.12
29	571.05	571.99	570.58	571.11	570.30	570.84	571.32	571.81	572.38	571.81	571.68	571.07
30	570.46	571.86	571.58	570.98	---	570.86	571.16	571.56	572.08	571.79	571.64	571.44
31	570.55	---	571.35	570.76	---	570.86	---	571.83	---	572.10	571.76	---
MEAN	570.78	570.72	570.76	570.92	570.33	570.65	571.14	571.49	571.99	571.92	571.80	571.46
MAX	572.07	573.92	571.86	572.42	571.12	571.45	571.53	572.15	572.38	572.43	572.26	571.76
MIN	570.44	569.97	569.39	569.43	569.89	569.21	570.60	571.01	571.45	571.35	571.22	570.46

CAL YR 2003 MEAN 570.78 MAX 573.92 MIN 568.56
WTR YR 2004 MEAN 571.17 MAX 573.92 MIN 569.21

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°55'00", Erie County, Hydrologic Unit 04120104, at head of Niagara River at Buffalo, and 34.3 mi upstream from mouth.

DRAINAGE AREA.--263,700 mi^2.

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936 (M), WDR NY-77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 347,000 ft^3/s, Dec. 2, 1985, result of high, storm-generated Lake Erie level; minimum daily, 90,000 ft^3/s, Jan. 13, 1964, Aug. 29, 1984. Maximum monthly mean discharge, 268,400 ft^3/s, June 1986; minimum monthly mean, 116,200 ft^3/s, February 1936. Maximum and minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 261,000 ft^3/s, Nov. 13; minimum daily discharge, 160,000 ft^3/s, Jan. 26, Mar. 16. Maximum and minimum instantaneous discharge not determined.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

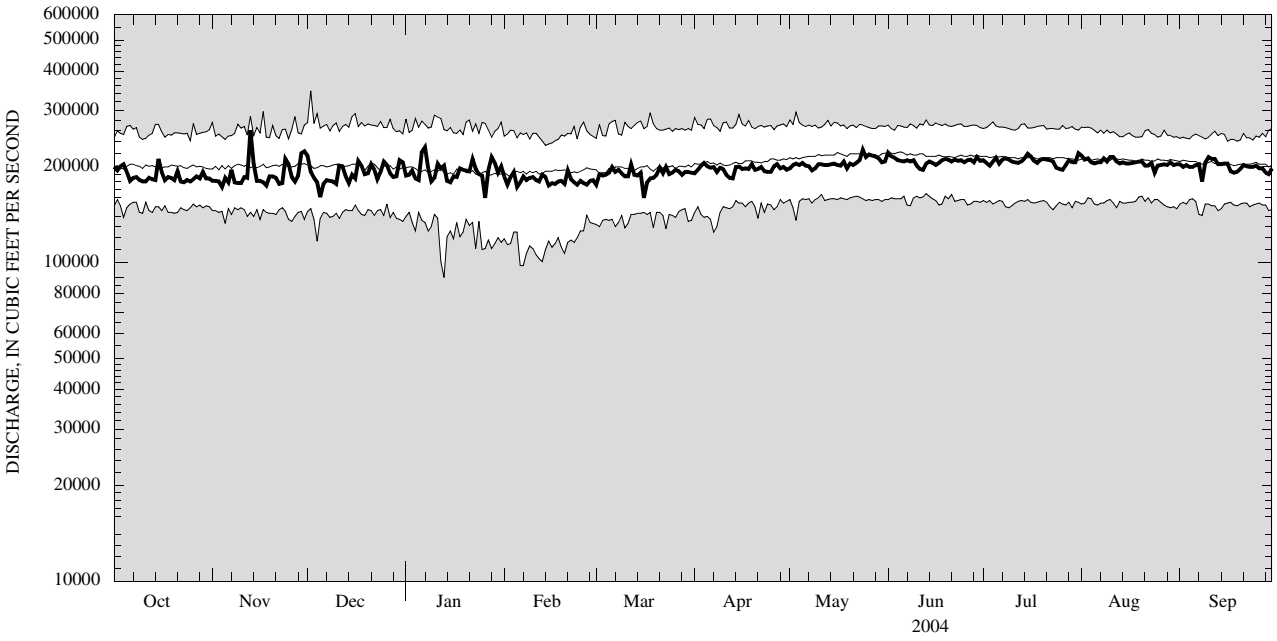
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200,000	181,000	217,000	188,000	187,000	176,000	191,000	198,000	222,000	210,000	217,000	204,000
2	195,000	181,000	193,000	189,000	176,000	190,000	196,000	203,000	216,000	206,000	211,000	200,000
3	201,000	180,000	185,000	195,000	186,000	188,000	202,000	205,000	214,000	202,000	213,000	203,000
4	204,000	173,000	179,000	184,000	193,000	189,000	206,000	203,000	210,000	208,000	207,000	200,000
5	193,000	185,000	161,000	182,000	173,000	192,000	201,000	206,000	209,000	214,000	205,000	200,000
6	181,000	179,000	177,000	223,000	179,000	200,000	199,000	202,000	208,000	205,000	207,000	203,000
7	185,000	196,000	182,000	231,000	187,000	193,000	200,000	201,000	210,000	211,000	207,000	204,000
8	186,000	179,000	181,000	198,000	182,000	196,000	193,000	195,000	208,000	213,000	213,000	180,000
9	182,000	178,000	180,000	180,000	185,000	191,000	199,000	198,000	210,000	211,000	208,000	207,000
10	180,000	178,000	177,000	185,000	186,000	187,000	197,000	204,000	202,000	208,000	215,000	215,000
11	180,000	186,000	202,000	205,000	182,000	187,000	189,000	204,000	197,000	207,000	215,000	212,000
12	185,000	185,000	201,000	198,000	180,000	204,000	185,000	203,000	196,000	206,000	208,000	212,000
13	183,000	261,000	187,000	202,000	189,000	189,000	184,000	203,000	205,000	208,000	205,000	204,000
14	182,000	205,000	178,000	181,000	186,000	188,000	200,000	204,000	208,000	213,000	207,000	204,000
15	212,000	181,000	189,000	179,000	175,000	192,000	201,000	205,000	206,000	220,000	205,000	205,000
16	193,000	181,000	184,000	187,000	178,000	160,000	197,000	203,000	203,000	216,000	205,000	205,000
17	182,000	179,000	209,000	186,000	177,000	179,000	198,000	202,000	206,000	209,000	206,000	194,000
18	186,000	175,000	202,000	198,000	180,000	184,000	197,000	208,000	210,000	206,000	207,000	192,000
19	185,000	187,000	190,000	196,000	181,000	185,000	204,000	198,000	212,000	211,000	208,000	193,000
20	182,000	187,000	191,000	195,000	177,000	189,000	196,000	205,000	211,000	212,000	208,000	197,000
21	194,000	185,000	204,000	194,000	195,000	199,000	197,000	203,000	208,000	211,000	202,000	203,000
22	180,000	177,000	196,000	212,000	183,000	191,000	200,000	206,000	211,000	210,000	202,000	201,000
23	179,000	178,000	183,000	197,000	179,000	200,000	194,000	210,000	209,000	208,000	206,000	200,000
24	182,000	212,000	193,000	190,000	176,000	190,000	193,000	227,000	210,000	199,000	192,000	200,000
25	180,000	204,000	208,000	188,000	181,000	192,000	193,000	215,000	207,000	197,000	202,000	202,000
26	183,000	186,000	203,000	160,000	178,000	196,000	201,000	219,000	210,000	196,000	203,000	198,000
27	187,000	180,000	191,000	196,000	176,000	194,000	204,000	217,000	211,000	203,000	204,000	198,000
28	184,000	188,000	186,000	215,000	181,000	189,000	198,000	216,000	207,000	210,000	203,000	192,000
29	193,000	221,000	187,000	206,000	182,000	193,000	200,000	213,000	215,000	207,000	207,000	190,000
30	184,000	224,000	210,000	192,000	---	193,000	196,000	207,000	209,000	207,000	203,000	198,000
31	184,000	---	207,000	201,000	---	192,000	---	208,000	---	221,000	204,000	---
TOTAL	5,807,000	5,692,000	5,933,000	6,033,000	5,270,000	5,888,000	5,911,000	6,391,000	6,260,000	6,465,000	6,405,000	6,016,000
MEAN	187,300	189,700	191,400	194,600	181,700	189,900	197,000	206,200	208,700	208,500	206,600	200,500
MAX	212,000	261,000	217,000	231,000	195,000	204,000	206,000	227,000	222,000	221,000	217,000	215,000
MIN	179,000	173,000	161,000	160,000	173,000	160,000	184,000	195,000	196,000	196,000	192,000	180,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2004, BY WATER YEAR (WY)

MEAN	200,200	200,400	201,000	195,200	192,700	198,800	207,500	216,100	215,700	211,900	208,100	203,700
MAX	254,000	248,000	260,900	254,000	241,600	255,500	264,200	264,700	268,400	265,200	253,500	243,700
(WY)	(1987)	(1987)	(1986)	(1987)	(1987)	(1986)	(1985)	(1974)	(1986)	(1986)	(1986)	(1986)
MIN	152,700	148,100	149,800	138,500	116,200	142,700	152,000	159,100	158,000	154,100	155,000	153,900
(WY)	(1935)	(1935)	(1965)	(1964)	(1936)	(1934)	(1935)	(1934)	(1934)	(1934)	(1934)	(1934)

04216000 NIAGARA RIVER AT BUFFALO, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1926 - 2004	
ANNUAL TOTAL	68,210,000		72,071,000			
ANNUAL MEAN	186,900		196,900		204,700	
HIGHEST ANNUAL MEAN					249,600	1986
LOWEST ANNUAL MEAN					155,300	1934
HIGHEST DAILY MEAN	261,000	Nov 13	261,000	Nov 13	347,000	Dec 2, 1985
LOWEST DAILY MEAN	145,000	Jan 17	160,000	Jan 26	90,000	Jan 13, 1964
ANNUAL SEVEN-DAY MINIMUM	160,000	Jan 16	177,000	Dec 4	105,000	Feb 6, 1936
10 PERCENT EXCEEDS	201,000		211,000		239,000	
50 PERCENT EXCEEDS	186,000		198,000		205,000	
90 PERCENT EXCEEDS	171,000		180,000		171,000	



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04216218 BLACK ROCK CANAL AT BLACK ROCK LOCK, BUFFALO, NY

LOCATION.--Lat 42°56'01", long 78°54'18", Erie County, Hydrologic Unit 04120104, at Black Rock Lock adjacent to U.S. Army Corps of Engineers installation at foot of Hamilton Street, Buffalo and 0.2 mi downstream from International railroad bridge.

DRAINAGE AREA.--263,700 mi^2.

PERIOD OF RECORD.--October 1984 to March 1997, November 1998 to current year.

GAGE.--Water stage recorder. Datum of gage is International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, datum of gage was International Great Lakes Datum (IGLD) of 1955, 0.67 ft lower.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 575.95 ft, datum then in use, Dec. 2, 1985; minimum daily, 568.63 ft, Feb. 16, 2003, but may have been lower during periods of no elevation record Jan. 16-27 and Mar. 13-22, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 572.24 ft, July 15, but may have been higher during periods of no elevation record Oct. 10 to Nov. 14 and Jan. 23 to Feb. 2; minimum daily elevation, 568.72 ft, Mar. 16 but may have been lower during periods of no gage height record Oct. 10 to Nov. 14 and Jan 23 to Feb 2.

ELEVATION (FEET IGLD)
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571.44	---	571.75	570.52	---	569.76	570.35	571.03	571.98	571.87	571.79	571.47
2	571.03	---	570.69	570.60	---	570.09	570.52	571.20	571.81	571.67	571.73	571.32
3	571.50	---	570.30	570.78	570.19	569.93	570.74	571.23	571.82	571.59	571.83	571.48
4	571.35	---	570.08	570.20	570.23	569.83	570.89	571.16	571.53	571.79	571.62	571.37
5	570.88	---	569.31	570.43	569.41	570.02	570.75	571.33	571.61	572.05	571.48	571.36
6	570.53	---	570.18	572.29	569.94	570.20	570.61	571.11	571.67	571.64	571.67	571.48
7	570.53	---	570.28	572.31	570.03	570.17	570.96	571.10	571.69	571.88	571.72	571.58
8	570.66	---	570.26	570.95	569.96	570.24	570.88	570.83	571.71	571.94	571.86	570.28
9	570.46	---	570.21	570.18	570.01	570.11	571.10	570.92	571.86	571.87	571.71	571.29
10	---	---	570.13	570.61	570.09	570.06	571.03	571.28	571.37	571.70	572.08	571.51
11	---	---	571.32	571.36	569.81	570.18	570.69	571.14	571.28	571.62	571.99	571.45
12	---	---	570.98	571.01	569.83	570.98	570.44	571.16	571.42	571.70	571.55	571.56
13	---	---	570.30	571.34	570.35	570.15	570.60	571.19	571.63	571.71	571.61	571.35
14	---	---	570.15	570.11	570.02	570.30	571.06	571.22	571.96	572.02	571.58	571.42
15	---	570.27	570.57	570.56	569.61	570.25	570.97	571.37	571.70	572.24	571.53	571.45
16	---	570.19	570.54	570.69	569.66	568.72	570.89	571.25	571.67	572.04	571.55	571.58
17	---	570.19	571.59	570.55	569.71	569.94	571.01	571.20	571.83	571.82	571.53	570.94
18	---	570.00	571.09	571.11	569.75	570.05	570.93	571.40	572.02	571.62	571.76	570.93
19	---	570.57	570.58	571.07	569.79	570.12	571.38	571.17	572.03	571.80	571.69	571.01
20	---	570.37	570.68	570.79	569.56	570.26	570.81	571.31	572.04	571.80	571.58	571.19
21	---	570.39	571.37	570.80	570.64	570.59	571.08	571.24	571.91	571.74	571.55	571.42
22	---	569.90	570.90	571.71	569.82	570.32	571.04	571.44	572.10	571.84	571.44	571.37
23	---	570.25	570.38	---	569.64	570.64	570.93	571.49	571.92	571.67	571.64	571.25
24	---	571.84	570.71	---	569.65	570.22	570.96	571.98	572.09	571.30	571.04	571.27
25	---	571.05	571.35	---	569.79	570.30	570.85	571.58	571.77	571.32	571.45	571.44
26	---	570.42	571.23	---	569.67	570.33	571.31	571.64	572.08	571.17	571.47	571.21
27	---	570.19	570.52	---	569.65	570.29	571.31	571.67	572.06	571.51	571.56	571.18
28	---	570.61	570.47	---	569.81	570.04	571.03	571.80	571.90	571.80	571.46	570.94
29	---	571.88	570.50	---	569.83	570.37	571.18	571.63	572.20	571.63	571.48	570.88
30	---	571.82	571.52	---	---	570.38	571.00	571.38	571.91	571.62	571.44	571.26
31	---	---	571.30	---	---	570.38	---	571.69	---	571.90	571.57	---
MEAN	---	---	570.69	---	---	570.17	570.91	571.33	571.82	571.74	571.61	571.27
MAX	---	---	571.75	---	---	570.98	571.38	571.98	572.20	572.24	572.08	571.58
MIN	---	---	569.31	---	---	568.72	570.35	570.83	571.28	571.17	571.04	570.28

04216220 NIAGARA RIVER AT BLACK ROCK LOCK, BUFFALO, NY

LOCATION.--Lat. 42°56'02", long 78°54'17", Erie County, Hydrologic Unit 04120104, at Black Rock Lock adjacent to U.S. Army Corps of Engineers installation at foot of Hamilton Street, Buffalo and 0.2 mi downstream from International railroad bridge.

DRAINAGE AREA.--263,700 mi^2.

PERIOD OF RECORD.--October 1984 to March 1997, November 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, datum of gage was International Great Lakes Datum (IGLD) of 1955, 0.67 ft lower.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 568.80 ft, datum then in use, Jan. 21, 1985, but may have been higher during period of no gage height record Nov. 11 to Dec. 10, 1984; minimum daily, 561.92 ft, Jan. 14, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 567.01 ft, Nov. 13; minimum daily elevation, 563.56 ft, Mar. 16.

ELEVATION (FEET IGLD)T
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565.64	564.76	565.52	564.73	564.57	564.35	564.87	565.02	565.74	565.56	565.98	565.82
2	565.37	564.68	564.90	564.64	564.29	564.68	564.94	565.19	565.66	565.46	565.88	565.73
3	565.54	564.55	564.56	564.77	564.59	564.56	565.11	565.18	565.66	565.47	565.92	565.76
4	565.61	564.33	564.41	564.45	564.80	564.51	565.33	565.22	565.47	565.54	565.76	565.75
5	565.27	564.72	563.95	564.50	564.24	564.64	565.21	565.28	565.50	565.85	565.78	565.73
6	564.97	564.57	564.42	565.59	564.51	564.76	565.07	565.07	565.61	565.58	565.88	565.74
7	564.98	565.07	564.45	566.02	564.62	564.64	565.08	565.10	565.62	565.66	565.90	565.88
8	565.04	564.60	564.38	564.96	564.59	564.73	564.94	564.86	565.66	565.74	566.01	565.13
9	564.88	564.69	564.42	564.32	564.59	564.56	565.15	565.01	565.78	565.69	565.86	565.94
10	564.92	564.63	564.32	564.60	564.56	564.47	565.09	565.21	565.45	565.58	566.06	566.11
11	564.90	564.77	565.20	565.14	564.46	564.51	564.87	565.12	565.38	565.54	566.10	565.97
12	565.06	564.62	565.08	564.88	564.31	565.21	564.67	565.10	565.50	565.55	565.84	565.92
13	564.99	567.01	564.53	565.24	564.71	564.61	564.77	565.10	565.62	565.55	565.83	565.78
14	564.91	565.33	564.33	564.29	564.70	564.52	565.23	565.10	565.72	565.80	565.83	565.79
15	566.03	564.61	564.70	564.52	564.25	564.68	565.12	565.24	565.57	566.01	565.82	565.76
16	565.24	564.45	564.51	564.88	564.18	563.56	565.01	565.16	565.47	565.87	565.81	565.86
17	564.97	564.48	565.44	564.87	564.24	564.23	565.08	565.09	565.62	565.75	565.80	565.45
18	565.08	564.29	565.15	564.96	564.27	564.42	564.98	565.22	565.70	565.73	565.86	565.42
19	564.99	564.71	564.74	565.13	564.33	564.50	565.32	565.12	565.80	565.78	565.91	565.50
20	564.94	564.60	564.75	564.90	564.13	564.54	565.01	565.16	565.68	565.76	565.87	565.67
21	565.27	564.61	565.13	564.74	564.98	564.99	565.01	565.19	565.58	565.70	565.80	565.77
22	564.87	564.25	564.85	565.46	564.43	564.74	565.14	565.27	565.66	565.80	565.81	565.69
23	564.82	564.56	564.58	565.82	564.24	564.99	564.95	565.39	565.55	565.75	565.94	565.64
24	564.85	565.52	564.82	564.98	564.21	564.67	564.99	565.79	565.64	565.48	565.62	565.62
25	564.78	565.13	565.18	564.67	564.34	564.69	564.92	565.43	565.46	565.55	565.72	565.72
26	564.90	564.59	565.13	564.28	564.23	564.70	565.21	565.53	565.64	565.43	565.76	565.62
27	564.97	564.46	564.68	564.95	564.25	564.81	565.33	565.42	565.68	565.69	565.84	565.55
28	564.82	564.77	564.60	565.39	564.34	564.60	565.08	565.52	565.59	565.87	565.77	565.46
29	565.16	565.58	564.61	565.32	564.33	564.78	565.10	565.47	565.83	565.84	565.89	565.34
30	564.79	565.49	565.32	565.64	---	564.78	565.01	565.29	565.57	565.79	565.79	565.58
31	564.82	---	565.11	565.33	---	564.72	---	565.51	---	566.02	565.88	---
MEAN	565.08	564.81	564.77	564.97	564.42	564.62	565.05	565.24	565.61	565.69	565.86	565.69
MAX	566.03	567.01	565.52	566.02	564.98	565.21	565.33	565.79	565.83	566.02	566.10	566.11
MIN	564.78	564.25	563.95	564.28	564.13	563.56	564.67	564.86	565.38	565.43	565.62	565.13

WTR YR 2004 MEAN 565.15 MAX 567.01 MIN 563.56

04216418 TONAWANDA CREEK AT ATTICA, NY

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi upstream from Tannery Creek.

DRAINAGE AREA.--76.9 mi^2.

PERIOD OF RECORD.--October 1977 to September 2004 (discontinued).

REVISED RECORDS.--WDR NY-79-1: 1978 (M). WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 954.63 ft above NGVD of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,400 ft^3/s, July 8, 1998, gage height, 12.71 ft, from high-water mark, from rating curve extended above 2,300 ft^3/s; minimum discharge, 3.1 ft^3/s, Aug. 26, Sep. 7, 1995; minimum gage height, 3.27 ft, Oct. 4, 2001, Sept. 13, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft^3/s, June 23, 1972, gage height, about 12.0 ft, from information supplied by Village of Attica.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 5	1845	2,660	7.37	0915	*3,300	*8.00
May 24	0745	2,120	6.79			

Minimum discharge, 16 ft^3/s, July 4, gage height, 3.38 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	e76	e620	e200	e90	e120	317	82	228	21	155	56
2	142	e120	e420	e220	e88	e500	669	98	152	19	84	42
3	74	e300	e260	e340	e94	796	514	118	138	18	64	37
4	240	e240	e160	e380	e100	688	433	87	97	19	57	33
5	192	e160	e120	e280	e110	1,650	309	85	79	28	60	31
6	95	e180	e100	e126	e120	1,100	281	80	73	22	49	28
7	67	e140	e80	e140	e160	489	316	237	66	62	45	26
8	52	e120	e100	e160	e150	423	251	137	56	88	43	50
9	43	e100	e140	e120	e140	269	207	378	50	49	39	1,850
10	41	e86	e180	e120	e120	240	169	199	48	32	36	368
11	36	e94	e300	e140	e110	232	148	145	48	25	45	168
12	35	e120	e240	e150	e100	211	134	113	40	22	38	112
13	33	e190	e140	e140	e96	175	595	99	36	22	38	86
14	34	e220	e95	e130	e82	174	788	89	39	68	43	71
15	e110	e200	e140	e120	e80	245	313	110	38	172	37	62
16	e70	e210	e120	e115	e60	e160	215	124	32	247	39	54
17	e44	e200	e400	e115	e66	e180	180	90	51	127	33	107
18	e40	e180	e360	e110	e68	e200	263	95	69	126	31	409
19	e46	e240	e260	e115	e76	e150	220	116	56	284	32	126
20	e40	e700	e200	e110	e84	204	161	77	46	218	43	88
21	e41	e600	e130	e100	e110	550	142	293	34	84	48	70
22	e66	e400	e100	e100	e110	280	163	150	34	61	42	60
23	e56	e200	e240	e94	e100	212	138	1,150	33	64	34	52
24	e44	e140	e560	e92	e90	292	124	1,180	27	51	32	49
25	e60	e160	e460	e94	e76	867	121	398	40	38	29	46
26	e78	e120	e300	e92	e80	616	127	338	31	37	27	44
27	e160	e220	e180	e90	e70	925	123	212	25	586	26	41
28	e140	e600	e140	e92	e68	383	107	761	23	191	77	40
29	e140	e1,800	e160	e92	e77	273	93	235	24	109	86	36
30	e88	e1,000	e260	e94	---	218	83	160	23	82	159	36
31	e82	---	e340	e92	---	210	---	193	---	158	107	---
TOTAL	2,446	9,116	7,305	4,363	2,775	13,032	7,704	7,629	1,736	3,130	1,678	4,278
MEAN	78.9	304	236	141	95.7	420	257	246	57.9	101	54.1	143
MAX	240	1,800	620	380	160	1,650	788	1,180	228	586	159	1,850
MIN	33	76	80	90	60	120	83	77	23	18	26	26
CFSM	1.03	3.95	3.06	1.83	1.24	5.47	3.34	3.20	0.75	1.31	0.70	1.85
IN.	1.18	4.41	3.53	2.11	1.34	6.30	3.73	3.69	0.84	1.51	0.81	2.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

MEAN	63.9	122	154	141	150	237	214	116	65.7	42.8	34.9	49.6
MAX	182	353	329	361	293	459	366	265	278	221	192	172
(WY)	(1987)	(1986)	(1978)	(1998)	(1981)	(1979)	(1978)	(2002)	(1989)	(1998)	(1992)	(2000)
MIN	10.8	16.6	34.5	41.5	34.4	122	73.1	36.4	16.5	10.1	7.28	6.19
(WY)	(1992)	(1992)	(1990)	(1994)	(1980)	(1981)	(1995)	(1995)	(1999)	(1983)	(1991)	(1995)

04216418 TONAWANDA CREEK AT ATTICA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	53,367		65,192			
ANNUAL MEAN	146		178		116	
HIGHEST ANNUAL MEAN					178	2004
LOWEST ANNUAL MEAN					72.8	1995
HIGHEST DAILY MEAN	1,800	Nov 29	1,850	Sep 9	3,200	Jul 8, 1998
LOWEST DAILY MEAN	15	Sep 11	18	Jul 3	3.7	Aug 24, 1995
ANNUAL SEVEN-DAY MINIMUM	16	Sep 8	21	Jun 28	3.9	Aug 23, 1995
ANNUAL RUNOFF (CFSM)	1.90		2.32		1.50	
ANNUAL RUNOFF (INCHES)	25.82		31.54		20.43	
10 PERCENT EXCEEDS	310		379		251	
50 PERCENT EXCEEDS	88		110		63	
90 PERCENT EXCEEDS	21		36		14	

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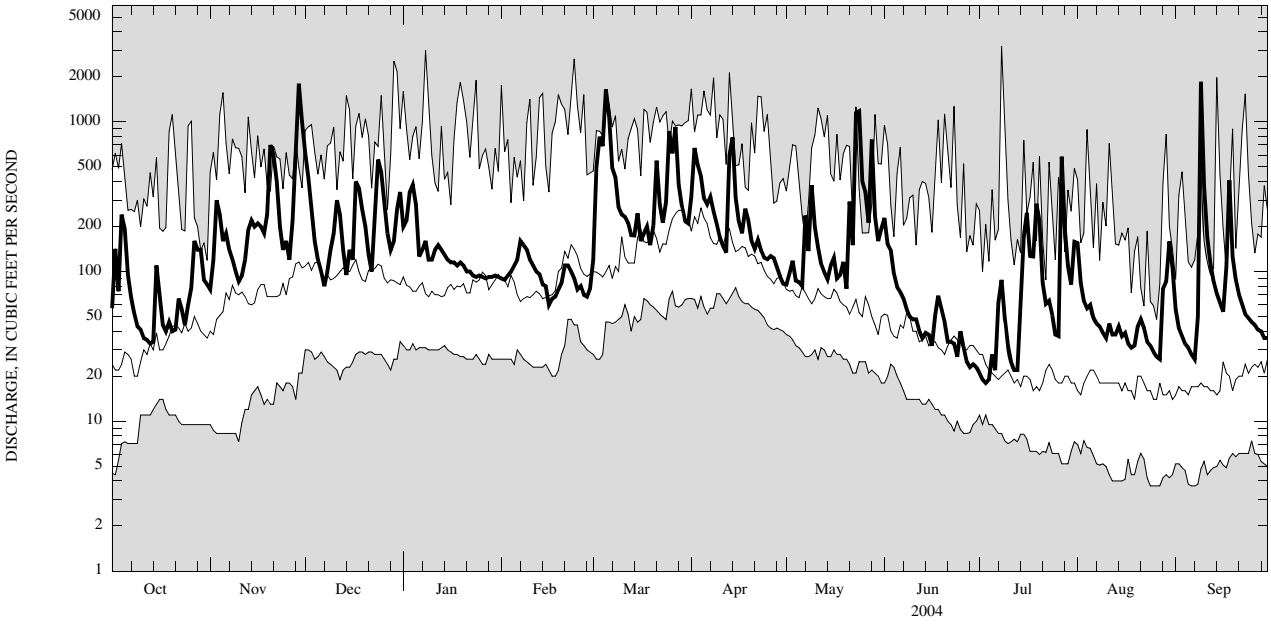

2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04217000 TONAWANDA CREEK AT BATAVIA, NY

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft downstream from municipal dam, 500 ft upstream from bridge on Walnut Street in Batavia, and 5.0 mi downstream from Little Tonawanda Creek.

DRAINAGE AREA.--171 mi^2.

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

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

GAGE.--Water-stage recorder, crest stage gage, and concrete control. Datum of gage is 876.33 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage. Telephone and satellite gage-height telemeters at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft^3/s, Mar. 31, 1960, gage height, 12.70 ft; maximum gage height, 13.85 ft, Apr. 6, 1947; minimum discharge, 0.4 ft^3/s, Aug. 5, 6, 7, 1955; minimum gage height, 0.59 ft, July 26, 27, 1948.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 29	1600	2,460	7.51	1945	1,960	6.32
Mar 3	2330	1,990	6.41	0600	2,050	6.55
Mar 6	1430	3,100	8.96	0930	*3,670	*10.13

Minimum discharge, 29 ft^3/s, Aug. 27, 28, gage height, 1.60 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	142	853	323	118	247	365	135	505	44	335	129
2	169	129	671	266	116	529	1,010	144	296	38	186	79
3	183	436	407	421	119	1,540	1,380	204	248	34	119	60
4	140	387	304	629	e135	1,770	1,180	164	189	35	96	50
5	424	255	290	397	e145	1,570	940	141	150	47	91	43
6	211	340	250	310	144	2,780	647	138	132	47	83	39
7	135	225	208	171	179	1,820	633	222	122	50	72	38
8	97	170	159	223	200	1,060	555	215	106	171	68	86
9	77	140	186	233	184	776	415	355	93	106	64	1,160
10	64	123	197	172	182	505	321	413	89	72	55	3,310
11	55	117	437	162	170	488	258	239	88	54	54	1,590
12	50	140	456	176	159	427	224	178	78	45	61	478
13	46	248	239	191	160	327	335	144	69	41	52	260
14	42	424	162	175	156	284	1,400	131	68	39	56	187
15	50	265	202	165	e146	394	1,360	117	69	141	57	146
16	213	298	194	154	e134	308	636	175	64	279	53	116
17	107	354	463	149	e125	183	377	134	70	271	50	111
18	74	318	504	152	e124	275	388	109	168	168	42	505
19	69	315	334	150	e120	238	677	139	116	126	45	333
20	77	1,110	276	142	e120	248	381	112	104	486	50	178
21	71	1,190	228	135	e150	722	287	218	77	191	54	129
22	76	547	226	e130	218	799	296	203	66	111	57	104
23	113	331	328	e128	203	e450	264	567	69	93	47	89
24	94	261	696	e128	214	345	229	1,400	61	91	41	79
25	75	299	785	e124	173	818	199	1,850	71	72	36	74
26	101	277	482	121	172	1,250	232	1,030	75	64	33	70
27	296	270	321	118	151	1,190	221	527	60	496	31	65
28	353	747	265	121	148	1,280	198	616	50	851	33	59
29	219	2,040	258	123	167	715	171	738	47	331	179	56
30	252	1,420	352	123	---	430	146	347	46	183	242	55
31	181	---	522	121	---	357	---	249	---	196	281	---
TOTAL	4,219	13,318	11,255	6,133	4,532	24,125	15,725	11,354	3,446	4,973	2,723	9,678
MEAN	136	444	363	198	156	778	524	366	115	160	87.8	323
MAX	424	2,040	853	629	218	2,780	1,400	1,850	505	851	335	3,310
MIN	42	117	159	118	116	183	146	109	46	34	31	38
CFSM	0.80	2.60	2.12	1.16	0.91	4.55	3.07	2.14	0.67	0.94	0.51	1.89
IN.	0.92	2.90	2.45	1.33	0.99	5.25	3.42	2.47	0.75	1.08	0.59	2.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	83.2	172	261	265	315	537	455	211	110	58.7	49.7	68.1
MAX	344	653	718	812	903	1,206	1,100	544	722	415	451	873
(WY)	(1946)	(1986)	(1978)	(1998)	(1976)	(1945)	(1947)	(1984)	(1989)	(1998)	(1977)	(1977)
MIN	9.03	15.3	13.6	17.5	50.9	244	82.1	65.8	20.1	6.17	7.91	5.63
(WY)	(1965)	(1961)	(1961)	(1961)	(1963)	(1965)	(1946)	(1995)	(1965)	(1955)	(1944)	(1955)

04217000 TONAWANDA CREEK AT BATAVIA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	95,734		111,481			
ANNUAL MEAN	262		305		215	
HIGHEST ANNUAL MEAN					311	1976
LOWEST ANNUAL MEAN					124	1965
HIGHEST DAILY MEAN	2,810	Mar 18	3,310	Sep 10	6,660	Mar 31, 1960
LOWEST DAILY MEAN	19	Sep 12	31	Aug 27	0.60	Aug 2, 1955
ANNUAL SEVEN-DAY MINIMUM	21	Sep 9	40	Aug 22	1.1	Jul 31, 1955
ANNUAL RUNOFF (CFSM)	1.53		1.78		1.26	
ANNUAL RUNOFF (INCHES)	20.83		24.25		17.08	
10 PERCENT EXCEEDS	547		683		510	
50 PERCENT EXCEEDS	162		175		100	
90 PERCENT EXCEEDS	32		55		15	

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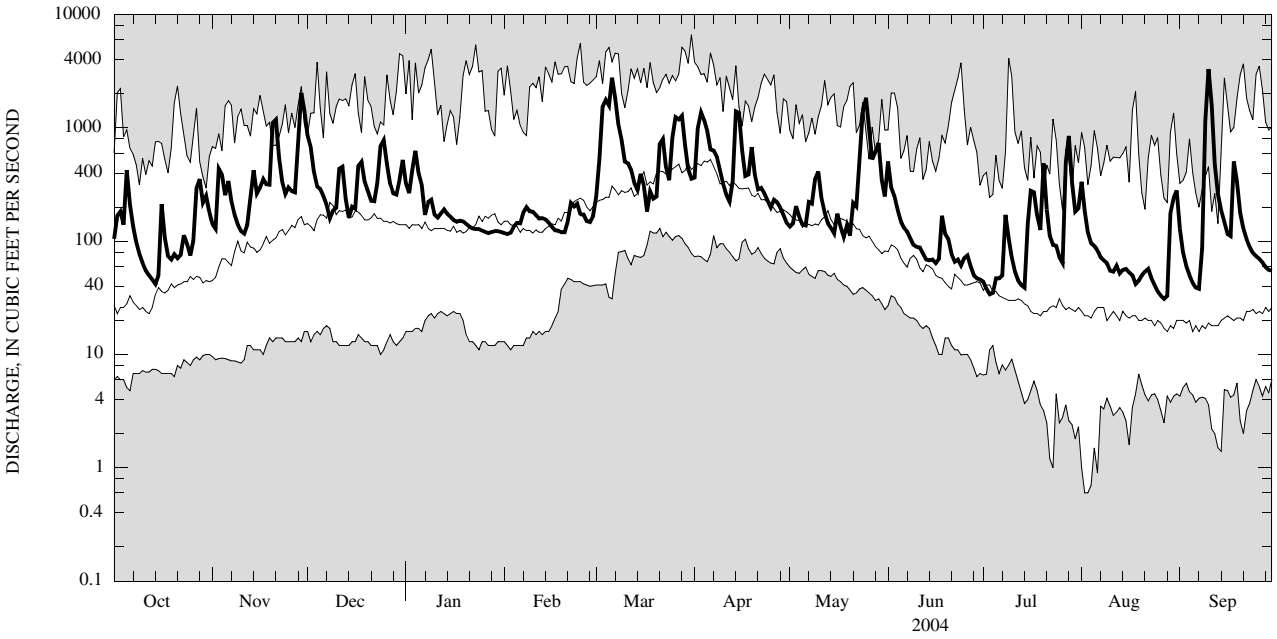


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi east of Pendleton, 4.9 mi downstream from Beeman Creek, and 5.9 mi upstream from Mud Creek.

DRAINAGE AREA.--349 mi^2, includes 0.76 mi^2 in Mud Creek from which flow is diverted into Black Creek.

PERIOD OF RECORD.--August 1955 to September 1965, March 1978 to September 1979 (seasonal gage-height records only), October 1979 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 571.19 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft^3/s, Apr. 1, 1960, gage height, 16.96 ft (does not include about 4,300 ft^3/s bypassing the gage, as estimated and reported by the Buffalo District Corps of Engineers); minimum discharge, 4.5 ft^3/s, July 28, 1983, gage height, 0.91 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 1	0830	3,110	9.72	0600	2,450	8.05
Mar 8	0730	3,950	11.64	1830	2,420	7.99
Apr 5	0500	2,460	8.08	1030	*4,290	*12.38

Minimum discharge, 49 ft^3/s, Aug. 28, gage height, 1.37 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	262	3,010	915	e225	e290	802	351	532	97	1,130	395
2	110	224	2,230	638	e220	1,080	1,170	323	735	92	961	288
3	127	363	1,460	580	e215	2,190	1,810	330	595	84	614	165
4	201	559	900	781	e220	2,710	2,390	366	454	81	383	114
5	173	654	613	993	e250	3,600	2,380	349	359	201	281	88
6	314	526	523	732	e270	3,590	1,950	308	287	165	231	73
7	268	475	442	e460	e270	3,580	1,410	288	253	130	199	63
8	176	378	e360	e360	e300	3,810	1,180	306	229	127	172	59
9	132	282	339	e340	e340	2,680	1,060	377	202	210	157	1,110
10	106	231	330	e330	e340	1,710	808	458	183	243	151	2,810
11	90	203	468	e320	e330	1,170	614	576	174	175	135	3,530
12	79	200	802	305	e320	1,010	507	413	165	133	119	4,180
13	71	217	792	e300	e300	862	539	321	156	112	113	2,970
14	69	293	472	e300	e290	674	1,540	269	143	105	113	1,240
15	75	508	331	e290	e280	634	2,080	251	145	125	101	521
16	86	430	380	e290	e270	676	2,340	235	161	145	101	369
17	142	416	550	e280	e250	553	1,560	253	154	328	95	303
18	167	489	881	e280	e230	427	999	253	171	434	86	267
19	119	513	995	e275	e220	475	1,180	224	277	337	81	449
20	97	745	730	e275	e220	500	1,260	219	295	451	76	459
21	91	1,220	537	e270	e240	949	974	222	219	569	80	290
22	97	1,580	460	e260	e280	1,260	730	238	181	418	78	232
23	96	1,140	516	e250	e340	1,360	661	362	155	237	79	201
24	103	585	746	e240	e360	1,090	600	1,280	140	169	77	175
25	125	449	1,160	e240	e350	1,130	527	2,100	132	145	71	156
26	122	465	1,250	e230	e320	1,450	528	2,360	137	130	61	144
27	155	497	993	e225	e300	2,120	568	2,050	167	264	54	133
28	283	804	637	e225	e280	2,160	552	1,210	151	904	53	120
29	407	1,720	519	e230	e270	2,040	477	940	123	1,210	138	112
30	323	2,470	641	e230	---	1,490	400	1,000	107	785	172	99
31	290	---	822	e230	---	995	---	597	---	764	278	---
TOTAL	4,767	18,898	24,889	11,674	8,100	48,265	33,596	18,829	7,182	9,370	6,440	21,115
MEAN	154	630	803	377	279	1,557	1,120	607	239	302	208	704
MAX	407	2,470	3,010	993	360	3,810	2,390	2,360	735	1,210	1,130	4,180
MIN	69	200	330	225	215	290	400	219	107	81	53	59
CFSM	0.44	1.80	2.30	1.08	0.80	4.46	3.21	1.74	0.69	0.87	0.60	2.02
IN.	0.51	2.01	2.65	1.24	0.86	5.14	3.58	2.01	0.77	1.00	0.69	2.25

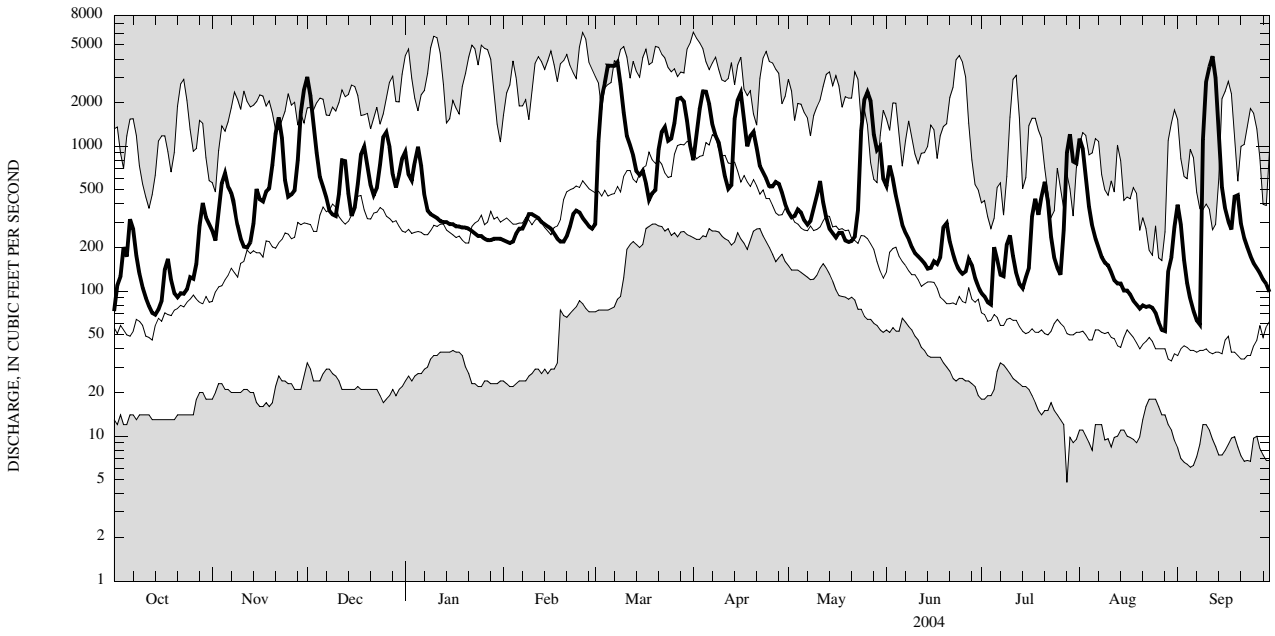
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2004, BY WATER YEAR (WY)

MEAN	148	313	490	533	653	978	903	432	220	105	88.9	110
MAX	642	1,239	1,116	1,581	1,363	1,650	1,534	1,046	1,372	511	601	704
(WY)	(1987)	(1986)	(1987)	(1998)	(1981)	(1956)	(1960)	(1956)	(1989)	(1998)	(1992)	(2004)
MIN	14.8	25.7	23.3	29.4	103	452	334	144	45.6	26.1	15.9	10.0
(WY)	(1965)	(1961)	(1961)	(1961)	(1963)	(1981)	(1995)	(1993)	(1965)	(1991)	(1991)	(1991)

04218000 TONAWANDA CREEK AT RAPIDS, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1955 - 2004	
ANNUAL TOTAL	173,168		213,125			
ANNUAL MEAN	474		582		413	
HIGHEST ANNUAL MEAN					582	2004
LOWEST ANNUAL MEAN					255	1965
HIGHEST DAILY MEAN	4,890	Mar 20	4,180	Sep 12	6,130	Apr 1, 1960
LOWEST DAILY MEAN	36	Sep 14	53	Aug 28	4.8	Jul 28, 1983
ANNUAL SEVEN-DAY MINIMUM	40	Sep 9	68	Aug 22	6.8	Sep 1, 1991
ANNUAL RUNOFF (CFSM)	1.36		1.67		1.18	
ANNUAL RUNOFF (INCHES)	18.46		22.72		16.10	
10 PERCENT EXCEEDS	1,020		1,300		1,070	
50 PERCENT EXCEEDS	283		317		200	
90 PERCENT EXCEEDS	54		106		32	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi upstream from sewage treatment plant, 1.4 mi northwest of Williamsville, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--81.6 mi^2.

PERIOD OF RECORD.--October 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 586.41 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Regulation by seasonal manipulation of dam at Island Park 2.4 mi upstream by Village of Williamsville and by intermittent pumping from stone quarries into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 042l8500 between October 1955 and September 1972. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,640 ft^3/s, Feb. 25, 1985, gage height, 11.19 ft; no flow for part of July 27, 1976, gage height, 0.73 ft, result of pipeline construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 29	1800	1,740	7.17	2030	1,160	5.71
Mar 3	2100	1,200	5.80	0600	1,000	5.27
Mar 6	1345	1,250	5.94	1200	*2,940	*9.87

Minimum discharge, 3.3 ft^3/s, Sept. 2, gage height, 1.50 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	75	372	219	e76	161	180	102	e200	27	801	88
2	68	98	320	166	e76	420	452	105	e180	25	291	36
3	63	208	e200	214	e78	986	716	118	136	22	119	30
4	105	255	e150	283	e82	950	614	134	113	90	93	28
5	94	205	151	201	e88	840	434	113	91	178	83	28
6	70	159	130	158	e100	1,150	287	107	79	63	73	27
7	53	122	109	e120	e120	588	237	110	61	73	61	26
8	49	100	e86	e100	e120	359	207	119	61	140	57	46
9	45	85	89	e96	e110	309	165	137	62	123	54	1,080
10	38	57	89	e96	e110	234	137	214	127	83	56	2,490
11	26	62	207	e92	e110	205	117	158	121	59	44	907
12	25	73	298	e90	e100	184	104	115	71	50	42	240
13	24	116	160	e90	e96	156	196	93	54	39	53	146
14	37	193	98	e88	e94	147	852	82	72	89	47	113
15	63	136	96	e86	e90	172	664	e80	108	132	44	98
16	53	113	101	e86	e82	165	257	e82	112	151	42	88
17	45	122	236	e84	e80	97	183	e82	74	152	37	83
18	48	131	334	e84	e74	123	190	e78	152	83	37	83
19	46	179	243	e82	e76	115	306	e78	115	75	36	76
20	42	401	183	e80	e78	171	215	e80	76	139	35	58
21	38	380	141	e76	e94	439	167	e84	54	124	37	61
22	32	164	141	e70	e100	471	166	e120	46	75	32	58
23	31	111	212	e64	e110	266	163	e340	42	69	33	57
24	41	96	347	e66	e110	181	136	e480	46	61	29	54
25	32	105	357	e66	e100	371	128	e540	47	56	29	53
26	82	146	263	e66	e100	445	179	314	101	53	30	53
27	145	193	191	e68	e98	494	199	200	59	348	27	51
28	141	539	157	e70	e96	486	161	e160	45	795	33	50
29	106	1,480	172	e72	109	257	131	e180	40	214	68	51
30	88	871	312	e74	---	178	111	e140	35	100	48	50
31	93	---	363	e76	---	151	---	e120	---	406	201	---
TOTAL	1,881	6,975	6,308	3,283	2,757	11,271	8,054	4,865	2,580	4,094	2,672	6,309
MEAN	60.7	232	203	106	95.1	364	268	157	86.0	132	86.2	210
MAX	145	1,480	372	283	120	1,150	852	540	200	795	801	2,490
MIN	24	57	86	64	74	97	104	78	35	22	27	26
CFSM	0.74	2.85	2.49	1.30	1.17	4.46	3.29	1.92	1.05	1.62	1.06	2.58
IN.	0.86	3.18	2.88	1.50	1.26	5.14	3.67	2.22	1.18	1.87	1.22	2.88

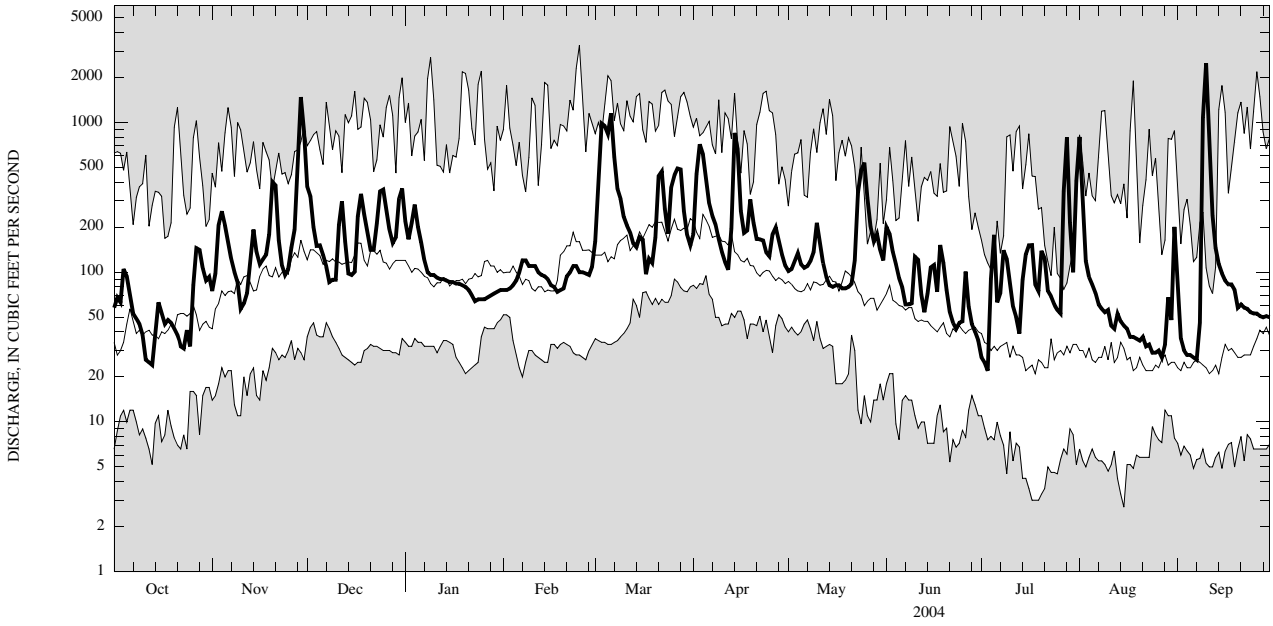
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

MEAN	70.9	140	194	170	188	274	208	123	78.1	46.1	55.3	69.3
MAX	196	342	441	426	377	519	363	284	275	144	397	425
(WY)	(1997)	(1986)	(1978)	(1998)	(1990)	(1977)	(1996)	(2002)	(1989)	(1976)	(1977)	(1977)
MIN	11.2	27.1	40.6	39.2	56.0	119	94.8	47.5	24.2	11.8	13.5	9.76
(WY)	(1975)	(1979)	(1990)	(1977)	(1980)	(1981)	(1995)	(1977)	(1988)	(1978)	(1974)	(1973)

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1973 - 2004	
ANNUAL TOTAL	48,291		61,049			
ANNUAL MEAN	132		167		134	
HIGHEST ANNUAL MEAN					177	1977
LOWEST ANNUAL MEAN					91.2	1999
HIGHEST DAILY MEAN	1,480	Nov 29	2,490	Sep 10	3,280	Feb 25, 1985
LOWEST DAILY MEAN	21	Sep 14	22	Jul 3	2.7	Aug 15, 1978
ANNUAL SEVEN-DAY MINIMUM	24	Sep 8	30	Aug 22	3.6	Jul 15, 1978
ANNUAL RUNOFF (CFSM)	1.62		2.04		1.65	
ANNUAL RUNOFF (INCHES)	22.02		27.83		22.39	
10 PERCENT EXCEEDS	248		347		300	
50 PERCENT EXCEEDS	85		100		75	
90 PERCENT EXCEEDS	31		42		19	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft downstream from headgate in old Erie Canal, 700 ft downstream from bridge on State Highway 350, 0.2 mi downstream from Lock 30, and 2.6 mi upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1950 to September 1977, October 1977 to current year (navigation seasons only). Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft above NGVD of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--No estimated daily values. Records good. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the non-navigation period, when the pool upstream from Lock 30 is drained, discharge consists of leakage through guard gates, runoff from small areas tributary to canal upstream from station, or diversion for use downstream in the Canal system.

COOPERATION.--Records of gate openings, lockages, lock-valve openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Canal Corporation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft^3/s, Dec. 3, 1969, maximum instantaneous discharge not determined; no significant flow at times in many years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	249	241	---	---	---	---	---	169	116	201	272	264
2	244	241	---	---	---	---	---	174	116	211	257	255
3	253	243	---	---	---	---	---	179	116	244	269	244
4	262	230	---	---	---	---	---	187	123	262	251	263
5	254	136	---	---	---	---	---	182	141	254	291	244
6	252	74	---	---	---	---	---	179	118	250	267	234
7	252	47	---	---	---	---	---	189	128	245	260	228
8	255	35	---	---	---	---	---	179	131	248	269	247
9	255	33	---	---	---	---	---	185	127	253	244	274
10	257	70	---	---	---	---	---	181	140	246	251	304
11	261	131	---	---	---	---	---	191	133	261	261	261
12	258	124	---	---	---	---	---	184	152	250	249	252
13	251	117	---	---	---	---	---	191	139	256	239	246
14	244	104	---	---	---	---	---	189	131	241	249	251
15	238	83	---	---	---	---	---	186	129	244	249	241
16	236	67	---	---	---	---	---	189	123	249	251	239
17	239	39	---	---	---	---	---	186	131	246	256	238
18	242	---	---	---	---	---	---	193	126	251	259	243
19	242	---	---	---	---	---	---	192	135	255	249	236
20	244	---	---	---	---	---	---	198	133	246	244	229
21	239	---	---	---	---	---	---	191	163	253	246	235
22	239	---	---	---	---	---	---	191	197	251	263	233
23	241	---	---	---	---	---	---	198	198	243	241	239
24	241	---	---	---	---	---	---	246	184	263	255	218
25	238	---	---	---	---	---	---	279	195	251	266	197
26	240	---	---	---	---	---	---	227	199	243	265	198
27	240	---	---	---	---	---	14	142	195	244	256	192
28	240	---	---	---	---	---	83	124	207	259	261	187
29	239	---	---	---	---	---	124	126	195	259	260	193
30	240	---	---	---	---	---	154	126	201	267	248	191
31	241	---	---	---	---	---	---	120	---	267	254	---
TOTAL	7,626	---	---	---	---	---	---	5,673	4,522	7,713	7,952	7,076
MEAN	246	---	---	---	---	---	---	183	151	249	257	236
MAX	262	---	---	---	---	279	207	267	291	304		
MIN	236	---	---	---	---	120	116	201	239	187		

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY

LOCATION.--Lat 43°15'13", long 77°43'33", Monroe County, Hydrologic Unit 04130001, on right bank 75 ft downstream from bridge on State Highway 18 (Latta Road), 0.5 mi west of North Greece, and 5.1 mi upstream from mouth.

DRAINAGE AREA.--10.1 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-2001-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 306 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft^3/s, Sept. 9, 2004, gage height, 5.01 ft, from rating extended above 130 ft^3/s on basis of contracted-opening measurement of peak flow; minimum discharge, 0.39 ft^3/s, Aug. 19, 1993, gage height 0.46 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 758 ft^3/s, May 17, 1974, gage height, 4.36 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 2	1945	235	2.69	0800	222	2.63
Apr 2	0830	224	2.64	1900	256	2.78
May 24	0300	539	3.76	1330	350	3.15
Jul 15	0045	235	2.69	0830	*1,060	*5.01

Minimum discharge, 4.3 ft^3/s, Oct. 6, 7, 8, 9, 16, 17, 18, gage height, 0.79 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.1	14	10	e7.0	32	24	9.2	19	6.7	20	16
2	4.9	6.8	11	10	e8.0	135	151	12	15	6.6	13	11
3	5.1	9.7	e8.5	16	e10	82	88	14	14	6.4	11	9.6
4	5.3	7.8	e7.8	13	e14	40	73	11	12	6.8	12	8.7
5	4.9	6.8	7.3	11	e11	59	45	12	11	11	12	8.0
6	4.7	6.1	6.8	e10	e10	37	27	12	10	7.5	9.7	7.6
7	4.7	5.6	e6.1	e8.4	e16	19	23	12	9.6	7.9	8.9	7.6
8	4.5	5.2	e6.4	e7.8	e14	19	18	11	8.8	8.4	8.5	60
9	5.0	5.2	6.0	e7.0	e13	16	15	17	9.2	8.1	8.1	e720
10	4.9	5.4	6.1	e7.0	e12	14	12	16	25	7.6	7.7	116
11	5.0	6.4	17	e7.0	e11	12	11	13	13	7.2	7.9	40
12	5.0	6.4	13	e7.0	e10	11	9.7	11	10	7.2	7.9	27
13	4.9	9.5	10	e7.0	e9.0	8.9	47	10	9.9	7.2	8.2	21
14	5.1	9.9	26	e7.0	e9.0	8.4	112	11	11	36	7.9	17
15	6.6	8.2	40	e7.0	e8.0	9.3	26	11	18	82	7.9	15
16	5.1	8.2	19	e7.0	e7.0	7.9	14	11	10	24	7.6	14
17	4.6	8.6	26	e7.0	e7.0	12	11	9.6	11	14	7.0	13
18	4.8	8.2	21	e7.0	e6.0	8.9	21	9.7	11	43	6.7	11
19	5.3	19	14	e7.0	e7.0	8.6	22	10	9.4	21	7.5	11
20	5.2	18	11	e7.0	e8.0	17	17	9.2	8.7	27	7.2	10
21	e5.4	8.8	10	e7.0	e11	41	12	11	7.8	17	7.3	10
22	e6.8	6.4	12	e7.0	e15	22	22	9.2	9.1	11	6.9	10
23	e9.0	5.6	30	e7.0	e13	13	13	97	8.1	9.3	7.1	9.7
24	e7.6	5.1	47	e7.0	e11	25	10	366	7.2	8.7	6.8	9.7
25	e6.4	5.1	29	e7.0	e9.6	43	15	46	9.2	8.3	6.6	9.7
26	e7.4	5.1	16	e7.0	e8.6	23	18	26	9.1	8.5	6.3	9.7
27	e11	6.7	12	e7.0	e8.0	41	18	20	8.3	140	6.8	9.1
28	e11	52	10	e7.0	e12	20	17	18	7.7	49	7.6	8.9
29	e10	45	10	e7.0	17	14	12	14	7.7	19	16	8.8
30	e6.0	20	16	e7.0	---	11	10	12	7.2	14	139	8.7
31	5.4	---	13	e7.0	---	10	---	15	---	52	35	---
TOTAL	186.5	325.9	482.0	247.2	302.2	820.0	913.7	865.9	327.0	682.4	432.1	1,237.8
MEAN	6.02	10.9	15.5	7.97	10.4	26.5	30.5	27.9	10.9	22.0	13.9	41.3
MAX	11	52	47	16	17	135	151	366	25	140	139	720
MIN	4.5	5.1	6.0	7.0	6.0	7.9	9.7	9.2	7.2	6.4	6.3	7.6

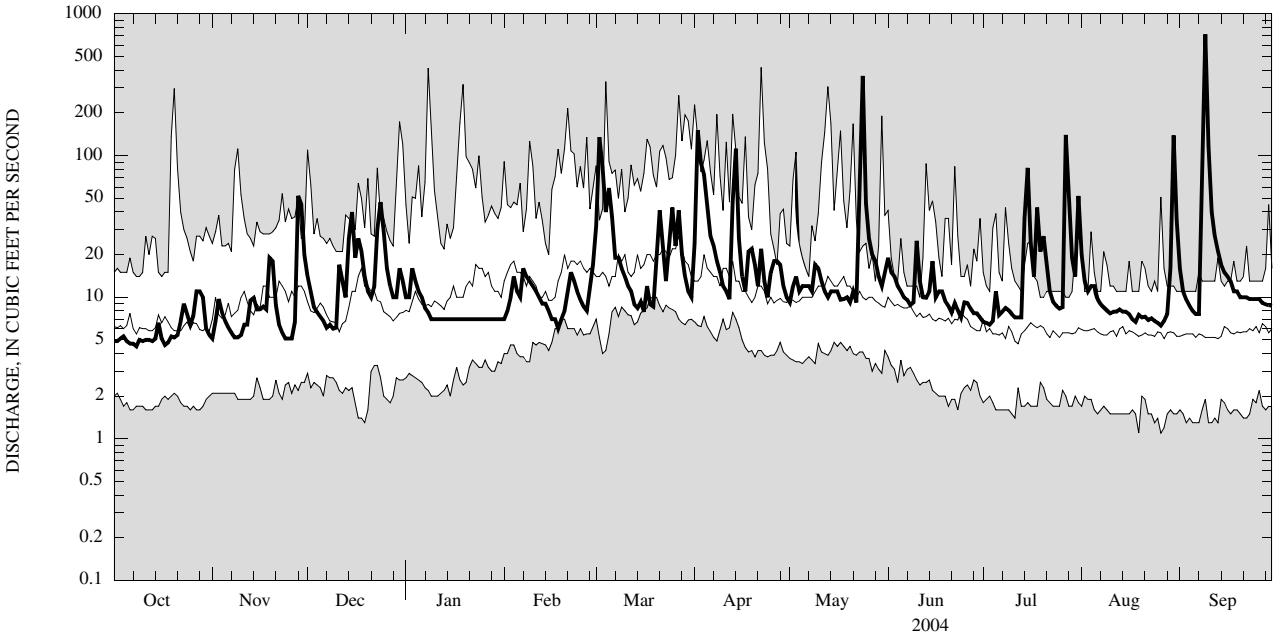
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	8.40	11.8	12.6	16.9	20.0	26.3	21.9	16.5	8.65	7.24	6.45	8.51
MAX	30.9	26.4	23.7	45.6	38.9	40.7	31.7	31.3	16.8	22.0	13.9	41.3
(WY)	(1997)	(1997)	(1997)	(1998)	(1990)	(1993)	(1991)	(2002)	(1996)	(2004)	(2004)	(2004)
MIN	1.83	2.49	3.00	6.39	7.82	15.2	5.27	4.77	3.06	1.96	1.60	1.92
(WY)	(1995)	(1992)	(1999)	(2000)	(1993)	(2002)	(1995)	(1993)	(1991)	(1993)	(1993)	(1994)

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	5,088.1		6,822.7			
ANNUAL MEAN	13.9		18.6		13.7	
HIGHEST ANNUAL MEAN					18.7	1998
LOWEST ANNUAL MEAN					7.33	1995
HIGHEST DAILY MEAN	131	Mar 17	720	Sep 9	720	Sep 9, 2004
LOWEST DAILY MEAN	4.5	Aug 25	4.5	Oct 8	1.1	Aug 19, 1993
ANNUAL SEVEN-DAY MINIMUM	4.8	Oct 5	4.8	Oct 5	1.4	Aug 22, 1993
10 PERCENT EXCEEDS	27		28		25	
50 PERCENT EXCEEDS	8.1		10		8.6	
90 PERCENT EXCEEDS	5.2		6.2		3.1	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1989 to current year.
CHEMICAL DATA: Water years 1989 (a), 1990 to 2003 (e), 2004 (d).
NUTRIENT DATA: Water years 1989 (a), 1990 to 2002 (e), 2004 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.

INSTRUMENTATION.--Automatic water sampler since October 1989. Water temperature recorder since November 1994 provides 15-minute-interval readings.

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.0°C, July 5, 1999; minimum, 0°C, on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.0°C, June 9; minimum, 0°C, on many days during winter period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	11.0	12.0	13.5	12.0	13.0	4.5	2.5	4.0	3.0	2.5	2.5
2	11.0	10.0	10.5	12.0	11.0	11.0	2.5	0.0	1.5	4.5	2.5	3.5
3	10.5	9.0	10.0	11.5	10.5	11.0	0.5	0.0	0.0	8.0	4.5	6.5
4	11.5	10.5	11.0	10.5	10.0	10.0	1.0	0.0	0.5	8.0	4.0	6.0
5	10.5	9.5	10.0	12.5	10.0	11.5	1.0	0.0	0.5	4.0	1.5	2.0
6	10.0	9.0	9.5	11.5	8.5	10.0	0.5	0.0	0.5	1.5	0.0	0.5
7	11.0	8.5	10.0	8.5	6.5	7.5	0.5	0.0	0.0	1.0	0.0	0.0
8	13.5	10.0	12.0	6.5	3.5	5.0	0.5	0.0	0.0	0.0	0.0	0.0
9	15.0	13.5	14.5	4.0	2.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
10	15.5	14.0	14.5	4.0	2.0	3.0	4.0	0.0	2.5	0.0	0.0	0.0
11	15.5	14.0	14.5	6.0	3.5	4.5	4.5	3.0	4.5	0.0	0.0	0.0
12	15.0	13.5	14.5	9.0	6.0	7.5	3.0	0.5	2.0	0.0	0.0	0.0
13	13.5	12.5	13.0	9.0	4.0	6.5	0.5	0.0	0.0	0.0	0.0	0.0
14	13.5	11.5	12.5	4.0	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
15	13.5	11.0	12.0	3.5	2.0	3.0	0.5	0.0	0.0	0.0	0.0	0.0
16	11.0	10.0	10.5	5.5	3.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
17	10.5	9.0	9.5	6.0	5.5	6.0	2.0	0.0	1.5	0.0	0.0	0.0
18	10.0	9.0	9.5	8.5	5.5	7.0	1.5	1.0	1.0	0.0	0.0	0.0
19	10.0	8.0	9.5	11.0	8.5	10.0	1.5	0.5	1.0	0.0	0.0	0.0
20	10.5	7.5	9.0	10.5	7.0	8.5	1.0	0.0	0.0	0.0	0.0	0.0
21	11.5	10.5	11.0	8.0	6.0	7.0	1.0	0.0	0.5	0.0	0.0	0.0
22	10.5	8.0	9.0	7.5	6.0	7.0	2.5	0.5	2.0	0.0	0.0	0.0
23	8.0	6.5	7.0	9.0	6.5	8.0	4.0	2.5	3.0	0.0	0.0	0.0
24	7.5	6.5	7.0	10.0	7.0	9.0	4.0	3.5	4.0	0.0	0.0	0.0
25	8.5	7.0	7.5	7.0	4.5	5.5	3.5	2.5	3.0	0.0	0.0	0.0
26	10.5	8.5	9.5	5.0	4.0	4.5	2.5	2.0	2.0	0.0	0.0	0.0
27	10.0	9.0	10.0	5.5	3.5	4.5	2.5	1.5	2.0	0.0	0.0	0.0
28	9.5	8.0	9.0	7.0	5.5	6.5	3.0	1.0	2.0	0.0	0.0	0.0
29	9.5	8.5	9.0	6.5	3.5	4.5	4.5	2.5	3.5	1.0	0.0	0.0
30	9.5	8.0	9.0	4.0	3.0	3.5	5.0	3.5	4.5	0.0	0.0	0.0
31	12.5	9.0	10.5	---	---	---	3.5	2.5	3.0	0.0	0.0	0.0
MONTH	15.5	6.5	10.5	13.5	2.0	6.9	5.0	0.0	1.6	8.0	0.0	0.7

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	2.5	1.0	1.5	9.0	6.0	7.5	19.5	16.0	17.5
2	0.0	0.0	0.0	2.5	1.5	1.5	6.0	5.0	5.5	17.5	12.5	15.5
3	0.0	0.0	0.0	2.5	1.5	2.0	6.0	4.5	5.5	13.0	10.5	11.5
4	0.0	0.0	0.0	4.5	2.5	3.5	6.0	2.5	4.5	13.5	9.0	11.5
5	0.0	0.0	0.0	8.0	3.5	5.5	5.5	1.0	3.0	13.5	11.0	12.0
6	0.0	0.0	0.0	7.5	4.0	5.5	6.5	2.0	4.5	15.5	10.0	13.0
7	0.0	0.0	0.0	4.5	3.0	4.0	6.5	4.5	5.5	17.5	14.0	15.5
8	0.0	0.0	0.0	4.0	2.5	3.0	7.5	3.5	5.5	14.0	10.5	11.5
9	0.0	0.0	0.0	4.0	2.0	3.0	10.0	6.0	8.0	13.5	10.5	12.0
10	0.0	0.0	0.0	5.0	1.5	3.0	10.5	6.5	8.5	19.0	13.0	16.0
11	0.0	0.0	0.0	5.5	2.5	4.0	10.5	6.0	8.0	20.5	17.0	18.5
12	0.0	0.0	0.0	5.0	1.5	3.0	9.5	7.0	8.0	21.0	16.5	19.0
13	0.0	0.0	0.0	3.0	0.0	1.5	8.0	6.0	6.5	22.0	19.0	20.5
14	0.0	0.0	0.0	3.0	0.5	2.0	9.5	5.0	7.0	22.0	20.0	21.0
15	0.0	0.0	0.0	3.0	2.0	2.5	11.5	6.5	9.0	21.0	15.5	18.5
16	0.0	0.0	0.0	2.0	0.0	0.5	12.5	7.0	10.0	16.0	14.0	15.0
17	0.0	0.0	0.0	0.5	0.0	0.0	12.5	10.5	11.5	19.0	13.5	16.5
18	0.0	0.0	0.0	0.5	0.0	0.0	12.5	10.0	11.5	19.5	18.5	19.0
19	0.0	0.0	0.0	4.0	0.0	1.5	15.5	12.0	13.5	19.0	16.5	17.5
20	0.0	0.0	0.0	2.5	1.5	2.0	13.5	11.0	12.0	19.5	15.5	17.5
21	0.0	0.0	0.0	2.0	1.0	1.5	15.5	10.5	13.0	19.0	17.0	18.5
22	0.0	0.0	0.0	2.5	0.0	1.0	15.5	13.5	14.5	17.0	15.5	16.0
23	0.0	0.0	0.0	2.0	0.0	1.0	14.5	11.0	13.0	16.0	15.0	15.5
24	0.0	0.0	0.0	5.5	1.5	3.5	15.0	10.5	13.0	19.0	15.0	17.0
25	0.0	0.0	0.0	8.5	4.0	6.0	12.5	9.5	10.5	18.0	15.5	16.5
26	0.0	0.0	0.0	10.5	8.0	9.0	12.5	10.0	11.0	17.0	15.0	16.0
27	0.0	0.0	0.0	10.5	8.5	9.5	11.5	8.5	10.0	18.0	15.0	16.5
28	1.5	0.0	0.5	11.0	7.0	9.0	11.5	6.5	9.0	18.0	16.0	17.5
29	3.5	1.0	2.0	13.0	7.5	10.5	17.5	10.5	14.0	16.0	13.5	15.0
30	---	---	---	12.5	9.5	11.0	18.0	14.0	16.0	17.0	13.5	15.5
31	---	---	---	11.0	9.0	10.0	---	---	---	16.0	15.0	15.5
MONTH	3.5	0.0	0.1	13.0	0.0	3.9	18.0	1.0	9.3	22.0	9.0	16.1
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	15.0	16.5	21.5	18.5	20.0	23.0	21.5	22.0	21.0	19.5	20.0
2	17.0	15.5	16.0	21.5	19.0	20.0	23.0	20.5	21.5	20.5	18.5	19.5
3	17.5	15.0	16.0	21.5	18.5	20.0	23.5	21.5	22.5	21.5	19.0	20.5
4	17.0	14.5	16.0	22.0	19.5	21.0	23.0	21.0	22.0	22.0	20.5	21.5
5	16.5	15.0	15.5	22.5	20.0	21.5	21.0	19.0	20.0	22.5	20.5	21.5
6	17.5	16.0	16.5	21.0	19.0	20.0	19.0	18.0	18.5	22.0	20.5	21.5
7	20.0	16.5	18.5	21.0	19.5	20.5	18.5	17.5	18.0	22.0	21.0	21.5
8	22.5	19.0	20.5	21.5	20.5	21.0	20.5	18.0	19.0	21.5	19.0	20.0
9	24.0	21.5	22.5	20.5	19.0	19.5	22.0	19.5	20.5	19.0	18.0	18.5
10	22.5	17.0	19.5	21.5	19.0	20.0	22.0	20.5	21.0	19.5	17.5	18.5
11	18.0	15.5	17.0	22.5	20.0	21.0	21.0	20.0	20.5	19.5	17.5	18.5
12	18.0	15.0	16.5	22.0	20.5	21.5	20.0	19.5	19.5	20.5	18.5	19.5
13	19.0	16.5	17.5	23.5	21.0	22.0	19.5	19.0	19.5	20.0	19.0	19.5
14	22.0	18.5	20.0	22.5	20.0	21.5	19.5	18.5	19.0	20.5	18.0	19.0
15	22.0	20.5	21.0	20.0	19.5	19.5	20.0	18.5	19.5	21.5	20.0	20.5
16	21.5	19.5	20.5	21.0	19.5	20.0	20.5	18.5	19.5	21.5	19.5	20.5
17	20.5	20.0	20.0	22.0	20.0	21.0	20.5	18.5	19.5	21.0	18.5	19.5
18	21.0	19.5	20.5	21.5	20.0	21.0	21.5	19.5	20.5	18.5	16.5	17.5
19	21.0	18.0	19.5	22.0	20.0	20.5	21.5	20.0	21.0	16.5	15.5	16.0
20	18.5	16.0	17.5	21.5	20.0	21.0	20.0	19.0	19.5	17.0	15.0	16.0
21	19.5	16.5	18.0	23.5	20.0	22.0	19.0	18.0	18.5	18.5	16.0	17.0
22	19.5	18.5	19.0	23.5	22.5	23.0	19.0	16.5	17.5	19.5	17.5	18.5
23	20.0	17.5	19.0	23.5	20.5	22.0	20.0	18.0	19.0	20.0	18.5	19.0
24	21.5	18.0	19.5	20.5	19.0	20.0	20.0	18.5	19.0	20.5	19.0	20.0
25	19.5	16.5	18.0	19.5	18.5	19.0	21.0	18.0	19.5	20.5	20.0	20.5
26	18.0	15.5	17.0	20.0	19.0	19.5	22.5	21.0	21.5	20.0	18.5	19.0
27	18.5	16.5	17.5	20.0	19.0	19.0	23.5	21.5	22.5	19.5	17.5	18.5
28	17.5	16.5	16.5	20.5	18.5	19.5	23.5	22.5	23.0	19.0	18.0	19.0
29	18.5	16.0	17.0	22.0	19.5	21.0	23.0	21.5	22.5	18.0	16.5	17.5
30	19.5	17.0	18.0	22.0	21.0	21.5	22.0	20.5	21.0	17.0	16.0	16.5
31	---	---	---	22.5	21.5	22.0	21.0	19.5	20.5	---	---	---
MONTH	24.0	14.5	18.2	23.5	18.5	20.7	23.5	16.5	20.2	22.5	15.0	19.2
YEAR	24.0	0.0	10.6									

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Discharge, cfs (00060)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
OCT												
26-30	1730	0930	10	83	76	5	--	.71	.06	1.9	.113	.155
OCT 31-NOV 02	0935	2035	5.5	88	67	<5	--	.64	<.01	2.2	.144	.186
02-05	2135	1034	8.6	94	66	9	--	.76	<.01	1.8	.151	.196
DEC												
10-11	1535	1134	11	169	71	--	12	1.9	1.0	3.2	.059	.153
11-16	1145	0545	22	166	82	12	--	1.5	.54	2.6	.062	.061
JAN												
23-28	1330	1030	7.0	--	--	--	--	2.7	1.8	2.9	.104	.166
FEB												
19-24	0905	0804	11	249	77	5	--	1.3	.47	2.2	.044	.080
FEB 26-MAR 03	1215	1014	26	145	62	<6	--	1.2	.26	2.4	.034	.188
03-10	1030	0930	32	140	54	23	--	.89	.09	1.9	.036	.098
10-17	1225	0825	10	191	66	7	--	.93	.18	2.4	.030	.052
APR												
12-19	0935	0835	35	70	42	17	--	.75	.05	2.0	.016	.063
MAY												
22-26	1850	0950	144	62	39	238	--	2.3	.07	1.3	.068	.609
MAY 26-JUN 02	1015	0915	17	87	42	44	--	1.0	.02	2.0	.076	.221
09-12	2000	0259	18	90	38	104	--	1.4	.05	2.0	.095	.327
14-16	1900	1200	15	93	42	135	--	1.5	.03	1.9	.100	.467
SEP												
08-15	0815	0715	137	61	37	782	--	5.2	.03	1.3	.073	.139

< Less than.

04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft upstream from concrete weir at Wellsville, 0.5 mi upstream from bridge on State Highway 17, 0.6 mi upstream from Crowner Brook and sewage treatment plant, 0.6 mi downstream from Dyke Creek, and 140.9 mi upstream from mouth.

DRAINAGE AREA.--288 mi^2.

PERIOD OF RECORD.--August 1955 to September 1958, October 1972 to current year. Records for June 1916 to September 1972, published as Genesee River at Scio (station 04221500) at site 5.2 mi downstream, are not equivalent because of difference in drainage areas.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft above NGVD of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi upstream at datum 3.00 ft higher. August 1955 to September 1957, at same site at datum 8.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,700 ft^3/s, Jan. 19, 1996, gage height, 16.13 ft; minimum instantaneous discharge not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since June 1916, 38,500 ft^3/s, June 23, 1972, gage height, 20.7 ft, present datum, from floodmark, on basis of contracted-opening measurement of peak flow 0.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	2230	7,520	10.32	1130	4,420	8.48
Dec 11	1230	5,400	9.10	1400	6,880	9.97
Mar 5	2045	4,740	8.69	0600	*7,970	*10.56
Apr 13	2200	6,810	9.93			

Minimum discharge, 56 ft^3/s, July 12, gage height, 4.36 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	623	455	650	663	201	e220	1,160	437	526	90	886	376
2	554	433	607	720	207	e650	1,780	528	380	81	588	284
3	495	410	533	995	215	1,870	1,180	587	372	74	462	241
4	737	371	508	1,110	201	2,070	1,030	425	292	70	393	210
5	744	358	481	1,160	158	3,470	896	433	263	76	393	183
6	518	396	440	968	158	3,970	767	394	258	68	289	159
7	454	335	e395	734	170	2,290	690	660	230	68	247	143
8	405	295	e390	746	152	1,670	604	464	204	72	217	198
9	361	263	374	e580	144	1,150	543	2,940	186	67	183	5,040
10	325	247	371	e450	149	920	468	1,600	179	62	183	2,420
11	291	247	3,410	e460	145	769	418	2,160	173	59	250	1,080
12	264	252	1,780	528	132	689	398	1,210	154	58	188	769
13	242	338	1,140	e460	146	573	2,560	1,540	140	66	315	589
14	227	297	939	e340	e130	504	3,390	953	138	410	217	472
15	596	288	830	e310	e124	553	1,490	1,070	132	609	178	396
16	407	332	710	e290	e120	464	1,070	884	127	347	342	340
17	307	328	733	e290	e118	448	880	672	186	244	192	1,910
18	279	297	658	e310	e118	425	750	688	311	286	153	6,380
19	277	2,710	566	e280	e120	396	647	583	232	376	135	2,220
20	255	4,560	507	276	128	474	612	482	155	273	159	1,180
21	239	1,820	449	e240	176	1,030	547	2,150	127	189	1,700	865
22	240	1,220	430	e225	188	640	753	1,240	120	158	610	671
23	232	950	775	e210	e160	553	794	1,780	117	164	391	536
24	212	851	2,000	e200	e155	617	643	1,210	103	172	326	448
25	193	888	1,600	e190	e140	1,110	586	900	99	123	274	385
26	192	670	1,070	e195	e130	1,050	796	773	100	211	227	334
27	902	595	878	e205	e130	1,510	643	651	89	1,820	203	289
28	720	757	740	e205	e135	1,090	582	681	88	1,120	310	262
29	619	915	676	e195	e160	882	525	508	127	872	214	238
30	585	663	1,090	e180	---	750	466	418	96	668	733	218
31	492	---	805	e170	---	733	---	464	---	1,510	840	---
TOTAL	12,987	22,541	26,535	13,885	4,410	33,540	27,668	29,485	5,704	10,463	11,798	28,836
MEAN	419	751	856	448	152	1,082	922	951	190	338	381	961
MAX	902	4,560	3,410	1,160	215	3,970	3,390	2,940	526	1,820	1,700	6,380
MIN	192	247	371	170	118	220	398	394	88	58	135	143
CFSM	1.45	2.61	2.97	1.56	0.53	3.76	3.20	3.30	0.66	1.17	1.32	3.34
IN.	1.68	2.91	3.43	1.79	0.57	4.33	3.57	3.81	0.74	1.35	1.52	3.72

04221000 GENESEE RIVER AT WELLSVILLE, NY—Continued

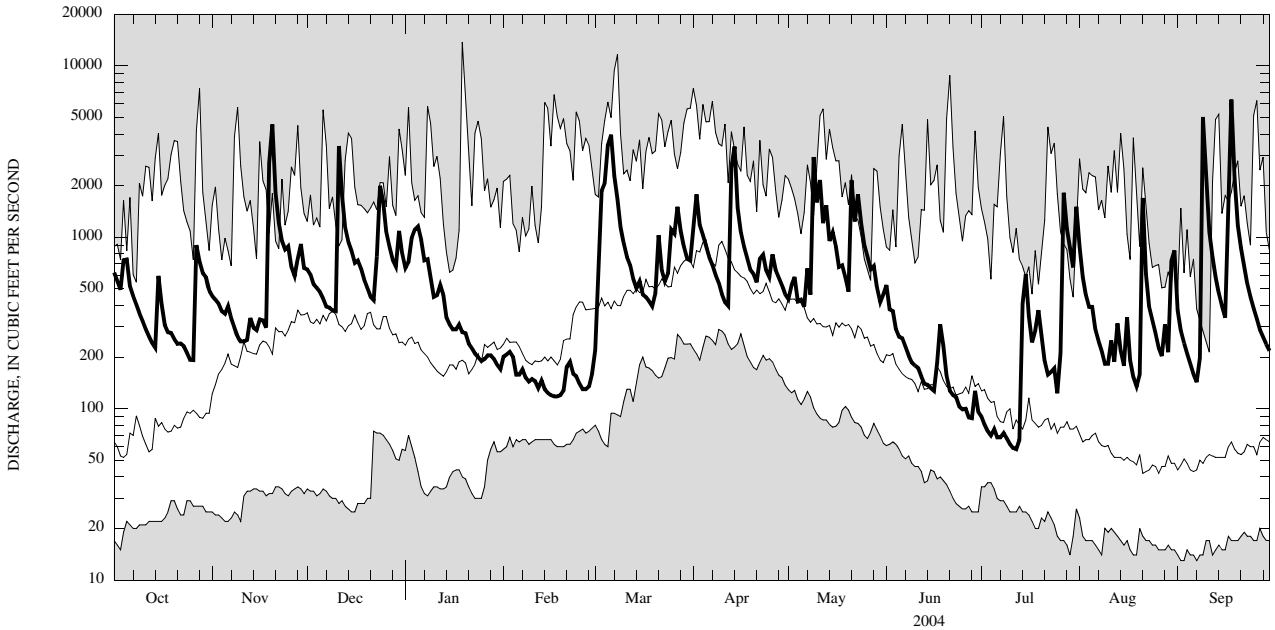
DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2004, BY WATER YEAR (WY)

MEAN	221	350	446	378	452	771	854	465	296	173	149	192
MAX	784	1,001	1,016	1,263	1,443	1,689	1,925	1,208	1,269	691	1,079	1,246
(WY)	(1991)	(1997)	(1973)	(1996)	(1976)	(1956)	(1958)	(1996)	(1989)	(2003)	(2003)	(1977)
MIN	25.0	32.6	50.5	52.1	94.4	320	361	113	45.3	27.5	23.0	18.8
(WY)	(1958)	(1999)	(1999)	(1981)	(1958)	(1981)	(1976)	(1985)	(1991)	(1993)	(1999)	(1995)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1956 - 2004	
ANNUAL TOTAL	230,177		227,852			
ANNUAL MEAN	631		623		395	
HIGHEST ANNUAL MEAN					623	2004
LOWEST ANNUAL MEAN					210	1999
HIGHEST DAILY MEAN	5,260	Mar 21	6,380	Sep 18	13,800	Jan 19, 1996
LOWEST DAILY MEAN	82	Jul 15	58	Jul 12	13	Sep 2, 1991
ANNUAL SEVEN-DAY MINIMUM	111	Feb 15	65	Jul 7	15	Sep 3, 1995
ANNUAL RUNOFF (CFSM)	2.19		2.16		1.37	
ANNUAL RUNOFF (INCHES)	29.73		29.43		18.63	
10 PERCENT EXCEEDS	1,500		1,190		891	
50 PERCENT EXCEEDS	332		414		210	
90 PERCENT EXCEEDS	138		134		40	



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft downstream from bridge on State Highway 436, 800 ft upstream from abandoned railroad bridge piers, 0.9 mi upstream from Upper Falls, and 89.8 mi upstream from mouth.

DRAINAGE AREA.--984 mi^2.

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112; WDR NY-82-3: Drainage area. WDR NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft downstream at datum 2.60 ft higher (destroyed by flood of June 1972). June 21, 1972 to July 11, 1972, nonrecording gage at same site and datum. July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft upstream at datum 11.48 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft^3/s, June 23, 1972, gage height, 35.25 ft, site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft^3/s on basis of contracted-opening measurement of 71,000 ft^3/s, 0.4 mi upstream and contracted-opening measurement of 98,200 ft^3/s, 0.7 mi downstream from gage; minimum discharge, 18 ft^3/s, Oct. 5, 17, 1913, gage height, 1.70 ft, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	0300	19,200	16.96	1300	18,800	16.83
Mar 6	0100	15,200	15.63	1700	*23,100	*18.27
Apr 14	0500	17,300	16.33	0900	18,800	16.83

Minimum discharge, 224 ft^3/s, July 13, gage height, 8.60 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

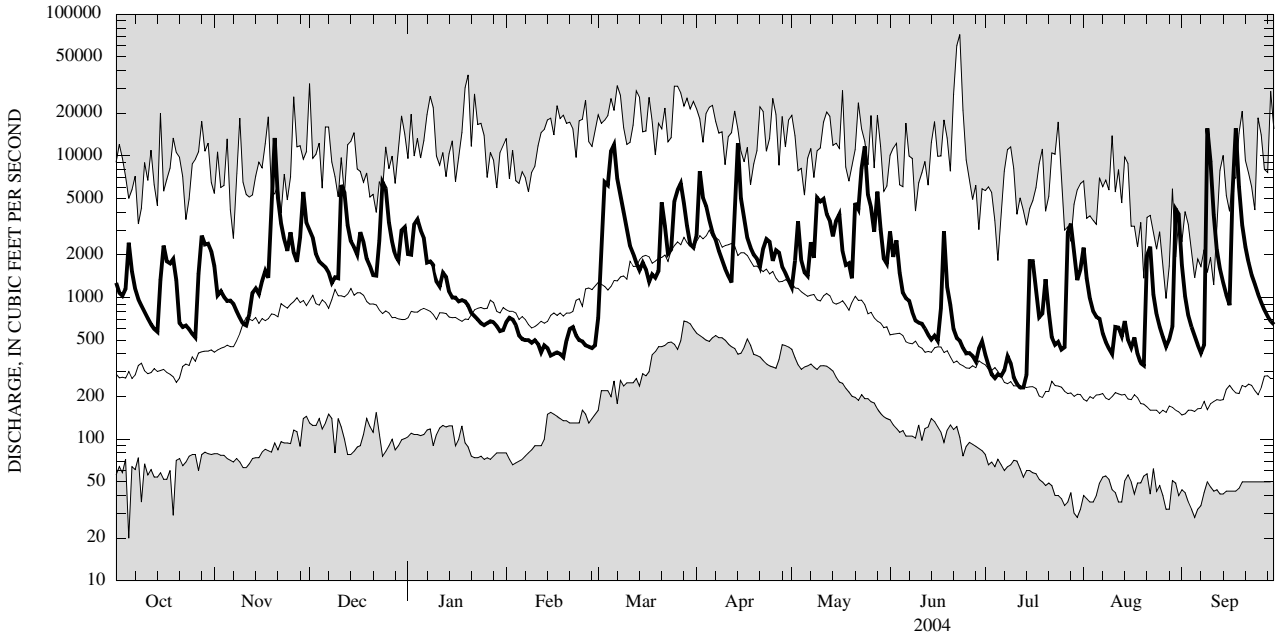
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,270	1,670	3,000	2,030	e670	e720	2,780	1,180	2,930	396	2,250	1,700
2	1,080	1,040	2,650	2,010	e720	e2,000	7,810	1,820	1,940	332	1,370	1,020
3	1,030	1,110	2,030	3,290	e700	6,550	5,070	3,450	2,540	287	983	745
4	1,150	1,010	1,800	3,570	e640	6,230	4,450	1,830	1,500	270	801	620
5	2,440	946	1,720	3,000	e540	10,800	3,520	1,510	1,080	288	732	536
6	1,530	953	1,640	2,640	e510	12,000	2,880	1,420	990	280	709	463
7	1,150	904	1,500	1,770	e500	6,930	2,550	2,460	952	307	558	407
8	973	801	1,270	e1,800	e500	5,220	2,130	1,910	789	386	486	463
9	876	718	1,390	e1,700	e480	4,020	1,850	5,090	688	343	436	15,700
10	791	653	1,370	e1,300	e500	3,010	1,600	4,770	664	273	398	9,130
11	714	636	6,220	e1,200	e470	2,320	1,420	4,980	655	246	619	3,850
12	648	765	5,520	e1,500	e410	2,050	1,280	3,890	604	231	614	2,190
13	601	1,080	3,250	e1,400	e460	1,760	4,880	3,480	547	232	534	1,590
14	573	1,160	2,500	e1,100	e440	1,560	12,300	2,710	506	286	682	1,270
15	1,330	1,060	2,270	e1,000	e390	1,770	5,030	3,500	539	1,810	504	1,040
16	2,330	1,310	2,010	e1,000	e400	1,580	3,610	3,890	496	1,810	444	884
17	1,800	1,550	2,900	e940	e410	1,290	2,630	2,120	838	1,110	523	5,650
18	1,740	1,380	2,460	e960	e400	1,460	2,250	1,700	2,950	726	398	15,700
19	1,870	4,830	1,880	e940	e380	1,380	2,010	1,750	1,190	770	345	6,040
20	1,330	13,400	1,670	e880	e500	1,540	1,880	1,370	885	1,350	332	3,250
21	662	5,090	1,440	e780	e600	4,700	1,650	4,650	598	794	1,990	2,290
22	620	3,340	1,430	e740	e620	3,210	2,220	4,200	518	525	2,290	1,760
23	635	2,560	2,520	e700	e540	2,040	2,590	8,170	496	464	1,050	1,440
24	599	2,140	6,530	e660	e500	2,190	2,480	11,700	440	487	758	1,240
25	554	2,890	5,900	e640	e490	4,810	1,820	5,280	403	429	621	1,060
26	523	2,070	3,400	e660	e460	5,750	2,160	4,330	405	447	526	926
27	1,470	1,790	2,470	e680	e450	6,400	2,080	2,920	387	2,890	450	816
28	2,740	2,670	2,000	e670	e440	4,620	1,650	5,590	353	3,330	509	738
29	2,370	5,570	1,830	e630	e460	3,220	1,490	3,050	436	2,090	627	682
30	2,400	3,390	2,990	e580	---	2,380	1,320	1,880	490	1,330	4,220	646
31	2,120	---	3,150	e590	---	2,260	---	1,730	---	1,590	3,890	---
TOTAL	39,919	68,486	82,710	41,360	14,580	115,770	91,390	108,330	27,809	26,109	30,649	83,846
MEAN	1,288	2,283	2,668	1,334	503	3,735	3,046	3,495	927	842	989	2,795
MAX	2,740	13,400	6,530	3,570	720	12,000	12,300	11,700	2,950	3,330	4,220	15,700
MIN	523	636	1,270	580	380	720	1,280	1,180	353	231	332	407
CFSM	1.31	2.32	2.71	1.36	0.51	3.80	3.10	3.55	0.94	0.86	1.00	2.84
IN.	1.51	2.59	3.13	1.56	0.55	4.38	3.45	4.10	1.05	0.99	1.16	3.17

04223000 GENESEE RIVER AT PORTAGEVILLE, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2004, BY WATER YEAR (WY)												
MEAN	644	1,086	1,349	1,409	1,460	2,893	2,776	1,530	908	464	354	437
MAX	3,320	4,201	4,314	4,795	5,838	7,360	7,780	4,826	7,006	1,938	2,794	4,949
(WY)	(1918)	(1928)	(1928)	(1913)	(1976)	(1936)	(1940)	(1919)	(1972)	(2003)	(2003)	(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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1908 - 2004	
ANNUAL TOTAL	729,295		730,958			
ANNUAL MEAN	1,998		1,997		1,274	
HIGHEST ANNUAL MEAN					2,038	1916
LOWEST ANNUAL MEAN					766	1962
HIGHEST DAILY MEAN	15,700	Mar 22	15,700	Sep 9	72,000	Jun 23, 1972
LOWEST DAILY MEAN	302	Jul 8	231	Jul 12	20	Oct 5, 1913
ANNUAL SEVEN-DAY MINIMUM	345	Jul 3	285	Jul 8	34	Jul 25, 1934
ANNUAL RUNOFF (CFSM)	2.03		2.03		1.30	
ANNUAL RUNOFF (INCHES)	27.57		27.63		17.60	
10 PERCENT EXCEEDS	3,920		4,630		2,920	
50 PERCENT EXCEEDS	1,200		1,370		620	
90 PERCENT EXCEEDS	541		446		135	



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi northwest of Mount Morris, 5.0 mi upstream from Canaseraga Creek, and 69.3 mi upstream from mouth.

DRAINAGE AREA.--1,080 mi^2.

PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."

REVISED RECORDS.--WSP 1437: 1955. WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.

REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by U. S. Army Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft between elevation 585.0 ft, sill of conduits, and 760.0 ft, crest of spillway. Dead storage, 609 acre-ft. Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.

COOPERATION.--Capacity table provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft, June 25, 1972, contents, 322,600 acre-ft; minimum elevation, 584.06 ft, Aug. 30, 1991, contents, 446.4 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 676.32 ft, Mar. 8, contents, 111,700 acre-ft; minimum elevation, 585.06 ft, Aug. 17, contents, 619 acre-ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Furnished by U. S. Army Corps of Engineers in 1953)

Elevation	Contents	Elevation	Contents	Elevation	Contents
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 ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591.19	592.77	636.31	620.73	593.90	599.39	612.40	599.31	662.82	591.48	592.43	622.22
2	590.98	590.75	634.13	615.50	593.93	606.97	622.44	596.27	660.62	591.42	592.14	616.50
3	590.66	590.26	631.06	611.23	593.98	625.98	635.44	612.60	657.43	591.36	591.91	605.03
4	590.63	589.59	627.08	612.87	594.02	639.45	639.44	620.31	653.24	591.29	591.73	590.39
5	592.56	589.36	622.17	612.85	594.04	650.52	640.94	622.99	648.93	591.26	591.63	589.76
6	592.10	592.22	615.67	608.59	594.05	664.78	641.19	624.98	644.46	591.19	591.49	589.32
7	590.92	594.17	601.03	596.33	595.27	673.53	640.00	626.79	639.45	591.37	591.40	588.97
8	590.46	593.42	592.49	593.27	599.30	676.00	636.92	629.13	632.87	591.67	591.31	589.39
9	590.37	592.82	592.57	593.42	601.46	675.96	632.83	631.57	624.72	591.51	591.25	617.59
10	590.32	592.29	592.63	592.69	602.18	674.07	627.10	640.35	614.37	591.33	591.30	650.23
11	590.24	592.05	603.42	596.92	602.74	671.30	621.42	645.18	594.70	591.20	591.44	656.64
12	590.17	592.19	626.23	607.70	602.52	668.11	615.41	648.02	592.11	591.12	591.23	658.36
13	589.79	594.74	628.15	612.71	601.52	664.77	610.60	647.06	591.81	591.09	591.18	656.61
14	588.90	595.65	626.04	616.13	601.35	661.14	635.25	644.44	591.54	591.64	591.12	652.62
15	589.81	594.39	622.70	617.12	600.73	657.15	647.48	641.40	591.36	592.27	591.02	646.84
16	602.21	595.62	618.53	616.46	598.46	653.17	650.93	639.79	591.21	593.02	590.92	640.61
17	596.86	602.36	614.24	614.59	594.25	648.90	651.53	638.38	591.25	592.19	588.34	636.93
18	594.50	612.23	612.19	613.10	594.08	644.38	650.22	635.57	603.95	592.06	585.86	650.93
19	594.57	615.69	606.97	612.62	594.08	639.61	649.46	632.48	594.77	591.99	585.83	661.50
20	593.64	637.30	596.29	611.92	594.10	633.57	648.98	628.96	592.60	591.83	585.78	662.31
21	590.60	646.64	594.56	610.69	594.12	629.08	645.96	626.46	592.52	591.73	587.58	659.86
22	589.88	647.95	594.58	609.41	595.22	629.84	641.25	629.30	592.45	591.62	592.36	655.92
23	589.44	646.85	596.39	607.76	600.37	627.96	637.79	633.07	592.32	591.47	589.56	651.82
24	589.09	643.68	613.33	604.12	601.21	622.93	635.04	647.49	592.21	591.29	589.33	647.10
25	588.81	640.43	628.90	596.24	601.75	618.68	632.60	659.20	592.01	591.16	587.51	641.26
26	588.61	637.19	632.77	594.02	598.58	623.37	629.62	663.59	591.75	591.55	586.87	634.75
27	588.97	632.93	633.24	594.05	597.43	629.12	626.92	665.59	591.62	593.02	586.84	627.25
28	593.87	628.96	632.18	594.05	595.37	632.89	623.71	666.22	591.55	594.94	586.77	618.79
29	594.03	633.93	628.54	593.95	595.19	630.83	619.27	668.07	591.53	592.63	586.76	605.85
30	594.06	637.28	624.37	593.91	---	626.13	612.66	667.71	591.50	592.32	594.80	592.39
31	593.52	---	623.39	593.92	---	619.95	---	665.39	---	592.19	621.60	---
MEAN	591.67	611.52	616.20	605.45	597.42	642.57	633.83	638.63	609.79	591.81	590.94	630.59
MAX	602.21	647.95	636.31	620.73	602.74	676.00	651.53	668.07	662.82	594.94	621.60	662.31
MIN	588.61	589.36	592.49	592.69	593.90	599.39	610.60	596.27	591.21	591.09	585.78	588.97

CAL YR 2003 MEAN 614.77 MAX 716.89 MIN 588.61
WTR YR 2004 MEAN 613.37 MAX 676.00 MIN 585.78

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 04130002, on right bank on Poags Hole Road, 0.7 mi upstream from Stony Brook, and 1.7 mi south of Dansville.

DRAINAGE AREA.--88.9 mi^2.

PERIOD OF RECORD.--August 1974 to current year.

REVISED RECORDS.--WDR NY-82-3: Drainage area. WDR NY-91-3: 1984, 1986(P).

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft above NGVD of 1929.

