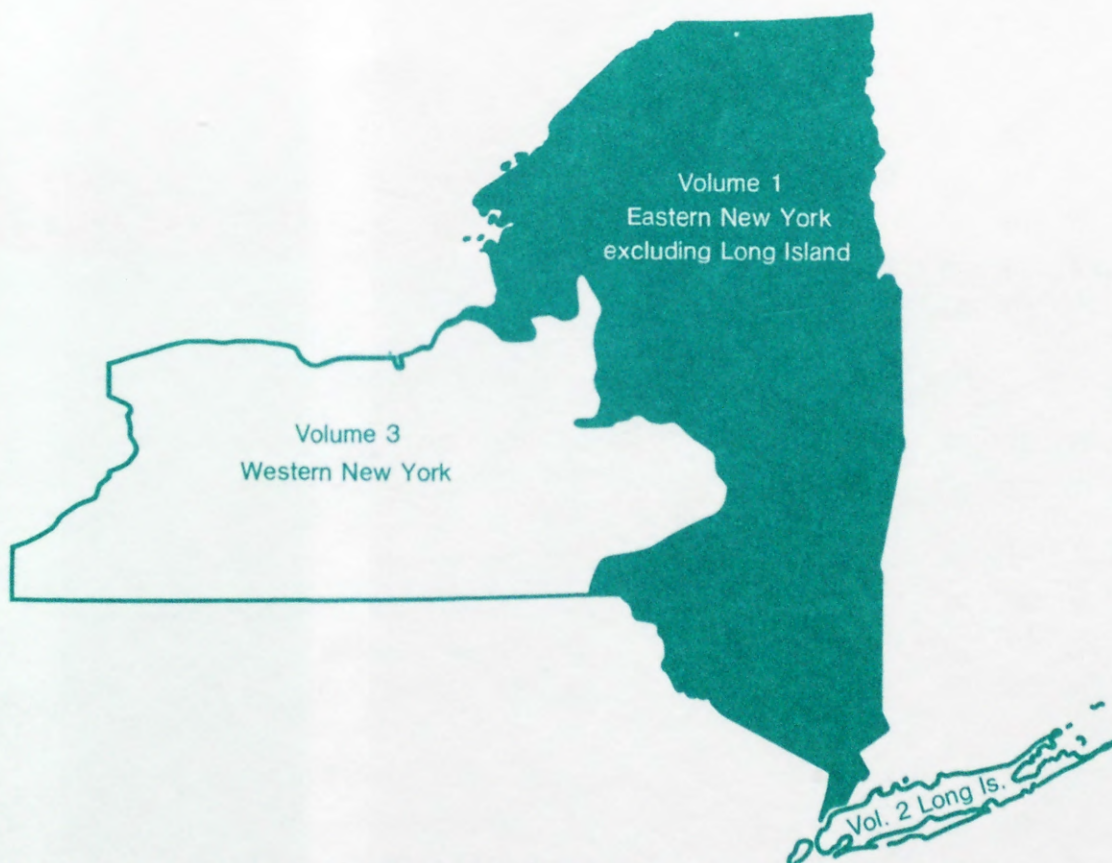


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# Water Resources Data New York Water Year 1995

Volume 1. Eastern New York excluding Long Island



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-95-1  
Prepared in cooperation with the State of New York  
and with other agencies



## CALENDAR FOR WATER YEAR 1995

1994

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1995

[illegible]

APRIL							MAY							JUNE						
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9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
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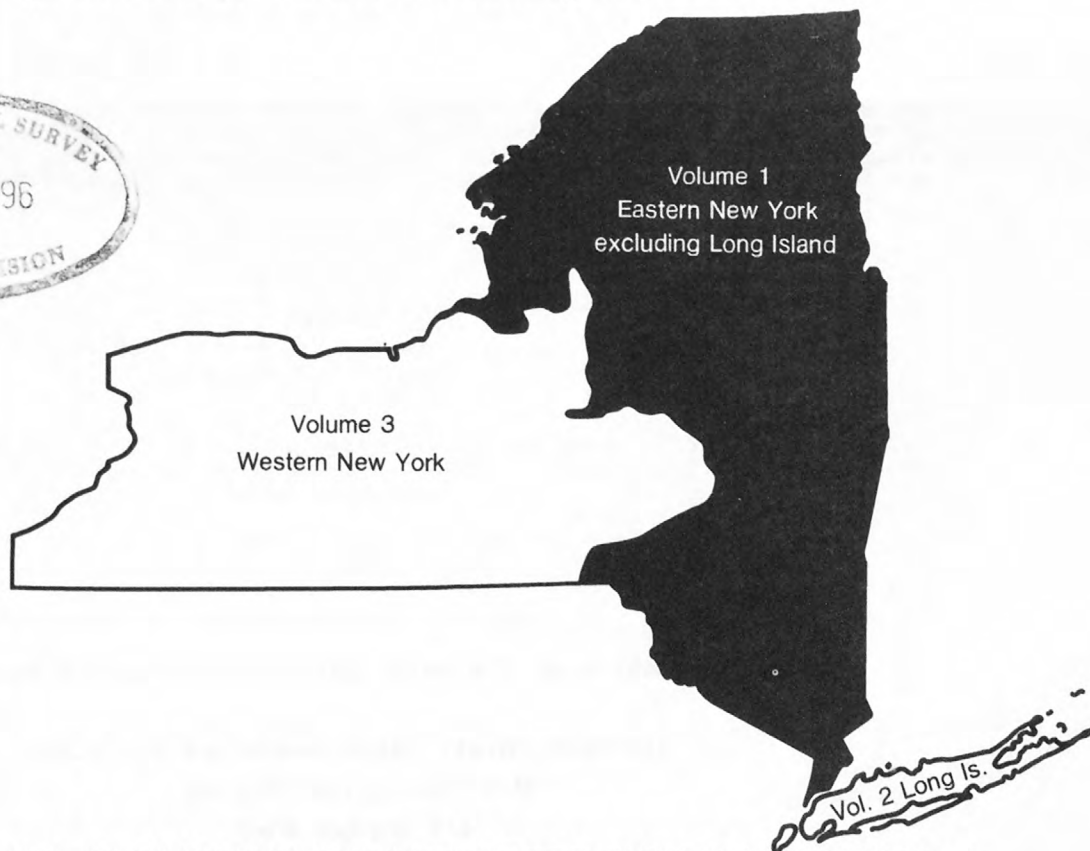
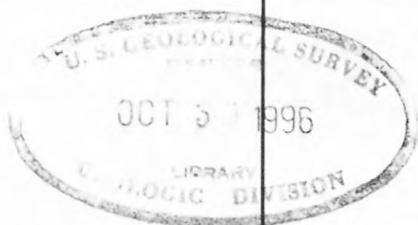
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# Water Resources Data New York Water Year 1995

Volume 1. Eastern New York excluding Long Island

by G. D. Firda, R. Lumia, P. M. Murray, and E. A. Flanary



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-95-1

Prepared in cooperation with the State of New York  
and with other agencies

OCT 29 1996



U.S. DEPARTMENT OF THE INTERIOR

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Troy, NY 12180

1996



## 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 water quality 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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[Letter after station name designates type of data: (d) discharge, (e) elevation, (g) gage height, (v) contents, (c) chemical, (b) biological, (s) sediment, (m) minor element, (p) pesticide, (n) nutrient, (o) organic, (r) radiochemical, (t) water temperature]

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

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in eastern New York excluding Long Island 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 a crest-stage partial-record station.

[Letters after station name designate type of data collected:  
(d) discharge, (e) elevation, (g) gage height]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Housatonic River Basin			
Tenmile River near Wassaic, NY (d)	01199420	120	1959-61
Swamp River near Dover Plains, NY (d)	01199490	46.6	1961-68
Tenmile River at Dover Plains, NY (d)	01199500	189	1901-04
Blind Brook Basin			
Blind Brook at Rye, NY (d)	01300000	9.20	1944-89
Beaver Swamp Brook Basin			
Beaver Swamp Brook at Mamaroneck, NY (d)	01300500	4.59	1944-89
Mamaroneck River Basin			
Mamaroneck River at Mamaroneck, NY (d)	01301000	23.1	1944-89
Hutchinson River Basin			
Hutchinson River at Pelham, NY (d)	01301500	5.76	1944-89
Bronx River Basin			
Bronx River at Bronxville, NY (d)	01302000	26.5	1944-89
Hudson River Basin			
Opalescent River near Tahawus, NY (d)	01311900	9.02	1921-23
Arbutus Pond Outlet near Newcomb, NY (d)	01311992*	1.22	1991-92
Hudson River near Newcomb, NY (d)	01312000*	192	1925-87
Cedar River near Indian Lake, NY (d)	01313000	85.3	1911-18
Cedar River below Chain Lakes near Indian Lake, NY (d)	01313500	160	1931-61
Hudson River at Gooley near Indian Lake, NY (d)	01314000	419	1916-68
North Creek at North Creek, NY (d)	01316000	21.9	1924-32
Schroon River at Riverbank, NY (d)	01317000*	527	1907-70
Schroon River at Warrensburg, NY (d)	01317500	567	1899-1902
Hudson River at Thurman, NY (d)	01318000	1,533	1907-20
East Branch Sacandaga River at Griffin, NY (d)	01319000	114	1933-78
Sacandaga River at Wells, NY (d)	01319500	260	1907-11
West Branch Sacandaga River near Wells, NY (d)	01320500	210	1911-16
West Stony Creek near Northville, NY (d)	01321500	88.0	1933-37
East Stony Creek near Northville, NY (d)	01322000	88.7	1933-37
Sacandaga River at Northville, NY (d)	01322500	712	1907-11
Kennyetto Creek near Broadalbin, NY (d)	01323000	28.3	1939-46
Hudson River at Corinth, NY (d)	01325420	2,755	1904-13
Hudson River at Spier Falls, NY (d)	01326500	2,779	1913-23
Glens Falls Feeder at Glens Falls, NY (d)	01327000		1927-64
Glens Falls Feeder at Dunham Basin, NY (d)	01327500		1945-80
Bond Creek at Dunham Basin, NY (d)	01328000	14.7	1947-82
Batten Kill at Battenville, NY (d)	01329500*	394	1923-68
Hudson River at Schuylerville, NY (d)	01329650	3,440	1977-79
Hoosic River at Buskirk, NY (d)	01335000	577	1903-09
Hudson River at Mechanicville, NY (d)	01335500	4,500	1896-1956
Oriskany Creek at Colemans Mills, NY (g)	01337995	134	1904-06
Oriskany Creek near Oriskany, NY (d)	01338000	139	1901-05
Oriskany Creek at State Dam at Oriskany, NY (d)	01338500	140	1899-1901
			1904-05
Sauquoit Creek at New York Mills, NY (d)	01339000	46.6	1898-1900
Mohawk River at Utica, NY (d)	01340000	514	1901-03
Reall Creek near Utica, NY (d)	01340500	5.68	1901-05
Johnston Brook near Utica, NY (d)	01341000	0.62	1903-05
Sylvan Glen Creek near New Hartford, NY (d)	01341500	1.10	1904-07
Graefenberg Creek near New Hartford, NY (d)	01342000	0.35	1903-07
Starch Factory Creek near New Hartford, NY (d)	01342500	3.66	1903-07
Steele Creek at Ilion, NY (d)	01342730	26.2	1967-68
West Canada Creek at Nobleboro, NY (d)	01342800*	193	1967-68



DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS  
(continued)

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Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Hudson River Basin--continued			
West Canada Creek near Hinckley, NY (d)	01343500	360	1900-10
West Canada Creek at Hinckley, NY (d)	01344000	375	1919-59
Ninemile Feeder near Holland Patent, NY (d)	01344500		1919-68
West Canada Creek at Poland, NY (d)	01345000	463	1913-14
West Canada Creek at Middleville, NY (d)	01345500	512	1899-1901
Mohawk River at Little Falls, NY (d)	01346500	1,290	1898-1910
			1912-13
East Canada Creek at Dolgeville, NY (d)	01347500	258	1898-1913
			1928-46
Otsquago Creek at Fort Plain, NY (d)	01349000	61.0	1950-89
Cayadutta Creek near Johnstown, NY (d)	01349500	38.4	1899-1900
Silver Lake Outlet at Hensonville, NY (d)	01349858	6.66	1976-77
West Kill at North Blenheim, NY (d)	01350200	44.6	1975-87
Schoharie Creek at Middleburg, NY (d)	01350500	532	1927-39
Fox Creek at West Berne, NY (d)	01351000	67.2	1924-32
			1962-68
Alplaus Kill near Charlton, NY (d)	01355000	23.7	1913-17
Mohawk River at Vischer Ferry Dam, NY (d)	01356000	3,380	1899-1910
			1913-19
Poesten Kill near Troy, NY (d)	01358500	89.4	1923-68
Mill Creek near East Greenbush, NY (d)	01359150	9.74	1975-77
Hunger Kill at Guilderland, NY (d)	01359513	8.16	1967-77
Normans Kill near Westmere, NY (d)	01359519	131	1968-79
Normans Kill at Albany, NY (d)	01359528*	168	1979-83
Coeymans Creek near Selkirk, NY (d)	01359902	35.1	1967-77
Silver Creek at Dormansville, NY (d)	01359918	2.90	1978-81
Hannicrois Creek near New Baltimore, NY (d)	01359924	61.6	1968-77
Kinderhook Creek near Garfield, NY (d)	01360000	62.8	1893-1895
Kinderhook Creek at East Nassau, NY (d)	01360500	116	1892-1893
Kinderhook Creek at Rossman, NY (d)	01361000*	329	1906-14
			1928-68
Catskill Creek at Oak Hill, NY (d)	01361500*	98.0	1929-77
Tenmile Creek at Oak Hill, NY (d)	01361570	35.3	1969-78
Catskill Creek at South Cairo, NY (d)	01362000	270	1901-07
Roeliff Jansen Kill near Hillsdale, NY (d)	01362100*	27.5	1957-60
Esopus Creek near Olivebridge, NY (d)	01363500	239	1903-04
			1907-14
Esopus Creek at Kingston, NY (d)	01364000	317	1901-09
Saw Kill at Red Hook, NY (d)	01364800	20.9	1959-66
Chestnut Creek above Red Brook at Grahamsville, NY (d)	01365450	12.2	1937-39
Chestnut Creek at Grahamsville, NY (d)	01365500	20.9	1939-87
Rondout Creek near Lackawack, NY (d)	01366500	100	1932-67
Sandburg Creek at Ellenville, NY (d)	01366650	56.7	1957-77
Wallkill River near Unionville, NY (d)	01368000	140	1937-81
Rutgers Creek at Gardnerville, NY (d)	01368500*	59.7	1943-68
Pochuck Creek near Pine Island, NY (d)	01369000	98.0	1937-77
Quaker Creek at Florida, NY (d)	01369500	9.69	1937-79
Wallkill River at Pellets Island, NY (d)	01370000	380	1920-68
Wallkill River near Phillipsburg, NY (d)	01370500	406	1937-59
Crystal Brook near Middletown, NY (d)	01370600	8.41	1964-68
Shawangunk Kill at Pine Bush, NY (d)	01371000	102	1924-32
			1957-71
			1989-93
Wallkill River at New Paltz, NY (d)	01372000	739	1901-04
Crum Elbow Creek at Hyde Park, NY (d)	01372040	17.3	1959-62
Casper Creek near Wappingers Falls, NY (d)	01372065	10.1	1969-76
East Branch Wappinger Creek near Clinton Corners, NY (d)	01372100	33.6	1956-63
Wappinger Creek near Clinton Corners, NY (d)	01372200	92.4	1956-76
Little Wappinger Creek at Salt Point, NY (d)	01372300	32.9	1956-76
Great Spring Creek at Pleasant Valley, NY (d)	01372400	15.5	1960-66
Fishkill Creek at Hopewell Junction, NY (d)	01372800*	57.3	1958-76
Whortlekill Creek at Hopewell Junction, NY (d)	01372850	7.37	1959-68
Fishkill Creek at Beacon, NY (d)	01373500	190	1944-68
Seely Brook near Chester, NY (d)	01373600	12.8	1964-68
Woodbury Creek near Highland Mills, NY (d)	01373690	11.2	1966-68
Lake Tiorati Brook at Cedar Flats, NY (d)	01374420	10.6	1960-63
Cedar Pond Brook at Stony Point, NY (d)	01374440	17.3	1960-62
Minisceongo Creek at Thiells, NY (d)	01374480	15.1	1960-63
Bird Brook near Croton, NY (d)	01375500	0.40	1933-38
			1940-41
Sparkill Creek at Tappan, NY (d)	01376270	4.71	1960-63
			1965-66
Sparkill Creek at Tappan Station, NY (d)	01376275	9.42	1965-66
Sparkill Creek at Sparkill, NY (d)	01376280	10.7	1959-68
			1976-78

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS  
(continued)

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Hackensack River Basin			
Hackensack River at Brookside Park, NY (d)	01376600	13.2	1960-63
Nauraushaun Brook at Nauraushaun, NY (d)	01376850	5.89	1960-63
Hackensack River at Nauraushaun, NY (d)	01376900	44.6	1960-62
Pascack Brook Tributary at Spring Valley, NY (d)	01377200	4.19	1960-62
Pascack Brook at Pearl River, NY (d)	01377300	9.83	1959-63
Passaic River Basin			
Ramapo River at Sloatsburg, NY (d)	01387250	60.1	1959-63
Stony Brook at Sloatsburg, NY (d)	01387300	18.2	1960-62
Mahwah River at Suffern, NY (d)	01387480	20.8	1959-62
Saddle River near Spring Valley, NY (d)	01390200	2.10	1960-63
Pine Brook near Spring Valley, NY (d)	01390300	2.28	1959-62
Delaware River Basin			
Platte Kill at Dunraven, NY (d)	01414000	35.0	1942-62
Terry Clove Kill near Pepacton, NY (d)	01415500	13.6	1937-62
Fall Clove Kill near Pepacton, NY (d)	01416000	11.3	1942-43
Coles Clove Kill near Pepacton, NY (d)	01416500	28.0	1945-53
Beaver Kill near Turnwood, NY (d)	01418000	40.8	1949-59
Beaver Kill at Craigie Clair, NY (d)	01418500	81.9	1937-70
Willowemoc Creek at DeBruce, NY (d)	01419000	41.2	1949-52
Willowemoc Creek near Livingston Manor, NY (d)	01419500	62.6	1937-70
Little Beaver Kill near Livingston Manor, NY (d)	01420000	20.1	1924-81
East Branch Delaware River at Hancock, NY (d)	01421500	839	1903-13
West Branch Delaware River at Delhi, NY (d)	01422000	142	1937-70
Little Delaware River near Delhi, NY (d)	01422500	49.7	1938-70
West Branch Delaware River near Hamden, NY (d)	01422700	256	1959-67
Dryden Brook near Granton, NY (d)	01423500	8.10	1952-67
Trout Creek near Mount Royal, NY (d)	01424000	20.0	1952-67
Trout Creek at Cannonsville, NY (d)	01424500	49.5	1940-63
Cold Spring Brook at China, NY (d)	01425500	1.49	1935-68
Butler Brook at Deposit, NY (d)	01425642	8.46	1976-77
Oquaga Creek near North Sanford, NY (d)	01425675	4.69	1970-81
Oquaga Creek at Deposit, NY (d)	01426000	67.6	1941-73
West Branch Delaware River at Hancock, NY (d)	01427000	650	1903-13
Delaware River near Callicoon, NY (d)	01427405	1,708	1967-75
Callicoon Creek at Callicoon, NY (d)	01427500*	110	1940-82
Tenmile River at Tusten, NY (d)	01428000	45.6	1946-73
Mongaup River near Rio, NY (d)	01433400	191	1909-13
East Branch Neversink River, east of Ladleton, NY (d)	01434013	18.6	1991-94
West Branch Neversink River at Branch near Frost Valley, NY (d)	0143402265	7.89	1991-94
West Branch Neversink River near Claryville, NY (d)	01434176	25.3	1991-94
Neversink River at Claryville, NY (d)	01434500	62.0	1949-51
Neversink River at Halls Mills near Curry, NY (d)	01435500	68.7	1938-49
Neversink River at Woodbourne, NY (d)	01436500	113	1938-73
Neversink River at Oakland Valley, NY (d)	01437000	223	1978-93
Streams tributary to Lake Ontario			
Salmon River near Redfield, NY (d)	04249500	188	1911-14
Beaverdam Brook at Altmar, NY (d)	04249910	16.9	1974-76
Orwell Brook near Altmar, NY (d)	04250000	19.0	1911-16
Salmon River near Pulaski, NY (d)	04250500	260	1900-14
Forestport Feeder near Boonville, NY (d)	04251000		1916-34
Mill Creek Sluiceway at Boonville, NY (d)	04251500		1934-40
Black River Canal (flowing south) near Boonville, NY (d)	04252000		1915-80
Sugar River at Talcottville, NY (d)	04253000	43.1	1926-32
Panther Lake Outlet near Old Forge, NY (d)	04253275	0.46	1967-68
Middle Branch Moose River at Old Forge, NY (d)	04253500	55.0	1912-73
Middle Branch Moose River near McKeever, NY (d)	04254000	151	1926-68
Moose River at McKeever, NY (d)	04254500*	363	1900-70
Otter Creek near Glenfield, NY (d)	04255000	64.5	1924-33
Independence River at Sperryville, NY (d)	04255500	81.8	1928-42
Cranberry Pond Outlet near Big Moose, NY (d)	04256460	0.58	1984-86
Woods Lake Tributary near Big Moose, NY (d)	04256480	0.13	1980-82
Woods Lake near Big Moose, NY (g)	04256484	0.80	1984-86
Woods Lake Outlet near Big Moose, NY (d)	04256485	0.80	1979-82
			1978-82
			1984-89
			1991-92



DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS  
(continued)

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Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Streams tributary to Lake Ontario--continued			
Beaver River below Stillwater Dam near Beaver River, NY (d)	04257000	171	1924-87
Beaver River at Eagle Falls near Number Four, NY (d)	04257500	225	1921-25
Beaver River near Croghan, NY (d)	04257955	266	1901-03
Deer River at Copenhagen, NY (d)	04258500	86.6	1929-57
Deer River at Deer River, NY (d)	04258700*	94.8	1957-68
Black River at Black River, NY (d)	04259500	1,842	1897-1914 1917-20
St. Lawrence River Basin			
Oswegatchie River at Cranberry Lake, NY (d)	04261000	140	1923-82
Oswegatchie River at Newton Falls, NY (d)	04261500	170	1913-23
Oswegatchie River near Ogdensburg, NY (d)	04263500	1,562	1903-17
St. Lawrence River near Waddington, NY (e)	04264050	298,500	1976-86
Sucker Brook near Waddington, NY (d)	04264100	25.6	1961-64
Little Sucker Brook at Waddington, NY (d)	04264200	19.9	1959-61
Brandy Brook near Waddington, NY (d)	04264300	27.0	1959-63
Middle Branch Grass River near Clare, NY (d)	04264400	63.0	1959-61
North Branch Grass River near South Colton, NY (d)	04264500	28.1	1924-32
North Branch Grass River near Clare, NY (d)	04264700	46.3	1958-63
Plumb Brook at Russell, NY (d)	04264800	35.3	1958-60
Grass River at Pyrites, NY (d)	04265000	333	1924-77
Elm Creek near Hermon, NY (d)	04265100*	32.6	1958-68
Tanner Creek at Stellaville, NY (d)	04265200	30.3	1958-61
Little River near Canton, NY (d)	04265300	42.4	1959-61
Grannis Brook at Crary Mills, NY (d)	04265400	20.9	1959-61
Lost Brook near Raquette Lake, NY (d)	0426545290	17.0	1978-80
Sagamore Lake Outlet near Raquette Lake, NY (d)	0426545295	19.1	1978-82
Raquette River near Coreys, NY (d)	04265500	418	1908-13
Little Simon Pond Outlet near Tupper Lake, NY (d)	04265605	2.95	1984-88
Bog River at mouth near Tupper Lake, NY (d)	04266000	132	1908-12
Parkhurst Brook near Potsdam, NY (d)	04267700	16.8	1958-63
Trout Brook at Allen Corners, NY (d)	04267800	54.2	1958-63
Plum Brook near Grantville, NY (d)	04268200*	43.9	1958-63
Raquette River at Massena Springs, NY (d)	04268230	1,196	1904-17
Squeak Brook near Massena, NY (d)	04268300	39.1	1959-61
St. Regis River near Paul Smiths, NY (d)	04268390	22.0	1973-75
East Branch St. Regis River near Meacham Lake, NY (d)	04268600	52.2	1958-68
St. Regis River at St. Regis Falls, NY (d)	04268700	234	1958-68
Lake Ozonia Outlet near St. Regis Falls, NY (d)	04268710	28.3	1961-63
Trout Brook at Stockholm Center, NY (d)	04268900	42.4	1958-61
Deer River at North Lawrence, NY (d)	04269043	78.0	1973-79
Allen Brook near Brasher Falls, NY (d)	04269050	16.0	1961-66
Lawrence Brook near Moira, NY (d)	04269100	25.7	1958-61
Deer River at Brasher Iron Works, NY (d)	04269500	182	1912-16 1958-68
East Branch Deer Creek at Fort Covington Center, NY (d)	04270150	23.9	1961-62
Farrington Brook near Moira, NY (d)	04270180	17.7	1961-66
Chateaugay River near Chateaugay, NY (d)	04270500	112	1908-09 1927-66
Little Trout River near Burke, NY (d)	04270600	27.6	1961-63
Trout River at Trout River, NY (d)	04270700*	107	1960-66
English River near Mooers Forks, NY (d)	04270800	40.8	1960-68
Saranac River at Saranac, NY (d)	04273000	521	1930-43
Lake Placid at Lake Placid, NY (e)	04273900	20.1	1960-82
West Branch Ausable River near Lake Placid, NY (d)	04274000*	116	1916-68
Black Brook at Black Brook, NY (d)	04274500	49.4	1924-61
West Brook at Lake George, NY (d)	04276895	8.38	1980-83
English Brook at Lake George, NY (d)	04276920	7.84	1980-83
La Chute at Ticonderoga, NY (d)	04279000	234	1904-06 1943-79

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The following continuous-record surface-water-quality stations in eastern New York excluding Long Island have been discontinued. Daily records of suspended-sediment discharge, temperature, or specific conductance were collected and published for the period of record shown for each station. Those stations with an asterisk (\*) after the station number are currently operated as a surface-water-quality station (intermittent record).

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

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record
Hudson River Basin				
Hudson River at Glens Falls, NY	01327600	2,807	S.S.	1977
Hudson River at Rogers Island at Fort Edward, NY	01327755*	2,817	S.S.	1978-79
Hudson River at Schuylerville, NY	01329650	3,440	S.S.	1977-79
Glowegee Creek near West Milton, NY	01329995	21.5	Temp.	1967-73
Glowegee Creek at West Milton, NY	01330000	26.0	S.C.	1967-73
			Temp.	1954-73
			S.C.	1965-73
Kayaderosseras Creek near West Milton, NY	01330500	90.0	Temp.	1953-78
Hudson River at Mechanicville, NY	01335500	4,500	Temp.	1960-61
Mohawk River below Delta Dam, near Rome, NY	01336000	152	Temp.	1967-72
Schoharie Creek at North Blenheim, NY	01350180	358	Temp.	1972-85
			Temp.	1976
			Temp.	1956-59
Schoharie Creek at Breakabeen, NY	01350355	444	S.S.	1954-59
Mohawk River at Cohoes, NY	01357500	3,450		1977-79
Hudson River at Green Island, NY	01358000	8,090 (about)	Temp.	1955-81
Mill Creek near East Greenbush, NY	01359150	9.74	S.S.	1975-76
Crystal Brook near Middletown, NY	01370600	8.41	Temp.	1966-68
Hudson River at Poughkeepsie, NY	01372055	1,732	Temp.	1967-69
Hudson River near Beacon, NY	01372560		S.C.	1967-69
			Temp.	1966-68
			S.C.	1966-68
Fishkill Creek at Hopewell Junction, NY	01372800	57.3	Temp.	1964-75
Whortlekill Creek at Hopewell Junction, NY	01372850	7.37	Temp.	1963-68
Seely Brook near Chester, NY	01373600	12.8	Temp.	1964-69
Hudson River at West Point, NY	01374020		Temp.	1969
Hudson River at Peekskill, NY	01374310		S.C.	1969
			Temp.	1968-69
			S.C.	1968-69
Delaware River Basin				
Oquaga Creek near North Sanford, NY	01425675	4.69	Temp.	1971-81
Delaware River near Callicoon, NY	01427405	1,708	Temp.	1968-75
Delaware River at Skinners Falls, NY	01427705	1,897	Temp.	1968-71
Delaware River at Port Jervis, NY	01434000	3,070	Temp.	1974-79
				1957-60
				1973-94
			S.C.	1973
			S.S.	1960
Neversink River at Woodbourne, NY	01436500	113	Temp.	1970-76
				1978-93
Streams tributary to Lake Ontario				
Sandy Creek near Adams, NY	04250750	128	Temp.	1981-84
Independence River at Donnattsburg, NY	04256000	88.7	S.C.	1981-84
			Temp.	1960-61
				1964-78
Black River at Watertown, NY	04260500	1,864	Temp.	1956-59
				1962-69
St. Lawrence River Basin				
West Brook at Lake George, NY	04276895	8.38	S.S.	1981
English Brook at Lake George, NY	04276920	7.84	S.S.	1981

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WATER RESOURCES DATA FOR NEW YORK, 1995  
Volume 1.--Eastern New York excluding Long Island

INTRODUCTION

Water-resources data for the 1995 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; ground-water levels; and precipitation quality. This volume contains records for water discharge at 119 gaging stations; stage only at 7 gaging stations; stage and contents at 4 gaging stations, and 19 other lakes and reservoirs; water quality at 34 gaging stations and 1 precipitation-quality station; and water levels at 22 observation wells. Also included are data for 31 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program, and are published as miscellaneous measurements and analyses in this volume. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey in cooperation with State, Municipal, and Federal agencies in New York.

Records of discharge and stage of streams, and contents and 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 water 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 and universities in the United States or may be purchased from the U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Alexandria, VA 22304.

Since the 1961 water year, streamflow data and since the 1964 water year, water-quality data have been released by the Geological Survey in annual reports on a State-boundary basis. These reports provided rapid release of water data in each state shortly after the end of the water year. Through 1970 the data were also released in the water-supply paper series mentioned above.

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-95-1." 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 Office at the address given on the back of the title page or by telephone (518) 285-5600.



## COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 1, water year 1995, through cooperative agreement with the Survey are:

- New York State Department of Environmental Conservation
- New York State Department of Transportation
- County of Ulster, County Legislature
- City of New York, Department of Environmental Protection
- Village of Nyack
- Board of Hudson River-Black River Regulating District
- New York Power Authority
- City of Saratoga Springs

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the following:

- U. S. Army Corps of Engineers
- U. S. Department of Energy

The following municipalities, organizations, and agencies aided in collecting records:

- Plattsburgh
- Tarrytown
- Yonkers
- New York State Electric and Gas Corp.
- Orange and Rockland Utilities, Inc.
- Niagara Mohawk Power Corp.
- Oswegatchie River-Cranberry Reservoir Commission
- Utica Board of Water Supply
- United Water New York
- Consolidated Hydro, Inc.
- National Weather Service

Organizations that supplied data are acknowledged in station descriptions.

## SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Streamflows in eastern New York during water year 1995 were below normal throughout the region and were much below normal in extreme southeastern parts of the State and within the Lake Champlain basin in north-eastern New York. The distribution of 1995 water year runoff relative to average runoff for 1960-89 is shown in figure 1 (next page).

Average month-end contents and 1995 month-end contents of the New York City reservoir system are shown in figure 2A; 1995 month-end contents in Great Sacandaga Lake at Conklingville (in the upper Hudson River basin) are shown with the average month-end contents for the period of record (1931-94) in figure 2B. Reservoir contents in the New York City system (fig. 2A) remained near normal through April 1995 but declined steadily to much below by the end of September; similarly, contents in Great Sacandaga Lake (fig. 2B) were near or above normal from October through March, and declined to below normal for the remainder of the year.

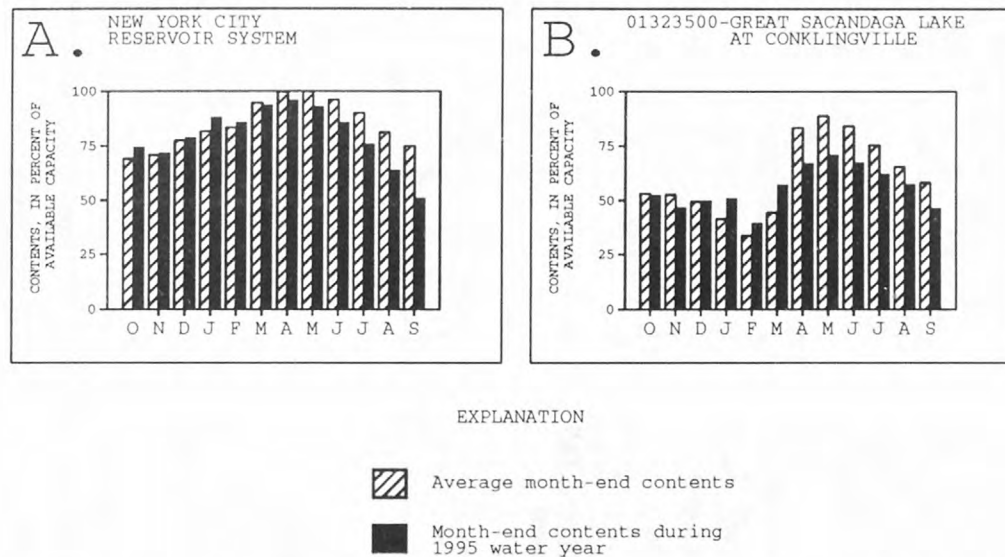


Figure 2.--Comparison of average month-end reservoir contents and month-end contents during 1995 water year for two selected reservoir systems in eastern New York.

The 1995 monthly runoff values for selected streamflow-gaging stations in eastern New York are plotted with each site's 1960-89 average monthly runoff in figure 3. A few of the sites were discontinued on March 31, 1995. The first quarter of the 1995 water year was fairly dry except for a few rainstorms in early October, early November, and early and late December. Several sites north of the Mohawk River recorded their maximum discharge for the year on December 5. The New York City reservoir system and Great Sacandaga Lake at Conklingville were at normal levels at the end of December. Streamflows throughout eastern New York were generally normal by January.

January was warm and wet throughout eastern New York and was the eighth warmest January on record statewide; temperatures ranged from 13°F to 19°F warmer than in January 1994. The early part of the month was fairly cool, but temperatures rose to much above normal by mid-month and, accompanied by two rainstorms, resulted in much-above-normal streamflows for the month. Many gaging stations north of the Mohawk River recorded their maximum discharge for the year on January 16.

Below-normal temperatures during February returned streamflows to normal or below-normal conditions, and some areas east of Lake Ontario received heavy snowfalls (84 inches at Hooker). Precipitation was below normal but fairly warm temperatures caused snowmelt and resulted in generally normal streamflows throughout eastern New York during March. A storm in early March accompanied by snowmelt caused many sites south of the Mohawk River to attain their maximum discharge for the year on March 8 or 9. The New York City reservoir system, Great Sacandaga Lake, and Lake Champlain were at or slightly above normal levels by the end of March.

April 1995 was the beginning of an extremely dry 6-month period throughout eastern New York. Rainfall was generally 1 to 2 inches below normal during April and resulted in much below normal streamflows in all areas. Most sites north of the Mohawk River recorded their lowest April flow in 1995. Reservoir levels throughout eastern New York dropped to below normal during April, and Lake Champlain was 2.2 ft below normal by the end of the month.

The rainfall and streamflow deficits continued throughout May and June. Lake Champlain fell to 2.8 ft below normal by the end of May. Other reservoirs also continued their decline. By the end of June, the Lake Champlain region was in extreme drought conditions, and drought conditions elsewhere were severe. Statewide precipitation from February through June 1995 was 64 percent of normal, and this was the driest February-through-June period ever recorded.

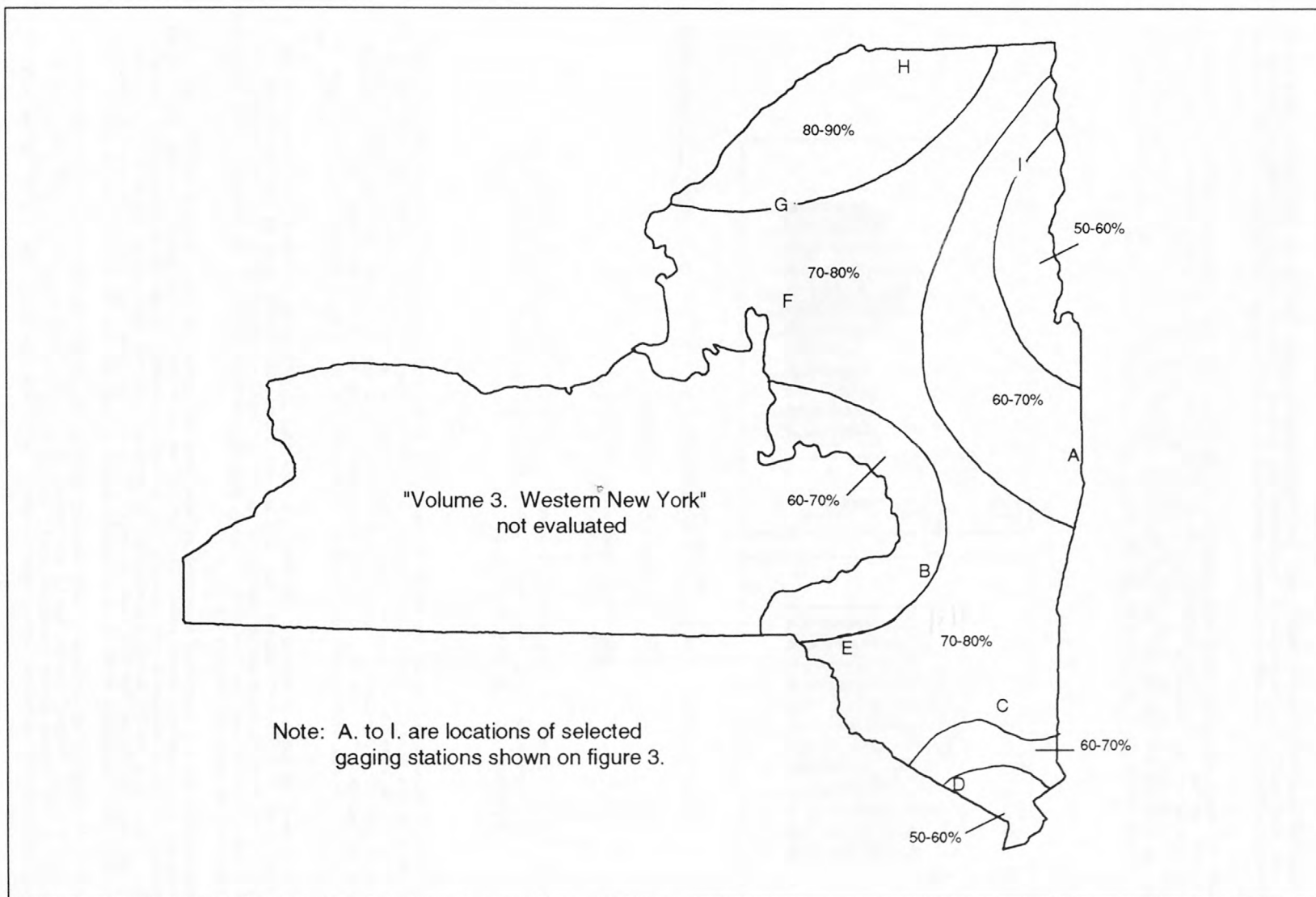


Figure 1.--1995 water year runoff as a percentage of the average annual runoff for 1960-89 for eastern New York excluding Long Island.



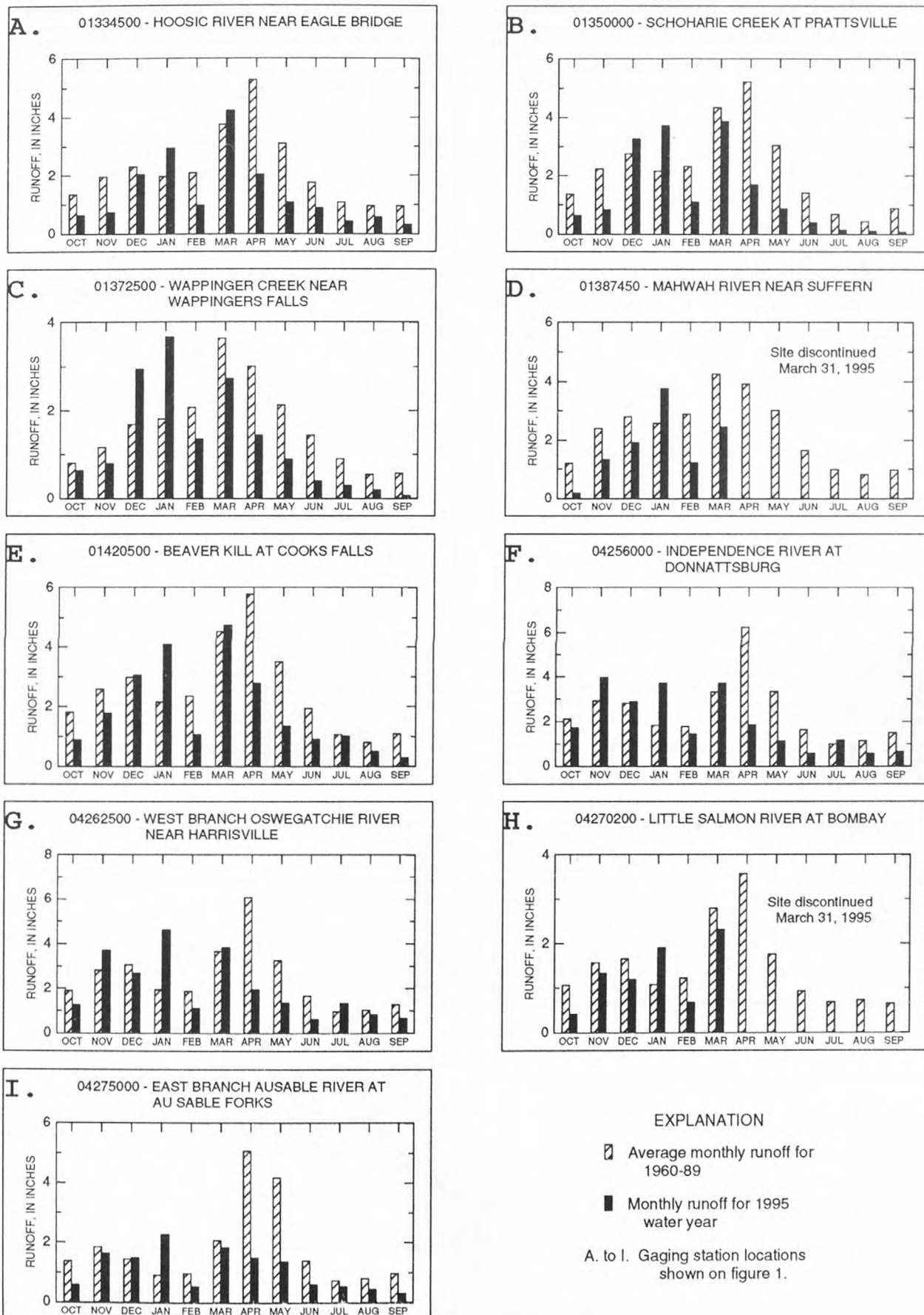


Figure 3.--Comparison of monthly runoff for 1995 water year and average monthly runoff for 1960-89 for selected gaging stations in eastern New York (site locations are shown on figure 1).

Rainfall during the last quarter of the 1995 water year was generally below normal but variable because of local severe thunderstorms throughout the period. For example, Poughkeepsie and Lansing Manor (Schoharie Creek basin) received over 10 inches of rain during July (more than 6 inches above normal), while most other areas throughout southeastern New York received below-normal rainfall during the month. The variability of streamflows throughout the year is illustrated by two representative sites in figures 4 and 5. Below-normal to normal flows during July and August kept lakes and reservoirs at below-normal levels during this period. The Delaware River basin reservoir system (part of the New York City reservoir system) was close to the drought-warning level by the end of August.

Continued dry weather during September 1995 resulted in much-below-normal streamflows throughout eastern New York. Several sites recorded below-normal streamflows for the sixth consecutive month. The New York City reservoir system was at 51 percent of available capacity by the end of September. (Normal for this time is 75 percent.)

#### Surface-Water Quality

Water-quality data from the Hydrologic Benchmark station and the two NASQAN stations in eastern upstate New York (locations shown on fig. 8) generally were within the historic extremes of the individual stations' period of record. Significant new extremes were noted at one site during the year. A few other new extremes were measured during the year but represented only minor changes.

The previous maximum measurement of dissolved nitrite plus nitrate (0.72 mg/L as N) at St. Lawrence River at Cornwall, Ontario, near Massena, NY was exceeded with a measurement of 1.3 mg/L on August 7.

The location of the Hudson River salt front (100 mg/L chloride concentration or 500 microsiemens) ranged from 25 mi to 75 mi upstream of the Battery, New York City, from October 1994 through July 1995. The salt front moved upstream of the water intakes for Poughkeepsie (river mile 77.2) on August 28 as a result of below-normal freshwater inflows, as well as tidal cycles and hurricane Felix. The salt front (at high slack tide) was located 4.4 mi upstream of Poughkeepsie on September 7 and 11, and approached the location of the front during the 1964 drought. Low freshwater inflows kept the salt front (at high slack tide) upstream of Poughkeepsie through September 1995.

Water-quality data from 17 periodic-measurement sites (locations shown on fig. 8) and miscellaneous-measurement sites collected for the Hudson River NAWQA project in eastern upstate New York are presented in this report. Also presented are PCB and daily-sediment loads at 3 sites on the upper Hudson River, daily temperature and specific conductance values at 3 sites on the lower Hudson River, and daily temperature data from 20 additional sites in eastern upstate New York. Water-quality data are periodically collected at additional sites and are generally published in project reports.

#### Ground Water

Ground-water levels in shallow, unconfined aquifers in eastern New York typically show uniform patterns of seasonal change during the water year. Recharge to aquifers varies locally throughout the year and is affected by the timing and amount of precipitation, season (because evapotranspiration declines during the nongrowing season), soil moisture, and air temperature (because frozen soil prevents recharge, and high temperatures increase evaporation). Water levels generally rise during the fall, when the growing season ends and evapotranspiration decreases, and generally decline during the winter, when frozen ground prevents infiltration of water, and precipitation is in the form of snow. Water levels rise in early spring, before and during the onset of the growing season, when recharge is significant and often supplemented by snowmelt. Water-level rises during the spring usually exceed those that occur in the fall. Water levels decline during the late spring and summer, when plant growth and warm temperatures increase the rate of evapotranspiration. Storms, if of sufficient intensity and duration, can provide minor recharge to shallow aquifers during summer.

The hydrographs in figure 6 show the minimum, maximum, and median long-term monthly water levels and the water levels at selected wells during the 1995 water year. The hydrographs for well St-40 in St. Lawrence County (extreme northern New York) and well Re-700 in Rensselaer County (east-central New York) illustrate typical seasonal water-level fluctuations under natural (nonpumping) conditions in shallow, unconfined sand aquifers. The hydrograph for well Du-321 in Dutchess County (southern New York) illustrates the water-level fluctuations under natural conditions in a deep, confined shale aquifer.

Ground-water levels during the first half of the 1995 water year were above average to average in most of southeastern New York and average to below average in most of northeastern New York in relation to long-term average water levels. Water levels in wells generally rose from October 1994 through March 1995. In April, water levels began to decline, and generally continued to do so through the end of August (majority of observation wells were discontinued 8/31/95). Ground-water levels during the second half of the water year in most of eastern New York were below average in relation to long-term average water levels.

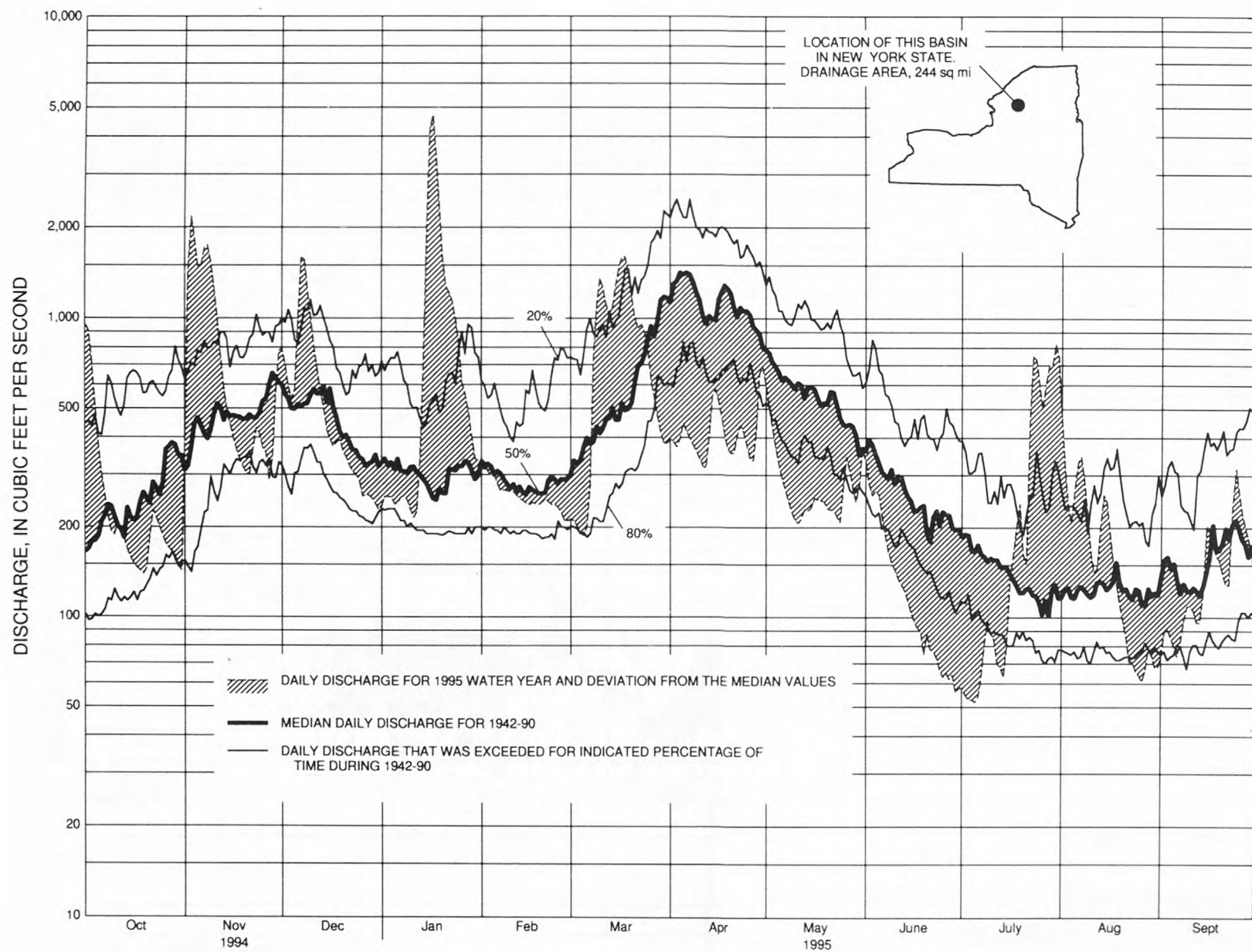


FIGURE 4.--HYDROGRAPHIC COMPARISONS, WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, N.Y.



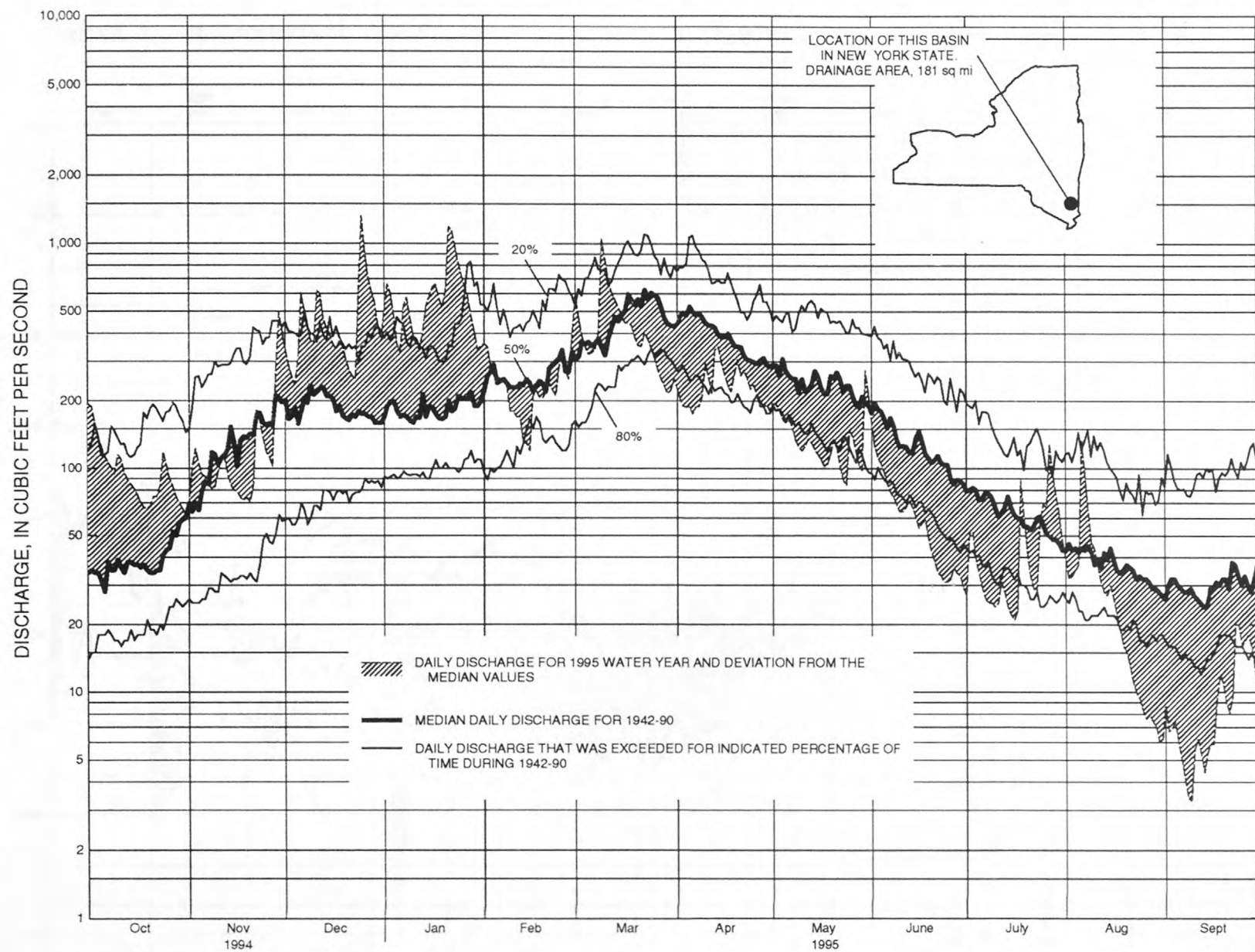
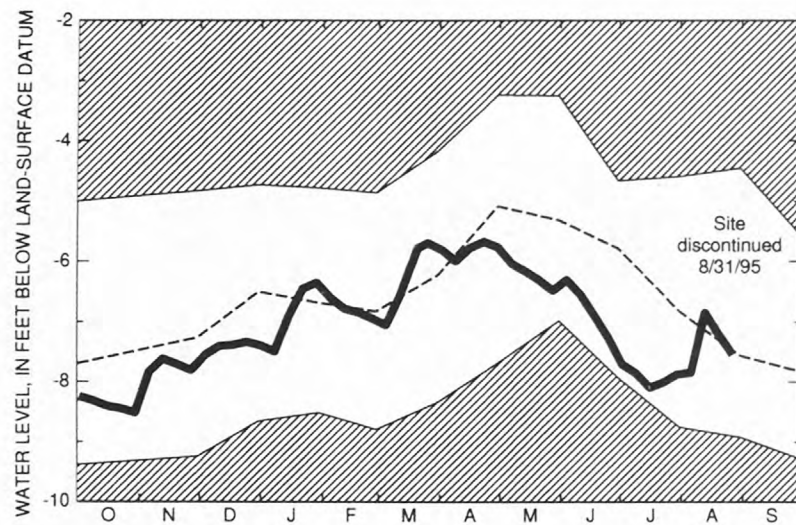
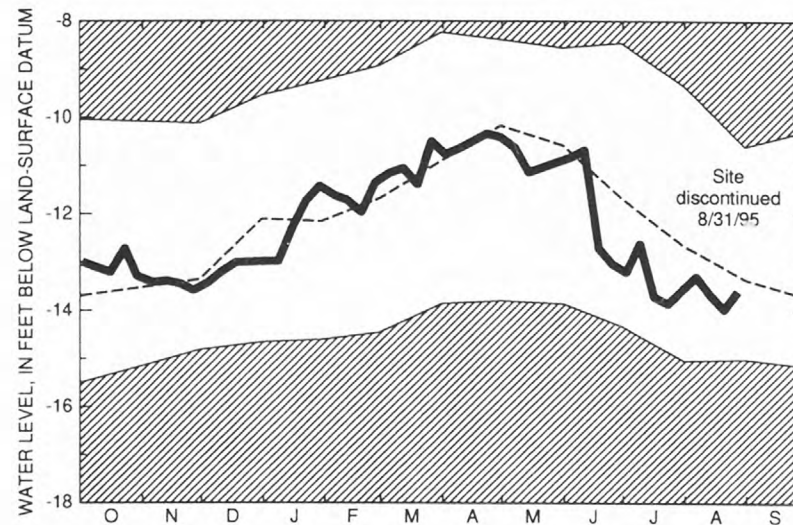


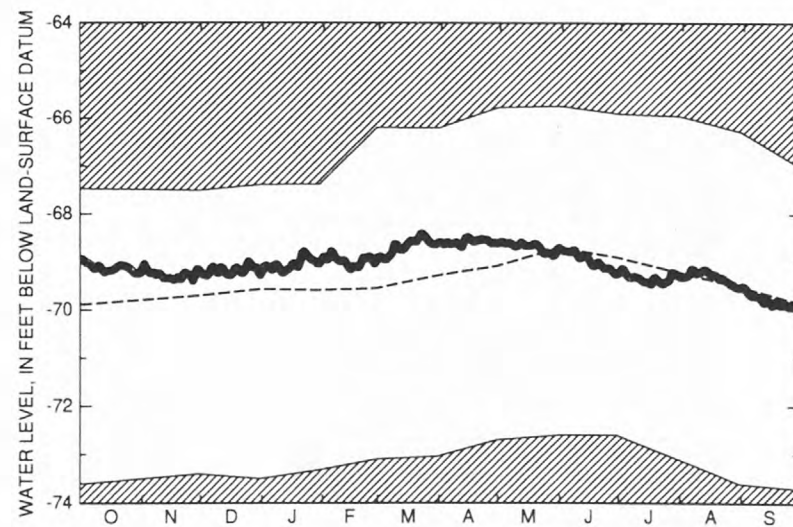
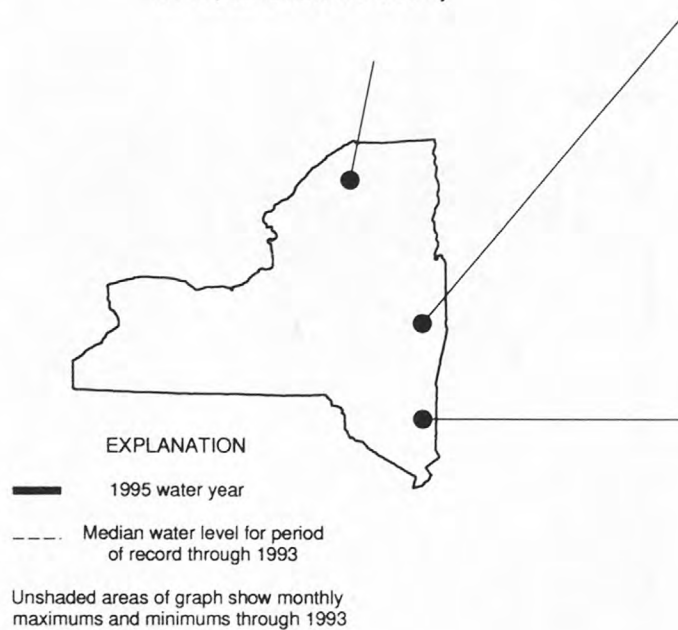
FIGURE 5.--HYDROGRAPHIC COMPARISONS, WAPPINGER CREEK NEAR WAPPINGERS FALLS, N.Y.



St-40, St. Lawrence County



Re-700, Rensselaer County



Du-321, Dutchess County

Figure 6.--Hydrographic comparisons, ground-water levels at selected observation wells.

## WATER RESOURCES DATA FOR NEW YORK, 1995

## SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 142 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

NASQAN was redesigned in 1995 and will be known as NASQAN II beginning in 1996. NASQAN II will focus on four of the largest river basins in the Nation--the Mississippi, the Columbia, the Colorado and the Rio Grande. The objective of NASQAN II is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of wet atmospheric deposition, which includes snow, rain, sleet, and hail. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Radiochemical Programs is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

## EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1995 water year that began October 1, 1994, and ended September 30, 1995. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data, and ground-water level data. The locations of the stations and wells where the data were collected are shown in figure 8. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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



## WATER RESOURCES DATA FOR NEW YORK, 1995

## Downstream Order System

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

The station identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 01300500, includes the 2-digit part number "01" plus the 6-digit downstream-order number "300500". The Part number designates the major river basin. In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9 or 10-digit station number) and/or a latitude-longitude number was used for identification.

## Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 7 below.)

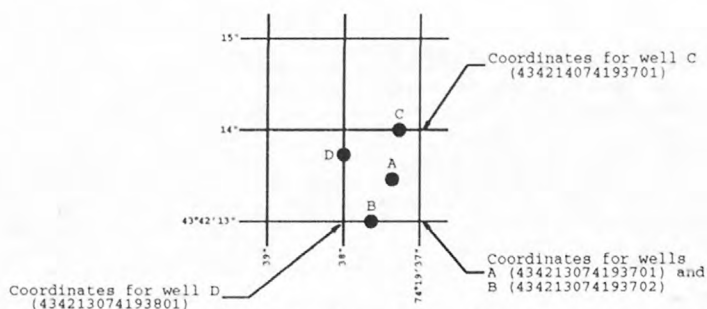


Figure 7. System for numbering wells (latitude and longitude)

## Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Locations of all gaging stations and observation wells in this report are shown in figure 8.

## Data Collection and Computation

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents 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 either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

## WATER RESOURCES DATA FOR NEW YORK, 1995

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow-over-dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrographers and observers are used in 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 control, the daily mean discharge is computed by what is basically the shifting-control method. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

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

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is 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. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

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

## Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1993 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table. This change represents the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

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

Station manuscript

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

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the 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 some stations, were determined and used by the U.S. Army Corps of Engineers or other agencies.

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

## WATER RESOURCES DATA FOR NEW YORK, 1995

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

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

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

**REMARKS.**--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information 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, outlet works and spillway, and purpose and use of the reservoir.

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

**AVERAGE DISCHARGE.**--The discharge value given is the arithmetic mean of the water-year mean discharges. Only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless.

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

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

**EXTREMES FOR CURRENT YEAR.**--Extremes given here are similar to those for the period of record, except the peak discharge listing 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 control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. 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.**--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because 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 skeleton stage-capacity table when daily contents are given.



## WATER RESOURCES DATA FOR NEW YORK, 1995

Data table of daily mean values

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

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") 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 figures. The designated period will be expressed as "FOR WATER YEARS \_\_\_\_\_, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

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 flows, 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 record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

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

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

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

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

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

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



## WATER RESOURCES DATA FOR NEW YORK, 1995

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

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

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

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

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

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 is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage 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 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. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

## Identifying Estimated Daily Discharge

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

## Accuracy of the Records

The accuracy of streamflow 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 interpretation of records.

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

Figures 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<sup>3</sup>/s; to tenths between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures above 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

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

## WATER RESOURCES DATA FOR NEW YORK, 1995

## Other Records Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge-measurement notes, gage-height records, and rating tables is on file in the district office. Also, most 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 of the published records may be obtained from the district office.

Records of Surface-Water Quality

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

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

## Classification of Records

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

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers 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.

## Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, unless otherwise footnoted under "REMARKS". 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. Data for precipitation-quality stations appear next. The table of ground-water quality data follow the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. Data collected at miscellaneous sites and ground-water quality for the NAWQA program appear last.

## On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

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

## WATER RESOURCES DATA FOR NEW YORK, 1995

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, minimum, and mean values for each constituent measured and are based upon measurements recorded hourly or more frequently. More detailed records (hourly values) may be obtained from the District office.

### Water Temperature

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

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been 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 loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

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

### Laboratory Measurements

Samples for indicator bacteria and daily samples for specific conductance are analyzed locally. Sediment samples are analyzed in the Geological Survey laboratory in Harrisburg, Pa. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colo. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

### 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, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.



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LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

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

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature 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 Geological Survey by a cooperating organization are identified here.

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

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

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

## Categories of Water-Quality Data

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittent for certain types of data, with analyses available for some but not all years within a station's period of record. An accurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation"). Thus, "CHEMICAL DATA: 1972-74(c), 1977-81(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 year, 1977-81.

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

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

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

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

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

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

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

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

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



## WATER RESOURCES DATA FOR NEW YORK, 1995

## Frequency-of-Sampling Notation

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

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

## Remarks Codes

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

<u>Printed Output</u>	<u>Remark</u>
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).

## Dissolved Trace-Element Concentrations

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

## Change in National Trends Network Procedures

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

Records of Ground-Water Levels

Ground-water level data consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. (See figure 7.)

## 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.

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; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the elevation of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values, and the extremes are instantaneous values selected from the digital record. Water levels in wells not equipped with recording gages are read periodically or measured periodically with a weighted tape by U.S. Geological Survey personnel and/or an observer.

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

## WATER RESOURCES DATA FOR NEW YORK, 1995

## Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the water year, and the 10-year hydrograph. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

**LOCATION.**--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic unit number; the distance and direction from a geographic point of reference; and the owner's name.

**AQUIFER.**--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

**WELL CHARACTERISTICS.**--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other 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 weekly, monthly, or some other frequency of measurement.

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

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

**PERIOD OF RECORD.**--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

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

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed for wells without recorders. The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the table for wells with recorders. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

A hydrograph of water levels follows the data table for each well. The current year and the previous 9 years of record are plotted in feet below land-surface datum. If the period of record is less than 10 years, the water levels for the entire record are plotted.

Records of Ground-Water Quality

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

## Data Collection and Computation

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

## WATER RESOURCES DATA FOR NEW YORK, 1995

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

## Data Presentation

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

## ACCESS TO WATSTORE DATA

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

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

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

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

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.)



## WATER RESOURCES DATA FOR NEW YORK, 1995

## DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded 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. Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Bed material See Bottom material.

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

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

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



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

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

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

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

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

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

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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

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

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

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. 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 (it can also be above ground level). Formerly called artesian aquifer.

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.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

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

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

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

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

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

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

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

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

Dissolved-solids concentration of water 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 of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

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

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

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

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

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.

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ( $\text{CaCO}_3$ ).

High tide is the maximum tidal peak reached each day.

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

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

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

Low tide is the minimum tidal trough reached each day.

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

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

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

Micrograms per gram (UG/G,  $\mu\text{g/g}$ ) is a unit expressing the concentration of a chemical constituent as the mass of the constituent (micrograms) per unit mass (gram) of medium (e.g. sediment, biological tissue). One microgram per gram is equivalent to one part per million.

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Micrograms per kilogram (UG/KG) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of medium. One microgram per kilogram is equivalent to one part per billion.

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

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

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters ( $\text{m}^2$ ), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

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

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

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

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



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Picocurie (PCI, pCi) is one trillionth ( $1 \times 10^{12}$ ) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

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

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

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

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

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

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

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

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

Aroclor is the registered trade mark for a group of polychlorinated biphenyls which were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific four-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 weight percent of the hydrogen substituted chlorine.

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

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

Milligrams of carbon per area or volume per unit time [ $\text{mg C}/(\text{m}^2 \cdot \text{time})$ ] for periphyton and macrophytes and [ $\text{mg C}/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [ $\text{mg O}_2/(\text{m}^2 \cdot \text{time})$ ] for periphyton and macrophytes and [ $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

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

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



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Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

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

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

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

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

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. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

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

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

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "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 lived.

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

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

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

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

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

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

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

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

Total (as used in tables of chemical analyses):

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

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

Water table is the surface of a ground-water body at which the water is at atmospheric pressure. It is defined by the levels at which water stands in wells that penetrate the water body just far enough to hold standing water.

Water-table aquifer is an unconfined aquifer whose upper boundary is the water table.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year".

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WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-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 weight refers to the weight of a substance including its contained water.

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

## PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

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

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
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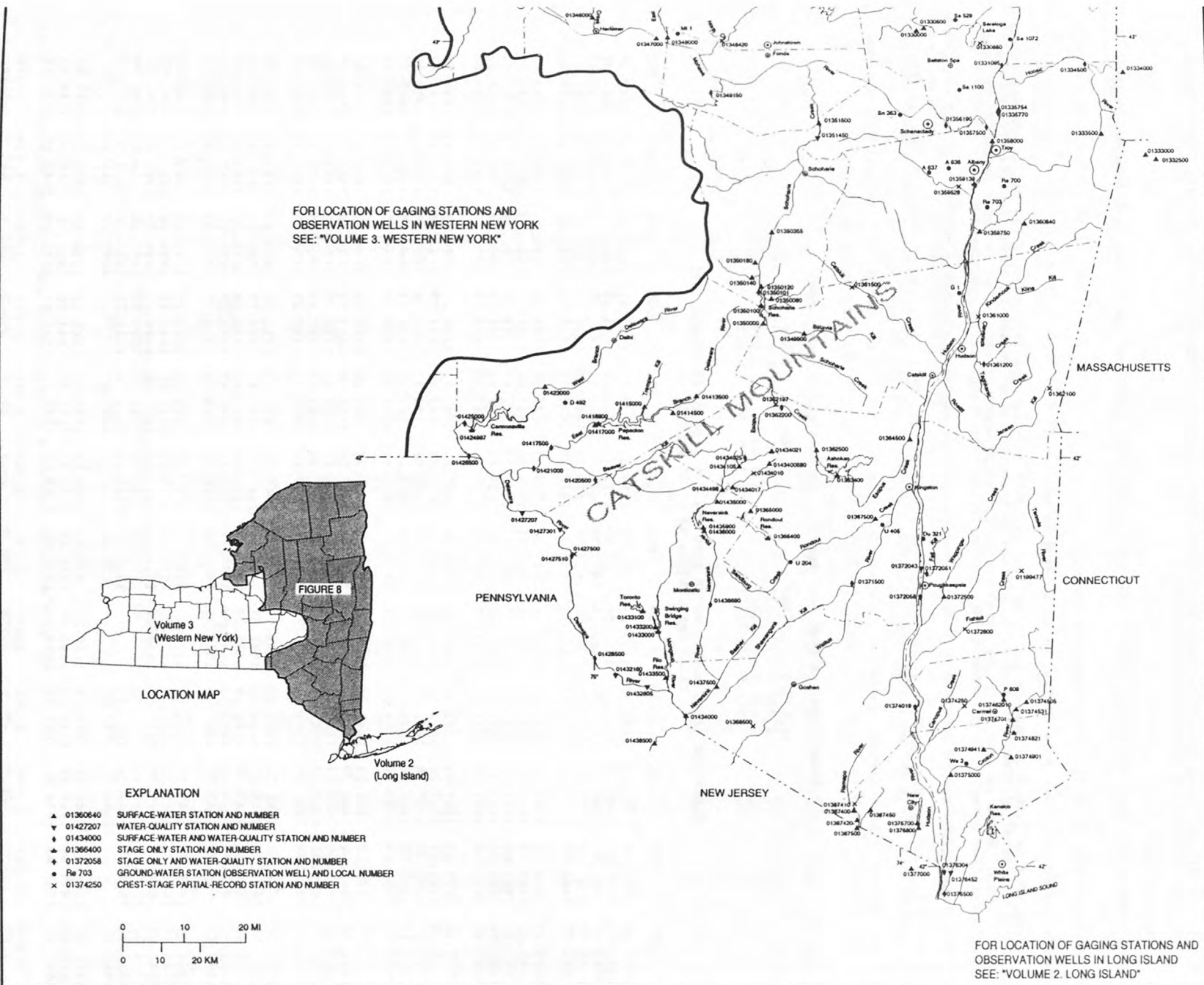


FIGURE 8.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

## HUDSON RIVER BASIN

01314500 INDIAN LAKE NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'20", long 74°16'35", Hamilton County, Hydrologic Unit 02020001, at Indian Lake Dam on Indian River, and 2.0 mi south of village of Indian Lake.

DRAINAGE AREA.--131 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1900 to current year. Prior to October 1956, published as "Indian Lake Reservoir near Indian Lake."

REVISED RECORDS.--WDR NY-94-1: 1993 (change in contents).

GAGE.--Nonrecording gage read once daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by masonry dam, completed in 1898. Usable capacity, about 4.668 bil ft<sup>3</sup> at elevation, 1,651.29 ft (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft. Dead storage unknown. Water is used for power development, for improvement of navigation in lower Hudson River, and to compensate for flow diverted from Hudson River at Glens Falls into Champlain (Barge) Canal.

COOPERATION.--Gage-height record provided by Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft, Mar. 28, 1913, contents, 5.781 bil ft<sup>3</sup>; minimum observed, 1,616.8 ft, estimated, Feb. 13, 1948, contents, 0.20 bil ft<sup>3</sup>.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,647.26 ft, Dec. 10, 11, contents, 3.941 bil ft<sup>3</sup>; minimum observed, 1,636.66 ft, Mar. 14, 15, contents, 2.210 bil ft<sup>3</sup>.

Capacity table  
(elevation, in feet and capacity, in billions of cubic feet)

1,635.0	1.958	1,648.0	4.068
1,636.0	2.110	1,653.0	5.007
1,638.0	2.417	1,655.0	5.419
1,643.0	3.221	1,657.0	5.844

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1645.86	1643.89	1645.46	1644.30	1642.81	1637.96	1639.61	1642.31	1643.87	1644.14	1645.15	1644.40
2	1645.89	1644.26	1645.51	1644.11	1642.66	1637.85	1639.61	1642.36	1643.89	1644.11	1645.12	1644.30
3	1645.81	1644.61	1645.47	1643.91	1642.46	1637.76	1639.56	1642.41	1643.95	1644.07	1645.16	1644.21
4	1645.79	1644.83	1645.45	1643.71	1642.25	1637.51	1639.66	1642.46	1644.01	1644.05	1645.36	1644.11
5	1645.71	1644.99	1645.36	1643.53	1642.11	1637.36	1639.70	1642.51	1644.06	1644.02	1645.24	1644.01
6	1645.67	1645.11	1646.01	1643.35	1641.96	1637.25	1639.71	1642.59	1644.09	1644.00	1645.28	1643.91
7	1645.61	1645.19	1646.71	1643.16	1641.76	1637.11	1639.80	1642.64	1644.12	1644.13	1645.30	1643.81
8	1645.56	1645.26	1647.06	1642.96	1641.53	1637.01	1639.77	1642.69	1644.14	1644.16	1645.30	1643.71
9	1645.50	1645.26	1647.21	1642.76	1641.36	1637.01	1639.81	1642.68	1644.16	1644.16	1645.31	1643.62
10	1645.45	1645.26	1647.26	1642.51	1641.19	1637.01	1639.87	1642.70	1644.18	1644.16	1645.33	1643.60
11	1645.36	1645.18	1647.26	1642.37	1640.91	1636.86	1639.87	1642.72	1644.25	1644.15	1645.31	1643.50
12	1645.28	1645.21	1647.20	1642.17	1640.81	1636.76	1639.87	1642.81	1644.27	1644.15	1645.30	1643.42
13	1645.17	1645.20	1647.16	1641.91	1640.61	1636.71	1640.06	1642.93	1644.28	1644.15	1645.32	1643.36
14	1645.11	1645.16	1647.06	1641.80	1640.41	1636.66	1640.26	1643.07	1644.29	1644.15	1645.32	1643.35
15	1645.03	1645.14	1646.96	1641.76	1640.21	1636.66	1640.42	1643.11	1644.30	1644.15	1645.35	1643.26
16	1644.96	1645.10	1646.81	1642.26	1640.01	1636.96	1640.49	1643.12	1644.30	1644.21	1645.36	1643.21
17	1644.89	1645.01	1646.70	1643.00	1639.81	1637.46	1640.56	1643.14	1644.30	1644.23	1645.35	1643.16
18	1644.83	1645.05	1646.61	1643.46	1639.61	1638.01	1640.61	1643.21	1644.30	1644.41	1645.35	1643.11
19	1644.75	1645.01	1646.56	1643.66	1639.41	1638.41	1640.66	1643.26	1644.27	1644.46	1645.35	1643.05
20	1644.70	1644.89	1646.36	1643.71	1639.21	1638.66	1640.81	1643.34	1644.27	1644.46	1645.33	1642.89
21	1644.57	1644.85	1646.25	1643.86	1639.01	1638.76	1640.91	1643.38	1644.26	1644.49	1645.31	1642.80
22	1644.53	1644.85	1646.07	1644.09	1638.81	1639.06	1641.31	1643.41	1644.25	1644.51	1645.26	1642.71
23	1644.46	1644.86	1645.90	1644.16	1638.70	1639.26	1641.46	1643.44	1644.24	1644.55	1645.16	1642.66
24	1644.37	1644.86	1645.61	1644.11	1638.56	1639.44	1641.61	1643.47	1644.23	1644.56	1645.11	1642.60
25	1644.29	1644.84	1645.43	1644.06	1638.45	1639.46	1641.71	1643.50	1644.21	1644.57	1645.02	1642.54
26	1644.23	1644.78	1645.37	1644.01	1638.31	1639.51	1641.81	1643.54	1644.21	1644.66	1644.91	1642.49
27	1644.16	1644.73	1645.21	1643.77	1638.21	1639.56	1641.86	1643.61	1644.19	1644.86	1644.81	1642.45
28	1644.09	1644.78	1645.09	1643.54	1638.08	1639.53	1641.96	1643.64	1644.17	1644.91	1644.76	1642.30
29	1644.02	1645.11	1644.97	1643.41	---	1639.51	1642.06	1643.70	1644.16	1645.06	1644.66	1642.24
30	1643.91	1645.36	1644.74	1643.21	---	1639.55	1642.26	1643.74	1644.15	1645.11	1644.56	1642.19
31	1643.81	---	1644.51	1643.01	---	1639.61	---	1643.83	---	1645.11	1644.46	---
MEAN	1644.95	1644.95	1646.11	1643.28	1640.33	1638.07	1640.59	1643.07	1644.18	1644.38	1645.16	1643.23
MAX	1645.89	1645.36	1647.26	1644.30	1642.81	1639.61	1642.26	1643.83	1644.30	1645.11	1645.36	1644.40
MIN	1643.81	1643.89	1644.51	1641.76	1638.08	1636.66	1639.56	1642.31	1643.87	1644.00	1644.46	1642.19
+	3.364	3.628	3.450	3.201	2.417	2.671	3.105	3.364	3.412	3.580	3.459	3.078
++	-125	+102	-66.5	-93.0	-324	+94.8	+167	+96.7	+18.5	+62.7	-45.2	-147

CAL YR 1994 MEAN ---- MAX 1652.16 MIN 1635.54 ++ + 5.84  
WTR YR 1995 MEAN 1643.21 MAX 1647.26 MIN 1636.66 ++ -19.7

+ Contents, in billions of cubic feet, at 2400 hours on last day of month, by interpolation.  
++ Change in contents, equivalent in cubic feet per second.

NOTE: Elevations at 0800 hours for Dec. 30 and Apr. 16 computed based on observations at 0800 hours on adjacent days.

## HUDSON RIVER BASIN

01315000 INDIAN RIVER NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'30", long 74°16'05", Hamilton County, Hydrologic Unit 02020001, on right bank 0.8 mi downstream from Indian Lake Dam, 1.0 mi upstream from Big Brook, and 2.0 mi south of village of Indian Lake.

DRAINAGE AREA.--132 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1912 to June 1914, June 1915 to September 1915 (monthly discharges only, published in WSP 1302), October 1915 to current year.

REVISED RECORDS.--WDR NY-94-1: 1993.

GAGE.--Water-stage recorder. Datum of gage is 1,604.23 ft above sea level. Prior to Aug. 30, 1916, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Indian Lake (see station 01314500).

AVERAGE DISCHARGE.--81 years (water years 1913, 1916-95), 296 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft<sup>3</sup>/s, Mar. 28, 1913, gage height, 7.8 ft; minimum, has been less than 1.0 ft<sup>3</sup>/s, when entire flow of river is stored in Indian Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 561 ft<sup>3</sup>/s, Dec. 24, 25, gage height, 2.99 ft; minimum, 18 ft<sup>3</sup>/s, July 5, 6, 7, 8, 9-14, 15, gage height, 0.65 ft; minimum daily discharge, 18 ft<sup>3</sup>/s, July 8-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	217	376	544	530	353	187	42	43	43	20	207
2	218	215	421	541	529	353	187	42	43	43	20	207
3	217	214	420	539	527	353	140	42	44	43	22	207
4	217	214	420	538	526	350	99	42	43	43	24	205
5	217	214	428	536	526	349	99	42	43	34	22	204
6	217	215	430	534	524	345	99	42	43	19	22	204
7	217	214	432	531	522	343	99	42	43	19	21	204
8	217	214	431	530	522	343	99	42	44	18	21	203
9	217	212	432	528	514	343	99	42	44	18	21	205
10	217	212	432	527	508	343	99	42	44	18	21	202
11	217	212	432	526	507	291	99	43	44	18	21	202
12	217	212	432	523	504	264	100	43	44	18	22	202
13	216	212	432	519	502	263	103	42	44	18	21	202
14	215	212	430	516	500	264	101	42	44	18	21	202
15	214	212	429	521	497	266	101	42	44	21	21	202
16	214	212	428	529	494	271	101	42	44	20	21	202
17	214	211	428	534	492	273	101	42	44	25	20	200
18	214	209	426	535	489	276	101	42	44	21	21	199
19	214	209	425	537	487	278	101	42	44	21	21	199
20	214	209	425	540	482	280	101	42	43	21	21	199
21	214	210	486	543	479	283	104	42	43	21	66	199
22	213	210	556	545	403	285	105	42	43	21	117	201
23	212	209	555	546	359	285	104	42	43	21	116	201
24	212	209	555	545	359	285	104	43	43	21	116	199
25	212	208	557	544	357	285	104	43	43	21	141	199
26	212	207	555	542	356	285	73	43	43	25	213	199
27	212	207	555	540	356	285	42	43	43	21	212	199
28	212	213	553	538	356	252	42	43	43	22	211	199
29	211	272	549	537	---	187	42	43	43	23	209	199
30	210	310	546	534	---	187	42	43	43	21	209	199
31	210	---	545	532	---	187	---	43	---	21	209	---
TOTAL	6651	6506	14521	16574	13207	9007	2978	1312	1303	737	2243	6051
MEAN	215	217	468	535	472	291	99.3	42.3	43.4	23.8	72.4	202
MAX	218	310	557	546	530	353	187	43	44	43	213	207
MIN	210	207	376	516	356	187	42	42	43	18	20	199

## ADJUSTED FOR CHANGE IN CONTENTS OF INDIAN LAKE

MEAN	90.3	319	402	442	148	386	267	139	61.9	86.5	27.2	55.0
CFSM	0.68	2.42	3.04	3.35	1.12	2.92	2.02	1.05	0.47	0.66	0.21	0.42
IN	0.79	2.69	3.51	3.86	1.17	3.37	2.25	1.21	0.52	0.76	0.24	0.46

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1995, BY WATER YEAR (WY)

MEAN	272	219	257	363	415	279	180	302	255	276	365	355
MAX	808	649	777	944	980	745	774	757	907	644	700	862
(WY)	1978	1977	1973	1933	1932	1913	1913	1943	1947	1939	1930	1935
MIN	2.31	1.20	.74	3.13	36.7	5.69	2.51	2.42	3.30	4.43	47.7	24.9
(WY)	1919	1914	1931	1924	1945	1925	1927	1958	1958	1931	1975	1965

## HUDSON RIVER BASIN

01315000 INDIAN RIVER NEAR INDIAN LAKE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1912 - 1995	
ANNUAL TOTAL	112002		81090			
ANNUAL MEAN	307		222		295	
ANNUAL MEAN (ADJUSTED)	313		202			
HIGHEST ANNUAL MEAN					457	1976
LOWEST ANNUAL MEAN					106	1931
HIGHEST DAILY MEAN	992	May 3	557	Dec 25	3460	Mar 28 1913
LOWEST DAILY MEAN	88	Jun 12	18	Jul 8	.50	Sep 23 1913
ANNUAL SEVEN-DAY MINIMUM	90	Jun 12	18	Jul 8	.50	Oct 20 1913
ANNUAL RUNOFF (CFSM, ADJUSTED)	2.37		1.53			
ANNUAL RUNOFF (INCHES, ADJUSTED)	32.17		20.81			
10 PERCENT EXCEEDS	485		528		638	
50 PERCENT EXCEEDS	261		208		256	
90 PERCENT EXCEEDS	212		21		7.9	





## HUDSON RIVER BASIN

01315500 HUDSON RIVER AT NORTH CREEK, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1907 - 1995	
ANNUAL TOTAL	586821		405425		1569	
ANNUAL MEAN	1608		1111		2449	1976
HIGHEST ANNUAL MEAN					862	1965
LOWEST ANNUAL MEAN					23900	Mar 27 1913
HIGHEST DAILY MEAN	14800	Apr 17	6990	Jan 17	114	Jul 26 1934
LOWEST DAILY MEAN	352	Sep 14	135	Jun 30	120	Jul 20 1934
ANNUAL SEVEN-DAY MINIMUM	476	Jun 20	148	Jun 25	3300	
10 PERCENT EXCEEDS	3530		2080		990	
50 PERCENT EXCEEDS	940		880		460	
90 PERCENT EXCEEDS	524		313			

## HUDSON RIVER BASIN

01318500 HUDSON RIVER AT HADLEY, NY

LOCATION.--Lat 43°19'08", long 73°50'41", Saratoga County, Hydrologic Unit 02020001, on right bank at Hadley, 400 ft downstream from outlet of Lake Luzerne, and 0.3 mi upstream from Sacandaga River.

DRAINAGE AREA.--1,664 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1921 to current year.

REVISED RECORDS.--WSP 561: 1921-22. WSP 756: Drainage area. WSP 1432: 1931 (m).

GAGE.--Water-stage recorder. Datum of gage is 563.99 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some diurnal fluctuation caused by powerplant on Schroon River. Flow regulated by Indian Lake (see station 01314500) and other reservoirs upstream from station. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--74 years, 2,913 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft<sup>3</sup>/s, Jan. 1, 1949, gage height, 21.21 ft; minimum, 261 ft<sup>3</sup>/s, July 7, 1995; minimum gage height, 0.94 ft, Sept. 3, 1934, July 7, 1995; minimum daily discharge, 282 ft<sup>3</sup>/s, Sept. 11, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge for the flood of March 27, 1913, was about 49,000 ft<sup>3</sup>/s, based on peak runoff comparison with a station 12.7 mi upstream (drainage area 1,533 mi<sup>2</sup>).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	1515	*10,300	*7.79				

Minimum discharge, 261 ft<sup>3</sup>/s, July 7, gage height, 0.94 ft; minimum daily, 285 ft<sup>3</sup>/s, July 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	880	3030	1890	e2300	e1300	2720	2690	1380	294	1360	467
2	1530	2350	2980	e1900	e2200	e1300	2620	2410	1370	319	1090	453
3	1360	3890	2510	1820	e2000	1320	2450	2270	1300	352	923	505
4	1150	3460	2460	1780	e1700	1230	2330	2140	1390	293	1500	448
5	1060	2860	3280	1690	e1500	1370	2220	2050	1400	295	2560	448
6	1010	2470	7330	1760	e1500	1230	2070	1960	1320	291	2580	397
7*	970	2380	8160	1650	e1600	e1300	2010	1890	1260	285	2480	414
8	935	2490	7300	1700	e1700	e1400	1970	1730	1090	320	2270	442
9	958	2450	6010	1640	e1700	e1700	1870	1610	1080	500	1940	470
10	915	2220	5130	1540	e1700	e1900	1840	1480	1010	483	1660	625
11	993	2000	4710	1450	e1700	2150	1780	1460	941	435	1450	598
12	1040	1810	4070	1360	e1700	2100	1650	1610	940	387	1290	534
13	740	1650	3540	1630	e1600	2090	2130	1660	919	349	1190	542
14	834	1550	3180	1830	e1600	2390	2810	1770	881	323	1090	554
15	824	1480	3090	e2500	e1600	3550	3000	1790	820	304	1010	594
16	805	1500	2860	e6800	e1600	5650	2770	1750	811	309	896	707
17	786	1420	2740	9140	e1600	7780	2530	1860	678	426	789	839
18	760	1330	2630	8780	e1600	8500	2360	1760	651	937	676	750
19	784	1280	2520	7130	e1600	7410	2270	1690	606	1170	576	472
20	799	1230	2320	6030	e1500	6590	2320	1590	536	1050	520	483
21	818	1200	2340	7230	e1500	6180	2520	1620	484	836	482	519
22	823	1280	2280	7690	e1500	6120	3200	1510	445	837	430	538
23	838	1380	2230	6870	e1500	5900	3870	1370	420	1230	409	645
24	826	1390	2290	5810	e1400	5390	3690	1300	404	1140	379	787
25	802	1390	e2200	5250	1350	4830	3200	1300	380	974	358	798
26	780	1350	e2200	4760	1240	4320	2850	1350	357	870	374	749
27	746	1150	e2100	4200	1180	3940	2610	1410	348	1140	402	745
28	755	1320	e1900	3580	1220	3610	2560	1440	333	1340	468	743
29	740	2560	e1800	e3000	---	3290	2800	1380	300	1410	469	723
30	722	3250	1620	e2800	---	3020	2910	1380	297	1750	451	713
31	714	---	1850	e2500	---	2910	---	1410	---	1690	457	---
TOTAL	28327	56970	102660	117710	44890	111770	75930	52640	24151	22339	32529	17702
MEAN	914	1899	3312	3797	1603	3605	2531	1698	805	721	1049	590
MAX	1530	3890	8160	9140	2300	8500	3870	2690	1400	1750	2580	839
MIN	714	880	1620	1360	1180	1230	1650	1300	297	285	358	397

e Estimated

## HUDSON RIVER BASIN

01318500 HUDSON RIVER AT HADLEY, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1919	2634	2554	2160	1987	3651	8379	5294	2393	1434	1201	1365
MAX	7087	5657	6925	6548	6948	11670	14230	11820	9497	4201	2717	4135
(WY)	1978	1960	1984	1949	1981	1936	1993	1972	1947	1935	1986	1938
MIN	575	681	551	397	384	451	2531	1576	737	392	396	590
(WY)	1965	1931	1931	1931	1940	1940	1995	1987	1988	1934	1985	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1922 - 1995
ANNUAL TOTAL	1077029	687618	
ANNUAL MEAN	2951	1884	2913
HIGHEST ANNUAL MEAN			4574
LOWEST ANNUAL MEAN			1408
HIGHEST DAILY MEAN	26100	Apr 17	38100
LOWEST DAILY MEAN	628	Sep 15	282
ANNUAL SEVEN-DAY MINIMUM	751	Oct 25	299
10 PERCENT EXCEEDS	6730		6470
50 PERCENT EXCEEDS	1660		1790
90 PERCENT EXCEEDS	922		785



## HUDSON RIVER BASIN

01321000 SACANDAGA RIVER NEAR HOPE, NY

LOCATION.--Lat 43°21'10", long 74°16'15", Hamilton County, Hydrologic Unit 02020002, on left bank 1.5 mi downstream from West Branch Sacandaga River, on State Highway 30, and 4.5 mi upstream from Hope.

DRAINAGE AREA.--491 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 881.31 ft above sea level. Prior to July 24, 1929, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some seasonal regulation on West Branch Sacandaga River at Piseco Lake Outlet, about 17 mi upstream, and, since 1959, diurnal fluctuation caused by powerplant 4 mi upstream from station at Lake Algonquin. Minor fluctuations caused by mill upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--84 years, 1,100 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft<sup>3</sup>/s, Mar. 27, 1913, gage height, 11.0 ft, from floodmarks at site then in use; maximum gage height, 13.32 ft, Mar. 1, 1955 (ice jam); minimum discharge, about 16 ft<sup>3</sup>/s, Sept. 30, 1913, gage height, 1.17 ft; minimum gage height, 1.15 ft, Aug. 7, 8, 11, 1964; minimum daily discharge, 18 ft<sup>3</sup>/s, Sept. 20, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 5	2000	*8,890	*6.46				

Minimum discharge, 37 ft<sup>3</sup>/s, Sept. 6, 7, 8, 9, gage height, 1.28 ft; minimum daily, 37 ft<sup>3</sup>/s, Sept. 7-8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	504	536	1470	705	772	e490	1050	897	400	62	138	61
2	488	2250	1260	665	688	e470	963	819	358	61	145	56
3	464	1610	1120	578	574	e470	864	752	705	58	150	49
4	445	1280	1070	567	591	e470	932	696	878	55	338	45
5	406	1130	4050	466	598	e470	914	651	713	52	263	41
6	371	1040	6450	629	555	e500	840	612	539	51	244	39
7	329	1120	4200	596	e620	e550	822	536	494	55	233	37
8	329	1020	3330	557	e680	e640	761	555	387	70	188	37
9	304	920	2570	515	e680	e840	731	466	421	81	184	65
10	308	833	2210	412	e680	e1000	723	459	333	73	138	134
11	282	750	2010	e530	e680	e940	700	540	320	77	132	97
12	275	689	1500	e620	e660	919	718	711	562	77	149	79
13	258	599	1320	e700	e620	817	1870	663	684	70	137	72
14	252	611	1300	975	e600	1180	1840	607	527	58	144	126
15	247	530	1190	2130	e600	2440	1520	640	483	58	115	65
16	231	505	983	5010	e600	4310	1390	620	381	64	127	105
17	242	498	956	4110	e600	4920	1190	572	335	150	102	56
18	211	428	934	3100	e600	4130	1040	553	325	331	97	61
19	234	458	853	2640	e600	3320	1050	508	276	174	87	59
20	243	422	734	2620	e590	2920	1030	486	246	156	80	55
21	262	419	748	3990	e570	2950	1070	417	168	91	73	57
22	270	598	693	3200	e550	3030	1730	426	123	100	66	140
23	231	599	655	2610	e530	2610	1530	362	123	105	58	290
24	264	478	734	2190	e520	2290	1340	360	108	158	54	199
25	237	551	e780	1840	e510	1920	1170	411	98	134	48	181
26	231	495	e780	1430	e490	1670	1040	381	94	170	46	157
27	218	398	e740	1190	e490	1490	960	410	78	285	51	246
28	215	938	e680	913	e520	1320	1040	379	79	204	50	218
29	211	2500	e600	875	---	1200	1080	423	69	321	46	219
30	202	1890	537	813	---	1150	977	590	64	299	43	168
31	204	---	720	801	---	1140	---	498	---	202	45	---
TOTAL	8968	26095	47177	47977	16768	52566	32885	17000	10371	3902	3771	3214
MEAN	289	870	1522	1548	599	1696	1096	548	346	126	122	107
MAX	504	2500	6450	5010	772	4920	1870	897	878	331	338	290
MIN	202	398	537	412	490	470	700	360	64	51	43	37

e Estimated

## HUDSON RIVER BASIN

01321000 SACANDAGA RIVER NEAR HOPE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	719	1107	1036	837	704	1643	3587	1764	730	427	272	386
MAX	2677	2727	2988	2607	3197	5315	6143	4342	2752	2221	1225	1604
(WY)	1946	1960	1928	1937	1981	1936	1922	1972	1947	1935	1915	1987
MIN	53.4	205	235	188	172	207	1096	425	133	72.3	52.9	79.4
(WY)	1965	1965	1918	1931	1920	1940	1995	1941	1949	1949	1934	1939

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1911 - 1995
ANNUAL TOTAL	453549	270694	
ANNUAL MEAN	1243	742	1100
HIGHEST ANNUAL MEAN			1706
LOWEST ANNUAL MEAN			611
HIGHEST DAILY MEAN	12800	Apr 16	6450
LOWEST DAILY MEAN	168	Aug 12	37
ANNUAL SEVEN-DAY MINIMUM	217	Oct 25	43
10 PERCENT EXCEEDS	2750		1630
50 PERCENT EXCEEDS	660		520
90 PERCENT EXCEEDS	268		68

## HUDSON RIVER BASIN

01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

LOCATION.--Lat 43°18'57", long 73°55'39", Saratoga County, Hydrologic Unit 02020002, 800 ft upstream from right end of Conklingville Dam on Sacandaga River at Conklingville.

DRAINAGE AREA.--1,044 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1930 to current year. Prior to October 1969, published as "Sacandaga Reservoir at Conklingville."

GAGE.--Water-stage recorder. Datum of gage is sea level, adjustment of 1912. Prior to Apr. 23, 1930, nonrecording gage at same datum in outlet channel 800 ft downstream.

REMARKS.--Reservoir is formed by earth and concrete dam; storage began in March 1930; dam completed in 1930. Usable capacity for stream regulation, 29.670 bil ft<sup>3</sup> between elevations 735.0 ft and 768.0 ft. Between elevations 768.0 ft and 771.0 ft (spillway crest) an additional 3.450 bil ft<sup>3</sup> is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft. Capacity of 4.600 bil ft<sup>3</sup> below elevation 735.0 ft is considered dead storage, except for extraordinary emergencies or for necessary inspection of structures. Purpose of reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and safety. Area of water surface of reservoir filled to capacity, elevation, 771.0 ft, is 41.7 mi<sup>2</sup>. Discharge over spillway May 1-10, 1983, May 18-25, 1990, Apr. 25-28, 1993 (only spillage since dam completion in 1930). Satellite gage-height telemeter at station.

COOPERATION.--Supplemental records provided by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 773.29 ft, May 4, 1983, contents, 40.418 bil ft<sup>3</sup>; minimum since first filling, 729.55 ft, Mar. 30, 1940, contents, 2.100 bil ft<sup>3</sup>.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 761.57 ft, June 13, contents, 27.250 bil ft<sup>3</sup>; minimum, 747.97 ft, Mar. 7, 8, 10, 11, contents, 14.143 bil ft<sup>3</sup>.

Capacity table (including dead storage)  
(elevation, in feet, and contents, in billions of cubic feet)

738	6.43	760	25.61
740	7.80	764	29.85
745	11.64	768	34.27
750	15.94	771	37.72
755	20.61	774	41.26

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	759.66	754.16	751.89	753.04	753.48	748.86	755.98	759.83	761.08	759.80	757.87	756.06
2	759.51	754.29	751.73	752.92	753.31	748.74	756.11	759.95	761.07	759.73	757.73	755.97
3	759.32	754.23	751.52	752.73	753.13	748.62	756.24	760.07	761.16	759.57	757.70	755.89
4	759.15	754.18	751.30	752.54	752.94	748.49	756.46	760.16	761.26	759.47	757.81	755.82
5	758.98	754.11	751.38	752.34	752.82	748.35	756.61	760.25	761.40	759.36	757.77	755.71
6	758.79	754.07	752.60	752.09	752.60	748.25	756.58	760.33	761.41	759.28	757.73	755.50
7	758.62	753.98	753.47	751.91	752.36	748.12	756.57	760.39	761.42	759.19	757.70	755.34
8	758.45	753.83	754.10	751.73	752.17	748.09	756.58	760.41	761.41	759.13	757.68	755.11
9	758.29	753.70	754.47	751.53	752.04	748.15	756.58	760.45	761.42	759.02	757.65	755.00
10	758.09	753.57	754.79	751.29	751.94	748.13	756.63	760.46	761.40	758.91	757.60	754.81
11	757.89	753.40	755.21	751.04	751.75	748.13	756.62	760.50	761.40	758.79	757.55	754.67
12	757.72	753.24	755.43	750.85	751.55	748.17	756.66	760.59	761.44	758.75	757.54	754.47
13	757.57	753.07	755.60	750.65	751.32	748.27	756.86	760.63	761.45	758.68	757.50	754.33
14	757.38	752.90	755.77	750.53	751.12	748.43	757.11	760.68	761.43	758.61	757.45	754.20
15	757.24	752.79	755.85	750.55	750.91	748.66	757.40	760.76	761.41	758.52	757.40	753.96
16	757.11	752.63	755.66	751.12	750.78	749.31	757.58	760.79	761.40	758.41	757.36	753.78
17	756.92	752.49	755.47	751.87	750.58	750.33	757.75	760.82	761.34	758.37	757.27	753.60
18	756.75	752.37	755.27	752.50	750.38	751.24	757.86	760.91	761.30	758.43	757.19	753.47
19	756.55	752.33	755.06	752.91	750.18	751.94	757.93	760.89	761.24	758.40	757.14	753.39
20	756.37	752.17	754.83	753.07	749.98	752.47	758.04	760.93	761.07	758.31	757.05	753.24
21	756.20	752.04	754.59	753.58	749.80	752.98	758.13	760.96	760.99	758.24	756.98	753.06
22	756.03	752.06	754.33	754.05	749.65	753.52	758.45	760.98	760.86	758.13	756.86	752.95
23	755.84	751.91	754.08	754.30	749.52	753.97	758.67	760.96	760.73	758.05	756.80	752.83
24	755.68	751.76	753.89	754.39	749.46	754.34	758.87	760.97	760.60	758.05	756.70	752.67
25	755.51	751.66	753.93	754.43	749.31	754.65	759.04	760.96	760.49	757.98	756.55	752.51
26	755.29	751.55	753.91	754.39	749.16	754.89	759.19	760.98	760.36	757.98	756.46	752.35
27	755.09	751.39	753.83	754.29	749.04	755.10	759.28	760.99	760.23	757.94	756.39	752.24
28	754.93	751.44	753.75	754.13	748.96	755.30	759.48	761.01	760.11	757.90	756.31	752.06
29	754.70	751.72	753.63	753.95	---	755.49	759.63	761.04	759.98	757.97	756.25	751.92
30	754.52	751.85	753.43	753.79	---	755.67	759.71	761.08	759.88	757.95	756.13	751.79
31	754.30	---	753.21	753.63	---	755.85	---	761.11	---	757.89	756.09	---
MEAN	757.05	752.83	754.00	752.65	751.08	751.05	757.62	760.67	761.02	758.61	757.17	753.96
MAX	759.66	754.29	755.85	754.43	753.48	755.85	759.71	761.11	761.45	759.80	757.87	756.06
MIN	754.30	751.39	751.30	750.53	748.96	748.09	755.98	759.83	759.88	757.89	756.09	751.79
†	19.81	17.62	18.84	19.25	15.00	21.53	25.35	26.73	25.42	23.42	21.68	17.53
††	-2,050	-845	+455	+153	-1,757	+2,438	+1,474	+515	-505	-747	-650	-1,601
CAL YR 1994	MEAN 758.17	MAX 768.98	MIN 742.74	†† - 64								
WTR YR 1995	MEAN 755.67	MAX 761.45	MIN 748.09	†† -246								

† Contents, in billions of cubic feet, at 2400 hours on last day of month.  
†† Change in contents, equivalent in cubic feet per second.

## HUDSON RIVER BASIN

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

LOCATION.--Lat 43°18'41", long 73°52'04", Saratoga County, Hydrologic Unit 02020002, on left bank 1.0 mi downstream from Stewarts Bridge, 1.1 mi west of Hadley, 1.4 mi upstream from mouth, and 1.5 mi downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.--1,055 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1907 to current year. Published as "near Hadley" 1907-1910, "at Hadley" 1911-32 and "at Conklingville" 1932-52. Records published for both sites October 1951 to September 1952.

REVISED RECORDS.--WSP 1302: 1908. WSP 1432: 1910-12, 1916-21, WDR NY-83-1: 1968(M), 1971-72(M), 1976-77(M), 1979(M).

GAGE.--Water-stage recorder. Datum of gage is 582.00 ft above sea level. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, water-stage recorder at site 0.8 mi downstream at datum 8.82 ft lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi upstream at datum 85.47 ft higher than present datum.

REMARKS.--Records good except those below about 50 ft<sup>3</sup>/s, which are fair, and estimated daily discharges, which are poor. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); discharge over spillway May 1-10, 1983, May 18-25, 1990, Apr. 25-28, 1993 (only spillage since completion of Conklingville Dam in 1930). Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station directed by Board of Hudson River-Black River Regulating District and through Stewarts Bridge hydroelectric station. Satellite gage-height telemeter at station.

COOPERATION.--From Oct. 1, 1932, to Dec. 4, 1979, discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey. Since Dec. 4, 1979, discharge computed by U.S. Geological Survey.

AVERAGE DISCHARGE.--88 years, 2,145 ft<sup>3</sup>/s, 27.61 in/yr, adjusted for storage since 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,500 ft<sup>3</sup>/s, Mar. 28, 1913, gage height, 12.36 ft, site and datum then in use; minimum, 4.2 ft<sup>3</sup>/s, May 4, 1985, Mar. 30, 31, Apr. 1-10, 11, 13, 14, 15, 1992; minimum daily, 4.2 ft<sup>3</sup>/s, Mar. 31, Apr. 1-10, 14, 1992. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft<sup>3</sup>/s, May 4, 1983, gage height, 9.68 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,450 ft<sup>3</sup>/s, Sept. 14, gage height, 6.18 ft; minimum, 5.2 ft<sup>3</sup>/s, Mar. 28, 29, 30; minimum daily, 5.2 ft<sup>3</sup>/s, Mar. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	2660	3240	3100	3100	2030	39	40	686	1350	861	865
2	2660	2590	4030	3100	3050	2020	64	40	704	1350	856	855
3	2530	2680	4040	3100	2990	1950	41	40	751	1230	858	857
4	2520	2660	4030	3100	3150	2040	40	40	734	1190	913	859
5	2550	2690	3390	3100	3000	2060	40	40	685	1190	878	2010
6	2530	2690	840	3100	3060	2070	1230	40	695	1190	856	2000
7	2540	2700	40	3100	3010	1970	1230	40	694	1170	764	2010
8	2520	2700	38	2880	3090	1970	1250	442	758	1180	727	2020
9	2530	2700	93	3140	972	2130	1240	538	850	1200	739	2020
10	2320	2700	42	3120	2950	2050	1240	551	852	1180	707	2010
11	2400	2700	43	3150	3070	1120	1240	547	871	1210	737	2010
12	2380	2700	41	3110	3130	1000	1190	688	856	1020	875	2010
13	2020	2700	42	3100	2790	46	1050	703	1030	1020	821	2150
14	1990	2700	172	2640	2820	996	698	718	1030	1020	796	2020
15	2000	2260	2850	2540	2790	1070	50	568	1100	1030	824	2050
16	2590	2050	4030	2540	2840	163	48	507	1050	1020	815	2010
17	2510	1990	4040	56	2810	135	47	520	1180	1080	887	2020
18	2510	2000	4030	48	2820	46	623	542	1160	1030	913	2320
19	2470	1660	4040	1950	2850	44	728	532	1280	1020	967	1580
20	2640	2020	3940	2530	2880	43	667	534	1320	1050	1020	1730
21	2510	1990	4040	2440	2750	44	705	529	2300	1030	1020	1830
22	2390	2030	4030	2450	2160	e7.0	55	526	1440	1040	1020	1830
23	2630	2060	3200	2840	1980	e105	60	558	1190	1030	1010	1900
24	2390	1770	3140	3100	1980	e160	41	696	1480	1050	1020	1760
25	2510	1840	3190	3100	1970	e6.2	41	701	1480	963	1020	1710
26	2640	1810	3300	3130	2110	e6.2	40	714	1580	750	857	1680
27	2520	1820	3300	3120	2020	e5.8	40	695	1500	881	859	1590
28	2390	1870	3170	3120	2030	e5.8	41	687	1520	857	858	1670
29	2630	1850	3100	3070	---	5.2	40	691	1450	855	851	1680
30	2500	1830	3110	3130	---	21	40	719	1360	890	858	1700
31	2460	---	3100	3200	---	147	---	683	---	865	858	---
TOTAL	76280	68420	79691	85204	74172	25466.2	13858	14869	33586	32941	27045	52756
MEAN	2461	2281	2571	2749	2649	821	462	480	1120	1063	872	1759
MAX	2660	2700	4040	3200	3150	2130	1250	719	2300	1350	1020	2320
MIN	1990	1660	38	48	972	5.2	39	40	685	750	707	855

Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool

MEAN	411	1435	3026	2902	891	3258	1936	996	615	316	224	157
CFSM	0.39	1.36	2.87	2.75	0.84	3.09	1.83	0.94	0.58	0.30	0.21	0.15
IN.	0.45	1.52	3.31	3.17	0.88	3.56	2.05	1.09	0.65	0.35	0.24	0.17

e Estimated



## HUDSON RIVER BASIN

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1994	2213	2491	2757	2729	1942	1195	2362	2022	1948	1912	1841
MAX	5149	5177	4935	5026	4910	3921	5691	7035	5203	4589	3013	2846
(WY)	1946	1976	1960	1978	1973	1972	1979	1983	1947	1935	1935	1994
MIN	744	1224	1117	1210	1144	89.0	5.85	40.5	711	927	872	963
(WY)	1960	1994	1965	1965	1931	1954	1985	1931	1987	1941	1995	1941

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1931 - 1995
ANNUAL TOTAL	895958	584288.2	
ANNUAL MEAN	2455	1601	2116
ANNUAL MEAN (ADJUSTED)*	2391	1355	2145
HIGHEST ANNUAL MEAN			3452
LOWEST ANNUAL MEAN			1122
HIGHEST DAILY MEAN	7250	May 4	12800
LOWEST DAILY MEAN	11	Apr 23	4.2
ANNUAL SEVEN-DAY MINIMUM	48	Dec 7	4.2
ANNUAL RUNOFF (CFSM) (ADJUSTED)*	2.27	1.28	2.03
ANNUAL RUNOFF (INCHES) (ADJUSTED)*	30.76	17.43	27.61
10 PERCENT EXCEEDS	4010	3100	4030
50 PERCENT EXCEEDS	2390	1440	2080
90 PERCENT EXCEEDS	1130	47	29

\* Water years 1908 to current, adjusted for storage since 1930.

## HUDSON RIVER BASIN

01325010 HUDSON RIVER SOUTH OF LAKE LUZERNE, NY  
(National water-quality assessment program station)

LOCATION.--Lat 43°18'17", long 73°50'00", Warren County, Hydrologic Unit 02020003, at bridge on State Highway 9N, 0.8 mi downstream from Sacandaga River, and 0.8 mi south of Lake Luzerne.

DRAINAGE AREA.--not determined.

PERIOD OF RECORD.--Water years 1993 to current year.

CHEMICAL DATA: 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENTS DATA: 1993 (a).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1993 (c), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (c), 1994 (d), 1995 (c).

REMARKS.--Water-discharge data based on records obtained for Hudson River at Hadley (station 01318500) and Sacandaga River at Stewarts Bridge, near Hadley (station 01325000). Also published as a NAWQA fish-tissue collection site.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
21...	0950	4820	49	7.0	10.0	13.0	747	10.5	102	18	5.4	1.1
NOV												
10...	1050	4960	41	6.9	8.5	9.5	750	12.1	108	16	4.9	1.0
DEC												
09...	1050	6260	41	6.8	-3.5	0.0	760	15.3	105	14	4.4	0.8
JAN												
20...	1000	8390	38	6.7	5.5	2.0	740	13.6	101	15	4.6	0.9
FEB												
16...	1030	E4380	49	6.8	2.5	1.5	750	14.0	102	18	5.5	1.1
MAR												
09...	1220	E5740	48	6.6	-3.5	2.0	750	13.0	96	17	5.0	1.1

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT												
21...	2.9	25	0.3	0.4	11	5.0	4.3	<0.1	3.2	37	31	<0.01
NOV												
10...	2.5	25	0.3	0.3	9	5.1	3.8	<0.1	3.8	35	29	<0.01
DEC												
09...	2.0	23	0.2	0.3	7	4.9	3.1	<0.1	6.1	37	28	<0.01
JAN												
20...	2.1	23	0.2	0.3	6	4.4	3.8	<0.1	5.6	39	28	<0.01
FEB												
16...	2.9	25	0.3	0.3	11	5.0	4.2	<0.1	6.1	42	33	<0.01
MAR												
09...	2.8	26	0.3	0.3	11	4.6	4.5	<0.1	5.8	45	32	<0.01

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT											
21...	0.10	0.02	<0.20	<0.20	<0.01	<0.01	<0.01	71	4	2.9	0.3
NOV											
10...	<0.05	<0.02	<0.20	<0.20	<0.01	<0.01	<0.01	81	6	3.8	0.2
DEC											
09...	0.16	<0.02	0.30	<0.20	0.06	<0.01	<0.01	90	7	4.5	0.4
JAN											
20...	0.25	0.03	<0.20	<0.20	<0.01	<0.01	<0.01	79	12	3.8	0.2
FEB											
16...	0.23	0.03	<0.20	<0.20	<0.01	<0.01	<0.01	70	14	3.0	0.2
MAR											
09...	0.28	0.03	<0.20	<0.20	0.02	0.03	0.03	71	16	3.4	0.3

E Estimated daily

## HUDSON RIVER BASIN

01325010 HUDSON RIVER SOUTH OF LAKE LUZERNE, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
21...	0950	4820	2	26	64
NOV					
10...	1050	4960	3	40	59
DEC					
09...	1050	6260	53	896	15
JAN					
20...	1000	8390	4	91	48
FEB					
16...	1030	E4380	2	24	33
MAR					
09...	1220	E5740	1	15	67

E Estimated daily

## HUDSON RIVER BASIN

01327750 HUDSON RIVER AT FORT EDWARD, NY

LOCATION.--Lat 43°16'10", long 73°35'47", Washington County, Hydrologic Unit 02020003, on left bank 40 ft upstream from Scott Paper Mill, 150 ft south of River Street in Fort Edward, and 0.4 mi upstream from bridge on State Highway 197.

DRAINAGE AREA.--2,817 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1899 to December 1908, December 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft above sea level. Prior to December 1976, nonrecording gage at different site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated appreciably by Great Sacandaga Lake since March 1930 (see station 01323500) and Indian Lake since 1898 (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder, Bond Creek, and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--18 years (1978-95), 5,095 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD (December 1976 to current year).--Maximum discharge, 35,200 ft<sup>3</sup>/s, May 3, 1983, gage height, 28.34 ft; maximum gage height, 28.71 ft, Jan. 11, 1978 (ice jam); minimum discharge, 234 ft<sup>3</sup>/s, July 25, 1983; minimum gage height, 19.33 ft, Sept. 4, 1978; minimum daily discharge, 652 ft<sup>3</sup>/s, Sept. 4, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 89,100 ft<sup>3</sup>/s, Mar. 28, 1913, at site about 14 mi upstream (drainage area, 2,779 mi<sup>2</sup>).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,600 ft<sup>3</sup>/s, Jan. 17, gage height, 23.94 ft; minimum, 334 ft<sup>3</sup>/s, July 15, gage height, 19.57 ft; minimum daily discharge, 907 ft<sup>3</sup>/s, July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3620	3720	5340	4980	e5800	3400	2850	3060	2210	1650	2680	1370
2	4390	4090	6990	5000	e5600	3740	2980	2540	2120	1640	2030	1190
3	e4400	6160	6840	5090	e5200	3450	2640	2230	1980	1590	2000	1260
4	3160	6290	6580	4990	e5000	3510	2590	2390	2100	1590	2720	1460
5	3790	5810	6300	4730	e4800	3260	2360	2260	2210	1440	2920	2320
6	3590	5300	8840	4850	e4800	3420	3160	2190	1990	1470	3760	2580
7	3610	5200	8450	4790	e5000	3590	3230	2140	1820	1510	3620	2250
8	3590	5070	7970	5040	e5000	3400	3580	2020	1970	1550	3190	2440
9	3250	5240	6720	4940	e3500	4210	3340	2270	1850	1590	3130	2640
10	3610	5190	5310	4660	e4800	4180	3130	1930	1910	1640	2370	2620
11	3280	5090	5250	4170	5020	3860	3370	2100	1890	1640	1960	2610
12	3550	4360	4780	4950	e4900	3330	3120	2310	1900	1650	2290	2630
13	2890	4430	4230	4720	e4700	2810	3200	2070	1980	1360	1930	2400
14	2610	4100	3470	4630	e4600	2630	3790	2680	2090	1390	1890	2960
15	3000	4080	4440	4750	4590	4500	3900	2480	1710	907	1780	2500
16	3060	3860	6610	7490	4460	5260	2890	2440	1410	1670	1700	2620
17	3190	3270	6940	10500	4780	8050	2900	2310	1560	1610	1660	2680
18	3110	3270	6850	9530	4750	8920	3020	2410	2040	1630	1680	2820
19	3230	2930	6730	8460	4650	8210	3310	2330	2190	2370	1700	2640
20	3510	3360	6270	9240	4620	6780	3010	2250	1650	2240	1550	2140
21	2910	3040	6450	9460	e4200	6650	3430	2230	2640	1890	1180	2420
22	3350	3470	6380	10300	e3900	6490	3800	2100	2190	1720	1650	2510
23	3430	3460	6080	10200	3750	6580	4210	1950	1450	2070	1200	2450
24	3240	3380	5510	9130	2740	5840	3760	1920	2160	2280	1260	2540
25	3050	3200	e5800	8670	2950	5430	3150	1920	1590	2200	1220	2660
26	3140	3350	e5800	8090	3140	4750	3310	2070	1830	1940	1240	2830
27	3740	3260	e5700	7690	3170	4120	2810	2000	2090	1770	1250	2510
28	2980	3580	e5500	6850	3510	3840	2750	2100	1700	2020	1320	2360
29	3500	3510	e5200	6350	---	3750	2840	2220	1750	2160	1390	2310
30	2920	5310	e5000	6350	---	3240	2890	2060	1680	2620	1300	2120
31	3780	---	e5000	5990	---	3500	---	2190	---	2560	1250	---
TOTAL	104480	126380	187330	206590	123930	144700	95320	69170	57660	55367	60820	70840
MEAN	3370	4213	6043	6664	4426	4668	3177	2231	1922	1786	1962	2361
MAX	4400	6290	8840	10500	5800	8920	4210	3060	2640	2620	3760	2960
MIN	2610	2930	3470	4170	2740	2630	2360	1920	1410	907	1180	1190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	4407	5523	5624	5118	5012	5908	10010	7194	3893	2741	2866	3173							
MAX	9773	8572	9581	9907	8616	10950	16790	16670	6345	4237	4586	4478							
(WY)	1978	1991	1984	1978	1984	1990	1993	1983	1983	1984	1986	1987							
MIN	2707	2963	2957	2714	2697	3387	3177	2231	1922	1786	1962	2361							
(WY)	1981	1979	1979	1989	1989	1989	1995	1995	1995	1995	1995	1995							

e Estimated



## HUDSON RIVER BASIN

01327750 HUDSON RIVER AT FORT EDWARD, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1977 - 1995	
ANNUAL TOTAL	1919750		1302587			
ANNUAL MEAN	5260		3569		5094	
HIGHEST ANNUAL MEAN					6768	1990
LOWEST ANNUAL MEAN					3569	1995
HIGHEST DAILY MEAN	27700	Apr 17	10500	Jan 17	34100	May 3 1983
LOWEST DAILY MEAN	2050	Jun 20	907	Jul 15	652	Sep 4 1978
ANNUAL SEVEN-DAY MINIMUM	2330	Jun 16	1270	Aug 23	1270	Aug 23 1995
10 PERCENT EXCEEDS	9140		6290		9030	
50 PERCENT EXCEEDS	3860		3150		3920	
90 PERCENT EXCEEDS	2930		1650		2350	

## HUDSON RIVER BASIN

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY

LOCATION.--Lat 43°15'52", long 73°35'28", Saratoga-Washington Counties, Hydrologic Unit 02020003, at bridges on State Highway 197 over Rogers Island in Fort Edward, 0.4 mi downstream from discharge station (01327750, Hudson River at Fort Edward), and 0.6 mi upstream from Champlain Canal.

DRAINAGE AREA.--2,817 mi<sup>2</sup>, at gage.

PERIOD OF RECORD.--Water years 1975 to current year.

CHEMICAL DATA: 1975-76 (a), 1980 (b), 1981 (d), 1982-84 (e), 1985 (d), 1986-87 (e), 1988 (a).

MINOR ELEMENT DATA: 1975 (b), 1976-77 (a), 1978-79 (e), 1980 (d), 1986 (b), 1987 (e), 1988 (a).

PESTICIDE DATA: 1975, 1977 (a), 1978-79 (e), 1980 (a).

ORGANIC DATA: OC--1975 (a).

PCB--1975, 1977 (a), 1978-84 (e), 1985 (d), 1986 (e), 1987 (d), 1988-89 (e), 1991-92 (d), 1993-95 (e).

PCN--1977 (a), 1978-79 (e), 1980 (a).

NUTRIENT DATA: 1975-77 (a), 1978 (e).

SEDIMENT DATA: 1975 (b), 1980-84 (e), 1985 (d), 1986-89, 1991 (e), 1992 (d), 1993-95 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1978 to September 1979.

REMARKS.--Water-discharge data is that for Hudson River at Fort Edward (station 01327750). Samples for PCB analysis are collected from both the navigation canal (east channel) and river (west channel), then composited in proportion to discharge.

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	AROCLO 1254 PCB TOTAL (UG/L)	AROCLO 1242 PCB TOTAL (UG/L)	SAMPLE LOCATION
OCT							
04...	1030	3120	2	17	0.01	0.030	COMPOSITE
26...	1030	3060	2	17	<0.01	0.022	COMPOSITE
NOV							
09...	1050	5470	2	30	<0.01	0.024	COMPOSITE
29...	1000	3530	2	19	<0.01	0.015	COMPOSITE
DEC							
21...	1025	6410	2	35	<0.01	0.020	COMPOSITE
MAR							
16...	1230	5320	2	29	<0.01	0.018	COMPOSITE
29...	1035	4230	1	11	<0.01	0.015	COMPOSITE
APR							
04...	1240	2760	1	7.5	<0.01	0.013	COMPOSITE
20...	1145	3680	2	20	<0.01	0.016	COMPOSITE
MAY							
04...	1230	2840	2	15	<0.01	0.018	COMPOSITE
18...	1055	3090	3	25	<0.01	0.030	COMPOSITE
31...	1035	2500	2	13	<0.01	0.027	COMPOSITE
JUN							
16...	1125	1390	2	7.5	<0.01	0.024	COMPOSITE
30...	1035	2080	3	17	<0.01	0.020	COMPOSITE
JUL							
13...	1030	e307	1	0.83	<0.01	0.028	CANAL
13...	1045	909	2	4.9	<0.01	0.014	COMPOSITE
13...	1100	e606	2	3.3	<0.01	0.012	RIVER
27...	1000	e299	1	0.81	<0.01	0.028	CANAL
27...	1015	896	2	4.8	<0.01	0.020	COMPOSITE
27...	1030	e623	3	5.0	<0.01	0.016	RIVER
AUG							
08...	0940	e700	2	3.8	0.044	0.16	CANAL
08...	0955	2130	3	17	0.033	0.13	COMPOSITE
08...	1010	e1420	3	12	0.028	0.12	RIVER
30...	1035	e265	2	1.4	<0.01	0.027	CANAL
30...	1100	845	3	6.8	<0.01	0.030	COMPOSITE
30...	1125	e793	3	6.4	<0.01	0.032	RIVER
SEP							
15...	1240	e1000	1	2.7	<0.01	0.017	CANAL
15...	1247	3010	1	8.1	<0.01	0.030	COMPOSITE
15...	1255	e1990	1	5.4	<0.01	0.037	RIVER
22...	1020	e670	1	1.8	<0.01	0.021	CANAL
22...	1035	1940	1	5.2	<0.01	0.022	COMPOSITE
22...	1050	e1310	1	3.5	<0.01	0.022	RIVER

e Estimated.

## HUDSON RIVER BASIN

01330000 GLOWEGEE CREEK AT WEST MILTON, NY

LOCATION.--Lat 43°01'50", long 73°55'40", Saratoga County, Hydrologic Unit 02020003, on left bank at upstream side of highway bridge, 1.5 mi upstream from mouth, 4.0 mi northwest of Ballston Spa, and 0.5 mi south of West Milton.

DRAINAGE AREA.--26.0 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1948 to June 1963, October 1990 to current year.

GAGE.--Water-stage recorder. Concrete control since June 20, 1952. Datum of gage is 407.22 ft above sea level. Prior to Aug. 27, 1948, nonrecording gage at highway bridge at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since May 1955, ground-water pumpage by the Knolls Atomic Power Laboratory, West Milton site, enters Glowegee Creek upstream from station.

AVERAGE DISCHARGE.--19 years (water years 1949-62, 1991-95), 36.1 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,670 ft<sup>3</sup>/s, Dec. 31, 1948, gage height, 7.04 ft; minimum, 0.37 ft<sup>3</sup>/s, Aug. 10, 11, 1949, gage height, 0.67 ft (prior to concrete control).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 5	2030	*403	*5.15	No other peak greater than base discharge.			
Minimum discharge, 2.8 ft <sup>3</sup> /s, July 5, Sept. 21, 22, gage height, 2.90 ft.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	33	26	23	22	29	23	11	4.1	5.3	3.6
2	17	43	26	36	24	21	26	20	10	5.2	5.4	5.7
3	14	26	23	27	18	19	25	19	53	6.7	6.4	5.5
4	12	19	23	22	15	19	e24	18	51	3.4	53	4.0
5	11	16	170	16	e14	20	e24	16	28	3.0	19	3.4
6	9.6	16	171	15	e14	29	e25	17	17	4.4	14	3.4
7	11	17	86	18	e13	45	26	16	12	5.0	11	3.4
8	9.8	16	61	19	e13	e100	27	14	11	6.3	8.4	3.9
9	10	15	44	19	e13	87	28	13	12	5.1	7.9	4.2
10	10	14	41	17	e12	63	38	13	9.3	5.1	6.0	5.5
11	10	13	60	15	e12	49	32	32	8.8	4.7	5.8	4.2
12	10	12	48	16	e12	44	29	42	25	4.4	13	3.2
13	9.8	12	32	20	e12	74	119	29	24	4.3	20	5.0
14	8.8	12	35	42	e13	106	67	31	14	4.2	10	5.7
15	9.1	11	35	110	e13	149	44	27	11	4.7	7.2	4.8
16	7.8	12	30	140	e14	162	34	24	9.6	4.7	6.8	4.9
17	8.2	11	30	98	e15	134	30	20	8.3	5.2	6.1	4.7
18	9.6	11	33	63	e16	102	29	18	7.3	7.2	6.3	4.6
19	9.1	12	35	53	e19	81	30	15	5.9	5.4	5.4	4.4
20	12	11	31	123	27	72	29	15	5.9	4.5	5.0	4.3
21	24	11	29	192	31	91	34	13	5.6	4.1	4.9	3.5
22	18	15	29	121	27	92	71	12	5.1	4.1	5.2	4.7
23	15	15	29	80	24	66	45	11	4.5	4.2	4.8	13
24	13	11	55	62	e22	54	32	10	4.4	6.2	4.3	6.9
25	12	12	85	51	e19	44	27	12	6.2	5.6	4.1	5.3
26	11	13	55	e34	e17	37	24	13	5.6	6.2	4.0	5.7
27	11	9.1	41	e25	16	34	21	15	5.0	6.5	4.0	8.4
28	12	28	35	e20	20	32	27	12	4.0	6.5	3.9	8.1
29	11	63	29	e19	---	29	27	15	3.5	11	3.6	5.7
30	12	47	18	e20	---	30	26	16	4.3	7.5	4.2	5.3
31	13	---	20	23	---	32	---	13	---	6.0	3.6	---
TOTAL	365.8	549.1	1472	1542	488	1939	1049	564	382.3	165.5	268.6	155.0
MEAN	11.8	18.3	47.5	49.7	17.4	62.5	35.0	18.2	12.7	5.34	8.66	5.17
MAX	24	63	171	192	31	162	119	42	53	11	53	13
MIN	7.8	9.1	18	15	12	19	21	10	3.5	3.0	3.6	3.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1995, BY WATER YEAR (WY)

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
MEAN	19.5	33.1	37.1	33.8	35.2	74.5	103	42.9	19.3	11.5	9.92	10.4			
MAX	108	73.0	61.5	80.1	77.2	133	204	97.4	36.2	35.9	29.6	30.4			
(WY)	1956	1955	1949	1949	1954	1951	1993	1953	1952	1951	1994	1960			
MIN	4.29	8.83	10.5	8.49	7.68	35.6	35.0	18.2	7.85	2.13	3.04	2.02			
(WY)	1962	1962	1962	1961	1962	1960	1995	1995	1959	1959	1958	1948			

e Estimated

## HUDSON RIVER BASIN

01330000 GLOWEGEE CREEK AT WEST MILTON, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1948 - 1995	
ANNUAL TOTAL	15757.9		8940.3			
ANNUAL MEAN	43.2		24.5		36.1	
HIGHEST ANNUAL MEAN					53.4	1956
LOWEST ANNUAL MEAN					24.5	1995
HIGHEST DAILY MEAN	469	Apr 14	192	Jan 21	1080	Dec 31 1948
LOWEST DAILY MEAN	5.9	Sep 19	3.0	Jul 5	.40	Aug 10 1949
ANNUAL SEVEN-DAY MINIMUM	6.9	Sep 16	3.8	Aug 26	.51	Aug 22 1949
10 PERCENT EXCEEDS	110		53		83	
50 PERCENT EXCEEDS	19		15		18	
90 PERCENT EXCEEDS	10		4.6		4.1	



## HUDSON RIVER BASIN

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY

LOCATION.--Lat 43°02'18", long 73°54'35", Saratoga County, Hydrologic Unit 02020003, on left bank 600 ft downstream from Glowegee Creek, 1.0 mi east of West Milton, and 3.5 mi northwest of Ballston Spa.

DRAINAGE AREA.--90.0 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1927 to March 1995 (discontinued).

REVISED RECORDS.--WSP 741: Drainage area. WSP 1202: 1935-40.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 376.06 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Slight occasional diurnal fluctuation at low flow caused by mills upstream from station.

AVERAGE DISCHARGE.--67 years (water years 1927-94), 138 ft<sup>3</sup>/s, 20.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,710 ft<sup>3</sup>/s, Mar. 18, 1936, gage height, 10.78 ft, from floodmarks; maximum gage height, 11.20 ft, Mar. 14, 1977, from floodmarks; minimum discharge, 6.1 ft<sup>3</sup>/s, Aug. 23, 1927, gage height, 0.86 ft; minimum daily, 12 ft<sup>3</sup>/s, Aug. 5-9, Sept. 8, 1964.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Peak discharges greater than base discharge of 1,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 5	2230	*935	*4.58				

Minimum discharge, 35 ft<sup>3</sup>/s, Oct. 16, 17, 18, gage height, 1.64 ft; minimum daily, 37 ft<sup>3</sup>/s, Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	79	110	e110	e120	118	---	---	---	---	---	---
2	56	152	88	108	e94	e94	---	---	---	---	---	---
3	51	95	78	110	e94	e80	---	---	---	---	---	---
4	47	80	75	e78	e90	e70	---	---	---	---	---	---
5	44	69	376	e70	e80	e70	---	---	---	---	---	---
6	41	62	650	e72	e76	e80	---	---	---	---	---	---
7	42	70	331	72	e70	e100	---	---	---	---	---	---
8	40	64	209	68	e64	e280	---	---	---	---	---	---
9	44	58	151	62	e62	e340	---	---	---	---	---	---
10	41	53	126	e60	e60	230	---	---	---	---	---	---
11	41	48	e160	e80	e60	179	---	---	---	---	---	---
12	41	46	e140	89	e60	119	---	---	---	---	---	---
13	38	46	e120	79	e62	161	---	---	---	---	---	---
14	38	46	e110	118	e70	245	---	---	---	---	---	---
15	40	46	e100	e280	e100	377	---	---	---	---	---	---
16	38	46	e96	e400	173	459	---	---	---	---	---	---
17	37	43	e84	308	197	443	---	---	---	---	---	---
18	38	43	92	208	167	353	---	---	---	---	---	---
19	39	43	94	166	150	276	---	---	---	---	---	---
20	44	41	87	269	145	232	---	---	---	---	---	---
21	62	43	80	495	150	267	---	---	---	---	---	---
22	52	54	78	355	131	303	---	---	---	---	---	---
23	46	56	77	241	117	215	---	---	---	---	---	---
24	43	48	128	182	e100	173	---	---	---	---	---	---
25	41	47	231	e140	e80	144	---	---	---	---	---	---
26	40	47	e170	e110	e74	129	---	---	---	---	---	---
27	40	e50	e110	e100	e80	116	---	---	---	---	---	---
28	41	95	e96	e98	111	108	---	---	---	---	---	---
29	39	223	e88	e92	---	100	---	---	---	---	---	---
30	39	157	e80	e92	---	100	---	---	---	---	---	---
31	42	---	e90	e100	---	102	---	---	---	---	---	---
TOTAL	1342	2050	4505	4812	2837	6063	---	---	---	---	---	---
MEAN	43.3	68.3	145	155	101	196	---	---	---	---	---	---
MAX	62	223	650	495	197	459	---	---	---	---	---	---
MIN	37	41	75	60	60	70	---	---	---	---	---	---
CPISM	.48	.76	1.61	1.72	1.13	2.17	---	---	---	---	---	---
IN.	.55	.85	1.86	1.99	1.17	2.51	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1995, BY WATER YEAR (WY)

MEAN	82.1	124	128	122	126	265	334	180	107	69.2	53.5	62.5
MAX	286	292	294	319	456	866	757	407	293	372	167	251
(WY)	1956	1973	1984	1937	1981	1936	1940	1983	1972	1935	1976	1987
MIN	18.2	25.4	44.6	32.8	34.0	75.6	139	48.6	29.7	18.7	20.5	15.0
(WY)	1965	1965	1965	1931	1980	1940	1946	1941	1964	1964	1964	1964

e Estimated

## HUDSON RIVER BASIN

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY--Continued

## SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

WATER YEARS 1927 - 1995

ANNUAL TOTAL	52709			
ANNUAL MEAN	144			138
HIGHEST ANNUAL MEAN				231
LOWEST ANNUAL MEAN				59.3
HIGHEST DAILY MEAN	1560	Apr 14		3650
LOWEST DAILY MEAN	33	Sep 19		12
ANNUAL SEVEN-DAY MINIMUM	35	Sep 16		12
ANNUAL RUNOFF (CFSM)	1.60			1.53
ANNUAL RUNOFF (INCHES)	21.79			20.80
10 PERCENT EXCEEDS	368			300
50 PERCENT EXCEEDS	72			82
90 PERCENT EXCEEDS	42			32

## HUDSON RIVER BASIN

01331095 HUDSON RIVER AT STILLWATER, NY

LOCATION.--Lat 42°56'08", long 73°39'08", Rensselaer County, Hydrologic Unit 02020003, on left bank at dam, 0.15 mi downstream from bridge on State Highway 67 in Stillwater, and 0.75 mi upstream from Hoosic River. Water-quality sampling site at bridge on State Highway 67, 0.15 mi upstream from discharge station.

DRAINAGE AREA.--3,773 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1932-33 and 1966-67 (discharge measurements only), March 1977 to current year. Daily discharge records prior to October 1981 are published with suspended-sediment data.

GAGE.--There is no gage due to construction of powerplant at station. Discharge is estimated based on records for Hudson River at Fort Edward (01327750) and Batten Kill at Battenville (01329500). Prior to October 1992, water-stage recorder and crest-stage gage at datum of 78.99 ft above sea level. Prior to January 1978, nonrecording gages in upper pool of Champlain (Barge) Canal lock 4, at Barge Canal datum.

REMARKS.--Records poor. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder, Bond Creek, and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--18 years, 6,428 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,600 ft<sup>3</sup>/s, May 4, 1983, gage height, 8.69 ft; minimum daily, 900 ft<sup>3</sup>/s, July 25, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 13,000 ft<sup>3</sup>/s, Jan. 17, 23; minimum daily, about 1,300 ft<sup>3</sup>/s, July 15, Aug. 24-26, Sept. 2-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4500	e4700	e6400	e5800	e6800	e4300	e3900	e3700	e2800	e2100	e2800	e1400
2	e5100	e5000	e7700	e6300	e6700	e4500	e3700	e3400	e2700	e2000	e2200	e1300
3	e5500	e6600	e8000	e6000	e6400	e4500	e3500	e2900	e2500	e2000	e2100	e1300
4	e4000	e7900	e7600	e5700	e6000	e4400	e3300	e2900	e2600	e2000	e3000	e1600
5	e4300	e6500	e7300	e5500	e5600	e4200	e3100	e2900	e2700	e1900	e3600	e2300
6	e4200	e6000	e12000	e6000	e6000	e4200	e3500	e2800	e2600	e1800	e4300	e2700
7	e4200	e6100	e11500	e5600	e6200	e4400	e4000	e2700	e2300	e1900	e4600	e2600
8	e4400	e5800	e10300	e6200	e6300	e5000	e4300	e2600	e2400	e1900	e4200	e2500
9	e3900	e6100	e9000	e5600	e5000	e7200	e4300	e2700	e2300	e1800	e3600	e2700
10	e4300	e5900	e7300	e5300	e5300	e6600	e4000	e2600	e2400	e1900	e3000	e2800
11	e3900	e5700	e6600	e5100	e6200	e5800	e4100	e2500	e2400	e1800	e2300	e2700
12	e4000	e5200	e6200	e5800	e6200	e5000	e4000	e2800	e2400	e1700	e2500	e2700
13	e3500	e5000	e5600	e6000	e6000	e4400	e4000	e2700	e2400	e1600	e2200	e2600
14	e3200	e4700	e4700	e5900	e5800	e4200	e4500	e3000	e2600	e1500	e2100	e3000
15	e3600	e4300	e5100	e5900	e5800	e5600	e4800	e3200	e2300	e1300	e2200	e2700
16	e3800	e4100	e7000	e8800	e5200	e7400	e4100	e3100	e1900	e1700	e2000	e2700
17	e3900	e3500	e7800	e13000	e5500	e11000	e3600	e2900	e1900	e2000	e1800	e2800
18	e3600	e3700	e7700	e12500	e5800	e12000	e3700	e3000	e2300	e2000	e1900	e2900
19	e4000	e3300	e7700	e11200	e5600	e10700	e4000	e2900	e2700	e2600	e1800	e2800
20	e4300	e3700	e7200	e11300	e5500	e9200	e3900	e2800	e2300	e2400	e1700	e2300
21	e3900	e3500	e7000	e11900	e5400	e8800	e4100	e2800	e2800	e2000	e1400	e2600
22	e4000	e3800	e7100	e12600	e5000	e8600	e4600	e2700	e2500	e1800	e1800	e2800
23	e4300	e3900	e7000	e13000	e4800	e8400	e5100	e2500	e1800	e2200	e1400	e2700
24	e4100	e3800	e6600	e12000	e3900	e7700	e4900	e2400	e2300	e2700	e1300	e2800
25	e3900	e3700	e7200	e11200	e3600	e7000	e4200	e2400	e2200	e2300	e1300	e3000
26	e3900	e3700	e7300	e10500	e3800	e6300	e4100	e2500	e2200	e2100	e1300	e3200
27	e4400	e3600	e7200	e9200	e4000	e5500	e3700	e2500	e2500	e2100	e1400	e2800
28	e3500	e4200	e7000	e8100	e4200	e5000	e3500	e2600	e2300	e2400	e1500	e2600
29	e4000	e4400	e6700	e7700	---	e4700	e3500	e2700	e2200	e2300	e1500	e2500
30	e3500	e6200	e6000	e7300	---	e4300	e3600	e2600	e2100	e2800	e1400	e2300
31	e4000	---	e5700	e7000	---	e4300	---	e2700	---	e2700	e1400	---
TOTAL	125700	144600	227500	254000	152600	195200	119600	86500	71400	63300	69600	75700
MEAN	4055	4820	7339	8194	5450	6297	3987	2790	2380	2042	2245	2523
MAX	5500	7900	12000	13000	6800	12000	5100	3700	2800	2800	4600	3200
MIN	3200	3300	4700	5100	3600	4200	3100	2400	1800	1300	1300	1300

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	5480	6927	7055	6342	6384	8396	12670	8866	4950	3361	3488	3842							
MAX	12060	11740	12570	11300	11750	14620	21760	19960	8380	5365	5919	6311							
(WY)	1978	1991	1984	1978	1981	1979	1993	1983	1984	1984	1986	1987							
MIN	2965	3630	3945	3035	2752	4735	3987	2790	2380	2042	2245	2523							
(WY)	1981	1981	1981	1981	1980	1989	1995	1995	1995	1995	1995	1995							

e Estimated

## HUDSON RIVER BASIN

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1977 - 1995	
ANNUAL TOTAL	2504100		1585700			
ANNUAL MEAN	6861		4344		6426	
HIGHEST ANNUAL MEAN					8567	1990
LOWEST ANNUAL MEAN					4344	1995
HIGHEST DAILY MEAN	33400	Apr 18	13000	Jan 17	44100	May 4 1983
LOWEST DAILY MEAN	3100	Sep 16	1300	Jul 15	900	Jul 25 1983
ANNUAL SEVEN-DAY MINIMUM	3510	Sep 16	1390	Aug 23	1390	Aug 23 1995
10 PERCENT EXCEEDS	12000		7300		11900	
50 PERCENT EXCEEDS	5400		3900		5000	
90 PERCENT EXCEEDS	3800		2000		2800	



## HUDSON RIVER BASIN

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to 1975, 1977 to current year.

CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c), 1980 (b), 1981 (c), 1982-85 (e), 1986-88 (d).

MINOR ELEMENTS DATA: 1972 (b), 1973-75 (a), 1977-79 (e), 1980 (c).

PESTICIDE DATA: 1977-79 (e), 1980 (a).

ORGANIC DATA: OC--1974 (a), 1975 (c).

PCB--1977-85 (e), 1986-88 (d), 1989 (e), 1991 (d), 1992-94 (e), 1995 (d).

PCN--1977-79 (e), 1980 (a).

NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975 (c), 1977-78 (e).

SEDIMENT DATA: 1977 (d), 1978 (a), 1981-95 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD (Water years 1977-95).--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 280 mg/L, Mar. 30, 1993; minimum daily mean, &lt;1 mg/L on several days during the 1991 water year, Oct. 31, 1991, Aug. 26, 1993, Aug. 11, 1994, July 22, Aug. 22, 1995.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, about 17,400 tons, Mar. 30, 1993; minimum daily, 3.5 tons, Aug. 24, Sept. 2, 1995.

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	AROCLOR 1254 PCB TOTAL (UG/L)	AROCLOR 1242 PCB TOTAL (UG/L)
OCT						
04...	1145	E4000	2	22	<0.01	0.038
NOV						
29...	1125	E4400	2	24	<0.01	0.024
MAR						
16...	1055	E7400	16	320	<0.01	0.008
29...	1225	E4700	1	13	<0.01	0.006
APR						
04...	1135	E3300	2	18	<0.01	0.006
20...	1040	E3900	2	21	<0.01	0.024
MAY						
04...	1405	E2900	2	16	<0.01	0.025
18...	1205	E3000	4	32	<0.01	0.026
31...	1145	E2700	4	29	<0.01	0.019
JUN						
16...	1300	E1900	3	15	<0.01	0.040
30...	1145	E2100	2	11	<0.01	0.040
JUL						
13...	1245	E1600	2	8.6	<0.01	0.026
27...	1150	E2100	1	5.7	<0.01	0.027
AUG						
08...	1110	E4200	2	23	<0.01	0.061
30...	1255	E1400	1	3.8	<0.01	0.032
SEP						
15...	1105	E2700	2	15	<0.01	0.042
22...	1150	E2800	2	15	<0.01	0.044

E Estimated daily.

## HUDSON RIVER BASIN

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3	36	3	38	6	104	2	31	3	55	5	58
2	3	41	4	54	2	42	2	34	2	36	4	49
3	3	45	6	107	5	108	1	16	2	35	4	49
4	3	32	5	107	4	82	2	31	2	32	3	36
5	2	23	5	88	13	256	2	30	2	30	3	34
6	2	23	4	65	31	1000	2	32	2	32	3	34
7	2	23	3	49	15	466	2	30	3	50	3	36
8	2	24	4	63	8	222	2	33	4	68	1	13
9	3	32	4	66	6	146	3	45	3	40	55	1070
10	2	23	4	64	4	79	3	43	1	14	18	321
11	2	21	4	62	6	107	11	151	4	67	11	172
12	3	32	2	28	4	67	3	47	3	50	5	67
13	4	38	2	27	5	76	3	49	2	32	15	178
14	5	43	3	38	4	51	3	48	3	47	10	113
15	3	29	3	35	3	41	9	143	3	47	24	363
16	3	31	4	44	3	57	21	499	2	28	18	360
17	2	21	3	28	3	63	47	1650	3	45	27	802
18	3	29	2	20	3	62	15	506	4	63	16	518
19	4	43	2	18	3	62	8	242	3	45	10	289
20	3	35	3	30	3	58	11	336	3	45	7	174
21	4	42	3	28	3	57	30	964	6	87	3	71
22	4	43	5	51	2	38	31	1050	4	54	8	186
23	3	35	4	42	7	132	13	456	2	26	5	113
24	4	44	3	31	7	125	6	194	2	21	4	83
25	4	42	6	60	6	117	8	242	3	29	2	38
26	4	42	3	30	5	99	5	142	5	51	3	51
27	4	48	3	29	5	97	4	99	6	65	3	45
28	3	28	3	34	2	38	3	66	5	57	3	40
29	2	22	2	24	2	36	3	62	---	---	1	13
30	4	38	6	100	3	49	2	39	---	---	2	23
31	3	32	---	---	3	46	3	57	---	---	2	23
DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2	21	3	30	4	30	3	17	2	15	1	3.8
2	2	20	2	18	5	36	3	16	2	12	1	3.5
3	2	19	3	23	5	34	4	22	2	11	2	7.0
4	4	36	2	16	5	35	3	16	5	40	1	4.3
5	4	33	1	7.8	4	29	2	10	5	49	1	6.2
6	3	28	2	15	4	28	2	9.7	5	58	1	7.3
7	3	32	3	22	5	31	2	10	3	37	1	7.0
8	2	23	3	21	6	39	2	10	2	23	1	6.7
9	1	12	3	22	1	6.2	2	9.7	2	19	2	15
10	1	11	2	14	4	26	2	10	2	16	3	23
11	2	22	3	20	4	26	2	9.7	2	12	3	22
12	2	22	3	23	3	19	2	9.2	2	13	2	15
13	5	54	2	15	3	19	3	13	1	5.9	2	14
14	9	109	3	24	3	21	2	8.1	1	5.7	2	16
15	9	117	3	26	2	12	2	7.0	2	12	2	15
16	5	55	3	25	3	15	2	9.2	1	5.4	3	22
17	2	19	2	16	3	15	2	11	1	4.9	3	23
18	2	20	3	24	3	19	2	11	2	10	2	16
19	2	22	3	23	3	22	2	14	1	4.9	2	15
20	3	32	3	23	3	19	2	13	1	4.6	3	19
21	3	33	3	23	3	23	1	5.4	1	3.8	2	14
22	4	50	2	15	1	6.7	<1	<4.9	<1	<4.9	3	23
23	5	69	3	20	3	15	2	12	1	3.8	2	15
24	5	66	3	19	3	19	2	15	1	3.5	2	15
25	3	34	3	19	3	18	2	12	2	7.0	3	24
26	2	22	3	20	3	18	1	5.7	2	7.0	3	26
27	3	30	4	27	3	20	1	5.7	2	7.6	3	23
28	2	19	4	28	3	19	1	6.5	1	4.0	3	21
29	2	19	3	22	3	18	2	12	1	4.0	3	20
30	2	19	4	28	2	11	2	15	1	3.8	4	25
31	---	---	3	22	---	---	2	15	1	3.8	---	---



## HUDSON RIVER BASIN

01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1940 - 1995	
ANNUAL TOTAL	95653		71325			
ANNUAL MEAN	262		195		271	
HIGHEST ANNUAL MEAN					368	1975
LOWEST ANNUAL MEAN					135	1965
HIGHEST DAILY MEAN	2490	Apr 14	1340	Mar 9	10400	Dec 31 1948
LOWEST DAILY MEAN	51	Sep 22	40	Aug 25	24	Sep 9 1980
ANNUAL SEVEN-DAY MINIMUM	57	Sep 10	41	Aug 24	25	Sep 9 1980
INSTANTANEOUS PEAK FLOW			2360	Dec 5	a13000	Dec 31 1948
INSTANTANEOUS PEAK STAGE			8.14	Dec 5	b14.85	Dec 31 1948
INSTANTANEOUS LOW FLOW			36	Sep 6	c5.8	Aug 30 1940
ANNUAL RUNOFF (CFSM)	2.08		1.55		2.15	
ANNUAL RUNOFF (INCHES)	28.24		21.06		29.27	
10 PERCENT EXCEEDS	566		401		580	
50 PERCENT EXCEEDS	140		140		165	
90 PERCENT EXCEEDS	76		51		67	

a From rating curve extended above 4,300 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.

b Former site and datum.

c Occurred Aug. 30, 31, Oct. 26, 1940.



## HUDSON RIVER BASIN

01333000 GREEN RIVER AT WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'32", long 73°11'50", Berkshire County, Hydrologic Unit 02020003, on left bank 0.1 mi upstream from bridge on State Highway 2, at Williamstown, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--42.6 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: September 1949 to current year.  
Water-quality records: Water years 1967-69.

REVISED RECORDS.--WDR MA-RI-84-1: 1977-78(P), 1979, 1980-83(P).

GAGE.--Water-stage recorder. Elevation of gage is 615 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation at times caused by mill upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 850 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2015	a*920	b*4.30	No other peak greater than base discharge.			
a About.							
b Ice jam.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	21	56	132	e60	e80	68	54	41	17	11	12
2	39	27	50	101	e62	e56	63	51	37	17	10	7.6
3	33	26	47	79	e54	e52	59	49	60	15	12	6.8
4	30	23	46	e62	e50	e50	83	46	120	15	22	6.4
5	28	23	189	e45	e45	e50	64	52	69	14	20	6.1
6	27	28	201	e56	e43	e60	60	53	57	13	161	5.8
7	25	32	157	e90	e47	e80	61	46	51	13	43	5.5
8	24	27	126	e64	e54	e380	58	44	47	15	30	5.4
9	23	26	105	e50	e50	476	60	43	44	13	24	7.0
10	29	25	96	e42	e46	268	63	42	41	12	21	7.9
11	25	24	147	e45	e42	204	57	45	41	12	19	6.2
12	24	24	96	e60	e39	185	54	44	80	12	18	5.9
13	23	24	75	e90	e37	212	125	42	60	11	18	6.1
14	22	23	77	e180	e36	208	90	40	51	9.6	16	7.8
15	21	23	69	231	e37	240	80	46	46	13	15	6.0
16	20	22	64	272	e52	255	75	42	43	11	14	5.6
17	20	21	63	277	e42	240	70	41	38	12	14	9.2
18	20	21	66	217	e38	211	66	41	36	19	12	10
19	19	21	61	183	e36	177	91	41	33	23	11	6.8
20	21	20	54	211	e38	154	80	41	31	12	9.9	6.1
21	30	22	51	254	e40	163	82	38	28	11	9.5	6.0
22	24	41	50	223	e38	152	86	37	26	10	8.6	19
23	23	31	49	184	e36	131	76	35	25	10	8.0	29
24	22	28	141	159	e50	119	71	34	24	22	7.6	13
25	21	28	134	138	e40	105	67	40	23	16	6.9	9.9
26	20	27	107	121	e35	94	63	37	27	49	7.2	10
27	20	25	91	105	e33	85	60	35	24	31	8.0	10
28	19	86	83	77	e50	78	67	33	20	19	7.9	8.4
29	19	93	72	e70	---	73	60	43	19	24	6.8	7.6
30	18	64	47	e60	---	73	55	63	18	16	6.6	7.4
31	18	---	61	e55	---	77	---	46	---	13	6.7	---
TOTAL	742	926	2731	3933	1230	4788	2114	1344	1260	499.6	584.7	260.5
MEAN	23.9	30.9	88.1	127	43.9	154	70.5	43.4	42.0	16.1	18.9	8.68
MAX	39	93	201	277	62	476	125	63	120	49	161	29
MIN	18	20	46	42	33	50	54	33	18	9.6	6.6	5.4
CFSM	.56	.72	2.07	2.98	1.03	3.63	1.65	1.02	.99	.38	.44	.20
IN.	.65	.81	2.38	3.43	1.07	4.18	1.85	1.17	1.10	.44	.51	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1995, BY WATER YEAR (WY)

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
MEAN	44.8	76.9	93.1	77.9	80.9	144	207	110	61.3	30.1	26.8	28.2
MAX	222	171	259	219	239	376	390	251	256	112	147	158
(WY)	1978	1956	1974	1979	1984	1979	1969	1984	1972	1975	1975	1960
MIN	5.33	6.71	24.8	11.0	14.6	33.6	70.5	32.4	18.2	8.30	5.61	4.09
(WY)	1965	1965	1965	1981	1980	1965	1995	1987	1965	1993	1964	1964

e Estimated

## HUDSON RIVER BASIN

01333000 GREEN RIVER AT WILLIAMSTOWN, MA--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1949 - 1995	
ANNUAL TOTAL	28125.6		20412.8			
ANNUAL MEAN	77.1		55.9		81.6	
HIGHEST ANNUAL MEAN					126 1975	
LOWEST ANNUAL MEAN					31.7 1965	
HIGHEST DAILY MEAN	670	Apr 7	476	Mar 9	2200	Dec 21 1973
LOWEST DAILY MEAN	9.8	Aug 12	5.4	Sep 8	3.2	Sep 20 1964
ANNUAL SEVEN-DAY MINIMUM	12	Sep 10	6.1	Sep 3	3.4	Sep 19 1964
INSTANTANEOUS PEAK FLOW			920	Mar 8	a4060	Dec 21 1973
INSTANTANEOUS PEAK STAGE			4.30	Mar 8	b6.35	Mar 13 1977
INSTANTANEOUS LOW FLOW			5.4	Sep 7	3.1	Sep 20 1964
ANNUAL RUNOFF (CFSM)	1.81		1.31		1.92	
ANNUAL RUNOFF (INCHES)	24.56		17.83		26.04	
10 PERCENT EXCEEDS	188		128		183	
50 PERCENT EXCEEDS	36		40		47	
90 PERCENT EXCEEDS	16		10		11	

a From rating curve extended above 750 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

b From floodmarks, gage-height in well unknown.

## HUDSON RIVER BASIN

01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY

LOCATION.--Lat 42°45'50", long 73°20'16", Rensselaer County, Hydrologic Unit 02020003, on left bank 100 ft downstream from highway bridge on dirt road, 1.0 mi downstream from Petersburg, and 4.9 mi upstream from mouth.

DRAINAGE AREA.--56.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1702: 1959.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 587.40 ft above sea level.

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

AVERAGE DISCHARGE.--44 years, 93.8 ft<sup>3</sup>/s, 22.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft<sup>3</sup>/s, June 30, 1973, gage height, 9.20 ft; minimum, 1.9 ft<sup>3</sup>/s, Sept. 11, 12, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of 9.4 ft, from floodmarks, discharge, 7,470 ft<sup>3</sup>/s, from contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2030	*1,940	*5.89	No other peak greater than base discharge.			

Minimum discharge, 4.9 ft<sup>3</sup>/s, Sept. 16, 17, gage height, 1.05 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	14	46	e100	82	101	81	62	23	10	7.0	7.9
2	32	20	43	94	74	80	74	59	21	9.6	6.7	6.6
3	27	23	40	77	61	73	69	56	53	8.8	7.0	6.3
4	24	20	38	69	e58	69	101	54	108	8.5	23	5.9
5	22	18	113	71	e54	69	89	55	62	8.3	39	5.8
6	21	17	146	91	e52	99	77	56	51	8.1	296	5.6
7	20	21	130	e120	e50	162	77	52	45	7.7	72	5.2
8	18	20	113	101	e49	777	74	46	41	7.9	43	5.3
9	18	19	96	85	e46	776	76	45	37	7.5	31	6.2
10	23	19	89	e65	e45	433	83	44	33	7.2	25	6.4
11	20	18	133	e70	e44	304	76	44	34	7.3	21	5.8
12	19	18	e95	e105	e43	260	73	44	55	7.0	19	5.4
13	18	18	e85	199	e43	281	148	43	47	6.6	20	5.6
14	17	17	e75	194	e43	282	122	41	37	6.2	16	6.1
15	17	16	71	211	e43	285	111	43	32	7.9	15	5.4
16	16	16	63	247	e46	286	105	40	28	7.4	14	5.1
17	16	16	62	282	e49	265	98	37	25	7.3	13	6.9
18	15	15	65	227	e50	243	92	36	22	10	12	7.8
19	15	15	60	197	e48	200	113	34	20	14	11	6.0
20	15	15	52	240	46	175	102	34	18	8.2	9.8	5.6
21	19	15	49	280	e44	180	99	32	16	7.4	9.2	5.4
22	17	22	47	256	e43	169	101	29	15	7.0	8.6	15
23	16	20	46	215	e44	150	91	28	14	7.1	8.3	27
24	15	19	88	186	e80	137	86	26	13	12	7.8	13
25	15	19	101	161	e60	123	79	29	13	8.4	7.2	10
26	14	18	84	e130	e40	111	74	28	16	32	7.1	9.0
27	14	17	77	e110	e60	102	69	27	16	29	7.5	8.2
28	13	46	75	e95	112	95	79	24	12	14	7.3	7.6
29	13	66	66	e90	---	87	71	32	11	11	6.8	6.9
30	13	51	e50	e85	---	88	66	44	11	8.8	6.4	6.6
31	12	---	e70	87	---	93	---	28	---	7.7	6.3	---
TOTAL	563	648	2368	4540	1509	6555	2656	1252	929	309.9	783.0	229.6
MEAN	18.2	21.6	76.4	146	53.9	211	88.5	40.4	31.0	10.0	25.3	7.65
MAX	32	66	146	282	112	777	148	62	108	32	296	27
MIN	12	14	38	65	40	69	66	24	11	6.2	6.3	5.1
CFSM	.32	.39	1.36	2.61	.96	3.77	1.58	.72	.55	.18	.45	.14
IN.	.37	.43	1.57	3.01	1.00	4.35	1.76	.83	.62	.21	.52	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1995, BY WATER YEAR (WY)

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995					
MEAN	48.0	93.6	113	94.2	104	183	232	122	59.5	28.7	27.9	25.0																																						
MAX	234	226	262	221	290	504	448	319	265	98.5	179	237																																						
(WY)	1978	1987	1974	1979	1984	1977	1956	1984	1972	1973	1976	1960																																						
MIN	3.87	4.43	19.1	12.0	17.3	45.1	88.5	29.2	13.1	5.86	3.81	2.85																																						
(WY)	1965	1965	1965	1981	1980	1965	1995	1987	1964	1964	1964	1964																																						

e Estimated

## HUDSON RIVER BASIN

01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1951 - 1995	
ANNUAL TOTAL	32848.8		22342.5		93.8	
ANNUAL MEAN	90.0		61.2		149	
HIGHEST ANNUAL MEAN					37.6	
LOWEST ANNUAL MEAN					3090	
HIGHEST DAILY MEAN	868	Apr 7	777	Mar 8	1976	
LOWEST DAILY MEAN	6.7	Aug 10	5.1	Sep 16	1965	
ANNUAL SEVEN-DAY MINIMUM	7.2	Aug 6	5.7	Sep 10	Mar 14 1977	
ANNUAL RUNOFF (CFSM)	1.60		1.09		Sep 11 1964	
ANNUAL RUNOFF (INCHES)	21.78		14.82		Sep 9 1964	
10 PERCENT EXCEEDS	243		130		2.3	
50 PERCENT EXCEEDS	40		38		1.67	
90 PERCENT EXCEEDS	10		7.3		22.73	
					220	
					51	
					8.0	



LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi downstream from Paran Creek and 1.4 mi south of North Bennington.

DRAINAGE AREA.--111 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: June 1931 to current year.

Water-quality records: Water years 1953-54.

REVISED RECORDS.--WSP 781: 1933 (M).

GAGE.--Water-stage recorder. Elevation of gage is 525 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2245	*1,860	*5.44				

Minimum daily discharge, 26 ft<sup>3</sup>/s, Sept. 7.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	94	139	214	156	192	214	154	99	41	37	33
2	130	107	120	214	144	135	e188	146	92	49	36	32
3	112	113	113	159	118	115	e175	138	274	42	38	30
4	101	105	112	132	115	106	e237	129	233	39	461	28
5	93	94	408	122	126	106	e254	133	168	38	150	28
6	86	89	592	e112	e115	129	e190	146	135	37	294	27
7	82	121	403	207	e110	157	e188	127	113	39	157	26
8	79	101	310	199	e105	587	e178	115	107	43	95	27
9	81	92	238	148	e102	934	173	107	101	42	72	36
10	127	84	214	116	e100	461	194	105	92	39	59	43
11	103	79	272	e112	e106	352	179	112	106	52	53	34
12	87	77	212	127	e128	311	171	127	182	73	71	31
13	82	76	156	242	e120	338	422	117	172	50	92	31
14	79	75	171	333	e105	380	337	106	121	41	65	32
15	76	73	150	513	e107	463	255	123	105	62	70	31
16	73	71	134	543	132	666	221	122	92	53	66	29
17	71	70	130	633	108	635	199	108	82	48	54	36
18	70	69	137	405	98	499	190	106	76	63	47	44
19	70	70	130	319	98	406	254	105	68	80	43	36
20	76	70	115	365	102	379	258	124	63	54	40	33
21	113	71	109	499	107	455	228	110	61	49	38	32
22	94	111	103	391	99	506	282	117	56	46	35	101
23	82	97	103	314	96	379	231	102	52	44	33	228
24	80	78	258	264	165	319	202	97	52	54	32	88
25	75	79	336	230	127	278	186	131	60	46	31	60
26	70	77	228	193	104	252	172	131	59	115	31	53
27	69	66	175	175	97	236	163	121	49	162	38	50
28	67	175	157	136	166	223	188	106	45	84	39	44
29	67	310	135	135	---	211	187	118	42	60	33	40
30	65	184	e102	142	---	216	165	134	41	49	31	38
31	68	---	121	149	---	241	---	113	---	42	31	---
TOTAL	2663	2978	6083	7843	3256	10667	6481	3730	2998	1736	2372	1381
MEAN	85.9	99.3	196	253	116	344	216	120	99.9	56.0	76.5	46.0
MAX	135	310	592	633	166	934	422	154	274	162	461	228
MIN	65	66	102	112	96	106	163	97	41	37	31	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

MEAN	149	211	213	189	179	322	539	323	176	120	105	117
MAX	418	412	471	425	575	958	1008	742	414	311	481	585
(WY)	1976	1960	1974	1937	1981	1936	1969	1943	1972	1935	1976	1938
MIN	30.9	39.6	94.6	61.6	54.2	68.0	215	116	53.1	39.8	41.2	25.6
(WY)	1965	1965	1948	1965	1980	1965	1946	1987	1964	1964	1964	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1931 - 1995
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ANNUAL TOTAL	75114		52188					
ANNUAL MEAN	206		143			220		
HIGHEST ANNUAL MEAN						362		1976
LOWEST ANNUAL MEAN						98.9		1965
HIGHEST DAILY MEAN	2390	Apr 16	934	Mar 9		6350	Dec 31	1948
LOWEST DAILY MEAN	45	Aug 12	26	Sep 7		a 21	Sep 22	1964
ANNUAL SEVEN-DAY MINIMUM	50	Aug 6	28	Sep 2		22	Sep 20	1964
INSTANTANEOUS PEAK FLOW			1860	Mar 8		b 8450	Sep 21	1938
INSTANTANEOUS PEAK STAGE			5.44	Mar 8		12.04	Sep 21	1938
INSTANTANEOUS LOW FLOW						4.0	Sep 27	1932
10 PERCENT EXCEEDS	442		300			458		
50 PERCENT EXCEEDS	110		107			140		
90 PERCENT EXCEEDS	66		39			57		

e Estimated

Also occurred on Sept. 23, 1964 and July 12, 1965.

b From rating curve extended above 2,800 ft<sup>3</sup>/s on basis of contracted-opening measurements at gage heights 10.13 ft, 10.49 ft, 11.50 ft, and 12.04 ft and slope area measurement and computation of flow over dam at gage height 12.04 ft.