REMARKS.--Records fair. Satellite gage-height and precipitation telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,340 ft^3/s, Jan. 19, 1996, gage height, 8.50 ft, from rating curve extended above 2,700 ft^3/s; minimum discharge, 6.5 ft^3/s, Aug. 17, 18, 1999.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1715	2,250	4.16	0945	1,880	3.89
Apr 13	2100	2,000	3.98	1245	*5,090	*5.67
May 24	1045	2,560	4.37	0300	2,860	4.56

Minimum discharge, 19 ft^3/s, Aug. 18, 19, 27, 28, gage height, 0.63 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	53	155	146	e35	125	374	119	221	31	51	76
2	33	50	133	151	e35	499	827	260	377	29	40	54
3	31	59	108	197	e35	506	462	267	372	27	33	45
4	53	50	106	175	e35	451	387	182	185	27	31	38
5	78	46	102	161	e35	938	324	171	153	26	33	32
6	53	42	91	139	e35	536	284	155	138	25	29	28
7	39	40	81	e90	e40	288	277	304	119	35	27	26
8	33	36	71	e90	e45	233	240	205	102	53	25	32
9	29	34	80	e70	e50	195	220	461	91	36	24	2,070
10	27	32	87	e50	e50	175	199	279	88	30	24	294
11	25	33	432	e55	e45	164	179	249	78	27	32	149
12	24	36	185	e55	e45	156	166	198	69	25	26	113
13	23	40	136	e55	e45	137	727	169	63	25	37	93
14	22	45	118	e35	e45	127	727	228	60	66	32	79
15	32	39	120	e30	e45	143	345	284	61	87	26	69
16	37	54	113	e40	e35	125	269	237	54	72	23	60
17	27	69	170	e50	e40	121	231	180	106	67	21	754
18	24	57	151	e60	e35	130	218	157	121	45	20	1,040
19	24	557	132	e55	e35	122	204	147	83	54	20	222
20	23	462	121	e50	e35	145	193	124	68	54	23	150
21	22	177	110	e45	e40	379	175	233	56	42	107	118
22	24	137	112	e45	e50	206	246	204	54	34	50	93
23	26	116	253	e45	e55	176	259	631	49	32	34	78
24	25	108	585	e45	e55	206	209	1,200	43	30	29	69
25	23	136	331	e40	e55	445	187	420	42	26	25	62
26	25	104	205	e35	e50	323	187	408	42	39	22	56
27	98	94	166	e35	e50	364	169	271	37	195	20	50
28	99	224	144	e35	e55	249	150	334	35	101	21	46
29	75	262	143	e35	e80	205	136	191	37	61	27	44
30	81	160	220	e35	---	182	125	152	34	47	629	43
31	61	---	171	e35	---	177	---	193	---	55	175	---
TOTAL	1,233	3,352	5,132	2,184	1,290	8,228	8,696	8,613	3,038	1,503	1,716	6,083
MEAN	39.8	112	166	70.5	44.5	265	290	278	101	48.5	55.4	203
MAX	99	557	585	197	80	938	827	1,200	377	195	629	2,070
MIN	22	32	71	30	35	121	125	119	34	25	20	26
CFSM	0.45	1.26	1.86	0.79	0.50	2.99	3.26	3.13	1.14	0.55	0.62	2.28
IN.	0.52	1.40	2.15	0.91	0.54	3.44	3.64	3.60	1.27	0.63	0.72	2.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	50.8	85.7	108	107	132	209	214	121	69.1	40.4	34.8	44.4
MAX	175	194	252	411	432	557	519	327	270	134	138	331
(WY)	(1991)	(1993)	(1978)	(1996)	(1976)	(2003)	(1993)	(1996)	(1989)	(2003)	(2003)	(1977)
MIN	10.7	17.4	21.6	24.4	31.4	70.6	81.8	26.2	16.8	10.8	7.52	6.83
(WY)	(2002)	(2002)	(1999)	(1984)	(1980)	(1984)	(1981)	(1985)	(1991)	(1985)	(1985)	(1995)

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	54,412		51,068			
ANNUAL MEAN	149		140		101	
HIGHEST ANNUAL MEAN					154	1996
LOWEST ANNUAL MEAN					64.1	1999
HIGHEST DAILY MEAN	1,710	Mar 21	2,070	Sep 9	3,680	Jan 19, 1996
LOWEST DAILY MEAN	18	Jul 8	20	Aug 18	6.6	Sep 26, 1995
ANNUAL SEVEN-DAY MINIMUM	21	Jul 2	24	Aug 14	6.7	Sep 2, 1995
ANNUAL RUNOFF (CFSM)	1.68		1.57		1.13	
ANNUAL RUNOFF (INCHES)	22.77		21.37		15.42	
10 PERCENT EXCEEDS	305		290		219	
50 PERCENT EXCEEDS	84		72		52	
90 PERCENT EXCEEDS	26		27		13	

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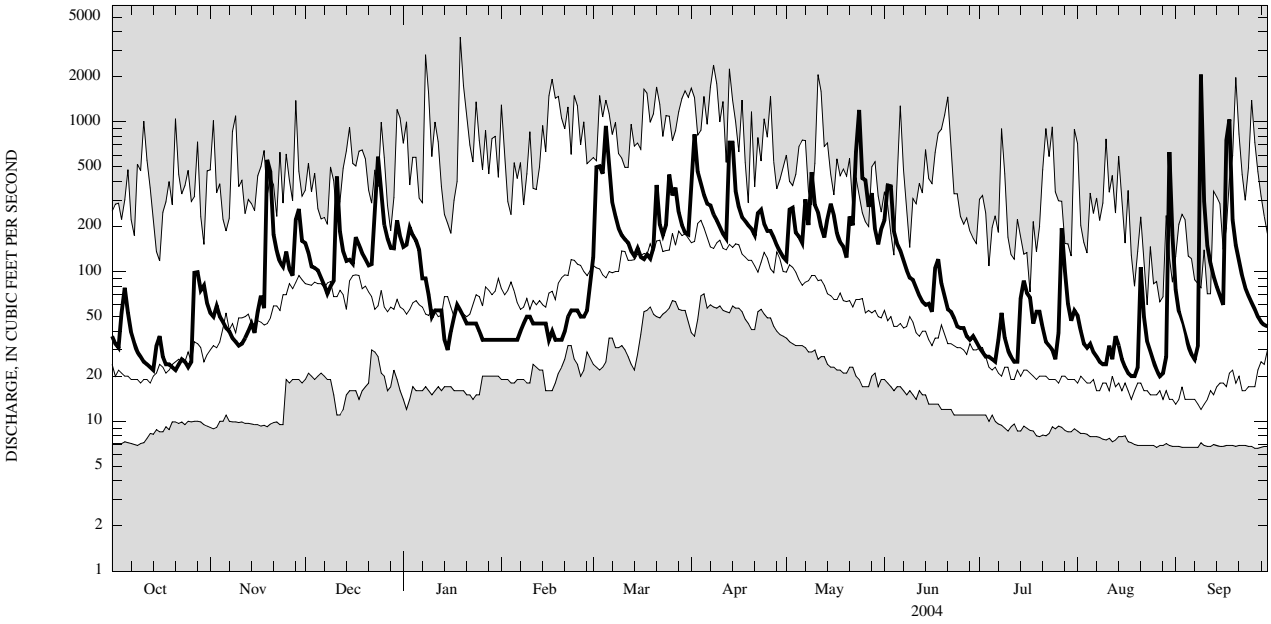

2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'27", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft upstream from bridge on State Highway 408 at Shakers Crossing, 1.4 mi upstream from mouth, and 1.5 mi northeast of Mount Morris.

DRAINAGE AREA.--335 mi^2.

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 545.52 ft above NGVD of 1929. Prior to July 1981 at site 250 ft east on left bank of old filled-in channel at same datum,and prior to November 1958 at site 250 ft east and 40 ft north at datum 5.52 ft lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi downstream from base gage.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft^3/s, Jan. 19, 1996, gage height 13.01 ft; maximum gage height 23.62 ft, present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft^3/s, Aug. 19, 1970, gage height, 2.26 ft, result of temporary regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached an estimated discharge of 11,200 ft^3/s from U. S. Army Corps of Engineers publication (Tropical Storm Agnes, June 1972).

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

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 14	0000	*3,250	*10.78	1430	3,190	10.39
May 24	1400	3,220	10.67	0600	3,130	10.40

Minimum discharge,64 ft^3/s, Sept. 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	173	581	448	e115	499	786	277	764	e110	e170	278
2	143	168	501	424	e115	1,100	2,440	497	524	e110	e140	154
3	132	225	361	529	e120	1,480	1,870	899	1,170	e100	e120	128
4	142	197	350	540	e120	1,210	1,550	479	773	e96	e110	130
5	282	182	320	477	e120	1,610	1,170	402	469	e92	e120	111
6	189	173	285	432	e125	1,690	846	375	413	e90	e100	99
7	151	158	254	302	e140	996	753	803	327	e110	e95	90
8	133	142	217	e320	e155	698	665	573	323	e190	e90	101
9	119	132	270	e250	e165	556	545	1,320	316	e140	e85	2,270
10	113	124	281	e165	e165	496	504	1,000	247	e110	e90	2,250
11	106	123	978	e185	e160	446	413	664	257	e98	104	1,130
12	99	133	976	e185	e160	423	354	494	228	e94	99	634
13	96	222	543	e185	e160	354	1,270	411	208	e96	113	345
14	92	226	397	e125	e155	328	2,660	410	199	e220	123	e240
15	100	180	393	e105	e150	364	1,590	669	200	e290	100	e300
16	118	178	358	e135	e120	335	1,000	696	e185	e260	92	361
17	105	204	688	e175	e130	302	647	440	e325	e220	85	846
18	97	192	603	e200	e125	323	673	382	e380	e160	80	2,860
19	95	871	447	e185	e120	316	705	411	e360	e195	79	1,600
20	97	1,830	399	e175	e130	405	504	302	e230	e190	81	859
21	94	1,090	368	e160	e150	1,410	460	803	e200	e150	210	555
22	95	677	381	e160	e175	738	639	506	e190	e120	211	436
23	108	459	653	e160	e185	487	556	1,810	e180	e110	124	371
24	102	407	1,410	e150	e190	548	510	2,570	e160	e105	106	e270
25	95	546	1,430	e135	e190	995	415	2,090	e150	e95	98	329
26	93	395	963	e125	e180	937	421	1,750	e150	e130	84	302
27	220	333	635	e115	e180	889	382	1,160	e130	e480	79	298
28	415	660	494	e120	e190	758	329	1,500	e120	e400	80	191
29	246	1,260	463	e120	310	566	290	915	e130	e210	124	173
30	298	734	567	e120	---	477	262	554	e125	e170	665	158
31	207	---	586	e120	---	444	---	524	---	e190	858	---
TOTAL	4,539	12,394	17,152	7,027	4,500	22,180	25,209	25,686	9,433	5,131	4,715	17,869
MEAN	146	413	553	227	155	715	840	829	314	166	152	596
MAX	415	1,830	1,430	540	310	1,690	2,660	2,570	1,170	480	858	2,860
MIN	92	123	217	105	115	302	262	277	120	90	79	90
CFSM	0.44	1.23	1.65	0.68	0.46	2.14	2.51	2.47	0.94	0.49	0.45	1.78
IN.	0.50	1.38	1.90	0.78	0.50	2.46	2.80	2.85	1.05	0.57	0.52	1.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

MEAN	145	223	306	314	398	659	669	359	210	115	97.8	118
MAX	601	647	906	1,181	1,452	1,575	1,537	1,081	913	454	567	1,162
(WY)	(1978)	(1993)	(1978)	(1998)	(1976)	(1979)	(1993)	(1996)	(1989)	(1992)	(2003)	(1977)
MIN	24.4	31.3	29.9	30.9	74.6	209	231	109	48.1	22.9	19.9	22.6
(WY)	(1965)	(1965)	(1961)	(1961)	(1963)	(1965)	(1995)	(1995)	(1965)	(1965)	(1965)	(1965)

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1959 - 2004	
ANNUAL TOTAL	151,489		155,835			
ANNUAL MEAN	415		426		301	
HIGHEST ANNUAL MEAN					464	1998
LOWEST ANNUAL MEAN					137	1965
HIGHEST DAILY MEAN	3,140	Mar 22	2,860	Sep 18	5,150	Jan 9, 1998
LOWEST DAILY MEAN	65	Jul 15	79	Aug 19	8.5	Aug 18, 1970
ANNUAL SEVEN-DAY MINIMUM	72	Jul 2	91	Aug 14	15	Jul 26, 1965
ANNUAL RUNOFF (CFSM)	1.24		1.27		0.899	
ANNUAL RUNOFF (INCHES)	16.82		17.30		12.22	
10 PERCENT EXCEEDS	927		977		702	
50 PERCENT EXCEEDS	251		256		150	
90 PERCENT EXCEEDS	95		100		40	

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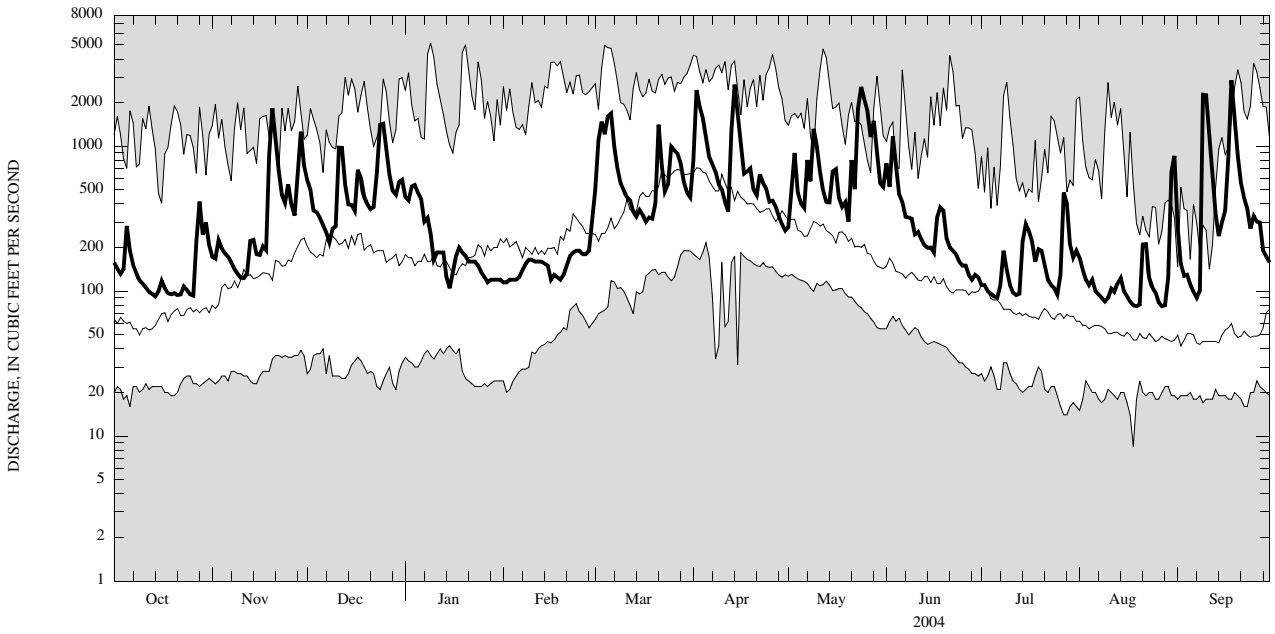


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft north of Jones Bridge Road, 0.8 mi downstream from Canaseraga Creek, 2.8 mi northeast of Mount Morris, and 63.0 mi upstream from mouth.

DRAINAGE AREA.--1,424 mi^2.

PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."

REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112; WDR NY-82-3: Drainage area. WDR NY-78-1: 1974-77 (M, m). WDR NY-01-3: 1991, 1992, 1996-2000 (M).

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft above NGVD of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Mt. Morris Reservoir in November 1951, 55,100 ft^3/s, May 17, 1916, gage height, 25.44 ft; maximum gage height, 25.80 ft, Mar. 13, 1920 (ice jam); minimum discharge, 18 ft^3/s, Aug. 29, 1909. Maximum discharge, since construction of Mt. Morris Reservoir in November 1951, 17,800 ft^3/s, June 23, 1972, gage height, 24.50 ft, minimum discharge, 12 ft^3/s, July 23, 1955, gage height, 0.22 ft, partially obstructed intake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,150 ft^3/s, June 3, gage height 12.57 ft; minimum discharge, 337 ft^3/s, July 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,600	2,220	4,660	4,190	e860	e1,500	4,490	2,340	5,450	566	2,450	3,190
2	1,290	1,340	4,830	3,910	e900	e1,800	5,100	1,770	5,430	482	1,860	3,160
3	1,170	1,400	4,540	3,790	e920	e2,000	4,020	2,160	6,740	424	1,280	2,650
4	1,130	1,310	4,310	3,900	e940	e2,100	4,460	1,190	6,550	390	1,020	971
5	2,450	1,180	4,080	3,990	e940	e2,300	4,360	1,090	5,490	388	904	680
6	2,040	1,110	3,950	4,100	e980	e2,700	4,500	1,080	5,170	385	871	576
7	1,450	1,110	3,230	2,810	e1,100	e3,700	5,030	1,850	5,310	400	755	498
8	1,150	993	1,710	2,200	e1,200	4,990	5,130	2,080	5,360	616	636	481
9	1,020	904	1,760	e1,900	e1,300	5,610	5,200	2,590	4,700	555	569	2,880
10	928	834	1,780	e1,600	e1,300	6,060	5,000	1,710	3,650	454	519	2,700
11	854	797	3,240	e1,500	e1,200	6,010	3,910	2,060	1,710	387	506	1,880
12	790	817	4,340	e1,500	e1,200	5,880	3,320	3,870	914	353	789	2,740
13	732	1,240	4,240	e1,500	e1,200	5,690	3,700	4,890	810	351	659	4,380
14	692	1,730	4,310	e1,000	e1,200	5,600	4,660	5,290	738	436	749	5,640
15	726	1,530	4,150	e860	e1,100	5,700	2,850	5,390	737	1,280	717	6,350
16	2,370	1,590	3,940	e1,100	e1,000	5,560	2,850	5,170	703	2,450	564	5,780
17	2,250	1,460	4,060	e1,400	e880	5,340	4,240	4,330	771	1,850	577	4,160
18	1,950	702	3,940	e1,600	e860	5,230	4,430	4,130	3,050	1,110	581	5,350
19	2,120	2,230	3,480	e1,500	e840	5,320	3,010	4,060	2,140	989	496	4,850
20	1,940	4,930	2,600	e1,400	e880	5,590	4,080	3,830	1,370	1,460	451	5,250
21	870	4,510	2,050	e1,300	e1,000	6,050	5,590	4,320	924	1,340	851	6,030
22	756	4,430	1,990	e1,300	e1,200	4,760	5,760	4,120	760	873	3,220	5,800
23	755	5,040	2,490	e1,300	e1,300	4,520	5,110	4,740	705	658	1,360	5,560
24	744	5,570	4,120	e1,200	e1,400	4,840	4,650	3,880	644	618	910	5,640
25	687	5,640	4,490	e1,100	e1,400	5,270	4,080	2,780	591	601	713	5,820
26	647	5,370	4,030	e1,000	e1,300	4,990	3,960	3,010	583	549	595	5,510
27	909	5,080	3,630	e900	e1,200	4,690	3,820	4,070	570	2,010	505	4,900
28	3,290	4,320	3,960	e920	e1,100	5,430	3,630	5,270	522	4,240	479	3,890
29	2,730	3,370	4,550	e940	e1,100	5,660	3,400	4,360	514	2,520	728	2,780
30	2,820	3,930	4,470	e940	---	5,350	3,090	4,760	631	1,940	1,660	992
31	2,480	---	4,500	e920	---	4,930	---	5,180	---	1,510	3,500	---
TOTAL	45,340	76,687	113,430	57,570	31,800	145,170	127,430	107,370	73,237	32,185	31,474	111,088
MEAN	1,463	2,556	3,659	1,857	1,097	4,683	4,248	3,464	2,441	1,038	1,015	3,703
MAX	3,290	5,640	4,830	4,190	1,400	6,060	5,760	5,390	6,740	4,240	3,500	6,350
MIN	647	702	1,710	860	840	1,500	2,850	1,080	514	351	451	481

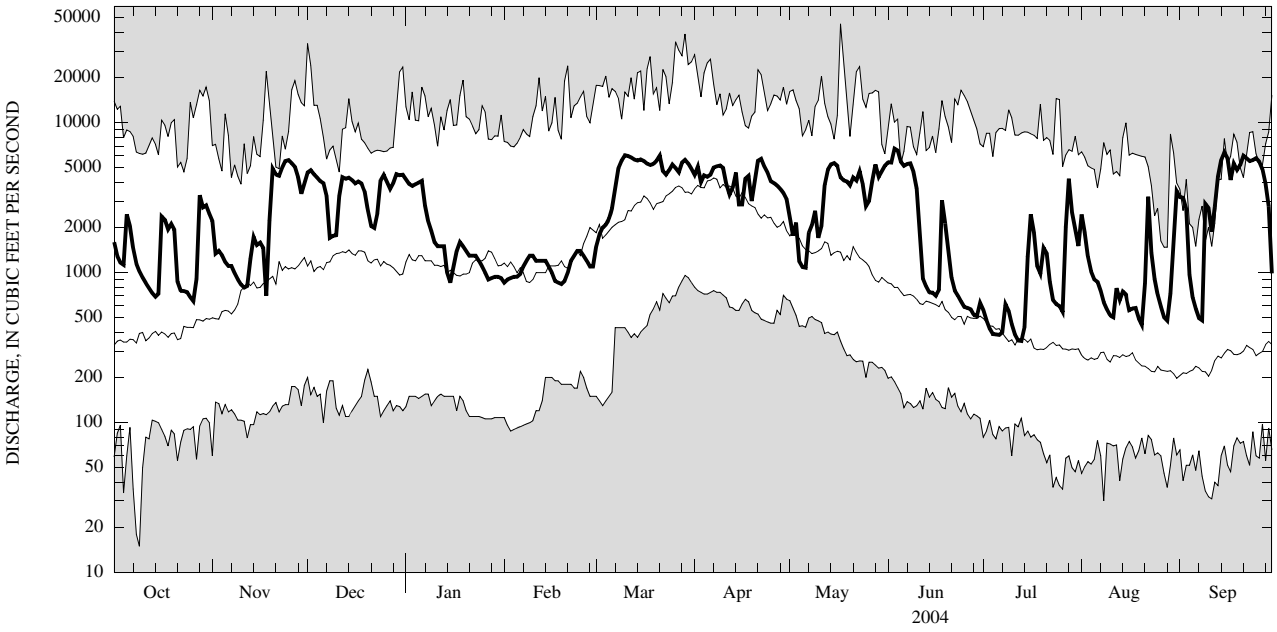
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004, BY WATER YEAR (WY)

MEAN	940	1,441	2,025	1,807	2,035	3,724	4,135	2,155	1,267	752	531	602
MAX	4,743	3,720	5,369	5,659	5,106	7,755	7,270	5,677	4,305	6,801	4,040	4,130
(WY)	(1978)	(1968)	(1973)	(1998)	(1990)	(1976)	(1978)	(1996)	(1989)	(1972)	(2003)	(1977)
MIN	107	152	280	135	383	1,365	1,464	477	191	87.6	116	99.2
(WY)	(1961)	(1965)	(1961)	(1961)	(1958)	(1960)	(1995)	(1955)	(1955)	(1955)	(2001)	(1995)

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1952 - 2004	
ANNUAL TOTAL	941,521		952,781			
ANNUAL MEAN	2,580		2,603		1,782	
HIGHEST ANNUAL MEAN					2,603	2004
LOWEST ANNUAL MEAN					1,057	1965
HIGHEST DAILY MEAN	7,310	Mar 30	6,740	Jun 3	16,500	Jun 24, 1972
LOWEST DAILY MEAN	363	Jul 9	351	Jul 13	15	Oct 9, 1980
ANNUAL SEVEN-DAY MINIMUM	401	Jul 3	434	Jul 1	57	Jul 27, 1955
10 PERCENT EXCEEDS	6,080		5,330		4,800	
50 PERCENT EXCEEDS	1,960		2,000		969	
90 PERCENT EXCEEDS	633		627		188	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft east of State Highway 256, and 3.0 mi south of Lakeville.

DRAINAGE AREA.--69.8 mi^2.

PERIOD OF RECORD.--January 1930 to current year. January1930 to June 1963 in files of village of Geneseo.

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. To convert elevations to adjustment of 1988, subtract 0.53 ft. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft downstream at datum 796.59 ft higher.

REMARKS.--Lake elevation regulated by gates at outlet. Area of water surface, 5.08 mi^2. Daily average of about 2 ft^3/s diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft, present datum, June 24, 1972; minimum elevation, 816.11 ft, Dec. 22, 24, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 819.35 ft, May 24, but may have been higher during period of no elevation record Apr. 28 to Aug. 10; minimum elevation, 816.38 ft, Feb. 21, 22, but may have been lower during period of no elevation record Apr. 28 to Aug. 10.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	817.88	817.88	817.97	817.55	817.24	816.57	818.30	---	z818.36	818.45	---	818.60
2	817.88	817.90	817.90	817.53	817.19	816.72	818.50	---	---	---	---	818.60
3	817.86	817.96	817.81	817.53	817.15	816.95	818.66	---	---	---	---	818.60
4	817.86	817.99	817.73	817.52	817.11	817.13	818.79	---	---	---	---	818.59
5	817.87	818.02	817.66	817.52	817.05	817.36	818.80	z818.73	---	---	z818.50	818.59
6	817.86	818.05	817.61	817.51	817.00	817.56	818.75	---	---	---	---	818.57
7	817.85	818.05	817.56	817.48	816.95	817.68	818.69	---	---	---	---	818.55
8	817.85	818.03	817.51	817.46	816.91	817.79	818.67	---	---	z818.37	---	818.56
9	817.84	818.01	817.48	817.44	816.86	817.86	818.64	---	z818.49	---	---	818.96
10	817.84	818.00	817.45	817.45	816.81	817.91	818.62	---	---	---	---	819.05
11	817.84	817.99	817.52	817.45	816.78	817.95	818.59	---	---	---	818.39	818.87
12	817.83	818.00	817.58	817.48	816.73	818.00	818.57	z818.85	---	---	818.38	818.67
13	817.82	818.04	817.53	817.50	816.69	818.03	818.66	---	---	---	818.38	818.54
14	817.82	818.03	817.47	817.51	816.65	818.04	818.98	---	---	z818.38	818.38	818.48
15	817.82	818.02	817.42	817.53	816.61	818.07	819.05	---	---	---	818.37	818.46
16	817.79	818.01	817.35	817.53	816.56	818.10	818.99	---	---	---	818.35	818.44
17	817.77	818.00	817.31	817.52	816.52	818.14	818.87	---	z818.50	---	818.35	818.47
18	817.75	818.00	817.30	817.51	816.48	818.14	818.79	---	---	---	818.33	818.67
19	817.75	818.09	817.27	817.50	816.45	818.11	818.76	---	---	---	818.32	818.73
20	817.74	818.39	817.27	817.49	816.41	818.09	818.67	z818.62	---	---	818.32	818.75
21	817.74	818.45	817.27	817.47	816.40	818.16	818.59	---	---	---	818.34	818.74
22	817.74	818.44	817.26	817.46	816.39	818.17	818.58	---	---	z818.54	818.33	818.70
23	817.73	818.41	817.30	817.45	816.40	818.15	818.55	z819.06	---	---	818.32	818.69
24	817.71	818.36	817.44	817.43	816.43	818.14	818.54	z819.35	z818.61	---	818.31	818.70
25	817.70	818.27	817.61	817.41	816.45	818.18	818.53	---	---	---	818.30	818.69
26	817.71	818.16	817.67	817.40	816.46	818.20	818.55	z819.22	---	---	818.29	818.66
27	817.76	818.06	817.68	817.39	816.47	818.27	818.55	---	---	---	818.27	818.62
28	817.80	818.02	817.67	817.41	816.49	818.31	---	---	---	z818.63	818.28	818.58
29	817.83	818.09	817.64	817.38	816.52	818.32	z818.52	---	---	---	818.34	818.54
30	817.85	818.04	817.62	817.35	---	818.30	---	---	z818.48	---	818.44	818.52
31	817.87	---	817.58	817.30	---	818.28	---	---	---	---	818.58	---
MEAN	817.81	818.09	817.53	817.47	816.70	817.89	---	---	---	---	---	818.64
MAX	817.88	818.45	817.97	817.55	817.24	818.32	---	---	---	---	---	819.05
MIN	817.70	817.88	817.26	817.30	816.39	816.57	---	---	---	---	---	818.44

CAL YR 2003 MEAN 818.18 MAX 819.26 MIN 817.08

z Once daily reading by USGS personnel.

04227995 CONESUS CREEK NEAR LAKEVILLE, NY

LOCATION.--Lat 42°51'13", long 77°42'57", Livingston County, Hydrologic Unit 04130003, on right bank 100 ft upstream from bridge on West Lake Road (State Highway 256), 1.5 mi downstream from Lakeville, and 10.7 mi upstream from mouth.

DRAINAGE AREA.--69.8 mi^2.

PERIOD OF RECORD.--April 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 810 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Flow regulated by Conesus Lake (see station 04227980).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s, May 12, 1996, gage height, 5.55 ft; minimum discharge, 2.5 ft^3/s, Aug. 29, 31, 2003, gage height, 0.33 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 808 ft^3/s, May 24, gage height, 4.91 ft; minimum discharge, 5.7 ft^3/s, Aug. 16, 17, gage height, 0.45 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	256	126	108	21	113	67	83	36	68	15
2	11	18	238	126	106	31	127	71	37	36	67	14
3	11	18	230	130	110	19	152	57	37	36	67	14
4	12	17	203	126	125	18	272	38	36	36	71	14
5	11	19	149	126	120	26	326	69	36	24	68	14
6	11	24	122	125	118	18	318	99	36	15	40	14
7	11	34	120	e105	116	16	261	121	36	17	17	18
8	11	32	110	e78	113	21	197	147	25	16	17	28
9	10	32	92	54	110	35	173	153	17	15	17	385
10	10	33	93	33	107	47	131	158	18	14	17	594
11	10	32	123	33	105	46	129	179	17	14	17	551
12	10	32	171	32	102	47	108	186	17	14	17	402
13	10	50	207	33	100	46	124	182	17	13	17	211
14	9.9	62	201	e32	98	46	211	181	17	22	17	101
15	13	62	201	e29	e95	46	272	180	18	17	17	49
16	16	62	203	e44	93	45	340	178	18	14	11	34
17	16	64	190	61	91	63	349	174	19	14	8.3	41
18	15	65	160	59	e86	101	316	149	57	16	10	49
19	15	103	118	58	80	114	289	115	97	15	11	39
20	15	141	75	58	77	121	266	114	96	14	12	48
21	16	166	75	58	81	138	253	218	62	14	13	83
22	16	177	76	e58	61	135	218	317	36	14	12	82
23	16	176	84	e57	21	134	143	558	36	14	12	16
24	16	241	93	58	20	137	117	721	36	14	12	16
25	16	295	84	e58	19	139	88	727	36	14	12	44
26	16	281	98	57	19	137	67	726	36	15	12	70
27	19	271	128	57	17	145	67	694	36	29	12	70
28	17	293	127	57	14	140	67	681	36	17	13	69
29	18	292	145	76	19	140	66	634	35	48	24	47
30	17	284	181	101	---	138	66	555	35	70	33	36
31	17	---	160	109	---	124	---	297	---	70	19	---
TOTAL	422.9	3,393	4,513	2,214	2,331	2,434	5,626	8,746	1,118	717	760.3	3,168
MEAN	13.6	113	146	71.4	80.4	78.5	188	282	37.3	23.1	24.5	106
MAX	19	295	256	130	125	145	349	727	97	70	71	594
MIN	9.9	17	75	29	14	16	66	38	17	13	8.3	14

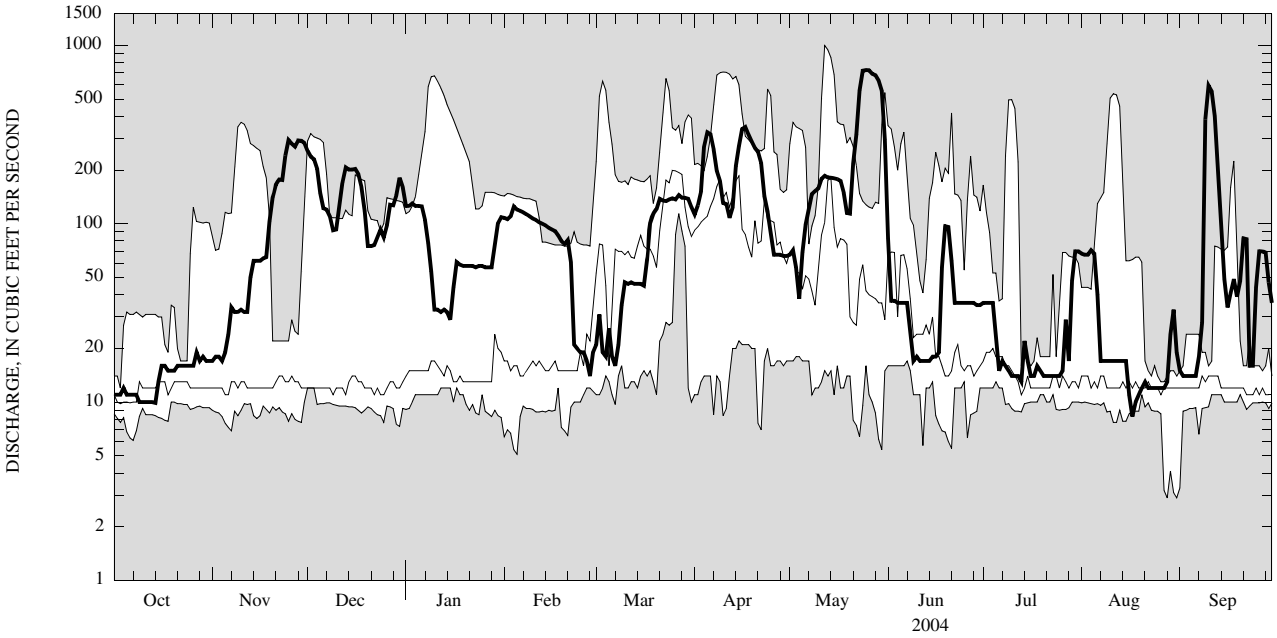
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	15.9	43.2	55.9	62.9	38.9	114	147	125	51.7	25.7	25.4	26.5
MAX	32.4	142	146	276	81.1	197	225	282	88.3	85.6	117	106
(WY)	(1997)	(1997)	(2004)	(1998)	(2003)	(1998)	(2001)	(2004)	(2002)	(1998)	(2003)	(2004)
MIN	9.84	9.86	10.1	11.9	12.6	66.6	93.1	24.8	13.1	11.3	9.62	11.2
(WY)	(2003)	(2001)	(1999)	(2002)	(1997)	(2000)	(1997)	(2001)	(1999)	(1999)	(1999)	(2001)

04227995 CONESUS CREEK NEAR LAKEVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	27,948.5		35,443.2			
ANNUAL MEAN	76.6		96.8		59.7	
HIGHEST ANNUAL MEAN					96.8	2004
LOWEST ANNUAL MEAN					39.1	1999
HIGHEST DAILY MEAN	653	Mar 23	727	May 25	997	May 12, 1996
LOWEST DAILY MEAN	2.9	Aug 28	8.3	Aug 17	2.9	Aug 28, 2003
ANNUAL SEVEN-DAY MINIMUM	4.0	Aug 26	10	Oct 8	4.0	Aug 26, 2003
10 PERCENT EXCEEDS	201		218		153	
50 PERCENT EXCEEDS	41		58		17	
90 PERCENT EXCEEDS	11		14		9.9	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04228500 GENESEE RIVER AT AVON, NY

LOCATION.--Lat 42°55'04", long 77°45'27", Livingston County, Hydrologic Unit 04130003, on right bank 250 ft downstream from bridge on U.S. Highway 20 (State Highway 5), 0.3 mi west of Avon, 0.8 mi downstream from Conesus Creek, and 35.6 mi upstream from mouth.

DRAINAGE AREA.--1,673 mi^2.

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.11 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake, at high flows by Mount Morris Lake (see station 04224000), and by Conesus Lake (see station 04227980). Monthly figures of discharge and runoff August 1955 to September 1965 adjusted for change in contents in Rushford Lake and Mount Morris Lake. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s, June 25, 1972, gage height 40.67 ft; minimum discharge, 47 ft^3/s, Oct. 10, 11, 1980, gage height, 13.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,470 ft^3/s, May 24, gage height, 31.28 ft; minimum discharge, 402 ft^3/s, July 14, gage height, 15.04 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,770	2,280	4,970	4,570	e920	e1,500	5,060	2,870	5,810	748	1,910	3,260
2	1,470	1,860	5,290	4,220	e960	e2,200	6,440	2,040	5,640	655	2,130	3,120
3	1,270	1,490	5,050	4,060	e980	e2,600	6,150	2,270	6,110	569	1,580	2,830
4	1,190	1,520	4,710	4,160	e1,000	e2,800	5,760	1,820	7,040	507	1,300	1,980
5	1,550	1,400	4,420	4,120	e1,000	e2,900	5,920	1,410	6,190	481	1,170	969
6	2,270	1,350	4,100	4,320	e1,000	e3,400	5,270	1,380	5,420	461	1,050	776
7	1,730	1,290	3,970	3,780	e1,100	e3,800	5,450	1,520	5,130	493	944	670
8	1,340	1,200	2,530	2,370	e1,300	4,920	5,690	2,190	5,370	704	806	626
9	1,120	1,070	1,870	e2,000	e1,400	5,750	5,540	2,440	5,100	749	717	4,410
10	997	972	1,920	e1,700	e1,400	6,220	5,600	2,440	4,200	621	656	e5,000
11	902	908	2,370	e1,600	e1,300	6,390	4,770	1,880	3,040	502	614	e3,500
12	829	897	4,470	e1,600	e1,300	6,270	3,750	2,960	1,440	440	738	2,750
13	770	1,110	4,550	e1,600	e1,300	6,040	3,710	4,440	1,100	410	823	3,730
14	722	1,710	4,530	e1,200	e1,300	5,790	6,900	5,260	1,010	554	756	4,980
15	710	1,750	4,410	e940	e1,200	5,840	5,330	5,500	933	1,100	854	6,010
16	1,330	1,640	4,240	e1,100	e1,100	5,820	3,530	5,670	922	2,000	709	6,270
17	2,270	1,800	4,230	e1,500	e980	5,590	4,000	4,880	895	2,000	594	5,180
18	1,920	1,200	4,450	e1,700	e940	5,480	5,280	4,330	2,030	1,530	656	5,180
19	1,850	1,390	4,030	e1,600	e920	5,370	4,530	4,160	3,010	1,160	556	5,560
20	1,930	4,680	3,330	e1,500	e940	5,740	3,880	3,950	1,870	1,300	494	4,980
21	1,490	5,350	2,430	e1,400	e1,100	6,680	5,320	4,270	1,390	1,550	494	5,770
22	873	4,760	2,130	e1,400	e1,300	6,210	6,560	4,630	1,040	1,160	2,110	6,040
23	800	4,890	2,380	e1,400	e1,400	4,950	5,980	5,950	922	829	2,070	5,720
24	802	5,600	4,120	e1,300	e1,500	5,030	5,360	7,860	854	711	1,230	5,460
25	769	5,930	5,500	e1,200	e1,500	5,710	4,540	6,960	797	696	936	5,700
26	724	5,880	4,870	e1,100	e1,400	6,050	4,160	4,740	751	649	778	5,690
27	744	5,540	4,190	e1,000	e1,300	5,350	4,000	4,740	724	1,110	675	5,330
28	2,020	5,600	3,810	e1,000	e1,200	5,750	3,790	6,060	683	3,740	743	4,410
29	2,840	5,400	4,540	e1,000	e1,200	6,190	3,540	6,020	639	3,360	1,060	3,510
30	2,680	4,450	4,730	e1,000	---	5,980	3,260	5,440	681	2,270	1,340	2,080
31	2,590	---	4,820	e980	---	5,530	---	5,660	---	1,640	3,220	---
TOTAL	44,272	84,917	122,960	62,420	34,240	157,850	149,070	125,740	80,741	34,699	33,713	121,491
MEAN	1,428	2,831	3,966	2,014	1,181	5,092	4,969	4,056	2,691	1,119	1,088	4,050
MAX	2,840	5,930	5,500	4,570	1,500	6,680	6,900	7,860	7,040	3,740	3,220	6,270
MIN	710	897	1,870	940	920	1,500	3,260	1,380	639	410	494	626

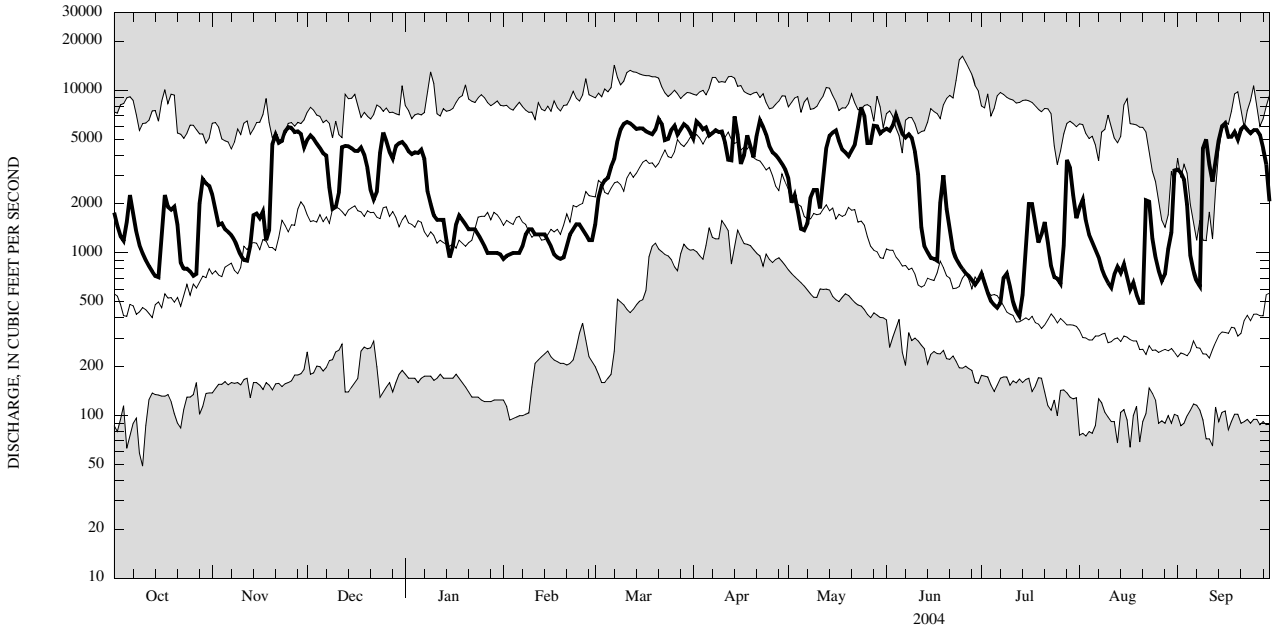
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2004, BY WATER YEAR (WY)

MEAN	1,028	1,582	2,246	2,018	2,300	4,076	4,592	2,388	1,402	845	594	658
MAX	5,146	3,756	5,942	6,715	6,036	8,916	7,846	6,516	4,906	7,032	4,285	4,569
(WY)	(1978)	(1997)	(1973)	(1998)	(1990)	(1956)	(1993)	(1996)	(1989)	(1972)	(2003)	(1977)
MIN	145	182	325	155	397	1,813	1,672	613	281	172	142	111
(WY)	(1964)	(1965)	(1961)	(1961)	(1958)	(1960)	(1995)	(1985)	(1999)	(1962)	(1965)	(1955)

04228500 GENESEE RIVER AT AVON, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1955 - 2004	
ANNUAL TOTAL	1,006,918		1,052,113			
ANNUAL MEAN	2,759		2,875		1,976	
HIGHEST ANNUAL MEAN					2,875	2004
LOWEST ANNUAL MEAN					1,130	1965
HIGHEST DAILY MEAN	8,040	Apr 5	7,860	May 24	16,200	Jun 25, 1972
LOWEST DAILY MEAN	418	Jul 9	410	Jul 13	49	Oct 10, 1980
ANNUAL SEVEN-DAY MINIMUM	461	Jul 4	553	Jul 2	88	Aug 1, 1955
10 PERCENT EXCEEDS	6,220		5,740		5,370	
50 PERCENT EXCEEDS	2,000		2,060		1,100	
90 PERCENT EXCEEDS	738		744		225	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

LOCATION.--Lat 42°57'26", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft downstream from bridge on State Highway 65 at Honeoye Falls, and 15.3 mi upstream from mouth.

DRAINAGE AREA.--196 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft above NGVD of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Outlet of Honeoye Lake not controlled. Some diversion from, and regulation of Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gal/min (1.33 ft^3/s). This pumped water enters creek upstream from gage. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft^3/s, Mar. 28, 1950, gage height, 6.42 ft, datum then in use; minimum discharge, no flow, Aug. 12, 15, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 6.3 ft, present datum; discharge, about 6,600 ft^3/s, from rating curve extended above 3,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 14	1500	1,370	3.55	0600	1,670	3.84
May 24	2045	*2,650	*4.55			

Minimum discharge, 5.6 ft^3/s, Oct. 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

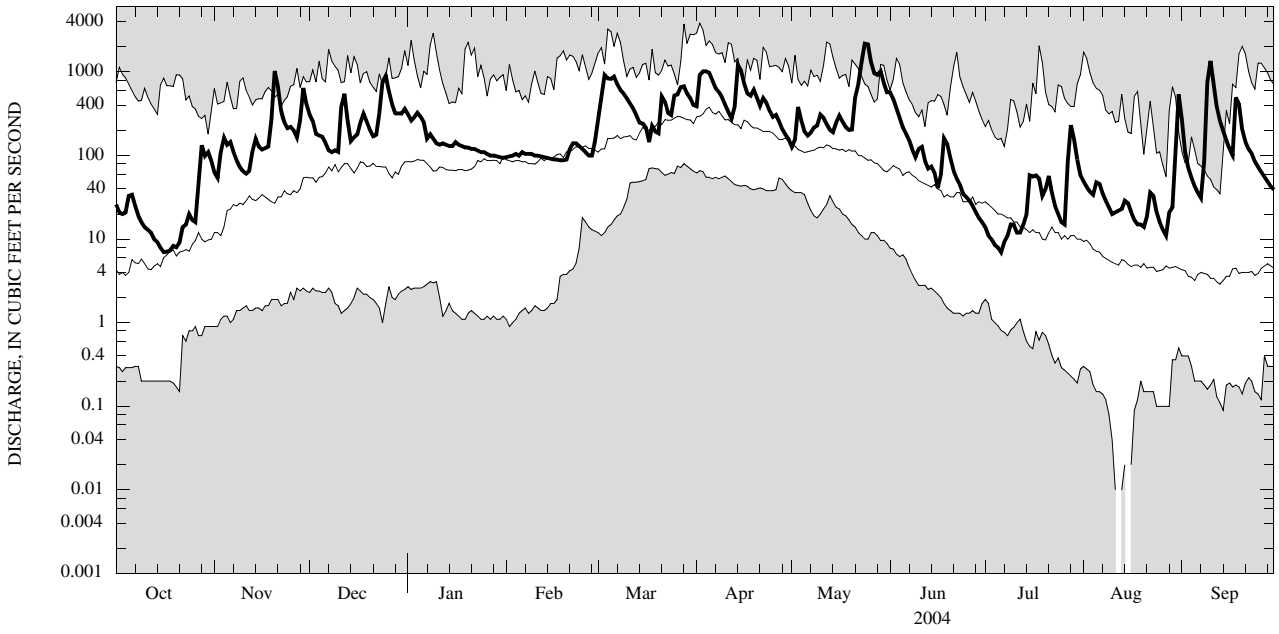
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	63	310	311	e96	e260	389	127	571	14	49	270
2	21	54	259	263	e98	e480	928	156	475	11	42	111
3	20	111	182	288	e100	e920	1,020	382	366	9.9	37	71
4	21	164	174	325	e105	835	1,020	263	281	8.5	34	54
5	33	135	169	292	e100	830	978	194	217	8.0	48	43
6	34	145	143	e250	e110	886	788	174	184	7.0	46	36
7	25	111	116	e160	e105	716	642	189	153	9.3	35	31
8	19	88	e110	e180	e105	608	577	217	118	11	29	83
9	16	73	e116	e160	e105	553	496	229	96	15	24	757
10	14	65	111	e140	e100	485	408	310	120	15	20	1,360
11	13	61	389	e135	e100	420	334	284	127	12	21	699
12	12	66	550	e140	e98	369	278	237	87	12	22	381
13	10	113	261	e135	e96	304	389	203	70	15	23	258
14	9.2	160	149	e130	e94	249	1,210	191	74	20	29	196
15	7.9	128	166	e130	e92	242	1,040	249	62	58	27	151
16	7.0	118	179	e145	e90	216	727	301	41	56	21	119
17	7.1	123	248	e135	e90	145	556	254	60	58	17	101
18	7.3	128	319	e130	e88	226	521	219	161	53	15	498
19	8.3	275	257	e125	e88	194	616	203	138	33	15	413
20	8.0	1,030	203	e125	e90	185	494	205	93	40	14	204
21	9.1	676	170	e120	e120	509	394	502	66	57	19	146
22	14	344	178	e120	e140	438	488	724	53	36	36	119
23	15	252	323	e115	e140	325	430	1,310	45	25	33	106
24	20	213	761	e110	e130	306	344	2,200	35	20	21	85
25	17	221	905	e110	e120	524	290	2,150	32	16	16	73
26	16	200	586	e105	e110	541	307	1,310	29	15	13	64
27	49	165	408	e100	e100	660	259	965	25	86	11	56
28	133	266	319	e100	e100	678	208	926	21	232	21	49
29	99	645	320	e98	e150	556	178	1,020	18	157	24	43
30	110	414	318	e96	---	489	157	737	16	90	128	39
31	86	---	362	e94	---	402	---	571	---	58	541	---
TOTAL	886.9	6,607	9,061	4,867	3,060	14,551	16,466	17,002	3,834	1,257.7	1,431	6,616
MEAN	28.6	220	292	157	106	469	549	548	128	40.6	46.2	221
MAX	133	1,030	905	325	150	920	1,210	2,200	571	232	541	1,360
MIN	7.0	54	110	94	88	145	157	127	16	7.0	11	31

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)												
MEAN	39.4	75.4	128	131	162	300	332	181	79.3	31.5	24.0	24.0
MAX	443	345	493	486	664	685	1,146	608	344	377	336	538
(WY)	(1978)	(1978)	(1946)	(1998)	(1976)	(1976)	(1993)	(1996)	(1989)	(1992)	(1992)	(1977)
MIN	0.45	2.06	2.04	2.15	10.3	107	50.0	23.7	3.19	0.94	0.24	0.62
(WY)	(1964)	(1961)	(1961)	(1961)	(1958)	(1965)	(1946)	(1995)	(1995)	(2001)	(2001)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1946 - 2004	
ANNUAL TOTAL	58,483.7		85,639.6			
ANNUAL MEAN	160		234		125	
HIGHEST ANNUAL MEAN					238	1993
LOWEST ANNUAL MEAN					46.4	1965
HIGHEST DAILY MEAN	1,200	Mar 18	2,200	May 24	3,820	Apr 2, 1993
LOWEST DAILY MEAN	2.1	Jul 20	7.0	Oct 16	0.00	Aug 12, 2001
ANNUAL SEVEN-DAY MINIMUM	3.1	Jul 15	7.8	Oct 15	0.01	Aug 10, 2001
10 PERCENT EXCEEDS	385		580		330	
50 PERCENT EXCEEDS	94		128		52	
90 PERCENT EXCEEDS	8.9		16		2.4	



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1998 to current year.
CHEMICAL DATA: Water years 1954 (a), 1998 to 2003 (e), 2004 (e).
NUTRIENT DATA: Water years 1954 (a), 1998 to 2003 (e), 2004 (e).

INSTRUMENTATION.--Automatic water sampler since March 1998.

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

REMARKS.--Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Discharge, cfs (00060)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
OCT 26-30	1540	0839	88	57	20	35	.69	<.01	.10	.027	.169
OCT 30-NOV 02	0850	1250	78	20	53	16	.59	<.01	.17	.031	.092
02-05	1350	0850	125	53	21	31	.68	<.01	.16	.021	.117
NOV 05-12	0920	0820	93	63	60	17	.80	<.01	.35	.012	.069
DEC 10-11	0640	0839	136	42	24	10	.54	<.03	.38	.008	.060
11-16	0930	0930	301	32	18	37	.50	.01	.43	.026	.128
JAN 30-FEB 04	0950	0849	98	--	--	--	.49	.05	.38	.083	.493
19-24	1105	1004	119	63	22	8	.42	.03	.50	.011	.030
FEB 26-MAR 03	1115	0815	249	58	20	65	.66	.03	.59	.010	.166
03-10	0905	0805	726	35	16	86	.73	.03	.43	.012	.180
10-17	1030	0930	303	44	26	17	.44	.02	.27	.009	.052
APR 13-19	0455	0655	751	50	39	104	.70	.02	.39	.014	.216
MAY 22-26	1730	0729	1,770	31	21	414	1.4	.26	.24	.135	.644
MAY 26-JUN 02	0820	0720	827	34	22	101	.77	.05	.26	.026	.236
JUL 14-16	0745	0445	46	45	22	71	.86	.07	.24	<.001	.202
JUL 27-AUG 03	0825	0725	102	37	16	90	.81	.04	.47	.023	.220
SEP 08-15	0930	0830	541	21	11	146	1.5	.05	.19	.029	.332

< Less than.

04230380 OATKA CREEK AT WARSAW, NY

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft downstream from bridge on Court Street, Warsaw.

DRAINAGE AREA.--39.1 mi^2.

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 987.15 ft above NGVD of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,110 ft^3/s, July 8, 1998, gage height 9.90 ft; minimum discharge, 0.90 ft^3/s, Aug. 1, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s (revised) and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1730	1,330	5.03	0215	1,070	4.40
Nov 28	1545	1,110	4.52	1000	1,240	4.83
Mar 5	1900	1,430	5.25	0615	*1,650	*5.73
Apr 13	2115	1,130	4.55			

Minimum discharge, 6.3 ft^3/s, Aug. 27, 28, Sept. 6, 7, 8, gage height, 0.53 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	24	121	60	e28	55	203	39	110	12	27	14
2	39	44	83	75	e29	319	484	45	79	11	18	11
3	20	75	67	152	e29	378	249	44	66	10	15	8.7
4	71	49	60	102	e30	345	197	37	50	11	15	7.9
5	59	63	54	81	e30	854	147	37	44	15	17	7.5
6	31	54	48	63	e32	541	126	40	42	11	14	6.5
7	22	38	40	e48	e35	212	127	97	37	30	12	6.3
8	18	30	42	e55	e38	176	104	81	32	28	12	16
9	16	25	39	e45	e36	117	89	159	29	18	10	766
10	14	24	55	e42	e36	101	77	88	29	15	11	110
11	13	27	149	e44	e35	95	68	66	28	13	13	47
12	12	31	70	e45	e35	90	63	49	24	12	11	30
13	12	122	53	e40	35	e74	391	42	23	11	13	22
14	12	66	42	e39	e34	e80	401	38	24	34	14	19
15	42	59	49	e38	e33	102	146	53	24	42	11	17
16	27	82	50	e38	e32	e60	102	49	21	51	10	16
17	19	75	122	e39	e30	e65	91	38	28	32	8.7	101
18	17	58	75	e38	e30	e76	124	62	31	22	8.4	216
19	19	455	62	e36	29	e70	104	51	29	33	9.7	55
20	18	203	55	e35	28	114	82	67	23	30	12	36
21	17	84	50	e35	42	211	77	216	19	21	18	28
22	20	62	53	e33	e38	116	93	140	20	17	11	24
23	20	53	132	e32	e40	97	76	694	18	20	9.5	20
24	17	54	213	e31	e36	132	64	759	16	15	8.6	19
25	15	60	122	e31	e36	405	58	225	19	13	7.9	18
26	23	49	77	e30	e34	254	62	196	18	19	7.3	17
27	60	53	62	e30	e34	369	58	122	15	105	7.0	16
28	48	504	56	e30	e34	164	50	352	15	51	7.5	15
29	41	239	58	e30	36	120	44	108	15	25	27	15
30	36	119	116	e29	---	99	39	79	14	20	34	15
31	27	---	76	e29	---	103	---	119	---	30	25	---
TOTAL	823	2,881	2,351	1,455	974	5,994	3,996	4,192	942	777	424.6	1,699.9
MEAN	26.5	96.0	75.8	46.9	33.6	193	133	135	31.4	25.1	13.7	56.7
MAX	71	504	213	152	42	854	484	759	110	105	34	766
MIN	12	24	39	29	28	55	39	37	14	10	7.0	6.3
CFSM	0.68	2.46	1.94	1.20	0.86	4.95	3.41	3.46	0.80	0.64	0.35	1.45
IN.	0.78	2.74	2.24	1.38	0.93	5.70	3.80	3.99	0.90	0.74	0.40	1.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	24.1	49.6	66.6	67.7	76.5	127	112	55.5	32.2	19.2	13.5	19.5
MAX	76.7	131	130	234	235	232	185	135	165	145	86.8	166
(WY)	(1978)	(1986)	(1978)	(1979)	(1976)	(2003)	(1996)	(2004)	(1989)	(1998)	(1992)	(1977)
MIN	2.76	5.09	17.2	15.1	22.5	49.2	33.2	16.9	6.36	2.52	2.36	1.81
(WY)	(1965)	(1965)	(1965)	(1981)	(1980)	(1981)	(1995)	(1995)	(1965)	(1965)	(1965)	(1964)

04230380 OATKA CREEK AT WARSAW, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	22,870.1		26,509.5			
ANNUAL MEAN	62.7		72.4		55.3	
HIGHEST ANNUAL MEAN					83.3	1998
LOWEST ANNUAL MEAN					29.6	1965
HIGHEST DAILY MEAN	866	Mar 21	854	Mar 5	2,050	Jul 8, 1998
LOWEST DAILY MEAN	6.1	Aug 28	6.3	Sep 7	1.0	Aug 1, 1965
ANNUAL SEVEN-DAY MINIMUM	7.1	Sep 8	8.4	Aug 22	1.4	Jul 26, 1965
ANNUAL RUNOFF (CFSM)	1.60		1.85		1.41	
ANNUAL RUNOFF (INCHES)	21.76		25.22		19.22	
10 PERCENT EXCEEDS	117		142		122	
50 PERCENT EXCEEDS	36		38		29	
90 PERCENT EXCEEDS	10		13		5.3	

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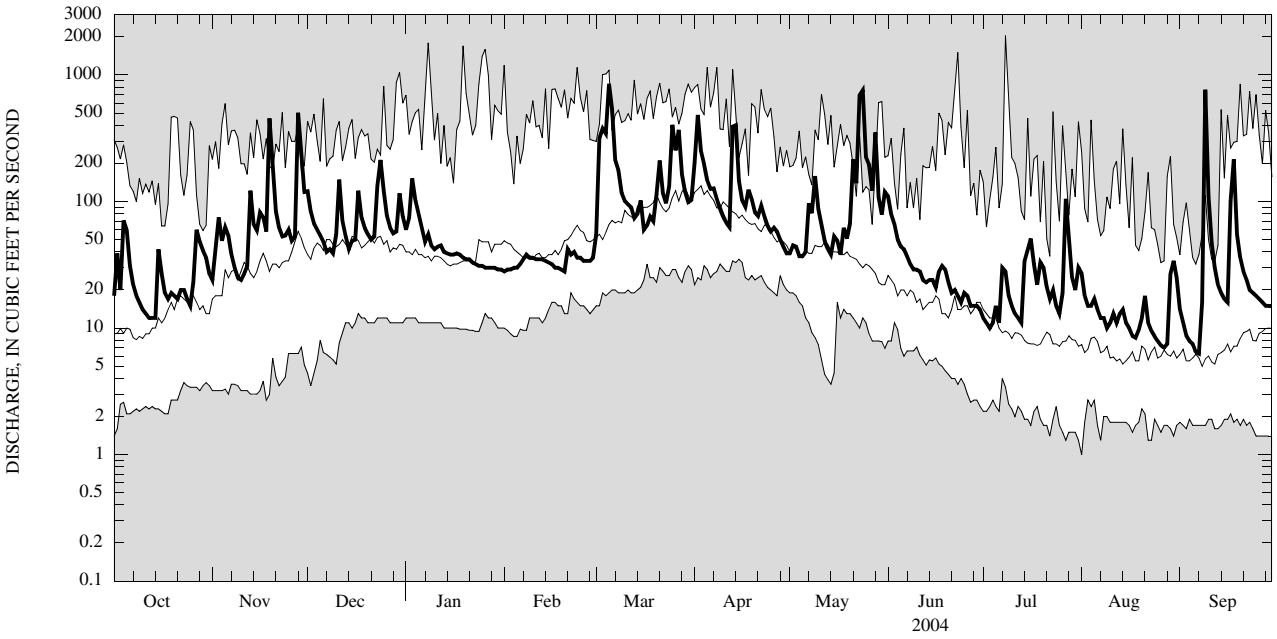


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04230500 OATKA CREEK AT GARBUTT, NY

LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft downstream from bridge on Union Street in Garbutt, 1.5 mi west of Scottsville, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--200 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area. WDR NY 1971: 1960(M). WDR NY 1993: 1991. WDR NY 1997: 1996 (P).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft^3/s, Mar. 31, 1960, gage height, 8.64 ft; minimum discharge, 3.3 ft^3/s, Sept. 11, 12, 1958; minimum gage height, 1.88 ft, June 19, 1959, result of regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 7	0500	1,960	5.65	0121	1,770	5.47
Apr 3	2100	1,700	5.39	1936	*2,360	*6.18
Apr 15	1215	1,680	5.37			

Minimum discharge, 40 ft^3/s, Oct. 16, 17, gage height, 2.41 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	90	921	358	125	229	434	231	426	96	125	143
2	46	78	612	293	123	442	932	228	457	91	129	107
3	50	102	453	309	125	1,140	1,470	237	372	87	112	88
4	71	175	322	406	127	1,560	1,460	233	300	85	114	80
5	60	159	310	428	130	1,610	1,130	218	247	87	102	75
6	128	151	277	359	131	1,770	876	209	217	82	94	71
7	90	182	239	223	137	1,810	716	199	200	101	99	69
8	66	136	185	210	e150	1,120	622	217	183	132	90	98
9	57	112	211	e240	e160	761	521	253	172	148	85	1,270
10	52	96	208	e200	160	615	435	375	178	115	83	1,630
11	49	91	271	184	159	482	381	333	161	99	78	1,180
12	47	90	379	194	154	429	344	252	151	100	76	760
13	46	135	344	195	150	377	404	222	150	96	77	386
14	45	287	223	176	150	332	1,210	201	139	107	76	304
15	47	334	184	e170	e140	329	1,560	191	129	125	74	259
16	44	258	226	e160	e135	365	1,020	194	122	139	74	226
17	65	283	252	163	128	263	622	213	163	142	71	213
18	66	293	352	168	e128	279	523	185	197	154	68	298
19	56	300	342	163	132	284	737	175	243	129	71	447
20	49	689	290	158	132	308	665	239	167	117	72	450
21	47	725	240	152	142	466	472	251	144	123	68	280
22	50	656	244	152	164	573	428	329	132	109	65	210
23	49	372	284	e140	e180	591	426	508	126	100	64	178
24	48	248	508	141	e180	448	382	1,030	121	90	63	161
25	50	217	681	e135	e175	730	357	1,630	139	86	60	148
26	52	225	643	132	e165	950	332	1,630	128	84	57	144
27	54	209	497	132	e160	1,150	319	1,000	119	155	58	136
28	79	413	341	132	e150	977	299	698	111	309	61	129
29	132	1,100	299	130	e160	850	276	570	103	279	e72	123
30	110	1,170	303	127	---	589	250	703	98	170	e160	119
31	107	---	361	127	---	447	---	501	---	135	182	---
TOTAL	1,954	9,376	11,002	6,257	4,252	22,276	19,603	13,455	5,595	3,872	2,680	9,782
MEAN	63.0	313	355	202	147	719	653	434	186	125	86.5	326
MAX	132	1,170	921	428	180	1,810	1,560	1,630	457	309	182	1,630
MIN	42	78	184	127	123	229	250	175	98	82	57	69
CFSM	0.32	1.56	1.77	1.01	0.73	3.59	3.27	2.17	0.93	0.62	0.43	1.63
IN.	0.36	1.74	2.05	1.16	0.79	4.14	3.65	2.50	1.04	0.72	0.50	1.82

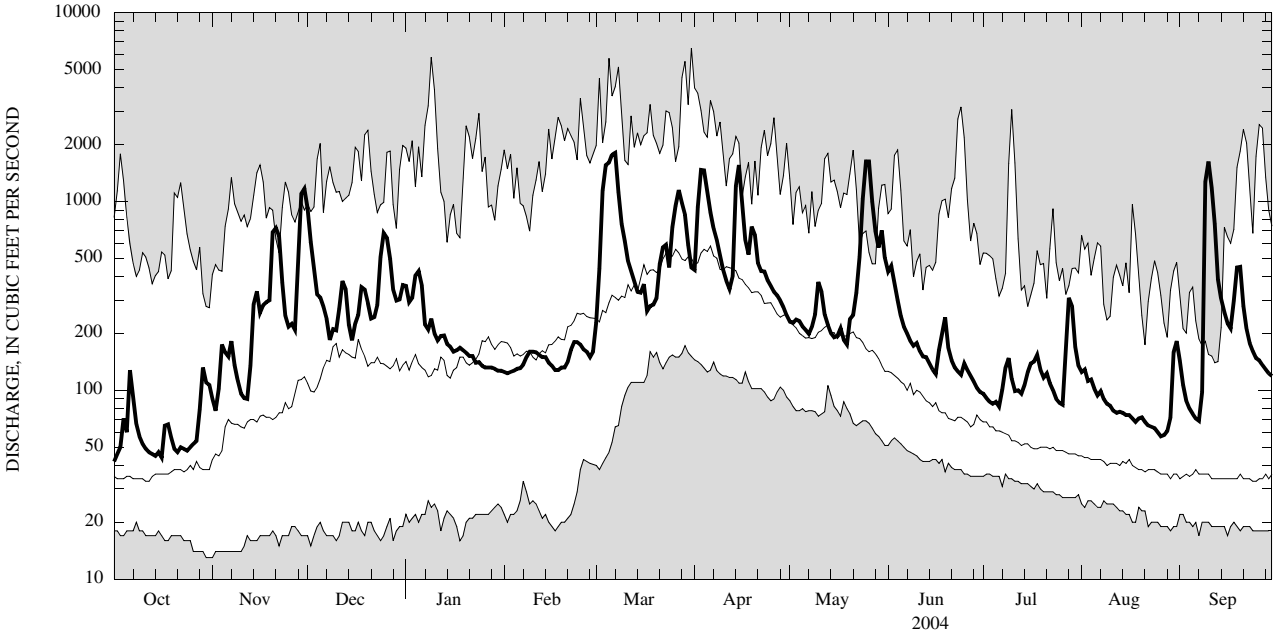
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

MEAN	75.4	138	219	235	296	548	503	254	139	77.4	58.5	64.3
MAX	400	567	798	881	868	1,048	1,069	581	760	355	294	748
(WY)	(1978)	(1986)	(1978)	(1998)	(1976)	(1956)	(1947)	(1984)	(1989)	(1998)	(1992)	(1977)
MIN	18.0	17.2	20.1	22.9	33.4	244	117	99.7	45.6	31.8	22.5	19.2
(WY)	(1966)	(1965)	(1961)	(1961)	(1958)	(1965)	(1946)	(1995)	(1949)	(1965)	(1965)	(1965)

04230500 OATKA CREEK AT GARBUTT, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1946 - 2004	
ANNUAL TOTAL	91,232		110,104			
ANNUAL MEAN	250		301		217	
HIGHEST ANNUAL MEAN					371	1978
LOWEST ANNUAL MEAN					117	1965
HIGHEST DAILY MEAN	2,220	Mar 19	1,810	Mar 7	6,500	Mar 31, 1960
LOWEST DAILY MEAN	38	Sep 21	42	Oct 1	13	Oct 30, 1966
ANNUAL SEVEN-DAY MINIMUM	41	Sep 19	47	Oct 10	14	Oct 26, 1966
ANNUAL RUNOFF (CFSM)	1.25		1.50		1.08	
ANNUAL RUNOFF (INCHES)	16.97		20.48		14.73	
10 PERCENT EXCEEDS	496		692		510	
50 PERCENT EXCEEDS	176		178		110	
90 PERCENT EXCEEDS	48		71		30	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04230500 OATKA CREEK AT GARBUTT, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1962, 1971, 1975 to 1977, 1989-90, 1997 to current year.
CHEMICAL DATA: Water years 1954 (a), 1962 (a), 1971 (a), 1975 (b), 1976-77 (e), 1989 (c), 1990 (d), 1997 to 2003 (e), 2004 (d).
NUTRIENT DATA: Water years 1954 (a), 1962 (a), 1971 (a), 1975 (b), 1976-77 (e), 1989 (c), 1990 (d), 1997 to 2003 (e), 2004 (d).
SEDIMENT DATA: Water years 1975 to 1977 (e), 1989 (c), 1990 (d), 1991 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1959 to March 1961.
SUSPENDED SEDIMENT DISCHARGE: 1975 to September 1977.

INSTRUMENTATION.--Automatic water sampler since July 1997.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 282 mg/L Aug. 17, 1997, minimum daily mean, 0 mg/L Apr. 14, 1975.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,980 tons Mar. 5, 1976, minimum daily, 0 ton Apr, 14, 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT											
27-30	2015	0914	103	60	206	14	.51	.01	1.3	.014	.080
OCT 30-NOV 02	0925	1424	96	65	205	10	.62	<.01	1.3	.023	.058
02-05	1525	0824	136	65	198	15	.68	.01	1.4	.027	.084
05-12	0950	0850	128	61	144	21	.65	<.01	1.2	.025	.068
DEC											
10-11	1420	0920	217	60	173	7	.45	<.03	2.8	.016	.050
11-16	1005	1005	280	50	106	10	.47	<.01	2.0	.029	.120
JAN 30-FEB 04	0915	0814	126	--	--	--	.55	.04	2.5	.095	.548
19-24	1035	0934	154	76	119	6	.69	.02	1.7	.011	.024
FEB 26-MAR 03	1140	0840	281	85	143	27	.76	.04	2.3	.013	.114
03-10	0925	0825	1,380	41	46	74	1.2	.07	2.1	.033	.207
10-17	1105	1005	395	64	115	14	.57	.03	3.0	.025	.045
APR											
13-20	2225	0725	928	49	92	19	.61	.02	2.3	.010	.056
MAY											
23-26	1005	0904	1,240	35	54	58	1.1	<.03	1.8	.030	.228
MAY 26-JUN 02	0855	0755	722	39	77	28	.81	.03	1.9	.026	.101
JUL											
14-21	0705	0605	132	62	176	51	1.1	.09	1.8	<.001	.135
JUL 27-AUG 03	0910	0810	187	73	199	25	.58	.02	2.1	.029	.087
SEP											
09-16	0615	0515	829	45	114	34	1.2	<.01	.89	.052	.146

< Less than.

04230650 GENESEE RIVER AT BALLANTYNE BRIDGE, NEAR MORTIMER, NY

LOCATION.--Lat 43°05'32", long 77°40'50", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft upstream from Ballantyne Bridge on State Highway 252, 1.6 mi west of Mortimer, and 2.8 mi upstream from Erie (Barge) Canal.

DRAINAGE AREA.--2,210 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above NGVD of 1929.

REMARKS.--River regulated for operation of Erie (Barge) Canal, downstream powerplants, and at high stages by Mount Morris Lake (see station 04224000). Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 20.57 ft, Jan. 10, 1998; minimum gage height recorded, 8.20 ft, Nov. 9, 1979, but may have been lower as a result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.71 ft, Jan. 25; minimum, 10.34 ft, Jan. 16.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 16.76 ft, Sept. 10; minimum elevation, 10.69 ft, Nov. 8.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.94	11.84	13.66	13.17	11.55	12.10	12.94	11.96	13.67	11.48	11.79	12.42
2	11.99	11.85	13.63	12.93	11.66	12.57	13.98	11.65	13.63	11.43	11.95	12.06
3	11.91	11.34	13.30	12.71	11.68	13.66	14.81	12.38	13.62	11.43	11.58	12.03
4	11.83	10.94	13.07	12.92	11.68	13.70	14.68	12.22	13.96	11.58	11.54	11.80
5	11.91	11.08	12.79	12.95	11.58	13.58	14.65	12.06	13.59	11.43	11.51	11.37
6	12.31	10.89	12.63	12.92	11.68	13.95	13.98	12.11	13.20	11.33	11.47	11.39
7	11.93	10.96	12.74	12.82	11.82	13.86	13.80	12.09	13.04	11.37	11.47	11.41
8	11.75	10.81	12.42	12.58	12.03	13.80	13.73	12.13	13.17	11.42	11.55	11.50
9	11.68	10.79	12.31	13.01	12.19	13.87	13.52	12.10	13.05	11.46	11.37	13.42
10	11.67	10.84	12.31	13.22	12.27	13.87	13.40	12.33	12.75	11.35	11.28	16.52
11	11.67	10.86	12.19	12.73	12.23	13.83	13.05	12.08	12.36	11.32	11.31	14.96
12	11.67	10.89	13.08	12.73	12.22	13.66	12.59	12.32	11.76	11.30	11.36	13.49
13	11.59	11.22	13.10	12.79	12.15	13.51	12.42	12.79	11.60	11.22	11.36	13.22
14	11.52	11.29	12.99	12.63	12.09	13.32	14.68	13.16	11.60	11.41	11.45	13.34
15	11.58	11.36	12.87	12.24	12.01	13.31	14.57	13.38	11.44	11.62	11.49	13.63
16	11.73	11.31	12.97	12.01	11.88	13.44	13.43	13.41	11.44	11.83	11.36	13.60
17	12.15	11.63	13.07	12.32	11.78	13.23	13.02	13.27	11.48	11.83	11.28	13.11
18	12.07	12.07	13.24	12.64	11.78	13.22	13.40	12.88	11.88	11.52	11.27	13.07
19	12.07	11.42	13.16	12.49	11.88	13.21	13.43	12.71	12.30	11.53	11.28	13.55
20	12.10	12.57	12.89	12.31	11.79	13.49	12.88	12.60	11.72	11.73	11.28	13.12
21	11.90	13.33	12.45	12.25	11.91	14.01	13.37	12.87	11.57	11.68	11.36	13.35
22	11.70	13.08	12.23	12.28	12.11	13.98	13.94	13.14	11.50	11.48	11.66	13.44
23	11.72	13.09	12.45	12.23	12.31	13.34	13.74	13.90	11.40	11.41	11.69	13.23
24	11.72	13.13	13.30	12.11	12.32	13.34	13.28	15.46	11.37	11.48	11.37	13.10
25	11.85	13.31	14.09	12.00	12.22	13.79	12.92	16.15	11.39	11.34	11.30	13.26
26	11.86	13.34	13.65	11.83	12.06	14.09	12.77	14.74	11.30	11.32	11.27	13.26
27	11.72	13.15	13.25	11.67	11.87	13.94	12.81	14.03	11.31	11.68	11.31	13.08
28	11.88	13.14	12.80	11.64	11.82	13.99	12.68	14.07	11.40	12.60	11.28	12.74
29	12.20	13.74	13.10	11.66	11.81	14.02	12.52	14.14	11.47	12.67	11.59	12.35
30	12.03	13.29	13.24	11.62	---	13.64	12.19	13.71	11.52	12.03	11.80	11.89
31	12.09	---	13.28	11.61	---	13.22	---	13.61	---	11.64	12.40	---
MEAN	11.86	11.95	12.98	12.42	11.94	13.57	13.44	13.08	12.18	11.58	11.48	12.96
MAX	12.31	13.74	14.09	13.22	12.32	14.09	14.81	16.15	13.96	12.67	12.40	16.52
MIN	11.52	10.79	12.19	11.61	11.55	12.10	12.19	11.65	11.30	11.22	11.27	11.37

CAL YR 2003 MEAN 12.30 MAX 15.93 MIN 10.77
WTR YR 2004 MEAN 12.45 MAX 16.52 MIN 10.79

04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft downstream from mainline tracks of Penn Central Transportation Co., and 0.3 mi downstream from Black Creek Dam.

DRAINAGE AREA.--130 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-3: Drainage area. WDR NY-2000-3: 1998 (M), 1999 (M).

GAGE.--Water-stage recorder. Datum of gage is 551.88 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft^3/s, Mar. 31, 1960, gage height, 9.44 ft; minimum discharge, 0.17 ft^3/s, Aug. 12, 2001; minimum gage height, 0.93 ft, Aug. 5, 6, 7, Sept. 15, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 30	1230	861	4.58	0830	907	4.84
Mar 4	1600	1,030	5.12	1730	1,230	5.56
Apr 3	2200	954	4.95	1730	*2,490	*7.83

Minimum discharge, 5.7 ft^3/s, Oct. 15, gage height, 1.38 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	34	546	181	65	161	207	136	185	47	252	170
2	11	39	300	149	e62	337	394	134	213	37	198	98
3	12	82	207	156	65	709	857	156	187	41	118	68
4	18	125	127	195	e72	994	898	152	155	40	199	54
5	18	109	138	207	e80	862	689	138	118	54	220	43
6	18	72	110	139	e82	715	512	135	100	60	171	36
7	18	50	85	82	e86	701	386	130	91	54	119	30
8	14	39	56	91	e92	467	319	120	88	65	89	55
9	11	30	83	87	e98	350	271	121	88	69	70	1,060
10	11	24	78	e80	e98	298	223	134	138	55	62	2,220
11	11	23	123	74	e100	252	183	132	149	41	58	1,970
12	10	24	162	69	e100	221	160	116	101	35	56	963
13	8.8	32	146	69	e100	190	198	108	87	48	55	439
14	8.5	43	65	e70	102	163	506	141	87	57	56	247
15	13	71	72	e70	e96	152	862	134	107	65	52	170
16	8.2	75	101	e70	e80	145	529	121	115	62	45	131
17	11	77	135	e67	e80	108	303	105	101	57	41	111
18	12	84	197	68	e78	127	255	92	153	58	41	99
19	13	104	222	70	77	136	369	87	145	68	39	93
20	14	144	178	70	76	145	448	88	107	124	43	93
21	17	214	133	68	e80	220	316	145	80	312	45	85
22	18	229	130	e70	e95	315	259	205	68	130	39	76
23	19	122	180	e68	e110	336	237	236	71	68	31	65
24	19	85	283	e68	e120	246	200	779	62	50	30	59
25	20	70	369	e68	e114	314	174	1,160	69	38	31	58
26	27	74	385	64	e110	478	191	903	85	34	28	54
27	37	85	263	65	e110	525	212	449	69	225	23	51
28	42	187	179	61	e110	487	210	286	55	578	24	51
29	49	466	148	66	117	370	190	251	53	530	46	48
30	43	819	154	e62	---	261	155	190	51	207	226	47
31	40	---	181	74	---	211	---	145	---	153	248	---
TOTAL	581.2	3,632	5,536	2,798	2,655	10,996	10,713	7,229	3,178	3,462	2,755	8,744
MEAN	18.7	121	179	90.3	91.6	355	357	233	106	112	88.9	291
MAX	49	819	546	207	120	994	898	1,160	213	578	252	2,220
MIN	8.2	23	56	61	62	108	155	87	51	34	23	30
CFSM	0.14	0.93	1.37	0.69	0.70	2.73	2.75	1.79	0.81	0.86	0.68	2.24
IN.	0.17	1.04	1.58	0.80	0.76	3.15	3.07	2.07	0.91	0.99	0.79	2.50

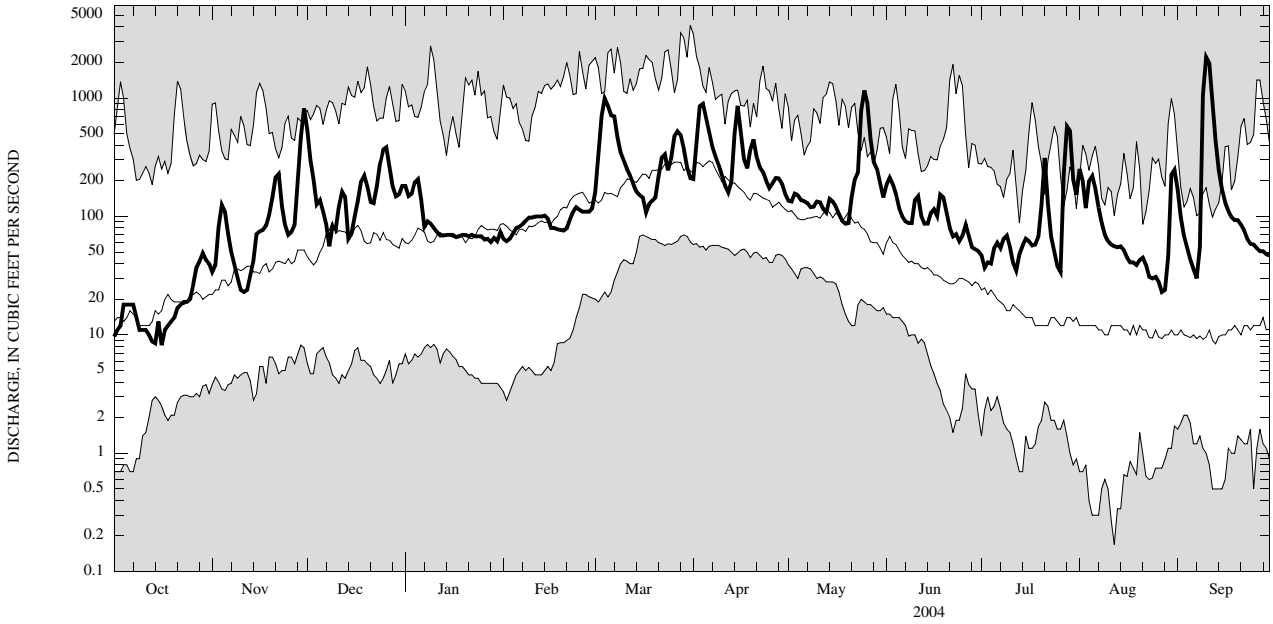
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

MEAN	39.4	75.7	122	128	185	329	254	131	65.9	28.2	22.7	29.4
MAX	235	405	497	484	460	664	497	325	348	143	201	291
(WY)	(1946)	(1971)	(1978)	(1998)	(1981)	(1971)	(1947)	(1956)	(1989)	(1992)	(1992)	(2004)
MIN	2.61	6.07	5.68	6.15	15.4	122	51.6	38.1	10.7	3.75	2.35	1.66
(WY)	(1964)	(1965)	(1961)	(1961)	(1958)	(1989)	(1946)	(1949)	(1949)	(1965)	(2001)	(1959)

04231000 BLACK CREEK AT CHURCHVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1946 - 2004	
ANNUAL TOTAL	47,130.9		62,279.2			
ANNUAL MEAN	129		170		117	
HIGHEST ANNUAL MEAN					207	1978
LOWEST ANNUAL MEAN					52.3	1953
HIGHEST DAILY MEAN	1,680	Mar 19	2,220	Sep 10	4,120	Mar 31, 1960
LOWEST DAILY MEAN	3.9	Sep 12	8.2	Oct 16	0.17	Aug 12, 2001
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 8	10	Oct 10	0.47	Aug 3, 1959
ANNUAL RUNOFF (CFSM)	0.993		1.31		0.902	
ANNUAL RUNOFF (INCHES)	13.49		17.82		12.26	
10 PERCENT EXCEEDS	275		369		290	
50 PERCENT EXCEEDS	83		100		50	
90 PERCENT EXCEEDS	11		31		6.9	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04231000 BLACK CREEK AT CHURCHVILLE, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1956, 1961, 1962, 1965 to 1976, 1998 to current year.
CHEMICAL DATA: Water years 1954 (a), 1956 (a), 1961 (b), 1962 (e), 1965 (a), 1966 to 1974 (d), 1975-76 (e), 1998 to 2003 (e), 2004 (d).
NUTRIENT DATA: Water years 1954 (a), 1956 (a), 1961 (b), 1962 (e), 1965 (a), 1966 to 1974 (d), 1975-76 (e), 1998 to 2004 (e), 2004 (d).
SEDIMENT DATA: Water years 1975-76 (e).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1961 to September 1962.

INSTRUMENTATION.--Automatic water sampler since April 1998.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT											
26-30	0220	0920	40	74	483	6	.58	.07	.59	.017	.061
OCT 30-NOV 02	0955	0854	37	79	403	15	.62	<.01	.74	.012	.040
02-05	0955	0854	94	78	351	12	.84	.03	.72	.025	.069
05-12	1015	0915	44	74	283	6	.98	.03	1.6	.038	.074
MAR											
01-03	1105	0904	297	81	156	38	.83	.05	2.4	.021	.105
03-10	0950	0850	670	52	85	19	.92	.05	2.4	.034	.104
10-17	1145	1045	188	71	133	<5	.69	.02	2.8	.029	.025
MAY											
23-26	1245	0844	865	35	88	106	1.8	<.03	1.1	.042	.368
MAY 26-JUN 02	0925	0825	297	47	107	50	1.4	.02	1.7	.038	.153
JUL											
14-21	0845	0745	82	64	213	22	.37	.01	2.7	<.001	.041
JUL 27-AUG 03	0950	0850	308	53	135	41	1.4	.06	1.7	.053	.184
SEP											
09-15	0115	2014	1,030	30	74	60	1.5	<.01	.94	.048	.206

< Less than.

04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft downstream from Rochester Gas and Electric Corporation plant, 5,100 ft upstream from bridge on Driving Park Avenue in Rochester, and 6.4 mi upstream from mouth.

DRAINAGE AREA.--2,467 mi^2.

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 244.24 ft above NGVD of 1929 (245.00 ft, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi upstream at datum 506.85 ft, Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 5.76 ft higher than present datum. June 20, 1956 to Sept. 30, 1969, at present site at datum 2.76 ft higher than present datum. Oct. 1, 1969 to Sept. 30, 1985, at present site at datum 2.00 ft higher than present datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake, Mount Morris Lake (see station 04224000), and Conesus Lake (see station 04227980).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Mt. Morris Reservoir in November 1951, 48,300 ft^3/s, Mar. 30, 1916, gage height 15.3 ft, site and datum then in use; maximum at present site, 34,400 ft^3/s, Mar. 19, 1942; maximum gage height, 17.08 ft, Apr. 2, 1940, datum then in use; minimum discharge, less than 10 ft^3/s, occurred during low-water periods in some years when power plant was shut down. Maximum discharge, since construction of Mt. Morris Reservoir in November 1951, 29,600 ft^3/s, June 25, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge on Mar. 18, 1865, was about 54,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,200 ft^3/s, May 25, gage height, 12.53 ft, result of regulation; minimum daily discharge, about 920 ft^3/s, July 4. Minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,160	3,650	e7,800	5,900	1,350	2,380	7,140	4,730	7,930	e1,260	2,820	4,830
2	1,740	2,660	e7,700	5,560	1,240	3,910	9,280	3,280	7,690	1,320	3,420	4,060
3	1,540	3,070	e6,900	5,360	1,380	7,330	10,900	3,540	7,720	e1,120	2,730	3,400
4	1,490	3,620	e6,300	5,570	1,380	7,550	10,600	3,570	9,040	e920	2,200	3,060
5	1,500	2,990	e5,900	5,600	1,440	7,650	10,400	2,570	8,080	e1,300	2,160	1,590
6	2,680	e2,400	e5,400	5,770	1,400	8,470	8,810	2,450	6,500	e1,030	1,930	1,320
7	2,460	e1,900	e5,200	5,000	1,440	8,130	8,320	2,550	6,250	e1,110	1,650	1,160
8	1,670	e2,000	e4,400	3,210	1,620	8,000	8,190	3,630	6,410	e1,300	1,580	1,420
9	1,420	e1,700	e3,100	2,670	1,850	8,440	7,970	3,730	6,370	1,450	1,510	9,500
10	1,260	e1,600	e3,200	2,280	1,900	8,460	7,910	4,360	5,850	e1,310	e1,210	12,800
11	1,100	e1,500	e4,000	2,040	1,910	8,470	6,850	3,460	4,690	e1,120	e1,170	10,700
12	1,160	e1,300	e6,400	1,950	1,890	8,060	5,550	4,240	2,760	e1,120	e1,090	7,460
13	1,050	e1,600	e6,400	2,070	1,840	7,630	5,220	5,850	2,180	e1,130	1,410	6,200
14	1,040	e2,300	e5,500	2,040	1,810	7,300	10,100	6,970	2,210	1,320	e1,210	6,320
15	1,010	e2,800	e5,500	1,680	1,750	7,140	9,990	7,320	1,990	2,530	1,320	6,710
16	1,060	e2,600	e5,400	1,520	1,640	7,310	7,330	7,380	1,880	3,080	1,320	6,930
17	2,400	e2,800	e5,600	1,670	1,550	7,000	6,290	6,660	1,890	3,330	e1,080	6,370
18	2,380	e2,200	e6,200	2,090	1,260	6,730	7,390	6,120	2,850	2,660	1,130	5,650
19	2,000	e2,600	e5,700	2,230	1,300	6,660	7,710	5,730	4,740	1,910	e970	6,500
20	2,300	e7,700	e4,900	2,110	1,260	7,040	6,300	5,560	3,240	2,260	e970	6,070
21	2,030	e8,200	e3,200	2,020	1,390	8,630	7,470	6,120	2,440	2,660	e1,030	5,820
22	1,230	e7,300	e2,600	1,930	1,630	8,740	8,980	6,740	1,940	2,280	2,040	6,190
23	1,010	e6,700	e3,200	1,940	1,990	7,070	7,770	8,380	1,740	1,550	3,040	6,120
24	1,000	e7,400	e6,300	1,870	2,130	6,730	6,550	12,400	1,660	1,350	1,630	5,800
25	947	e7,800	e8,800	1,740	2,100	8,060	5,740	12,300	1,700	1,300	1,220	5,720
26	1,020	e7,600	e7,900	1,540	1,990	8,940	5,220	9,880	1,590	e1,150	1,080	5,860
27	1,250	e7,300	e6,600	1,350	1,770	9,000	5,840	7,820	e1,420	2,200	1,010	5,700
28	1,770	e7,800	e5,400	1,330	1,730	9,040	5,360	7,980	e1,250	5,320	990	5,250
29	3,850	e9,100	e5,600	1,380	1,740	9,160	5,390	9,050	e1,290	5,760	1,810	4,510
30	3,460	e8,100	e6,200	1,380	---	8,540	5,260	7,880	e1,290	4,180	2,870	3,320
31	3,610	---	6,290	1,370	---	7,660	---	7,770	---	3,120	4,420	---
TOTAL	54,597	130,290	173,590	84,170	47,680	235,230	225,830	190,020	116,590	63,450	54,020	166,340
MEAN	1,761	4,343	5,600	2,715	1,644	7,588	7,528	6,130	3,886	2,047	1,743	5,545
MAX	3,850	9,100	8,800	5,900	2,130	9,160	10,900	12,400	9,040	5,760	4,420	12,800
MIN	947	1,300	2,600	1,330	1,240	2,380	5,220	2,450	1,250	920	970	1,160

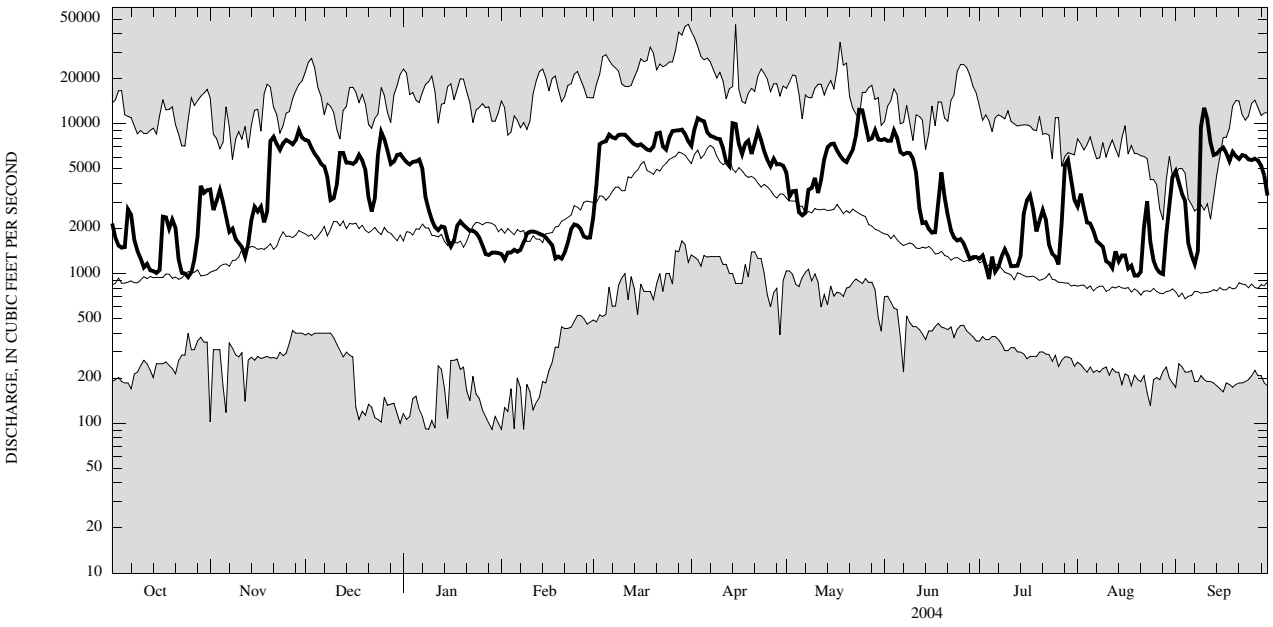
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2004, BY WATER YEAR (WY)

MEAN	1,446	2,125	2,768	2,848	3,211	6,174	6,021	3,558	2,116	1,317	1,008	1,039
MAX	7,095	7,383	9,973	8,830	9,157	14,300	14,160	10,230	7,311	8,524	4,825	6,722
(WY)	(1978)	(1928)	(1928)	(1913)	(1925)	(1945)	(1940)	(1943)	(1972)	(1972)	(2003)	(1977)
MIN	338	436	502	152	560	2,213	1,561	1,140	479	350	229	199
(WY)	(1914)	(1910)	(1910)	(1961)	(1920)	(1937)	(1946)	(1915)	(1915)	(1913)	(1913)	(1913)

04232000 GENESEE RIVER AT ROCHESTER, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1904 - 2004	
ANNUAL TOTAL	1,370,666		1,541,807			
ANNUAL MEAN	3,755		4,213		2,819	
HIGHEST ANNUAL MEAN					4,426	1978
LOWEST ANNUAL MEAN					1,663	1999
HIGHEST DAILY MEAN	13,500	Mar 22	12,800	Sep 10	46,300	Mar 31, 1916
LOWEST DAILY MEAN	582	Jul 5	920	Jul 4	91	Jan 9, 1961
ANNUAL SEVEN-DAY MINIMUM	723	Jul 4	1,100	Oct 10	104	Jan 26, 1961
10 PERCENT EXCEEDS	7,830		8,070		6,860	
50 PERCENT EXCEEDS	3,030		3,200		1,600	
90 PERCENT EXCEEDS	1,010		1,260		596	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY

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

DRAINAGE AREA.--39.2 mi^2.