## HUDSON RIVER BASIN

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°56'19", long 73°22'39", Rensselaer County, Hydrologic Unit 02020003, on right bank 0.5 mi upstream from Case Brook, 1.2 mi downstream from Walloomsac River, and 1.2 mi southeast of Eagle Bridge. Water-quality sampling site at discharge station.

DRAINAGE AREA.--510 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to March 1922, July 1923 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 756: 1913(M). WSP 1302: 1922(M). WSP 1432: 1913 (minimum gage height). WSP 1502: 1911-12, 1914, 1920-21, 1928(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 355.41 ft above sea level. Prior to March 1922, nonrecording gage and July 24, 1923 to July 18, 1936, water-stage recorder, at site 0.2 mi upstream at different datums.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants upstream from station. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--83 years (water years 1911-21, 1924-95), 946 ft<sup>3</sup>/s, 25.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,400 ft<sup>3</sup>/s, Dec. 31, 1948, gage height, 21.15 ft, from floodmark in gage house, from rating curve extended above 30,000 ft<sup>3</sup>/s on basis of peak flow over downstream dams and contracted-opening measurements at gage heights 17.8 ft and 21.15 ft; minimum discharge, 24 ft<sup>3</sup>/s, Sept. 14, 1913; minimum daily, 30 ft<sup>3</sup>/s, Sept. 14, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 9	0215	*10,500	*10.13	No other peak greater than base discharge.			

Minimum discharge, 54 ft<sup>3</sup>/s, Sept. 6, 7, 8; minimum daily, 97 ft<sup>3</sup>/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	241	630	e800	e650	1070	975	621	400	162	149	119
2	439	287	533	1080	e680	763	887	604	342	163	140	118
3	407	343	479	e800	e570	638	824	569	695	157	140	109
4	363	316	471	e650	e510	581	945	532	1090	147	609	103
5	322	292	1050	e600	e450	571	1170	528	797	145	412	99
6	305	272	3370	e550	e420	702	877	626	586	137	1490	100
7	286	338	1800	e850	e400	874	882	534	502	141	701	97
8	269	333	1410	1090	e390	3140	822	483	462	138	409	99
9	261	302	1040	865	e380	6940	813	449	436	148	310	112
10	322	279	938	e700	e370	3020	912	438	396	138	250	130
11	322	269	1220	e650	e370	2230	849	447	396	145	219	117
12	280	253	1090	e600	e360	1940	816	537	631	191	215	109
13	259	250	833	e900	e370	2120	1500	487	668	159	259	107
14	254	246	808	e1300	e370	2370	1400	436	506	139	216	113
15	242	242	715	e1800	e380	2570	1090	469	428	151	201	113
16	232	232	642	2510	e410	3270	967	501	380	170	198	106
17	226	227	617	3280	e440	3230	891	440	336	140	174	107
18	224	226	630	2210	e500	2690	825	437	307	167	162	154
19	223	226	616	1760	515	2140	952	417	284	278	148	135
20	225	223	540	1750	486	1890	1120	449	258	190	135	116
21	303	220	516	2930	e470	1950	943	417	242	161	132	116
22	305	374	473	2470	e440	2200	1140	412	226	148	125	133
23	263	376	482	1940	e420	1770	980	372	213	139	114	576
24	251	306	905	1610	e720	1530	873	349	203	173	120	282
25	241	280	1780	1400	e600	1350	802	410	199	168	105	195
26	231	278	1130	1200	e500	1210	734	434	210	248	109	169
27	222	244	871	e1050	e460	1110	694	406	223	640	116	164
28	217	357	e700	e800	712	1040	728	355	187	310	120	154
29	213	1400	e550	e720	---	976	764	368	176	235	112	137
30	210	840	e400	e680	---	963	670	621	163	200	109	131
31	211	---	e500	e630	---	1080	---	488	---	170	102	---
TOTAL	8607	10072	27739	40175	13343	57928	27845	14636	11942	5798	7801	4320
MEAN	278	336	895	1296	477	1869	928	472	398	187	252	144
MAX	479	1400	3370	3280	720	6940	1500	626	1090	640	1490	576
MIN	210	220	400	550	360	571	670	349	163	137	102	97
CFSM	.54	.66	1.75	2.54	.93	3.66	1.82	.93	.78	.37	.49	.28
IN.	.63	.73	2.02	2.93	.97	4.23	2.03	1.07	.87	.42	.57	.32

e Estimated

## HUDSON RIVER BASIN

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	520	888	978	925	916	1689	2330	1272	682	427	348	390
MAX	2238	3394	2449	3002	2546	4595	4247	3094	2362	1349	1893	2668
(WY)	1978	1928	1974	1979	1984	1936	1993	1984	1972	1915	1976	1938
MIN	83.7	111	149	135	233	406	875	358	195	142	113	95.7
(WY)	1965	1965	1915	1931	1931	1965	1946	1987	1964	1962	1913	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1910 - 1995
ANNUAL TOTAL	370379	230206	
ANNUAL MEAN	1015	631	947
HIGHEST ANNUAL MEAN			1611
LOWEST ANNUAL MEAN			378
HIGHEST DAILY MEAN	9060	Apr 14	6940
LOWEST DAILY MEAN	143	Aug 12	97
ANNUAL SEVEN-DAY MINIMUM	163	Aug 7	103
ANNUAL RUNOFF (CFSM)	1.99		1.24
ANNUAL RUNOFF (INCHES)	27.02		16.79
10 PERCENT EXCEEDS	2490		1370
50 PERCENT EXCEEDS	500		417
90 PERCENT EXCEEDS	211		138
			39000
			30
			77
			1.86
			25.22
			2110
			558
			174
			Dec 31 1948
			Sep 14 1913
			Oct 7 1964

## HUDSON RIVER BASIN

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-71, 1973, April 1993 to September 1995 (discontinued).

CHEMICAL DATA: 1970-71, 1973 (a), 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENTS DATA: 1970 (a).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1993 (b), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1970-71, 1973 (a), 1993 (b), 1994 (a), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (b), 1994 (d), 1995 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1993 to September 1995 (discontinued).

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

REMARKS.--Interruption of temperature record was due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 29.5°C, July 7, 8, 10, 1993, July 15, 1995; minimum (water years 1994-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 29.5°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
20...	0910	266	283	7.8	14.0	12.0	752	9.8	93	110	29	9.2
NOV												
04...	1030	364	256	7.9	18.5	9.5	757	12.6	111	100	28	8.4
DEC												
08...	1040	1430	149	7.5	-5.0	2.5	764	13.5	99	58	16	4.5
JAN												
19...	1030	1760	153	7.4	5.0	4.5	760	13.5	104	58	16	4.4
FEB												
10...	1230	E370	238	7.8	0.0	0.5	750	15.1	106	95	26	7.4
MAR												
10...	1240	2870	128	7.4	-5.0	0.5	767	14.9	102	51	14	3.9
DATE		SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT												
20...	15	22	0.6	1.9	98	17	19	<0.1	0.5	158	152	0.01
NOV												
04...	12	20	0.5	1.7	98	13	17	<0.1	2.7	140	141	0.01
DEC												
08...	6.2	18	0.4	1.0	49	8.7	10	<0.1	4.4	90	83	<0.01
JAN												
19...	7.1	21	0.4	0.9	47	8.8	12	<0.1	4.4	91	85	<0.01
FEB												
10...	12	21	0.5	1.3	78	12	17	<0.1	4.7	135	133	0.02
MAR												
10...	7.1	23	0.4	0.8	96	7.7	12	<0.1	3.9	83	77	<0.01

E Estimated daily.



## HUDSON RIVER BASIN

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 20...	0.35	0.02	0.30	0.20	0.03	0.03	0.04	67	12	2.3	0.3
NOV 04...	0.43	<0.02	0.30	<0.20	0.04	0.03	0.03	55	8	2.3	0.4
DEC 08...	0.41	0.04	0.20	<0.20	0.04	0.03	0.02	39	10	2.6	0.5
JAN 19...	0.47	0.02	<0.20	<0.20	0.04	0.03	0.02	30	8	1.8	0.5
FEB 10...	0.79	0.09	<0.20	<0.20	0.03	0.02	0.03	26	11	1.2	0.3
MAR 10...	0.59	0.03	0.20	0.30	0.06	0.04	0.02	34	12	2.2	0.8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 20...	0910	266	3	2.2	79
NOV 04...	1030	364	3	2.9	69
DEC 08...	1040	1430	15	58	88
JAN 19...	1030	1760	15	71	91
FEB 10...	1230	E370	9	9.0	77
MAR 10...	1240	2870	56	434	87

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.0	11.5	12.0	12.0	10.0	11.0	3.0	2.0	2.5	.0	.0	.0
2	12.0	11.0	11.5	12.0	9.0	10.5	3.0	1.5	2.5	.0	.0	.0
3	11.5	9.0	10.5	9.0	8.0	8.5	3.0	1.5	2.5	.0	.0	.0
4	11.0	10.0	10.5	11.0	8.5	9.5	4.0	2.5	3.0	.0	.0	.0
5	11.0	10.0	10.5	12.5	11.0	11.5	6.0	4.0	5.0	.5	.0	.0
6	11.0	9.5	10.5	12.5	12.0	12.0	6.5	5.5	6.0	.5	.0	.0
7	12.0	9.5	11.0	12.0	9.5	11.0	---	---	---	.0	.0	.0
8	13.0	10.5	12.0	9.5	8.5	9.0	---	---	---	.0	.0	.0
9	15.0	12.5	13.5	10.5	9.0	9.5	---	---	---	.0	.0	.0
10	14.5	12.5	13.5	9.5	7.5	9.0	---	---	---	.0	.0	.0
11	12.5	10.0	11.0	7.5	5.5	6.5	---	---	---	.0	.0	.0
12	11.0	8.5	9.5	6.0	4.5	5.0	---	.0	---	.0	.0	.0
13	11.0	8.5	10.0	7.0	5.0	6.0	.0	.0	.0	.0	.0	.0
14	11.0	9.5	10.0	8.0	6.0	7.0	.5	.0	.0	3.0	.0	1.0
15	11.0	8.5	9.5	9.5	8.0	8.5	1.5	.5	1.0	5.5	3.0	4.5
16	10.5	8.0	9.0	8.5	7.0	7.5	1.5	.5	1.0	6.0	5.5	6.0
17	10.5	7.5	9.0	7.5	5.5	6.0	2.5	1.5	2.0	5.5	4.0	4.5
18	10.5	8.5	9.5	8.0	5.5	6.5	3.5	2.5	3.0	4.0	3.5	4.0
19	11.5	10.0	11.0	9.5	7.5	8.0	3.5	2.0	3.0	4.5	4.0	4.0
20	12.5	11.5	12.0	8.0	6.0	7.0	2.0	1.0	1.5	5.0	4.5	4.5
21	13.0	12.0	12.5	6.5	5.5	6.0	1.5	1.0	1.5	4.5	3.5	4.0
22	13.5	12.0	12.5	7.5	6.0	7.0	2.0	.5	1.5	3.5	2.5	3.0
23	13.0	12.0	12.5	6.0	2.5	4.5	2.0	1.0	1.5	2.5	2.0	2.0
24	13.5	11.5	12.0	2.5	1.0	1.5	3.5	2.0	2.5	2.5	2.0	2.0
25	12.0	10.5	11.0	2.5	1.0	1.5	3.5	2.5	3.0	2.0	1.0	2.0
26	10.5	9.5	10.0	3.0	1.5	2.0	2.5	1.0	2.0	1.0	.0	.5
27	10.0	8.5	9.5	2.0	.5	1.0	1.5	.5	1.0	.5	.0	.0
28	10.5	8.0	9.0	3.0	1.0	1.5	2.0	.5	1.0	.5	.0	.0
29	9.5	8.0	8.5	3.0	2.0	2.5	2.0	.0	1.5	.5	.0	.0
30	10.0	8.0	9.0	3.0	2.0	2.5	1.0	.0	.5	.5	.0	.0
31	10.0	9.0	9.5	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	15.0	7.5	10.7	12.5	.5	6.5	---	---	---	6.0	.0	1.5

E Estimated daily.

## HUDSON RIVER BASIN

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.0	.0	.0	.0	6.0	4.5	5.5	11.5	10.0	10.5
2	1.0	.0	.5	1.0	.0	.5	7.0	4.0	5.5	11.0	9.5	10.5
3	1.0	.0	.0	1.5	.5	1.0	6.5	4.5	5.5	12.5	9.0	11.0
4	.5	.0	.0	2.5	.5	1.5	6.5	5.0	6.0	14.5	10.0	12.5
5	.5	.0	.5	3.5	1.0	2.5	5.0	2.5	3.0	14.0	11.5	12.0
6	1.0	.0	.5	3.5	3.0	3.0	3.5	1.0	2.5	13.5	10.5	12.0
7	1.0	.0	.5	4.5	3.0	3.5	6.0	3.0	4.5	13.0	9.5	11.5
8	.5	.0	.5	5.0	1.5	4.0	5.5	4.0	4.5	13.5	9.0	11.5
9	.5	.0	.5	1.5	.0	.5	4.5	4.0	4.0	14.5	10.0	12.5
10	.5	.0	.5	.5	.0	.5	6.0	3.0	4.5	14.0	11.5	12.5
11	1.0	.0	.5	1.5	.0	1.0	7.5	4.0	6.0	11.5	11.0	11.0
12	.5	.0	.0	4.0	1.5	2.5	7.5	6.5	7.0	12.5	10.5	11.5
13	1.0	.0	.5	5.5	3.0	4.0	7.0	6.0	7.0	15.0	12.0	13.0
14	1.0	.0	.5	5.0	3.5	4.0	6.5	5.5	6.0	15.0	12.0	14.0
15	1.0	.0	.5	5.5	4.0	5.0	7.5	5.5	6.5	14.5	13.0	14.0
16	1.0	.0	.5	6.0	5.0	5.5	6.5	5.5	6.0	16.0	12.0	14.0
17	1.0	.0	.0	6.0	5.0	5.0	8.5	4.5	6.5	15.5	14.0	14.5
18	1.0	.0	.5	5.0	4.5	5.0	10.5	7.0	8.5	15.0	13.5	14.5
19	1.0	.0	.5	6.0	4.0	5.0	11.0	9.5	10.0	14.5	13.0	13.5
20	1.5	.5	.5	6.5	5.0	6.0	11.5	8.5	10.0	15.5	12.0	14.0
21	.5	.5	.5	6.5	6.0	6.0	11.0	9.5	10.0	17.0	13.0	15.0
22	1.0	.5	.5	6.0	5.0	5.5	9.5	8.5	9.0	17.5	14.0	16.0
23	1.0	.5	.5	5.5	5.0	5.5	9.0	7.5	8.5	18.5	14.0	16.5
24	1.0	.5	.5	5.0	3.5	4.5	10.5	7.0	8.5	18.0	16.0	17.0
25	.5	.0	.0	5.5	3.0	4.0	11.5	8.0	9.5	18.0	16.5	17.5
26	1.0	.0	.5	7.0	3.5	5.0	12.0	9.5	10.5	17.5	15.5	16.5
27	.5	.5	.5	7.0	4.5	6.0	13.5	9.5	11.5	18.0	14.5	16.5
28	.5	.0	.5	7.5	4.5	6.0	13.0	11.0	12.0	17.5	15.0	16.5
29	---	---	---	8.0	4.5	6.5	11.0	9.5	10.5	19.0	16.0	17.5
30	---	---	---	7.0	6.0	6.5	12.0	9.0	10.5	18.5	16.5	17.5
31	---	---	---	6.0	5.5	6.0	---	---	---	20.0	15.0	17.5
MONTH	1.5	.0	.5	8.0	.0	4.0	13.5	1.0	7.5	20.0	9.0	14.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.0	17.0	19.5	24.0	22.5	23.5	28.0	23.0	25.5	23.5	19.5	21.0
2	21.0	19.5	20.5	24.5	21.5	22.5	26.5	24.5	25.5	24.5	19.0	21.0
3	21.5	19.0	20.0	25.5	19.0	22.0	26.5	23.5	25.0	23.0	17.5	20.0
4	20.5	18.5	19.5	26.0	19.5	22.5	24.5	22.5	23.0	23.5	17.5	20.0
5	20.5	17.0	18.5	25.5	21.5	23.5	23.5	23.0	23.0	24.0	18.5	21.0
6	21.5	16.5	19.0	27.5	22.0	24.5	23.0	20.0	21.0	25.5	19.0	21.5
7	21.5	18.5	20.0	25.0	22.5	24.0	22.0	19.0	20.5	23.5	19.0	21.0
8	21.0	17.0	18.5	26.0	22.0	23.0	22.5	19.5	21.0	20.0	17.5	18.5
9	19.5	15.0	17.5	24.5	20.5	22.0	23.5	20.5	22.0	17.5	16.5	17.0
10	18.5	16.5	17.5	25.0	19.5	22.0	24.5	21.0	22.5	19.5	15.5	17.0
11	19.0	16.5	17.5	25.5	20.5	22.5	25.5	22.5	23.5	20.0	14.5	16.5
12	18.5	16.5	17.5	25.5	21.0	22.5	24.0	22.5	23.0	20.5	14.5	17.0
13	19.5	15.5	17.0	27.0	21.5	24.0	25.0	21.0	23.0	18.5	16.5	17.5
14	18.0	16.0	17.0	29.0	23.5	25.5	24.5	22.0	23.0	21.0	17.0	18.5
15	17.0	14.5	16.0	29.5	25.0	27.0	25.0	22.5	23.5	21.5	16.0	18.0
16	20.0	15.0	17.5	29.0	24.5	26.5	27.0	23.5	25.0	19.0	14.5	16.5
17	21.0	17.0	19.0	26.0	23.0	24.5	28.0	24.0	25.5	17.5	15.5	16.0
18	23.0	18.5	20.5	25.5	22.5	23.5	27.0	23.5	25.0	19.5	15.5	16.5
19	25.0	20.5	22.5	25.0	22.0	23.5	27.0	22.5	24.5	18.5	14.0	16.0
20	26.0	22.5	24.0	25.0	22.0	23.0	26.5	21.5	23.5	18.0	14.5	16.0
21	25.0	20.5	22.5	24.0	22.0	23.0	26.0	21.5	23.0	16.5	15.5	16.0
22	25.0	20.5	23.0	26.0	21.5	23.5	24.0	20.5	22.0	18.5	15.5	16.5
23	25.5	20.5	23.0	25.5	23.0	24.0	24.5	19.0	21.5	16.5	14.5	15.5
24	24.0	21.0	23.0	26.5	23.0	24.5	24.5	19.5	21.5	15.5	13.0	14.0
25	25.5	21.0	23.0	28.5	24.0	26.0	23.5	18.0	20.0	15.0	13.5	14.0
26	25.0	22.5	23.5	27.0	25.0	26.0	21.0	17.5	19.0	15.0	13.5	14.0
27	25.5	21.0	23.0	25.0	23.0	24.0	20.5	18.0	19.0	17.0	13.5	15.0
28	24.5	19.5	22.0	26.5	23.0	24.5	23.0	17.5	19.5	17.5	13.5	15.0
29	25.0	19.5	22.0	27.0	24.5	25.5	23.5	18.5	20.5	17.0	12.0	14.0
30	25.5	21.5	23.0	28.0	23.5	25.5	24.5	18.0	20.5	17.0	12.0	14.0
31	---	---	---	27.5	23.0	25.0	23.0	18.0	20.0	---	---	---
MONTH	26.0	14.5	20.5	29.5	19.0	24.0	28.0	17.5	22.5	25.5	12.0	17.0

## HUDSON RIVER BASIN

01335754 HUDSON RIVER ABOVE LOCK 1 NEAR WATERFORD, NY

LOCATION.--Lat 42°49'45", long 73°40'00", Saratoga County, Hydrologic Unit 02020003, 0.4 mi upstream from dam at Lock 1c, 3.4 mi downstream from dam at Lock 2c Champlain (Barge) Canal, and 2.8 mi northeast of Waterford.

DRAINAGE AREA.--4,611 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1976 to current year. Daily discharge records prior to October 1981 are published with suspended-sediment data as 01335770 Hudson River at Waterford, NY.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to February 1978, nonrecording gage 200 ft downstream.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder, Bond Creek, and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin. Water-discharge data for July 1992 through May 1994 based on records for Hudson River at Stillwater (01331095) and Hoosic River near Eagle Bridge (01334500) due to reconstruction of dam at Lock 1c. Telephone gage height telemeter at station.

AVERAGE DISCHARGE.--19 years, 8,009 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 71,800 ft<sup>3</sup>/s, Mar. 15, 1977; maximum gage height, 36.38 ft, May 30, 31, 1984; minimum daily discharge, 1,170 ft<sup>3</sup>/s, July 25, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,300 ft<sup>3</sup>/s, Jan. 17, gage height, 23.78 ft; maximum gage height, 32.23 ft, Dec. 6; minimum daily discharge, 1,430 ft<sup>3</sup>/s, Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4920	5360	6990	6480	7750	5610	5380	5190	3360	e2300	2860	1530
2	5970	5710	8420	7210	7810	5950	5620	4560	2800	e2200	2320	1520
3	6590	7070	8790	6810	e7100	5360	4510	4370	3970	e2300	2220	1430
4	4290	8250	8580	6640	e6400	5020	4690	4200	4020	e2500	4440	e1800
5	4750	7200	8020	6230	e6000	5050	4940	3990	4030	e2200	4800	e2500
6	4640	6530	e14000	e6800	e6400	5610	4950	3690	3750	e2200	5490	e2900
7	4600	6700	13700	6450	e7200	5930	5330	3450	3480	e2100	5660	e2800
8	4800	6340	12400	7190	e7100	8540	5180	3290	3150	e2200	4540	e2700
9	4270	6720	10600	6800	e6300	18000	4860	3620	2510	e2000	4110	2850
10	4820	6380	8350	6550	e6400	12300	4990	3440	2780	2150	3160	3000
11	4400	6140	8320	5970	6490	10100	5130	3200	2750	2010	2440	2940
12	4320	5760	8750	6370	e7100	8140	4790	3770	3270	1790	2820	2920
13	4180	5490	6630	6650	e7100	8690	5890	3820	3190	1760	2570	2770
14	3470	5550	6390	8370	e6900	8620	7160	4220	3020	e1800	2260	3070
15	4070	4580	6140	9670	e6800	10700	6590	4110	3100	e2000	2390	2780
16	4180	4530	7380	12200	5600	12600	5400	4260	2040	e1800	2300	2750
17	4140	3620	8440	19900	6230	15900	e5100	3870	2260	e2200	1950	3010
18	3970	4310	8480	16800	6390	16700	5120	4070	2430	e2300	2280	3020
19	4340	3600	8430	14000	6180	15400	5430	3380	3040	2890	1900	3290
20	4600	4200	8040	14100	6120	12600	5650	3610	3090	2680	1960	2390
21	4150	3840	7550	17200	6340	11700	5610	3310	3290	2090	1640	2870
22	4420	4250	7730	19200	6170	12200	6800	3010	2850	1960	2210	3130
23	4370	4590	7730	17500	5170	11500	7000	3000	1970	2290	1500	3020
24	4500	4230	7160	15300	5120	10200	6990	2640	e2800	3110	1450	3420
25	4330	4180	8680	13000	4730	9130	6020	3070	e2600	2500	1490	3250
26	4290	3990	9230	11600	5030	8240	5460	3400	e2600	2260	1440	3490
27	4760	4010	8330	10700	e4600	6600	4970	2890	e3000	2290	1570	3010
28	3770	4870	7770	8860	4600	6790	5040	2940	e2800	2900	1640	2780
29	4360	5740	e7400	8350	---	6550	5430	3250	e2600	2610	1580	2730
30	3760	7630	e6800	8260	---	6180	5200	3470	e2400	2960	1580	2340
31	4330	---	6310	7960	---	5590	---	3580	---	2670	1590	---
TOTAL	138360	161370	261540	319120	175130	291500	165230	112670	88950	71020	80160	82010
MEAN	4463	5379	8437	10290	6255	9403	5508	3635	2965	2291	2586	2734
MAX	6590	8250	14000	19900	7810	18000	7160	5190	4030	3110	5660	3490
MIN	3470	3600	6140	5970	4600	5020	4510	2640	1970	1760	1440	1430

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	6819	8587	8731	7749	8029	11550	16260	10760	5845	3770	3874	4220							
MAX	16560	14390	16250	15880	16250	20240	29480	24230	10290	6321	7282	7009							
(WY)	1978	1991	1984	1978	1981	1979	1993	1983	1984	1984	1990	1987							
MIN	3054	4188	4945	3157	3973	5845	5508	3635	2718	2291	2481	2654							
(WY)	1981	1979	1983	1981	1980	1989	1995	1995	1988	1995	1985	1980							

e Estimated

## HUDSON RIVER BASIN

01335754 HUDSON RIVER ABOVE LOCK 1 NEAR WATERFORD, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1977 - 1995	
ANNUAL TOTAL	3093350		1947060			
ANNUAL MEAN	8475		5334		8008	
HIGHEST ANNUAL MEAN					10700	1990
LOWEST ANNUAL MEAN					5334	1995
HIGHEST DAILY MEAN	45500	Apr 17	19900	Jan 17	62000	Mar 15 1977
LOWEST DAILY MEAN	3340	Sep 17	1430	Sep 3	1170	Jul 25 1983
ANNUAL SEVEN-DAY MINIMUM	3830	Sep 16	1520	Aug 23	1520	Aug 23 1995
10 PERCENT EXCEEDS	16000		8680		15600	
50 PERCENT EXCEEDS	6390		4580		6000	
90 PERCENT EXCEEDS	4190		2220		2990	



## HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°47'19", long 73°40'28", at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on U.S. Highway 4 in Waterford, 0.4 mi upstream from first branch of Mohawk River, and 2.8 mi downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,620 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1970 to current year.

CHEMICAL DATA: 1970-71 (e), 1972-76 (d), 1978 (e), 1979 (d), 1980-82 (e), 1987 (b), 1988-89 (c), 1990-91 (b), 1992 (a), 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENTS DATA: 1970-71 (e), 1972-76 (d), 1977-79 (e), 1980-81 (d), 1982 (a), 1983, 1987 (b), 1988-89 (c), 1990-91 (b), 1992-93 (a).

PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e), 1982, 1993-94 (a).

ORGANIC DATA: OC--1974 (c), 1975 (d), 1976 (c), 1978-79 (d), 1993 (c), 1994 (d), 1995 (c).

PCB--1975 (b), 1976 (d), 1977-84 (e), 1985 (c), 1986-87 (e), 1988 (d), 1989 (e), 1991 (d), 1992-94 (e), 1995 (d).

PCN--1977-79 (e), 1982, 1993 (a).

NUTRIENT DATA: 1970-71 (e), 1972-75 (d), 1976 (c), 1977-78 (e), 1979-81 (d), 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1978 (e), 1979-81 (d), 1993 (a).

Phytoplankton--1974 (a), 1975 (b), 1976 (c), 1979 (d), 1993 (a).

SEDIMENT DATA: 1975 (b), 1976-95 (e).

PERIOD OF DAILY RECORD.--SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--Water discharge data based on records obtained above Lock 1 near Waterford (station 01335754), 3.2 mi upstream.

EXTREMES FOR PERIOD OF DAILY RECORD (water years 1977-95).--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L, March 14, 1977; minimum daily mean, <1 mg/L, July 28, Aug. 2, 1991, several days in September 1993, Oct. 4, 21, 23-25, 1993, Jan. 5, May 2, 20, Sept. 20, 1995.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons, March 14, 1977; minimum daily, 3.9 tons, Sept. 7, 1981.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
19...	1450	3600	152	7.2	18.5	13.0	762	10.8	102	54	17	2.8
NOV												
09...	1440	6240	134	7.0	14.5	11.0	761	11.0	99	49	15	2.7
DEC												
07...	1420	14700	127	7.2	1.0	5.0	761	12.6	99	47	14	2.9
JAN												
18...	1340	16800	112	7.1	8.0	3.5	772	11.1	82	43	13	2.6
FEB												
15...	0920	E6800	157	7.2	-18.5	0.0	777	14.0	95	57	18	2.9
MAR												
08...	1440	7590	177	7.1	6.5	4.0	761	12.4	95	67	20	4.1
APR												
25...	0930	5860	176	7.0	9.5	10.5	758	11.5	103	59	18	3.5
DATE		SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT												
19...	7.6	23	0.5	0.8	34	14	14	<0.1	3.4	95	82	0.01
NOV												
09...	6.5	22	0.4	0.9	26	12	13	<0.1	4.4	84	75	0.01
DEC												
07...	5.2	19	0.3	1.2	29	9.5	13	<0.1	4.2	85	71	<0.01
JAN												
18...	5.9	22	0.4	0.9	23	8.2	12	0.1	5.2	74	67	<0.01
FEB												
15...	7.7	22	0.4	0.8	31	12	18	<0.1	6.2	102	87	<0.01
MAR												
08...	9.2	23	0.5	1.1	41	13	19	<0.1	5.7	121	101	<0.01
APR												
25...	7.6	22	0.4	0.7	37	12	17	<0.1	5.2	113	92	0.01

E Estimated daily.

## HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEDED TOTAL (MG/L AS C)
OCT 19...	0.36	0.09	0.20	0.30	0.01	0.01	0.01	100	16	4.4	0.2
NOV 09...	0.27	0.09	0.40	0.30	0.04	<0.01	0.02	120	15	5.2	0.3
DEC 07...	0.38	0.16	0.50	0.40	0.06	0.03	0.02	150	17	4.6	1.4
JAN 18...	0.38	0.05	0.40	0.20	0.05	0.03	0.02	100	15	3.5	0.8
FEB 15...	0.38	0.14	0.30	0.30	0.01	0.01	0.02	120	33	3.6	0.2
MAR 08...	0.57	0.09	0.30	0.30	0.03	0.03	0.02	100	37	3.9	0.7
APR 25...	0.39	0.07	0.30	0.30	0.03	0.03	0.02	170	42	9.4	0.2

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	1450	3600	2	19	77
NOV 09...	1440	6240	3	51	82
DEC 07...	1420	14700	34	1350	89
JAN 18...	1340	16800	23	1040	91
FEB 15...	0920	E6800	3	55	72
MAR 08...	1440	7590	26	533	98
APR 25...	0930	5860	6	95	98

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	AROCLO 1254 PCB TOTAL (UG/L)	AROCLO 1242 PCB TOTAL (UG/L)
OCT 04...	1350	2410	3	20	<0.01	0.046
26...	1330	11100	4	120	<0.01	0.024
NOV 09...	1405	12100	2	65	<0.01	0.032
29...	1310	11300	4	122	<0.01	0.016
DEC 21...	1225	6360	3	52	<0.01	0.009
MAR 16...	0930	12700	26	892	<0.01	0.012
29...	1340	5900	3	48	<0.01	0.012
APR 04...	1020	4160	2	22	<0.01	0.014
20...	0940	5450	3	44	<0.01	0.015
MAY 04...	1515	3790	3	31	<0.01	0.026
18...	1320	3790	3	31	<0.01	0.030
31...	1315	3380	4	37	<0.01	0.017
JUN 16...	1405	2440	6	40	<0.01	0.026
30...	1320	E2600	4	27	<0.01	0.028
JUL 13...	1355	1590	4	17	<0.01	0.022
27...	1310	2110	4	23	<0.01	0.021
AUG 08...	1220	4260	6	69	<0.01	0.027
30...	1355	1160	2	6.3	<0.01	0.030
SEP 15...	0955	2600	4	28	<0.01	0.046
22...	1250	2700	4	29	<0.01	0.043

E Estimated daily.

## HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3	40	3	43	3	57	3	52	2	42	3	45
2	3	48	3	46	1	23	2	39	2	42	5	80
3	3	53	5	95	5	119	3	55	2	38	4	58
4	3	35	5	111	6	139	2	36	2	35	4	54
5	2	26	3	58	4	87	<1	<17	2	32	4	55
6	2	25	2	35	24	907	3	55	2	35	7	106
7	2	25	2	36	30	1110	3	52	2	39	10	160
8	2	26	2	34	7	234	3	58	3	58	13	300
9	2	23	2	36	7	200	8	147	3	51	62	3010
10	3	39	4	69	6	135	5	88	2	35	26	863
11	3	36	3	50	6	135	8	129	3	53	18	491
12	3	35	3	47	6	142	5	86	3	58	12	264
13	3	34	3	44	4	72	12	215	3	58	7	164
14	3	28	3	45	5	86	18	407	3	56	4	93
15	4	44	3	37	4	66	14	366	3	55	7	202
16	3	34	3	37	9	179	18	593	3	45	21	714
17	3	34	3	29	7	160	81	4350	3	50	41	1760
18	3	32	2	23	2	46	25	1130	3	52	21	947
19	3	35	2	19	4	91	15	567	3	50	13	541
20	3	37	3	34	4	87	13	495	3	50	2	68
21	3	34	2	21	4	82	23	1070	5	86	3	95
22	3	36	2	23	3	63	80	4150	7	117	3	99
23	3	35	2	25	7	146	39	1840	5	70	6	186
24	3	36	2	23	7	135	27	1120	3	41	3	83
25	3	35	3	34	6	141	13	456	3	38	2	49
26	3	35	3	32	7	174	14	438	3	41	7	156
27	3	39	3	32	7	157	26	751		75	2	36
28	3	31	2	26	8	168	8	191	5	62	4	73
29	3	35	2	31	2	40	7	158	---	---	4	71
30	2	20	4	82	4	73	5	112	---	---	6	100
31	3	35	---	---	3	51	4	86	---	---	3	45

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3	44	3	42	4	36	3	19	4	31	8	33
2	3	46	<1	<12	3	23	3	18	5	31	4	16
3	2	24	1	12	2	21	2	12	4	24	4	15
4	4	51	3	34	3	33	3	20	4	48	2	9.7
5	5	67	2	22	2	22	8	48	4	52	5	34
6	4	53	2	20	1	10	10	59	5	74	5	39
7	4	58	4	37	3	28	5	28	3	46	4	30
8	3	42	2	18	1	8.5	3	18	2	25	5	36
9	3	39	2	20	1	6.8	8	43	3	33	2	15
10	3	40	3	28	2	15	8	46	2	17	3	24
11	3	42	3	26	2	15	9	49	3	20	2	16
12	4	52	4	41	2	18	5	24	2	15	2	16
13	6	95	4	41	2	17	1	4.8	3	21	2	15
14	7	135	4	46	5	41	1	4.9	2	12	2	17
15	7	125	4	44	5	42	2	11	2	13	2	15
16	3	44	2	23	4	22	1	4.9	2	12	3	22
17	4	55	3	31	7	43	1	5.9	1	5.3	2	16
18	4	55	2	22	4	26	2	12	1	6.2	2	16
19	3	44	4	37	2	16	1	7.8	1	5.1	4	36
20	3	46	<1	<9.7	3	25	1	7.2	1	5.3	<1	<6.5
21	4	61	1	8.9	5	44	3	17	2	8.9	1	7.7
22	4	73	1	8.1	4	31	1	5.3	2	12	2	17
23	3	57	1	8.1	5	27	2	12	2	8.1	2	16
24	3	57	3	21	3	23	2	17	2	7.8	2	18
25	3	49	3	25	3	21	2	13	2	8.0	2	18
26	3	44	3	28	4	28	2	12	3	12	2	19
27	2	27	3	23	4	32	2	12	3	13	2	16
28	5	68	2	16	4	30	2	16	3	13	2	15
29	6	88	3	26	4	28	4	28	3	13	2	15
30	4	56	3	28	4	26	9	72	3	13	2	13
31	---	---	3	29	---	---	4	29	4	17	---	---

## HUDSON RIVER BASIN

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY

LOCATION.--Lat 43°15'52", long 75°26'12", Oneida County, Hydrologic Unit 02020004, on right bank at Rome Fish Hatchery, 1.0 mi downstream from Delta Dam, and 4.0 mi north of Rome.

DRAINAGE AREA.--152 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1921 to September 1927 (monthly discharges only, published in WSP 1302), October 1927 to current year.

REVISED RECORDS.--WDR NY-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 472.85 ft above sea level. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir. Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft<sup>3</sup>). Small quantity of water diverted from Delta Reservoir for fish hatchery use and later returned to river, part upstream and part downstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--68 years (water years 1928-95), 367 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft<sup>3</sup>/s, Oct. 2, 1945, gage height, 11.18 ft, from rating curve extended above 5,200 ft<sup>3</sup>/s on basis of flow-over-dam measurement of peak flow; minimum discharge, 18 ft<sup>3</sup>/s, July 21, 27, Oct. 24, 25, 1983, minimum gage height, 0.63 ft, Oct. 24, 25, 1983; minimum daily discharge, 45 ft<sup>3</sup>/s, Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,600 ft<sup>3</sup>/s, Dec. 7, gage height, 4.88 ft; minimum, 133 ft<sup>3</sup>/s, Sept. 26, 27, 28, 29, 30, gage height, 1.55 ft; minimum daily, 134 ft<sup>3</sup>/s, Sept. 26-27, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e300	201	211	235	224	222	375	e150	157	160	149	142
2	e300	198	209	235	223	221	278	e150	165	160	149	142
3	e300	162	206	235	220	218	264	e150	177	160	150	142
4	e300	155	205	e235	219	215	227	e150	170	160	151	142
5	e290	968	283	e235	220	216	182	e150	e160	160	151	142
6	e290	1540	1180	232	220	220	171	e150	e160	160	149	139
7	e290	1540	1510	231	218	229	177	e150	162	403	149	140
8	294	796	1510	230	216	284	164	e150	163	388	149	140
9	294	208	835	230	216	242	154	e150	160	219	149	141
10	298	205	244	231	217	230	146	e150	160	219	149	140
11	294	204	243	230	218	228	148	e150	160	219	149	140
12	294	203	240	231	218	225	e170	153	161	219	149	140
13	291	203	238	252	217	235	e220	154	161	219	149	139
14	293	203	238	272	216	258	e350	153	163	219	149	138
15	291	201	238	308	217	271	e240	160	165	221	148	137
16	291	200	237	288	218	272	e180	154	163	219	148	137
17	210	200	237	259	219	263	e160	152	163	219	147	137
18	149	200	239	251	219	244	e160	157	164	219	147	136
19	146	200	241	453	217	236	e150	157	163	219	147	136
20	149	199	236	663	217	235	e150	154	163	219	144	135
21	151	199	235	811	219	246	e150	155	163	219	144	135
22	149	201	234	807	216	242	e150	150	163	219	144	136
23	147	201	233	800	216	245	e150	149	162	219	144	136
24	148	200	235	796	218	284	e150	150	160	219	144	135
25	149	200	235	794	217	292	e150	153	160	218	144	135
26	149	201	234	791	217	286	e150	151	160	218	144	134
27	149	200	235	790	216	273	e150	152	160	218	144	134
28	148	231	238	788	218	253	e150	152	160	302	144	135
29	146	222	236	785	---	249	e150	155	160	561	143	135
30	146	211	232	538	---	286	e150	154	160	558	142	134
31	147	---	235	226	---	308	---	153	---	297	144	---
TOTAL	6993	10052	11362	13462	6106	7728	5566	4718	4868	7629	4553	4134
MEAN	226	335	367	434	218	249	186	152	162	246	147	138
MAX	300	1540	1510	811	224	308	375	160	177	561	151	142
MIN	146	155	205	226	216	215	146	149	157	160	142	134

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
MEAN	310	357	406	469	386	432	664	377	276	252	234	251
MAX	1199	784	888	1152	917	1038	1319	929	755	518	423	651
(WY)	1946	1960	1984	1930	1932	1943	1993	1972	1972	1935	1986	1945
MIN	105	144	102	85.5	98.4	92.9	185	152	147	147	143	92.6
(WY)	1935	1962	1961	1961	1961	1931	1946	1995	1988	1941	1941	1934

e Estimated



## HUDSON RIVER BASIN

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY-Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1928 - 1995	
ANNUAL TOTAL	137955		87171			
ANNUAL MEAN	378		239		367	
HIGHEST ANNUAL MEAN					601	1947
LOWEST ANNUAL MEAN					219	1965
HIGHEST DAILY MEAN	4800	Apr 16	1540	Nov 6	7270	Oct 2 1945
LOWEST DAILY MEAN	146	Oct 19	134	Sep 26	45	Jan 17 1931
ANNUAL SEVEN-DAY MINIMUM	148	Oct 25	135	Sep 24	55	Feb 28 1931
10 PERCENT EXCEEDS	636		294		717	
50 PERCENT EXCEEDS	291		203		253	
90 PERCENT EXCEEDS	172		144		169	

## HUDSON RIVER BASIN

01346000 WEST CANADA CREEK AT KAST BRIDGE, NY

LOCATION.--Lat 43°04'08", long 74°59'19", Herkimer County, Hydrologic Unit 02020004, on right bank 600 ft downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi downstream from North Creek, 2.2 mi north of Herkimer, and 4.0 mi upstream from mouth. Prior to Oct. 23, 1985, at site on left bank.

DRAINAGE AREA.--560 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1907, April to December 1907, March 1908 to December 1909, April 1910 to December 1911 (monthly discharges only, published in WSP 1302), January 1912 to December 1913, April 1914 to June 1918 (monthly discharges only, published in WSP 1302), October 1920 to current year.

REVISED RECORDS.--WDR NY-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 438.99 ft above sea level. Prior to Sept. 18, 1920, nonrecording gage at former highway bridge 500 ft upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi upstream from station (usable capacity, 3,320 mil ft<sup>3</sup>). Diurnal fluctuation at low and medium flow caused by powerplants upstream from station. Diversion at Trenton Falls, 26 mi upstream from station, by Ninemile feeder since 1915 during canal navigation season. Diversion from Hinckley Reservoir for Utica water supply returned to Mohawk River.

AVERAGE DISCHARGE.--75 years (water years 1921-95), 1,324 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft<sup>3</sup>/s, Mar. 26, 1913, from reports of State Engineer and Surveyor; maximum gage height, 10.47 ft, probably Feb. 17, 1943, from floodmark in gage well (ice jam); minimum discharge, 20 ft<sup>3</sup>/s, Sept. 3, 1929, gage height, 0.90 ft; minimum daily, 59 ft<sup>3</sup>/s, Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,420 ft<sup>3</sup>/s, Jan. 15, gage height, 4.79 ft; minimum, 189 ft<sup>3</sup>/s, July 9, gage height, 1.90 ft; minimum daily, 254 ft<sup>3</sup>/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1110	2120	1270	1210	1280	1130	990	876	419	469	406	389
2	1130	2580	1240	1190	e1100	1070	1030	858	512	475	397	396
3	991	1420	1240	1170	e1000	1060	925	888	814	496	404	372
4	1010	1250	1210	1150	e980	1030	e920	826	550	444	551	371
5	1000	1230	2660	1160	e960	1020	925	747	522	440	453	377
6	968	1270	2520	1180	e960	1040	829	843	528	449	432	300
7	1020	1550	2850	1180	e1000	1020	638	784	523	469	435	254
8	1060	1290	2680	1140	e1050	2870	837	776	459	462	430	287
9	1050	1230	1880	1090	1100	e1200	844	815	443	435	428	445
10	1070	1180	1580	e1050	1130	e900	859	798	494	428	413	416
11	1050	1170	e1500	1090	1100	e1100	843	844	618	334	419	357
12	1030	1160	e1400	1280	e1000	1300	835	801	738	389	458	354
13	999	1160	e1400	1930	e980	1490	1590	582	670	481	473	356
14	991	1020	e1400	2200	e980	2180	1720	540	618	474	458	392
15	1010	791	e1400	3510	e1000	2860	1600	627	590	380	450	376
16	1000	759	1450	4130	e1000	2890	1530	691	595	470	430	350
17	1010	766	1480	3270	e1020	2510	1510	562	579	570	418	345
18	1030	778	1550	2630	e1030	2310	1060	612	576	516	453	339
19	1020	1170	1510	2490	1040	2010	1030	523	579	427	409	331
20	1040	1210	1250	2780	1050	1920	1130	489	587	399	392	336
21	1080	1190	1230	2920	1100	2260	950	477	479	438	401	340
22	1070	1280	1220	2610	1050	2130	1130	463	472	423	375	388
23	1040	1220	1230	2390	1040	1820	1060	459	402	441	357	440
24	1030	1170	1310	2290	1050	1690	1020	446	473	479	382	344
25	1060	1190	1370	e2000	e930	1600	962	512	467	443	349	335
26	1050	1170	1260	e1700	e870	1400	953	469	448	541	398	388
27	1050	1140	1200	e1400	e930	1080	950	465	457	482	414	385
28	991	1450	1230	e1200	1160	1010	1110	479	445	441	411	361
29	945	1820	e1200	e1200	---	1030	1020	602	482	441	332	358
30	937	1340	1160	e1200	---	1060	889	525	493	417	389	317
31	978	---	1200	1280	---	1040	---	583	---	413	407	---
TOTAL	31820	38074	47080	57020	28890	49030	31689	19962	16032	13966	12924	10799
MEAN	1026	1269	1519	1839	1032	1582	1056	644	534	451	417	360
MAX	1130	2580	2850	4130	1280	2890	1720	888	814	570	551	445
MIN	937	759	1160	1050	870	900	638	446	402	334	332	254

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1995, BY WATER YEAR (WY)

MEAN	944	1329	1394	1315	1221	1881	2926	1865	976	746	596	700
MAX	3131	2984	2797	3044	2704	3725	5623	4667	3875	2075	1481	1831
(WY)	1946	1960	1928	1930	1981	1945	1993	1972	1972	1935	1986	1977
MIN	338	335	621	453	316	681	1056	594	359	283	227	284
(WY)	1965	1965	1931	1931	1931	1940	1995	1987	1941	1941	1934	1934

e Estimated

HUDSON RIVER BASIN

01346000 WEST CANADA CREEK AT KAST BRIDGE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1921 - 1995	
ANNUAL TOTAL	560202		357286		1324	
ANNUAL MEAN	1535		979		1872	1972
HIGHEST ANNUAL MEAN					829	1965
LOWEST ANNUAL MEAN					16100	Oct 2 1945
HIGHEST DAILY MEAN	9610	Apr 27	4130	Jan 16	59	Sep 2 1929
LOWEST DAILY MEAN	525	Jun 23	254	Sep 7	211	Aug 16 1934
ANNUAL SEVEN-DAY MINIMUM	681	Jul 16	337	Sep 2		
10 PERCENT EXCEEDS	2690		1600		2590	
50 PERCENT EXCEEDS	1100		980		1000	
90 PERCENT EXCEEDS	795		394		450	

## HUDSON RIVER BASIN

01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY

LOCATION.--Lat 43°00'53", long 74°46'47", Herkimer County, Hydrologic Unit 02020004, on left bank 1,800 ft downstream from Fivemile Dam, 2.0 mi upstream from East Canada Creek, and 4.5 mi southeast of city of Little Falls.

DRAINAGE AREA.--1,342 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1927 to current year.

REVISED RECORDS.--WSP 741: 1929(M). WSP 1302: 1932(M). WSP 1432: 1928-30. WDR NY-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 308.84 ft above sea level (levels by Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Records of daily discharge include diversion at Fivemile Dam into Erie (Barge) Canal for lockages at lock 16, near St. Johnsville. During canal navigation season, water is received from Black River basin through Black River Canal flowing south, and from Chenango River basin through Oriskany Creek feeder. Water is diverted into (or may occasionally be received from) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica. Diurnal fluctuation caused by powerplants and locks and dams on Erie (Barge) Canal. Regulation by Delta and Hinckley Reservoirs (combined usable capacity, 6,120 mil ft<sup>3</sup>) (see Reservoirs in Hudson River Basin). Telephone gage-height telemeter at station.

COOPERATION.--Figures of diversions at Fivemile Dam into Erie (Barge) Canal provided by New York State Department of Transportation.

AVERAGE DISCHARGE.--68 years, 2,825 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (river channel only), 33,100 ft<sup>3</sup>/s, Mar. 14, 1977, gage height, 19.17 ft, from floodmark in gage house; minimum discharge (river channel only), 214 ft<sup>3</sup>/s, Aug. 18, 1949, gage height, 3.75 ft; minimum daily discharge, probably not less than 463 ft<sup>3</sup>/s, Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges (river channel only) greater than base discharge of 16,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1130	*11,100	*11.45				

Minimum discharge (river channel only), 427 ft<sup>3</sup>/s, Sept. 7, gage height, 4.34 ft; minimum daily, 490 ft<sup>3</sup>/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2400	3720	2780	2060	e2200	e2400	2150	1840	1020	746	904	717
2	2150	7880	2790	2180	e1900	2630	2060	1730	942	827	797	777
3	1880	6050	2290	2060	e1800	2330	1890	1690	1530	823	666	733
4	1750	3430	2060	e1800	e1700	2150	2440	1550	1460	720	838	624
5	1680	2600	4390	e1700	e1600	2110	2620	1420	1140	669	939	582
6	1630	3160	7420	e1700	e1600	2490	2190	1510	1020	681	790	562
7	1610	4160	7700	e1800	e1600	3290	1790	1450	1030	775	817	490
8	1620	3990	7210	e1800	e1600	9040	1990	1390	911	894	695	505
9	1600	2940	5810	1870	e1700	e6700	1970	1420	854	1000	752	650
10	1670	2180	4450	1790	e1700	6180	2060	1390	900	836	723	1010
11	1700	2030	3840	1740	e1700	4670	2150	1510	1070	791	690	767
12	1620	1920	3530	1870	e1800	3660	2060	1810	1530	639	718	646
13	1590	1870	2900	4140	e1900	3990	3570	1550	1340	828	764	639
14	1560	1760	2700	5020	e1900	6100	3920	1280	1130	830	807	713
15	1560	1470	2640	e6500	e1900	8080	3480	1350	1030	932	799	778
16	1500	1410	2520	9280	e1900	8210	3170	1420	1020	951	783	688
17	1500	1350	2490	8070	2330	6990	2500	1220	969	1060	703	613
18	1510	1350	2730	6570	2190	5940	2100	1250	928	1100	750	601
19	1410	1630	2940	4810	2140	4670	1620	1190	923	877	712	594
20	1420	1730	2570	5320	2250	4130	2210	1110	914	791	683	616
21	1510	1710	2400	6640	2510	4350	1890	1030	843	808	599	559
22	1530	1920	2300	6090	2420	4710	2180	992	809	788	668	672
23	1440	1850	2290	5430	2220	4000	2340	978	816	749	505	1080
24	1410	1720	2360	4820	e2100	3570	2180	922	801	850	576	906
25	1440	1730	2730	4540	e2000	3200	1980	1070	754	816	577	659
26	1430	1750	2650	4240	e1900	2940	1870	1090	742	926	578	705
27	1420	1680	2340	3810	e1800	2430	1810	1030	733	1050	642	717
28	1370	2130	2200	2940	e1800	2190	2140	955	698	912	640	633
29	1310	4070	2420	e2800	---	2080	2350	1180	693	835	534	629
30	1290	3190	e1900	e2600	---	2120	1980	1200	752	1020	640	544
31	1370	---	e1900	e2400	---	2270	---	1170	---	1050	647	---
TOTAL	48880	78380	101250	118390	54160	129620	68660	40697	29302	26574	21936	20409
MEAN	1577	2613	3266	3819	1934	4181	2289	1313	977	857	708	680
MAX	2400	7880	7700	9280	2510	9040	3920	1840	1530	1100	939	1080
MIN	1290	1350	1900	1700	1600	2080	1620	922	693	639	505	490

e Estimated



## HUDSON RIVER BASIN

01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1919	2813	3124	3011	2906	4788	6100	3318	1884	1478	1182	1417
MAX	6529	5873	6254	6742	6759	9558	13160	7879	6306	3771	2912	4361
(WY)	1946	1960	1974	1930	1976	1945	1993	1943	1972	1935	1986	1977
MIN	719	750	1061	820	679	1693	2289	1313	903	685	642	680
(WY)	1965	1931	1931	1931	1931	1940	1995	1995	1941	1934	1934	1995
SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR					FOR 1995 WATER YEAR				WATER YEARS 1928 - 1995		
ANNUAL TOTAL	1213370					738258						
ANNUAL MEAN	3324					2023				2825		
HIGHEST ANNUAL MEAN										4208		
LOWEST ANNUAL MEAN										1684		
HIGHEST DAILY MEAN	17700					9280				29900		
LOWEST DAILY MEAN	1020					490				463		
ANNUAL SEVEN-DAY MINIMUM	1180					579				529		
10 PERCENT EXCEEDS	7670					4090				5910		
50 PERCENT EXCEEDS	2030					1630				1940		
90 PERCENT EXCEEDS	1390					692				901		

## HUDSON RIVER BASIN

01348000 EAST CANADA CREEK AT EAST CREEK, NY

LOCATION.--Lat 43°01'00", long 74°44'28", Herkimer County, Hydrologic Unit 02020004, on right bank at village of East Creek, 0.2 mi downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi upstream from mouth, and 3.5 mi northwest of St. Johnsville.

DRAINAGE AREA.--289 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1945 to March 1995 (discontinued).

REVISED RECORDS.--WDR NY-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Extensive diurnal fluctuation and slight regulation caused by powerplants upstream from station. City of Little Falls diverts about 5 ft<sup>3</sup>/s for municipal supply.

AVERAGE DISCHARGE.--48 years (water years 1947-94), 687 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft<sup>3</sup>/s, Dec. 29, 1984, gage height, 7.68 ft; minimum, 0.05 ft<sup>3</sup>/s, July 9, 1978, gage height, 0.47 ft; minimum gage height, 0.44 ft, July 29, 1977; minimum daily discharge, 0.22 ft<sup>3</sup>/s, July 9, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1945, reached a stage of 9.0 ft, from floodmarks (discharge, 24,000 ft<sup>3</sup>/s, from slope-area measurement of peak flow), result of dam failure.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Peak discharges greater than base discharge of 7,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 5	2130	*7,130	*6.10	No other peak greater than base discharge.			
Minimum discharge, 13 ft <sup>3</sup> /s, Nov. 10, gage height, 1.00 ft; minimum daily, 26 ft <sup>3</sup> /s, Oct. 13.							

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	641	658	333	322	227	---	---	---	---	---	---
2	374	1870	559	382	363	310	---	---	---	---	---	---
3	367	1660	354	261	342	420	---	---	---	---	---	---
4	323	1100	353	246	201	223	---	---	---	---	---	---
5	306	646	1750	265	305	246	---	---	---	---	---	---
6	238	591	4510	217	221	295	---	---	---	---	---	---
7	216	893	2590	286	222	392	---	---	---	---	---	---
8	216	748	1700	344	198	834	---	---	---	---	---	---
9	92	648	1040	241	188	618	---	---	---	---	---	---
10	396	228	878	192	284	611	---	---	---	---	---	---
11	478	380	876	192	235	596	---	---	---	---	---	---
12	203	260	783	309	208	570	---	---	---	---	---	---
13	26	231	443	288	305	467	---	---	---	---	---	---
14	94	400	289	673	264	826	---	---	---	---	---	---
15	215	524	636	1140	262	1080	---	---	---	---	---	---
16	131	200	504	3970	361	2350	---	---	---	---	---	---
17	92	309	279	3310	348	3030	---	---	---	---	---	---
18	68	307	535	1920	319	2740	---	---	---	---	---	---
19	165	471	492	1500	393	2170	---	---	---	---	---	---
20	92	404	357	1310	294	1810	---	---	---	---	---	---
21	163	537	330	2420	265	2150	---	---	---	---	---	---
22	187	410	330	1880	348	2670	---	---	---	---	---	---
23	283	443	306	1350	272	1890	---	---	---	---	---	---
24	161	358	422	855	317	1570	---	---	---	---	---	---
25	161	288	432	955	228	1180	---	---	---	---	---	---
26	82	282	488	517	237	990	---	---	---	---	---	---
27	67	328	481	602	236	904	---	---	---	---	---	---
28	188	345	430	294	226	723	---	---	---	---	---	---
29	90	1090	336	314	---	908	---	---	---	---	---	---
30	88	969	165	417	---	612	---	---	---	---	---	---
31	187	---	263	435	---	804	---	---	---	---	---	---
TOTAL	6309	17561	23569	27418	7764	34216	---	---	---	---	---	---
MEAN	204	585	760	884	277	1104	---	---	---	---	---	---
MAX	560	1870	4510	3970	393	3030	---	---	---	---	---	---
MIN	26	200	165	192	188	223	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1995, BY WATER YEAR (WY)

	489	731	691	530	525	1071	2047	886	453	267	219	340
MEAN	489	731	691	530	525	1071	2047	886	453	267	219	340
MAX	1474	1661	1584	1611	1896	2392	3749	2063	1457	757	634	1446
(WY)	1977	1960	1974	1950	1981	1979	1993	1971	1972	1976	1992	1975
MIN	79.9	167	288	161	102	389	679	193	100	59.5	78.7	60.1
(WY)	1965	1965	1990	1961	1980	1960	1946	1987	1964	1963	1985	1969

## HUDSON RIVER BASIN

01348000 EAST CANADA CREEK AT EAST CREEK, NY--Continued

## SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

WATER YEARS 1946 - 1995

ANNUAL TOTAL	264919				
ANNUAL MEAN	726			687	
HIGHEST ANNUAL MEAN				962	1976
LOWEST ANNUAL MEAN				455	1965
HIGHEST DAILY MEAN	8890	Apr 16		11800	Mar 14 1977
LOWEST DAILY MEAN	26	Oct 13		.22	Jul 9 1978
ANNUAL SEVEN-DAY MINIMUM	113	Oct 13		1.9	Oct 12 1969
10 PERCENT EXCEEDS	1680			1580	
50 PERCENT EXCEEDS	374			394	
90 PERCENT EXCEEDS	148			54	

## HUDSON RIVER BASIN

01349150 CANAJOHARIE CREEK NEAR CANAJOHARIE, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°52'34", long 74°36'12", Montgomery County, Hydrologic Unit 02020004, on right bank 10 ft upstream from bridge on McEwan Road, and 2.3 mi southwest of Canajoharie. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.7 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1993 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 640 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--2 years, 63.3 ft<sup>3</sup>/s, 14.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft<sup>3</sup>/s, Mar. 30, 1993, gage height, 7.96 ft; maximum gage height, 8.81 ft, Mar. 29, 1993 (ice jam); minimum discharge, 0.23 ft<sup>3</sup>/s, Aug. 27, 28, 29, 1995, gage height, 1.26 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft<sup>3</sup>/s (revised) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 20	1900	*1,740	6.68	Mar. 8	1030	1,340	6.08
Mar. 8	0745	ice jam	*7.47				

Minimum discharge, 0.23 ft<sup>3</sup>/s, Aug. 27, 28, 29, gage height, 1.26 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	7.9	17	39	e40	e46	42	28	9.5	3.7	1.8	1.5
2	8.3	31	13	51	e35	e35	34	25	8.6	6.0	1.6	1.9
3	7.7	14	11	e32	e31	e29	31	22	99	5.0	1.4	2.2
4	5.8	8.9	10	e25	e28	e27	46	20	53	3.7	1.6	1.8
5	5.2	6.8	173	e23	e26	e27	52	20	29	3.4	1.9	1.6
6	4.8	6.5	174	e22	e24	e40	38	22	18	3.2	2.1	1.4
7	4.8	6.1	e110	e20	e24	e150	43	18	14	3.1	2.2	1.2
8	4.6	6.2	e82	e18	e26	e500	41	15	11	3.1	2.4	1.2
9	4.2	5.2	e58	e16	e27	255	40	14	11	3.0	2.1	1.5
10	4.6	4.9	e45	e15	e25	172	53	14	9.0	3.0	1.8	2.0
11	5.2	4.6	e100	e14	e23	129	53	16	8.8	3.1	1.6	3.0
12	5.1	4.4	e74	e17	e21	94	44	21	10	3.1	1.6	2.3
13	4.7	4.4	e52	e80	e20	312	367	19	12	3.2	1.5	2.1
14	4.5	4.3	e35	e90	e18	500	138	15	8.7	2.9	1.8	2.0
15	4.7	4.2	e32	e170	e18	498	87	15	8.0	2.7	2.1	2.0
16	4.4	4.0	e30	221	e17	367	65	14	7.1	2.6	1.9	2.2
17	4.1	3.9	e27	169	e18	226	53	12	6.2	3.6	1.8	2.0
18	4.2	3.8	e40	113	e19	151	47	12	5.7	3.9	1.8	1.8
19	4.5	3.9	e58	99	e20	117	e45	12	5.3	3.8	1.5	1.8
20	4.8	3.7	e38	528	e21	100	e42	11	4.9	3.1	1.3	1.8
21	5.6	3.8	e35	488	e20	112	39	9.9	4.2	2.7	1.1	1.9
22	6.2	4.7	e37	246	e18	126	55	9.2	4.0	2.6	.84	2.4
23	4.3	4.6	e45	147	e17	97	45	8.7	3.9	2.7	.66	4.2
24	4.7	3.6	268	110	e30	76	36	8.3	4.1	2.8	.46	4.6
25	4.6	e3.5	295	89	e27	61	31	8.8	3.8	2.8	.30	2.9
26	4.5	e3.5	123	e68	e24	53	28	11	3.8	3.0	.29	3.0
27	4.4	e3.8	75	e60	e22	47	27	14	4.3	3.0	.27	3.1
28	4.5	9.3	61	e56	e40	43	43	9.8	3.7	2.8	.28	2.8
29	4.5	50	63	e52	---	38	39	17	3.2	2.7	.36	2.2
30	4.5	26	69	e48	---	40	32	21	3.2	2.5	.70	1.9
31	4.7	---	38	e43	---	55	---	13	---	2.1	1.1	---
TOTAL	154.7	251.5	2288	3169	679	4523	1736	475.7	377.0	98.9	42.16	66.3
MEAN	4.99	8.38	73.8	102	24.2	146	57.9	15.3	12.6	3.19	1.36	2.21
MAX	8.3	50	295	528	40	500	367	28	99	6.0	2.4	4.6
MIN	4.1	3.5	10	14	17	27	27	8.3	3.2	2.1	.27	1.2
CFSM	.08	.14	1.24	1.71	.41	2.44	.97	.26	.21	.05	.02	.04
IN.	.10	.16	1.43	1.97	.42	2.82	1.08	.30	.23	.06	.03	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	5.44	36.8	65.5	61.2	53.6	207	321	26.7	14.0	7.46	23.9	4.25
MAX	5.89	65.2	73.8	102	83.0	268	486	37.8	22.1	15.6	67.0	7.52
(WY)	1994	1994	1995	1995	1994	1994	1993	1994	1994	1994	1994	1994
MIN	4.99	8.38	57.3	20.1	24.2	146	57.9	15.3	7.39	3.19	1.36	2.21
(WY)	1995	1995	1994	1994	1995	1995	1995	1995	1993	1995	1995	1995

e Estimated



## HUDSON RIVER BASIN

01349150 CANAJOHARIE CREEK NEAR CANAJOHARIE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1993 - 1995	
ANNUAL TOTAL	31108.7		13861.26			
ANNUAL MEAN	85.2		38.0			
HIGHEST ANNUAL MEAN					63.3	
LOWEST ANNUAL MEAN					88.6	1994
HIGHEST DAILY MEAN	1300	Apr 7	528	Jan 20	38.0	1995
LOWEST DAILY MEAN	3.5	Nov 25	.27	Aug 27	2600	Mar 30 1993
ANNUAL SEVEN-DAY MINIMUM	3.9	Nov 15	.37	Aug 23	.27	Aug 27 1995
ANNUAL RUNOFF (CFSM)	1.43		.64		.37	Aug 23 1995
ANNUAL RUNOFF (INCHES)	19.38		8.64		1.06	
10 PERCENT EXCEEDS	251		95		14.40	
50 PERCENT EXCEEDS	15		11		183	
90 PERCENT EXCEEDS	4.7		1.9		13	
					2.6	

## HUDSON RIVER BASIN

01349150 CANAJOHARIE CREEK NEAR CANAJOHARIE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993 to current year.

CHEMICAL DATA: 1993 (c), 1994-95 (e).

PESTICIDE DATA: 1993 (a), 1994 (d), 1995 (e).

ORGANIC DATA: OC--1993 (c), 1994-95 (e).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1993 (c), 1994-95 (e).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (c), 1994-95 (e).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1993 to current year.

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

REMARKS.--Interruptions of temperature record were due to malfunction of recording instrument. Temperature probe may be influenced by solar radiation during periods of low flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 37.0°C, July 15, 1995; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 37.0°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT											
18...	0940	4.1	1090	7.8	10.0	8.5	750	12.1	105	570	180
NOV											
08...	0940	6.6	884	7.9	12.5	8.0	748	10.6	91	440	140
DEC											
06...	1010	158	353	7.6	9.0	6.5	748	11.4	94	150	47
JAN											
17...	1110	166	345	7.3	4.5	3.0	750	12.4	94	150	49
FEB											
14...	1000	E18	761	7.9	-6.0	0.0	754	12.3	85	390	130
MAR											
07...	0930	E150	258	7.6	4.0	0.0	751	12.8	89	110	34
APR											
18...	1500	48	483	8.0	18.5	13.5	745	15.7	154	210	70
MAY											
11...	1400	16	691	7.9	12.0	13.0	740	9.4	92	320	100
16...	1330	14	677	7.9	16.0	17.0	742	9.8	104	320	100
23...	1550	8.5	756	8.0	28.0	20.5	750	10.1	115	380	120
30...	1510	21	766	8.0	25.5	20.0	744	9.5	107	370	120
JUN											
03...	1420	102	522	7.8	26.0	21.5	742	7.3	85	240	75
07...	1400	14	644	8.0	35.0	25.0	737	9.0	113	290	95
12...	1515	9.8	783	7.9	19.0	20.5	741	9.0	103	370	120
19...	1355	5.3	845	7.9	33.5	29.5	745	8.4	112	380	120
21...	1227	4.4	--	--	--	--	--	--	--	--	--
27...	1325	4.6	990	7.9	28.0	26.5	755	8.7	110	470	150
JUL											
05...	1340	3.4	1100	7.8	28.5	26.5	753	7.8	98	540	170
11...	1100	3.1	1100	7.8	24.0	24.0	747	8.7	107	540	170
18...	1000	4.2	1160	7.4	25.0	26.5	737	5.6	73	570	180
24...	1100	2.8	1210	7.7	29.0	25.5	742	7.8	98	600	190
AUG											
04...	1030	1.6	1290	7.9	29.5	26.5	--	6.9	--	710	230
10...	1110	1.9	1310	7.9	29.0	23.5	743	8.5	103	740	240
22...	1900	0.77	1430	7.9	21.0	24.0	746	6.0	73	810	260
SEP											
05...	1240	1.5	1470	--	26.5	25.0	752	9.0	111	790	250
07...	1355	1.3	1560	7.9	32.0	23.0	730	9.5	116	--	--

E Estimated daily.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

[illegible]

## HUDSON RIVER BASIN

01349150 CANAJOHARIE CREEK NEAR CANAJOHARIE, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-A PHYTO- PLANK- TON CHROMO- FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO- FLUOROM (UG/L)
OCT										
18...	14	15	-67.3	-9.96	2.4	0.3	--	--	--	--
NOV										
08...	20	13	-64.6	-9.77	3.4	0.2	--	--	--	--
DEC										
06...	200	9	-68.6	-10.14	3.3	0.3	--	--	--	--
JAN										
17...	78	9	-69.9	-10.57	4.9	0.6	--	--	--	--
FEB										
14...	12	13	-74.6	-11.06	2.0	0.2	--	--	--	--
MAR										
07...	120	12	-83.0	-11.20	7.1	1.5	--	--	--	--
APR										
18...	17	18	-74.0	-10.79	2.6	0.2	--	--	--	--
MAY										
11...	26	20	--	--	2.7	0.1	--	--	--	--
16...	22	18	-70.7	-10.27	2.9	0.2	--	--	--	--
23...	17	26	-70.5	-10.13	2.7	0.2	--	--	--	--
30...	25	32	-65.2	-9.55	3.4	0.4	--	--	--	--
JUN										
03...	66	32	-55.3	-8.38	6.8	0.8	--	--	--	--
07...	21	42	-62.8	-9.10	4.4	0.3	--	--	--	--
12...	26	50	-63.7	-9.30	3.1	0.3	--	--	--	--
19...	30	100	-63.7	-8.91	3.5	0.8	--	--	--	--
21...	--	--	--	--	--	--	28.0	10.0	--	--
27...	24	56	-60.3	-8.13	4.1	2.2	--	--	15.0	2.70
JUL										
05...	28	68	-60.7	-8.16	3.6	0.9	--	--	--	--
11...	33	46	-61.5	-8.05	3.8	0.3	--	--	--	--
18...	35	74	--	--	4.2	0.8	--	--	--	--
24...	18	98	-54.1	-7.23	6.4	1.4	--	--	--	--
AUG										
04...	29	130	--	--	4.2	1.8	--	--	--	--
10...	21	72	--	--	4.2	1.7	--	--	--	--
22...	19	110	-49.0	-5.43	4.5	--	--	--	--	--
SEP										
05...	20	70	-45.9	-4.98	4.3	1.4	--	--	--	--
07...	--	--	-46.7	-5.07	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	DIS- CHARGE, SUS- PENDED (MG/L)	SEDIMENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
18...	0940	4.1	27	0.30	94
NOV					
08...	0940	6.6	6	0.11	91
DEC					
06...	1010	158	43	18	93
JAN					
17...	1110	166	16	7.2	100
FEB					
14...	1000	E18	3	0.14	87
MAR					
07...	0930	E150	36	14.0	99
APR					
18...	1500	48	5	0.65	80
MAY					
11...	1400	16	33	1.4	87
16...	1330	14	11	0.42	91
23...	1550	8.5	10	0.23	90
30...	1510	21	12	0.68	90
JUN					
03...	1420	102	63	17	91
07...	1400	14	13	0.49	62
12...	1515	9.8	13	0.34	98
19...	1355	5.3	13	0.19	92
27...	1325	4.6	21	0.26	91
JUL					
05...	1340	3.4	14	0.13	94
11...	1100	3.1	59	0.49	59
18...	1000	4.2	43	0.49	93
24...	1100	2.8	19	0.14	93
AUG					
04...	1030	1.6	16	0.07	99
10...	1110	1.9	31	0.16	98
SEP					
05...	1240	1.5	14	0.06	95

E Estimated daily.



## HUDSON RIVER BASIN

01349150 CANAJOHARIE CREEK NEAR CANAJOHARIE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.5	10.5	12.0	11.5	10.0	10.5	.5	.0	.5	.5	.0	.0
2	13.0	10.5	11.5	11.0	8.0	9.5	1.0	.0	.5	.5	.0	.0
3	12.0	9.5	10.5	9.5	7.0	8.0	1.0	.0	.5	.5	.0	.0
4	11.0	10.0	10.5	11.0	8.0	9.0	1.5	.5	1.0	.5	.0	.0
5	11.5	9.5	10.5	12.5	10.5	11.5	6.0	1.5	3.0	.5	.0	.0
6	12.0	10.0	10.5	12.5	11.5	12.0	7.0	6.0	6.5	.5	.0	.0
7	12.5	9.0	10.5	11.5	8.0	10.5	7.0	2.5	5.0	.5	.0	.0
8	13.5	10.0	11.5	8.5	7.5	8.0	2.5	.0	.5	.5	.0	.0
9	15.5	11.5	13.0	9.0	8.0	8.5	.5	.0	.0	.5	.0	.0
10	14.0	11.5	13.0	9.0	7.0	8.0	1.0	.0	.5	.5	.0	.0
11	12.0	9.5	10.5	7.0	4.0	5.5	1.5	.0	1.0	.0	.0	.0
12	11.5	8.0	9.5	5.5	3.5	4.0	.5	.0	.0	.5	.0	.0
13	10.5	7.5	9.0	6.0	3.5	4.5	.5	.0	.0	.5	.0	.0
14	11.0	8.5	9.5	7.0	5.0	6.0	.0	.0	.0	.5	.0	.0
15	11.5	8.0	9.5	8.5	7.0	8.0	.5	.0	.0	3.5	.0	.5
16	11.0	7.5	9.0	7.5	6.0	7.0	.5	.0	.0	4.0	3.0	3.5
17	10.0	7.0	8.5	6.5	4.5	5.0	.0	.0	.0	3.5	3.0	3.0
18	9.5	8.0	9.0	6.0	4.0	5.0	.5	.0	.0	3.0	2.5	2.5
19	11.5	9.5	10.5	7.0	5.5	6.0	.5	.0	.0	3.0	2.5	2.5
20	13.0	11.5	12.0	6.0	4.5	5.0	.5	.0	.0	3.0	2.5	2.5
21	14.0	12.0	13.0	4.5	3.5	4.0	.5	.0	.0	3.0	2.5	3.0
22	14.5	12.5	13.5	5.5	4.5	5.0	.5	.0	.0	3.0	2.0	2.5
23	13.0	11.5	12.5	4.5	1.0	2.5	.5	.0	.0	2.0	1.0	1.5
24	13.0	10.0	11.0	2.0	1.0	1.5	.5	.0	.0	2.0	1.0	1.5
25	11.5	10.0	10.5	1.5	1.0	1.0	2.0	.5	1.5	1.5	.5	1.0
26	10.0	9.0	9.5	1.5	.5	1.0	1.5	.5	1.0	.5	.0	.0
27	9.0	8.0	8.5	1.5	.5	1.0	1.0	.0	.5	.5	.0	.0
28	10.0	7.0	8.0	1.0	.5	.5	1.0	.0	.5	---	.0	---
29	10.0	7.0	8.0	.5	.0	.5	1.0	.0	.5	---	---	---
30	10.0	8.0	8.5	.5	.0	.0	.5	.0	.0	---	---	---
31	10.0	8.5	9.5	---	---	---	.5	.0	.0	---	---	---
MONTH	15.5	7.0	10.5	12.5	.0	5.5	7.0	.0	.5	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	.0	.0	.0	8.5	3.5	5.5	13.5	10.0	11.5
2	---	---	---	.0	.0	.0	9.5	3.5	6.0	13.5	9.5	11.5
3	---	---	---	.0	.0	.0	7.5	3.5	5.5	16.0	10.5	13.0
4	---	---	---	.0	.0	.0	6.5	3.0	5.5	18.0	10.5	14.0
5	---	---	---	.0	.0	.0	3.0	.5	1.5	16.5	13.5	14.5
6	---	---	---	.0	.0	.0	2.5	.0	1.0	16.5	11.5	14.0
7	---	---	---	.0	.0	.0	7.0	1.0	3.5	15.0	10.5	13.0
8	---	---	---	.0	.0	.0	4.5	3.0	3.5	16.5	9.0	12.5
9	---	---	---	.0	.0	.0	3.5	2.0	3.0	19.0	11.0	15.0
10	---	---	---	.0	.0	.0	6.5	1.0	3.5	18.0	14.0	15.0
11	---	---	---	.0	.0	.0	10.0	3.5	6.0	14.0	12.5	13.0
12	---	---	---	1.5	.0	.5	8.5	7.0	8.0	15.5	12.0	13.5
13	---	---	---	3.0	.5	1.5	8.0	6.0	6.5	18.5	13.5	16.0
14	.0	.0	.0	3.5	.5	1.5	8.5	5.0	6.5	18.5	14.5	16.5
15	.0	.0	.0	5.5	2.0	3.5	8.0	6.0	7.0	17.5	15.5	16.0
16	.0	.0	.0	6.5	3.5	5.0	8.0	5.0	6.5	19.5	12.0	16.0
17	.0	.0	.0	6.0	3.5	4.5	11.0	4.5	7.5	19.0	15.5	16.5
18	.0	.0	.0	6.0	3.0	4.5	14.5	8.0	11.0	16.5	14.5	15.5
19	.0	.0	.0	7.0	4.0	6.0	---	11.5	---	16.0	14.0	15.0
20	.0	.0	.0	7.5	5.5	6.5	14.5	---	---	18.5	13.0	15.5
21	.0	.0	.0	7.0	5.0	6.5	12.5	10.5	11.5	20.0	15.0	17.5
22	.0	.0	.0	6.0	4.5	5.0	10.5	8.0	9.5	19.5	16.0	17.5
23	.0	.0	.0	5.5	4.0	5.0	9.5	6.5	7.5	21.0	14.5	18.0
24	.0	.0	.0	4.5	3.0	3.5	12.5	6.0	9.0	21.0	18.5	19.5
25	.0	.0	.0	6.0	1.5	3.5	14.5	7.0	10.5	21.0	17.5	19.0
26	.0	.0	.0	8.5	3.0	5.0	15.0	10.0	12.0	21.0	18.0	19.0
27	.0	.0	.0	9.5	4.0	6.5	16.5	10.5	13.5	23.0	17.0	20.0
28	.0	.0	.0	10.0	4.5	7.0	16.0	12.5	14.0	22.5	18.0	19.0
29	---	---	---	10.5	4.5	7.0	12.5	10.5	11.5	21.5	16.5	18.5
30	---	---	---	8.5	7.0	7.5	13.5	8.5	10.5	21.0	17.5	19.5
31	---	---	---	7.5	5.0	6.5	---	---	---	24.0	17.0	20.5
MONTH	---	---	---	10.5	.0	3.0	---	---	---	24.0	9.0	16.0

## HUDSON RIVER BASIN

01349150 CANAJOHARIE CREEK NEAR CANAJOHARIE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	25.5	19.0	22.5	27.5	25.0	26.0	31.0	23.0	27.0	28.0	21.0	23.5
2	25.0	22.5	24.0	25.5	22.5	24.0	27.5	24.5	26.0	26.5	20.5	22.5
3	24.0	18.5	21.5	25.5	20.0	22.5	29.5	24.0	26.5	25.0	19.0	22.0
4	24.0	20.5	22.0	27.0	21.0	24.0	29.5	25.0	27.0	24.5	20.0	22.0
5	25.0	18.5	21.5	28.5	24.0	25.5	26.5	25.0	25.5	27.0	19.5	23.0
6	25.5	19.0	22.0	29.5	24.5	26.5	25.0	23.0	24.0	32.0	21.0	24.0
7	27.0	20.5	24.0	27.5	25.0	26.0	28.0	21.5	24.0	25.0	20.5	22.5
8	26.0	20.0	22.5	25.5	23.0	24.5	28.0	20.5	24.0	22.0	19.0	20.0
9	22.5	17.0	20.0	24.0	21.0	22.0	29.0	20.5	24.0	19.5	17.0	18.0
10	22.5	19.5	20.5	24.0	20.0	21.5	27.0	20.5	24.0	20.5	15.0	17.0
11	22.5	19.5	21.0	27.5	20.5	23.0	28.5	23.0	25.5	20.0	14.5	17.0
12	22.5	20.0	20.5	28.0	21.5	24.5	27.0	24.0	25.5	22.0	15.0	18.0
13	23.5	17.0	20.5	29.5	22.5	26.0	29.5	22.0	25.5	22.5	18.0	19.5
14	23.5	19.5	21.0	32.0	25.5	28.5	29.5	24.0	26.5	22.0	19.0	21.0
15	23.5	19.0	21.5	37.0	27.0	30.0	30.5	24.5	27.5	25.0	19.0	21.0
16	24.5	19.5	22.0	32.5	26.0	28.5	33.0	26.5	28.5	21.0	17.0	19.0
17	25.0	20.5	23.0	28.5	26.0	27.0	31.0	25.0	28.0	20.5	17.0	18.5
18	27.0	22.0	24.5	30.0	25.5	27.0	30.0	24.0	26.5	23.0	17.0	19.0
19	29.5	24.0	26.5	29.5	25.0	26.5	30.0	22.5	25.5	22.5	15.5	17.5
20	31.0	26.0	27.5	27.0	24.0	25.0	30.5	21.5	25.0	17.0	14.5	16.0
21	28.5	23.5	25.5	26.0	23.5	24.5	29.0	21.5	24.5	17.0	16.0	16.5
22	27.0	22.5	24.5	28.0	21.5	24.5	28.0	21.5	24.0	19.0	16.0	17.0
23	27.5	22.0	24.5	26.5	24.0	25.0	27.5	19.5	23.0	16.5	14.0	15.5
24	28.0	22.5	25.0	27.0	23.5	25.0	28.0	21.0	23.5	15.0	12.0	13.5
25	30.5	24.0	26.5	29.5	24.0	26.5	26.0	18.5	22.5	14.0	13.0	13.5
26	30.0	25.5	27.0	29.5	25.5	27.0	26.0	18.5	21.5	15.5	13.0	14.0
27	27.5	23.5	25.5	27.5	25.5	26.5	22.0	19.5	21.0	22.0	13.5	15.5
28	27.0	22.0	24.0	29.5	24.5	27.0	26.0	17.0	21.0	20.0	14.0	15.5
29	28.0	21.5	24.5	31.0	26.0	28.0	29.0	19.5	22.5	17.0	12.5	14.5
30	28.5	23.0	25.5	31.5	25.0	27.5	28.0	19.0	23.0	17.0	11.5	14.0
31	---	---	---	32.0	23.5	27.0	27.5	19.0	22.5	---	---	---
MONTH	31.0	17.0	23.5	37.0	20.0	25.5	33.0	17.0	24.5	32.0	11.5	18.5

## HUDSON RIVER BASIN

01349900 BATAVIA KILL NEAR ASHLAND, NY

LOCATION.--Lat 42°17'36", long 74°18'22", Greene County, Hydrologic Unit 02020005, on right bank 40 ft upstream from bridge on County Route 17, 0.2 mi south of State Highway 23, and 1.6 mi southeast of Ashland.

DRAINAGE AREA.--51.2 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR NY-93-1: 1992.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,440 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated to some extent at high flows by three flood-retardation reservoirs, combined drainage area of 19.2 mi<sup>2</sup>. Seasonal diversion for snowmaking by Ski Windham ski area at Windham.