WATER-DISCHARGE RECORDS

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

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,000 ft^3/s, Jan. 8, 1998, gage height 10.40 ft, from rating curve extended above 420 ft^3/s; minimum discharge, 6.8 ft^3/s, Aug. 21, 1995, gage height, 3.96 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 14	0830	408	7.58	2215	*746	*9.35
May 24	2300	375	7.38			

Minimum discharge, 13 ft^3/s, Oct. 12, 13, 14, 15, gage height, 4.15 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	58	44	26	86	70	32	56	18	60	53
2	16	23	47	41	e26	154	242	58	45	18	30	33
3	18	38	39	68	27	167	173	99	34	18	24	25
4	18	34	35	68	31	89	164	48	28	16	23	22
5	19	31	34	e48	31	107	134	47	26	16	27	20
6	18	42	32	e35	31	89	92	44	25	16	22	18
7	16	34	30	e32	35	58	74	43	25	38	23	17
8	16	26	29	e32	e34	62	64	39	28	36	22	28
9	15	23	28	e32	32	55	59	44	24	25	19	481
10	14	21	33	e32	32	49	52	44	53	22	18	362
11	14	21	99	e32	31	44	50	38	32	19	18	96
12	13	25	100	e32	30	43	43	31	31	25	17	60
13	13	37	47	32	29	36	106	29	34	32	22	43
14	13	42	36	e32	e28	34	293	31	42	24	25	37
15	13	35	38	e32	e26	36	103	50	42	55	20	28
16	14	34	40	e32	e26	33	64	48	26	39	18	26
17	14	37	64	e32	e26	31	60	36	46	27	17	30
18	14	36	81	e32	25	36	88	35	58	22	16	82
19	14	67	59	30	25	35	99	58	40	20	17	43
20	15	210	48	29	26	43	70	31	29	49	21	32
21	15	67	43	e29	34	105	58	87	25	34	41	35
22	18	42	43	28	46	63	91	48	29	21	28	26
23	26	35	87	e28	43	45	62	97	25	19	20	24
24	22	33	208	e28	43	55	47	246	23	17	17	23
25	18	36	185	e28	38	129	42	165	28	16	16	22
26	20	33	72	e28	33	76	45	67	30	16	15	21
27	41	31	53	e28	32	158	49	46	24	129	15	21
28	40	95	45	e28	33	87	40	58	22	90	21	29
29	38	173	44	27	47	57	41	45	20	65	56	22
30	39	75	58	e27	---	50	35	33	20	34	118	20
31	27	---	56	e27	---	51	---	37	---	44	177	---
TOTAL	607	1,460	1,871	1,053	926	2,163	2,610	1,814	970	1,020	983	1,779
MEAN	19.6	48.7	60.4	34.0	31.9	69.8	87.0	58.5	32.3	32.9	31.7	59.3
MAX	41	210	208	68	47	167	293	246	58	129	177	481
MIN	13	21	28	27	25	31	35	29	20	16	15	17
CFSM	0.50	1.24	1.54	0.87	0.81	1.78	2.22	1.49	0.82	0.84	0.81	1.51
IN.	0.58	1.39	1.78	1.00	0.88	2.05	2.48	1.72	0.92	0.97	0.93	1.69

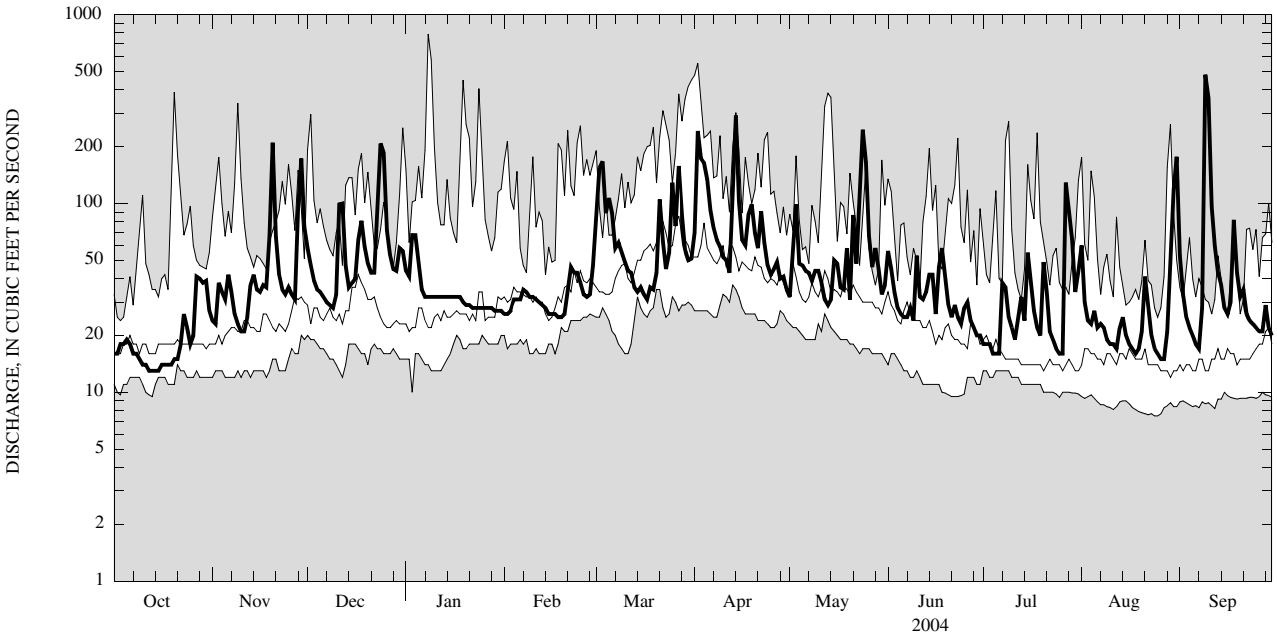
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	22.5	33.5	38.5	43.4	43.1	69.2	67.4	42.8	29.1	22.4	20.0	21.1
MAX	53.7	67.5	73.0	112	69.7	98.0	143	69.0	56.5	52.5	58.0	59.3
(WY)	(1997)	(1993)	(1997)	(1998)	(1998)	(1993)	(1993)	(2002)	(1996)	(1992)	(1992)	(2004)
MIN	12.5	15.3	20.7	20.8	27.8	41.1	27.4	20.2	12.3	12.1	9.03	9.92
(WY)	(2002)	(2002)	(1999)	(2002)	(1995)	(2002)	(1995)	(1995)	(1995)	(2001)	(1995)	(1995)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	14,369		17,256			
ANNUAL MEAN	39.4		47.1		37.9	
HIGHEST ANNUAL MEAN					53.5	1993
LOWEST ANNUAL MEAN					24.7	1995
HIGHEST DAILY MEAN	242	Apr 6	481	Sep 9	790	Jan 8, 1998
LOWEST DAILY MEAN	10	Sep 12	13	Oct 12	7.5	Aug 24, 1995
ANNUAL SEVEN-DAY MINIMUM	11	Sep 9	13	Oct 10	7.6	Aug 20, 1995
ANNUAL RUNOFF (CFSM)	1.00		1.20		0.966	
ANNUAL RUNOFF (INCHES)	13.64		16.38		13.13	
10 PERCENT EXCEEDS	77		88		71	
50 PERCENT EXCEEDS	31		34		26	
90 PERCENT EXCEEDS	13		18		13	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1992 to current year.
CHEMICAL DATA: Water years 1992 to 2003 (e), 2004 (d).
NUTRIENT DATA: Water years 1992 to 2003 (e), 2004 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: February 1995 to current year.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C, July 3, 2002; minimum 0°C, many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 20.5°C, Aug. 1, 30; minimum 0°C, many days during winter period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.5	11.0	12.0	11.0	10.0	10.5	4.5	3.5	4.5	4.0	3.0	3.5
2	11.0	10.0	10.5	10.5	10.5	10.5	5.0	1.5	2.5	5.0	3.5	4.0
3	10.0	9.0	9.5	11.0	10.5	10.5	2.0	0.5	1.5	7.5	5.0	6.5
4	10.5	10.0	10.0	10.5	10.5	10.5	2.5	0.5	1.5	7.5	5.5	6.5
5	10.0	9.5	10.0	11.5	10.5	10.5	2.5	1.5	2.0	5.5	3.0	4.0
6	10.0	9.0	9.5	11.5	10.5	11.0	2.0	2.0	2.0	3.0	0.5	2.0
7	9.5	8.5	9.0	10.5	9.5	10.0	2.0	1.5	1.5	1.0	0.5	0.5
8	11.0	9.0	10.0	9.5	7.5	8.5	2.0	0.0	1.0	1.5	0.0	1.0
9	12.0	10.5	11.5	7.5	6.5	6.5	3.5	2.0	2.5	1.0	0.0	0.5
10	13.0	12.0	12.5	6.5	5.5	6.0	5.0	3.5	4.0	0.5	0.0	0.5
11	13.0	12.0	12.5	6.5	5.5	5.5	4.5	3.0	4.5	0.5	0.0	0.5
12	12.5	12.0	12.5	8.0	6.5	7.0	3.0	2.0	2.5	2.0	0.5	1.0
13	12.0	11.0	11.5	8.0	7.0	7.5	2.0	1.5	2.0	2.0	0.5	1.5
14	11.5	10.5	11.0	7.0	5.5	6.0	1.5	0.0	1.0	0.5	0.5	0.5
15	11.5	10.5	11.5	5.5	5.0	5.5	2.0	0.0	1.5	0.5	0.0	0.5
16	10.5	10.0	10.5	6.0	5.5	5.5	3.0	1.5	2.0	0.5	0.0	0.0
17	10.5	9.5	10.0	6.5	6.0	6.5	3.0	1.5	2.5	0.0	0.0	0.0
18	10.0	9.5	9.5	7.5	6.5	7.0	2.0	1.0	1.5	2.0	0.0	1.5
19	9.5	9.0	9.5	9.0	7.5	8.5	2.5	1.0	1.5	1.5	0.0	1.0
20	9.5	8.0	9.0	9.5	7.5	8.5	2.0	1.5	2.0	1.0	0.5	1.0
21	10.5	9.5	10.0	8.0	6.0	7.0	2.5	1.5	2.0	1.0	0.0	0.5
22	10.5	9.0	9.5	7.5	6.0	7.0	3.5	2.0	3.0	2.0	0.5	1.5
23	9.0	8.0	8.5	8.5	7.0	7.5	4.0	3.5	3.5	0.5	0.0	0.0
24	8.5	7.5	8.0	9.0	7.5	8.5	3.5	2.5	3.0	0.5	0.0	0.5
25	8.5	8.0	8.0	8.0	6.0	6.5	3.0	2.5	2.5	0.5	0.0	0.0
26	9.5	8.5	9.0	6.0	5.0	5.5	3.0	2.0	2.5	0.5	0.5	0.5
27	9.5	9.5	9.5	6.5	5.0	5.5	3.5	2.5	3.0	0.5	0.5	0.5
28	9.5	9.0	9.0	7.0	6.5	6.5	3.5	1.5	2.5	1.5	0.5	1.0
29	9.0	9.0	9.0	6.5	3.5	5.0	5.0	2.5	3.5	1.0	0.5	0.5
30	9.0	8.5	9.0	4.5	3.5	4.0	5.0	4.0	5.0	0.5	0.5	0.5
31	10.0	8.5	9.0	---	---	---	4.0	3.0	3.5	1.0	0.5	0.5
MONTH	13.0	7.5	10.0	11.5	3.5	7.5	5.0	0.0	2.5	7.5	0.0	1.4

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

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	0.5	1.0	3.0	1.0	2.0	9.5	7.0	8.5	16.0	14.0	15.0
2	2.0	0.5	1.0	3.0	1.5	2.0	7.0	6.0	6.0	16.0	14.0	15.0
3	2.5	1.5	2.0	3.5	2.0	2.5	6.0	5.0	5.5	14.0	12.0	12.5
4	3.0	2.0	2.0	5.0	3.5	4.0	6.5	3.5	5.5	12.5	10.5	11.5
5	2.0	1.0	1.5	7.0	4.5	5.5	5.5	2.0	3.5	12.0	11.0	11.5
6	3.0	1.5	2.0	8.0	5.5	7.0	6.5	3.0	5.0	13.5	10.5	11.5
7	3.0	1.5	2.5	6.0	4.5	5.0	6.5	5.5	6.0	15.0	13.0	13.5
8	1.5	0.5	1.0	5.0	3.5	4.5	8.0	4.5	6.0	14.0	11.5	12.0
9	2.5	0.5	1.5	4.5	3.0	3.5	10.0	7.0	8.5	12.5	11.0	11.5
10	3.0	2.0	2.5	5.0	2.0	3.5	9.5	7.0	8.5	15.5	12.0	13.5
11	2.5	1.5	2.0	6.0	3.0	4.5	10.5	6.5	8.5	17.5	14.5	16.0
12	2.5	1.0	1.5	5.5	3.0	4.0	9.5	7.0	8.0	17.5	15.0	16.0
13	3.0	2.0	2.5	4.5	2.0	3.0	8.0	7.0	7.5	18.0	16.0	17.0
14	2.5	1.5	2.0	4.5	2.0	3.0	8.5	6.0	7.0	18.0	16.5	17.5
15	2.0	0.5	1.0	4.5	3.5	4.0	9.5	6.5	8.0	18.0	16.0	17.0
16	1.0	0.5	0.5	4.0	1.0	2.5	11.5	7.0	9.0	16.0	14.5	15.0
17	2.0	0.5	1.0	3.5	0.5	2.0	12.0	10.0	11.0	17.5	13.0	15.0
18	2.0	0.5	1.5	4.0	1.5	3.0	12.5	11.0	11.5	18.0	15.5	17.0
19	3.5	2.0	2.5	4.5	1.5	3.0	14.0	12.0	13.0	18.5	16.0	17.0
20	3.5	2.5	3.0	4.0	2.5	3.5	13.5	11.5	12.5	17.5	13.5	15.5
21	4.0	2.5	3.5	3.5	1.5	2.5	14.5	11.0	12.5	18.0	16.0	17.0
22	3.0	1.5	2.0	3.5	0.5	2.0	14.5	13.5	14.0	16.5	15.0	16.0
23	2.5	0.5	1.5	3.0	1.0	2.0	13.5	12.0	13.0	16.5	15.5	16.0
24	3.0	1.5	2.0	5.5	2.5	4.0	13.5	11.0	12.5	18.5	15.5	17.0
25	2.5	0.5	1.5	7.5	4.0	5.5	13.0	10.5	11.0	18.5	16.0	17.5
26	3.0	1.0	2.0	10.0	7.5	8.5	11.0	10.0	10.5	16.5	15.0	16.0
27	3.0	0.5	2.0	10.0	9.0	9.5	11.0	10.0	10.5	17.5	14.0	15.5
28	3.5	0.5	2.0	11.0	8.0	9.0	11.5	8.5	10.0	16.5	15.0	16.0
29	4.0	1.5	2.5	12.0	8.0	10.0	14.5	10.5	12.0	15.5	12.5	14.0
30	---	---	---	12.0	9.0	10.5	15.5	12.5	14.0	16.0	11.5	13.5
31	---	---	---	11.0	9.5	10.0	---	---	---	14.5	13.0	13.0
MONTH	4.0	0.5	1.8	12.0	0.5	4.7	15.5	2.0	9.3	18.5	10.5	14.9
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	13.0	14.5	17.5	15.0	16.0	20.5	19.0	19.5	19.0	18.0	18.5
2	15.5	14.5	15.0	18.0	15.5	17.0	19.5	17.5	18.5	18.0	16.0	17.0
3	16.0	13.5	14.5	17.5	15.5	16.5	19.0	17.5	18.5	18.0	15.5	17.0
4	16.0	12.5	14.0	17.5	16.0	17.0	19.0	17.5	18.0	18.5	16.5	17.5
5	14.5	12.5	13.5	18.0	17.0	17.5	18.0	16.5	17.0	18.0	16.0	17.5
6	15.5	13.0	14.5	18.0	16.0	17.0	17.0	15.5	16.0	18.5	16.5	17.5
7	17.5	13.5	15.5	18.0	16.0	17.0	15.5	14.5	15.0	18.5	17.0	17.5
8	19.0	15.0	17.0	18.0	17.0	17.5	16.5	14.5	15.5	18.0	17.0	17.0
9	20.0	17.0	18.5	17.5	16.0	16.5	17.5	15.0	16.5	19.0	17.0	18.5
10	19.5	16.0	17.5	17.5	15.0	16.5	17.0	16.0	16.5	18.5	17.5	18.0
11	16.5	14.0	15.0	18.0	16.0	17.0	17.5	16.0	17.0	18.0	16.5	17.0
12	17.0	12.5	15.0	17.5	16.5	17.0	17.5	16.0	16.0	18.5	16.5	17.5
13	16.0	14.0	15.0	19.0	17.0	18.0	16.0	15.5	15.5	18.5	17.0	17.5
14	19.0	15.5	17.0	18.5	17.0	17.5	17.0	15.0	16.0	17.5	15.5	16.5
15	19.5	17.5	18.5	17.0	16.0	16.5	16.5	15.5	16.0	18.5	16.0	17.0
16	19.0	16.5	18.0	17.5	16.5	17.0	16.5	15.0	16.0	17.5	15.5	17.0
17	18.0	16.5	17.5	18.0	16.5	17.0	16.5	15.0	16.0	17.5	15.0	16.0
18	19.0	18.0	18.5	17.5	16.5	17.0	17.5	15.5	16.5	15.5	14.5	15.0
19	18.5	17.0	17.5	17.5	16.0	16.5	17.5	16.5	16.5	14.5	13.0	14.0
20	17.0	14.5	15.5	18.5	16.0	17.0	16.5	16.0	16.0	14.0	11.5	13.0
21	16.5	14.0	15.5	19.0	17.5	18.0	17.0	15.5	16.0	15.0	12.5	14.0
22	17.0	15.0	16.0	18.5	17.5	18.0	16.5	14.5	15.5	15.5	13.0	14.0
23	17.5	15.0	16.5	18.0	17.5	17.5	16.0	14.5	15.5	16.0	14.0	15.0
24	17.5	15.0	16.5	17.5	16.0	17.0	17.0	15.0	16.0	16.0	14.5	15.5
25	17.5	15.0	15.5	17.0	15.0	16.0	17.0	15.5	16.0	16.0	15.0	15.5
26	16.0	14.0	15.0	16.0	15.0	15.5	18.0	16.5	17.0	16.0	15.0	15.5
27	16.0	14.0	15.0	18.0	15.0	16.5	18.5	17.0	17.5	15.5	13.5	14.5
28	15.5	13.5	14.0	19.0	17.5	18.0	18.5	17.5	18.0	16.0	14.5	15.0
29	15.5	13.0	14.0	19.5	17.5	18.5	20.0	18.0	19.0	15.5	13.5	14.5
30	16.5	14.0	15.0	18.5	17.5	18.0	20.5	19.5	20.0	14.0	13.0	13.5
31	---	---	---	19.5	17.5	18.0	20.0	19.0	19.5	---	---	---
MONTH	20.0	12.5	15.8	19.5	15.0	17.1	20.5	14.5	16.9	19.0	11.5	16.1
YEAR	20.5	0.0	9.9									

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Discharge, cfs (00060)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
OCT 26-30	1455	0754	39	91	193	7	.35	<.01	.78	.013	.033
OCT 30-NOV 02	0830	1929	28	200	100	<5	.47	<.01	.89	.009	.026
02-05	2030	0730	34	100	207	5	.48	<.01	.86	.009	.027
05-12	0850	0750	28	113	210	<5	.48	<.01	1.1	.008	.018
DEC 10-11	0610	0809	40	106	215	3	.30	<.03	1.4	.012	.024
11-16	0855	0855	63	119	146	8	.37	<.01	1.1	.014	.040
JAN 22-27	0945	0844	28	--	--	--	.86	.16	1.4	.104	.038
FEB 19-24	1140	1039	36	125	139	6	.48	.09	.65	.005	.024
FEB 26-MAR 03	1030	0829	76	90	90	12	.38	.01	.86	.006	.044
03-10	0835	0735	81	112	100	19	.41	<.01	.92	.013	.041
10-17	0950	0850	38	106	156	<5	.30	.03	1.1	.014	.011
APR 12-19	2135	0635	118	95	99	62	.48	.02	.78	.007	.056
MAY 22-26	1715	0615	152	70	76	172	1.4	.23	.09	.009	.230
MAY 26-JUN 02	0755	0655	48	109	128	40	.53	.01	.91	.013	.066
09-13	2225	0924	37	106	150	81	.79	.03	.90	.007	.076
13-16	1025	0725	40	102	166	49	.65	<.01	1.0	.006	.009
JUL 14-21	0725	0625	35	100	173	57	1.3	.21	.27	<.001	.107
19-19	1045	1045	20	--	--	63	1.3	.02	1.2	.020	.109
JUL 26-AUG 02	1315	1215	64	91	142	87	1.9	.04	.49	.011	.155
SEP 08-15	0800	0700	159	74	113	149	1.2	.01	.24	.014	.179

< Less than.

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1.3 mi upstream from Irondequoit Creek.

DRAINAGE AREA.--30.1 mi^2, flow from 3.5 mi^2 noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WDR NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M, P), 1960-63, 1972-74.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft above NGVD of 1929.

REMARKS.--Records fair. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health. Discharge prior to January 1980 included undetermined diversion (maximum 20 ft^3/s) from Erie (Barge) Canal upstream from station. January 1980 to present, diversion reduced to a maximum of 3 ft^3/s for use by several golf courses adjacent to stream. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft^3/s, May 17, 1974, gage height, 7.42 ft, from rating curve extended above 1,000 ft^3/s on basis of contracted-opening measurement of peak discharge and step-backwater analysis; minimum daily discharge, 1.7 ft^3/s, Jan. 24, 1963; minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	1615	527	3.89	0915	552	3.94
Apr 13	2045	579	3.99	0345	547	3.93
May 24	0900	994	4.68	1045	*2,080	*6.04
Aug 29	1600	858	4.47			

Minimum discharge, 6.5 ft^3/s, Oct. 6, 8, 9, gage height, 2.27 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	15	53	27	10	87	103	20	35	14	34	41
2	8.2	44	30	26	11	e141	285	72	24	13	21	24
3	7.8	72	21	68	14	e120	257	48	20	13	17	19
4	12	22	19	40	21	90	239	28	17	13	23	17
5	8.2	21	17	33	18	96	176	29	16	19	16	16
6	6.8	17	15	27	19	69	90	19	15	14	12	15
7	6.9	15	14	20	27	41	65	19	15	51	16	24
8	6.7	15	12	18	e20	41	41	17	16	22	13	323
9	7.4	15	12	e15	20	29	29	24	42	17	12	1,490
10	8.2	14	14	e12	19	24	21	45	109	18	15	400
11	7.7	20	178	e12	19	20	18	20	24	16	20	206
12	8.4	20	80	14	17	19	22	16	19	81	17	101
13	8.5	50	37	16	17	16	213	14	95	35	25	54
14	8.7	29	25	e17	17	14	310	13	42	70	21	46
15	13	22	24	e16	15	15	114	22	31	163	14	28
16	9.2	19	24	e12	e12	14	56	17	17	63	13	15
17	7.7	18	102	11	e10	14	38	14	40	32	12	17
18	9.4	17	76	12	12	16	129	13	23	27	11	70
19	13	179	45	12	12	16	102	11	16	22	48	21
20	12	152	32	12	14	61	61	13	14	82	24	23
21	16	47	27	12	33	149	63	18	13	41	20	20
22	25	27	34	12	40	57	131	18	34	23	15	19
23	15	20	121	e11	34	32	52	130	16	19	17	17
24	13	18	273	e11	e28	52	35	669	15	16	16	16
25	13	20	182	e9.0	e20	94	40	150	64	14	14	15
26	25	16	72	9.8	e20	75	33	69	17	19	14	15
27	51	29	41	10	e21	219	28	37	14	237	13	15
28	21	252	30	10	e22	84	23	67	13	114	14	9.4
29	34	201	26	11	50	44	22	28	13	75	299	8.5
30	21	89	61	10	---	27	21	21	12	33	333	9.8
31	16	---	35	10	---	32	---	43	---	35	123	---
TOTAL	427.2	1,495	1,732	535.8	592	1,808	2,817	1,724	841	1,411	1,262	3,094.7
MEAN	13.8	49.8	55.9	17.3	20.4	58.3	93.9	55.6	28.0	45.5	40.7	103
MAX	51	252	273	68	50	219	310	669	109	237	333	1,490
MIN	6.7	14	12	9.0	10	14	18	11	12	13	11	8.5

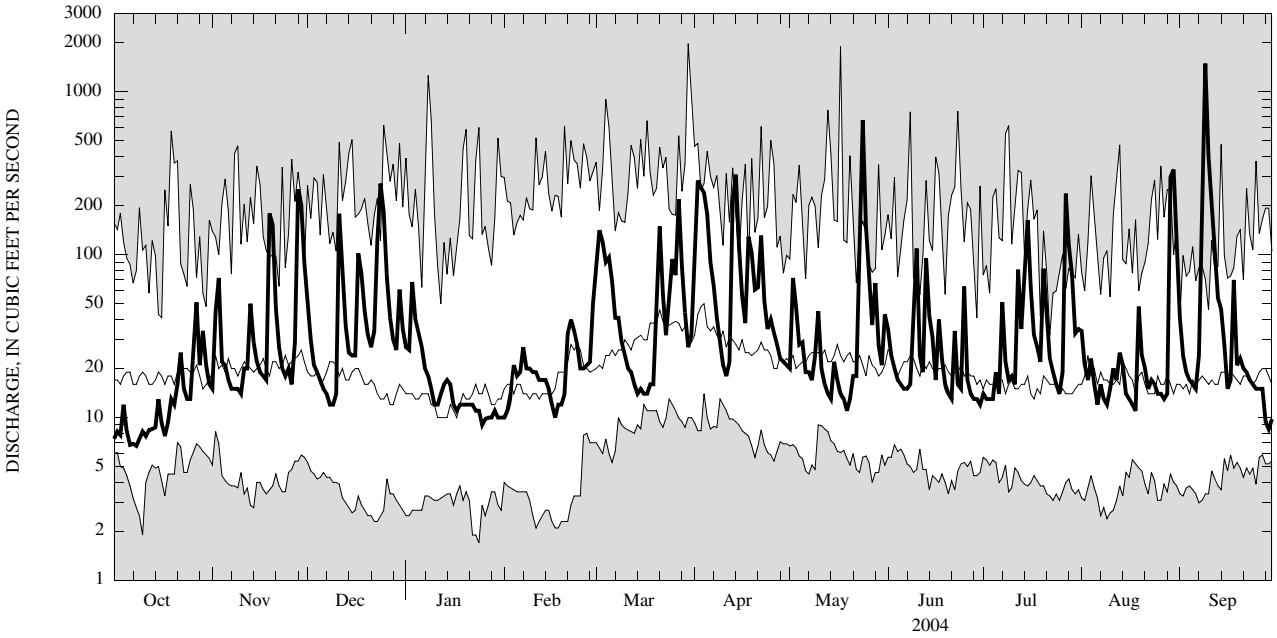
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	23.8	30.0	30.3	24.8	34.6	56.8	46.4	33.8	27.0	22.4	23.9	23.9
MAX	74.8	102	89.7	108	94.9	131	93.9	103	78.4	79.7	50.7	103
(WY)	(1978)	(1973)	(1978)	(1998)	(1981)	(1960)	(2004)	(1974)	(1972)	(1998)	(1992)	(2004)
MIN	7.99	7.42	4.80	4.40	10.4	22.6	11.2	8.94	8.58	6.29	5.08	6.07
(WY)	(1962)	(1961)	(1961)	(1963)	(1989)	(1981)	(1995)	(1995)	(2001)	(2001)	(2002)	(1961)

04232050 ALLEN CREEK NEAR ROCHESTER, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	12,474.7		17,739.7			
ANNUAL MEAN	34.2		48.5		31.2	
HIGHEST ANNUAL MEAN					50.6	1978
LOWEST ANNUAL MEAN					16.1	1995
HIGHEST DAILY MEAN	300	Apr 5	1,490	Sep 9	1,970	Mar 30, 1960
LOWEST DAILY MEAN	4.5	Jul 20	6.7	Oct 8	1.7	Jan 24, 1963
ANNUAL SEVEN-DAY MINIMUM	5.0	Sep 8	7.4	Oct 5	2.3	Feb 15, 1962
10 PERCENT EXCEEDS	72		102		57	
50 PERCENT EXCEEDS	19		20		19	
90 PERCENT EXCEEDS	6.0		12		7.3	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04232050 ALLEN CREEK NEAR ROCHESTER, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-72, 1979-81, 1983 to current year.
CHEMICAL DATA: Water years 1971-72 (a), 1979 (a), 1980 (d), 1981 (e), 1983 to 2003 (e), 2004 (d).
NUTRIENT DATA: Water years 1971-72 (a), 1979 (a), 1980 (d), 1981 (e), 1983 to 2003 (e), 2004 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.

INSTRUMENTATION.--Automatic water sampler since October 1983. Water temperature recorder since November 1994 provides 15-minute-interval readings.

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

REMARKS.--Records for October 1983 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1984-88", U.S. Geological Survey open-file report 93-370, and in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1983, unpublished records are available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C, July 5, 1999; minimum, 0°C, many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily mean, 21.5°C, July 13, Aug. 28-30; minimum daily mean, 0°C, Jan. 24, 26.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	12.0	5.5	4.5	1.5	3.5	8.0	15.5	16.0	18.5	21.0	20.0
2	12.0	11.5	3.5	5.0	2.0	4.0	6.5	14.5	15.5	19.0	20.5	19.0
3	11.5	11.5	3.0	7.5	2.0	3.5	6.5	12.5	15.5	19.0	20.5	19.0
4	12.0	11.0	3.0	6.5	2.0	5.0	6.0	12.0	15.5	19.5	20.0	19.5
5	11.5	12.0	4.0	4.5	1.5	6.0	5.0	12.0	15.0	20.0	19.0	19.5
6	10.5	11.0	3.5	2.5	2.0	6.5	5.5	13.0	16.0	19.0	17.5	19.5
7	11.0	9.5	3.0	1.0	1.5	5.5	6.5	14.5	17.0	20.0	17.5	20.0
8	12.0	7.5	2.5	1.0	1.0	4.5	6.5	11.5	18.5	20.0	18.0	20.5
9	14.0	6.0	4.0	0.5	1.5	4.5	8.0	12.5	20.5	18.5	19.0	19.5
10	14.5	5.5	6.0	0.5	2.5	4.5	8.0	15.0	19.0	19.0	19.5	19.0
11	14.5	7.0	5.5	1.0	2.0	5.0	8.5	16.5	16.5	20.0	20.0	18.5
12	14.0	9.5	3.5	2.5	2.0	4.5	8.5	16.5	16.5	20.5	19.0	19.0
13	13.0	8.5	3.0	2.0	2.5	3.5	8.0	17.5	17.5	21.5	18.5	18.5
14	12.5	5.5	1.5	0.5	2.0	3.5	8.0	18.0	20.0	20.5	19.0	18.0
15	12.5	6.0	2.5	0.5	1.0	4.5	9.0	16.5	20.5	19.5	18.5	19.0
16	11.5	7.0	3.5	0.5	0.5	2.5	9.5	15.0	19.5	19.5	18.5	19.0
17	11.0	7.5	3.5	1.0	1.5	2.5	10.5	15.5	19.0	20.0	18.5	17.5
18	11.0	8.5	3.0	2.5	1.5	3.0	11.0	17.0	20.0	19.5	19.5	17.0
19	10.5	11.0	3.0	1.5	3.0	3.0	13.0	16.5	18.5	19.5	20.0	16.0
20	10.5	9.0	2.5	1.0	3.5	4.0	12.0	16.0	17.0	20.0	19.5	15.5
21	11.5	8.5	3.0	0.5	3.0	3.0	13.0	17.0	17.5	21.0	18.5	16.0
22	10.5	8.5	4.0	1.5	2.0	2.5	14.0	15.5	18.0	21.0	18.0	16.5
23	9.0	9.0	4.5	0.5	2.0	2.5	13.0	16.5	18.5	20.0	18.5	17.0
24	9.0	9.5	4.5	0.0	2.5	4.5	13.0	18.0	18.5	19.0	19.0	17.0
25	9.5	7.5	4.0	0.5	2.0	6.5	10.5	17.0	17.5	18.0	19.0	17.5
26	10.5	7.0	3.5	0.0	2.5	8.5	11.0	16.5	16.5	18.5	20.0	17.0
27	10.5	7.0	3.5	0.5	2.0	9.5	10.5	16.5	17.0	19.5	21.0	16.5
28	10.0	7.5	3.5	1.0	3.0	9.0	10.5	17.0	16.0	20.0	21.5	16.5
29	10.0	6.0	5.0	0.5	3.5	10.0	13.5	15.0	16.5	20.5	21.5	15.0
30	10.0	5.5	5.5	0.5	---	10.0	14.5	15.0	17.5	20.0	21.5	14.5
31	11.0	---	4.5	1.0	---	9.5	---	15.0	---	20.5	20.5	---
MEAN	11.4	8.4	3.7	1.7	2.1	5.1	9.6	15.4	17.6	19.7	19.4	17.9
MAX	14.5	12.0	6.0	7.5	3.5	10.0	14.5	18.0	20.5	21.5	21.5	20.5
MIN	9.0	5.5	1.5	0.0	0.5	2.5	5.0	11.5	15.0	18.0	17.5	14.5

04232050 ALLEN CREEK NEAR ROCHESTER, NY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT											
26-30	1420	0719	35	114	49	15	.49	<.01	.52	.018	.080
OCT 30-NOV 02	0810	0510	16	155	64	<5	.50	<.01	.53	.013	.058
02-05	0610	0809	46	127	52	18	.67	<.01	.56	.018	.081
05-12	0830	0730	17	182	85	8	.61	.02	.71	.019	.056
JAN											
22-27	0915	0814	10	--	--	--	.57	.02	1.6	.007	.055
FEB											
19-24	1210	1109	28	617	94	<5	.73	.02	1.5	.006	.028
MAR											
05-11	1015	0715	46	345	56	10	1.0	.02	1.4	.009	.051
APR											
12-19	1135	0634	134	229	47	65	1.0	.07	1.3	.018	.159
MAY											
22-26	1655	0654	274	128	42	365	2.6	.04	.70	.024	.613
MAY 26-JUN 02	0705	0605	40	166	50	86	1.1	.03	1.2	.022	.193
09-13	1500	0900	51	169	57	150	1.4	.06	.86	.030	.065
13-16	1000	0700	58	159	46	138	1.0	.05	.76	.020	.216
JUL											
14-21	0755	0655	67	115	91	267	1.1	.03	.97	<.001	.545
19-19	0927	0927	21	--	--	22	.95	.02	1.4	.035	.133
JUL 26-AUG 02	1225	0825	80	101	40	48	1.2	.04	1.2	.044	.182

< Less than.

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY

LOCATION.--Lat 43°08'42", long 77°30'44", Monroe County, Hydrologic Unit 04140101, on right bank 4,000 ft upstream from bridge on Blossom Road, 1.8 mi east of Rochester, 1.7 mi downstream from Allen Creek, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--142 mi^2, flow from 7.78 mi^2 noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements water years 1977-80. December 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 247.87 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1991, at site 0.8 mi downstream at datum 1.56 ft lower.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft^3/s, Jan. 8, 1998, gage height, 9.95 ft; minimum discharge, 25 ft^3/s, Sept. 8, 9, 10, 14, 2002, gage height, 2.14 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
May 24	1345	1,990	9.26	1245	*3,060	*9.83

Minimum discharge, 44 ft^3/s, Oct. 14, gage height, 2.43 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	76	277	162	e90	242	243	e116	208	81	258	247
2	62	119	210	148	e90	430	576	174	167	78	153	152
3	59	194	165	203	e100	528	627	266	145	78	117	119
4	74	133	140	209	e116	409	595	181	123	102	113	103
5	68	112	129	172	110	379	522	159	112	110	107	90
6	58	102	117	150	113	375	398	160	106	102	90	78
7	53	97	107	e110	130	286	319	e135	102	164	95	80
8	51	81	96	e106	e114	257	253	e130	101	143	81	417
9	50	69	97	e100	e115	219	211	147	124	93	72	2,390
10	49	65	101	e96	116	186	178	199	294	78	90	1,950
11	48	62	310	e90	113	163	157	187	158	69	95	746
12	47	56	305	e96	108	154	143	176	121	177	75	415
13	46	107	196	e98	107	136	345	137	226	132	107	294
14	46	129	146	e100	106	123	696	125	203	151	106	230
15	64	119	130	e96	e94	124	496	150	183	287	78	186
16	53	106	136	e100	e78	118	290	152	131	205	70	152
17	46	103	228	e100	e86	113	218	125	164	128	66	141
18	47	100	256	e102	e90	122	287	111	177	120	63	218
19	54	324	211	e96	92	120	338	126	134	108	127	168
20	52	526	175	e90	95	159	250	111	116	187	103	137
21	61	348	151	e88	126	314	213	144	101	188	106	128
22	91	200	154	e92	156	245	312	143	132	113	97	105
23	76	146	254	e84	150	180	225	284	108	98	82	75
24	63	132	561	e82	150	181	172	1,420	95	83	72	74
25	57	132	620	e84	e120	307	157	780	185	72	64	76
26	83	116	382	e86	e120	283	150	433	115	73	61	74
27	163	123	250	e92	116	476	148	282	102	576	58	67
28	125	431	195	e94	118	370	134	299	93	426	62	73
29	127	559	167	e94	154	246	e125	213	90	363	327	81
30	118	385	212	e90	---	188	e120	163	83	192	540	76
31	91	---	197	e92	---	183	---	168	---	183	474	---
TOTAL	2,139	5,252	6,675	3,402	3,273	7,616	8,898	7,396	4,199	4,960	4,009	9,142
MEAN	69.0	175	215	110	113	246	297	239	140	160	129	305
MAX	163	559	620	209	156	528	696	1,420	294	576	540	2,390
MIN	46	56	96	82	78	113	120	111	83	69	58	67
CFSM	0.51	1.30	1.60	0.82	0.84	1.83	2.21	1.78	1.04	1.19	0.96	2.27
IN.	0.59	1.46	1.85	0.94	0.91	2.11	2.47	2.05	1.16	1.37	1.11	2.53

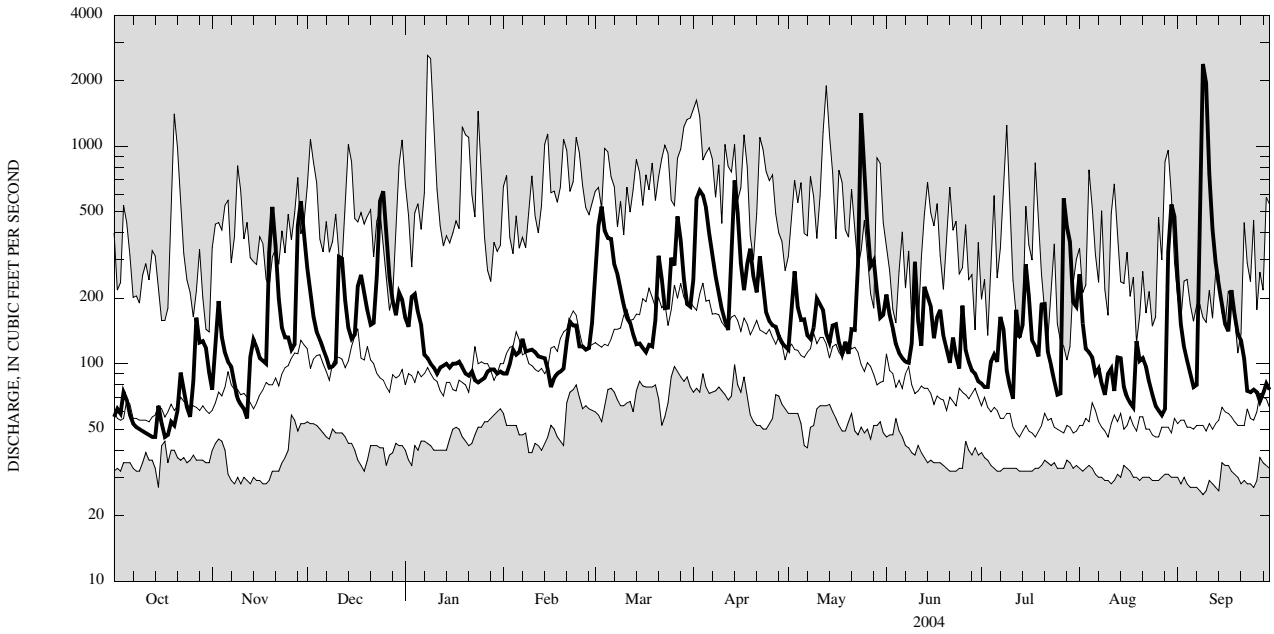
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2004, BY WATER YEAR (WY)

MEAN	84.1	115	138	139	169	226	225	154	101	75.8	79.6	80.5
MAX	191	224	253	446	347	348	468	292	186	194	253	305
(WY)	(1997)	(1986)	(1997)	(1998)	(1981)	(1993)	(1993)	(1984)	(1989)	(1998)	(1992)	(2004)
MIN	39.5	52.3	49.5	60.8	67.1	122	82.8	62.1	46.9	42.2	35.8	39.8
(WY)	(1983)	(2002)	(1990)	(1989)	(1989)	(1988)	(1995)	(1995)	(1988)	(1983)	(2002)	(1995)

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1981 - 2004	
ANNUAL TOTAL	51,731		66,961			
ANNUAL MEAN	142		183		133	
HIGHEST ANNUAL MEAN					183	2004
LOWEST ANNUAL MEAN					80.1	1995
HIGHEST DAILY MEAN	798	Apr 6	2,390	Sep 9	2,620	Jan 8, 1998
LOWEST DAILY MEAN	39	Sep 14	46	Oct 13	25	Sep 9, 2002
ANNUAL SEVEN-DAY MINIMUM	42	Sep 8	48	Oct 8	27	Sep 4, 2002
ANNUAL RUNOFF (CFSM)	1.06		1.36		0.990	
ANNUAL RUNOFF (INCHES)	14.34		18.56		13.45	
10 PERCENT EXCEEDS	289		340		261	
50 PERCENT EXCEEDS	114		126		89	
90 PERCENT EXCEEDS	46		72		44	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980-81, 1983 to current year.
CHEMICAL DATA: Water years 1980-81, 1983 to current year (e).
NUTRIENT DATA: Water years 1980-81, 1983 to current year (e).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to September 2001.

INSTRUMENTATION.--Automatic water sampler since October 1983. Water temperature recorder since November 1994 provides 15-minute-interval readings.

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

REMARKS.--Records for October 1983 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1984-88", U.S. Geological Survey Open-File Report 93-370 and in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1983, unpublished records are available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 27.0°C, July 5,6, 1999; minimum 0.0°C, many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Zinc, water, unfltrd recover-able, ug/L (01092)
OCT												
14-20	1230	1130	52	128	172	18	.35	<.01	.74	.019	.033	<5
26-28	1350	0650	147	76	91	18	.45	<.01	.56	.017	.063	8
OCT 28-NOV 02	1125	0925	101	86	95	5	.42	.03	.52	.028	.041	<5
02-03	1025	1025	188	114	118	23	.40	<.01	.68	.020	.074	8
03-10	1055	0955	102	104	113	6	.56	.02	.64	.037	.048	8
19-25	1145	0845	286	112	92	255	.78	.03	.79	.022	.103	18
DEC												
10-11	1015	1214	170	171	126	61	.83	<.03	1.4	.026	.174	--
11-16	1255	0755	208	139	76	53	.90	.01	1.0	.022	.143	31
16-23	0950	0850	191	213	87	11	.50	.02	1.1	.018	.048	11
JAN												
21-27	1015	0915	86	--	--	--	.62	.02	1.6	.017	.022	--
FEB												
19-24	1240	1139	130	281	140	<7	.46	.02	1.7	.013	.034	<5
25-29	0915	2314	126	208	123	<5	.47	.03	1.3	.011	.037	<5
MAR												
05-11	0945	0744	272	153	81	10	.64	.04	1.5	.021	.044	6
11-18	0840	0740	153	202	114	<6	.48	<.01	1.4	.019	.025	<5
APR												
12-19	1815	0615	379	106	58	50	.69	.04	.80	.013	.076	18
MAY												
22-26	1615	0815	736	83	54	401	2.1	.03	.59	.016	.617	125
MAY 26-JUN 02	0825	0725	236	100	67	120	1.2	.03	.95	.024	.265	37
09-13	1430	0830	180	106	80	154	1.2	.02	.84	.023	.264	53
13-16	0930	0630	211	111	83	135	1.2	.01	.93	.022	.283	55
JUL												
07-12	0750	1250	105	139	134	284	1.9	.03	1.0	.084	.444	97
12-19	1235	0635	177	125	43	50	1.6	.11	1.0	<.001	.158	36
19	0756		105	--	--	15	1.4	.04	1.1	.042	.344	--

< Less than.

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY

LOCATION.--Lat 43°10'34", long 77°31'37", Monroe County, Hydrologic Unit 04140101, on right bank 25 ft upstream from bridge on Empire Boulevard (Route 404), 200 ft upstream from mouth at south end of Irondequoit Bay, and 1.5 mi east of Rochester.

DRAINAGE AREA.--151 mi^2, flow from 7.78 mi^2 noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1990 to current year. Prior to January 2003, daily mean discharge only published.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 242.66 ft above NGVD of 1929 (levels by Corps of Engineers).

REMARKS.--Records affected by backwater from Irondequoit Bay. Unpublished gage-height record for March 1989 to December 2002 is available in files of U.S. Geological Survey. Unpublished water-quality records are available in files of Monroe County Department of Health. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.64 ft, Apr. 23, 1993 (backwater from Irondequoit Bay); minimum gage height, 2.28 ft, Nov. 25, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.95 ft, Sept. 9; minimum gage height, 2.81 ft, Nov. 19.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.36	3.15	3.60	3.77	3.86	3.34	3.87	4.28	4.88	4.75	4.89	4.31
2	3.41	3.18	3.72	3.75	3.79	3.37	3.96	4.36	4.93	4.80	4.82	4.24
3	3.29	3.27	3.54	3.77	3.77	3.50	3.92	4.43	4.96	4.77	4.81	4.14
4	3.29	3.32	3.47	3.86	3.86	3.47	4.11	4.40	4.98	4.67	4.83	4.15
5	3.36	3.21	3.52	3.92	3.83	3.42	4.16	4.38	4.94	4.72	4.86	4.09
6	3.36	3.24	3.58	3.82	3.80	3.53	4.02	4.37	4.92	4.82	4.78	3.97
7	3.27	3.20	3.52	3.85	3.88	3.52	3.96	4.45	4.91	---	4.71	4.00
8	3.23	3.29	3.38	3.93	3.83	3.55	3.94	4.41	4.88	---	4.65	4.24
9	3.25	3.15	3.37	3.94	3.74	3.54	3.97	4.43	4.93	---	4.65	5.12
10	3.26	3.10	3.31	3.89	3.73	3.53	3.98	4.42	5.03	4.80	4.59	5.27
11	3.22	3.06	3.48	3.80	3.75	3.51	3.96	4.46	4.97	4.76	4.63	4.65
12	3.16	3.12	3.58	3.88	3.70	3.53	3.96	4.46	4.91	4.69	4.61	4.53
13	3.16	3.24	3.50	4.04	3.67	3.61	4.04	4.47	4.84	4.68	4.61	4.53
14	3.06	3.34	3.44	3.96	3.66	3.50	4.19	4.45	4.84	4.66	4.56	4.42
15	3.28	3.21	3.55	4.01	3.67	3.56	4.17	4.50	4.90	4.72	4.52	4.37
16	3.25	3.17	3.48	4.12	3.59	3.71	4.07	4.52	4.90	4.85	4.49	4.36
17	3.21	3.20	3.52	3.94	3.55	3.67	4.07	4.50	4.90	4.83	4.45	4.49
18	3.17	3.05	3.61	3.91	3.53	3.52	4.12	4.47	4.91	4.79	4.38	4.54
19	3.21	3.14	3.57	4.05	3.52	3.51	4.10	4.54	4.96	4.74	4.41	4.38
20	3.07	3.44	3.62	4.00	3.48	3.47	4.21	4.44	4.92	4.71	4.44	4.25
21	3.17	3.38	3.50	3.92	3.48	3.65	4.11	4.53	4.87	4.73	4.44	4.23
22	3.29	3.34	3.50	3.88	3.57	3.64	4.24	4.54	4.87	4.70	4.34	4.28
23	3.25	3.27	3.55	3.94	3.49	3.45	4.28	4.60	4.89	4.81	4.30	4.26
24	3.13	3.18	3.65	3.98	3.47	3.49	4.26	4.81	4.82	4.80	4.28	4.22
25	3.04	3.25	3.74	3.90	3.45	3.51	4.17	4.95	4.90	4.68	4.12	4.17
26	3.09	3.26	3.74	3.80	3.41	3.53	4.23	4.84	4.86	4.60	4.06	4.18
27	3.12	3.31	3.70	3.79	3.37	3.67	4.29	4.83	4.82	4.65	4.08	4.10
28	3.09	3.46	3.66	3.84	3.33	3.69	4.30	4.87	4.82	4.66	4.14	4.12
29	3.09	3.69	3.64	3.87	3.32	3.60	4.23	4.88	4.77	4.64	4.21	4.13
30	3.10	3.51	3.70	3.85	---	3.61	4.28	4.87	4.81	4.62	4.37	3.94
31	3.07	---	3.70	3.90	---	3.68	---	4.83	---	4.77	4.38	---
MEAN	3.20	3.26	3.56	3.90	3.62	3.54	4.11	4.56	4.89	---	4.50	4.32
MAX	3.41	3.69	3.74	4.12	3.88	3.71	4.30	4.95	5.03	---	4.89	5.27
MIN	3.04	3.05	3.31	3.75	3.32	3.34	3.87	4.28	4.77	---	4.06	3.94

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.
CHEMICAL DATA: Water years 1989 to current year (e).
NUTRIENT DATA: Water years 1989 to current year (e).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to September 2003.

INSTRUMENTATION. --Automatic water sampler since September 1989. Water-temperature recorder since November 1994 provided 15-minute-interval readings; since July 2000, provided 5-minute-interval readings.

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Stream discharges were estimated based on comparison of records with Irondequoit Creek at Blossom Road.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 29.0°C, July 15, 1995, Aug. 9, 2001; minimum recorded, 0°C, on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Zinc, water, unfltrd recover-able, ug/L (01092)
OCT												
14-20	1335	1235	e67	119	158	20	.68	.02	.57	.022	.095	13
26-28	1510	0810	e194	--	--	36	.75	<.01	.66	.019	.119	15
OCT 29-NOV 02	1040	0939	e123	127	131	30	.56	.02	.65	.018	.110	8
02-03	1040	1040	e256	123	124	57	.79	.02	.63	.022	.185	20
03-09	1115	1015	e136	131	130	36	.95	.04	.72	.027	.159	14
19-20	1245	2345	e399	112	83	40	1.9	.05	.67	.029	.574	98
DEC												
10-11	0950	1149	e222	174	127	61	.94	.03	1.4	.018	.187	--
11-16	1230	0829	e277	190	95	57	.92	.02	1.2	.027	.161	48
16-23	0905	0805	e251	288	104	28	.64	.01	1.4	.022	.095	25
JAN												
21-27	0950	0850	e113	--	--	--	.56	.05	1.1	.047	.048	--
FEB												
19-24	1320	1219	e170	345	130	21	.49	.02	1.4	.011	.042	6
FEB 25-MAR 03	0935	0734	e314	223	111	26	.64	.03	1.4	.008	.086	13
04-11	0755	0655	e392	168	70	55	.86	.03	1.5	.024	.112	23
11-18	0810	0710	e174	184	100	20	.57	.02	1.2	.017	.062	7
MAY												
22-26	2330	0830	e1,210	95	56	231	2.0	<.03	.72	.026	.453	81
MAY 26-JUN 02	0840	0740	e331	114	74	163	1.5	<.01	1.1	.037	.400	62
10-13	2110	1510	e226	117	84	81	1.0	.03	.96	.034	.144	34
13-16	1610	0609	e261	110	75	78	1.2	.05	.78	.037	.232	38
JUL												
07-12	1510	1310	e148	114	103	97	1.0	.07	.83	.082	.268	42
12-19	1310	1210	e220	119	80	133	2.0	.10	1.2	<.001	.424	48
SEP												
08-09	1400	2359	e1,810	74	49	252	1.9	.01	.90	.070	.571	76
10-16	2259	1059	e509	83	58	116	1.3	.01	.81	.056	.239	29

< Less than.
e Estimated.

04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft from lake on shorter of two boat slips at Watkins Glen.

DRAINAGE AREA.--704 mi^2.

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (1.59 ft Barge Canal datum). To convert elevations to NAVD adjustment of 1988, subtract 0.62 ft. Prior to Oct. 1, 1975, at datum 438.41 ft higher.

REMARKS.--Area of water surface, 67.6 mi^2. Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. Lake elevation regulated by taintor gates on Seneca River at Lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.95 ft, April 26, 27, 1993; minimum elevation, 442.64 ft, Mar. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 446.40 ft, Sept. 18 but may have been higher during period of no elevation record; minimum elevation, 443.83 ft, Feb. 21, 28, 29.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444.93	444.99	445.02	445.15	444.22	443.85	445.35	---	---	---	---	445.44
2	444.92	445.02	444.99	445.07	444.21	443.91	445.42	---	---	---	---	445.44
3	444.84	445.07	444.92	445.03	444.18	444.10	445.46	---	z445.97	---	---	445.37
4	444.79	445.07	444.83	445.02	444.22	444.24	445.54	---	---	---	445.35	445.41
5	444.86	445.04	444.80	444.99	444.21	444.37	445.61	---	---	---	445.35	445.38
6	444.86	445.08	444.75	444.93	444.18	444.58	445.58	---	---	---	445.30	445.27
7	444.81	445.07	444.76	444.86	444.22	444.66	445.56	---	---	---	445.23	445.30
8	444.79	445.07	444.70	444.82	444.21	444.71	445.53	---	---	---	445.21	445.38
9	444.80	445.03	444.67	444.77	444.17	444.73	445.51	---	---	---	445.15	445.77
10	444.81	445.00	444.63	444.68	444.15	444.73	445.48	---	---	---	445.11	446.06
11	444.81	444.95	444.76	444.56	444.11	444.72	445.44	---	---	---	445.09	446.03
12	444.79	444.96	444.87	444.57	444.07	444.74	445.40	---	---	---	445.12	445.98
13	444.80	444.99	444.89	444.56	444.04	444.75	445.47	---	---	---	445.13	445.98
14	444.77	445.00	444.91	444.53	444.01	444.72	445.84	---	---	---	445.13	445.89
15	444.77	445.00	444.96	444.53	444.02	444.77	445.89	---	---	---	445.11	445.80
16	444.83	444.98	444.89	444.49	443.99	444.80	445.87	---	---	---	445.12	445.77
17	444.77	444.98	444.90	444.44	443.93	444.84	445.85	---	---	---	445.07	445.85
18	444.75	444.93	444.90	444.44	443.91	444.83	---	---	---	---	445.01	446.26
19	444.80	444.98	444.88	444.46	443.89	444.83	---	---	---	---	445.00	446.26
20	444.75	445.25	444.88	444.44	443.86	444.80	---	---	---	---	445.04	446.20
21	444.74	445.27	444.79	444.40	443.84	444.93	---	---	---	---	445.10	446.16
22	444.81	445.25	444.77	444.36	443.88	444.98	---	---	---	---	445.11	446.12
23	444.80	445.23	444.76	444.35	443.88	444.95	---	---	---	---	445.06	446.08
24	444.75	445.22	444.94	444.34	443.89	444.97	---	---	---	---	445.14	446.02
25	444.68	445.24	445.22	444.30	443.88	445.04	---	---	---	---	445.00	445.98
26	444.71	445.21	445.26	444.28	443.86	445.12	---	---	---	---	444.95	445.96
27	444.86	445.17	445.27	444.25	443.85	445.25	---	---	---	---	444.99	445.86
28	444.91	445.12	445.22	444.27	443.83	445.33	---	---	---	---	444.99	445.83
29	444.92	445.11	445.20	444.25	443.83	445.36	---	---	---	---	445.02	445.79
30	444.95	445.05	445.21	444.22	---	445.34	---	---	---	---	445.21	445.64
31	444.96	---	445.18	444.20	---	445.34	---	---	---	---	445.44	---
MEAN	444.82	445.08	444.93	444.57	444.02	444.78	---	---	---	---	---	445.81
MAX	444.96	445.27	445.27	445.15	444.22	445.36	---	---	---	---	---	446.26
MIN	444.68	444.93	444.63	444.20	443.83	443.85	---	---	---	---	---	445.27

CAL YR 2003 MEAN 444.93 MAX 445.78 MIN 443.76

z Once daily reading by USGS personnel.

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--207 mi^2.

PERIOD OF RECORD.--April 1965 to current year.

REVISED RECORD.--WDR NY-86-3: 1984 (P).

GAGE.--Water-stage recorder. Datum of gage is 445.35 ft above NGVD of 1929. Prior to Sept. 6, 1991 at datum 0.68 ft lower and prior to Oct. 1, 1982, at datum 1.32 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi^2 of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s, Jun. 22, 1972, gage height 8.37 ft, datum then in use, from rating curve extended above 730 ft^3/s on basis of contracted-opening measurement at Mays Mill, adjusted for intervening area; minimum discharge, 3.2 ft^3/s, part or all of each day, Sept. 6-10, 1982, gage height, 1.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft^3/s, Sept. 9, gage height, 5.62 ft, from rating curve extended as explained above; minimum discharge, 14 ft^3/s, Oct. 24, gage height, 1.47 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	253	48	392	e310	69	53	390	912	32	173	760
2	18	251	45	389	e310	158	228	461	888	32	49	715
3	18	249	e46	390	e300	142	419	576	883	105	47	684
4	18	245	e44	383	293	110	421	638	819	32	47	645
5	18	244	42	425	283	164	411	620	788	32	46	621
6	17	238	40	529	281	105	408	603	757	31	46	599
7	17	236	39	518	280	65	401	596	725	43	44	570
8	16	228	e95	502	265	55	390	565	694	44	42	561
9	16	228	313	493	153	48	381	570	669	35	42	1,490
10	16	224	307	482	27	44	372	560	639	99	43	893
11	16	221	490	477	26	191	367	550	361	30	44	793
12	16	214	374	465	e26	335	363	530	147	30	43	750
13	16	223	344	453	26	324	715	519	146	31	215	712
14	15	208	338	440	26	320	714	562	92	47	332	685
15	17	202	337	431	e26	320	627	503	32	38	321	658
16	15	200	336	405	e28	314	629	401	147	33	189	563
17	15	146	350	407	e28	321	626	376	179	31	21	723
18	15	32	356	404	e26	363	633	334	43	31	21	1,150
19	16	81	346	396	30	465	630	183	36	31	21	833
20	15	122	335	386	27	472	601	187	34	31	21	795
21	16	62	331	376	29	541	596	630	33	31	240	767
22	16	51	329	371	32	493	613	662	34	32	338	727
23	16	46	468	347	e34	483	479	738	32	31	167	698
24	123	46	812	e350	34	500	490	1,050	32	90	20	679
25	255	51	524	e350	e32	531	478	940	32	31	21	552
26	249	46	442	e340	e28	512	422	1,000	34	31	33	349
27	278	43	417	e340	e30	534	415	1,010	33	176	32	190
28	274	46	408	e330	e32	515	403	1,060	33	261	129	37
29	274	56	400	e330	e42	503	397	985	33	397	36	36
30	273	49	416	e320	---	488	387	940	32	367	467	36
31	261	---	405	e320	---	362	---	918	---	365	806	---
TOTAL	2,364	4,541	9,577	12,541	3,064	9,847	14,069	19,657	9,319	2,630	4,096	19,271
MEAN	76.3	151	309	405	106	318	469	634	311	84.8	132	642
MAX	278	253	812	529	310	541	715	1,060	912	397	806	1,490
MIN	15	32	39	320	26	44	53	183	32	30	20	36

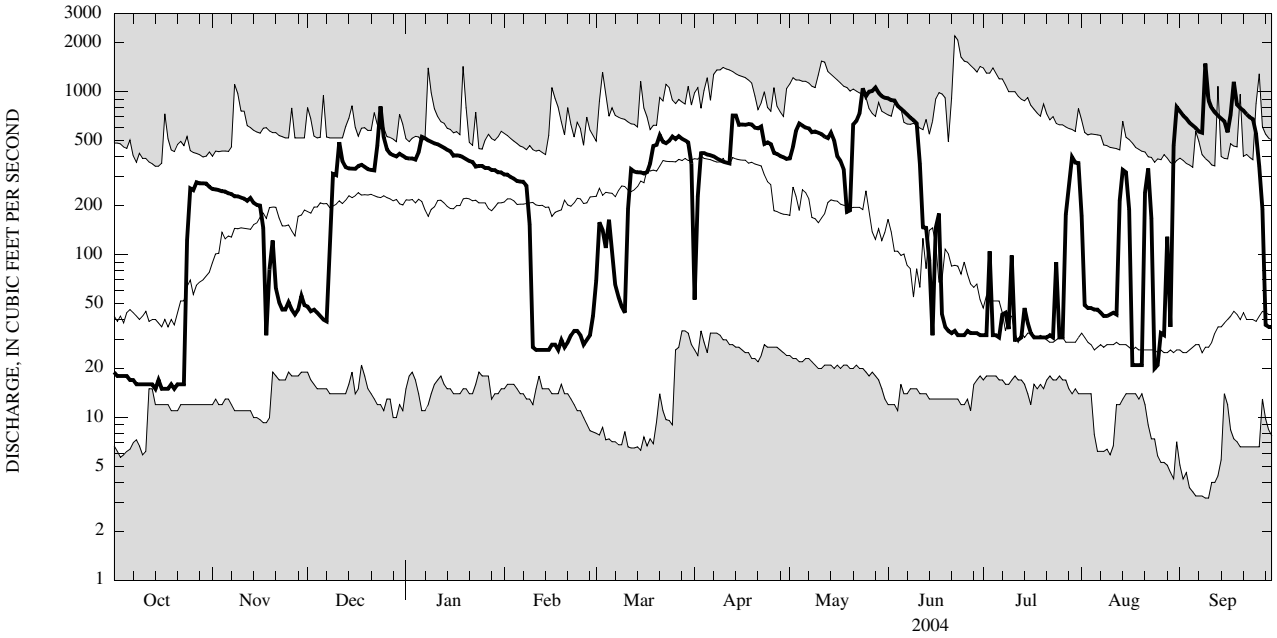
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	106	175	224	209	196	300	339	275	188	107	81.9	95.1
MAX	404	534	532	523	421	601	831	1,003	676	892	450	642
(WY)	(1978)	(1978)	(1978)	(1998)	(1978)	(1976)	(2001)	(1996)	(1972)	(1972)	(1972)	(2004)
MIN	14.6	14.5	14.6	18.3	19.2	31.8	34.9	22.2	17.2	21.1	13.7	7.14
(WY)	(1989)	(2002)	(2002)	(1966)	(1967)	(1989)	(1995)	(1988)	(1980)	(1985)	(1983)	(1982)

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL TOTAL	80,953		110,976			
ANNUAL MEAN	222		303		193	
HIGHEST ANNUAL MEAN					362	1978
LOWEST ANNUAL MEAN					81.1	1981
HIGHEST DAILY MEAN	1,220	Apr 5	1,490	Sep 9	2,200	Jun 22, 1972
LOWEST DAILY MEAN	15	Oct 14	15	Oct 14	3.2	Sep 9, 1982
ANNUAL SEVEN-DAY MINIMUM	15	Oct 14	15	Oct 14	3.4	Sep 4, 1982
10 PERCENT EXCEEDS	489		684		451	
50 PERCENT EXCEEDS	144		279		125	
90 PERCENT EXCEEDS	21		27		21	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi upstream from Enfield (formerly Butternut) Creek, and 5.0 mi south of Ithaca.

DRAINAGE AREA.--35.2 mi^2.

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

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft above NGVD of 1929 (levels by Corps of Engineers).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft^3/s, Jun. 23, 1972, gage height, 8.10 ft, from rating curve extended above 1,600 ft^3/s on basis of slope-area measurements at gage heights 5.5 ft and 7.58 ft; minimum discharge, 1.7 ft^3/s, July 22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 24	1615	798	3.14	0600	808	3.16
Jul 28	1645	862	3.27	0500	1,640	4.60
Aug 30	1545	*1,680	*4.65			

Minimum discharge, 11 ft^3/s, Oct. 13, 14, gage height, 0.55 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	41	53	68	e22	40	114	51	77	16	66	82
2	17	36	49	66	e22	135	e160	117	78	15	49	67
3	16	34	43	76	e21	192	e105	183	80	14	65	57
4	17	31	43	79	e21	202	e100	97	59	13	58	52
5	18	30	40	e80	e21	364	e95	90	51	15	53	48
6	15	36	39	e75	e23	256	e90	77	47	13	43	44
7	15	31	38	e60	e23	169	e85	86	42	51	37	42
8	13	26	40	e55	e23	136	e75	68	37	110	33	114
9	13	24	36	e45	e22	105	e65	72	32	37	28	478
10	13	24	42	e40	e22	94	e55	65	32	26	31	143
11	12	25	285	e40	e22	86	e50	80	31	20	34	87
12	12	25	130	e42	e22	79	e45	74	27	23	32	67
13	12	36	89	e40	e22	67	e200	84	24	23	100	56
14	11	28	75	e35	e21	61	e400	75	22	57	52	49
15	37	27	73	e35	e21	63	e150	133	29	59	38	44
16	24	27	66	e32	e20	59	102	111	22	48	34	40
17	18	29	72	e32	e22	61	88	82	31	41	32	209
18	16	27	71	e30	e22	58	94	72	51	41	32	663
19	20	117	62	e30	24	54	87	65	35	45	30	186
20	18	154	56	e28	24	61	80	54	27	37	37	111
21	17	77	52	e27	29	95	69	94	22	27	200	83
22	18	61	51	e26	30	69	81	70	21	26	81	67
23	17	52	99	e25	30	64	97	144	20	48	62	56
24	16	54	317	e24	29	84	79	188	19	35	50	49
25	15	68	209	e23	28	137	72	102	19	24	41	46
26	16	51	117	e23	27	106	100	87	e18	27	35	43
27	115	46	92	e23	26	130	79	85	e17	169	32	38
28	69	63	82	e23	27	101	68	106	e18	239	33	38
29	87	81	76	e23	32	89	63	69	29	138	59	35
30	65	59	93	e22	---	78	56	58	19	78	382	34
31	48	---	79	e22	---	72	---	61	---	89	142	---
TOTAL	817	1,420	2,669	1,249	698	3,367	3,004	2,800	1,036	1,604	2,001	3,128
MEAN	26.4	47.3	86.1	40.3	24.1	109	100	90.3	34.5	51.7	64.5	104
MAX	115	154	317	80	32	364	400	188	80	239	382	663
MIN	11	24	36	22	20	40	45	51	17	13	28	34
CFSM	0.75	1.34	2.45	1.14	0.68	3.09	2.84	2.57	0.98	1.47	1.83	2.96
IN.	0.86	1.50	2.82	1.32	0.74	3.56	3.17	2.96	1.09	1.70	2.11	3.31

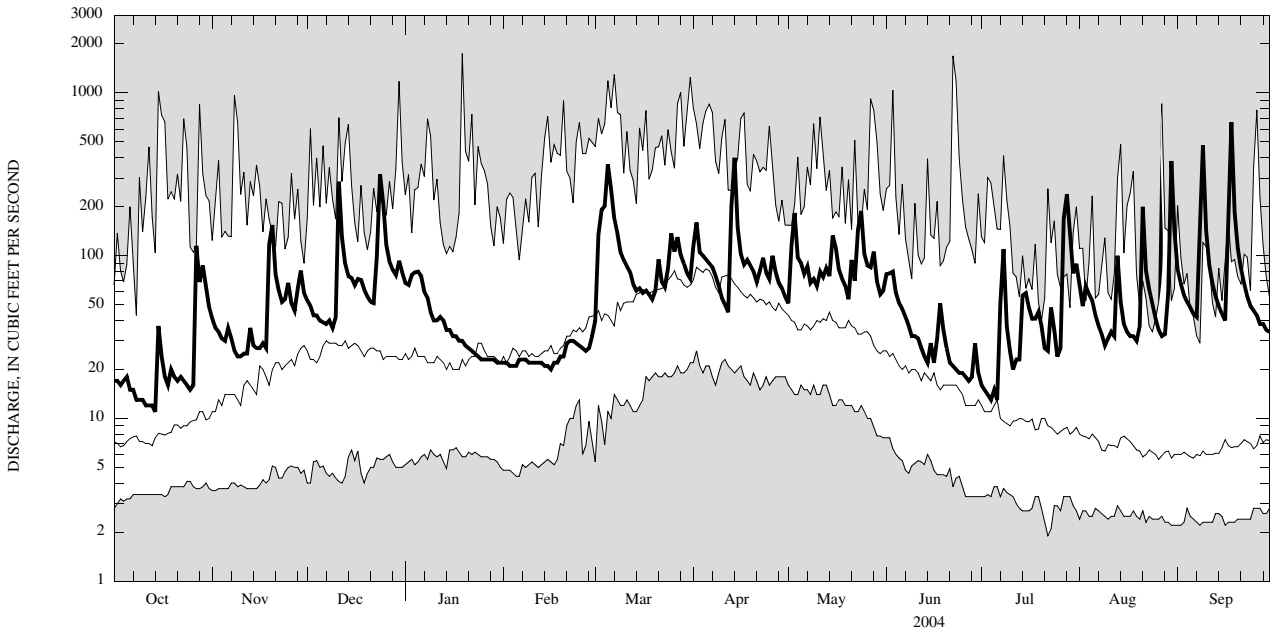
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY)

MEAN	19.7	30.9	39.9	37.1	47.3	88.3	86.9	51.8	27.9	15.5	12.4	13.0
MAX	106	112	118	131	113	182	310	132	162	57.4	66.2	104
(WY)	(1956)	(1997)	(1973)	(1998)	(1976)	(1945)	(1993)	(1984)	(1972)	(1972)	(1942)	(2004)
MIN	3.76	4.56	6.09	6.32	11.8	25.0	21.8	15.7	5.47	3.77	3.24	2.98
(WY)	(1965)	(1965)	(1961)	(1961)	(1980)	(1965)	(1946)	(2001)	(1955)	(1955)	(1966)	(1964)

04233000 CAYUGA INLET NEAR ITHACA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1937 - 2004	
ANNUAL TOTAL	18,755.3		23,793			
ANNUAL MEAN	51.4		65.0		39.1	
HIGHEST ANNUAL MEAN					65.0	2004
LOWEST ANNUAL MEAN					15.3	1965
HIGHEST DAILY MEAN	317	Apr 5	663	Sep 18	1,750	Jan 19, 1996
LOWEST DAILY MEAN	8.7	Aug 28	11	Oct 14	1.9	Jul 22, 1955
ANNUAL SEVEN-DAY MINIMUM	9.5	Aug 23	12	Oct 8	2.2	Aug 28, 1939
ANNUAL RUNOFF (CFSM)	1.46		1.85		1.11	
ANNUAL RUNOFF (INCHES)	19.82		25.14		15.07	
10 PERCENT EXCEEDS	113		116		85	
50 PERCENT EXCEEDS	36		49		21	
90 PERCENT EXCEEDS	14		20		5.4	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04233286 SIXMILE CREEK AT BROOKTONDALE, NY

LOCATION.--Lat 42°22'53", long 76°23'41", Tompkins County, Hydrologic Unit 04140201, on left bank 1,000 ft upstream of bridge on Valley Road and 6.5 mi southeast of Ithaca.

DRAINAGE AREA.--27.0 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 900 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft^3/s, July 28, 2004, gage height, 2.79 ft; minimum discharge, 6.5 ft^3/s, Feb. 12, 2004, gage height 0.36 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,490 ft^3/s, July 28, gage height, 2.79 ft; minimum discharge, 6.5 ft^3/s, Feb. 12, gage height, 0.36 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	88	90	82	20	26	108	40	73	13	77	52
2	22	80	80	89	21	99	117	86	67	12	54	40
3	22	56	67	85	21	127	92	120	62	11	72	33
4	25	37	65	81	20	e160	96	65	42	11	76	27
5	28	36	60	79	20	468	88	74	38	13	81	24
6	20	49	60	e75	23	371	78	59	33	11	45	21
7	17	42	50	e54	25	210	77	57	32	55	33	20
8	16	34	47	e48	e24	159	72	53	30	48	29	50
9	16	30	41	e35	e23	105	61	56	52	21	26	240
10	16	29	50	e30	23	84	51	52	56	16	25	143
11	15	33	409	e32	22	66	47	64	39	12	28	100
12	14	36	217	e42	e22	66	46	49	31	14	55	77
13	13	46	151	e40	22	58	e300	48	29	15	224	61
14	14	33	114	e35	21	53	223	52	26	58	95	46
15	58	32	107	e38	e20	55	128	83	26	75	63	40
16	25	33	98	e35	e19	53	85	73	21	56	46	36
17	20	42	98	e34	e21	52	70	58	25	58	33	239
18	21	39	97	35	e20	49	73	62	27	78	25	465
19	47	166	91	32	21	42	65	61	22	51	23	158
20	33	212	80	30	19	47	66	46	19	38	48	108
21	36	103	69	30	20	76	55	80	18	30	168	79
22	37	75	66	e26	22	56	69	56	18	30	75	58
23	35	70	122	e25	e24	49	74	81	15	82	65	45
24	30	73	379	e24	25	73	62	142	14	42	55	37
25	26	77	230	e23	e24	156	56	89	14	32	42	27
26	26	66	162	e24	e22	160	93	91	14	31	38	28
27	203	63	121	e23	e21	309	66	81	13	170	36	29
28	106	109	98	e23	e20	181	52	101	20	e300	36	30
29	175	150	83	e22	22	119	50	68	28	156	48	27
30	104	98	101	e21	---	88	44	54	15	99	126	25
31	80	---	69	19	---	86	---	56	---	112	92	---
TOTAL	1,325	2,037	3,572	1,271	627	3,703	2,564	2,157	919	1,750	1,939	2,365
MEAN	42.7	67.9	115	41.0	21.6	119	85.5	69.6	30.6	56.5	62.5	78.8
MAX	203	212	409	89	25	468	300	142	73	300	224	465
MIN	13	29	41	19	19	26	44	40	13	11	23	20
CFSM	1.58	2.51	4.26	1.52	0.80	4.42	3.16	2.58	1.13	2.09	2.31	2.92
IN.	1.82	2.80	4.92	1.75	0.86	5.10	3.53	2.97	1.27	2.41	2.67	3.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	42.7	67.9	79.8	37.8	36.6	126	79.1	54.2	40.0	50.1	44.0	52.5
MAX	42.7	67.9	115	41.0	52.1	132	85.5	69.6	49.4	56.5	62.5	78.8
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)
MIN	42.7	67.9	44.4	34.6	21.6	119	72.6	38.8	30.6	43.7	25.4	26.1
(WY)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)

04233286 SIXMILE CREEK AT BROOKTONDALE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	21,340.5		24,229			
ANNUAL MEAN	58.5		66.2		66.2	
HIGHEST ANNUAL MEAN					66.2	2004
LOWEST ANNUAL MEAN					66.2	2004
HIGHEST DAILY MEAN	415	Mar 21	468	Mar 5	468	Mar 5, 2004
LOWEST DAILY MEAN	9.6	Jul 15	11	Jul 3	9.6	Jul 15, 2003
ANNUAL SEVEN-DAY MINIMUM	12	Jul 9	12	Jun 30	12	Jul 9, 2003
ANNUAL RUNOFF (CFSM)	2.16		2.45		2.45	
ANNUAL RUNOFF (INCHES)	29.38		33.36		33.29	
10 PERCENT EXCEEDS	126		123		123	
50 PERCENT EXCEEDS	35		50		50	
90 PERCENT EXCEEDS	14		20		20	

e Estimated

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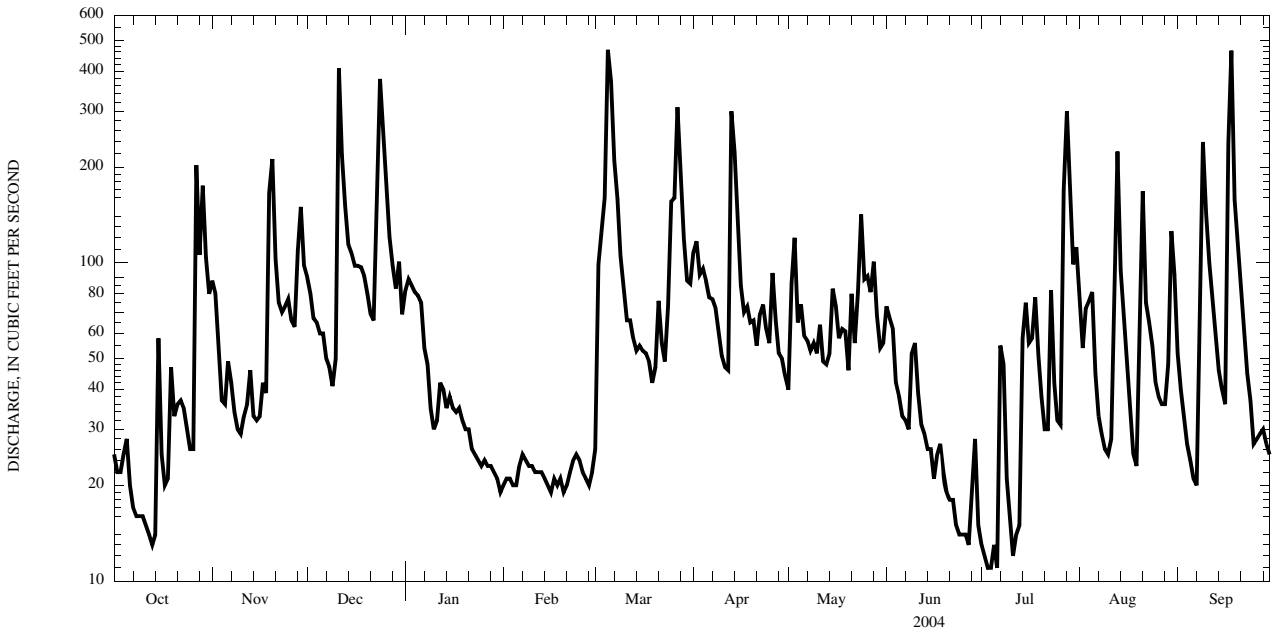


2004 WATER YEAR DAILY MEAN DISCHARGE.

04233286 SIXMILE CREEK AT BROOKTONDALE, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2003 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Water years 2003 to current year.
SUSPENDED-SEDIMENT DISCHARGE: Water years 2003 to current year.
CHEMICAL DATA: Water years 2003 to current year (b).
NUTRIENT DATA: Water years 2003 to current year (b).

INSTRUMENTATION.--Automatic water sampler since 1995.

COOPERATION.--Water-quality samples were collected and analyzed by personnel from the City of Ithaca Water Treatment Plant. Records of daily suspended sediment (mg/L) furnished by the City of Ithaca Water Treatment Plant.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 1,080 mg/L, July 28, 2004; minimum daily mean, 1 mg/L, many days during the 2003 and 2004 water years.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 2,060 tons, July 28, 2004; minimum daily mean, 0.03 tons, Aug. 28, 2003.

SUSPENDED SEDIMENT CONCENTRATION, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e1	e10	e6	e2	e138	e8	17	e6
2	---	---	---	---	e2	e9	9	e2	42	10	e9	22
3	---	---	---	---	2	7	e10	e3	---	e9	e8	e16
4	---	---	---	---	44	e9	e48	e3	---	e8	9	7
5	---	---	---	---	12	9	e88	3	---	e8	e8	4
6	---	---	---	---	e5	e7	e19	e2	---	e7	7	e3
7	---	---	---	---	5	5	16	2	---	6	e6	e2
8	---	---	---	---	e5	e4	e11	e2	---	e6	6	e2
9	---	---	---	---	e5	e4	6	2	---	7	e13	1
10	---	---	---	---	9	3	4	e2	---	e6	e12	e1
11	---	---	---	---	e8	e3	4	e5	---	6	7	1
12	---	---	---	---	e5	e3	e4	e9	---	e6	e7	1
13	---	---	---	---	e5	e3	e3	e6	27	e6	7	e1
14	---	---	---	---	e4	14	3	4	e20	6	e7	e1
15	---	---	---	---	e4	e16	e3	5	e12	e9	8	1
16	---	---	---	---	e4	e24	3	2	6	10	e21	e2
17	---	---	---	---	e3	133	e3	e1	e5	e8	e14	e2
18	---	---	---	---	3	67	e3	e1	5	54	4	e2
19	---	---	---	---	1	29	e3	e1	e5	e19	e2	2
20	---	---	---	---	3	53	e3	e1	6	e9	e3	e2
21	---	---	---	---	1	96	3	1	e6	21	3	e2
22	---	---	---	---	e4	e53	e3	e1	e7	77	4	e3
23	---	---	---	---	e20	e29	e2	2	7	50	e3	e16
24	---	---	---	---	13	e19	2	e9	7	e28	e3	e6
25	---	---	---	---	e7	e18	e2	e8	6	e20	2	e2
26	---	---	---	---	2	39	e2	e5	e6	13	e2	e3
27	---	---	---	---	e7	e17	e2	3	e6	e10	1	e2
28	---	---	---	---	11	8	e2	e2	e6	7	e1	e2
29	---	---	---	---	---	e6	e2	e1	e6	e6	1	2
30	---	---	---	---	---	e5	2	1	6	5	e1	---
31	---	---	---	1	---	4	---	e9	---	e5	e2	---
MEAN	---	---	---	---	7	23	9	3	---	15	6	---
MAX	---	---	---	-	44	133	88	9	-	77	21	-
MIN	---	---	---	-	1	3	2	1	-	5	1	-

e Estimated

04233286 SIXMILE CREEK AT BROOKTONDALE, NY—Continued

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e0.06	e0.60	e1.6	e0.16	e131	e0.26	1.8	e0.66
2	---	---	---	---	e0.08	e0.60	3.1	e0.21	17	0.31	e0.63	5.8
3	---	---	---	---	0.10	e1.0	e3.3	e0.19	e5.0	e0.29	e0.44	e1.9
4	---	---	---	---	21	e1.0	e29	e0.19	e3.5	e0.33	0.82	1.4
5	---	---	---	---	3.2	e0.80	e82	0.20	e3.0	e0.27	e0.69	0.46
6	---	---	---	---	e0.93	e0.80	e8.5	e0.18	e2.5	e0.21	0.42	e0.29
7	---	---	---	---	0.72	e0.70	5.0	0.15	e2.0	0.19	e0.29	e0.18
8	---	---	---	---	e0.60	e0.67	e3.3	e0.13	e1.5	e0.29	0.27	e0.11
9	---	---	---	---	e0.53	e0.66	1.5	0.11	e1.0	e0.23	e4.0	0.05
10	---	---	---	---	e0.40	0.69	1.1	e0.10	e0.80	0.22	e2.3	e0.04
11	---	---	---	---	e0.40	e0.57	0.89	e1.1	e0.90	e0.23	0.69	0.04
12	---	---	---	---	e0.40	e0.45	e0.68	e2.1	e1.5	e0.18	e0.62	0.04
13	---	---	---	---	e0.40	e0.43	e0.56	e1.6	2.8	0.18	0.55	e0.04
14	---	---	---	---	e0.40	2.1	0.44	0.87	e1.5	0.17	e0.44	e0.05
15	---	---	---	---	e0.40	e2.8	e0.40	0.73	e0.69	e0.22	0.47	e0.05
16	---	---	---	---	e0.40	e9.8	0.33	0.20	0.25	0.63	e3.5	e0.05
17	---	---	---	---	e0.34	103	e0.23	e0.09	e0.19	e0.23	e1.7	e0.05
18	---	---	---	---	0.36	54	e0.17	e0.08	0.32	8.6	0.28	e0.05
19	---	---	---	---	0.12	17	e0.20	e0.06	e0.27	e1.1	e0.15	0.08
20	---	---	---	---	0.19	52	e0.16	e0.05	0.33	e0.28	e0.14	e0.08
21	---	---	---	---	0.10	111	0.16	0.09	e1.1	e70	0.15	e0.06
22	---	---	---	---	e0.69	e48	e0.26	e0.06	e1.2	e200	0.16	e0.10
23	---	---	---	---	e14	e19	e0.29	0.08	0.73	25	e0.12	e2.7
24	---	---	---	---	6.8	e9.4	0.19	e1.8	0.55	e9.6	e0.09	e0.29
25	---	---	---	---	e2.6	e8.8	e0.16	e1.5	0.40	e3.5	0.07	e0.09
26	---	---	---	---	1.1	22	e0.15	e0.59	e0.33	1.8	e0.05	e0.08
27	---	---	---	---	e0.80	e7.0	e0.15	0.26	e0.27	e1.3	0.04	e0.09
28	---	---	---	---	e0.60	2.5	e0.14	e0.17	e0.23	0.82	e0.03	e0.29
29	---	---	---	---	---	e2.1	e0.14	e0.12	e0.22	e0.49	0.04	0.08
30	---	---	---	---	---	e1.7	0.14	0.10	0.22	0.33	e0.06	e0.07
31	---	---	---	---	---	1.3	---	e1.3	---	e0.25	e0.06	---
TOTAL	---	---	---	---	57.72	482.47	144.24	14.57	181.30	327.51	21.07	15.27
MEAN	---	---	---	---	2.1	16	4.8	0.47	6.0	11	0.68	0.51
MAX	---	---	---	---	21	111	82	2.1	131	200	4.0	5.8
MIN	---	---	---	---	0.06	0.43	0.14	0.05	0.19	0.17	0.03	0.04

e Estimated

04233286 SIXMILE CREEK AT BROOKTONDALE, NY—Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
JAN													
13...	0730	31	--	7.6	265	.0	31.1	5.89	.91	10.9	76	93	19.9
MAY													
27...	0830	87	12.1	7.9	233	13.9	27.0	4.79	1.14	10.3	61	74	15.6
JUN													
28...	0700	12	--	8.2	356	15.0	47.7	7.79	1.10	14.1	118	141	23.4
SEP													
14...	0800	48	--	8.1	273	14.7	33.8	5.44	1.12	9.79	71	88	13.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Iron, water, fltrd, ug/L (01046)
JAN													
13...	<.2	5.75	12.1	146	E.08	.13	<.04	.78	<.008	<.02	.010	.011	14
MAY													
27...	<.2	5.47	8.3	130	.15	.20	<.04	.31	E.004	<.02	.010	.024	37
JUN													
28...	<.2	5.39	12.4	201	E.10	.13	<.04	.47	<.008	<.02	.005	.008	11
SEP													
14...	<.2	6.66	8.2	142	.10	.10	<.040	.367	.001	<.020	.006	.011	12

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)
JAN	
13...	10.0
MAY	
27...	7.1
JUN	
28...	3.0
SEP	
14...	4.6

04233286 SIXMILE CREEK AT BROOKTONDALE, NY—Continued

WATER-QUALITY RECORDS

SUSPENDED SEDIMENT CONCENTRATION, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1	e6	5	e1	e4	5	23	e4	e9	e3	e102	2
2	e1	e5	e4	1	4	e19	e25	154	7	4	23	e1
3	1	4	4	e3	e3	67	e18	48	e6	e4	e8	e1
4	e1	e3	7	e4	2	90	e12	e11	5	e4	54	e1
5	e1	3	3	6	e2	364	6	140	e4	e4	50	e1
6	1	e3	e2	e6	2	238	e5	e226	e4	5	6	e1
7	e1	3	e2	6	e4	e153	5	27	5	407	e4	1
8	1	e3	3	e5	e6	41	e6	e6	e5	247	e4	49
9	e1	e4	e4	3	7	e20	8	e4	185	5	3	167
10	e1	4	11	e4	e5	11	e7	3	302	e3	e3	21
11	e2	e4	425	e6	3	12	e5	e2	e11	e4	3	e7
12	e2	3	37	7	e2	e11	21	2	e8	4	88	e5
13	e2	e3	31	e6	3	e9	676	e2	e6	e4	317	4
14	3	e3	e21	4	e3	e6	150	3	4	288	e32	e5
15	7	e2	11	e4	e2	5	22	192	e4	218	e19	7
16	e5	e2	e9	e4	e3	e6	11	e306	4	12	7	e7
17	1	2	8	e3	e1	8	e8	53	e4	68	e4	217
18	e1	e2	e6	e3	2	e7	e8	e6	4	e177	3	159
19	e1	137	4	e3	e10	6	8	7	e4	7	e2	e30
20	1	64	e3	e3	18	e7	e10	e11	e4	e6	86	13
21	e2	16	e3	e2	e18	e9	e12	15	3	6	329	e9
22	2	e9	9	2	e16	11	e13	e15	e3	e6	e33	e8
23	e3	e7	51	4	15	e16	13	e38	e3	428	11	6
24	3	5	293	e3	e13	24	6	618	e2	e28	e4	4
25	e3	e4	46	e2	10	60	e5	112	2	e17	2	e2
26	e8	3	e24	1	e9	27	33	25	e2	45	e1	e2
27	182	e3	e18	e1	7	e20	e12	e70	e2	194	1	1
28	61	42	e12	1	e6	e16	5	34	2	1,080	e1	e1
29	114	35	6	e3	e5	12	4	e13	e2	e228	129	1
30	28	e17	e3	4	---	e10	e4	e12	3	68	366	e1
31	14	---	2	e4	---	9	---	e10	---	147	e12	---
MEAN	15	13	34	4	6	42	38	70	20	120	55	24
MAX	182	137	425	7	18	364	676	618	302	1,080	366	217
MIN	1	2	2	1	1	5	4	2	2	3	1	1

e Estimated

04233286 SIXMILE CREEK AT BROOKTONDALE, NY—Continued

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.06	e1.4	1.3	e0.33	e0.22	0.42	6.9	e0.43	e1.7	e0.12	e22	0.33
2	e0.06	e1.1	e0.86	0.30	0.22	e5.7	e7.9	91	1.3	0.12	3.4	e0.11
3	0.06	0.62	0.77	e0.60	e0.17	22	e4.5	23	e0.98	e0.11	e1.5	e0.09
4	e0.07	e0.34	1.2	e0.95	0.11	34	e3.0	e2.0	0.52	e0.12	14	e0.07
5	e0.08	0.29	0.40	1.2	e0.11	532	1.4	e34	e0.46	e0.14	15	e0.06
6	0.05	e0.40	e0.26	e1.1	0.13	240	e1.0	37	e0.40	0.16	0.72	e0.06
7	e0.05	0.35	e0.31	e0.90	e0.26	e88	0.96	4.1	0.39	177	e0.39	0.05
8	0.05	e0.31	0.39	e0.60	e0.40	18	e1.2	e0.83	e0.37	54	e0.28	19
9	e0.05	e0.29	e0.43	e0.50	e0.36	e5.7	1.3	e0.64	79	0.29	0.21	124
10	e0.06	0.30	2.3	e0.40	e0.32	2.5	e0.98	0.39	56	e0.14	e0.20	8.8
11	e0.06	e0.31	589	e0.40	0.15	2.2	e0.69	e0.35	e1.2	e0.13	0.22	e1.9
12	e0.06	0.30	22	e0.60	e0.17	e1.9	3.1	0.21	e0.71	0.16	42	e1.1
13	e0.06	e0.35	13	e0.60	0.17	e1.4	1,070	e0.31	e0.47	e0.16	252	0.67
14	0.11	e0.23	e6.3	e0.55	e0.15	e0.92	110	0.44	0.28	94	e8.2	e0.64
15	1.2	e0.21	3.2	e0.50	e0.15	0.70	7.8	62	e0.25	38	e3.3	0.70
16	e0.35	e0.20	e2.3	e0.45	e0.14	e0.89	2.5	e62	0.21	1.9	0.90	e0.68
17	0.07	0.23	2.1	e0.41	e0.14	1.2	e1.6	8.5	e0.27	26	e0.34	287
18	e0.06	e0.26	e1.6	e0.29	0.19	e0.93	e1.6	e1.0	0.32	e46	0.17	327
19	e0.13	153	1.0	e0.24	e0.57	0.62	1.4	1.2	e0.25	0.97	e0.14	e13
20	0.09	47	e0.73	e0.20	0.92	e0.87	e1.7	e1.4	e0.19	e0.63	22	3.9
21	e0.15	4.5	e0.50	e0.19	e0.98	e1.8	e1.7	3.2	0.16	0.45	173	e1.9
22	0.20	e1.9	1.6	e0.18	e0.96	1.7	e2.5	e2.3	e0.15	e0.47	e6.7	e1.2
23	e0.24	e1.4	18	e0.16	1.0	e2.2	2.6	e7.2	e0.11	147	1.9	0.71
24	0.24	1.0	527	e0.14	e0.84	5.1	e1.0	285	e0.09	e3.2	e0.61	0.36
25	e0.21	e0.86	30	e0.12	e0.70	26	0.72	29	0.08	e1.5	0.17	e0.18
26	e0.62	0.57	e10	e0.10	e0.60	12	9.9	6.0	e0.08	4.8	e0.10	e0.13
27	123	e0.51	e5.8	e0.09	0.51	e17	e2.1	e15	e0.07	88	0.10	0.09
28	19	22	e3.1	0.07	e0.41	e7.7	0.65	11	0.10	2,060	e0.10	e0.10
29	67	16	1.4	e0.18	e0.26	3.9	0.51	e2.5	e0.16	e101	42	0.11
30	7.8	e4.5	e0.94	e0.20	---	e2.3	e0.46	e1.7	0.11	18	137	e0.10
31	2.9	---	0.38	e0.20	---	2.1	---	e1.5	---	45	e3.3	---
TOTAL	224.14	260.73	1,248.17	12.75	11.31	1,041.75	1,251.67	695.20	146.38	2,909.57	751.95	794.04
MEAN	7.2	8.7	40	0.41	0.39	34	42	22	4.9	94	24	26
MAX	123	153	589	1.2	1.0	532	1,070	285	79	2,060	252	327
MIN	0.05	0.20	0.26	0.07	0.11	0.42	0.46	0.21	0.07	0.11	0.10	0.05

e Estimated

04233300 SIXMILE CREEK AT BETHEL GROVE, NY

LOCATION.--Lat 42°24'11", long 76°26'07", Tompkins County, Hydrologic Unit 04140201, on left bank at bridge on German Cross Road, 3.4 mi southeast of Ithaca.

DRAINAGE AREA.--39.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 700 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,200 ft^3/s, Jan. 19, 1996, gage height, 9.78 ft, from rating curve extended above 2,700 ft^3/s; minimum discharge, 1.5 ft^3/s, Aug. 2, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 11	1315	1,430	5.13	2045	1,330	5.02
Dec 24	1600	*1,710	*5.42	1645	1,570	5.28
Mar 5	1645	1,010	4.59	0445	1,670	5.38

Minimum discharge, 12 ft^3/s, July 3, 4, 5, 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	97	109	e100	e30	38	110	54	83	15	90	53
2	29	79	91	e95	e30	133	135	122	75	14	59	43
3	26	70	77	e100	e32	254	96	198	72	13	100	37
4	28	62	73	e125	e34	286	103	98	52	12	116	34
5	32	59	66	106	e32	712	88	118	47	14	116	31
6	25	62	66	103	e33	526	77	95	43	13	61	29
7	23	53	61	e75	e36	285	74	86	39	63	51	26
8	21	48	63	e68	e34	203	65	70	34	90	46	57
9	20	43	56	e50	e32	134	60	74	60	27	41	405
10	19	41	64	e42	e32	99	54	71	64	21	36	186
11	19	42	692	e46	e32	90	50	90	40	17	39	110
12	18	43	316	e60	e31	88	48	68	32	19	79	83
13	17	50	201	e58	e30	70	465	65	29	19	353	66
14	17	43	151	e50	e30	61	384	62	28	84	122	56
15	62	42	145	e54	e29	64	188	116	29	81	82	49
16	31	41	118	e50	e28	58	132	95	24	56	63	45
17	24	49	122	e48	e30	57	101	68	27	51	52	296
18	22	47	118	e50	e29	55	103	65	30	75	44	768
19	44	232	94	e46	e29	50	94	65	25	44	39	231
20	34	320	85	e44	e28	57	100	52	22	33	56	148
21	35	152	77	e40	e38	99	74	75	19	26	341	105
22	40	112	75	e38	e46	64	102	55	19	28	119	82
23	35	89	156	e36	e35	60	121	82	18	88	84	67
24	33	90	679	e35	e40	85	88	193	15	41	72	58
25	30	125	383	e34	e34	174	78	98	15	30	55	55
26	30	87	198	e34	e32	159	136	100	16	28	49	50
27	327	77	e140	e33	e30	299	91	87	14	225	44	42
28	191	136	e110	e33	e30	173	76	114	18	352	42	42
29	310	198	e100	e32	e34	129	65	67	32	215	51	39
30	178	124	e140	e32	---	99	59	55	17	120	138	34
31	124	---	e148	e31	---	85	---	62	---	145	90	---
TOTAL	1,874	2,713	4,974	1,748	940	4,746	3,417	2,720	1,038	2,059	2,730	3,327
MEAN	60.5	90.4	160	56.4	32.4	153	114	87.7	34.6	66.4	88.1	111
MAX	327	320	692	125	46	712	465	198	83	352	353	768
MIN	17	41	56	31	28	38	48	52	14	12	36	26
CFSM	1.54	2.30	4.08	1.43	0.82	3.90	2.90	2.23	0.88	1.69	2.24	2.82
IN.	1.77	2.57	4.71	1.65	0.89	4.49	3.23	2.57	0.98	1.95	2.58	3.15

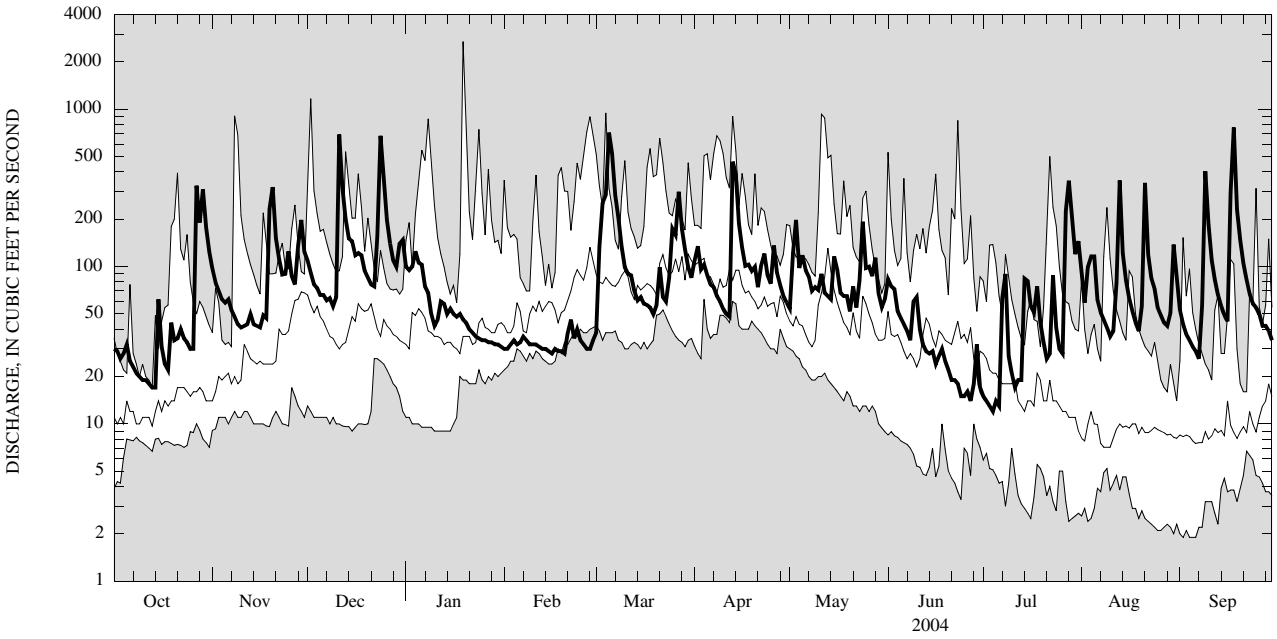
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	25.8	51.3	73.3	76.4	82.5	119	110	75.9	50.7	28.5	22.1	25.7
MAX	60.5	125	184	186	134	188	197	165	94.2	66.4	88.1	111
(WY)	(2004)	(1997)	(1997)	(1996)	(2000)	(2003)	(2001)	(1996)	(2002)	(2004)	(2004)	(2004)
MIN	9.19	11.5	14.8	26.5	32.4	60.6	51.5	19.5	6.77	4.10	3.93	4.38
(WY)	(1998)	(1999)	(1999)	(2001)	(2004)	(2002)	(1995)	(1999)	(1999)	(1999)	(1999)	(1995)

04233300 SIXMILE CREEK AT BETHEL GROVE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	29,824.0		32,286			
ANNUAL MEAN	81.7		88.2		63.5	
HIGHEST ANNUAL MEAN					88.2	2004
LOWEST ANNUAL MEAN					38.1	1999
HIGHEST DAILY MEAN	692	Dec 11	768	Sep 18	2,700	Jan 19, 1996
LOWEST DAILY MEAN	9.0	Jul 15	12	Jul 4	1.9	Sep 2, 1999
ANNUAL SEVEN-DAY MINIMUM	14	Jul 9	14	Jun 30	2.0	Aug 31, 1999
ANNUAL RUNOFF (CFSM)	2.08		2.24		1.62	
ANNUAL RUNOFF (INCHES)	28.23		30.56		21.96	
10 PERCENT EXCEEDS	179		173		130	
50 PERCENT EXCEEDS	48		60		36	
90 PERCENT EXCEEDS	18		27		8.9	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04233300 SIXMILE CREEK AT BETHEL GROVE, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1996 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS CONCENTRATION: October 1996 to September 1998.
SUSPENDED-SOLIDS DISCHARGE: October 1996 to September 1998.
SUSPENDED-SEDIMENT CONCENTRATION: December 1998 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1998 to current year.

INSTRUMENTATION.--Automatic water sampler since 1995.

COOPERATION.--Water-quality samples were collected and analyzed by personnel from the City of Ithaca Water Treatment Plant. Records of daily suspended sediment (mg/L) furnished by the City of Ithaca Water Treatment Plant.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SOLIDS CONCENTRATION: Maximum daily mean, 1,480 mg/L, Nov. 8, 1996; minimum daily mean, 1 mg/L, many days during the 1998 water year.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily mean, 7,050 tons, Nov. 8, 1996; minimum daily mean, 0.02 tons, several days in October 1997 and September 1998.
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 2,330 mg/L, June 23, 2001; minimum daily mean, 1 mg/L, Aug. 19, 2004.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 8,410 tons, June 23, 2001; minimum daily mean, 0.08 tons, Oct. 1, 2003.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 1,660 mg/L, Dec. 11; minimum daily mean, 1 mg/L, Aug. 19.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 4,510 tons,Dec. 11; minimum daily mean, 0.08 tons, Oct. 1.

SUSPENDED SEDIMENT CONCENTRATION, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2	e18	21	23	e5	25	59	e10	e15	e3	e70	29
2	e2	e15	e18	16	e5	e64	60	181	13	2	24	e8
3	2	12	18	19	e5	252	e45	159	e11	e3	182	e7
4	e2	e13	41	e28	e5	e372	e32	e34	9	e5	145	e6
5	e2	15	21	36	e5	350	20	14	e8	e6	63	e4
6	2	e14	e16	e38	5	e243	e16	e15	e8	6	33	e3
7	e2	12	e22	39	e5	e153	14	17	7	238	e24	2
8	3	e11	27	e47	e5	50	e13	e16	e7	438	e14	59
9	e3	e9	e25	56	6	23	11	e14	105	10	5	331
10	3	8	25	e49	e8	e19	e10	12	95	e9	e4	101
11	e3	e7	1,660	e36	e11	15	e8	e11	e13	e11	e4	e30
12	e3	6	488	23	e14	e15	48	11	e10	13	76	e18
13	e3	e6	e91	e15	16	e15	1,220	e11	e7	e19	254	7
14	e5	6	e84	8	e15	e14	386	e10	4	95	e49	e4
15	25	e7	76	e5	e14	14	47	108	e5	74	e28	3
16	e18	e8	e68	4	e12	e16	33	e79	6	14	9	e3
17	5	9	e59	e4	e10	19	e27	e18	e6	32	e4	178
18	e10	e9	e50	e4	8	e19	e23	e16	5	e112	2	652
19	e17	173	42	e4	e8	19	19	16	e4	18	e1	70
20	7	123	e38	e4	7	e20	e18	e27	e3	e7	22	37
21	e5	23	e35	e4	e14	e21	18	38	2	4	263	e27
22	e6	21	e32	e4	e23	22	e31	e40	e3	26	e29	e21
23	e7	e26	711	e4	31	e22	47	e393	e4	135	12	14
24	7	29	492	e4	e31	85	e51	854	e4	e59	e8	9
25	e6	24	e645	e5	e29	47	e54	71	5	e35	7	e7
26	e12	17	306	e5	e26	58	49	33	e4	e19	e5	e5
27	227	e18	80	e5	e24	e241	e31	e48	e3	172	3	4
28	52	49	e48	e5	e21	e161	13	61	2	1,010	e2	e3
29	86	56	29	e5	e19	41	12	e22	e3	231	43	3
30	31	29	26	e5	---	42	e11	e18	3	76	129	e3
31	21	---	30	e5	---	23	---	e16	---	108	e116	---
MEAN	19	26	172	16	13	80	81	77	12	96	53	55
MAX	227	173	1,660	56	31	372	1,220	854	105	1,010	263	652
MIN	2	6	16	4	5	14	8	10	2	2	1	2

e Estimated

04233300 SIXMILE CREEK AT BETHEL GROVE, NY—Continued

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	e4.8	6.1	e14	e1.4	2.6	19	e1.5	e3.3	e0.11	e18	4.4
2	e0.14	e3.1	e4.3	e12	e1.4	e26	22	156	2.6	0.09	3.9	e0.99
3	0.14	2.2	3.7	e11	e1.5	173	e12	126	e2.2	e0.11	73	e0.72
4	e0.15	e2.2	8.2	e14	e1.8	e288	e8.8	e9.0	1.3	e0.15	50	e0.53
5	e0.17	2.5	3.7	10	e2.3	660	4.7	4.3	e1.1	e0.21	24	e0.36
6	0.14	e2.4	e2.9	e11	4.6	e350	e3.3	e3.8	e0.88	0.21	5.5	e0.23
7	e0.15	1.8	e3.7	e9.0	e4.7	e120	2.8	4.1	0.73	224	e3.4	0.13
8	0.15	e1.4	4.6	e7.0	e3.0	29	e2.2	e3.0	e0.66	214	e1.7	25
9	e0.15	e1.1	e3.8	e5.0	3.2	8.5	1.8	e2.8	e80	0.77	0.60	374
10	0.15	0.86	4.6	e4.0	e3.7	e5.0	e1.4	2.4	e60	e0.52	e0.40	56
11	e0.14	e0.79	4,510	e4.0	e4.0	3.8	e1.1	e2.8	e1.4	e0.51	e0.42	e9.0
12	e0.14	0.75	506	e4.2	e5.6	e3.5	6.8	2.0	e0.86	0.67	46	e4.0
13	e0.13	e0.87	e50	e6.2	5.1	e2.8	2,590	e1.9	e0.54	e0.97	321	1.2
14	e0.22	0.75	e34	4.6	e4.3	e2.3	529	e1.7	0.31	45	e17	e0.65
15	4.3	e0.82	30	e4.4	e3.4	2.5	24	48	e0.37	15	e6.4	0.39
16	e1.5	e0.91	e22	5.1	e4.2	e2.6	12	e22	0.38	2.2	1.6	e0.34
17	0.31	1.2	e19	e5.6	e3.9	2.9	e7.5	e3.4	e0.40	7.0	e0.54	324
18	e0.61	e1.2	e16	e3.7	2.9	e2.8	e6.4	e2.7	0.40	e24	0.22	1,690
19	e2.1	221	11	e2.7	e2.4	2.6	4.9	2.7	e0.27	2.4	e0.09	46
20	0.72	135	e8.6	e2.4	1.8	e3.1	e4.8	e3.8	e0.18	e0.60	5.0	15
21	e0.51	9.7	e7.2	e2.0	e4.1	e5.6	3.5	7.7	0.12	0.30	288	e7.6
22	e0.64	6.3	e6.4	e1.4	e5.8	3.8	e8.4	e5.8	e0.15	2.7	e9.5	e4.6
23	e0.64	e6.1	223	e1.6	8.5	e3.6	15	e77	e0.17	36	2.6	2.6
24	0.64	7.1	1,460	e1.8	e6.4	21	e12	406	e0.18	e6.7	e1.5	1.4
25	e0.52	8.6	e689	e1.6	e7.7	22	e11	20	0.20	e2.9	1.1	e1.0
26	e1.0	3.9	174	e1.5	e6.1	26	18	9.0	e0.17	e1.6	e0.67	e0.72
27	285	e3.7	28	e1.5	e4.8	e194	e7.6	e11	e0.12	109	0.33	0.44
28	29	32	e20	e1.5	e3.8	e77	2.7	20	0.11	2,320	e0.24	e0.35
29	97	34	e15	e1.3	e2.7	14	2.0	e4.0	e0.23	168	9.8	0.28
30	15	9.8	e20	e1.4	---	11	e1.8	e2.7	0.14	25	54	e0.24
31	7.1	---	e20	e1.5	---	5.3	---	e2.7	---	42	e29	---
TOTAL	448.64	506.85	7,914.8	157.0	115.1	2,074.3	3,346.5	969.8	159.47	3,252.72	975.51	2,572.17
MEAN	14	17	255	5.1	4.0	67	112	31	5.3	105	31	86
MAX	285	221	4,510	14	8.5	660	2,590	406	80	2,320	321	1,690
MIN	0.08	0.75	2.9	1.3	1.4	2.3	1.1	1.5	0.11	0.09	0.09	0.13

e Estimated

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY

(Formerly published as Cayuga Lake at Ithaca)

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank in restaurant 200 ft upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1.0 mi upstream from mouth of Inlet, at Ithaca.