AVERAGE DISCHARGE.--4 years, 75.0 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft<sup>3</sup>/s, Mar. 30, 1993, gage height, 11.26 ft; minimum daily discharge, about 0.80 ft<sup>3</sup>/s, Aug. 31, 1995.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 12,700 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 14.82 ft, from floodmarks, from rating curve extended above 2,200 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,480 ft<sup>3</sup>/s, Dec. 24, gage height, 9.41 ft; minimum daily discharge, about 0.80 ft<sup>3</sup>/s, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e62	e13	e72	127	e66	e68	61	46	20	5.4	e2.7	e1.3
2	e58	e32	e60	e120	e56	e50	58	44	19	9.7	e2.8	e1.2
3	e48	e28	e50	e90	e50	e42	51	40	24	7.3	e3.9	e1.1
4	e42	e22	e70	e72	e45	e39	60	36	25	5.9	e4.9	e1.1
5	e37	e21	e110	e62	e42	e37	59	40	21	5.0	e4.9	e1.0
6	e34	e19	e130	e64	e40	53	48	45	18	4.4	e8.8	e.98
7	e30	e20	e120	142	e39	90	48	36	17	4.2	e8.6	e.94
8	e28	e19	e110	104	e42	512	45	32	16	4.4	e6.0	e.90
9	e26	e17	e80	e70	e46	497	48	30	16	3.9	e4.7	e1.2
10	e29	e19	e78	e50	e40	e260	65	29	15	3.6	e3.7	e1.6
11	e28	e19	e120	e45	e38	e180	52	31	15	3.5	e3.4	e1.4
12	e25	e17	e96	64	e35	171	49	35	22	4.6	e3.2	e1.3
13	e23	e18	e70	126	e32	245	146	32	23	3.6	e3.0	e1.3
14	e20	e16	e52	122	e30	329	101	31	18	3.2	e2.7	e1.2
15	e18	e16	e40	167	e29	326	82	31	15	3.9	e2.6	e1.2
16	e18	e15	e36	249	e28	270	74	28	13	3.7	e2.6	e1.2
17	e17	e15	e34	189	e29	227	67	25	12	3.8	e2.5	e1.3
18	e16	e14	43	149	e31	189	63	25	10	4.7	e2.7	e1.4
19	e16	e14	39	129	e33	158	91	25	9.6	3.9	e2.1	e1.7
20	e16	e14	e31	295	e34	138	85	25	8.6	3.3	e1.6	e1.6
21	e18	e15	e30	406	e35	139	75	23	7.7	3.2	e1.3	e1.6
22	e16	e35	e30	274	e27	137	78	21	6.9	3.1	e1.2	e3.0
23	e15	e32	e31	198	e28	117	72	20	6.7	3.1	e1.1	e1.0
24	e15	e29	648	162	e52	102	63	19	6.0	3.3	e1.0	e7.0
25	e14	e22	814	138	e45	88	56	23	6.1	3.9	e1.0	e4.5
26	e14	e21	343	116	e36	80	51	23	8.6	3.6	e1.2	e3.5
27	e13	e23	231	e96	e33	74	48	22	7.6	e3.6	e1.2	e3.2
28	e12	e120	184	e82	e60	69	50	20	6.1	e4.2	e1.0	e2.9
29	e12	e180	145	e72	---	64	47	21	5.2	e5.2	e.90	e2.5
30	e11	e110	115	e68	---	64	43	30	4.9	e4.0	e.84	e2.5
31	e11	---	94	72	---	70	---	23	---	e3.1	e.80	---
TOTAL	742	955	4106	4120	1101	4885	1936	911	403.0	132.3	88.94	65.62
MEAN	23.9	31.8	132	133	39.3	158	64.5	29.4	13.4	4.27	2.87	2.19
MAX	62	180	814	406	66	512	146	46	25	9.7	8.8	10
MIN	11	13	30	45	27	37	43	19	4.9	3.1	.80	.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

MEAN	13.2	71.4	101	122	43.2	161	263	63.3	29.2	7.96	10.2	10.0
MAX	23.9	116	132	194	82.7	202	483	92.5	73.6	12.7	34.2	35.1
(WY)	1995	1994	1995	1993	1994	1994	1993	1992	1992	1994	1994	1994
MIN	4.43	31.8	70.9	79.3	23.2	101	64.5	29.4	8.34	2.44	1.80	2.19
(WY)	1994	1995	1993	1994	1993	1992	1995	1995	1993	1993	1993	1995

e Estimated

## HUDSON RIVER BASIN

01349900 BATAVIA KILL NEAR ASHLAND, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1991 - 1995	
ANNUAL TOTAL	32604.7		19445.86			
ANNUAL MEAN	89.3		53.3		75.0	
HIGHEST ANNUAL MEAN					92.8 1994	
LOWEST ANNUAL MEAN					53.3 1995	
HIGHEST DAILY MEAN	852	Apr 7	814	Dec 25	2230	Mar 30 1993
LOWEST DAILY MEAN	5.1	Aug 12	.80	Aug 31	.80	Aug 31 1995
ANNUAL SEVEN-DAY MINIMUM	6.2	Sep 16	.99	Aug 25	.99	Aug 25 1995
10 PERCENT EXCEEDS	235		128		168	
50 PERCENT EXCEEDS	34		28		26	
90 PERCENT EXCEEDS	9.6		2.5		2.6	



## HUDSON RIVER BASIN

01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY

LOCATION.--Lat 42°19'10", long 74°26'13", Greene County, Hydrologic Unit 02020005, on left bank 100 ft upstream from bridge on State Highway 23 in Prattsville, 0.2 mi upstream from Schoharie Reservoir, 0.2 mi downstream from Huntersfield Creek, and 1.6 mi downstream from Batavia Kill.

DRAINAGE AREA.--237 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1902 to current year.

REVISED RECORDS.--WSP 1432: 1937-38. WDR NY-87-1: 1956(M), 1972(M), 1974-76(M), 1978(P), 1979(M), 1980(P), 1981(M), 1984(M). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,131.57 ft above sea level. Prior to Oct. 1, 1915, nonrecording gage, and Oct. 1, 1915 to July 17, 1936, water-stage recorder, at old highway bridge 80 ft upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi downstream, all at datum 1.56 ft lower than present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Seasonal diversion for snowmaking by Hunter Mountain ski area near Tannersville and Ski Windham ski area at Windham. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--92 years, 458 ft<sup>3</sup>/s, 26.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,600 ft<sup>3</sup>/s, Oct. 16, 1955, gage height, 19.14 ft, from rating curve extended above 17,800 ft<sup>3</sup>/s on basis of contracted-opening measurements of peak flow at gage heights 18.37 ft and 19.14 ft; maximum gage height, 19.57 ft, Mar. 5, 1979 (ice jam); minimum daily discharge, 4.8 ft<sup>3</sup>/s, Sept. 22, 1964.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 24	2000	5,960	7.68	Mar. 8	2200	*8,230	*8.73

Minimum discharge, 6.8 ft<sup>3</sup>/s, Sept. 8, 9; minimum daily discharge, 7.1 ft<sup>3</sup>/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	79	447	764	e360	e450	291	271	119	34	18	9.8
2	313	163	373	e600	e340	e350	269	263	106	48	18	9.2
3	262	142	336	e470	e320	e300	249	246	149	49	23	9.1
4	224	120	303	e370	e290	e270	304	225	160	37	34	8.4
5	198	112	515	e320	e270	e250	308	234	130	32	34	8.2
6	176	107	876	e360	e250	e350	266	251	109	29	66	7.8
7	158	112	e600	815	e240	e450	259	215	98	36	65	7.4
8	143	105	e500	596	e260	2320	242	196	89	36	44	7.1
9	133	100	e430	479	e280	3070	251	184	84	32	33	9.1
10	157	109	432	e350	e260	1370	317	180	75	28	27	11
11	152	109	590	e300	e240	980	271	186	77	27	24	9.7
12	132	96	496	e400	e230	814	258	202	141	28	22	9.8
13	121	98	415	649	e210	1040	717	195	154	30	20	9.4
14	114	95	378	648	e190	1390	550	179	123	26	18	8.8
15	109	93	302	1040	e180	1440	466	175	109	24	18	8.9
16	102	90	278	2070	e170	1340	415	164	88	23	18	8.5
17	98	87	262	1270	e180	1140	381	153	77	24	17	9.3
18	92	84	272	925	e190	946	353	151	70	32	18	10
19	92	87	e240	756	e200	774	520	150	64	28	16	12
20	93	85	e200	1510	e210	663	500	149	58	24	14	11
21	100	89	e190	2190	e220	650	444	138	53	21	12	11
22	96	188	e190	1480	e200	654	464	131	47	19	12	15
23	90	167	e200	1060	e180	563	430	120	46	19	10	51
24	86	e140	2820	847	e350	499	386	113	43	23	9.9	45
25	83	e130	3540	703	e300	441	354	148	43	28	9.2	28
26	78	e120	1740	593	e250	399	326	148	47	24	8.8	22
27	76	e110	1150	511	e220	367	304	141	45	25	8.7	21
28	72	e600	900	e440	e400	339	312	124	42	30	8.4	17
29	70	1040	724	e410	---	316	295	129	36	38	8.2	15
30	67	594	486	e400	---	310	268	158	33	28	7.9	14
31	67	---	492	e380	---	318	---	140	---	22	7.7	---
TOTAL	4082	5251	20677	23706	6990	24563	10770	5459	2515	904	649.8	423.5
MEAN	132	175	667	765	250	792	359	176	83.8	29.2	21.0	14.1
MAX	328	1040	3540	2190	400	3070	717	271	160	49	66	51
MIN	67	79	190	300	170	250	242	113	33	19	7.7	7.1
CFSM	.56	.74	2.81	3.23	1.05	3.34	1.51	.74	.35	.12	.09	.06
IN.	.64	.82	3.25	3.72	1.10	3.86	1.69	.86	.39	.14	.10	.07

e Estimated

## HUDSON RIVER BASIN

01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	290	479	526	456	451	872	1105	583	285	153	123	170
MAX	2496	1526	1723	2210	1711	2804	3023	1738	1230	981	1190	1153
(WY)	1956	1928	1974	1978	1981	1936	1958	1989	1972	1935	1955	1960
MIN	8.50	17.7	72.5	49.2	39.0	247	264	84.2	37.9	11.1	10.6	6.15
(WY)	1965	1965	1923	1931	1931	1937	1946	1905	1964	1965	1964	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1903 - 1995			
ANNUAL TOTAL	163783				105990.3							
ANNUAL MEAN	449				290				459			
HIGHEST ANNUAL MEAN									873			
LOWEST ANNUAL MEAN									202			
HIGHEST DAILY MEAN	4720				3540				26200			
LOWEST DAILY MEAN	32				7.1				4.8			
ANNUAL SEVEN-DAY MINIMUM	42				8.2				5.3			
ANNUAL RUNOFF (CFSM)	1.89				1.23				1.94			
ANNUAL RUNOFF (INCHES)	25.71				16.64				26.32			
10 PERCENT EXCEEDS	1140				652				1040			
50 PERCENT EXCEEDS	186				157				220			
90 PERCENT EXCEEDS	71				16				31			

## HUDSON RIVER BASIN

01350080 MANOR KILL AT WEST CONESVILLE NEAR GILBOA, NY

LOCATION.--Lat 42°22'37", long 74°24'48", Schoharie County, Hydrologic Unit 02020005, on right bank 50 ft south of County Highway 3, 0.5 mi east of West Conesville, 2.2 mi southeast of Gilboa, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--32.4 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,255.95 ft above sea level.

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

AVERAGE DISCHARGE.--9 years, 43.8 ft<sup>3</sup>/s, 18.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,680 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 9.76 ft in gage well, 10.9 ft from floodmarks, from rating curve extended above 970 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum discharge, 1.0 ft<sup>3</sup>/s, Aug. 28, 29, 30, 31, Sept. 1, 2, 1993, Sept. 6, 7, 8, 1995; minimum gage height, 0.68 ft, Sept. 6, 7, 8, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 24	1930	*587	*3.17				

Minimum discharge, 1.0 ft<sup>3</sup>/s, gage height, 0.68 ft, Sept. 6, 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.5	20	e52	e38	e41	41	32	10	7.5	2.5	1.6
2	15	11	18	e48	e34	e31	38	30	9.3	14	2.9	1.4
3	12	9.2	17	e45	e30	e25	35	27	13	6.2	4.6	1.3
4	11	7.8	17	e42	e27	e23	e35	25	21	4.9	3.6	1.3
5	9.9	7.2	31	e39	e25	e28	e34	31	14	4.5	4.3	1.2
6	9.9	6.8	43	e38	e24	e30	e34	33	11	4.4	5.5	1.1
7	8.7	6.8	40	e50	e24	e50	33	26	9.3	7.0	4.4	1.1
8	8.3	6.4	40	e45	e25	247	31	24	8.6	7.2	3.6	1.1
9	8.0	6.3	32	e41	e28	169	33	22	8.1	5.5	3.1	1.6
10	9.6	6.2	31	e36	e26	128	42	22	7.5	5.0	2.8	1.7
11	9.0	5.9	43	e31	e23	114	36	23	7.6	4.8	2.6	1.5
12	7.8	5.8	e34	e40	e21	98	35	25	15	6.8	2.7	1.4
13	7.4	5.8	e30	75	e19	149	143	23	13	5.1	2.6	1.5
14	7.2	5.6	e26	65	e18	192	84	21	9.7	4.3	2.3	1.5
15	7.0	5.6	e23	74	e17	198	67	20	8.4	5.0	2.4	1.4
16	6.6	5.5	e23	74	e17	171	59	19	7.2	4.8	2.4	1.3
17	6.3	5.4	22	71	e18	143	53	18	6.5	5.5	2.1	1.4
18	6.4	5.3	25	62	e18	120	49	17	6.1	6.2	2.0	1.5
19	6.2	5.3	24	57	e19	101	58	17	5.4	5.0	1.8	1.3
20	6.3	5.1	21	150	e20	88	51	17	5.1	4.2	1.7	1.3
21	6.3	5.9	20	199	e22	96	48	15	4.8	3.7	1.6	1.3
22	6.1	8.6	19	143	e17	95	48	14	4.6	3.5	1.5	2.1
23	6.1	7.4	20	109	e18	80	44	13	4.5	3.5	1.5	3.8
24	5.8	6.8	218	93	e32	68	41	12	4.1	4.1	1.4	2.4
25	5.8	6.7	260	81	e27	59	38	16	3.9	3.9	1.3	2.0
26	5.5	6.8	144	71	e26	53	35	17	4.3	4.2	1.3	2.0
27	5.4	e6.8	103	e58	e25	49	33	15	4.1	4.8	1.3	1.9
28	5.2	e26	86	e56	e35	46	37	13	3.5	4.3	1.4	1.7
29	5.2	39	e66	e50	---	44	34	13	3.3	3.5	1.2	1.6
30	5.0	24	e60	e46	---	44	31	13	3.1	3.1	1.2	1.6
31	5.1	---	e56	e42	---	46	---	12	---	2.7	1.2	---
TOTAL	236.1	267.5	1612	2083	673	2826	1380	625	236.0	159.2	74.8	47.9
MEAN	7.62	8.92	52.0	67.2	24.0	91.2	46.0	20.2	7.87	5.14	2.41	1.60
MAX	15	39	260	199	38	247	143	33	21	14	5.5	3.8
MIN	5.0	5.1	17	31	17	23	31	12	3.1	2.7	1.2	1.1
CFSM	.24	.28	1.60	2.07	.74	2.81	1.42	.62	.24	.16	.07	.05
IN.	.27	.31	1.85	2.39	.77	3.24	1.58	.72	.27	.18	.09	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	23.5	43.7	42.7	42.7	38.5	86.5	138	61.0	22.7	10.2
MAX	100	79.0	57.0	111	116	140	297	152	70.7	28.3
(WY)	1988	1991	1991	1993	1990	1987	1993	1989	1989	1989
MIN	3.25	8.92	14.3	16.0	12.8	38.4	46.0	20.2	5.80	2.75
(WY)	1994	1995	1990	1989	1993	1989	1995	1995	1991	1993

e Estimated

## HUDSON RIVER BASIN

01350080 MANOR KILL AT WEST CONESVILLE NEAR GILBOA, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1986 - 1995	
ANNUAL TOTAL	17273.9		10220.5			
ANNUAL MEAN	47.3		28.0		43.8	
HIGHEST ANNUAL MEAN					57.3	1987
LOWEST ANNUAL MEAN					28.0	1995
HIGHEST DAILY MEAN	525	Apr 14	260	Dec 25	1640	Apr 4 1987
LOWEST DAILY MEAN	3.1	Sep 22	1.1	Sep 6	1.1	Aug 30 1993
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 16	1.2	Sep 2	1.2	Aug 27 1993
ANNUAL RUNOFF (CFSM)	1.46		.86		1.35	
ANNUAL RUNOFF (INCHES)	19.83		11.73		18.36	
10 PERCENT EXCEEDS	142		66		100	
50 PERCENT EXCEEDS	17		14		20	
90 PERCENT EXCEEDS	5.6		1.8		3.3	



## HUDSON RIVER BASIN

01350100 SCHOHARIE RESERVOIR NEAR GRAND GORGE, NY

LOCATION.--Lat 42°21'21", long 74°26'42", Schoharie County, Hydrologic Unit 02020005, in Shandaken Tunnel intake house on Intake Road, 1.6 mi north of junction of Intake Road and State Highway 23, 2.5 mi upstream from Gilboa Dam, and 2.6 mi east of Grand Gorge.

DRAINAGE AREA.--315 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1973 to current year. Monthly contents only published as "at Gilboa" for September 1928 to December 1972.

REVISED RECORDS.--WDR NY-86-1: 1956 (maximum elevation). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Supplementary nonrecording gage used for periods when reservoir elevation is below 1,072.50 ft. Datum of gage is sea level (levels by Board of Water Supply, City of New York).

REMARKS.--Reservoir is formed by masonry and earth dam. Storage began July 24, 1926. Usable capacity 19,583 mil gal between minimum operating level, elevation, 1,050.00 ft, and crest of spillway, elevation, 1,130.00 ft. Dead storage below elevation 1,050.00, 1,968 mil gal. Figures given herein represent usable contents. Reservoir impounds water except for periods of spilling, for diversion through Shandaken Tunnel into Esopus Creek to Ashokan Reservoir, for New York City water supply.

COOPERATION.--Capacity table and once-daily nonrecording gage readings provided by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,136.26 ft, Oct. 16, 1955, contents, 22,058 mil gal; minimum observed (after initial filling), 1,062.00 ft, Aug. 20, 1970, contents, 1,520 mil gal.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,130.94 ft, Jan. 21, contents, 19,946 mil gal; minimum elevation, 1,083.62 ft, Sept. 30, contents, 5,829 mil gal.

Capacity table (elevation, in feet, and usable contents in million gallons)

1,063.0	1,670	1,120.0	16,100
1,080.0	4,970	1,133.0	20,700

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1124.01	1118.65	1102.33	1119.76	1128.25	1107.35	1130.11	1128.12	1112.31	1107.99	1102.40	1093.32
2	1123.85	1118.46	1102.21	1120.60	1127.90	1107.01	1130.12	1128.33	1111.88	1108.04	1102.14	1092.98
3	1123.65	1118.14	1101.97	1120.95	1127.27	1106.39	1130.07	1128.52	1110.91	1107.99	1101.94	1092.61
4	1123.77	1117.70	1101.66	1121.06	1126.66	1105.67	1130.09	1128.65	1110.03	1107.90	1101.67	1092.27
5	1123.97	1117.21	1101.46	1120.90	1125.98	1104.91	1130.17	1128.78	1109.85	1107.81	1101.41	1091.93
6	1124.12	1116.70	1102.46	1120.54	1125.21	1104.20	1130.10	1128.99	1109.80	1107.71	1101.20	1091.58
7	1124.19	1116.18	1103.20	1120.77	1124.42	1103.77	1130.08	1129.11	1109.72	1107.64	1101.02	1091.22
8	1124.26	1115.68	1103.84	1121.58	1123.70	1104.76	1129.96	1129.16	1109.62	1107.58	1100.79	1090.86
9	1124.30	1115.15	1104.05	1121.68	1122.94	1113.11	1129.93	1129.18	1109.49	1107.48	1100.52	1090.53
10	1124.36	1114.57	1104.07	1121.45	1122.09	1117.88	1130.08	1129.19	1109.35	1107.37	1100.23	1090.20
11	1124.44	1113.85	1104.33	1121.12	1121.18	1120.79	1129.75	1129.20	1109.21	1107.27	1099.94	1089.84
12	1124.39	1113.01	1104.74	1120.84	1120.40	1122.97	1129.75	1129.01	1109.19	1107.21	1099.65	1089.48
13	1124.22	1112.16	1104.65	1121.24	1119.47	1125.18	1129.96	1128.62	1109.25	1107.02	1099.35	1089.14
14	1124.06	1111.32	1104.45	1121.86	1118.50	1128.20	1130.05	1128.20	1109.24	1106.79	1099.04	1088.81
15	1123.84	1110.44	1104.16	1122.55	1117.52	1130.36	1129.85	1127.72	1109.17	1106.55	1098.77	1088.46
16	1123.59	1109.57	1103.75	1125.45	1116.64	1130.55	1129.58	1126.96	1109.05	1106.31	1098.55	1088.10
17	1123.33	1108.69	1103.31	1127.58	1115.84	1130.50	1129.20	1126.05	1109.00	1106.14	1098.25	1087.79
18	1123.06	1107.79	1102.94	1128.77	1114.95	1130.49	1128.75	1125.14	1108.95	1105.96	1097.95	1087.47
19	1122.79	1106.90	1102.57	1129.68	1114.03	1130.43	1128.40	1124.21	1108.90	1105.73	1097.66	1087.12
20	1122.53	1106.03	1102.12	1130.30	1113.16	1130.36	1128.33	1123.27	1108.87	1105.48	1097.35	1086.78
21	1122.26	1105.14	1101.53	1130.81	1112.36	1130.33	1128.04	1122.32	1108.81	1105.19	1097.04	1086.44
22	1121.99	1104.36	1100.94	1130.64	1111.52	1130.32	1127.76	1121.33	1108.74	1104.91	1096.71	1086.13
23	1121.70	1103.75	1100.34	1130.48	1110.60	1130.30	1127.42	1120.28	1108.67	1104.64	1096.36	1085.89
24	1121.39	1103.05	1101.47	1130.32	1110.02	1130.27	1127.01	1119.22	1108.59	1104.41	1096.03	1085.66
25	1121.07	1102.23	1110.04	1130.23	1109.54	1130.26	1126.82	1118.21	1108.51	1104.17	1095.68	1085.38
26	1120.73	1101.38	1114.54	1130.16	1108.81	1130.23	1126.97	1117.23	1108.45	1103.91	1095.33	1085.09
27	1120.41	1100.53	1116.61	1130.09	1107.92	1130.20	1127.11	1116.23	1108.37	1103.68	1095.00	1084.79
28	1120.06	1099.99	1118.02	1129.83	1107.30	1130.16	1127.38	1115.18	1108.28	1103.46	1094.66	1084.46
29	1119.70	1101.44	1118.99	1129.42	---	1130.09	1127.69	1114.14	1108.18	1103.22	1094.32	1084.12
30	1119.34	1102.19	1119.26	1128.95	---	1130.11	1127.92	1113.23	1108.06	1102.97	1093.97	1083.79
31	1118.98	---	1119.27	1128.62	---	1130.11	---	1112.67	---	1102.69	1093.63	---
MEAN	1122.72	1109.74	1105.98	1125.43	1118.01	1122.17	1128.95	1124.08	1109.28	1105.97	1098.34	1088.41
MAX	1124.44	1118.65	1119.27	1130.81	1128.25	1130.55	1130.17	1129.20	1112.31	1108.04	1102.40	1093.32
MIN	1118.98	1099.99	1100.34	1119.76	1107.30	1103.77	1126.82	1112.67	1108.06	1102.69	1093.63	1083.79
†	15716	10731	15892	19009	12177	19637	18872	13724	12377	10799	8320	5829
††	-86.4	-257	+258	+156	-378	+372	-39.4	-257	-69.5	-78.8	-124	-128

CAL YR 1994  
WTR YR 1995 MEAN 1113.26 MAX 1130.81 MIN 1083.79 †† -49.2

† Contents, in million gallons, at 2400 hours on last day of month.  
†† Change in contents, equivalent in cubic feet per second.

NOTE: Mean elevations for Jan. 15-19, 31, Feb. 1, 12, Mar. 12-15, 29, and Apr. 9-14 computed based on observations at 0800 hours.



## HUDSON RIVER BASIN

01350120 PLATTER KILL AT GILBOA, NY

LOCATION.--Lat 42°24'22", long 74°26'51", Schoharie County, Hydrologic Unit 02020005, on right bank, 0.2 mi downstream from County Highway 17, and 0.6 mi northwest of Gilboa.

DRAINAGE AREA.--10.9 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1975 to current year. Occasional discharge measurements, water years 1969-73.

REVISED RECORDS.--WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,080 ft above sea level, from topographic map. Prior to October 1, 1990, at site 0.2 mi upstream at datum about 30 ft higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--20 years, 14.0 ft<sup>3</sup>/s, 17.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 5.24 ft in gage well, about 6.2 ft, from floodmarks, site and datum then in use, 6.4 ft, from floodmarks, present site and datum, from rating curve extended above 280 ft<sup>3</sup>/s on basis of flow-through-culvert measurement of peak flow; minimum discharge, 0.32 ft<sup>3</sup>/s, Nov. 18, 1980 (result of freezeup).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 6	0530	ice jam	*3.28	Mar. 10	1315	*103	3.04

Minimum discharge, 1.0 ft<sup>3</sup>/s, Sept. 21, gage height, 1.76 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	4.0	5.8	e10	e11	e10	13	11	4.1	5.4	2.1	1.7
2	6.9	4.9	5.3	e9.4	e10	e9.0	10	10	3.8	5.1	3.8	1.4
3	6.0	3.6	5.1	e9.0	e9.6	e8.0	9.0	9.9	8.5	2.8	4.0	1.3
4	5.4	3.2	5.0	e8.6	e9.0	e9.0	e10	9.3	6.1	2.3	3.6	1.3
5	4.9	2.9	7.4	e8.0	e8.4	11	e9.5	10	4.6	2.4	4.1	1.2
6	4.6	2.8	8.4	e7.4	e8.0	12	e9.0	10	3.9	3.1	4.8	1.2
7	4.3	2.9	9.3	e11	e8.0	15	9.2	9.4	3.3	4.3	3.3	1.2
8	4.1	2.7	9.2	e10	e9.0	28	9.0	8.8	3.1	3.8	2.6	1.2
9	4.0	2.6	8.7	e9.0	e9.2	36	9.7	8.1	2.9	2.9	2.5	2.7
10	4.0	2.4	8.6	e8.0	e9.0	74	11	8.3	2.5	2.3	2.3	1.7
11	3.8	2.4	9.9	e9.0	e8.0	52	10	8.6	2.7	5.7	2.2	1.3
12	3.6	2.2	e9.0	e13	e7.4	15	10	8.8	4.0	7.0	2.2	1.2
13	3.2	2.2	e8.8	e18	e6.8	21	23	8.3	3.0	4.5	2.1	1.7
14	3.0	2.1	e8.0	e16	e6.2	30	22	8.0	2.6	3.4	1.9	1.5
15	2.9	2.0	e7.0	e17	e5.8	30	17	7.8	2.2	5.6	2.2	1.2
16	2.7	1.9	e6.0	e16	e5.6	27	14	7.5	1.9	5.8	2.0	1.3
17	2.7	1.8	e6.0	e15	e5.6	21	15	7.4	1.8	11	1.8	1.3
18	2.7	1.8	e6.8	e14	e6.0	17	15	7.3	1.7	8.3	1.7	1.4
19	2.8	1.8	e6.0	e11	e6.8	15	15	6.6	1.6	5.7	1.7	1.2
20	2.9	1.8	e5.8	e24	e7.0	14	16	6.9	1.6	4.5	1.5	1.2
21	2.7	2.7	e5.6	e60	e6.2	15	16	6.8	1.6	3.9	1.5	1.2
22	2.7	2.9	e5.4	e44	e5.8	14	16	6.8	1.5	3.6	1.5	4.0
23	2.7	2.5	e6.8	e30	e6.4	15	15	6.6	1.4	3.4	1.4	3.6
24	2.8	2.3	22	e24	e9.0	19	14	6.6	1.4	4.1	1.4	1.5
25	2.9	2.3	29	e20	e8.0	17	14	7.7	1.3	4.0	1.4	1.4
26	2.9	2.3	20	e18	e7.0	16	13	9.3	1.5	4.0	1.4	1.5
27	2.9	3.5	16	e16	e7.0	15	12	6.6	1.4	3.9	1.5	1.4
28	2.8	8.1	e14	e15	e11	14	13	5.4	1.3	3.4	1.5	1.3
29	2.8	7.4	e13	e14	---	15	12	5.4	1.3	3.0	1.3	1.3
30	2.7	6.6	e12	e13	---	13	11	4.8	1.3	2.6	1.4	1.3
31	2.8	---	e11	e12	---	14	---	4.5	---	2.3	1.5	---
TOTAL	111.4	92.6	300.9	509.4	216.8	621.0	392.4	242.5	79.9	134.1	68.2	46.7
MEAN	3.59	3.09	9.71	16.4	7.74	20.0	13.1	7.82	2.66	4.33	2.20	1.56
MAX	6.9	8.1	29	60	11	74	23	11	8.5	11	4.8	4.0
MIN	2.7	1.8	5.0	7.4	5.6	8.0	9.0	4.5	1.3	2.3	1.3	1.2
CFSM	.33	.28	.89	1.51	.71	1.84	1.20	.72	.24	.40	.20	.14
IN.	.38	.32	1.03	1.74	.74	2.12	1.34	.83	.27	.46	.23	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	9.58	10.7	12.5	13.1	17.2	31.0	34.9	18.7	9.71	4.49	3.25	4.32									
MAX	53.0	36.0	28.2	48.4	46.4	75.5	96.8	40.6	23.6	7.94	8.66	26.0									
(WY)	1978	1978	1984	1978	1976	1979	1987	1984	1986	1979	1978	1977									
MIN	1.47	2.20	2.31	1.84	2.18	8.67	11.5	6.05	2.66	1.70	1.35	1.22									
(WY)	1984	1985	1983	1981	1980	1989	1985	1985	1995	1993	1993	1980									

e Estimated

## HUDSON RIVER BASIN

01350120 PLATTER KILL AT GILBOA, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995	
ANNUAL TOTAL	4831.4		2815.9		14.0	
ANNUAL MEAN	13.2		7.71		26.6	1978
HIGHEST ANNUAL MEAN					5.43	1985
LOWEST ANNUAL MEAN					467	Mar 15 1986
HIGHEST DAILY MEAN	99	Apr 7	74	Mar 10	.89	Sep 12 1980
LOWEST DAILY MEAN	1.8	Aug 12	1.2	Sep 5	.95	Aug 24 1980
ANNUAL SEVEN-DAY MINIMUM	1.9	Nov 14	1.3	Sep 2	1.29	
ANNUAL RUNOFF (CFSM)	1.21		.71		17.46	
ANNUAL RUNOFF (INCHES)	16.49		9.61		33	
10 PERCENT EXCEEDS	30		15		7.6	
50 PERCENT EXCEEDS	7.4		5.8		1.7	
90 PERCENT EXCEEDS	2.7		1.5			

## HUDSON RIVER BASIN

01350140 MINE KILL NEAR NORTH BLENHEIM, NY

LOCATION.--Lat 42°25'44", long 74°28'24", Schoharie County, Hydrologic Unit 02020005, on left bank 200 ft upstream from bridge on State Highway 30, 0.6 mi upstream from mouth, and 3.0 mi southwest of North Blenheim.

DRAINAGE AREA.--16.2 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1974 to current year. Occasional discharge measurements, water years 1969-74.

REVISED RECORDS.--WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Sept. 23, 1975. Elevation of gage is 1,060 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--20 years (water years 1976-95), 23.8 ft<sup>3</sup>/s, 19.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,700 ft<sup>3</sup>/s, July 16, 1995, gage height, 4.57 ft, from floodmarks, from rating curve extended above 560 ft<sup>3</sup>/s on basis of step-backwater analysis of peak flow; minimum discharge, 0.10 ft<sup>3</sup>/s, Aug. 27, 28, 29, 30, 1980; minimum gage height, 0.48 ft, Aug. 31, Sept. 1, 2, 3, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
July 16	Unknown	a*1,700	b*4.57	No other peak greater than base discharge.			

a From rating curve extended as explained above.  
b From floodmarks.

Minimum discharge, 0.28 ft<sup>3</sup>/s, Sept. 8, 9, gage height, 0.51 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.8	7.7	e15	e14	e15	15	11	3.8	8.0	2.0	.59
2	6.7	9.5	6.8	e14	e13	e13	12	10	4.4	5.6	2.0	.60
3	4.0	5.9	6.4	e13	e12	e11	12	e10	18	2.1	3.8	.45
4	2.7	3.8	5.9	e12	e11	e9.0	22	e9.0	8.5	1.5	2.3	.37
5	2.4	3.2	e12	e12	e10	e8.6	19	11	5.5	1.2	3.3	.34
6	2.1	2.8	e15	e11	e9.8	e6.0	e16	11	4.3	1.2	8.4	.32
7	1.8	3.9	e13	e15	e9.8	e30	15	8.4	3.5	1.6	4.0	.31
8	1.8	3.3	e11	e13	e11	e170	13	7.4	3.1	1.6	2.4	.29
9	1.7	2.9	e10	e12	e11	e100	16	6.8	3.0	1.2	1.8	1.1
10	2.7	2.6	e11	e10	e11	71	19	6.9	4.0	1.2	1.5	1.3
11	2.4	2.3	e14	e11	e10	59	17	8.0	3.3	6.5	1.4	.70
12	2.1	2.1	e9.0	e15	e9.0	55	19	8.8	13	13	1.5	.51
13	1.9	2.1	e7.8	e44	e8.2	92	63	7.7	7.8	3.4	1.8	.72
14	1.8	2.1	e7.0	40	e7.4	104	38	6.6	5.2	2.2	2.5	.99
15	1.7	2.0	e6.8	41	e7.0	90	30	6.6	3.9	3.4	1.8	.68
16	1.5	2.0	e7.0	39	e6.8	74	25	6.3	3.0	e150	2.4	.50
17	1.5	1.8	e7.4	31	e6.8	59	15	5.5	2.4	e120	1.4	.49
18	1.5	1.8	e9.6	25	e7.2	50	22	5.5	2.2	e40	1.1	.62
19	1.5	1.9	e8.8	24	e8.0	42	32	5.4	1.7	e20	.91	.55
20	1.7	1.7	e8.0	89	e8.8	32	25	5.1	1.5	12	.77	.42
21	1.7	2.6	e7.8	102	e8.0	39	21	4.5	1.3	9.1	.87	.43
22	1.6	4.6	e7.6	69	e6.8	38	20	4.9	1.2	7.8	.85	1.6
23	1.7	3.0	e8.2	52	e8.2	31	18	4.2	1.2	7.2	.56	3.9
24	1.6	2.3	71	41	e14	24	16	4.1	1.1	9.1	.49	1.4
25	1.6	2.7	72	34	e12	22	14	6.0	1.0	8.3	.41	1.0
26	1.5	2.5	38	29	e9.0	19	13	10	1.2	7.8	.37	.98
27	1.5	1.8	28	e22	e8.0	17	12	8.3	1.1	7.3	.41	1.0
28	1.5	22	e22	e20	e16	16	14	6.2	.89	5.6	.43	.84
29	1.5	19	e20	e18	---	15	12	5.9	.79	4.3	.42	.70
30	1.5	10	e18	e16	---	16	11	6.7	.77	3.4	.37	.57
31	1.5	---	e15	e15	---	18	---	5.1	---	2.6	.34	---
TOTAL	64.2	131.0	491.8	904	273.8	1345.6	596	222.9	112.65	468.2	52.60	24.27
MEAN	2.07	4.37	15.9	29.2	9.78	43.4	19.9	7.19	3.75	15.1	1.70	.81
MAX	6.7	22	72	102	16	170	63	11	18	150	8.4	3.9
MIN	1.5	1.7	5.9	10	6.8	6.0	11	4.1	.77	1.2	.34	.29
CFSM	.13	.27	.98	1.80	.60	2.68	1.23	.44	.23	.93	.10	.05
IN.	.15	.30	1.13	2.08	.63	3.09	1.37	.51	.26	1.08	.12	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	14.0	21.4	25.1	22.9	29.7	56.1	60.8	29.6	12.7	4.61	3.40	6.11									
MAX	67.3	48.6	59.7	74.3	86.5	126	242	76.9	36.0	15.1	12.1	42.3									
(WY)	1978	1978	1978	1979	1981	1977	1993	1984	1986	1995	1994	1977									
MIN	.36	3.62	5.79	1.77	1.25	20.8	19.9	7.19	.93	.53	.43	.26									
(WY)	1983	1983	1983	1981	1980	1989	1995	1995	1991	1993	1981	1982									

e Estimated



## HUDSON RIVER BASIN

01350140 MINE KILL NEAR NORTH BLENHEIM, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995	
ANNUAL TOTAL	7820.69		4687.02			
ANNUAL MEAN	21.4		12.8		23.8	
HIGHEST ANNUAL MEAN					40.9	1993
LOWEST ANNUAL MEAN					12.7	1985
HIGHEST DAILY MEAN	218	Apr 7	170	Mar 8	1030	Mar 30 1993
LOWEST DAILY MEAN	.88	Aug 12	.29	Sep 8	.10	Aug 28 1980
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 6	.38	Sep 2	.11	Aug 24 1980
ANNUAL RUNOFF (CFSM)	1.32		.79		1.47	
ANNUAL RUNOFF (INCHES)	17.96		10.76		19.93	
10 PERCENT EXCEEDS	68		30		55	
50 PERCENT EXCEEDS	7.4		6.8		11	
90 PERCENT EXCEEDS	1.6		.90		.90	

## HUDSON RIVER BASIN

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2,300 ft upstream from West Kill, and 1.2 mi upstream from bridge on State Highway 30 in North Blenheim.

DRAINAGE AREA.--358 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year. Occasional measurements, water years 1969-70.

REVISED RECORDS.--WDR NY-87-1: 1984(M). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 800 ft above sea level, from topographic map. Prior to Oct. 1, 1971, at datum 1.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 315 mi<sup>2</sup>, except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--25 years, 388 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,200 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 16.70 ft, from floodmarks, from rating curve extended above 12,000 ft<sup>3</sup>/s on basis of computation of peak flow through radial gates; minimum discharge, no flow, Oct. 12, 15, Oct. 16 to Nov. 1, Nov. 2, 1972, Sept. 12, 13, 14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,480 ft<sup>3</sup>/s, Jan. 21, gage height, 6.73 ft; minimum, 3.6 ft<sup>3</sup>/s, Sept. 19, 20, 21, 24, 27, gage height, 0.85 ft; minimum daily discharge, 3.7 ft<sup>3</sup>/s, Sept. 21, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	7.2	7.9	82	21	118	239	46	7.7	e11	8.4	7.5
2	6.9	7.3	8.0	90	27	58	141	41	8.4	e18	8.5	7.7
3	6.9	7.3	8.2	41	29	23	144	30	50	e10	8.4	7.0
4	7.3	7.6	7.3	27	29	22	185	12	e24	e8.0	8.4	6.5
5	7.4	7.8	10	24	79	20	193	9.6	e19	e7.0	9.4	6.9
6	7.6	7.1	10	25	25	119	95	9.5	e14	e7.2	25	6.6
7	7.8	7.2	9.6	54	25	81	53	10	e12	e7.5	18	6.8
8	8.1	7.4	9.6	92	15	353	53	24	e11	e8.0	8.0	7.5
9	7.2	7.5	28	e12	21	205	54	23	e10	e7.0	7.0	8.5
10	7.6	7.7	30	e12	22	114	99	24	e9.0	e9.0	7.1	6.7
11	7.6	8.1	60	e14	20	112	87	24	e9.0	e8.0	7.5	6.8
12	7.8	8.1	57	e11	48	119	63	24	e19	9.7	8.0	6.7
13	7.8	7.0	32	102	22	181	298	24	e23	8.3	6.9	7.1
14	7.9	7.1	33	61	18	264	245	22	e13	8.3	6.9	7.2
15	8.2	7.1	32	72	19	1500	84	18	e11	9.4	7.4	7.3
16	7.3	6.7	30	136	21	1940	54	11	e10	99	9.4	7.6
17	7.8	6.7	14	72	49	1620	56	7.6	e9.0	423	7.6	6.7
18	8.4	6.4	15	51	20	1270	57	7.7	e8.0	121	7.6	5.5
19	7.7	6.1	22	39	32	1090	77	8.1	e7.5	45	7.7	4.2
20	7.8	5.4	23	969	56	929	79	7.9	e7.0	20	6.8	3.8
21	8.0	7.0	24	2830	57	917	72	7.0	e6.5	24	6.8	3.7
22	8.2	7.3	24	1840	20	804	17	7.2	e6.0	9.4	7.4	4.8
23	7.3	7.6	25	1250	20	711	41	7.1	e6.0	8.3	7.4	4.4
24	7.6	8.4	170	678	104	589	44	7.5	e6.5	8.5	7.4	4.6
25	8.1	7.8	217	291	74	384	45	7.7	e7.0	16	7.4	5.1
26	8.2	7.7	69	202	21	359	37	13	e7.5	25	7.5	4.3
27	10	7.4	48	156	19	352	34	8.4	e7.0	27	6.6	3.7
28	8.9	9.5	63	102	104	257	29	12	e6.5	17	6.6	3.9
29	8.3	7.8	82	e10	---	260	28	20	e5.5	14	7.1	4.1
30	7.0	7.7	28	e10	---	236	26	26	e6.0	12	7.4	4.2
31	7.4	---	11	e11	---	210	---	22	---	11	7.4	---
TOTAL	242.5	221.0	1207.6	9366	1017	15217	2729	521.3	346.1	1016.6	263.0	177.4
MEAN	7.82	7.37	39.0	302	36.3	491	91.0	16.8	11.5	32.8	8.48	5.91
MAX	10	9.5	217	2830	104	1940	298	46	50	423	25	8.5
MIN	6.9	5.4	7.3	10	15	20	17	7.0	5.5	7.0	6.6	3.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1995, BY WATER YEAR (WY)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	151	226	365	329	343	837	1366	704	249	58.2	10.7	20.3													
MAX	1474	1511	1522	1610	1468	2532	3685	1599	1561	452	29.1	140													
(WY)	1978	1978	1973	1979	1976	1979	1987	1984	1972	1973	1978	1977													
MIN	.15	4.56	4.88	6.17	15.5	47.6	42.9	16.8	8.37	6.83	1.53	.25													
(WY)	1973	1983	1983	1983	1987	1989	1981	1995	1991	1977	1973	1973													

e Estimated

## HUDSON RIVER BASIN

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1971 - 1995	
ANNUAL TOTAL	101092.6		32324.5			
ANNUAL MEAN	277		88.6		388	
HIGHEST ANNUAL MEAN					834	1978
LOWEST ANNUAL MEAN					21.7	1985
HIGHEST DAILY MEAN	6800	Apr 14	2830	Jan 21	19900	Apr 4 1987
LOWEST DAILY MEAN	5.4	Nov 20	3.7	Sep 21	.00	Oct 15 1972
ANNUAL SEVEN-DAY MINIMUM	6.5	Nov 15	4.3	Sep 24	.00	Oct 15 1972
10 PERCENT EXCEEDS	736		162		1070	
50 PERCENT EXCEEDS	14		11		27	
90 PERCENT EXCEEDS	7.4		6.9		4.9	

## HUDSON RIVER BASIN

01350355 SCHOHARIE CREEK AT BREAKABEEN, NY

LOCATION.--Lat 42°32'13", long 74°24'39", Schoharie County, Hydrologic Unit 02020005, on left bank 100 ft downstream from bridge on State Highway 30, 0.9 mi north of Breakabeen, and 1.1 mi downstream from Keyser Kill.

DRAINAGE AREA.--444 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR NY-81-1: 1980(M). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 686.79 ft above sea level (Soil Conservation Service Benchmark).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 315 mi<sup>2</sup>, except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--20 years, 492 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 72,200 ft<sup>3</sup>/s, Apr. 5, 1987, gage height, about 19.5 ft, from reconstructed graph, 20.0 ft, from floodmarks, from rating curve extended above 20,000 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum discharge, 1.7 ft<sup>3</sup>/s, Oct. 14, 1980; minimum gage height, 0.25 ft, Sept. 26, 1985; minimum daily discharge, 5.8 ft<sup>3</sup>/s, Sept. 13, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,020 ft<sup>3</sup>/s, Jan. 21, gage height, 5.04 ft; minimum, 7.3 ft<sup>3</sup>/s, Sept. 19, 20, 21, 22, gage height, 0.74 ft; minimum daily discharge, 7.3 ft<sup>3</sup>/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	21	47	e170	e65	291	360	118	38	35	17	11
2	26	34	43	e230	e60	188	233	121	32	53	16	10
3	25	36	40	e120	e75	e120	218	102	95	23	17	10
4	23	30	38	e90	e90	e110	312	76	73	19	16	9.5
5	22	28	69	e70	e120	e110	314	77	56	17	17	8.4
6	21	26	150	e80	e85	216	204	80	49	19	32	8.3
7	21	25	112	e130	e70	286	151	68	31	19	40	8.2
8	21	25	114	e170	e60	1200	147	73	30	21	18	8.3
9	20	24	99	e80	e70	806	147	71	28	18	15	12
10	20	23	106	e60	e75	521	196	70	26	32	14	14
11	21	23	151	e70	e80	406	194	73	26	21	14	11
12	21	22	143	e80	e95	382	161	79	45	43	14	10
13	20	22	81	246	e85	574	625	75	56	23	14	11
14	20	21	102	228	e75	828	557	69	31	17	12	11
15	19	21	97	242	e80	2120	270	64	27	20	12	11
16	19	20	78	324	e90	2670	211	55	24	22	17	11
17	19	20	76	259	e110	2290	198	48	21	824	15	11
18	19	20	68	203	e90	1870	189	46	21	215	12	10
19	20	19	77	176	e80	1600	245	46	18	83	12	8.8
20	20	19	72	1040	e120	1390	237	43	16	53	10	7.4
21	20	19	68	3500	e130	1360	221	40	15	40	9.1	7.3
22	21	25	67	2440	e80	1280	156	40	15	31	9.5	9.2
23	21	25	68	1790	e70	1100	154	38	14	24	9.0	21
24	20	23	379	1150	e190	923	157	35	15	24	9.0	15
25	19	23	606	571	e170	663	152	40	16	26	8.3	12
26	19	24	e300	e360	e100	582	133	53	16	37	8.8	12
27	19	20	e200	e250	e95	563	127	51	16	54	8.8	11
28	19	49	e180	e170	e210	416	127	41	14	38	8.3	9.1
29	18	93	e190	e100	---	401	119	53	13	28	8.3	8.8
30	18	58	e100	e80	---	367	108	66	13	23	8.8	8.7
31	18	---	e80	e70	---	329	---	61	---	20	8.9	---
TOTAL	632	838	4001	14549	2720	25962	6623	1972	890	1922	430.8	316.0
MEAN	20.4	27.9	129	469	97.1	837	221	63.6	29.7	62.0	13.9	10.5
MAX	26	93	606	3500	210	2670	625	121	95	824	40	21
MIN	18	19	38	60	60	110	108	35	13	17	8.3	7.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	281	376	389	366	445	1153	1702	806	276	52.1	26.4	47.4									
MAX	1973	1909	1528	2009	1698	3354	4522	2068	1255	238	64.3	341									
(WY)	1978	1978	1978	1978	1976	1979	1987	1984	1982	1976	1994	1977									
MIN	10.8	20.9	31.7	18.8	59.1	164	141	63.6	18.6	14.0	9.83	9.69									
(WY)	1983	1983	1983	1981	1992	1989	1981	1995	1991	1993	1980	1982									

e Estimated

## HUDSON RIVER BASIN

01350355 SCHOHARIE CREEK AT BREAKABEEN, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995	
ANNUAL TOTAL	141439		60855.8		492	
ANNUAL MEAN	388		167		1064	1978
HIGHEST ANNUAL MEAN					89.9	1985
LOWEST ANNUAL MEAN					26500	Apr 5 1987
HIGHEST DAILY MEAN	7670	Apr 14	3500	Jan 21	5.8	Sep 13 1980
LOWEST DAILY MEAN	14	Aug 11	7.3	Sep 21	6.3	Sep 11 1980
ANNUAL SEVEN-DAY MINIMUM	16	Aug 6	8.6	Aug 25		
10 PERCENT EXCEEDS	955		341		1290	
50 PERCENT EXCEEDS	56		48		85	
90 PERCENT EXCEEDS	19		12		14	



## HUDSON RIVER BASIN

01351450 SCHOHARIE CREEK AT ESPERANCE, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°45'39", long 74°15'21", Schoharie County, Hydrologic Unit 02020005, just downstream from bridge on U.S. Highway 20 at Esperance.

DRAINAGE AREA.--875 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1993 to current year.

CHEMICAL DATA: 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENTS DATA: 1993 (a).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1993 (c), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (b), 1994 (d), 1995 (c).

REMARKS.--Water-discharge data based on records obtained for Schoharie Creek at Burtonsville (station 01351500).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 18...	1320	39	297	8.1	--	11.5	--	11.8	--	120	40	5.0
NOV 08...	1510	59	351	7.9	15.0	10.5	747	11.2	102	140	46	5.6
DEC 06...	1430	783	303	7.7	11.5	5.5	749	12.8	103	110	38	4.8
JAN 17...	1550	1350	217	7.6	7.5	5.0	753	12.1	96	84	28	3.3
FEB 14...	1410	E300	252	7.8	--	0.5	--	13.4	--	110	38	3.8
MAR 07...	1430	E1600	234	7.7	12.0	0.0	750	13.7	96	95	32	3.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT 18...	14	20	0.6	2.0	103	19	21	<0.1	1.7	173	165	<0.01
NOV 08...	17	21	0.6	2.5	103	24	26	<0.1	2.0	203	195	<0.01
DEC 06...	14	21	0.6	2.1	91	19	24	<0.1	2.8	177	164	<0.01
JAN 17...	10	20	0.5	1.7	56	13	20	<0.1	4.1	132	121	<0.01
FEB 14...	9.7	16	0.4	1.3	82	15	16	<0.1	4.0	149	144	<0.01
MAR 07...	13	23	0.6	1.6	70	13	25	<0.1	3.5	152	140	<0.01

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 18...	0.22	<0.02	0.20	0.20	<0.01	<0.01	<0.01	24	2	1.9	0.4
NOV 08...	0.49	<0.02	0.30	<0.20	0.02	<0.01	<0.01	21	4	2.4	0.4
DEC 06...	0.42	<0.02	0.20	0.20	0.03	0.02	<0.01	36	6	7.5	1.8
JAN 17...	0.48	<0.02	0.30	0.20	0.02	0.01	0.01	70	6	3.4	0.3
FEB 14...	0.72	0.02	<0.20	<0.20	<0.01	<0.01	<0.01	28	14	2.0	0.1
MAR 07...	0.58	0.03	0.20	<0.20	0.01	<0.01	0.02	59	10	2.9	0.5

E Estimated daily.

## HUDSON RIVER BASIN

01351450 SCHOHARIE CREEK AT ESPERANCE, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
18...	1320	39	6	0.63	97
NOV					
08...	1510	59	7	1.1	91
DEC					
06...	1430	783	8	17	85
JAN					
17...	1550	1350	9	33	99
FEB					
14...	1410	E300	1	0.81	89
MAR					
07...	1430	E1600	15	65	98

E Estimated daily.

## HUDSON RIVER BASIN

01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY

LOCATION.--Lat 42°48'00", long 74°15'48", Schenectady County, Hydrologic Unit 02020005, on right bank 0.4 mi south of Burtonsville, 2.7 mi north of Esperance, and 14.9 mi upstream from mouth.

DRAINAGE AREA.--886 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR NY-82-1: 1981(average discharge). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 507.98 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 315 mi<sup>2</sup>, except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--56 years, 1,002 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft<sup>3</sup>/s, Oct. 16, 1955, gage height, 12.39 ft; minimum, 2.4 ft<sup>3</sup>/s, Sept. 24, 25, 1964, gage height, 0.30 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 and 10.2 ft, respectively, from information provided by local resident. However, flood of October 1903 is known to have reached a higher stage than the 1936 or 1938 flood.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,140 ft<sup>3</sup>/s, Jan. 21, gage height, 3.70 ft; minimum, 9.3 ft<sup>3</sup>/s, Sept. 8, 9; minimum gage height, 0.48 ft, Aug. 27, 28, 29, 30, 31, Sept. 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	39	189	e600	e250	e1300	757	394	154	48	43	15
2	68	56	154	e850	e250	e800	699	400	124	66	37	13
3	69	84	133	e600	e300	e450	544	372	272	113	34	12
4	69	90	122	e380	e350	e400	617	335	988	79	32	12
5	63	78	154	e300	e450	e400	850	309	486	58	32	12
6	57	68	653	e300	e300	e750	657	357	292	49	34	12
7	55	61	546	e450	e260	e1600	558	313	222	45	33	11
8	50	56	512	e700	e240	e3900	493	263	174	46	51	10
9	48	54	392	e400	e260	3720	471	250	150	46	57	11
10	47	54	359	e300	e280	2220	553	236	133	44	42	12
11	44	50	e390	e250	e300	1780	640	244	121	40	34	14
12	44	46	e480	e300	e350	1510	567	275	132	45	32	16
13	43	46	e410	e850	e320	2150	1950	272	156	54	30	19
14	42	45	e350	e800	e300	3700	1900	246	163	60	29	18
15	42	45	e320	e900	e300	4450	1260	227	130	48	28	15
16	40	43	e300	e1300	e340	5150	987	214	109	39	35	14
17	38	42	267	1380	e400	4250	847	192	94	315	35	13
18	37	41	268	1050	e340	3470	764	179	82	358	29	13
19	38	41	e270	909	e300	2840	802	172	72	226	26	11
20	37	39	e260	1790	e400	2420	926	165	65	129	24	11
21	40	40	249	6670	e450	2230	779	156	58	100	22	11
22	43	44	238	4860	e300	2440	764	149	50	75	19	14
23	42	45	236	3460	e270	2050	649	146	46	67	17	17
24	41	47	734	2590	e700	1720	597	134	44	58	16	18
25	39	48	3110	1830	e600	1510	535	126	43	49	14	18
26	38	e46	1780	1300	e400	1170	480	135	42	50	12	20
27	36	e46	e1000	1090	e380	1080	437	155	42	98	12	18
28	35	59	e760	e700	e800	1010	456	153	41	104	12	15
29	35	211	e520	e400	---	853	505	149	39	87	11	13
30	35	263	e400	e300	---	831	424	176	37	64	11	12
31	34	---	e350	e270	---	814	---	177	---	50	12	---
TOTAL	1420	1927	15906	37879	10190	62968	22468	7071	4561	2710	855	420
MEAN	45.8	64.2	513	1222	364	2031	749	228	152	87.4	27.6	14.0
MAX	71	263	3110	6670	800	5150	1950	400	988	358	57	20
MIN	34	39	122	250	240	400	424	126	37	39	11	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

MEAN	399	706	956	905	1031	2348	3096	1534	620	194	111	153
MAX	5181	3414	3397	3365	4069	6627	8446	4045	3384	1302	1159	2330
(WY)	1956	1978	1973	1978	1976	1979	1993	1984	1972	1974	1955	1960
MIN	4.07	40.3	68.5	71.3	108	525	356	140	48.8	19.4	8.26	4.90
(WY)	1965	1942	1965	1981	1940	1981	1946	1941	1964	1959	1965	1964

e Estimated

## HUDSON RIVER BASIN

01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1940 - 1995	
ANNUAL TOTAL	329544		168375		1003	
ANNUAL MEAN	903		461		1952	1978
HIGHEST ANNUAL MEAN					320	1965
LOWEST ANNUAL MEAN						
HIGHEST DAILY MEAN	14500	Apr 14	6670	Jan 21	54100	Oct 16 1955
LOWEST DAILY MEAN	30	Sep 21	10	Sep 8	2.4	Sep 24 1964
ANNUAL SEVEN-DAY MINIMUM	33	Sep 17	11	Sep 3	2.6	Sep 21 1964
10 PERCENT EXCEEDS	2300		1080		2600	
50 PERCENT EXCEEDS	154		156		300	
90 PERCENT EXCEEDS	41		18		30	

## HUDSON RIVER BASIN

01356190 LISHA KILL NORTHWEST OF NISKAYUNA, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°47'00", long 73°51'27", Schenectady County, Hydrologic Unit 02020004, on left bank 20 ft downstream from culvert on U.S. Route 7, 5.6 mi east of Schenectady, and 1.0 mi upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--15.6 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 250 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--2 years, 12.6 ft<sup>3</sup>/s, 10.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 300 ft<sup>3</sup>/s, Apr. 14, 1994; maximum gage height, 3.47 ft, Jan. 2, 1994 (ice jam); minimum discharge, 0.17 ft<sup>3</sup>/s, Aug. 28, 31, 1995, gage height, 0.05 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 145 ft<sup>3</sup>/s, Mar. 8, gage height, 2.10 ft; maximum gage height, 2.26 ft, Mar. 7 (ice jam); minimum discharge, 0.17 ft<sup>3</sup>/s, Aug. 28, 31, gage height 0.05 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	6.3	5.8	19	e8.5	e30	10	8.4	2.9	.80	.40	9.1
2	6.1	5.6	4.7	16	e8.0	e20	8.6	7.7	2.7	1.0	.49	.63
3	3.9	3.0	4.3	e9.2	e7.8	e18	7.8	7.1	38	.75	2.0	.36
4	3.1	2.8	4.0	e8.2	e7.5	e16	18	6.6	19	.71	25	.28
5	3.0	2.9	34	e10	e7.2	e14	14	6.7	8.3	.69	5.3	.25
6	2.8	2.9	25	11	e7.0	e21	9.5	7.8	4.8	.49	24	.20
7	2.6	3.0	e12	e11	e6.8	e30	9.7	6.0	3.6	1.7	3.4	.18
8	2.5	2.7	e10	e10	e6.5	e60	8.9	4.8	2.9	5.7	1.6	.19
9	2.8	2.7	e9.0	e9.0	e6.2	e50	10	4.7	2.7	2.4	.96	6.4
10	7.2	2.5	e8.0	e8.5	e6.0	e38	16	4.8	2.1	.97	.78	1.9
11	3.6	2.5	17	e14	e5.9	e30	10	7.0	2.0	.97	.72	.42
12	2.6	2.4	e11	e22	e5.7	25	9.3	7.8	10	.97	.75	.38
13	2.4	2.5	7.2	61	e5.7	46	46	6.2	5.0	.88	.78	.52
14	2.4	2.6	6.3	32	e5.6	47	19	5.4	3.7	.67	.60	1.2
15	2.4	2.8	5.3	26	e5.6	40	14	7.2	2.4	2.0	.53	.43
16	2.6	2.6	e5.0	18	e5.5	30	11	6.1	1.9	1.2	.41	.34
17	2.2	2.4	e4.8	14	e5.4	24	10	4.8	1.8	.66	.38	.37
18	2.6	2.5	e4.6	10	e5.3	20	9.3	4.1	1.5	.58	.33	.47
19	2.5	2.6	e4.4	8.3	e5.2	18	13	4.3	1.3	.44	.24	.38
20	2.7	2.4	e4.2	46	e5.1	16	11	4.2	1.2	.39	.23	.36
21	3.2	2.9	e4.1	50	e7.0	20	11	3.3	1.1	.36	.21	.31
22	3.8	6.1	e4.0	27	e8.8	22	13	3.2	.83	.32	.25	9.9
23	2.7	3.2	4.5	18	e9.5	17	9.7	3.5	.89	.62	.19	15
24	2.6	3.1	18	14	e8.0	15	8.7	3.2	.96	2.6	.22	1.7
25	2.8	2.8	23	12	e7.2	13	7.6	3.9	.89	.74	.18	1.5
26	2.8	3.0	10	e11	e7.0	11	7.0	4.3	1.5	7.9	.18	1.3
27	2.6	2.6	e6.5	e10	e6.8	10	6.4	4.1	1.7	5.6	.18	1.0
28	2.7	15	e6.0	e10	e16	9.8	19	2.8	.93	1.5	.17	.86
29	2.5	15	e5.4	e9.5	---	9.3	13	6.8	.84	.92	.18	.76
30	2.6	8.2	e5.0	e9.0	---	11	10	12	1.0	.75	.18	.78
31	2.6	---	4.7	e8.8	---	13	---	4.2	---	.57	1.4	---
TOTAL	94.5	121.6	277.8	542.5	196.8	744.1	370.5	173.0	128.44	45.85	72.24	57.47
MEAN	3.05	4.05	8.96	17.5	7.03	24.0	12.3	5.58	4.28	1.48	2.33	1.92
MAX	7.2	15	34	61	16	60	46	12	38	7.9	25	15
MIN	2.2	2.4	4.0	8.2	5.1	9.3	6.4	2.8	.83	.32	.17	.18
CFSM	.20	.26	.57	1.12	.45	1.54	.79	.36	.27	.09	.15	.12
IN.	.23	.29	.66	1.29	.47	1.77	.88	.41	.31	.11	.17	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

MEAN	3.46	9.39	14.1	15.6	10.6	32.9	36.9	10.2	5.95	3.96	4.87	2.77
MAX	3.86	14.7	19.2	17.5	14.1	41.8	61.5	14.8	7.62	6.44	7.41	3.47
(WY)	1994	1994	1994	1995	1994	1994	1994	1994	1994	1994	1994	1994
MIN	3.05	4.05	8.96	13.8	7.03	24.0	12.3	5.58	4.28	1.48	2.33	1.92
(WY)	1995	1995	1995	1994	1995	1995	1995	1995	1995	1995	1995	1995

e Estimated



## HUDSON RIVER BASIN

01356190 LISHA KILL NORTHWEST OF NISKAYUNA, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1993 - 1995	
ANNUAL TOTAL	5675.6		2824.80			
ANNUAL MEAN	15.5		7.74		12.6	
HIGHEST ANNUAL MEAN					17.4	1994
LOWEST ANNUAL MEAN					7.74	1995
HIGHEST DAILY MEAN	180	Apr 14	61	Jan 13	180	Apr 14 1994
LOWEST DAILY MEAN	1.3	Sep 18	.17	Aug 28	.17	Aug 28 1995
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 16	.18	Aug 24	.18	Aug 24 1995
ANNUAL RUNOFF (CFSM)	1.00		.50		.80	
ANNUAL RUNOFF (INCHES)	13.53		6.74		10.93	
10 PERCENT EXCEEDS	41		18		26	
50 PERCENT EXCEEDS	6.0		4.8		5.7	
90 PERCENT EXCEEDS	2.5		.49		1.1	

## HUDSON RIVER BASIN

01356190 LISHA KILL NORTHWEST OF NISKAYUNA, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993 to current year.

CHEMICAL DATA: 1993 (c), 1994-95 (e).

MINOR ELEMENTS DATA: 1993 (a).

PESTICIDE DATA: 1993 (a), 1994 (d), 1995 (e).

ORGANIC DATA: OC--1993 (c), 1994-95 (e).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1993 (c), 1994-95 (e).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (c), 1994-95 (e).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1993 to current year.

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

REMARKS.--Also published as a NAWQA fish-tissue collection site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded (water years 1994-95), 28.5°C, July 14, 15, Aug. 1, 1995; minimum (water years 1994-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 28.5°C, July 14, 15, Aug. 1; minimum, 0.0°C on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
17...	1210	2.1	860	7.8	13.0	7.5	766	12.9	107	270	81	16
NOV												
07...	1140	3.0	814	7.8	10.0	9.5	763	10.1	88	260	80	15
DEC												
05...	1030	13	541	7.5	8.0	5.0	758	12.0	95	160	49	9.4
JAN												
30...	1210	E9.0	1030	7.6	-0.5	0.0	758	14.5	100	310	95	18
FEB												
13...	1150	E5.7	949	7.6	-6.0	0.0	764	12.5	86	300	91	17
MAR												
06...	1120	E21	865	7.5	4.5	0.0	760	12.5	86	210	64	13
APR												
18...	0930	9.1	838	7.6	10.5	8.5	757	13.1	113	240	73	14
MAY												
12...	1250	7.6	837	8.0	19.0	13.0	754	12.5	120	240	73	15
24...	1420	3.0	966	7.9	27.5	18.5	754	7.6	82	280	86	17
31...	1435	3.9	748	7.8	29.5	20.5	759	7.1	78	230	69	13
JUN												
06...	1405	4.7	784	7.8	34.0	21.0	754	10.0	113	230	72	13
14...	1450	3.9	775	8.0	20.0	18.5	755	7.9	84	240	73	13
23...	1115	0.72	1050	8.0	25.0	20.0	761	9.0	100	290	86	18
29...	1100	0.72	1010	7.9	23.5	20.0	760	10.7	119	270	79	17
JUL												
06...	1325	0.37	1020	8.1	30.5	26.0	760	8.6	107	250	75	16
07...	1330	1.5	832	7.3	24.0	22.0	754	6.6	77	220	64	14
12...	1210	0.90	719	8.0	26.0	22.0	760	8.7	101	200	62	12
19...	1000	0.50	767	7.8	23.5	21.0	753	7.3	83	220	65	13
25...	1140	0.64	758	8.0	29.0	23.5	757	8.4	100	200	62	12
AUG												
02...	1215	0.57	775	7.9	26.5	23.5	761	8.6	101	230	70	13
09...	1130	0.90	687	7.8	25.0	20.5	760	8.4	94	220	70	12
SEP												
06...	1210	0.22	544	7.9	23.0	20.5	761	8.9	99	160	50	8.8

E Estimated daily.

## HUDSON RIVER BASIN

01356190 LISHA KILL NORTHWEST OF NISKAYUNA, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, DIS- SOLVED (MG/L AS N)
OCT												
17...	70	36	2	2.9	197	41	130	0.1	6.9	504	469	<0.01
NOV												
07...	64	34	2	3.1	187	37	120	0.1	7.4	459	445	<0.01
DEC												
05...	42	36	1	2.0	119	28	78	<0.1	5.2	310	290	<0.01
JAN												
30...	94	39	2	2.4	208	57	190	0.1	9.5	616	598	<0.01
FEB												
13...	86	38	2	2.3	208	50	170	0.1	9.6	569	551	0.01
MAR												
06...	95	49	3	2.5	129	38	170	0.1	6.7	507	474	0.01
APR												
18...	71	39	2	1.9	164	45	140	0.1	4.5	486	454	<0.01
MAY												
12...	70	38	2	2.0	178	36	140	<0.1	5.6	496	453	0.01
24...	81	38	2	2.5	214	69	150	0.1	5.5	570	539	0.03
31...	59	36	2	2.4	173	30	110	0.1	8.0	437	399	0.05
JUN												
06...	62	36	2	2.3	186	30	110	<0.1	8.9	470	411	0.06
14...	63	36	2	2.2	196	30	110	<0.1	8.9	466	414	0.04
23...	91	40	2	2.7	211	40	190	0.1	9.1	595	570	0.01
29...	91	42	2	2.8	188	39	180	0.2	8.6	580	535	<0.01
JUL												
06...	91	44	2	2.8	191	37	180	0.2	7.2	570	527	0.02
07...	80	44	2	3.2	139	32	150	0.2	6.3	482	444	0.01
12...	58	38	2	2.6	151	30	110	0.1	6.9	423	380	<0.01
19...	67	40	2	2.9	158	28	120	0.1	7.7	456	400	<0.01
25...	67	41	2	3.2	160	33	120	0.1	7.3	450	397	<0.01
AUG												
02...	64	38	2	3.0	171	39	120	0.1	7.6	479	420	<0.01
09...	54	34	2	2.7	148	51	99	0.1	9.6	440	394	<0.01
SEP												
06...	41	35	1	2.9	117	42	68	0.2	4.0	342	288	<0.01

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT											
17...	0.06	<0.02	0.30	<0.20	0.02	<0.01	0.01	68	43	4.2	0.1
NOV											
07...	<0.05	<0.02	0.20	<0.20	0.03	<0.01	0.01	86	56	4.8	0.2
DEC											
05...	0.31	0.06	0.40	<0.20	0.07	0.04	0.03	68	69	4.4	0.7
JAN											
30...	0.63	0.11	0.20	0.30	<0.01	0.01	<0.01	19	200	3.7	0.2
FEB											
13...	0.54	0.13	0.30	0.30	<0.01	0.01	0.01	17	180	3.1	0.3
MAR											
06...	0.48	0.11	0.60	0.30	0.09	0.02	0.01	98	260	5.0	1.4
APR											
18...	0.14	<0.02	0.30	0.20	0.02	0.02	0.03	57	170	4.3	0.3
MAY											
12...	0.36	0.02	0.40	0.30	0.04	0.02	<0.01	95	150	5.8	0.1
24...	0.38	0.18	0.50	0.40	<0.01	<0.01	<0.01	63	200	5.3	0.5
31...	0.31	0.21	0.60	0.50	0.02	<0.01	<0.01	140	240	6.5	0.3
JUN											
06...	0.43	0.16	0.50	0.40	0.01	<0.01	0.02	120	210	6.6	0.4
14...	0.38	0.07	0.40	0.40	0.05	0.02	0.02	73	110	5.8	0.3
23...	0.39	0.04	0.40	0.30	0.05	0.04	<0.01	48	85	5.0	0.2
29...	0.37	0.03	0.60	0.60	0.04	0.03	0.02	84	110	8.4	0.2
JUL											
06...	1.3	0.02	0.30	0.40	0.03	0.03	0.02	68	63	7.4	0.3
07...	0.45	0.04	0.60	0.40	0.08	0.02	0.02	61	100	12	0.4
12...	0.20	0.02	0.40	0.30	0.03	0.02	<0.01	72	78	6.9	0.4
19...	0.36	0.04	0.40	0.40	0.07	0.03	0.02	85	91	7.8	0.2
25...	0.40	0.03	0.40	0.30	0.06	0.03	0.03	57	58	7.2	0.5
AUG											
02...	0.34	<0.02	0.30	0.30	0.02	0.03	0.03	27	62	6.2	0.1
09...	0.51	0.03	0.30	0.30	0.03	0.04	0.02	60	64	3.6	0.2
SEP											
06...	0.35	<0.02	0.40	0.40	0.06	0.05	0.04	76	39	7.1	0.2

## HUDSON RIVER BASIN

01356190 LISHA KILL NORTHWEST OF NISKAYUNA, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. 8 FINER THAN .062 MM
OCT					
17...	1210	2.1	5	0.03	53
NOV					
07...	1140	3.0	3	0.02	90
DEC					
05...	1030	13	33	1.2	93
JAN					
30...	1210	E9.0	5	0.12	85
FEB					
13...	1150	E5.7	5	0.08	82
MAR					
06...	1120	E21	54	3.1	92
APR					
18...	0930	9.1	4	0.10	86
MAY					
12...	1250	7.6	5	0.10	80
24...	1420	3.0	9	0.07	90
31...	1435	3.9	8	0.08	85
JUN					
06...	1405	4.7	8	0.10	97
14...	1450	3.9	9	0.09	97
23...	1115	0.72	6	0.01	95
29...	1100	0.72	9	0.02	86
JUL					
06...	1325	0.37	5	0.00	69
07...	1330	1.5	17	0.07	45
12...	1210	0.90	6	0.02	90
19...	1000	0.50	20	0.03	86
25...	1140	0.64	5	0.01	87
AUG					
02...	1215	0.57	3	0.00	93
09...	1130	0.90	4	0.01	94
SEP					
06...	1210	0.22	3	0.00	88

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	11.0	11.5	11.5	9.5	10.5	1.5	.5	1.0	.0	.0	.0
2	11.5	9.5	10.5	11.0	8.5	10.0	2.0	.5	1.5	.0	.0	.0
3	10.5	8.0	9.5	9.0	6.5	8.0	2.5	.0	1.5	.0	.0	.0
4	11.0	9.0	10.0	11.0	8.5	10.0	3.5	1.0	2.5	.0	.0	.0
5	11.0	9.0	10.0	13.0	11.0	12.0	7.0	3.5	5.0	.0	.0	.0
6	11.0	8.5	9.5	13.0	11.5	12.5	7.0	6.5	7.0	.0	.0	.0
7	11.0	8.0	9.5	11.5	8.5	9.5	7.0	3.5	5.5	.0	.0	.0
8	12.5	9.0	11.0	10.0	7.5	9.0	3.5	.0	1.5	.0	.0	.0
9	15.0	11.5	13.0	10.0	8.5	9.5	.0	.0	.0	.0	.0	.0
10	13.0	10.5	12.0	9.5	6.5	8.0	1.5	.0	.5	.0	.0	.0
11	10.5	8.5	9.5	6.5	4.5	5.5	2.0	.5	1.5	.0	.0	.0
12	9.5	6.5	8.0	5.0	3.0	4.0	1.0	.0	.0	.0	.0	.0
13	9.5	6.0	7.5	7.0	4.5	6.0	.0	.0	.0	.0	.0	.0
14	10.0	7.5	8.5	8.0	5.0	6.5	.0	.0	.0	.0	.0	.0
15	9.5	6.5	8.0	9.5	7.5	8.5	.0	.0	.0	7.0	.0	2.0
16	9.0	5.5	7.5	7.5	6.0	7.0	.0	.0	.0	7.0	6.5	7.0
17	9.0	5.5	7.5	6.0	4.0	5.0	.0	.0	.0	6.5	4.0	5.0
18	9.0	7.0	8.0	6.5	4.0	5.5	1.5	.0	.5	4.0	3.5	3.5
19	11.0	9.0	10.0	7.0	5.5	6.5	2.5	1.0	2.0	4.5	3.5	4.0
20	12.5	11.0	11.5	6.0	4.0	5.0	1.0	.0	.5	5.5	4.0	4.5
21	13.5	11.5	12.5	6.0	4.0	5.0	1.0	.0	.5	4.5	3.5	4.0
22	13.5	11.5	12.5	6.5	4.5	6.0	1.0	.0	.5	4.0	2.5	3.0
23	12.5	10.5	11.5	4.5	.5	2.5	1.5	.0	.5	2.5	1.5	2.0
24	11.5	9.0	10.5	.5	.0	.0	2.0	1.0	1.5	2.0	1.5	2.0
25	11.0	9.0	9.5	1.5	.0	.5	3.0	2.0	2.0	2.5	1.0	1.5
26	9.5	7.0	8.5	.5	.0	.0	2.0	.5	1.0	1.0	.0	.5
27	9.0	7.0	8.0	.0	.0	.0	1.0	.0	.5	.0	.0	.0
28	8.5	6.0	7.5	.5	.0	.0	1.5	.0	.5	.0	.0	.0
29	9.0	6.0	7.5	2.5	.5	1.5	1.5	.0	.5	.0	.0	.0
30	9.5	7.0	8.0	2.5	1.0	1.5	.0	.0	.0	.0	.0	.0
31	10.0	8.5	9.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	15.0	5.5	9.5	13.0	.0	6.0	7.0	.0	1.0	7.0	.0	1.0

E Estimated daily.

## HUDSON RIVER BASIN

01356190 LISHA KILL NORTHWEST OF NISKAYUNA, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	7.5	5.0	6.0	13.5	10.5	12.0
2	.0	.0	.0	.0	.0	.0	8.0	3.5	5.5	12.5	10.5	11.5
3	.0	.0	.0	.0	.0	.0	7.0	3.5	5.5	15.0	9.5	12.0
4	.0	.0	.0	.0	.0	.0	7.5	4.0	6.0	16.5	10.5	13.5
5	.0	.0	.0	.0	.0	.0	4.0	1.0	2.0	14.5	12.0	13.5
6	.0	.0	.0	.0	.0	.0	4.5	.0	2.0	15.5	11.0	12.5
7	.0	.0	.0	1.5	.0	.0	6.0	2.5	4.5	16.0	9.5	12.5
8	.0	.0	.0	3.5	.0	2.5	4.5	3.5	4.0	16.5	9.0	12.5
9	.0	.0	.0	.5	.0	.0	4.5	3.5	4.0	18.5	10.0	14.0
10	.0	.0	.0	.0	.0	.0	6.5	2.5	4.5	14.0	12.5	13.5
11	.0	.0	.0	1.0	.0	.0	9.0	4.5	6.5	12.5	11.5	12.0
12	.0	.0	.0	4.0	1.0	2.5	8.5	7.5	8.0	13.5	11.5	12.5
13	.0	.0	.0	5.0	1.5	3.0	8.5	7.5	8.0	16.5	12.5	14.5
14	.0	.0	.0	5.5	1.5	3.5	8.0	7.0	7.5	19.0	13.0	15.5
15	.0	.0	.0	7.0	3.5	5.5	9.0	5.5	7.5	16.5	13.5	14.5
16	.0	.0	.0	8.0	5.0	6.5	7.5	6.0	7.0	18.5	11.5	15.0
17	.0	.0	.0	7.5	6.5	7.0	10.0	4.5	7.5	16.0	14.0	15.0
18	.0	.0	.0	6.5	5.0	6.0	13.5	8.0	10.5	15.0	13.5	14.5
19	.0	.0	.0	7.5	5.0	6.5	14.0	10.5	12.0	14.5	13.0	14.0
20	.0	.0	.0	8.0	6.0	7.0	15.0	11.0	13.0	17.0	11.5	14.0
21	.0	.0	.0	7.5	7.0	7.0	12.5	11.0	12.0	18.0	12.0	15.5
22	.0	.0	.0	7.5	6.0	6.5	11.0	9.0	10.5	17.0	13.5	15.5
23	.0	.0	.0	7.0	6.0	6.5	9.5	7.5	8.5	19.0	12.5	16.0
24	.0	.0	.0	7.0	5.0	6.0	12.0	6.5	9.0	19.0	16.0	17.5
25	.0	.0	.0	6.5	3.0	5.0	14.0	8.0	11.0	19.0	16.0	17.5
26	.0	.0	.0	8.5	4.5	6.5	14.0	10.0	12.0	17.5	15.5	16.5
27	.0	.0	.0	8.5	5.0	6.5	16.0	10.0	12.5	18.5	14.5	16.0
28	.0	.0	.0	8.5	5.0	6.5	13.5	12.0	12.5	17.0	14.0	15.5
29	---	---	---	9.0	4.5	7.0	12.0	11.0	11.5	18.5	14.5	16.5
30	---	---	---	8.5	7.0	7.5	13.0	9.5	11.0	18.0	16.5	17.5
31	---	---	---	8.0	6.0	7.0	---	---	---	20.5	16.5	18.5
MONTH	.0	.0	.0	9.0	.0	4.0	16.0	.0	8.0	20.5	9.0	14.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.5	17.0	19.5	25.0	21.0	22.5	28.5	20.0	23.5	22.0	19.5	20.5
2	21.0	18.5	19.5	22.5	18.5	20.5	24.5	21.0	22.5	21.0	17.0	19.0
3	21.5	19.0	20.0	24.0	16.0	19.5	25.0	20.0	22.5	21.0	14.5	17.0
4	21.0	19.0	20.0	24.0	16.5	20.0	24.0	22.5	23.0	21.5	14.0	17.0
5	20.5	17.5	19.0	25.5	20.0	22.0	23.5	22.0	23.0	22.5	15.5	18.5
6	21.5	17.0	19.5	28.0	21.0	23.5	22.5	20.5	21.5	23.5	16.5	19.0
7	22.0	18.5	20.5	23.0	21.0	22.0	22.5	19.0	20.5	23.0	16.5	19.0
8	21.0	16.5	18.5	23.5	20.5	21.5	23.0	17.5	20.0	19.5	14.5	15.5
9	19.0	15.0	16.5	22.5	19.0	20.5	23.5	17.5	20.5	16.5	14.5	15.5
10	19.0	16.0	17.0	22.5	18.0	20.0	24.5	18.0	21.0	16.5	13.0	15.0
11	20.5	16.5	18.5	24.0	18.5	21.0	25.0	20.0	22.5	17.0	11.0	13.5
12	19.5	17.0	18.0	24.5	18.0	21.0	23.5	21.5	22.5	17.5	11.5	14.5
13	19.0	15.5	17.5	26.5	20.0	22.5	25.5	19.5	22.0	17.0	15.0	16.0
14	18.5	16.0	17.5	28.5	22.0	25.0	25.0	20.0	22.0	19.5	16.5	17.5
15	19.0	15.0	17.0	28.5	23.5	25.5	26.0	21.5	23.0	17.5	13.0	15.5
16	21.0	15.0	18.0	27.5	22.5	24.5	28.0	22.5	24.5	16.0	10.5	13.5
17	21.5	16.0	18.5	24.0	21.0	22.5	27.0	21.5	23.5	16.0	13.5	14.5
18	23.5	17.5	20.5	27.5	21.5	23.5	27.0	20.5	23.0	17.0	13.0	15.0
19	25.5	19.5	22.5	26.5	20.5	22.5	27.0	19.5	22.0	16.0	10.5	13.0
20	26.5	20.5	23.0	24.5	19.0	21.5	25.5	16.5	20.0	15.5	11.0	13.0
21	24.0	17.0	20.0	23.5	20.5	22.0	25.5	17.0	20.5	15.5	14.0	14.5
22	22.5	18.0	20.0	27.0	18.5	22.0	24.0	18.0	20.5	18.5	14.5	16.0
23	24.0	17.5	20.5	25.5	21.5	23.0	24.5	15.5	19.0	16.5	13.0	14.5
24	25.0	18.0	21.0	24.5	21.5	23.0	24.0	17.5	19.5	13.5	10.5	12.0
25	24.5	20.0	22.0	27.5	22.0	24.0	23.0	14.0	17.5	13.5	11.0	12.0
26	26.5	21.0	22.5	26.0	23.0	24.0	19.5	14.0	16.5	14.0	12.5	13.0
27	25.0	20.0	22.0	25.0	22.5	24.0	20.5	16.5	18.5	16.0	13.0	14.0
28	23.0	16.5	19.5	27.5	22.5	24.5	23.5	13.5	18.0	15.5	11.0	13.0
29	24.0	17.0	20.5	27.5	23.5	25.0	24.0	16.5	19.5	13.5	8.5	11.0
30	25.0	19.5	22.0	27.5	21.5	24.0	23.5	15.5	19.0	13.5	9.0	11.0
31	---	---	---	27.5	19.0	22.5	24.5	14.5	18.0	---	---	---
MONTH	26.5	15.0	19.5	28.5	16.0	22.5	28.5	13.5	21.0	23.5	8.5	15.0



## HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°47'07", long 73°42'29", Albany County, Hydrologic Unit 02020004, on right bank at Niagara Mohawk Power Corp. School Street powerplant in Cohoes, and 2.0 mi upstream from mouth. Water-quality sampling site at bridge on State Highway 32, 0.75 mi below gage.

DRAINAGE AREA.--3,450 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1917 to current year. Prior to July 17, 1925, published as "at Crescent Dam".