DRAINAGE AREA.--Cayuga Inlet 143 mi^2; Cayuga Lake at mouth 1,564 mi^2; Cayuga Lake portion 785 mi^2.

PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (1.43 ft Barge Canal datum). To convert elevations to NAVD adjustment of 1988, subtract 0.62 ft. Prior to September 1925, non-recording gage at several sites within 1 mi of present site. Prior to October 1968, at datum 378.57 ft higher. October 1968 to September 1975, at datum 376.57 ft higher.

REMARKS.--Lake elevation regulated at Mud Lock by New York State Thruway Authority. Area of water surface, 66.9 mi^2. Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi upstream from Mud Lock and is included in second drainage area given above. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.46 ft, Apr. 26, 1993; minimum elevation not determined; minimum daily elevation, 377.64 ft, present datum, Mar. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 383.88 ft, Sept. 18; minimum elevation, 378.78 ft, Feb. 18.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382.15	382.25	381.50	382.28	379.29	379.04	381.45	383.11	383.26	382.44	383.13	383.23
2	382.09	382.19	381.56	382.17	379.25	379.21	381.57	383.13	383.22	382.49	383.10	383.18
3	381.97	382.16	381.51	382.14	379.24	379.52	381.59	383.37	383.19	382.48	383.00	383.04
4	381.87	382.07	381.48	382.16	379.28	379.71	381.66	383.38	383.09	382.38	382.99	382.99
5	381.92	381.98	381.51	382.13	379.24	380.02	381.69	383.33	382.94	382.44	382.97	382.83
6	381.85	381.97	381.53	382.07	379.19	380.41	381.63	383.32	382.86	382.53	382.87	382.62
7	381.78	381.90	381.49	381.98	379.21	380.55	381.62	383.34	---	382.45	382.79	382.56
8	381.79	381.84	381.32	381.91	379.14	380.69	381.62	383.27	---	382.59	382.69	382.58
9	381.80	381.66	381.22	381.83	379.06	380.75	381.71	383.24	382.81	382.68	382.60	382.84
10	381.81	381.54	381.10	381.70	379.09	380.80	381.79	383.20	382.86	382.66	382.51	383.15
11	381.83	381.40	381.34	381.55	379.07	380.81	381.88	383.17	382.83	382.67	382.53	383.11
12	381.83	381.39	381.55	381.52	379.03	380.86	381.96	383.10	382.76	382.66	382.56	383.15
13	381.85	381.42	381.55	381.46	379.01	380.89	382.21	383.03	382.62	382.68	382.65	383.17
14	381.77	381.37	381.52	381.29	379.00	380.76	382.78	382.96	382.59	382.76	382.67	383.12
15	381.89	381.25	381.58	381.20	378.94	380.82	382.91	382.92	382.65	382.89	382.64	383.04
16	381.93	381.13	381.48	381.09	---	380.84	382.91	382.84	382.67	382.94	382.65	383.04
17	381.90	381.07	381.55	380.89	---	380.87	382.92	382.72	382.67	382.91	382.56	383.15
18	381.89	380.91	381.60	380.76	---	380.85	382.98	382.65	382.74	382.90	382.53	383.72
19	381.95	380.96	381.60	380.63	---	380.84	383.02	382.64	382.80	382.89	382.50	383.73
20	381.90	381.33	381.63	380.50	---	380.74	383.09	382.55	382.72	382.85	382.55	383.65
21	381.95	381.37	381.55	380.32	---	380.88	383.01	382.74	382.59	382.78	382.68	383.51
22	382.05	381.40	381.54	380.18	---	380.90	383.17	382.80	382.58	382.69	382.69	383.47
23	382.05	381.33	381.56	380.05	---	380.84	383.23	---	382.62	382.71	382.65	383.38
24	382.00	381.27	381.89	379.94	379.00	380.84	383.30	---	382.56	382.72	382.67	383.28
25	381.91	381.36	382.26	379.81	379.00	380.92	383.23	---	382.60	382.58	382.46	383.18
26	381.98	381.36	382.38	379.70	379.02	381.02	383.30	---	382.59	382.55	382.42	383.10
27	382.19	381.35	382.40	379.57	379.03	381.27	383.33	383.35	382.53	382.80	382.46	382.90
28	382.27	381.35	382.33	379.53	379.02	381.35	383.29	383.50	382.48	383.02	382.47	382.85
29	382.30	381.44	382.28	379.44	379.01	381.30	383.19	383.52	382.47	383.12	382.45	382.76
30	382.33	381.43	382.30	379.38	---	381.34	383.16	383.44	382.48	383.06	382.81	382.65
31	382.28	---	382.29	379.35	---	381.41	---	383.33	---	383.08	383.21	---
MEAN	381.97	381.51	381.69	380.92	---	380.68	382.51	---	---	382.72	382.69	383.10
MAX	382.33	382.25	382.40	382.28	---	381.41	383.33	---	---	383.12	383.21	383.73
MIN	381.77	380.91	381.10	379.35	---	379.04	381.45	---	---	382.38	382.42	382.56

CAL YR 2003 MEAN 381.68 MAX 383.30 MIN 379.07

0423368620 VIRGIL CREEK AT STATE HIGHWAY 13 AT DRYDEN, NY

LOCATION.--Lat 42°29'25", long 76°18'23", Tompkins County, Hydrologic Unit 04140201, on left bank, 150 ft upstream from bridge on State Highway 13, and 0.4 mi east of Dryden.

DRAINAGE AREA.--29.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2002 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1,070 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft^3/s, Dec. 11, 2003, gage height, 4.32 ft; minimum discharge, 4.0 ft^3/s, Sept. 11, 2003, gage height, 1.13 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,070 ft^3/s, Dec. 11, gage height, 4.32 ft; minimum discharge, 7.4 ft^3/s, July 4, 6, 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	93	92	88	e25	25	111	47	116	14	89	52
2	21	76	75	82	e25	115	133	73	87	12	56	41
3	22	68	61	102	e27	254	89	187	80	11	48	34
4	23	57	55	103	e28	246	91	85	60	9.0	48	26
5	32	53	48	e96	e27	636	e90	78	52	8.6	51	23
6	22	48	47	e90	e27	835	e78	70	46	7.9	38	19
7	19	41	45	e56	e29	333	69	65	42	11	32	17
8	17	34	42	e56	e28	225	59	53	37	22	27	27
9	16	31	38	e42	e27	155	51	55	32	28	24	337
10	16	29	41	e34	e27	123	42	50	32	14	25	159
11	16	31	647	e38	e27	109	e45	58	30	11	23	84
12	15	33	335	e52	e26	104	39	42	25	12	30	63
13	15	59	165	e50	e25	82	249	38	23	11	342	52
14	16	48	129	e42	e25	68	340	33	22	122	106	43
15	120	43	122	e44	e24	74	e200	40	22	115	65	37
16	51	42	104	e42	e23	67	e160	45	20	91	51	30
17	30	75	107	e41	e25	64	92	30	30	76	47	148
18	25	63	108	e42	e24	59	92	31	32	45	36	626
19	45	205	93	e38	e24	51	91	37	22	33	32	211
20	38	392	85	e35	e23	57	85	28	19	23	35	141
21	42	129	77	e33	e32	141	68	197	17	16	257	107
22	43	87	74	e32	e39	e90	92	76	19	16	98	82
23	36	69	144	e30	e29	e66	104	96	18	29	67	66
24	34	66	433	e29	e32	95	79	320	15	20	52	56
25	33	91	290	e28	e27	226	69	156	13	13	42	48
26	30	61	159	e28	e27	186	167	198	14	14	35	44
27	383	57	123	e27	e24	377	107	151	12	196	28	41
28	211	98	102	e27	17	198	77	282	15	248	27	42
29	316	214	94	e27	18	135	67	120	23	199	34	34
30	180	102	144	e27	---	104	55	92	15	89	174	31
31	119	---	109	e25	---	87	---	91	---	127	95	---
TOTAL	2,008	2,495	4,188	1,486	761	5,387	3,091	2,924	990	1,643.5	2,114	2,721
MEAN	64.8	83.2	135	47.9	26.2	174	103	94.3	33.0	53.0	68.2	90.7
MAX	383	392	647	103	39	835	340	320	116	248	342	626
MIN	15	29	38	25	17	25	39	28	12	7.9	23	17
CFSM	2.18	2.80	4.55	1.61	0.88	5.85	3.47	3.18	1.11	1.79	2.30	3.05
IN.	2.52	3.13	5.25	1.86	0.95	6.75	3.87	3.66	1.24	2.06	2.65	3.41

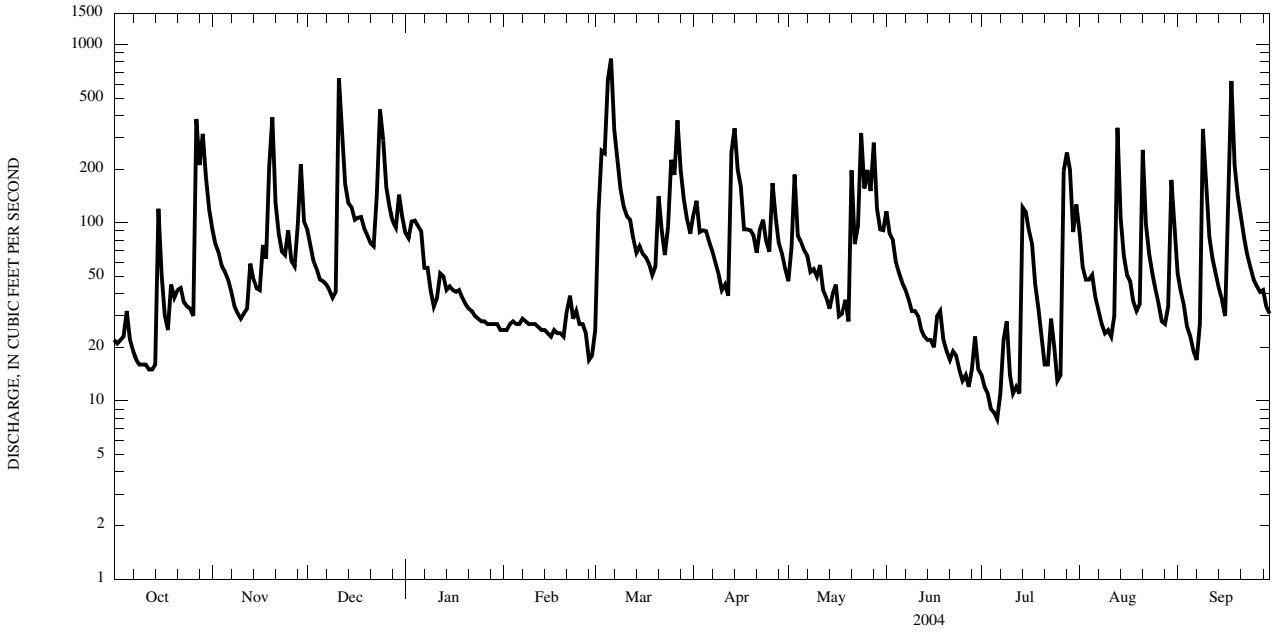
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	64.8	75.0	101	48.2	40.1	164	98.1	68.0	39.1	54.6	47.2	56.6
MAX	64.8	83.2	135	48.5	54.4	174	103	94.3	45.2	56.2	68.2	90.7
(WY)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)
MIN	64.8	66.9	66.1	47.9	26.2	154	93.2	41.8	33.0	53.0	26.3	22.5
(WY)	(2004)	(2003)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2004)	(2003)	(2003)

0423368620 VIRGIL CREEK AT STATE HIGHWAY 13 AT DRYDEN, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	25,177.5		29,808.5			
ANNUAL MEAN	69.0		81.4		81.4	
HIGHEST ANNUAL MEAN					81.4	2004
LOWEST ANNUAL MEAN					81.4	2004
HIGHEST DAILY MEAN	647	Dec 11	835	Mar 6	835	Mar 6, 2004
LOWEST DAILY MEAN	8.7	Aug 31	7.9	Jul 6	7.9	Jul 6, 2004
ANNUAL SEVEN-DAY MINIMUM	10	Aug 25	10	Jul 1	10	Aug 25, 2003
ANNUAL RUNOFF (CFSM)	2.32		2.74		2.74	
ANNUAL RUNOFF (INCHES)	31.54		37.34		37.26	
10 PERCENT EXCEEDS	158		182		182	
50 PERCENT EXCEEDS	36		48		48	
90 PERCENT EXCEEDS	15		19		19	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE.

0423368620 VIRGIL CREEK AT STATE HIGHWAY 13 AT DRYDEN, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2003 to current year.
CHEMICAL DATA: Water years 2003 to current year (b).
NUTRIENT DATA: Water years 2003 to current year (b).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
JAN													
13...	0830	41	7.5	315	.0	38.6	7.78	1.14	11.4	94	115	20.5	<.2
MAY													
27...	0700	133	8.1	261	15.7	31.9	6.26	1.26	10.0	75	90	14.0	<.2
JUN													
28...	0800	12	8.1	383	14.0	48.9	10.1	1.06	15.4	125	151	26.1	<.2
SEP													
14...	0700	48	8.2	334	15.8	40.8	7.49	1.28	12.3	107	130	19.4	<.2

Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
JAN													
13...	4.65	12.6	172	.12	.26	<.04	1.48	E.004	<.02	.006	.019	24	11.9
MAY													
27...	4.08	9.1	143	.26	.36	<.04	.59	.014	E.01	.020	.042	108	21.4
JUN													
28...	3.06	14.2	208	.18	.22	<.04	1.01	<.008	<.02	.007	.017	38	11.3
SEP													
14...	5.40	9.8	182	.20	.40	<.04	.78	<.008	<.02	.005	.027	29	8.2

PESTICIDE DATA

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
JAN													
13...	0830	<.006	E.009	<.006	<.004	<.005	.008	<.050	<.010	<.002	<.041	<.020	<.005
MAY													
27...	0700	<.006	E.015	<.006	<.004	<.005	.046	<.050	<.010	<.002	<.041	<.020	<.005
JUN													
28...	0800	<.006	E.008	<.006	<.004	<.005	.016	<.050	<.010	<.002	<.041	<.020	<.005
SEP													
14...	0700	<.006	E.010	<.006	<.004	<.005	.018	<.050	<.010	<.002	<.041	<.020	<.005

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)
JAN													
13...	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
MAY													
27...	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
JUN													
28...	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
SEP													
14...	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027

0423368620 VIRGIL CREEK AT STATE HIGHWAY 13 AT DRYDEN, NY—Continued

PESTICIDE DATA—CONTINUED

Date	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)
JAN													
13...	<.006	E.006	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010
MAY													
27...	<.006	.035	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010
JUN													
28...	<.006	E.009	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010
SEP													
14...	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010

Date	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
JAN									
13...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
MAY									
27...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
JUN									
28...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
SEP									
14...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009

< Less than.

04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi east of Ithaca, 0.5 mi upstream from Cornell University dam, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--126 mi^2.

PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.

REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft above NGVD of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion from point about 1 mi upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft^3/s, July 8, 1935, gage height, 9.52 ft, from average of computed flow over each of four dams; maximum gage height, 11.16 ft, Feb. 21, 1971 (ice jam); minimum discharge, 2.1 ft^3/s, Sept. 6, 7, 1999, gage height, 0.12 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 11	2130	2,040	3.78	0230	2,150	3.86
Dec 24	2330	1,990	3.74	0430	*2,320	3.99
Jan 16	1100	2,280	3.96	1830	2,190	3.89
Mar 3	0130	ice jam	*a6.54	0900	2,300	3.97

Minimum discharge, 38 ft^3/s, July 6, gage height, 0.69 ft.

a Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	337	417	374	e105	e140	379	238	333	53	339	532
2	98	289	370	323	e105	e300	565	276	248	48	217	317
3	105	283	296	360	e110	e500	392	754	239	44	178	244
4	99	250	259	458	e115	e900	383	e450	179	41	179	200
5	137	220	262	395	e110	1,550	351	e400	152	43	181	175
6	109	206	239	347	e112	2,020	304	e420	142	41	150	157
7	93	184	226	223	e120	1,280	294	e370	132	44	133	138
8	83	162	206	e225	e115	791	268	e290	119	170	118	146
9	78	143	222	e170	e110	545	239	e220	110	200	107	899
10	73	135	219	e140	e110	435	207	e195	104	92	99	713
11	70	136	1,220	155	e110	382	187	201	110	64	98	347
12	66	162	1,300	209	e106	380	177	171	94	57	95	247
13	61	248	551	e200	e104	308	762	169	86	79	584	208
14	60	239	396	e170	e102	261	1,650	146	84	238	286	179
15	215	200	361	e180	e100	275	612	182	93	597	174	158
16	236	186	364	e170	e96	260	412	251	80	370	139	144
17	131	241	371	e165	e102	233	335	166	96	307	128	358
18	105	274	394	e170	e100	239	319	144	153	580	127	1,880
19	132	465	347	e155	e98	213	381	185	97	224	106	626
20	148	1,460	307	e145	e96	213	333	138	80	159	123	359
21	136	637	265	e135	e130	505	280	693	69	124	710	281
22	151	428	259	e130	e160	346	384	252	74	111	406	231
23	129	337	439	e125	e120	261	435	324	88	746	210	199
24	121	304	1,210	e120	e130	310	362	1,170	66	269	166	171
25	119	490	1,340	e115	e110	708	287	513	57	150	140	155
26	113	352	649	e115	e110	615	508	580	58	131	121	146
27	736	294	486	e112	e100	1,240	408	369	53	943	108	132
28	881	324	397	e112	e100	895	315	833	50	979	106	131
29	769	787	362	e110	e110	567	271	353	81	686	199	126
30	733	487	500	e110	---	434	249	249	63	324	1,470	118
31	430	---	522	e105	---	363	---	225	---	348	1,490	---
TOTAL	6,523	10,260	14,756	6,023	3,196	17,469	12,049	10,927	3,390	8,262	8,687	9,717
MEAN	210	342	476	194	110	564	402	352	113	267	280	324
MAX	881	1,460	1,340	458	160	2,020	1,650	1,170	333	979	1,490	1,880
MIN	60	135	206	105	96	140	177	138	50	41	95	118
CFSM	1.67	2.71	3.78	1.54	0.87	4.47	3.19	2.80	0.90	2.12	2.22	2.57
IN.	1.93	3.03	4.36	1.78	0.94	5.16	3.56	3.23	1.00	2.44	2.56	2.87

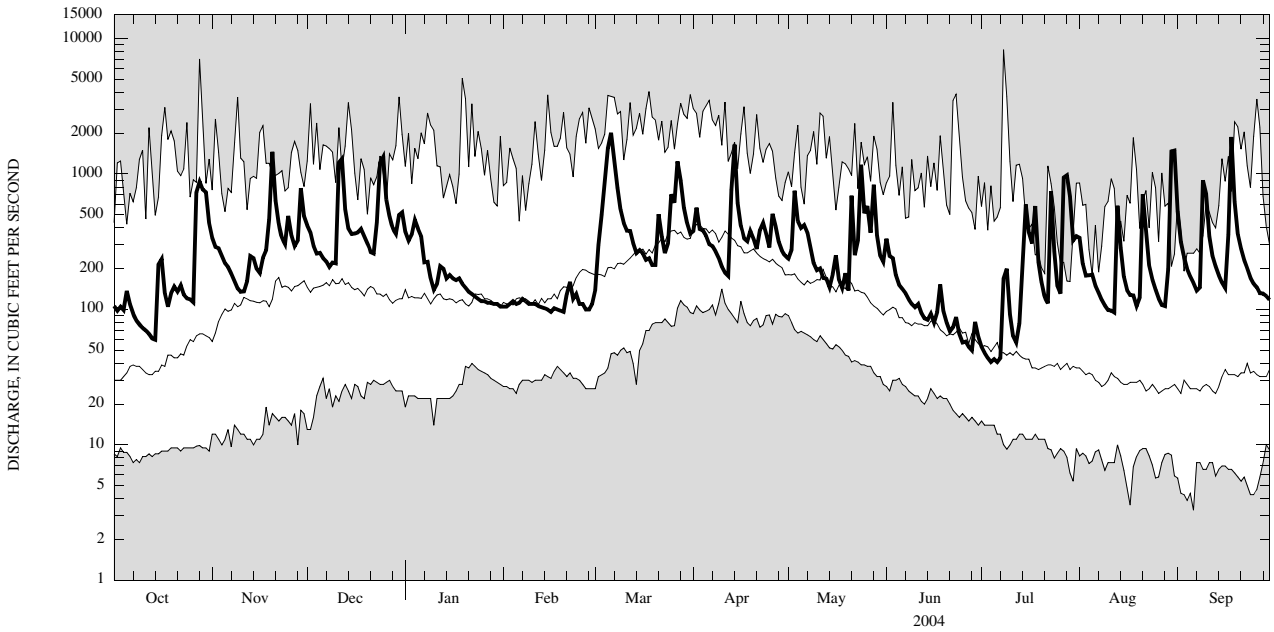
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	102	177	209	191	218	412	410	214	122	74.8	54.0	67.7
MAX	594	497	555	575	595	1,037	1,313	532	615	608	280	561
(WY)	(1982)	(1928)	(1997)	(1998)	(1981)	(1936)	(1993)	(1996)	(1972)	(1935)	(2004)	(1977)
MIN	9.57	16.5	31.9	38.4	44.1	160	100	62.0	25.6	14.9	8.93	7.09
(WY)	(1965)	(1965)	(1961)	(1961)	(1934)	(1965)	(1946)	(1934)	(1999)	(1999)	(1965)	(1964)

04234000 FALL CREEK NEAR ITHACA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	92,617		111,259			
ANNUAL MEAN	254		304		188	
HIGHEST ANNUAL MEAN					304	2004
LOWEST ANNUAL MEAN					83.6	1965
HIGHEST DAILY MEAN	1,640	Apr 5	2,020	Mar 6	8,280	Jul 8, 1935
LOWEST DAILY MEAN	32	Aug 29	41	Jul 4	3.3	Sep 6, 1999
ANNUAL SEVEN-DAY MINIMUM	38	Aug 23	45	Jul 1	4.6	Aug 31, 1999
ANNUAL RUNOFF (CFSM)	2.01		2.41		1.49	
ANNUAL RUNOFF (INCHES)	27.34		32.85		20.25	
10 PERCENT EXCEEDS	581		629		420	
50 PERCENT EXCEEDS	153		208		100	
90 PERCENT EXCEEDS	56		96		23	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04234232 GREAT BROOK BELOW VICTOR, NY

LOCATION.--Lat 42°58'41", long 77°23'47", Ontario County, Hydrologic Unit 04140201, on right bank 0.1 mi upstream from State Highway 96, at east boundary line of village of Victor, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--16.8 mi^2.

PERIOD OF RECORD.--November 1993 to September 2004 (discontinued).

REVISED RECORDS.--WDR NY-96-3: 1994-95 (M). WDR NY-98-3: 1994-97. WDR NY-03-3: 1994-2002 (M).

GAGE.--Water-stage recorder and double V-notch sharp-crested weir as control. Elevation of gage is 560 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 350 ft^3/s, Jan. 8, 1998, gage height, 7.09 ft, from rating curve extended above 260 ft^3/s; minimum discharge 0.83 ft^3/s, Aug. 3, 1999, gage height, 1.22 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	2145	232	5.00	1315	263	5.51
Dec 24	1830	237	5.07	2215	216	4.75
Apr 2	0630	224	4.87	1130	*347	*7.05
Apr 13	2300	228	4.94			

Minimum discharge, 2.0 ft^3/s, Oct. 17, 18, gage height, 1.56 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	5.7	21	13	e6.2	38	54	8.8	16	4.7	8.7	15
2	5.1	6.6	15	13	e6.2	113	148	16	8.4	3.3	5.5	8.9
3	4.5	15	12	27	e6.6	64	69	23	7.0	3.0	4.5	6.4
4	6.0	11	11	21	e7.2	39	69	13	5.0	3.4	5.0	5.1
5	5.7	12	11	17	e7.4	59	51	13	4.2	3.5	5.8	4.4
6	4.2	11	9.5	13	e7.8	36	34	12	4.1	4.8	4.6	4.0
7	3.7	7.7	8.7	10	e9.6	22	30	13	3.7	32	5.1	4.0
8	3.4	6.1	8.0	9.1	e8.2	22	23	10	3.1	14	4.6	14
9	3.2	5.1	8.0	9.3	e7.8	18	18	14	3.4	7.6	3.8	268
10	3.0	4.6	11	e8.0	e7.6	16	15	13	14	5.3	4.1	51
11	3.1	5.7	54	e7.8	e7.6	15	13	9.7	5.3	4.2	4.6	22
12	3.0	6.9	25	e8.6	e7.4	16	12	8.2	3.9	9.4	4.8	13
13	2.9	20	13	e9.0	e7.0	12	78	7.5	9.5	9.5	8.0	9.4
14	2.8	14	11	e8.6	e6.8	11	107	8.6	12	9.9	7.8	7.4
15	4.5	12	14	e8.2	e6.4	13	32	11	8.9	23	5.9	5.9
16	4.4	12	12	e7.2	e6.2	10	21	9.8	5.6	13	5.3	5.0
17	2.5	16	27	e7.0	e6.0	13	16	7.5	36	10	4.9	14
18	2.0	13	26	e7.6	e6.0	12	36	23	21	11	4.5	54
19	2.7	74	17	e7.8	e6.4	11	30	19	17	10	7.1	15
20	2.7	75	15	e7.6	e6.8	17	20	11	8.5	13	8.0	8.5
21	4.0	19	13	e7.0	e10	48	22	28	5.9	8.7	15	6.6
22	6.5	13	14	e7.0	e16	23	55	13	6.0	7.0	8.1	5.6
23	5.5	11	57	e6.8	e12	16	21	67	5.4	6.6	5.1	5.1
24	3.9	11	139	e6.6	e11	30	16	175	4.9	5.9	4.0	4.2
25	3.4	12	59	e6.4	e9.0	51	14	34	8.2	5.2	3.6	4.0
26	5.4	9.3	23	e6.0	e8.6	30	15	21	6.9	6.1	3.6	3.7
27	18	10	16	e6.6	e8.2	84	14	15	6.2	90	3.0	3.3
28	12	76	14	e7.2	e9.2	30	11	25	4.4	61	11	3.6
29	12	57	13	e6.8	e16	20	10	13	4.3	31	21	3.5
30	12	24	23	e6.6	---	15	8.8	9.5	4.2	13	83	3.6
31	7.1	---	17	e6.4	---	21	---	12	---	12	62	---
TOTAL	164.0	575.7	717.2	293.2	241.2	925	1,062.8	663.6	253.0	441.1	332.0	578.2
MEAN	5.29	19.2	23.1	9.46	8.32	29.8	35.4	21.4	8.43	14.2	10.7	19.3
MAX	18	76	139	27	16	113	148	175	36	90	83	268
MIN	2.0	4.6	8.0	6.0	6.0	10	8.8	7.5	3.1	3.0	3.0	3.3
CFSM	0.31	1.14	1.38	0.56	0.50	1.78	2.11	1.27	0.50	0.85	0.64	1.15
IN.	0.36	1.27	1.59	0.65	0.53	2.05	2.35	1.47	0.56	0.98	0.74	1.28

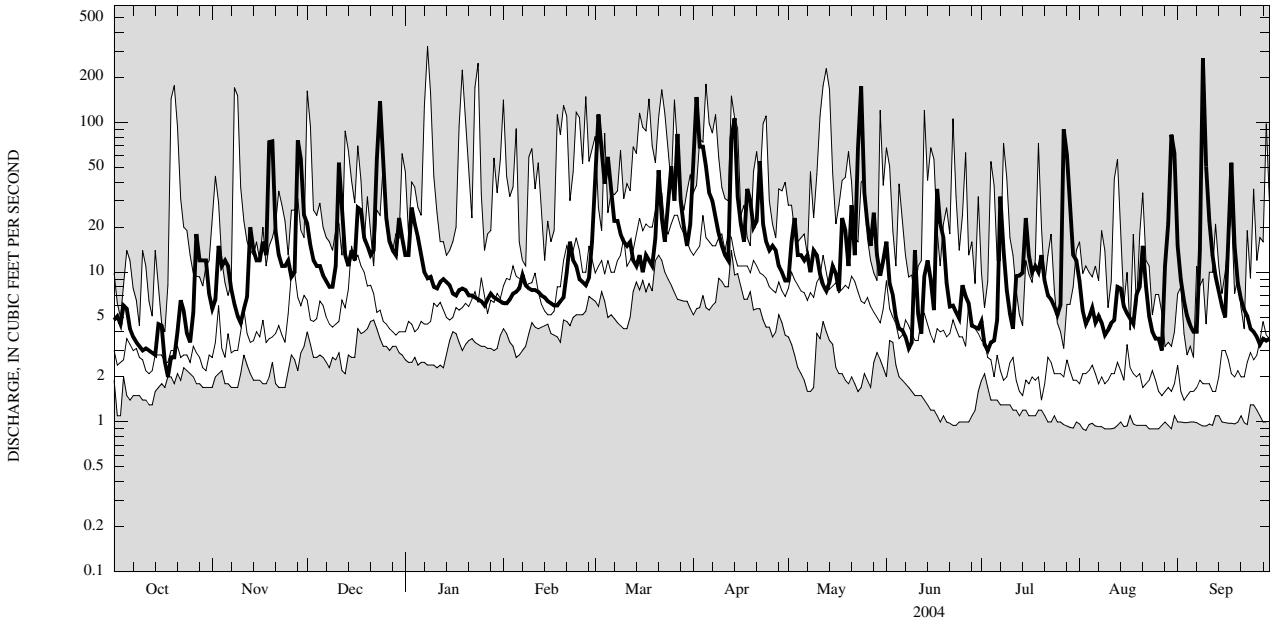
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	5.36	9.06	11.4	13.1	15.2	24.2	21.0	13.4	7.93	4.92	4.06	5.11
MAX	19.9	22.2	25.8	35.9	25.2	37.4	35.4	28.2	14.3	14.2	10.7	19.3
(WY)	(1997)	(1997)	(1997)	(1998)	(1998)	(1994)	(2004)	(2002)	(2002)	(2004)	(2004)	(2004)
MIN	2.52	3.31	3.42	4.95	8.32	13.0	7.19	2.80	1.53	1.60	1.20	1.22
(WY)	(2003)	(1999)	(1999)	(2002)	(2004)	(2000)	(1995)	(1995)	(1995)	(1999)	(1995)	(1995)

04234232 GREAT BROOK BELOW VICTOR, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	4,756.6		6,247.0			
ANNUAL MEAN	13.0		17.1		11.2	
HIGHEST ANNUAL MEAN					17.1	2004
LOWEST ANNUAL MEAN					6.01	1995
HIGHEST DAILY MEAN	181	Apr 5	268	Sep 9	323	Jan 8, 1998
LOWEST DAILY MEAN	1.2	Sep 13	2.0	Oct 18	0.88	Aug 3, 1999
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 8	3.1	Oct 8	0.92	Aug 6, 2001
ANNUAL RUNOFF (CFSM)	0.776		1.02		0.666	
ANNUAL RUNOFF (INCHES)	10.53		13.83		9.05	
10 PERCENT EXCEEDS	25		35		22	
50 PERCENT EXCEEDS	8.0		9.6		5.6	
90 PERCENT EXCEEDS	1.9		4.1		1.6	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY

LOCATION.--Lat 42°53'30", long 77°17'22", Ontario County, Hydrologic Unit 04140201, at comfort station in middle of city pier at northern end of Canandaigua Lake, 1 mi southeast of Canandaigua.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY 1971: 1970. WDR NY-86-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. To convert elevations to NAVD adjustment of 1988, subtract 0.50 ft. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.

REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft and 684.94 ft, respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi^2.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft, present datum, June 24, 1972; minimum daily elevation, 685.62 ft, present datum, Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 689.49 ft, May 24; minimum elevation, 687.07 ft, Jan. 26.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	688.07	688.03	688.03	688.08	687.16	687.15	687.99	688.51	689.13	688.54	688.69	688.53
2	688.06	688.05	688.00	688.05	687.16	687.27	688.16	688.54	689.05	688.50	688.68	688.52
3	688.08	688.09	687.98	688.04	687.17	687.49	688.27	688.58	689.00	688.49	688.65	688.52
4	688.05	688.11	687.95	688.00	687.20	687.65	688.32	688.59	688.93	688.52	688.63	688.49
5	688.03	688.14	687.91	687.99	687.19	687.82	688.37	688.61	688.88	688.49	688.58	688.49
6	688.00	688.11	687.87	687.97	687.20	687.98	688.38	688.62	688.80	688.45	688.56	688.51
7	688.00	688.11	687.84	687.93	687.21	688.10	688.39	688.63	688.73	688.47	688.54	688.45
8	687.99	688.07	687.81	687.86	687.21	688.12	688.37	688.62	688.66	688.50	688.51	688.43
9	687.97	688.06	687.78	687.82	687.21	688.11	688.34	688.65	688.60	688.50	688.49	688.76
10	687.97	688.05	687.79	687.77	687.21	688.09	688.30	688.69	688.55	688.48	688.49	688.94
11	687.96	688.05	687.82	687.73	687.22	688.06	688.26	688.71	688.56	688.47	688.46	688.94
12	687.96	688.03	687.92	687.69	687.22	688.05	688.21	688.71	688.55	688.50	688.45	688.89
13	687.95	688.05	687.94	687.66	687.22	687.99	688.28	688.72	688.57	688.51	688.45	688.80
14	687.99	687.98	687.95	687.61	687.22	687.96	688.57	688.78	688.56	688.60	688.45	688.74
15	687.96	687.93	687.95	687.58	687.22	687.91	688.67	688.78	688.53	688.65	688.43	688.68
16	687.93	687.89	687.94	687.54	687.21	687.86	688.69	688.76	688.52	688.64	688.42	688.60
17	687.91	687.86	687.92	687.48	687.21	687.87	688.66	688.73	688.54	688.62	688.41	688.55
18	687.90	687.90	687.91	687.45	687.21	687.84	688.66	688.72	688.61	688.61	688.42	688.65
19	687.89	687.91	687.88	687.41	687.21	687.80	688.68	688.66	688.62	688.60	688.39	688.66
20	687.91	688.05	687.85	687.37	687.21	687.79	688.65	688.66	688.62	688.59	688.38	688.63
21	687.90	688.11	687.84	687.33	687.22	687.79	688.67	688.74	688.62	688.57	688.42	688.57
22	687.88	688.11	687.79	687.31	687.24	687.80	688.63	688.75	688.62	688.56	688.43	688.50
23	687.88	688.11	687.79	687.27	687.24	687.80	688.62	688.89	688.60	688.51	688.41	688.44
24	687.87	688.13	687.92	687.21	687.25	687.79	688.60	689.12	688.61	688.48	688.39	688.43
25	687.88	688.05	688.13	687.17	687.23	687.86	688.62	689.25	688.59	688.47	688.42	688.42
26	687.86	688.01	688.18	687.14	687.20	687.91	688.56	689.27	688.58	688.48	688.41	688.39
27	687.94	687.97	688.18	687.15	687.17	687.97	688.52	689.26	688.58	688.66	688.38	688.38
28	687.99	687.97	688.18	687.18	687.15	688.02	688.49	689.28	688.55	688.73	688.36	688.34
29	688.01	688.04	688.13	687.19	687.14	688.05	688.52	689.24	688.56	688.73	688.37	688.31
30	688.04	688.05	688.13	687.19	---	688.02	688.50	689.19	688.53	688.73	688.44	688.31
31	688.06	---	688.12	687.17	---	687.98	---	689.15	---	688.74	688.53	---
MEAN	687.96	688.03	687.95	687.56	687.20	687.87	688.47	688.82	688.66	688.56	688.47	688.56
MAX	688.08	688.14	688.18	688.08	687.25	688.12	688.69	689.28	689.13	688.74	688.69	688.94
MIN	687.86	687.86	687.78	687.14	687.14	687.15	687.99	688.51	688.52	688.45	688.36	688.31

CAL YR 2003 MEAN 688.08 MAX 689.08 MIN 686.62
WTR YR 2004 MEAN 688.18 MAX 689.28 MIN 687.14

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft upstream from bridge on State Highway 488, and 4.1 mi downstream from Canandaigua Lake.

DRAINAGE AREA.--195 mi^2.

PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 671.44 ft above NGVD of 1929. Prior to June 25, 1974, at site 0.1 mi upstream at datum 676.90 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft^3/s, June 24, 1972, gage height, 11.08 ft, present datum, at site then in use; minimum discharge, 4.4 ft^3/s, Sept. 24, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft^3/s, May 24, gage height, 6.06 ft; minimum discharge, 40 ft^3/s, Oct. 19, 20, gage height, 3.31 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	49	448	508	e80	265	480	131	837	45	137	73
2	47	53	434	496	e80	212	626	144	811	46	135	67
3	46	65	390	495	78	164	590	163	791	50	133	67
4	48	59	360	485	73	191	639	144	773	50	134	70
5	46	75	350	482	e74	477	634	143	756	50	131	70
6	44	126	338	474	73	e275	616	142	737	50	125	71
7	44	125	330	462	74	207	602	263	714	53	114	78
8	43	121	323	455	75	519	585	316	684	54	112	189
9	43	120	316	430	e75	535	569	152	654	59	110	935
10	43	120	318	434	73	523	552	149	391	70	104	738
11	43	121	434	399	74	508	531	149	98	69	81	691
12	44	120	400	386	74	495	513	149	90	117	63	669
13	44	178	371	374	74	475	633	243	92	81	66	646
14	43	356	369	365	74	458	771	e190	91	90	63	631
15	45	359	398	362	74	451	710	e150	90	85	61	609
16	43	352	460	336	e75	429	693	e150	80	93	58	591
17	42	351	487	336	e74	431	679	e385	77	140	49	590
18	42	349	497	e315	e72	425	710	556	60	140	48	705
19	42	439	466	e290	71	413	691	551	56	141	48	642
20	41	564	446	e280	72	422	639	581	52	139	49	636
21	43	458	436	e275	78	478	623	605	51	137	59	617
22	46	444	427	e260	83	436	604	613	51	135	52	594
23	45	439	489	263	85	371	564	815	50	107	49	438
24	44	449	608	270	121	360	546	1,000	50	60	48	137
25	43	441	605	e245	254	371	539	903	51	58	48	124
26	46	421	555	e165	247	433	506	882	50	60	48	120
27	66	408	544	e90	239	533	477	873	49	194	47	108
28	60	479	537	e85	236	481	328	884	49	173	48	118
29	58	510	530	e80	250	471	135	868	45	149	57	116
30	59	456	533	e80	---	456	131	851	45	142	96	115
31	51	---	530	e80	---	450	---	836	---	140	120	---
TOTAL	1,441	8,607	13,729	10,057	3,082	12,715	16,916	13,981	8,425	2,977	2,493	11,255
MEAN	46.5	287	443	324	106	410	564	451	281	96.0	80.4	375
MAX	66	564	608	508	254	535	771	1,000	837	194	137	935
MIN	41	49	316	80	71	164	131	131	45	45	47	67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	73.8	95.9	133	147	156	289	404	269	150	88.0	63.2	56.9
MAX	613	419	521	522	518	748	1,036	725	566	852	483	375
(WY)	(1978)	(1978)	(1973)	(1998)	(1976)	(1976)	(1993)	(1943)	(1972)	(1972)	(1992)	(2004)
MIN	13.0	12.9	11.1	8.38	9.47	28.9	61.4	46.7	20.7	17.3	16.2	13.3
(WY)	(1992)	(1964)	(1967)	(1967)	(1967)	(1967)	(1946)	(1995)	(1955)	(1963)	(1991)	(1991)

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	81,162		105,678			
ANNUAL MEAN	222		289		159	
HIGHEST ANNUAL MEAN					302	1993
LOWEST ANNUAL MEAN					57.7	1965
HIGHEST DAILY MEAN	898	Apr 5	1,000	May 24	1,680	Jun 24, 1972
LOWEST DAILY MEAN	33	Jul 13	41	Oct 20	5.2	Sep 15, 1948
ANNUAL SEVEN-DAY MINIMUM	38	Jul 11	43	Oct 14	7.1	Feb 23, 1967
10 PERCENT EXCEEDS	572		632		455	
50 PERCENT EXCEEDS	90		176		63	
90 PERCENT EXCEEDS	46		48		26	

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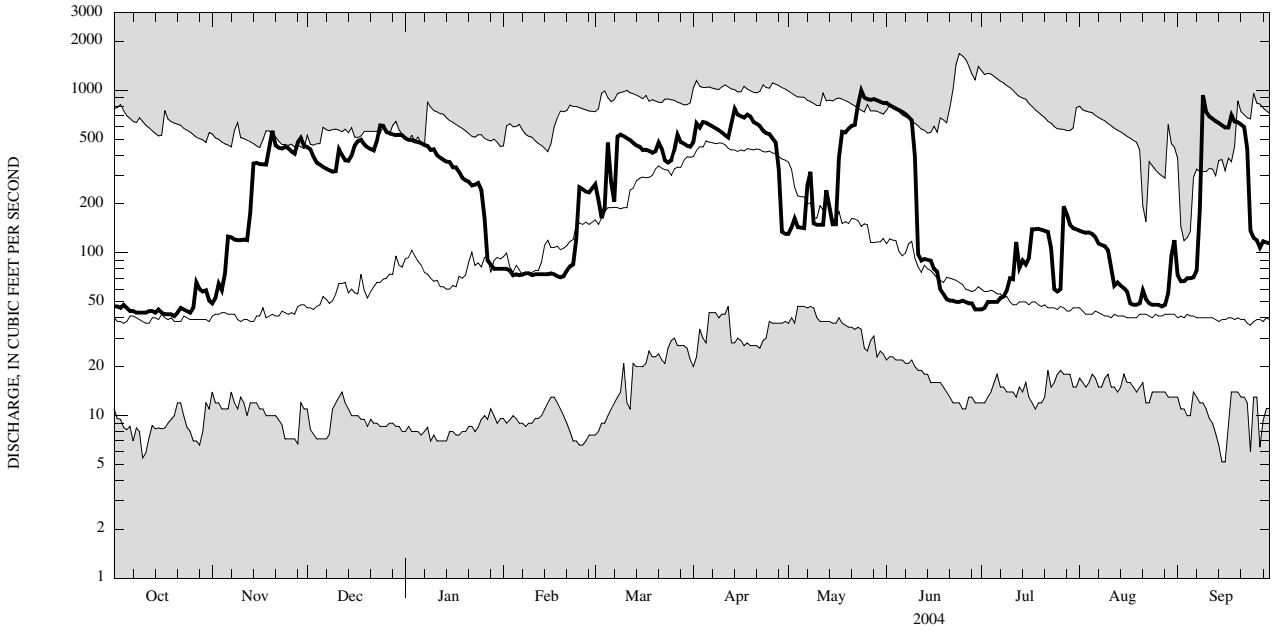


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04235250 FLINT CREEK AT PHELPS, NY

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 mi^2.

PERIOD OF RECORD.--October 1959 to March 1995, June 2002 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft above NGVD of 1929.

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 mi upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft^3/s. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft^3/s, Mar. 30, 1960, gage height, 5.83 ft; maximum gage height, 6.20 ft, Mar. 17, 1963 (ice jam); no flow for many days 1962-65, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 24	2245	2,340	4.47	2145	1,320	3.96
Mar 3	1300	1,390	4.00	0215	1,660	4.15
Apr 14	0615	*2,780	*4.65			

Minimum discharge, 7.1 ft^3/s, Oct. 13, gage height, 1.13 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	57	182	223	50	e96	181	77	176	17	48	247
2	21	49	147	157	51	e350	590	83	150	15	38	78
3	18	76	107	150	53	e1,100	635	212	130	14	29	39
4	17	77	95	155	58	e1,000	518	205	245	13	23	28
5	19	67	88	151	57	1,140	432	127	142	12	22	22
6	21	56	77	129	57	1,080	366	105	92	12	20	19
7	20	47	63	e75	55	728	305	108	77	15	19	19
8	16	40	75	e86	e60	426	239	114	65	17	16	22
9	13	34	76	e78	e60	296	184	111	54	19	15	893
10	11	29	75	e70	52	210	149	158	53	18	13	1,470
11	9.9	29	483	e68	e50	171	124	128	53	14	12	783
12	8.4	31	611	80	e47	155	108	101	45	35	12	255
13	7.8	37	391	77	47	124	445	86	39	34	18	118
14	7.9	40	190	67	47	103	2,080	97	35	123	20	79
15	10	40	119	e68	e48	101	1,010	103	32	112	19	62
16	12	43	142	e72	e46	101	444	144	28	91	15	51
17	13	50	152	e78	e45	80	305	122	36	55	12	58
18	16	54	174	e67	e44	99	309	92	55	39	10	509
19	15	198	166	e68	44	89	365	94	100	31	9.4	531
20	14	665	149	e65	e43	98	286	87	57	28	8.9	271
21	16	491	129	e63	46	198	198	143	41	38	16	129
22	19	283	120	e59	55	221	288	429	33	25	31	91
23	20	150	249	e58	e63	162	233	492	30	19	27	69
24	22	112	1,270	e55	e68	206	202	964	27	16	15	55
25	24	108	1,830	e52	e65	488	165	886	25	14	12	48
26	23	98	801	e53	e58	468	148	518	23	15	10	47
27	62	85	406	e52	e53	616	131	362	23	411	8.7	39
28	94	145	271	e50	e48	433	109	380	21	440	9.7	36
29	96	315	198	e52	e63	309	95	363	20	195	12	33
30	90	245	222	53	---	208	84	211	19	91	28	32
31	78	---	276	e54	---	167	---	145	---	62	277	---
TOTAL	840.0	3,751	9,334	2,585	1,533	11,023	10,728	7,247	1,926	2,040	825.7	6,133
MEAN	27.1	125	301	83.4	52.9	356	358	234	64.2	65.8	26.6	204
MAX	96	665	1,830	223	68	1,140	2,080	964	245	440	277	1,470
MIN	7.8	29	63	50	43	80	84	77	19	12	8.7	19
CFSM	0.27	1.23	2.95	0.82	0.52	3.49	3.51	2.29	0.63	0.65	0.26	2.00
IN.	0.31	1.37	3.40	0.94	0.56	4.02	3.91	2.64	0.70	0.74	0.30	2.24

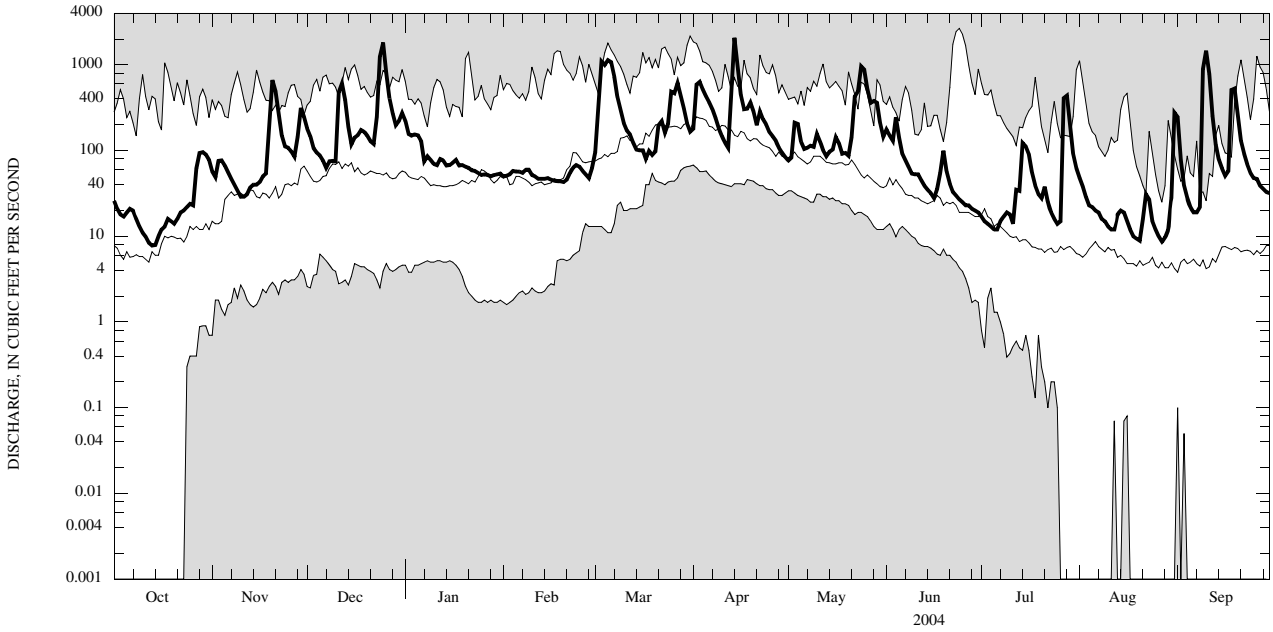
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	36.8	68.5	104	77.1	112	237	225	105	62.0	24.2	16.6	25.8
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	0.16	2.85	4.08	3.66	19.1	69.0	52.1	31.1	8.73	0.94	0.02	0.03
(WY)	(1965)	(1965)	(1961)	(1961)	(1989)	(1965)	(1981)	(1987)	(1965)	(1965)	(1965)	(1965)

04235250 FLINT CREEK AT PHELPS, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	45,183.0		57,965.7			
ANNUAL MEAN	124		158		91.6	
HIGHEST ANNUAL MEAN					162	1978
LOWEST ANNUAL MEAN					32.2	1965
HIGHEST DAILY MEAN	1,830	Dec 25	2,080	Apr 14	2,670	Jun 24, 1972
LOWEST DAILY MEAN	5.5	Jul 18	7.8	Oct 13	0.00	Sep 16, 1962
ANNUAL SEVEN-DAY MINIMUM	7.8	Sep 19	9.6	Oct 10	0.00	Sep 16, 1962
MAXIMUM PEAK FLOW					2,940	Mar 30, 1960
MAXIMUM PEAK STAGE					6.20	Mar 17, 1963
INSTANTANEOUS LOW FLOW					0.00	Jul 1, 1962
ANNUAL RUNOFF (CFSM)	1.21		1.55		0.898	
ANNUAL RUNOFF (INCHES)	16.48		21.14		12.20	
10 PERCENT EXCEEDS	271		416		233	
50 PERCENT EXCEEDS	65		70		38	
90 PERCENT EXCEEDS	9.9		16		3.7	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.
ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE LOWEST DAILY MEAN FOR PERIOD OF RECORD.

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°54'14", long 76°32'22", Cayuga County, Hydrologic Unit 04140201, on right bank near downstream side of bridge in Emerson Park, 0.2 mi south of city limits of Auburn, and 1.0 mi upstream from State dam.

DRAINAGE AREA.--205 mi^2.

PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. To convert elevations to adjustment of 1988, subtract 0.49 ft. Prior to May 1, 1982, nonrecording gage read once daily by employees of city of Auburn Water Division at same site and datum from reference mark at elevation 718.59 ft above NGVD of 1929.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi^2. Telephone gage-height telemeter at station.

COOPERATION.--Records furnished by city of Auburn until April 30, 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.48 ft, June 25, 1972; minimum observed elevation, 708.45 ft, Mar. 22, 23, 1993.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since l9l2, 7l6.9l ft, Mar. 23, l936, Apr. 9, l940.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 713.47 ft, Aug. 31; minimum elevation, 709.90 ft, Jan. 21.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	712.23	712.44	712.55	711.05	710.19	710.12	712.44	712.56	712.80	712.85	712.55	713.34
2	712.13	712.47	712.51	711.07	710.18	710.22	712.54	712.66	712.74	712.86	712.64	713.15
3	712.06	712.51	712.45	711.15	710.18	710.59	712.59	712.76	712.67	712.78	712.68	712.95
4	711.99	712.53	712.35	711.18	710.20	710.92	712.63	712.75	712.65	712.80	712.71	712.88
5	711.91	712.54	712.26	711.15	710.19	711.37	712.66	712.80	712.70	712.79	712.67	712.99
6	711.83	712.48	712.15	711.17	710.19	712.06	712.67	712.80	712.74	712.80	712.68	712.91
7	711.73	712.44	712.04	711.12	710.18	712.54	712.68	712.78	712.76	712.82	712.69	712.72
8	711.66	712.35	711.98	711.06	710.19	712.72	712.69	712.75	712.77	712.91	712.67	712.40
9	711.57	712.28	711.94	710.96	710.18	712.73	712.67	712.71	712.77	712.90	712.69	712.39
10	711.54	712.20	711.89	710.86	710.17	712.66	712.65	712.68	712.80	712.80	712.70	712.47
11	711.54	712.15	712.01	710.78	710.17	712.57	712.62	712.62	712.83	712.69	712.67	712.37
12	711.54	712.09	712.43	710.71	710.17	712.49	712.58	712.61	712.86	712.64	712.66	712.32
13	711.53	712.04	712.53	710.62	710.17	712.37	712.68	712.67	712.87	712.65	712.73	712.29
14	711.55	712.06	712.47	710.55	710.15	712.22	713.21	712.75	712.86	712.61	712.78	712.31
15	711.56	712.03	712.41	710.45	710.15	712.08	713.32	712.84	712.81	712.64	712.80	712.26
16	711.61	711.99	712.24	710.37	710.13	711.94	713.27	712.92	712.79	712.77	712.82	712.24
17	711.63	711.99	712.05	710.29	710.11	711.82	713.17	712.95	712.83	712.82	712.80	712.31
18	711.64	712.00	711.94	710.21	710.11	711.68	713.09	712.88	712.89	712.87	712.78	712.68
19	711.66	711.98	711.81	710.09	710.09	711.53	713.03	712.79	712.92	712.90	712.76	712.90
20	711.69	712.33	711.67	710.00	710.07	711.38	712.96	712.75	712.94	712.91	712.76	712.88
21	711.67	712.53	711.53	709.98	710.09	711.34	712.86	712.70	712.96	712.90	712.87	712.84
22	711.66	712.56	711.40	710.06	710.10	711.30	712.79	712.66	712.96	712.86	712.98	712.82
23	711.66	712.56	711.20	710.07	710.10	711.28	712.76	712.71	712.94	712.84	712.99	712.74
24	711.69	712.53	711.35	710.10	710.11	711.37	712.69	712.72	712.94	712.85	712.97	712.68
25	711.71	712.57	711.77	710.12	710.11	711.55	712.61	712.72	712.90	712.85	712.99	712.61
26	711.72	712.56	711.78	710.13	710.12	711.70	712.56	712.78	712.91	712.84	712.99	712.52
27	711.87	712.51	711.66	710.15	710.12	712.16	712.56	712.77	712.90	712.94	712.96	712.51
28	712.12	712.47	711.53	710.18	710.11	712.44	712.58	712.83	712.86	713.09	712.96	712.52
29	712.23	712.55	711.37	710.19	710.11	712.47	712.60	712.82	712.84	712.93	713.01	712.54
30	712.40	712.59	711.24	710.18	---	712.44	712.57	712.76	712.83	712.77	713.13	712.51
31	712.45	---	711.18	710.19	---	712.41	---	712.75	---	712.62	713.43	---
MEAN	711.80	712.34	711.93	710.52	710.14	711.82	712.76	712.75	712.83	712.82	712.82	712.63
MAX	712.45	712.59	712.55	711.18	710.20	712.73	713.32	712.95	712.96	713.09	713.43	713.34
MIN	711.53	711.98	711.18	709.98	710.07	710.12	712.44	712.56	712.65	712.61	712.55	712.24

CAL YR 2003 MEAN 712.04 MAX 713.08 MIN 709.92
WTR YR 2004 MEAN 712.10 MAX 713.43 MIN 709.98

04235440 OWASCO OUTLET AT GENESEE STREET, AUBURN, NY

LOCATION.--Lat 42°55'56", long 76°33'55", Cayuga County, Hydrologic Unit 04140201, on left bank in city of Auburn combined sewer overflow building, approximately 200 ft upstream from Genesee Street, and 2.5 mi downstream from State Dam at outlet of Owasco Lake.

DRAINAGE AREA.--207 mi^2.

PERIOD OF RECORD.--October 1998 to current year. Records for November 1912 to September 1966, published as "Owasco Lake Outlet" and October 1966 to September 1998, published as "Owasco Outlet near Auburn" (station 04235500) at site 2.6 mi downstream, are not equivalent because of regulation between sites.

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above NGVD of 1929, from topographic map.

REMARKS.--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. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,830 ft^3/s, May 15, 2002, gage height, 5.73 ft; minimum discharge, 1.6 ft^3/s, Mar. 30, 31, July 22, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft^3/s, July 29, gage height, 4.95 ft; minimum discharge, 5.0 ft^3/s, Aug. 27.

REVISIONS.--Revised peak discharges for the 2001 to 2003 water years and revised daily discharges, in cubic feet per second, for high water periods are shown in the following tables. These figures supercede those published in corresponding reports.

Peak discharges:

	Date	Discharge (ft^3/s)	Gage height (ft)
2001	Apr 10, 2001	1,730	5.43
2002	May 15, 2002	1,830	5.73

Date	Discharge (ft^3/s)	Gage height (ft)
Apr 7, 2003	1,580	4.97

Daily discharges:

	Discharge (ft^3/s)	Discharge (ft^3/s)	Discharge (ft^3/s)	Discharge (ft^3/s)
Apr 9, 2001	1,390	1,430	1,570	1,180
Apr 10, 2001	1,580	1,500	1,520	1,340
Apr 11, 2001	1,540	1,710	1,470	
	1,480	1,680	1,150	

	TOTAL	MEAN	MAX	MIN
April 2001	20218	674	1,580	107
May 2002	21230	685	1,710	70

TOTAL	MEAN	MAX	MIN
17632	588	1,340	68

04235440 OWASCO OUTLET AT GENESEE STREET, AUBURN, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	410	709	1,010	129	153	484	407	340	78	507	1,440
2	412	408	704	724	142	155	460	397	493	77	86	1,300
3	406	334	703	524	161	156	454	915	477	77	84	1,170
4	403	430	699	524	e158	299	447	730	237	79	86	545
5	395	426	697	523	155	473	441	528	65	77	85	251
6	392	416	694	520	159	549	439	529	65	73	84	503
7	389	418	687	517	159	571	434	527	73	84	82	732
8	383	439	534	512	153	645	440	526	77	40	82	1,010
9	381	440	459	506	157	803	420	530	79	229	83	1,150
10	243	440	459	506	157	867	413	527	123	391	86	1,240
11	67	441	462	507	154	866	407	527	78	385	85	1,110
12	64	429	471	506	154	861	404	183	77	174	86	880
13	61	417	631	503	153	853	406	51	79	59	86	536
14	64	407	778	496	150	853	681	54	78	501	85	393
15	63	404	843	496	149	846	925	60	167	448	85	393
16	59	402	1,000	495	148	837	919	63	77	123	86	197
17	58	435	1,050	496	149	832	912	344	79	159	86	75
18	59	456	1,000	503	149	821	918	494	73	160	87	76
19	59	476	964	504	150	811	911	493	70	150	87	341
20	59	570	930	500	153	805	908	489	70	138	86	532
21	60	572	899	324	149	808	911	493	71	138	91	531
22	59	571	735	e68	147	809	891	488	74	139	93	369
23	59	570	995	e64	147	567	875	490	132	138	96	497
24	58	570	1,000	e62	148	208	841	928	84	136	92	498
25	58	587	1,030	e62	147	196	818	776	78	134	104	495
26	60	613	1,080	e61	148	477	801	549	78	254	46	490
27	274	609	1,090	82	148	636	526	546	77	1,020	99	213
28	419	622	1,060	132	149	851	415	553	76	1,140	98	80
29	415	715	1,020	131	150	855	362	544	78	1,210	194	50
30	414	713	1,050	131	---	857	421	544	77	1,030	847	286
31	414	---	1,070	130	---	642	---	258	---	969	1,280	---
TOTAL	6,728	14,740	25,503	12,119	4,372	19,962	18,684	14,543	3,702	9,810	5,164	17,383
MEAN	217	491	823	391	151	644	623	469	123	316	167	579
MAX	421	715	1,090	1,010	161	867	925	928	493	1,210	1,280	1,440
MIN	58	334	459	61	129	153	362	51	65	40	46	50

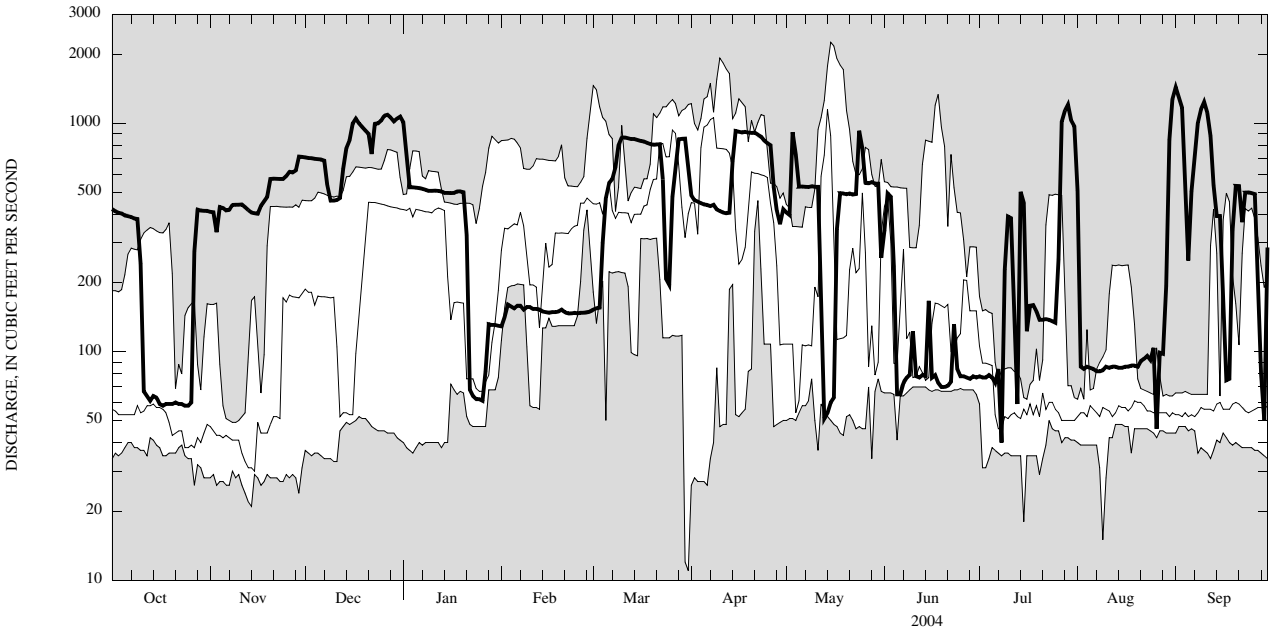
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	105	165	387	295	334	546	578	385	223	117	78.6	152
MAX	217	491	823	442	580	644	779	756	399	316	167	579
(WY)	(2004)	(2004)	(2004)	(2003)	(2002)	(2004)	(2000)	(2002)	(2000)	(2004)	(2004)	(2004)
MIN	39.0	28.7	64.0	177	151	245	211	88.1	67.4	45.5	43.8	40.2
(WY)	(2000)	(2002)	(1999)	(2001)	(2004)	(2002)	(1999)	(2001)	(1999)	(1999)	(1999)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	136,812		152,710			
ANNUAL MEAN	375		417		282	
HIGHEST ANNUAL MEAN					417	2004
LOWEST ANNUAL MEAN					162	1999
HIGHEST DAILY MEAN	1,500	Apr 7	1,440	Sep 1	1,710	May 15, 2002
LOWEST DAILY MEAN	50	Mar 5	40	Jul 8	11	Mar 31, 1999
ANNUAL SEVEN-DAY MINIMUM	55	May 1	59	Oct 19	23	Mar 30, 1999
10 PERCENT EXCEEDS	778		909		715	
50 PERCENT EXCEEDS	378		412		130	
90 PERCENT EXCEEDS	63		73		42	

e Estimated

04235440 OWASCO OUTLET AT GENESEE STREET, AUBURN, NY—Continued



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04235600 SENECA RIVER NEAR PORT BYRON, NY

LOCATION.--Lat 43°04'43", long 76°38'45", Cayuga County, Hydrologic Unit 04140201, on right bank , 50 ft upstream of Rt. 38 bridge, 3.0 mi north of Port Byron, and 10.1 mi upstream from Cross Lake.

DRAINAGE AREA.-- 2,815 mi^2.

PERIOD OF RECORD.--August 1996 to current year.

GAGE.--Acoustic velocity meter, water-stage recorder, and crest-stage gage. Elevation of gage is 375 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of the year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Telephone and satellite gage-height telemeters at station.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below Lock 24 & 25, furnished by New York State Thruway Authority, Office of Canals.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,600 ft^3/s, Jan. 11, 1998; minimum daily discharge, 258 ft^3/s, Jan. 22, 2002. Maximum and minimun instantaneous discharges not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,900 ft^3/s, Dec. 27; minimum daily discharge, 412 ft^3/s, Oct. 19. Maximum and minimum instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,440	3,910	e6,500	e8,580	2,810	e2,160	e6,000	e5,800	7,490	1,050	5,400	5,600
2	2,400	3,930	e6,100	8,340	2,480	2,700	6,200	e5,900	7,710	907	4,560	5,530
3	2,330	3,890	e5,900	7,870	2,490	5,150	6,890	e6,300	7,760	969	4,500	5,450
4	2,330	4,120	e5,500	7,830	2,890	6,590	7,360	e6,500	7,440	863	4,320	5,310
5	2,290	4,190	e5,400	7,800	2,990	e7,310	7,490	e6,300	7,220	795	3,820	4,730
6	2,190	4,050	e5,200	7,650	2,930	e7,900	7,440	e6,200	5,860	846	3,360	4,940
7	1,650	3,950	e5,000	7,430	3,000	e8,100	7,250	e6,100	5,290	756	3,230	4,820
8	1,280	3,840	e4,900	7,130	2,890	e7,800	6,610	e6,100	4,740	748	3,180	5,030
9	1,050	3,830	e5,000	6,750	2,870	e7,400	e5,300	e6,100	4,640	1,010	3,220	6,450
10	906	3,740	e5,000	6,610	2,890	e6,900	e4,100	e6,000	3,980	1,200	2,650	8,610
11	682	3,620	e5,300	6,630	2,920	e6,000	e3,530	e5,900	4,070	1,180	2,120	9,660
12	607	3,660	e6,000	6,580	2,920	e5,800	e3,100	e5,900	3,880	1,290	1,960	9,710
13	532	3,780	e6,600	6,550	2,890	e5,300	e3,200	e5,900	3,770	1,740	1,970	8,860
14	489	3,710	e6,500	6,270	2,900	e5,000	e6,000	e5,600	3,710	2,610	1,980	7,410
15	622	4,000	e6,200	5,760	2,870	e4,700	8,200	5,550	3,550	4,400	1,980	6,400
16	589	4,090	e6,000	5,520	2,500	4,570	e8,530	5,840	2,900	3,770	1,740	5,800
17	548	e4,080	e6,000	5,890	2,120	4,540	8,050	5,950	2,560	3,340	1,610	5,010
18	490	e4,330	e6,300	6,190	1,870	4,450	e7,400	5,890	2,470	2,980	1,710	5,420
19	412	e4,310	e6,600	6,100	1,690	4,430	e7,200	e5,690	2,520	2,880	1,720	6,550
20	589	e5,820	e6,500	5,950	1,680	4,410	e7,100	e4,880	2,520	2,900	1,760	7,170
21	617	6,600	e6,400	5,870	1,670	4,530	e7,200	4,310	2,300	3,450	1,840	7,210
22	632	6,540	e6,000	5,620	1,650	4,800	e7,000	4,370	1,840	3,560	1,960	6,840
23	594	5,910	e6,300	4,780	1,740	4,940	e7,000	4,510	1,600	3,250	2,410	6,870
24	558	5,460	e7,900	4,910	1,900	4,490	e6,900	5,980	1,540	3,250	2,820	6,580
25	638	5,290	e9,000	5,130	2,000	4,100	e6,500	8,090	1,500	3,170	2,550	6,220
26	622	5,040	e9,500	5,160	2,060	4,920	e6,400	8,610	1,510	2,300	1,970	6,160
27	1,340	4,950	e9,900	4,830	2,170	5,810	e6,200	8,550	1,500	3,510	1,820	5,970
28	2,910	5,430	e9,600	4,540	2,100	e6,900	e6,200	8,100	1,460	6,610	1,670	5,840
29	3,810	6,060	e9,000	3,850	2,060	e7,000	e6,200	7,840	1,390	7,130	1,840	5,120
30	3,910	6,520	e8,900	3,140	---	e6,800	e5,800	7,610	1,250	6,510	3,350	4,260
31	3,900	---	e8,800	3,040	---	e6,400	---	7,400	---	6,060	4,490	---
TOTAL	43,957	138,650	207,800	188,300	69,950	171,900	192,350	193,770	109,970	85,034	83,510	189,530
MEAN	1,418	4,622	6,703	6,074	2,412	5,545	6,412	6,251	3,666	2,743	2,694	6,318
MAX	3,910	6,600	9,900	8,580	3,000	8,100	8,530	8,610	7,760	7,130	5,400	9,710
MIN	412	3,620	4,900	3,040	1,650	2,160	3,100	4,310	1,250	748	1,610	4,260

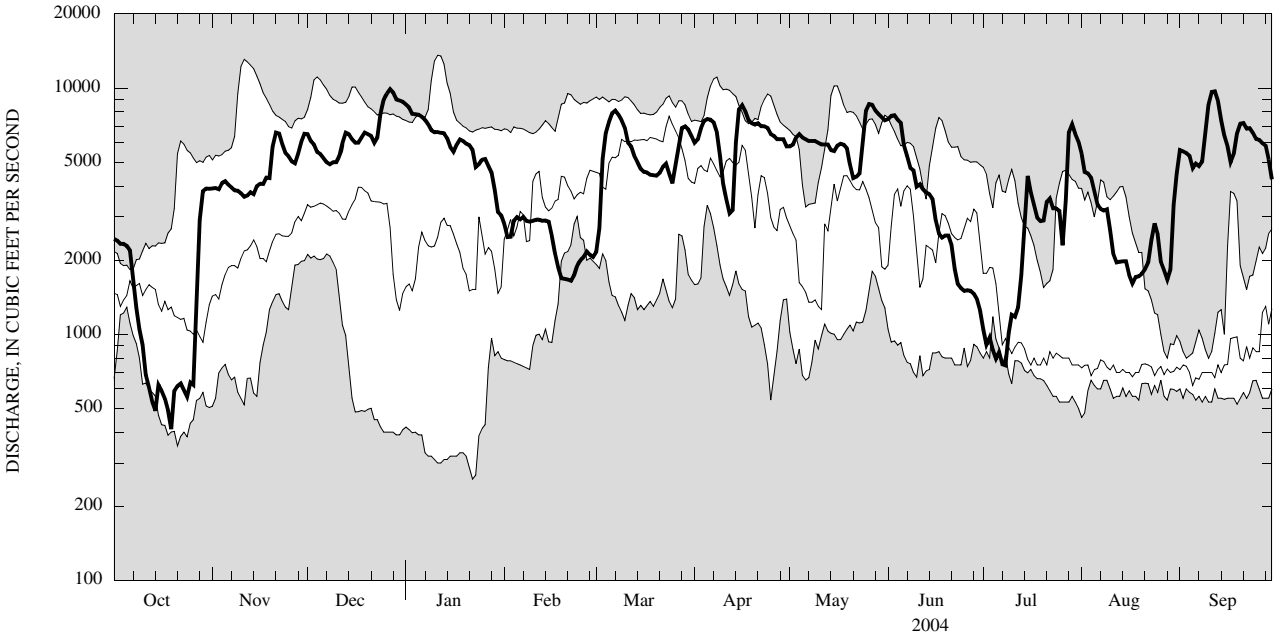
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	1,539	3,149	4,072	3,559	3,628	5,393	4,786	3,757	3,086	1,568	1,342	1,600
MAX	3,013	8,247	8,876	7,671	7,590	8,483	7,416	6,274	5,302	2,743	2,694	6,318
(WY)	(1997)	(1997)	(1997)	(1998)	(1998)	(1998)	(2001)	(2000)	(2002)	(2004)	(2004)	(2004)
MIN	810	1,287	1,186	676	2,134	1,684	2,126	1,234	998	786	602	611
(WY)	(2002)	(2000)	(1999)	(2002)	(1997)	(2002)	(1997)	(1999)	(1999)	(2001)	(2001)	(1998)

04235600 SENECA RIVER NEAR PORT BYRON, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	1,372,587		1,674,721			
ANNUAL MEAN	3,761		4,576		3,119	
HIGHEST ANNUAL MEAN					4,576	2004
LOWEST ANNUAL MEAN					1,840	1999
HIGHEST DAILY MEAN	11,100	Apr 8	9,900	Dec 27	13,600	Jan 11, 1998
LOWEST DAILY MEAN	412	Oct 19	412	Oct 19	258	Jan 22, 2002
ANNUAL SEVEN-DAY MINIMUM	526	Oct 13	526	Oct 13	310	Jan 8, 1999
10 PERCENT EXCEEDS	7,300		7,430		6,910	
50 PERCENT EXCEEDS	3,710		4,760		2,260	
90 PERCENT EXCEEDS	747		1,500		680	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04237411 SENECA RIVER, MOUTH AT STATE DITCH, NEAR JORDAN, NY

LOCATION.--Lat 43°06'54", long 76°26'21", Onondaga County, Hydrologic Unit 04140201, on right bank 700 ft downstream from Bridge on Plainville Road, 1.2 mi north of Jack's Reef.

DRAINAGE AREA.-- 3,093 mi^2.

PERIOD OF RECORD.--April 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 380 ft above NGVD of 1929, from topographic map.

REMARKS.--A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Seneca River basin receives water from Erie (Barge) Canal through Lock 32 near Pittsford. During part of year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.31 ft, Jan. 12, 1998; minimum recorded gage height, 0.02 ft, Jan. 28, 2003 (minimum recordable) but was lower during the period of Jan. 28 to Feb. 21, 2003, result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.74 ft, Sept. 12, 13; minimum gage height, 0.74 ft, Oct. 12.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.26	1.52	---	---	1.79	1.15	3.26	2.77	3.87	1.21	3.26	2.59
2	1.19	1.46	---	---	1.56	1.49	3.21	2.73	3.86	1.16	2.89	2.88
3	1.13	1.61	---	---	1.58	2.20	3.29	2.94	3.87	1.12	2.61	2.92
4	1.23	1.61	---	---	1.58	3.10	3.52	3.19	3.82	1.03	2.44	2.94
5	1.33	---	---	---	1.34	3.77	3.66	3.21	3.71	0.93	2.24	2.77
6	1.37	---	---	---	1.26	4.31	3.69	3.14	3.45	0.85	1.90	2.64
7	1.28	---	---	3.69	1.14	4.41	3.68	3.08	3.05	0.92	1.92	2.58
8	1.12	---	---	3.59	1.21	4.32	3.55	3.01	2.61	1.19	1.89	2.61
9	0.94	---	---	3.46	1.41	4.09	3.13	2.98	2.29	1.29	1.78	3.13
10	0.95	---	---	3.52	1.53	3.76	2.49	2.97	2.07	1.36	1.67	3.98
11	0.89	---	---	3.50	1.46	3.35	1.92	2.90	1.89	1.43	1.42	4.44
12	0.81	---	---	3.36	1.46	3.10	1.44	2.84	1.95	1.39	1.25	4.68
13	0.98	---	---	3.28	1.56	2.83	1.44	2.75	1.92	1.24	1.38	4.69
14	1.16	---	---	3.17	1.59	2.58	2.32	2.67	1.84	1.42	1.32	4.41
15	1.26	---	---	3.01	1.48	2.42	3.26	2.62	1.69	2.13	1.25	3.92
16	1.01	---	---	3.14	1.37	2.21	3.78	2.72	1.47	2.17	1.28	3.46
17	0.95	---	---	3.19	1.20	2.06	3.95	2.78	1.34	1.85	1.17	3.03
18	0.96	---	---	3.26	1.16	1.93	3.88	2.81	1.47	1.64	1.16	2.84
19	1.13	---	---	3.31	1.14	1.83	3.76	2.81	1.56	1.61	1.33	2.97
20	1.25	---	---	3.21	1.13	1.75	3.68	2.57	1.58	1.40	1.31	3.26
21	1.16	---	---	3.07	1.16	1.82	3.63	2.21	1.41	1.37	1.39	3.41
22	1.01	---	---	2.94	1.26	1.95	3.60	1.88	1.14	1.59	1.37	3.42
23	0.92	---	---	2.78	1.32	2.10	3.54	1.80	1.04	1.62	1.32	3.38
24	1.07	---	---	2.49	1.43	2.06	3.54	2.48	1.06	1.53	1.75	3.35
25	1.08	---	---	2.47	1.52	1.92	3.46	3.54	1.07	1.41	1.73	3.25
26	1.09	---	---	2.50	1.56	1.98	3.33	4.02	1.05	1.31	1.35	3.15
27	1.22	---	---	2.47	1.41	2.78	3.24	4.23	1.01	1.80	1.04	3.07
28	1.58	---	---	2.29	1.42	3.36	3.13	4.31	1.00	3.25	1.18	2.95
29	1.84	---	---	2.15	1.33	3.51	3.05	4.25	1.04	3.73	1.42	2.81
30	1.75	---	---	1.91	---	3.45	2.90	4.10	1.04	3.68	1.70	2.38
31	1.60	---	---	1.71	---	3.38	---	3.95	---	3.48	2.22	---
MEAN	1.18	---	---	---	1.39	2.74	3.21	3.04	2.01	1.68	1.68	3.26
MAX	1.84	---	---	---	1.79	4.41	3.95	4.31	3.87	3.73	3.26	4.69
MIN	0.81	---	---	---	1.13	1.15	1.44	1.80	1.00	0.85	1.04	2.38

04237500 SENECA RIVER AT BALDWINSVILLE, NY

LOCATION.--Lat 43°09'25", long 76°19'55", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft downstream from bridge on State Highways 31 and 48 in Baldwinsville, and 400 ft downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi^2.

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WDR NY-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 361.38 ft above NGVD of 1929 (362.60 ft Erie (Barge) Canal Datum). Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft downstream from base gage at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are 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 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Telephone and satellite gage-height telemeters at station.

COOPERATION.--Records of lockages at Lock 24 furnished by New York State Thruway Authority, Office of Canals.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,100 ft^3/s, Apr. 27, 1993, maximum gage height, 9.63 ft, Apr. 26, 27, 1993; minimum daily discharge, 34 ft^3/s, Sept. 17, 1985, result of extreme regulation. Maximum and minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 11,000 ft^3/s, Sept. 12, maximum gage height, 5.71 ft, Sept. 12; minimum daily discharge, 188 ft^3/s, Oct. 13. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,290	4,750	7,760	9,780	3,540	1,940	7,210	6,550	8,230	876	5,960	5,390
2	3,260	4,450	7,500	9,520	2,840	2,460	7,220	6,520	8,170	980	4,990	5,980
3	2,780	4,480	6,940	9,360	2,490	5,070	7,440	7,090	8,150	980	4,610	6,040
4	2,530	4,780	6,250	9,220	3,470	7,290	7,920	7,520	7,930	973	4,360	6,090
5	2,560	4,730	5,730	9,100	3,430	8,800	8,270	7,530	7,740	957	4,190	5,790
6	2,510	4,640	5,280	9,010	3,450	9,790	8,230	7,350	7,130	938	3,600	5,550
7	1,990	4,570	4,830	8,790	3,430	9,800	8,100	7,230	6,240	425	3,290	5,540
8	1,610	4,440	4,600	8,480	2,930	9,570	7,880	7,040	5,540	790	3,430	5,750
9	1,220	4,350	4,560	7,760	2,680	9,170	7,110	7,000	5,010	1,180	3,470	7,830
10	909	3,540	4,580	7,640	3,130	8,600	5,910	6,960	4,820	1,360	3,250	10,100
11	955	3,120	5,190	8,210	3,390	7,680	5,010	6,800	4,140	1,350	2,790	10,800
12	548	3,160	6,410	8,520	3,140	7,170	3,760	6,670	3,950	1,970	2,310	11,000
13	188	3,550	6,830	8,030	2,980	6,610	3,500	6,560	3,940	2,350	2,400	10,900
14	221	3,880	6,990	7,320	3,150	6,040	5,510	6,560	4,080	2,810	2,650	10,600
15	1,130	4,090	6,870	6,750	3,270	5,740	7,290	6,420	3,960	4,200	2,350	9,760
16	922	4,150	6,180	7,130	2,860	5,520	8,460	6,590	3,380	4,470	2,140	8,600
17	735	4,190	6,170	7,270	2,250	5,320	8,790	6,690	2,460	4,180	2,090	7,080
18	496	4,290	6,590	7,560	e2,200	5,140	8,710	6,800	2,190	3,440	1,710	6,540
19	282	4,450	6,770	7,950	e2,000	5,110	8,550	6,780	2,300	3,430	1,850	6,790
20	723	5,820	6,910	7,670	e1,900	5,020	8,320	6,430	2,610	3,500	2,240	7,620
21	1,000	6,940	6,780	7,300	e1,900	5,150	8,220	5,750	2,750	3,480	2,490	7,990
22	1,010	7,490	6,390	6,960	e1,900	5,260	8,160	5,430	2,270	3,570	2,990	7,950
23	662	7,290	6,140	6,550	e1,900	5,420	7,960	5,430	1,670	3,620	2,480	8,170
24	531	6,740	7,410	5,920	e2,000	5,350	8,040	7,300	1,460	3,540	2,990	7,990
25	819	6,470	9,420	6,000	e2,100	5,300	7,910	8,870	1,500	3,420	3,420	7,670
26	779	6,110	10,100	6,330	2,070	5,440	7,580	9,210	1,680	2,810	3,190	7,160
27	1,170	5,630	10,300	6,350	2,130	6,900	7,320	9,410	1,670	3,670	2,490	6,820
28	2,400	5,540	10,300	6,220	2,040	7,590	7,130	9,700	1,410	6,920	1,990	6,490
29	4,470	6,550	10,200	4,980	2,320	7,790	7,030	9,320	1,400	8,620	2,410	6,160
30	5,280	7,230	10,100	4,430	---	7,710	6,840	8,840	1,130	8,110	3,650	5,550
31	4,990	---	10,000	3,830	---	7,490	---	8,370	---	7,090	5,030	---
TOTAL	51,970	151,420	220,080	229,940	76,890	201,240	219,380	224,720	118,910	96,009	96,810	225,700
MEAN	1,676	5,047	7,099	7,417	2,651	6,492	7,313	7,249	3,964	3,097	3,123	7,523
MAX	5,280	7,490	10,300	9,780	3,540	9,800	8,790	9,700	8,230	8,620	5,960	11,000
MIN	188	3,120	4,560	3,830	1,900	1,940	3,500	5,430	1,130	425	1,710	5,390

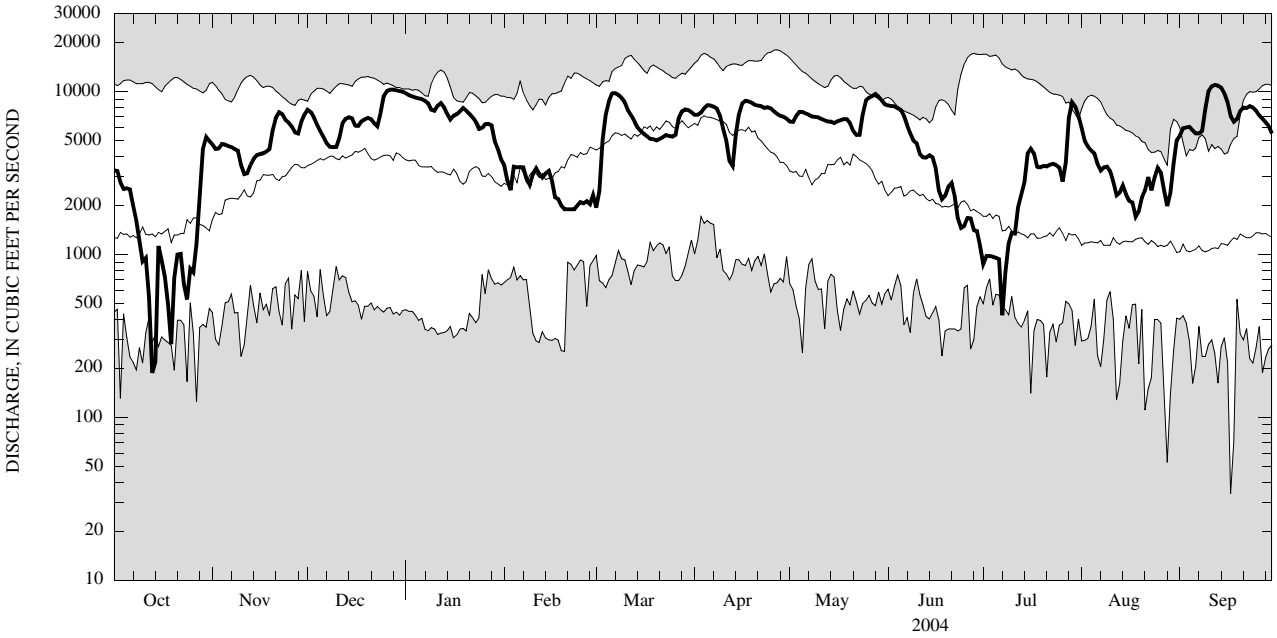
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	2,125	3,339	4,393	3,939	3,890	5,856	6,005	4,078	2,748	1,933	1,552	1,532
MAX	11,020	9,491	10,330	8,807	8,313	11,650	15,610	9,778	6,456	12,100	6,214	7,523
(WY)	(1978)	(1978)	(1978)	(1978)	(1976)	(1956)	(1993)	(1996)	(1972)	(1972)	(1992)	(2004)
MIN	572	675	778	805	965	1,606	1,317	719	592	621	576	421
(WY)	(1986)	(1958)	(1961)	(1954)	(1980)	(1965)	(1981)	(1995)	(1995)	(1985)	(2001)	(1995)

04237500 SENECA RIVER AT BALDWINSVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	1,508,806		1,913,069			
ANNUAL MEAN	4,134		5,227		3,444	
HIGHEST ANNUAL MEAN					5,998	1978
LOWEST ANNUAL MEAN					1,357	1965
HIGHEST DAILY MEAN	11,500	Apr 7	11,000	Sep 12	18,100	Apr 27, 1993
LOWEST DAILY MEAN	188	Oct 13	188	Oct 13	34	Sep 17, 1985
ANNUAL SEVEN-DAY MINIMUM	568	Oct 13	568	Oct 13	283	Sep 23, 1988
10 PERCENT EXCEEDS	8,530		8,560		7,660	
50 PERCENT EXCEEDS	3,860		5,420		2,380	
90 PERCENT EXCEEDS	985		1,650		840	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY

LOCATION.--Lat 42°51'18", long 76°08'24", Onondaga County, Hydrologic Unit 04140201, on right side of 9-in flume, 250 ft downstream from main depression area, about 2,100 ft east of Tully Farms Road, 1,500 ft south of Otisco Road, 400 ft upstream from mouth, and 4.2 mi northwest of Tully.

DRAINAGE AREA.--0.32 mi^2 (0.70 mi^2 diverted to Trib. No. 5 on June 12, 1992).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to June 1999, October 1999 to current year.

REVISED RECORD.--WDR NY-93-3: 1992 (M).

GAGE.--Water stage recorder and flume. Datum of gage is 555.93 ft above NGVD of 1929. Prior to Aug. 16, 2000 at datum 0.15 ft lower.

REMARKS.--Records fair to poor. Flow may include inflow from depressurizing wells, some originating outside the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to flow being diverted to Tributary No. 5 on June 12, 1992, 45 ft^3/s, Mar. 27, 1992, gage height, 2.08 ft; no flow part of each day, July 29, 1993 and June 20, 1994, result of dam construction. Maximum discharge since diversion to Tributary No. 5 on June 12, 1992, 23 ft^3/s, Mar. 24, 1994, gage height 1.96 ft ,and Aug. 30, 2004, gage height 2.96 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23 ft^3/s, Aug. 30, gage height, 2.96 ft; minimum discharge, 0.42 ft^3/s, July 5, 6, gage height, 0.27 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.48	e1.1	e1.4	1.1	0.63	0.89	1.1	e1.6	0.83	0.50	0.85	e3.2
2	e0.49	e1.0	e1.1	1.1	0.65	2.4	1.3	e0.90	0.79	0.49	0.77	e2.0
3	e0.46	e1.4	e1.0	1.1	0.68	3.1	1.2	e1.3	0.75	0.48	0.71	e1.3
4	e0.60	e1.1	e0.95	1.1	0.68	3.0	1.2	1.2	0.71	0.46	0.70	e1.0
5	e0.60	e0.95	e0.90	1.1	0.69	3.1	1.2	1.2	0.70	0.44	0.66	e0.92
6	e0.50	e0.95	e0.85	1.0	0.74	3.0	1.1	4.0	0.71	0.43	0.66	e0.86
7	e0.48	e0.90	e0.80	0.90	0.80	2.3	1.1	1.4	0.67	0.73	0.63	e0.82
8	e0.48	e0.85	e0.80	0.88	0.71	1.9	1.1	1.0	0.63	1.2	0.61	e1.3
9	e0.48	e0.85	e0.80	0.82	0.70	1.6	e1.0	0.93	0.61	0.77	0.61	e2.5
10	e0.46	0.80	e0.90	0.75	0.70	1.3	e0.90	0.92	0.67	0.66	0.59	e1.9
11	e0.46	e0.80	e2.7	0.82	0.68	1.2	e0.80	3.1	0.59	0.60	0.58	e1.4
12	e0.43	e0.85	e1.9	0.86	0.67	1.1	e0.75	0.88	0.59	0.60	0.60	e1.2
13	e0.43	e1.0	e1.6	0.86	0.70	1.0	e2.0	0.81	0.60	0.61	e0.75	e1.2
14	e0.43	e0.90	1.4	0.82	0.70	0.99	3.1	0.73	0.57	0.81	e0.70	e1.2
15	e1.1	e0.90	1.3	0.82	0.64	0.95	e1.8	0.82	0.55	1.1	e0.66	e1.1
16	e0.70	e1.1	1.2	0.81	0.65	0.96	e1.4	0.93	0.57	0.99	e0.64	e1.0
17	e0.60	e1.3	1.4	0.81	0.67	0.99	e1.2	0.81	0.68	0.98	e0.62	e2.0
18	e0.55	e1.2	1.4	0.82	0.67	0.95	1.1	0.74	0.65	0.79	e0.60	e2.5
19	e0.60	e1.5	1.2	0.77	0.67	0.92	1.1	0.74	0.63	0.74	e0.60	e1.6
20	e0.55	e2.9	1.1	0.76	0.69	1.0	e1.0	1.1	0.57	0.69	e0.60	e1.3
21	e0.55	e1.4	1.1	0.75	0.97	1.5	e0.90	0.81	0.56	0.63	e1.2	e1.1
22	e0.60	e1.2	1.1	0.74	0.92	1.3	1.1	0.80	0.55	0.59	e0.80	e1.0
23	e0.52	e1.1	1.8	0.70	0.83	1.1	3.8	0.82	0.55	0.59	e0.70	e0.90
24	e0.52	e3.0	3.3	0.70	0.80	1.2	e1.0	1.0	0.53	0.58	e0.66	e0.86
25	0.51	e1.5	2.8	0.68	0.75	1.1	e1.0	0.92	0.50	0.57	e0.64	e0.84
26	0.57	e1.1	2.1	0.67	0.74	1.5	0.94	0.89	0.50	0.60	e0.60	e0.80
27	1.7	e1.0	1.7	0.71	0.72	1.8	0.94	1.4	0.52	3.1	e0.58	e0.78
28	1.1	e1.2	1.4	0.70	0.73	1.5	0.88	0.83	0.52	2.0	e0.80	e0.78
29	1.5	e1.8	1.2	0.67	0.77	1.3	3.0	0.78	0.49	1.3	e1.3	e0.75
30	e1.2	e1.5	1.5	0.66	---	1.2	e0.85	0.75	0.50	1.8	12	e0.75
31	e1.1	---	1.4	0.64	---	1.1	---	0.81	---	0.94	8.1	---
TOTAL	20.75	37.15	44.10	25.62	20.95	47.25	39.86	34.92	18.29	26.77	40.52	38.86
MEAN	0.67	1.24	1.42	0.83	0.72	1.52	1.33	1.13	0.61	0.86	1.31	1.30
MAX	1.7	3.0	3.3	1.1	0.97	3.1	3.8	4.0	0.83	3.1	12	3.2
MIN	0.43	0.80	0.80	0.64	0.63	0.89	0.75	0.73	0.49	0.43	0.58	0.75
CFSM	2.09	3.87	4.45	2.58	2.26	4.76	4.15	3.52	1.91	2.70	4.08	4.05
IN.	2.41	4.32	5.13	2.98	2.44	5.49	4.63	4.06	2.13	3.11	4.71	4.52

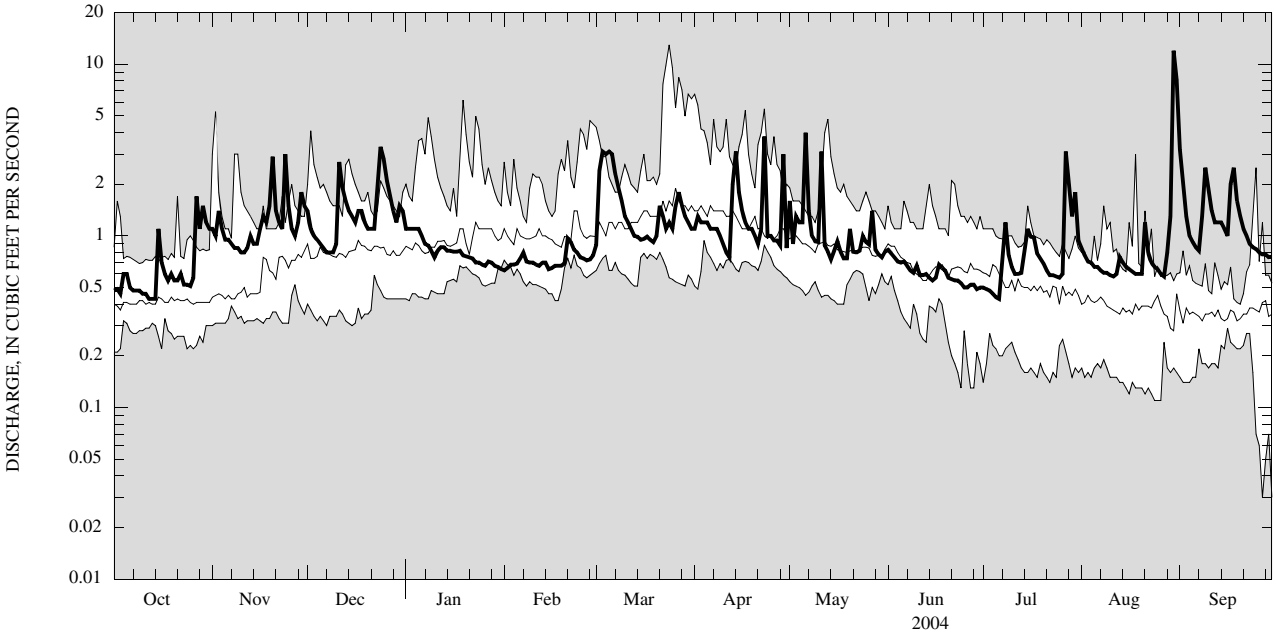
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	0.47	0.74	0.92	1.08	1.10	1.59	1.49	0.98	0.69	0.55	0.50	0.45
MAX	0.78	1.24	1.84	1.78	1.63	3.31	3.13	1.56	1.25	0.95	1.31	1.30
(WY)	(1993)	(2004)	(1997)	(1998)	(1998)	(1994)	(1993)	(2000)	(2000)	(2000)	(2004)	(2004)
MIN	0.29	0.35	0.39	0.63	0.66	0.90	0.73	0.51	0.31	0.21	0.15	0.23
(WY)	(1994)	(1999)	(1999)	(2001)	(1995)	(2002)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	354.81		395.04			
ANNUAL MEAN	0.97		1.08		0.88	
HIGHEST ANNUAL MEAN					1.08	2004
LOWEST ANNUAL MEAN					0.57	1999
HIGHEST DAILY MEAN	3.5	Apr 5	12	Aug 30	13	Mar 24, 1994
LOWEST DAILY MEAN	0.34	Sep 21	0.43	Oct 12	0.03	Sep 27, 1996
ANNUAL SEVEN-DAY MINIMUM	0.38	Sep 16	0.45	Oct 8	0.07	Sep 24, 1996
ANNUAL RUNOFF (CFSM)	3.04		3.37		2.74	
ANNUAL RUNOFF (INCHES)	41.25		45.92		37.28	
10 PERCENT EXCEEDS	1.6		1.7		1.5	
50 PERCENT EXCEEDS	0.84		0.85		0.72	
90 PERCENT EXCEEDS	0.51		0.57		0.33	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY—

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year.
CHEMICAL DATA: Water years 1991 (c), 1992 to 2002 (b), 2003 (a).
SEDIMENT DATA: Water years 1991 (c), 1992 to current year (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: October 1991 to June 1999, October 1999 to September 2002.
SUSPENDED-SEDIMENT DISCHARGE: October 1991 to June 1999, October 1999 to September 2002.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 27,200 mg/L, Oct. 1, 1991; minimum daily mean, 22 mg/L, Aug.19, 1993.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 148 tons, Mar.11, 1992; minimum daily mean, 0.02 tons, on many days during August and September 1993.

REMARKS.-- Unpublished records of daily suspended-sediment concentration and daily suspended-sediment discharges for the 2003 and 2004 water year are available in the files of the U.S. Geological Survey. During in the 2003 water year, the suspended-sediment sampling location was moved further downstream to include a new area of additional mudboil activity. Records beginning in the 2003 water year are not equivalent to previously published records beacuse of the differences in sampling areas.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT				
13...	1830	e.43	363	--
27...	1530	3.0	360	2.9
NOV				
04...	1730	e1.1	277	--
16...	1600	e1.1	281	--
DEC				
05...	1700	--	--	--
13...	1700	e1.6	332	--
21...	1300	1.1	319	.95
29...	1700	1.2	379	1.2
JAN				
03...	1630	1.2	465	1.5
10...	1700	.86	500	1.2
18...	1400	.80	703	1.5
27...	1700	.74	694	1.4
FEB				
04...	1000	.71	655	1.3
11...	1800	.68	516	.95
22...	1400	.89	356	.86
29...	1430	.80	350	.76
MAR				
15...	1815	.95	430	1.1
24...	1800	1.2	320	1.0
31...	1830	1.1	402	1.2
APR				
08...	1700	1.1	398	1.2
17...	1600	e1.2	271	--
24...	1430	.80	358	.77
MAY				
10...	1800	.95	315	.81
17...	1730	.80	375	.81
26...	1400	.89	369	.89
JUN				
05...	1500	.71	731	1.4
18...	1430	.68	527	.97
27...	1330	.54	549	.80
JUL				
05...	1500	.44	526	.62
15...	1200	1.1	286	.85
22...	1600	.60	426	.69
AUG				
01...	1900	.77	412	.86
11...	1400	e.58	584	--
16...	1600	e.64	563	--
21...	1830	e1.2	260	--
SEP				
06...	1430	e.86	497	--
15...	1700	e1.1	289	--
23...	1700	e.90	335	--

e Estimated.

04237962 ONONDAGA CREEK NEAR CARDIFF, NY

LOCATION.--Lat 42°54'00", long 76°10'10", Onondaga County, Hydrologic Unit 04140201, on left bank 10 ft upstream from bridge on State Highway 20, 0.7 mi west of Tully Farms road, and 4.2 mi upstream from Onondaga Reservoir.

DRAINAGE AREA.--33.9 mi^2.

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

GAGE.--Acoustic velocity meter, water-stage recorder and crest-stage gage. Elevation of gage is 500 ft above NGVD of 1929 from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Telephone and satellite gage-height and precipitation telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, about 1,060 ft^3/s, Aug. 30, 2004, maximum gage height, 8.85 ft, Aug. 30, 2004, from floodmark; minimum daily discharge, 3.8 ft^3/s, Sept. 14, 2002. Maximum and minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 1,060 ft^3/s, Aug. 30; minimum daily discharge, 16 ft^3/s, Oct. 12, 13, 14. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	64	129	118	28	56	157	e85	e57	e22	e58	e220
2	21	58	93	114	28	184	173	e140	e45	e21	e47	e140
3	19	109	71	141	34	222	137	e190	e40	e22	e42	e88
4	29	71	65	130	38	221	142	e120	e36	e21	e40	e72
5	30	63	58	109	42	367	118	e110	e35	e21	e38	e64
6	23	51	53	94	44	427	111	e100	e34	e21	e35	e57
7	20	44	51	76	46	222	113	e100	e33	e58	e34	e53
8	20	38	48	70	34	171	107	e85	e31	e77	e32	e88
9	20	34	48	55	38	139	e85	e90	e32	e42	e30	e300
10	19	33	57	60	37	124	e77	e81	e37	e29	e29	e160
11	19	36	455	71	35	117	e73	e74	e32	e25	e30	e120
12	16	41	255	83	33	109	e69	e66	e30	e29	e30	e98
13	16	79	149	79	33	91	e380	e62	e29	e28	e65	e89
14	16	53	116	59	33	83	e390	e62	e28	e69	e36	e79
15	90	47	110	57	20	87	e180	e88	e26	e58	e30	e74
16	43	48	114	57	32	78	e140	e76	e26	e63	e30	e69
17	28	78	133	62	30	76	e130	e58	e32	e53	e29	e98
18	25	83	123	61	30	74	e150	e53	e40	e40	e26	e240
19	27	161	106	55	29	69	e140	e50	e35	e36	e26	e110
20	26	359	94	53	29	84	e130	e46	e30	e32	e28	e90
21	24	142	84	53	53	126	e110	e45	e26	e30	e120	e79
22	25	107	86	51	54	89	e160	e43	e26	e29	e48	e69
23	22	91	181	40	44	81	e160	e66	e25	e33	e35	e64
24	23	103	443	42	40	103	e120	e110	e24	e29	e32	e59
25	24	152	350	37	35	158	e120	e59	e24	e26	e29	e57
26	25	84	200	40	36	167	e120	e62	e24	e31	e28	e53
27	191	75	159	43	33	348	e110	e50	e23	e410	e26	e48
28	117	111	132	41	35	200	e99	e57	e23	e140	e43	e48
29	155	208	128	36	38	157	e90	e45	e23	e92	e220	e46
30	106	128	210	32	---	136	e79	e41	e23	e70	e1,060	e45
31	67	---	142	29	---	125	---	e44	---	e65	e520	---
TOTAL	1,306	2,751	4,443	2,048	1,041	4,691	4,170	2,358	929	1,722	2,876	2,877
MEAN	42.1	91.7	143	66.1	35.9	151	139	76.1	31.0	55.5	92.8	95.9
MAX	191	359	455	141	54	427	390	190	57	410	1,060	300
MIN	16	33	48	29	20	56	69	41	23	21	26	45

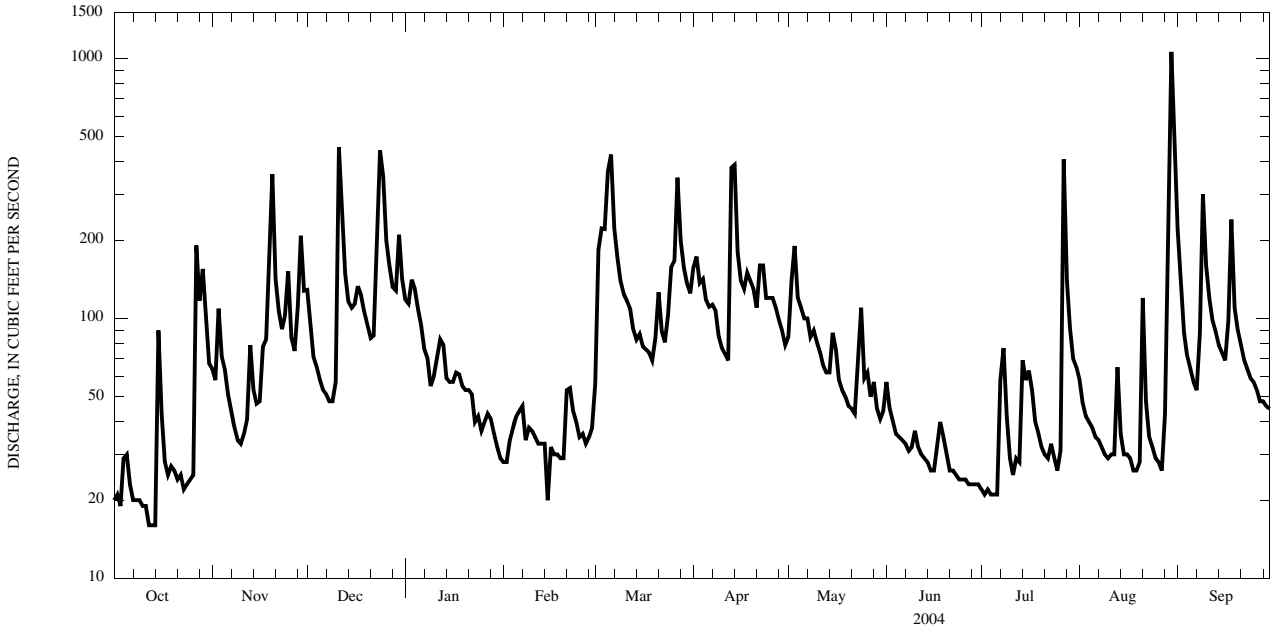
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	26.0	50.8	89.6	57.1	69.0	135	132	77.0	46.1	33.9	46.2	41.3
MAX	42.1	91.7	143	66.1	113	178	139	103	55.8	55.5	92.8	95.9
(WY)	(2004)	(2004)	(2004)	(2004)	(2002)	(2003)	(2004)	(2002)	(2002)	(2004)	(2004)	(2004)
MIN	17.1	28.1	57.5	46.8	35.9	75.4	125	52.2	31.0	17.9	9.73	7.57
(WY)	(2003)	(2002)	(2002)	(2002)	(2004)	(2002)	(2002)	(2003)	(2004)	(2002)	(2002)	(2002)

04237962 ONONDAGA CREEK NEAR CARDIFF, SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	27,237		31,212			
ANNUAL MEAN	74.6		85.3		67.0	
HIGHEST ANNUAL MEAN					85.3	2004
LOWEST ANNUAL MEAN					54.4	2002
HIGHEST DAILY MEAN	503	Apr 5	1,060	Aug 30	1,060	Aug 30, 2004
LOWEST DAILY MEAN	11	Sep 19	16	Oct 12	3.8	Sep 14, 2002
ANNUAL SEVEN-DAY MINIMUM	14	Sep 16	18	Oct 8	4.2	Sep 8, 2002
10 PERCENT EXCEEDS	165		159		136	
50 PERCENT EXCEEDS	48		58		45	
90 PERCENT EXCEEDS	20		26		15	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE.

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft upstream from bridge on Dorwin Avenue, at Syracuse, and 4.0 mi downstream from Onondaga Reservoir.

DRAINAGE AREA.--88.5 mi^2.

PERIOD OF RECORD.--May l951 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 414.19 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by Onondaga Reservoir. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft^3/s, July 3, 1974, gage height, 6.48 ft; minimum discharge not determined; minimum gage height, 1.15 ft, Sept. 16, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,400 ft^3/s, Aug. 30, gage height, 4.80 ft; minimum discharge, 34 ft^3/s, Oct. 14, gage height, 1.56 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	143	287	255	e92	120	239	159	e170	47	132	957
2	52	126	256	227	e90	326	333	277	e140	46	110	772
3	51	196	211	250	e92	e580	261	430	e120	44	95	399
4	60	169	192	255	e94	e630	264	321	e105	44	88	168
5	81	145	177	229	92	e750	245	233	95	43	86	146
6	e62	130	166	208	93	e830	221	211	92	43	78	128
7	e56	119	161	e180	110	740	220	217	89	58	76	118
8	e52	112	e150	e170	e100	581	212	183	86	199	75	121
9	e48	101	147	e135	e96	369	190	190	84	149	68	504
10	44	96	153	e125	94	256	173	e180	101	87	59	468
11	43	97	514	e140	92	230	160	170	89	67	64	246
12	41	109	731	154	e90	e220	150	154	78	61	68	179
13	40	175	554	e145	88	e200	417	152	73	70	141	153
14	37	175	e260	e135	86	e185	754	e165	74	98	113	136
15	123	151	e220	e135	84	e185	629	e180	73	162	83	126
16	117	143	e220	e130	e80	168	447	e190	66	139	67	115
17	79	180	263	e130	e82	165	263	e140	84	137	65	135
18	66	203	281	e130	e80	164	260	126	102	98	59	415
19	71	254	243	e125	79	154	302	120	90	87	57	248
20	69	573	221	e120	78	162	280	109	70	74	63	166
21	64	409	196	e115	110	278	229	108	63	66	203	138
22	67	243	194	e110	134	215	315	107	62	65	164	127
23	66	200	284	e105	e110	185	307	145	63	90	96	116
24	64	184	659	e105	111	215	262	e400	56	72	79	108
25	63	284	781	e100	e100	328	222	e210	53	61	68	97
26	64	214	635	e98	e98	346	247	168	58	67	61	98
27	246	187	412	e100	e98	558	225	137	56	616	57	91
28	336	191	265	e100	e96	543	208	165	51	672	58	87
29	273	365	241	e98	98	408	189	157	53	440	150	86
30	273	289	321	e96	---	262	165	125	50	172	903	87
31	190	---	336	e94	---	229	---	118	---	139	1,080	---
TOTAL	2,951	5,963	9,731	4,499	2,747	10,582	8,389	5,747	2,446	4,213	4,566	6,735
MEAN	95.2	199	314	145	94.7	341	280	185	81.5	136	147	224
MAX	336	573	781	255	134	830	754	430	170	672	1,080	957
MIN	37	96	147	94	78	120	150	107	50	43	57	86

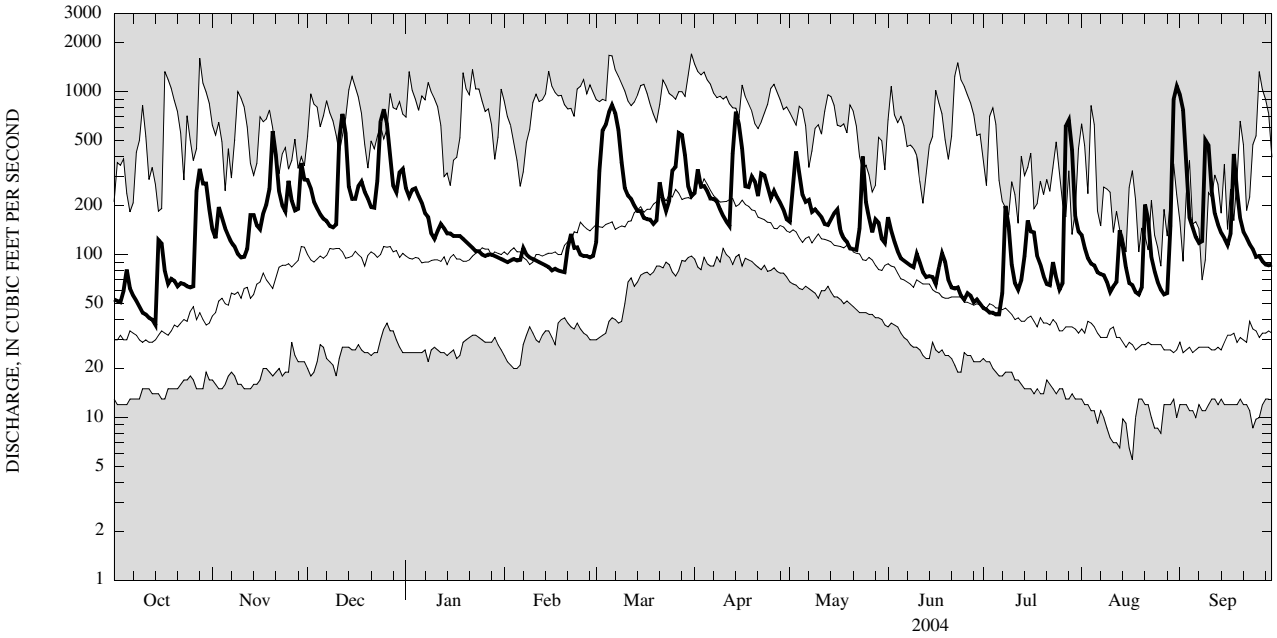
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	62.4	104	143	138	167	264	266	143	93.9	59.3	42.6	46.7
MAX	328	312	365	355	390	535	758	330	563	166	147	224
(WY)	(1978)	(1969)	(1973)	(1998)	(1990)	(1979)	(1993)	(2000)	(1972)	(1992)	(2004)	(2004)
MIN	15.3	19.3	31.7	33.7	40.8	93.3	112	58.1	28.1	19.5	10.7	13.2
(WY)	(1965)	(1965)	(1961)	(1961)	(1963)	(1983)	(1981)	(1995)	(1999)	(1962)	(1965)	(1964)

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	60,317		68,569			
ANNUAL MEAN	165		187		127	
HIGHEST ANNUAL MEAN					198	1978
LOWEST ANNUAL MEAN					58.8	1965
HIGHEST DAILY MEAN	855	Apr 5	1,080	Aug 31	1,710	Mar 31, 1960
LOWEST DAILY MEAN	29	Sep 19	37	Oct 14	5.5	Aug 17, 1965
ANNUAL SEVEN-DAY MINIMUM	31	Sep 16	44	Oct 8	7.4	Aug 11, 1965
10 PERCENT EXCEEDS	336		366		262	
50 PERCENT EXCEEDS	120		138		81	
90 PERCENT EXCEEDS	44		63		25	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft upstream from bridge on Spencer Street in Syracuse, 1,000 ft upstream from Erie (Barge) Canal terminal, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--110 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WDR NY 1972: 1971(M). WDR NY 1975: 1972(M), 1974(M). WDR NY-81-3: Drainage area. WDR NY-89-3: 1971-72(M), 1974-80(M), 1982-84(M), 1986(M), 1988(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 362.29 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by Onondaga Reservoir. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 365.00 ft. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,050 ft^3/s, July 3, 1974, gage height, 8.73 ft, from rating curve extended above 1,600 ft^3/s on basis of runoff comparisons with nearby stations; minimum, 20 ft^3/s, Sept. 26, 1985, gage height, 2.16 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft^3/s, Apr. 13, gage height, 6.45 ft; minimum discharge, 56 ft^3/s, Oct. 14, gage height, 2.51 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	164	323	312	123	165	315	217	206	71	168	874
2	66	147	292	282	122	424	417	376	179	69	144	750
3	66	223	241	312	123	706	341	532	158	67	129	467
4	76	192	218	317	129	740	341	403	142	68	120	218
5	92	161	202	290	123	845	322	307	132	66	118	190
6	75	143	190	266	127	905	293	280	128	65	110	172
7	71	132	182	217	148	810	288	284	123	106	106	155
8	67	123	171	e200	132	690	280	242	116	238	101	183
9	65	113	168	e160	130	481	252	250	114	171	97	612
10	62	109	174	e150	132	344	231	244	130	106	107	522
11	61	111	568	e165	130	312	213	220	119	87	98	306
12	59	121	710	188	123	308	204	202	108	83	100	229
13	58	190	566	190	127	270	586	217	106	87	179	199
14	57	193	313	e160	124	242	864	223	103	144	147	182
15	156	167	260	e160	113	250	733	229	100	180	113	166
16	137	157	270	160	109	233	565	244	93	167	98	156
17	93	195	309	165	114	225	355	188	111	159	95	175
18	81	225	331	165	115	224	339	168	129	118	89	479
19	87	289	290	158	114	210	394	159	115	105	104	309
20	83	603	263	151	113	219	361	147	99	95	90	215
21	77	452	236	148	151	351	326	144	90	88	280	190
22	78	272	232	148	181	286	457	146	90	127	211	173
23	77	223	332	e130	155	246	438	246	88	111	131	162
24	74	211	719	e128	155	278	388	465	82	93	110	154
25	73	311	796	e125	133	405	345	277	79	83	100	147
26	86	240	670	e125	135	442	371	222	87	88	93	142
27	289	209	483	131	129	699	342	200	80	842	87	135
28	372	214	331	132	129	641	320	255	77	665	116	130
29	323	397	304	129	139	508	270	209	77	485	263	128
30	312	326	390	127	---	347	220	169	74	220	908	129
31	216	---	399	126	---	304	---	172	---	178	966	---
TOTAL	3,556	6,613	10,933	5,617	3,778	13,110	11,171	7,637	3,335	5,232	5,578	8,049
MEAN	115	220	353	181	130	423	372	246	111	169	180	268
MAX	372	603	796	317	181	905	864	532	206	842	966	874
MIN	57	109	168	125	109	165	204	144	74	65	87	128

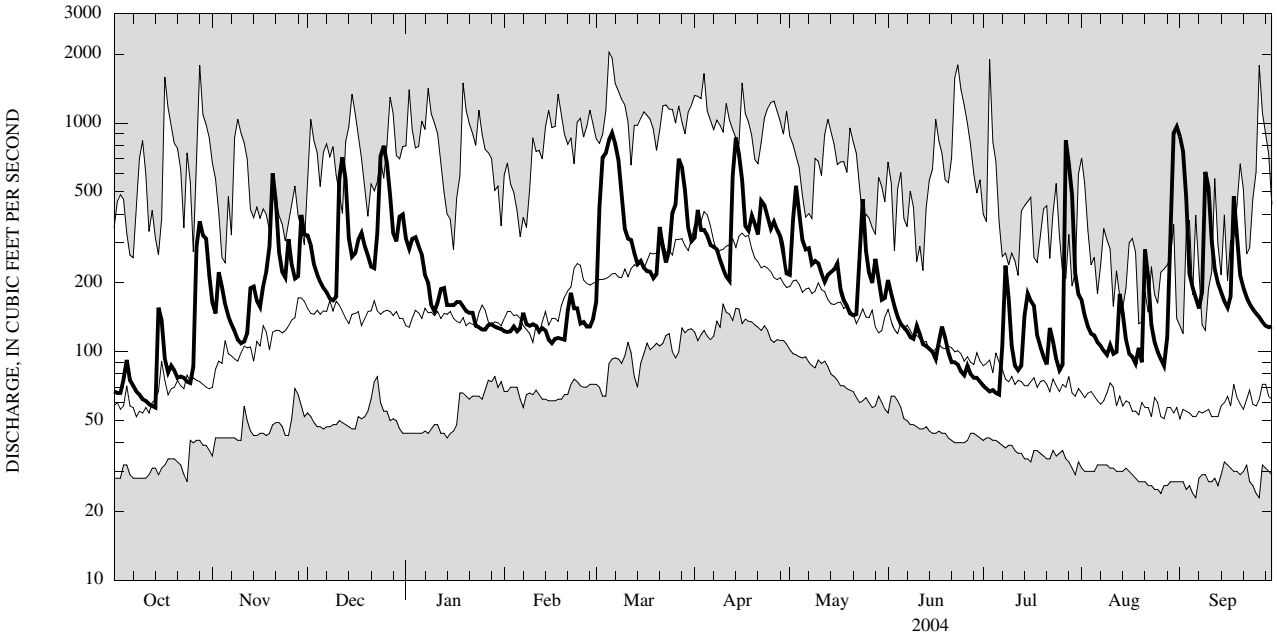
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	106	152	200	187	216	329	353	206	143	102	78.8	88.5
MAX	424	324	452	425	457	653	935	390	617	237	180	275
(WY)	(1978)	(1978)	(1973)	(1998)	(1976)	(1979)	(1993)	(2000)	(1972)	(1974)	(2004)	(1975)
MIN	39.2	48.9	53.9	73.6	70.4	123	153	78.8	49.3	39.6	30.4	36.2
(WY)	(1984)	(1999)	(1999)	(1981)	(1980)	(1983)	(1995)	(1995)	(1995)	(1995)	(1999)	(1995)

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	74,809		84,609			
ANNUAL MEAN	205		231		180	
HIGHEST ANNUAL MEAN					273	1976
LOWEST ANNUAL MEAN					100	1995
HIGHEST DAILY MEAN	977	Apr 5	966	Aug 31	2,040	Mar 5, 1979
LOWEST DAILY MEAN	54	Sep 22	57	Oct 14	23	Sep 26, 1985
ANNUAL SEVEN-DAY MINIMUM	56	Sep 16	61	Oct 8	26	Aug 31, 1999
10 PERCENT EXCEEDS	411		454		358	
50 PERCENT EXCEEDS	156		171		126	
90 PERCENT EXCEEDS	68		87		49	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'09", long 76°10'55", Onondaga County, Hydrologic Unit 04140201, on left bank 160 ft upstream from bridge on Holden Street at Syracuse, 220 ft downstream from gated outlet of Velasko Road Detention Basin, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--10.0 mi^2.

PERIOD OF RECORD.--June 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-82-3: 1981 (M), WDR-NY-88-3: 1986-87 (M).

GAGE.--Water-stage recorder. Datum of gage is 391.16 ft above NGVD of 1929. Prior to Sept. 30, l978, at site 1,660 ft upstream and Oct. 1, 1978 to May 31, 1980, at site 1,800 ft upstream at datum 3.63 ft higher.

REMARKS.--Records fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flows can be regulated at detention basin by Onondaga County. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft^3/s, July 3, 1974, gage height, 8.34 ft, datum then in use, from rating curve extended above 180 ft^3/s on basis of slope-area measurements of peak flow; no flow for part of each day July 14, 16, 18, 1997, Aug. 20, 26, 1998, Sept. 11, 14, 1998, result of regulation for maintenance work in the channel.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 255 ft^3/s, July 27, gage height 4.82 ft; minimum discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.8	e7.0	18	16	6.9	10	19	13	19	5.9	8.4	13
2	e6.0	7.6	13	16	6.9	37	22	25	14	5.9	8.3	9.6
3	e5.9	12	9.7	22	7.1	50	18	29	13	5.7	8.0	8.4
4	e7.8	e7.2	9.9	18	7.0	40	20	17	12	5.6	7.9	8.0
5	e6.5	e7.0	9.0	17	6.7	57	18	18	11	5.6	7.8	7.9
6	e6.4	6.6	8.3	13	7.1	43	16	15	11	5.7	7.7	7.8
7	e6.4	e6.4	8.2	10	7.1	26	16	17	10	11	7.6	7.8
8	e6.2	e6.2	8.0	9.8	6.8	24	14	14	9.7	13	7.5	12
9	e6.2	e6.2	7.9	e9.4	6.8	21	13	17	9.7	7.9	7.4	55
10	e6.6	e6.4	10	e9.2	6.8	18	12	16	11	6.0	8.8	22
11	e6.6	e6.8	45	e9.2	6.9	17	12	13	9.0	5.8	8.2	14
12	e6.2	e6.5	21	9.4	6.9	18	11	13	8.6	7.7	9.0	11
13	e6.2	9.1	13	e9.2	6.9	14	52	15	9.7	6.1	19	10
14	e6.2	e8.0	9.9	e9.0	6.9	14	37	20	8.7	16	9.7	9.7
15	12	e7.8	8.8	e8.8	6.8	16	22	17	8.7	7.8	8.4	9.6
16	e8.0	e7.6	8.9	e8.6	6.6	13	18	14	8.0	16	8.4	9.6
17	e7.2	11	15	e8.5	6.6	13	17	12	10	11	8.2	14
18	e6.8	e11	17	e8.3	6.7	13	18	11	8.3	6.8	8.0	33
19	e7.6	e21	14	e8.2	6.6	13	18	11	7.6	6.6	11	14
20	e6.6	29	13	e7.7	6.7	15	18	10	7.3	6.5	8.0	12
21	e6.6	e14	12	e7.7	9.4	23	15	10	6.9	6.5	30	11
22	e6.8	e11	13	e7.5	7.9	16	22	11	7.8	14	10	11
23	e6.6	e10	28	e7.4	7.8	15	17	20	6.9	9.4	8.0	10
24	e6.4	e11	50	e7.4	7.9	21	15	54	6.9	7.0	7.7	9.9
25	e6.4	14	29	e7.3	7.6	28	16	18	6.8	6.8	8.0	9.3
26	e9.5	10	21	e7.2	7.6	26	17	15	8.0	8.1	7.5	8.9
27	30	e10	18	e7.1	7.5	54	14	15	6.5	133	7.1	8.6
28	15	15	17	e7.1	7.7	23	13	28	6.5	24	12	8.3
29	25	20	18	e7.1	8.6	19	12	16	6.4	14	27	8.2
30	e14	16	26	7.0	---	17	11	13	6.1	9.6	53	8.4
31	e9.0	---	19	7.0	---	16	---	16	---	9.5	24	---
TOTAL	272.5	321.4	518.6	307.1	208.8	730	543	533	275.1	404.5	371.6	382.0
MEAN	8.79	10.7	16.7	9.91	7.20	23.5	18.1	17.2	9.17	13.0	12.0	12.7
MAX	30	29	50	22	9.4	57	52	54	19	133	53	55
MIN	5.8	6.2	7.9	7.0	6.6	10	11	10	6.1	5.6	7.1	7.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

MEAN	5.65	6.68	8.35	8.67	10.5	17.2	17.6	10.1	7.49	6.05	4.96	5.19
MAX	21.7	21.6	26.0	27.9	33.5	39.6	59.4	22.6	32.2	13.5	12.0	20.7
(WY)	(1978)	(1969)	(1978)	(1998)	(1976)	(1979)	(1993)	(1976)	(1972)	(1974)	(2004)	(1975)
MIN	2.24	2.74	2.76	3.07	3.48	5.14	5.07	4.35	3.55	2.81	2.55	2.35
(WY)	(1967)	(1967)	(1962)	(1961)	(1963)	(1983)	(1967)	(1995)	(1995)	(1965)	(1965)	(1959)

04240100 HARBOR BROOK AT SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1959 - 2004	
ANNUAL TOTAL	4,446.1		4,867.6			
ANNUAL MEAN	12.2		13.3		9.04	
HIGHEST ANNUAL MEAN					15.7	1976
LOWEST ANNUAL MEAN					4.53	1967
HIGHEST DAILY MEAN	63	Apr 5	133	Jul 27	248	Mar 30, 1960
LOWEST DAILY MEAN	4.5	Aug 4	5.6	Jul 4	0.51	Jun 15, 1984
ANNUAL SEVEN-DAY MINIMUM	5.3	Jul 29	5.8	Jun 30	1.6	Nov 10, 1988
10 PERCENT EXCEEDS	23		22		17	
50 PERCENT EXCEEDS	9.5		9.9		5.8	
90 PERCENT EXCEEDS	5.8		6.6		3.2	

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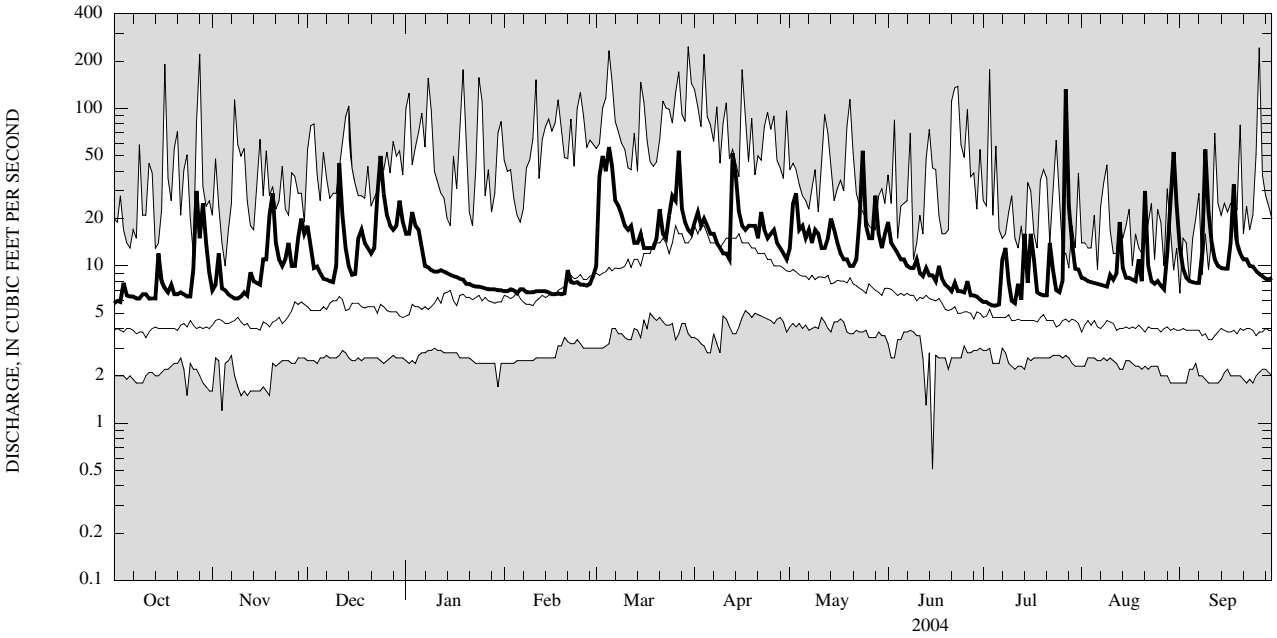


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft downstream from culvert on Hiawatha Boulevard, in Syracuse, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--12.1 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P). WDR NY-2001-3: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 365.86 ft above NGVD of 1929.

REMARKS.--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 Velasko Road Detention Basin 2.1 mi upstream. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s, July 3, 1974, gage height, 7.91 ft, from rating curve extended above 190 ft^3/s on basis of step-backwater computations; maximum gage height, 8.15 ft, Sept. 26, 1975 (backwater from debris jam); no flow for part of each day Oct. 26, 27, 1987, result of regulation for maintenance work in the channel.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 552 ft^3/s, July 27, gage height, 6.59 ft; minimum discharge, 4.0 ft^3/s, Oct. 8, gage height, 1.85 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	7.2	18	16	7.7	11	19	13	e19	5.3	6.4	12
2	4.7	8.0	15	16	7.8	39	22	30	e14	5.2	6.2	9.8
3	4.6	12	11	21	8.1	56	17	31	e13	5.2	6.4	7.6
4	8.1	8.1	11	17	8.2	43	19	15	e12	5.2	6.5	7.1
5	5.0	7.1	11	17	7.9	66	17	16	e11	5.1	6.4	6.9
6	4.9	6.7	10	14	8.3	48	15	13	e10	5.1	6.3	6.8
7	5.0	6.5	9.6	12	8.3	28	15	15	e10	20	6.2	6.7
8	4.8	6.4	9.3	11	7.9	25	14	12	e9.5	25	6.1	16
9	4.8	6.5	9.2	11	7.7	21	13	14	9.0	7.4	5.9	e85
10	5.1	6.6	11	11	7.8	19	12	14	9.8	5.7	13	20
11	5.1	7.2	77	10	7.7	18	11	12	8.4	5.4	6.9	12
12	4.9	6.4	25	11	7.5	18	11	13	8.1	9.0	6.7	9.6
13	4.9	10	17	10	7.5	15	84	17	10	5.9	17	8.6
14	4.9	8.5	13	9.7	7.3	15	48	23	8.5	34	7.1	8.0
15	15	8.2	11	9.4	7.3	17	22	18	8.1	7.0	6.1	7.9
16	6.5	7.8	10	9.3	7.2	14	18	15	7.5	16	6.0	7.7
17	5.7	11	16	9.2	7.1	14	16	13	9.5	10	5.9	11
18	5.6	12	19	9.0	7.1	14	18	13	7.5	5.8	5.7	36
19	7.5	24	16	8.9	7.1	13	18	13	6.6	5.4	11	11
20	5.6	32	15	8.5	7.1	16	16	12	6.4	5.3	5.7	9.2
21	5.6	14	13	8.5	10	23	14	12	6.2	5.2	41	8.4
22	5.8	12	13	8.4	8.5	16	22	14	7.1	25	8.8	7.8
23	5.6	10	31	8.4	8.3	15	15	36	6.1	7.8	6.7	7.5
24	5.4	13	70	8.1	8.3	20	13	98	6.0	5.6	6.4	7.4
25	5.4	15	35	8.0	8.1	27	15	e21	5.9	5.4	6.4	7.1
26	9.5	11	22	7.8	8.1	28	15	e18	7.4	6.7	6.4	6.9
27	38	10	18	7.8	8.0	74	13	e17	5.8	e160	5.9	6.9
28	15	15	17	7.8	8.2	23	11	e34	5.8	24	e20	6.9
29	28	20	17	7.7	9.1	18	11	e19	5.6	11	e40	6.7
30	13	16	29	7.7	---	16	9.9	e16	5.5	7.7	e80	6.7
31	8.4	---	18	7.7	---	15	---	e17	---	7.8	22	---
TOTAL	257.0	338.2	617.1	328.9	229.2	785	563.9	624	259.3	459.2	391.1	371.2
MEAN	8.29	11.3	19.9	10.6	7.90	25.3	18.8	20.1	8.64	14.8	12.6	12.4
MAX	38	32	77	21	10	74	84	98	19	160	80	85
MIN	4.6	6.4	9.2	7.7	7.1	11	9.9	12	5.5	5.1	5.7	6.7

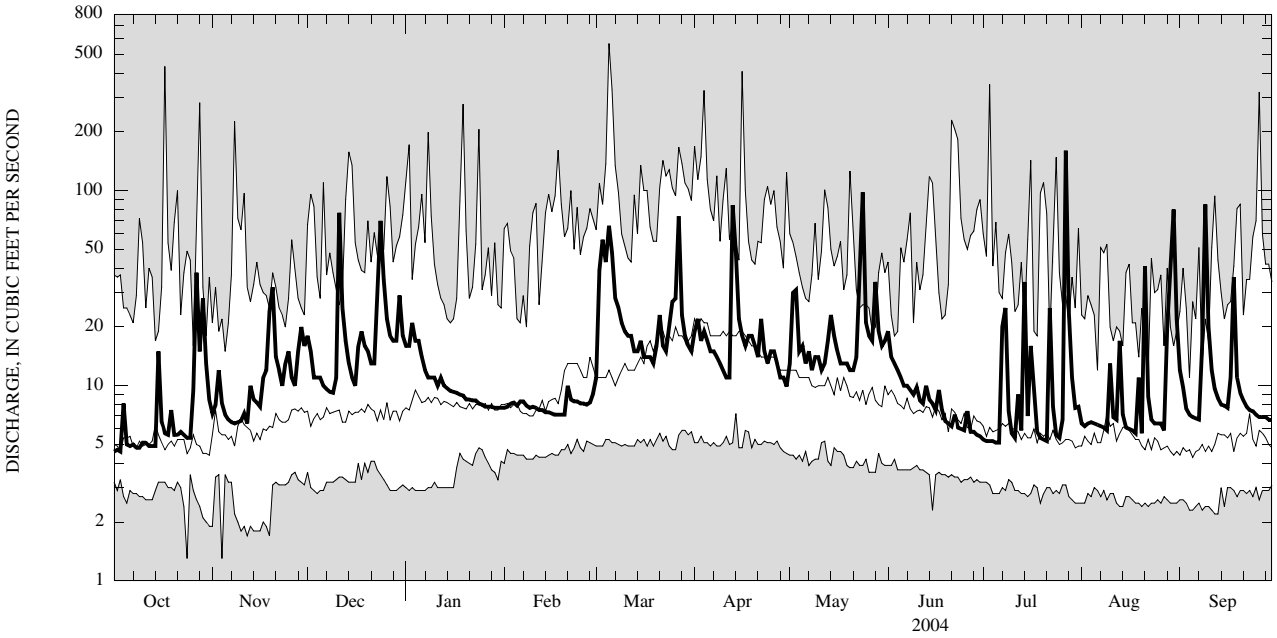
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2004, BY WATER YEAR (WY)

MEAN	8.07	8.90	11.4	11.6	12.9	21.9	22.3	13.1	10.5	9.04	7.02	7.80
MAX	34.0	26.6	35.8	31.0	38.4	68.8	68.8	27.9	51.9	25.4	12.6	28.7
(WY)	(1978)	(1978)	(1978)	(1973)	(1976)	(1979)	(1993)	(1976)	(1972)	(1974)	(2004)	(1975)
MIN	3.44	3.68	3.54	4.43	4.99	6.04	6.09	4.80	3.79	3.44	3.08	3.70
(WY)	(1998)	(1999)	(1999)	(1983)	(1995)	(1983)	(1981)	(1981)	(1995)	(1995)	(1999)	(1997)

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1971 - 2004	
ANNUAL TOTAL	4,819.8		5,224.1			
ANNUAL MEAN	13.2		14.3		12.0	
HIGHEST ANNUAL MEAN					21.3	1973
LOWEST ANNUAL MEAN					5.54	1995
HIGHEST DAILY MEAN	100	Mar 17	160	Jul 27	567	Mar 5, 1979
LOWEST DAILY MEAN	4.2	Sep 11	4.6	Oct 1	1.3	Nov 4, 1988
ANNUAL SEVEN-DAY MINIMUM	4.3	Sep 10	4.9	Oct 8	1.8	Nov 10, 1988
INSTANTANEOUS LOW FLOW					0.00	Oct 26, 1987
10 PERCENT EXCEEDS	28		24		23	
50 PERCENT EXCEEDS	8.8		10		7.6	
90 PERCENT EXCEEDS	4.9		5.7		4.0	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi upstream from bridge on Park Street, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--29.9 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M). WDR NY-2001-3: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and, since July 9, 1984, steel "I" beam control. Datum of gage is 362.76 ft above NGVD of 1929. Prior to Oct. 1, 1978, at same site at datum 0.08 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.0 ft. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft^3/s, Sept. 26, 1975, gage height, 6.17 ft, datum then in use, from rating curve extended above 530 ft^3/s; maximum gage height, 7.02 ft, Apr. 26, 1993 (backwater from Onondaga Lake); minimum discharge not determined; minimum gage height, 0.28 ft, Feb. 6-8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 27	0400	479	3.40	2200	461	3.34
Apr 13	2200	621	3.87	1330	504	3.48
May 24	0700	*786	*4.44	0730	464	3.35
Jul 27	1130	719	4.21			

Minimum discharge, 8.7 ft^3/s, Oct. 12, gage height, 0.97 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	33	e78	e70	16	62	61	e30	e120	13	26	e90
2	12	36	e70	e50	18	158	80	94	90	12	18	e48
3	12	75	e45	e78	18	198	61	155	e56	12	15	38
4	36	46	e33	e75	21	181	75	e62	e36	11	14	25
5	27	36	e32	e64	19	202	69	e50	e28	11	15	19
6	17	31	32	e38	22	e195	57	e38	e26	11	14	16
7	13	27	29	e36	32	e130	51	e50	e25	31	13	15
8	11	24	27	e33	25	e82	45	e32	e21	112	13	28
9	9.9	21	27	32	24	e62	41	e44	21	45	13	318
10	9.6	18	30	26	27	e50	36	e50	26	19	15	132
11	9.8	21	175	e22	28	e52	31	e33	18	14	27	e52
12	9.5	24	132	e30	26	60	30	e38	16	18	16	e38
13	9.4	48	79	e26	27	50	214	e28	27	18	76	e34
14	9.8	51	48	23	27	41	303	124	24	99	27	e28
15	103	46	50	23	24	45	129	88	30	52	17	e22
16	43	43	44	21	23	43	e56	e62	20	65	15	20
17	22	58	61	23	22	45	e46	e38	22	46	14	30
18	16	55	70	28	20	48	e44	e32	19	30	13	117
19	39	82	63	29	21	47	e52	e30	16	20	37	41
20	22	132	60	26	21	59	e50	29	14	17	24	29
21	16	e62	56	24	47	105	e38	26	15	15	142	25
22	16	e42	56	22	45	75	e78	21	21	30	49	23
23	13	e30	97	19	41	56	e48	74	19	36	29	27
24	14	e42	210	18	40	55	e35	583	16	17	20	25
25	12	e66	e180	16	36	69	e46	e220	18	14	17	26
26	29	e40	e120	16	35	79	e62	e90	37	21	16	20
27	157	e34	e95	18	35	288	54	e60	17	488	19	18
28	74	e52	e85	19	38	119	e39	e250	15	204	74	18
29	109	e80	e70	18	48	73	e32	e92	15	e75	138	17
30	67	e62	e120	17	---	58	e30	e47	14	e29	336	16
31	44	---	e100	16	---	47	---	e45	---	e26	203	---
TOTAL	993.0	1,417	2,374	956	826	2,834	1,993	2,615	842	1,611	1,465	1,355
MEAN	32.0	47.2	76.6	30.8	28.5	91.4	66.4	84.4	28.1	52.0	47.3	45.2
MAX	157	132	210	78	48	288	303	583	120	488	336	318
MIN	9.4	18	27	16	16	41	30	21	14	11	13	15
CFSM	1.26	1.85	3.00	1.21	1.12	3.59	2.61	3.31	1.10	2.04	1.85	1.77
IN.	1.45	2.07	3.46	1.39	1.20	4.13	2.91	3.81	1.23	2.35	2.14	1.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

MEAN	33.4	46.3	52.7	41.4	51.1	75.4	73.3	42.6	31.3	26.9	23.2	29.5
MAX	129	102	145	107	125	154	334	94.8	71.4	61.6	47.3	99.1
(WY)	(1978)	(1978)	(1978)	(1998)	(1976)	(1978)	(1993)	(1996)	(1973)	(1992)	(2004)	(1975)
MIN	7.01	17.3	18.5	11.0	16.1	25.0	22.5	12.7	11.8	10.6	8.22	9.07
(WY)	(1983)	(1979)	(1989)	(1977)	(1993)	(1981)	(1981)	(1987)	(1995)	(1995)	(1987)	(1994)

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1973 - 2004	
ANNUAL TOTAL	18,431.8		19,281.0			
ANNUAL MEAN	50.5		52.7		43.4	
HIGHEST ANNUAL MEAN					69.8	1978
LOWEST ANNUAL MEAN					24.8	1995
HIGHEST DAILY MEAN	420	Apr 5	583	May 24	831	Sep 26, 1975
LOWEST DAILY MEAN	7.1	Jul 20	9.4	Oct 13	1.9	Feb 6, 1977
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 7	9.9	Oct 8	2.3	Feb 2, 1977
ANNUAL RUNOFF (CFSM)	1.98		2.07		1.70	
ANNUAL RUNOFF (INCHES)	26.89		28.13		23.13	
10 PERCENT EXCEEDS	109		106		93	
50 PERCENT EXCEEDS	32		33		24	
90 PERCENT EXCEEDS	10		15		9.9	

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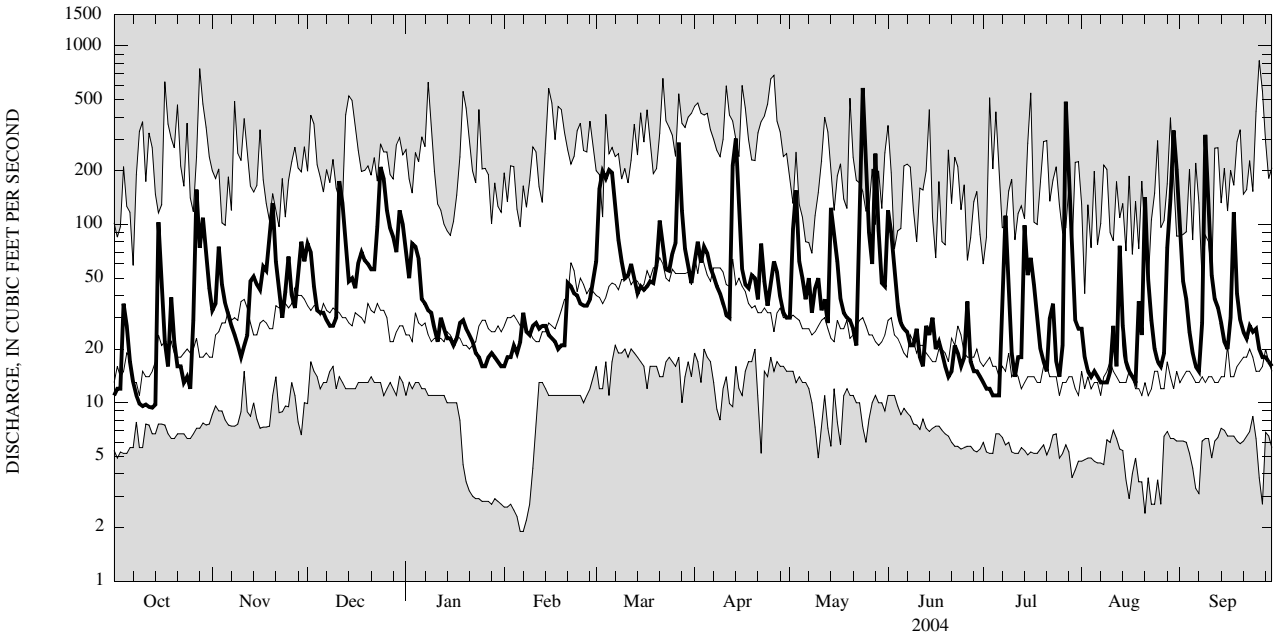

2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft upstream from bridge on Schuyler Road, 0.9 mi north of Marietta, and 1.8 mi downstream from Otisco Lake.

DRAINAGE AREA.--45.1 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WDR NY l971: 1966(M), 1968, 1969. WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.25 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Otisco Lake from which water is diverted by the Onondaga County Water Authority for water supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s, June 23, 1972, gage height, 8.65 ft; minimum discharge, 0.58 ft^3/s, July 16, 17, 18, 19, 20, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 273 ft^3/s, Sept. 1, gage height, 4.47 ft; minimum discharge, 4.3 ft^3/s, Oct. 12, gage height, 0.88 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.5	7.5	112	161	12	11	177	87	45	7.7	61	247
2	e5.5	8.0	110	161	43	26	179	107	41	8.2	55	255
3	e5.2	16	108	162	97	38	168	127	35	8.3	49	251
4	e7.0	39	109	160	86	47	159	116	31	8.3	42	228
5	e6.5	59	110	161	84	77	149	111	29	8.5	34	201
6	e6.0	57	110	160	85	48	108	104	26	9.5	27	177
7	e5.8	56	109	158	85	18	79	101	22	12	22	159
8	e5.6	54	109	158	84	20	78	93	20	15	19	151
9	e5.5	54	130	99	84	28	76	90	18	11	17	186
10	e5.5	54	168	13	83	36	73	85	17	9.8	16	170
11	e5.5	53	207	11	83	44	69	79	15	10	14	159
12	5.3	53	173	11	83	52	66	74	13	9.6	13	151
13	7.1	61	168	11	82	55	113	70	13	9.1	19	119
14	5.1	57	167	11	82	55	178	69	11	12	17	72
15	10	56	167	11	82	55	173	68	8.4	10	15	48
16	6.6	57	167	12	83	55	165	66	7.0	12	13	47
17	5.9	62	169	12	49	60	154	62	8.4	9.1	11	51
18	5.8	71	167	11	11	60	152	59	8.5	9.0	11	64
19	6.5	101	165	11	10	57	155	50	9.1	9.6	10	51
20	5.9	114	165	10	10	59	149	48	7.6	9.3	9.5	49
21	6.0	99	164	10	12	76	145	40	6.7	9.1	21	48
22	6.3	113	163	10	11	77	145	37	7.1	9.3	17	47
23	6.6	113	174	10	11	74	142	46	6.1	9.2	15	46
24	7.7	109	203	10	11	81	134	70	6.5	8.6	13	46
25	7.9	111	186	11	11	101	130	61	7.3	8.6	12	46
26	14	108	171	11	11	115	125	60	8.0	9.5	12	45
27	39	107	168	12	11	195	115	58	8.1	78	9.4	45
28	17	112	167	13	11	189	107	60	8.2	71	9.1	45
29	24	117	166	12	10	206	100	49	8.1	70	26	44
30	13	111	172	12	---	213	90	43	7.8	68	105	45
31	8.5	---	165	12	---	191	---	42	---	68	228	---
TOTAL	271.8	2,189.5	4,789	1,627	1,417	2,419	3,853	2,232	458.9	607.3	942.0	3,293
MEAN	8.77	73.0	154	52.5	48.9	78.0	128	72.0	15.3	19.6	30.4	110
MAX	39	117	207	162	97	213	179	127	45	78	228	255
MIN	5.1	7.5	108	10	10	11	66	37	6.1	7.7	9.1	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	20.7	29.6	43.4	49.6	53.0	66.6	102	51.2	28.2	16.4	11.1	13.2
MAX	147	125	160	157	143	180	352	151	278	74.0	76.2	110
(WY)	(1978)	(1978)	(1997)	(1973)	(1990)	(1998)	(1993)	(2000)	(1972)	(1972)	(1992)	(2004)
MIN	1.52	2.47	2.90	2.75	3.10	5.23	5.80	3.24	1.45	1.65	1.28	1.16
(WY)	(1967)	(1967)	(1999)	(1981)	(1967)	(1965)	(1965)	(1965)	(1999)	(1981)	(1966)	(1966)

04240180 NINEMILE CREEK NEAR MARIETTA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	19,426.4		24,099.5			
ANNUAL MEAN	53.2		65.8		40.4	
HIGHEST ANNUAL MEAN					76.3	1976
LOWEST ANNUAL MEAN					3.95	1965
HIGHEST DAILY MEAN	289	Apr 5	255	Sep 2	931	Jun 23, 1972
LOWEST DAILY MEAN	5.1	Oct 14	5.1	Oct 14	0.67	Jul 18, 1999
ANNUAL SEVEN-DAY MINIMUM	5.6	Oct 6	5.6	Oct 6	0.77	Jul 15, 1999
10 PERCENT EXCEEDS	141		165		108	
50 PERCENT EXCEEDS	32		49		15	
90 PERCENT EXCEEDS	6.0		8.1		3.3	

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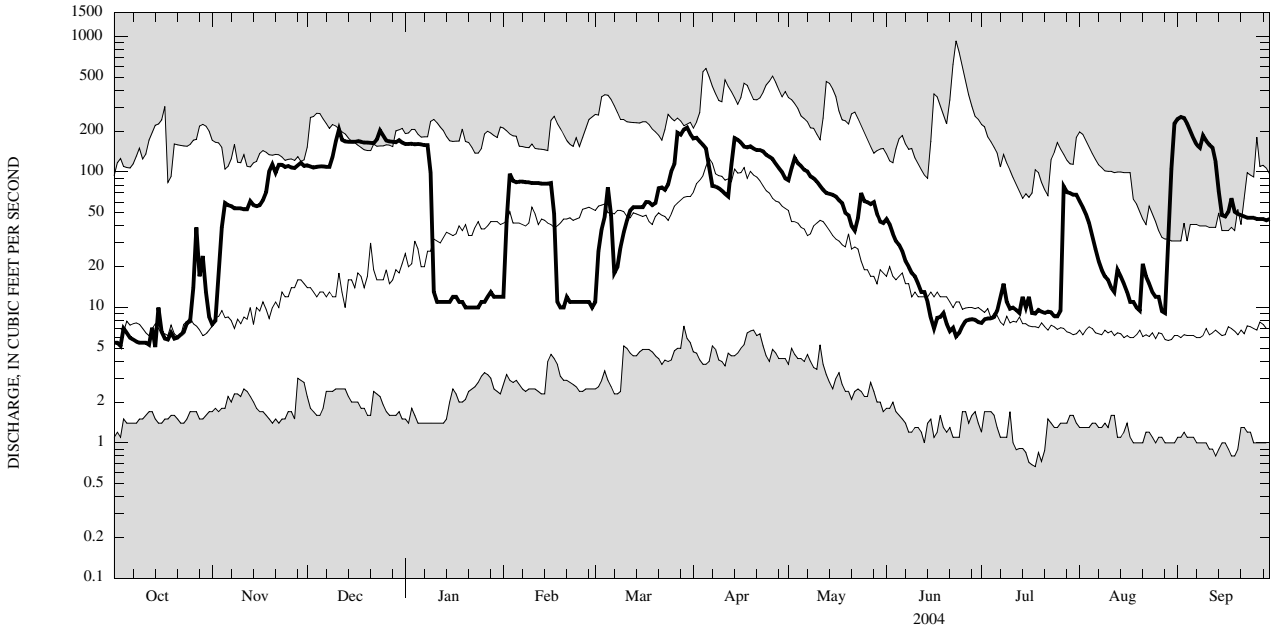


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft downstream from bridge on State Highway 48, 0.6 mi downstream from Geddes Brook, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--115 mi^2.

PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.

REVISED RECORDS.--WDR NY-83-3: 1972 (M), 1976 (M), 1979 (M), 1982 (M). WDR NY 1997: 1976, 1977, 1978, 1979, 1980, 1981.

GAGE.--Doppler velocity meter, water-stage recorder, and crest-stage gage. Datum of gage is 360.67 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Otisco Lake from which water is diverted by Onondaga County Water Authority for water supply. Flow affected by backwater from Onondaga Lake whenever lake level exceeds about 362 ft msl. High lake levels affected the entire 2004 water year. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,110 ft^3/s, June 23, 1972; maximum gage height, 9.63 ft, Apr. 27, 1993, (backwater from Onondaga Lake); minimum daily discharge, about 13 ft^3/s, Aug. 18, 1985; maximum and minimum instantaneous discharges not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 821 ft^3/s, Mar. 27, maximum gage height, 5.85 ft, July 28 (backwater from Onondaga Lake); minimum daily discharge, 49 ft^3/s, Oct. 13. Maximum and minimum instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

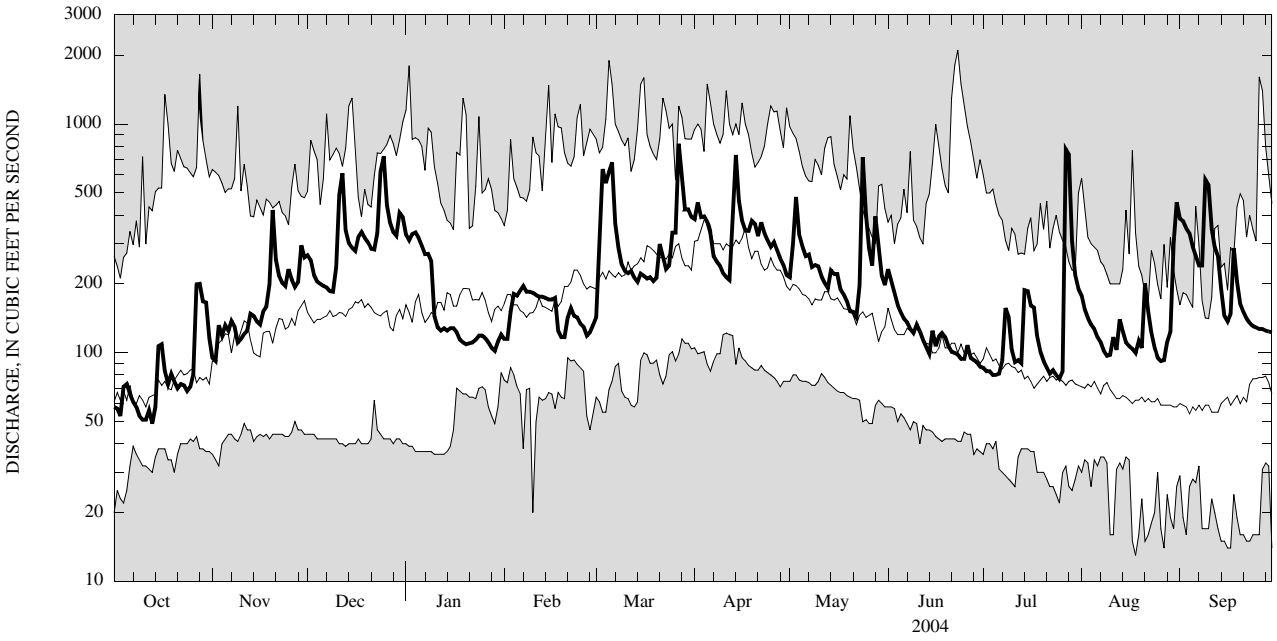
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	95	267	329	115	143	384	214	232	86	178	386
2	57	92	254	310	115	304	454	300	205	83	155	377
3	53	132	219	331	151	636	392	480	182	83	142	350
4	71	119	205	336	181	552	395	327	162	80	133	333
5	73	132	200	318	178	620	373	291	150	80	127	291
6	66	125	196	294	187	681	332	265	141	81	117	265
7	61	138	193	270	196	368	264	269	136	93	111	241
8	58	130	186	271	185	288	250	237	127	157	102	241
9	53	111	185	252	185	243	240	242	122	143	97	571
10	51	115	237	144	183	228	223	239	133	103	98	541
11	51	121	489	129	179	223	214	216	124	91	117	348
12	56	125	610	125	176	228	208	202	114	93	103	289
13	49	148	342	128	176	213	355	192	106	90	140	264
14	58	145	301	125	174	204	733	229	99	188	124	190
15	107	137	288	128	171	222	462	221	125	186	111	145
16	109	133	279	128	171	217	377	221	107	161	107	137
17	83	152	321	123	174	211	342	189	118	158	104	148
18	73	159	337	114	125	214	341	180	122	118	100	287
19	81	199	318	111	117	206	378	168	117	101	113	205
20	75	421	304	109	117	213	366	152	107	92	105	164
21	70	256	285	110	143	299	324	151	101	86	201	151
22	73	217	283	111	157	262	372	143	100	81	152	141
23	72	202	334	114	145	232	334	197	98	84	122	135
24	68	196	624	119	143	241	310	717	94	80	105	131
25	71	232	724	119	134	335	291	404	94	77	95	129
26	81	209	443	116	130	335	305	287	108	83	92	127
27	199	194	369	111	119	821	282	241	95	774	93	127
28	200	204	338	105	123	572	258	395	93	736	112	125
29	168	295	325	102	132	423	242	289	91	307	124	124
30	166	261	409	112	---	424	219	217	87	218	301	123
31	116	---	392	120	---	393	---	198	---	190	455	---
TOTAL	2,627	5,195	10,257	5,314	4,482	10,551	10,020	8,073	3,690	4,983	4,236	7,086
MEAN	84.7	173	331	171	155	340	334	260	123	161	137	236
MAX	200	421	724	336	196	821	733	717	232	774	455	571
MIN	49	92	185	102	115	143	208	143	87	77	92	123

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2004, BY WATER YEAR (WY)

MEAN	115	157	202	198	220	309	337	209	146	103	86.2	92.6
MAX	506	439	623	492	549	586	807	385	676	289	216	308
(WY)	(1978)	(1978)	(1973)	(1973)	(1990)	(1979)	(1993)	(1983)	(1972)	(1972)	(1992)	(1975)
MIN	40.9	45.0	42.7	81.8	86.0	112	100	69.1	47.7	40.5	28.6	33.0
(WY)	(1998)	(1999)	(1999)	(1984)	(1989)	(1983)	(1995)	(1995)	(1999)	(1999)	(1985)	(1985)

04240300 NINEMILE CREEK AT LAKELAND, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1971 - 2004	
ANNUAL TOTAL	68,270		76,514			
ANNUAL MEAN	187		209		177	
HIGHEST ANNUAL MEAN					310	1973
LOWEST ANNUAL MEAN					91.2	1995
HIGHEST DAILY MEAN	915	Apr 5	821	Mar 27	2,110	Jun 23, 1972
LOWEST DAILY MEAN	47	Sep 18	49	Oct 13	13	Aug 18, 1985
ANNUAL SEVEN-DAY MINIMUM	50	Sep 16	54	Oct 8	16	Sep 20, 1985
10 PERCENT EXCEEDS	342		374		357	
50 PERCENT EXCEEDS	160		172		129	
90 PERCENT EXCEEDS	64		87		50	



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04240495 ONONDAGA LAKE AT LIVERPOOL, NY

LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft southwest of Onondaga Lake Parkway, and 1.9 mi upstream from outlet of lake.

DRAINAGE AREA.--285 mi^2.

PERIOD OF RECORD.--October 1970 to current year. Elevation records, at Barge Canal datum, since February 1927 collected by, and in files of, New York State Department of Transportation at Syracuse.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. To convert elevations to NAVD adjustment of 1988, subtract 0.59 ft.

REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi^2. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.78 ft, Apr. 26, 27, 1993; minimum elevation, 361.54 ft, Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 365.03 ft, Mar. 6; minimum elevation, 362.29 ft, Feb. 3.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363.32	363.74	364.27	364.64	362.61	362.77	363.63	363.96	364.38	362.96	363.92	364.22
2	363.32	363.72	364.16	364.44	362.65	362.84	363.78	363.98	364.38	363.02	363.74	364.09
3	363.28	363.73	364.04	364.32	362.47	363.56	363.88	364.26	364.33	363.01	363.58	363.91
4	363.25	363.77	363.88	364.29	362.85	364.00	363.98	364.28	364.29	362.98	363.48	363.67
5	363.25	363.76	363.77	364.22	362.87	364.39	364.05	364.24	364.26	362.97	363.46	363.50
6	363.22	363.74	363.62	364.15	362.82	364.94	363.94	364.15	364.08	363.01	363.31	363.32
7	363.12	363.70	363.48	363.96	362.86	364.87	363.82	364.13	363.87	362.96	363.31	363.23
8	363.08	363.70	363.47	363.86	362.74	364.66	363.78	364.07	363.79	363.05	363.42	363.33
9	363.01	363.68	363.49	363.69	362.69	364.43	363.73	364.04	363.69	363.11	363.39	363.79
10	362.90	363.53	363.51	363.39	362.91	364.17	363.60	364.05	363.72	363.19	363.31	364.19
11	362.98	363.29	363.80	363.91	363.09	363.94	363.35	363.99	363.57	363.08	363.20	364.44
12	362.94	363.29	364.12	364.13	363.01	363.84	363.21	363.95	363.48	363.14	363.17	364.54
13	362.86	363.42	364.02	363.72	362.94	363.69	363.33	364.02	363.44	363.23	363.23	364.54
14	362.85	363.63	363.95	363.53	363.00	363.50	363.72	364.04	363.40	363.35	363.36	364.39
15	363.05	363.62	363.91	363.64	363.08	363.42	363.85	363.98	363.42	363.64	363.24	364.15
16	362.99	363.71	363.63	363.60	362.92	363.57	364.10	364.00	363.27	363.83	363.01	363.92
17	362.93	363.74	363.70	363.68	362.80	363.54	364.23	364.00	363.11	363.73	362.83	363.77
18	363.07	363.74	363.88	363.85	362.61	363.37	364.20	364.01	362.97	363.55	362.77	363.87
19	363.04	363.78	363.90	363.91	362.52	363.49	364.15	364.05	363.00	363.52	362.72	363.84
20	363.08	364.08	363.93	363.76	362.49	363.44	364.11	363.95	363.01	363.57	362.91	363.87
21	363.17	364.11	363.87	363.58	362.52	363.55	364.08	363.78	363.04	363.52	363.30	363.88
22	363.18	364.17	363.78	363.37	362.58	363.60	364.09	363.73	363.05	363.50	363.37	363.90
23	363.13	364.12	363.74	363.22	362.59	363.58	364.05	363.79	363.09	363.52	363.30	364.09
24	363.07	364.04	364.12	363.06	362.60	363.58	364.15	364.61	363.00	363.43	363.34	364.07
25	363.15	364.06	364.71	363.06	362.64	363.69	364.13	364.78	363.00	363.24	363.42	364.08
26	363.16	363.99	364.89	363.13	362.69	363.79	364.02	364.57	363.12	363.18	363.32	363.98
27	363.27	363.93	364.97	363.29	362.82	364.27	363.86	364.53	363.08	363.79	363.14	363.93
28	363.39	363.89	364.91	363.36	362.73	364.01	363.86	364.78	362.99	364.37	363.11	363.93
29	363.65	364.10	364.81	363.21	362.67	363.87	363.94	364.72	362.95	364.28	363.21	363.92
30	363.86	364.25	364.83	362.83	---	363.78	364.02	364.49	363.03	364.16	363.71	363.82
31	363.81	---	364.84	362.61	---	363.68	---	364.34	---	364.02	364.20	---
MEAN	363.17	363.80	364.06	363.66	362.75	363.80	363.89	364.17	363.46	363.42	363.32	363.94
MAX	363.86	364.25	364.97	364.64	363.09	364.94	364.23	364.78	364.38	364.37	364.20	364.54
MIN	362.85	363.29	363.47	362.61	362.47	362.77	363.21	363.73	362.95	362.96	362.72	363.23

CAL YR 2003 MEAN 363.57 MAX 365.96 MIN 362.60
WTR YR 2004 MEAN 363.62 MAX 364.97 MIN 362.47

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft upstream from bridge on Sconondoa Street at Oneida, and 500 ft downstream from Sconondoa Creek.

DRAINAGE AREA.--113 mi^2.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-78-1: 1951, 1956, 1958, 1961, 1963, 1964, 1972, 1976 (P). WDR NY-83-3: 1950 (M), 1977 (M), 1979 (M).

GAGE.--Water-stage recorder. Datum of gage is 409.33 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional regulation by small mills upstream from station. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,110 ft^3/s, Oct. 9, 1976, gage height, 15.01 ft; minimum discharge, 9.5 ft^3/s, Sept. 6, 7, 1999; minimum gage height, 1.30 ft, Aug. 3, 6, 1955, Aug. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	0500	2,370	9.17	0900	1,960	7.95
Dec 11	2230	2,450	9.32	0230	*2,940	*10.23
Jul 27	1830	2,090	8.53	0400	2,010	8.14

Minimum discharge, 33 ft^3/s, July 6, gage height, 1.95 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	230	395	324	e100	e140	286	138	230	44	204	435
2	61	207	317	286	e100	658	384	148	179	56	157	305
3	63	416	277	407	e108	1,220	292	293	134	41	133	243
4	81	296	246	496	e114	963	283	190	105	37	136	206
5	114	226	222	353	e108	1,130	245	194	93	36	117	182
6	84	192	209	289	e110	1,490	211	194	87	35	102	163
7	72	166	218	e200	e120	851	216	201	84	51	93	149
8	63	146	e240	e190	e114	565	204	153	77	345	87	145
9	58	129	e220	e150	e110	403	184	171	72	228	79	680
10	55	123	192	e140	e110	331	164	252	102	107	82	434
11	52	127	1,240	e160	e108	297	153	187	78	80	116	259
12	50	145	1,140	e180	e105	287	142	144	68	68	101	198
13	48	312	547	e180	e105	240	230	158	68	63	1,250	169
14	47	301	395	e160	e102	209	743	150	72	68	458	149
15	255	240	359	e150	e98	223	334	138	69	113	253	133
16	230	220	e360	e160	e96	197	245	151	54	111	278	123
17	122	355	375	e150	e100	190	212	117	65	94	254	135
18	95	543	395	e160	e98	188	208	104	78	134	170	620
19	109	785	334	e150	e96	176	212	100	66	126	169	285
20	109	1,640	301	e150	e96	209	245	91	58	102	202	201
21	96	659	271	e140	e130	534	194	93	54	71	835	170
22	85	411	258	e130	e190	289	378	89	61	62	446	147
23	82	315	433	e125	e170	220	303	118	64	85	265	132
24	80	269	1,220	e120	e150	249	240	821	51	69	203	122
25	75	364	1,110	e115	e130	385	201	265	45	55	169	114
26	74	272	619	e115	e120	426	262	188	48	60	148	107
27	716	235	436	e110	e115	955	221	148	43	1,350	173	102
28	645	237	343	e115	e110	594	193	231	40	881	776	98
29	815	629	310	e110	e120	393	171	144	43	523	1,360	97
30	561	408	518	e105	---	309	160	113	43	277	1,420	93
31	298	---	445	e100	---	270	---	108	---	218	823	---
TOTAL	5,358	10,598	13,945	5,720	3,333	14,591	7,516	5,592	2,331	5,590	11,059	6,396
MEAN	173	353	450	185	115	471	251	180	77.7	180	357	213
MAX	815	1,640	1,240	496	190	1,490	743	821	230	1,350	1,420	680
MIN	47	123	192	100	96	140	142	89	40	35	79	93
CFSM	1.53	3.13	3.98	1.63	1.02	4.17	2.22	1.60	0.69	1.60	3.16	1.89
IN.	1.76	3.49	4.59	1.88	1.10	4.80	2.47	1.84	0.77	1.84	3.64	2.11

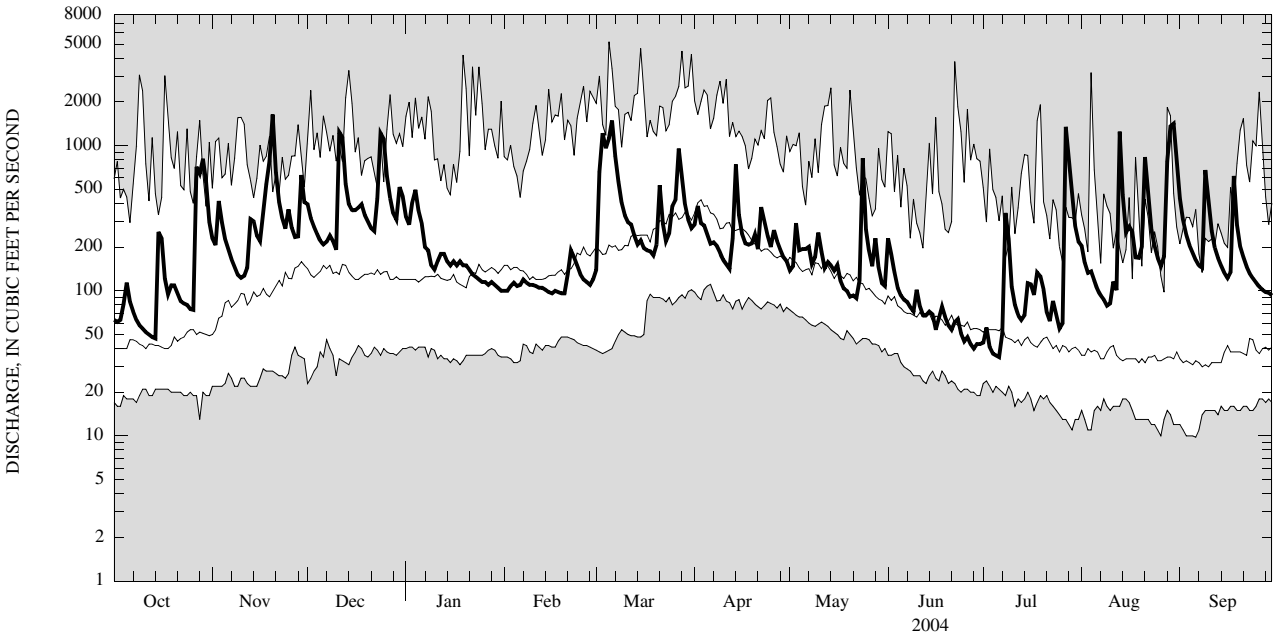
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	87.2	153	195	195	222	370	344	172	107	68.4	58.3	63.5
MAX	472	382	481	452	589	781	915	495	539	225	357	297
(WY)	(1978)	(1973)	(1974)	(1998)	(1976)	(1977)	(1993)	(2000)	(1972)	(1951)	(2004)	(1977)
MIN	21.5	30.5	39.6	38.9	50.5	131	109	61.0	28.4	23.2	14.8	18.0
(WY)	(1964)	(1965)	(1961)	(1981)	(1980)	(1981)	(1981)	(1995)	(1999)	(1962)	(1999)	(1964)

04243500 ONEIDA CREEK AT ONEIDA, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	97,018		92,029			
ANNUAL MEAN	266		251		169	
HIGHEST ANNUAL MEAN					284	1976
LOWEST ANNUAL MEAN					89.7	1988
HIGHEST DAILY MEAN	1,880	Mar 21	1,640	Nov 20	5,210	Mar 5, 1979
LOWEST DAILY MEAN	36	Sep 13	35	Jul 6	9.8	Sep 6, 1999
ANNUAL SEVEN-DAY MINIMUM	40	Sep 9	42	Jun 30	11	Sep 1, 1999
ANNUAL RUNOFF (CFSM)	2.35		2.23		1.50	
ANNUAL RUNOFF (INCHES)	31.94		30.30		20.34	
10 PERCENT EXCEEDS	583		537		364	
50 PERCENT EXCEEDS	170		169		97	
90 PERCENT EXCEEDS	63		68		30	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY

LOCATION.--Lat 43°02'30", long 76°06'02", Onondaga County, Hydrologic Unit 04140202, on right bank 170 ft downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--3.06 mi^2.

PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (annual maximum only), October 1978 to current year.

REVISED RECORDS.--WDR NY-75-1: 1974 (M). WDR NY-78-1: 1977 (M). WDR-NY-90-3: 1971-89 (P). WDR NY-2001-3: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and artificial control. Datum of gage is 511.50 ft above NGVD of 1929.

REMARKS.--Records fair. Flow includes storm sewer inflow, some originating outside the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 418 ft^3/s, July 3, 1974, gage height 6.51 ft, from rating curve extended above 62 ft^3/s on basis of computation of peak flow through culvert at gage height 6.36 ft; minimum discharge, 0.02 ft^3/s, Sept. 11, 1972, Aug. 24, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 13	1530	128	3.28	1630	*151	*3.58
May 24	0230	136	3.39	0845	104	2.94
Jul 27	0330	111	3.04			

Minimum discharge, 0.32 ft^3/s, Jan. 27, gage height, 1.10 ft. (result of freezeup)

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.67	0.95	3.1	e2.6	1.6	4.2	4.1	3.1	3.7	0.95	1.00	1.6
2	0.70	1.4	1.9	e2.6	1.5	17	4.1	8.3	1.7	0.95	0.89	1.3
3	0.61	2.3	1.4	e3.4	1.6	8.1	2.5	5.8	1.4	0.94	0.95	1.4
4	2.1	0.77	1.3	e2.9	1.6	5.3	3.0	1.8	1.3	0.96	0.95	1.2
5	1.0	0.80	1.2	e2.8	1.4	6.5	2.4	2.8	1.2	0.95	0.95	1.2
6	0.64	0.86	1.2	e2.4	1.9	4.4	2.0	2.2	1.2	0.94	0.96	1.2
7	0.57	0.96	1.2	e2.0	2.2	2.9	2.1	2.8	1.3	5.6	0.97	1.3
8	0.56	1.2	1.1	1.8	1.7	2.7	1.9	1.6	1.3	5.7	0.97	4.8
9	0.64	1.2	1.1	1.7	1.6	2.7	1.8	2.6	1.6	1.8	0.98	20
10	0.67	1.1	1.4	1.3	1.7	2.3	1.7	2.2	2.0	0.86	2.2	2.6
11	0.70	1.4	18	1.5	1.7	2.2	1.7	1.6	1.4	0.79	1.4	1.6
12	0.76	1.1	3.8	1.7	1.6	2.6	2.0	1.7	1.5	1.2	2.0	1.5
13	0.76	3.2	2.1	1.7	1.6	2.2	29	1.6	2.5	0.95	5.3	1.5
14	0.75	2.3	2.6	e1.7	1.6	2.1	9.3	4.3	1.9	7.1	1.1	1.5
15	7.5	2.0	2.0	e1.7	1.6	2.3	2.7	4.2	1.7	1.7	0.89	1.5
16	1.4	1.7	1.7	e1.7	e1.6	2.0	2.2	1.8	1.6	4.3	0.87	1.4
17	0.83	2.1	4.0	1.7	e1.6	2.5	2.0	1.4	3.5	1.2	0.86	3.4
18	0.73	1.6	3.2	1.6	1.5	2.2	2.5	1.4	1.6	0.95	0.90	9.2
19	1.9	6.5	2.3	e1.6	1.5	2.1	2.6	1.3	1.1	1.00	3.0	1.6
20	0.93	4.8	2.1	1.6	1.5	3.7	2.1	1.3	1.0	0.96	0.96	1.5
21	0.95	1.4	1.8	1.5	3.8	4.4	2.2	1.2	1.0	0.94	13	1.6
22	0.99	1.1	2.0	1.8	2.6	2.5	3.9	1.7	1.6	4.4	1.1	1.5
23	0.95	1.1	8.5	e1.8	2.1	2.2	2.1	6.9	1.1	1.9	0.77	1.3
24	0.91	2.7	14	1.8	1.9	2.2	1.7	22	1.0	0.89	0.72	1.3
25	0.81	2.3	e5.0	e1.7	1.8	2.2	3.1	2.0	1.0	0.84	0.72	1.3
26	2.7	1.2	e3.2	e1.7	1.8	5.0	2.4	1.7	2.7	1.6	0.68	1.3
27	13	1.1	e2.6	1.7	1.9	11	1.8	4.1	1.0	41	0.72	1.3
28	1.9	3.1	e2.4	e1.7	2.1	2.7	1.6	9.0	0.95	2.8	1.5	1.3
29	6.9	2.7	e2.6	1.7	2.8	2.2	1.5	1.7	1.0	1.4	17	1.3
30	1.6	2.4	e4.4	e1.6	---	2.1	1.5	1.5	0.97	1.1	21	1.4
31	0.98	---	e3.0	e1.6	---	1.9	---	3.7	---	1.2	3.7	---
TOTAL	56.11	57.34	106.2	58.6	53.4	118.4	103.5	109.3	46.82	97.87	89.01	74.9
MEAN	1.81	1.91	3.43	1.89	1.84	3.82	3.45	3.53	1.56	3.16	2.87	2.50
MAX	13	6.5	18	3.4	3.8	17	29	22	3.7	41	21	20
MIN	0.56	0.77	1.1	1.3	1.4	1.9	1.5	1.2	0.95	0.79	0.68	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2004, BY WATER YEAR (WY)

MEAN	1.60	2.01	2.15	2.10	2.44	3.65	3.16	2.63	2.25	1.81	1.46	1.66
MAX	4.73	4.46	4.66	5.56	4.38	6.93	7.51	5.56	6.12	5.04	5.16	3.03
(WY)	(1982)	(1997)	(1991)	(1998)	(1990)	(1972)	(1993)	(2000)	(1972)	(1988)	(1990)	(1989)
MIN	0.19	0.71	1.04	0.67	1.12	1.38	1.34	1.08	0.86	0.48	0.32	0.31
(WY)	(1972)	(1979)	(1971)	(1981)	(1993)	(1981)	(1981)	(1971)	(1981)	(1980)	(1971)	(1971)

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1971 - 2004	
ANNUAL TOTAL	831.55		971.45			
ANNUAL MEAN	2.28		2.65		2.26	
HIGHEST ANNUAL MEAN					3.27	1990
LOWEST ANNUAL MEAN					1.27	1981
HIGHEST DAILY MEAN	18	Apr 4	41	Jul 27	84	Oct 28, 1981
LOWEST DAILY MEAN	0.47	Sep 18	0.56	Oct 8	0.04	Oct 13, 1971
ANNUAL SEVEN-DAY MINIMUM	0.54	Sep 12	0.65	Oct 6	0.04	Oct 13, 1971
10 PERCENT EXCEEDS	4.3		4.4		4.1	
50 PERCENT EXCEEDS	1.7		1.7		1.5	
90 PERCENT EXCEEDS	0.68		0.94		0.60	

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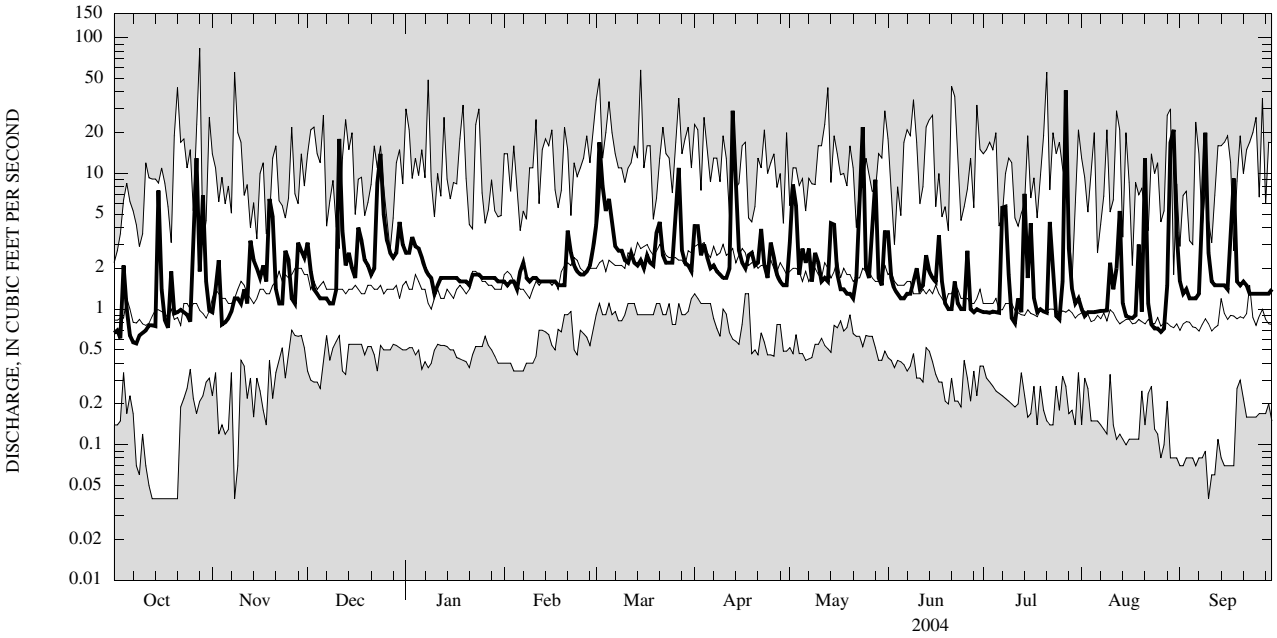


2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04246000 ONEIDA LAKE AT BREWERTON, NY

LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft west of bridge on U.S. Highway 11, at Brewerton.

DRAINAGE AREA.--1,382 mi^2, at dam at Caughdenoy.

PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (1.01 ft Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft higher.

REMARKS.--Lake elevation regulated by taintor-gate dam on Oneida River at Caughdenoy and gates on Oneida Canal and Erie (Barge) Canal. Lake volume at elevation 369 ft NGVD of 1929, 1.135 million acre-ft. Area of water surface, 79.8 mi^2; axes, 20.9 mi by 5.5 mi; shoreline length, 54.7 mi.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 373.14 ft, Apr. 24,1993; minimum daily elevation, 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 recorded elevation, 370.92 ft, May 27; minimum recorded elevation, 367.30 ft, Mar. 2 but may have been lower during period of missing no elevation record.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.67	369.68	369.69	369.68	368.11	367.35	370.13	369.44	370.36	370.12	---	---
2	369.54	369.68	369.77	369.73	368.06	367.36	370.24	369.48	370.27	370.07	---	---
3	369.57	369.66	369.83	369.71	368.04	367.46	370.32	369.52	370.13	370.10	---	---
4	369.50	369.81	369.74	369.72	368.00	367.64	370.28	369.59	370.06	370.14	---	---
5	369.45	369.65	369.75	369.81	367.97	367.87	370.19	369.74	369.96	370.01	---	---
6	369.57	369.55	369.60	369.63	367.95	368.13	370.24	369.79	369.85	370.03	---	---
7	369.65	369.41	369.47	369.57	367.90	368.43	370.22	369.75	369.69	370.11	---	---
8	369.67	369.33	369.43	369.62	367.88	368.62	370.15	369.87	369.63	370.11	---	---
9	369.66	369.33	369.39	369.54	367.85	368.75	370.01	369.82	369.65	370.08	---	---
10	369.68	369.34	369.40	369.44	367.81	368.81	369.92	369.87	369.70	370.09	---	---
11	369.65	369.48	369.15	369.35	367.78	368.83	369.86	369.84	369.73	370.07	---	---
12	369.61	369.50	369.30	369.27	367.76	368.85	369.81	369.85	369.77	370.07	---	---
13	369.57	369.10	369.58	369.19	367.72	368.85	369.82	369.84	369.84	370.05	---	---
14	369.67	369.43	369.87	369.13	367.69	368.84	369.91	369.85	369.82	369.99	---	---
15	369.19	369.65	369.58	369.04	367.66	368.79	370.10	369.82	369.85	369.89	---	---
16	369.64	369.65	369.61	368.97	367.63	368.77	370.18	369.84	369.90	369.87	---	---
17	369.88	369.59	369.54	368.91	367.60	368.75	370.15	369.87	369.97	369.91	---	---
18	369.92	369.61	369.49	368.83	367.56	368.71	370.12	369.78	369.96	369.96	---	---
19	369.94	369.59	369.52	368.77	367.53	368.65	369.99	369.80	369.83	369.92	---	---
20	369.91	369.74	369.48	368.71	367.52	368.62	369.99	369.83	369.93	369.84	---	---
21	369.80	370.03	369.44	368.64	367.51	368.61	370.04	369.75	369.98	369.78	---	---
22	369.73	370.10	369.37	368.57	367.49	368.65	369.91	369.74	370.01	369.73	---	---
23	369.62	370.13	369.32	368.55	367.48	368.63	369.92	369.73	370.02	369.67	---	---
24	369.55	370.04	369.31	368.50	367.46	368.61	369.75	370.13	370.06	369.65	---	---
25	369.54	369.91	369.44	368.44	367.44	368.62	369.91	370.64	370.07	369.70	---	---
26	369.42	369.91	369.52	368.38	367.42	368.67	369.71	370.80	370.05	---	---	---
27	369.40	369.86	369.63	368.33	367.40	368.96	369.60	370.82	370.03	---	---	---
28	369.54	369.77	369.65	368.28	367.38	369.38	369.55	370.70	370.08	---	---	---
29	369.60	369.48	369.60	368.25	367.36	369.71	369.55	370.67	370.09	---	---	---
30	369.68	369.85	369.52	368.21	---	369.91	369.47	370.59	370.10	---	---	---
31	369.76	---	369.62	368.16	---	370.03	---	370.57	---	---	---	---
MEAN	369.63	369.66	369.54	369.00	367.69	368.64	369.97	369.98	369.95	---	---	---
MAX	369.94	370.13	369.87	369.81	368.11	370.03	370.32	370.82	370.36	---	---	---
MIN	369.19	369.10	369.15	368.16	367.36	367.35	369.47	369.44	369.63	---	---	---

CAL YR 2003 MEAN 369.47 MAX 371.50 MIN 367.58

04247000 ONEIDA RIVER NEAR EUCLID, NY

LOCATION.--Lat 43°12'18", long 76°13'05", Oswego County, Hydrologic Unit 04140202, on right bank, 50 ft downstream of Morgan Road bridge, 9.2 mi downstream from Oneida Lake, 1.3 mi north of Euclid, and 7.7 mi upstream from mouth at Three Rivers.

DRAINAGE AREA.-- 1,439 mi^2.

PERIOD OF RECORD.--November 1996 to current year. Records for September 1902 to December 1909, published as "Oneida River near Eucild", and January 1910 to December 1912 and October 1947 to September 1998, published as "Oneida River at Caughdenoy" (station 04246500) at site 7.6 mi upstream, are not equivalent because of regulation between sites.

GAGE.--Acoustic velocity meter, water-stage recorder, and crest-stage gage. Elevation of gage is 370 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi^2 of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin. Telephone and satellite gage-height telemeters at station.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below Lock 23, furnished by New York State Thruway Authority, Office of Canals.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,380 ft^3/s, Apr. 15, 16, 2001; minimum daily discharge, 130 ft^3/s, June 9, 1999. Maximum and minimun instantaneous discharges not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,470 ft^3/s, May 26; minimum daily discharge, about 340 ft^3/s, Aug. 9. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,840	4,630	5,530	5,770	e3,600	e2,500	6,510	e3,500	6,540	572	5,410	7,070
2	2,810	4,610	5,590	5,810	e3,600	e2,400	6,690	e2,300	6,300	774	5,180	7,130
3	2,830	4,670	5,720	e6,000	e3,500	2,610	6,830	2,430	5,980	805	5,000	7,010
4	2,800	4,840	5,580	e5,900	e3,500	3,070	6,760	2,380	5,860	847	4,720	6,810
5	2,770	4,620	5,590	e5,900	e3,400	3,590	6,570	2,420	5,720	803	2,980	6,660
6	2,100	4,440	5,350	e5,600	e3,400	4,320	6,630	e2,800	5,490	804	1,040	6,320
7	1,690	4,260	5,100	e5,700	e3,300	4,540	6,570	e3,100	4,910	805	393	5,860
8	1,690	4,090	5,070	e5,900	e3,300	4,600	6,400	3,130	e3,500	1,140	438	5,650
9	1,700	3,990	4,960	e5,500	e3,200	4,610	6,110	3,180	e550	1,730	e340	6,480
10	1,620	1,750	4,990	e5,400	e3,100	4,550	5,970	e3,300	508	2,480	419	6,320
11	1,620	342	5,070	e5,200	e3,100	4,540	5,840	3,520	496	2,420	373	6,360
12	1,640	363	5,170	e5,200	e3,100	4,560	5,690	3,650	e510	2,400	407	6,260
13	1,640	851	5,460	e5,000	e3,000	4,440	5,870	3,640	513	2,400	1,170	e6,000
14	1,630	2,630	6,020	e4,700	e2,900	4,450	6,350	3,680	e520	2,490	2,250	e5,900
15	1,650	3,600	5,890	e4,600	e2,900	4,280	6,410	3,690	e670	2,570	2,220	e5,600
16	1,770	4,400	5,580	e4,300	e2,800	4,180	6,530	3,680	e460	2,520	1,130	e5,400
17	2,300	4,560	5,590	e4,400	e2,800	4,190	6,480	3,670	e630	2,530	474	e4,700
18	2,990	4,640	5,580	e4,400	e2,700	4,060	6,320	3,720	e520	2,530	490	4,850
19	2,960	4,640	5,620	e4,300	e2,700	3,990	6,240	3,680	476	3,110	502	4,890
20	3,450	5,080	5,520	e4,200	e2,700	3,970	6,050	3,750	480	3,570	804	4,080
21	3,940	5,450	5,450	e4,300	e2,600	4,010	6,270	3,540	e444	3,510	1,920	2,830
22	4,130	5,590	5,290	e4,200	e2,600	4,100	5,920	3,500	480	2,770	3,310	1,860
23	4,080	5,620	5,130	e4,000	e2,600	4,080	5,860	3,590	e470	2,140	3,630	938
24	3,990	5,820	5,200	e4,000	e2,600	4,020	5,590	5,740	478	1,170	3,530	388
25	3,950	5,870	5,620	e4,000	e2,500	4,180	5,830	7,250	491	478	2,740	480
26	3,870	5,790	5,630	e3,900	e2,500	4,420	5,400	7,470	563	481	2,150	472
27	3,910	5,690	5,700	e3,900	e2,500	5,500	4,960	7,450	554	e1,500	e2,100	429
28	4,030	5,590	5,720	e3,800	e2,500	5,660	4,860	7,210	540	e4,000	2,170	430
29	4,230	5,260	5,550	e3,700	e2,500	6,220	e4,900	7,150	515	e5,800	2,400	435
30	4,650	5,790	5,650	e3,700	---	e6,500	e4,700	6,940	e480	e5,800	e5,000	529
31	4,800	---	5,860	e3,600	---	6,470	---	6,870	---	5,640	e6,800	---
TOTAL	90,080	129,476	169,780	146,880	85,500	134,610	181,110	131,930	55,648	70,589	71,490	128,141
MEAN	2,906	4,316	5,477	4,738	2,948	4,342	6,037	4,256	1,855	2,277	2,306	4,271
MAX	4,800	5,870	6,020	6,000	3,600	6,500	6,830	7,470	6,540	5,800	6,800	7,130
MIN	1,620	342	4,960	3,600	2,500	2,400	4,700	2,300	444	478	340	388

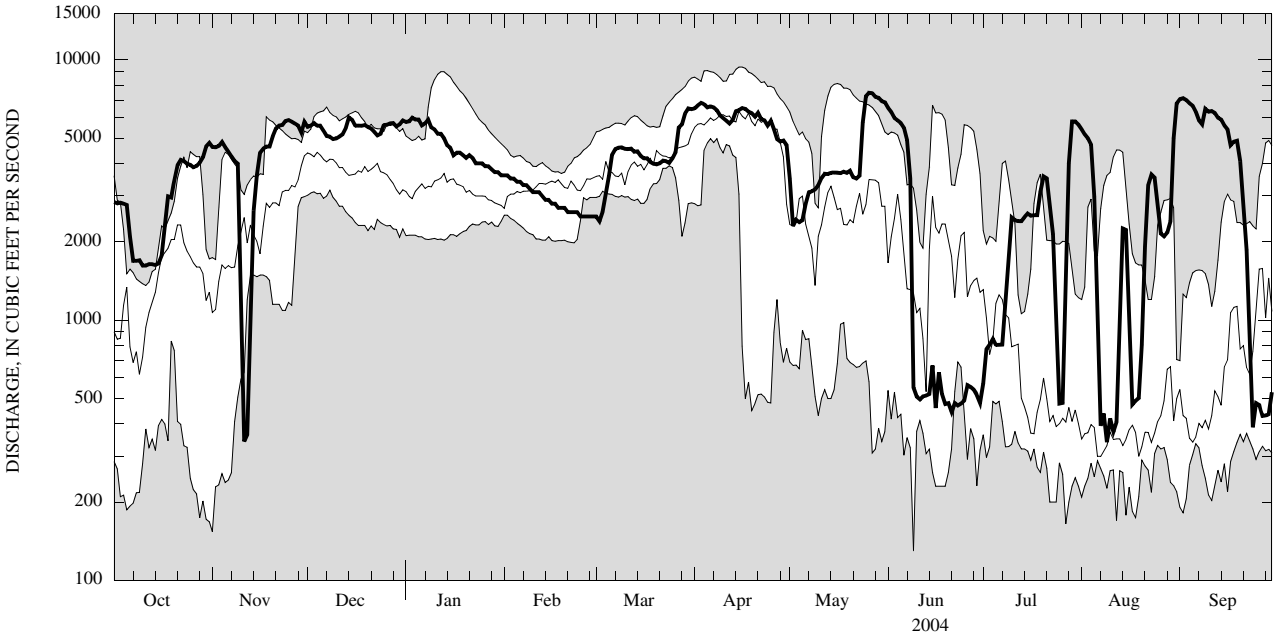
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	1,607	2,599	4,134	3,708	3,206	4,384	5,423	3,312	2,066	1,077	950	1,369
MAX	2,906	4,316	5,835	6,199	3,934	5,562	7,638	5,336	3,122	2,277	2,306	4,271
(WY)	(2004)	(2004)	(1997)	(1998)	(1998)	(1998)	(2001)	(2002)	(2002)	(2004)	(2004)	(2004)
MIN	688	1,832	2,578	2,519	2,443	3,524	3,135	1,146	469	549	261	516
(WY)	(1999)	(1999)	(1999)	(2002)	(2000)	(1999)	(1998)	(1999)	(1999)	(2002)	(1999)	(1998)

04247000 ONEIDA RIVER NEAR EUCLID, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	1,258,420		1,395,234			
ANNUAL MEAN	3,448		3,812		2,816	
HIGHEST ANNUAL MEAN					3,812	2004
LOWEST ANNUAL MEAN					1,839	1999
HIGHEST DAILY MEAN	9,100	Apr 5	7,470	May 26	9,380	Apr 15, 2001
LOWEST DAILY MEAN	210	Aug 19	340	Aug 9	130	Jun 9, 1999
ANNUAL SEVEN-DAY MINIMUM	364	Aug 19	452	Sep 24	187	Oct 26, 1998
10 PERCENT EXCEEDS	5,910		6,250		5,620	
50 PERCENT EXCEEDS	3,150		4,000		2,740	
90 PERCENT EXCEEDS	477		537		370	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY

LOCATION.--Lat 43°27'06", long 76°30'20", Oswego County, Hydrologic Unit 04140203, on right bank at New York State Barge Canal (Oswego Canal) Lock 7 in Oswego, 0.8 mi upstream from mouth.

DRAINAGE AREA.--5,100 mi^2.

PERIOD OF RECORD.--October 1900 to April 1906, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to January 1904, published as "above Minetto" or "near Minetto."January 1904 to April 1906, published as "at Battle Island." Records for April 1897 to September 1900, published in WSP 65 and for October 1927 to September 1928, published in WSP 644, have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR NY 78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 245.12 ft above NGVD of 1929. Prior to 1933, nonrecording gage at site about 6 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to 1933 and subsequent to 1972, flow in Oswego (Barge) Canal not included. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Erie (Barge) and Oswego (Barge) Canal systems in the river basin.Large diurnal fluctuations at low and medium flow caused by powerplants upstream from station. Oswego River basin receives water from Erie (Barge) Canal through Lock 32 near Pittsford. Water may be diverted into or received from Mohawk River basin through Erie (Barge) Canal between New London and Utica. During part of year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Nearly all of the flow from 14 mi^2 of the Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin. Telephone and satellite gage-height telemeters at station.