REVISED RECORDS.--WSP 1302: 1919-23 (M). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 49.13 ft above sea level. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi upstream at Crescent Dam at datum 130.87 ft higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records good except those below 1,000 ft<sup>3</sup>/s, which are fair, and those for estimated daily discharges, which are poor. Total flow of Mohawk river equals flow published at Cohoes which includes small diversion for Cohoes water supply, plus flow diverted at Crescent Dam to Barge Canal through Lock 6 (see 01357499 Diversion from Mohawk River at Crescent Dam). Prior to 1926 records published as total flow. See Diversions in Hudson River Basin for regulation and diversions upstream from this station. Telephone gage-height telemeter at station.

COOPERATION.--Diversions through Barge Canal at Lock 6 provided by New York State Department of Transportation.

AVERAGE DISCHARGE.--7 years (water years 1919-25), 5,820 ft<sup>3</sup>/s, includes diversion at Lock 6; 70 years (water years 1926-95), 5,645 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft<sup>3</sup>/s, Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft, from rating curve extended above 110,000 ft<sup>3</sup>/s; minimum discharge (water years 1918-90), 6 ft<sup>3</sup>/s, Sept. 18, 1941, gage height, 3.40 ft; minimum daily discharge, 23 ft<sup>3</sup>/s, Aug. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--An extreme flood occurred sometime from 1860-65 with a depth of 12 ft on the Cohoes dam and a peak discharge estimated to be at least 200,000 ft<sup>3</sup>/s (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 41,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 16	1000	*22,400	*14.84				

Minimum discharge not determined; minimum gage height, 4.72 ft, Sept. 30; minimum daily discharge, 330 ft<sup>3</sup>/s, Aug. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	2530	7750	3140	3950	3280	4100	2760	1660	660	998	944
2	2440	9190	5890	3470	3610	4210	3930	2860	1770	819	831	594
3	1670	7210	4040	3460	2950	4130	3620	2090	2150	684	886	762
4	2240	6150	2960	3090	2920	3550	3260	1010	4310	787	1230	641
5	1800	3570	4430	2600	e2700	3090	4250	1210	3220	627	733	669
6	1680	2570	13000	2140	e2500	3580	4290	2180	1980	705	1450	572
7	2050	5140	13800	2560	e2400	5360	3870	1940	2150	711	645	522
8	1510	3670	11800	2770	e2500	10700	3360	2050	2000	862	639	601
9	1800	4630	9530	3050	2670	17400	3280	1830	1190	814	984	582
10	1450	2880	7780	2590	2930	11800	3370	1870	1160	934	753	489
11	2030	2220	6340	1760	2780	9760	1560	1980	1220	841	614	1120
12	2020	2560	6040	1800	2640	8130	829	2180	2570	936	702	741
13	2120	2270	5150	3000	2720	7110	3280	2460	2670	788	764	637
14	1580	2830	4170	5310	2450	11900	8060	2000	1430	892	828	645
15	1670	2600	4030	12000	2400	16000	7750	1980	2230	554	685	546
16	1250	1840	3960	15400	2620	19400	5870	2060	1180	780	1060	744
17	1680	1760	3820	16700	2890	18400	4530	2020	1160	981	863	731
18	1640	1590	3340	13300	3620	15700	3380	1990	1340	1140	710	601
19	1550	1920	4070	9800	3400	12900	1300	1750	1400	1760	570	536
20	1590	1960	4120	8740	3270	10600	1160	1750	919	1210	664	669
21	1370	2350	3620	19000	3590	9560	1820	1570	995	1000	574	667
22	1570	2380	3220	17900	3800	10600	4210	1560	1010	745	634	1020
23	1550	2340	3290	13600	3720	10500	3430	1550	1020	899	546	748
24	2110	2260	3530	10900	3440	8520	3650	1170	732	873	510	1450
25	1460	2160	6420	9020	3310	7450	3400	1430	613	1200	394	989
26	1630	2170	7370	7810	3460	6050	2810	1350	489	1050	330	910
27	1490	2070	5360	6710	2950	5040	2580	1080	525	1160	488	994
28	1420	3220	4510	5090	2710	4990	1810	1780	835	1150	503	621
29	1420	5800	4030	3280	---	4130	3950	1670	659	1020	491	710
30	1520	8160	2540	4000	---	3970	3200	1680	554	848	491	755
31	1520	---	2380	4180	---	3970	---	2090	---	879	518	---
TOTAL	53130	102000	172290	218170	84900	271780	105909	56900	45141	28309	22088	22210
MEAN	1714	3400	5558	7038	3032	8767	3530	1835	1505	913	713	740
MAX	2440	9190	13800	19000	3950	19400	8060	2860	4310	1760	1450	1450
MIN	1250	1590	2380	1760	2400	3090	829	1010	489	554	330	489

e Estimated

## HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3344	5406	6288	5541	5662	11110	13900	6768	3473	2312	1716	2297
MAX	13950	14090	14610	13460	15810	28580	32280	17320	14290	8779	4089	9345
(WY)	1978	1928	1928	1937	1976	1936	1993	1943	1972	1935	1986	1938
MIN	731	842	1841	1017	1314	3723	3530	1835	1121	671	605	740
(WY)	1965	1931	1931	1931	1931	1940	1995	1995	1941	1941	1941	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1926 - 1995			
ANNUAL TOTAL	2104890				1182827							
ANNUAL MEAN	5767				3241				5645			
HIGHEST ANNUAL MEAN									8270			
LOWEST ANNUAL MEAN									3017			
HIGHEST DAILY MEAN	49200				19400				112000			
LOWEST DAILY MEAN	1110				330				23			
ANNUAL SEVEN-DAY MINIMUM	1310				458				458			
10 PERCENT EXCEEDS	13800				7760				13000			
50 PERCENT EXCEEDS	2720				2120				3320			
90 PERCENT EXCEEDS	1520				662				1140			

## HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

(01357499) Diversion, in cubic feet per second, from Mohawk River at Crescent Dam, NY, through Barge Canal at lock 6, water year October 1994 to September 1995

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	85	79	3.0	3.0	3.0	3.0	139	127	151	133	139
2	103	73	73	3.0	3.0	3.0	3.0	109	121	181	121	145
3	103	85	73	3.0	3.0	3.0	3.0	103	121	145	133	145
4	73	79	73	3.0	3.0	3.0	3.0	103	133	133	115	133
5	127	91	73	3.0	3.0	3.0	3.0	115	127	139	163	121
6	109	79	46	3.0	3.0	3.0	3.0	115	103	127	127	127
7	97	91	3.0	3.0	3.0	3.0	3.0	97	133	151	103	127
8	127	103	3.0	3.0	3.0	3.0	3.0	103	109	151	121	85
9	115	85	3.0	3.0	3.0	3.0	3.0	103	109	151	145	109
10	91	79	3.0	3.0	3.0	3.0	3.0	121	115	127	127	145
11	121	91	3.0	3.0	3.0	3.0	37	127	127	121	139	115
12	97	73	3.0	3.0	3.0	3.0	73	121	109	121	139	109
13	109	73	3.0	3.0	3.0	3.0	73	157	127	151	151	127
14	91	73	3.0	3.0	3.0	3.0	73	109	127	145	127	127
15	85	79	3.0	3.0	3.0	3.0	73	121	115	139	121	115
16	109	85	3.0	3.0	3.0	3.0	73	127	127	139	97	133
17	109	79	3.0	3.0	3.0	3.0	85	115	151	121	133	145
18	97	73	3.0	3.0	3.0	3.0	73	115	151	133	139	109
19	97	79	3.0	3.0	3.0	3.0	73	127	175	139	157	103
20	79	79	3.0	3.0	3.0	3.0	73	121	109	133	163	109
21	85	85	3.0	3.0	3.0	3.0	85	115	115	139	127	115
22	73	85	3.0	3.0	3.0	3.0	73	103	103	157	121	139
23	85	73	3.0	3.0	3.0	3.0	73	97	139	133	121	145
24	97	73	3.0	3.0	3.0	3.0	85	121	139	127	109	139
25	91	73	3.0	3.0	3.0	3.0	73	121	127	115	139	121
26	91	73	3.0	3.0	3.0	3.0	73	115	121	127	139	133
27	79	73	3.0	3.0	3.0	3.0	73	139	103	133	133	133
28	97	59	3.0	3.0	3.0	3.0	73	133	127	139	109	115
29	79	85	3.0	3.0	---	3.0	73	115	127	145	109	115
30	91	79	3.0	3.0	---	3.0	73	103	151	139	121	133
31	73	---	3.0	3.0	---	3.0	---	121	---	139	103	---
TOTAL	3007	2392	492.0	93.0	84.0	93.0	1490.0	3631	3768	4291	3985	3756
MEAN	97.0	79.7	15.9	3.00	3.00	3.00	49.7	117	126	138	129	125
MAX	127	103	79	3.0	3.0	3.0	85	157	175	181	163	145
MIN	73	59	3.0	3.0	3.0	3.0	3.0	97	103	115	97	85

CAL YR 1994 TOTAL 25728.0 MEAN 70.5 MAX 181 MIN 3.0  
 WTR YR 1995 TOTAL 27082.0 MEAN 74.2 MAX 181 MIN 3.0

01357500 MOHAWK RIVER AT COHOES, NY

REGULATION  
(see Reservoirs in Hudson River Basin)

Delta Dam.  
 Hinckley Reservoir.  
 Schoharie Reservoir.

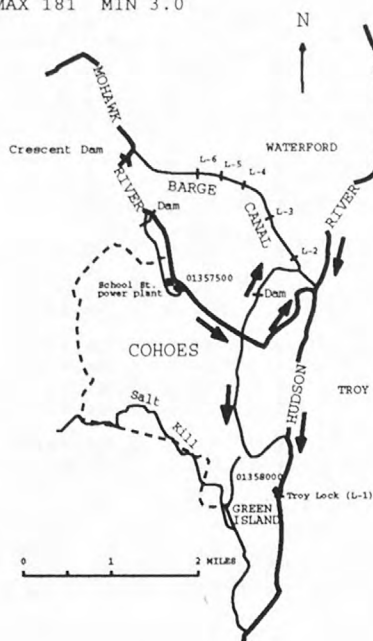
DIVERSIONS  
(see Reservoirs in Hudson River Basin)

From Chenango River basin through  
 Oriskany Creek Feeder.

From (and occasionally into) Oswego  
 River basin through summit level of  
 Erie (Barge) Canal between New London  
 and Utica.

From Black River basin through Black  
 River Canal during navigation period.

Into Esopus Creek from Schoharie  
 Reservoir through Shandaken Tunnel  
 for New York City water supply.



01358000 HUDSON RIVER AT GREEN ISLAND, NY

REGULATION

Great Sacandaga Lake at Conklingville  
 (see station 01323500).  
 Indian Lake near Indian Lake (see  
 station 01314500).  
 Mohawk River regulation listed  
 under Mohawk River at Cohoes.

DIVERSIONS

Mohawk River diversions listed  
 under Mohawk River at Cohoes.

Into St. Lawrence River basin through:  
 Glens Falls feeder at Dunham Basin.  
 Bond Creek at Dunham Basin.  
 Champlain (Barge) Canal.

From St. Lawrence River basin through  
 summit level of Champlain (Barge)  
 Canal at Dunham Basin.

Figure 9.--Gaging stations and diversions near mouth of Mohawk River.

## HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-59, 1970, 1976-79, June 1988 to current year.

CHEMICAL DATA: 1955, 1957 (a), 1958-59 (b), 1970 (a), 1977 (c), 1978-79 (d), 1988 (a), 1989 (c), 1990 (d), 1991 (c), 1992 (a), 1993 (c), 1994 (d), 1995 (e).

MINOR ELEMENTS DATA: 1958-59 (b), 1976 (a), 1977 (c), 1978 (d), 1979 (e), 1988 (a), 1989 (c), 1990 (d), 1991 (c), 1992 (a).

PESTICIDE DATA: 1976 (a), 1977 (c), 1979 (d), 1993 (a), 1994 (d), 1995 (e).

ORGANIC DATA: OC--1976 (a), 1977 (c), 1978-79 (d), 1993 (c), 1994 (d), 1995 (e).

PCB--1976 (a), 1977 (c), 1979 (d), 1993 (a).

PCN--1976 (a), 1979 (d), 1993 (a).

NUTRIENT DATA: 1955, 1957 (a), 1958-59 (b), 1970, 1976 (a), 1977 (c), 1978-79 (d), 1993 (c), 1994 (d), 1995 (e).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978-79 (d), 1993 (a).

Phytoplankton--1979 (d), 1993 (a).

SEDIMENT DATA: 1954-58, 1976-79 (e), 1988 (a), 1989 (c), 1990 (d), 1991 (c), 1992 (a), 1993 (c), 1994 (d), 1995 (e).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1956 to June 1959.

SUSPENDED-SEDIMENT DISCHARGE: January 1954 to June 1959, August 1976 to September 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE (water years 1956-59): Maximum daily, 28.0°C, July 21, 1957; minimum daily, 0.0°C on many days during winter periods.

SUSPENDED-SEDIMENT CONCENTRATION (water years 1954-59, 1976-79): Maximum daily mean, 1,230 mg/L, Oct. 17, 1955; minimum daily mean, 1 mg/L, Jan. 6, 1956, Jan. 6, 7, Feb. 21, 22, 25, 1977.

SUSPENDED-SEDIMENT DISCHARGE (water years 1954-59, 1976-79): Maximum daily, 300,000 tons, Oct. 17, 1955; minimum daily, 0.8 ton, Aug. 7, 1955.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO3)
OCT										
19...	0940	1610	301	7.5	13.0	12.5	763	9.8	92	120
NOV										
09...	0950	4540	273	7.6	14.5	10.5	760	10.6	95	110
DEC										
07...	0910	13700	275	7.6	5.5	11.5	761	14.3	132	110
JAN										
18...	0900	13300	224	6.8	3.5	2.5	772	15.2	110	88
MAR										
08...	0950	8650	375	7.7	15.5	1.0	758	14.8	104	130
23...	1100	10500	230	7.1	6.5	6.0	748	12.8	104	89
APR										
14...	0915	8240	323	7.8	9.0	6.5	747	12.4	102	120
14...	1430	8580	327	7.8	11.0	6.5	747	12.5	104	140
16...	0850	6430	298	7.2	4.5	7.0	746	11.9	100	110
19...	1420	1130	280	7.8	19.5	9.5	751	11.7	104	100
MAY										
12...	1020	2110	301	7.8	18.0	14.0	754	10.3	101	110
24...	0940	1600	326	7.6	20.5	17.0	761	8.7	90	120
31...	1015	2530	328	7.5	26.0	19.0	765	7.4	79	120
JUN										
06...	0925	1620	344	7.5	24.0	22.0	760	7.2	82	120
14...	0955	1720	344	7.5	21.0	21.5	760	5.5	63	130
22...	1030	1090	317	7.3	28.0	24.0	769	6.6	78	110
28...	1030	729	310	7.3	22.0	24.0	771	4.9	58	110
JUL										
07...	1100	740	313	7.3	24.0	24.5	764	5.1	60	110
11...	1150	1390	313	7.6	27.5	24.5	763	5.9	71	110
18...	1050	744	314	7.5	26.5	25.5	755	5.9	72	110
24...	1020	644	323	7.5	28.0	26.0	761	5.1	63	110
AUG										
01...	1040	2780	316	7.6	29.0	27.0	765	5.3	67	110
08...	1150	801	314	7.4	25.5	26.0	771	4.7	57	110
SEP										
07...	1015	146	302	7.4	23.5	23.0	759	5.5	64	100

## HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT										
19...	36	6.2	12	18	0.5	1.8	106	22	18	<0.1
NOV										
09...	35	6.1	10	16	0.4	2.4	82	22	15	<0.1
DEC										
07...	33	6.0	11	18	0.5	1.8	84	20	18	<0.1
JAN										
18...	28	4.4	11	21	0.5	1.6	66	12	20	<0.1
MAR										
08...	39	7.1	27	31	1	1.4	90	20	47	<0.1
23...	28	4.5	9.3	18	0.4	1.1	69	15	16	<0.1
APR										
14...	37	6.4	15	21	0.6	1.2	87	23	26	<0.1
14...	41	7.8	16	20	0.6	1.1	86	23	26	<0.1
16...	34	5.7	13	20	0.5	1.2	87	21	23	<0.1
19...	32	5.4	12	20	0.5	1.2	87	17	19	<0.1
MAY										
12...	35	6.2	13	20	0.5	1.2	90	20	22	<0.1
24...	37	6.6	15	21	0.6	1.3	96	22	25	0.1
31...	37	6.7	15	21	0.6	1.3	90	23	23	<0.1
JUN										
06...	38	7.0	17	23	0.7	1.4	97	24	26	<0.1
14...	39	7.3	17	22	0.7	1.5	96	25	25	<0.1
22...	35	6.6	15	22	0.6	1.5	89	23	23	<0.1
28...	34	6.4	15	22	0.6	1.4	94	21	23	0.1
JUL										
07...	32	6.3	16	24	0.7	1.5	89	23	25	0.1
11...	33	6.4	16	24	0.7	1.4	84	21	25	0.1
18...	33	6.6	18	26	0.7	1.4	80	22	27	0.1
24...	32	6.6	18	26	0.8	1.5	89	24	27	0.1
AUG										
01...	32	6.7	16	24	0.7	1.5	86	25	25	0.1
08...	34	6.7	17	24	0.7	1.5	83	24	26	0.1
SEP										
07...	30	6.8	18	27	0.8	1.7	79	27	27	0.1
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)
OCT										
19...	4.3	175	162	0.02	0.66	0.11	0.30	0.40	0.05	0.07
NOV										
09...	4.9	164	153	0.01	0.55	0.12	0.50	0.40	0.09	0.04
DEC										
07...	5.2	166	152	<0.01	0.65	0.09	0.50	0.30	0.09	0.03
JAN										
18...	5.0	139	129	<0.01	0.66	0.09	0.50	0.30	0.10	0.04
MAR										
08...	4.4	221	207	<0.01	0.84	0.17	0.40	0.40	0.03	0.02
23...	4.3	121	126	0.02	0.70	0.07	0.30	0.20	0.03	0.02
APR										
14...	2.5	172	170	0.02	0.67	0.09	0.40	0.20	0.03	0.01
14...	2.6	168	181	0.02	0.69	0.11	0.30	0.20	0.03	0.02
16...	2.8	160	159	0.01	0.60	0.06	0.30	0.20	0.02	<0.01
19...	3.2	164	146	0.02	0.62	0.06	0.30	<0.20	0.02	<0.01
MAY										
12...	2.6	177	160	0.02	0.79	0.14	0.40	0.30	0.04	0.03
24...	2.5	180	171	0.02	0.75	0.09	0.20	0.20	<0.01	<0.01
31...	2.8	179	169	0.03	0.75	0.19	0.40	0.30	<0.01	0.01
JUN										
06...	3.1	193	179	0.03	0.78	0.18	0.50	0.30	0.03	<0.01
14...	3.7	195	181	0.05	0.76	0.24	0.50	0.60	0.06	0.04
22...	3.0	179	166	0.04	0.55	0.12	0.40	0.40	0.03	0.02
28...	3.2	176	160	0.05	0.40	0.23	0.60	0.60	0.07	0.04
JUL										
07...	1.9	179	163	0.05	0.49	0.25	0.70	0.50	0.08	0.05
11...	2.5	174	160	0.05	0.46	0.15	0.40	0.50	0.03	0.02
18...	2.2	175	162	<0.01	0.19	0.11	0.50	0.40	0.03	<0.01
24...	2.2	179	165	0.05	0.45	0.11	0.50	0.50	0.08	0.07
AUG										
01...	2.3	182	160	0.04	0.39	0.11	0.50	0.40	0.05	0.02
08...	2.3	182	164	0.04	0.39	0.19	0.50	0.50	0.07	0.03
SEP										
07...	2.1	169	161	0.03	0.33	0.10	0.50	0.40	0.04	0.06



## HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT									
19...	0.06	69	24	-63.8	-9.34	3.9	0.1	0.60	0.20
NOV									
09...	0.04	100	14	-61.1	-9.19	4.9	0.1	0.60	0.10
DEC									
07...	0.03	90	5	-66.1	-10.04	4.1	1.3	--	--
JAN									
18...	0.03	85	7	-71.8	-10.65	3.6	0.9	--	--
MAR									
08...	0.02	61	28	-73.7	-10.98	2.6	0.5	--	--
23...	<0.01	59	23	--	--	3.1	0.2	--	--
APR									
14...	0.01	84	57	--	--	2.7	0.3	--	--
14...	0.02	90	60	--	--	2.8	0.3	--	--
16...	<0.01	120	44	--	--	3.4	0.3	--	--
19...	0.01	49	36	-72.5	-10.76	3.9	0.1	--	--
MAY									
12...	0.02	61	47	--	--	2.9	0.1	--	--
24...	0.02	11	27	-72.2	-10.47	3.1	0.4	--	--
31...	0.02	16	25	-71.1	-10.28	2.9	0.1	--	--
JUN									
06...	0.02	26	51	-67.5	-9.86	6.8	0.1	--	--
14...	0.04	36	91	-65.6	-9.77	3.6	0.1	--	--
22...	<0.01	30	45	-65.0	-9.57	4.0	0.1	--	--
28...	0.03	60	130	--	--	4.0	0.1	--	--
JUL									
07...	0.05	23	57	-63.8	-9.13	3.9	0.1	--	--
11...	0.02	20	24	-62.3	-9.11	3.7	0.2	--	--
18...	0.02	25	45	-61.3	-8.97	4.1	0.2	--	--
24...	0.05	27	72	-63.6	-9.15	3.5	0.2	--	--
AUG									
01...	0.02	22	39	-64.0	-9.11	3.5	0.1	--	--
08...	0.03	25	85	-60.9	-8.82	3.5	0.1	--	--
SEP									
07...	0.04	22	60	-60.0	-8.55	3.4	0.2	--	--

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
19...	0940	1610	17	74	89
NOV					
09...	0950	4540	9	110	82
DEC					
07...	0910	13700	52	1920	93
JAN					
18...	0900	13300	52	1870	77
MAR					
08...	0950	8650	5	117	98
23...	1100	10500	16	454	95
APR					
14...	0915	8240	20	445	92
14...	1430	8580	9	208	91
16...	0850	6430	10	174	92
19...	1420	1130	132	403	100
MAY					
12...	1020	2110	5	28	97
24...	0940	1600	11	48	89
JUN					
06...	0925	1620	9	39	90
14...	0955	1720	2	9.3	93
22...	1030	1090	2	5.9	98
28...	1030	729	9	18	79
JUL					
07...	1100	740	11	22	86
11...	1150	1390	3	11	90
18...	1050	744	3	6.0	84
24...	1020	644	3	5.2	90
AUG					
01...	1040	2780	11	83	51
08...	1150	801	2	4.3	87
SEP					
07...	1015	146	3	1.2	96

## HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY

LOCATION.--Lat 42°45'08", long 73°41'22", Albany County, Hydrologic Unit 02020006, on right bank at Green Island, just upstream from Troy lock and dam, and 0.5 mi downstream from 5th branch Mohawk River.

DRAINAGE AREA.--8,090 mi<sup>2</sup>, approximately (including that above site of former auxiliary gage).

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

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft below sea level (Corps of Engineers benchmark). From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft higher. Totalizing flowmeter on each turbine in powerplant.

REMARKS.--Records fair. Records include flow over spillway, flow through lock, and flow through powerplant. Powerplant, located on the right bank just downstream from gage, was inoperative from Nov. 20, 1960 to Feb. 23, 1971. An inflatable rubber dam was installed on the spillway during August 1991. Since August 1991, estimated water-discharge data based on records for Hudson River above Lock 1 near Waterford (01335754) and Mohawk River at Cohoes (01357500) due to inflatable rubber dam. See Diversions in Hudson River Basin for regulation and diversions upstream from this station. Satellite gage-height and flowmeter telemeter readings at station.

COOPERATION.--Turbine flowmeter readings provided by Niagara Mohawk Power Corporation.

AVERAGE DISCHARGE.--49 years, 13,700 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft<sup>3</sup>/s, Dec. 31, 1948, gage height, 27.05 ft, from high-water mark in gage well; maximum daily discharge, 152,000 ft<sup>3</sup>/s, Mar. 14, 1977; minimum daily, 882 ft<sup>3</sup>/s, Sept. 2, 1968; minimum gage height, 13.68 ft, July 6, 1981, when pool was lowered for inspection of flashboards.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 29.48 ft at gage on opposite bank, from information by Corps of Engineers (discharge, 215,000 ft<sup>3</sup>/s). Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy lock and dam, reached a stage about 0.2 ft higher upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft higher than flood in 1936, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 40,000 ft<sup>3</sup>/s, Jan. 17, 21, Mar. 9; maximum gage height, 20.04 ft, Dec. 6; minimum daily discharge, about 1,900 ft<sup>3</sup>/s, Aug. 26; minimum gage height, 13.83 ft, June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7300	e8000	e14800	e9600	e11700	e8900	e9500	e8100	e5100	e3100	e4000	e2600
2	e8500	e15000	e14400	e10700	e11400	e10200	e9500	e7500	e4700	e3200	e3300	e2300
3	e8400	e14400	e12900	e10300	e10000	e9500	e8100	e6600	e6200	e3100	e3200	e2300
4	e6600	e14500	e11600	e9700	e9300	e8600	e7900	e5300	e8500	e3400	e5800	e2600
5	e6700	e10900	e12500	e8800	e8700	e8100	e9200	e5300	e7400	e3000	e5700	e3300
6	e6400	e9200	e27000	e8900	e8900	e9200	e9200	e6000	e5800	e3000	e7100	e3600
7	e6700	e11900	e27500	e9000	e9600	e11300	e9200	e5500	e5800	e3000	e6400	e3400
8	e6400	e10100	e24200	e10000	e9600	e19200	e8500	e5400	e5300	e3200	e5300	e3400
9	e6200	e11400	e20100	e9800	e9000	e35400	e8100	e5500	e3800	e3000	e5200	e3500
10	e6400	e9300	e16100	e9100	e9300	e24100	e8400	e5400	e4000	e3200	e4000	e3600
11	e6500	e8400	e14700	e7700	e9300	e19900	e6700	e5300	e4100	e3000	e3200	e4200
12	e6400	e8400	e14800	e8200	e9700	e16300	e5700	e6100	e5900	e2800	e3700	e3800
13	e6400	e7800	e11800	e9600	e9800	e15800	e9200	e6400	e6000	e2700	e3500	e3500
14	e5100	e8400	e10600	e13700	e9300	e20500	e15300	e6300	e4600	e2800	e3200	e3800
15	e5800	e7300	e10200	e21700	e9200	e26700	e14400	e6200	e5400	e2700	e3200	e3400
16	e5500	e6400	e11300	e27600	e8200	e32000	e11300	e6400	e3300	e2700	e3500	e3600
17	e5900	e5500	e12300	e36600	e9100	e34300	e9700	e6000	e3600	e3300	e2900	e3900
18	e5700	e6000	e11800	e30100	e10000	e32400	e8600	e6200	e3900	e3600	e3100	e3700
19	e6000	e5600	e12500	e23800	e9600	e28300	e6800	e5300	e4600	e4800	e2600	e3900
20	e6300	e6200	e12200	e22800	e9400	e23200	e6900	e5500	e4100	e4000	e2800	e3200
21	e5600	e6300	e11200	e36200	e9900	e21300	e7500	e5000	e4400	e3200	e2300	e3600
22	e6100	e6700	e10900	e37100	e10000	e22800	e11100	e4700	e4000	e2900	e3000	e4300
23	e6000	e7000	e11000	e31100	e8900	e22000	e10500	e4600	e3100	e3300	e2200	e3900
24	e6700	e6600	e10700	e26200	e8600	e18700	e10700	e3900	e3700	e4100	e2100	e5000
25	e5900	e6400	e15100	e22000	e8000	e16600	e9500	e4600	e3300	e3800	e2000	e4400
26	e6000	e6200	e16600	e19400	e8500	e14300	e8300	e4900	e3200	e3400	e1900	e4500
27	e6300	e6100	e13700	e17400	e7500	e11600	e7600	e4100	e3600	e3600	e2200	e4100
28	e5300	e8100	e12300	e13900	e7300	e11800	e6900	e4800	e3800	e4200	e2200	e3500
29	e5900	e11600	e11400	e11600	---	e10700	e9400	e5000	e3400	e3800	e2200	e3500
30	e5400	e15900	e9300	e12300	---	e10100	e8500	e5200	e3100	e3900	e2200	e3200
31	e5900	---	e8700	e12100	---	e9600	---	e5800	---	e3700	e2200	---
TOTAL	194300	265600	434200	537000	259800	563400	272200	172900	137700	103500	106200	107600
MEAN	6268	8853	14010	17320	9279	18170	9073	5577	4590	3339	3426	3587
MAX	8500	15900	27500	37100	11700	35400	15300	8100	8500	4800	7100	5000
MIN	5100	5500	8700	7700	7300	8100	5700	3900	3100	2700	1900	2300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1995, BY WATER YEAR (WY)

	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN
(WY)	8917	30140	1978	12720	26150	1973	14740	28220	1984	13230	33970	1949
(WY)	2965	2965	3257	6084	6084	4177	13950	44240	9116	22180	40520	5500
(WY)	1965	1965	1965	1965	1965	1961	13950	44240	9116	22180	40520	5500

e Estimated

## HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1946 - 1995	
ANNUAL TOTAL	5233700		3154400			
ANNUAL MEAN	14340		8642		13670	
HIGHEST ANNUAL MEAN					22100	1976
LOWEST ANNUAL MEAN					6380	1965
HIGHEST DAILY MEAN	94800	Apr 17	37100	Jan 22	152000	Mar 14 1977
LOWEST DAILY MEAN	4900	Sep 22	1900	Aug 26	882	Sep 2 1968
ANNUAL SEVEN-DAY MINIMUM	5400	Sep 16	2110	Aug 23	2110	Aug 23 1995
10 PERCENT EXCEEDS	30300		16000		28600	
50 PERCENT EXCEEDS	9400		6600		9300	
90 PERCENT EXCEEDS	6000		3200		4300	

## HUDSON RIVER BASIN

01359139 HUDSON RIVER AT ALBANY, NY

LOCATION.--Lat 42°38'53", long 73°44'50", Albany County, Hydrologic Unit 02020006, on right bank 0.3 mi upstream from bridge on U.S. Highways 9 and 20 in Albany, and 0.5 mi downstream from the Conrail railroad bridge.

DRAINAGE AREA.--8,288 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1972 to September 1976, April 1981 to current year.

REVISED RECORDS.--WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level (levels by Corps of Engineers). Gage-height record converted to elevation above or below (-) mean sea level for publication.

REMARKS.--Telephone gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 28, 1913, reached a stage of 21.45 ft, discharge, 240,000 ft<sup>3</sup>/s (estimated, tide affected) from information provided by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 10.14 ft, Mar. 30, 1993; minimum recorded, -4.50 ft, Mar. 8, 1986.

## TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
<u>Maximum high tide</u>												
Elevation	4.86	5.11	5.61	6.14	4.85	5.81	5.11	5.26	5.25	4.86	5.33	5.02
Date	18	6	6	21	4	17	19	15	28	16	8	26,27
<u>Minimum low tide</u>												
Elevation	-2.22	-2.86	-3.33	-2.60	-3.52	-2.01	-3.19	-2.81	-2.73	-2.33	-2.65	-2.06
Date	11	7	30	29	6	1	5	8	20	30	25	11
Mean high tide	4.24	4.16	4.43	4.45	3.46	4.56	4.13	4.46	4.25	4.30	4.41	4.27
Mean water level	1.43	1.24	1.61	1.81	1.01	2.01	1.34	1.52	1.29	1.37	1.53	1.48
Mean low tide	-1.55	-1.83	-1.34	-0.97	-1.69	-0.74	-1.62	-1.55	-1.85	-1.75	-1.59	-1.50

## HUDSON RIVER BASIN

01359750 MOORDENER KILL AT CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°32'02", long 73°44'15", Rensselaer County, Hydrologic Unit 02020006, on left bank 800 ft downstream from bridge on State Highway 150, 0.2 mi east of village of Castleton-on-Hudson, 0.5 mi downstream from unnamed tributary, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--32.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1957 to March 1995 (discontinued).

REVISED RECORDS.--WDR NY-93-1: 1959(M), 1984(M), 1986(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 98.72 ft above sea level. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation of low flow by mills upstream.

AVERAGE DISCHARGE.--37 years (water years 1958-94), 38.5 ft<sup>3</sup>/s, 16.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,520 ft<sup>3</sup>/s, Mar. 15, 1986, gage height, 4.25 ft; minimum, 0.30 ft<sup>3</sup>/s, Aug. 9, 10, 1964, gage height, 0.25 ft; minimum daily, 1.0 ft<sup>3</sup>/s, Sept. 6, 1964.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2330	*521	a*2.44	No other peak greater than base discharge.			

a Recorded in well; outside gage height was 2.75 ft, from crest-stage gage.

Minimum discharge, 5.5 ft<sup>3</sup>/s, Nov. 27; minimum gage height, 0.68 ft, Jan. 11, result of freezeup;  
minimum daily discharge, 6.0 ft<sup>3</sup>/s, Nov. 20.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.8	13	e20	e25	55	---	---	---	---	---	---
2	13	11	12	e30	e24	46	---	---	---	---	---	---
3	12	11	10	e25	e22	40	---	---	---	---	---	---
4	11	9.7	8.8	e20	e20	36	---	---	---	---	---	---
5	9.4	9.0	26	e17	e18	33	---	---	---	---	---	---
6	8.5	9.0	55	e14	e17	57	---	---	---	---	---	---
7	7.9	9.1	36	e15	e16	82	---	---	---	---	---	---
8	7.2	15	31	e16	e16	242	---	---	---	---	---	---
9	8.2	8.2	23	e14	e15	348	---	---	---	---	---	---
10	17	7.2	22	e13	e15	178	---	---	---	---	---	---
11	15	7.0	41	e12	e14	122	---	---	---	---	---	---
12	12	6.7	e42	e15	e14	108	---	---	---	---	---	---
13	11	6.5	e32	e25	e14	153	---	---	---	---	---	---
14	9.8	6.2	e21	e35	e15	168	---	---	---	---	---	---
15	9.2	6.6	e19	e54	e14	138	---	---	---	---	---	---
16	8.6	6.6	e18	80	e15	117	---	---	---	---	---	---
17	7.7	6.6	e18	94	e14	102	---	---	---	---	---	---
18	7.2	6.3	e17	63	e13	87	---	---	---	---	---	---
19	7.6	6.6	e17	51	e14	70	---	---	---	---	---	---
20	8.1	6.0	e16	71	e17	61	---	---	---	---	---	---
21	8.9	6.8	e15	137	e21	67	---	---	---	---	---	---
22	8.9	8.8	15	137	e20	73	---	---	---	---	---	---
23	9.0	9.3	14	106	e19	58	---	---	---	---	---	---
24	10	8.2	28	82	e18	57	---	---	---	---	---	---
25	7.2	7.7	48	69	e18	46	---	---	---	---	---	---
26	6.6	7.6	31	52	e20	39	---	---	---	---	---	---
27	7.0	6.7	e22	45	e35	35	---	---	---	---	---	---
28	7.2	16	e20	e40	e80	32	---	---	---	---	---	---
29	7.1	26	e18	e35	---	31	---	---	---	---	---	---
30	7.1	17	e17	e31	---	32	---	---	---	---	---	---
31	6.8	---	e16	e28	---	41	---	---	---	---	---	---
TOTAL	290.2	277.2	721.8	1446	563	2754	---	---	---	---	---	---
MEAN	9.36	9.24	23.3	46.6	20.1	88.8	---	---	---	---	---	---
MAX	17	26	55	137	80	348	---	---	---	---	---	---
MIN	6.6	6.0	8.8	12	13	31	---	---	---	---	---	---
CFSM	.29	.28	.71	1.43	.62	2.73	---	---	---	---	---	---
IN.	.33	.32	.82	1.65	.64	3.14	---	---	---	---	---	---

e Estimated



## HUDSON RIVER BASIN

01359750 MOORDENER KILL AT CASTLETON-ON-HUDSON, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	20.0	33.0	42.2	40.7	48.8	89.7	79.5	46.2	23.2	13.1	12.1	11.9
MAX	99.8	83.0	123	182	144	194	178	133	76.5	46.1	57.0	105
(WY)	1976	1973	1984	1979	1981	1977	1993	1984	1972	1972	1976	1960
MIN	3.21	3.39	4.20	3.76	6.39	10.2	26.4	10.5	3.58	2.70	2.12	1.81
(WY)	1964	1965	1965	1981	1980	1965	1966	1965	1965	1965	1964	1964

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## WATER YEARS 1958 - 1995

ANNUAL TOTAL	14469.1		
ANNUAL MEAN	39.6	38.5	
HIGHEST ANNUAL MEAN		60.0	1984
LOWEST ANNUAL MEAN		8.41	1965
HIGHEST DAILY MEAN	332	Mar 25	
LOWEST DAILY MEAN	4.9	Aug 11	
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 7	
ANNUAL RUNOFF (CFSM)	1.22		
ANNUAL RUNOFF (INCHES)	16.51		
10 PERCENT EXCEEDS	120		
50 PERCENT EXCEEDS	16		
90 PERCENT EXCEEDS	6.6		

## HUDSON RIVER BASIN

01360640 VALATIE KILL NEAR NASSAU, NY

LOCATION.--Lat 42°33'07", long 73°35'31", Rensselaer County, Hydrologic Unit 02020006, on left bank about 200 ft upstream from bridge on Hoags Corners Road, and 2.7 mi northeast of Nassau.

DRAINAGE AREA.--9.48 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Elevation of gage is 450 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--5 years, 11.2 ft<sup>3</sup>/s, 16.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 482 ft<sup>3</sup>/s, Mar. 30, 1993, gage height, 4.81 ft; minimum discharge, 0.08 ft<sup>3</sup>/s, Aug. 31, Sept. 6, 7, 8, 1995, gage height, 0.76 ft; minimum daily, 0.10 ft<sup>3</sup>/s, Aug. 2, 1991, Sept. 8, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2100	*357	*4.44	No other peak greater than base discharge.			
Minimum discharge, 0.08 ft <sup>3</sup> /s, Aug. 31, Sept. 6, 7, 8, gage height, 0.76; minimum daily discharge, 0.10 ft <sup>3</sup> /s, Sept. 8.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	1.3	4.0	7.5	e6.2	21	11	7.9	1.7	.29	1.1	.27
2	3.9	1.6	3.2	13	e6.0	18	9.4	7.0	1.4	.34	.89	.18
3	2.8	1.7	2.8	11	5.4	16	8.4	6.5	2.5	.24	.82	.14
4	2.2	1.8	2.7	7.4	4.9	16	11	5.7	2.2	.21	e1.5	.12
5	1.9	1.6	13	5.0	e4.8	14	e10	6.1	1.9	.22	e6.0	.12
6	1.7	1.4	23	4.4	e4.6	21	e9.0	8.3	1.7	.21	e20	.11
7	1.5	1.4	15	5.9	e4.6	34	e8.0	6.5	1.3	.21	e8.0	.11
8	1.4	1.3	12	6.4	e4.4	149	8.1	5.2	1.2	.30	e5.0	.10
9	1.5	1.3	8.9	5.4	e4.4	156	9.3	4.6	1.1	.32	e4.0	.18
10	5.0	1.3	7.0	4.0	e4.2	76	15	4.4	.97	.23	e3.0	.18
11	3.0	1.3	17	3.1	e4.0	47	12	4.3	1.1	.33	e2.0	.14
12	2.3	1.2	18	3.8	4.0	29	10	4.3	2.4	.44	1.5	.13
13	1.9	1.1	8.9	e9.0	4.2	48	32	4.2	2.5	.49	1.1	.23
14	1.8	1.1	7.9	e14	4.5	53	26	3.8	2.1	.36	.85	.24
15	1.6	.95	e5.8	e23	4.1	48	19	4.0	1.7	.47	.71	.18
16	1.6	1.1	e5.2	e30	4.2	40	14	3.8	1.3	.39	.58	.15
17	1.6	1.0	e4.6	37	4.2	34	12	3.5	1.1	.63	.51	.37
18	1.4	1.0	e4.4	26	3.8	28	11	3.2	.87	.57	.42	.35
19	1.2	1.0	e4.2	19	4.0	23	16	3.0	.70	.47	.34	.22
20	1.3	.94	e4.0	28	4.8	20	16	2.9	.61	.41	.28	.20
21	1.9	1.1	e3.8	46	6.4	23	14	2.6	.48	.41	.24	.18
22	1.8	1.9	3.7	46	5.7	25	16	2.3	.40	.40	.20	1.2
23	1.6	1.8	3.6	34	5.4	20	13	2.2	.37	1.0	.18	3.1
24	1.5	1.6	14	26	e5.2	18	11	2.0	.37	2.2	.18	1.9
25	1.3	1.4	21	21	e5.0	15	9.2	2.7	.33	2.5	.19	1.3
26	1.3	1.4	e14	e17	e5.4	13	8.2	2.8	.40	5.9	.21	1.1
27	1.4	1.2	e11	e12	e6.0	12	7.1	2.6	.38	7.2	.20	.85
28	1.4	4.3	e7.0	e9.0	e11	11	12	2.4	.28	3.6	.13	.64
29	1.3	7.1	e4.5	e7.2	---	10	12	2.3	.26	3.1	.12	.45
30	1.2	5.3	e3.5	e6.5	---	10	9.0	2.3	.23	2.3	.12	.38
31	1.1	---	3.7	e6.5	---	12	---	2.0	---	1.6	.14	---
TOTAL	59.2	52.49	261.4	494.1	141.4	1060	378.7	125.4	33.85	37.34	60.51	14.82
MEAN	1.91	1.75	8.43	15.9	5.05	34.2	12.6	4.05	1.13	1.20	1.95	.49
MAX	5.0	7.1	23	46	11	156	32	8.3	2.5	7.2	20	3.1
MIN	1.1	.94	2.7	3.1	3.8	10	7.1	2.0	.23	.21	.12	.10
CFSM	.20	.18	.89	1.68	.53	3.61	1.33	.43	.12	.13	.21	.05
IN.	.23	.21	1.03	1.94	.55	4.16	1.49	.49	.13	.15	.24	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	6.99	14.4	16.7	10.9	7.55
MAX	16.6	26.5	23.3	16.3	12.8
(WY)	1992	1992	1991	1993	1994
MIN	1.73	1.75	8.43	4.88	3.44
(WY)	1993	1995	1995	1994	1993

e Estimated

## HUDSON RIVER BASIN

01360640 VALATIE KILL NEAR NASSAU, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1991 - 1995	
ANNUAL TOTAL	4535.82		2719.21			
ANNUAL MEAN	12.4		7.45		11.2	
HIGHEST ANNUAL MEAN					14.2	
LOWEST ANNUAL MEAN					7.45	
HIGHEST DAILY MEAN	112	Apr 7	156	Mar 9	344	Mar 30 1993
LOWEST DAILY MEAN	.60	Sep 13	.10	Sep 8	.10	Aug 2 1991
ANNUAL SEVEN-DAY MINIMUM	.70	Sep 11	.13	Sep 2	.13	Sep 2 1995
ANNUAL RUNOFF (CFSM)	1.31		.79		1.18	
ANNUAL RUNOFF (INCHES)	17.80		10.67		16.01	
10 PERCENT EXCEEDS	38		18		27	
50 PERCENT EXCEEDS	4.2		3.1		4.7	
90 PERCENT EXCEEDS	1.1		.25		.42	

## HUDSON RIVER BASIN

01361200 CLAVERACK CREEK AT CLAVERACK, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°12'54", long 73°43'46", Columbia County, Hydrologic Unit 02020006, on right bank 40 ft upstream from bridge on State Highway 9H, 2.2 mi upstream from Taghkanic Creek, and 0.5 mi south of Claverack. Water-quality sampling site at discharge station.

DRAINAGE AREA.--60.6 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1960 to September 1962, March 1963 to September 1968 (no winter records prior to October 1965), October 1968 to September 1980 (annual maximum only), March 1993 to April 1995 (discontinued).

REVISED RECORDS.--WDR NY-78-1: 1973-78 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 139.77 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional slight diurnal fluctuation at low flow.

AVERAGE DISCHARGE.--4 years (water years 1966-68, 1994), 68.9 ft<sup>3</sup>/s, 15.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,590 ft<sup>3</sup>/s, June 30, 1973, gage height, 12.38 ft, from computation of flow over dam; minimum discharge, 0.8 ft<sup>3</sup>/s, Nov. 19, 1964; minimum daily, 1.8 ft<sup>3</sup>/s, Aug. 15, 1961.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Apr. 1995: Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 9	0045	*1,750	*7.77	No other peak greater than base discharge.			

Minimum discharge, 12 ft<sup>3</sup>/s, Nov. 19, 20, 21; minimum daily, 13 ft<sup>3</sup>/s, Nov. 20.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO APRIL 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	17	45	e70	e62	125	73	---	---	---	---	---
2	27	19	37	e80	e60	96	68	---	---	---	---	---
3	23	17	33	e72	53	82	64	---	---	---	---	---
4	21	17	30	e60	e49	76	65	---	---	---	---	---
5	19	17	63	e50	e48	72	63	---	---	---	---	---
6	18	16	119	e55	e47	92	58	---	---	---	---	---
7	17	16	84	e62	e46	132	57	---	---	---	---	---
8	16	16	85	e75	e45	472	55	---	---	---	---	---
9	17	16	66	e62	e44	922	58	---	---	---	---	---
10	28	17	61	56	e43	391	70	---	---	---	---	---
11	23	15	142	46	e41	266	61	---	---	---	---	---
12	20	15	112	50	e39	228	57	---	---	---	---	---
13	20	15	76	120	e37	279	141	---	---	---	---	---
14	18	15	68	135	e35	296	122	---	---	---	---	---
15	17	14	63	160	e33	250	101	---	---	---	---	---
16	16	14	55	163	32	213	89	---	---	---	---	---
17	16	14	e51	168	32	187	82	---	---	---	---	---
18	16	14	e49	132	31	171	76	---	---	---	---	---
19	15	14	e47	114	32	148	94	---	---	---	---	---
20	16	13	45	191	36	131	97	---	---	---	---	---
21	18	16	41	378	40	131	85	---	---	---	---	---
22	17	25	38	337	37	142	91	---	---	---	---	---
23	17	21	37	256	36	126	81	---	---	---	---	---
24	18	19	281	e170	e38	116	74	---	---	---	---	---
25	17	18	372	e120	e40	103	71	---	---	---	---	---
26	17	18	199	e90	e47	94	66	---	---	---	---	---
27	16	17	142	e80	51	87	63	---	---	---	---	---
28	15	47	117	e75	96	82	76	---	---	---	---	---
29	15	99	97	e70	---	77	76	---	---	---	---	---
30	15	60	e57	e65	---	75	66	---	---	---	---	---
31	15	---	58	e64	---	78	---	---	---	---	---	---
TOTAL	572	651	2770	3626	1230	5740	2300	---	---	---	---	---
MEAN	18.5	21.7	89.4	117	43.9	185	76.7	---	---	---	---	---
MAX	29	99	372	378	96	922	141	---	---	---	---	---
MIN	15	13	30	46	31	72	55	---	---	---	---	---
CFSM	.30	.36	1.47	1.93	.72	3.06	1.27	---	---	---	---	---
IN.	.35	.40	1.70	2.23	.76	3.52	1.41	---	---	---	---	---

e Estimated

## HUDSON RIVER BASIN

01361200 CLAVERACK CREEK AT CLAVERACK, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.9	31.8	70.6	65.2	79.4	208	145	62.2	35.2	18.7	11.6	18.8
MAX	49.0	80.6	115	117	132	298	324	109	96.7	53.0	24.1	96.0
(WY)	1961	1994	1994	1995	1994	1994	1993	1961	1967	1967	1960	1960
MIN	4.46	5.29	26.0	26.0	43.9	159	50.4	26.3	11.2	6.46	4.15	3.85
(WY)	1965	1965	1966	1968	1995	1961	1966	1963	1963	1965	1966	1964

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## WATER YEARS 1960 - 1995

ANNUAL TOTAL	31002.2	
ANNUAL MEAN	84.9	
HIGHEST ANNUAL MEAN		68.9
LOWEST ANNUAL MEAN		92.1
HIGHEST DAILY MEAN		44.4
LOWEST DAILY MEAN	710	Mar 25
ANNUAL SEVEN-DAY MINIMUM	7.3	Aug 12
ANNUAL RUNOFF (CFSM)	7.8	Aug 7
ANNUAL RUNOFF (INCHES)	1.40	
10 PERCENT EXCEEDS	19.03	
50 PERCENT EXCEEDS	264	
90 PERCENT EXCEEDS	37	
	11	
		1700
		1.8
		2.8
		1.14
		15.45
		148
		28
		6.0



## HUDSON RIVER BASIN

01361200 CLAVERACK CREEK AT CLAVERACK, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-66, March 1993 to April 1995 (discontinued).

CHEMICAL DATA: 1964 (b), 1965 (c), 1966 (a), 1993 (b), 1994 (d), 1995 (c).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1993 (b), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1964 (b), 1965 (c), 1966 (a), 1993 (b), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (b), 1994 (d), 1995 (c).

PERIOD OF DAILY RECORD.--WATER TEMPERATURES: March 1993 to April 1995 (discontinued).

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

REMARKS.--Interruptions of temperature record were due to malfunction of recording instrument. Also published as a NAWQA fish-tissue collection site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1993-94), 26.5°C, June 18, 19, July 7, 1994; minimum (water years 1994-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES (Oct. 1994 to Apr. 1995): Maximum, 15.0°C, Oct. 9; minimum, 0.0°C on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATUR-ATION	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 14...	1030	18	282	7.6	13.0	10.0	769	11.8	103	120	39	4.3
NOV 18...	0950	14	292	7.5	9.5	8.0	766	11.9	99	120	40	4.5
DEC 16...	1020	54	212	7.1	-4.0	1.5	777	14.9	104	81	27	3.4
JAN 23...	1050	265	164	7.2	0.5	3.0	756	13.6	102	61	20	2.8
FEB 06...	1110	E47	254	7.5	-14.0	0.0	752	13.6	94	110	36	4.1
MAR 17...	0800	190	183	7.4	9.0	8.5	760	11.4	97	72	24	2.9
DATE		SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT 14...	11	17	0.4	1.8	85	17	20	<0.1	4.5	162	155	<0.01
NOV 18...	11	17	0.4	1.6	100	17	20	<0.1	3.5	173	160	0.01
DEC 16...	9.6	20	0.5	1.3	65	16	18	<0.1	6.4	131	123	<0.01
JAN 23...	8.4	23	0.5	1.1	43	13	15	<0.1	6.4	107	96	<0.01
FEB 06...	11	18	0.5	1.2	73	17	19	<0.1	6.8	150	149	<0.01
MAR 17...	8.1	19	0.4	1.0	53	14	14	<0.1	5.5	107	104	<0.01
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 14...		1.0	<0.02	<0.20	<0.20	0.02	0.02	0.02	27	16	1.7	0.2
NOV 18...		1.1	<0.02	<0.20	<0.20	0.02	<0.01	<0.01	26	10	1.2	0.2
DEC 16...		0.97	<0.02	<0.20	<0.20	0.02	<0.01	0.02	37	17	1.7	0.2
JAN 23...		0.72	0.03	<0.20	0.20	0.04	0.03	0.02	45	14	2.5	0.4
FEB 06...		1.6	0.06	0.20	<0.20	0.03	<0.01	0.03	32	21	1.3	0.3
MAR 17...		0.83	0.02	<0.20	<0.20	0.02	0.01	0.02	32	11	1.8	0.2

E Estimated daily.

## HUDSON RIVER BASIN

01361200 CLAVERACK CREEK AT CLAVERACK, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 14...	1030	18	2	0.10	80
NOV 18...	0950	14	3	0.11	56
DEC 16...	1020	54	3	0.44	88
JAN 23...	1050	265	9	6.4	89
FEB 06...	1110	E47	15	1.9	71
MAR 17...	0800	190	6	3.1	93

WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1994 TO APRIL 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.5	12.0	12.5	12.5	10.5	11.5	4.5	3.5	4.0	3.0	1.5	2.5
2	13.0	11.5	12.0	12.0	9.5	11.0	4.5	3.0	4.0	3.0	1.5	2.5
3	13.0	10.0	11.5	11.5	8.5	10.0	5.0	3.0	4.0	1.5	.5	1.0
4	12.0	10.5	11.0	13.0	9.5	11.0	5.5	4.0	5.0	1.5	.0	1.0
5	12.0	10.5	11.0	14.0	11.5	12.5	7.0	5.5	6.5	.5	.0	.0
6	12.0	10.0	11.0	13.5	12.0	12.5	8.0	6.5	7.0	.5	.0	.0
7	12.5	9.5	11.0	12.0	9.5	11.0	8.0	5.0	7.0	1.5	.0	1.0
8	14.0	11.0	12.0	11.0	9.0	10.0	5.0	2.0	3.5	1.5	1.0	1.5
9	15.0	12.5	13.5	11.0	10.0	10.5	3.0	1.5	2.0	1.5	.5	1.0
10	13.5	11.5	13.0	10.5	8.0	9.5	4.0	3.0	3.5	1.0	.0	.5
11	12.0	10.0	11.0	8.5	6.5	7.5	4.0	2.5	3.5	.5	.0	.0
12	11.0	8.5	9.5	7.5	5.5	6.0	2.5	.0	1.0	2.5	.0	1.0
13	11.0	8.0	9.5	8.5	6.0	7.0	.5	.0	.5	4.0	2.5	3.5
14	11.5	9.0	10.0	9.5	6.5	8.0	2.5	.5	1.5	6.0	3.5	5.0
15	11.5	9.0	10.0	10.0	8.5	9.5	2.5	1.5	2.0	7.5	6.0	7.0
16	10.5	8.0	9.0	9.0	7.5	8.5	2.5	1.0	1.5	7.5	7.5	7.5
17	10.5	7.5	9.0	8.5	6.0	7.5	3.5	2.5	3.0	7.5	5.5	6.5
18	10.5	8.5	9.5	8.5	7.0	8.0	4.0	3.5	4.0	5.5	5.0	5.0
19	12.0	10.0	11.0	9.5	7.0	8.5	4.0	2.5	3.5	5.5	4.5	5.0
20	13.0	11.5	12.5	8.0	6.0	7.0	3.0	2.0	2.5	6.0	5.5	5.5
21	14.0	12.0	13.0	7.5	5.5	6.5	3.0	2.0	2.5	5.5	4.5	5.0
22	14.5	12.5	13.5	8.5	6.5	7.5	3.0	2.0	2.5	4.5	3.5	4.0
23	13.0	11.5	12.0	6.5	3.5	5.0	3.5	2.0	2.5	3.5	3.0	3.0
24	13.0	11.0	12.0	4.0	2.5	3.0	3.5	2.5	3.0	3.5	3.0	3.0
25	13.0	11.0	11.5	5.0	2.5	3.5	3.5	2.5	3.0	3.5	2.5	3.0
26	11.5	9.5	10.5	4.0	2.5	3.5	3.0	2.0	2.5	2.5	1.5	2.0
27	10.5	9.0	10.0	4.0	2.0	2.5	3.0	1.5	2.0	2.5	.5	1.5
28	10.5	7.5	9.0	3.5	2.0	3.0	3.5	2.0	2.5	.5	.0	.0
29	11.0	8.5	9.5	4.5	2.5	3.5	3.5	.5	2.5	1.0	.0	.5
30	12.0	9.0	10.0	4.0	2.5	3.5	1.0	.0	.5	1.5	.0	.5
31	11.0	10.0	10.5	---	---	---	1.5	.0	.5	2.5	1.0	2.0
MONTH	15.0	7.5	11.0	14.0	2.0	7.5	8.0	.0	3.0	7.5	.0	2.5

E Estimated daily.

## HUDSON RIVER BASIN

01361200 CLAVERACK CREEK AT CLAVERACK, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1994 TO APRIL 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.5	2.0	3.0	3.0	1.5	2.0	10.5	7.0	9.0	---	---	---
2	3.5	1.0	3.0	3.0	1.0	2.0	9.5	6.0	8.0	---	---	---
3	2.0	.5	1.0	3.5	.5	2.0	8.5	5.0	7.0	---	---	---
4	1.0	.0	.5	3.5	1.0	2.5	10.0	7.5	8.5	---	---	---
5	.5	.0	.0	4.5	1.5	3.0	7.5	4.0	5.5	---	---	---
6	.0	.0	.0	5.5	3.5	4.5	6.5	3.0	5.0	---	---	---
7	.0	.0	.0	5.5	3.5	4.5	8.5	5.0	6.5	---	---	---
8	.5	.0	.0	6.0	1.0	5.0	7.5	5.0	5.5	---	---	---
9	.5	.0	.0	1.0	.0	.5	10.5	5.0	7.0	---	---	---
10	.5	.0	.0	1.5	.0	.5	12.5	6.5	8.5	---	---	---
11	1.0	.0	.5	3.0	.5	1.5	9.0	4.5	7.0	---	---	---
12	.5	.0	.0	5.0	2.0	3.0	9.0	7.5	8.0	---	---	---
13	.5	.0	.0	7.0	3.5	5.0	10.5	8.5	9.0	---	---	---
14	.5	.0	.0	7.0	4.0	5.5	9.5	7.5	8.5	---	---	---
15	.5	.0	.0	9.0	6.0	7.5	9.5	7.0	8.0	---	---	---
16	2.5	.5	1.5	9.5	7.5	8.5	9.5	6.0	7.5	---	---	---
17	3.0	1.0	2.0	10.0	8.0	9.0	10.5	5.0	---	---	---	---
18	3.0	1.0	2.0	9.0	7.0	8.0	12.5	8.0	10.5	---	---	---
19	4.0	1.5	3.0	9.0	6.0	7.5	12.5	10.0	11.0	---	---	---
20	4.0	2.0	3.0	9.0	6.5	7.5	14.0	10.0	12.0	---	---	---
21	3.5	3.0	3.5	8.5	7.5	8.0	12.5	11.0	11.0	---	---	---
22	3.5	2.0	3.0	8.0	6.5	7.5	13.0	10.5	11.5	---	---	---
23	4.0	2.5	3.5	7.0	6.0	6.5	12.0	9.0	10.5	---	---	---
24	4.0	2.0	3.0	7.0	5.5	6.0	13.0	8.5	11.0	---	---	---
25	2.5	1.0	1.5	7.5	4.0	5.5	13.0	9.0	11.0	---	---	---
26	1.5	.5	1.0	8.5	4.0	6.0	13.0	10.5	12.0	---	---	---
27	1.0	.0	.5	8.5	4.5	6.5	14.5	10.0	12.5	---	---	---
28	2.0	1.0	1.5	8.0	4.0	6.0	14.0	12.5	13.5	---	---	---
29	---	---	---	13.0	5.5	---	13.5	11.5	12.5	---	---	---
30	---	---	---	11.0	9.5	10.0	12.5	10.5	11.5	---	---	---
31	---	---	---	10.5	8.5	9.5	---	---	---	---	---	---
MONTH	4.0	.0	1.5	13.0	.0	---	14.5	3.0	---	---	---	---

## HUDSON RIVER BASIN

01362200 ESOPUS CREEK AT ALLABEN, NY  
(National water-quality assessment program station)

LOCATION.--Lat 42°07'01", long 74°22'50", Ulster County, Hydrologic Unit 02020006, on right bank, 20 ft downstream from bridge on Fox Hollow Road, 0.5 mi west of Allaben, 200 ft downstream from Fox Hollow Creek, and 600 ft upstream from Peck Hollow Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--63.7 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1988, published as Esopus Creek at Shandaken.

GAGE.--Water-stage recorder. Datum of gage is 998.04 ft above sea level. Prior to November 22, 1988, at site 0.5 mi upstream at datum 19.23 ft higher.

REMARKS.--Records poor. Occasional slight regulation when filling or draining swimming pools or small ponds upstream from station. Satellite gage-height and temperature telemeter at station.

AVERAGE DISCHARGE.--32 years, 137 ft<sup>3</sup>/s, 29.21 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 13.70 ft, from floodmarks, site and datum then in use, from rating curve extended above 3,000 ft<sup>3</sup>/s, on basis of slope-area measurement at gage height 13.70 ft, at site 0.5 mi upstream, includes undetermined amount of flow bypassing gage; minimum discharge, 2.1 ft<sup>3</sup>/s, Sept. 16, 1983 (result of slight regulation upstream from station).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1951 reached a stage of about 15.1 ft, at previous site and datum, from information supplied by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2045	*1,770	*7.11	No other peak greater than base discharge.			
Minimum discharge, 4.0 ft <sup>3</sup> /s, Aug. 31, Sept. 7, 8, 30.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	43	242	193	125	82	91	112	64	35	9.1	11
2	149	50	210	182	119	77	85	105	63	34	8.6	6.2
3	127	45	183	155	113	e76	81	99	84	28	8.7	5.4
4	115	44	163	146	e100	e76	88	95	77	25	8.8	5.2
5	105	42	250	156	e96	77	82	94	72	23	24	5.0
6	96	43	302	e160	e90	82	79	90	74	22	38	4.5
7	88	44	291	190	e86	88	75	84	87	31	27	4.4
8	82	42	260	159	e84	542	74	81	104	28	21	4.3
9	78	42	231	149	e82	902	74	79	93	22	18	11
10	77	48	218	146	e80	517	80	79	88	19	16	8.3
11	72	46	236	138	e78	371	74	78	91	26	15	6.0
12	68	46	193	139	e74	274	77	77	115	21	14	5.4
13	65	46	169	164	e70	260	167	74	104	17	12	8.2
14	61	45	155	174	e68	285	166	70	95	15	11	7.1
15	60	45	143	254	e64	342	175	69	88	14	16	6.0
16	57	45	134	404	e62	387	173	67	81	14	11	5.7
17	54	44	127	374	e62	384	165	66	77	17	11	12
18	53	44	122	325	e60	316	157	65	73	24	10	8.9
19	52	44	115	283	e54	252	182	65	68	18	10	6.5
20	53	43	107	464	55	213	167	63	63	15	9.7	6.3
21	52	53	101	627	56	203	164	61	58	13	9.6	6.5
22	49	67	98	528	e50	195	164	58	56	12	7.9	20
23	47	61	96	424	52	172	156	55	53	13	7.3	27
24	45	61	220	344	e60	152	147	56	48	17	6.9	23
25	43	61	260	282	e58	137	139	63	47	15	6.4	19
26	42	61	274	236	e60	125	133	58	51	16	6.3	18
27	41	61	262	204	e64	117	127	56	53	17	6.1	16
28	40	232	242	178	e82	110	125	53	44	19	5.8	14
29	39	363	213	e150	---	105	117	57	39	14	5.1	12
30	38	296	191	e140	---	101	112	77	36	12	4.7	9.5
31	37	---	165	134	---	97	---	68	---	10	5.0	---
TOTAL	2154	2207	5973	7602	2104	7117	3696	2274	2146	606	370.0	302.4
MEAN	69.5	73.6	193	245	75.1	230	123	73.4	71.5	19.5	11.9	10.1
MAX	169	363	302	627	125	902	182	112	115	35	38	27
MIN	37	42	96	134	50	76	74	53	36	10	4.7	4.3
CFSM	1.09	1.15	3.02	3.85	1.18	3.60	1.93	1.15	1.12	.31	.19	.16
IN.	1.26	1.29	3.49	4.44	1.23	4.16	2.16	1.33	1.25	.35	.22	.18

e Estimated

## HUDSON RIVER BASIN

01362200 ESOPUS CREEK AT ALLABEN, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	75.2	136	163	134	140	248	334	194	97.7	50.9	30.3	39.9
MAX	370	346	496	358	385	553	827	511	363	208	86.3	213
(WY)	1978	1973	1974	1978	1981	1977	1993	1989	1973	1972	1969	1987
MIN	4.16	5.58	49.4	19.4	29.6	69.9	123	67.3	19.4	8.94	6.30	4.23
(WY)	1965	1965	1965	1981	1987	1970	1995	1987	1965	1965	1964	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1964 - 1995			
ANNUAL TOTAL	54775				36551.4							
ANNUAL MEAN	150				100				137			
HIGHEST ANNUAL MEAN									218			
LOWEST ANNUAL MEAN									59.8			
HIGHEST DAILY MEAN	1580				902				5000			
LOWEST DAILY MEAN	13				4.3				3.3			
ANNUAL SEVEN-DAY MINIMUM	17				5.0				3.5			
ANNUAL RUNOFF (CFSM)	2.36				1.57				2.15			
ANNUAL RUNOFF (INCHES)	31.99				21.35				29.16			
10 PERCENT EXCEEDS	304				234				301			
50 PERCENT EXCEEDS	76				69				75			
90 PERCENT EXCEEDS	31				10				13			



## HUDSON RIVER BASIN

01362200 ESOPUS CREEK AT ALLABEN, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year. Published as Esopus Creek at Shandaken (01362198), October 1963 to September 1988, October 1989 to August 1992 (non-daily record).

CHEMICAL DATA: 1963 (a), 1964 (b), 1965 (a), 1966 (b), 1967 (c), 1968-82 (d), 1983 (c), 1984 (b), 1985 (c), 1986 (b), 1987 (a), 1988-92 (b), 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENT DATA: 1964 (b), 1965, 1967-73, 1975-76 (a), 1977 (b), 1978-84 (a), 1985-86 (b), 1987 (a), 1988-92 (b), 1993 (a).

RADIOCHEMICAL DATA: 1967-77, 1979-85, 1988-92 (a).

PESTICIDE DATA: 1967-71 (a), 1972 (b), 1974-77, 1979-82, 1993-94 (a).

ORGANIC DATA: OC--1972, 1974, 1979 (a), 1981-82, 1993 (c), 1994 (d), 1995 (c).

PCB--1972, 1974-77, 1979-82, 1993 (a).

PCN--1977, 1979-82, 1993 (a).

NUTRIENT DATA: 1963 (a), 1964 (b), 1965 (a), 1966 (b), 1967 (c), 1968-82 (d), 1983 (c), 1984 (b), 1985 (c), 1986 (b), 1987 (a), 1988-92 (b), 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1968-69 (d), 1970-72 (c), 1973-82 (d), 1983-85 (b), 1986-88 (a), 1990-92 (b), 1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1969 (d), 1970-71 (c), 1972-73 (d), 1974 (c), 1975, 1977-78 (d), 1979 (c), 1980-82 (d), 1983-86, 1988-92 (b), 1993 (c), 1994 (d), 1995 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1963 to July 1968, January 1970 to May 1994, February to September 1995. Prior to October 1988, published as Esopus Creek at Shandaken (01362198).

INSTRUMENTATION.--Water-temperature satellite telemeter since June 1989, provides 15-minute-interval readings. Prior to June 1989, water-temperature digital recorder provided one-hour-interval punches, and prior to November 1981, water-temperature recorder provided continuous recordings.

REMARKS.--Interruption of temperature record was due to malfunction of recording instrument. Also published as a NAWQA fish-tissue collection site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1963-76, 1978-80, 1982, 1985-86, 1989-93), 28.5°C Aug. 16, 1965, Aug. 9, 1980, July 10, 1993; minimum, 0.0°C on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES (Feb. to Sept. 1995): Maximum recorded, 27.0°C, Aug. 4, 16, 17; minimum, 0.0°C on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
OCT													
11...	1150	71	49	7.0	11.0	8.5	747	11.4	99	17	5.1	1.1	
NOV													
14...	1150	46	51	7.0	16.5	8.0	753	11.9	101	19	5.5	1.2	
DEC													
12...	1140	191	41	6.8	-4.5	1.5	749	13.9	101	14	4.1	1.0	
JAN													
23...	1600	406	40	6.8	0.5	4.0	732	12.3	97	14	4.1	1.0	
FEB													
06...	1530	E90	50	6.8	-11.5	0.0	725	14.1	101	17	5.0	1.1	
MAR													
16...	1400	406	42	6.8	21.0	7.5	737	11.6	101	14	4.1	0.9	

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT												
11...	2.7	25	0.3	0.3	11	6.3	3.4	<0.1	2.4	30	29	<0.01
NOV												
14...	2.9	25	0.3	0.3	12	6.2	4.0	<0.1	2.4	39	31	<0.01
DEC												
12...	2.1	24	0.2	0.2	7	5.8	3.3	<0.1	2.8	30	26	<0.01
JAN												
23...	2.3	26	0.3	0.3	5	5.3	3.5	<0.1	2.9	29	25	<0.01
FEB												
06...	2.9	27	0.3	0.3	11	5.8	3.9	<0.1	3.3	32	29	<0.01
MAR												
16...	2.4	26	0.3	0.3	13	5.0	4.4	<0.1	2.7	27	26	<0.01

E Estimated daily.

## HUDSON RIVER BASIN

01362200 ESOPUS CREEK AT ALLABEN, NY--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 11...	<0.05	<0.02	<0.20	<0.20	<0.01	<0.01	<0.01	17	4	0.9	0.1
NOV 14...	0.08	<0.02	<0.20	<0.20	<0.01	<0.01	<0.01	7	2	0.8	0.2
DEC 12...	0.27	<0.02	<0.20	<0.20	<0.01	0.01	0.01	5	2	1.0	0.1
JAN 23...	0.36	<0.02	<0.20	<0.20	<0.01	<0.01	<0.01	4	1	1.1	0.2
FEB 06...	0.30	<0.02	<0.20	<0.20	0.03	<0.01	0.03	<3	2	0.8	0.2
MAR 16...	0.45	<0.02	<0.20	<0.20	<0.01	0.01	<0.01	12	2	1.2	0.3

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 11...	1150	71	2	0.38	78
NOV 14...	1150	46	2	0.25	75
DEC 12...	1140	191	1	0.52	100
JAN 23...	1600	406	2	2.2	81
FEB 06...	1530	E90	1	0.24	100
MAR 16...	1400	406	4	4.4	84

## WATER TEMPERATURE, DEGREES CELSIUS, FEBRUARY TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	3.0	1.0	2.0	7.5	3.0	4.5	10.0	7.0	8.0
2	---	---	---	2.5	.0	1.0	7.5	2.0	4.5	8.0	6.0	7.0
3	.5	.0	.0	2.5	.0	1.0	7.0	1.5	4.5	11.0	5.5	8.0
4	.5	.0	.0	2.0	.0	1.0	7.5	2.5	5.5	12.0	6.0	9.0
5	1.5	.0	.0	3.5	.0	2.0	3.0	.0	1.5	9.5	8.0	9.0
6	.0	.0	.0	4.0	2.0	3.0	5.0	.0	2.5	13.0	7.0	9.0
7	1.5	.0	.0	3.5	2.5	3.0	6.5	3.0	4.0	13.0	5.5	9.0
8	1.0	.0	.0	4.5	.0	3.5	3.5	2.0	2.5	13.5	5.5	9.0
9	2.0	.0	.5	2.0	.0	1.0	5.5	3.0	4.0	14.5	6.5	10.5
10	2.0	.0	.5	3.0	.0	1.5	7.5	1.5	4.5	11.0	9.0	9.5
11	.5	.0	.0	3.5	1.0	2.0	9.0	2.5	5.5	9.5	8.5	9.0
12	.5	.0	.0	5.0	1.5	3.0	6.5	4.5	5.5	10.0	8.5	9.5
13	.5	.0	.0	7.0	2.5	4.0	7.0	5.5	6.0	12.5	8.0	10.0
14	.0	.0	.0	7.0	3.0	4.5	7.0	4.5	5.5	13.5	8.0	10.5
15	.5	.0	.0	8.0	4.0	5.5	7.0	3.5	5.5	14.5	9.5	11.0
16	1.0	.0	.0	8.0	5.0	6.0	9.5	3.0	5.5	16.0	8.5	12.0
17	1.0	.0	.0	7.0	4.5	5.5	10.5	3.5	6.5	12.5	10.0	11.0
18	1.0	.0	.5	6.5	4.0	5.0	11.5	5.0	8.0	12.0	10.0	11.0
19	1.5	.0	.5	7.5	3.5	5.0	11.0	7.0	8.5	11.0	9.5	10.0
20	1.5	.5	1.0	7.0	4.0	5.5	12.0	6.5	9.0	15.5	8.0	11.0
21	2.0	1.0	1.5	6.5	5.0	5.5	8.5	7.0	8.0	15.5	8.5	12.0
22	1.5	.0	1.0	6.5	4.5	5.0	10.0	7.0	8.0	15.5	9.5	12.5
23	2.5	1.0	1.5	5.0	4.0	4.5	10.5	5.5	7.5	16.5	8.5	12.5
24	2.0	.0	1.5	5.0	2.5	4.0	12.0	5.0	8.0	17.5	11.5	14.5
25	1.0	.0	.5	6.5	2.0	3.5	12.0	5.0	8.0	16.0	13.0	14.0
26	1.5	.0	.0	7.5	2.5	4.5	11.0	6.5	8.5	13.5	11.5	12.5
27	.0	.0	.0	8.0	2.5	5.0	11.5	6.0	8.5	17.5	10.5	13.5
28	1.5	.0	.5	8.0	2.5	5.0	11.5	8.0	9.5	13.0	10.0	12.0
29	---	---	---	8.5	2.5	5.0	9.5	7.0	8.0	16.5	11.0	13.0
30	---	---	---	6.5	4.5	5.5	9.5	6.0	8.0	13.5	12.0	12.5
31	---	---	---	7.0	4.0	5.0	---	---	---	18.0	10.5	14.0
MONTH	---	---	---	8.5	.0	4.0	12.0	.0	6.0	18.0	5.5	11.0

E Estimated daily.

## HUDSON RIVER BASIN

01362200 ESOPUS CREEK AT ALLABEN, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, FEBRUARY TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.0	11.5	15.0	21.0	17.0	18.5	26.0	19.0	22.5	21.5	17.5	19.0
2	15.5	13.0	14.5	19.5	15.5	17.5	25.0	20.0	22.5	21.0	16.0	18.0
3	18.5	13.5	15.5	22.5	13.5	17.0	26.0	21.0	23.0	21.5	14.0	17.5
4	18.5	13.5	15.5	21.5	14.0	18.0	27.0	21.0	23.0	20.5	14.5	17.5
5	18.0	12.0	14.5	23.0	17.0	19.5	22.5	20.0	21.5	22.0	16.0	18.5
6	18.0	12.0	15.0	22.5	18.0	20.0	21.5	19.5	20.0	22.5	16.0	18.5
7	18.5	13.0	15.5	18.5	17.0	17.5	24.0	18.5	20.5	21.5	16.5	18.5
8	16.0	13.5	14.5	21.5	15.0	18.0	23.0	16.5	19.5	18.5	16.0	17.5
9	17.5	12.0	14.5	22.5	14.5	16.5	24.0	16.5	20.0	16.5	15.5	16.0
10	15.0	13.0	14.0	---	---	---	22.0	16.5	19.5	18.0	13.5	15.0
11	16.5	13.0	14.5	---	---	---	24.0	18.0	20.5	18.5	11.5	14.5
12	15.0	12.5	13.5	---	---	---	22.0	19.0	20.5	19.0	11.5	15.0
13	17.0	11.5	14.0	---	---	---	25.5	18.0	21.0	16.0	15.5	15.5
14	15.0	11.5	13.5	---	---	---	24.5	18.0	21.5	19.0	15.5	17.0
15	17.0	11.0	14.0	---	---	---	26.0	20.5	22.5	18.5	13.5	15.5
16	18.5	11.0	14.5	---	---	---	27.0	21.0	23.5	15.5	11.5	13.5
17	19.5	12.0	15.5	---	---	---	27.0	20.5	23.0	15.5	13.5	14.5
18	20.0	13.0	16.5	25.0	18.5	21.5	25.5	19.5	22.5	18.5	13.5	15.0
19	22.0	14.5	18.0	23.0	18.0	20.5	25.5	19.0	22.0	16.5	11.0	13.5
20	22.0	16.0	19.0	22.5	17.5	20.0	25.0	17.5	20.5	15.5	12.0	13.5
21	20.0	15.0	17.5	20.5	18.5	19.5	25.5	17.5	21.0	16.0	14.0	14.5
22	16.5	14.5	15.5	22.5	17.0	20.0	24.0	18.5	20.5	16.5	14.5	15.5
23	19.0	13.5	16.0	22.0	19.0	20.5	23.5	16.5	19.5	14.5	12.0	13.5
24	19.5	14.0	16.5	25.0	19.0	21.0	23.5	17.5	19.5	13.5	9.5	11.5
25	21.0	15.5	17.5	25.0	19.5	22.0	22.5	15.5	18.5	13.0	11.0	12.0
26	20.5	16.0	18.0	23.5	20.0	21.5	21.0	15.0	18.0	13.5	12.0	12.5
27	21.0	16.0	18.0	23.5	19.5	21.5	20.5	17.0	18.5	16.0	12.0	13.5
28	20.5	14.5	17.0	26.0	19.5	22.5	22.5	15.0	18.0	15.5	11.5	13.0
29	21.5	14.0	17.5	26.0	21.0	23.0	23.0	16.0	19.0	13.5	9.0	11.0
30	21.5	15.5	18.5	26.5	20.0	22.5	22.5	16.0	19.0	13.5	8.5	11.0
31	---	---	---	26.0	18.5	22.0	22.0	15.0	18.5	---	---	---
MONTH	22.0	11.0	16.0	---	---	---	27.0	15.0	20.5	22.5	8.5	15.0

## HUDSON RIVER BASIN

01362500 ESOPUS CREEK AT COLDBROOK, NY

LOCATION.--Lat 42°00'51", long 74°16'16", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Coldbrook Road in Coldbrook, 0.3 mi downstream from Little Beaver Kill, 1.5 mi upstream from Ashokan Reservoir, and 2.5 mi south of Mount Tremper.