COOPERATION.--Records of lockages at Lock 7 furnished by New York State Thruway Authority, record of elevations of Lake Ontario by U.S. Army Corps of Engineers, daily discharge records for Oswego River High Dam upstream by Niagara Mohawk Power Corp.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft^3/s, Mar. 28, 1936, includes daily mean discharge of canals; maximum gage height, 13.46 ft, Apr. 10, 1940; minimum discharge (river only), 30 ft^3/s, Nov. 6, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft^3/s, May 24, gage height, 9.43 ft; minimum discharge, 626 ft^3/s, Nov. 13.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,450	10,100	14,200	18,000	7,070	5,520	16,100	11,600	16,300	e1,460	13,200	14,300
2	5,940	9,990	14,700	17,500	6,950	5,420	16,400	9,740	15,900	e1,880	12,400	15,800
3	5,860	10,000	14,300	17,500	6,610	8,880	16,400	11,100	15,400	e1,920	11,400	14,900
4	5,460	10,200	13,700	17,300	e5,700	12,400	16,800	10,700	14,800	e1,880	10,800	14,500
5	5,600	10,400	13,300	16,900	7,140	14,600	16,900	11,300	14,500	e1,780	9,270	13,800
6	5,060	9,890	12,800	16,400	7,040	18,200	17,100	11,000	14,100	e1,780	5,620	12,900
7	4,100	9,720	12,200	15,600	7,100	18,900	16,600	11,600	12,200	e1,680	4,250	12,200
8	3,280	9,210	11,500	14,900	7,160	18,000	16,000	11,000	10,200	e2,190	4,130	11,700
9	3,390	9,210	11,200	14,000	6,160	16,700	15,300	11,100	6,290	e2,660	5,050	15,500
10	2,700	7,740	11,300	13,700	5,870	15,800	13,600	11,500	6,090	e3,840	4,620	15,900
11	2,460	4,250	12,400	e14,000	6,630	14,500	12,700	11,300	6,180	e3,880	4,000	16,600
12	2,640	4,330	14,200	e14,400	6,960	14,100	11,300	11,300	e4,680	4,020	e3,020	17,000
13	2,000	4,620	14,700	14,300	6,680	13,100	11,100	10,600	5,100	4,790	e3,190	16,800
14	1,900	7,180	14,700	e13,000	6,220	12,500	15,900	11,200	5,220	5,330	5,510	16,600
15	3,160	8,580	14,400	e11,800	6,450	11,500	16,000	11,100	e5,240	7,240	4,960	15,500
16	4,580	9,660	14,100	e11,200	7,000	11,000	16,900	10,800	e4,900	8,170	4,430	14,100
17	2,390	9,960	13,100	e11,000	6,020	11,200	16,900	11,000	e3,960	8,580	e2,680	12,800
18	4,100	10,200	13,900	11,200	5,470	10,600	16,800	10,900	e3,170	7,460	e2,470	12,600
19	3,520	10,400	13,900	11,400	4,680	10,200	16,700	11,000	e3,040	6,660	e2,330	12,400
20	4,210	11,900	13,800	e11,500	4,710	10,500	16,100	11,100	e3,210	7,700	e2,580	11,900
21	5,170	13,400	14,100	e11,300	4,720	10,700	16,100	10,100	e3,550	7,720	4,720	10,900
22	5,450	13,700	13,600	e11,000	4,830	10,900	16,000	9,850	e3,140	7,390	6,180	9,560
23	5,520	13,700	13,600	e10,600	4,870	10,800	15,300	9,260	e2,600	6,080	7,180	8,490
24	4,850	13,700	14,100	e10,100	4,870	10,700	14,900	16,300	e2,730	5,680	5,900	8,180
25	5,000	13,500	17,000	e9,600	4,880	11,200	15,000	18,800	e1,760	4,440	7,150	8,000
26	4,650	13,200	17,800	e9,600	4,830	12,300	15,400	19,300	e2,270	4,090	5,600	8,050
27	7,340	12,900	17,900	9,580	5,430	17,800	13,700	18,700	e2,640	6,570	5,210	7,570
28	7,550	12,700	18,000	9,440	5,420	18,400	13,100	18,600	e2,430	13,300	3,760	7,650
29	8,690	13,000	17,600	9,550	5,310	17,600	12,500	18,500	e2,120	14,900	4,620	7,560
30	10,400	13,900	17,900	9,380	---	17,300	12,000	17,600	e1,810	14,600	8,800	7,130
31	10,600	---	18,500	8,800	---	16,900	---	16,700	---	13,800	13,800	---
TOTAL	154,020	311,240	448,500	394,550	172,780	408,220	455,600	394,650	195,530	183,470	188,830	370,890
MEAN	4,968	10,370	14,470	12,730	5,958	13,170	15,190	12,730	6,518	5,918	6,091	12,360
MAX	10,600	13,900	18,500	18,000	7,160	18,900	17,100	19,300	16,300	14,900	13,800	17,000
MIN	1,900	4,250	11,200	8,800	4,680	5,420	11,100	9,260	1,760	1,460	2,330	7,130

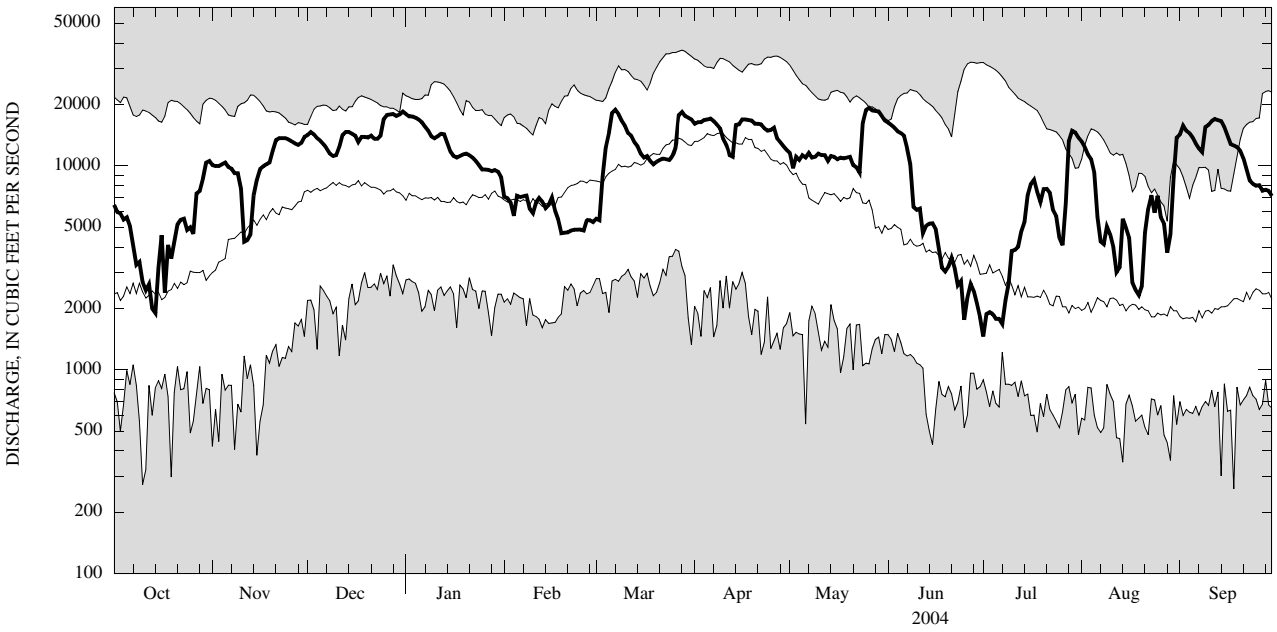
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2004, BY WATER YEAR (WY)

MEAN	3,820	6,143	8,493	7,912	7,810	11,610	13,140	8,304	5,131	3,402	2,541	2,781
MAX	17,950	16,070	17,920	16,970	15,130	21,720	30,250	20,350	17,000	19,660	8,951	12,360
(WY)	(1978)	(1978)	(1978)	(1998)	(1976)	(1979)	(1993)	(1943)	(1947)	(1972)	(1992)	(2004)
MIN	1,173	1,167	2,917	2,610	2,547	3,914	2,757	1,993	1,383	1,113	836	760
(WY)	(1940)	(1965)	(1940)	(1963)	(1963)	(1983)	(1995)	(1995)	(1995)	(1995)	(1934)	(1995)

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1934 - 2004	
ANNUAL TOTAL	3,005,593		3,678,280			
ANNUAL MEAN	8,235		10,050		6,789	
HIGHEST ANNUAL MEAN					11,030	1976
LOWEST ANNUAL MEAN					3,433	1965
HIGHEST DAILY MEAN	23,500	Apr 7	19,300	May 26	37,000	Mar 28, 1936
LOWEST DAILY MEAN	904	Sep 12	1,460	Jul 1	261	Sep 18, 1985
ANNUAL SEVEN-DAY MINIMUM	1,170	Sep 8	1,770	Jul 1	697	Sep 4, 1995
10 PERCENT EXCEEDS	15,800		16,700		14,400	
50 PERCENT EXCEEDS	7,610		10,600		5,220	
90 PERCENT EXCEEDS	1,830		3,480		1,600	

e Estimated



2004 WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).

04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY (see station for daily mean elevation).

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).

04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).

04240495 ONONDAGA LAKE AT LIVERPOOL, NY (see station for daily mean elevation).

04246000 ONEIDA LAKE AT BREWERTON, NY (see station for daily mean elevation).

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
SUSQUEHANNA RIVER BASIN								
Little Elk Creek near Westford, NY (01497805)	Lat 42°38'01", long 74°47'45", Otsego County, Hydrologic Unit 02050101, at culvert on Greenbush Road, 1.2 mi south of Westford, and 2.2 mi upstream from mouth. Elevation of gage is 1,520 feet above NGVD of 1929, from topographic map. Drainage area is 3.73 mi^2.	1978-04	9-18-04	16.34	118	1-19-96	19.92	278
Susquehanna River at Unadilla, NY (01500500)	Lat 42°19'17", long 75°19'01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft downstream from bridge on Bridge Street at Unadilla, 1.0 mi upstream from Carrs Creek, and 1.6 mi downstream from Ouleout Creek. Datum of gage is 997.25 ft above NGVD of 1929 (Corps of Engineers benchmark). Drainage area is 982 mi^2.	1938-95‡ 1996-04	9-19-04	10.51	11,900	3-18-36 3-14-77	16.6 14.64	j31,300 23,500
Susquehanna River at Bainbridge, NY (01502632)	Lat 42°17'29", long 75°28'36", Chenango County, Hydrologic Unit 02050101, on right bank at the downstream side of bridge on State Highway 206 over the Susquehanna River, at Bainbridge. Datum of gage is 956.55 ft above NGVD of 1929. Drainage area is 1,610 mi^2.	1988-04	9-18-04	15.11	22,700	3-31-93 1-20-96	20.17 21.04	36,600 a
Susquehanna River at Windsor, NY (01502731)	Lat 42°04'28", long 75°38'17", Broome County, Hydrologic Unit 02050101, on right bank at downstream side of bridge on County Highway 315 over the Susquehanna River, at Windsor. Datum of gage is 900.00 ft above NGVD of 1929. Drainage area is 1,820 mi^2.	1988-04	9-18-04	15.98	26,400	1-20-96	a21.22	e40,000

‡ Operated as a continuous-record gaging station.
a Ice jam.
e Estimated.
j From U. S. Army Corps of Engineers.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
SUSQUEHANNA RIVER BASIN--Continued								
Chenango River at Eaton, NY (01503980)	Lat 42°51'02", long 75°36'21", Madison County, Hydrologic Unit 02050102, at bridge on Landon Road at Eaton, 0.1 mi upstream from Eaton Brook, and 0.1 mi downstream from State Highway 26. Elevation of gage is 1,180 ft above mean NGVD of 1929, from topographic map. Drainage area is 24.3 mi^2.	1964-65, 1967-04	12-11-03	7.41	928	3- 6-64 1-19-96	8.12 8.51	2,350 a
Chenango River at Greene, NY (01507000)	Lat 42°19'28", long 75°46'18", Chenango County, Hydrologic Unit 02050102, on left bank 0.3 mi downstream from bridge on State Highway 206 at Greene, and 0.6 mi downstream from Birdsall Brook. Datum of gage is 892.58 ft above NGVD of 1929. Drainage area is 593 mi^2.	1937-70‡, 1971-03	9-18-04	12.29	8,520	12-31-42	18.33	18,900
Tioughnioga River at Lisle, NY (01509520)	Lat 42°20'58", long 75°59'58", Broome County, Hydrologic Unit 02050102, on left bank 50 ft downstream from bridge on State Highway 79, at Lisle, and 2.3 mi upstream from Otselic River. Datum of gage is 956.52 ft above NGVD of 1929. Drainage area is 453 mi^2.	1988-04	9-18-04 4-10-01 2- 1-02 3-22-03	6.81 8.32 5.51 7.02	9,360 R13,400 R6,420 R9,880	1-19-96 4-10-01	10.50 8.32	a 13,400
Merrill Creek tributary near Texas Valley, NY (01510610)	Lat 42°28'03", long 75°59'19", Cortland County, Hydrologic Unit 02050102, at bridge on town road, 0.3 mi upstream from mouth, and 1.4 mi southwest of Texas Valley. Elevation of gage is 1,150 ft above NGVD of 1929, from topographic map. Drainage area is 5.32 mi^2.	1976-81, 1983-04	7-27-04	2.01	464	1-19-96	a6.64	e1,150
Tioughnioga River at Itaska, NY (01511500)	Lat 42°17'53", long 75°54'33", Broome County, Hydrologic Unit 02050102, on right bank at Itaska, 3.8 mi downstream from Otselic River and village of Whitney Point, and 6.0 mi upstream from mouth. Datum of gage is 917.97 ft above NGVD of 1929. Drainage area is 730 mi^2.	1930-67‡, 1968-04	12-11-03	7.21	8,570	7- 8-35 2-26-61	i16.61 11.15	m61,100 22,600

‡ Operated as a continuous-record gaging station.
a Ice jam.
e Estimated.
i From floodmark.
m Prior to current degree of regulation.
R Revised.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
SUSQUEHANNA RIVER BASIN--Continued								
Susquehanna River at Vestal, NY (01513500)	Lat 42°05'27", long 76°03'23", Broome County, Hydrologic Unit 02050103, on left bank 400 ft downstream from highway bridge, at Vestal, and 800 ft upstream from Choconut Creek. Datum of gage is 799.19 ft above NGVD of 1929 (levels of U. S. Army Corps of Engineers). Drainage area is 3,941 mi^2.	1936, 1937-67‡, 1968-72, 1974-04	9-18-04	25.94	77,600	e3-18-36	e30.50	107,000
Susquehanna River at Owego, NY (01513831)	Lat 42°05'50", long 76°16'06", Tioga County, Hydrologic Unit 02050103, on right bank in pumphouse for village sewage treatment plant, 0.4 mi downstream from bridge on State Highway 96, at Owego. Datum of gage is 776.64 ft above NGVD of 1929. Drainage area is 4,216 mi^2.	1988-96, 1999-04	9-18-04 3-27-02 3-23-03	31.04 23.49 R 26.57 R	86,300 40,200 57,500	3-18-36 1-20-96	g n32.97	107,000 81,400
Owego Creek near Owego, NY (01514000)	Lat 42°07'45", long 76°16'15", Tioga County, Hydrologic Unit 02050103, on right bank of right channel 300 ft upstream from bridge on State Highway 96, 0.5 mi upstream from Catatonk Creek, and 1.5 mi north of Owego. Datum of gage is 819.82 ft above NGVD of 1929. Drainage area is 185 mi^2.	1930-78‡, 1979-04	9-18-04	8.51	6,960	7- 8-35 1-19-96	i11.50 11.66	23,500 a
Catatonk Creek near Owego, NY (01514801)	Lat 42°08'18", long 76°17'23", Tioga County, Hydrologic Unit 02050103, on right bank 0.4 mi downstream from bridge on County Highway 23, 1.4 mi north of Owego, and 1.2 mi upstream from mouth. Elevation of gage is 810 ft above NGVD of 1929, from topographic map. Drainage area is 151 mi^2.	1988-04	9-18-04 1-20-96	11.06 14.83 R	5,200 12,200	1-20-96	14.83	12,200
Tioga River near Lindley, NY (01520500)	Lat 42°01'43", long 77°07'57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi upstream from Canisteo River. Datum of gage is 964.50 ft above NGVD of 1929. Drainage area is 771 mi^2.	1930-95‡ 1996-04	9-17-04 6- 8-02 3-24-03	13.81 12.60 R 12.66 R	13,900 10,400 10,400	6-23-72 9-17-04	i26.27 m 13.81	128,000 13,900

‡ Operated as a continuous-record gaging station.
a Ice jam.
e Estimated.
g None available.
i From floodmark.
m Prior to current degree of regulation.
n Datum prior to.
R Revised.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
SUSQUEHANNA RIVER BASIN--Continued								
Big Creek near Howard, NY (01521596)	Lat 42°22'01", long 77°34'33", Steuben County, Hydrologic Unit 02050104, at culvert on town road, 0.1 mi south of State Highway 70, 1.3 mi north of Butcher Corner, 3.4 mi west of Howard, and 6.2 mi upstream from mouth. Elevation of gage is 810 ft above NGVD of 1929, from topographic map. Drainage area is 6.32 mi^2.	1977-04	9- 9-04	3.66	601	1-19-96	n16.23	Re1,600
Canacadea Creek at Alfred, NY (01522075)	Lat 42°15'13", long 77°47'24", Steuben County, Hydrologic Unit 02050104, at culvert off Saxon Road, on Alfred University campus, at Alfred. Elevation of gage is 1720 ft above NGVD of 1929, from topographic map. Drainage area is 1.28 mi^2.	1999-04	5-24-04	2.67	207	5-24-04 3-20-03	2.67 4.85	207 c
Canisteo River at West Cameron, NY (01525500)	Lat 42°13'20", long 77°25'05", Steuben County, Hydrologic Unit 02050104, on right bank 250 ft downstream from bridge on County Highway 119, 0.3 mi southeast of West Cameron, and 1.7 mi north of Cameron. Datum of gage is 1,037 ft above NGVD of 1929, (levels from Corps of Engineers, datum 1912). Drainage area is 340 mi^2.	1930-31‡, 1937-70‡, 1971-72, 1974-04	9- 9-04	15.82	13,100	6-23-72	23.48	43,000
Cohocton River at Bath, NY (01528320)	Lat 42°20'36", long 77°20'39", Steuben County, Hydrologic Unit 02050104, on left bank 150 ft upstream from bridge on Veterans Avenue at Bath, and 0.6 mi downstream from Harrisburg Hollow Creek. Datum of gage is 1,100.00 ft above NGVD of 1929. Drainage area is 316 mi^2.	1988-96, 1999-04	9- 9-04	10.96	9,190	1-19-96	13.67	14,200
Cuthrie Run near Big Flats, NY (01530301)	Lat 42°10'43", long 75°55'32", Chemung County, Hydrologic Unit 02050105, at culvert on Breed Hollow Road, 0.9 mi north of intersection of Eacher Hollow Road and Breed Hollow Road, 2.3 mi north of State Highway 17, and 3.0 mi north of Big Flats. Elevation of gage is 925 ft above NGVD of 1929, from topographic map. Drainage area is 5.39 mi^2.	1976, 1979-81, 1983-04	9-18-04	14.04	430	6-19-76	18.52	800

‡ Operated as a continuous-record gaging station.

c Discharge not determined.
e Estimated.
R Revised.
n Datum prior to.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (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. Datum of gage is 833.65 ft above NGVD of 1929. Drainage area is 2,162 mi^2.	1988-04	9-18-04	13.59	45,100	1-20-96	i18.51	e71,000
ALLEGHENY RIVER BASIN								
Ischua Creek tributary near Machias, NY (03010734)	Lat 42°24'28", long 78°31'33", Cattaraugus County, Hydrologic Unit 05010001, at culvert on Very Road, 0.2 mi upstream from mouth, 0.7 mi north of State Highway 242, and 1.5 mi west of Machias. Elevation of gage is 1,680 ft above NGVD of 1929, from topographic map. Drainage area is 5.12 mi^2.	1978-81, 1983-04	9- 9-04	9.37	e200	9-14-79	10.59	570
Ball Creek at Stow, NY (03013800)	Lat 42°09'13", long 79°24'27", Chautauqua County, Hydrologic Unit 05010002, on left bank 75 ft upstream from bridge on State Highway 394 at Stow, and 0.4 mi upstream from mouth. Elevation of gage is 1,330 ft above NGVD of 1929, from topographic map. Drainage area is 9.58 mi^2.	1955-64§, 1965, 1967-68b, 1974‡, 1975-04	9- 9-04	17.07	1,880	9-14-79	21.88	2,000
STREAMS TRIBUTARY TO LAKE ERIE								
Canadaway Creek at Fredonia, NY (04213376)	Lat 42°27'02", long 79°21'03", Chautauqua County, Hydrologic Unit 04120101, at bridge on Van Buren Road (Matteson Street), 0.8 mi northwest of Fredonia corporate boundary, and 1.2 mi upstream from Beaver Creek. Elevation of gage is 650 ft above NGVD of 1929, from topographic map. Drainage area is 32.9 mi^2.	1962-63b, 1987-04	5-24-04	7.79	4,830	5-19-97 8- 7-79	9.50 --	6,690 12,000
STREAMS TRIBUTARY TO NIAGARA RIVER								
Little Tonawanda Creek at Linden, NY (04216500)	Lat 42°52'37", long 78°09'48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on County Highway 13A (Depot Road) in Linden and 9.3 mi upstream from mouth. Datum of gage is 1,081.62 ft above NGVD of 1929. Drainage area is 22.1 mi^2.	1913-68‡, 1970-72‡, 1977-92‡, 1993-04	9- 9-04	9.29	1,320	6-23-89	i16.99	2,900

‡ Operated as a continuous-record gaging station.
§ Operated as a low-flow partial-record station.
b Miscellaneous measurements made.
e Estimated.
i From floodmark.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
STREAMS TRIBUTARY TO LAKE ONTARIO								
Eighteenmile Creek at Newfane, NY (04219767)	Lat 43°16'43", long 78°42'32", Niagara County, Hydrologic Unit 04130001, on left bank at downstream side of bridge on Jacques Road, at Corwin, and approximately 4.0 mi upstream from Lake Ontario. Elevation of gage is 350 ft above NGVD of 1929, from topographic map. Drainage area is 75.4 mi^2.	1989-90§, 2004	9-10-04	41.42	2,070	9-10-04	41.42	2,070
Stony Brook tributary at South Dansville, NY (04224807)	Lat 42°28'16", long 77°40'21" Steuben County, Hydrologic Unit 04130002, at culvert on Willey Road, 0.6 mi upstream from mouth, and 0.9 mi west of South Dansville. Elevation of gage is 1,400 ft above NGVD of 1929, from topographic map. Drainage area is 3.15 mi^2.	1977-82, 1984-91, 1996-04	5-24-04	10.78	244	8- 3-81	15.89	790
Bear Creek at Ontario, NY (042320578)	Lat 43°13'30", long 77°17'00", Wayne County, Hydrologic Unit 04140101, at culvert on New Street in Ontario, 100 ft west of Furnaceville Road, and 4.0 mi upstream from mouth. Elevation of gage is 420 ft above NGVD of 1929, from topographic map. Drainage area is 6.74 mi^2.	1971-73, 1975-04	9- 9-04	13.01	181	1- 8-98	13.38	238
Catharine Creek at Montour Falls, NY (04232200)	Lat 42°19'42", long 76°50'39", Schuyler County, Hydrologic Unit 04140201, on left bank 12 ft downstream from bridge on Town Road, 0.4 mi south of village line of Montour Falls, and 0.6 mi upstream from diversion channel. Elevation of gage is 490 ft above NGVD of 1929, from topographic map. Drainage area is 41.1 mi^2.	1957-62§, 1964-66§, 1970§, 1976-77‡, 1987-04	9-18-04	6.18	1,270	11- 8-96	8.48	e4,700
Kendig Creek near MacDougall, NY (04232630)	Lat 42°50'57", long 76°53'33", Seneca County, Hydrologic Unit 04140201, at downstream side of bridge on County Highway 120, 3.0 mi north of MacDougall, 3.5 mi southwest of Waterloo, and 4.6 mi upstream from mouth. Elevation of gage is 530 ft above NGVD of 1929, from topographic map. Drainage area is 13.8 mi^2.	1966-04	7-27-04	16.08	821	7-31-92 3-15-78	n6.32 n6.72	1,000 c

‡ Operated as a continuous-record gaging station.
§ Operated as a low-flow partial-record station.
c Discharge not determined.
e Estimated.
n Datum prior to Oct. 1991.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
STREAMS TRIBUTARY TO LAKE ONTARIO--Continued								
Cayuga Inlet at Ithaca, NY (04233255)	Lat 42°25'38", long 76°31'19", Tompkins County, Hydrologic Unit 04140201, on upstream abutment face of flood-control weir, at east end of Burtt Place, south of Ithaca city line, 0.3 mi east of State Highway 13A, 0.9 mi downstream from Buttermilk Creek, and 2.4 mi upstream from mouth. Datum of gage is 379.97 ft above NGVD of 1929. Drainage area is 86.7 mi^2.	1971-72, 1975-04	9-18-04	8.24	2,180	1-19-96	14.67	12,500
Coy Glen Creek at Ithaca, NY (04233258)	Lat 42°25'45", long 76°31'18", Tompkins County, Hydrologic Unit 04140201, on right bank at double drop structure 200 ft upstream from mouth at Ithaca. Datum of gage is 380.00 ft above NGVD of 1929. Drainage area is 3.56 mi^2.	1983-04	7-28-04	20.03	358	1-19-96	22.23	820
Trumansburg Creek near Trumansburg, NY (0423403092)	Lat 42°32'16", long 76°41'06", Tompkins County, Hydrologic Unit 04140201, at bridge on Curry Road, 1.0 mi west of Trumansburg and 4.2 mi upstream from mouth. Elevation of gage is 1,040 ft above NGVD of 1929, from topographic map. Drainage area is 2.52 mi^2.	2002-04	7-27-04 3-17-03	3.78 2.53	284 R140	7-27-04	3.78	284
Schaeffer Creek near Canandaigua, NY (04234138)	Lat 42°54'25", long 77°22'14", Ontario County, Hydrologic Unit 04140201, at culvert on McCann Road, 0.8 mi upstream from Mud Creek, 1.7 mi north of U.S. Highway 20, and 3.2 mi west of Canandaigua. Elevation of gage is 860 ft above NGVD of 1929, from topographic map. Drainage area is 7.84 mi^2.	1980-04	9- 9-04	15.79	623	9- 9-04	15.79	623
Mud Creek at East Victor, NY (04234200)	Lat 42°58'28", long 77°22'58", Ontario County, Hydrologic Unit 04140201, on left bank, 25 ft downstream from bridge on State Highway 96 at East Victor, 0.3 mi upstream from Fish Creek, and 0.5 mi upstream from mouth. Elevation of gage is 580 ft above NGVD of 1929, from topographic map. Drainage area is 64.2 mi^2.	1958-68‡, 1972, 1976-04	9- 9-04	7.11	1,820	6-22-72 4-21-91	7.85 7.22	1,800 1,880

‡ Operated as a continuous-record gaging station.
R Revised.

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 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (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 Preemption Road, 0.5 mi south of Wayne-Ontario County line, 1.8 mi southwest of Alloway, and 2.9 mi upstream from mouth. Elevation of gage is 490 ft above NGVD of 1929, from topographic map. Drainage area is 2.94 mi^2.	1978-04	9- 9-04	--	e90	5-30-02	8.39	155
Butternut Creek near Jamesville, NY (04245200)	Lat 42°56'02", long 76°03'44", Onondaga County, Hydrologic Unit 04140202, on left bank, 15 ft downstream from bridge on Walberger Road, 125 ft downstream from tributary from Stebbins Gulf, 2.2 mi upstream from Jamesville Reservoir, and 4.0 mi south of Jamesville. Datum of gage is 717.93 ft above NGVD of 1929. Drainage area is 32.2 mi^2.	1955-58b, 1958-99‡, 2000-04	8-30-04	9.27	1,130	7- 3-74 1-19-96	7.84 a9.20	2,820 e1,850
Scriba Creek near Constantia, NY (04245840)	Lat 43°15'35" long 76°00'11", Oswego County, Hydrologic Unit 04140202, on right bank, 8 ft upstream from bridge on Cemetery Road, and about 0.8 mi north of village of Constantia. Elevation of gage is 410 ft above NGVD of 1929, from topographic map. Drainage area is 38.4 mi^2.	1966-68‡, 1969, 1971-04	5-24-04	6.90	1,210	9-26-75 6-22-72	7.33 7.42	1,310 1,200
Catfish Creek at New Haven, NY (04249050)	Lat 43°29'00", long 76°19'34", Oswego County, Hydrologic Unit 04140102, at bridge on State Highway 104B, at New Haven, and 1.4 mi upstream from mouth. Elevation of gage is 350 ft above NGVD of 1929, from topographic map. Drainage area is 31.7 mi^2.	1962-66, 1968-04	12-11-03	5.65	591	3-18-73	7.85	1,350

‡ Operated as a continuous-record gaging station.
a Ice jam.
b Miscellaneous measurements made.
e Estimated.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 2004

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements: Date	Measurements: Discharge (ft^3/s)
		SUSQUEHANNA RIVER BASIN				
01497819 Schenevus Creek above Maryland, NY	Susquehanna River	Lat 42°32'05", long 74°52'33", Otsego County, Hydrologic Unit 02050101, 0.25 mi south of State Highway 7, 0.5 mi upstream from bridge on town road in Maryland, and 1.3 mi downstream from bridge on town road in Chaseville.	93.0	2002-03	10-23-03 10-31-03 4-15-04 8-11-04 9-18-04	107 606 241 64.5 1,560
01498500 Charlotte Creek at West Davenport, NY	Susquehanna River	Lat 42°26'42", long 74°57'50", Delaware County, Hydrologic Unit 02050101, on right bank on County Highway 11 at West Davenport, 700 ft upstream from small tributary, and 1.7 mi downstream from Pumpkin Hollow.	167	1938-76‡, 2001-03	4-8-04 6-10-04	335 344
01528000 Fivemile Creek near Kanona, NY	Cohocton River	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.	66.8	1937-95‡	4-14-04 4-28-04	1,170 260
		ALLEGHENY RIVER BASIN				
03013000 Conewango Creek at Waterboro, NY	Allegheny River	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, 0.2 mi downstream from Davis Brook, 0.4 mi upstream from Harris Brook, and 1.9 mi northeast of Kennedy.	290	1938-93‡, 2003	7-10-03	165
		STREAMS TRIBUTARY TO NIAGARA RIVER				
04216875 Little Tonawanda Creek Trib. near Batavia, NY	Little Tonawanda Creek	Lat 42°56'33", long 78°09'46", Genesee County, Hydrologic Unit 04120104, at culvert on Francis Road, 1.6 mi upstream of mouth, and 2.9 mi south of the city limits of Batavia.	1.02	2003	5-8-03 4-14-04 4-27-04	0.59 17.6 1.30

‡ Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 2004

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
STREAMS TRIBUTARY TO LAKE ONTARIO						
04232730 Seneca River near Seneca Falls, NY	Cayuga Lake	Lat 42°56'20", long 76°45'41", Seneca County, Hydrologic Unit 04140201, 0.1 mi downstream from bridge on State Highway 89, 1.2 mi upstream of Cayuga Lake, and 2.0 mi northwest of Bridgeport.	785	---	5-12-04	1,560
					6- 9-04	1,760
					7- 8-04	686
					8-11-04	815
					8-31-04	948
					9- 8-04	1,370
					9-15-04	2,230
04233253 Cayuga Inlet SE of RR Tracks near Ithaca, NY	Cayuga Lake	Lat 42°25'26", long 76°31'14", Tompkins County, Hydrologic Unit 04140201, 0.2 mi northwest of State Highway 13, 0.2 mi west of dyke, and 0.2 mi northwest of Home Depot in Ithaca.	86.2	---	5-13-04	136
					6-10-04	66.4
					7- 7-04	22.3
					8-12-04	51.1
					8-30-04	2,040
					9- 9-04	2,300
0423368490 Dryden Lake Outlet upstream of SH 38 at Dryden, NY	Virgil Creek	Lat 42°28'54", long 76°17'44", Tompkins County, Hydrologic Unit 04140201, 50 ft west of Jay Street, 0.6 mi south of Dryden, and 0.9 mi upstream of Virgil Creek.	8.69	---	1-13-04	14.3
					6-28-04	3.45
04233669 Virgil Creek (2,200 ft above SH 38) near Dryden, NY	Fall Creek	Lat 42°29'00", long 76°17'26", Tompkins County, Hydrologic Unit 04140201, 600 ft upstream of bridge on Lake Road and 0.6 mi southeast of Dryden.	20.3	---	1-13-04	26.3
					6-28-04	6.79
0423368010 Dryden Lake Trib. at East Lake Rd. near Dryden, NY	Dryden Lake	Lat 42°27'44", long 76°15'39", Tompkins County, Hydrologic Unit 04140201, at culvert on East Lake Road, 0.5 mi upstream of Dryden Lake, and 2.7 mi southeast of Dryden.	0.15	---	1-13-04	0.33
04233679 Dryden Lake Trib. at East Lake Rd. near Harford, NY	Dryden Lake	Lat 42°26'51", long 76°15'23", Tompkins County, Hydrologic Unit 04140201, 50 ft downstream of culvert on East Lake Road, 0.5 mi upstream of Dryden Lake, and 3.6 mi southeast of Dryden.	1.26	---	1-13-04	2.54
					6-28-04	0.11
04233680 Dryden Lake Inlet near Dryden, NY	Dryden Lake	Lat 42°27'20", long 76°15'44", Tompkins County, Hydrologic Unit 04140201, 50 ft of State Highway 13, 0.2 mi west of dyke, and 0.2 mi northwest of Home Depot in Ithaca.	4.93	---	1-13-04	136
					6-28-04	66.4
0423368020 Dryden Lake Trib. at West Lake Rd. near Dryden, NY	Dryden Lake	Lat 42°27'05", long 76°16'33", Tompkins County, Hydrologic Unit 04140201, at culvert on West Lake Road, 1.8 mi upstream of mouth, and 3.0 mi south of Dryden.	0.22	---	1-13-04	0.25
04234001 Fall Creek at Ithaca, NY	Cayuga Lake	Lat 42°27'17", long 76°30'02", Tompkins County, Hydrologic Unit 04140201, 400 ft upstream of Cayuga Street bridge, southwest of Ithaca High School, and 300 ft upstream of Cayuga Lake.	127	---	5-13-04	162
					6-10-04	89.2
					7- 7-04	35.8
					8-12-04	79.4
					8-30-04	2,200
					9- 9-04	1,170
					9-16-04	143

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 2004

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		STREAMS TRIBUTARY TO LAKE ONTARIO--Continued				
04234019 Salmon Creek at Myers, NY	Cayuga Lake	Lat 42°32'22", long 76°32'37", Tompkins County, Hydrologic Unit 04140201, 50 ft downstream from bridge at Myers Road, 1800 ft downstream of bridge on State Highway 34, and 1800 ft upstream fromCayuga Lake.	89.1	---	5-13-04	77.7
					6-10-04	37.4
					7- 7-04	7.61
					8-12-04	24.2
					8-30-04	2,640
					9- 9-04	648
					9-16-04	76.2
0423403010 Taughannock Creek near Taughannock Falls, NY	Cayuga Lake	Lat 42°32'45", long 76°36'02", Tompkins County, Hydrologic Unit 04140201, 150 ft upstream from bridge on State Highway 89, in Taughannock Falls State Park and 0.9 mi downstream of Taughannock Falls.	67.0	---	5-13-04	68.65
					6-10-04	78.4
					7- 7-04	6.52
					8-12-04	17.1
					8-30-04	523
					9- 9-04	2,390
					9-16-04	46.2
04234060 Yawger Creek near Cayuga, NY	Cayuga Lake	Lat 42°53'16", long 76°42'18", Cayuga County, Hydrologic Unit 04140201, 300 ft upstream from bridge on State Highway 90, 2.5 mi south of the villaga of Cayuga, and .25 mi upstream of Cayuga Lake.,	24.9	---	5-12-04	15.1
					6- 9-04	7.2
					7- 8-04	4.91
					8-11-04	7.61
					8-31-04	106
					9- 8-04	6.74
					9-15-04	12.4
0423406130 Seneca River at Free Bridge Corners, NY	Lake Ontario	Lat 42°57'46", long 76°44'17", Seneca County, Hydrologic Unit 04140201, 0.1 mi upstream from bridge on State Highway 20, 1.2 mi downstream of Cayuga Lake, and 0.2 mi west of Free Bridge Corners.	1566	---	5-12-03	3,880
					6- 9-04	38.7
					7- 8-04	2,910
					8-11-04	1,190
					8-31-04	1,080
					9- 8-04	3,670
					9-15-04	3,170

STREAMS TRIBUTARY TO LAKE ONTARIO

430449077294201 CARTERSVILLE WASTE CHANNEL AT PITTSFORD, NY

LOCATION.--Lat 43°04'49", long 77°29'42", Hydrologic Unit 04140101, at Marsh Road, 0.1 mi south of New York State Highway 31 and 0.25 mi north of Erie Canal.

PERIOD OF RECORD.-- Water years 1989 to current year.
CHEMICAL DATA: Water years 1989-91 (d), 1992 (c) 1993 (b), 1994 (d), 1995 (b), 1996-97 (a), 1998 (b), 1999 to 2002 (d), 2003 (c), 2004 (a).
NUTRIENT DATA: Water years 1989-91 (d), 1992 (c) 1993 (b), 1994 (d), 1995 (b), 1996-97 (a), 1998 (b), 1999 to 2002 (d), 2003 (c), 2004 (a).

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

REMARKS.--Records for October 1998 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
JUN 15	0800	59	18	.50	.02	.71	.017	.044

STREAMS TRIBUTARY TO LAKE ONTARIO

430557077344401 ALLEN CREEK ABOVE ERIE CANAL SIPHON NEAR ROCHESTER, NY

LOCATION.--Lat 43°05'57", long 77°34'44", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.01 mi east of Winton Road.

PERIOD OF RECORD.--Water years 1985 to current year.
CHEMICAL DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (b), 1994 (d), 1995 (a), 1996-97 (a), 1998 (b), 1999 (c), 2000 to 2002 (d), 2003 (c), 2004 (a).
NUTRIENT DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (b), 1994 (d), 1995 (a), 1996-97 (a), 1998 (b), 1999 (c), 2000 to 2002 (d), 2003 (c), 2004 (a).

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
JUN 15	1000	52	<5	.66	.04	.42	.018	.055

< Less than.

STREAMS TRIBUTARY TO LAKE ONTARIO

430557077344402 ALLEN CREEK BELOW ERIE CANAL SIPHON NEAR ROCHESTER, NY

LOCATION.--Lat 43°05'57", long 77°34'44", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.01 mi east of Winton Road.

PERIOD OF RECORD.--Water years 1985 to current year.
CHEMICAL DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996-97 (a), 1998 (b), 1999 (c), 2000 to 2002 (d), 2003 (c), 2004 (a).
NUTRIENT DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996-97 (a), 1998 (b), 1999 (c), 2000 to 2002 (d), 2003 (c), 2004 (a).

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
JUN 15	0855	128	15	.81	.03	.05	.007	.038

STREAMS TRIBUTARY TO LAKE ONTARIO

430557077344403 ALLEN CREEK AT ERIE CANAL SIPHON NEAR ROCHESTER, NY

LOCATION.--Lat 43°05'57", long 77°34'44", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.01 mi east of Winton Road.

PERIOD OF RECORD.--Water years 1986 to current year.
CHEMICAL DATA: Water years 1986-1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996 (b), 1997 (a), 1998 (b), 1999 (c), 2000 to 2002 (d), 2003 (c), 2004 (a).
NUTRIENT DATA: Water years 1986-1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996 (b), 1997 (a), 1998 (b), 1999 (c), 2000 to 2002 (d), 2003 (c), 2004 (a).

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
JUN 15	0900	58	15	.59	.03	.08	.011	.042

STREAMS TRIBUTARY TO LAKE ONTARIO

430605077262201 FAIRPORT WASTE CHANNEL AT FAIRPORT, NY

LOCATION.--Lat 43°06'05", long 77°26'22", Hydrologic Unit 04140101, at State Street, 0.15 mi east of New York State Highway 250, and 0.05 mi north of Erie canal.

PERIOD OF RECORD.-- Water years 1989 to current year.
CHEMICAL DATA: Water years 1989 (d), 1990 (c), 1991 (a), 1992-94 (c), 1995 (b), 1996-98 (a), 1999-2000 (c), 2001 to 2002 (d), 2003 (c), 2004 (a).
NUTRIENT DATA: Water years 1989 (d), 1990 (c), 1991 (a), 1992-94 (c), 1995 (b), 1996-98 (a), 1999-2000 (c), 2001 to 2002 (d), 2003 (c), 2004 (a).

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
JUN 15	0725	30	12	.45	.03	.60	.011	.048

STREAMS TRIBUTARY TO LAKE ONTARIO

431132077475301 NORTHRUP CREEK ABOVE SPENCERPORT WASTE CHANNEL AT SPENCERPORT, NY

LOCATION.--Lat 43°11'32", long 77°47'53", Hydrologic Unit 04140101, 300 ft north of Erie (Barge) at Canal Street 800 ft east of State Highway 259.

PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 (c), 2002 to 2002 (d), 2003 (c), 2004 (b).
NUTRIENT DATA: Water years 2001 (c), 2002 to 2002 (d), 2003 (c), 2004 (b).

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 2003 TO SEPTEMBER 2004

Date	Time	Dis-solved oxygen, mg/L (00300)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT									
21	1110	8.3	130	4	.58	.10	.90	.054	.090
JUN									
16	1120	--	50	12	.73	.04	1.5	.034	.087
JUL									
13	0905	--	159	7	.55	.05	1.1	.080	.068

STREAMS TRIBUTARY TO LAKE ONTARIO

431133077474901 SPENCERPORT WASTE CHANNEL AT SPENCERPORT, NY

LOCATION.--Lat 43°11'33", long 77°47'49", Hydrologic Unit 04140101, 600 ft north of Erie (Barge) and 0.25 mi east of State Highway 259.

PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 (c), 2002 (d), 2003 (c), 2004 (b).
NUTRIENT DATA: Water years 2001 (c), 2002 (d), 2003 (c), 2004 (b).

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 2003 TO SEPTEMBER 2004

Date	Time	Dis-solved oxygen, mg/L (00300)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT									
21	1100	10.2	31	3	.30	.05	.77	.042	.046
JUN									
16	1110	--	57	18	.58	.04	1.4	.031	.082
JUL									
13	0855	--	54	27	.49	.05	.95	.080	.122

STREAMS TRIBUTARY TO LAKE ONTARIO

431142077473401 NORTHRUP CREEK BELOW WASTE CHANNEL AT BIG RIDGE ROAD NEAR SPENCERPORT, NY

LOCATION.--Lat 43°12'16", long 77°47'09", Hydrologic Unit 04140101, 50 ft south of bridge on Big Ridge Road, 0.35 mi east of State Highway 259.

PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 to 2002 (d), 2003 (c), 2004 (b).
NUTRIENT DATA: Water years 2001 to 2002 (d), 2003 (c), 2004 (b).

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 2003 TO SEPTEMBER 2004

Date	Time	Dis-solved oxygen, mg/L (00300)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT									
21	1015	8.9	49	3	.39	.10	.84	.047	.059
JUN									
16	1025	--	36	15	.59	.16	1.4	.037	.083
JUL									
13	0835	--	79	29	.50	.07	1.2	.096	.122

STREAMS TRIBUTARY TO LAKE ONTARIO

431216077470901 NORTHRUP CREEK AT OGDEN PARMA TOWNLINE ROAD NEAR SPENCERPORT, NY

LOCATION.--Lat 43°12'16", long 77°47'09", Hydrologic Unit 04140101, 60 ft north of bridge on Odgen Parma Townline Road, 0.55 mi east of State Highway 259.

PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 to 2002 (d), 2003 (c), 2004 (b).
NUTRIENT DATA: Water years 2001 to 2002 (d), 2003 (c), 2004 (b).

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 2003 TO SEPTEMBER 2004

Date	Time	Dis-solved oxygen, mg/L (00300)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT									
21	0925	7.3	67	9	2.0	1.1	1.7	.168	.252
JUN									
16	1000	--	80	11	>2.0	1.5	1.4	.097	.194
JUL									
13	0755	--	87	7	.77	.16	1.7	.136	.174

> Greater than.

STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY

LOCATION.--Lat 43°15'10", long 77°36'35", Monroe County, Hydrologic Unit 04130003, at Charlotte, in Rochester, on west bank of the Genesee River, 1300 ft downstream of Stutson Street Bridge, 0.5 mi upstream of mouth, and 5.0 mi downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,467 mi^2 at station 04232000.

PERIOD OF RECORD.--Water years 1990 to current year.
CHEMICAL DATA: Water years 1990 to current year (e).
NUTRIENT DATA: Water years 1990 to current year (e).

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT											
02-08	0850	0949	1,920	33	49	35	.54	.06	.84	.025	.120
08-14	1020	0519	1,230	37	53	22	.49	.02	.99	.029	.103
16-18	1025	0925	2,080	45	67	25	.45	.06	.91	.032	.085
22-28	1000	1000	1,070	35	63	14	.39	.08	.74	.022	.082
OCT 30-											
NOV 02	1230	1129	3,440	44	124	49	.50	.02	.67	.019	.149
05-12	1120	1020	1,880	52	71	21	.68	.02	.96	.022	.066
25-27	1000	2100	8,080	24	31	237	1.1	.01	.87	.016	.733
DEC											
04-05	1245	0544	8,910	30	40	87	.58	.05	1.2	.016	.252
DEC 29-											
JAN 05	1430	0929	5,790	38	41	99	.56	.05	1.6	.019	.212
06-13	0930	0630	3,080	46	50	37	.50	.06	1.4	.013	.120
13-20	1340	1140	1,910	56	70	9	.44	.09	1.7	.017	.050
20-27	1150	1249	1,820	56	69	6	.49	.10	1.8	.016	.034
JAN 27-											
FEB 03	1400	1300	1,350	64	85	<10	.58	.12	1.9	.020	.032
03-10	1305	0805	1,530	52	97	<5	.52	.13	1.8	.034	.060
10-18	0855	0755	1,770	82	83	4	.67	.09	1.6	.025	.034
18-24	1010	1009	1,530	35	92	5	1.1	.14	1.6	.018	.029
FEB 24-											
MAR 02	1050	1749	2,140	101	89	48	.57	.08	1.8	.010	.048
04-10	1320	1020	8,110	72	49	156	.93	.09	1.6	.039	.403
15-17	0925	0825	7,280	46	69	162	.87	.04	1.9	.021	.452
17-24	1055	0855	7,370	37	37	98	.66	.07	1.5	.014	.278
24-28	0945	1645	8,460	51	39	117	.70	.05	1.7	.013	.223
MAR 31-											
APR 07	0930	1130	9,280	46	46	148	.75	.02	1.3	.013	.301
07-13	1155	0255	7,330	41	40	84	.61	.04	1.4	.012	.169
14-18	0945	1245	8,260	47	40	183	.99	.04	1.1	.019	.386
20-28	0930	0830	6,690	37	39	99	.66	.04	1.2	.013	.250
APR 28-											
MAY 05	1040	0840	4,270	43	49	--	.57	.04	1.2	.012	.132
05-08	0955	2255	2,800	53	66	--	.71	.04	1.1	.013	.125
11-18	1010	0910	6,130	41	48	--	.67	.02	1.1	.015	.215
18-25	1015	0915	7,690	35	40	121	.76	.04	.95	.025	.304
MAY 25-											
JUN 01	1015	0915	8,650	55	84	196	1.1	.06	1.2	.044	.530
01-08	1025	0925	7,500	26	30	116	.89	.02	1.3	.025	.298
08-15	1050	1149	4,070	37	50	79	.66	.03	1.2	.014	.585
15-22	1215	1115	2,710	52	74	56	.57	.08	1.2	.044	.176
22-29	1045	0945	1,570	52	80	33	1.3	.11	1.4	.061	.117
JUN 29-											
JUL 06	1020	0920	1,200	60	94	24	.61	.09	1.1	.017	.055
07-13	1005	1104	1,240	59	96	26	.66	.11	1.00	.029	.087
13-21	1020	0920	2,360	64	88	41	.84	.12	1.3	<.001	.136
21-28	0930	1029	1,910	57	73	49	.73	.12	1.2	.036	.127
JUL 28-											
AUG 03	1100	1000	4,000	48	52	100	.93	.09	1.1	.036	.174
04-10	1025	0925	1,770	45	61	39	.80	.11	.99	.043	.116

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

Date	Time	End time	Discharge, cfs (00060)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
AUG											
10-18	1020	0920	1,220	50	74	21	.94	.11	1.1	.038	.106
18-24	0845	0745	1,560	51	79	20	.81	.12	.94	.026	.096
SEP											
02-07	1000	0859	2,430	25	38	118	.92	.06	.63	.031	.426
07-15	1030	1030	7,220	33	45	206	1.4	.06	.89	.052	.645
15-21	1120	1119	6,310	23	31	100	1.1	.05	.71	.028	.465
21-28	1210	1010	5,860	20	28	184	1.9	.03	.69	.024	.481
SEP 28-OCT 05	1045	0745	2,560	31	59	50	.74	.06	1.1	.025	.134

< Less than.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Statewide Pesticide Monitoring Project

In June, 1997, the New York State Department of Environmental Conservation and the U.S. Geological Survey (USGS) began a cooperative effort to monitor pesticides in order to assess the presence and distribution of pesticides and their residues in the waters of the State. The initial monitoring effort included a statewide survey of pesticide concentrations in surface water, particularly in areas where pesticides are used and areas where surface water provides water supply. In the 2004 water year, water samples were collected from 6 public-water-supply intake sites and 2 community-water-system well sites in western New York State and analyzed for as many as 180 pesticides or pesticide degradates. Samples were analyzed for pesticide compounds using the USGS National Water Quality Laboratory (NWQL) SH2001/2010 method (Zaugg and others, 1995), NWQL SH2060 method (Furlong and others, 2001), and the Kansas District Organic Geochemistry Laboratory LCAA method (Lee and others, 2001). The pesticide schedules include selected pesticides and metabolites that are efficiently partitioned from a water sample by solid-phase extraction and are sufficiently volatile and thermally stable for analysis by gas and liquid chromatography. Results are also reported for the determination of caffeine, although not a pesticide, as part of the SH2060 analyses. Samples were filtered through a glass-fiber membrane filter with openings that are 0.7 microns in size to remove sediment and microorganisms. Therefore, all results are for compounds dissolved in water.

The sites shown in figures 9-10 were sampled as part of the state-wide monitoring project for pesticides. The sampling network included sites in eastern New York excluding Long Island (vol. 1) and Long Island (vol. 2), as well as those reported herein for western New York (vol. 3). Pesticide data from other sites located in eastern New York and Long Island are published in their respective volumes.

Laboratory Reporting Levels

The data tables list the pesticides analyzed for, the unit of measure (micrograms per liter, ug/L), the USGS National Water Information System parameter code, and the reported values for concentration or Laboratory Reporting Levels (LRL). The LRL may vary for particular pesticide compounds; it provides a quantitative index that indicates uncertainty in the measurement of low concentrations. When an analyte is detected and all criteria for a positive result are met, the concentration is reported. If the concentration is quantified but is less than the LRL, an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the NWQL will identify the result with an 'E' code even though the measured value is greater than the LRL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the LRL preceded by a less-than sign (<).

References Cited

Furlong, E.T., Anderson, B.D., Werner, S.L., Soliven, P.P., Coffey, L.J., and Burkhardt, M.R., 2001, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory-Determination of pesticides in water by graphitized carbon-based solid-phase extraction and high-performance liquid chromatography/mass spectrometry: U.S. Geological Survey Water-Resources Investigations Report 01-4134, 73 p.

Lee, E.A., Kish, J.L., Zimmerman, L.R., and Thurman, E.M., 2001, Methods of analysis by the U.S Geological Survey Organic Geochemistry Research Group- Update and additions to the determination of chloroacetanilide herbicide degradation compounds in water using high-performance liquid chromatography/mass spectrometry: U.S. Geological Survey Open File Report 01-10, 17 p.

Zaugg, S.D., Sandstrom, M.W., Smith, S.G., and Fehlberg, K.M., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory - Determination of pesticides in water by C-18 solid-phase extraction and capillary-column gas chromatography with selective-ion monitoring: U.S. Geological Survey Open-File Report 95-181, 49 p.

Statewide Pesticide Monitoring Project
Monitoring at Water-Supply Intake Sites at Lakes and Reservoirs in Western New York

Raw, untreated water from 6 surface-water intake sites (fig. 9) was sampled as part of the Statewide Pesticide Monitoring Project in cooperation with New York State Department of Environmental Conservation. All samples were analyzed by the USGS for the SH2001/2010 and LCAA pesticide schedules and selected samples were also analyzed for the SH2060 schedule. Additional samples of raw water and finished water at the Leroy Reservoir intake were sampled as part of the USGS National Water Quality Assessment Program; results for the finished-water samples are not included herein. Concentrations in all samples did not exceed Federal or State maximum contaminant levels (MCLs) for drinking water for any compound.

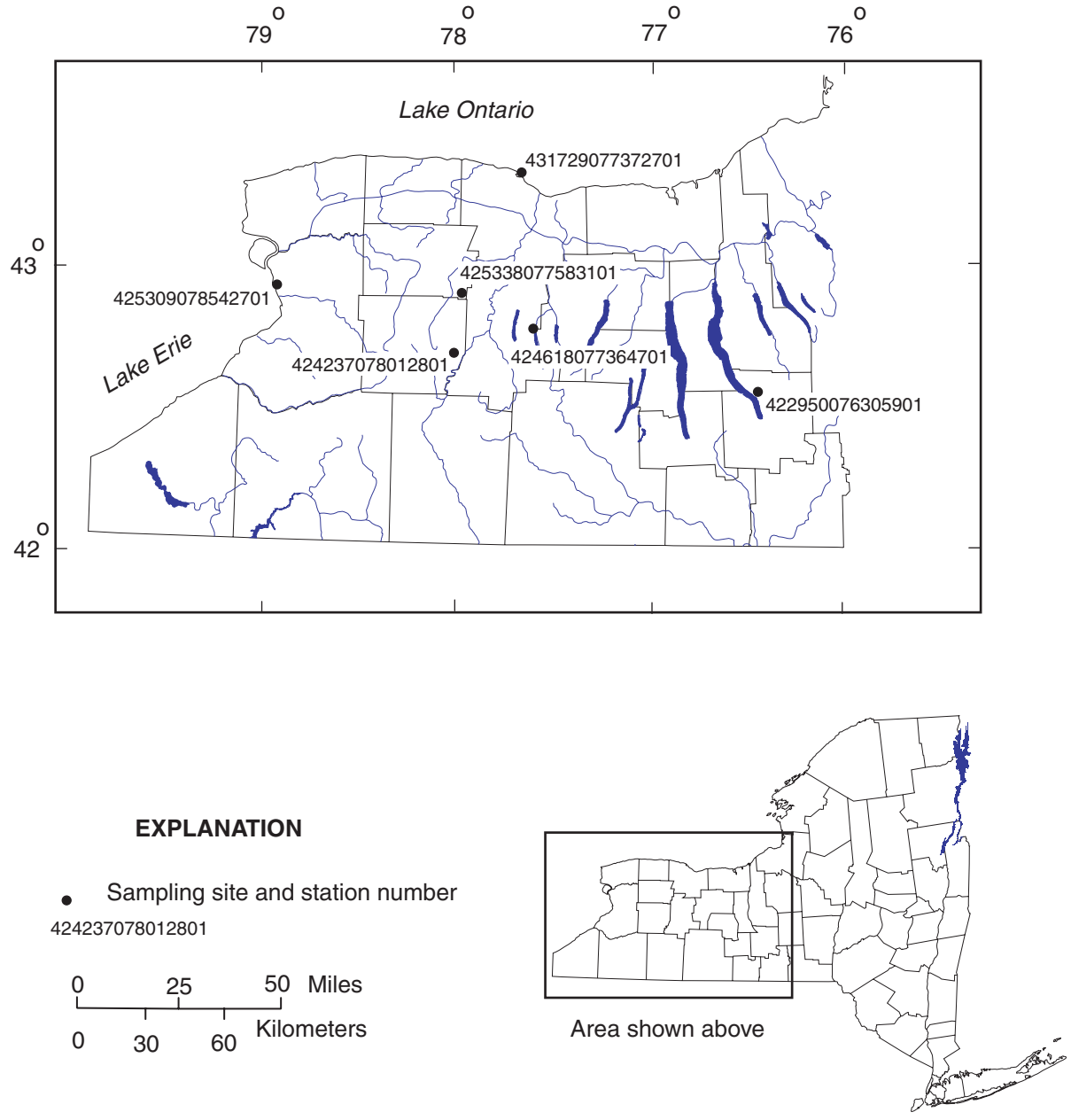


Figure 9. -- Location of public-water-supply intake sites that were sampled in western New York for pesticide analysis in water year 2004.

PESTICIDE ANALYSES

METHOD SH2010

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT 2003 23...	1500	<.006	E.053	.04	<.02	<.006	<.02	<.02	<.004	<.005	.082	<.050	<.010
FEB 2004 02...	1030	<.006	E.053	.02	.02	.006	<.02	<.02	<.004	<.005	.128	<.050	<.010
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	1300	<.006	E.084	<.02	<.02	<.006	.99	.27	.009	<.005	.191	<.050	<.010
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 2003 22...	0900	<.006	E.095	<.02	<.02	<.006	<.02	.02	<.004	<.005	.123	<.050	<.010
JAN 2004 27...	1300	<.006	E.080	<.02	<.02	<.006	.02	<.02	<.004	<.005	.129	<.050	<.010
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 2003 23...	1200	<.006	E.046	<.02	<.02	.007	<.02	<.02	<.004	<.005	.090	<.050	<.010
FEB 2004 02...	0900	<.006	E.048	.02	.03	.007	<.02	<.02	<.004	<.005	.120	<.050	<.010
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
FEB 2004 02...	1400	<.006	E.010	<.02	<.02	<.006	<.02	<.02	<.004	<.005	.017	<.050	<.010
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 2003 23...	1400	<.006	E.061	<.02	<.02	<.006	.18	.04	<.004	<.005	.153	<.050	<.010
FEB 2004 02...	1300	<.006	E.051	<.02	<.02	<.006	.21	.06	<.004	<.005	.144	<.050	<.010

< Less than.
E Estimated.

METHOD SH2010—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT 2003 23...	<.002	<.041	<.020	<.005	<.006	E.018	E.003	<.005	<.005	<.02	<.02	<.02	<.002
FEB 2004 02...	<.002	<.041	<.020	<.005	<.006	E.012	<.003	<.005	<.005	<.02	<.02	<.02	<.002
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.02	<.02	<.002
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 2003 22...	<.002	<.041	<.020	<.005	<.006	E.013	E.003	<.005	<.005	<.02	<.02	<.02	<.002
JAN 2004 27...	<.002	<.041	<.020	<.005	<.006	E.010	<.003	<.005	<.005	<.02	<.02	<.02	<.002
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 2003 23...	<.002	<.041	<.020	<.005	<.006	E.011	<.003	<.005	<.005	<.02	<.02	<.02	<.002
FEB 2004 02...	<.002	<.041	<.020	<.005	<.006	E.008	<.003	<.005	<.005	<.02	<.02	<.02	<.002
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
FEB 2004 02...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.02	<.02	<.002
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 2003 23...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005	.02	<.02	<.02	<.002
FEB 2004 02...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.02	<.02	<.002

< Less than.
E Estimated.

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT 2003 23...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.05	.04	.017	<.006
FEB 2004 02...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.08	.06	.022	<.006
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	2.16	.85	.062	<.006
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 2003 22...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.29	.14	.040	<.006
JAN 2004 27...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.28	.14	.039	<.006
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 2003 23...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.04	.03	.019	<.006
FEB 2004 02...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.08	.05	.021	<.006
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
FEB 2004 02...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.06	.04	E.010	<.006
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 2003 23...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	.78	.35	.052	<.006
FEB 2004 02...	<.009	<.005	<.02	<.02	<.003	<.004	<.035	<.027	<.006	1.08	.38	.052	<.006

< Less than.
E Estimated.

METHOD SH2010—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT 2003 23...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.013
FEB 2004 02...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.016
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	.015
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 2003 22...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.013
JAN 2004 27...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.010
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 2003 23...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.017
FEB 2004 02...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.016
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
FEB 2004 02...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.010
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 2003 23...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.024
FEB 2004 02...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.018

< Less than.
E Estimated.

METHOD SH2010—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)						
OCT 2003						
23...	<.02	<.034	<.02	<.005	<.002	<.009
FEB 2004						
02...	<.02	<.034	<.02	<.005	<.002	<.009
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)						
DEC 2003						
09...	<.02	<.034	<.02	<.005	<.002	<.009
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)						
OCT 2003						
22...	<.02	<.034	<.02	<.005	<.002	<.009
JAN 2004						
27...	<.02	<.034	<.02	<.005	<.002	<.009
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)						
OCT 2003						
23...	<.02	<.034	<.02	<.005	<.002	<.009
FEB 2004						
02...	<.02	<.034	<.02	<.005	<.002	<.009
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)						
FEB 2004						
02...	<.02	<.034	<.02	<.005	<.002	<.009
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)						
OCT 2003						
23...	<.02	<.034	<.02	<.005	<.002	<.009
FEB 2004						
02...	<.02	<.034	<.02	<.005	<.002	<.009

< Less than.
E Estimated.

PESTICIDE ANALYSES

METHOD SH2060

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	1310	<.009	<.02	<.02	E.06	E.02	E.180	<.006	<1.50	<.007	<.02	<.008	<.04
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
FEB 2004 02...	1310	<.009	.02	<.02	E.01	E.02	E.174	<.006	<1.50	<.007	<.02	<.008	<.04

Date	Atrazine, water, fltrd, ug/L (39632)	Bendiocarb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Caffeine, water, fltrd, ug/L (50305)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	E.139	<.03	<.004	<.02	E.02	<.03	<.02	.025	<.03	<.006	<.02	<.010	M
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
FEB 2004 02...	.042	<.03	<.008	<.02	<.01	<.03	<.02	<.010	<.03	<.006	<.02	<.010	<.01

Date	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cycloate, water, fltrd, ug/L (04031)	Dacthal monoacid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd, ug/L (50356)
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	<.04	<.01	<.01	<.01	<.01	<.01	<.01	<.03	<.01	<.03	<.02	<.03	<.02
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
FEB 2004 02...	<.04	<.01	<.01	<.01	<.01	<.01	<.01	<.03	<.01	<.03	<.01	<.03	<.02

Date	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsulfuron, water, fltrd, ug/L (61697)	N-(4-Chlorophenyl) -N-' methylurea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
DEC 2003 09...	<.02	<.007	<.01	<.02	<.01	<.02	<.008	<.004	<.03	<.02	<.01	E.03	<.02
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
FEB 2004 02...	<.02	<.023	<.01	<.02	<.01	<.02	<.008	<.004	<.03	<.02	<.01	<.01	<.02

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfometruron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd, ug/L (04032)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)											
DEC 2003 09...	<.02	<.01	<.02	<.010	<.02	<.008	<.02	<.009	<.006	<.010	<.02
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)											
FEB 2004 02...	<.49	<.01	<.03	<.010	<.02	<.008	<.02	<.009	<.006	<.010	<.02

< Less than.
E Estimated.
M Presence verified, not quantified.

Surface-water synoptic sampling study- Dryden aquifer study

Date	Time	Instantaneous discharge, cfs (00061)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
04233669 VIRGIL CR (2200FT UPSTREAM OF SH38) NR DRYDEN NY (LAT 42 28 58N LONG 076 17 25W)													
JAN 13...	1000	26	42.1	8.23	1.21	11.8	21.2	<.2	4.95	12.3	182	.12	.13
JUN 28...	0930	6.8	--	--	--	--	--	--	--	--	--	--	--
04233679 DRYDEN LAKE TRIB AT EAST LAKE RD NEAR HARFORD NY (LAT 42 26 51N LONG 076 15 22W)													
JAN 13...	1200	2.5	47.6	10.8	.91	11.4	21.2	<.2	6.59	12.7	213	.20	.50
JUN 28...	1100	.11	--	--	--	--	--	--	--	--	--	--	--
04233680 DRYDEN LAKE INLET NEAR DRYDEN NY (LAT 42 27 19N LONG 076 15 42W)													
JAN 13...	1130	5.6	27.2	6.23	.79	7.22	12.1	<.2	5.63	10.8	134	.10	1.0
JUN 28...	1030	.62	--	--	--	--	--	--	--	--	--	--	--
0423368010 DRYDEN LAKE TRIB AT EAST LAKE ROAD NR DRYDEN NY (LAT 42 27 44N LONG 076 15 38W)													
JAN 13...	1100	.33	16.9	4.00	1.03	3.41	4.54	<.2	4.56	8.0	84	.20	.32
0423368020 DRYDEN LAKE TRIB AT WEST LAKE ROAD NR DRYDEN NY (LAT 42 27 05N LONG 076 16 32W)													
JAN 13...	1245	.25	7.46	1.59	.45	22.3	35.0	<.2	4.51	7.1	92	.15	.27
0423368490 DRYDEN LAKE OUTLET UPSTREAM OF SH38 AT DRYDEN NY (LAT 42 28 54N LONG 076 17 44W)													
JAN 13...	0915	14	30.6	6.76	.91	8.64	15.4	<.2	4.08	12.7	140	.23	.20
JUN 28...	0900	3.5	--	--	--	--	--	--	--	--	--	--	--

< Less than.

Surface-water synoptic sampling study- Dryden aquifer study—Continued

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)
04233669 VIRGIL CR (2200FT UPSTREAM OF SH38) NR DRYDEN NY (LAT 42 28 58N LONG 076 17 25W)								
JAN 13...	<.04	1.76	E.004	<.02	.007	.013	9	8.4
JUN 28...	--	--	--	--	--	--	--	--
04233679 DRYDEN LAKE TRIB AT EAST LAKE RD NEAR HARFORD NY (LAT 42 26 51N LONG 076 15 22W)								
JAN 13...	<.04	5.17	E.005	<.02	.009	.04	16	8.1
JUN 28...	--	--	--	--	--	--	--	--
04233680 DRYDEN LAKE INLET NEAR DRYDEN NY (LAT 42 27 19N LONG 076 15 42W)								
JAN 13...	<.04	2.17	<.008	<.02	.006	.086	47	36.6
JUN 28...	--	--	--	--	--	--	--	--
0423368010 DRYDEN LAKE TRIB AT EAST LAKE ROAD NR DRYDEN NY (LAT 42 27 44N LONG 076 15 38W)								
JAN 13...	<.04	.12	<.008	<.02	.016	.101	69	25.2
0423368020 DRYDEN LAKE TRIB AT WEST LAKE ROAD NR DRYDEN NY (LAT 42 27 05N LONG 076 16 32W)								
JAN 13...	<.04	.22	<.008	E.01	.024	.05	24	5.8
0423368490 DRYDEN LAKE OUTLET UPSTREAM OF SH38 AT DRYDEN NY (LAT 42 28 54N LONG 076 17 44W)								
JAN 13...	<.04	1.16	.008	<.02	.006	.018	44	27.7
JUN 28...	--	--	--	--	--	--	--	--

< Less than.
E Estimated.

Surface-water synoptic sampling study- Dryden aquifer study—Continued

METHOD SH2010

Date	Time	Instantaneous discharge, cfs (00061)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)
04233669 VIRGIL CR (2200FT UPSTREAM OF SH38) NR DRYDEN NY (LAT 42 28 58N LONG 076 17 25W)													
JAN 13...	1000	26	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	0930	6.8	<.006	E.006	<.006	<.004	<.005	.018	<.050	<.010	<.002	<.041	<.020
04233679 DRYDEN LAKE TRIB AT EAST LAKE RD NEAR HARFORD NY (LAT 42 26 51N LONG 076 15 22W)													
JAN 13...	1200	2.5	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	1100	.11	<.006	E.005	<.006	<.004	<.005	.008	<.050	<.010	<.002	<.041	<.020
04233680 DRYDEN LAKE INLET NEAR DRYDEN NY (LAT 42 27 19N LONG 076 15 42W)													
JAN 13...	1130	5.6	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	1030	.62	<.006	E.004	<.006	<.004	<.005	.007	<.050	<.010	<.002	<.041	<.020
0423368010 DRYDEN LAKE TRIB AT EAST LAKE ROAD NR DRYDEN NY (LAT 42 27 44N LONG 076 15 38W)													
JAN 13...	1100	.33	--	--	--	--	--	--	--	--	--	--	--
0423368020 DRYDEN LAKE TRIB AT WEST LAKE ROAD NR DRYDEN NY (LAT 42 27 05N LONG 076 16 32W)													
JAN 13...	1245	.25	--	--	--	--	--	--	--	--	--	--	--
0423368490 DRYDEN LAKE OUTLET UPSTREAM OF SH38 AT DRYDEN NY (LAT 42 28 54N LONG 076 17 44W)													
JAN 13...	0915	14	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	0900	3.5	<.006	E.009	<.006	<.004	<.005	.014	<.050	<.010	<.002	<.041	<.020

Surface-water synoptic sampling study- Dryden aquifer study—Continued

METHOD SH2010—Continued

Date	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)
04233669 VIRGIL CR (2200FT UPSTREAM OF SH38) NR DRYDEN NY (LAT 42 28 58N LONG 076 17 25W)													
JAN 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
28...	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035
04233679 DRYDEN LAKE TRIB AT EAST LAKE RD NEAR HARFORD NY (LAT 42 26 51N LONG 076 15 22W)													
JAN 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
28...	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035
04233680 DRYDEN LAKE INLET NEAR DRYDEN NY (LAT 42 27 19N LONG 076 15 42W)													
JAN 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
28...	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035
0423368010 DRYDEN LAKE TRIB AT EAST LAKE ROAD NR DRYDEN NY (LAT 42 27 44N LONG 076 15 38W)													
JAN 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
0423368020 DRYDEN LAKE TRIB AT WEST LAKE ROAD NR DRYDEN NY (LAT 42 27 05N LONG 076 16 32W)													
JAN 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
0423368490 DRYDEN LAKE OUTLET UPSTREAM OF SH38 AT DRYDEN NY (LAT 42 28 54N LONG 076 17 44W)													
JAN 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
28...	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035

Surface-water synoptic sampling study- Dryden aquifer study—Continued

METHOD SH2010—Continued

Date	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)
04233669 VIRGIL CR (2200FT UPSTREAM OF SH38) NR DRYDEN NY (LAT 42 28 58N LONG 076 17 25W)													
JAN 2004 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	<.027	<.006	.014	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004
04233679 DRYDEN LAKE TRIB AT EAST LAKE RD NEAR HARFORD NY (LAT 42 26 51N LONG 076 15 22W)													
JAN 2004 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	<.027	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004
04233680 DRYDEN LAKE INLET NEAR DRYDEN NY (LAT 42 27 19N LONG 076 15 42W)													
JAN 2004 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	<.027	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004
0423368010 DRYDEN LAKE TRIB AT EAST LAKE ROAD NR DRYDEN NY (LAT 42 27 44N LONG 076 15 38W)													
JAN 2004 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
0423368020 DRYDEN LAKE TRIB AT WEST LAKE ROAD NR DRYDEN NY (LAT 42 27 05N LONG 076 16 32W)													
JAN 2004 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
0423368490 DRYDEN LAKE OUTLET UPSTREAM OF SH38 AT DRYDEN NY (LAT 42 28 54N LONG 076 17 44W)													
JAN 2004 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	<.027	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004

Surface-water synoptic sampling study- Dryden aquifer study—Continued

METHOD SH2010—Continued

Date	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
04233669 VIRGIL CR (2200FT UPSTREAM OF SH38) NR DRYDEN NY (LAT 42 28 58N LONG 076 17 25W)										
JAN 2004										
13...	--	--	--	--	--	--	--	--	--	--
JUN										
28...	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
04233679 DRYDEN LAKE TRIB AT EAST LAKE RD NEAR HARFORD NY (LAT 42 26 51N LONG 076 15 22W)										
JAN 2004										
13...	--	--	--	--	--	--	--	--	--	--
JUN										
28...	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
04233680 DRYDEN LAKE INLET NEAR DRYDEN NY (LAT 42 27 19N LONG 076 15 42W)										
JAN 2004										
13...	--	--	--	--	--	--	--	--	--	--
JUN										
28...	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
0423368010 DRYDEN LAKE TRIB AT EAST LAKE ROAD NR DRYDEN NY (LAT 42 27 44N LONG 076 15 38W)										
JAN 2004										
13...	--	--	--	--	--	--	--	--	--	--
0423368020 DRYDEN LAKE TRIB AT WEST LAKE ROAD NR DRYDEN NY (LAT 42 27 05N LONG 076 16 32W)										
JAN 2004										
13...	--	--	--	--	--	--	--	--	--	--
0423368490 DRYDEN LAKE OUTLET UPSTREAM OF SH38 AT DRYDEN NY (LAT 42 28 54N LONG 076 17 44W)										
JAN 2004										
13...	--	--	--	--	--	--	--	--	--	--
JUN										
28...	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009

< Less than.

ALLEGANY COUNTY

421512077472801. Local number, Ag 261.

LOCATION.--Lat 42°15'12", long 77°47'28", Hydrologic Unit 02050104, behind Crandall Hall at Alfred University, Alfred. Owner: Alfred University.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 20 ft, cased to 9.5 ft, screened from 9.5 to 19.5 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,770 ft above NGVD of 1929, from topographic map. Measuring point: Top of pipe, 1.66 ft above land-surface datum.

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

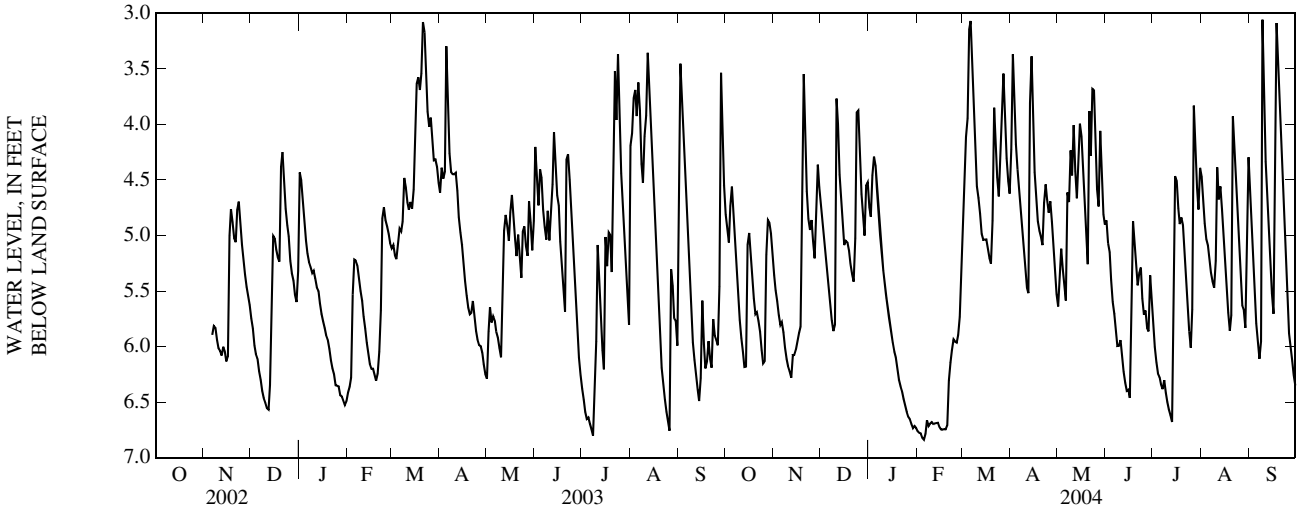
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.44 ft below land-surface datum, Sept. 18, 2004; lowest, 6.84 ft below land-surface datum, Feb. 4, 5, 2004.

EXTREMES FOR CURRENT YEAR.--Highest water level, 2.44 ft below land-surface datum, Sept.18; lowest, 6.84 below land-surface datum, Feb. 4, 5.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.81	5.36	4.74	4.75	6.76	5.12	4.23	5.64	4.86	5.84	4.47	4.66
2	4.93	5.49	4.89	4.83	6.78	4.68	3.37	5.43	5.07	6.00	4.71	4.99
3	5.06	5.59	5.05	4.46	6.78	4.11	3.83	5.12	5.15	6.14	4.89	5.30
4	4.73	5.72	5.19	4.29	6.82	3.95	4.18	5.30	5.40	6.24	5.03	5.58
5	4.56	5.81	5.33	4.37	6.84	3.14	4.40	5.44	5.60	6.28	5.09	5.79
6	4.79	5.78	5.48	4.53	6.78	3.07	4.57	5.59	5.71	6.34	5.21	5.96
7	5.03	5.87	5.63	4.73	6.66	3.57	4.74	4.61	5.86	6.38	5.34	6.11
8	5.29	6.01	5.76	4.94	6.72	3.90	4.92	4.70	5.99	6.30	5.41	5.95
9	5.56	6.11	5.86	5.15	6.69	4.30	5.12	4.23	5.99	6.42	5.47	3.06
10	5.76	6.18	5.80	5.31	6.68	4.56	5.30	4.46	5.94	6.50	5.23	3.78
11	5.92	6.22	3.77	5.44	6.70	4.66	5.47	4.01	6.09	6.57	4.39	4.34
12	6.05	6.28	4.00	5.56	6.69	4.80	5.52	4.42	6.22	6.62	4.68	4.66
13	6.19	6.08	4.45	5.66	6.69	4.98	3.81	4.67	6.32	6.68	4.56	4.97
14	6.18	6.08	4.66	5.75	6.69	5.04	3.39	4.32	6.40	5.74	4.76	5.27
15	5.08	6.03	4.90	5.85	6.72	5.04	4.03	3.99	6.39	4.47	5.06	5.52
16	4.98	5.95	5.08	5.96	6.75	5.03	4.43	4.11	6.46	4.51	5.26	5.71
17	5.18	5.88	5.05	6.05	6.75	5.12	4.67	4.51	5.72	4.76	5.48	4.28
18	5.38	5.82	5.06	6.10	6.74	5.20	4.87	4.78	4.87	4.90	5.70	3.09
19	5.57	4.37	5.14	6.20	6.75	5.25	4.96	5.04	5.04	4.84	5.86	3.96
20	5.71	3.55	5.26	6.30	6.71	4.87	5.01	5.26	5.23	4.91	5.72	4.42
21	5.69	4.23	5.35	6.36	6.31	3.85	5.09	3.88	5.45	5.17	3.93	4.73
22	5.77	4.60	5.42	6.40	6.14	4.21	4.71	4.28	5.34	5.43	4.26	5.02
23	5.87	4.85	5.03	6.47	6.03	4.48	4.54	3.68	5.29	5.67	4.56	5.31
24	6.03	4.95	3.89	6.53	5.94	4.65	4.68	3.69	5.57	5.86	4.78	5.53
25	6.15	4.86	3.88	6.59	5.96	4.31	4.79	4.21	5.71	6.01	5.07	5.71
26	6.13	5.05	4.33	6.63	5.96	3.99	4.69	4.58	5.67	5.67	5.38	5.88
27	5.17	5.21	4.63	6.65	5.90	3.54	4.88	4.74	5.83	3.83	5.63	6.02
28	4.86	4.85	4.83	6.70	5.73	4.00	5.13	4.06	5.86	4.17	5.67	6.13
29	4.88	4.36	5.00	6.73	5.44	4.30	5.35	4.49	5.36	4.57	5.83	6.26
30	4.98	4.56	4.55	6.71	---	4.51	5.53	4.81	5.61	4.77	4.78	6.35
31	5.16	---	4.52	6.73	---	4.62	---	4.90	---	4.39	4.30	---
MEAN	5.40	5.39	4.92	5.77	6.49	4.41	4.67	4.61	5.67	5.55	5.05	5.14
MAX	6.19	6.28	5.86	6.73	6.84	5.25	5.53	5.64	6.46	6.68	5.86	6.35
MIN	4.56	3.55	3.77	4.29	5.44	3.07	3.37	3.68	4.86	3.83	3.93	3.06

ALLEGANY COUNTY—Continued



ALLEGANY COUNTY—Continued

421544078021301. Local number, Ag 262.

LOCATION.--Lat 42°15'44", long 78°02'13", Hydrologic Unit 04130002, in the Allegany County landfill on County Route 48 near Belmont. Owner: Allegany County.

AQUIFER.--Shales of Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 29.5 ft, cased to 23.5 ft, screened from 23.5 to 29.1 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,456.13 ft above NGVD of 1929. Measuring point: Top of pipe, 1.74 ft above land-surface datum.

PERIOD OF RECORD.--November 1995 to September 2002 and November 2002 to current year. Records for November 1995 to September 2002 are unpublished and available in the files of the U.S. Geological Survey.

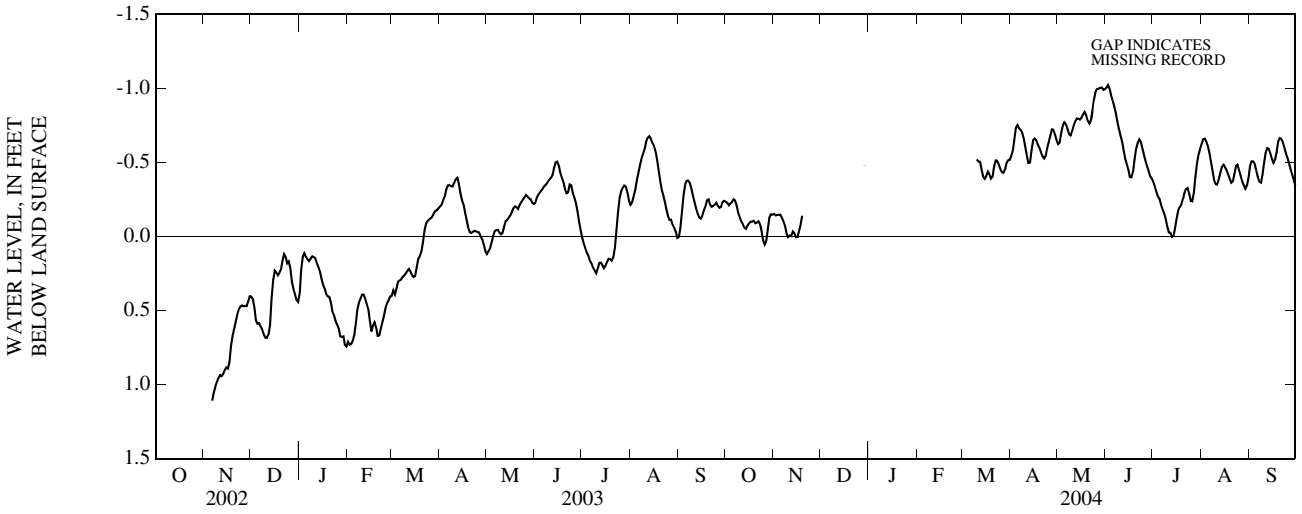
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.24 ft above land-surface datum, Jan. 20, 1998; lowest measured, 2.44 ft below land-surface datum, Jan. 29, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1.04 ft above land-surface datum, June 2; lowest, 0.07 ft below land-surface datum, Oct. 27.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-0.23	-0.15	---	---	---	---	-0.54	-0.62	-1.00	-0.37	-0.62	-0.47
2	-0.23	-0.14	---	---	---	---	-0.58	-0.63	-1.02	-0.34	-0.66	-0.51
3	-0.21	-0.14	---	---	---	---	-0.66	-0.70	-1.00	-0.30	-0.66	-0.51
4	-0.22	-0.15	---	---	---	---	-0.74	-0.75	-0.95	-0.27	-0.64	-0.49
5	-0.23	-0.15	---	---	---	---	-0.75	-0.77	-0.92	-0.25	-0.61	-0.45
6	-0.25	-0.13	---	---	---	---	-0.73	-0.76	-0.88	-0.22	-0.56	-0.40
7	-0.24	-0.10	---	---	---	---	-0.72	-0.73	-0.83	-0.18	-0.50	-0.37
8	-0.21	-0.07	---	---	---	---	-0.70	-0.69	-0.78	-0.16	-0.44	-0.36
9	-0.16	-0.02	---	---	---	---	-0.66	-0.68	-0.72	-0.12	-0.38	-0.42
10	-0.13	0.00	---	---	---	-0.52	-0.60	-0.71	-0.68	-0.07	-0.35	-0.50
11	-0.10	-0.01	---	---	---	-0.51	-0.54	-0.75	-0.64	-0.03	-0.35	-0.57
12	-0.08	0.00	---	---	---	-0.50	-0.50	-0.78	-0.58	-0.03	-0.39	-0.60
13	-0.06	-0.03	---	---	---	-0.45	-0.50	-0.80	-0.53	0.00	-0.43	-0.59
14	-0.05	-0.02	---	---	---	-0.40	-0.58	-0.80	-0.49	-0.01	-0.47	-0.56
15	-0.07	0.00	---	---	---	-0.39	-0.65	-0.79	-0.45	-0.06	-0.48	-0.53
16	-0.09	0.00	---	---	---	-0.41	-0.66	-0.80	-0.40	-0.13	-0.47	-0.50
17	-0.10	-0.04	---	---	---	-0.44	-0.65	-0.83	-0.40	-0.18	-0.45	-0.52
18	-0.10	-0.08	---	---	---	-0.42	-0.62	-0.84	-0.44	-0.20	-0.42	-0.57
19	-0.11	-0.14	---	---	---	-0.39	-0.60	-0.82	-0.52	-0.22	-0.39	-0.64
20	-0.09	---	---	---	---	-0.40	-0.57	-0.78	-0.59	-0.25	-0.36	-0.66
21	-0.09	---	---	---	---	-0.48	-0.54	-0.76	-0.63	-0.30	-0.37	-0.66
22	-0.10	---	---	---	---	-0.51	-0.53	-0.78	-0.66	-0.32	-0.42	-0.64
23	-0.08	---	---	---	---	-0.51	-0.55	-0.85	-0.64	-0.33	-0.48	-0.60
24	-0.03	---	---	---	---	-0.49	-0.60	-0.93	-0.60	-0.29	-0.48	-0.56
25	0.03	---	---	---	---	-0.46	-0.64	-0.98	-0.55	-0.24	-0.45	-0.53
26	0.05	---	---	---	---	-0.43	-0.68	-1.00	-0.51	-0.24	-0.41	-0.49
27	0.03	---	---	---	---	-0.43	-0.72	-1.00	-0.48	-0.29	-0.37	-0.45
28	-0.05	---	---	---	---	-0.45	-0.72	-1.00	-0.45	-0.40	-0.35	-0.42
29	-0.13	---	-0.48	---	---	-0.50	-0.69	-1.01	-0.41	-0.49	-0.32	-0.38
30	-0.15	---	---	---	---	-0.52	-0.65	-0.99	-0.39	-0.55	-0.34	-0.34
31	-0.15	---	---	---	---	-0.52	---	-0.99	---	-0.59	-0.40	---
MEAN	-0.12	---	---	---	---	---	-0.63	-0.82	-0.64	-0.24	-0.45	-0.51
MAX	0.05	---	---	---	---	---	-0.50	-0.62	-0.39	0.00	-0.32	-0.34
MIN	-0.25	---	---	---	---	---	-0.75	-1.01	-1.02	-0.59	-0.66	-0.66

ALLEGANY COUNTY—Continued



BROOME COUNTY

421138075511301. Local number, Bm 128.

LOCATION.--Lat 42°11'38", long 75°51'13", Hydrologic Unit 02050102, at end of Jeffery Drive on Chenango Forks School District property at Kattelville. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 53 ft, cased to 48.5 ft, screened from 48.5 to 53 ft.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 908.58 ft above NGVD of 1929. Measuring point: Double file mark on top of coupling, 3.20 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping in nearby village and school wells. Satellite water-level telemeter at station.

PERIOD OF RECORD.--September 1980 to August 1995 and October 2002 to current year. Records for September 1980 to February 1982 are unpublished and are available in files of the U.S. Geological Survey.

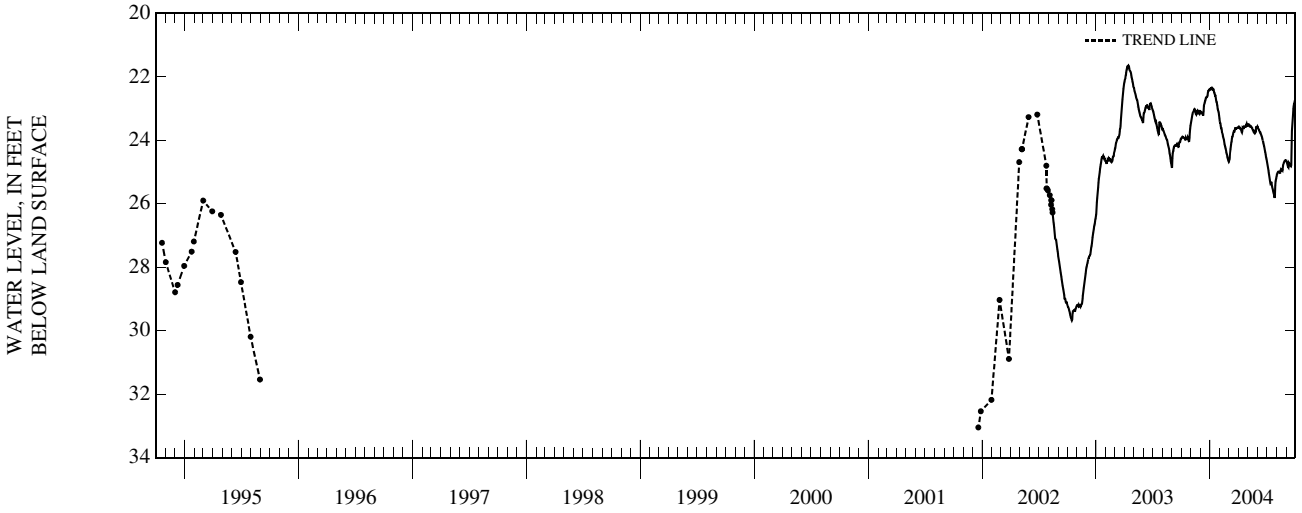
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.17 ft below land-surface datum, April 16, 1984; lowest measured, 33.05 ft below land-surface datum, Dec. 19, 2001.

EXTREMES FOR CURRENT YEAR.--Highest water level, 22.33 ft below land-surface datum, Jan. 6; lowest, 25.83 ft below land-surface datum July 26.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.93	23.43	23.08	22.41	23.40	24.68	23.57	23.55	23.57	24.67	25.14	24.65
2	23.92	23.37	23.12	22.38	23.45	24.66	23.59	23.54	23.59	24.72	25.10	24.68
3	23.92	23.31	23.15	22.37	23.47	24.60	23.59	23.51	23.62	24.78	25.06	24.70
4	23.89	23.25	23.14	22.38	23.55	24.53	23.58	23.51	23.65	24.84	25.03	24.72
5	23.89	23.19	23.13	22.35	23.61	24.41	23.62	23.51	23.66	24.90	25.01	24.76
6	23.90	23.14	23.13	22.34	23.62	24.28	23.63	23.52	23.68	24.97	24.99	24.80
7	23.90	23.11	23.14	22.34	23.66	24.20	23.63	23.54	23.70	25.02	24.99	24.84
8	23.91	23.10	23.18	22.35	23.74	24.12	23.64	23.56	23.73	25.08	24.99	24.85
9	23.92	23.09	23.20	22.38	23.77	24.08	23.67	23.56	23.75	25.15	25.00	24.70
10	23.93	23.06	23.20	22.40	23.80	24.04	23.70	23.57	23.75	25.22	25.00	24.71
11	23.94	23.03	23.08	22.40	23.87	23.95	23.73	23.56	23.78	25.29	25.03	24.73
12	23.94	23.01	22.92	22.40	23.91	23.89	23.75	23.57	23.81	25.34	25.05	24.74
13	23.98	23.02	22.89	22.45	23.94	23.88	23.70	23.59	23.84	25.38	24.97	24.76
14	23.98	23.08	22.83	22.49	23.99	23.84	23.60	23.61	23.86	25.38	24.94	24.79
15	23.92	23.12	22.79	22.50	24.06	23.79	23.60	23.62	23.90	25.31	24.95	24.81
16	23.94	23.14	22.77	22.55	24.12	23.76	23.61	23.66	23.94	25.37	24.95	24.82
17	23.95	23.17	22.71	22.59	24.16	23.72	23.60	23.68	23.97	25.43	24.93	24.78
18	23.95	23.19	22.67	22.59	24.19	23.71	23.60	23.68	24.01	25.48	24.92	24.05
19	23.95	23.17	22.65	22.66	24.23	23.72	23.58	23.71	24.05	25.51	24.93	23.70
20	23.94	23.08	22.65	22.73	24.27	23.68	23.59	23.74	24.10	25.56	24.95	23.55
21	23.89	23.07	22.64	22.78	24.31	23.63	23.57	23.76	24.14	25.61	24.87	23.40
22	23.92	23.09	22.63	22.80	24.38	23.63	23.56	23.77	24.18	25.66	24.79	23.24
23	23.95	23.11	22.62	22.86	24.42	23.63	23.56	23.78	24.23	25.69	24.76	23.12
24	24.00	23.10	22.58	22.92	24.45	23.64	23.57	23.77	24.29	25.73	24.72	23.01
25	24.03	23.13	22.49	23.00	24.50	23.63	23.57	23.70	24.34	25.77	24.70	22.93
26	24.02	23.16	22.45	23.05	24.55	23.62	23.51	23.71	24.39	25.82	24.67	22.86
27	23.92	23.17	22.44	23.07	24.59	23.61	23.49	23.60	24.45	25.70	24.65	22.83
28	23.74	23.12	22.43	23.12	24.63	23.61	23.53	23.57	24.52	25.42	24.64	22.78
29	23.64	23.07	22.40	23.19	24.66	23.61	23.55	23.59	24.56	25.30	24.63	22.74
30	23.54	23.08	22.39	23.23	---	23.59	23.55	23.59	24.61	25.24	24.63	22.75
31	23.49	---	22.40	23.30	---	23.58	---	23.58	---	25.20	24.64	---
MEAN	23.89	23.14	22.80	22.66	24.04	23.91	23.60	23.62	23.99	25.31	24.89	24.06
MAX	24.03	23.43	23.20	23.30	24.66	24.68	23.75	23.78	24.61	25.82	25.14	24.85
MIN	23.49	23.01	22.39	22.34	23.40	23.58	23.49	23.51	23.57	24.67	24.63	22.74

BROOME COUNTY—Continued



BROOME COUNTY—Continued

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 inch, depth 252 ft, cased to 52 ft, open hole.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,105.75 ft above NGVD of 1929. Measuring point: Top of coupling, 2.00 ft above land-surface datum.

REMARKS.--Well drilled by New York State Department of Transportation, originally intended as water-supply well for proposed rest area on Interstate Highway I-81. Satellite water-level telemeter at station.

PERIOD OF RECORD.--November 1985 to August 1995 and October 2002 to current year.

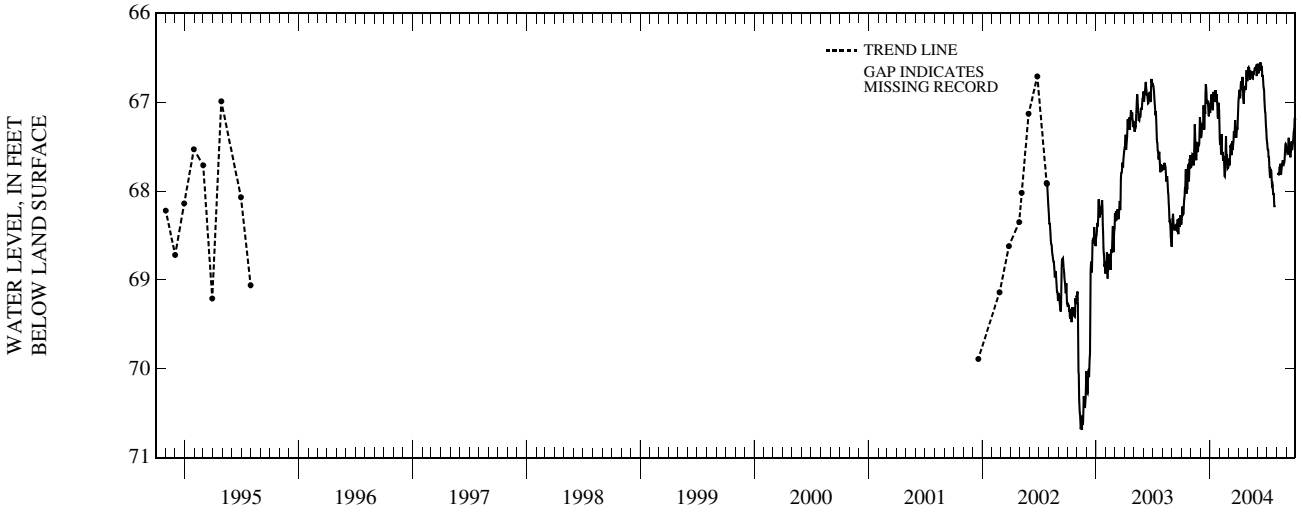
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 66.52 ft below land-surface datum, June 10, 2004; lowest measured, 75.83 ft below land-surface datum, Nov. 1, 1985.

EXTREMES FOR CURRENT YEAR.--Highest water level, 66.52 ft below land-surface datum, June 10; lowest, 68.41 ft below land- surface datum, Oct. 1.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.36	67.73	67.23	67.12	67.41	67.70	66.98	66.70	66.57	67.44	---	67.51
2	68.31	67.72	67.32	67.06	67.48	67.63	66.95	66.61	66.57	67.47	---	67.53
3	68.29	67.67	67.40	66.98	67.38	67.71	66.90	66.61	66.62	67.53	---	67.52
4	68.18	67.63	67.39	66.99	67.45	67.68	66.86	66.62	66.68	67.54	---	67.53
5	68.21	67.59	67.34	66.91	67.59	67.59	66.93	66.62	66.63	67.54	67.80	67.58
6	68.25	67.60	67.28	66.96	67.42	67.49	66.96	66.66	66.60	67.62	67.80	67.57
7	68.26	67.58	67.24	66.99	67.36	67.52	66.92	66.68	66.61	67.61	67.80	67.55
8	68.25	67.66	67.27	67.02	67.58	67.47	66.81	66.75	66.62	67.64	67.81	67.53
9	68.14	67.71	67.28	67.08	67.59	67.53	66.76	66.70	66.58	67.73	67.81	67.40
10	68.09	67.64	67.22	67.09	67.56	67.59	66.80	66.66	66.55	67.79	67.75	67.53
11	68.06	67.50	67.04	66.99	67.63	67.52	66.84	66.65	66.57	67.84	67.73	67.59
12	67.98	67.38	67.18	66.88	67.66	67.44	66.87	66.68	66.62	67.84	67.75	67.58
13	67.98	67.25	67.31	66.91	67.62	67.54	66.73	66.68	66.64	67.81	67.69	67.60
14	67.89	67.35	67.21	66.95	67.60	67.51	66.72	66.67	66.59	67.76	67.77	67.62
15	67.76	67.51	67.09	66.90	67.72	67.47	66.86	66.67	66.64	67.77	67.82	67.60
16	67.94	67.60	67.13	66.94	67.83	67.44	66.96	66.73	66.71	67.84	67.80	67.54
17	68.03	67.65	66.90	66.99	67.84	67.33	66.97	66.73	66.70	67.92	67.76	67.49
18	68.02	67.65	66.80	66.86	67.75	67.35	67.02	66.66	66.70	67.94	67.72	67.44
19	67.97	67.46	66.83	66.93	67.65	67.40	66.89	66.68	66.75	67.93	67.71	67.53
20	67.98	67.45	66.90	66.97	67.50	67.31	66.87	66.69	66.82	67.99	67.72	67.54
21	67.76	67.50	66.97	67.00	67.38	67.20	66.84	66.65	66.84	68.04	67.65	67.50
22	67.71	67.55	66.98	66.91	67.56	67.30	66.83	66.63	66.86	68.03	67.69	67.46
23	67.71	67.55	67.02	66.98	67.63	67.33	66.82	66.62	66.98	68.04	67.66	67.43
24	67.82	67.47	66.98	67.03	67.58	67.39	66.86	66.61	67.04	68.14	67.68	67.41
25	67.89	67.48	67.01	67.16	67.66	67.39	66.85	66.64	67.10	68.18	67.69	67.34
26	67.81	67.48	67.05	67.19	67.75	67.34	66.70	66.61	67.12	68.16	67.68	67.32
27	67.66	67.46	67.14	67.08	67.74	67.29	66.64	66.60	67.21	---	67.62	67.30
28	67.66	67.28	67.16	67.01	67.74	67.31	66.74	66.61	67.28	---	67.55	67.18
29	67.60	67.17	67.08	67.08	67.71	67.28	66.76	66.70	67.32	---	67.48	67.18
30	67.73	67.22	67.01	67.08	---	67.20	66.75	66.70	67.40	---	67.47	67.20
31	67.73	---	67.08	67.22	---	67.10	---	66.63	---	---	67.47	---
MEAN	67.97	67.52	67.12	67.01	67.60	67.43	66.85	66.66	66.80	---	---	67.47
MAX	68.36	67.73	67.40	67.22	67.84	67.71	67.02	66.75	67.40	---	---	67.62
MIN	67.60	67.17	66.80	66.86	67.36	67.10	66.64	66.60	66.55	---	---	67.18

BROOME COUNTY—Continued



CATTARAUGUS COUNTY

420530078445201. Local number, Ct 121.

LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House. Owner: New York State Department of Environmental Conservation.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 inch, depth 53 ft, cased to 53 ft, open end.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,467.08 ft above NGVD of 1929. Measuring point: Top of casing, 0.28 ft above land- surface datum, reset to 2.29 ft above land-surface datum, Apr. 3, 1997.

REMARKS.--Well is in a New York State owned and operated campground area. Extreme low water levels occurred from 1969 to 1979 due to the effect of pumping at the campground area. A central water system for the campground, utilizing a well about 1.5 mi from the observation well was put in operation in 1980. Satellite water-level telemeter at station.

PERIOD OF RECORD.--September 1950 to current year. Prior to Mar. 5, 1990, weekly float tape readings by observer.