DRAINAGE AREA.--192 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1914 to September 1925 (monthly discharge only, furnished by State engineer and surveyor of New York, published in WSP 1302), October 1925 to September 1931 (monthly discharge only, furnished by Board of Water Supply, City of New York, published in WSP 1302), October 1931 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 621.54 ft above sea level. Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since 1924, water diverted from Schoharie Reservoir through Shandaken Tunnel (see Reservoirs in Hudson River Basin) enters Esopus Creek 10.5 mi upstream from station and is included in records of daily discharge. Slight diversion from Beaver Kill into Cooper Lake for water supply of Kingston. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,300 ft<sup>3</sup>/s, Mar. 21, 1980, gage height 21.94 ft, from rating curve extended above 13,000 ft<sup>3</sup>/s, on basis of slope-area measurements at gage heights 12.39 ft, 15.15 ft, and 20.70 ft; minimum daily, 9.3 ft<sup>3</sup>/s, Aug. 27, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,200 ft<sup>3</sup>/s, Mar. 8, gage height, 10.47 ft; minimum, 137 ft<sup>3</sup>/s, July 10, 11, gage height, 3.85 ft; minimum daily discharge, 139 ft<sup>3</sup>/s, July 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	878	397	1310	1170	978	886	502	519	455	154	198	181
2	846	429	1190	1170	e900	e820	483	494	517	162	204	176
3	705	497	1100	1070	e820	e760	472	470	918	149	217	172
4	428	483	1040	e900	e780	e760	521	455	803	145	231	171
5	399	485	1480	e840	e760	e800	535	454	347	142	240	170
6	380	484	1620	e900	e760	852	514	441	325	142	268	168
7	361	481	1510	1200	e740	912	515	426	312	155	238	170
8	345	476	1400	1070	e760	2880	547	416	306	154	225	170
9	333	478	1290	1010	e780	3100	555	411	296	143	217	179
10	334	522	1230	e880	832	1570	596	414	287	139	212	178
11	328	632	1460	925	821	1160	619	450	290	151	210	172
12	380	625	1250	942	e760	949	719	616	333	167	205	175
13	373	618	1150	1040	e740	924	1050	675	322	187	201	177
14	379	621	1090	1080	e720	1000	1130	664	300	196	197	175
15	397	630	1050	1420	e740	1060	1170	686	292	194	197	166
16	386	625	997	2090	808	1120	1160	849	280	190	192	163
17	381	620	977	1760	778	1040	1150	868	218	200	194	178
18	381	631	967	1540	774	889	1130	861	210	226	186	175
19	384	627	915	1420	768	766	1220	861	200	208	178	170
20	387	617	877	2100	768	673	1190	852	181	204	175	169
21	384	668	867	1990	771	658	1190	837	175	207	176	174
22	376	767	850	1660	766	667	1210	836	172	206	178	198
23	372	714	835	1380	766	623	1180	838	171	207	173	222
24	370	698	1500	1380	806	610	1140	833	165	221	168	191
25	372	704	1730	1420	e740	605	878	856	163	213	167	183
26	368	712	1620	1300	e700	568	687	844	199	226	171	184
27	364	699	1480	1210	747	541	651	836	203	235	170	183
28	361	1580	1320	e1050	869	563	554	815	169	226	170	177
29	358	1850	1220	e960	---	507	531	822	161	215	170	174
30	355	1500	e1050	e960	---	513	515	825	156	206	169	170
31	353	---	1070	1010	---	503	---	574	---	201	169	---
TOTAL	12818	20870	37445	38847	21952	29279	24314	20798	8926	5771	6066	5311
MEAN	413	696	1208	1253	784	944	810	671	298	186	196	177
MAX	878	1850	1730	2100	978	3100	1220	868	918	235	268	222
MIN	328	397	835	840	700	503	472	411	156	139	167	163

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1995, BY WATER YEAR (WY)

	455	779	886	804	790	1188	1400	886	594	491	392	383
MEAN	2509	1699	2083	1897	2756	2810	3309	2320	1216	1364	1460	1194
MAX (WY)	1956	1943	1974	1937	1981	1936	1940	1989	1972	1945	1933	1937
MIN (WY)	22.3	43.6	178	145	137	406	552	410	233	52.0	44.9	27.3
(WY)	1942	1965	1965	1981	1980	1960	1985	1993	1933	1965	1962	1962

e Estimated

## HUDSON RIVER BASIN

01362500 ESOPUS CREEK AT COLDBROOK, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1932 - 1995	
ANNUAL TOTAL	302265		232397			
ANNUAL MEAN	828		637		753	
HIGHEST ANNUAL MEAN					1035	1952
LOWEST ANNUAL MEAN					419	1985
HIGHEST DAILY MEAN	4480	Apr 7	3100	Mar 9	24400	Aug 24 1933
LOWEST DAILY MEAN	196	Sep 22	139	Jul 10	9.3	Aug 27 1949
ANNUAL SEVEN-DAY MINIMUM	207	Sep 16	146	Jul 4	16	Sep 24 1943
10 PERCENT EXCEEDS	1560		1200		1470	
50 PERCENT EXCEEDS	618		547		540	
90 PERCENT EXCEEDS	324		172		162	



## HUDSON RIVER BASIN

01364500 ESOPUS CREEK AT MOUNT MARION, NY

LOCATION.--Lat 42°02'16", long 73°58'21", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Glasco Turnpike, 0.8 mi east of Mount Marion, 1.6 mi downstream from Plattekill Creek, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--419 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1907 to December 1913, January 1914 to March 1918 (monthly discharges only, published in WSP 1302), March 1970 to current year. Occasional miscellaneous measurements, 1902, 1951, 1956, 1966, 1967, 1969.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 40.16 ft above sea level. Prior to Aug. 12, 1970, nonrecording gage at same site (at different datum April 1907 to March 1918, and at present datum June 9, 1966 to Aug. 12, 1970).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow from 256 mi<sup>2</sup> of drainage area regulated by Ashokan Reservoir since Sept. 9, 1913. Water diverted from Schoharie Creek through Shandaken Tunnel (see Reservoirs in Hudson River Basin) since Feb. 3, 1924, enters Esopus Creek about 12.2 mi upstream from Ashokan Reservoir. Diversion from Plattekill Creek for water supply of village of Saugerties. Slight diversion at headwaters into Cooper Lake for water supply of Kingston. Diversions upstream during summer months for irrigation purposes. Diversions for water supply of city of New York made from Ashokan Reservoir (see Reservoirs in Hudson River Basin). Discharge records for this station now represent the natural flow from 112 mi<sup>2</sup>, together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--25 years (water years 1971-95), 451 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 ft<sup>3</sup>/s, Apr. 26, 1910, gage height, 25.10 ft, datum then in use; maximum discharge since March 1970, 22,500 ft<sup>3</sup>/s, Apr. 5, 1987, gage height, 24.78 ft; minimum discharge, 7.9 ft<sup>3</sup>/s, July 17, 18, 1993, gage height, 11.64 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,530 ft<sup>3</sup>/s, Mar. 9, gage height, 19.00 ft; minimum, 12 ft<sup>3</sup>/s, Sept. 8, 9, 15, 16, 17; minimum gage height, 11.68 ft, Sept. 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	57	559	289	214	379	200	162	82	26	46	18
2	209	86	428	421	204	340	180	154	68	33	42	19
3	174	83	347	411	177	299	152	144	62	37	87	17
4	148	81	295	e330	164	265	142	135	57	31	81	17
5	129	79	603	e240	158	242	148	125	54	26	69	15
6	114	75	1300	e220	e150	247	167	122	50	25	86	14
7	103	69	863	368	e140	283	143	117	47	24	89	14
8	95	68	642	432	e140	912	129	116	44	24	76	12
9	90	68	483	e320	e130	4440	136	105	41	23	66	12
10	104	71	412	e250	e130	1850	197	99	38	22	56	13
11	95	73	677	e230	e130	1050	205	100	36	22	48	14
12	85	71	660	241	e120	731	183	108	42	30	44	14
13	79	68	493	286	e110	610	252	106	53	34	39	14
14	76	67	415	358	e98	548	259	99	48	27	35	16
15	73	66	363	428	e96	501	234	93	43	22	32	13
16	69	64	315	612	e100	446	212	89	37	22	30	12
17	65	63	287	574	e110	403	194	83	36	23	29	19
18	62	64	297	486	e120	358	179	82	31	43	27	28
19	62	60	283	419	e110	317	212	83	28	42	25	23
20	63	59	250	600	e120	286	250	85	26	33	24	18
21	67	64	226	1370	e130	274	227	80	24	29	22	16
22	64	173	208	1180	e140	293	262	74	23	25	21	19
23	60	153	195	834	e140	264	320	70	22	24	19	53
24	60	133	354	636	e140	246	424	64	22	36	19	42
25	58	120	637	520	e130	240	474	77	23	37	16	31
26	56	111	498	433	e130	259	473	76	39	46	16	27
27	55	104	405	372	e120	231	398	70	61	85	16	24
28	54	627	356	305	246	197	315	63	46	91	16	21
29	52	1360	309	253	---	176	230	61	34	92	14	21
30	50	832	246	229	---	173	178	96	28	77	14	19
31	49	---	213	223	---	185	---	98	---	58	13	---
TOTAL	2745	5069	13619	13870	3897	17045	7075	3036	1245	1169	1217	595
MEAN	88.5	169	439	447	139	550	236	97.9	41.5	37.7	39.3	19.8
MAX	225	1360	1300	1370	246	4440	474	162	82	92	89	53
MIN	49	57	195	220	96	173	129	61	22	22	13	12

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	219	426	473	459	472	788	1265	688	346	155	95.1	122
MAX	837	1978	1498	1887	1745	2049	3306	1664	1773	747	426	609	
(WY)	1914	1914	1976	1978	1976	1977	1987	1978	1972	1973	1990	1987	
MIN	21.0	28.3	88.4	31.6	59.4	167	136	97.9	37.5	14.4	12.4	13.6	
(WY)	1981	1985	1981	1981	1980	1981	1985	1995	1991	1993	1993	1980	

e Estimated

## HUDSON RIVER BASIN

01364500 ESOPUS CREEK AT MOUNT MARION, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	139681		70582			
ANNUAL MEAN	383		193		451	
HIGHEST ANNUAL MEAN					908	1978
LOWEST ANNUAL MEAN					98.5	1985
HIGHEST DAILY MEAN	4940	Apr 15	4440	Mar 9	17800	Apr 5 1987
LOWEST DAILY MEAN	38	Sep 22	12	Sep 8	8.1	Jul 17 1993
ANNUAL SEVEN-DAY MINIMUM	43	Sep 16	13	Sep 6	8.5	Aug 6 1993
10 PERCENT EXCEEDS	1000		430		1180	
50 PERCENT EXCEEDS	150		96		167	
90 PERCENT EXCEEDS	58		22		31	

## HUDSON RIVER BASIN

01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY

LOCATION.--Lat 41°52'00", long 74°29'12", Sullivan County, Hydrologic Unit 02020007, on left bank 100 ft downstream from small tributary, 350 ft upstream from bridge on county road, 1.1 mi upstream from Sugarloaf Brook, 1.1 mi east of Lowes Corners, and 1.5 mi southwest of Sundown.

DRAINAGE AREA.--38.3 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1702: 1952. WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 874.44 ft above sea level. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft downstream at datum 847.00 ft above sea level (levels by Board of Water Supply, City of New York). Oct. 4, 1938 to July 5, 1951, water-stage recorder at site 1.2 mi downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft above sea level and July 4, 1949 to July 5, 1951, datum 846.00 ft above sea level (levels by Board of Water Supply, City of New York).

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

AVERAGE DISCHARGE.--58 years, 97.4 ft<sup>3</sup>/s, 34.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,600 ft<sup>3</sup>/s, July 22, 1938, from rating curve extended above 2,600 ft<sup>3</sup>/s; maximum gage height, 10.6 ft, Apr. 4, 1987, from floodmarks; minimum discharge, 3.3 ft<sup>3</sup>/s, Sept. 16, 17, Oct. 17, 18, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2300	*2,030	*6.33	No other peak greater than base discharge.			

Minimum discharge, 8.7 ft<sup>3</sup>/s, Sept. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	31	111	176	91	76	70	75	34	17	20	13
2	61	31	99	154	84	63	66	68	33	21	19	11
3	51	26	90	125	73	58	63	65	39	16	19	10
4	47	25	84	112	e64	56	67	61	33	15	22	9.6
5	45	24	224	95	e58	56	61	62	31	15	34	9.5
6	43	24	220	95	e56	61	57	59	30	16	40	9.1
7	41	24	179	193	e54	67	57	55	29	22	26	9.1
8	39	23	159	136	e52	533	57	53	28	20	22	9.2
9	39	23	137	119	e54	896	69	51	27	16	20	10
10	42	28	130	106	e58	395	93	54	26	15	19	11
11	37	25	185	99	e48	279	71	57	27	21	19	9.7
12	35	24	138	101	e44	227	67	54	33	25	18	9.6
13	34	23	119	146	e42	221	109	51	30	17	18	13
14	33	23	110	145	e40	218	89	47	26	15	16	13
15	32	23	101	172	e40	210	85	48	24	13	16	11
16	32	22	92	226	e48	200	82	46	22	13	16	10
17	31	22	90	209	e42	184	80	45	22	37	18	19
18	30	23	89	185	e40	161	77	45	21	52	15	17
19	30	24	81	171	e38	145	107	47	20	21	14	12
20	30	22	74	337	e40	133	95	44	19	17	13	10
21	29	29	70	382	e42	142	93	41	18	15	13	10
22	29	44	69	299	e40	140	99	39	18	15	13	19
23	28	31	68	242	e42	121	90	36	18	17	12	29
24	28	28	310	205	57	110	87	36	17	27	12	15
25	27	28	275	176	48	100	83	43	17	21	11	12
26	26	28	200	154	43	93	80	40	22	55	11	13
27	26	27	168	137	e40	88	77	38	44	63	11	13
28	25	205	150	119	89	83	78	35	21	51	11	11
29	25	175	131	108	---	79	72	44	18	32	10	10
30	24	131	112	102	---	78	69	55	17	25	10	9.9
31	24	---	105	97	---	75	---	39	---	22	10	---
TOTAL	1081	1216	4170	5123	1467	5348	2350	1533	764	747	528	367.7
MEAN	34.9	40.5	135	165	52.4	173	78.3	49.5	25.5	24.1	17.0	12.3
MAX	61	205	310	382	91	896	109	75	44	63	40	29
MIN	24	22	68	95	38	56	57	35	17	13	10	9.1
CFSM	.91	1.06	3.51	4.31	1.37	4.50	2.05	1.29	.66	.63	.44	.32
IN.	1.05	1.18	4.05	4.98	1.42	5.19	2.28	1.49	.74	.73	.51	.36

e Estimated

## HUDSON RIVER BASIN

01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	62.3	98.9	116	90.8	93.6	162	221	136	71.1	46.4	34.3	36.8
MAX	403	295	338	239	299	379	447	382	299	264	226	185
(WY)	1956	1973	1974	1979	1981	1977	1940	1989	1972	1938	1938	1987
MIN	4.92	5.88	29.8	18.2	21.0	60.5	64.8	41.3	18.7	9.18	7.19	5.95
(WY)	1965	1965	1947	1981	1980	1970	1946	1941	1962	1962	1962	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1937 - 1995			
ANNUAL TOTAL	35620				24694.7							
ANNUAL MEAN	97.6				67.7				97.4			
HIGHEST ANNUAL MEAN									144			
LOWEST ANNUAL MEAN									49.1			
HIGHEST DAILY MEAN	919				896				3500			
LOWEST DAILY MEAN	20				9.1				3.6			
ANNUAL SEVEN-DAY MINIMUM	23				9.5				4.1			
ANNUAL RUNOFF (CFSM)	2.55				1.77				2.54			
ANNUAL RUNOFF (INCHES)	34.60				23.99				34.55			
10 PERCENT EXCEEDS	206				154				210			
50 PERCENT EXCEEDS	55				42				58			
90 PERCENT EXCEEDS	27				13				14			

## HUDSON RIVER BASIN

01367500 RONDOUT CREEK AT ROSENDALE, NY

LOCATION.--Lat 41°50'35", long 74°05'11", Ulster County, Hydrologic Unit 02020007, on left bank 30 ft upstream from bridge on James Street in Rosendale, and 3 mi upstream from Wallkill River.

DRAINAGE AREA.--383 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1901 to November 1903, October 1905 to December 1906 (monthly discharges only, published in WSP 1302), January 1907 to December 1913, January 1914 to January 1919 (monthly discharges only, published in WSP 1302), August 1926 to current year.

REVISED RECORDS.--WSP 756: 1933. WDR NY-90-1: Drainage Area. WDR NY-92-1: 1903.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft above sea level. Prior to January 1919, nonrecording gage at site 150 ft downstream at datum 6.00 ft higher. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 10.00 ft higher. Sept. 11, 1969 to Feb. 3, 1970, water-stage recorder, and June 9, 1970 to Jan. 18, 1971, nonrecording gage at site 0.2 mi upstream at datum 11.20 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation from hydroelectric plant upstream from station. Diversion upstream from station during navigation season for Delaware and Hudson Canal, 1901-19. Diversion from Rondout Creek through the emergency connection to the Delaware Aqueduct at Lackawack for New York City water supply during April 1944 to May 1951. Since October 1950, flow regulated by Rondout Reservoir (see Reservoirs in Hudson River Basin). Subsequent to May 1951, entire flow except for period of spilling, diverted from Rondout Reservoir for New York City water supply. Discharge records for this station now represent the natural flow from 288 mi<sup>2</sup>, together with spillage during high flow from Rondout Reservoir. Telephone gage-height telemeter at station. Also published as a NAWQA water-quality miscellaneous site.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 ft<sup>3</sup>/s, Oct. 16, 1955, gage height, 36.8 ft, present datum, from floodmarks, from rating curve extended above 17,500 ft<sup>3</sup>/s, on basis of contracted-opening measurement at gage height 33.93 ft, present datum; minimum discharge, 2.2 ft<sup>3</sup>/s, July 16, 1965; minimum daily, 3.0 ft<sup>3</sup>/s, July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,900 ft<sup>3</sup>/s, Mar. 9, gage height, 18.49 ft; minimum, 40 ft<sup>3</sup>/s, Sept. 12, 13, 16, 17, gage height, 8.73 ft; minimum daily discharge, 41 ft<sup>3</sup>/s, Sept. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	408	158	823	881	e360	1090	303	345	343	94	140	51
2	499	211	667	1180	e350	811	285	370	262	137	128	53
3	398	216	514	902	e320	683	267	336	233	120	124	49
4	319	207	442	698	e300	613	272	307	219	96	116	49
5	284	194	1090	e480	e290	574	302	287	195	87	125	49
6	254	186	2020	e400	e280	573	266	282	176	83	283	47
7	236	181	1190	e780	e280	655	260	268	160	83	233	47
8	226	177	995	963	e270	1990	267	250	150	94	173	46
9	204	147	784	760	e260	10100	317	241	140	96	138	45
10	231	167	739	660	e250	3190	736	242	131	84	117	45
11	228	222	1570	588	e240	1810	600	267	131	90	106	45
12	200	185	1170	515	e230	1360	551	289	150	291	100	42
13	184	176	835	570	e220	1190	818	267	185	203	98	42
14	178	163	681	750	e210	1120	735	247	158	138	94	44
15	171	158	586	839	e200	976	626	240	138	111	92	44
16	162	152	506	980	e210	878	525	233	130	93	96	41
17	156	145	476	996	e240	828	426	220	119	91	92	51
18	152	142	501	853	e230	736	395	225	110	280	84	71
19	151	145	486	706	e230	624	461	234	108	213	75	68
20	154	138	431	1430	e260	572	540	240	101	142	66	53
21	165	165	393	2840	e270	563	459	220	94	120	63	50
22	158	564	373	1980	e280	614	534	199	88	110	60	55
23	154	364	361	1410	e290	548	501	179	86	107	68	77
24	168	274	702	1140	e280	496	442	165	84	207	58	80
25	171	245	1370	947	e270	461	386	217	83	349	55	63
26	156	233	855	720	e260	428	346	229	88	381	53	63
27	147	223	674	630	e240	373	318	216	265	510	53	69
28	141	1260	591	527	787	352	329	201	203	381	52	65
29	138	1970	535	458	---	330	326	207	131	342	49	58
30	135	1130	e430	e420	---	311	298	611	103	225	48	54
31	132	---	e390	e390	---	320	---	476	---	170	47	---
TOTAL	6460	9898	23180	27393	7907	35169	12891	8310	4564	5528	3086	1616
MEAN	208	330	748	884	282	1134	430	268	152	178	99.5	53.9
MAX	499	1970	2020	2840	787	10100	818	611	343	510	283	80
MIN	132	138	361	390	200	311	260	165	83	83	47	41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1995, BY WATER YEAR (WY)

	326	545	685	612	708	1165	1186	722	419	205	190	211
MEAN	326	545	685	612	708	1165	1186	722	419	205	190	211
MAX	2473	1456	2101	2043	2057	2379	2524	2302	2180	661	1220	1175
(WY)	1956	1973	1974	1979	1981	1977	1983	1989	1972	1984	1955	1987
MIN	22.0	34.8	147	75.0	126	316	313	201	68.0	29.0	24.1	16.8
(WY)	1965	1965	1965	1981	1980	1981	1985	1965	1965	1965	1964	1964

e Estimated



## HUDSON RIVER BASIN

01367500 RONDOUT CREEK AT ROSENDALE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1952 - 1995		
ANNUAL TOTAL	219097			146002					
ANNUAL MEAN	600			400			581		
HIGHEST ANNUAL MEAN							892		1952
LOWEST ANNUAL MEAN							255		1965
HIGHEST DAILY MEAN	3990	Mar 28		10100	Mar 9		23500	Oct 16	1955
LOWEST DAILY MEAN	85	Sep 22		41	Sep 16		3.0	Jul 16	1965
ANNUAL SEVEN-DAY MINIMUM	90	Sep 11		43	Sep 10		15	Sep 21	1964
10 PERCENT EXCEEDS	1630			831			1350		
50 PERCENT EXCEEDS	282			240			296		
90 PERCENT EXCEEDS	130			67			64		

## HUDSON RIVER BASIN

01371500 WALLKILL RIVER AT GARDINER, NY  
(National water-quality assessment program station)

LOCATION.--Lat 41°41'10", long 74°09'56", Ulster County, Hydrologic Unit 02020007, on left bank 400 ft upstream from bridge on U.S. Highway 44, 500 ft downstream from Shawangunk Kill, and 0.7 mi northwest of Gardiner. Water-quality sampling site at discharge station.

DRAINAGE AREA.--695 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.70 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Regulation at low flows by dams upstream and some diversions for municipalities and irrigational purposes. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--71 years, 1,062 ft<sup>3</sup>/s, 20.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft<sup>3</sup>/s, Oct. 16, 1955, gage height, 19.81 ft; minimum, 9.5 ft<sup>3</sup>/s, Sept. 28, 1964; minimum gage height, 1.59 ft, Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 9	0815	*11,100	*10.16	No other peak greater than base discharge.			

Minimum discharge, 19 ft<sup>3</sup>/s, Sept. 8, 9, gage height, 1.70 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	271	2070	1170	e640	2370	580	653	416	109	137	32
2	820	323	1540	2370	e600	1900	541	834	305	115	96	27
3	800	326	1210	2130	e500	1430	517	761	310	107	95	26
4	582	311	1030	1500	e440	1150	506	654	276	163	98	25
5	477	340	1820	e820	e380	1020	526	559	264	137	104	23
6	365	285	3210	e700	e410	1070	514	591	241	114	184	21
7	349	280	2190	1360	e400	1230	495	528	205	132	228	21
8	306	275	1740	1850	e390	2330	485	472	217	96	139	20
9	295	273	1370	1470	e370	9840	548	429	161	93	124	19
10	313	325	1250	1100	e360	6910	1090	394	178	92	92	23
11	364	483	2940	921	e340	5030	1070	472	164	116	85	23
12	342	496	2500	826	e320	4050	820	475	198	209	79	22
13	290	414	1730	1000	e310	3250	1210	506	312	151	74	27
14	271	327	1340	1250	e290	2550	1380	519	371	128	69	27
15	246	344	1180	1540	e290	2040	1140	448	321	117	69	23
16	238	309	1070	1850	e450	1730	892	421	245	96	58	25
17	228	298	999	1860	e500	1610	756	374	225	95	59	37
18	199	289	1080	1550	e470	1420	681	376	205	137	57	42
19	206	274	1110	1300	e450	1250	806	458	137	192	58	46
20	209	264	977	2710	e500	1110	1220	494	153	273	53	49
21	243	360	861	5600	e540	1060	966	501	137	186	48	49
22	235	1430	741	4470	e500	1170	932	430	131	120	43	52
23	247	1380	752	3080	e470	1130	847	403	122	134	40	60
24	446	983	1120	2460	e600	923	730	321	117	178	39	82
25	492	709	1690	2060	e700	865	665	461	116	232	36	74
26	431	581	1460	1760	e600	774	604	462	166	197	34	81
27	366	526	1160	1520	e560	702	563	489	258	192	34	108
28	284	2610	967	e1200	1380	664	526	471	204	254	33	98
29	292	4490	886	e940	---	635	548	453	164	273	31	103
30	282	2940	e700	e800	---	591	498	755	136	168	29	88
31	254	---	e560	e700	---	577	---	543	---	125	30	---
TOTAL	11162	22516	43253	53867	13760	62381	22656	15707	6455	4731	2355	1353
MEAN	360	751	1395	1738	491	2012	755	507	215	153	76.0	45.1
MAX	820	4490	3210	5600	1380	9840	1380	834	416	273	228	108
MIN	199	264	560	700	290	577	485	321	116	92	29	19
CFSM	.52	1.08	2.01	2.50	.71	2.90	1.09	.73	.31	.22	.11	.06
IN.	.60	1.21	2.32	2.88	.74	3.34	1.21	.84	.35	.25	.13	.07

e Estimated

## HUDSON RIVER BASIN

01371500 WALLKILL RIVER AT GARDINER, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	516	982	1186	1179	1408	2334	1919	1143	720	467	452	472
MAX	4217	3407	3279	3486	3084	5947	5466	4087	3688	2735	3333	2664
(WY)	1956	1928	1974	1979	1984	1936	1983	1989	1972	1928	1955	1938
MIN	58.2	76.1	157	102	241	669	463	239	98.2	33.6	21.6	18.9
(WY)	1965	1965	1947	1925	1980	1981	1946	1941	1965	1966	1966	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1925 - 1995			
ANNUAL TOTAL	469936				260196							
ANNUAL MEAN	1287				713				1063			
HIGHEST ANNUAL MEAN									1900			
LOWEST ANNUAL MEAN									390			
HIGHEST DAILY MEAN	8850				9840				25200			
LOWEST DAILY MEAN	93				19				10			
ANNUAL SEVEN-DAY MINIMUM	113				21				13			
ANNUAL RUNOFF (CFSM)	1.85				1.03				1.53			
ANNUAL RUNOFF (INCHES)	25.15				13.93				20.77			
10 PERCENT EXCEEDS	3500				1570				2650			
50 PERCENT EXCEEDS	581				430				560			
90 PERCENT EXCEEDS	198				58				110			

## HUDSON RIVER BASIN

01371500 WALLKILL RIVER AT GARDINER, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958, 1971, April 1993 to September 1995 (discontinued).

CHEMICAL DATA: 1958 (e), 1971 (a), 1993 (c), 1994 (d), 1995 (c).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1993 (c), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1958 (e), 1971 (a), 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (c), 1994 (d), 1995 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1957 to September 1958, June 1993 to September 1995 (discontinued).

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 33.0°C, July 9, 1993; minimum daily (water years 1958, 1994-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 32.5°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)
OCT												
11...	1700	374	380	8.6	14.0	13.0	770	11.0	104	140	40	9.4
NOV												
14...	1610	188	327	8.8	20.0	8.5	765	14.4	123	120	35	8.6
DEC												
12...	1630	2300	263	7.3	-1.0	2.5	772	14.1	102	95	28	6.1
JAN												
24...	0940	2480	244	7.4	2.5	2.5	754	15.1	112	84	24	5.8
FEB												
07...	1200	E360	379	7.7	-10.0	0.0	758	15.0	104	140	40	10
MAR												
16...	0930	1760	279	7.8	12.5	10.5	761	11.1	99	96	27	7.0
DATE		SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT												
11...	22	25	0.8	2.6	102	29	40	<0.1	5.1	229	207	<0.01
NOV												
14...	20	26	0.8	2.3	80	21	36	<0.1	2.2	206	172	0.01
DEC												
12...	13	22	0.6	2.2	49	31	23	<0.1	6.7	170	150	0.01
JAN												
24...	15	27	0.7	1.8	49	20	28	<0.1	6.7	148	138	0.01
FEB												
07...	22	25	0.8	1.8	94	27	39	<0.1	6.5	223	211	0.01
MAR												
16...	15	25	0.7	1.4	60	21	28	<0.1	5.0	160	147	<0.01
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS Fe)	MANGA-NESE, DIS-SOLVED (UG/L AS Mn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT												
11...		0.88	<0.02	0.50	0.40	0.13	0.12	0.13	110	16	6.6	0.3
NOV												
14...		0.46	<0.02	0.30	0.30	0.09	0.08	0.09	100	11	6.2	0.3
DEC												
12...		1.6	0.08	0.70	0.60	0.19	0.13	0.14	150	28	8.1	1.2
JAN												
24...		1.2	0.04	0.40	0.40	0.10	0.06	0.09	100	18	5.6	0.9
FEB												
07...		1.4	0.06	0.40	0.30	0.08	0.07	0.08	92	43	3.9	0.9
MAR												
16...		0.91	0.03	0.50	0.30	0.10	0.07	0.06	81	30	5.0	1.0

E Estimated daily.

## HUDSON RIVER BASIN

01371500 WALLKILL RIVER AT GARDINER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM- PLING DEPTH (FEET)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
DEC							
12...	1625	0.50	6.00	164	7.0	1.5	14.5
12...	1631	0.50	31.0	199	7.3	2.0	14.2
12...	1635	0.50	56.0	300	7.3	2.5	14.1
12...	1640	0.50	81.0	303	7.3	2.5	14.0
12...	1645	0.50	106	304	7.3	2.5	14.0
JAN							
24...	0935	0.50	6.00	171	6.9	2.0	15.6
24...	0941	0.50	32.0	250	7.3	2.5	15.3
24...	0945	0.50	58.0	268	7.4	2.5	15.1
24...	0950	0.50	84.0	269	7.5	2.5	15.1
24...	0955	0.50	112	272	7.4	2.5	15.0
FEB							
07...	1145	0.50	15.0	198	7.2	0.0	14.3
07...	1150	0.50	45.0	332	7.6	0.0	14.8
07...	1155	0.50	75.0	323	7.6	0.0	15.1
07...	1201	0.50	105	385	7.7	0.0	15.0
07...	1205	0.50	135	387	7.7	0.0	15.0
07...	1210	0.50	165	404	7.8	0.0	15.3
07...	1212	0.50	195	407	7.8	0.0	15.4
07...	1214	0.50	225	407	7.8	0.0	15.4
07...	1216	0.50	255	406	7.8	0.0	15.5
07...	1218	0.50	285	410	7.8	0.0	15.6
MAR							
16...	0925	1.00	14.0	139	7.3	9.5	11.7
16...	0931	1.00	70.0	270	7.6	10.5	11.2
16...	0935	1.00	126	297	7.6	10.5	11.1
16...	0940	1.00	182	303	7.7	10.5	11.1
16...	0945	1.00	238	303	7.7	10.0	10.9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. 8 FINER THAN .062 MM
OCT					
11...	1700	374	5	5.0	88
NOV					
14...	1610	188	5	2.5	85
DEC					
12...	1630	2300	21	130	97
JAN					
24...	0940	2480	21	141	94
FEB					
07...	1200	E360	13	13	70
MAR					
16...	0930	1760	25	119	93

E Estimated daily.



## HUDSON RIVER BASIN

01371500 WALLKILL RIVER AT GARDINER, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.5	13.5	13.5	13.0	10.5	11.5	3.0	2.5	3.0	1.0	.0	.5
2	14.5	12.5	13.5	12.0	9.5	11.0	3.0	2.0	2.5	1.5	.5	1.0
3	14.0	11.5	12.5	11.0	8.0	9.5	3.0	2.0	2.5	1.0	.0	.0
4	14.0	10.5	12.0	13.0	9.5	11.0	4.0	2.5	3.5	.5	.0	.0
5	13.5	11.5	12.5	13.5	11.0	12.0	6.5	4.0	5.0	.0	.0	.0
6	13.5	10.0	11.5	12.5	11.0	12.0	7.5	6.5	7.0	.0	.0	.0
7	14.5	10.0	12.0	11.5	9.5	10.5	7.5	6.0	7.0	.0	.0	.0
8	15.5	11.0	13.0	11.0	8.5	10.0	6.0	3.0	4.5	.0	.0	.0
9	15.5	12.5	14.0	11.0	9.5	10.5	3.0	2.0	2.0	.0	.0	.0
10	15.5	12.5	14.0	10.5	8.0	9.5	2.5	2.0	2.5	.0	.0	.0
11	13.5	11.0	12.0	8.5	6.5	7.5	3.5	2.5	3.0	.0	.0	.0
12	13.0	9.5	11.0	7.0	5.5	6.0	3.0	.5	1.5	.0	.0	.0
13	12.5	8.5	11.0	7.5	5.5	6.5	.5	.0	.0	.5	.0	.0
14	12.5	9.5	11.0	9.0	6.0	7.5	.5	.0	.5	.5	.0	.0
15	13.0	9.5	11.0	10.0	8.0	9.0	1.5	.5	1.0	3.0	.0	1.0
16	12.5	8.5	10.5	8.5	7.5	8.0	.5	.0	.5	5.5	3.0	5.0
17	12.0	8.0	10.0	8.5	6.5	7.5	1.0	.5	1.0	6.0	5.0	5.5
18	13.0	9.0	11.0	9.0	7.5	8.5	2.0	1.0	1.5	5.5	4.5	5.0
19	14.0	11.5	13.0	10.0	8.0	9.0	2.5	1.5	2.0	5.0	4.5	4.5
20	14.0	13.0	13.5	9.5	7.0	8.0	2.0	.5	1.0	5.0	4.5	5.0
21	16.0	13.0	14.5	8.0	6.5	7.0	1.5	.0	1.0	5.0	4.5	5.0
22	15.0	12.0	14.0	8.0	7.0	7.5	1.5	.0	1.0	4.5	3.5	4.0
23	14.0	12.0	12.5	7.0	3.5	5.5	2.0	.5	1.0	3.5	2.5	2.5
24	13.5	10.5	12.0	3.5	2.0	3.0	4.5	2.0	3.5	2.5	2.0	2.0
25	12.5	10.5	11.0	3.5	2.0	2.5	5.0	4.5	5.0	2.5	1.5	2.0
26	11.0	9.5	10.5	3.5	1.5	2.5	4.5	2.5	3.5	2.0	1.0	1.5
27	10.5	9.0	9.5	1.5	.0	1.0	2.5	1.5	2.0	1.5	.5	1.0
28	11.0	7.5	9.0	2.5	.0	1.0	2.5	1.0	2.0	1.0	.0	.0
29	11.5	7.5	9.5	3.5	2.5	3.0	2.5	.5	2.0	.0	.0	.0
30	12.0	7.5	10.0	3.0	2.5	3.0	.5	.0	.0	.0	.0	.0
31	11.0	9.0	10.0	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	16.0	7.5	12.0	13.5	.0	7.5	7.5	.0	2.5	6.0	.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	.5	.5	.0	.0	10.0	6.5	8.0	14.5	12.5	13.5
2	1.5	.0	.5	1.0	.0	.0	10.0	6.0	8.0	13.0	11.5	12.0
3	.5	.0	.0	1.5	.0	.5	10.0	6.0	8.0	13.5	10.5	12.0
4	.0	.0	.0	1.0	.0	.0	10.0	7.0	8.5	16.0	11.0	13.5
5	.0	.0	.0	2.0	.0	1.0	7.0	4.0	5.5	14.5	13.5	14.0
6	.0	.0	.0	2.5	1.0	1.5	7.5	3.0	5.0	15.5	12.0	13.5
7	.0	.0	.0	3.5	2.0	2.5	9.5	5.0	7.0	17.0	11.5	14.0
8	.0	.0	.0	5.0	3.5	4.0	7.0	4.5	5.5	17.5	11.5	14.5
9	.0	.0	.0	3.5	1.0	2.0	7.0	4.0	5.5	19.0	13.0	16.0
10	.0	.0	.0	1.5	.0	1.0	7.5	5.5	6.5	16.5	14.5	15.5
11	.0	.0	.0	2.5	1.0	1.5	9.5	6.0	7.5	14.5	13.0	14.0
12	.0	.0	.0	4.0	1.5	2.5	9.0	8.0	8.5	14.5	13.0	13.5
13	.0	.0	.0	6.5	3.5	5.0	9.0	8.0	8.5	17.0	13.0	15.0
14	.0	.0	.0	8.5	5.5	7.0	9.0	8.0	8.5	18.0	14.5	16.0
15	.0	.0	.0	10.5	7.5	9.0	10.5	8.5	9.5	18.5	15.5	16.5
16	.0	.0	.0	11.0	9.5	10.5	12.0	8.0	10.0	20.5	14.5	17.5
17	.0	.0	.0	11.0	10.0	10.5	14.0	9.0	11.0	17.5	16.5	17.0
18	.0	.0	.0	10.5	8.5	9.5	15.5	10.0	12.5	17.0	16.0	16.5
19	.0	.0	.0	10.0	8.5	9.0	13.5	12.0	13.0	16.0	14.5	15.5
20	.0	.0	.0	9.5	8.5	9.0	14.5	11.5	13.0	18.5	13.0	16.0
21	.0	.0	.0	9.0	8.5	8.5	14.0	12.5	13.5	19.5	15.0	17.5
22	.5	.0	.0	8.5	8.0	8.0	14.5	12.5	13.5	21.0	16.0	18.5
23	.5	.0	.0	8.0	7.5	7.5	14.5	12.0	13.5	22.5	15.0	19.0
24	1.0	.0	.0	7.5	5.5	6.5	16.0	12.0	14.0	23.5	17.5	20.0
25	.5	.0	.0	8.0	4.5	6.0	16.5	12.0	14.0	21.0	19.0	20.0
26	1.0	.0	.0	9.5	5.5	7.5	17.5	13.0	15.0	19.0	17.0	18.0
27	.0	.0	.0	10.5	6.0	8.0	18.5	13.5	16.0	20.5	16.5	18.0
28	.0	.0	.0	11.0	6.5	8.5	18.5	15.0	16.5	19.5	16.5	18.0
29	---	---	---	11.5	7.0	9.0	17.5	15.0	16.0	19.5	17.0	18.0
30	---	---	---	10.0	8.5	9.0	16.0	13.5	14.5	18.0	16.5	17.0
31	---	---	---	9.5	8.0	9.0	---	---	---	20.5	16.0	18.5
MONTH	1.5	.0	.0	11.5	.0	5.5	18.5	3.0	10.5	23.5	10.5	16.0

## HUDSON RIVER BASIN

01371500 WALLKILL RIVER AT GARDINER, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	18.5	21.0	27.0	23.0	25.0	31.0	25.0	28.0	26.5	22.0	24.5
2	23.0	20.5	21.5	26.5	23.5	25.0	31.5	26.5	29.0	24.5	21.5	23.0
3	25.0	21.5	23.0	27.0	20.5	24.0	29.5	26.5	28.0	24.5	18.5	21.5
4	25.5	22.0	23.5	27.5	22.0	25.0	30.5	26.0	28.0	25.0	19.0	22.0
5	26.0	20.5	23.0	25.5	23.5	24.5	28.5	25.5	27.0	25.5	20.0	23.0
6	26.5	21.0	23.5	26.0	23.0	24.5	25.5	23.0	24.5	25.5	20.0	23.0
7	27.5	22.0	24.5	24.5	23.0	23.5	26.5	22.5	24.5	26.0	21.5	23.5
8	25.0	22.5	24.0	27.0	22.5	24.5	26.5	20.5	24.0	23.5	18.5	20.0
9	25.5	20.0	22.5	24.5	21.5	23.0	27.0	21.5	24.5	19.5	18.0	18.5
10	23.0	21.0	22.0	27.5	21.0	24.5	27.5	22.0	25.0	20.5	17.0	19.0
11	23.5	20.0	21.5	27.0	22.5	24.5	28.0	23.0	26.0	20.5	14.5	17.5
12	23.0	20.0	21.0	26.0	21.5	23.5	27.5	24.5	26.0	21.5	14.5	18.5
13	23.0	18.5	21.0	28.5	22.5	25.5	29.0	23.5	26.5	20.5	18.0	19.0
14	22.0	19.0	20.5	31.0	25.0	28.0	29.5	24.0	26.5	23.0	19.0	21.0
15	24.5	18.0	21.0	32.5	27.0	30.0	28.5	25.5	27.0	20.5	17.0	19.0
16	25.0	18.5	22.0	29.5	27.0	28.0	29.5	25.0	27.0	19.0	15.0	17.5
17	27.0	20.0	23.5	27.5	25.0	26.5	30.0	26.0	28.0	18.5	16.5	17.5
18	27.5	21.5	25.0	29.0	24.0	26.0	29.5	25.0	27.5	20.5	16.5	18.0
19	30.0	23.5	27.0	29.0	23.5	26.5	28.5	24.0	26.5	19.5	14.5	17.0
20	30.5	25.5	28.0	28.5	24.0	26.5	27.5	22.0	25.0	19.0	16.5	18.0
21	27.5	23.5	25.5	27.0	25.0	26.0	28.5	21.5	25.0	19.5	17.5	18.5
22	24.5	22.5	23.5	29.0	23.5	26.5	26.5	23.0	25.0	19.5	18.0	19.0
23	26.0	21.5	23.5	28.0	25.5	26.5	26.0	20.5	23.5	18.0	15.5	17.0
24	26.5	22.0	24.0	29.5	24.0	26.5	26.0	21.0	23.5	17.5	13.5	15.5
25	27.5	23.0	25.0	29.0	25.0	26.5	24.5	19.5	22.5	16.5	15.0	16.0
26	26.0	24.0	25.0	28.0	26.0	27.0	24.5	19.0	22.0	16.0	15.0	15.5
27	25.5	23.0	24.0	28.5	25.5	26.5	24.0	21.0	22.5	19.0	15.0	16.5
28	25.5	21.0	23.0	28.0	25.5	26.5	25.5	20.0	22.5	18.5	15.0	17.0
29	27.0	20.5	24.0	29.5	25.5	27.5	26.5	20.0	23.0	17.5	13.0	15.5
30	26.5	22.0	24.5	30.5	25.5	28.0	25.0	20.5	23.0	17.5	13.0	15.5
31	---	---	---	30.5	24.5	27.5	26.0	18.5	22.5	---	---	---
MONTH	30.5	18.0	23.5	32.5	20.5	26.0	31.5	18.5	25.0	26.5	13.0	19.0

## HUDSON RIVER BASIN

01372043 HUDSON RIVER NEAR Poughkeepsie, NY  
(National water-quality assessment program station)

LOCATION.--Lat 41°43'18", long 73°56'28", Dutchess County, Hydrologic Unit 02020008, at city pumping station on east bank, adjacent (north) to Marist College, 0.5 mi north of Poughkeepsie, and 1.3 mi upstream from Mid-Hudson Bridge.

DRAINAGE AREA.--11,700 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1969-75, June 1988 to current year.

CHEMICAL DATA: 1969 (c), 1970-71 (d), 1972 (b), 1973 (e), 1974-75 (d), 1988 (a), 1989-90 (b), 1991 (c), 1992 (a), 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENTS DATA: 1969 (c), 1970-71 (d), 1972 (b), 1973-75 (d), 1988 (a), 1989-90 (b), 1991 (c), 1992 (a).

RADIOCHEMICAL DATA: 1974 (a), 1975 (d).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1974 (b), 1975 (d), 1993 (c), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1969 (c), 1970-71 (d), 1972 (b), 1973-75 (d), 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1973 (c), 1974-75 (d).

Phytoplankton--1973 (a), 1974 (b), 1975 (d), 1993 (a).

Periphyton--1974 (c), 1975 (a).

SEDIMENT DATA: 1973 (a), 1974 (b), 1975 (a), 1989-90 (b), 1991 (c), 1992 (a), 1993 (c), 1994 (d), 1995 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1959 to September 1966.

REMARKS.--Samples were collected by boat during the period of fastest ebb current of tidal cycle in cross section in vicinity of city pumping station, unless otherwise noted. Daily water-temperature measurements were made at approximately 0830 during water years 1959-63 and at approximately 0700 during water years 1964-66. Also published as a NAWQA fish-tissue collection site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE (water years 1959-66): Maximum daily, 26.5°C, August 29, 1959; minimum daily, 0.0°C on many days during winter periods.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	BAROMETRIC PRESURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (PER-CENT)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM DIS-SOLVED (MG/L AS Mg)	SODIUM DIS-SOLVED (MG/L AS Na)
OCT												
12...	1050	212	7.6	8.0	17.0	780	7.9	80	78	24	4.4	11
NOV												
15...	1450	233	7.4	--	12.0	768	10.4	95	82	25	4.7	12
DEC												
13...	1240	222	7.6	-4.5	3.5	780	13.2	98	78	24	4.5	11
JAN												
25...	1100	207	7.4	3.0	3.5	766	13.2	99	71	22	4.0	12
FEB												
08...	0910	194	7.5	-9.0	1.0	762	--	--	74	23	4.1	11
MAR												
13...	1330	249	7.5	17.0	2.5	776	13.4	97	78	24	4.4	17

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM DIS-SOLVED (MG/L AS K)	ALKALINITY WATER TOTAL FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT											
12...	23	0.5	1.5	53	16	18	<0.1	1.0	120	112	0.01
NOV											
15...	24	0.6	1.5	52	18	21	<0.1	1.3	134	123	0.02
DEC											
13...	23	0.5	1.3	61	17	19	<0.1	4.3	134	119	0.01
JAN											
25...	26	0.6	1.5	56	13	21	<0.1	4.9	124	113	0.01
FEB											
08...	24	0.6	1.4	52	14	17	<0.1	5.6	117	111	0.03
MAR											
13...	32	0.8	1.3	108	15	29	<0.1	4.8	141	130	<0.01

## HUDSON RIVER BASIN

01372043 HUDSON RIVER NEAR Poughkeepsie, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 12...	0.47	<0.02	0.30	0.30	0.07	0.04	0.04	41	4	4.1	0.3
NOV 15...	0.54	0.03	0.30	<0.20	0.06	0.03	0.03	29	1	3.7	0.4
DEC 13...	0.55	0.12	0.30	0.40	0.05	0.04	0.03	88	3	4.2	0.3
JAN 25...	0.57	0.11	0.50	0.30	0.05	0.01	0.02	90	5	3.6	1.1
FEB 08...	0.68	0.07	0.50	0.30	0.03	0.02	0.02	88	3	4.0	0.5
MAR 13...	0.62	0.16	0.50	0.40	0.08	0.03	0.02	96	24	3.8	0.6

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 12...	1050	10	90
NOV 15...	1450	22	92
DEC 13...	1240	12	98
JAN 25...	1100	25	98
FEB 08...	0910	18	99
MAR 13...	1330	37	99

## HUDSON RIVER BASIN

01372051 FALL KILL AT POUGHKEEPSIE, NY  
(National water-quality assessment program station)

LOCATION.--Lat 41°42'36", long 73°55'36", Dutchess County, Hydrologic Unit 02020008, on right bank 0.15 mi upstream from bridge on U.S. Highway 9, 0.6 mi upstream from mouth, and 0.20 mi northeast of Poughkeepsie. Water-quality sampling site at discharge station.

DRAINAGE AREA.--18.8 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to September 1995 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 50 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--2 years, 24.6 ft<sup>3</sup>/s, 17.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 232 ft<sup>3</sup>/s, Aug. 5, 1995, gage height, 1.94 ft; maximum gage height, 2.17 ft, Feb. 3, 1994 (ice jam); minimum discharge, 0.06 ft<sup>3</sup>/s, Aug. 4, 1993, gage height, 0.02 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 232 ft<sup>3</sup>/s, Aug. 5, gage height, 1.94 ft; minimum, 1.1 ft<sup>3</sup>/s, July 10, 11, 17; minimum gage height, 0.14 ft, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	8.8	35	37	28	55	16	24	26	2.7	10	3.4
2	14	12	28	54	27	48	15	23	18	2.6	7.2	2.4
3	12	11	24	51	23	41	14	22	14	5.4	7.1	2.5
4	9.7	11	21	42	22	36	14	20	12	5.4	9.5	3.1
5	8.7	9.4	37	36	20	33	14	20	9.5	3.4	25	2.9
6	7.8	8.3	57	27	e20	33	13	22	8.4	2.5	44	2.1
7	7.0	7.6	55	45	e20	34	13	19	7.2	2.2	25	1.8
8	6.0	6.7	45	50	e19	43	15	16	5.5	2.1	16	1.6
9	8.0	7.2	37	42	e17	87	17	14	5.8	1.7	12	1.6
10	7.9	11	37	33	e15	77	22	14	6.2	1.2	10	2.1
11	6.5	10	60	28	e14	64	21	15	5.5	6.6	8.8	1.8
12	6.9	10	61	26	e13	51	20	15	7.9	5.8	7.8	1.7
13	6.8	8.9	48	30	e12	47	30	15	7.0	3.8	7.1	2.2
14	6.3	8.1	39	40	e10	43	31	14	6.1	2.4	7.2	2.0
15	5.7	7.7	36	47	e10	39	27	13	6.0	2.4	8.1	1.9
16	5.5	7.1	32	52	18	35	24	12	5.4	1.7	6.4	1.7
17	4.8	6.7	30	57	19	35	21	11	5.7	13	5.7	5.4
18	4.5	6.1	33	51	19	33	20	11	6.0	34	5.1	3.1
19	4.4	6.5	31	45	19	29	26	12	5.7	24	3.9	2.0
20	5.2	6.0	27	64	21	26	30	13	4.7	11	3.7	1.8
21	4.9	12	24	95	24	26	28	12	3.3	6.4	4.3	1.9
22	4.8	19	22	97	24	27	29	11	2.3	5.1	3.8	5.2
23	8.4	19	21	83	23	25	27	9.5	3.2	13	4.0	4.5
24	8.2	16	47	73	30	23	24	13	3.7	12	2.5	4.0
25	8.3	13	71	59	34	21	23	15	3.1	15	1.9	2.6
26	7.4	11	63	51	30	19	23	16	3.7	26	3.0	3.8
27	6.5	11	51	46	26	18	22	11	4.5	50	2.6	2.9
28	5.9	37	43	39	42	17	23	8.6	4.3	46	1.8	3.0
29	5.6	45	37	32	---	16	22	11	2.5	30	1.6	3.1
30	5.5	42	31	e28	---	16	22	20	2.0	20	3.3	2.0
31	5.2	---	25	e29	---	16	---	39	---	14	2.6	---
TOTAL	225.4	395.1	1208	1489	599	1113	646	491.1	205.2	371.4	261.0	80.1
MEAN	7.27	13.2	39.0	48.0	21.4	35.9	21.5	15.8	6.84	12.0	8.42	2.67
MAX	17	45	71	97	42	87	31	39	26	50	44	5.4
MIN	4.4	6.0	21	26	10	16	13	8.6	2.0	1.2	1.6	1.6
CFSM	.39	.70	2.07	2.55	1.14	1.91	1.15	.84	.36	.64	.45	.14
IN.	.45	.78	2.39	2.95	1.19	2.20	1.28	.97	.41	.73	.52	.16

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1994	1995	1995	1995	1995	1995	1995	1995	1995
MEAN	7.27	18.0	45.5	33.6	26.0	72.8	44.2	19.0	5.59	5.96	7.15	4.05
MAX	7.27	22.8	52.0	48.0	30.6	110	66.8	20.8	6.84	12.0	12.5	6.89
(WY)	1994	1994	1994	1995	1994	1994	1994	1993	1995	1995	1994	1994
MIN	7.27	13.2	39.0	19.1	21.4	35.9	21.5	15.8	4.65	.67	.54	2.60
(WY)	1995	1995	1995	1994	1995	1995	1995	1995	1993	1993	1993	1993

e Estimated



HUDSON RIVER BASIN  
01372051 FALL KILL AT POUGHKEEPSIE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL TOTAL	10225.7	7084.3	
ANNUAL MEAN	28.0	19.4	24.7
HIGHEST ANNUAL MEAN			29.9
LOWEST ANNUAL MEAN			19.4
HIGHEST DAILY MEAN	207	97	207
LOWEST DAILY MEAN	1.4	1.2	207
ANNUAL SEVEN-DAY MINIMUM	2.1	1.8	.09
ANNUAL RUNOFF (CFSM)	1.49	1.03	.09
ANNUAL RUNOFF (INCHES)	20.23	14.02	1.31
10 PERCENT EXCEEDS	71	45	17.83
50 PERCENT EXCEEDS	14	14	55
90 PERCENT EXCEEDS	3.0	2.7	12
			1.7

## HUDSON RIVER BASIN

01372051 FALL KILL AT POUGHKEEPSIE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1993 to September 1995 (discontinued).

CHEMICAL DATA: 1993 (c), 1994 (d), 1995 (c).

MINOR ELEMENTS DATA: 1993 (a).

PESTICIDE DATA: 1993-94 (a).

ORGANIC DATA: OC--1993 (c), 1994 (d), 1995 (c).

PCB--1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1993 (c), 1994 (d), 1995 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993 (c), 1994 (d), 1995 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1993 to September 1995 (discontinued).

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

REMARKS.--Also published as a NAWQA fish-tissue collection site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 27.5°C, July 8, 9, 10, 1993, July 15, 1995, but may have been higher during period of instrument malfunction (1993 water year); minimum (water years 1994-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.5°C, July 15; minimum, 0.0°C on several days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
OCT												
12...	1550	7.3	505	7.7	14.0	11.0	774	10.4	93	150	51	5.7
NOV												
17...	1500	6.5	517	8.0	--	8.5	771	11.8	99	150	52	6.1
DEC												
15...	1510	34	362	7.6	4.5	2.5	774	13.7	98	110	36	4.4
JAN												
24...	1330	72	323	7.6	2.0	3.5	755	14.4	110	96	32	3.9
FEB												
08...	1240	E19	453	7.6	-1.0	0.0	757	12.9	89	140	47	5.3
MAR												
15...	1400	38	351	7.8	19.5	9.5	763	11.8	103	100	35	4.0

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT												
12...	43	38	2	1.9	110	23	74	<0.1	8.8	297	277	<0.01
NOV												
17...	42	37	1	1.8	116	21	74	<0.1	6.6	304	278	0.01
DEC												
15...	28	36	1	1.1	81	21	48	<0.1	7.6	212	197	<0.01
JAN												
24...	27	38	1	1.0	72	19	48	<0.1	6.6	190	180	<0.01
FEB												
08...	37	36	1	1.1	97	24	64	<0.1	6.6	261	248	0.02
MAR												
15...	28	37	1	0.8	146	19	51	<0.1	3.6	198	186	<0.01

E Estimated daily.

## HUDSON RIVER BASIN

01372051 FALL KILL AT POUGHKEEPSIE, NY--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 12...	0.18	0.04	0.40	0.40	0.04	0.03	0.02	46	17	5.8	0.2
NOV 17...	0.09	<0.02	0.20	0.30	0.02	0.02	0.01	66	24	4.7	0.1
DEC 15...	0.40	<0.02	<0.20	0.20	0.01	<0.01	0.02	91	43	4.5	0.2
JAN 24...	0.45	<0.02	0.20	0.40	0.02	<0.01	<0.01	67	33	3.7	0.3
FEB 08...	0.61	0.02	<0.20	<0.20	<0.01	<0.01	<0.01	100	120	2.7	0.3
MAR 15...	0.23	<0.02	<0.20	<0.20	0.02	<0.01	<0.01	57	29	3.1	0.3

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 12...	1550	7.3	3	0.06	59
NOV 17...	1500	6.5	4	0.07	61
DEC 15...	1510	34	2	0.18	89
JAN 24...	1330	72	5	0.97	78
FEB 08...	1240	E19	3	0.15	72
MAR 15...	1400	38	2	0.21	85

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.5	14.0	14.5	14.5	12.0	13.5	4.0	3.0	3.5	3.0	2.0	2.5
2	14.5	13.5	14.0	13.5	11.0	12.0	4.5	3.0	3.5	2.5	1.0	2.0
3	13.5	11.5	12.5	11.0	9.5	10.5	5.0	3.0	4.0	1.5	.5	1.0
4	13.0	11.5	12.0	13.5	11.0	12.5	5.0	4.0	4.5	1.5	.0	1.0
5	12.5	11.5	12.0	13.5	12.5	13.0	6.5	5.0	6.0	.5	.0	.0
6	11.5	10.0	11.0	13.5	12.5	13.0	6.5	5.5	6.0	1.5	.0	.5
7	12.5	10.5	11.5	12.5	10.0	11.0	7.0	5.5	6.5	1.5	1.0	1.5
8	14.0	11.5	12.5	10.5	9.0	10.0	5.5	4.0	4.5	1.5	.5	1.0
9	15.0	12.5	13.5	12.0	10.5	11.5	4.5	3.5	4.0	1.5	.0	1.0
10	14.5	11.5	13.0	11.5	9.0	10.5	4.0	3.5	3.5	1.0	.0	.5
11	11.5	9.5	10.5	9.0	7.0	8.0	4.0	2.5	3.5	.5	.0	.5
12	10.5	8.5	9.5	7.5	6.5	7.0	2.5	1.0	2.0	2.0	.5	1.0
13	10.5	8.5	9.5	9.0	7.0	8.0	1.5	.5	1.0	2.5	1.5	2.0
14	11.0	9.5	10.5	9.5	8.0	9.0	2.0	1.5	1.5	3.0	1.5	2.5
15	11.0	9.5	10.5	11.0	9.5	10.0	2.5	1.5	2.0	4.5	2.5	3.5
16	10.5	9.0	9.5	9.5	8.0	9.0	2.5	1.0	1.5	5.0	4.0	4.5
17	10.5	8.5	9.5	8.5	7.0	8.0	2.5	2.0	2.5	5.0	4.5	4.5
18	11.5	9.0	10.5	10.0	8.0	9.0	3.0	2.5	2.5	4.5	4.0	4.5
19	13.0	11.0	12.0	10.5	8.5	10.0	3.0	2.0	2.5	5.0	4.5	4.5
20	14.0	13.0	13.5	9.0	7.0	8.0	3.0	1.5	2.0	5.5	5.0	5.0
21	14.0	13.0	13.5	9.5	6.5	8.0	3.5	2.0	2.5	5.5	5.0	5.0
22	14.0	12.5	13.0	9.0	7.5	8.5	3.5	2.0	2.5	5.0	4.0	4.5
23	13.5	12.0	12.5	7.5	5.0	6.0	3.5	2.0	3.0	4.0	3.5	3.5
24	13.0	11.5	12.5	5.0	3.5	4.0	4.0	3.0	3.5	3.5	3.0	3.0
25	12.5	11.0	12.0	5.5	4.5	5.0	4.0	3.0	3.5	3.5	2.5	3.0
26	11.0	10.0	10.5	5.0	3.5	4.0	3.5	2.5	3.0	3.5	2.5	2.5
27	11.0	10.0	10.5	4.0	2.0	3.0	3.5	2.0	2.5	3.0	2.0	2.5
28	10.5	8.5	10.0	4.0	2.0	3.5	3.5	2.5	3.0	2.0	1.0	1.5
29	11.5	9.5	10.5	4.5	3.5	4.0	3.0	1.0	2.5	2.0	.5	1.5
30	12.0	9.5	10.5	4.0	2.5	3.5	1.5	.0	1.0	3.5	.5	1.5
31	12.5	10.5	11.5	---	---	---	2.5	.5	1.5	3.5	1.5	2.5
MONTH	15.5	8.5	11.5	14.5	2.0	8.5	7.0	.0	3.0	5.5	.0	2.5

E Estimated daily.

## HUDSON RIVER BASIN

01372051 FALL KILL AT POUGHKEEPSIE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	2.0	2.5	2.5	1.0	1.5	10.0	7.5	9.0	14.5	12.5	13.5
2	3.0	1.0	2.5	3.0	.5	1.5	9.5	7.0	8.5	14.5	12.5	13.0
3	2.0	.0	1.0	3.0	.5	2.0	9.5	6.5	8.0	15.0	11.5	13.5
4	2.0	.0	.5	3.0	1.0	2.0	10.0	7.5	9.0	15.5	12.5	14.5
5	1.0	.0	.5	4.0	1.0	2.5	7.5	4.5	6.0	15.5	13.0	14.0
6	.0	.0	.0	4.0	2.5	3.0	8.0	4.5	6.5	15.0	11.5	13.5
7	.0	.0	.0	5.0	3.0	4.0	9.5	6.5	8.0	15.0	11.5	13.5
8	.0	.0	.0	7.5	4.0	5.5	8.5	4.0	5.5	15.0	11.0	13.0
9	.0	.0	.0	5.0	3.0	3.5	8.5	4.5	7.0	16.0	12.5	14.5
10	1.0	.0	.0	4.0	2.0	3.0	8.5	5.5	7.0	15.5	13.0	14.0
11	2.5	.5	1.5	4.0	2.0	3.0	10.0	6.0	8.0	13.0	12.5	13.0
12	1.0	.0	.0	4.5	2.5	3.5	9.5	7.5	8.0	14.0	13.0	13.5
13	.0	.0	.0	7.0	3.5	5.0	10.0	9.0	9.5	15.5	13.5	14.5
14	1.5	.0	.5	8.0	5.0	6.5	9.5	8.5	9.0	16.0	13.5	14.5
15	1.0	.0	.5	10.5	6.5	8.5	10.5	8.0	9.0	15.5	14.0	14.5
16	3.0	1.0	2.0	12.0	9.5	10.5	12.0	7.5	9.5	17.0	13.5	15.0
17	3.0	1.0	2.0	12.0	10.5	11.0	12.5	8.5	10.5	16.0	15.0	15.5
18	3.0	.5	2.0	11.5	9.5	10.5	14.0	9.5	12.0	15.5	15.0	15.0
19	3.5	.5	2.0	11.0	8.5	10.0	14.0	11.5	12.5	15.0	14.0	14.5
20	3.5	1.0	2.5	10.5	8.5	9.5	15.5	11.5	13.5	16.5	12.5	14.5
21	3.0	2.0	2.5	10.5	9.5	10.0	14.5	13.0	13.5	17.5	15.0	16.0
22	3.0	1.5	2.5	10.0	9.0	9.5	15.0	12.5	13.5	17.5	15.5	16.5
23	3.0	2.0	2.5	9.5	8.5	9.0	15.0	12.0	13.5	18.5	14.5	16.5
24	4.0	1.5	3.0	9.0	8.0	8.5	15.5	11.5	13.5	20.0	16.0	18.0
25	3.5	.5	2.0	9.5	6.5	8.0	15.5	11.5	13.5	19.5	17.5	18.0
26	2.5	.5	1.5	10.0	6.5	8.5	15.5	12.0	14.0	18.0	17.0	17.5
27	1.5	.5	1.0	10.0	7.0	8.5	16.5	12.5	15.0	18.5	16.0	17.0
28	2.0	1.5	1.5	10.0	7.0	8.5	16.5	14.0	15.5	17.5	16.0	17.0
29	---	---	---	10.5	7.0	9.0	16.0	14.0	15.0	17.5	16.0	16.5
30	---	---	---	10.0	8.0	9.0	15.0	13.0	14.0	18.0	17.0	17.5
31	---	---	---	10.0	8.5	9.5	---	---	---	20.0	16.5	18.0
MONTH	4.0	.0	1.5	12.0	.5	6.5	16.5	4.0	10.5	20.0	11.0	15.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	20.0	17.5	19.0	23.5	21.0	22.0	25.5	23.5	24.5	21.5	20.0	21.0
2	20.0	18.5	19.0	23.0	21.0	22.0	26.5	24.5	25.5	20.5	18.5	19.5
3	21.0	19.5	20.0	22.0	19.0	20.5	25.5	24.0	25.0	19.5	16.5	18.0
4	21.0	20.0	20.5	23.0	19.5	21.0	26.5	24.5	25.5	20.0	16.5	18.5
5	21.0	18.5	19.5	23.0	21.0	22.0	25.5	24.0	25.0	21.5	18.5	19.5
6	21.5	19.0	20.0	23.5	21.5	22.5	24.5	23.0	23.5	21.0	19.0	20.0
7	22.0	20.0	21.0	22.5	21.5	22.0	23.5	22.0	23.0	21.5	19.5	20.5
8	21.5	19.0	20.5	23.5	21.5	22.5	23.0	20.5	21.5	21.0	16.5	18.0
9	20.5	17.5	19.0	21.5	19.5	20.5	22.0	20.5	21.5	18.0	16.5	17.0
10	19.5	18.5	19.0	22.5	19.5	21.0	22.0	20.5	21.5	18.0	15.5	16.5
11	20.0	17.5	18.5	23.0	21.0	22.0	23.5	21.5	22.5	16.5	13.5	15.0
12	19.5	18.0	19.0	23.5	20.5	22.0	23.0	22.5	22.5	17.5	14.5	16.0
13	19.0	17.0	18.0	25.0	21.5	23.0	23.0	21.5	22.5	19.0	17.0	18.0
14	19.0	17.0	18.0	26.5	23.0	25.0	23.5	21.5	22.5	20.0	18.5	19.5
15	20.0	16.5	18.0	27.5	24.5	26.0	23.5	22.5	23.0	18.5	16.0	17.0
16	20.5	16.5	18.5	26.0	24.0	24.5	24.0	22.0	23.0	16.5	14.0	15.5
17	22.0	18.0	20.0	24.5	22.5	23.5	24.5	22.5	23.5	17.5	16.0	16.5
18	23.0	19.5	21.0	26.0	23.5	24.5	24.0	22.0	23.0	17.5	16.0	16.5
19	24.5	21.0	22.5	25.5	24.5	25.0	23.0	21.0	22.0	16.0	14.0	15.0
20	25.5	22.5	23.5	25.0	23.5	24.5	21.5	18.5	20.0	16.5	14.5	16.0
21	22.5	20.0	21.0	24.0	23.5	24.0	22.5	18.5	20.5	18.0	16.0	17.0
22	21.5	19.0	20.0	24.5	22.5	23.5	21.5	20.0	20.5	19.5	17.5	18.5
23	21.0	18.5	20.0	24.5	23.5	24.0	21.0	18.5	19.5	18.5	15.0	16.0
24	21.5	19.0	20.5	24.5	23.0	24.0	21.5	19.0	20.0	15.0	13.0	14.5
25	22.5	20.5	21.5	25.5	24.0	24.5	19.5	17.0	18.0	15.0	14.0	14.5
26	23.0	21.5	22.0	26.0	24.5	25.0	19.5	16.5	18.0	15.5	15.0	15.5
27	23.0	20.5	22.0	26.0	24.5	25.5	20.0	19.0	19.5	17.0	15.0	16.0
28	21.5	18.5	20.0	25.5	24.5	25.0	20.0	17.5	19.0	16.0	14.5	15.0
29	22.0	18.0	20.0	26.0	24.5	25.5	20.5	17.0	19.0	15.0	12.5	14.0
30	22.5	19.0	21.0	26.0	24.5	25.5	20.0	17.5	19.0	15.0	12.5	14.0
31	---	---	---	25.5	23.5	24.5	22.0	16.5	18.5	---	---	---
MONTH	25.5	16.5	20.0	27.5	19.0	23.5	26.5	16.5	21.5	21.5	12.5	17.0

## HUDSON RIVER BASIN

01372058 HUDSON RIVER BELOW POUGHKEEPSIE, NY

LOCATION.--Lat 41°39'03", long 73°56'42", Dutchess County, Hydrologic Unit 02020008, on left bank at IBM pumping station, 3.5 mi south of the Mid-Hudson bridge, and 2.3 mi south of Poughkeepsie. Water-quality sampling site at stage station.

DRAINAGE AREA.--11,861 mi<sup>2</sup>.

## WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1995. Records for May 1992 to September 1994 are unpublished and available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below(-) mean sea level for publication.

REMARKS.--Telephone gage-height, temperature, and specific conductance telemeter at station. Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4.23 ft, Feb. 4; minimum, -3.34 ft, Feb. 5.

## ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	3.25	-.72	1.14	3.69	-.48	1.83	2.66	-1.66	.56	3.32	-1.34	.93
2	2.94	-.55	1.19	2.74	-1.88	.60	3.14	-1.17	.85	3.01	-1.51	.71
3	2.94	-.78	1.11	2.64	-2.60	-.01	2.74	-1.68	.50	2.29	-2.05	.16
4	3.14	-.86	1.15	3.33	-1.16	1.08	3.26	-1.24	.90	2.43	-1.55	.42
5	3.18	-.85	1.12	3.58	-.78	1.28	3.62	-1.14	1.21	1.67	-1.98	-.20
6	3.27	-.97	1.10	3.42	-.98	1.19	3.23	-.70	1.26	1.67	-1.74	.05
7	3.21	-1.06	1.08	2.14	-2.11	-.03	3.08	-.75	1.24	1.99	-1.69	.46
8	3.08	-1.06	1.04	2.51	-1.41	.36	2.08	-1.34	.34	2.06	-1.51	.52
9	3.20	-.85	1.21	2.60	-1.24	.67	2.40	-1.22	.81	1.92	-1.02	.52
10	2.56	-1.15	.85	2.60	-.78	.92	2.53	-.52	1.19	1.65	-1.37	.43
11	2.72	-1.15	.83	1.73	-1.50	.12	3.45	-1.15	1.04	2.38	-.96	.78
12	2.73	-.65	1.03	2.41	-1.35	.80	1.70	-1.88	.26	2.68	-.61	.98
13	2.69	-.68	.99	2.10	-1.06	.67	2.33	-1.15	.72	2.44	-.79	.66
14	2.41	-.73	.90	2.88	-.75	1.22	3.19	-.44	1.40	2.38	-1.01	.60
15	3.39	-.74	1.52	2.87	-.76	.92	2.90	-.25	1.26	3.35	-.33	1.44
16	2.57	-.99	.93	2.53	-1.54	.65	3.11	-.32	1.25	3.26	-.44	1.35
17	3.46	-.68	1.42	3.38	-.41	1.42	3.75	-.09	1.60	2.93	-.74	.96
18	3.60	.11	1.84	3.46	-.10	1.56	3.36	-.30	1.35	3.55	-.64	1.39
19	3.58	-.01	1.79	2.69	-1.17	.81	3.01	-.83	.99	3.76	.03	1.79
20	3.44	-.17	1.59	2.61	-1.44	.51	2.81	-.90	.79	4.13	.13	2.16
21	3.26	-.24	1.46	3.43	-.52	1.51	2.41	-1.14	.59	3.96	.30	2.14
22	3.30	-.41	1.41	3.39	-1.74	1.02	2.26	-1.27	.44	3.38	-.42	1.53
23	3.31	-.19	1.46	2.25	-1.78	-.08	2.59	-.73	.86	2.20	-.75	.74
24	2.98	-.37	1.27	1.72	-1.60	-.06	3.58	-.20	1.60	2.94	-.72	---
25	3.02	-.14	1.36	2.30	-1.21	.72	3.16	-.41	1.58	2.61	-.87	.83
26	---	-.22	---	1.63	-1.25	.24	2.90	-.42	1.33	2.67	-1.20	.63
27	2.39	-.39	.94	2.32	-1.51	.67	2.83	-.51	1.19	2.59	-1.45	.41
28	2.50	-.47	1.03	3.53	-.04	1.93	3.12	-.76	1.22	2.15	-1.96	.11
29	2.39	-.61	.83	2.37	-1.18	.60	2.48	-1.81	.05	2.60	-2.06	.44
30	2.25	-.89	.74	2.41	-1.77	.42	1.58	-2.63	-.44	3.17	-1.17	.94
31	2.88	-1.11	.95	---	---	---	2.85	-1.71	.56	3.15	-1.16	.97
MONTH	---	-1.15	---	3.69	-2.60	.78	3.75	-2.63	.92	4.13	-2.06	---



## HUDSON RIVER BASIN

01372058 HUDSON RIVER BELOW POUGHKEEPSIE, NY--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.73	-1.21	.72	2.81	-1.26	.82	2.87	-.90	.91	3.25	-.24	1.42
2	2.67	-1.28	.67	2.81	-1.05	.86	2.85	-.89	.87	3.31	-.46	1.36
3	2.71	-1.16	.79	2.83	-.86	1.04	2.69	-.97	.87	3.34	-.02	1.53
4	4.23	.01	1.95	2.97	-.75	1.10	3.09	-1.54	.83	3.27	-.10	1.40
5	2.10	-3.34	-.62	2.75	-.72	1.06	.40	-2.31	-.98	3.00	-.25	1.22
6	.58	-3.02	-.98	3.19	-.76	1.23	.97	-2.05	-.32	2.83	-.74	.83
7	1.26	-2.59	-.43	2.38	-.47	.92	2.71	-.58	.81	2.65	-.78	.89
8	2.53	-1.07	.66	2.67	-.02	1.29	2.52	-.38	1.08	1.76	-1.45	.36
9	1.28	-1.51	.01	1.66	-1.76	-.08	2.42	-.26	1.04	3.32	.15	1.76
10	1.73	-1.56	.03	1.08	-1.85	-.10	1.88	-.94	.33	3.00	-.35	1.32
11	2.59	-.56	.95	1.92	-.67	.62	2.19	-1.03	.66	3.39	-.28	1.61
12	1.10	-2.19	-.42	2.13	-.52	.81	2.73	-1.10	.79	3.44	-.63	1.41
13	1.79	-2.30	-.42	2.14	-1.05	.55	3.01	-1.01	1.03	3.46	-.87	1.26
14	1.74	-2.55	-.47	2.70	-1.22	.70	3.00	-.99	.94	3.67	-.52	1.39
15	2.87	-1.76	.58	2.86	-.96	.98	2.96	-1.21	.81	3.67	-.60	1.42
16	2.82	-1.86	.48	3.48	-.64	1.39	2.94	-1.19	.84	3.72	-.58	1.45
17	2.27	-1.70	.32	3.47	-.39	1.51	3.16	-.82	1.12	3.68	-.33	1.63
18	2.40	-1.43	.54	3.33	-.85	1.09	3.39	-.84	1.13	3.73	-.48	1.49
19	2.32	-1.35	.58	3.28	-.59	1.33	3.36	-.50	1.34	3.51	-.28	1.55
20	2.65	-.80	1.01	3.56	-.29	1.55	3.20	-.88	1.06	3.46	-.27	1.55
21	3.27	-.06	1.69	3.48	-.39	1.46	2.94	-.62	1.20	3.10	-.48	1.49
22	2.99	-.54	1.17	3.22	-.64	1.23	3.04	-.59	1.16	2.52	-.98	.96
23	2.96	-.57	1.17	2.95	-.36	1.17	2.22	-1.10	.63	2.63	-1.01	.83
24	3.25	-.99	.90	2.88	-.47	1.05	2.89	-.79	1.04	2.70	-.85	.93
25	1.48	-2.46	-.18	2.75	-.77	.83	2.93	-.99	1.05	2.47	-1.42	.50
26	1.84	-1.85	.03	2.73	-.91	.81	2.39	-1.39	.71	2.97	-.70	.97
27	2.79	-1.37	.78	2.65	-1.02	.84	2.88	-1.12	.74	2.95	-.88	.94
28	2.95	-.96	.90	2.96	-.90	.99	2.72	-1.11	.82	2.98	-.76	.92
29	---	---	---	3.33	-.74	1.17	3.13	-.93	1.02	2.98	-.57	1.12
30	---	---	---	3.30	-.51	1.37	3.15	-.78	.97	2.85	-1.08	.63
31	---	---	---	3.20	-.87	1.05	---	---	---	2.63	-.85	.82
MONTH	4.23	-3.34	.44	3.56	-1.85	.99	3.39	-2.31	.82	3.73	-1.45	1.19

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2.74	-.83	.84	3.15	-.30	1.41	2.78	-.84	1.06	2.94	-.53	1.35
2	2.77	-.76	.90	3.06	-.40	1.23	2.63	-.88	1.01	3.05	-.78	1.25
3	2.62	-.75	.94	2.69	-.78	1.01	2.85	-.96	1.06	3.26	-.48	1.43
4	2.49	-1.03	.74	2.64	-.75	1.13	2.86	-.79	1.14	3.29	-.47	1.38
5	2.43	-.76	1.02	2.63	-.74	1.16	3.23	-.95	1.10	3.17	-.49	1.33
6	2.48	---	---	2.81	-.82	1.12	3.64	-.40	1.59	3.26	-.84	1.10
7	3.15	-.47	1.46	2.78	-.87	1.08	3.91	-.09	1.86	3.48	-.41	1.43
8	2.61	-.91	1.10	3.10	-.68	1.19	3.56	-.62	1.50	3.21	-.89	1.13
9	2.99	-1.14	.80	3.03	-1.01	.95	3.37	-.91	1.15	3.30	-.43	1.52
10	3.29	-.93	1.08	---	-.69	---	3.51	-.75	1.26	3.33	-.94	1.08
11	3.43	-.85	1.23	3.40	-1.05	1.06	3.51	-.56	1.44	3.01	-.88	1.08
12	3.27	-1.11	1.06	3.35	-.92	1.08	3.59	-.47	1.48	2.78	-.79	1.09
13	3.63	-.76	1.29	3.40	-.91	1.12	3.38	-.64	1.33	2.85	-.43	1.24
14	3.77	-.88	1.33	3.27	-.91	1.08	3.11	-.66	1.41	2.62	-.54	1.03
15	3.41	-1.08	.99	3.12	-.96	1.11	3.10	---	---	2.33	-.76	.75
16	3.03	-1.27	.74	3.26	-.74	1.33	3.05	---	---	2.90	-.41	1.18
17	2.57	-1.30	.64	3.25	-.50	1.54	2.83	-.38	1.37	2.33	.18	1.40
18	2.40	-1.30	.66	3.12	-.39	1.56	3.23	-.07	1.62	2.29	-.35	.98
19	2.28	-1.22	.72	2.69	-.64	1.26	3.58	.69	2.20	2.89	-.21	1.16
20	2.27	-1.39	.61	2.78	-.56	1.15	3.02	.23	1.76	2.85	.10	1.44
21	2.98	-.63	1.19	2.71	-.63	1.08	2.93	.09	1.43	2.94	-.14	1.41
22	2.70	-.82	.99	2.87	-.54	1.05	2.44	-.82	---	3.34	-.16	1.65
23	2.83	-.80	.94	3.20	-.29	1.22	2.95	-.65	.97	2.57	-.90	.87
24	2.87	-.59	1.01	2.93	-.55	1.03	2.63	-.88	.90	3.30	-.72	1.25
25	3.04	-.49	1.05	2.98	-.68	.93	2.80	-1.18	.64	3.47	-.12	1.72
26	2.95	-.56	1.02	2.87	-.50	1.07	3.13	---	---	3.72	-.12	1.86
27	3.97	-.38	1.54	2.86	-.76	.86	3.16	-.67	1.22	3.64	-.07	1.78
28	3.97	-.47	1.39	2.87	-.80	1.04	---	---	---	2.92	-.67	1.13
29	3.02	-.58	1.05	2.95	-.63	1.07	3.29	-.25	1.58	3.19	-.60	1.30
30	3.08	-.44	1.24	2.57	-1.08	.66	3.00	-.73	1.17	3.21	-.31	1.49
31	---	---	---	2.55	-.95	.93	3.29	-.50	1.48	---	---	---
MONTH	3.97	---	---	---	-1.08	---	---	---	---	3.72	-.94	1.29

## HUDSON RIVER BASIN

01372058 HUDSON RIVER BELOW Poughkeepsie, NY--Continued

## WATER-QUALITY RECORDS

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1994 to September 1995. Records for May 1992 to September 1994 are unpublished and available in files of the Geological Survey.

WATER TEMPERATURES: October 1994 to September 1995. Records for May 1992 to September 1994 are unpublished and available in files of the Geological Survey.

INSTRUMENTATION.--Water-quality monitor provides 15-minute-interval readings.

REMARKS.--Telephone temperature and specific conductance telemeter at station. Interruptions of record were due to malfunction of recording instrument.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,800 microsiemens, Sept. 26; minimum, 96 microsiemens, Jan. 30.

WATER TEMPERATURES: Maximum, 28.0°C, Aug. 4, 5; minimum, 0.0°C on many days during winter period.

## SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	264	196	226	283	216	241	304	175	229	281	150	210
2	269	190	234	289	206	236	305	164	232	383	162	226
3	272	179	233	301	190	246	307	179	240	270	148	204
4	268	183	232	305	223	260	286	187	235	270	148	208
5	269	193	229	304	235	263	226	179	200	262	---	---
6	266	180	227	292	228	251	309	193	240	288	---	---
7	273	186	231	298	223	259	245	148	202	448	153	217
8	269	200	239	307	209	259	270	128	197	288	150	210
9	284	212	243	299	227	258	254	130	188	295	138	206
10	271	202	234	310	207	254	279	143	187	298	127	199
11	276	172	226	331	202	256	341	146	205	186	---	149
12	268	167	224	307	188	249	302	124	195	223	128	163
13	266	166	226	320	212	259	249	---	---	315	154	212
14	287	186	234	325	206	266	289	143	196	298	177	221
15	278	183	235	273	---	---	307	151	207	253	195	220
16	295	175	236	237	183	204	281	149	198	316	198	230
17	274	179	236	263	169	220	230	150	171	355	189	242
18	275	186	239	245	201	221	297	153	202	254	180	212
19	279	212	247	278	197	233	284	151	201	243	172	200
20	317	224	247	277	184	223	269	131	194	256	176	197
21	284	215	250	244	166	197	268	146	200	277	183	224
22	279	216	251	269	189	227	257	148	201	295	176	231
23	238	169	215	267	166	210	263	139	199	398	178	260
24	285	195	245	256	136	200	233	136	183	304	183	229
25	283	202	246	265	156	207	301	153	209	329	157	229
26	281	190	228	278	160	214	290	141	204	341	151	222
27	256	163	215	266	142	200	285	128	196	323	129	207
28	265	174	223	248	153	191	288	145	203	318	104	194
29	267	190	230	305	180	236	287	145	208	288	---	---
30	286	178	236	301	175	235	290	---	---	285	96	188
31	279	199	239	---	---	---	272	---	---	279	120	191
MONTH	317	163	234	331	---	---	341	---	---	448	---	---

## HUDSON RIVER BASIN

01372058 HUDSON RIVER BELOW POUGHKEEPSIE, NY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	281	155	206	356	183	248	314	180	234	313	194	240
2	301	140	213	357	179	254	303	167	227	279	194	232
3	282	122	190	369	185	255	288	158	218	305	189	239
4	174	129	143	354	181	244	275	150	213	286	191	241
5	289	119	188	321	181	258	254	113	185	253	---	---
6	250	---	---	329	196	257	268	106	189	304	185	239
7	249	---	---	321	189	255	292	131	209	295	189	240
8	300	---	---	332	210	261	182	127	150	291	176	238
9	264	---	---	497	189	318	307	122	199	304	185	244
10	286	116	194	415	175	288	310	129	207	263	203	225
11	285	142	211	378	192	279	288	120	206	279	196	226
12	293	116	190	392	208	292	245	152	184	312	201	243
13	296	---	---	406	230	310	282	158	206	311	213	251
14	309	---	---	395	226	309	282	159	213	291	209	245
15	252	---	---	381	241	311	266	150	206	294	212	247
16	368	158	234	395	249	308	289	150	208	307	206	250
17	339	154	225	407	248	311	304	149	214	287	216	245
18	326	158	227	391	242	302	316	153	221	292	213	245
19	314	154	228	365	236	297	273	161	209	302	210	241
20	291	158	232	358	237	293	315	147	225	296	198	247
21	271	176	219	351	239	275	295	147	211	307	207	252
22	330	140	230	360	219	282	286	155	217	298	214	252
23	298	155	209	---	219	---	280	148	217	302	200	248
24	342	155	223	351	197	261	287	155	223	300	217	254
25	300	141	220	347	191	267	305	168	226	300	225	255
26	319	135	222	344	182	271	294	189	235	285	214	247
27	223	142	170	342	191	270	302	192	234	304	209	249
28	417	154	229	333	191	265	297	212	244	277	211	244
29	---	---	---	331	184	260	324	204	243	289	217	244
30	---	---	---	343	203	252	287	196	236	284	224	251
31	---	---	---	308	193	243	---	---	---	287	216	250
MONTH	417	---	---	---	175	---	324	106	214	313	---	--

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	291	227	253	290	243	267	439	322	385	2340	894	1680
2	278	228	252	286	232	264	431	322	379	2400	906	1590
3	288	230	253	293	220	261	450	308	379	2620	1160	1780
4	287	227	255	297	228	268	435	326	384	2620	1150	1830
5	272	210	246	321	236	281	424	305	366	2490	1230	1840
6	279	218	251	370	245	301	431	295	363	2560	1110	1680
7	284	224	255	369	257	314	423	282	364	2460	1230	1810
8	291	222	252	386	255	333	384	244	340	2550	987	1610
9	288	199	246	374	239	324	375	255	332	2480	1160	1810
10	276	215	247	---	258	---	376	285	336	2230	916	1560
11	277	211	246	422	286	363	381	310	346	2250	928	1560
12	271	217	243	460	317	385	394	323	358	2030	931	1510
13	284	204	246	501	336	421	401	318	361	1880	947	1500
14	276	206	246	520	357	443	404	317	362	1760	825	1360
15	290	202	247	531	352	447	---	314	---	1650	735	1210
16	279	206	250	592	359	465	392	---	---	2060	911	1320
17	282	221	255	687	383	535	374	306	342	1770	1020	1400
18	283	226	258	669	381	523	417	266	343	1690	783	1200
19	279	235	260	573	402	492	425	315	361	2310	791	1340
20	287	239	261	541	380	469	407	318	356	2350	913	1550
21	282	221	255	550	395	460	376	271	331	2340	1090	1620
22	276	217	252	543	347	454	369	---	---	2190	1090	1640
23	280	217	254	543	365	466	370	215	311	1980	730	1240
24	284	220	256	526	342	449	458	239	332	1990	797	1330
25	278	233	259	524	345	444	827	240	357	2570	952	1650
26	279	240	259	517	377	442	1720	---	---	2800	949	1790
27	282	231	258	479	359	417	---	447	1090	2580	977	1810
28	286	222	258	451	347	398	---	---	---	2140	808	1490
29	286	215	258	465	343	410	2300	772	---	2410	838	1570
30	291	235	266	431	330	387	2260	663	1480	2580	1090	1720
31	---	---	---	440	330	381	2520	867	1670	---	---	---
MONTH	291	199	253	---	220	---	---	---	---	2800	730	1570

## HUDSON RIVER BASIN

01372058 HUDSON RIVER BELOW POUGHKEEPSIE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.0	19.0	19.5	14.5	14.0	14.5	8.0	7.5	8.0	2.0	1.5	1.5
2	19.5	19.0	19.5	14.5	13.5	14.0	8.0	7.0	7.5	3.0	1.5	1.5
3	19.5	18.5	19.0	14.0	13.0	13.5	7.5	6.5	7.0	1.5	1.0	1.5
4	19.0	18.5	18.5	14.5	13.5	14.0	7.0	6.5	7.0	1.5	1.0	1.0
5	18.5	18.0	18.5	14.0	13.5	14.0	7.5	6.5	7.0	1.0	.5	1.0
6	18.5	18.0	18.0	14.0	13.5	13.5	7.0	6.0	6.5	1.0	.5	.5
7	18.5	18.0	18.0	13.5	12.5	13.0	6.5	5.0	6.0	1.0	.5	.5
8	18.5	17.5	18.0	13.5	12.5	13.0	5.5	5.0	5.0	.5	.5	.5
9	18.0	17.5	18.0	13.5	12.5	13.0	5.0	4.5	5.0	.5	.0	.5
10	18.0	17.0	17.5	13.0	12.5	12.5	5.0	4.5	5.0	.5	.0	.0
11	17.5	17.0	17.0	12.5	12.0	12.5	5.0	4.0	4.5	.0	.0	.0
12	17.5	17.0	17.0	12.5	12.0	12.0	4.5	3.5	4.0	.0	.0	.0
13	17.0	16.5	17.0	12.5	11.5	12.0	4.0	3.5	3.5	.5	.0	.0
14	17.0	16.5	16.5	12.5	11.5	12.0	4.0	3.5	3.5	.5	.0	.0
15	17.0	16.0	16.5	12.0	12.0	12.0	4.0	3.0	3.5	.5	.0	.5
16	16.5	16.0	16.0	12.0	11.5	11.5	3.5	3.0	3.0	2.0	.0	.5
17	16.5	15.5	16.0	12.0	11.5	11.5	3.5	3.0	3.0	1.5	.5	.5
18	16.5	15.5	16.0	12.0	11.5	11.5	3.5	2.5	3.0	1.0	.5	.5
19	16.5	15.5	16.0	12.0	11.0	11.5	3.0	2.5	2.5	1.0	.5	1.0
20	16.0	15.5	16.0	11.5	11.0	11.0	3.0	2.0	2.5	2.0	1.0	1.0
21	16.0	15.5	16.0	11.5	11.0	11.0	2.5	2.0	2.5	2.5	1.0	1.5
22	16.0	15.5	15.5	11.5	10.5	11.0	2.5	2.0	2.0	3.0	1.5	2.0
23	16.0	15.0	15.5	11.0	9.5	10.5	2.5	2.0	2.0	3.5	2.5	3.0
24	16.0	15.0	15.5	10.5	9.5	10.0	3.0	2.0	2.5	3.5	3.0	3.0
25	15.5	15.0	15.5	10.0	9.5	9.5	3.0	2.0	2.5	3.5	3.0	3.5
26	15.5	14.5	15.0	10.0	9.0	9.5	2.5	2.0	2.0	3.5	3.0	3.5
27	15.0	14.5	14.5	9.5	8.5	9.0	2.5	2.0	2.0	3.5	3.0	3.0
28	15.0	14.5	14.5	9.5	8.0	9.0	2.5	2.0	2.0	3.0	2.5	3.0
29	14.5	14.5	14.5	9.0	8.5	8.5	2.0	1.0	2.0	3.0	2.0	2.5
30	14.5	14.0	14.5	8.5	8.0	8.5	2.0	1.0	1.5	3.0	2.5	2.5
31	14.5	14.0	14.5	---	---	---	1.5	1.0	1.5	2.5	2.5	2.5
MONTH	20.0	14.0	16.5	14.5	8.0	11.5	8.0	1.0	4.0	3.5	.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.0	2.0	2.5	.5	.0	.0	8.0	6.5	7.0	11.5	10.5	11.0
2	2.5	2.0	2.0	.5	.0	.0	8.0	6.5	7.0	11.5	10.5	11.0
3	2.0	1.5	2.0	1.0	.0	.0	7.5	6.5	7.0	12.0	10.5	11.0
4	2.0	1.0	1.5	.5	.0	.0	7.5	6.5	7.0	12.5	11.0	11.5
5	1.0	.0	1.0	.5	.0	.0	7.5	6.0	6.5	12.0	11.5	11.5
6	.5	.0	.0	.5	.0	.5	7.5	6.0	7.0	13.0	11.5	12.0
7	.5	.0	.0	1.0	.0	.5	8.0	6.5	7.0	13.0	11.5	12.0
8	.5	.0	.0	2.5	.5	1.0	7.5	6.5	7.0	13.0	11.5	12.5
9	.0	.0	.0	2.5	.5	1.0	7.5	6.5	7.0	13.0	12.0	12.5
10	.5	.0	.0	2.5	1.0	1.5	8.0	6.5	7.0	13.0	12.5	12.5
11	.5	.0	.0	2.0	1.5	2.0	8.0	6.5	7.0	13.0	12.5	12.5
12	.0	.0	.0	2.5	1.5	2.0	8.0	7.0	7.0	13.5	12.5	13.0
13	.0	.0	.0	3.5	2.0	2.5	7.5	7.0	7.5	13.5	12.5	13.0
14	.0	.0	.0	4.0	2.0	3.0	7.5	7.0	7.5	14.0	12.5	13.0
15	.0	.0	.0	4.0	2.5	3.0	8.0	7.0	7.5	14.0	13.0	13.5
16	.5	.0	.0	4.0	2.5	3.0	8.5	7.0	7.5	14.5	13.0	13.5
17	.5	.0	.0	4.0	3.0	3.5	8.5	7.0	7.5	14.5	13.5	14.0
18	.5	.0	.0	5.0	3.5	3.5	8.5	7.5	8.0	14.5	13.5	14.0
19	.5	.0	.0	5.0	3.5	4.0	8.5	8.0	8.0	14.5	14.0	14.0
20	.5	.0	.0	5.0	4.0	4.5	8.5	8.0	8.0	14.5	13.5	14.0
21	.5	.0	.0	5.5	4.5	5.0	8.5	8.0	8.5	15.0	14.0	14.5
22	.0	.0	.0	6.0	5.0	5.0	9.5	8.0	8.5	15.5	14.5	15.0
23	.5	.0	.0	6.0	5.5	5.5	9.5	8.5	9.0	15.5	14.5	15.0
24	.5	.0	.0	6.5	5.5	5.5	9.5	8.5	9.0	16.0	15.0	15.5
25	.0	.0	.0	7.0	5.5	6.0	10.0	8.5	9.0	16.0	15.5	15.5
26	.5	.0	.0	7.5	6.0	6.5	10.5	9.0	9.5	16.0	15.5	16.0
27	.0	.0	.0	7.5	6.0	6.5	11.0	9.5	10.0	17.0	15.5	16.0
28	.5	.0	.0	7.5	6.0	7.0	11.0	10.0	10.5	16.5	15.5	16.0
29	---	---	---	8.0	6.5	7.0	11.0	10.0	10.5	17.0	15.5	16.5
30	---	---	---	7.5	7.0	7.0	11.0	10.0	10.5	17.0	16.0	16.5
31	---	---	---	7.5	7.0	7.0	---	---	---	18.0	16.0	17.0
MONTH	3.0	.0	.5	8.0	.0	3.5	11.0	6.0	8.0	18.0	10.5	13.5

## HUDSON RIVER BASIN

01372058 HUDSON RIVER BELOW POUGHKEEPSIE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	16.5	17.0	24.0	23.0	23.5	27.5	26.5	27.0	26.0	25.5	25.5
2	18.0	17.0	17.5	23.5	23.0	23.5	27.5	27.0	27.0	26.0	25.0	25.5
3	18.5	17.5	18.0	24.0	23.0	23.5	27.5	27.0	27.5	26.0	25.0	25.5
4	18.5	17.5	18.0	24.0	23.5	23.5	28.0	27.0	27.5	26.0	25.0	25.5
5	19.0	18.0	18.5	24.0	23.5	24.0	28.0	27.0	27.5	26.0	25.0	25.5
6	19.5	18.5	18.5	24.5	23.5	24.0	27.5	27.0	27.0	26.0	25.0	25.5
7	19.5	18.5	19.0	24.0	24.0	24.0	27.0	26.5	27.0	25.5	25.0	25.0
8	20.0	19.0	19.5	24.5	23.5	24.0	27.5	26.5	27.0	25.0	24.5	25.0
9	20.0	19.0	19.5	24.5	23.5	24.0	27.5	26.5	27.0	25.0	24.5	24.5
10	20.0	19.5	19.5	24.5	23.5	---	27.0	26.5	27.0	24.5	24.0	24.0
11	20.0	19.5	19.5	25.0	24.0	24.0	27.5	26.5	27.0	24.0	23.5	24.0
12	20.0	19.5	19.5	25.0	24.0	24.5	27.5	26.5	27.0	24.0	23.5	24.0
13	20.0	19.5	20.0	25.0	24.0	24.5	27.5	26.5	27.0	24.0	23.0	23.5
14	20.5	19.5	20.0	25.5	24.5	25.0	27.5	26.5	27.0	24.0	23.5	23.5
15	21.0	19.5	20.0	26.0	24.5	25.0	---	---	---	23.5	23.0	23.5
16	21.0	20.0	20.5	25.5	25.0	25.0	---	---	---	23.5	23.0	23.0
17	21.5	20.0	20.5	25.5	25.0	25.5	---	---	---	23.5	22.0	23.0
18	21.5	20.5	21.0	26.0	25.0	25.5	---	---	---	23.0	22.5	23.0
19	22.0	21.0	21.5	26.0	25.0	25.5	---	---	---	23.0	22.5	22.5
20	22.0	21.5	22.0	26.0	25.5	25.5	---	---	---	22.5	22.5	22.5
21	22.0	21.5	22.0	26.0	25.5	25.5	---	---	---	22.5	22.0	22.5
22	22.5	21.5	22.0	26.5	25.5	26.0	---	---	---	22.5	21.5	22.0
23	23.0	21.5	22.0	26.0	25.5	26.0	---	---	---	22.0	21.5	22.0
24	23.0	22.0	22.5	27.0	25.5	26.0	---	---	---	22.0	21.5	21.5
25	23.5	22.0	22.5	27.0	25.5	26.0	---	---	---	22.0	21.0	21.5
26	23.0	22.5	22.5	27.0	26.0	26.5	---	---	---	21.5	21.0	21.0
27	23.0	22.5	23.0	27.0	26.0	26.5	26.5	26.0	26.0	21.5	21.0	21.0
28	23.5	22.5	23.0	27.0	26.0	26.5	26.0	25.5	26.0	21.0	20.5	21.0
29	23.5	22.5	23.0	27.0	26.5	26.5	26.5	25.5	26.0	21.0	20.5	20.5
30	23.5	22.5	23.0	27.5	26.5	27.0	26.0	25.5	25.5	21.0	20.5	20.5
31	---	---	---	27.5	26.5	27.0	26.5	25.0	25.5	---	---	---
MONTH	23.5	16.5	20.5	27.5	23.0	---	---	---	---	26.0	20.5	23.0



## HUDSON RIVER BASIN

01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY

LOCATION.--Lat 41°39'11", long 73°52'23", Dutchess County, Hydrologic Unit 02020008, on left bank 700 ft downstream from Red Oak Mill dam, and 4.5 mi northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1903 to June 1905 (monthly discharges and daily gage heights only, published in WSP 97, 125, 166, and 202), August 1928 to current year.

REVISED RECORDS.--WSP 741: 1932. WSP 1902: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 114.37 ft above sea level (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi downstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Telephone gage-height telemeter at station. Also published as a NAWQA water-quality miscellaneous site.

AVERAGE DISCHARGE.--67 years (water years 1929-95), 254 ft<sup>3</sup>/s, 19.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft<sup>3</sup>/s, Aug. 19, 1955, gage height, 19.60 ft, from floodmarks in gage shelter, from rating curve extended above 6,000 ft<sup>3</sup>/s on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft and contracted-opening and flow-over-road measurement at gage height 19.60 ft; minimum discharge, 0.90 ft<sup>3</sup>/s, Sept. 20, 21, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 25	0445	*1,480	*5.89				

Minimum discharge, 3.0 ft<sup>3</sup>/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	71	339	519	360	592	226	195	158	27	39	8.7
2	189	101	290	662	349	471	204	193	126	51	32	6.7
3	160	123	257	604	e290	393	190	181	111	52	33	6.9
4	138	105	237	e480	e260	350	188	166	105	39	35	7.4
5	125	94	313	e360	e260	323	189	160	96	34	37	6.0
6	113	92	605	e330	e250	328	175	167	85	29	133	5.0
7	107	85	511	530	e250	340	188	152	78	26	99	4.1
8	101	81	446	579	e230	407	189	134	74	25	65	3.4
9	94	83	374	474	e180	1050	209	125	69	25	47	3.3
10	115	97	360	396	e180	853	294	120	64	24	44	5.6
11	110	112	621	359	e170	694	253	126	64	25	37	6.2
12	96	112	601	340	e170	605	217	136	67	31	31	5.3
13	89	94	469	407	e130	565	338	130	72	28	28	4.4
14	85	84	423	530	e130	523	349	121	67	24	27	5.4
15	81	80	395	585	e120	479	299	115	61	22	30	5.9
16	76	79	359	642	210	446	261	109	54	21	26	5.9
17	71	74	340	662	222	447	233	102	57	23	22	9.1
18	67	72	374	579	208	433	220	104	59	89	19	12
19	66	74	351	522	206	385	262	116	48	62	16	11
20	68	71	308	608	220	354	306	135	42	43	15	8.9
21	75	84	277	1190	239	350	259	123	38	33	13	8.1
22	75	182	260	1150	224	403	276	101	34	29	11	9.5
23	84	166	249	982	211	376	251	88	33	28	9.9	20
24	119	137	628	828	282	342	226	84	31	57	9.3	20
25	105	118	1330	724	e330	309	235	147	31	69	8.2	16
26	90	112	918	650	e270	275	214	139	32	67	7.6	17
27	83	102	708	586	250	250	189	119	36	128	8.0	18
28	75	262	614	e480	391	233	189	103	34	95	7.4	16
29	70	495	553	e410	---	216	193	98	33	76	7.0	13
30	66	416	439	e340	---	223	181	274	29	63	6.0	10
31	62	---	e370	e350	---	251	---	218	---	47	6.1	---
TOTAL	3049	3858	14319	17858	6592	13266	7003	4281	1888	1392	908.5	278.8
MEAN	98.4	129	462	576	235	428	233	138	62.9	44.9	29.3	9.29
MAX	194	495	1330	1190	391	1050	349	274	158	128	133	20
MIN	62	71	237	330	120	216	175	84	29	21	6.0	3.3
CFSM	.54	.71	2.55	3.18	1.30	2.36	1.29	.76	.35	.25	.16	.05
IN.	.63	.79	2.94	3.67	1.35	2.73	1.44	.88	.39	.29	.19	.06

e Estimated

## HUDSON RIVER BASIN

01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	115	191	264	296	335	573	500	306	189	114	84.3	94.8
MAX	882	696	730	932	786	1195	1112	1204	813	884	845	890
(WY)	1956	1956	1973	1979	1976	1936	1983	1989	1972	1975	1955	1938
MIN	7.42	10.5	23.5	24.0	72.2	168	140	82.2	30.7	10.8	7.82	4.29
(WY)	1965	1965	1965	1981	1940	1965	1985	1941	1965	1965	1966	1964

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1928 - 1995

ANNUAL TOTAL	114932	74693.3	
ANNUAL MEAN	315	205	254
HIGHEST ANNUAL MEAN			438
LOWEST ANNUAL MEAN			65.7
HIGHEST DAILY MEAN	2190	Mar 24	10500
LOWEST DAILY MEAN	34	Jul 20	1.2
ANNUAL SEVEN-DAY MINIMUM	37	Jul 15	2.4
ANNUAL RUNOFF (CFSM)	1.74		1.41
ANNUAL RUNOFF (INCHES)	23.62		19.09
10 PERCENT EXCEEDS	872		603
50 PERCENT EXCEEDS	155		148
90 PERCENT EXCEEDS	56		23

## HUDSON RIVER BASIN

01374019 HUDSON RIVER AT SOUTH DOCK AT WEST POINT, NY

LOCATION.--Lat 41°23'10", long 73°57'20", Orange County, Hydrologic Unit 02020008, on right bank at South Dock at West Point. Water-quality sampling site at stage station.

DRAINAGE AREA.--12,598 mi<sup>2</sup>.

## WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1995. Records for June 1989 to September 1994 are unpublished and available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is mean sea level.

REMARKS.--Telephone gage-height, temperature, and specific conductance telemeter at station. Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4.18 ft, Feb. 4; minimum, -3.21 ft, Feb. 5.

## ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2.96	-.88	1.02	3.46	-.56	1.67	2.31	-1.74	.47	2.98	-1.39	.81
2	2.74	-.63	1.10	2.50	-1.80	.41	2.75	-1.25	.70	2.71	-1.46	.57
3	2.66	-.81	1.01	2.23	-2.59	-.13	2.38	-1.72	.38	1.96	-2.13	.00
4	2.84	-.91	1.04	2.87	-1.25	.87	2.93	-1.31	.77	2.16	-1.55	.24
5	2.88	-.85	1.01	3.13	-.94	1.04	3.25	-1.19	1.06	1.41	-2.03	-.33
6	2.94	-1.00	.96	3.00	-1.14	.96	2.90	-.79	1.06	1.39	-1.78	-.14
7	2.87	-1.08	.91	2.07	-2.17	-.23	2.86	-.68	1.08	1.90	-1.55	.37
8	2.73	-1.11	.84	2.10	-1.56	.14	1.91	-1.40	.21	1.87	-1.03	.44
9	2.81	-.95	1.00	2.30	-1.16	.50	2.14	-.69	.70	1.75	-1.40	.43
10	2.40	-1.07	.68	2.40	-1.27	.81	2.41	-.41	1.13	1.41	-1.41	.39
11	2.45	-.80	.73	1.51	-1.45	.00	3.22	-1.60	.91	2.20	-.93	.77
12	2.44	-.74	.92	2.14	-1.45	.67	1.54	-1.88	.22	2.46	-.66	.90
13	2.39	-.72	.87	1.94	-1.15	.53	2.10	-1.25	.68	2.19	-.90	.53
14	2.16	-.77	.82	2.52	-.93	---	2.97	-.57	1.34	2.10	-1.13	.50
15	3.17	-.77	1.47	2.58	-.75	.76	---	-.34	---	3.06	-.57	1.27
16	2.32	-.97	.87	2.24	-1.63	.57	2.89	-.41	1.15	3.04	-.45	1.18
17	3.20	-.74	1.34	3.07	-.53	1.31	3.45	-.23	1.48	2.79	-.74	.87
18	3.31	.04	1.70	3.15	-.15	1.41	3.12	-.39	1.22	3.26	-.75	1.30
19	3.26	-.11	1.62	2.44	-1.19	.64	2.83	-.92	.86	3.53	-.13	1.65
20	3.11	-.26	1.43	2.23	-1.58	.35	2.54	-.97	.65	3.98	-.03	2.06
21	2.99	-.30	1.32	3.10	-.72	1.35	2.17	-1.20	.42	3.84	.13	1.91
22	2.99	-.50	1.26	3.24	-1.64	.74	2.00	-1.40	.32	3.12	-.56	1.30
23	3.02	-.34	1.31	1.84	-1.70	-.26	2.51	-.79	.85	2.01	-.85	.58
24	2.66	-.54	1.12	1.44	-1.78	-.19	3.58	-.11	1.73	2.71	-.90	1.08
25	2.75	-.16	1.18	2.10	-1.22	.56	3.01	-.47	1.51	2.43	-1.06	.74
26	2.44	-.32	.95	1.46	-1.40	.14	2.75	-.60	1.24	2.41	-1.22	.56
27	2.17	-.48	.81	2.11	-1.38	.64	2.67	-.60	1.08	2.30	-1.60	.35
28	2.27	-.60	.89	3.29	-.13	1.80	2.78	-.95	1.08	1.90	-2.00	.09
29	2.10	-.80	.66	2.13	-1.26	.44	2.25	-1.62	-.01	2.38	-2.08	.44
30	1.99	-.99	.58	2.09	-1.84	.32	1.37	-2.61	-.43	2.92	-1.25	.85
31	2.55	-1.20	.82	---	---	---	2.57	-1.76	.50	2.89	-1.24	.85
MONTH	3.31	-1.20	1.04	3.46	-2.59	---	---	-2.61	---	3.98	-2.13	.73

## HUDSON RIVER BASIN

01374019 HUDSON RIVER AT SOUTH DOCK AT WEST POINT, NY--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.52	-1.27	.57	2.70	-1.29	.76	2.68	-.93	.83	3.06	-.33	1.36
2	2.56	-1.24	.59	2.59	-1.08	.80	2.68	-.96	.77	3.09	-.46	1.25
3	2.56	-1.24	.74	2.73	-.87	.96	2.54	-1.00	.75	3.09	-.09	1.43
4	4.18	-.09	1.88	2.79	-.85	.99	2.80	-1.42	.68	3.06	-.17	1.29
5	2.16	-3.21	-.72	2.59	-.75	.97	.33	-2.35	-.99	2.80	-.24	1.13
6	.38	-2.49	-1.05	2.96	-.88	1.08	.84	-2.09	-.40	2.68	-.81	.79
7	.87	-2.09	-.46	2.20	-.61	.78	2.47	-.44	.76	2.38	-.80	.83
8	2.20	-1.19	.60	2.42	-.11	1.13	2.42	-.35	1.02	1.59	-1.31	.39
9	1.01	-1.41	-.08	1.60	-1.84	-.20	2.41	-.56	1.01	3.21	-.06	1.65
10	1.38	-1.42	-.04	.85	-1.81	-.15	1.80	-.96	.35	2.76	-.50	1.24
11	2.21	-.52	.85	1.72	-.81	.52	1.95	-1.21	.57	3.17	-.33	1.54
12	.88	-1.99	-.48	1.94	-.70	.70	2.44	-1.23	.69	3.17	-.69	1.33
13	1.41	-2.18	-.51	1.99	-1.13	.45	2.75	-1.13	.92	3.13	-.90	1.19
14	1.37	-2.41	-.55	2.46	-1.39	.61	2.74	-1.02	.85	3.32	-.65	1.26
15	2.45	-1.65	.49	2.62	-1.08	.86	2.64	-1.21	.71	3.41	-.63	1.32
16	2.39	-1.70	.36	3.29	-.83	1.21	2.86	-1.20	.73	3.38	-.56	1.32
17	2.01	-1.70	.22	3.16	-.44	1.36	2.94	-.89	.99	3.34	-.35	1.47
18	2.16	-1.46	.42	3.09	-.93	.98	3.07	-.94	.98	3.45	-.53	1.35
19	2.08	-1.38	.45	3.07	-.68	1.17	3.02	-.57	1.19	3.20	-.37	1.42
20	2.43	-.85	.90	3.30	-.48	1.34	2.98	-.94	.92	3.20	-.21	1.41
21	3.07	-.12	1.56	3.22	-.55	1.29	2.69	-.65	1.06	2.90	-.49	1.34
22	2.89	-.65	1.08	2.98	-.72	1.06	2.85	-.90	1.06	2.43	-.98	.88
23	2.79	-.69	1.08	2.71	-.45	1.06	1.98	-1.15	.58	2.24	-1.09	.74
24	3.02	-1.61	.79	2.75	-.66	.99	2.78	-.85	1.01	2.26	-.95	.82
25	1.56	-2.50	-.22	2.56	-.74	.79	2.62	-1.05	.98	2.11	-1.47	.44
26	1.70	-1.84	.04	2.58	-.99	.78	2.12	-1.41	---	2.68	-.79	.91
27	2.58	-1.41	.76	2.55	-1.09	.81	2.61	-1.16	.65	2.60	-.90	.88
28	2.82	-1.02	.81	2.82	-.97	.97	2.47	-1.16	.75	2.67	-.83	.80
29	---	---	---	3.08	-.81	1.09	2.94	-.93	.94	2.64	-.65	1.00
30	---	---	---	3.06	-.64	1.26	3.01	-.86	.90	2.54	-1.13	.54
31	---	---	---	2.82	-.93	.97	---	---	---	2.48	-.82	.72
MONTH	4.18	-3.21	.36	3.30	-1.84	.88	3.07	-2.35	---	3.45	-1.47	1.10

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2.52	-.79	.71	2.90	-.32	1.27	2.55	-.79	.91	2.69	-.48	1.21
2	2.52	-.73	.75	2.85	-.43	1.12	2.43	-.84	.88	2.72	-.74	1.18
3	2.37	-.73	.80	2.50	-.71	.89	2.51	-.98	.92	2.92	-.50	1.35
4	2.34	-.86	.65	2.44	-.71	.98	2.60	-.81	1.01	2.93	-.49	1.29
5	2.26	-.76	.89	2.39	-.77	1.00	2.88	-.96	1.05	2.83	-.55	1.23
6	2.29	-.82	.98	2.46	-.87	.98	3.39	-.46	1.55	2.83	-.86	1.03
7	2.89	-.44	1.41	2.49	-.88	.99	3.63	-.13	1.83	3.14	-.39	1.32
8	2.46	-.76	---	2.88	-.74	1.11	3.25	-.68	1.43	2.87	-.82	1.10
9	2.67	-1.16	.76	2.68	-1.00	.89	3.00	-.91	1.09	3.16	-.38	1.42
10	2.92	-1.01	.98	2.91	-1.02	.98	3.17	-.76	1.17	3.03	-.83	1.00
11	3.06	-.92	1.12	3.06	-1.02	.99	3.24	-.48	1.33	2.67	-.87	.96
12	2.97	-1.11	1.00	3.04	-.95	.99	3.22	-.43	1.36	2.52	-.78	.92
13	3.42	-.78	1.23	2.96	-.91	.99	3.09	-.57	1.22	2.53	-.52	1.07
14	3.36	-.82	1.22	2.96	-.94	.95	2.87	-.59	1.27	2.49	-.60	.89
15	3.12	-1.11	.87	2.84	-.84	1.00	2.89	-.44	1.38	2.16	-.84	.66
16	2.72	-1.29	.59	2.97	-.69	1.19	2.81	---	---	2.57	-.41	1.07
17	2.27	-1.23	.48	2.96	-.49	1.37	2.66	.32	1.99	2.32	-.26	1.34
18	2.17	-1.25	.52	2.81	-.40	1.41	2.97	-.12	1.59	2.08	-.36	.95
19	2.07	-1.15	.59	2.50	-.65	1.16	3.43	.59	2.16	2.60	-.33	1.12
20	2.06	-1.39	.55	2.48	-.62	1.06	2.86	.17	1.69	2.71	-.01	1.36
21	2.66	-.60	1.14	2.45	-.69	1.01	2.79	-.10	1.36	2.76	-.21	1.30
22	2.40	-.87	---	2.57	-.65	.99	2.23	-.88	.80	3.22	-.26	1.50
23	2.52	-.87	.89	2.95	-.42	1.14	2.67	-.68	.90	2.22	-.93	.80
24	2.59	-.68	.94	2.68	-.67	.97	2.20	-.86	.82	3.03	-.72	1.17
25	2.77	-.62	.99	2.68	-.77	.86	2.46	-1.13	.60	3.23	-.10	1.62
26	2.71	-.72	.94	2.63	-.57	.96	2.84	-.66	1.10	3.43	-.13	1.75
27	3.76	-.34	1.47	2.52	-.81	.78	2.72	-.58	1.13	3.33	-.08	1.61
28	3.53	-.63	1.27	2.72	-.75	.93	3.02	-.57	1.31	2.77	-.64	1.00
29	2.74	-.58	.92	2.66	-.68	.95	3.04	-.23	1.44	2.88	-.60	1.15
30	2.84	-.45	1.11	2.37	-1.04	.56	2.81	-.58	1.08	2.91	-.33	1.35
31	---	---	---	2.28	-.91	.82	2.89	-.48	1.32	---	---	---
MONTH	3.76	-1.39	---	3.06	-1.04	1.01	3.63	---	---	3.43	-.93	1.19

## HUDSON RIVER BASIN

01374019 HUDSON RIVER AT SOUTH DOCK AT WEST POINT, NY--Continued

## WATER-QUALITY RECORDS

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1994 to September 1995. Records for February 1990 to September 1994 are unpublished and available in files of the Geological Survey.

WATER TEMPERATURES: October 1994 to September 1995. Records for February 1990 to September 1994 are unpublished and available in files of the Geological Survey.

INSTRUMENTATION.--Water-quality monitor provides 15-minute-interval readings.

REMARKS.--Telephone temperature and specific conductance telemeter at station. Interruptions of record were due to malfunction of recording instrument.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 12,600 microsiemens, Sept. 23; minimum, 174 microsiemens, Feb. 13.

WATER TEMPERATURES: Maximum, 28.0°C, July 31, Aug. 3, 4, 5, 6, 7, 18; minimum, 0.0°C, Feb. 13, 14.

## SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3140	823	1820	3770	1510	2610	416	266	308	566	224	285
2	3170	1040	2120	3340	733	1750	452	257	295	292	220	243
3	3050	1100	1910	1620	496	953	311	246	263	252	216	223
4	2590	1030	1630	1900	712	1170	378	247	272	230	216	221
5	2370	964	1480	1660	696	1030	381	247	274	221	216	218
6	2210	876	1330	1540	593	868	283	241	253	221	217	218
7	2000	823	1200	844	360	548	246	237	241	225	218	219
8	1750	780	1090	746	372	496	241	234	238	223	219	219
9	1680	741	1060	684	373	462	237	233	235	225	220	222
10	1180	630	858	577	373	431	234	232	233	227	222	225
11	1140	592	778	443	303	348	237	221	229	229	224	227
12	1140	588	755	490	303	369	224	217	220	411	227	254
13	1050	562	696	458	295	344	222	216	218	1050	200	421
14	824	487	631	---	303	---	224	215	218	1650	300	832
15	1160	481	748	498	284	339	---	217	---	2650	712	1430
16	1240	438	640	566	263	320	1060	188	367	1880	259	991
17	1840	467	949	1260	283	567	2160	245	903	815	233	348
18	2190	683	1400	1580	367	824	2320	337	1000	303	230	239
19	2560	790	1530	1210	320	669	1910	353	951	241	229	232
20	2580	757	1520	1820	276	724	1960	380	915	240	229	231
21	2210	802	1440	2480	536	1410	1530	331	819	232	226	230
22	2400	771	1470	2340	350	1390	1130	312	618	234	224	226
23	2480	879	1520	1680	335	757	1060	307	555	234	226	228
24	2170	865	1450	1470	330	746	1190	302	594	235	228	230
25	2350	890	1500	1660	586	1140	799	258	418	242	231	236
26	2110	828	1350	1190	523	827	622	237	300	248	238	244
27	1920	789	1280	1570	437	974	657	223	332	251	241	247
28	2210	853	1420	2410	772	1550	1000	198	378	251	246	248
29	2570	1020	1750	1410	363	629	426	216	244	250	245	247
30	2740	1070	1990	603	274	369	264	216	220	249	245	247
31	3230	1160	2190	---	---	---	544	217	274	247	240	244
MONTH	3230	438	1340	---	263	---	---	188	---	2650	200	327



## HUDSON RIVER BASIN

01374019 HUDSON RIVER AT SOUTH DOCK AT WEST POINT, NY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	245	232	239	302	233	254	263	256	260	364	252	279
2	240	224	232	276	234	245	266	260	264	326	249	282
3	234	219	226	271	235	243	268	263	266	356	280	298
4	236	221	228	282	235	243	269	266	267	339	276	290
5	224	203	213	251	234	239	270	266	267	308	243	264
6	211	203	207	256	233	239	270	265	268	379	236	269
7	211	203	206	239	232	235	272	267	269	1150	227	502
8	217	206	209	237	232	234	272	268	271	1870	282	834
9	208	205	206	244	234	239	570	269	302	3320	1290	2030
10	216	204	206	244	240	241	2660	196	686	3780	1450	247
11	465	206	238	245	240	242	3470	886	1940	4460	2140	3210
12	224	207	209	249	243	247	4480	1520	3160	4740	2080	3350
13	1070	174	405	256	248	252	4920	2150	3650	5020	1890	3290
14	1390	226	744	260	253	257	4760	1910	3200	4840	2260	3350
15	2390	445	1390	259	247	252	4120	1400	2630	4740	1930	3230
16	2460	575	1280	262	246	254	3220	1240	2110	4550	1890	3030
17	1570	521	905	261	248	255	2880	1230	1940	4260	2050	3000
18	1400	477	827	258	243	251	2660	1020	1730	4030	1690	2730
19	1030	425	643	255	240	247	2310	961	1520	3750	1710	2590
20	994	431	635	254	237	245	1890	695	1150	3430	1570	2430
21	1120	421	674	251	239	245	1560	675	976	2950	1570	2290
22	712	341	472	250	237	243	1260	561	797	2470	1140	1880
23	658	316	398	248	238	242	671	434	551	2620	1190	1760
24	852	273	372	254	247	249	659	384	480	2390	1240	1810
25	280	225	245	251	246	248	582	336	403	2290	939	1520
26	275	226	238	250	244	247	538	275	345	2320	1080	1630
27	519	228	283	249	246	247	373	265	300	2340	1010	1560
28	421	239	289	252	248	249	393	255	288	2300	1140	1520
29	---	---	---	252	249	251	351	261	285	2230	1070	1520
30	---	---	---	255	251	253	396	250	277	1850	850	1210
31	---	---	---	261	254	256	---	---	---	1720	796	1170
MONTH	2460	174	444	302	232	247	4920	196	1030	5020	227	1790

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	1620	821	1100	6310	4550	5430	5800	3710	4810	10000	7560	8970
2	1610	799	1090	6370	3430	4900	5680	3660	4700	10000	7430	8610
3	1640	713	1070	5560	3620	4630	6050	3350	4650	10600	7490	8770
4	1310	618	911	6110	3940	5010	5580	3380	4620	11000	7500	9040
5	1210	632	901	6760	4330	5380	5790	3000	4290	10500	7640	9080
6	1120	541	843	6760	4250	5440	5870	3290	4380	10600	7090	8860
7	1830	614	1000	6490	4070	5410	5890	3220	4380	10700	7760	9250
8	1670	---	---	6340	3920	5200	5640	2800	3980	10600	7580	8820
9	3300	613	1310	6380	3620	4950	5140	2570	3670	10400	7830	9140
10	4060	1050	2020	6410	3690	4990	5370	2720	3730	10200	7150	8610
11	4390	1470	2710	6540	3710	5020	5370	2810	3920	9860	7330	8470
12	4470	1420	2660	6700	3710	4970	5220	2820	4000	9510	7220	8360
13	3960	1440	2590	6400	3730	4980	5140	2830	3830	9460	7190	8430
14	4170	1560	2620	6220	3740	4870	4920	2860	3850	9100	6900	8080
15	3850	1340	2330	6100	3710	4810	5090	3010	3990	8570	6330	7510
16	3270	1280	2080	5880	3880	4910	4830	2990	3960	9740	6950	8010
17	2780	1330	2010	6100	4130	5060	5030	2820	3770	9180	7450	8330
18	2740	1310	1970	5880	3890	4930	6110	2930	4030	9050	6360	7410
19	2590	1290	1980	5350	3470	4540	6830	3420	4810	9720	6220	7760
20	2500	1160	1830	5420	3360	4330	6830	3150	4970	10500	6660	8800
21	---	1310	---	5620	3480	4330	7000	2960	5130	11000	7320	9340
22	2910	---	---	5880	3360	4480	8480	3880	5590	12400	9010	10900
23	3100	1260	2030	6590	4220	5030	9210	5120	7080	12600	8000	9620
24	3680	1390	2150	6520	3550	4930	9880	6050	7630	11700	8390	10100
25	4940	1610	2460	6440	3640	4890	9860	6750	8020	11900	8550	10600
26	4710	1950	3040	6440	4360	5290	10200	8130	9180	11700	7950	10300
27	5730	2870	4020	6400	3670	5060	10800	8090	9360	11400	8560	9940
28	6380	2760	4340	6350	4150	5150	10800	8170	9470	9980	7430	8990
29	5520	3520	4350	6320	3920	5170	10600	7850	9600	10600	7560	9020
30	6370	4020	4950	5870	3540	4700	10200	7750	9040	10200	7180	8970
31	---	---	---	5990	3730	4850	10900	7870	9230	---	---	---
MONTH	---	---	---	6760	3360	4960	10900	2570	5600	12600	6220	8940

## HUDSON RIVER BASIN

01374019 HUDSON RIVER AT SOUTH DOCK AT WEST POINT, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.0	19.5	19.5	15.5	15.0	15.5	8.5	8.5	8.5	2.5	2.0	2.0
2	20.0	19.5	19.5	15.5	14.5	15.0	8.5	8.0	8.5	2.5	2.0	2.0
3	19.5	19.0	19.0	15.0	14.5	14.5	8.5	8.0	8.5	2.0	1.5	2.0
4	19.5	18.5	19.0	15.0	14.5	14.5	8.5	8.0	8.0	2.0	1.5	1.5
5	19.0	18.5	18.5	15.0	14.5	14.5	8.5	8.0	8.0	1.5	1.0	1.5
6	18.5	18.0	18.5	15.0	14.5	14.5	8.5	8.0	8.0	1.5	1.0	1.0
7	18.5	18.0	18.0	14.5	14.0	14.0	8.0	7.5	8.0	1.5	1.0	1.0
8	18.5	18.0	18.0	14.0	14.0	14.0	7.5	6.5	7.0	1.0	1.0	1.0
9	18.5	17.0	18.0	14.0	13.5	14.0	7.0	6.0	6.5	1.0	.5	1.0
10	18.0	17.5	18.0	14.0	13.5	13.5	6.5	6.0	6.0	1.0	1.0	1.0
11	17.5	17.0	17.5	13.5	13.0	13.0	6.5	5.0	6.0	1.0	1.0	1.0
12	17.5	17.0	17.0	13.5	12.5	13.0	5.5	5.0	5.0	1.0	.5	1.0
13	17.5	17.0	17.0	13.0	12.5	12.5	5.0	4.5	4.5	1.0	1.0	1.0
14	17.0	16.5	17.0	13.0	12.5	12.5	5.0	4.0	4.5	1.5	1.0	1.0
15	17.0	16.5	17.0	13.0	12.5	12.5	4.5	4.0	4.0	2.0	1.5	1.5
16	17.0	16.0	16.5	12.5	12.0	12.0	4.5	4.0	4.0	2.5	2.0	2.0
17	16.5	16.0	16.0	12.5	12.0	12.0	4.5	3.5	4.0	2.5	2.0	2.5
18	17.0	16.0	16.5	12.5	12.0	12.0	4.5	4.0	4.0	2.5	2.0	2.0
19	16.5	16.0	16.0	12.5	12.0	12.0	4.5	3.5	4.0	2.0	1.5	2.0
20	16.5	16.0	16.0	12.0	11.5	12.0	4.5	3.5	4.0	2.0	1.5	1.5
21	16.5	16.0	16.0	12.0	11.5	12.0	4.0	3.5	4.0	1.5	1.5	1.5
22	16.5	16.0	16.0	12.0	11.0	11.5	4.0	3.5	3.5	1.5	1.5	1.5
23	16.0	16.0	16.0	11.5	10.5	11.0	4.0	3.5	3.5	1.5	1.5	1.5
24	16.5	15.5	16.0	11.0	10.5	10.5	4.0	3.5	3.5	2.0	1.5	1.5
25	16.0	15.5	16.0	11.0	10.0	10.5	3.5	3.5	3.5	2.5	2.0	2.0
26	16.0	15.5	15.5	10.5	10.0	10.0	3.5	3.0	3.5	3.0	2.0	2.5
27	15.5	15.5	15.5	10.0	9.5	10.0	3.5	3.0	3.0	3.0	2.5	2.5
28	15.5	15.0	15.5	10.0	9.5	10.0	3.5	3.0	3.0	3.0	2.5	2.5
29	15.5	15.0	15.5	10.0	9.0	9.0	3.0	2.5	2.5	2.5	2.0	2.5
30	15.5	15.0	15.5	9.0	8.5	8.5	2.5	2.0	2.5	2.5	2.5	2.5
31	15.5	15.0	15.5	---	---	---	2.5	2.0	2.0	2.5	2.5	2.5
MONTH	20.0	15.0	17.0	15.5	8.5	12.5	8.5	2.0	5.0	3.0	.5	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	2.5	2.5	1.0	1.0	1.0	7.0	6.5	6.5	11.0	10.5	11.0
2	2.5	2.5	2.5	1.5	1.0	1.0	7.0	6.5	6.5	11.0	11.0	11.0
3	2.5	2.0	2.0	1.5	1.0	1.0	7.5	6.5	7.0	11.5	11.0	11.0
4	2.0	2.0	2.0	1.0	1.0	1.0	7.5	6.5	7.0	11.5	11.0	11.0
5	2.0	1.0	1.5	1.5	1.0	1.0	7.0	6.5	7.0	11.5	11.0	11.5
6	1.5	1.0	1.0	1.5	1.0	1.0	7.0	6.5	7.0	12.5	11.0	11.5
7	1.0	1.0	1.0	1.5	1.0	1.0	7.0	6.5	7.0	12.0	11.0	11.5
8	1.0	.5	1.0	2.0	1.5	1.5	7.0	6.5	7.0	12.0	11.0	11.5
9	.5	.5	.5	2.0	1.0	1.5	7.0	6.5	7.0	12.5	11.5	12.0
10	.5	.5	.5	1.5	1.0	1.0	7.0	6.5	7.0	12.0	12.0	12.0
11	1.0	.5	.5	1.0	1.0	1.0	7.5	6.5	7.0	12.0	12.0	12.0
12	.5	.5	.5	1.5	1.0	1.5	7.5	7.0	7.0	12.5	12.0	12.0
13	.5	.0	.5	2.5	1.5	2.0	7.5	7.0	7.5	13.0	12.0	12.5
14	1.0	.0	.5	2.5	2.0	2.5	8.0	7.5	7.5	13.0	12.5	12.5
15	.5	.5	.5	3.0	2.5	3.0	8.0	7.5	7.5	13.0	12.5	13.0
16	1.0	.5	.5	3.5	3.0	3.5	8.5	7.5	7.5	14.0	12.5	13.0
17	1.0	.5	.5	4.0	3.5	4.0	8.5	7.5	8.0	13.5	13.0	13.0
18	1.0	.5	.5	4.5	4.0	4.0	8.5	8.0	8.0	13.5	13.0	13.5
19	1.0	.5	1.0	4.5	4.0	4.0	8.5	8.0	8.5	13.5	13.5	13.5
20	1.0	.5	1.0	4.5	4.0	4.0	9.0	8.0	8.5	14.0	13.5	13.5
21	1.0	1.0	1.0	4.5	4.0	4.5	9.0	8.5	9.0	14.5	13.5	14.0
22	1.0	1.0	1.0	5.0	4.5	4.5	9.5	9.0	9.0	15.0	14.0	14.5
23	1.0	1.0	1.0	5.0	4.5	4.5	9.5	9.0	9.5	15.0	14.5	14.5
24	1.5	1.0	1.0	5.0	4.5	5.0	10.0	9.5	9.5	15.5	14.5	15.0
25	1.5	1.0	1.5	5.5	5.0	5.0	10.5	9.5	10.0	15.5	15.0	15.0
26	1.5	1.0	1.0	5.5	5.0	5.5	10.5	9.5	10.0	15.5	15.0	15.5
27	1.0	1.0	1.0	6.0	5.5	5.5	10.5	10.0	10.0	16.0	15.0	15.5
28	1.0	1.0	1.0	6.0	5.5	6.0	11.0	10.0	10.5	16.0	15.5	15.5
29	---	---	---	6.5	5.5	6.0	11.0	10.5	10.5	16.0	15.5	16.0
30	---	---	---	6.5	6.0	6.0	11.0	10.5	11.0	16.5	15.5	16.0
31	---	---	---	6.5	6.0	6.5	---	---	---	17.0	16.0	16.5
MONTH	2.5	.0	1.0	6.5	1.0	3.0	11.0	6.5	8.0	17.0	10.5	13.0

## HUDSON RIVER BASIN

01374019 HUDSON RIVER AT SOUTH DOCK AT WEST POINT, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.0	16.0	16.5	23.0	22.5	22.5	27.5	27.0	27.5	26.0	25.0	25.5
2	17.5	16.5	17.0	23.0	22.5	22.5	27.5	27.0	27.5	25.5	25.0	25.5
3	17.5	17.0	17.0	23.5	22.5	23.0	28.0	27.0	27.5	25.5	24.5	25.0
4	18.0	17.0	17.5	23.5	22.5	23.0	28.0	27.5	27.5	25.5	25.0	25.0
5	18.5	17.5	17.5	23.0	22.5	23.0	28.0	27.5	27.5	25.5	25.0	25.0
6	19.0	17.5	18.0	23.5	23.0	23.0	28.0	27.5	27.5	25.5	25.0	25.0
7	19.0	18.0	18.5	23.5	23.0	23.0	28.0	27.0	27.5	25.5	25.0	25.0
8	---	---	---	23.5	23.0	23.5	27.5	27.0	27.0	25.5	24.5	25.0
9	19.5	18.5	19.0	23.5	23.0	23.5	27.5	26.5	27.0	25.0	24.5	24.5
10	19.5	19.0	19.0	24.0	23.0	23.5	27.5	26.5	27.0	25.0	23.5	24.5
11	19.5	19.0	19.0	24.0	23.5	23.5	27.5	27.0	27.0	24.5	23.5	24.0
12	19.5	19.0	19.5	24.5	23.5	24.0	27.5	27.0	27.0	24.5	23.5	24.0
13	19.5	19.0	19.5	24.5	24.0	24.0	27.5	27.0	27.0	24.0	23.5	24.0
14	20.0	19.5	19.5	25.0	24.0	24.5	27.5	27.0	27.0	24.0	23.0	23.5
15	20.5	19.5	19.5	25.5	24.5	25.0	27.5	27.0	27.0	23.5	23.0	23.5
16	20.5	19.5	20.0	25.5	25.0	25.0	27.5	27.0	27.0	23.5	22.5	23.0
17	20.5	19.5	20.0	25.5	25.0	25.0	27.5	27.0	27.5	23.5	22.5	23.0
18	21.0	20.0	20.5	25.5	25.0	25.0	28.0	26.5	27.5	23.0	22.0	22.5
19	21.5	20.5	20.5	25.5	25.0	25.0	27.5	27.0	27.5	22.5	21.5	22.5
20	22.0	20.5	21.0	25.5	25.0	25.5	27.5	26.5	27.0	22.5	22.0	22.0
21	21.5	---	---	26.0	25.0	25.5	27.5	26.5	27.0	22.5	22.0	22.0
22	21.5	---	---	26.0	25.5	25.5	27.0	26.5	27.0	22.0	22.0	22.0
23	22.0	21.5	21.5	26.0	25.5	26.0	27.0	26.5	26.5	22.0	21.5	21.5
24	22.0	21.5	21.5	26.5	26.0	26.0	27.0	26.0	26.5	22.0	21.0	21.5
25	22.5	21.5	22.0	26.5	26.0	26.5	26.5	26.0	26.0	21.5	21.0	21.5
26	23.0	22.0	22.5	27.0	26.0	26.5	26.5	26.0	26.0	21.5	21.0	21.0
27	23.0	22.0	22.5	27.0	26.5	26.5	26.5	26.0	26.0	21.5	21.0	21.0
28	23.0	22.0	22.5	27.5	26.5	26.5	26.5	25.5	26.0	21.5	20.5	21.0
29	23.5	22.0	22.5	27.5	26.5	27.0	26.5	25.5	26.0	21.0	20.5	20.5
30	23.0	22.0	22.5	27.5	26.5	27.0	26.0	25.5	25.5	21.0	20.5	20.5
31	---	---	---	28.0	26.5	27.0	26.0	25.0	25.5	---	---	---
MONTH	---	---	---	28.0	22.5	25.0	28.0	25.0	27.0	26.0	20.5	23.0

## HUDSON RIVER BASIN

01374505 EAST BRANCH CROTON RIVER AT BREWSTER, NY

LOCATION.--Lat 41°23'40", long 73°36'27", Putnam County, Hydrologic Unit 02030101, on right bank 50 ft downstream from bridge on U.S. Highway 6 in Brewster, 1.6 mi downstream from East Branch Reservoir dam, and 0.9 mi upstream from bridge at diverting reservoir.

DRAINAGE AREA.--81.2 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 330 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by East Branch Reservoir. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 998 ft<sup>3</sup>/s, Mar. 30, 1994, gage height, 5.57 ft; minimum recorded discharge, 56 ft<sup>3</sup>/s, Sept. 15, 1995, gage height, 3.15 ft, but may have been less during periods of estimated record (1995 water year); minimum daily discharge, 69 ft<sup>3</sup>/s, Nov. 19, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 440 ft<sup>3</sup>/s, Jan. 20, gage height, 4.54 ft; minimum recorded discharge, 56 ft<sup>3</sup>/s, Sept. 15, gage height, 3.15 ft, but may have been less during periods of estimated record; minimum daily discharge, 69 ft<sup>3</sup>/s, Nov. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e110	71	128	202	156	227	82	103	84	e76	e100	76
2	e105	71	164	250	151	231	82	108	84	e76	e94	76
3	e98	71	165	254	138	228	83	108	83	e76	e110	75
4	e92	71	153	260	148	209	83	104	83	e76	e100	75
5	e86	71	212	206	132	186	83	97	e84	e76	e110	74
6	e82	71	247	195	116	173	83	91	e82	e76	e150	73
7	e80	71	251	274	116	167	82	87	e82	e76	e130	73
8	e78	71	259	266	109	184	83	86	e80	e88	e110	73
9	e76	71	236	260	101	309	84	86	e80	e86	e100	73
10	e82	72	221	246	96	297	85	86	e80	e80	e90	72
11	e76	71	303	224	94	302	84	86	e80	e90	e86	72
12	e72	71	288	199	94	279	86	85	e90	e88	e84	73
13	e72	70	282	185	90	245	135	85	e100	e84	e82	74
14	e72	70	268	194	85	217	157	85	e100	e80	e82	73
15	e72	70	240	229	81	197	169	85	e90	e80	e82	81
16	e72	70	215	272	92	186	162	86	e86	e80	e82	87
17	e70	70	200	304	99	176	143	86	e82	e80	81	87
18	e70	70	200	301	106	165	123	86	e80	e130	81	86
19	e70	69	193	283	112	156	125	86	e80	e110	81	86
20	e70	70	183	348	117	146	138	86	e80	e100	81	85
21	e76	80	173	393	126	143	159	85	e80	e90	81	84
22	e74	76	160	401	128	141	171	84	e80	e84	81	85
23	e72	70	149	421	126	134	157	84	e78	e80	81	81
24	e78	70	279	385	158	127	137	84	e78	e80	80	79
25	e74	70	280	338	162	119	121	84	e78	e80	79	77
26	e72	71	302	296	158	109	108	84	e78	e110	79	78
27	71	71	313	259	156	100	100	84	e78	e160	79	77
28	71	83	281	222	204	104	94	84	e78	e180	79	76
29	71	75	241	186	---	87	91	83	e78	e160	78	76
30	71	75	194	171	---	85	88	82	e78	e130	77	75
31	71	---	166	163	---	83	---	84	---	e110	77	---
TOTAL	2406	2153	6946	8187	3451	5512	3378	2734	2474	2972	2787	2332
MEAN	77.6	71.8	224	264	123	178	113	88.2	82.5	95.9	89.9	77.7
MAX	110	83	313	421	204	309	171	108	100	180	150	87
MIN	70	69	128	163	81	83	82	82	78	76	77	72

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	77.6	71.8	224	264	123	178	239	117	86.7	95.7	103	89.6
MAX	77.6	71.8	224	264	123	178	366	145	90.9	95.9	115	101
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1995	1994	1994
MIN	77.6	71.8	224	264	123	178	113	88.2	82.5	95.5	89.9	77.7
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994	1995	1995

## SUMMARY STATISTICS

## FOR 1995 WATER YEAR

## WATER YEARS 1994 - 1995

ANNUAL TOTAL	45332		
ANNUAL MEAN	124	124	
HIGHEST ANNUAL MEAN		124	1995
LOWEST ANNUAL MEAN		124	1995
HIGHEST DAILY MEAN	421	832	Mar 31 1994
LOWEST DAILY MEAN	69	69	Nov 19 1994
ANNUAL SEVEN-DAY MINIMUM	70	70	Nov 13 1994
10 PERCENT EXCEEDS	243	251	
50 PERCENT EXCEEDS	86	94	
90 PERCENT EXCEEDS	72	75	

e Estimated

## HUDSON RIVER BASIN

01374531 EAST BRANCH CROTON RIVER NEAR CROTON FALLS, NY

LOCATION.--Lat 41°22'27", long 73°38'18", Putnam County, Hydrologic Unit 02030101, on right bank 200 ft downstream from dam on Diverting Reservoir, just downstream from Lower Mine Road, 2.6 mi northeast of Croton Falls, and 2.7 mi upstream from the confluence with West Branch Croton River.

DRAINAGE AREA.--86.4 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1994 to current year.

GAGE.--Water-stage recorder. Supplementary water-stage recorder and concrete control 90 ft downstream from release structure outlet. Elevation of gage is 280 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those greater than 300 ft<sup>3</sup>/s, which are poor. Records include flow over spillway greater than 10 ft<sup>3</sup>/s and flow through release structure. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 781 ft<sup>3</sup>/s, Jan. 20, 1995, gage height, 4.25 ft; minimum daily, 72 ft<sup>3</sup>/s, July 12 to Aug. 6, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 781 ft<sup>3</sup>/s, Jan. 20, gage height, 4.25 ft; minimum daily, 72 ft<sup>3</sup>/s, July 12 to Aug. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	74	120	237	139	190	78	94	77	76	e72	73
2	74	91	154	330	136	170	78	88	77	75	e72	73
3	74	74	155	301	122	162	78	78	77	75	e72	73
4	74	74	138	286	167	148	92	78	77	75	e72	73
5	74	74	360	214	137	131	78	78	76	75	e72	73
6	73	74	407	179	110	125	78	78	77	74	e72	73
7	73	74	346	366	103	119	78	78	76	74	e73	73
8	73	74	306	312	95	145	78	78	76	74	e73	73
9	73	74	275	279	90	310	79	78	76	74	e73	73
10	73	74	283	250	77	256	79	78	76	73	e73	73
11	73	74	448	219	77	279	79	78	76	73	e73	73
12	73	74	311	198	76	251	79	78	76	72	e73	73
13	73	74	286	179	76	211	134	78	76	72	e73	73
14	73	74	270	194	76	178	131	78	76	72	e73	73
15	73	74	232	242	76	160	133	78	76	72	e73	73
16	73	74	200	329	76	145	126	78	76	72	e73	73
17	73	74	190	366	76	137	109	78	76	72	e73	73
18	73	74	189	343	76	117	101	78	76	72	73	73
19	73	74	166	318	77	114	119	78	76	72	73	73
20	73	74	153	513	89	107	113	78	76	72	73	73
21	73	125	143	650	94	114	122	78	76	72	73	74
22	74	207	134	607	93	117	135	77	75	72	73	74
23	74	103	119	634	90	108	113	77	75	72	73	73
24	74	74	352	529	120	95	99	77	75	72	73	73
25	74	74	335	440	112	89	92	77	75	72	73	73
26	74	74	337	365	99	77	78	77	75	72	73	74
27	74	74	353	300	96	77	78	77	75	e72	73	74
28	74	168	315	212	184	77	78	77	75	e72	73	73
29	74	127	228	158	---	78	78	77	75	e72	73	73
30	74	101	144	154	---	78	78	77	75	e72	73	73
31	74	---	141	146	---	78	---	77	---	e72	73	---
TOTAL	2278	2624	7590	9850	2839	4443	2871	2434	2276	2258	2257	2194
MEAN	73.5	87.5	245	318	101	143	95.7	78.5	75.9	72.8	72.8	73.1
MAX	74	207	448	650	184	310	135	94	77	76	73	74
MIN	73	74	119	146	76	77	78	77	75	72	72	73

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	73.5	87.5	245	318	101	143	95.7	78.5	89.7	98.4	138	76.0
MAX	73.5	87.5	245	318	101	143	95.7	78.5	104	124	203	79.0
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1994	1994	1994	1994
MIN	73.5	87.5	245	318	101	143	95.7	78.5	75.9	72.8	72.8	73.1
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995

## SUMMARY STATISTICS

## FOR 1995 WATER YEAR

## WATER YEARS 1994 - 1995

ANNUAL TOTAL	43914	
ANNUAL MEAN	120	120
HIGHEST ANNUAL MEAN		120
LOWEST ANNUAL MEAN		120
HIGHEST DAILY MEAN	650	650
LOWEST DAILY MEAN	72	72
ANNUAL SEVEN-DAY MINIMUM	72	72
10 PERCENT EXCEEDS	253	238
50 PERCENT EXCEEDS	77	78
90 PERCENT EXCEEDS	73	73

e Estimated



## HUDSON RIVER BASIN

0137462010 WEST BRANCH CROTON RIVER NEAR CARMEL, NY

LOCATION.--Lat 41°24'42", long 73°41'39", Putnam County, Hydrologic Unit 02030101, on right bank 500 ft downstream from dam on West Branch Reservoir, 300 ft upstream from U.S. Highway 6, and 1.4 mi southwest of Carmel.

DRAINAGE AREA.--42.9 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 440 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by West Branch Reservoir. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 146 ft<sup>3</sup>/s, Apr. 4, 1995, gage height, 2.45 ft; minimum, 0.89 ft<sup>3</sup>/s, May 22, 23, 1995, gage height, 0.77 ft; minimum daily, 1.1 ft<sup>3</sup>/s, May 23, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 146 ft<sup>3</sup>/s, Apr. 4, gage height, 2.45 ft; minimum, 0.89 ft<sup>3</sup>/s, May 22, 23, gage height, 0.77 ft; minimum daily, 1.1 ft<sup>3</sup>/s, May 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	43	47	55	49	48	53	51	e13	e13	e12	15
2	44	43	47	55	49	48	55	51	e13	e13	e12	15
3	44	43	47	55	49	48	56	51	e13	e13	e14	15
4	44	42	47	56	49	48	65	51	e13	e13	e14	15
5	44	43	48	55	49	48	54	51	e13	e13	e15	15
6	44	43	49	55	49	48	51	52	e13	e13	e19	15
7	44	43	50	55	49	48	50	52	e13	e13	e16	15
8	44	42	51	55	49	48	50	53	e13	e14	e14	15
9	44	41	52	55	49	48	51	53	e13	e13	e12	15
10	44	42	53	55	49	48	53	53	e13	e13	e11	15
11	43	42	55	55	49	48	55	55	e13	e14	e10	15
12	43	42	54	55	49	48	53	55	e14	e13	e10	15
13	43	43	51	55	49	49	51	54	e16	e13	e9.5	15
14	43	43	50	55	49	49	52	54	e15	e13	e9.5	15
15	43	44	52	55	49	49	52	53	e14	e13	e9.0	15
16	44	45	54	55	49	48	53	53	e13	e13	e8.5	15
17	44	45	54	57	49	47	54	52	e13	e13	8.4	15
18	44	45	55	55	48	47	56	52	e13	e17	8.5	15
19	43	45	55	55	48	47	56	35	e13	e15	8.5	15
20	43	45	55	55	48	47	54	23	e13	e14	8.1	15
21	43	45	55	55	48	47	53	23	e13	e13	8.0	15
22	43	46	55	71	48	48	52	11	e13	e13	8.0	15
23	43	46	54	79	48	48	52	1.1	e13	e12	8.0	15
24	43	46	55	56	48	48	51	5.7	e13	e12	11	15
25	43	46	56	54	48	49	51	9.9	e13	e12	15	15
26	43	46	56	52	48	49	51	10	e13	e12	15	15
27	42	46	56	52	48	49	50	11	e13	e12	15	15
28	42	46	56	51	48	50	50	12	e13	e13	15	16
29	42	47	57	50	---	51	51	14	e13	e12	15	15
30	43	47	56	49	---	52	51	14	e13	e12	15	15
31	43	---	55	49	---	52	---	e13	---	e12	15	---
TOTAL	1343	1325	1637	1721	1361	1502	1586	1128.7	397	404	369.0	451
MEAN	43.3	44.2	52.8	55.5	48.6	48.5	52.9	36.4	13.2	13.0	11.9	15.0
MAX	44	47	57	79	49	52	65	55	16	17	19	16
MIN	42	41	47	49	48	47	50	1.1	13	12	8.0	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	1994	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995
MEAN	43.3	44.2	52.8	55.5	48.6	48.5	53.4	41.8	32.8	34.1	31.6	30.8
MAX	43.3	44.2	52.8	55.5	48.6	48.5	54.0	47.3	52.4	55.2	51.2	46.5
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1994	1994	1994
MIN	43.3	44.2	52.8	55.5	48.6	48.5	52.9	36.4	13.2	13.0	11.9	15.0
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995

## SUMMARY STATISTICS

## FOR 1995 WATER YEAR

## WATER YEARS 1994 - 1995

ANNUAL TOTAL	13224.7		
ANNUAL MEAN	36.2		
HIGHEST ANNUAL MEAN		36.2	1995
LOWEST ANNUAL MEAN		36.2	1995
HIGHEST DAILY MEAN	79	Jan 23	
LOWEST DAILY MEAN	1.1	May 23	
ANNUAL SEVEN-DAY MINIMUM	8.2	Aug 17	
10 PERCENT EXCEEDS	55		
50 PERCENT EXCEEDS	45		
90 PERCENT EXCEEDS	13		

e Estimated

## HUDSON RIVER BASIN

01374701 WEST BRANCH CROTON RIVER NEAR CROTON FALLS, NY

LOCATION.--Lat 41°21'28", long 73°40'07", Putnam County, Hydrologic Unit 02030101, on right bank 500 ft downstream from dam on Croton Falls Reservoir, 0.7 mi north of Croton Falls, 4.0 mi southwest of Brewster, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--80.4 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1994 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 210 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Croton Falls Reservoir. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 753 ft<sup>3</sup>/s, Mar. 29, 1994, gage height, 3.19 ft; minimum, 4.4 ft<sup>3</sup>/s, Sept. 18, 1995, gage height, 1.02 ft; minimum daily, 15 ft<sup>3</sup>/s, Sept. 19-21, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 458 ft<sup>3</sup>/s, Dec. 24, gage height, 2.65 ft; minimum, 4.4 ft<sup>3</sup>/s, Sept. 18, gage height, 1.02 ft; minimum daily, 15 ft<sup>3</sup>/s, Sept. 19-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	80	165	218	165	210	104	137	59	56	120	119
2	80	100	191	e270	161	195	101	120	59	57	121	118
3	77	67	192	e260	154	193	101	121	58	57	121	116
4	68	71	184	e240	179	185	132	111	66	58	120	116
5	58	73	294	e190	154	175	120	114	57	110	121	114
6	54	76	312	e160	138	168	60	133	56	137	119	114
7	54	99	297	e300	132	165	91	100	58	117	121	115
8	57	54	285	e270	127	196	72	122	60	116	117	117
9	62	64	257	e240	119	336	110	61	56	118	114	112
10	79	99	261	e220	114	274	113	85	55	116	112	112
11	81	82	332	e190	111	258	86	103	55	116	115	111
12	55	55	292	e170	107	242	94	104	55	116	119	110
13	54	61	263	e150	105	223	161	106	55	117	121	108
14	57	56	248	e160	101	205	165	96	55	118	121	108
15	60	75	227	e200	100	193	164	102	55	119	123	106
16	74	68	209	e270	118	181	154	102	55	119	128	106
17	58	62	204	e310	116	179	138	98	55	120	129	107
18	57	63	204	e280	119	177	130	104	54	121	127	68
19	57	76	201	e260	123	149	147	108	54	120	126	15
20	58	69	181	337	128	146	152	91	54	123	126	15
21	72	108	175	388	134	149	156	76	54	125	126	15
22	61	209	167	366	132	149	171	75	54	123	128	16
23	58	146	203	379	129	151	152	62	54	124	126	16
24	61	110	352	339	159	155	136	60	54	125	126	16
25	64	110	304	297	154	151	126	64	55	126	125	16
26	69	118	266	270	143	123	115	62	55	e130	124	17
27	77	98	266	240	140	123	107	68	55	123	124	18
28	57	200	247	233	206	114	112	60	55	121	122	19
29	57	170	253	196	---	104	100	60	55	122	121	32
30	59	152	211	177	---	105	103	65	56	121	120	46
31	59	---	168	170	---	108	---	61	---	120	119	---
TOTAL	1949	2871	7411	7750	3768	5482	3673	2831	1678	3491	3782	2218
MEAN	62.9	95.7	239	250	135	177	122	91.3	55.9	113	122	73.9
MAX	81	209	352	388	206	336	171	137	66	137	129	119
MIN	54	54	165	150	100	104	60	60	54	56	112	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

MEAN	62.9	95.7	239	250	145	281	233	126	74.2	103	121	69.2
MAX	62.9	95.7	239	250	156	385	343	161	92.4	113	122	73.9
(WY)	1995	1995	1995	1995	1994	1994	1994	1994	1995	1995	1995	1995
MIN	62.9	95.7	239	250	135	177	122	91.3	55.9	93.9	120	64.5
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994	1994	1994

## SUMMARY STATISTICS

## FOR 1995 WATER YEAR

## WATER YEARS 1994 - 1995

ANNUAL TOTAL	46904		
ANNUAL MEAN	129		
HIGHEST ANNUAL MEAN		129	1995
LOWEST ANNUAL MEAN		129	1995
HIGHEST DAILY MEAN	388	Jan 21	
LOWEST DAILY MEAN	15	Sep 19	
ANNUAL SEVEN-DAY MINIMUM	16	Sep 19	1995
10 PERCENT EXCEEDS	240		
50 PERCENT EXCEEDS	118		
90 PERCENT EXCEEDS	55		

e Estimated

## HUDSON RIVER BASIN

01374821 TITICUS RIVER AT PURDYS STATION, NY

LOCATION.--Lat 41°19'37", long 73°39'22", Westchester County, Hydrologic Unit 02030101, on left bank 40 ft upstream from bridge on State Highway 22 in Purdys Station, 0.45 mi downstream from dam on Titicus Reservoir, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--23.8 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 210 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Titicus Reservoir. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 349 ft<sup>3</sup>/s, Jan. 16, 1995, gage height, 3.83 ft; minimum, 2.9 ft<sup>3</sup>/s, Sept. 21, 22, 1995, gage height, 1.21 ft; minimum daily, 3.5 ft<sup>3</sup>/s, Sept. 21, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 349 ft<sup>3</sup>/s, Jan. 16, gage height, 3.83 ft; minimum, 2.9 ft<sup>3</sup>/s, Sept. 21, 22, gage height, 1.21 ft; minimum daily, 3.5 ft<sup>3</sup>/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	13	e18	57	46	44	22	38	15	13	13	12
2	21	13	e23	52	52	44	21	44	13	13	13	11
3	19	13	e25	41	42	46	20	39	13	13	13	12
4	17	13	e24	43	41	44	20	34	13	13	13	12
5	15	12	e40	39	39	45	20	30	13	13	14	12
6	14	13	73	39	37	51	19	28	13	12	14	11
7	13	12	e60	49	38	56	18	24	13	12	13	9.8
8	12	13	e54	51	39	139	19	22	13	13	13	8.3
9	12	13	e45	46	39	48	21	19	13	13	13	7.1
10	12	13	e50	43	41	43	32	21	13	13	13	6.4
11	12	e13	e70	41	47	45	33	23	13	13	13	5.7
12	12	e13	e62	43	40	46	30	23	14	13	13	5.1
13	12	e12	e56	48	39	163	52	24	14	13	13	4.9
14	12	e12	e52	71	40	e70	61	22	13	13	13	4.6
15	12	12	48	213	39	e62	52	21	13	13	13	4.3
16	12	12	43	333	44	e55	42	20	13	13	13	4.0
17	12	e12	46	193	56	e50	35	20	13	14	13	4.3
18	12	12	55	76	50	46	31	20	13	13	13	4.4
19	12	12	53	61	51	43	38	22	13	13	13	4.0
20	13	11	47	67	70	40	51	24	13	13	12	3.7
21	13	12	50	65	52	39	48	22	13	13	12	3.5
22	13	29	52	52	51	42	46	19	13	12	12	4.1
23	13	e20	52	50	46	42	41	17	13	12	12	4.7
24	13	e15	67	49	54	38	37	15	13	12	12	4.4
25	13	e12	77	49	43	34	32	16	13	12	12	4.1
26	13	e12	67	51	42	31	29	16	13	13	12	4.8
27	13	e12	55	52	40	29	27	16	12	13	12	4.9
28	e13	20	59	45	41	27	27	14	12	13	12	4.6
29	13	38	62	45	---	26	26	14	13	13	12	4.3
30	13	e16	42	46	---	24	26	16	13	13	12	3.9
31	13	---	42	45	---	23	---	16	---	13	12	---
TOTAL	420	435	1569	2155	1259	1535	976	699	392	398	393	189.9
MEAN	13.5	14.5	50.6	69.5	45.0	49.5	32.5	22.5	13.1	12.8	12.7	6.33
MAX	21	38	77	333	70	163	61	44	15	14	14	12
MIN	12	11	18	39	37	23	18	14	12	12	12	3.5

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	1994	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995
MEAN	13.5	14.5	50.6	69.5	45.0	49.5	57.8	35.7	32.1	26.4	24.9	11.8
MAX	13.5	14.5	50.6	69.5	45.0	49.5	83.0	48.8	51.2	39.9	37.1	17.2
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1994	1994	1994
MIN	13.5	14.5	50.6	69.5	45.0	49.5	32.5	22.5	13.1	12.8	12.7	6.33
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995

## SUMMARY STATISTICS

## FOR 1995 WATER YEAR

## WATER YEARS 1994 - 1995

ANNUAL TOTAL	10420.9		
ANNUAL MEAN	28.6		28.6
HIGHEST ANNUAL MEAN			28.6
LOWEST ANNUAL MEAN			28.6
HIGHEST DAILY MEAN	333	Jan 16	333
LOWEST DAILY MEAN	3.5	Sep 21	3.5
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 16	4.0
10 PERCENT EXCEEDS	52		70
50 PERCENT EXCEEDS	16		24
90 PERCENT EXCEEDS	12		12

e Estimated

## HUDSON RIVER BASIN

01374901 CROSS RIVER AT KATONAH, NY

LOCATION.--Lat 41°15'58", long 73°39'58", Westchester County, Hydrologic Unit 02030101, on left bank 600 ft downstream from dam on Cross River Reservoir, and 1.5 mi northeast of Katonah.

DRAINAGE AREA.--29.9 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 210 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Cross River Reservoir. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 346 ft<sup>3</sup>/s, Mar. 29, 1994, gage height, 1.92 ft; minimum, 11 ft<sup>3</sup>/s, Sept. 23, 26, 1995, gage height, 0.72 ft; minimum daily, 13 ft<sup>3</sup>/s, Sept. 20-21, Oct. 7, 9-11, 13-14, Nov. 1, 13-14, 20, 1994, Sept. 21, 24-26, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 248 ft<sup>3</sup>/s, Jan. 21, gage height, 1.67 ft; minimum, 11 ft<sup>3</sup>/s, Sept. 23, 26, gage height 0.72 ft; minimum daily, 13 ft<sup>3</sup>/s, Oct. 7, 9-11, 13-14, Nov. 1, 13-14, 20, Sept. 21, 24-26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	13	79	87	57	120	21	59	19	e14	e43	51
2	19	14	63	119	56	101	20	59	17	e14	e43	48
3	16	15	54	111	50	80	20	48	16	e14	e52	46
4	15	14	50	91	69	69	20	40	15	e14	e48	47
5	15	14	92	65	58	62	20	36	14	e43	e50	44
6	14	15	137	55	50	64	17	30	e16	e43	e64	44
7	13	15	112	108	45	62	17	27	e15	e43	e60	44
8	14	14	92	117	42	73	18	21	e14	e48	e57	48
9	13	14	76	93	38	157	22	21	e14	e45	e55	47
10	13	16	79	72	37	133	41	26	e14	e44	e53	42
11	13	14	134	63	37	106	37	24	e14	e46	e52	42
12	14	14	120	65	36	87	30	23	e15	e45	e52	42
13	13	13	93	67	32	76	74	24	e16	e43	e51	41
14	13	13	78	78	31	68	82	23	e15	e43	e51	41
15	15	15	68	92	29	63	63	22	e14	e43	e51	29
16	15	15	62	108	40	59	48	21	e14	e44	e51	14
17	17	17	62	111	43	57	41	21	e14	e44	e51	14
18	16	17	65	97	42	52	36	21	e14	e53	e51	14
19	16	16	59	83	41	48	53	24	e14	e49	e50	14
20	15	13	53	143	42	44	64	25	e14	e45	e50	14
21	15	19	48	225	48	45	59	21	e14	e43	e50	13
22	17	65	44	184	48	49	55	18	e14	e43	50	14
23	17	81	41	156	46	45	45	18	e14	e43	50	14
24	18	66	156	135	62	39	42	17	e14	e43	50	13
25	18	54	174	119	68	33	37	18	e14	e43	51	13
26	18	45	133	107	57	29	34	20	e14	e43	52	13
27	19	37	109	94	47	25	33	19	e14	e44	50	14
28	18	105	91	77	86	23	33	18	e14	e43	51	14
29	16	125	77	66	---	23	32	17	e14	e46	50	14
30	14	97	60	59	---	22	32	21	e14	e44	49	14
31	14	---	54	58	---	22	---	21	---	e43	49	---
TOTAL	479	985	2615	3105	1337	1936	1146	803	438	1255	1587	862
MEAN	15.5	32.8	84.4	100	47.7	62.5	38.2	25.9	14.6	40.5	51.2	28.7
MAX	19	125	174	225	86	157	82	59	19	53	64	51
MIN	13	13	41	55	29	22	17	17	14	14	43	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

MEAN	15.5	32.8	84.4	100	47.7	62.5	69.4	45.3	34.9	53.2	55.0	25.3
MAX	15.5	32.8	84.4	100	47.7	62.5	101	64.7	55.2	65.9	58.7	28.7
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1994	1994	1995
MIN	15.5	32.8	84.4	100	47.7	62.5	38.2	25.9	14.6	40.5	51.2	21.8
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994

## SUMMARY STATISTICS

## FOR 1995 WATER YEAR

## WATER YEARS 1994 - 1995

ANNUAL TOTAL	16548											
ANNUAL MEAN	45.3											
HIGHEST ANNUAL MEAN									45.3			1995
LOWEST ANNUAL MEAN									45.3			1995
HIGHEST DAILY MEAN	225								314			Mar 29 1994
LOWEST DAILY MEAN	13								13			Sep 20 1994
ANNUAL SEVEN-DAY MINIMUM	13								13			Oct 7 1994
10 PERCENT EXCEEDS	91								118			
50 PERCENT EXCEEDS	43								43			
90 PERCENT EXCEEDS	14								14			

e Estimated









## HUDSON RIVER BASIN

01375000 CROTON RIVER AT NEW CROTON DAM, NEAR CROTON-ON-HUDSON, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1933 - 1995	
ANNUAL TOTAL	187788.6		98526.0			
ANNUAL MEAN	514		270			
HIGHEST ANNUAL MEAN					295	
LOWEST ANNUAL MEAN					849	1956
HIGHEST DAILY MEAN	3070	Mar 29	2160	Jan 21	.90	1965
LOWEST DAILY MEAN	6.0	Jan 17	1.9	Sep 16	33000	Oct 16 1955
ANNUAL SEVEN-DAY MINIMUM	13	Jun 5	3.8	Sep 15	.10	Mar 14 1965
10 PERCENT EXCEEDS	1210		734		.20	Mar 12 1965
50 PERCENT EXCEEDS	351		172		903	
90 PERCENT EXCEEDS	48		9.5		12	
					.97	

## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY  
(National water-quality assessment program station)

LOCATION.--Lat 40°59'16", long 73°53'15", Westchester County, Hydrologic Unit 02030101, 180 ft from left bank on abandoned Mobil Oil Corporation platform, 0.5 mi southwest of railroad station, at Hastings-on-Hudson. Water-quality sampling site at stage station.

DRAINAGE AREA.--13,265 mi<sup>2</sup>.

## WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1995. Records for May 1992 to September 1994 are unpublished and available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. Gage-height record converted to elevation above or below(-) mean sea level for publication.

REMARKS.--Telephone gage-height, temperature, and specific conductance telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4.63 ft, Feb. 4; minimum, -3.16 ft, Feb. 5.

## ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	3.21	-1.18	1.05	3.77	-.91	1.69	2.80	-2.17	.56	3.52	-1.83	.86
2	3.10	-.90	1.18	2.91	-2.36	.29	3.22	-1.73	.65	3.25	-1.98	.54
3	3.11	-1.23	1.05	2.70	-3.11	.00	2.89	-2.21	.44	2.49	-2.56	-.01
4	3.36	-1.27	1.10	3.38	-1.84	.84	3.55	-1.75	.81	2.62	-2.11	.15
5	3.40	-1.35	1.05	3.63	-1.48	.96	3.88	-1.60	1.08	1.85	-2.41	-.34
6	3.44	-1.51	.95	3.52	-1.55	.89	3.36	-1.20	.99	1.69	-2.29	-.28
7	3.35	-1.62	.84	2.55	-2.63	-.23	3.30	-1.00	1.04	2.20	-1.89	.42
8	3.17	-1.62	.73	2.51	-1.95	.07	2.43	-1.84	.26	2.02	-1.06	.49
9	3.28	-1.41	.90	2.73	-1.48	.52	2.44	-.96	.76	1.98	-1.42	.46
10	2.88	-1.42	.64	2.97	-1.66	.89	2.81	-.53	1.25	1.65	-.97	.48
11	2.89	-1.03	.79	1.94	-1.64	.21	3.59	-1.83	.93	2.30	-.84	.86
12	2.74	-.98	.90	2.41	-1.07	.78	1.86	-1.51	.41	2.63	-.91	.93
13	2.62	-1.02	.89	2.26	-1.30	.60	2.43	-1.30	.91	2.39	-1.09	.54
14	2.58	-.96	.89	2.85	-1.14	1.12	3.23	-.66	1.51	2.31	-1.41	.51
15	3.52	-.96	1.62	2.84	-1.05	.80	3.10	-.40	1.33	3.19	-.85	1.16
16	2.70	-.98	1.05	2.72	-1.76	.77	3.26	-.73	1.23	3.20	-.84	1.07
17	3.56	-.89	1.49	3.46	-.72	1.46	3.74	-.46	1.56	3.20	-1.09	.95
18	3.65	-.30	1.73	3.56	-.41	1.51	3.48	-.73	1.29	3.62	-.96	1.38
19	3.58	-.39	1.62	2.87	-1.47	.67	3.29	-1.10	.97	3.86	-.64	1.60
20	3.46	-.55	1.46	2.54	-1.73	.45	2.90	-1.44	.66	4.43	-.43	2.04
21	3.45	-.55	1.37	3.65	-.86	1.47	2.60	-1.69	.38	3.98	-.55	1.62
22	3.38	-.74	1.29	3.49	-1.63	.63	2.45	-1.70	.35	3.22	-1.16	1.07
23	3.38	-.54	1.32	2.01	-1.91	-.25	3.09	-.94	1.11	2.29	-1.30	.48
24	2.95	-.71	1.10	1.85	-1.93	.00	4.14	.01	2.22	3.12	-1.28	.98
25	2.98	-.38	1.14	2.38	-1.45	.46	3.50	-.52	1.67	2.77	-1.56	.71
26	2.68	-.46	.96	1.97	-1.58	.21	3.20	-.78	1.28	2.74	-1.93	.59
27	2.51	-.70	.85	2.37	-.83	.83	2.99	-1.23	1.06	2.55	-2.12	.35
28	2.45	-.93	.85	3.66	-1.21	1.76	3.06	-1.65	1.06	2.35	-2.38	.23
29	2.24	-1.29	.58	2.42	-2.12	.35	2.72	-2.50	.11	2.96	-2.30	.65
30	2.29	-1.48	.60	2.48	-2.24	.41	2.00	-2.89	-.17	3.34	-1.62	.90
31	2.86	-1.51	.88	---	---	---	3.12	-2.08	.60	3.35	-1.58	.85
MONTH	3.65	-1.62	1.06	3.77	-3.11	.67	4.14	-2.89	.91	4.43	-2.56	.72

## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.89	-1.83	.50	3.11	-1.51	.90	3.13	-1.30	.90	3.39	-.48	1.44
2	3.09	-1.67	.63	3.03	-1.34	.90	2.86	-1.33	.80	3.38	-.79	1.28
3	3.08	-1.51	.86	3.19	-1.24	1.01	3.03	-1.40	.71	3.37	-.28	1.49
4	4.63	-.42	1.97	3.01	-1.20	.99	2.99	-1.47	.61	3.31	-.36	1.28
5	2.62	-3.16	-.74	3.13	-1.06	1.00	1.06	-2.39	-.77	3.03	-.49	1.16
6	.57	-2.66	-1.00	3.20	-1.08	1.03	1.73	-2.35	-.35	2.93	-.77	.93
7	.96	-1.61	-.36	2.44	-.83	.79	2.60	-.46	.83	2.55	-.80	.88
8	2.15	-1.26	.61	2.61	-.40	1.03	2.59	-.54	1.03	2.03	-1.22	.60
9	1.07	-1.45	-.06	1.92	-1.79	-.14	2.68	-.88	.93	3.36	-.56	1.55
10	1.39	-1.49	-.02	1.06	-1.15	-.01	2.11	-1.18	.51	3.10	-.77	1.28
11	2.29	-.78	.83	1.86	-.86	.51	2.18	-1.59	.57	3.53	-.58	1.60
12	1.28	-2.02	-.40	2.15	-.86	.72	2.71	-1.47	.75	3.55	-1.03	1.37
13	1.28	-2.27	-.52	2.20	-1.37	.43	3.02	-1.49	.91	3.62	-1.21	1.28
14	1.43	-2.63	-.50	2.65	-1.64	.63	3.13	-1.38	.91	3.80	-1.18	1.27
15	2.56	-1.68	.59	2.83	-1.44	.81	3.21	-1.51	.79	4.00	-1.12	1.34
16	2.17	-1.94	.30	3.50	-1.22	1.17	3.44	-1.61	.78	3.90	-.97	1.32
17	2.52	-1.92	.27	3.56	-.99	1.33	3.56	-1.47	.94	3.94	-.93	1.44
18	2.47	-1.88	.37	3.43	-1.41	.97	3.38	-1.55	.89	3.92	-.95	1.32
19	2.63	-1.73	.42	3.68	-1.33	1.08	3.38	-1.11	1.12	3.68	-.78	1.44
20	2.82	-1.22	.91	3.58	-1.12	1.18	3.46	-1.26	.85	3.70	-.65	1.38
21	3.36	-.30	1.56	3.58	-.97	1.17	3.14	-1.20	.99	3.27	-.93	1.24
22	3.33	-.81	1.11	3.30	-1.12	.95	3.19	-1.08	1.01	2.81	-1.36	.87
23	2.97	-.90	1.05	3.08	-.84	1.04	2.38	-1.57	.64	2.56	-1.48	.76
24	3.23	-2.51	.78	3.16	-.87	.99	3.15	-.93	1.09	2.55	-1.36	.78
25	1.60	-2.54	-.14	2.86	-1.17	.90	2.88	-1.33	1.06	2.49	-1.68	.54
26	2.12	-2.06	.18	2.85	-1.19	.88	2.54	-1.60	.66	3.03	-.99	1.00
27	2.98	-1.69	.90	2.87	-1.32	.94	2.93	-1.56	.69	2.96	-1.13	.94
28	3.12	-1.37	.84	3.17	-1.16	1.12	2.88	-1.49	.82	2.89	-1.24	.78
29	---	---	---	3.34	-1.08	1.15	3.26	-1.31	.98	2.96	-.99	.93
30	---	---	---	3.40	-1.07	1.26	3.38	-1.11	.97	2.66	-1.28	.60
31	---	---	---	3.19	-1.22	1.05	---	---	---	2.84	-1.26	.74
MONTH	4.63	-3.16	.39	3.68	-1.79	.90	3.56	-2.39	.76	4.00	-1.68	1.12

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2.78	-1.14	.68	3.25	-.61	1.27	2.96	-1.18	.89	3.19	-.67	1.22
2	2.75	-1.10	.70	3.25	-.66	1.17	2.78	-1.19	.85	3.23	-.86	1.28
3	2.63	-1.13	.75	2.99	-.94	.95	2.85	-1.27	.91	3.33	-.64	1.40
4	2.60	-1.16	.67	2.83	-1.01	.97	2.92	-1.09	.96	3.22	-.74	1.32
5	2.56	-1.03	.86	2.74	-1.00	.97	3.18	-1.12	1.09	3.23	-.84	1.27
6	2.54	-1.00	.97	2.81	-1.13	.95	3.88	-.64	1.67	3.31	-1.14	1.13
7	3.27	-.57	1.47	2.93	-1.08	1.04	4.05	-.32	1.96	3.55	-.86	1.31
8	3.01	-1.05	1.11	3.45	-1.00	1.22	3.67	-.99	1.48	3.42	-1.06	1.26
9	3.01	-1.42	.87	3.21	-1.31	1.03	3.52	-1.31	1.15	3.60	-.75	1.46
10	3.23	-1.37	1.01	3.52	-1.39	1.08	3.71	-1.22	1.22	3.17	-.99	1.11
11	3.52	-1.27	1.16	3.69	-1.51	1.09	3.77	-1.07	1.32	3.16	-1.21	.99
12	3.58	-1.45	1.14	3.65	-1.38	1.08	3.60	-.87	1.36	2.98	-1.15	.88
13	4.03	-1.16	1.34	3.53	-1.32	1.03	3.36	-1.03	1.24	2.87	-.91	.99
14	3.68	-1.15	1.25	3.34	-1.32	.94	3.30	-.99	1.23	2.75	-.88	.87
15	3.29	-1.51	.86	3.38	-1.27	1.02	3.28	-.80	1.36	2.46	-1.01	.72
16	3.23	-1.77	.53	3.44	-1.06	1.22	3.23	-.56	1.42	2.75	-.50	1.11
17	2.77	-1.74	.42	3.39	-.85	1.34	3.06	-.45	1.41	2.81	-.46	1.43
18	2.60	-1.70	.48	3.25	-.65	1.43	3.34	-.19	1.74	2.53	-.39	1.09
19	2.42	-1.54	.54	2.94	-.77	1.21	3.84	.48	2.24	2.87	-.46	1.24
20	2.37	-1.70	.60	2.78	-.80	1.10	3.24	-.01	1.71	3.09	-.29	1.44
21	3.04	-.76	1.24	2.83	-.82	1.08	3.15	-.28	1.40	3.11	-.48	1.36
22	2.69	-.99	.99	2.88	-.76	1.10	2.69	-1.02	.92	3.54	-.51	1.49
23	2.87	-1.07	.98	3.23	-.59	1.22	2.96	-.98	.97	2.76	-1.12	.95
24	2.89	-.91	1.02	3.02	-.81	1.06	2.69	-.97	.89	3.49	-1.00	1.32
25	3.10	-.84	1.06	3.04	-.95	.96	2.95	-1.36	.79	3.74	-.42	1.69
26	3.02	-.94	.99	3.03	-.96	1.00	3.21	-1.00	1.12	3.97	-.48	1.80
27	4.05	-.60	1.59	3.01	-1.02	.88	3.01	-.85	1.17	3.77	-.51	1.56
28	3.08	-.81	1.29	3.10	-1.19	.96	3.46	-.87	1.36	3.24	-.99	1.02
29	3.04	-.94	.94	2.81	-1.02	.95	3.38	-.53	1.45	3.40	-.91	1.18
30	3.25	-.77	1.12	2.78	-1.34	.66	3.18	-.78	1.15	3.37	-.65	1.34
31	---	---	---	2.96	-1.27	.87	3.23	-.74	1.29	---	---	---
MONTH	4.05	-1.77	.95	3.69	-1.51	1.06	4.05	-1.36	1.28	3.97	-1.21	1.24

## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993 to current year.