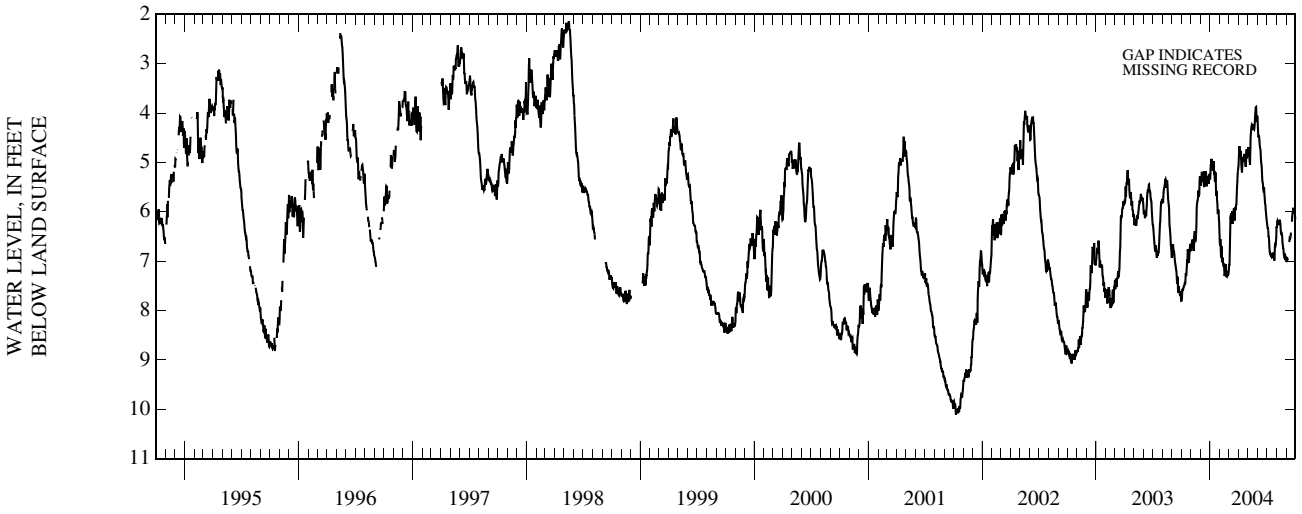
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft, below land-surface datum, June 26, 1989; lowest measured, 34.87 ft below land-surface datum, Nov. 21, 1972.

EXTREMES FOR CURRENT YEAR.--Highest water level, 3.85 ft below land-surface datum, May 27, 28; lowest, 7.82 ft below land-surface datum, Oct. 1.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.80	6.75	5.29	5.34	6.61	7.18	5.08	4.77	4.10	6.22	6.30	6.98
2	7.76	6.71	5.41	5.18	6.68	7.08	4.96	4.69	4.25	6.27	6.32	6.96
3	7.72	6.64	5.47	5.04	6.55	7.07	4.78	4.86	4.42	6.33	6.22	6.92
4	7.56	6.60	5.37	5.08	6.75	6.81	4.67	4.88	4.49	6.33	6.18	6.93
5	7.59	6.56	5.22	4.93	6.93	6.42	4.85	4.85	4.46	6.38	6.20	6.97
6	7.59	6.62	5.23	5.04	6.71	6.13	4.87	4.95	4.47	6.51	6.21	6.96
7	7.55	6.61	5.27	5.05	6.71	6.14	4.77	5.00	4.56	6.49	6.21	6.95
8	7.52	6.72	5.36	5.05	7.02	6.02	4.78	5.05	4.66	6.56	6.24	---
9	7.51	6.79	5.40	5.10	6.99	6.13	4.92	4.72	4.70	6.70	6.27	---
10	7.49	6.68	5.33	5.17	6.93	6.23	5.05	4.47	4.72	6.80	6.18	6.61
11	7.48	6.51	5.18	5.07	7.01	6.07	5.14	4.40	4.82	6.85	6.16	6.60
12	7.42	6.45	5.38	4.97	7.07	5.99	5.20	4.31	4.98	6.86	6.21	6.53
13	7.47	6.39	5.50	5.11	7.06	6.24	5.03	4.26	5.03	6.87	6.24	6.54
14	7.34	6.58	5.30	5.19	7.04	6.17	4.92	4.23	5.08	6.86	6.35	6.53
15	7.24	6.59	5.27	5.18	7.17	6.12	4.97	4.25	5.22	6.87	6.42	6.50
16	7.30	6.55	5.33	5.36	7.30	6.05	4.96	4.34	5.37	6.89	6.45	6.42
17	7.23	6.46	5.21	5.39	7.27	5.93	4.89	4.32	5.38	6.93	6.46	---
18	7.10	6.28	5.18	5.20	7.23	6.03	4.92	4.23	5.42	6.92	6.45	---
19	7.00	5.90	5.25	5.37	7.14	6.18	4.83	4.28	5.48	6.89	6.49	6.20
20	7.00	5.84	5.39	5.59	7.11	6.07	4.92	4.32	5.55	6.90	6.63	6.09
21	6.76	5.79	5.48	5.67	7.06	5.91	4.82	4.33	5.54	6.89	6.67	6.02
22	6.82	5.76	5.43	5.58	7.30	5.97	4.96	4.29	5.50	6.82	6.73	6.01
23	6.87	5.72	5.39	5.76	7.31	5.91	5.02	4.20	5.65	6.86	6.74	6.00
24	7.00	5.57	5.31	5.82	7.21	5.89	5.09	4.05	5.72	6.99	6.85	5.94
25	7.03	5.70	5.30	6.03	7.25	5.85	5.01	3.97	5.82	6.97	6.89	5.92
26	6.94	5.66	5.37	6.03	7.29	5.69	4.83	3.88	5.84	6.88	6.93	5.98
27	6.81	5.65	5.43	5.95	7.29	5.49	4.73	3.88	5.95	6.68	6.94	5.97
28	6.74	5.37	5.40	6.01	7.28	5.40	4.86	3.92	6.02	6.66	6.92	5.94
29	6.65	5.28	5.28	6.17	7.22	5.28	4.87	4.15	6.09	6.67	6.90	6.05
30	6.80	5.33	5.23	6.20	---	5.19	4.85	4.18	6.17	6.61	6.93	6.15
31	6.77	---	5.33	6.36	---	5.13	---	4.05	---	6.52	6.97	---
MEAN	7.22	6.20	5.33	5.45	7.05	6.06	4.92	4.39	5.18	6.71	6.51	---
MAX	7.80	6.79	5.50	6.36	7.31	7.18	5.20	5.05	6.17	6.99	6.97	---
MIN	6.65	5.28	5.18	4.93	6.55	5.13	4.67	3.88	4.10	6.22	6.16	---

CATTARAUGUS COUNTY—Continued



CAYUGA COUNTY

424158076251901. Local number, Cy 7.

LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia. Owner: Private.

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 from 26 to 28 ft with 1.25-inch well point.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 760.70 ft above NGVD of 1929. Measuring point: File marks in bottom of shelter, 3.12 ft above land-surface datum.

PERIOD OF RECORD.--December 1965 to August 1995 and July 2003 to current year. Records for December 1965 to September 1976 are unpublished and available in files of the U.S. Geological Survey. Prior to February 22, 1989, weekly measurements with chalked tape by observer.

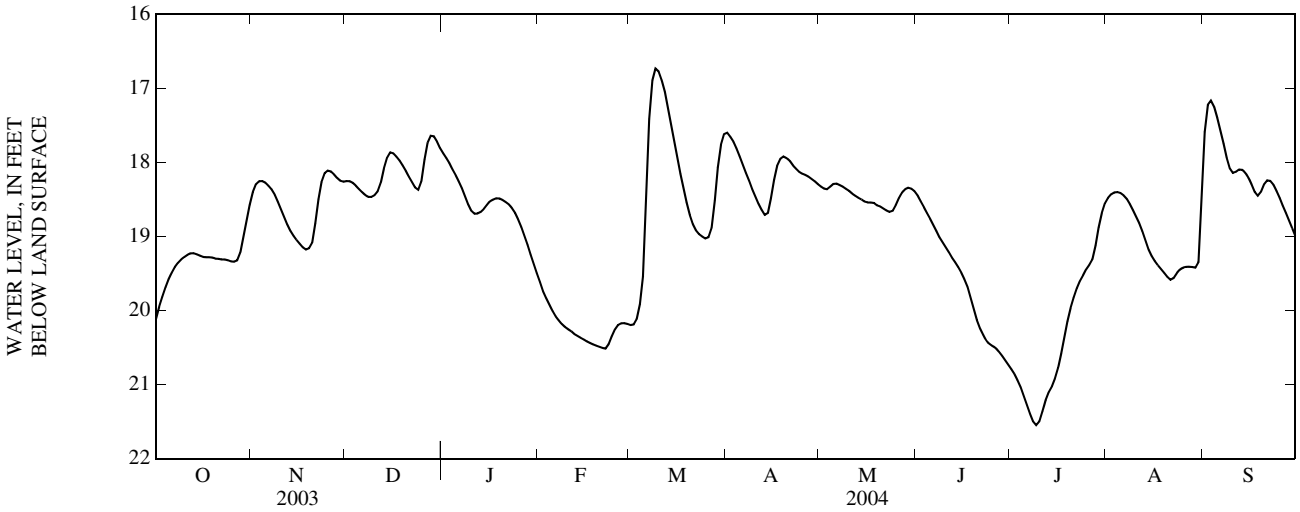
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft, below land-surface datum, June 26, 1972; lowest measured, 25.00 ft below land-surface datum, Sept. 19, 1983.

EXTREMES FOR CURRENT YEAR.--Highest water level, 16.72 ft below land-surface datum, Mar. 9; lowest, 21.55 ft below land-surface datum, July 9.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.11	18.40	18.25	17.88	19.62	20.20	17.60	18.32	18.45	20.79	18.48	17.59
2	19.95	18.30	18.25	17.94	19.74	20.19	17.65	18.35	18.52	20.86	18.43	17.22
3	19.82	18.25	18.28	18.01	19.83	20.11	17.72	18.36	18.60	20.94	18.40	17.16
4	19.69	18.25	18.31	18.10	19.92	19.91	17.81	18.33	18.68	21.03	18.40	17.25
5	19.58	18.27	18.36	18.17	20.01	19.54	17.92	18.29	18.76	21.15	18.41	17.39
6	19.49	18.32	18.40	18.26	20.08	18.41	18.03	18.29	18.84	21.27	18.44	17.57
7	19.41	18.36	18.44	18.35	20.13	17.41	18.14	18.30	18.93	21.39	18.49	17.75
8	19.36	18.43	18.46	18.46	20.18	16.89	18.25	18.33	19.01	21.50	18.56	17.93
9	19.31	18.53	18.46	18.57	20.22	16.73	18.36	18.36	19.08	21.55	18.64	18.08
10	19.28	18.63	18.44	18.65	20.25	16.77	18.46	18.38	19.14	21.50	18.73	18.14
11	19.25	18.73	18.39	18.69	20.28	16.89	18.56	18.42	19.21	21.36	18.82	18.13
12	19.23	18.84	18.27	18.69	20.32	17.04	18.64	18.45	19.28	21.21	18.93	18.09
13	19.23	18.92	18.08	18.67	20.34	17.25	18.71	18.48	19.35	21.10	19.05	18.10
14	19.24	18.99	17.93	18.63	20.37	17.48	18.68	18.50	19.41	21.03	19.17	18.14
15	19.26	19.05	17.86	18.57	20.39	17.71	18.48	18.53	19.49	20.92	19.26	18.21
16	19.28	19.10	17.88	18.53	20.42	17.94	18.23	18.54	19.58	20.77	19.33	18.29
17	19.28	19.15	17.92	18.50	20.44	18.15	18.04	18.54	19.68	20.58	19.39	18.40
18	19.28	19.18	17.97	18.49	20.46	18.35	17.95	18.55	19.82	20.36	19.44	18.45
19	19.28	19.16	18.04	18.49	20.48	18.54	17.92	18.58	19.98	20.15	19.49	18.40
20	19.30	19.08	18.11	18.51	20.49	18.71	17.94	18.60	20.13	19.96	19.54	18.30
21	19.30	18.82	18.19	18.53	20.50	18.83	17.98	18.62	20.24	19.83	19.58	18.24
22	19.31	18.50	18.27	18.57	20.51	18.92	18.04	18.65	20.33	19.70	19.56	18.25
23	19.31	18.27	18.34	18.62	20.45	18.97	18.08	18.67	20.41	19.60	19.50	18.30
24	19.32	18.15	18.37	18.68	20.35	19.00	18.13	18.65	20.45	19.52	19.45	18.38
25	19.34	18.11	18.26	18.77	20.25	19.03	18.15	18.58	20.48	19.44	19.42	18.48
26	19.34	18.12	17.96	18.87	20.20	19.01	18.17	18.48	20.51	19.38	19.41	18.58
27	19.32	18.16	17.74	18.99	20.17	18.89	18.19	18.41	20.55	19.31	19.41	18.68
28	19.21	18.21	17.64	19.11	20.17	18.52	18.22	18.36	20.61	19.12	19.41	18.78
29	19.01	18.25	17.65	19.24	20.18	18.07	18.25	18.34	20.67	18.88	19.42	18.89
30	18.79	18.26	17.72	19.37	---	17.76	18.29	18.35	20.73	18.68	19.35	18.99
31	18.57	---	17.81	19.50	---	17.62	---	18.39	---	18.55	18.49	---
MEAN	19.34	18.56	18.13	18.59	20.23	18.35	18.15	18.45	19.63	20.37	19.05	18.14
MAX	20.11	19.18	18.46	19.50	20.51	20.20	18.71	18.67	20.73	21.55	19.58	18.99
MIN	18.57	18.11	17.64	17.88	19.62	16.73	17.60	18.29	18.45	18.55	18.40	17.16

CAYUGA COUNTY—Continued



CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.

LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer. Owner: City of Jamestown.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 12 inch to 10 inch, depth 232 ft, filled in from original depth of 240 ft, diameter 12 inch from 0 ft to 130 ft, diameter 10 inch from 130 ft to 240 ft, slotted 130 ft to 144 ft, open end.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,252.52 ft above NGVD of 1929. Measuring point: Top of well casing, 5.46 ft above land-surface datum.

REMARKS.--Water level affected by pumping from municipal well field. Satellite water-level telemeter at station.

PERIOD OF RECORD.--November 1939 to September 1943, August 1946 to August 1995, October 1996 to current. Records for November 1939 to September 1943, August 1946 to September 1976 are unpublished and available in files of the Geological Survey. Weekly measurements by City of Jamestown personnel until Oct. 13, 1999. Prior to Dec. 14, 1978, Type F graphic recorder at same site and datum. Dec. 14, 1978 to Sept. 16, 1982, digital recorder every fifth day high water-level published. Sept. 1982 to Sept. 1987, twice-daily readings by City of Jamestown personnel, every fifth day high water-level published.

REVISED RECORD.--WDR NY-87-3: 1983-86. WDR NY-91-3: 1988-90.

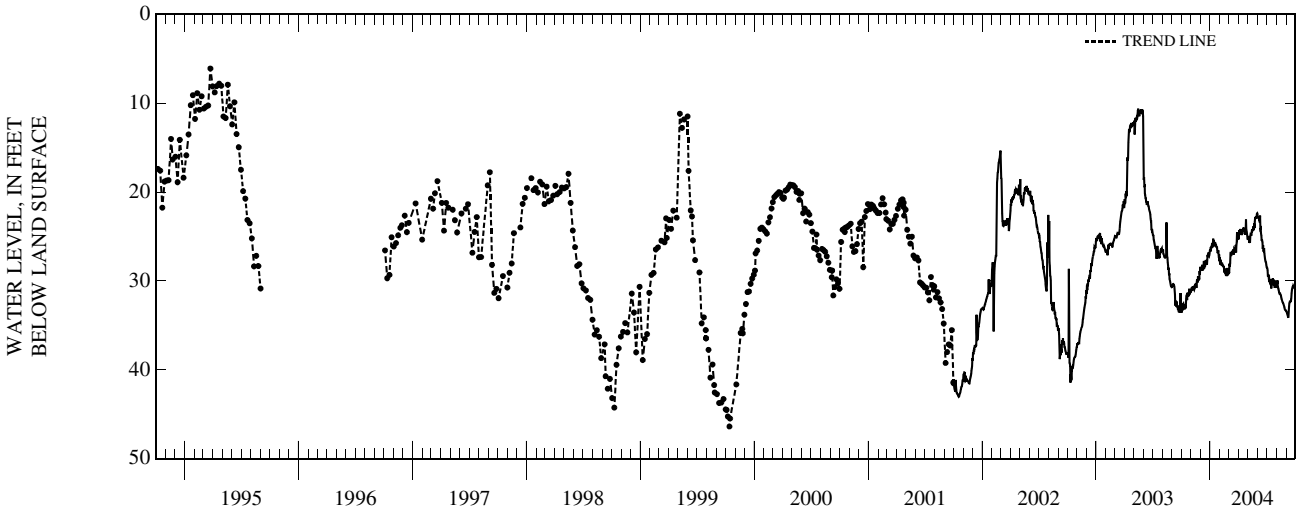
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.2 ft above land-surface datum, Mar. 14, 1942; lowest measured 66.6 ft below land-surface datum, Nov. 3, 1971

EXTREMES FOR CURRENT YEAR.--Highest water level, 14.04 ft below land-surface datum, June 9; lowest, 34.59 ft below land-surface datum, Oct. 19.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.58	31.15	28.60	26.42	27.34	28.94	24.94	25.27	22.53	28.53	30.49	33.39
2	33.19	30.92	28.55	26.69	28.14	29.13	25.29	24.95	22.85	28.55	30.10	33.47
3	32.96	30.75	28.59	26.18	27.60	28.06	24.59	25.08	22.85	28.81	30.32	33.56
4	33.35	31.11	28.55	26.42	27.87	28.35	24.28	25.32	22.86	29.49	29.93	33.66
5	32.83	30.72	28.84	26.15	28.14	27.99	24.59	25.68	22.77	29.34	30.69	33.78
6	32.63	30.71	28.53	26.13	28.15	26.99	24.80	25.58	23.18	29.46	30.78	33.90
7	32.57	30.76	28.18	25.73	28.07	26.74	24.14	25.68	22.96	29.62	30.91	34.05
8	32.85	30.93	28.82	26.23	27.95	27.21	24.74	25.72	23.43	29.57	31.10	34.15
9	32.99	30.82	28.24	25.95	28.13	27.16	24.20	24.94	22.65	30.14	31.30	33.48
10	32.60	30.93	28.73	25.97	28.26	26.97	24.50	24.72	24.16	29.78	31.42	32.90
11	33.21	30.97	28.19	25.25	28.27	26.73	24.85	24.74	24.10	29.97	31.40	32.51
12	32.65	30.79	27.75	25.89	28.35	26.70	24.56	24.92	24.68	30.31	31.41	32.38
13	32.77	30.61	28.60	25.42	28.36	26.98	24.38	24.62	24.90	30.39	31.48	32.33
14	33.09	30.67	28.19	25.72	28.40	26.58	24.38	24.31	25.48	30.28	31.56	32.27
15	32.83	30.63	28.23	25.86	29.04	26.52	24.15	24.30	25.36	30.83	31.64	32.23
16	32.06	30.45	28.25	25.76	28.61	26.52	24.44	24.34	25.55	30.26	31.84	32.25
17	31.78	30.27	27.94	25.62	28.77	27.03	23.98	24.25	25.65	29.79	31.99	31.96
18	31.54	30.79	27.66	26.09	29.04	26.42	24.31	24.19	26.40	30.19	32.09	31.37
19	32.16	30.18	28.18	25.91	29.03	26.50	24.36	23.83	25.98	30.03	32.21	31.06
20	31.32	29.83	27.64	25.96	28.99	26.57	24.37	24.28	26.65	29.70	32.34	30.85
21	31.61	29.93	27.72	26.20	29.44	26.62	24.74	23.55	26.68	30.44	32.42	30.69
22	31.36	30.18	28.19	26.22	28.70	26.51	24.20	24.05	26.30	29.83	32.47	30.63
23	31.52	29.48	27.69	26.23	29.45	25.95	24.78	23.34	26.91	30.52	32.58	30.65
24	31.70	29.99	27.06	26.69	28.54	26.79	24.22	22.88	27.21	30.34	32.69	30.55
25	31.45	29.59	27.32	26.87	29.39	25.96	23.11	22.85	27.54	30.32	32.81	30.63
26	30.87	29.58	27.17	26.76	28.98	25.71	24.28	22.84	27.72	30.78	32.97	30.69
27	31.50	29.85	26.79	26.55	28.89	24.52	24.36	23.01	27.88	30.67	33.15	30.73
28	31.44	28.87	27.03	27.12	29.23	25.06	24.64	22.93	27.92	29.97	33.22	30.78
29	31.19	29.30	27.12	27.42	29.19	25.31	24.95	22.75	28.21	30.66	33.29	30.87
30	31.11	28.41	26.94	27.01	---	25.24	25.27	22.41	28.45	30.22	33.31	31.01
31	31.11	---	26.63	27.79	---	25.36	---	22.39	---	30.79	33.33	---
MEAN	32.19	30.31	27.93	26.26	28.56	26.68	24.48	24.18	25.33	29.99	31.85	32.09
MAX	33.58	31.15	28.84	27.79	29.45	29.13	25.29	25.72	28.45	30.83	33.33	34.15
MIN	30.87	28.41	26.63	25.25	27.34	24.52	23.11	22.39	22.53	28.53	29.93	30.55

CHAUTAUQUA COUNTY—Continued



CHEMUNG COUNTY

420828076484601. Local number, Cm 622.

LOCATION.--Lat 42°08'28", long 76°48'46", Hydrologic Unit 02050105, on NYS Route 14, 1.0 mi south of intersection of Routes 17 and 14, behind the "Church of Love", near Horseheads. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 44 ft, cased to 29 ft, screened from 29 to 39 ft.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 885.15 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of pipe, 32.77 ft above land-surface datum. Prior to October 2002, water levels were measured at Cm 46, located about 30 ft southeast, at datum 0.54 ft higher.

REMARKS.--Water level affected by stage of Newtown Creek. This well is a replacement for 420829076484801 (local number Cm 46), which has a period of record from October 1955 to September 2002. Satellite water-level telemeter at station.

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

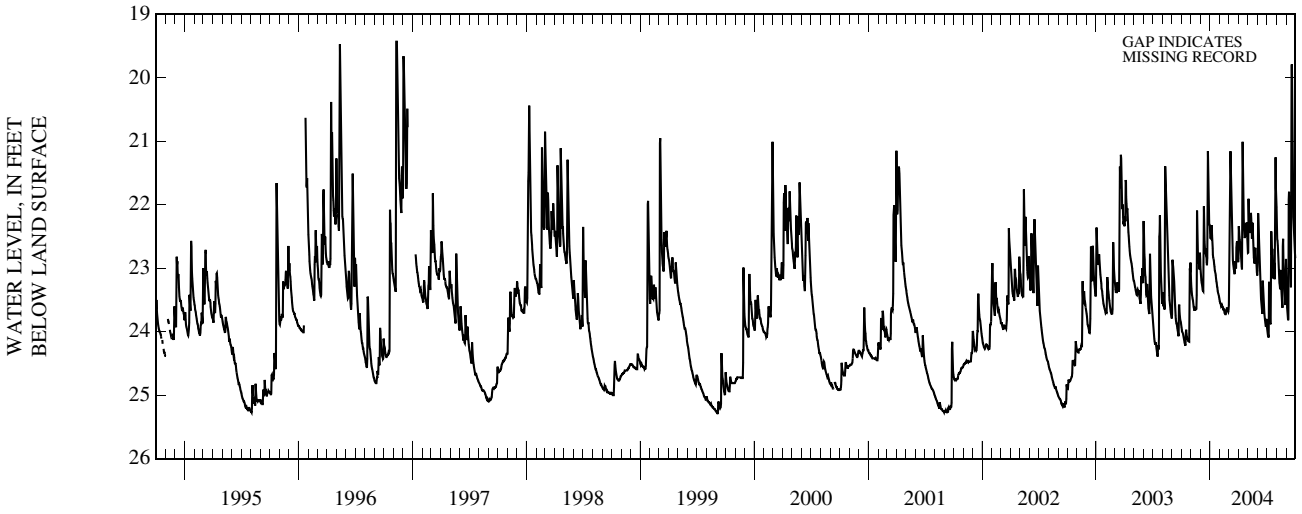
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.58 ft below land-surface datum, April 25, 1961; lowest measured, 25.95 ft below land-surface datum, July 18, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 19.37 ft below land-surface datum, Sept. 18; lowest, 24.23 ft below land- surface datum, Oct. 14.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.93	23.23	22.98	22.45	23.52	23.58	22.84	22.76	23.04	23.93	22.04	23.19
2	23.97	23.32	23.06	22.53	23.54	23.31	22.34	22.75	22.85	23.97	22.32	23.39
3	23.99	23.37	23.14	22.53	23.55	22.32	22.41	21.91	22.14	24.01	22.54	23.52
4	24.00	23.43	23.19	22.46	23.57	21.91	22.51	22.17	22.49	24.06	22.57	23.62
5	24.01	23.46	23.23	22.36	23.59	21.44	22.55	22.36	22.74	24.06	22.64	23.70
6	24.03	23.49	23.26	22.33	23.58	21.16	22.59	22.45	22.90	24.09	22.79	23.76
7	24.06	23.52	23.29	22.49	23.57	21.56	22.65	22.32	23.03	24.06	22.93	23.82
8	24.09	23.57	23.34	22.59	23.60	21.91	22.73	22.40	23.14	23.22	23.05	23.80
9	24.12	23.61	23.36	22.68	23.61	22.19	22.82	22.33	23.24	23.46	23.15	21.92
10	24.14	23.64	23.36	22.79	23.61	22.41	22.90	22.31	23.32	23.66	23.23	21.79
11	24.17	23.65	22.53	22.83	23.62	22.56	22.97	22.13	23.40	23.79	23.26	22.40
12	24.19	23.67	22.03	22.85	23.64	22.66	23.02	22.22	23.48	23.87	23.33	22.72
13	24.21	23.62	22.39	22.88	23.64	22.78	22.58	22.41	23.55	23.89	23.04	22.93
14	24.22	23.62	22.58	22.94	23.65	22.87	21.01	22.53	23.61	23.22	23.03	23.08
15	24.02	23.64	22.68	22.98	23.67	22.93	21.49	22.44	23.66	22.42	23.20	23.20
16	23.97	23.65	22.76	23.03	23.71	22.98	21.88	22.28	23.72	22.63	23.33	23.30
17	24.03	23.65	22.77	23.06	23.71	23.02	22.09	22.48	23.66	22.79	23.42	22.90
18	24.07	23.64	22.69	23.07	23.72	23.05	22.25	22.62	23.20	22.69	23.50	19.81
19	24.10	23.42	22.76	23.11	23.72	23.08	22.35	22.73	23.33	22.80	23.57	19.79
20	24.11	22.09	22.84	23.17	23.72	23.09	22.43	22.83	23.47	22.98	23.62	20.77
21	24.12	22.43	22.90	23.21	23.69	22.90	22.52	22.88	23.57	23.14	22.65	21.38
22	24.13	22.69	22.95	23.23	23.66	22.90	22.51	22.93	23.65	23.16	22.54	21.74
23	24.15	22.84	22.84	23.28	23.65	22.99	22.41	22.83	23.72	22.92	22.88	22.00
24	24.15	22.92	21.98	23.31	23.62	23.01	22.37	22.69	23.77	22.91	23.03	22.19
25	24.15	22.82	21.16	23.35	23.65	22.67	22.51	22.68	23.82	23.09	23.19	22.35
26	24.16	22.90	21.66	23.38	23.66	22.61	22.28	22.85	23.86	23.17	23.32	22.48
27	23.69	22.99	21.97	23.40	23.68	22.58	22.29	22.90	23.90	22.21	23.42	22.60
28	23.00	23.02	22.17	23.42	23.68	22.60	22.47	22.85	23.92	21.65	23.51	22.68
29	23.06	22.75	22.30	23.44	23.65	22.72	22.59	22.95	23.80	21.25	23.58	22.76
30	22.91	22.87	22.31	23.46	---	22.82	22.68	23.06	23.87	21.74	23.40	22.84
31	23.11	---	22.32	23.48	---	22.90	---	23.11	---	21.90	22.86	---
MEAN	23.94	23.25	22.67	22.97	23.64	22.63	22.43	22.59	23.39	23.12	23.06	22.55
MAX	24.22	23.67	23.36	23.48	23.72	23.58	23.02	23.11	23.92	24.09	23.62	23.82
MIN	22.91	22.09	21.16	22.33	23.52	21.16	21.01	21.91	22.14	21.25	22.04	19.79

CHEMUNG COUNTY—Continued



CHENANGO COUNTY

421556075281602. Local number, Cn 12.

LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, 400 ft south of intersection of County Highways 39 and 12, 0.5 mi east of Susquehanna River, and 2.0 mi south of Bainbridge. Owner: Private.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 13 ft, cased to 13 ft, open end.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 979.28 ft above NGVD of 1929. Measuring point: File mark at top of shelter base, 1.37 ft above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft north, which had 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.

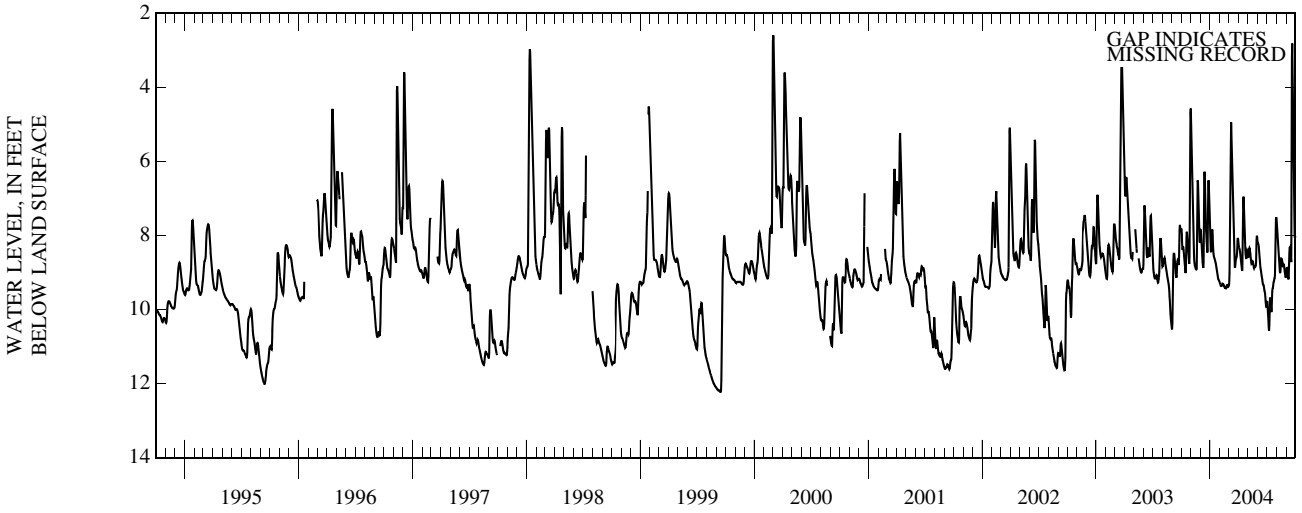
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.45 ft below land-surface datum, Apr. 3-4, 1993; lowest, 12.22 ft below land-surface datum, Sept. 13, 14, 15, 16, 1999.

EXTREMES FOR CURRENT YEAR.--Highest water level, 2.78 ft below land-surface datum, Sept. 20; lowest, 10.58 ft below land-surface datum, July 8.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.84	4.90	7.85	8.08	9.27	9.35	8.20	8.49	8.17	9.79	7.58	8.97
2	7.96	5.47	7.85	8.27	9.30	9.30	8.29	8.57	8.22	9.77	7.69	8.89
3	8.15	6.13	7.97	8.42	9.33	9.03	8.33	8.59	8.22	9.90	7.85	8.88
4	8.33	6.76	8.12	8.45	9.35	8.38	8.35	8.49	8.24	10.06	8.04	8.92
5	8.39	7.29	8.30	8.30	9.36	7.37	8.39	8.37	8.31	10.22	8.23	8.98
6	8.34	7.69	8.47	8.05	9.37	6.17	8.45	8.34	8.42	10.37	8.37	9.06
7	8.33	7.96	8.61	7.86	9.36	5.28	8.52	8.36	8.54	10.50	8.48	9.13
8	8.39	8.18	8.73	7.86	9.34	4.94	8.61	8.42	8.66	10.57	8.61	9.19
9	8.49	8.36	8.82	8.00	9.30	5.10	8.70	8.49	8.76	10.42	8.74	9.13
10	8.62	8.51	8.88	8.20	9.31	5.50	8.78	8.58	8.86	9.96	8.85	8.79
11	8.73	8.64	8.73	8.38	9.31	6.04	8.86	8.66	8.92	9.71	8.94	8.48
12	8.84	8.74	7.48	8.50	9.32	6.61	8.93	8.73	8.97	9.68	9.02	8.32
13	8.93	8.80	6.56	8.56	9.35	7.15	8.95	8.78	9.03	9.75	8.99	8.31
14	9.01	8.84	6.28	8.59	9.35	7.60	8.43	8.77	9.09	9.91	8.82	8.39
15	8.98	8.86	6.48	8.61	9.37	7.96	7.54	8.70	9.15	10.07	8.67	8.51
16	8.54	8.89	6.93	8.64	9.39	8.25	7.04	8.69	9.20	10.03	8.63	8.64
17	8.06	8.91	7.40	8.68	9.42	8.45	6.95	8.71	9.25	9.72	8.63	8.72
18	7.90	8.92	7.70	8.71	9.42	8.61	7.14	8.75	9.30	9.51	8.65	6.07
19	7.97	8.90	7.89	8.75	9.42	8.74	7.44	8.81	9.32	9.44	8.70	3.19
20	8.09	8.25	8.02	8.81	9.42	8.84	7.75	8.86	9.33	9.42	8.76	2.82
21	8.17	7.03	8.15	8.87	9.43	8.87	8.01	8.89	9.36	9.35	8.83	3.11
22	8.28	6.52	8.31	8.92	9.41	8.78	8.23	8.86	9.42	9.27	8.82	3.72
23	8.40	6.56	8.46	8.98	9.36	8.67	8.40	8.85	9.48	9.24	8.77	4.63
24	8.53	6.88	8.40	9.03	9.35	8.62	8.52	8.85	9.52	9.20	8.78	5.63
25	8.66	7.28	7.55	9.09	9.34	8.61	8.60	8.84	9.57	9.16	8.83	6.50
26	8.77	7.64	6.75	9.14	9.37	8.57	8.63	8.82	9.67	9.15	8.90	7.18
27	8.58	7.93	6.51	9.18	9.38	8.47	8.56	8.73	9.80	9.07	8.97	7.68
28	6.94	8.15	6.68	9.20	9.38	8.32	8.46	8.40	9.88	8.57	9.03	8.02
29	5.58	8.20	7.03	9.21	9.37	8.14	8.40	8.11	9.93	7.98	9.09	8.08
30	4.67	8.01	7.45	9.22	---	8.07	8.42	8.01	9.92	7.58	9.14	8.01
31	4.57	---	7.81	9.24	---	8.11	---	8.06	---	7.51	9.11	---
MEAN	8.03	7.77	7.75	8.64	9.36	7.80	8.26	8.60	9.08	9.51	8.66	7.46
MAX	9.01	8.92	8.88	9.24	9.43	9.35	8.95	8.89	9.93	10.57	9.14	9.19
MIN	4.57	4.90	6.28	7.86	9.27	4.94	6.95	8.01	8.17	7.51	7.58	2.82

CHENANGO COUNTY—Continued



CORTLAND COUNTY

424452076081902. Local number, C 998.

LOCATION.--Lat 42°44'52", long 76°08'19", Hydrologic Unit 02050102, at end of Currie Road, Cortland. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 25 ft, screened from 15 to 25 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,184.20 ft above NGVD of 1929. Measuring point: Top of PVC pipe, 3.15 ft above land-surface datum.

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

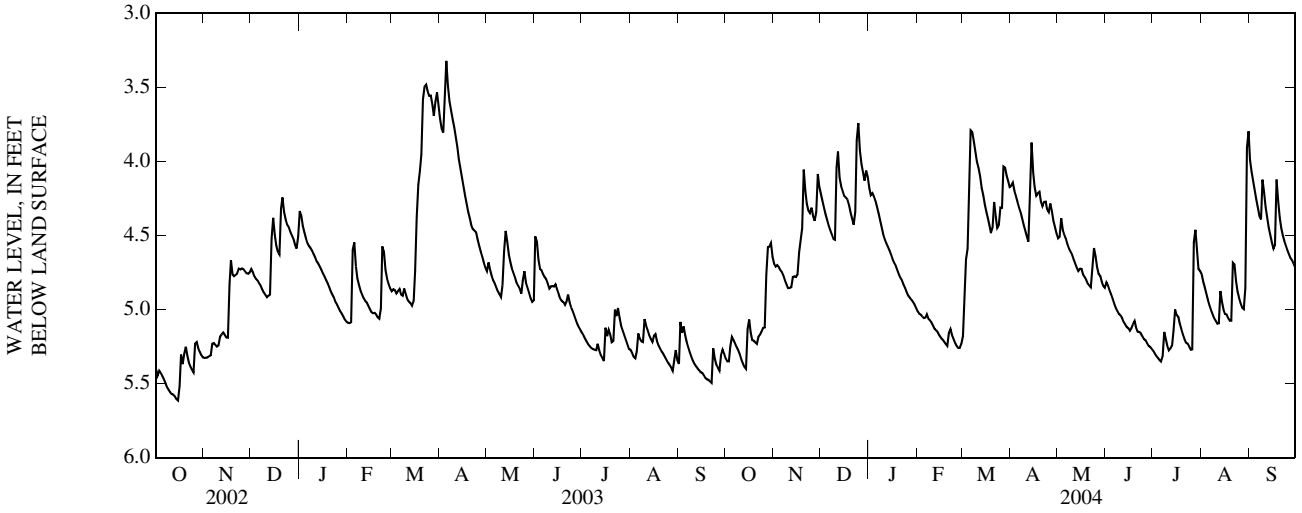
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.27 ft below land-surface datum, Apr. 5, 2003; lowest, 5.79 ft below land-surface datum, Sept. 13, 14, 15, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level, 3.51 ft below land-surface datum, Aug. 30; lowest, 5.40 ft below land- surface datum, Oct. 13, 14, 15.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.33	4.69	4.22	4.18	5.01	5.18	4.16	4.52	4.82	5.28	4.76	3.99
2	5.35	4.71	4.27	4.23	5.03	4.94	4.14	4.51	4.84	5.30	4.81	4.07
3	5.35	4.70	4.32	4.21	5.03	4.66	4.20	4.38	4.87	5.31	4.85	4.14
4	5.25	4.71	4.35	4.24	5.05	4.59	4.23	4.46	4.90	5.33	4.89	4.20
5	5.18	4.73	4.39	4.27	5.06	4.20	4.27	4.50	4.93	5.34	4.93	4.26
6	5.21	4.75	4.43	4.31	5.05	3.79	4.31	4.52	4.96	5.35	4.97	4.31
7	5.23	4.77	4.46	4.35	5.03	3.80	4.34	4.56	4.99	5.32	5.00	4.37
8	5.25	4.80	4.49	4.40	5.06	3.87	4.38	4.59	5.01	5.15	5.03	4.39
9	5.27	4.83	4.52	4.45	5.07	3.94	4.43	4.61	5.03	5.20	5.06	4.12
10	5.30	4.85	4.53	4.49	5.09	4.00	4.47	4.63	5.04	5.24	5.08	4.21
11	5.34	4.86	4.04	4.53	5.11	4.04	4.51	4.66	5.06	5.28	5.10	4.31
12	5.36	4.85	3.93	4.55	5.13	4.10	4.54	4.69	5.08	5.26	5.09	4.39
13	5.39	4.78	4.11	4.58	5.14	4.18	4.28	4.72	5.10	5.24	4.88	4.45
14	5.40	4.78	4.17	4.60	5.16	4.23	3.87	4.74	5.12	5.14	4.95	4.50
15	5.13	4.78	4.20	4.63	5.18	4.29	4.08	4.72	5.13	5.00	5.00	4.55
16	5.07	4.76	4.23	4.66	5.19	4.34	4.17	4.72	5.14	5.04	5.03	4.59
17	5.15	4.61	4.24	4.69	5.20	4.38	4.23	4.76	5.13	5.05	5.03	4.57
18	5.21	4.53	4.26	4.70	5.22	4.43	4.22	4.78	5.10	5.09	5.06	4.12
19	5.21	4.45	4.29	4.73	5.23	4.48	4.21	4.80	5.08	5.13	5.07	4.27
20	5.22	4.05	4.34	4.76	5.25	4.45	4.27	4.82	5.12	5.17	5.08	4.38
21	5.23	4.20	4.38	4.79	5.16	4.27	4.30	4.84	5.15	5.20	4.68	4.45
22	5.18	4.29	4.43	4.80	5.13	4.37	4.27	4.85	5.15	5.22	4.69	4.50
23	5.17	4.33	4.34	4.83	5.17	4.45	4.27	4.70	5.16	5.23	4.81	4.54
24	5.15	4.35	3.86	4.86	5.20	4.43	4.32	4.58	5.18	5.25	4.88	4.57
25	5.12	4.31	3.74	4.88	5.22	4.31	4.34	4.64	5.20	5.27	4.92	4.60
26	5.12	4.37	3.93	4.91	5.25	4.31	4.28	4.71	5.21	5.27	4.96	4.63
27	4.76	4.40	4.02	4.92	5.26	4.03	4.34	4.76	5.23	4.55	4.99	4.65
28	4.58	4.34	4.08	4.93	5.26	4.04	4.40	4.77	5.24	4.46	5.00	4.67
29	4.58	4.08	4.13	4.95	5.23	4.10	4.44	4.81	5.25	4.61	4.85	4.69
30	4.55	4.17	4.06	4.96	---	4.13	4.49	4.84	5.27	4.73	3.91	4.72
31	4.64	---	4.10	4.99	---	4.17	---	4.85	---	4.74	3.80	---
MEAN	5.14	4.56	4.22	4.63	5.14	4.27	4.29	4.68	5.08	5.12	4.88	4.41
MAX	5.40	4.86	4.53	4.99	5.26	5.18	4.54	4.85	5.27	5.35	5.10	4.72
MIN	4.55	4.05	3.74	4.18	5.01	3.79	3.87	4.38	4.82	4.46	3.80	3.99

CORTLAND COUNTY—Continued



ERIE COUNTY

425704078360601. Local number, E 1196.

LOCATION.--Lat 42°57'04", long 78°36'06", Hydrologic Unit 04120102, behind main service building at NYS Thruway rest stop near Clarence. Owner: NYSDEC.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 20 ft, cased to 8 ft, screened 8 to 20 ft.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 765 ft above NGVD of 1929, from topographic map. Measuring point: File marks in top of well casing, 0.40 ft above land-surface datum.

REMARKS.--Satellite water-level telemeter at station.

PERIOD OF RECORD.--March 2004 to September 2004

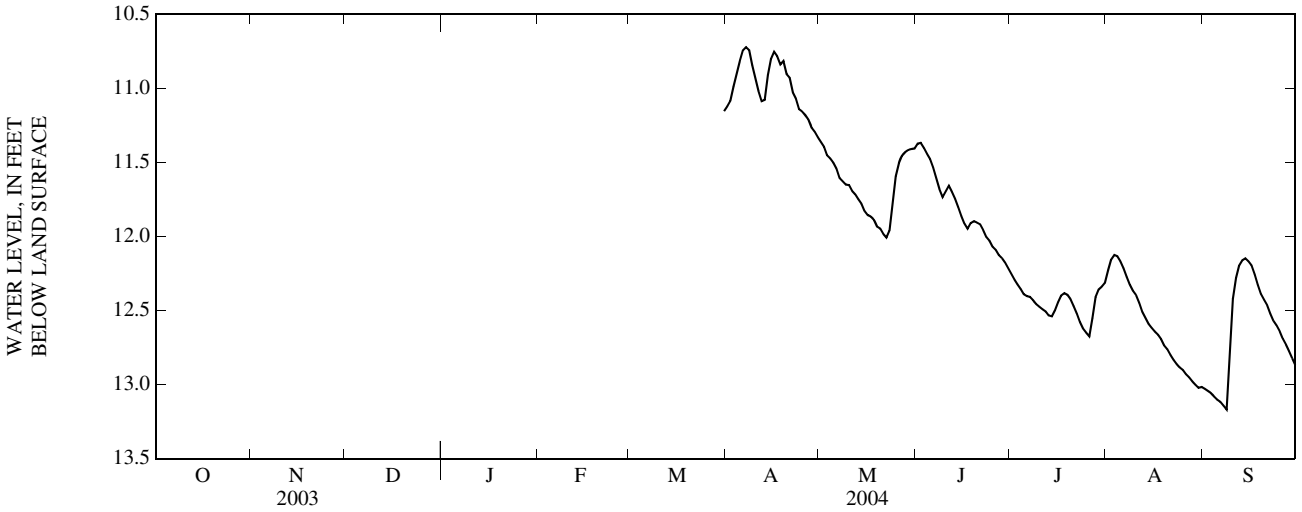
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.70 ft, below land-surface datum, Apr. 6, 2004; lowest, 13.18 ft below land-surface datum, Sept. 8, 2004.

EXTREMES FOR CURRENT PERIOD.--March 2004 to September 2004:Highest water level, 10.70 ft below land-surface datum, Apr. 6; lowest, 13.18 ft below land-surface datum, Sept. 8.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	11.12	11.36	11.37	12.25	12.23	13.03
2	---	---	---	---	---	---	11.08	11.39	11.37	12.29	12.16	13.04
3	---	---	---	---	---	---	10.99	11.45	11.40	12.32	12.12	13.06
4	---	---	---	---	---	---	10.90	11.47	11.44	12.35	12.13	13.08
5	---	---	---	---	---	---	10.82	11.50	11.48	12.39	12.17	13.10
6	---	---	---	---	---	---	10.74	11.54	11.53	12.40	12.21	13.12
7	---	---	---	---	---	---	10.72	11.60	11.61	12.41	12.27	13.14
8	---	---	---	---	---	---	10.74	11.63	11.68	12.43	12.32	13.17
9	---	---	---	---	---	---	10.84	11.65	11.73	12.46	12.37	12.75
10	---	---	---	---	---	---	10.93	11.65	11.70	12.47	12.39	12.42
11	---	---	---	---	---	---	11.02	11.69	11.66	12.49	12.45	12.28
12	---	---	---	---	---	---	11.09	11.72	11.70	12.51	12.51	12.20
13	---	---	---	---	---	---	11.08	11.75	11.74	12.53	12.55	12.16
14	---	---	---	---	---	---	10.91	11.78	11.80	12.54	12.59	12.15
15	---	---	---	---	---	---	10.80	11.83	11.86	12.50	12.62	12.17
16	---	---	---	---	---	---	10.75	11.86	11.91	12.44	12.64	12.20
17	---	---	---	---	---	---	10.78	11.87	11.95	12.40	12.66	12.26
18	---	---	---	---	---	---	10.84	11.89	11.91	12.38	12.69	12.33
19	---	---	---	---	---	---	10.81	11.93	11.90	12.39	12.74	12.39
20	---	---	---	---	---	---	10.90	11.95	11.91	12.42	12.76	12.43
21	---	---	---	---	---	---	10.93	11.98	11.92	12.47	12.80	12.46
22	---	---	---	---	---	---	11.03	12.01	11.96	12.52	12.83	12.52
23	---	---	---	---	---	---	11.07	11.96	12.00	12.58	12.86	12.57
24	---	---	---	---	---	---	11.14	11.76	12.03	12.62	12.88	12.60
25	---	---	---	---	---	---	11.16	11.59	12.07	12.65	12.90	12.64
26	---	---	---	---	---	---	11.18	11.51	12.09	12.67	12.93	12.69
27	---	---	---	---	---	---	11.21	11.45	12.12	12.55	12.95	12.73
28	---	---	---	---	---	---	11.27	11.43	12.15	12.41	12.98	12.77
29	---	---	---	---	---	---	11.29	11.42	12.18	12.36	13.00	12.82
30	---	---	---	---	---	---	11.33	11.41	12.22	12.34	13.02	12.87
31	---	---	---	---	---	11.15	---	11.41	---	12.31	13.02	---
MEAN	---	---	---	---	---	---	10.98	11.66	11.81	12.45	12.60	12.64
MAX	---	---	---	---	---	---	11.33	12.01	12.22	12.67	13.02	13.17
MIN	---	---	---	---	---	---	10.72	11.36	11.37	12.25	12.12	12.15

ERIE COUNTY—Continued



GENESEE COUNTY

425913078085501. Local number, Gs 190.

LOCATION.--Lat 42°59'13", long 78°08'55", Hydrologic Unit 04120104, on Genesee County fairgrounds, east of Batavia. Owner: City of Batavia.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driiied observation well, diameter 2 inch PVC, depth 75 ft, cased to 55 ft, screened from 55 to 75 ft.

INSTRUMENTATION.--Electronic data logger--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 890 ft above NGVD of 1929, from topographic map. Measuring point: Top of pipe, 2.63 ft above land-surface datum.

PERIOD OF RECORD.-- September 1997 to current year. Records for September 1997 to September 2002 are unpublished and in the files of the U.S. Geological Survey.

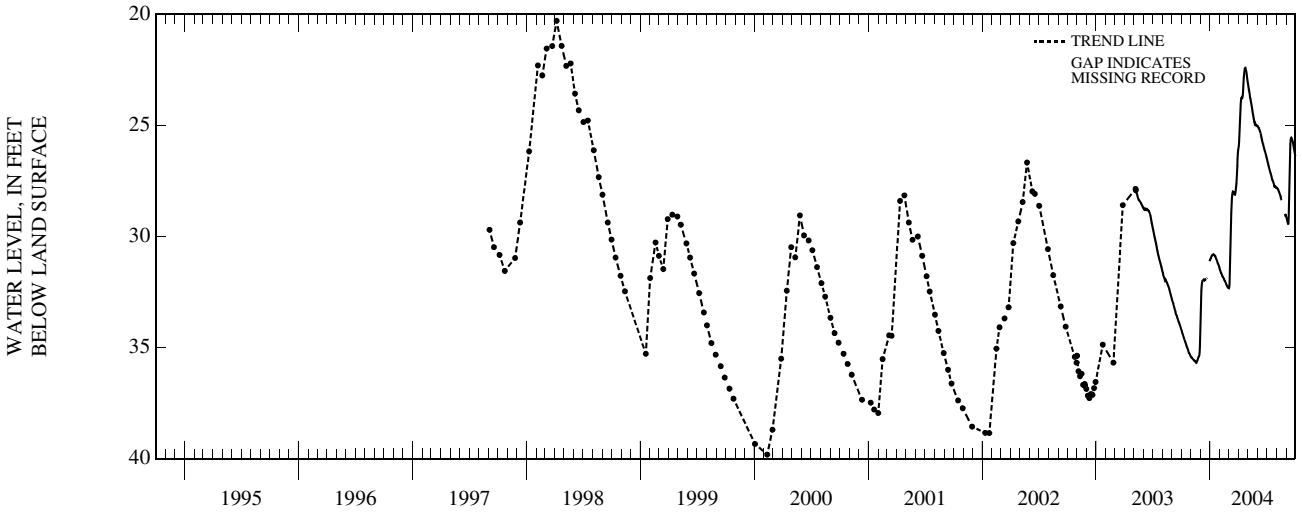
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.29 ft below land-surface datum, Apr. 7, 1998; lowest measured, 39.82 ft below land-surface datum, Feb. 11, 2000.

EXTREMES FOR CURRENT YEAR.--Highest water level, 22.41 ft below land-surface datum, Apr. 21, 22, 23; lowest, 35.69 ft below land-surface datum, Nov. 18, 19.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.21	35.43	33.81	31.05	31.47	32.33	26.03	23.11	25.01	26.51	27.80	29.12
2	34.25	35.45	33.26	31.00	31.51	32.26	25.93	23.19	25.04	26.57	27.81	29.17
3	34.29	35.45	32.79	30.97	31.54	32.17	25.73	23.30	25.07	26.64	27.82	29.21
4	34.33	35.48	32.44	30.95	31.59	31.84	25.42	23.38	25.10	26.69	27.84	29.27
5	34.38	35.49	32.22	30.91	31.64	31.34	25.05	23.46	25.12	26.75	27.86	29.32
6	34.42	35.51	32.09	30.88	31.65	30.74	24.66	23.54	25.14	26.82	27.89	29.37
7	34.47	35.52	32.02	30.86	31.69	30.07	24.31	23.63	25.18	26.85	27.92	29.43
8	34.51	35.54	31.98	30.84	31.74	29.43	24.03	23.71	25.22	26.89	27.96	29.42
9	34.56	35.56	31.97	30.84	31.77	28.93	23.86	23.78	25.26	26.95	28.00	29.09
10	34.60	35.57	31.95	30.83	31.79	28.56	23.76	23.85	25.31	27.01	28.03	28.51
11	34.65	35.58	31.94	30.80	31.83	28.28	23.74	23.94	25.37	27.06	28.07	27.68
12	34.69	35.60	31.97	30.80	31.86	28.11	23.77	24.02	25.45	27.11	28.12	26.84
13	34.73	35.60	31.98	30.81	31.87	28.04	23.77	24.10	25.51	27.16	28.16	26.23
14	34.77	35.63	31.96	30.82	31.90	27.98	23.72	24.18	25.58	27.21	28.22	25.86
15	34.81	35.65	31.96	30.84	31.94	27.99	23.55	24.28	25.65	27.25	28.27	25.66
16	34.85	35.66	31.96	30.87	31.98	28.00	23.27	24.38	25.73	27.32	28.32	25.57
17	34.90	35.68	31.93	30.89	32.00	28.01	23.02	24.47	25.75	27.38	28.37	25.55
18	34.94	35.69	31.92	30.89	32.02	28.05	22.85	24.55	25.80	27.44	---	25.57
19	34.98	35.66	31.92	30.94	32.05	28.10	22.72	24.64	25.86	27.47	---	25.62
20	35.02	35.62	---	30.99	32.07	28.10	22.60	24.72	25.92	27.49	---	25.66
21	35.05	35.59	---	31.02	32.10	28.11	22.45	24.81	25.96	27.53	---	25.70
22	35.10	35.55	31.88	31.05	32.15	28.03	22.42	24.88	26.01	27.57	---	25.75
23	35.14	35.51	31.86	31.09	32.19	27.88	22.41	24.93	26.08	27.62	---	25.82
24	35.18	35.47	---	31.13	32.21	27.75	22.47	24.89	26.14	27.69	---	25.89
25	35.22	35.44	---	31.19	32.25	27.61	22.51	24.94	26.17	27.74	---	25.97
26	35.25	35.40	---	31.22	32.27	27.42	22.59	24.96	26.22	27.79	---	26.06
27	35.27	35.36	---	31.24	32.30	27.14	22.68	24.98	26.28	27.73	---	26.14
28	35.31	35.24	---	31.28	32.31	26.82	22.81	24.99	26.33	27.73	28.98	26.21
29	35.34	34.95	---	31.32	32.33	26.51	22.91	25.02	26.39	27.77	29.04	26.30
30	35.37	34.42	31.12	31.35	---	26.27	23.02	25.03	26.45	27.80	29.04	26.38
31	35.40	---	31.08	31.41	---	26.11	---	25.01	---	27.80	29.07	---
MEAN	34.84	35.48	---	31.00	31.93	28.64	23.60	24.28	25.67	27.27	---	27.08
MAX	35.40	35.69	---	31.41	32.33	32.33	26.03	25.03	26.45	27.80	---	29.43
MIN	34.21	34.42	---	30.80	31.47	26.11	22.41	23.11	25.01	26.51	---	25.55

GENESEE COUNTY—Continued



LIVINGSTON COUNTY

425833077503901. Local number, Lv 330.

LOCATION.--Lat 42°58'33", long 77°50'39", Hydrologic Unit 04130003, adjacent to Iroquois Road on the Caledonia Country Club, at Caledonia. Owner: NYSDEC.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 31.5 ft, screened from 29.5 to 31.5 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 650 ft above NGVD of 1929, from topographic map. Measuring point: Top of well casing, 2.94 ft above land-surface datum.

PERIOD OF RECORD.--March 2004 to September 2004.

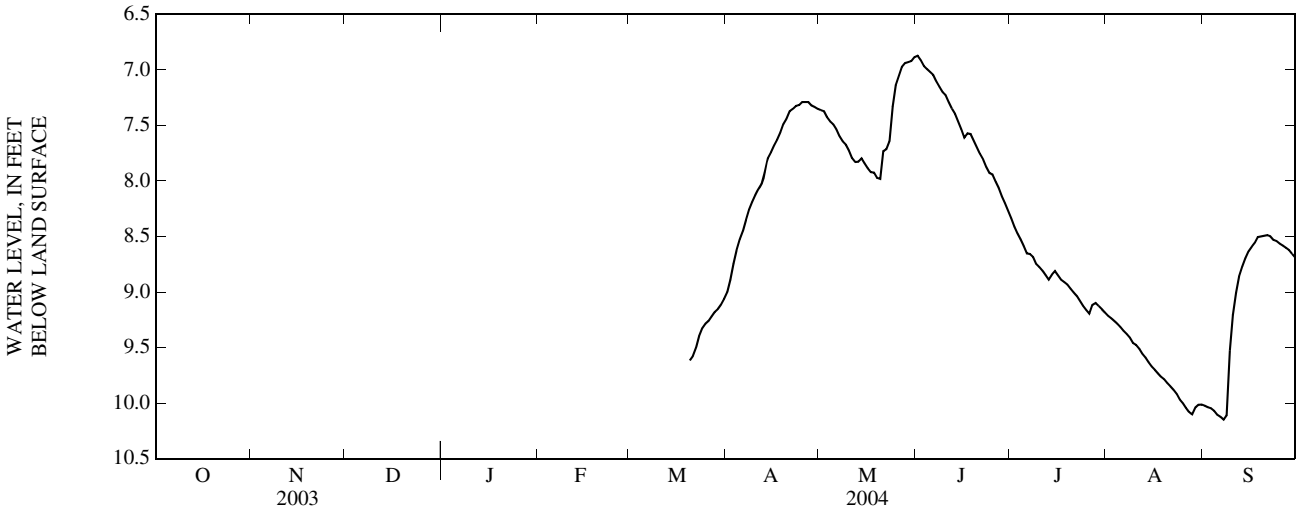
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.85 ft, below land-surface datum, June 1, 2004; lowest, 10.19 ft below land-surface datum, Sept. 7, 2004.

EXTREMES FOR CURRENT PERIOD.--March 2004 to September 2004:Highest water level, 6.85 ft below land-surface datum, June 1; lowest, 10.19 ft below land-surface datum, Sept. 7.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	9.00	7.36	6.87	8.34	9.21	10.02
2	---	---	---	---	---	---	8.89	7.37	6.91	8.41	9.24	10.04
3	---	---	---	---	---	---	8.74	7.43	6.96	8.47	9.26	10.05
4	---	---	---	---	---	---	8.62	7.46	6.99	8.53	9.29	10.07
5	---	---	---	---	---	---	8.53	7.49	7.02	8.58	9.32	10.10
6	---	---	---	---	---	---	8.45	7.54	7.04	8.65	9.35	10.12
7	---	---	---	---	---	---	8.35	7.60	7.10	8.66	9.38	10.15
8	---	---	---	---	---	---	8.26	7.64	7.15	8.68	9.41	10.11
9	---	---	---	---	---	---	8.19	7.67	7.20	8.75	9.46	9.53
10	---	---	---	---	---	---	8.12	7.73	7.23	8.78	9.48	9.21
11	---	---	---	---	---	---	8.07	7.79	7.29	8.81	9.51	9.01
12	---	---	---	---	---	---	8.02	7.83	7.35	8.85	9.55	8.86
13	---	---	---	---	---	---	7.92	7.83	7.40	8.89	9.59	8.77
14	---	---	---	---	---	---	7.79	7.80	7.46	8.84	9.63	8.70
15	---	---	---	---	---	---	7.74	7.84	7.53	8.81	9.67	8.63
16	---	---	---	---	---	---	7.68	7.89	7.61	8.85	9.70	8.59
17	---	---	---	---	---	---	7.63	7.92	7.57	8.89	9.73	8.56
18	---	---	---	---	---	---	7.56	7.92	7.58	8.91	9.76	8.50
19	---	---	---	---	---	---	7.49	7.97	7.64	8.93	9.79	8.50
20	---	---	---	---	---	9.62	7.44	7.98	7.70	8.97	9.82	8.49
21	---	---	---	---	---	9.58	7.37	7.73	7.76	9.00	9.85	8.49
22	---	---	---	---	---	9.50	7.35	7.71	7.81	9.04	9.88	8.50
23	---	---	---	---	---	9.40	7.33	7.64	7.87	9.08	9.92	8.53
24	---	---	---	---	---	9.32	7.32	7.33	7.93	9.12	9.97	8.54
25	---	---	---	---	---	9.29	7.29	7.14	7.94	9.16	10.00	8.56
26	---	---	---	---	---	9.26	7.29	7.05	8.01	9.20	10.04	8.58
27	---	---	---	---	---	9.22	7.29	6.97	8.06	9.12	10.08	8.60
28	---	---	---	---	---	9.18	7.32	6.94	8.14	9.10	10.10	8.62
29	---	---	---	---	---	9.15	7.33	6.93	8.20	9.12	10.04	8.66
30	---	---	---	---	---	9.11	7.35	6.92	8.27	9.15	10.02	8.69
31	---	---	---	---	---	9.06	---	6.89	---	9.18	10.01	---
MEAN	---	---	---	---	---	---	7.86	7.53	7.52	8.87	9.68	9.06
MAX	---	---	---	---	---	---	9.00	7.98	8.27	9.20	10.10	10.15
MIN	---	---	---	---	---	---	7.29	6.89	6.87	8.34	9.21	8.49

LIVINGSTON COUNTY—Continued



MADISON COUNTY

430056075354102. Local number, M 178.

LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills. Owner: Private.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 16 ft, cased to 16 ft, open end.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 573.76 ft above NGVD of 1929. Measuring point: Top of flange, 3.07 ft above land-surface datum.

REMARKS.--Well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft west, which had a period of record from October 1965 to September 1973 (unpublished). Satellite water-level telemeter at station.

PERIOD OF RECORD.--April 1975 to August 1995, December 1996 to current year. Records for April 1975 to September 1976 are unpublished and available in files of the Geological Survey. April 1975 to May 1986, digital recorder at same site and datum. Weekly observer readings May 1986 to Dec. 1988. Electronic data recorder at same site and datum Dec. 1988 to Feb. 1991. Periodic measurements with chalked tape Feb. 1991 to Aug. 1995 and Oct. 1996 to Feb. 1997.

REVISED RECORDS.--WDR NY-91-3: 1990 water level; WDR NY-99-3: 1995 water level.

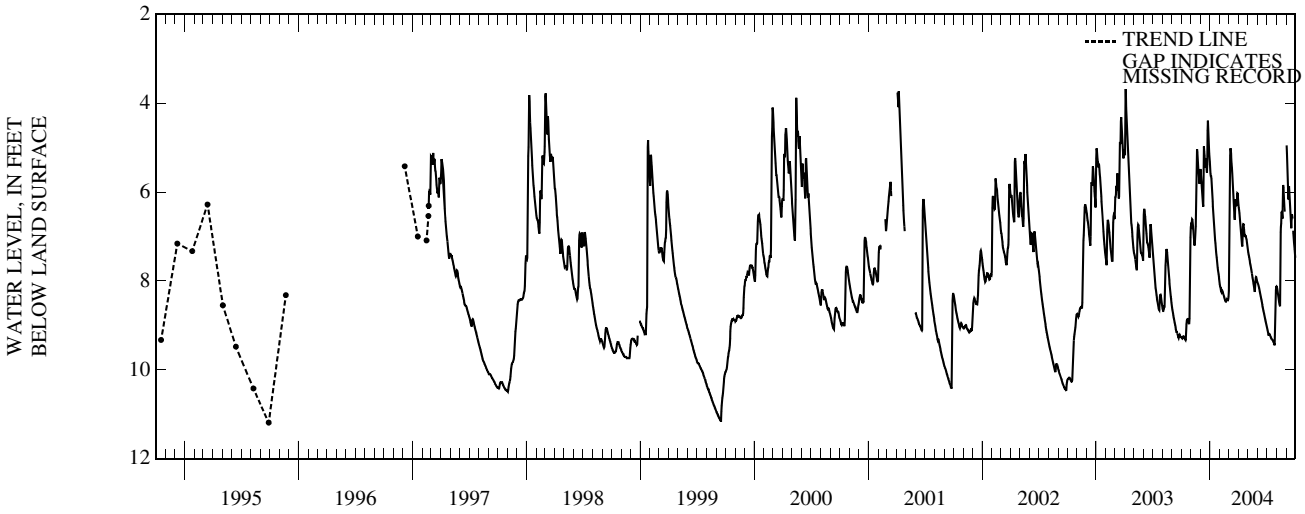
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.60 ft below land-surface datum, Mar. 5, 1979; lowest measured, 11.19 ft below land-surface datum, Sept. 27, 1995.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.35 ft below land-surface datum, Dec. 25; lowest, 9.46 ft below land-surface datum, July 26, 27.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.27	6.75	5.48	5.47	8.08	8.22	6.29	7.30	8.03	9.04	8.12	---
2	9.28	6.76	5.53	5.58	8.12	7.59	6.36	7.36	8.05	9.08	8.14	4.95
3	9.29	6.69	5.64	5.64	8.14	6.27	6.41	7.40	8.07	9.11	8.17	5.13
4	9.30	6.61	5.74	5.64	8.19	5.60	6.47	7.43	8.10	9.15	8.22	5.36
5	9.28	6.62	5.84	5.70	8.23	5.19	6.57	7.47	8.13	9.18	8.27	5.58
6	9.27	6.70	5.95	5.81	8.24	5.02	6.65	7.51	8.16	9.21	8.32	5.78
7	9.25	6.78	6.05	5.92	8.20	5.05	6.73	7.55	8.20	9.24	8.37	5.96
8	9.25	6.88	6.17	6.07	8.22	5.13	6.82	7.59	8.24	9.19	8.43	6.16
9	9.25	6.98	6.27	6.21	8.22	5.26	6.92	7.63	8.27	9.19	8.48	5.93
10	9.27	7.05	6.33	6.33	8.24	5.37	7.01	7.66	8.31	9.20	8.52	5.87
11	9.29	7.13	5.64	6.43	8.27	5.45	7.10	7.70	8.34	9.22	8.55	5.99
12	9.30	7.20	4.97	6.54	8.29	5.57	7.18	7.74	8.38	9.23	8.57	6.14
13	9.32	7.18	5.09	6.66	8.31	5.76	7.22	7.79	8.42	9.25	7.48	6.29
14	9.33	7.04	5.18	6.78	8.33	5.90	6.97	7.83	8.45	9.27	6.90	6.43
15	9.30	6.90	5.30	6.88	8.37	6.04	6.78	7.88	8.49	9.29	6.78	6.56
16	9.12	6.77	5.45	6.98	8.40	6.17	6.72	7.93	8.53	9.31	6.71	6.68
17	8.97	6.57	5.39	7.09	8.42	6.29	6.73	7.97	8.57	9.31	6.45	6.82
18	8.90	6.26	5.25	7.15	8.43	6.43	6.80	8.01	8.60	9.32	6.45	6.62
19	8.87	5.92	5.32	7.24	8.45	6.56	6.85	8.06	8.64	9.33	6.53	6.50
20	8.87	5.04	5.42	7.34	8.46	6.63	6.94	8.11	8.67	9.34	6.60	6.54
21	8.86	5.10	5.50	7.42	8.47	6.37	6.99	8.16	8.70	9.36	6.21	6.60
22	8.88	5.24	5.56	7.47	8.45	6.18	7.00	8.20	8.74	9.37	5.84	---
23	8.90	5.37	5.38	7.55	8.43	6.18	6.98	8.25	8.77	9.39	5.90	6.87
24	8.93	5.48	4.62	7.62	8.41	6.26	6.99	8.13	8.81	9.41	6.04	6.93
25	8.96	5.54	4.40	7.70	8.42	6.30	7.02	8.01	8.85	9.43	6.19	7.02
26	8.97	5.65	4.59	7.76	8.43	6.30	7.04	7.94	8.88	9.45	6.34	7.13
27	8.84	5.77	4.80	7.80	8.43	6.15	7.08	7.91	8.91	9.20	6.44	7.21
28	8.20	5.82	4.97	7.85	8.42	6.03	7.14	7.92	8.95	8.70	---	7.29
29	7.65	5.62	5.13	7.91	8.36	6.03	7.19	7.95	8.98	8.39	---	7.39
30	7.02	5.56	5.23	7.95	---	6.09	7.25	7.98	9.01	8.20	---	7.48
31	6.79	---	5.32	8.02	---	6.19	---	8.01	---	8.13	---	---
MEAN	8.90	6.30	5.40	6.86	8.33	6.05	6.87	7.82	8.51	9.14	---	---
MAX	9.33	7.20	6.33	8.02	8.47	8.22	7.25	8.25	9.01	9.45	---	---
MIN	6.79	5.04	4.40	5.47	8.08	5.02	6.29	7.30	8.03	8.13	---	---

MADISON COUNTY—Continued



MONROE COUNTY

430252077283402. Local number, Mo 11.

LOCATION.--Lat 43°02'52", long 77°28'34", Hydrologic Unit 04140101, next to intermittent stream south of Park Road, northeast of fish hatchery ponds at Powder Mill Park near Bushnell Basin. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 16 ft, cased to 6 ft, screened from 6 to 16 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 448.66 ft above NGVD of 1929. Measuring point: File marks in top of PVC pipe, 2.95 ft above land-surface datum.

PERIOD OF RECORD.--December 1983 to September 1993 and December 2003 to September 2004.

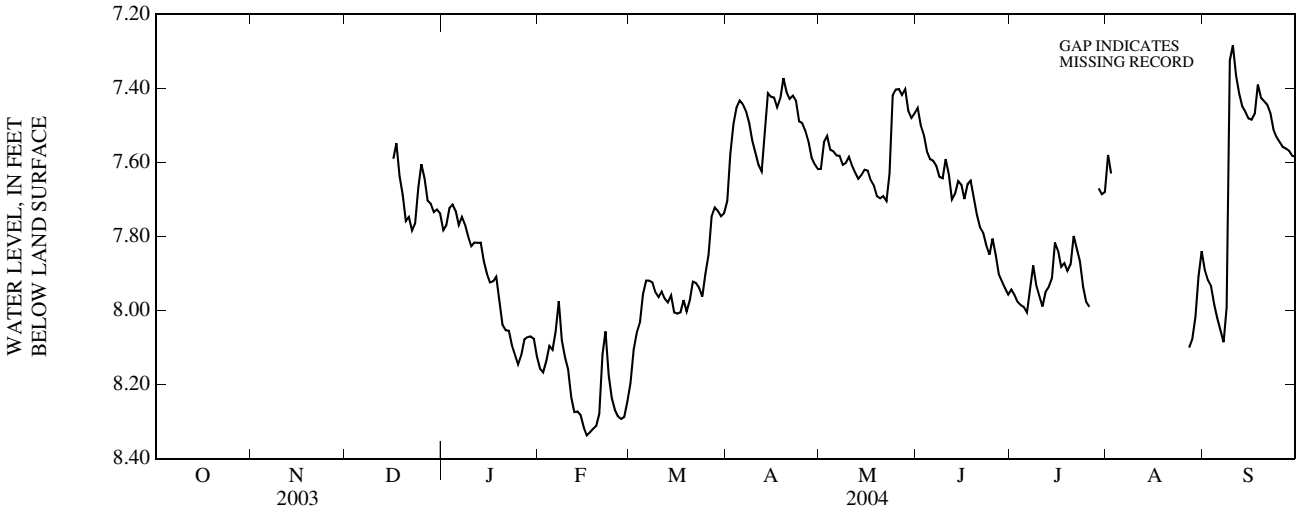
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.17 ft below land-surface datum, Sept. 9, 2004; lowest measured, 10.42 ft below land-surface datum, Sept. 12, 1988.

EXTREMES FOR CURRENT PERIOD.--December 2003 to September 2004:Highest water level, 7.17 ft below land-surface datum, Sept. 9; lowest, 8.35 ft below land-surface datum, Feb. 16, 18.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	7.78	8.16	8.20	7.70	7.62	7.45	7.94	7.58	7.89
2	---	---	---	7.77	8.17	8.11	7.58	7.54	7.50	7.96	7.63	7.92
3	---	---	---	7.72	8.14	8.06	7.50	7.53	7.53	7.98	---	7.93
4	---	---	---	7.71	8.10	8.03	7.45	7.57	7.57	7.99	---	7.98
5	---	---	---	7.73	8.11	7.96	7.43	7.57	7.59	7.99	---	8.02
6	---	---	---	7.77	8.06	7.92	7.44	7.58	7.60	8.01	---	8.05
7	---	---	---	7.75	7.97	7.92	7.46	7.58	7.61	7.94	---	8.09
8	---	---	---	7.77	8.08	7.92	7.49	7.61	7.64	7.88	---	7.99
9	---	---	---	7.80	8.13	7.95	7.54	7.60	7.64	7.93	---	7.32
10	---	---	---	7.83	8.16	7.96	7.57	7.59	7.59	7.96	---	7.28
11	---	---	---	7.82	8.23	7.95	7.61	7.61	7.63	7.99	---	7.37
12	---	---	---	7.82	8.27	7.97	7.62	7.63	7.70	7.95	---	7.41
13	---	---	---	7.82	8.27	7.98	7.51	7.64	7.68	7.94	---	7.45
14	---	---	---	7.87	8.28	7.96	7.41	7.63	7.65	7.91	---	7.46
15	---	---	---	7.90	8.32	8.01	7.42	7.62	7.66	7.82	---	7.48
16	---	---	7.59	7.92	8.34	8.01	7.42	7.62	7.70	7.84	---	7.48
17	---	---	7.55	7.92	8.33	8.01	7.45	7.65	7.66	7.88	---	7.47
18	---	---	7.64	7.91	8.32	7.97	7.43	7.66	7.65	7.87	---	7.39
19	---	---	7.69	7.97	8.31	8.00	7.37	7.69	7.69	7.89	---	7.43
20	---	---	7.76	8.04	8.28	7.97	7.41	7.70	7.74	7.87	---	7.43
21	---	---	7.75	8.05	8.12	7.92	7.43	7.69	7.78	7.80	---	7.44
22	---	---	7.78	8.05	8.06	7.93	7.42	7.70	7.79	7.83	---	7.47
23	---	---	7.76	8.09	8.18	7.94	7.43	7.63	7.82	7.87	---	7.51
24	---	---	7.67	8.12	8.24	7.96	7.49	7.42	7.85	7.94	---	7.53
25	---	---	7.60	8.15	8.27	7.90	7.49	7.40	7.81	7.98	---	7.55
26	---	---	7.64	8.12	8.29	7.85	7.51	7.40	7.85	7.99	---	7.56
27	---	---	7.70	8.08	8.29	7.75	7.54	7.42	7.90	---	8.10	7.56
28	---	---	7.71	8.07	8.29	7.72	7.59	7.40	7.92	---	8.08	7.57
29	---	---	7.73	8.07	8.24	7.73	7.60	7.46	7.94	7.67	8.02	7.58
30	---	---	7.73	8.08	---	7.75	7.62	7.48	7.96	7.69	7.91	7.58
31	---	---	7.74	8.12	---	7.74	---	7.47	---	7.68	7.84	---
MEAN	---	---	---	7.92	8.21	7.94	7.50	7.57	7.70	---	---	7.61
MAX	---	---	---	8.15	8.34	8.20	7.70	7.70	7.96	---	---	8.09
MIN	---	---	---	7.71	7.97	7.72	7.37	7.40	7.45	---	---	7.28

MONROE COUNTY—Continued



NIAGARA COUNTY

430739078502701. Local number, Ni 869.

LOCATION.--Lat 43°07'39", long 78°50'27", Hydrologic Unit 04120102, behind fire station at Shawnee. Owner: USEPA.

AQUIFER.--Confined aquifer in Lockport dolomite of Upper Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 inch , depth 36.7 ft, cased to 12 ft, open end.

INSTRUMENTATION.--Electronic data recorder--15 minute; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 650 ft above NGVD of 1929, from topographic map. Measuring point: Top of well casing, 2.94 ft above land-surface datum.

REMARKS.--Satellite water-level telemeter at station.

PERIOD OF RECORD.--August 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.72 ft above land-surface datum, July 31, 2004; lowest, 5.74 ft below land-surface datum, Sept. 21, 2003.

EXTREMES FOR CURRENT YEAR.--Highest water level, 0.72 ft above land-surface datum, July 31; lowest, 5.65 ft below land-surface datum, Oct. 13, 14.

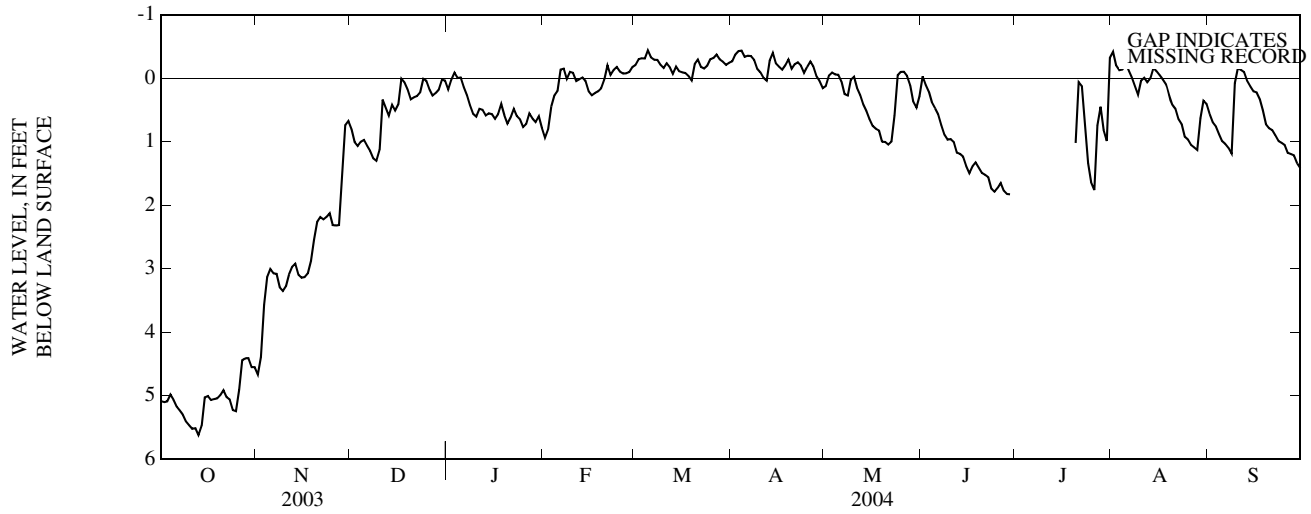
DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	4.38
2	---	---	---	---	---	---	---	---	---	---	---	4.37
3	---	---	---	---	---	---	---	---	---	---	---	4.34
4	---	---	---	---	---	---	---	---	---	---	---	4.42
5	---	---	---	---	---	---	---	---	---	---	---	4.61
6	---	---	---	---	---	---	---	---	---	---	---	4.68
7	---	---	---	---	---	---	---	---	---	---	---	4.73
8	---	---	---	---	---	---	---	---	---	---	---	4.87
9	---	---	---	---	---	---	---	---	---	---	---	4.97
10	---	---	---	---	---	---	---	---	---	---	---	5.03
11	---	---	---	---	---	---	---	---	---	---	---	5.11
12	---	---	---	---	---	---	---	---	---	---	---	5.16
13	---	---	---	---	---	---	---	---	---	---	---	5.23
14	---	---	---	---	---	---	---	---	---	---	---	5.28
15	---	---	---	---	---	---	---	---	---	---	---	5.29
16	---	---	---	---	---	---	---	---	---	---	---	5.36
17	---	---	---	---	---	---	---	---	---	---	---	5.47
18	---	---	---	---	---	---	---	---	---	---	---	5.49
19	---	---	---	---	---	---	---	---	---	---	---	5.39
20	---	---	---	---	---	---	---	---	---	---	---	5.64
21	---	---	---	---	---	---	---	---	---	---	---	5.70
22	---	---	---	---	---	---	---	---	---	---	---	5.59
23	---	---	---	---	---	---	---	---	---	---	3.82	5.43
24	---	---	---	---	---	---	---	---	---	---	3.91	5.48
25	---	---	---	---	---	---	---	---	---	---	3.93	5.53
26	---	---	---	---	---	---	---	---	---	---	3.88	5.59
27	---	---	---	---	---	---	---	---	---	---	3.88	5.35
28	---	---	---	---	---	---	---	---	---	---	4.05	5.11
29	---	---	---	---	---	---	---	---	---	---	4.05	5.16
30	---	---	---	---	---	---	---	---	---	---	4.29	5.22
31	---	---	---	---	---	---	---	---	---	---	4.37	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	5.13
MAX	---	---	---	---	---	---	---	---	---	---	---	5.70
MIN	---	---	---	---	---	---	---	---	---	---	---	4.34

NIAGARA COUNTY—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.09	4.67	0.80	0.18	0.94	-0.21	-0.27	0.12	-0.03	---	-0.41	0.56
2	5.10	4.40	1.01	0.03	0.81	-0.30	-0.37	-0.04	0.10	---	-0.20	0.70
3	5.09	3.57	1.07	-0.09	0.44	-0.31	-0.43	-0.09	0.21	---	-0.13	0.76
4	4.98	3.13	1.00	0.00	0.27	-0.31	-0.43	-0.06	0.38	---	-0.14	0.88
5	5.07	3.01	0.97	-0.01	0.20	-0.44	-0.34	-0.05	0.47	---	-0.21	0.99
6	5.17	3.07	1.07	0.14	-0.14	-0.33	-0.35	0.05	0.57	---	-0.13	1.04
7	5.23	3.08	1.15	0.27	-0.15	-0.29	-0.35	0.25	0.74	---	-0.02	1.10
8	5.31	3.30	1.26	0.42	0.01	-0.29	-0.29	0.27	0.89	---	0.12	1.19
9	5.41	3.35	1.30	0.56	-0.10	-0.21	-0.15	0.03	0.97	---	0.26	0.08
10	5.47	3.27	1.13	0.61	-0.08	-0.16	-0.09	-0.02	0.96	---	0.04	-0.16
11	5.52	3.09	0.34	0.48	0.04	-0.24	-0.01	0.15	1.01	---	-0.01	-0.13
12	5.51	2.97	0.47	0.50	0.02	-0.17	0.04	0.27	1.17	---	0.06	-0.10
13	5.62	2.92	0.59	0.59	-0.01	-0.07	-0.28	0.41	1.19	---	0.00	0.05
14	5.47	3.10	0.42	0.55	0.04	-0.18	-0.40	0.52	1.24	---	-0.16	0.13
15	5.03	3.14	0.51	0.57	0.21	-0.11	-0.23	0.64	1.39	---	-0.11	0.21
16	5.01	3.13	0.41	0.64	0.27	-0.09	-0.18	0.75	1.50	---	-0.05	0.22
17	5.07	3.08	0.01	0.56	0.23	-0.08	-0.13	0.80	1.39	---	0.02	0.33
18	5.06	2.88	0.07	0.41	0.21	-0.03	-0.21	0.82	1.33	---	0.10	0.50
19	5.04	2.55	0.18	0.59	0.16	0.03	-0.30	1.00	1.41	---	0.27	0.73
20	4.99	2.26	0.33	0.71	0.02	-0.23	-0.15	1.00	1.49	1.02	0.41	0.79
21	4.91	2.19	0.30	0.62	-0.20	-0.30	-0.22	1.05	1.52	0.06	0.48	0.82
22	5.03	2.22	0.28	0.48	-0.05	-0.18	-0.25	1.00	1.56	0.12	0.64	0.90
23	5.06	2.19	0.23	0.60	-0.13	-0.15	-0.20	0.59	1.74	0.66	0.72	0.99
24	5.23	2.13	0.01	0.65	-0.18	-0.20	-0.08	-0.05	1.79	1.34	0.92	1.02
25	5.25	2.31	0.04	0.77	-0.10	-0.30	-0.18	-0.10	1.73	1.64	0.97	1.05
26	4.91	2.32	0.18	0.72	-0.07	-0.32	-0.26	-0.10	1.65	1.76	1.05	1.18
27	4.44	2.31	0.27	0.56	-0.08	-0.37	-0.18	-0.04	1.77	0.74	1.09	1.20
28	4.41	1.51	0.23	0.64	-0.10	-0.30	-0.03	0.11	1.82	0.45	1.13	1.22
29	4.41	0.74	0.18	0.69	-0.18	-0.26	0.05	0.37	1.83	0.82	0.63	1.34
30	4.55	0.67	0.03	0.60	---	-0.21	0.15	0.46	---	0.99	0.35	1.42
31	4.55	---	0.04	0.78	---	-0.24	---	0.28	---	-0.32	0.41	---
MEAN	5.06	2.75	0.51	0.48	0.08	-0.22	-0.20	0.34	---	---	0.26	0.70
MAX	5.62	4.67	1.30	0.78	0.94	0.03	0.15	1.05	---	---	1.13	1.42
MIN	4.41	0.67	0.01	-0.09	-0.20	-0.44	-0.43	-0.10	---	---	-0.41	-0.16



ONONDAGA COUNTY

430243076180402. Local number, Od 1833.

LOCATION.--Lat 43°02'43", long 76°18'04", Hydrologic Unit 04140201, behind Town of Camillus Department of Public Works buildings, near Camillus. Owner: U.S. Geological Survey.

AQUIFER.--Confined aquifer in Vernon shale of Upper Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 210 ft, cased to 200 ft, screened from 200 to 210 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 408 ft above NGVD of 1929, from topographic map. Measuring point: Top of PVC pipe, 3.05 ft above land-surface datum.

PERIOD OF RECORD.--January 2004 to September 2004.

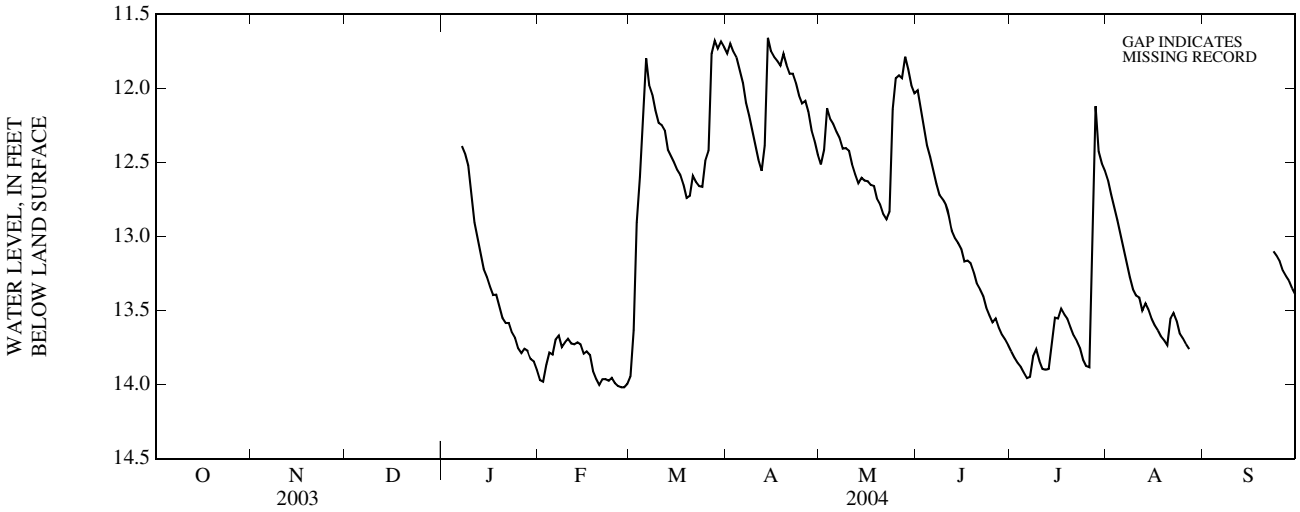
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.53 ft below land-surface datum, Mar. 27, 2004; lowest, 14.05 ft below land-surface datum, Feb. 26, 27, 28, 2004.

EXTREMES FOR CURRENT PERIOD.--January 2004 to September 2004:Highest water level, 11.53 ft below land-surface datum, Mar. 27; lowest, 14.05 ft below land-surface datum, Feb. 26, 27, 28.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	13.97	13.94	11.77	12.51	12.01	13.78	12.62	---
2	---	---	---	---	13.98	13.63	11.70	12.41	12.14	13.82	12.72	---
3	---	---	---	---	13.87	12.91	11.75	12.13	12.27	13.85	12.80	---
4	---	---	---	---	13.78	12.60	11.79	12.21	12.38	13.88	12.89	---
5	---	---	---	---	13.80	12.20	11.88	12.24	12.46	13.92	13.00	---
6	---	---	---	---	13.70	11.80	11.96	12.29	12.55	13.96	13.09	---
7	---	---	---	12.39	13.67	11.98	12.10	12.33	12.64	13.95	13.19	---
8	---	---	---	12.44	13.75	12.04	12.19	12.41	12.72	13.81	13.27	---
9	---	---	---	12.52	13.71	12.15	12.28	12.40	12.75	13.76	13.36	---
10	---	---	---	12.70	13.69	12.23	12.39	12.42	12.78	13.84	13.40	---
11	---	---	---	12.91	13.72	12.25	12.48	12.51	12.86	13.89	13.41	---
12	---	---	---	13.01	13.73	12.29	12.56	12.58	12.96	13.90	13.50	---
13	---	---	---	13.12	13.71	12.41	12.39	12.64	13.01	13.89	13.45	---
14	---	---	---	13.22	13.73	12.46	11.66	12.60	13.04	13.73	13.49	---
15	---	---	---	13.27	13.79	12.50	11.75	12.62	13.08	13.55	13.56	---
16	---	---	---	13.34	13.78	12.55	11.79	12.63	13.17	13.55	13.60	---
17	---	---	---	13.39	13.80	12.59	11.81	12.65	13.16	13.49	13.63	---
18	---	---	---	13.39	13.91	12.65	11.85	12.66	13.18	13.53	13.68	---
19	---	---	---	13.48	13.96	12.74	11.77	12.75	13.24	13.56	13.70	---
20	---	---	---	13.55	14.00	12.73	11.84	12.79	13.32	13.62	13.73	---
21	---	---	---	13.58	13.96	12.59	11.90	12.85	13.36	13.67	13.55	---
22	---	---	---	13.58	13.96	12.63	11.90	12.88	13.40	13.71	13.52	---
23	---	---	---	13.65	13.97	12.66	11.96	12.83	13.48	13.75	13.57	13.10
24	---	---	---	13.69	13.95	12.66	12.05	12.14	13.53	13.83	13.65	13.13
25	---	---	---	13.76	13.99	12.49	12.10	11.93	13.58	13.87	13.69	13.17
26	---	---	---	13.79	14.01	12.42	12.08	11.91	13.55	13.88	13.73	13.23
27	---	---	---	13.76	14.02	11.77	12.16	11.93	13.61	12.88	13.76	13.27
28	---	---	---	13.77	14.02	11.68	12.28	11.79	13.66	12.12	---	13.30
29	---	---	---	13.83	13.99	11.73	12.35	11.87	13.69	12.43	---	13.35
30	---	---	---	13.84	---	11.68	12.45	11.98	13.73	12.51	---	13.39
31	---	---	---	13.90	---	11.72	---	12.03	---	12.55	---	---
MEAN	---	---	---	---	13.86	12.41	12.03	12.38	13.04	13.56	---	---
MAX	---	---	---	---	14.02	13.94	12.56	12.88	13.73	13.96	---	---
MIN	---	---	---	---	13.67	11.68	11.66	11.79	12.01	12.12	---	---

ONONDAGA COUNTY—Continued



ONTARIO COUNTY

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 Thruway Authority.

AQUIFER.--Confined aquifer in Camillus shale of the Salina Group of Late Silurian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 inch, depth 139 ft, cased to 11 ft, open hole.

INSTRUMENTATION.--Monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 556.70 ft above NGVD of 1929. 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.

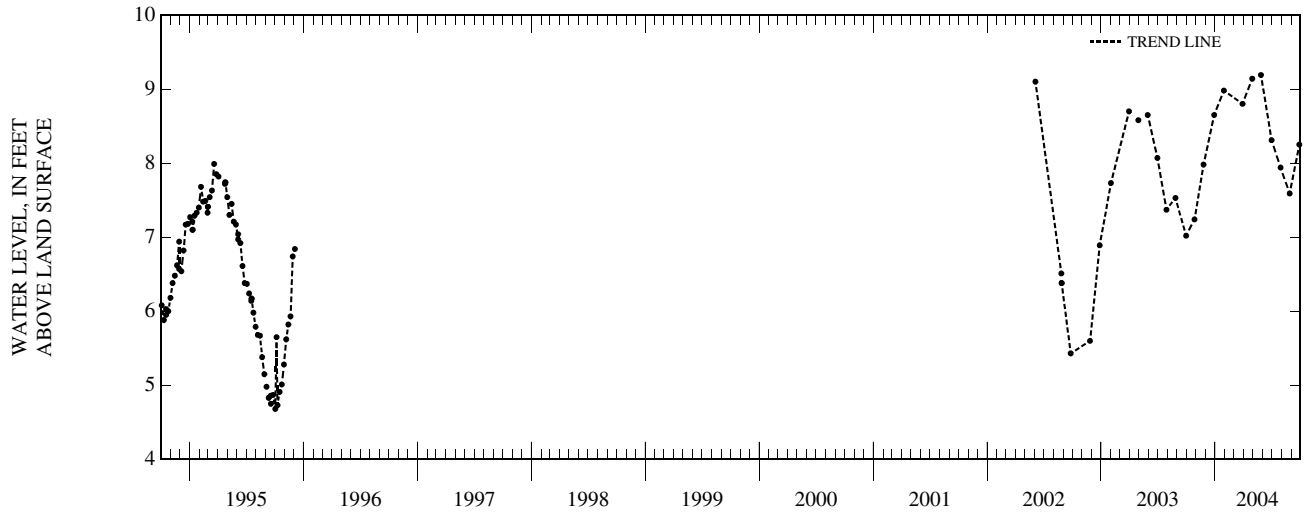
PERIOD OF RECORD.--May 1955 to August 1995 and October 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.14 ft above land-surface datum, Mar. 15, 1976; lowest measured, 4.44 ft above land-surface datum, Oct. 28, 1991.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 9.19 ft above land-surface datum, May 27; lowest measured 7.24 ft above land-surface datum, Oct. 27.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "-"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	-7.24	DEC 29	-8.65	MAR 29	-8.80	MAY 27	-9.19	JUL 29	-7.94	SEP 27	-8.25
NOV 25	-7.98	JAN 29	-8.98	APR 29	-9.14	JUN 30	-8.31	AUG 27	-7.59		



ONTARIO COUNTY

425803077151201. Local number, Ot 1133.

LOCATION.--Lat 42°58'03", long 77°15'12", Hydrologic Unit 04140201, at village of Manchester pumphouse, on State Street, 1.1 miles east of intersection with NYS Route 21, Manchester. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 20 ft, cased to 10 ft, screened from 10 to 20 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 605 ft above NGVD of 1929, from topographic map. Measuring point: Top of pipe, 3.26 ft above land-surface datum.

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

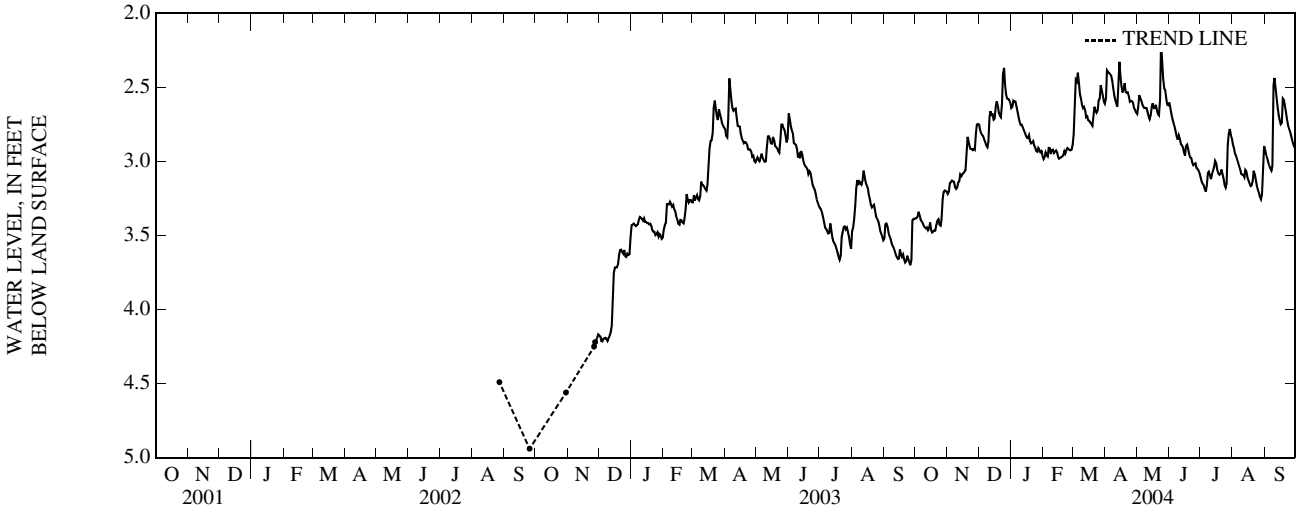
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.11 ft below land-surface datum, May 24, 2004; lowest, 4.94 ft below land-surface datum, Sept. 25, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level, 2.11 ft below land surface, datum, May 24; lowest, 3.48 ft, below land surface datum, on several days in October.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.39	3.22	2.75	2.64	2.98	2.82	2.57	2.68	2.60	3.11	2.88	2.92
2	3.38	3.21	2.79	2.63	2.97	2.60	2.38	2.64	2.65	3.14	2.91	2.95
3	3.37	3.15	2.81	2.59	2.94	2.45	2.40	2.55	2.68	3.15	2.95	2.98
4	3.34	3.14	2.82	2.60	2.96	2.46	2.40	2.57	2.71	3.16	2.96	3.01
5	3.37	3.13	2.83	2.60	2.97	2.40	2.41	2.59	2.74	3.18	2.98	3.03
6	3.40	3.14	2.85	2.63	2.91	2.47	2.42	2.61	2.77	3.20	3.01	3.05
7	3.41	3.14	2.87	2.66	2.91	2.54	2.46	2.63	2.80	3.16	3.03	3.06
8	3.42	3.17	2.89	2.70	2.95	2.58	2.50	2.64	2.83	3.08	3.05	3.03
9	3.44	3.19	2.90	2.73	2.92	2.62	2.56	2.64	2.85	3.07	3.08	2.49
10	3.45	3.18	2.87	2.75	2.92	2.64	2.58	2.64	2.82	3.09	3.09	2.44
11	3.45	3.14	2.70	2.75	2.94	2.63	2.61	2.67	2.84	3.12	3.09	2.51
12	3.45	3.13	2.66	2.77	2.93	2.65	2.63	2.69	2.88	3.08	3.11	2.57
13	3.46	3.09	2.69	2.79	2.93	2.70	2.49	2.71	2.89	3.06	3.06	2.64
14	3.45	3.10	2.68	2.80	2.94	2.70	2.33	2.69	2.91	3.04	3.07	2.68
15	3.41	3.09	2.72	2.82	2.97	2.72	2.43	2.63	2.94	3.00	3.11	2.72
16	3.46	3.08	2.71	2.84	2.98	2.73	2.49	2.61	2.96	3.01	3.13	2.75
17	3.48	3.07	2.63	2.84	2.98	2.74	2.53	2.64	2.90	3.05	3.15	2.74
18	3.47	3.06	2.59	2.82	2.97	2.75	2.51	2.64	2.89	3.08	3.17	2.57
19	3.46	2.96	2.62	2.86	2.97	2.76	2.47	2.62	2.91	3.09	3.16	2.58
20	3.47	2.83	2.67	2.88	2.96	2.69	2.53	2.65	2.95	3.08	3.13	2.63
21	3.43	2.86	2.69	2.87	2.93	2.63	2.54	2.68	2.97	3.05	3.06	2.67
22	3.40	2.90	2.70	2.86	2.95	2.65	2.53	2.69	2.98	3.08	3.09	2.71
23	3.39	2.92	2.61	2.89	2.93	2.67	2.56	2.58	3.01	3.12	3.12	2.76
24	3.43	2.92	2.41	2.91	2.91	2.66	2.60	2.19	3.03	3.16	3.17	2.78
25	3.43	2.92	2.37	2.93	2.92	2.59	2.59	2.31	3.02	3.18	3.19	2.80
26	3.39	2.92	2.48	2.93	2.92	2.57	2.59	2.44	3.01	3.15	3.21	2.83
27	3.26	2.92	2.55	2.91	2.92	2.49	2.61	2.51	3.04	2.89	3.24	2.86
28	3.21	2.81	2.58	2.92	2.92	2.52	2.64	2.52	3.05	2.82	3.26	2.88
29	3.20	2.75	2.58	2.94	2.88	2.56	2.65	2.58	3.06	2.78	3.22	2.90
30	3.20	2.75	2.58	2.93	---	2.59	2.67	2.62	3.08	2.82	3.06	2.91
31	3.20	---	2.60	2.96	---	2.61	---	2.62	---	2.84	2.90	---
MEAN	3.39	3.03	2.68	2.80	2.94	2.62	2.52	2.60	2.89	3.06	3.09	2.78
MAX	3.48	3.22	2.90	2.96	2.98	2.82	2.67	2.71	3.08	3.20	3.26	3.06
MIN	3.20	2.75	2.37	2.59	2.88	2.40	2.33	2.19	2.60	2.78	2.88	2.44

ONTARIO COUNTY—Continued



ORLEANS COUNTY

431045078160401. Local number, Ol 20.

LOCATION.--Lat 43°10'45", long 78°16'04", Hydrologic Unit 04130001, in dirt driveway south of landowners house on Pine Hill Road, west of Barre. Owner: Private.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 48.9 ft, cased to 39.1 ft, screened 39.1 to 48.9 ft.

INSTRUMENTATION.--Electronic data recorder--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 695 ft above NGVD of 1929, from topographic map. Measuring point: Top of well casing, 3.79 ft above land-surface datum.

REMARKS.--Satellite water-level telemeter at station.

PERIOD OF RECORD.--January 2004 to September 2004.

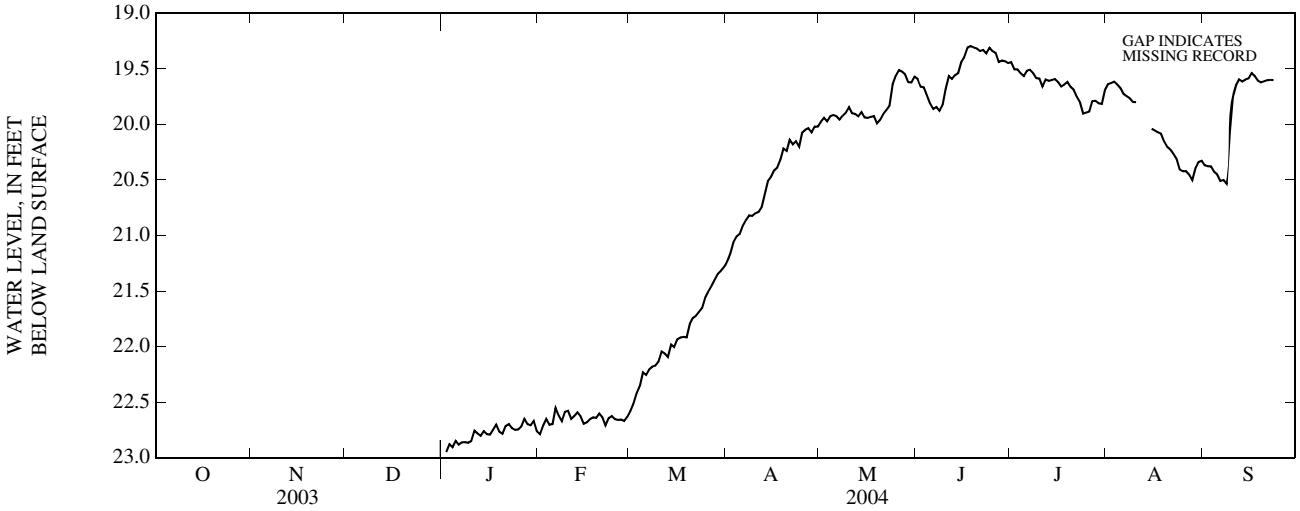
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.27 ft, below land-surface datum, June 17, 18, 19, 2004; lowest, 23.21 ft below land-surface datum, Jan. 2, 2004.

EXTREMES FOR CURRENT PERIOD.--January 2004 to September 2004: Highest water level, 19.27 ft below land-surface datum, June 17, 18, 19; lowest, 23.21 ft below land-surface datum, Jan. 2.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	22.79	22.58	21.23	19.98	19.59	19.44	19.64	20.37
2	---	---	---	22.95	22.71	22.51	21.16	19.94	19.66	19.50	19.63	20.38
3	---	---	---	22.88	22.65	22.42	21.06	19.97	19.67	19.50	19.61	20.38
4	---	---	---	22.91	22.70	22.35	21.01	19.93	19.74	19.54	19.64	20.43
5	---	---	---	22.85	22.70	22.23	20.99	19.92	19.81	19.56	19.67	20.45
6	---	---	---	22.88	22.55	22.26	20.91	19.93	19.86	19.52	19.73	20.51
7	---	---	---	22.86	22.62	22.21	20.86	19.96	19.84	19.51	19.75	20.50
8	---	---	---	22.86	22.67	22.18	20.82	19.92	19.88	19.54	19.77	20.53
9	---	---	---	22.87	22.59	22.17	20.82	19.89	19.82	19.58	19.80	20.07
10	---	---	---	22.85	22.58	22.13	20.80	19.84	19.68	19.59	19.80	19.75
11	---	---	---	22.76	22.65	22.05	20.79	19.90	19.56	19.66	---	19.65
12	---	---	---	22.78	22.63	22.06	20.74	19.91	19.59	19.60	---	19.59
13	---	---	---	22.80	22.59	22.09	20.63	19.93	19.56	19.61	---	19.61
14	---	---	---	22.76	22.63	21.98	20.51	19.89	19.54	19.60	---	19.60
15	---	---	---	22.79	22.69	22.00	20.47	19.94	19.44	19.59	20.04	19.59
16	---	---	---	22.79	22.68	21.93	20.41	19.94	19.39	19.62	20.05	19.54
17	---	---	---	22.75	22.65	21.92	20.39	19.93	19.31	19.66	20.07	19.56
18	---	---	---	22.70	22.64	21.91	20.32	19.93	19.29	19.64	20.08	19.60
19	---	---	---	22.77	22.64	21.92	20.22	19.99	19.31	19.62	20.16	19.62
20	---	---	---	22.79	22.60	21.80	20.24	19.96	19.32	19.66	20.20	19.61
21	---	---	---	22.71	22.64	21.74	20.14	19.91	19.34	19.69	20.23	19.60
22	---	---	---	22.70	22.71	21.72	20.18	19.87	19.33	19.75	20.27	19.60
23	---	---	---	22.73	22.64	21.69	20.15	19.83	19.36	19.80	20.31	19.60
24	---	---	---	22.75	22.63	21.65	20.20	19.64	19.31	19.90	20.41	---
25	---	---	---	22.75	22.65	21.56	20.07	19.56	19.34	19.89	20.42	---
26	---	---	---	22.72	22.66	21.50	20.05	19.51	19.36	19.88	20.42	---
27	---	---	---	22.65	22.66	21.45	20.03	19.52	19.44	19.79	20.45	---
28	---	---	---	22.70	22.67	21.40	20.07	19.55	19.43	19.79	20.50	---
29	---	---	---	22.71	22.63	21.34	20.02	19.62	19.43	19.81	20.40	---
30	---	---	---	22.67	---	21.32	20.02	19.62	19.45	19.82	20.34	---
31	---	---	---	22.76	---	21.29	---	19.57	---	19.69	20.33	---
MEAN	---	---	---	---	22.65	21.91	20.51	19.83	19.52	19.66	---	---
MAX	---	---	---	---	22.79	22.58	21.23	19.99	19.88	19.90	---	---
MIN	---	---	---	---	22.55	21.29	20.02	19.51	19.29	19.44	---	---

ORLEANS COUNTY—Continued



OSWEGO COUNTY

432148076225101. Local number, Ow 5013.

LOCATION.--Lat 43°21'48", long 76°22'51", Hydrologic Unit 04140203, in gravel pit adjacent to Oswego County landfill, near Volney. Owner: Oswego County.

AQUIFER.--Confined aquifer in sandstone of the Medina Group and Queenston Formation of Upper Ordovician and Lower Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2.0 inch, depth 83 ft, cased to 64 ft, screened from 64 to 83 ft.

INSTRUMENTATION.--Electronic data logger--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 475 ft above NGVD of 1929, from topographic map. Measuring point: Top of pipe, 1.77 ft above land-surface datum.

REMARKS.--Satellite water-level telemetry at station.

PERIOD OF RECORD.--September 1999 to current year. Records for September 1999 to September 2002 are unpublished and available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.69 ft below land-surface datum, Apr. 1, 2004; lowest measured, 23.96 ft below land-surface datum, Sept. 28, 2001.

EXTREMES FOR CURRENT YEAR.--Highest water level, 19.69 ft below land surface datum, Apr. 1; lowest, 23.76 ft below land surface datum, Oct. 1.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.76	22.92	22.40	21.55	22.47	22.75	19.71	21.94	21.90	22.95	23.05	23.18
2	23.75	22.89	22.37	21.53	22.50	22.73	19.77	21.97	21.94	22.96	23.05	23.18
3	23.74	22.85	22.35	21.49	22.51	22.66	19.87	21.99	22.00	22.98	23.06	23.18
4	23.72	22.82	22.33	21.45	22.54	22.51	20.00	22.02	22.04	23.01	23.07	23.18
5	23.69	22.80	22.31	21.41	22.57	22.29	20.14	22.06	22.09	23.03	23.09	23.19
6	23.65	22.80	22.30	21.38	22.57	21.94	20.29	22.10	22.14	23.04	23.10	23.20
7	23.62	22.80	22.31	21.36	22.59	21.58	20.43	22.13	22.19	23.06	23.11	23.20
8	23.61	22.81	22.33	21.37	22.61	21.32	20.56	22.17	22.24	23.07	23.12	23.20
9	23.60	22.83	22.34	21.41	22.62	21.20	20.69	22.20	22.29	23.08	23.13	23.08
10	23.60	22.84	22.35	21.46	22.64	21.15	20.82	22.21	22.33	23.10	23.14	22.99
11	23.60	22.84	22.30	21.52	22.65	21.13	20.94	22.23	22.37	23.12	23.15	22.96
12	23.59	22.84	22.26	21.58	22.66	21.13	21.06	22.27	22.41	23.13	23.17	22.92
13	23.61	22.83	22.26	21.64	22.66	21.17	21.14	22.30	22.45	23.14	23.17	22.90
14	23.59	22.82	22.25	21.71	22.68	21.23	21.13	22.34	22.49	23.15	23.18	22.88
15	23.55	22.82	22.25	21.77	22.69	21.29	21.17	22.36	22.52	23.11	23.19	22.88
16	23.51	22.83	22.24	21.83	22.70	21.34	21.23	22.39	22.56	23.07	23.19	22.87
17	23.48	22.84	22.23	21.89	22.70	21.41	21.27	22.42	22.59	23.06	23.20	22.87
18	23.46	22.84	22.22	21.94	22.71	21.48	21.31	22.44	22.62	23.07	23.21	22.87
19	23.44	22.82	22.20	22.00	22.72	21.54	21.34	22.46	22.65	23.08	23.22	22.89
20	23.42	22.75	22.20	22.06	22.73	21.59	21.38	22.49	22.68	23.09	23.23	22.90
21	23.38	22.72	22.20	22.10	22.74	21.62	21.43	22.51	22.71	23.11	23.24	22.90
22	23.37	22.68	22.21	22.14	22.75	21.66	21.47	22.53	22.75	23.13	23.24	---
23	23.35	22.65	22.21	22.19	22.75	21.70	21.53	22.53	22.77	23.14	23.25	22.95
24	23.35	22.62	22.16	22.22	22.75	21.75	21.58	22.32	22.80	23.16	23.25	22.96
25	23.34	22.58	21.97	22.26	22.75	21.69	21.64	22.13	22.81	23.17	23.26	22.98
26	23.32	22.56	21.85	22.30	22.75	21.55	21.68	21.99	22.83	23.19	23.27	23.00
27	23.25	22.55	21.77	22.32	22.75	21.11	21.73	21.90	22.86	23.13	23.28	23.01
28	23.18	22.52	21.73	22.36	22.76	20.49	21.79	21.85	22.88	23.07	23.28	23.02
29	23.12	22.46	21.70	22.39	22.76	20.10	21.84	21.84	22.90	23.07	23.28	23.04
30	23.05	22.43	21.64	22.41	---	19.84	21.89	21.86	22.92	23.07	23.24	23.07
31	22.97	---	21.58	22.44	---	19.71	---	21.89	---	23.07	23.19	---
MEAN	23.47	22.75	22.16	21.85	22.66	21.44	21.03	22.19	22.49	23.08	23.18	---
MAX	23.76	22.92	22.40	22.44	22.76	22.75	21.89	22.53	22.92	23.19	23.28	---
MIN	22.97	22.43	21.58	21.36	22.47	19.71	19.71	21.84	21.90	22.95	23.05	---

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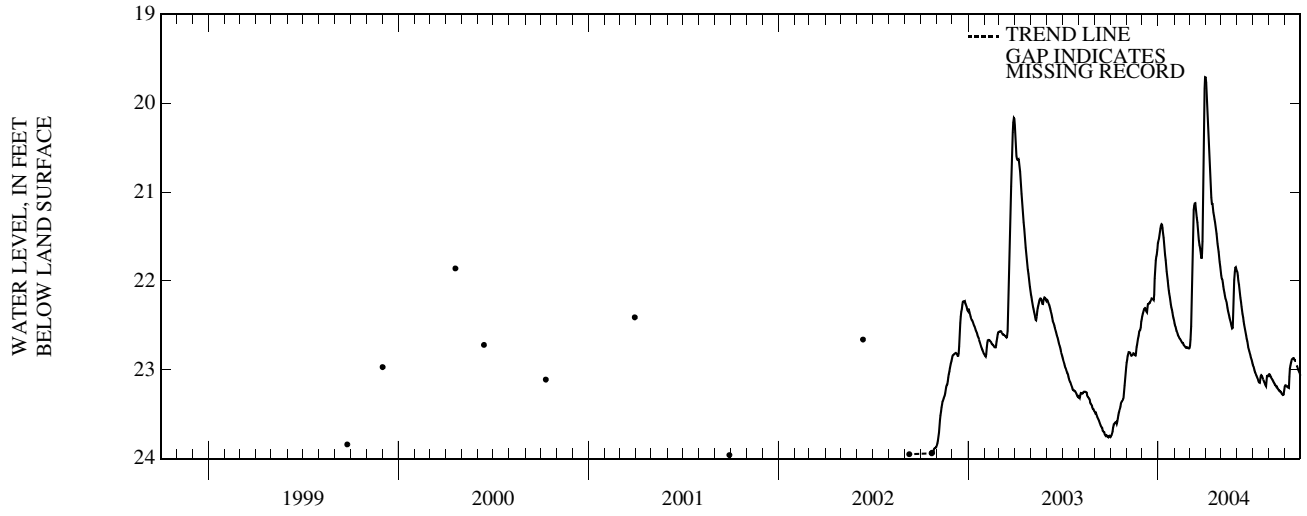
OSWEGO COUNTY—Continued



OSWEGO COUNTY

432148076225102. Local number, Ow 5014.

LOCATION.--Lat 43°21'48", long 76°22'51", Hydrologic Unit 04140203, in gravel pit adjacent to Oswego County landfill, near Volney. Owner: Oswego County.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 30 ft, screened from 20 ft to 30 ft.

INSTRUMENTATION.--Electronic data logger--15 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 475 ft above NGVD of 1929, from topographic map. Measuring point: Top of pipe, 2.07 ft above land-surface datum.

REMARKS.--Satellite water-level telemetry at station.

PERIOD OF RECORD.--September 1999 to current year. Records for September 1999 to October 2002 are unpublished and available in the files of the U.S. Geological Survey.

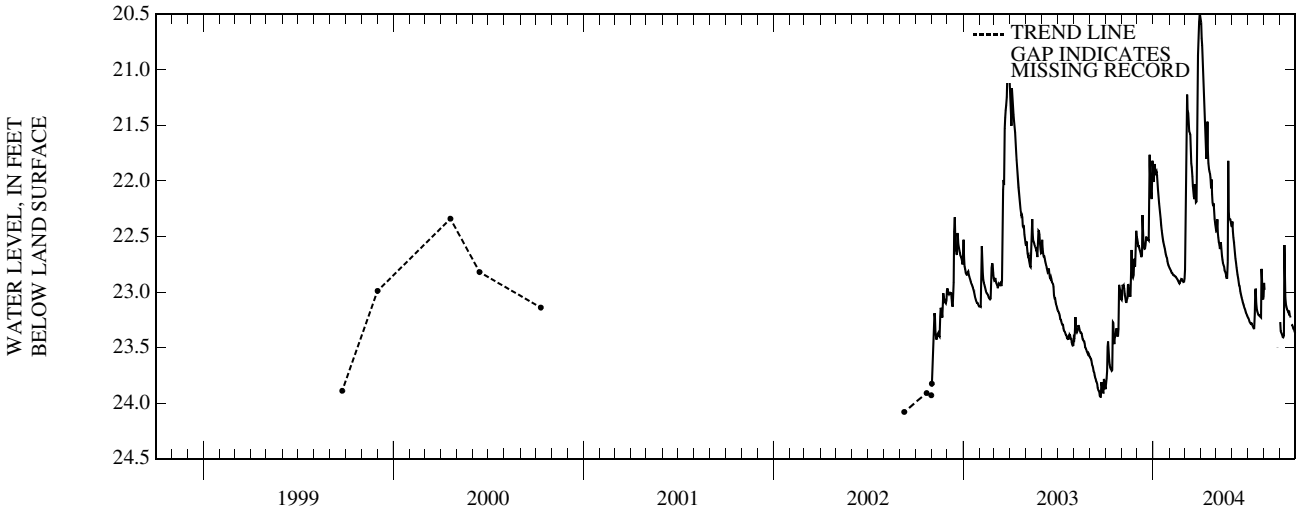
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.49 ft below land-surface datum, Mar. 30, 2004; lowest measured, 24.08 ft below land-surface datum, Sept. 9, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level, 20.49 ft below land-surface datum, Mar. 30; lowest, 23.88 ft below land-surface datum, Oct. 1, 2.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.87	23.07	22.52	21.98	22.78	22.88	20.55	22.45	22.37	23.23	22.92	23.27
2	23.83	23.03	22.56	22.01	22.79	22.80	20.58	22.45	22.45	23.24	22.98	23.35
3	23.78	22.93	22.60	21.85	22.80	22.52	20.71	22.35	22.51	23.25	---	23.36
4	23.71	22.95	22.58	21.88	22.81	22.08	20.78	22.47	22.56	23.26	---	23.38
5	23.49	22.94	22.61	21.92	22.83	21.66	20.94	22.51	22.60	23.28	---	23.39
6	23.45	22.97	22.63	21.93	22.83	21.22	21.10	22.55	22.65	23.29	---	23.40
7	23.54	23.02	22.64	21.92	22.83	21.36	21.24	22.58	22.70	23.28	---	23.41
8	23.61	23.05	22.66	21.95	22.84	21.39	21.37	22.61	22.74	23.28	---	23.39
9	23.66	23.08	22.69	22.01	22.85	21.48	21.49	22.59	22.78	23.29	---	22.58
10	23.68	23.10	22.67	22.08	22.85	21.55	21.61	22.55	22.81	23.30	---	22.85
11	23.69	23.08	22.31	22.15	22.85	21.56	21.70	22.62	22.84	23.32	---	23.05
12	23.70	23.06	22.43	22.20	22.86	21.58	21.80	22.68	22.88	23.32	---	23.11
13	23.71	22.94	22.55	22.25	22.86	21.74	21.69	22.71	22.91	23.33	---	23.14
14	23.70	22.94	22.60	22.29	22.87	21.84	21.47	22.74	22.94	23.20	---	23.15
15	23.27	22.99	22.61	22.35	22.88	21.88	21.74	22.76	22.95	22.98	---	23.16
16	23.28	23.03	22.61	22.40	22.88	21.96	21.84	22.77	22.99	22.98	---	23.17
17	23.43	23.03	22.58	22.44	22.89	22.05	21.89	22.80	23.01	23.10	---	23.19
18	23.47	23.04	22.51	22.48	22.90	22.09	21.92	22.82	23.03	23.16	---	23.17
19	23.39	22.86	22.51	22.52	22.91	22.14	21.93	22.83	23.05	23.18	---	23.20
20	23.40	22.62	22.53	22.55	22.92	22.16	21.97	22.85	23.07	23.19	---	23.22
21	23.36	22.82	22.53	22.57	22.91	22.03	22.07	22.85	23.09	23.20	---	23.23
22	23.33	22.86	22.53	22.59	22.90	22.10	21.99	22.88	23.11	23.21	---	---
23	23.35	22.87	22.54	22.61	22.90	22.19	22.12	22.73	23.12	23.21	---	23.29
24	23.38	22.85	22.07	22.64	22.88	22.19	22.19	21.82	23.14	23.21	---	23.30
25	23.40	22.70	21.77	22.66	22.88	21.68	22.23	22.27	23.15	23.22	---	23.31
26	23.33	22.76	22.02	22.68	22.90	21.46	22.20	22.34	23.17	23.23	---	23.32
27	22.94	22.77	22.08	22.69	22.90	20.87	22.28	22.34	23.18	22.79	23.50	23.34
28	22.96	22.60	22.13	22.72	22.91	20.69	22.34	22.35	23.20	22.88	---	23.35
29	22.99	22.45	22.16	22.74	22.91	20.57	22.39	22.37	23.21	23.03	---	23.36
30	22.98	22.50	21.82	22.76	---	20.51	22.42	22.40	23.22	23.07	---	23.37
31	23.07	---	21.87	22.77	---	20.51	---	22.41	---	23.04	---	---
MEAN	23.44	22.90	22.42	22.34	22.87	21.70	21.68	22.56	22.91	23.18	---	---
MAX	23.87	23.10	22.69	22.77	22.92	22.88	22.42	22.88	23.22	23.33	---	---
MIN	22.94	22.45	21.77	21.85	22.78	20.51	20.55	21.82	22.37	22.79	---	---

OSWEGO COUNTY—Continued



OTSEGO COUNTY

424136075025101. Local number, Og 23.

LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, at "Wild Creek Farm", 0.6 mi northeast of intersection of State Highway 205 and Kallan Road, 2.2 mi north of Hartwick, and 3.2 mi southeast of Oaksville. Owner: Private.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 inch, depth 15 ft, stone lined.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,432.44 ft above NGVD of 1929. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.

PERIOD OF RECORD.--May 1953 to August 1995, December 1996 to current year. Records for May 1953 to September 1976 are unpublished and available in files of the Geological Survey. Weekly measurement with chalked tape by observer Oct. 1976 to Feb. 1999.

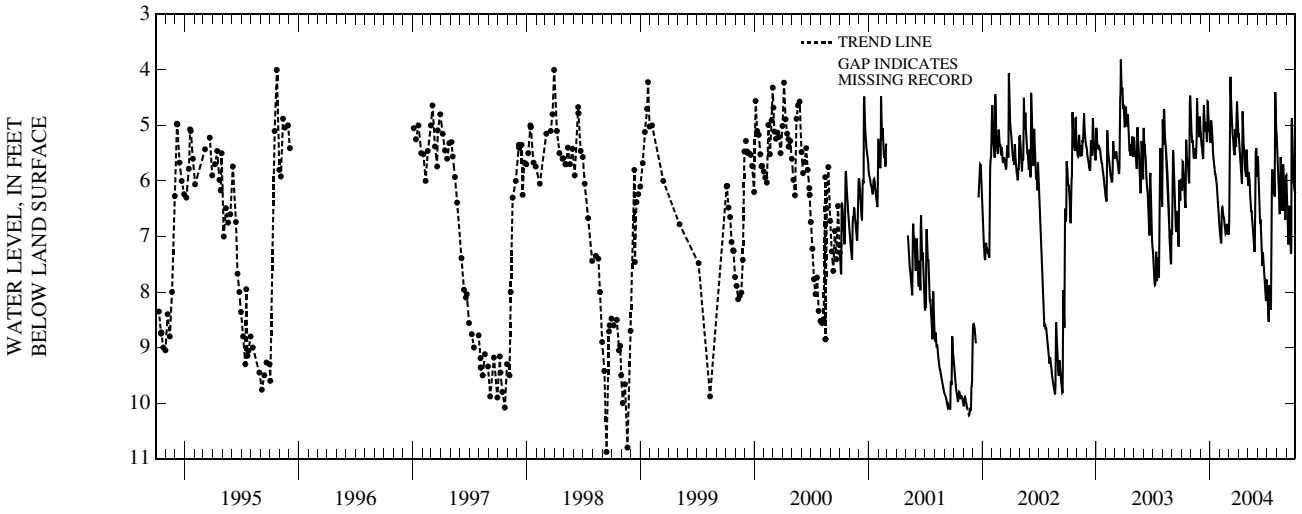
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft below land-surface datum, Nov. 14, 1964.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.02 ft below land-surface datum, Mar. 6; lowest 8.56 ft below land- surface datum, July 7.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.09	4.94	5.05	5.23	6.89	6.94	5.21	6.01	5.68	7.90	5.12	5.90
2	6.13	5.09	5.12	5.31	6.96	6.73	5.15	6.08	5.56	8.03	5.30	6.10
3	6.17	5.17	5.24	5.11	7.00	5.73	5.28	5.86	5.68	8.16	5.47	6.32
4	6.02	5.26	5.31	4.91	7.05	4.82	5.37	5.84	5.91	8.27	5.63	6.54
5	5.65	5.31	5.37	4.95	7.12	4.37	5.46	5.94	6.13	8.36	5.74	6.74
6	5.66	5.27	5.42	5.02	7.11	4.13	5.55	5.98	6.33	8.46	5.87	6.89
7	5.77	5.38	5.47	5.11	6.65	4.41	5.65	6.08	6.48	8.53	6.02	7.02
8	5.90	5.48	5.53	5.23	6.48	4.56	5.73	6.21	6.63	8.00	6.18	7.14
9	6.03	5.57	5.58	5.33	6.47	4.66	5.81	6.31	6.77	7.88	6.33	6.66
10	6.13	5.60	5.61	5.43	6.51	4.80	5.90	6.38	6.69	7.95	6.46	6.45
11	6.23	5.56	4.85	5.53	6.57	4.92	5.99	6.48	6.76	8.08	6.60	6.49
12	6.31	5.43	4.64	5.60	6.62	5.01	6.05	6.56	6.90	8.21	6.38	6.63
13	6.41	5.41	4.83	5.65	6.64	5.13	5.63	6.53	7.06	8.32	5.82	6.82
14	6.49	5.48	4.92	5.71	6.66	5.20	4.75	6.63	7.23	8.28	5.57	7.02
15	5.75	5.56	5.00	5.76	6.72	5.25	4.95	6.73	7.38	7.44	5.75	7.18
16	5.26	5.60	5.11	5.83	6.78	5.35	5.15	6.78	7.51	6.56	5.96	7.32
17	5.41	5.52	5.08	5.87	6.83	5.44	5.30	6.86	7.53	5.99	6.08	7.27
18	5.55	5.40	4.95	5.88	6.87	5.50	5.38	6.95	7.28	5.79	6.22	4.97
19	5.61	5.21	5.07	5.92	6.90	5.54	5.40	7.02	7.35	5.88	6.39	4.88
20	5.64	4.52	5.14	5.97	6.95	5.52	5.53	7.12	7.47	5.88	6.54	5.16
21	5.67	4.72	5.22	6.02	6.94	5.07	5.65	7.21	7.59	6.00	6.14	5.38
22	5.75	4.84	5.30	6.06	6.84	5.12	5.78	7.28	7.68	6.18	5.70	5.58
23	5.81	4.94	5.20	6.13	6.80	5.29	5.83	7.23	7.77	6.23	5.79	5.75
24	5.91	5.04	4.57	6.22	6.77	5.38	5.85	6.71	7.84	6.03	6.00	5.90
25	5.99	5.04	4.57	6.33	6.80	4.96	5.92	6.10	7.92	6.12	6.21	6.01
26	6.04	5.15	4.77	6.43	6.85	4.79	5.54	5.46	7.99	6.28	6.36	6.07
27	5.15	5.21	4.89	6.51	6.90	4.57	5.44	5.48	8.08	5.01	6.49	6.14
28	4.60	5.18	4.99	6.59	6.95	4.72	5.60	5.41	8.16	4.40	6.60	6.18
29	4.46	4.84	5.07	6.67	6.97	4.83	5.76	5.57	7.78	4.63	6.70	6.19
30	4.58	5.00	5.06	6.73	---	4.93	5.90	5.77	7.79	4.93	6.47	6.22
31	4.77	---	5.11	6.80	---	5.09	---	5.93	---	5.09	5.91	---
MEAN	5.71	5.22	5.10	5.80	6.81	5.12	5.55	6.34	7.10	6.87	6.06	6.30
MAX	6.49	5.60	5.61	6.80	7.12	6.94	6.05	7.28	8.16	8.53	6.70	7.32
MIN	4.46	4.52	4.57	4.91	6.47	4.13	4.75	5.41	5.56	4.40	5.12	4.88

OTSEGO COUNTY—Continued



SCHUYLER COUNTY

422710076462901. Local number, Sy 706.

LOCATION.--Lat 42°27'10", long 76°46'29", Hydrologic Unit 04140201, behind red barn of landowner, on State Highway 79, 0.4 mi east of the intersection of State Highways 79 and 227, and 4.5 mi northeast of Burdett. Owner: Private.

AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 27 ft, cased to 27 ft, open end.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,160 ft above NGVD of 1929, from topographic map. Measuring point: Mark on inside of shelter, 3.83 ft above land-surface datum.

PERIOD OF RECORD.--October 2003 to September 2004.

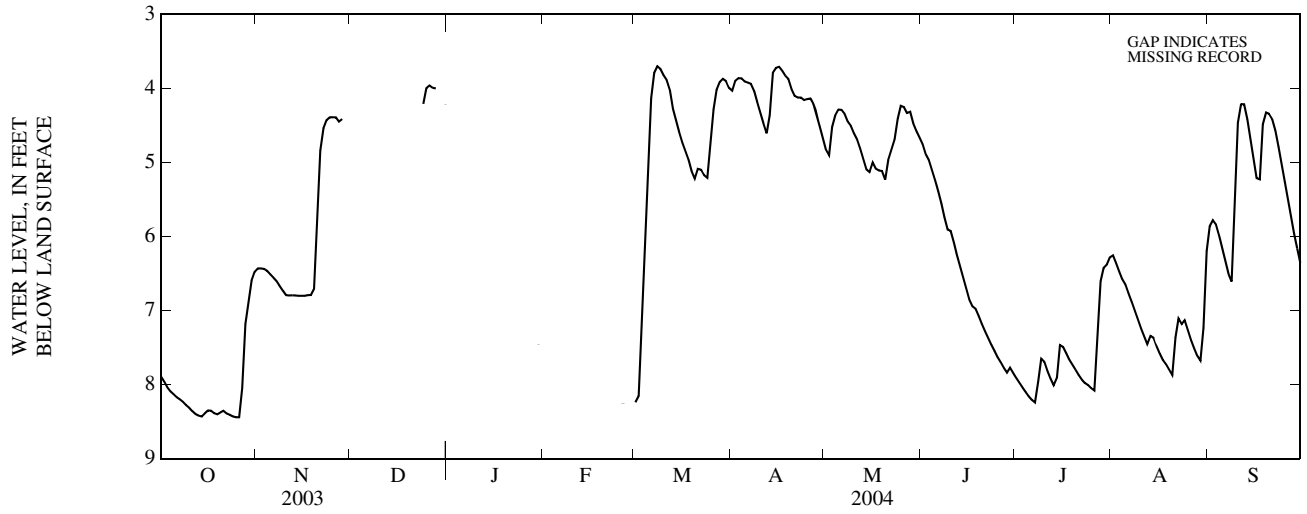
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.69 ft, below land-surface datum, April 16, 2004; lowest, 8.44 ft below land-surface datum, Oct. 14, 15, 24, 25, 26, 27.

EXTREMES FOR CURRENT PERIOD.--October 2003 to September 2004; Highest water level, 3.69 ft below land-surface datum, April 16; lowest, 8.44 ft below land-surface datum, Oct. 14, 15, 24, 25, 26, 27.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.89	6.43	---	---	---	8.24	4.03	4.83	4.75	7.91	6.25	5.86
2	7.96	6.43	---	---	---	8.16	3.90	4.90	4.89	7.98	6.36	5.78
3	8.04	6.44	---	---	---	7.26	3.86	4.52	4.97	8.04	6.47	5.84
4	8.09	6.46	---	---	---	6.02	3.86	4.36	5.10	8.10	6.58	5.99
5	8.13	6.51	---	---	---	4.97	3.91	4.28	5.24	8.16	6.65	6.16
6	8.17	6.56	---	---	---	4.14	3.92	4.29	5.39	8.21	6.77	6.34
7	8.20	6.60	---	---	---	3.79	3.94	4.34	5.55	8.24	6.88	6.51
8	8.23	6.67	---	---	---	3.70	4.03	4.45	5.74	7.96	7.00	6.61
9	8.28	6.73	---	---	---	3.74	4.18	4.50	5.91	7.65	7.12	5.35
10	8.31	6.79	---	---	---	3.82	4.33	4.61	5.92	7.69	7.24	4.47
11	8.36	6.80	---	---	---	3.89	4.47	4.69	6.08	7.81	7.35	4.21
12	8.40	6.79	---	---	---	4.02	4.61	4.81	6.25	7.92	7.45	4.21
13	8.42	6.80	---	---	---	4.27	4.36	4.95	6.41	8.01	7.34	4.41
14	8.43	6.80	---	---	---	4.44	3.79	5.10	6.56	7.91	7.37	4.67
15	8.39	6.80	---	---	---	4.59	3.72	5.13	6.71	7.47	7.49	4.96
16	8.35	6.80	---	---	---	4.73	3.71	5.00	6.85	7.49	7.58	5.21
17	8.35	6.79	---	---	---	4.84	3.76	5.08	6.95	7.57	7.67	5.23
18	8.39	6.79	---	---	---	4.96	3.83	5.11	6.97	7.67	7.73	4.49
19	8.40	6.71	---	---	---	5.12	3.87	5.11	7.08	7.73	7.80	4.33
20	8.38	5.59	---	---	---	5.22	4.01	5.23	7.18	7.80	7.87	4.34
21	8.35	4.84	---	---	---	5.09	4.10	4.97	7.28	7.87	7.36	4.42
22	8.39	4.54	---	---	---	5.10	4.12	4.83	7.37	7.93	7.11	4.57
23	8.41	4.43	---	---	---	5.17	4.12	4.70	7.46	7.98	7.18	4.79
24	8.43	4.39	4.21	---	---	5.21	4.16	4.41	7.54	8.01	7.13	5.03
25	8.44	4.39	4.00	---	---	4.75	4.15	4.23	7.63	8.05	7.26	5.26
26	8.44	4.39	3.96	---	8.25	4.28	4.14	4.25	7.70	8.08	7.39	5.50
27	8.05	4.45	3.99	---	---	4.02	4.21	4.33	7.77	7.30	7.51	5.74
28	7.18	4.42	4.00	---	---	3.91	4.37	4.32	7.84	6.60	7.61	5.96
29	6.89	---	---	---	---	3.87	4.51	4.47	7.77	6.42	7.68	6.16
30	6.59	---	---	7.46	---	3.90	4.67	4.57	7.84	6.38	7.24	6.35
31	6.48	---	4.22	---	---	3.99	---	4.66	---	6.28	6.20	---
MEAN	8.09	---	---	---	---	4.81	4.09	4.68	6.56	7.68	7.18	5.29
MAX	8.44	---	---	---	---	8.24	4.67	5.23	7.84	8.24	7.87	6.61
MIN	6.48	---	---	---	---	3.70	3.71	4.23	4.75	6.28	6.20	4.21

SCHUYLER COUNTY—Continued



STEUBEN COUNTY

422445077203301. Local number, Sb 472.

LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona. Owner: Private.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation well, diameter 2.5 inch, depth 17 ft, filled in from original depth of 18 ft, cased to 16 ft, 1.25 inch well point (60-gauze screen 16 ft to 18 ft, damaged during well installation).

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,209.78 ft above NGVD of 1929. Measuring point: Top of casing, 2.99 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year. Records for November 1965 to September 1976 are unpublished and available in files of the Geological Survey. Weekly measurement with chalked tape by observer Nov. 1965 to Dec. 1997.

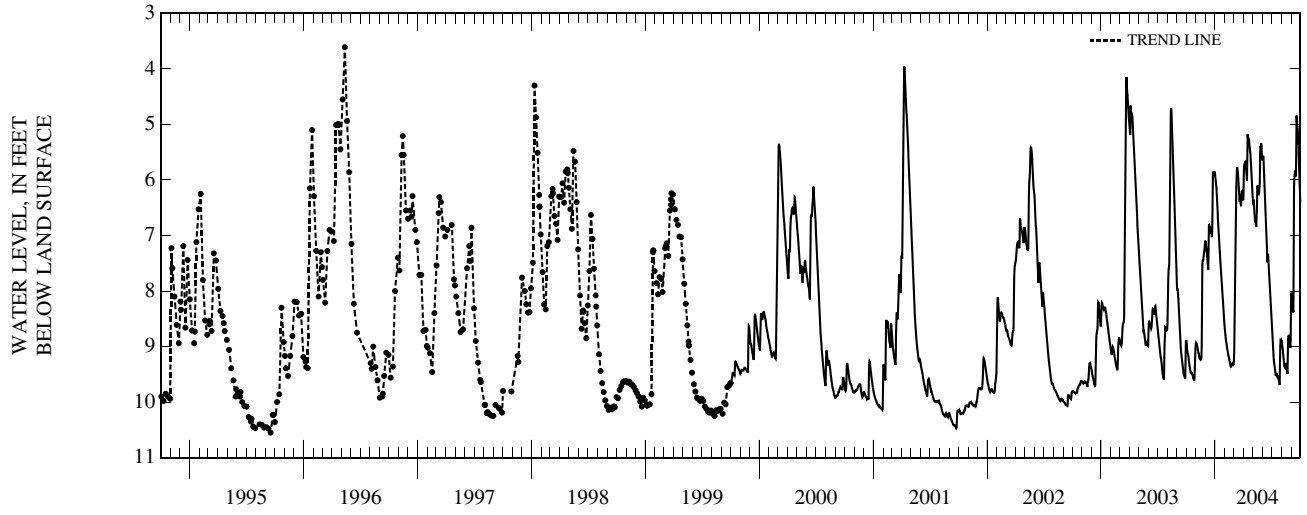
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.61 ft below land-surface datum, May 12, 1996; lowest measured, 10.84 ft below land-surface datum, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.77 ft below land-surface datum, Sept. 18; lowest, 9.70 ft below land-surface datum, July 26.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.91	8.93	7.09	5.93	8.67	9.27	6.30	6.39	5.60	8.77	8.89	8.03
2	8.97	8.94	7.13	5.98	8.73	9.12	5.89	6.45	5.66	8.85	8.91	8.04
3	9.04	8.95	7.18	6.03	8.78	8.47	5.74	6.35	5.57	8.94	8.97	8.09
4	9.09	8.97	7.23	6.08	8.84	7.99	5.72	6.41	5.62	9.02	9.03	8.16
5	9.11	9.01	7.28	6.14	8.90	7.53	5.71	6.51	5.73	9.09	9.08	8.23
6	9.13	9.04	7.34	6.24	8.93	7.02	5.68	6.61	5.85	9.17	9.14	8.29
7	9.17	9.07	7.41	6.35	8.97	6.69	5.67	6.68	5.98	9.23	9.20	8.35
8	9.21	9.11	7.48	6.47	9.01	6.38	5.69	6.74	6.13	9.28	9.26	8.39
9	9.26	9.12	7.56	6.59	9.05	6.13	5.76	6.76	6.28	9.32	9.31	7.05
10	9.31	9.15	7.62	6.70	9.08	5.96	5.84	6.77	6.43	9.37	9.36	6.12
11	9.35	9.18	7.22	6.79	9.11	5.82	5.93	6.81	6.58	9.42	9.37	5.98
12	9.39	9.20	6.81	6.90	9.15	5.77	6.01	6.85	6.74	9.46	9.38	5.90
13	9.42	9.21	6.81	7.00	9.17	5.84	5.77	6.63	6.89	9.51	9.34	5.84
14	9.46	9.23	6.84	7.10	9.20	5.86	5.18	6.56	7.04	9.52	9.30	5.82
15	9.47	9.23	6.90	7.20	9.23	5.93	5.23	6.18	7.20	9.48	9.31	5.87
16	9.46	9.24	6.93	7.31	9.26	6.00	5.27	6.10	7.36	9.49	9.35	5.94
17	9.46	9.22	6.91	7.41	9.28	6.10	5.28	6.16	7.49	9.53	9.38	5.68
18	9.47	9.19	6.89	7.49	9.31	6.21	5.28	6.19	7.35	9.55	9.41	4.84
19	9.49	9.00	6.92	7.59	9.33	6.34	5.28	6.23	7.35	9.55	9.46	4.96
20	9.51	7.84	6.96	7.69	9.35	6.40	5.36	6.24	7.47	9.52	9.49	5.02
21	9.52	7.50	6.99	7.79	9.36	6.27	5.42	6.22	7.60	9.55	9.24	5.07
22	9.55	7.46	7.03	7.88	9.36	6.34	5.48	6.12	7.74	9.58	8.86	5.15
23	9.57	7.45	6.87	7.98	9.34	6.44	5.50	6.05	7.87	9.60	8.81	5.26
24	9.58	7.43	6.34	8.07	9.32	6.47	5.57	5.52	8.00	9.63	8.80	5.38
25	9.60	7.38	5.87	8.16	9.31	6.29	5.67	5.44	8.13	9.66	8.82	5.51
26	9.62	7.32	5.85	8.25	9.32	6.21	5.76	5.39	8.25	9.69	8.87	5.67
27	9.55	7.29	5.90	8.32	9.32	6.20	5.88	5.44	8.37	9.42	8.93	5.84
28	9.31	7.24	5.91	8.39	9.33	6.24	6.03	5.34	8.48	8.99	8.98	6.02
29	9.16	7.16	5.91	8.46	9.32	6.29	6.16	5.47	8.57	8.88	9.03	6.22
30	9.03	7.10	5.87	8.52	---	6.34	6.28	5.56	8.67	8.89	8.88	6.41
31	8.95	---	5.85	8.60	---	6.36	---	5.61	---	8.91	8.21	---
MEAN	9.33	8.47	6.80	7.27	9.15	6.59	5.68	6.19	7.07	9.32	9.11	6.37
MAX	9.62	9.24	7.62	8.60	9.36	9.27	6.30	6.85	8.67	9.69	9.49	8.39
MIN	8.91	7.10	5.85	5.93	8.67	5.77	5.18	5.34	5.57	8.77	8.21	4.84

STEUBEN COUNTY—Continued



TIOGA COUNTY

421213076313301. Local number, Ti 891.

LOCATION.--Lat 42°12'13", long 76°31'33", Hydrologic Unit 02050103, next to baseball field backstop in field south of Spencer VanEtten Central School near Spencer. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 53 ft, screened 48 to 53 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,280 ft above NGVD of 1929, from topographic map. Measuring point: Top of well casing, 3.94 ft above land-surface datum.

PERIOD OF RECORD.--December 2003 to September 2004.

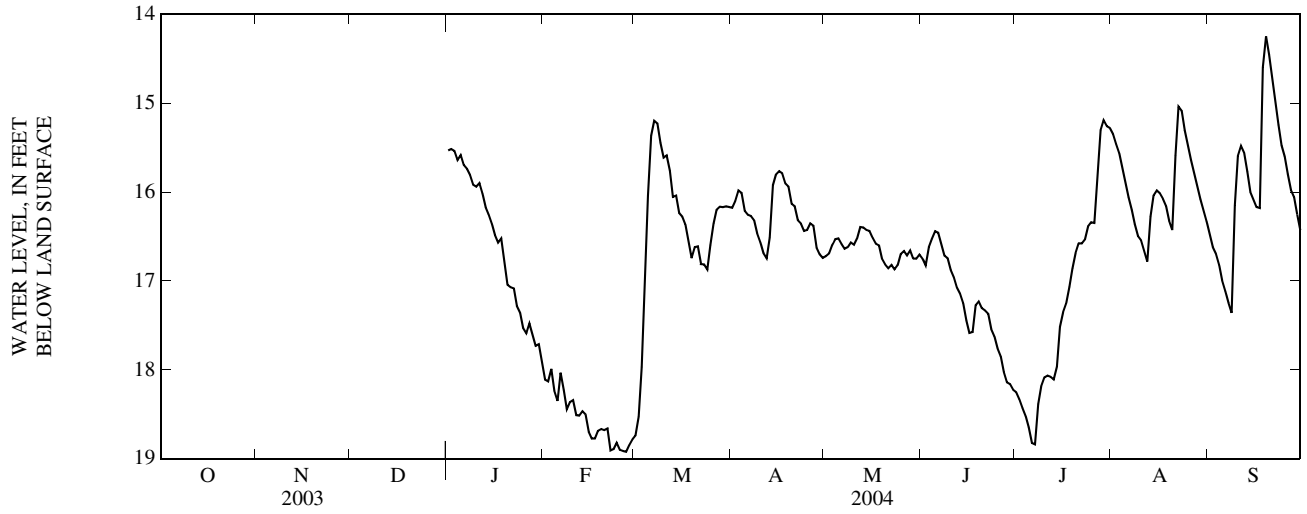
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.20 ft below land-surface datum, Sept. 19, 2004; lowest, 19.07 ft below land-surface datum, Feb. 25, 2004.

EXTREMES FOR CURRENT PERIOD.--December 2003 to September 2004: Highest water level, 14.20 ft below land-surface datum, Sept. 19; lowest, 19.07 ft below land-surface datum, Feb. 25.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	15.53	18.11	18.74	16.18	16.72	16.75	18.25	15.35	16.48
2	---	---	---	15.52	18.13	18.53	16.10	16.69	16.83	18.33	15.46	16.62
3	---	---	---	15.54	17.99	17.97	15.98	16.60	16.62	18.43	15.56	16.69
4	---	---	---	15.64	18.24	17.04	16.01	16.53	16.53	18.52	15.72	16.82
5	---	---	---	15.58	18.35	16.04	16.21	16.52	16.44	18.65	15.90	17.00
6	---	---	---	15.69	18.03	15.36	16.26	16.59	16.46	18.82	16.06	17.12
7	---	---	---	15.74	18.23	15.20	16.27	16.64	16.59	18.84	16.20	17.25
8	---	---	---	15.80	18.45	15.23	16.32	16.62	16.71	18.39	16.36	17.36
9	---	---	---	15.92	18.36	15.44	16.47	16.57	16.74	18.19	16.50	16.15
10	---	---	---	15.94	18.34	15.61	16.57	16.59	16.87	18.09	16.54	15.60
11	---	---	---	15.90	18.51	15.59	16.69	16.52	16.96	18.07	16.66	15.48
12	---	---	---	16.02	18.52	15.76	16.75	16.39	17.07	18.08	16.78	15.56
13	---	---	---	16.17	18.47	16.05	16.51	16.40	17.14	18.11	16.28	15.77
14	---	---	---	16.25	18.50	16.04	15.92	16.43	17.25	17.97	16.04	16.00
15	---	---	---	16.36	18.70	16.23	15.80	16.44	17.45	17.52	15.98	16.09
16	---	---	---	16.48	18.77	16.28	15.76	16.52	17.59	17.35	16.01	16.17
17	---	---	---	16.57	18.77	16.36	15.79	16.58	17.58	17.25	16.08	16.18
18	---	---	---	16.52	18.69	16.57	15.90	16.60	17.28	17.07	16.16	14.60
19	---	---	---	16.79	18.67	16.74	15.94	16.75	17.23	16.86	16.33	14.25
20	---	---	---	17.04	18.68	16.62	16.13	16.82	17.31	16.68	16.43	14.45
21	---	---	---	17.07	18.66	16.61	16.16	16.86	17.33	16.58	15.59	14.70
22	---	---	---	17.09	18.91	16.81	16.32	16.82	17.37	16.58	15.04	14.97
23	---	---	---	17.28	18.89	16.81	16.35	16.87	17.54	16.53	15.09	15.25
24	---	---	---	17.36	18.82	16.87	16.44	16.82	17.63	16.39	15.31	15.47
25	---	---	---	17.53	18.90	16.60	16.43	16.70	17.76	16.34	15.47	15.60
26	---	---	---	17.59	18.91	16.36	16.35	16.66	17.85	16.35	15.64	15.80
27	---	---	---	17.48	18.92	16.20	16.38	16.71	18.02	15.87	15.79	15.98
28	---	---	---	17.61	18.85	16.16	16.63	16.66	18.14	15.30	15.94	16.05
29	---	---	---	17.73	18.78	16.17	16.70	16.75	18.16	15.19	16.08	16.25
30	---	---	---	17.71	---	16.16	16.74	16.75	18.23	15.26	16.21	16.43
31	---	---	---	17.91	---	16.17	---	16.70	---	15.28	16.33	---
MEAN	---	---	---	16.56	18.56	16.40	16.27	16.64	17.25	17.26	15.96	15.94
MAX	---	---	---	17.91	18.92	18.74	16.75	16.87	18.23	18.84	16.78	17.36
MIN	---	---	---	15.52	17.99	15.20	15.76	16.39	16.44	15.19	15.04	14.25

TIOGA COUNTY—Continued



WAYNE COUNTY

430403077190201. Local number, Wn 592.

LOCATION.--Lat 43°04'03", long 77°19'02", Hydrologic Unit 04140201, Behind pumphouse on Kemp Road on the east side of Macedon. Owner: Village of Macedon.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug water supply well, diameter 36 inch, depth 21.7 ft.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 490 ft above NGVD of 1929, from topographic map. Measuring point: File marks in coupling inside shelter, 3.67 ft above land-surface datum.

PERIOD OF RECORD.--March 2004 to September 2004.

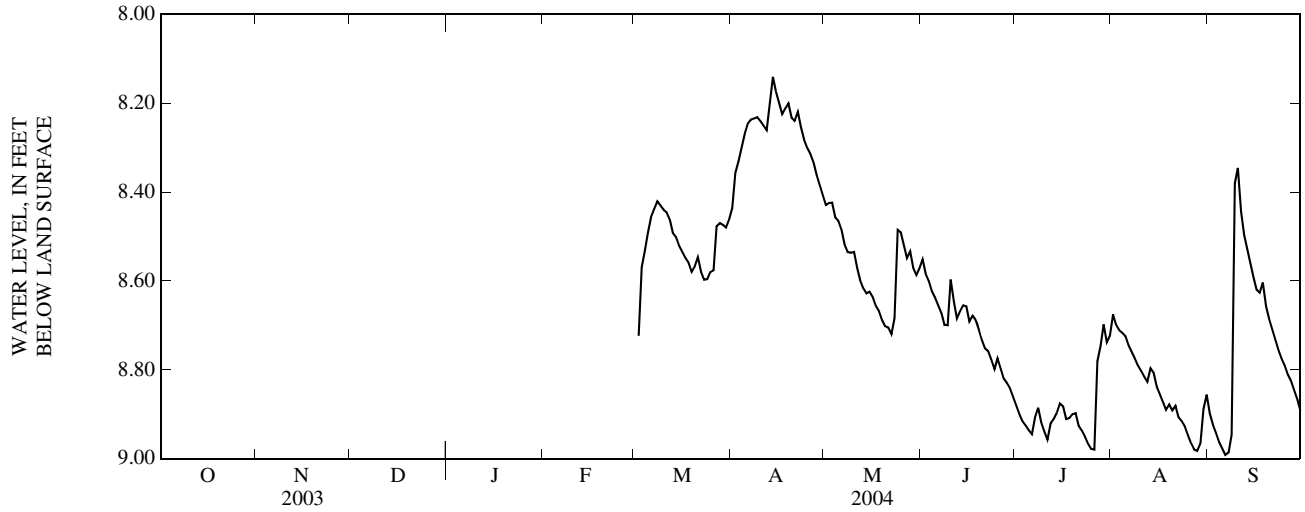
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.12 ft below land-surface datum, Apr. 13, 2004; lowest, 9.01 ft below land-surface datum, Sept. 7, 2004.

EXTREMES FOR CURRENT PERIOD.--March 2004 to September 2004: Highest water level, 8.12 ft below land-surface datum, Apr. 13; lowest, 9.01 ft below land-surface datum, Sept. 7.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	8.44	8.43	8.55	8.88	8.68	8.90
2	---	---	---	---	---	8.72	8.36	8.42	8.58	8.90	8.70	8.92
3	---	---	---	---	---	8.57	8.33	8.42	8.60	8.92	8.71	8.94
4	---	---	---	---	---	8.53	8.30	8.46	8.62	8.93	8.72	8.96
5	---	---	---	---	---	8.49	8.27	8.46	8.64	8.94	8.72	8.98
6	---	---	---	---	---	8.46	8.25	8.49	8.65	8.94	8.74	8.99
7	---	---	---	---	---	8.44	8.24	8.52	8.67	8.91	8.76	8.99
8	---	---	---	---	---	8.42	8.23	8.54	8.70	8.89	8.77	8.95
9	---	---	---	---	---	8.43	8.23	8.54	8.70	8.92	8.79	8.38
10	---	---	---	---	---	8.44	8.24	8.53	8.60	8.94	8.80	8.35
11	---	---	---	---	---	8.45	8.25	8.57	8.65	8.96	8.82	8.44
12	---	---	---	---	---	8.46	8.26	8.60	8.68	8.92	8.83	8.50
13	---	---	---	---	---	8.49	8.20	8.62	8.67	8.91	8.80	8.53
14	---	---	---	---	---	8.50	8.14	8.63	8.65	8.90	8.81	8.56
15	---	---	---	---	---	8.52	8.17	8.62	8.66	8.88	8.84	8.59
16	---	---	---	---	---	8.54	8.20	8.64	8.69	8.88	8.85	8.62
17	---	---	---	---	---	8.55	8.22	8.66	8.68	8.91	8.87	8.63
18	---	---	---	---	---	8.56	8.21	8.67	8.69	8.91	8.89	8.60
19	---	---	---	---	---	8.58	8.20	8.69	8.71	8.90	8.88	8.66
20	---	---	---	---	---	8.57	8.23	8.70	8.73	8.90	8.89	8.68
21	---	---	---	---	---	8.55	8.24	8.70	8.75	8.93	8.88	8.71
22	---	---	---	---	---	8.58	8.22	8.72	8.76	8.94	8.91	8.73
23	---	---	---	---	---	8.60	8.25	8.68	8.78	8.95	8.92	8.76
24	---	---	---	---	---	8.60	8.28	8.49	8.80	8.97	8.93	8.77
25	---	---	---	---	---	8.58	8.30	8.49	8.77	8.98	8.95	8.79
26	---	---	---	---	---	8.58	8.31	8.52	8.80	8.98	8.96	8.81
27	---	---	---	---	---	8.48	8.33	8.55	8.82	8.78	8.98	8.82
28	---	---	---	---	---	8.47	8.36	8.53	8.83	8.75	8.98	8.84
29	---	---	---	---	---	8.47	8.38	8.57	8.84	8.70	8.97	8.87
30	---	---	---	---	---	8.48	8.41	8.59	8.86	8.74	8.89	8.89
31	---	---	---	---	---	8.46	---	8.57	---	8.72	8.86	---
MEAN	---	---	---	---	---	---	8.27	8.57	8.70	8.89	8.84	8.74
MAX	---	---	---	---	---	---	8.44	8.72	8.86	8.98	8.98	8.99
MIN	---	---	---	---	---	---	8.14	8.42	8.55	8.70	8.68	8.35

WAYNE COUNTY—Continued



WYOMING COUNTY

423743078070802. Local number, Wo 4.

LOCATION.--Lat 42°37'43", long 78°07'08", Hydrologic Unit 04130002, on Letchworth Central School property, on County Road 40, 0.1 mi south of School Road, and 1.0 mi southeast of Gainesville. Owner: Letchworth Central School.

AQUIFER.--Unconfined aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 20 ft, cased to 20 ft, open end.

INSTRUMENTATION.---Electronic data recorder--30 minute; periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 1,606.76 ft above NGVD of 1929. Measuring point: Top of casing, 2.64 ft above land-surface datum.

REMARKS.--Well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft southeast, which had 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. Satellite water-level telemetry at station.

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.

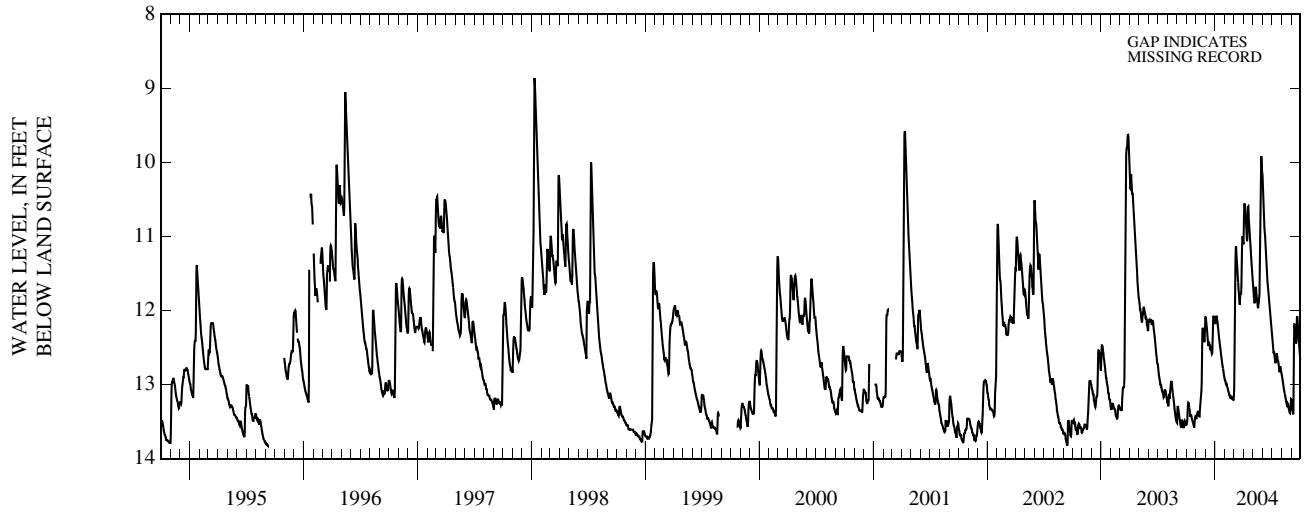
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.89 ft below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft below land-surface datum, Nov. 3, 1974.

EXTREMES FOR CURRENT YEAR.--Highest water level, 9.90 ft above land-surface datum, May 28; lowest, 13.59 ft below land-surface datum, Oct. 26.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.54	13.46	12.09	12.17	12.93	13.15	11.11	11.65	10.17	12.34	12.86	13.20
2	13.52	13.47	12.09	12.18	12.94	13.05	10.90	11.70	10.29	12.39	12.88	13.23
3	13.51	13.42	12.13	12.16	12.95	12.66	10.66	11.76	10.43	12.44	12.91	13.26
4	13.48	13.40	12.17	12.10	12.98	12.35	10.55	11.81	10.56	12.48	12.93	13.30
5	13.36	13.38	12.21	12.07	13.00	11.94	10.57	11.85	10.67	12.52	12.96	13.33
6	13.29	13.37	12.26	12.09	13.00	11.31	10.61	11.90	10.78	12.56	12.99	13.36
7	13.24	13.37	12.32	12.12	13.00	11.15	10.66	11.87	10.89	12.58	13.02	13.39
8	13.25	13.38	12.38	12.15	13.02	11.13	10.72	11.89	10.94	12.55	13.05	13.40
9	13.28	13.39	12.43	12.18	13.03	11.19	10.81	11.74	10.99	12.60	13.08	12.86
10	13.31	13.41	12.48	12.22	13.05	11.28	10.89	11.68	11.08	12.64	13.10	12.35
11	13.35	13.43	12.45	12.25	13.07	11.34	10.98	11.69	11.17	12.67	13.12	12.19
12	13.38	13.43	12.42	12.29	13.09	11.41	11.06	11.74	11.26	12.70	13.15	12.19
13	13.41	13.37	12.44	12.34	13.10	11.50	11.04	11.79	11.34	12.71	13.17	12.25
14	13.44	13.30	12.47	12.38	13.11	11.57	10.75	11.84	11.42	12.68	13.19	12.32
15	13.42	13.26	12.51	12.41	13.14	11.62	10.60	11.88	11.49	12.61	13.21	12.39
16	13.41	13.21	12.54	12.46	13.15	11.71	10.60	11.91	11.57	12.59	13.23	12.44
17	13.43	13.15	12.52	12.49	13.16	11.75	10.67	11.96	11.62	12.59	13.25	12.43
18	13.45	13.09	12.50	12.52	13.17	11.82	10.76	11.97	11.66	12.62	13.27	12.21
19	13.47	12.97	12.52	12.56	13.18	11.89	10.82	11.88	11.70	12.66	13.29	12.09
20	13.49	12.56	12.54	12.60	13.19	11.92	10.91	11.90	11.75	12.68	13.30	12.08
21	13.50	12.30	12.57	12.63	13.17	11.82	10.97	11.83	11.81	12.69	13.26	12.12
22	13.51	12.23	12.59	12.66	13.18	11.77	11.04	11.78	11.86	12.71	13.27	12.19
23	13.53	12.25	12.57	12.70	13.18	11.76	11.12	11.62	11.92	12.75	13.30	12.26
24	13.54	12.29	12.41	12.73	13.17	11.78	11.20	11.21	11.97	12.78	13.32	12.33
25	13.56	12.33	12.21	12.76	13.18	11.67	11.26	10.69	12.03	12.82	13.34	12.39
26	13.58	12.38	12.10	12.78	13.19	11.39	11.32	10.24	12.08	12.83	13.36	12.45
27	13.53	12.43	12.07	12.80	13.20	11.14	11.38	10.03	12.13	12.77	13.38	12.51
28	13.47	12.41	12.08	12.84	13.21	11.05	11.47	9.92	12.19	12.75	13.39	12.56
29	13.44	12.25	12.12	12.87	13.21	11.00	11.53	9.96	12.23	12.77	13.35	12.62
30	13.43	12.15	12.13	12.89	---	11.02	11.59	10.08	12.29	12.81	13.29	12.66
31	13.43	---	12.13	12.91	---	11.08	---	10.14	---	12.83	13.20	---
MEAN	13.44	12.96	12.34	12.46	13.10	11.65	10.95	11.42	11.41	12.65	13.17	12.61
MAX	13.58	13.47	12.59	12.91	13.21	13.15	11.59	11.97	12.29	12.83	13.39	13.40
MIN	13.24	12.15	12.07	12.07	12.93	11.00	10.55	9.92	10.17	12.34	12.86	12.08

WYOMING COUNTY—Continued



YATES COUNTY

423143076582601. Local number, Ya 180.

LOCATION.--Lat 42°31'43", long 76°58'26", Hydrologic Unit 04140201, on gravel utility road just north of Dundee Central School at Dundee. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch PVC, depth 19.5 ft, cased to 16 ft, open end.

INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 990 ft above NGVD of 1929, from topographic map. Measuring point: File marks in coupling inside shelter, 3.67 ft above land-surface datum.

PERIOD OF RECORD.--March 2004 to September 2004.

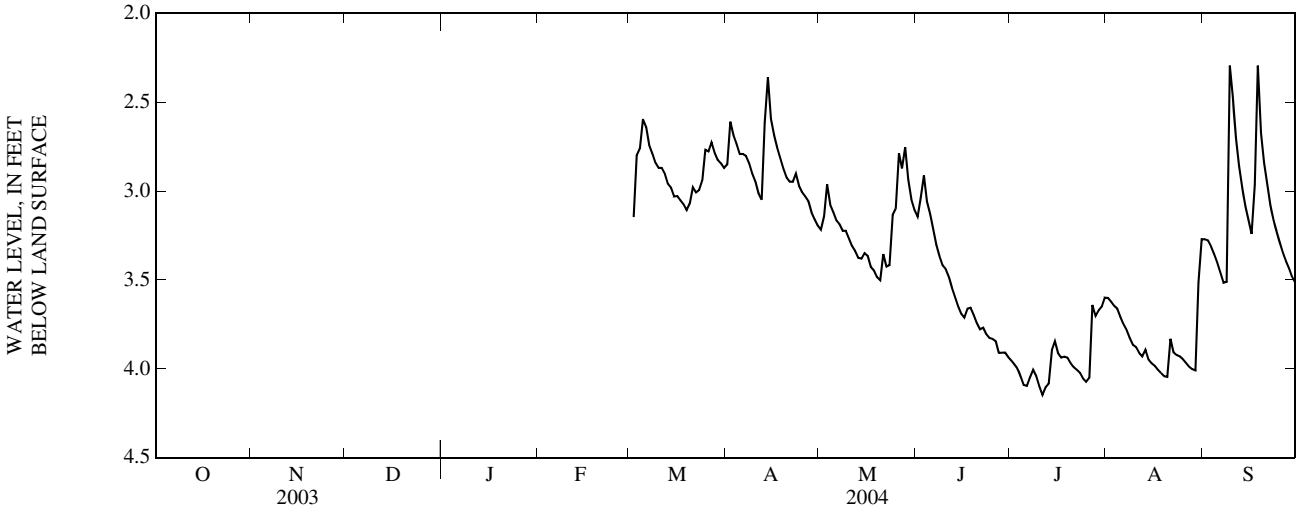
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.92 ft below land-surface datum, Apr. 13, 2004; lowest, 4.18 ft below land-surface datum, July 11, 2004.

EXTREMES FOR CURRENT PERIOD.--March 2004 to September 2004: Highest water level, 1.92 ft below land-surface datum, Apr. 13; lowest, 4.18 ft below land-surface datum, July 11.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.85	3.22	3.14	3.95	3.60	3.27
2	---	---	---	---	---	3.15	2.61	3.14	3.04	3.98	3.62	3.28
3	---	---	---	---	---	2.80	2.69	2.96	2.91	4.00	3.65	3.31
4	---	---	---	---	---	2.76	2.73	3.08	3.06	4.04	3.66	3.35
5	---	---	---	---	---	2.60	2.79	3.12	3.13	4.09	3.71	3.40
6	---	---	---	---	---	2.64	2.79	3.17	3.22	4.10	3.75	3.46
7	---	---	---	---	---	2.74	2.80	3.19	3.30	4.05	3.78	3.52
8	---	---	---	---	---	2.79	2.84	3.22	3.37	4.01	3.83	3.51
9	---	---	---	---	---	2.84	2.90	3.22	3.42	4.04	3.87	2.29
10	---	---	---	---	---	2.87	2.95	3.27	3.44	4.10	3.88	2.47
11	---	---	---	---	---	2.87	3.01	3.31	3.48	4.15	3.91	2.71
12	---	---	---	---	---	2.90	3.05	3.34	3.54	4.10	3.93	2.86
13	---	---	---	---	---	2.96	2.62	3.38	3.60	4.08	3.89	2.98
14	---	---	---	---	---	2.98	2.36	3.38	3.65	3.90	3.95	3.08
15	---	---	---	---	---	3.03	2.59	3.35	3.69	3.85	3.97	3.17
16	---	---	---	---	---	3.03	2.69	3.37	3.71	3.91	3.98	3.24
17	---	---	---	---	---	3.05	2.75	3.43	3.66	3.94	4.01	2.96
18	---	---	---	---	---	3.08	2.82	3.45	3.66	3.93	4.02	2.29
19	---	---	---	---	---	3.11	2.87	3.48	3.70	3.94	4.04	2.67
20	---	---	---	---	---	3.07	2.92	3.50	3.74	3.97	4.05	2.84
21	---	---	---	---	---	2.98	2.95	3.36	3.78	3.99	3.83	2.97
22	---	---	---	---	---	3.01	2.95	3.42	3.77	4.01	3.91	3.08
23	---	---	---	---	---	2.99	2.90	3.42	3.81	4.02	3.92	3.16
24	---	---	---	---	---	2.94	2.97	3.13	3.83	4.06	3.93	3.23
25	---	---	---	---	---	2.77	3.01	3.10	3.83	4.07	3.95	3.29
26	---	---	---	---	---	2.78	3.03	2.79	3.84	4.05	3.97	3.34
27	---	---	---	---	---	2.73	3.06	2.87	3.91	3.64	3.99	3.39
28	---	---	---	---	---	2.79	3.12	2.75	3.91	3.70	4.00	3.43
29	---	---	---	---	---	2.83	3.16	2.93	3.91	3.67	4.01	3.48
30	---	---	---	---	---	2.84	3.19	3.05	3.93	3.65	3.51	3.52
31	---	---	---	---	---	2.87	---	3.10	---	3.60	3.27	---
MEAN	---	---	---	---	---	---	2.87	3.21	3.57	3.95	3.85	3.12
MAX	---	---	---	---	---	---	3.19	3.50	3.93	4.15	4.05	3.52
MIN	---	---	---	---	---	---	2.36	2.75	2.91	3.60	3.27	2.29

YATES COUNTY—Continued



Statewide Pesticide Monitoring Project
Monitoring at Community-Water-System Wells in Western New York

In 1999, the U.S. Geological Survey, in cooperation with the New York State Department of Environmental Conservation, began a monitoring program to determine the occurrence and trends of pesticide residues in selected community water-supply wells in western New York (fig. 10). Samples of raw, untreated water from these wells were analyzed for the pesticide compounds using the USGS SH2001/2010 and LCAA methods. Concentrations did not exceed Federal or State maximum contaminant levels (MCLs) for drinking water for any compound. Additional data on pesticide residues in selected water-supply wells are published for eastern New York excluding Long Island (vol 1.) and for Long Island (vol. 2)

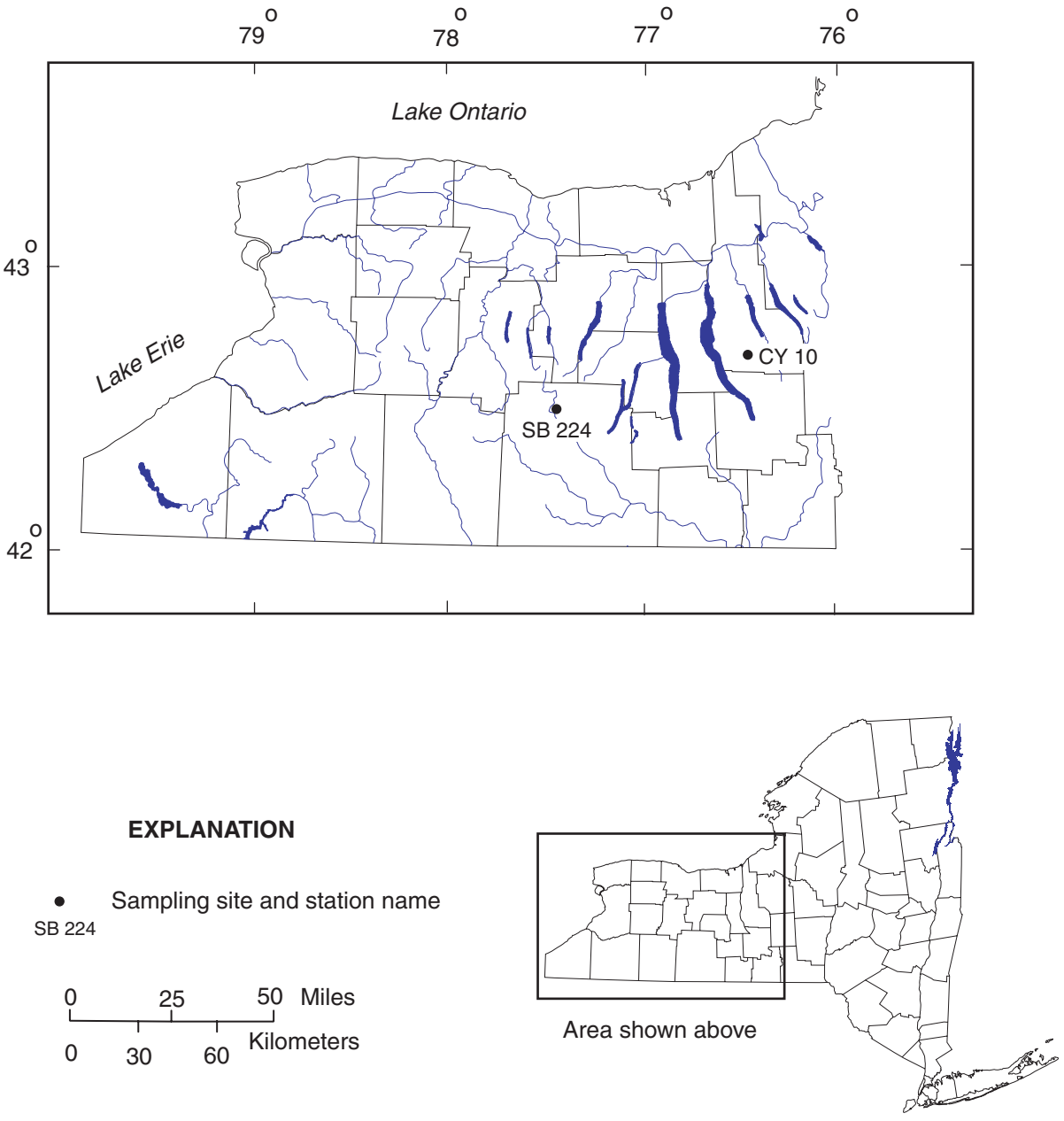


Figure 10.-- Location of community water-supply wells in western New York that were sampled in water year 2004 for pesticide analysis.

PESTICIDE ANALYSES

METHOD SH2010

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

MULTIPLE STATION ANALYSES

Local identifier	Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)
STEUBEN COUNTY											
SB 224	02-02-04	1500	<.006	E.015	<.02	<.02	<.006	.05	.20	<.004	<.005
CAYUGA COUNTY											
CY 10	01-27-04	0830	<.006	E.041	<.02	<.02	<.006	<.02	<.02	<.004	<.005

Local identifier	Date	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)
STEUBEN COUNTY											
SB 224	02-02-04	.040	<.050	<.010	<.002	<.041	E.003	<.005	<.006	<.018	<.003
CAYUGA COUNTY											
CY 10	01-27-04	.041	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003

Local identifier	Date	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)
STEUBEN COUNTY											
SB 224	02-02-04	<.005	<.005	<.02	<.02	<.02	<.002	<.009	<.005	<.02	<.02
CAYUGA COUNTY											
CY 10	01-27-04	<.005	<.005	<.02	<.02	<.02	<.002	<.009	<.005	<.02	<.02

Local identifier	Date	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)
STEUBEN COUNTY											
SB 224	02-02-04	<.003	<.004	<.035	<.027	<.006	.68	2.65	.014	.066	<.002
CAYUGA COUNTY											
CY 10	01-27-04	<.003	<.004	<.035	<.027	<.006	.24	.02	E.007	<.006	<.002

METHOD SH2010—CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Local identifier	Date	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)
STEUBEN COUNTY											
SB 224	02-02-04	<.007	<.003	<.010	<.004	<.022	<.011	.05	<.004	<.010	<.011
CAYUGA COUNTY											
CY 10	01-27-04	<.007	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.010	<.011

Local identifier	Date	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
STEUBEN COUNTY									
SB 224	02-02-04	<.02	.005	<.02	<.034	<.02	<.005	<.002	<.009
CAYUGA COUNTY									
CY 10	01-27-04	<.02	.006	<.02	<.034	<.02	<.005	<.002	<.009

< Less than.
E Estimated.

PESTICIDE ANALYSES

METHOD SH2060

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

MULTIPLE STATION ANALYSES

Local identifier	Date	Time	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)
STEUBEN COUNTY											
SB 224	02-02-04	1510	<.009	<.02	<.02	M	<.04	E.011	<.006	<1.50	<.007

Local identifier	Date	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	Atra-zine, water, fltrd, ug/L (39632)	Bendio-carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)
STEUBEN COUNTY											
SB 224	02-02-04	<.02	<.008	<.04	.013	<.03	<.004	<.02	<.01	<.03	<.04

Local identifier	Date	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)
STEUBEN COUNTY											
SB 224	02-02-04	<.010	<.03	<.006	<.02	<.010	<.01	<.04	<.01	<.01	<.01

Local identifier	Date	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)
STEUBEN COUNTY											
SB 224	02-02-04	<.01	<.01	<.01	<.03	<.01	<.03	<.01	<.03	<.02	<.02

Local identifier	Date	Imida-cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Metsul-furon, water, fltrd, ug/L (61697)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)
STEUBEN COUNTY											
SB 224	02-02-04	<.043	<.01	<.02	<.01	E.01	<.008	<.004	<.03	<.02	<.01

Local identifier	Date	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfometruron, water, fltrd, ug/L (50337)
STEUBEN COUNTY											
SB 224	02-02-04	<.01	<.02	<.66	<.01	<.02	<.010	<.02	<.008	<.02	<.009

Local identifier	Date	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd, ug/L (04032)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)
STEUBEN COUNTY				
SB 224	02-02-04	<.006	<.010	<.02

< Less than.
E Estimated.
< Presence verified, not quantified.

ONONDAGA COUNTY

WATER-QUALITY DATA, WATER YEAR, OCTOBER 2003 TO SEPTEMBER 2004

Local identifier	Station number	Date	Time	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)
OD1806	430701076143801	09-10-04	1300	--	--	--	--	--	--	--
OD1788	430402076103201	10-08-03	1700	6.9	196,000	2,200	370	420	63,000	92
OD1026	430439076143701	10-07-03	1200	6.3	171,000	18,000	300	200	20,000	55
OD1832	430458076132302	10-08-03	1000	6.4	200,000	6,300	230	1,500	63,000	33
OD1825	430243076180401	10-07-03	1500	7.5	3,010	580	77.0	130	1,000	141
OD1833	430243076180402	10-07-03	1400	7.5	26,300	2,700	310	340	4,700	50
OD1827	430810076141002	10-08-03	1200	7.3	94,800	42.0	8.90	61.0	380	24
OD1828	430829076180001	10-08-03	1100	7.5	1,340	130	39.0	8.00	91.0	250
OD1834	430829076180002	10-08-03	1130	7.0	7,890	1200	13.0	32.0	890	121
OD1831	430535076135401	10-08-03	1100	6.5	111,000	9,900	170	320	19,000	35
OD1836	430535076135402	10-08-03	1130	6.3	142,000	12,000	14,000	1,200	22,000	22
OD1829	430458076110601	10-30-03	1400	7.0	144,000	4,000	740	580	--	77
OD1835	430458076110602	10-30-03	1400	6.8	166,000	3,600	650	920	56,000	64
OD 416	425111076083301	09-16-04	1200	--	24,100	800	<200	110	2,700	756
OD1839	425505076110401	08-31-04	1230	--	3,400	380	100	14.0	180	160
OD1843	425505076110402	09-07-04	1200	--	10,200	780	<40.0	250	380	1,580
OD1815	425903076093101	05-17-04	1230	--	--	144	22.5	2.4	66.6	228
OD1841	425614076103901	05-06-04	1015	7.9	662	60.0	27.0	1.00	9.00	262
OD1842	425839076081801	05-17-04	1000	--	1,410	170	35.0	2.00	37.0	280
OD1838	425822076081601	05-17-04	1200	--	1,100	80.0	18.0	1.60	70.0	234
OD1844	425526076123401	09-13-04	1630	7.5	555	75.5	18.5	1.46	18.6	220
OD1845	425623076142901	09-13-04	1500	7.3	511	72.6	17.9	1.35	9.39	197
OD1847	425635076141701	09-13-04	1530	7.2	720	104	30.0	1.89	8.27	287
OD1846	430756076152601	09-13-04	1330	8.0	1,300	123	39.6	2.36	86.1	302

Local identifier	Date	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat flt mg/L (00515)	Residue on evap. at 180degC wat flt mg/L (70300)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OD1806	09-10-04	--	--	--	--	--	--	--	--	--	--
OD1788	10-08-03	112	36.0	97,900	--	--	3,900	170,000	--	--	--
OD1026	10-07-03	67	150	66,200	--	--	730	175,000	--	--	--
OD1832	10-08-03	40	450	110,000	--	--	1,900	118,000	--	--	--
OD1825	10-07-03	172	8.2	11,200	--	--	2,300	4,750	--	--	--
OD1833	10-07-03	61	93.0	11,800	--	--	1,500	23,500	--	--	--
OD1827	10-08-03	29	2.7	294	--	2.00	5.0	101,000	--	.04	.001
OD1828	10-08-03	305	--	130	--	--	300	1,330	--	--	--
OD1834	10-08-03	148	29.0	2,490	--	--	1,400	6,980	--	--	--
OD1831	10-08-03	43	360	46,400	--	--	1,100	83,100	--	--	--
OD1836	10-08-03	27	430	57,900	--	--	1,200	138,000	--	--	--
OD1829	10-30-03	94	200	71,200	--	--	2,600	121,000	--	--	--
OD1835	10-30-03	78	74.0	93,400	--	--	2,700	151,000	--	--	--
OD 416	09-16-04	922	3.2	7,100	--	<50.0	58.0	--	--	<1.00	<.020
OD1839	08-31-04	195	1.0	650	--	5.60	<1.0	--	--	<.20	<.004
OD1843	09-07-04	1,930	13.0	570	--	<2.00	1,240	--	--	<1.00	<.020
OD1815	05-17-04	278	.1	116	--	--	172	--	--	--	--
OD1841	05-06-04	320	<.1	100	--	2.90	50.0	--	--	14.6	.330
OD1842	05-17-04	342	<.2	140	--	2.80	350	--	--	2.56	.058
OD1838	05-17-04	285	<.2	200	--	1.90	70.0	--	--	1.60	.036
OD1844	09-13-04	--	.03	25.0	<.2	6.24	14.6	--	268	--	--
OD1845	09-13-04	--	.03	--	<.2	5.57	--	--	176	--	--
OD1847	09-13-04	--	.04	20.4	<.2	12.0	51.1	--	428	--	--
OD1846	09-13-04	--	.07	154	<.2	7.69	106	--	665	--	--

ONONDAGA COUNTY—Continued

Local identifier	Date	Barium, water, fltrd, ug/L (01005)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Strontium, water, fltrd, ug/L (01080)	Tritium 2-sigma water unfltrd pCi/L (75985)	Tritium water unfltrd pCi/L (07000)
OD1806	09-10-04	--	--	<128	E12.9	--	--	2.6
OD1788	10-08-03	--	--	4,780	1,060	--	1.9	M
OD1026	10-07-03	--	--	38,200	10,400	--	1.9	M
OD1832	10-08-03	--	--	15,200	6,810	--	1.6	M
OD1825	10-07-03	--	--	1,780	447	--	2.6	9.6
OD1833	10-07-03	--	--	616	2,490	--	1.9	M
OD1827	10-08-03	M	M	30,100	8,030	--	--	0.5
OD1828	10-08-03	--	--	56	88.4	--	3.2	18.2
OD1834	10-08-03	--	--	5,080	1,290	--	1.9	4.2
OD1831	10-08-03	--	--	5,450	5,750	--	1.6	1.6
OD1836	10-08-03	--	--	23,300	13,100	--	--	0.5
OD1829	10-30-03	--	--	860	3,090	--	1.9	M
OD1835	10-30-03	--	--	4,610	4,130	--	1.9	M
OD 416	09-16-04	<1.0	<1.00	<96	<12.0	70	1.9	--
OD1839	08-31-04	<1.0	M	1,460	83.0	10	1.3	2.2
OD1843	09-07-04	<1.0	M	E90	<12.0	10	1.9	7
OD1815	05-17-04	--	--	--	--	--	3.2	56
OD1841	05-06-04	.3	M	<6	E.6	M	--	46
OD1842	05-17-04	.1	M	<6	<.8	M	--	47
OD1838	05-17-04	.1	M	<6	<.8	M	3.2	58
OD1844	09-13-04	--	--	<6	<.8	--	3.2	53
OD1845	09-13-04	--	--	<6	<.8	--	3.2	51
OD1847	09-13-04	--	--	44	3.0	--	2.6	41
OD1846	09-13-04	--	--	<6	.9	--	3.2	57

< Less than.

E Estimated.

M Presence verified, not quantified.

ERIE COUNTY

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

METHOD SH1380

Local identifier	Date	Xylene, water, unfltrd ug/L (81551)	1,1,1,2-Tetrachloroethane, water, unfltrd ug/L (77562)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetrachloroethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Trichloroethane, water, unfltrd ug/L (34511)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,1-Dichloropropene water unfltrd ug/L (77168)	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)
E1202	09-07-04	<.2	<.2	<.1	<.2	<.1	<.2	<.1	<.1	<.2	<.2

Local identifier	Date	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloroethane-d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)
E1202	09-07-04	<.2	<.2	<.2	<.5	<.2	<.1	<.2	120	<.1	<.2

Local identifier	Date	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	14Bromofluorobenzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)
E1202	09-07-04	<.1	<.2	<.1	103	<.2	<.2	<.2	<.2	<2.5	<.1

Local identifier	Date	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chlorobenzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloromethane water unfltrd ug/L (34418)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	Dibromochloromethane water unfltrd ug/L (32105)
E1202	09-07-04	<.2	<.2	<.1	<.3	<.1	<.2	<.2	<.1	<.2	<.2

Local identifier	Date	Dibromomethane water unfltrd ug/L (30217)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Isopropylbenzene water unfltrd ug/L (77223)	Naphthalene, water, unfltrd ug/L (34696)	n-Butylbenzene water unfltrd ug/L (77342)	n-propylbenzene water unfltrd ug/L (77224)	sec-Butylbenzene water unfltrd ug/L (77350)
E1202	09-07-04	<.2	<.2	<.2	<.1	<.2	<.2	<.5	<.2	<.2	<.2

ERIE COUNTY—Continued

METHOD SH1380—Continued

Local identifier	Date	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	Tri-bromo-methane water unfltrd ug/L (32104)
E1202	09-07-04	<.1	<.2	<.2	<.1	<.2	<.1	99.8	<.1	<.2	<.2

Local identifier	Date	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)
E1202	09-07-04	<.1	<.2	<.1	<.2

< Less than.

ERIE COUNTY—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

METHOD SH2002

Local identifier	Date	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol wat flt ug/L (61637)	2,5-Dichloroaniline water, fltrd, ug/L (61614)	2Amino-N-isopropylbenzamide, wat flt ug/L (61617)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	3-(Trifluoromethyl) aniline water, fltrd, ug/L (61630)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3,5-Dichloroaniline water, fltrd, ug/L (61627)
E1202	09-07-04	<.04	<.09	<.01	<.01	<.005	<.005	<.004	<.01	<.004	<.004

Local identifier	Date	4,4-Di'chlorobenzophenone, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chlorophenylmethyl sulfone water, fltrd, ug/L (61634)	alpha-Endosulfan, water, fltrd, ug/L (34362)	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	beta-Endosulfan, water, fltrd, ug/L (34357)	Bifenthrin, water, fltrd, ug/L (61580)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	cis-Propiconazole, water, fltrd, ug/L (79846)	Cycloate, water, fltrd, ug/L (04031)
E1202	09-07-04	<.007	<.006	<.01	<.005	<.07	<.01	<.005	<.06	<.008	<.005

Local identifier	Date	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	Dicrotophos, water fltrd, ug/L (38454)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton sulfoxide, water, fltrd, ug/L (61641)	(E)-Dimethomorph, water, fltrd, ug/L (79844)	Endosulfan ether, water, fltrd, ug/L (61642)	Endosulfan sulfate water, fltrd, ug/L (61590)
E1202	09-07-04	<.008	<.009	<.009	<.08	<.006	<.01	<.036	<.02	<.007	<.014

Local identifier	Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenthion sulfoxide, water, fltrd, ug/L (61647)	Fenthion, water, fltrd, ug/L (38801)	Flumetralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)	Hexazinone, water, fltrd, ug/L (04025)
E1202	09-07-04	<.0020	<.004	<.049	<.04	<.03	<.008	<.02	<.004	<.003	<.013

Local identifier	Date	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	c-Permethric acid methyl ester, wat flt ug/L (79842)	Methyl paraoxon, water, fltrd, ug/L (61664)	t-Permethric acid methyl ester, wat flt ug/L (79843)	Myclobutanil water, fltrd, ug/L (61599)	O-Et-O-Me-S-Pr-phosphorothioate wat flt ug/L (61660)
E1202	09-07-04	<.387	<.003	<.030	<.005	<.006	<.02	<.03	<.01	<.008	<.005

ERIE COUNTY—Continued

METHOD SH2002—Continued

Local identifier	Date	Oxyfluorfen, water, fltrd, ug/L (61600)	Paraoxon, water, fltrd, ug/L (61663)	Phorate oxon, water, fltrd, ug/L (61666)	Phostebupirim water, fltrd, ug/L (61602)	Profenofos water, fltrd, ug/L (61603)	Prometryn, water, fltrd, ug/L (04036)	Propetamphos, water, fltrd, ug/L (61604)	Sulfotepp, water, fltrd, ug/L (61605)	Sulprofos, water, fltrd, ug/L (38716)	Tebupirimphos oxon, water, fltrd, ug/L (61669)
E1202	09-07-04	<.007	<.016	<.10	<.005	<.006	<.005	<.004	<.003	<.02	<.006

Local identifier	Date	Tefluthrin, water, fltrd, ug/L (61606)	Temephos, water, fltrd, ug/L (61607)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbuthylazine, water, fltrd, ug/L (04022)	trans-Propiconazole, water, fltrd, ug/L (79847)	Tribuphos, water, fltrd, ug/L (61610)	(Z)-Dimethomorph, water, fltrd, ug/L (79845)	Dichlorvos, water fltrd, ug/L (38775)
E1202	09-07-04	<.008	<.3	<.07	<.01	<.01	<.004	<.05	<.01

< Less than.

ERIE COUNTY—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Local identifier	Date	Time	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
E1202	09-07-04	1100	7.5	716	12.4	98.5	21.3	1.24	10.0	35.5	<.2
	09-07-04	1105	--	--	--	95.3	21.3	1.19	9.83	35.4	<.2
E1201	09-07-04	1245	7.4	720	12.4	95.2	20.3	1.14	7.91	36.0	<.2
E1200	09-07-04	1330	7.4	797	12.3	101	23.2	1.34	25.0	72.9	<.2

Local identifier	Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
E1202	09-07-04	12.9	33.7	277	E.05	E.06	<.04	1.86	<.008	<.02	.005
	09-07-04	12.9	33.6	301	<.10	E.07	<.04	1.86	<.008	<.02	<.004
E1201	09-07-04	12.5	25.0	236	<.10	E.08	<.04	2.31	<.008	<.02	<.004
E1200	09-07-04	12.7	36.0	314	E.06	E.08	<.04	1.57	<.008	<.02	E.003

Local identifier	Date	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)
E1202	09-07-04	.012	E1	<.20	.2	178	<.06	15	.08	<.8	.244
	09-07-04	.007	E1	<.20	.2	178	<.06	14	.07	<.8	.232
E1201	09-07-04	.018	E1	<.20	<.2	162	<.06	20	.07	<.8	.197
E1200	09-07-04	E.002	<2	<.20	<.2	245	<.06	33	.05	E.7	.230

Local identifier	Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)
E1202	09-07-04	.7	<6	<.08	6.4	11.5	2.1	5.53	.6	<.2	136
	09-07-04	.6	E5	<.08	6.3	11.3	2.0	5.50	.7	<.2	135
E1201	09-07-04	.5	<6	<.08	5.5	2.8	1.2	1.05	<.4	<.2	134
E1200	09-07-04	.5	<6	<.08	7.1	6.4	1.2	7.41	<.4	<.2	154

Local identifier	Date	Thallium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
E1202	09-07-04	E.03	.3	1.7	.56
	09-07-04	E.03	.3	1.5	.55
E1201	09-07-04	<.04	.3	.8	.40
E1200	09-07-04	E.03	.3	1.3	.56

< Less than.
E Estimated.

ERIE COUNTY—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

METHOD SH2010

Local identifier	Date	Time	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
E1202	09-07-04	1100	<.006	<.006	<.006	<.004	<.005	<.007	<.050	<.010	<.002

Local identifier	Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)
E1202	09-07-04	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005	<.02	<.002

Local identifier	Date	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)
E1202	09-07-04	<.009	<.005	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002

Local identifier	Date	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)
E1202	09-07-04	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011

Local identifier	Date	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
E1202	09-07-04	<.02	<.005	<.02	<.034	<.02	<.01	<.005	<.002	<.009

< Less than.

ERIE COUNTY—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

METHOD SH2060

Local identifier	Date	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)
E1202	09-07-04	<.009	<.02	<.02	<.006	<.01	<.008	<.006	<.01	<.007	<.02

Local identifier	Date	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	Atra-zine, water, fltrd, ug/L (39632)	Bendio-carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Caf-feine, water, fltrd, ug/L (50305)
E1202	09-07-04	<.008	<.04	<.007	<.03	<.004	<.02	<.01	<.03	<.02	<.010

Local identifier	Date	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water fltrd 0.7u GF ug/L (38442)
E1202	09-07-04	<.03	<.006	<.02	<.010	<.04	<.04	<.01	<.005	<.01	<.01

Local identifier	Date	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)
E1202	09-07-04	<.01	<.01	<.03	<.01	<.03	<.01	<.03	<.02	<.02	<.007

Local identifier	Date	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Metsul-furon, water, fltrd, ug/L (61697)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)
E1202	09-07-04	<.01	<.02	<.01	<.02	<.008	<.004	<.03	<.02	<.01	<.01

ERIE COUNTY—Continued

METHOD SH2060—Continued

Local identifier	Date	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfometruron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)
E1202	09-07-04	<.02	<.02	<.01	<.02	<.010	<.02	<.008	<.02	<.009	<.02

Local identifier	Date	Terbacil, water, fltrd, ug/L (04032)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)
E1202	09-07-04	<.010	<.02

< Less than.

425129076082701 AT OTISCO ROAD NEAR TULLY, NY

LOCATION.--Lat 42°51'29", long 76°08'27", Onondaga County, Hydrologic unit 04140201, in backyard of residence on Otisco Road.

PERIOD OF RECORD.--October 1991 to July 1999, October 1999 to current year.

INSTRUMENTATION.--Tipping bucket raingage with 8.214-inch diameter receiving funnel, mounted on a pedestal in the backyard of residence. Funnel is heated to facilitate melting of snow. Each tip of the raingage bucket is equivalent to .01 inches of precipitation. Tips of the raingage bucket are recorded and accumulated at hourly intervals on an electronic data logger.

REMARKS.--Rain gage is operated in conjunction with streamflow station 04237946 Onondaga Creek Tributary No. 6, downstream of main depression area, for the Tully mudboil project.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded daily precipitation, 3.92 inches, November 8, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily precipitation, 2.10 inches, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.04	0.09	0.00	0.00	0.00	0.45	0.65	0.05	0.00	0.00	0.00
2	0.00	0.22	0.02	0.02	0.00	0.09	0.03	0.61	0.01	0.00	0.00	0.00
3	0.00	0.13	0.00	0.17	0.33	0.00	0.03	0.04	0.00	0.00	0.00	0.00
4	0.00	0.01	0.00	0.09	0.01	0.12	0.01	0.00	0.00	0.00	0.00	0.00
5	0.00	0.01	0.00	0.04	0.00	0.17	0.04	0.11	0.00	0.04	0.01	0.00
6	0.00	0.00	0.20	0.04	0.15	0.11	0.01	0.11	0.00	0.01	0.00	0.01
7	0.00	0.00	0.00	0.01	0.01	0.02	0.06	0.03	0.00	1.01	0.00	0.00
8	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.06	0.00	0.22	0.00	0.79
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.23	0.00	0.00	0.20
10	0.00	0.00	0.03	0.00	0.03	0.00	0.00	---	0.01	0.00	0.08	0.00
11	0.00	0.15	0.78	0.04	0.06	0.00	0.00	0.03	0.00	0.00	0.00	0.00
12	0.01	0.21	0.08	0.05	0.02	0.04	0.16	---	0.00	0.30	0.88	0.00
13	0.01	0.22	0.00	0.06	0.00	0.01	0.44	0.05	0.00	0.00	0.13	0.01
14	0.19	0.00	0.71	0.00	0.00	0.00	0.02	0.08	0.03	0.76	0.01	0.00
15	0.93	0.03	0.08	0.00	0.00	0.00	0.00	0.19	0.00	0.18	0.00	0.00
16	0.00	0.22	0.00	0.00	0.00	0.25	0.00	0.00	0.11	0.20	0.08	0.00
17	0.00	0.17	0.40	0.01	0.00	0.06	0.02	0.01	0.23	0.00	0.00	1.50
18	0.02	0.01	0.03	0.05	0.00	0.05	0.10	0.04	0.05	0.00	0.00	0.00
19	0.17	0.79	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.16	0.00
20	0.00	0.00	0.04	0.00	0.05	0.22	0.01	0.01	0.00	0.00	0.69	0.00
21	0.07	0.00	0.00	0.01	0.23	0.09	0.14	0.00	0.01	0.00	0.64	0.00
22	0.03	0.00	0.00	0.01	0.02	0.00	0.16	0.23	0.08	0.22	0.00	0.00
23	0.03	0.00	0.02	0.01	0.00	0.13	0.24	0.17	0.00	0.00	0.03	0.00
24	0.27	0.40	0.49	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.03	0.17	0.02	0.07	0.01	0.00	0.00
26	0.34	0.00	0.01	0.00	0.00	0.30	0.04	0.01	0.00	1.07	0.00	0.00
27	0.94	0.00	0.00	0.04	0.00	0.19	0.11	0.00	0.00	0.74	0.00	0.00
28	0.00	0.38	0.00	0.08	0.00	0.00	0.00	0.01	0.04	0.06	0.66	0.00
29	0.57	0.29	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.72	0.00
30	0.00	0.00	0.36	0.00	---	0.00	0.00	0.00	0.00	0.00	2.10	0.01
31	0.00	---	0.00	0.04	---	0.00	---	0.24	---	0.20	0.00	---
TOTAL	3.58	3.28	3.34	0.78	0.91	1.92	2.31	---	0.96	5.02	6.19	2.52
MAX	0.94	0.79	0.78	0.17	0.33	0.30	0.45	---	0.23	1.07	2.10	1.50

GENESEE RIVER BASIN

430117077350101 AT MENDON PONDS, ROCHESTER, NY

LOCATION.--Lat 43°01'17", long 77°35'01", Monroe County, Hydrologic Unit 04130003, in Mendon Ponds County Park, 200 ft east of rangers' quarters, 300 ft east of State Highway 65, and 1.7 mi south of Interstate Highway 90.

PERIOD OF RECORD.--Water years 1980 to current year. Dustfall data: Water years 1980 to 2003, monthly. Wetfall data: Water years 1980 to 2003, monthly. Bulk data: Water years 1980 to current year, monthly.

INSTRUMENTATION.--The composite sample collector is a straight-sided polyethlyene funnel approximately 6.5 inches in diameter that drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethlyene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft above ground level. Wet/dry precipitation collector used for wetfall and dustfall samples. An automatic sensor detects precipitation and activates a motor that removes the cover from the wetfall-collection vessel and covers the dustfall-collection vessel. When precipitation ceases, the cycle is reversed. The sampling vessels are polyethlyene and have a collection diameter of 11.26 inches and a capacity of about 3.4 gallons. The openings of the collectors are approximately 8 ft above ground level.

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

REMARKS.--Records for October 1983 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1984-88", U.S. Geological Survey Open-File Report 93-370 and in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1983, unpublished records are available in the files of the Monroe County Environmental Health Laboratory. Records of monthly precipitation totals are collected by the National Oceanic and Atmospheric Administration at the Rochester-Monroe County airport.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

MONTHLY BULK

Date	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Acidity water, unfltrd mg/L as CaCO3 (00435)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Lead, water, unfltrd recover-able, ug/L (01051)
OCT 06-31	6.4	22	7.1	1	3	.83	.15	.64	.315	.373	.0021
OCT 31-NOV 26	5.7	14	7.5	.6	2	.50	.36	1.0	.015	.027	<.0010
NOV 26-DEC 31	7.6	12	8.9	.8	1	.33	.17	1.2	.004	.027	.0040
DEC 31-JAN 30	7.0	29	9.3	3	2	.64	.45	.97	.097	.016	<.0010
JAN 30-MAR 01	6.8	27	7.0	4	1	.45	.25	.78	<.003	.008	<.0010
MAR 01-APR 02	5.3	19	5.7	1.0	1.0	.64	.39	.72	.006	.014	<.0010
APR 02-30	5.5	15	5.5	<.2	3	.76	.65	.52	.004	.028	<.0010
APR 30-MAY 28	5.1	20	7.5	.4	3	1.4	1.1	1.3	.080	.122	.0012
MAY 28-JUN 30	6.5	21	8.6	<10	<10	.88	.47	.41	.032	.066	<.0010
JUN 30-JUL 30	5.0	16	9.8	.3	3	1.2	.79	.48	.062	.103	.0023
JUL 30-SEP 07	5.1	16	8.8	<.2	2	1.9	.78	.47	.087	.110	.0016
SEP 07-OCT 01	5.7	6	4.9	<.2	.9	.21	.08	.16	.028	.053	<.0010

< Less than.

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Multiply	By	To obtain
	Length	
inch (in.)	25.4×10^{-1}	millimeter (mm)
	22.54×10^{-2}	meter(m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
acre	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubicc hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	meter (dm^3)
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second day [(ft^3/s)/d]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.233×10^{3}	cubic meter (m^3)
	1.233×10^{-3}	cubic hectometer (hm^3)
	1.233×10^{-6}	cubic kilometer (km^3)
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m^3/s)
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton, short (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$°F = (1.8 \times °C) + 32$