CHEMICAL DATA: 1993 (c), 1994 (d), 1995 (b).

PESTICIDE DATA: 1994 (a).

ORGANIC DATA: OC--1993 (c), 1994 (d), 1995 (b).

NUTRIENT DATA: 1993 (c), 1994 (d), 1995 (b).

BIOLOGICAL DATA:

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993-94 (c), 1995 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1994 to September 1995. Records for May 1992 to September 1994 are unpublished and available in files of the Geological Survey.

WATER TEMPERATURES: October 1994 to September 1995. Records for May 1992 to September 1994 are unpublished and available in files of the Geological Survey.

INSTRUMENTATION.--Water-quality monitor provides 15-minute-interval readings.

REMARKS.--Water-quality samples were collected by boat during the period of fastest ebb current of tidal cycle in cross section in vicinity of the gage. Specific conductance and water temperature values associated with water-quality samples may fall outside the range observed for that day by the water-quality monitor due to differences in location and methods of data collection. Telephone temperature and specific conductance telemeter at station. Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 30,500 microsiemens, Aug. 19; minimum, 663 microsiemens, Jan. 25.

WATER TEMPERATURES: Maximum, 28.5°C, July 27, Aug. 4, 5; minimum, -0.5°C on several days during February.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT												
13...	0940	14100	7.3	10.0	16.0	778	8.7	91	1600	120	310	2700
NOV												
16...	1230	16300	7.4	9.5	12.0	775	10.1	98	1800	130	350	3100
DEC												
14...	1220	15400	7.8	3.5	5.5	780	12.8	106	1800	130	350	3000
JAN												
26...	0940	5730	7.3	1.0	2.5	766	14.7	109	180	46	15	40
MAR												
14...	1130	5030	7.6	11.0	3.5	777	13.1	99	1700	130	330	3000

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT											
13...	79	30	10	70	660	4800	0.2	1.9	9270	8650	0.03
NOV											
16...	78	32	110	76	720	5400	0.4	1.7	10300	9860	0.03
DEC											
14...	77	31	110	69	720	5300	0.3	2.1	9930	9660	0.02
JAN											
26...	33	1	3.1	65	29	87	<0.1	11	315	302	0.02
MAR											
14...	78	32	110	120	660	5300	0.4	4.0	9660	9580	0.01

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT											
13...	0.67	0.19	0.50	0.50	0.11	0.09	0.10	53	<10	3.2	0.3
NOV											
16...	0.63	0.22	0.50	0.40	0.12	0.09	0.09	<10	20	3.0	0.4
DEC											
14...	0.56	0.22	0.60	0.50	0.12	0.07	0.07	50	20	3.0	0.3
JAN											
26...	0.56	0.21	0.50	0.50	0.09	0.04	0.04	84	58	3.1	0.5
MAR											
14...	0.55	0.29	0.50	0.50	0.08	0.05	0.04	20	50	3.2	1.1



## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 13...	0940	11	93
NOV 16...	1230	20	93
DEC 14...	1220	25	97
JAN 26...	0940	34	97
MAR 14...	1130	18	98

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19300	9350	13200	24400	15300	19000	14400	10300	11800	18200	8550	11900
2	19100	11400	14100	19200	10600	15200	15600	9520	11400	14000	6830	10000
3	17400	12400	14600	17000	10100	13100	12400	8120	9850	10900	5670	7620
4	17700	12300	14400	19300	11500	14800	14200	8010	9930	10100	5380	7280
5	17600	12000	14000	19400	11500	15000	14700	7700	10000	7490	4340	5630
6	18000	11500	13700	19300	11200	14600	12000	6140	8450	7770	4110	5790
7	17700	10700	13400	14900	8570	11000	8430	4480	6390	10800	4300	6770
8	17000	10700	12900	16500	9900	11600	5130	3160	4100	11700	4590	7150
9	17300	9610	12900	18100	10100	12300	6320	3270	4270	13200	5090	8020
10	15600	9780	11900	17700	10000	12800	8900	3420	5410	16000	4810	9660
11	16800	9930	12300	14800	9900	11700	11700	3170	5910	20900	6080	13100
12	19800	10200	13000	20100	10700	14200	13800	2740	6260	22600	6660	15400
13	17400	11100	13400	17300	10600	13600	16700	4200	9170	21800	6780	14700
14	16900	10500	13500	22100	12200	15800	20000	6400	12600	20800	8100	13600
15	20700	11400	15500	18300	10200	14000	19200	7930	13000	19200	9410	13300
16	16300	10800	13600	---	9700	---	19500	8930	12900	17600	9980	12300
17	20000	11800	15200	21900	12300	16200	21400	9570	13600	13100	9200	10700
18	21200	13500	16200	24300	12500	16600	19700	9960	12600	12900	9330	10100
19	19600	13200	15700	20600	11000	14200	16700	9880	11900	12200	7920	9680
20	19200	12200	15100	19600	11000	14400	15100	10600	12000	13500	7590	9550
21	18300	11300	14300	24000	13300	17200	13500	9950	11400	10400	4180	6740
22	18500	12500	14300	22300	11200	14900	12900	9640	10800	5680	2040	3850
23	19400	12500	14600	17200	11000	13100	18000	9860	11800	3090	1320	2060
24	17300	11500	14100	16700	11700	13200	16000	10000	13200	3270	703	1840
25	18500	11800	14200	18500	11000	14000	15700	10400	13200	5060	663	2300
26	18200	11600	13800	16400	10900	12800	15800	9310	12300	8140	1060	3540
27	19400	11200	14600	21600	11000	15100	15900	9310	11500	9260	1640	4330
28	19800	11100	15000	28300	13500	18100	16100	8970	11600	11100	2330	4890
29	18200	10900	14000	16400	10200	12600	13000	8270	9810	12600	2450	6520
30	19200	11600	14700	15800	10400	12800	11400	7210	8850	15000	4860	7940
31	20800	12400	16200	---	---	---	18300	8280	11500	13100	4720	7450
MONTH	21200	9350	14100	---	8570	---	21400	2740	10200	22600	663	8180

## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	10100	3340	5670	16500	9990	12500	13000	7020	9300	18200	9460	12800
2	8040	2460	4650	15200	8620	11400	13600	6570	9010	17000	9970	12600
3	9170	2570	4820	14100	8600	11000	13200	6520	8700	19800	10300	13600
4	19300	4280	8530	15100	7890	10600	17100	5610	9200	18300	9130	13200
5	8010	1510	3530	13700	8350	10200	7000	3430	4680	18800	9720	13800
6	6960	1590	3910	18000	7160	10500	11200	4150	5970	18200	8350	12400
7	7390	3450	5230	15000	7260	9740	17000	6930	11500	19300	9770	13000
8	17400	5020	9450	16000	6330	10100	20200	7210	13700	17000	10200	13400
9	14600	4730	7390	8690	2920	4890	23300	7320	15000	25200	13500	18300
10	16400	5100	7570	5010	2350	3580	16600	8050	11700	23900	12400	16400
11	21000	6210	11800	8250	2350	4300	21700	8940	13600	23100	13500	18100
12	13700	5560	8480	15300	3290	6680	20500	10300	14500	22900	14200	18000
13	15000	6670	9880	13800	4050	8370	21100	12000	15800	21300	15400	17500
14	16700	8540	11800	15900	4560	8970	18800	13000	15300	21900	15300	17500
15	24000	12400	15800	15200	6010	9410	17200	12600	14300	21600	15100	17400
16	22900	12400	15100	13000	7970	9780	16200	12100	13600	21600	14900	17100
17	18100	12500	14700	11600	7170	8770	16000	12200	13600	21100	14800	17200
18	17900	11400	14400	8950	5280	6710	17000	11700	13400	20700	14300	16700
19	16700	11400	13900	7340	4450	5760	16700	11600	13400	20400	14300	16500
20	18200	12200	14400	7250	3520	5000	16000	10700	12500	20400	14100	16400
21	20700	11800	15500	6070	2440	3940	15400	10700	12500	19700	13700	16000
22	17700	9770	13300	4530	1470	2830	16600	9530	12100	18200	13300	15200
23	18000	10300	13000	4620	1230	2190	13700	9390	11100	20600	12700	15200
24	19900	9310	12600	6050	1230	2910	19200	10000	12100	20600	12700	15400
25	13900	8770	11100	10900	1640	4170	18200	10200	12500	20000	12400	15000
26	14800	9060	11500	10700	2810	6030	15100	9030	11700	23400	13700	16100
27	20200	9650	13600	14600	4500	8060	17100	10400	12100	22200	12600	16200
28	19600	10700	13200	14400	6130	9780	16500	9620	11800	22400	13500	16500
29	---	---	---	17800	7640	10800	16800	9640	12000	22000	14100	17100
30	---	---	---	17000	8860	11600	17300	9340	11700	21500	12800	15400
31	---	---	---	15700	7630	10100	---	---	---	20400	13300	15600
MONTH	24000	1510	10500	18000	1230	7760	23300	3430	11900	25200	8350	15700
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19100	13000	14900	25000	18600	20800	22500	15800	19000	25700	19800	22300
2	20200	13000	15100	23800	17000	20200	21900	18100	20600	26000	18900	22100
3	20200	13000	15000	21500	16900	19500	24000	16400	19900	27600	19000	22500
4	17700	12400	14600	23000	17400	19700	25100	16800	20200	26800	19100	22500
5	18500	12100	14900	22800	17400	19900	25600	15000	19900	25800	19500	22300
6	20000	11300	15100	23700	17600	20000	27500	17600	21200	25700	20200	22200
7	24000	---	---	23800	15800	19500	27400	18500	21800	26200	20400	22600
8	25300	12200	18000	23500	16800	19400	24800	18500	21100	26100	19500	22000
9	24800	12600	16500	22100	15900	18400	24100	17100	20300	25800	20600	22900
10	25200	13700	18500	22600	16000	18400	23900	18000	20100	25500	18500	21400
11	24800	16200	19200	22000	14800	17900	23900	16800	20100	25000	19600	21900
12	23400	15600	18500	21300	14800	16600	24300	17400	20200	24300	18700	21900
13	23700	16100	19100	21700	15400	17700	23900	17800	20000	24800	20400	22100
14	24100	16500	18900	21600	15500	17600	22900	17100	19900	24300	19800	21400
15	23300	15600	18100	21200	15000	18000	23200	17300	20200	23500	18400	20600
16	21700	15000	17300	22200	15900	18800	23400	16900	19700	25500	19400	21700
17	20100	14700	16800	23000	16100	19400	23400	16700	19600	26600	19500	23300
18	20100	14200	16900	22200	16300	18800	26400	17300	21200	24200	19100	21400
19	20200	14200	16500	22200	16300	18300	30500	19900	24400	26800	18900	21800
20	20100	13700	16400	21800	14700	18000	27800	17600	22900	27600	19700	23300
21	24100	16000	18600	21700	14800	18100	26600	16900	21300	26800	18700	21900
22	23400	15100	18700	22700	15800	18700	24300	15600	18800	26500	18900	22600
23	24100	15400	19500	24400	16000	19500	25000	16400	19600	24300	19900	21300
24	24700	16700	20100	22800	15300	19000	22900	17100	19700	24700	19900	21900
25	26300	15700	19900	24800	15800	19500	24100	18300	20400	26000	20300	22900
26	24800	16300	20100	23400	16700	19600	25500	19600	21800	26400	20100	22700
27	29500	18200	21300	21300	16200	18800	25700	19400	21900	25500	19700	22200
28	29500	16500	20600	22500	16400	19000	25900	20100	23000	23500	18400	21000
29	23300	17100	19500	23100	16300	18800	26800	20600	23300	24600	19500	21400
30	23700	17900	20400	21300	14800	18000	25300	18900	22100	24800	19600	21800
31	---	---	---	21300	16100	18800	26700	20100	22900	---	---	---
MONTH	29500	---	---	25000	14700	18900	30500	15000	20900	27600	18400	22100

## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.5	18.5	19.0	15.0	15.0	15.0	8.5	8.0	8.5	4.5	3.5	4.0
2	19.5	18.5	18.5	15.0	14.0	14.5	8.0	8.0	8.0	4.5	3.0	4.0
3	18.5	18.0	18.5	14.5	13.5	14.0	8.0	8.0	8.0	3.5	2.5	3.0
4	18.5	17.5	18.0	14.5	14.0	14.5	8.0	8.0	8.0	3.5	2.0	3.0
5	18.0	17.5	17.5	14.5	14.0	14.5	8.5	8.0	8.0	2.5	1.5	2.0
6	17.5	17.0	17.0	14.5	14.0	14.5	8.5	8.0	8.5	2.5	1.0	1.5
7	17.5	17.0	17.0	14.5	13.5	14.0	8.5	8.5	8.5	2.5	1.0	2.0
8	17.5	17.0	17.0	14.0	13.5	13.5	8.5	7.5	8.0	2.5	1.5	1.5
9	17.5	17.0	17.0	14.0	13.5	13.5	8.0	7.5	8.0	2.5	1.0	1.5
10	17.0	16.5	17.0	13.5	12.5	13.0	8.0	7.5	7.5	2.5	1.0	2.0
11	17.0	16.0	16.5	13.0	12.0	12.5	8.0	6.5	7.5	3.0	1.5	2.0
12	16.5	16.0	16.0	13.0	11.0	12.0	7.5	6.0	7.0	3.0	1.5	2.5
13	16.5	15.5	16.0	12.0	11.0	11.5	7.5	5.5	6.5	3.0	2.0	2.5
14	16.5	16.0	16.0	12.5	11.5	12.0	7.5	5.5	6.5	3.0	2.5	3.0
15	16.5	15.5	16.0	12.5	12.0	12.0	7.0	5.5	6.5	4.0	3.0	3.5
16	16.0	15.5	15.5	12.0	11.5	12.0	7.0	5.5	6.0	4.0	3.5	4.0
17	15.5	15.0	15.5	12.0	11.5	11.5	7.0	5.5	6.0	4.0	3.5	4.0
18	16.0	15.0	15.5	12.0	11.5	11.5	6.5	5.5	6.0	4.0	3.5	4.0
19	16.0	15.5	15.5	12.0	11.5	12.0	6.5	5.5	6.0	4.0	3.5	4.0
20	15.5	15.5	15.5	12.0	11.5	11.5	6.0	5.0	5.5	4.0	3.5	4.0
21	16.0	15.5	15.5	11.5	11.0	11.5	6.0	5.5	5.5	4.0	3.5	3.5
22	16.0	15.5	15.5	11.5	11.0	11.5	5.5	5.0	5.5	3.5	3.0	3.0
23	16.0	15.5	15.5	11.5	9.5	10.5	6.0	5.0	5.5	3.0	2.5	3.0
24	16.0	15.5	15.5	10.5	8.5	9.5	5.5	5.0	5.5	3.0	2.0	2.5
25	15.5	15.5	15.5	10.0	8.5	9.0	5.5	5.5	5.5	2.5	2.0	2.5
26	15.5	15.0	15.0	9.0	8.0	8.5	5.5	5.0	5.0	3.0	2.0	2.0
27	15.5	14.5	15.0	9.5	8.0	8.5	5.5	4.5	5.0	3.0	1.5	2.0
28	15.0	14.0	14.5	9.5	8.0	8.5	5.5	4.5	5.0	3.0	1.5	2.0
29	14.5	14.0	14.5	8.5	8.0	8.5	5.0	4.0	5.0	2.5	1.0	1.5
30	15.0	14.0	14.5	9.0	8.5	8.5	4.5	4.0	4.0	2.5	1.0	1.5
31	15.5	14.5	15.0	---	---	---	4.5	3.5	4.0	2.0	1.0	1.5
MONTH	19.5	14.0	16.0	15.0	8.0	12.0	8.5	3.5	6.5	4.5	1.0	2.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.0	1.0	1.5	2.0	1.5	2.0	7.0	6.5	6.5	12.5	12.0	12.5
2	2.0	1.0	1.5	2.0	1.5	1.5	7.0	6.5	6.5	12.5	12.0	12.0
3	1.5	1.0	1.0	2.0	1.5	2.0	7.5	6.5	7.0	13.0	12.0	12.0
4	2.5	.5	1.5	2.0	1.5	2.0	7.5	6.5	7.0	13.0	12.0	12.5
5	1.0	-.5	.5	2.0	1.5	2.0	7.0	6.0	6.5	13.0	12.0	12.5
6	.5	-.5	.0	2.5	2.0	2.0	7.0	5.5	6.0	13.0	12.0	12.5
7	.0	-.5	.0	2.5	2.0	2.5	7.0	6.5	6.5	13.0	12.0	12.5
8	1.5	.0	.5	3.5	2.5	3.0	7.0	6.5	6.5	12.5	12.0	12.5
9	1.0	-.5	.0	3.5	2.0	3.0	7.5	6.5	7.0	13.5	12.0	12.5
10	1.0	-.5	.0	2.0	1.5	2.0	7.5	6.5	7.0	13.0	12.0	13.0
11	1.5	.0	.5	2.0	1.5	2.0	8.5	7.0	7.5	12.5	12.5	12.5
12	.5	-.5	.0	3.0	1.5	2.0	7.5	7.0	7.5	13.0	12.5	12.5
13	.5	-.5	.0	3.5	2.5	3.0	8.5	7.0	7.5	13.5	12.5	13.0
14	.5	-.5	.0	5.0	3.0	3.5	8.0	7.5	7.5	13.5	13.0	13.0
15	1.0	-.5	.0	5.0	3.5	4.0	8.5	7.5	8.0	14.0	13.0	13.5
16	1.0	-.5	.0	5.0	3.5	4.5	8.5	7.5	8.0	14.5	13.0	13.5
17	1.0	.0	.5	5.0	4.0	4.5	9.0	8.0	8.5	14.0	13.5	14.0
18	1.0	.5	1.0	4.5	4.0	4.5	9.0	8.5	8.5	14.5	13.5	14.0
19	1.5	.5	1.0	4.5	4.0	4.5	9.5	9.0	9.0	14.5	14.0	14.0
20	1.5	1.0	1.0	5.0	4.5	5.0	10.0	9.0	9.5	15.0	14.0	14.5
21	2.0	1.5	1.5	5.0	5.0	5.0	10.0	9.5	9.5	16.0	14.5	15.0
22	1.5	1.0	1.5	5.0	5.0	5.0	10.5	9.5	10.0	16.5	15.0	15.5
23	2.0	1.5	1.5	5.5	5.0	5.0	11.0	10.0	10.5	17.0	15.0	16.0
24	2.5	1.5	2.0	5.5	5.0	5.0	11.5	10.0	10.5	17.5	15.5	16.5
25	2.0	1.5	2.0	5.5	5.0	5.0	12.0	10.5	11.0	17.0	16.0	16.5
26	2.0	1.5	2.0	6.0	5.0	5.5	12.0	10.5	11.5	17.0	16.0	16.5
27	2.0	1.5	2.0	6.5	5.5	6.0	13.0	11.0	11.5	18.5	16.0	17.0
28	2.0	1.5	1.5	7.0	5.5	6.0	13.0	11.5	12.0	17.5	16.5	17.0
29	---	---	---	7.5	6.0	6.5	13.5	12.0	12.5	17.5	16.5	17.0
30	---	---	---	6.5	6.0	6.5	12.5	12.0	12.5	18.0	16.5	17.5
31	---	---	---	7.0	6.5	6.5	---	---	---	19.0	17.0	18.0
MONTH	2.5	-.5	1.0	7.5	1.5	4.0	13.5	5.5	8.5	19.0	12.0	14.0

## HUDSON RIVER BASIN

01376304 HUDSON RIVER SOUTH OF HASTINGS-ON-HUDSON, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.5	17.5	18.5	23.0	21.5	22.0	28.0	27.0	27.5	24.5	24.0	24.0
2	19.5	17.5	18.5	22.5	22.0	22.5	28.0	27.0	27.5	24.5	24.0	24.0
3	20.0	18.0	19.0	23.0	22.0	22.5	28.0	27.0	27.5	24.5	23.5	24.0
4	20.0	18.5	19.5	24.0	22.0	22.5	28.5	27.0	27.5	24.5	23.5	24.0
5	20.5	19.0	19.5	23.5	22.5	22.5	28.5	27.0	27.5	24.5	23.5	24.0
6	20.5	19.0	20.0	23.5	22.5	23.0	27.5	26.0	27.0	25.0	24.0	24.0
7	20.5	18.5	19.5	23.5	22.5	23.0	27.0	25.5	26.5	24.5	24.0	24.0
8	21.0	18.5	20.0	24.5	23.0	23.5	27.0	25.5	26.0	24.0	23.5	24.0
9	21.0	19.0	20.0	24.0	23.0	23.0	27.0	25.5	26.0	24.0	23.5	23.5
10	21.0	19.0	20.0	24.0	23.0	23.0	26.5	25.5	26.0	23.5	23.0	23.5
11	20.5	19.5	20.0	24.0	23.0	23.5	26.5	25.5	26.0	23.0	22.5	23.0
12	20.0	19.0	20.0	24.5	23.0	23.5	26.5	25.5	26.0	22.5	22.0	22.5
13	20.0	19.0	19.5	25.0	23.0	24.0	26.5	25.5	26.0	22.5	22.0	22.5
14	20.0	19.0	19.5	25.5	23.5	24.5	26.5	26.0	26.0	22.5	22.0	22.5
15	20.5	19.0	20.0	26.0	24.0	25.0	26.5	26.0	26.0	22.5	22.0	22.5
16	20.5	19.5	20.0	25.5	24.5	25.0	27.0	26.0	26.5	22.5	21.5	22.0
17	21.5	20.0	20.5	25.5	24.5	25.0	27.0	26.0	26.5	22.0	21.0	21.5
18	21.5	20.0	21.0	26.0	25.0	25.5	27.0	26.0	26.5	22.0	21.0	21.5
19	23.0	20.5	21.5	26.5	25.0	25.5	26.5	25.5	26.0	21.5	20.5	21.0
20	23.0	21.0	22.0	26.5	25.0	26.0	26.5	25.5	26.0	21.5	20.5	21.0
21	22.0	21.0	21.5	26.5	25.5	26.0	27.0	25.5	26.0	21.5	20.5	21.0
22	22.5	21.0	22.0	27.0	25.5	26.0	27.0	26.0	26.5	21.0	21.0	21.0
23	22.5	21.0	21.5	27.0	25.0	26.0	26.5	25.5	26.0	21.0	20.5	20.5
24	22.5	21.0	21.5	27.5	25.5	26.5	26.0	24.5	25.5	20.5	20.0	20.0
25	23.0	21.0	22.0	28.0	25.5	26.5	25.0	24.5	25.0	20.0	20.0	20.0
26	23.0	21.0	22.0	27.5	26.0	26.5	25.0	24.5	25.0	20.0	19.5	20.0
27	22.5	21.0	22.0	28.5	26.0	27.0	25.0	24.5	24.5	20.0	19.5	19.5
28	23.0	21.0	21.5	27.5	26.0	27.0	24.5	24.0	24.5	20.0	19.5	19.5
29	23.5	21.5	22.0	28.0	26.5	27.0	24.5	24.0	24.5	19.5	19.0	19.5
30	23.0	21.5	22.0	27.5	27.0	27.5	24.5	24.0	24.0	19.5	19.0	19.0
31	---	---	---	27.5	27.0	27.5	24.5	24.0	24.0	---	---	---
MONTH	23.5	17.5	20.5	28.5	21.5	25.0	28.5	24.0	26.0	25.0	19.0	22.0

## HUDSON RIVER BASIN

01376452 SAW MILL RIVER AT FARRAGUT AVENUE AT MOUNT HOPE, NY  
(National water-quality assessment program station)

LOCATION.--Lat 40°58'58", long 73°51'57", Westchester County, Hydrologic Unit 02030101, at bridge on Farragut Avenue, at Mount Hope.

DRAINAGE AREA.--not determined.

PERIOD OF RECORD.--March 1994 to March 1995 (discontinued).

CHEMICAL DATA: 1994-95 (c).

PESTICIDE DATA: 1994 (a).

ORGANIC DATA: OC--1994-95 (c).

NUTRIENT DATA: 1994-95 (c).

SEDIMENT DATA: 1994-95 (c).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 13...	1610	6.5	700	7.8	17.0	10.5	772	10.1	90	250	64	21
NOV 17...	1000	7.5	704	7.9	9.5	8.5	771	9.1	77	250	62	22
DEC 15...	0930	30	555	7.6	2.5	4.0	776	12.8	95	180	46	16
JAN 27...	0940	41	5860	7.5	0.0	2.5	763	13.9	102	640	58	120
FEB 09...	1020	20	747	7.8	-6.0	0.0	762	14.5	100	220	57	19
MAR 15...	0910	34	586	7.8	9.5	9.0	767	10.2	88	190	50	16

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT 13...	46	28	1	4.8	167	28	110	<0.1	10	393	389	<0.01
NOV 17...	44	28	1	4.8	176	27	100	<0.1	9.1	397	376	0.01
DEC 15...	36	30	1	3.6	--	29	82	<0.1	11	323	304	<0.01
JAN 27...	940	75	16	39	118	230	1800	0.2	5.1	3310	3240	<0.01
FEB 09...	61	37	2	3.7	133	32	130	<0.1	12	424	404	0.03
MAR 15...	41	31	1	3.4	174	28	91	<0.1	7.4	320	313	<0.01

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 13...	0.65	0.04	<0.20	0.30	0.02	0.03	0.02	85	56	2.5	0.2
NOV 17...	0.35	0.02	<0.20	<0.20	0.03	0.02	0.02	120	90	2.6	0.2
DEC 15...	1.4	0.03	<0.20	<0.20	0.02	<0.01	0.01	82	62	2.3	0.2
JAN 27...	1.5	0.02	<0.20	<0.20	0.01	<0.01	<0.01	36	7	2.0	0.2
FEB 09...	1.4	0.03	<0.20	<0.20	<0.01	0.01	<0.01	64	80	2.5	0.2
MAR 15...	0.95	0.02	0.20	<0.20	0.03	<0.01	<0.01	160	110	2.1	0.5



## HUDSON RIVER BASIN

01376452 SAW MILL RIVER AT FARRAGUT AVENUE AT MOUNT HOPE, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM
OCT					
13...	1610	6.5	3	0.05	90
NOV					
17...	1000	7.5	3	0.06	86
DEC					
15...	0930	30	4	0.33	95
JAN					
27...	0940	41	3	0.33	92
FEB					
09...	1020	20	2	0.11	87
MAR					
15...	0910	34	4	0.36	96

## HUDSON RIVER BASIN

01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION.--Lat 40°56'11", long 73°53'12", Westchester County, Hydrologic Unit 02030101, on right bank in Yonkers, just upstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Center Street, and 1.2 mi upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--25.6 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to September 1973, March 1974 to September 1989, January 1993 to September 1995 (discontinued).

REVISED RECORDS.--WDR NY-71-1: 1965, 1966.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 90 ft above sea level, from topographic map. Prior to Aug. 17, 1978, water-stage recorder and concrete control at same site but at datum 90.99 ft above sea level. Aug. 17, 1978 to Sept. 9, 1980, nonrecording and crest-stage gage, and Sept. 10, 1980 to Sept. 30, 1982, water-stage recorder and crest-stage gage at site 1,300 ft downstream at datum 80.10 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow affected by diversion by village of Tarrytown, and several industries for water supply and industrial purposes. No significant diversions this water year by the village of Tarrytown. Diurnal fluctuations caused by water supply and industrial operations.

COOPERATION.--Figures for diversion and return in upstream water supply provided by village of Tarrytown (see REMARKS).

AVERAGE DISCHARGE.--46 years (water years 1945-73, 1975-89, 1994-95), 34.1 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft<sup>3</sup>/s, July 7, 1984, gage height, 7.84 ft; minimum, no flow during part of several days in Oct., Nov., and June-Sept. of 1981 water year because of construction in channel upstream from gage; minimum daily discharge, 0.11 ft<sup>3</sup>/s, Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 549 ft<sup>3</sup>/s, July 26, gage height, 4.80 ft; minimum discharge, 0.37 ft<sup>3</sup>/s, Nov. 15, 17, Sept. 20, 21; minimum gage height, 1.18 ft, Nov. 15, 17; minimum daily discharge, 1.9 ft<sup>3</sup>/s, Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	61	25	48	32	69	23	74	12	9.9	5.2	4.1
2	20	30	22	72	32	44	23	35	11	12	4.8	3.2
3	12	15	21	38	29	37	22	25	12	9.2	4.9	2.5
4	10	11	20	30	e28	35	22	21	14	7.4	8.9	2.0
5	9.5	9.8	89	24	e27	34	21	22	11	7.4	20	2.2
6	9.1	9.7	82	42	e25	35	18	20	9.6	8.6	15	2.6
7	8.3	12	37	126	e24	34	16	18	9.3	11	9.8	2.6
8	8.0	9.7	33	47	e23	46	18	17	11	13	6.2	2.4
9	8.4	9.6	27	35	e23	133	29	18	8.9	8.9	5.6	2.2
10	10	37	42	31	25	50	65	20	8.6	8.0	4.2	2.3
11	10	19	124	30	27	39	27	20	9.4	21	4.4	2.1
12	8.4	12	48	38	e23	37	23	19	79	6.0	6.7	1.9
13	7.4	10	34	34	e21	35	80	21	27	8.9	4.3	3.3
14	7.8	9.6	31	38	e21	34	45	18	17	6.0	3.8	4.3
15	7.1	9.3	32	38	e22	32	29	17	14	5.4	2.9	3.5
16	6.7	9.3	29	47	47	31	23	17	12	5.5	3.2	2.0
17	7.0	8.6	30	64	36	32	22	18	11	4.6	3.6	16
18	6.5	9.4	33	42	31	32	20	22	11	70	3.0	8.0
19	6.5	11	28	36	29	29	26	25	9.2	7.9	2.5	3.0
20	15	9.2	24	133	31	26	28	22	9.1	10	2.3	2.1
21	20	47	23	216	35	29	25	16	8.4	6.0	2.6	2.2
22	9.6	182	23	77	31	29	29	14	14	5.8	2.2	17
23	12	39	23	62	27	26	22	14	8.1	8.9	2.4	29
24	24	22	96	56	50	23	21	12	8.0	6.1	3.5	5.6
25	13	18	58	51	40	22	20	19	12	18	2.7	6.7
26	8.9	16	35	46	30	21	19	52	12	106	2.6	67
27	8.1	16	30	43	26	22	18	23	13	52	3.1	23
28	7.7	128	29	39	94	26	22	16	10	14	2.6	7.6
29	7.7	63	27	35	---	25	20	15	9.4	10	2.6	4.5
30	7.6	31	24	33	---	25	24	15	8.2	8.1	2.7	4.3
31	7.8	---	23	33	---	25	---	13	---	6.1	2.0	---
TOTAL	319.1	874.2	1202	1684	889	1117	800	678	409.2	481.7	150.3	239.2
MEAN	10.3	29.1	38.8	54.3	31.7	36.0	26.7	21.9	13.6	15.5	4.85	7.97
MAX	24	182	124	216	94	133	80	74	79	106	20	67
MIN	6.5	8.6	20	24	21	21	16	12	8.0	4.6	2.0	1.9

e Estimated

## HUDSON RIVER BASIN

01376500 SAW MILL RIVER AT YONKERS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.0	29.6	35.8	37.5	43.7	60.9	60.5	42.5	27.2	20.3	17.7	16.1
MAX	135	107	135	150	98.7	134	193	139	138	133	57.3	88.6
(WY)	1956	1978	1984	1979	1973	1983	1983	1989	1972	1984	1955	1975
MIN	.73	.74	3.29	.76	9.67	23.9	11.5	13.0	4.51	1.57	2.88	.84
(WY)	1949	1950	1950	1950	1980	1981	1946	1965	1965	1954	1953	1950

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1945 - 1995

ANNUAL TOTAL	16191.3	8843.7	
ANNUAL MEAN	44.4	24.2	34.1
HIGHEST ANNUAL MEAN			76.5 1984
LOWEST ANNUAL MEAN			8.52 1950
HIGHEST DAILY MEAN	484	Jan 29	216 Jan 21
LOWEST DAILY MEAN	6.5	Oct 18	1.9 Sep 12
ANNUAL SEVEN-DAY MINIMUM	7.0	Oct 13	2.3 Sep 6
10 PERCENT EXCEEDS	102		47
50 PERCENT EXCEEDS	28		20
90 PERCENT EXCEEDS	9.8		4.2
			75
			20
			3.2

## HUDSON RIVER BASIN

01376500 SAW MILL RIVER AT YONKERS, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-72, 1976-77, 1993 to September 1995 (discontinued).

CHEMICAL DATA: 1971 (b), 1972 (a), 1993-94 (c).

MINOR ELEMENTS DATA: 1972, 1976-77, 1993 (a).

PESTICIDE DATA: 1976-77, 1993 (a).

ORGANIC DATA: OC--1976-77 (a), 1993-94 (c).

PCB--1976-77, 1993 (a).

PCN--1993 (a).

NUTRIENT DATA: 1971 (b), 1972, 1976-77 (a), 1993-94 (c).

BIOLOGICAL DATA:

Bacteria--1993 (a).

Phytoplankton--1993 (a).

SEDIMENT DATA: 1993-94 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1993 to September 1995 (discontinued).

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings.

REMARKS.--Interruption of temperature record was due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.5°C, July 14, 1995; minimum (water years 1994-95), 0.0°C on several days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 30.5°C, July 14; minimum, 0.0°C on several days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.0	14.0	14.5	16.0	13.5	15.0	7.5	4.5	5.5	5.0	2.5	3.5
2	16.0	13.0	14.0	14.5	11.0	13.0	7.0	4.5	5.0	5.5	3.0	4.5
3	16.0	11.5	13.0	13.0	10.0	11.5	7.0	4.5	5.5	3.0	1.0	2.0
4	16.5	11.5	13.0	15.0	11.0	12.5	8.0	5.5	6.5	2.5	.5	1.5
5	14.5	12.5	13.0	14.0	13.0	13.5	10.5	7.0	8.5	1.5	.0	.0
6	14.0	11.5	12.5	14.0	13.0	13.5	10.0	9.0	9.5	1.5	.0	.5
7	14.5	11.5	13.0	13.5	11.0	12.0	11.0	8.5	10.0	2.0	.5	1.5
8	16.0	12.5	14.0	13.0	11.0	11.5	8.5	5.0	6.5	3.5	2.0	2.5
9	15.5	14.0	14.5	14.5	11.5	12.5	5.5	4.0	4.5	3.5	1.5	2.0
10	16.0	13.5	14.5	13.0	9.0	11.0	6.0	5.0	5.5	3.0	1.0	1.5
11	14.5	11.5	13.0	10.5	7.0	8.5	6.5	5.5	6.0	2.0	1.0	1.5
12	14.5	10.5	12.0	9.0	6.0	7.5	5.5	2.5	3.5	3.0	1.0	2.0
13	14.0	10.5	11.5	9.5	7.5	8.5	3.5	1.5	2.0	6.0	3.0	4.0
14	13.5	11.5	12.5	12.0	8.0	9.5	5.5	2.0	3.5	7.5	5.0	6.0
15	14.5	11.5	12.5	13.0	9.5	10.5	7.5	3.5	4.5	10.0	7.0	8.5
16	14.0	10.5	12.0	10.5	9.5	10.0	5.0	3.5	4.0	10.5	10.0	10.5
17	13.5	10.5	11.5	11.0	8.5	9.5	5.5	3.5	4.5	10.5	8.5	9.5
18	14.5	11.5	12.5	12.5	9.5	10.5	6.5	5.0	5.5	8.5	7.0	7.5
19	15.0	13.0	14.0	12.5	10.0	11.0	6.5	4.0	5.0	7.0	6.5	6.5
20	16.5	14.0	15.0	10.5	9.5	10.0	5.5	3.5	4.0	6.5	6.0	6.5
21	16.5	14.0	15.0	14.0	9.0	10.5	5.0	3.0	3.5	6.5	6.0	6.5
22	15.5	13.5	14.5	12.5	10.0	11.5	5.5	3.0	4.0	6.0	4.5	5.5
23	15.0	14.5	14.5	10.0	5.5	8.0	5.5	3.5	4.0	4.5	3.5	4.0
24	15.0	13.0	14.0	5.5	4.0	5.0	6.0	4.5	5.5	4.5	3.5	4.0
25	14.5	12.5	13.0	6.0	3.5	4.5	7.5	6.0	6.5	4.5	3.5	4.0
26	13.0	11.5	12.5	6.5	4.0	5.0	6.5	4.5	5.5	4.5	3.0	4.0
27	12.5	11.0	11.5	5.5	3.0	3.5	5.0	3.5	4.5	4.0	2.5	3.0
28	14.0	10.5	11.5	7.5	5.0	6.0	5.5	3.5	4.5	3.0	1.0	2.0
29	12.5	10.5	11.5	8.0	7.0	7.5	5.5	2.5	4.5	2.0	.0	1.0
30	13.0	11.0	12.0	8.5	5.5	7.0	2.5	.0	1.5	3.0	.0	1.0
31	15.5	11.5	12.5	---	---	---	2.5	.0	1.0	3.5	1.0	2.0
MONTH	16.5	10.5	13.0	16.0	3.0	9.5	11.0	.0	5.0	10.5	.0	4.0

## HUDSON RIVER BASIN

01376500 SAW MILL RIVER AT YONKERS, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.0	2.0	3.0	4.0	2.5	3.0	12.5	7.5	9.0	13.0	11.0	12.0
2	5.5	2.5	4.0	5.0	3.0	3.5	10.5	7.5	8.5	13.0	11.0	12.0
3	3.0	1.0	2.0	6.0	2.5	3.5	12.5	6.0	8.5	16.0	10.5	12.5
4	1.0	.0	.5	4.0	3.5	4.0	12.0	7.5	9.0	16.5	12.5	14.0
5	1.0	.0	.0	5.5	3.0	4.0	10.5	5.0	7.0	15.0	13.5	14.0
6	.0	.0	.0	7.0	5.0	6.0	10.5	4.0	6.5	17.5	12.0	14.0
7	1.0	.0	.0	7.5	6.0	6.5	13.0	6.0	8.5	18.0	12.5	14.5
8	1.5	.0	.0	10.0	7.0	8.5	9.0	7.5	8.0	17.5	11.5	14.0
9	1.5	.0	.0	8.0	4.5	6.0	11.0	7.0	8.5	20.0	12.5	14.5
10	2.0	.0	.5	5.0	2.0	3.5	9.5	8.0	9.0	14.5	13.0	14.0
11	3.0	.0	1.0	5.5	3.0	4.0	15.0	9.0	10.0	13.0	12.0	12.5
12	1.5	.0	.0	6.5	4.0	5.5	10.5	9.5	10.0	15.0	12.0	13.0
13	1.0	.0	.0	11.0	6.0	7.5	11.5	10.0	10.5	17.5	12.5	14.5
14	2.5	.0	.5	12.5	8.0	9.5	11.0	10.0	10.5	17.5	13.5	15.0
15	1.5	.0	.5	13.0	9.5	10.5	13.0	9.0	10.5	17.5	14.0	14.5
16	2.0	.5	1.0	14.5	10.0	11.0	14.5	9.0	11.0	20.5	13.0	15.5
17	4.5	1.0	2.5	13.0	10.5	11.5	17.5	9.5	11.5	16.5	15.0	15.5
18	4.5	2.0	3.0	12.0	9.0	10.5	18.0	10.5	12.5	19.5	15.0	16.0
19	5.0	2.0	3.5	12.0	9.0	10.0	16.0	12.0	13.5	15.5	14.0	15.0
20	6.0	3.5	4.5	12.5	9.0	9.5	19.0	13.0	14.5	17.5	13.0	15.0
21	5.0	4.0	4.5	10.5	9.0	9.5	14.5	13.0	14.0	19.0	15.0	17.0
22	5.5	3.0	4.0	10.0	8.0	9.0	15.0	13.0	13.5	21.0	16.0	18.0
23	5.0	3.5	4.0	9.0	7.5	8.0	16.0	12.0	13.5	21.0	15.5	18.0
24	6.5	4.5	5.0	8.5	6.5	7.5	18.0	12.0	14.0	21.5	16.5	18.5
25	4.5	2.0	3.0	10.0	5.5	7.0	19.5	11.5	14.0	20.0	18.0	19.0
26	3.0	1.5	2.5	11.5	6.5	8.5	17.5	12.0	14.5	18.0	16.0	16.5
27	2.0	1.5	1.5	13.0	7.5	9.5	20.5	12.5	15.5	19.5	15.0	17.0
28	2.5	1.5	2.0	13.5	8.0	9.5	20.5	14.5	16.5	18.5	16.0	17.0
29	---	---	---	14.0	7.5	9.5	18.5	15.0	16.5	18.0	16.0	17.0
30	---	---	---	10.0	8.5	9.0	15.0	12.0	13.5	21.5	16.0	17.5
31	---	---	---	11.0	7.5	9.0	---	---	---	25.0	16.5	18.5
MONTH	6.5	.0	2.0	14.5	2.0	7.5	20.5	4.0	11.5	25.0	10.5	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	24.0	18.0	20.0	24.5	20.0	21.5	30.0	23.0	25.0	24.5	21.0	22.5
2	22.5	19.5	20.5	22.0	20.5	21.5	29.0	23.5	25.5	24.0	19.5	21.5
3	22.5	20.0	21.0	23.0	19.0	21.0	29.5	24.5	26.0	23.0	17.5	20.0
4	23.0	19.5	21.0	24.0	19.5	21.5	30.0	24.5	26.5	24.0	18.0	20.5
5	25.0	18.5	20.5	25.0	21.0	22.0	26.5	25.0	25.5	23.0	19.0	21.0
6	25.0	18.5	21.0	25.0	21.0	22.5	25.0	22.0	23.5	24.5	19.5	21.5
7	25.0	19.5	22.0	23.0	21.5	22.0	25.5	20.5	22.0	24.0	20.0	21.5
8	24.5	20.0	22.0	23.5	21.5	22.5	26.5	19.5	22.0	22.0	19.0	20.5
9	24.5	18.5	21.0	23.5	20.0	21.5	26.5	20.0	22.0	21.0	18.0	19.5
10	21.5	18.5	20.0	25.0	20.0	21.5	25.0	20.0	22.0	21.5	17.0	19.0
11	21.0	18.0	19.5	25.5	20.0	21.5	26.5	21.0	23.0	20.5	14.0	17.0
12	21.0	19.0	20.0	25.5	20.5	22.5	26.5	22.5	24.0	20.5	15.0	17.5
13	19.5	18.0	18.5	28.0	20.5	---	28.5	21.5	24.0	21.0	18.5	19.5
14	21.0	17.5	18.5	30.5	22.0	24.5	27.5	22.0	24.0	24.5	19.5	21.0
15	23.5	17.0	19.5	28.5	24.5	26.0	26.0	22.5	24.0	22.0	17.5	19.0
16	23.5	17.0	20.0	26.0	23.0	25.0	28.0	22.5	25.0	19.0	15.5	17.0
17	23.0	18.5	20.5	26.5	22.5	24.0	28.5	24.0	25.5	18.0	16.5	17.5
18	24.0	19.5	21.5	24.5	22.5	23.5	27.5	22.0	24.5	21.5	16.0	18.0
19	27.0	21.0	23.0	28.5	22.5	24.5	26.5	19.5	22.5	18.5	16.0	17.5
20	28.5	22.0	24.0	27.5	22.0	24.5	25.5	18.0	21.5	20.5	15.5	17.5
21	24.0	19.0	21.5	26.5	23.0	24.0	27.0	19.0	22.5	20.0	17.0	18.0
22	24.0	19.0	21.0	27.0	23.0	24.5	25.5	21.0	23.0	19.5	18.0	18.5
23	22.0	18.5	20.0	26.5	23.0	24.5	24.5	18.5	21.5	18.0	14.5	16.5
24	21.5	19.0	20.0	29.5	22.5	25.5	25.5	19.0	21.5	17.5	13.0	15.0
25	23.0	20.0	21.0	28.0	24.0	25.5	24.0	17.5	20.5	17.5	14.5	16.0
26	25.0	20.5	22.0	27.0	24.5	25.0	24.5	17.5	20.5	16.0	15.0	15.0
27	23.0	19.5	21.0	26.5	24.5	25.5	24.0	19.5	21.5	18.5	15.0	16.0
28	24.0	18.5	20.5	27.0	24.0	25.5	24.0	19.0	21.0	18.5	14.5	16.0
29	24.0	18.0	20.5	27.5	24.5	26.0	24.5	18.0	20.5	18.0	13.5	15.5
30	24.0	18.5	21.0	29.0	24.0	26.0	24.0	19.0	21.0	18.0	14.0	15.5
31	---	---	---	30.0	22.5	25.0	24.5	17.5	20.5	---	---	---
MONTH	28.5	17.0	20.5	30.5	19.0	---	30.0	17.5	23.0	24.5	13.0	18.5



## HUDSON RIVER BASIN

## RESERVOIRS IN HUDSON RIVER BASIN

- 01335900 DELTA RESERVOIR.--Lat 43°16'29", long 75°25'43", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi upstream from Rome. DRAINAGE AREA, 148 mi<sup>2</sup>. PERIOD OF RECORD, May 1913 to current year. REVISED RECORDS, WDR NY-85-1: Drainage area. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.  
Dam completed Aug. 3, 1912, and controlled storage for which records are available began May 1, 1913. Usable capacity 2,800 mil ft<sup>3</sup> at crest of spillway, elevation 550.0 ft. Reservoir is used for navigation in Barge Canal. Records provided by New York State Thruway Authority.  
EXTREMES FOR PERIOD OF RECORD (1951-94).--Maximum contents observed, 3,136 mil ft<sup>3</sup>, June 22, 1972, Apr. 17, 1994, elevation, 552.8 ft; minimum observed, 2.0 mil ft<sup>3</sup>, Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 2,872 mil ft<sup>3</sup>, Apr. 14, elevation, 550.6 ft; minimum observed, 1,588 mil ft<sup>3</sup>, Sept. 30, elevation, 538.2 ft.
- 01343900 HINCKLEY RESERVOIR.--Lat 43°18'41", long 75°06'30", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi east of Prospect. DRAINAGE AREA, 372 mi<sup>2</sup>. PERIOD OF RECORD, March 1914 to current year. REVISED RECORDS, WDR NY-85-1: Drainage area. GAGE, water-stage recorder. Datum of gage is Barge Canal datum.  
Reservoir is formed by earth and concrete dam; storage began March 1914. Usable capacity 3,320 mil ft<sup>3</sup> between elevation 1,173.5 and 1,225.0 ft. Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft, and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft. Crest of Ogee spillway is at elevation 1,225.0 ft. Length of spillway is 400 ft. Area of water surface at crest elevation is 4.46 mi<sup>2</sup>. Telephone gage-height telemeter at station. Records provided by New York Power Authority.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 4,041 mil ft<sup>3</sup>, Oct. 2, 1945, elevation, 1,230.2 ft; minimum observed (after initial filling), not determined.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,131 mil ft<sup>3</sup>, Jan. 22, elevation, 1,223.4 ft; minimum observed, 1,070 mil ft<sup>3</sup>, Sept. 22, elevation, 1,199.6 ft.
- 01350100 SCHOHARIE RESERVOIR (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).
- 01363400 ASHOKAN RESERVOIR.--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi south of Shokan. DRAINAGE AREA, 256 mi<sup>2</sup>. PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WDR NY-72-1: 1968. WDR NY-83-1: (M)(m). GAGE, nonrecording gage read daily at 0800. Datum of gage is sea level (levels by Board of Water Supply, City of New York).  
The reservoir is formed by the masonry Olive Bridge Dam across Esopus Creek and a series of earth embankments between hills. The reservoir is divided into two basins separated by a weir containing a gatehouse. Storage began Sept. 9, 1913. Usable capacity of West basin 47,180 mil gal between minimum operating level elevation 495.50 ft and crest of spillway to East basin, elevation 590.00 ft; dead storage below minimum operating level 2,237 mil gal. Usable capacity of East basin 80,678 mil gal between elevation 500.00 ft and crest of spillway, elevation 587.10 ft; no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records provided by Department of Environmental Protection, City of New York.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, in West basin, 54,001 mil gal, Mar. 31, 1951, elevation, 594.33 ft, in East basin, 89,411 mil gal, Mar. 31, 1951, elevation, 592.23 ft; minimum observed, in West basin, 9,098 mil gal, Oct. 24, 1926, elevation, 530.56 ft, in East basin, 8,394 mil gal, Oct. 24, 1926, elevation, 525.91 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, in West basin, 49,873 mil gal, Mar. 11, elevation, 590.43 ft, in East basin, 80,846 mil gal, Apr. 25, elevation, 587.20 ft; minimum observed, in West basin, 30,093 mil gal, Sept. 28, elevation, 568.38 ft, in East basin, 46,758 mil gal, Sept. 30, elevation, 564.46 ft.
- 01366400 RONDOUT RESERVOIR.--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi upstream from Brandy Brook, and 1.3 mi northwest of Lackawack. DRAINAGE AREA, 95.4 mi<sup>2</sup>. PERIOD OF RECORD, May 1951 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by Board of Water Supply, City of New York).  
Reservoir is formed by an earthfill rockfaced dam; storage began May 10, 1951. Initial filling (to crest of spillway) Mar. 28, 1955. Usable capacity 50,048 mil gal between minimum operating level, elevation, 720.00 ft and crest of spillway, elevation, 840.00 ft. Dead storage below elevation 720.00 ft, 2,387 mil gal. Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records provided by New York City Department of Environmental Protection.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 53,458 mil gal, Apr. 5, 1987, elevation, 841.49 ft; minimum observed (after initial filling), 8,335 mil gal, Oct. 15, 1957, elevation, 748.75 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 52,060 mil gal, Apr. 24, elevation, 839.45 ft; minimum observed, 40,969 mil gal, Feb. 27, elevation, 822.19 ft.

## HUDSON RIVER BASIN

## RESERVOIRS IN HUDSON RIVER BASIN--Continued

MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	Elevation (feet) †	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) *	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)
	<u>01335900 Delta Reservoir</u>			<u>01343900 Hinckley Reservoir</u>		
Sept. 30	543.3	2,070		1,216.3	2,380	
Oct. 31	540.5	1,795	-103	1,205.3	1,462	-343
Nov. 30	541.5	1,890	+ 36.7	1,214.6e	2,225e	+294e
Dec. 31	543.0	2,040	+ 56.0	1,216.4	2,390	+ 61.6e
CAL YR 1994	-	-	+ 3.81	-	-	+ 0.32e
Jan. 31	544.0	2,140	+ 37.3	1,218.6	2,610	+ 82.1
Feb. 28	542.6	2,000	- 57.9	1,205.5	1,476	-469
Mar. 31	550.1	2,812	+303	1,218.4	2,590	+416
Apr. 30	550.2	2,824	+ 4.63	1,222.5	3,027	+169
May 31	549.9	2,788	- 13.5	1,221.4	2,904	- 45.9
June 30	548.0	2,570	- 84.1	1,217.2	2,470	-167
July 31	543.2e	2,060e	-190e	1,211.3	1,936	-199
Aug. 31	540.2	1,768	-109e	1,202.9	1,291	-241
Sept. 30	538.2	1,588	- 69.4	1,200.0	1,097	- 74.8
WTR YR 1995	-	-	- 15.3	-	-	- 40.7

Date	Elevation (feet) ††	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ††	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) **	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)
	<u>01363398 Ashokan Reservoir West Basin</u>			<u>01363399 Ashokan Reservoir East Basin</u>			<u>01366400 Rondout Reservoir</u>		
Sept. 30	575.54	35,910		573.03	58,539		826.49	43,614	
Oct. 31	570.49	31,740	-208	569.01	52,843	-284	824.07	42,115	- 74.8
Nov. 30	571.12	32,256	+ 26.6	566.61	49,614	-167	823.28	41,632	- 24.9
Dec. 31	576.25	36,529	+213	572.39	57,617	+399	824.70	42,504	+ 43.5
CAL YR 1994	-	-	- 55.6	-	-	+144	-	-	+ 30.9
Jan. 31	584.30	43,789	+362	578.82	67,266	+482	826.57	43,665	+ 57.9
Feb. 28	584.83	44,281	+ 27.2	582.31	72,813	+307	822.43	41,114	-141
Mar. 31	588.85	48,273	+199	587.00	80,510	+384	831.17	46,580	+273
Apr. 30	589.95	49,368	+ 56.5	586.72	80,041	- 24.2	838.83	51,639	+261
May 31	590.00	49,417	- 2.45	585.40	77,826	-111	837.58	50,797	- 42.0
June 30	584.77	44,225	-268	581.92	72,184	-291	835.11	49,151	- 84.9
July 31	580.40	40,170	-202	578.02	66,032	-307	836.33	49,960	+ 40.4
Aug. 31	574.32	34,881	-264	571.52	56,364	-483	835.16	49,184	- 38.7
Sept. 30	568.55	30,224	-240	564.46	46,758	-495	829.15	45,289	-201
WTR YR 1995	-	-	- 24.1	-	-	- 49.9	-	-	+ 7.10

† Elevation at 2400 hours by interpolation.

\* Elevation at 2400 hours.

e Estimate.

†† Elevation at 0800 hours on last day of month.

\*\* Elevation at 0800 hours on first day of following month.

## HUDSON RIVER BASIN

## DIVERSIONS IN HUDSON RIVER BASIN

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

Undetermined diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin.

Undetermined diversion from Hudson River basin to summit level of Champlain (Barge) Canal.

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records provided by Utica Board of Water Supply.

01362230 Diversion from Schoharie Reservoir (see preceding pages) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924. Records provided by Department of Environmental Protection, City of New York.

01363401 Diversion from Ashokan Reservoir (see preceding pages) on Esopus Creek through the Catskill Aqueduct for municipal supply of New York City. Completed in 1917. Records provided by Department of Environmental Protection, City of New York.

01366399 Diversion from Rondout Reservoir. Total diversion from Rondout Reservoir to Delaware Aqueduct for municipal supply of City of New York. Rondout Reservoir is a collection basin for diversion from: Cannonsville Reservoir, Pepacton Reservoir, and Neversink Reservoir in the Delaware River basin and the Rondout Creek in the Hudson River basin. Diversion began April 1944 by means of temporary emergency connection to aqueduct. Records provided by Bureau of Water Resources Development, City of New York.

01367630 Diversion from Morris Lake, tributary to Wallkill River, by Newtown Water and Sewer Authority for municipal use in New Jersey. After use the water is released into the Paulins Kill (Delaware River basin). Records available from the Delaware River Basin Commission.

## DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Month	01343899 <u>Hinckley Reservoir</u>	01362230 <u>Schoharie Reservoir</u>	01363401 <u>Ashokan Reservoir</u>	01366399 <u>Rondout Reservoir</u>
October.....	32.8	319	882	1,420
November.....	31.3	607	878	1,283
December.....	31.0	674	762	1,131
CAL YR 1994	33.8	458	790	1,225
January.....	32.1	656	640	1,123
February.....	31.8	767	624	1,236
March.....	32.4	250	599	1,338
April.....	31.7	559	784	1,058
May.....	31.1	568	794	1,145
June.....	33.4	190	827	1,149
July.....	36.3	137	702	1,345
August.....	33.4	161	882	1,341
September.....	33.3	159	873	1,330
WTR YR 1995	32.6	418	771	1,242

## HACKENSACK RIVER BASIN

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft upstream from State Highway 59, and 1.0 mi downstream from DeForest Lake.

DRAINAGE AREA.--30.7 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1958 to current year.

REVISIONS.--WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder, stop-log control, and crest-stage gage. Datum of gage is 53.50 ft above sea level (levels by Hackensack Water Co.).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft<sup>3</sup>/s, Feb. 3, 1973, gage height, 9.38 ft, from floodmarks, from rating curve extended above 840 ft<sup>3</sup>/s; maximum gage height, 10.52 ft, May 30, 1984; minimum daily discharge, 2.6 ft<sup>3</sup>/s, June 12, 1965, Sept. 25-26, 30, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 333 ft<sup>3</sup>/s, Mar. 9, gage height, 5.40 ft; minimum daily, 6.2 ft<sup>3</sup>/s, Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	50	37	45	28	105	17	40	36	38	20	16
2	14	45	36	46	26	82	14	36	36	39	18	16
3	11	43	36	38	21	58	12	32	37	38	15	16
4	12	47	62	37	37	40	16	32	37	38	16	16
5	12	33	52	36	39	36	16	38	37	38	19	16
6	12	33	40	37	30	34	14	38	37	38	19	16
7	12	34	39	62	26	31	21	35	37	41	18	16
8	12	33	37	40	22	39	27	41	39	44	17	14
9	13	32	37	38	19	248	36	37	38	43	17	14
10	13	34	63	37	18	95	38	39	38	43	16	14
11	14	29	41	37	18	61	20	37	38	45	16	14
12	14	29	38	39	18	51	32	38	39	43	16	14
13	13	31	38	39	14	44	61	38	36	42	16	15
14	13	32	37	39	14	40	40	37	36	41	16	15
15	13	32	37	40	14	36	36	37	36	41	16	15
16	13	32	37	45	25	34	31	37	36	43	16	13
17	13	32	38	44	27	37	27	37	36	43	16	15
18	13	32	37	39	27	39	23	38	36	40	16	13
19	16	32	36	39	27	31	29	39	37	39	16	13
20	34	32	e36	90	28	28	31	37	37	40	16	13
21	38	79	e36	54	34	31	29	37	37	41	16	13
22	42	32	36	71	34	32	31	38	37	41	16	18
23	44	34	36	70	30	30	27	38	38	38	15	15
24	40	37	47	66	42	31	25	38	39	26	15	12
25	39	37	40	59	40	31	23	40	38	25	15	12
26	42	36	37	55	34	23	20	39	37	28	15	18
27	44	71	37	47	27	23	18	33	37	25	15	14
28	43	44	37	46	88	18	18	37	38	25	16	10
29	43	40	36	43	---	12	18	38	39	27	16	6.2
30	43	38	36	28	---	19	19	37	38	24	15	6.7
31	44	---	36	28	---	20	---	36	---	22	16	---
TOTAL	744	1145	1228	1434	807	1439	769	1154	1117	1139	505	418.9
MEAN	24.0	38.2	39.6	46.3	28.8	46.4	25.6	37.2	37.2	36.7	16.3	14.0
MAX	44	79	63	90	88	248	61	41	39	45	20	18
MIN	11	29	36	28	14	12	12	32	36	22	15	6.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1995, BY WATER YEAR (WY)

	MEAN	31.4	31.9	37.3	42.7	49.8	70.7	73.1	52.6	34.8	33.4	28.6	33.7
MAX	84.2	88.6	121	125	152	151	204	162	162	162	127	83.3	100
(WY)	1990	1976	1973	1978	1973	1961	1983	1989	1972	1984	1966	1975	
MIN	7.27	7.59	5.63	8.95	10.3	6.95	9.61	7.04	12.7	11.6	12.3	9.34	
(WY)	1967	1967	1967	1967	1967	1981	1966	1965	1981	1977	1981	1962	

e Estimated

## HACKENSACK RIVER BASIN

01376800 HACKENSACK RIVER AT WEST NYACK, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1959 - 1995		
ANNUAL TOTAL	15843.4		11899.9				
ANNUAL MEAN	43.4		32.6		43.5		
HIGHEST ANNUAL MEAN					74.1		1984
LOWEST ANNUAL MEAN					13.4		1981
HIGHEST DAILY MEAN	342	Mar 29	248	Mar 9	1320	Feb 3	1973
LOWEST DAILY MEAN	8.1	Mar 1	6.2	Sep 29	2.6	Jun 12	1965
ANNUAL SEVEN-DAY MINIMUM	9.3	Feb 26	11	Sep 24	3.1	Sep 25	1966
10 PERCENT EXCEEDS	93		44		86		
50 PERCENT EXCEEDS	24		36		24		
90 PERCENT EXCEEDS	13		14		12		



## HACKENSACK RIVER BASIN

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi upstream from Pascack Brook, 4.6 mi upstream from Oradell Dam, and 27.2 mi upstream from mouth.

DRAINAGE AREA.--58.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WDR-NJ-80-1: 1968-79(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 22.51 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by De Forest Lake (since Feb. 1956) and Lake Tappan (since 1965), see Hackensack River basin, reservoirs in. Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River basin, diversions). Water occasionally diverted from Oradell Reservoir to Lake Tappan. Several measurements of water temperature were made during the year. United Water New Jersey gage-height telemeter at station.

COOPERATION.--Gage-height record collected in cooperation with United Water New Jersey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	51	20	120	27	40	95	73	29	77	30	41
2	137	24	20	118	27	35	116	34	29	90	123	24
3	145	21	20	65	26	34	155	33	29	83	160	19
4	141	21	20	32	29	34	163	32	33	76	160	22
5	141	21	54	30	28	33	132	26	55	76	114	21
6	139	45	30	36	28	34	91	27	66	77	26	16
7	139	48	23	91	27	33	88	25	66	78	22	16
8	136	47	21	37	29	41	88	25	66	117	21	17
9	135	47	20	34	56	89	89	25	66	117	24	16
10	132	48	28	33	82	39	72	26	66	103	59	15
11	129	22	52	33	86	37	34	26	69	46	59	14
12	129	20	21	41	119	36	33	25	75	30	59	14
13	128	20	19	70	125	36	53	25	36	33	73	15
14	128	20	19	70	125	36	38	25	34	90	124	15
15	125	20	18	70	108	35	33	25	32	141	124	14
16	126	21	17	75	39	34	33	23	31	144	122	12
17	135	21	17	78	35	34	35	22	31	94	113	14
18	142	21	18	75	35	34	80	24	31	44	104	11
19	138	21	17	71	81	57	93	23	60	23	119	11
20	138	21	17	123	86	102	90	22	101	22	125	9.9
21	136	44	16	50	86	190	91	21	123	21	118	9.5
22	133	61	16	36	84	213	91	62	111	34	110	12
23	133	21	38	33	82	110	90	104	57	93	108	15
24	134	20	135	33	65	90	89	96	55	97	102	12
25	119	20	161	31	34	74	89	67	56	67	95	12
26	108	19	152	31	39	83	88	50	55	63	93	19
27	97	19	139	31	62	94	88	31	55	46	91	14
28	89	78	123	29	88	94	89	29	54	28	95	12
29	64	28	113	28	---	94	88	30	54	23	93	11
30	55	22	111	28	---	94	89	30	62	21	72	9.9
31	52	---	110	27	---	94	---	29	---	17	54	---
TOTAL	3798	912	1585	1659	1738	2083	2503	1115	1687	2071	2792	463.3
MEAN	123	30.4	51.1	53.5	62.1	67.2	83.4	36.0	56.2	66.8	90.1	15.4
MAX	145	78	161	123	125	213	163	104	123	144	160	41
MIN	52	19	16	27	26	33	33	21	29	17	21	9.5

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1995, BY WATER YEAR (WY)

	MEAN	60.7	71.7	78.4	88.5	91.8	137	139	102	74.0	77.4	70.9	63.4
MAX	312	240	202	251	221	379	438	310	319	339	197	177	
(WY)	1956	1956	1973	1949	1951	1953	1983	1989	1972	1945	1955	1975	
MIN	12.1	17.7	12.6	22.6	23.0	11.2	14.5	20.4	13.4	11.6	11.3	7.87	
(WY)	1942	1950	1981	1982	1967	1981	1981	1981	1957	1954	1944	1953	

## HACKENSACK RIVER BASIN

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1942 - 1995

ANNUAL TOTAL	33783		22406.3				
ANNUAL MEAN	92.6		61.4			87.9	
HIGHEST ANNUAL MEAN						156	1952
LOWEST ANNUAL MEAN						30.9	1981
HIGHEST DAILY MEAN	584	Mar 29	213	Mar 22		2190	May 31 1984
LOWEST DAILY MEAN	16	Dec 21	9.5	Sep 21		5.8	Sep 1 1953
ANNUAL SEVEN-DAY MINIMUM	17	Dec 16	11	Sep 16		6.3	Aug 30 1953
INSTANTANEOUS PEAK FLOW			269	Jan 20		2530	May 17 1989
INSTANTANEOUS PEAK STAGE			2.57	Jan 20		8.08	May 17 1989
INSTANTANEOUS LOW FLOW			8.6	Sep 22		.00	Jan 16 1970
10 PERCENT EXCEEDS	187		125			171	
50 PERCENT EXCEEDS	60		47			59	
90 PERCENT EXCEEDS	22		19			21	

## HACKENSACK RIVER BASIN

## RESERVOIRS IN HACKENSACK RIVER BASIN

01376700 DE FOREST LAKE.--Lat 41°06'23", long 73°58'01", Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.8 mi north of West Nyack, NY. DRAINAGE AREA, 27.5 mi<sup>2</sup>. PERIOD OF RECORD, February 1956 to current year. REVISED RECORDS.--WDR NJ-84-1: Drainage area. GAGE, water-stage recorder. Datum of gage is sea level. REMARKS.--Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Crest of dam topped by two 50 ft Bascule gates, 5 ft high. Capacity 5,670,000,000 gal, elevation, 85.00 ft, top of Bascule gates. Flow regulated by 12-inch Howell-Bunger valve at elevation, 59.25 ft and 24-inch Howell-Bunger valve at elevation, 61.25 ft. Reservoir used for storage and water released by United Water New Jersey for municipal water supply. COOPERATION.--Records provided by United Water New Jersey.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.5 mi north of Old Tappan. DRAINAGE AREA, about 49.0 mi<sup>2</sup>. PERIOD OF RECORD, October 1966 to current year. REVISED RECORDS, WDR NJ-89-1: Capacity. GAGE, water-stage recorder. Datum of gage is sea level. REMARKS.--Reservoir is formed by earthfill dam, completed in 1966. Capacity, 3,853,000,000 gal, elevation, 55.00 ft at top of Bascule gates. Flow regulated by four Bascule gates and one sluice gate. Water is released for diversion at New Milford (diversion discontinued May 1990) and Haworth by United Water New Jersey for municipal water supply. COOPERATION.--Records provided by United Water New Jersey.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.7 mi north of Hillsdale. DRAINAGE AREA, 19.4 mi<sup>2</sup>. PERIOD OF RECORD, December 1929 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. REVISED RECORDS, WDR NJ-89-1: Capacity. GAGE, water-stage recorder. Datum of gage is sea level. REMARKS.--Reservoir is formed by earthfill dam, completed about 1905. The dam was modified in 1984, which increased capacity, 871,000,000 gal, elevation, 95.00 ft at top of Bascule gates. Flow is regulated by two Bascule gates 85 ft long and 6 ft high each and one 24-inch Ball valve. Water is released for diversion at New Milford (diversion discontinued May 1990) and Haworth by United Water New Jersey for municipal supply. COOPERATION.--Records provided by United Water New Jersey.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi<sup>2</sup>. PERIOD OF RECORD, December 1922 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. REVISED RECORDS.--WDR NJ-84-1: Spillway elevation, WDR NJ-89-1: Capacity. GAGE, water-stage recorder. Datum of gage is sea level. REMARKS.--Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 3,507,000,000 gal, elevation, 23.16 ft. Flow regulated by seven sluice gates (7 by 9 ft). Prior to May 1990, water was released for diversion by United Water New Jersey 1 mi downstream from dam for municipal supply. Water is diverted from reservoir at Haworth by United Water New Jersey for municipal supply. COOPERATION.--Records provided by United Water New Jersey.

## MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)
01376700 DE FOREST LAKE				01376950 LAKE TAPPAN		
Sept. 30.....	84.5	5,522	--	49.5	2,051	--
Oct. 31.....	83.3	5,115	-20.3	41.8	388	-83.0
Nov. 30.....	83.2	5,110	-.3	46.9	1,365	50.4
Dec. 31.....	83.5	5,189	4.0	48.8	1,871	25.3
CAL YR 1994	-	-	5.6	-	-	1.6
Jan. 31.....	85.1	5,701	25.6	52.2	2,879	50.3
Feb. 28.....	85.2	5,738	2.0	51.7	2,728	-8.3
Mar. 31.....	85.0	5,678	-3.0	52.5	3,004	13.8
Apr. 30.....	85.1	5,708	1.5	49.9	2,178	-42.6
May 31.....	83.9	5,303	-20.2	51.2	2,581	20.1
June 30.....	81.1	4,443	-44.3	50.4	2,327	-13.1
July 31.....	77.8	3,459	-49.1	48.8	1,869	-22.8
Aug. 31.....	75.3	2,765	-34.7	41.1	305	-78.1
Sept. 30.....	73.7	2,317	-23.1	41.8	401	5.0
WTR YR 1995	-	-	-13.5	-	-	-6.9
Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)
01377450 WOODCLIFF LAKE				01378480 ORADELL RESERVOIR		
Sept. 30.....	91.4	674	--	19.3	2,531	--
Oct. 31.....	88.4	523	-7.5	19.5	2,581	2.5
Nov. 30.....	91.0	655	6.8	21.0	2,954	19.2
Dec. 31.....	90.8	640	-.8	19.0	2,464	-24.5
CAL YR 1994	-	-	-.1	-	-	-2.4
Jan. 31.....	91.1	656	.8	20.3	2,766	-7.8
Feb. 28.....	91.5	677	1.2	19.7	2,625	-7.8
Mar. 31.....	90.9	647	-1.5	19.1	2,488	-6.8
Apr. 30.....	90.8	641	-.3	19.8	2,651	8.4
May 31.....	92.7	741	5.0	20.2	2,760	5.4
June 30.....	93.8	806	3.4	19.9	2,668	-4.7
July 31.....	94.8	859	2.6	19.9	2,667	-.1
Aug. 31.....	89.6	581	-13.9	19.3	2,544	-6.1
Sept. 30.....	88.6	533	-2.5	20.0	2,696	7.9
WTR YR 1995	-	-	.6	-	-	.7

† Elevation at 2400 of the last day of each month.

## HACKENSACK RIVER BASIN

## DIVERSIONS INTO AND FROM HACKENSACK RIVER BASIN

- 01376272 United Water New Jersey diverts water from Sparkill Creek (Hudson River basin) at foot of Danny Lane in Northvale, 300 ft south of New York-New Jersey state line and 0.6 mi upstream of Sparkill Brook. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records provided by United Water New Jersey.
- 01376699 United Water New York diverts water from De Forest Lake for municipal supply in Rockland County, NY. Records provided by United Water New York.
- 01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft downstream from gaging station on Hackensack River at West Nyack, NY (station 01376800, measured flow includes diversions) for municipal supply. Records provided by Board of Water Commissioners of Nyack, NY.
- 01378490 United Water New Jersey diverts water for municipal supply from Oradell Reservoir at Haworth pumping station (station 01378478) 2.0 mi upstream from gaging station on Hackensack River at New Milford and prior to May 1990 from Hackensack River, at New Milford pumping station about 50 ft above gaging station on Hackensack River at New Milford, NJ (station 01378500). Diversion from the New Milford pumping station was discontinued in May 1990. Records provided by United Water New Jersey.
- 01378520 United Water New Jersey diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records provided by United Water New Jersey.
- 01388981 United Water New Jersey diverts water from the Wanaque South pumping station on the Pompton River at Two Bridges, 750 ft upstream from the Passaic River, to Oradell Reservoir. Water can also be diverted from Wanaque Reservoir to Oradell Reservoir in the Hackensack River basin. Figures given herein include diversion from both sources. Formerly diversion was from the Ramapo River (station 01387991). Records provided by United Water New Jersey.
- 01391210 United Water New Jersey diverts water from Saddle River (Passaic River basin) just north of bridge on State Route 4 at Arcola. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records provided by United Water New Jersey.

## DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

MONTH	01376699 UNITED WATER NEW YORK	01376810 WEST NYACK, NY	01378490 UNITED WATER NEW JERSEY
October.....	--	2.88	--
November.....	--	2.87	--
December.....	--	2.87	--
CAL YR 1994	--	2.83	--
January.....	--	3.03	--
February.....	--	3.01	--
March.....	--	2.96	--
April.....	--	2.93	--
May.....	--	2.88	--
June.....	--	2.83	--
July.....	--	2.77	--
August.....	--	2.75	--
September.....	--	2.69	--
WTR YR 1995	--	2.87	--

The following are diversions by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above (station 01378490).

MONTH	01376272 SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	01388981 POMPTON RIVER (PASSAIC RIVER BASIN)	01391210 SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October.....	0	0	12.04	0	0.30
November.....	0	1.63	63.97	0	.23
December.....	0	.56	4.62	0	.17
CAL YR 1994	0	.32	15.20	.68	.28
January.....	0	0	0	0	.15
February.....	0	0	0	0	.19
March.....	0	0	0	0	.25
April.....	0	.50	2.98	3.67	.20
May.....	.77	1.79	61.34	12.54	.41
June.....	.89	1.66	58.53	11.24	2.15
July.....	.97	1.83	66.69	11.45	2.56
August.....	.28	2.59	67.70	6.90	2.53
September.....	.90	2.61	69.80	12.86	3.22
WTR YR 1995	.32	1.10	34.00	4.89	1.03

## PASSAIC RIVER BASIN

01387400 RAMAPO RIVER AT RAMAPO, NY

LOCATION.--Lat 41°08'25", long 74°10'08", Rockland County, Hydrologic Unit 02030103, on right bank, 105 ft downstream from highway bridge on New York State Thruway at Ramapo, 500 ft upstream from local bridge, and 0.3 mi upstream from Torne Brook.

DRAINAGE AREA.--86.9 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1979 to current year.

REVISED RECORDS.--WDR NY-81-1: 1980(m). WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 297.00 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional regulation by Lake Sebago.

AVERAGE DISCHARGE.--16 years, 161 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft<sup>3</sup>/s, Apr. 5, 1984, gage height, 13.82 ft, from rating curve extended above 3,600 ft<sup>3</sup>/s on basis of runoff comparison with station 1.5 mi downstream; minimum discharge, 5.3 ft<sup>3</sup>/s, Aug. 7, 1983, gage height, 1.27 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 6,100 ft<sup>3</sup>/s, Mar. 12, 1936, by computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,050 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 21	1145	1,270	4.66	Mar. 9	1545	*1,470	*4.99

Minimum discharge, 9.0 ft<sup>3</sup>/s, Sept. 11, 12, 13, gage height, 1.33 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	51	225	144	156	228	82	121	44	20	17	14
2	71	52	191	231	139	194	77	126	39	23	17	14
3	61	46	170	236	120	164	72	105	36	18	15	14
4	47	35	153	186	125	149	71	92	34	17	15	13
5	40	31	197	148	136	138	78	87	33	17	18	13
6	35	29	272	130	e110	135	69	93	30	17	37	11
7	31	28	221	239	e100	142	66	87	28	16	29	10
8	28	29	191	277	e90	217	65	79	28	17	21	9.7
9	25	26	160	220	e85	1290	74	72	29	16	17	9.7
10	27	33	155	178	e82	947	127	71	25	16	15	9.6
11	30	38	271	158	e80	502	109	78	23	17	15	9.3
12	27	35	244	151	e78	370	99	79	40	17	15	9.0
13	24	31	198	154	e76	298	233	79	55	17	15	9.2
14	22	29	173	171	e75	257	234	76	44	13	14	9.6
15	22	28	161	190	e72	230	193	71	35	14	17	9.6
16	21	28	148	220	83	210	162	68	30	15	15	9.4
17	20	27	139	239	89	199	129	62	26	16	13	11
18	20	26	145	217	88	177	117	63	25	98	13	11
19	19	26	140	190	85	159	124	67	23	60	12	11
20	20	25	126	387	86	145	137	76	22	33	12	10
21	22	59	119	1200	93	142	121	68	21	26	11	10
22	23	264	119	901	95	153	115	59	20	23	12	14
23	24	183	116	547	93	144	106	50	20	20	12	23
24	40	126	154	406	107	130	98	44	18	20	13	18
25	40	101	208	325	126	117	91	51	17	20	14	15
26	32	91	167	270	113	108	84	72	17	20	14	16
27	29	81	140	238	102	101	79	73	17	20	14	23
28	30	347	128	220	155	94	77	63	17	18	14	20
29	34	464	120	196	---	88	77	56	15	26	13	18
30	46	279	105	174	---	85	74	57	15	23	13	17
31	48	---	89	164	---	85	---	53	---	18	13	---
TOTAL	1016	2648	5145	8707	2839	7398	3240	2298	826	711	485	391.1
MEAN	32.8	88.3	166	281	101	239	108	74.1	27.5	22.9	15.6	13.0
MAX	71	464	272	1200	156	1290	234	126	55	98	37	23
MIN	19	25	89	130	72	85	65	44	15	13	11	9.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1995, BY WATER YEAR (WY)

	MEAN	88.0	158	206	159	195	314	342	206	107	53.2	51.9	55.0
MAX	352	281	642	281	424	774	802	704	267	212	270	206	
(WY)	1990	1986	1984	1995	1981	1983	1984	1989	1982	1984	1990	1987	
MIN	14.5	19.8	39.9	16.8	46.8	122	84.9	74.1	27.1	13.7	10.7	10.8	
(WY)	1985	1985	1981	1981	1980	1981	1985	1995	1987	1993	1981	1981	

e Estimated



## PASSAIC RIVER BASIN

01387400 RAMAPO RIVER AT RAMAPO, NY--Continued

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1979 - 1995

ANNUAL TOTAL	57291		35704.1				
ANNUAL MEAN	157		97.8			161	
HIGHEST ANNUAL MEAN						284	1984
LOWEST ANNUAL MEAN						80.4	1985
HIGHEST DAILY MEAN	1260	Mar 29	1290	Mar 9		6300	Apr 5 1984
LOWEST DAILY MEAN	16	Aug 11	9.0	Sep 12		7.9	Sep 20 1983
ANNUAL SEVEN-DAY MINIMUM	17	Aug 8	9.4	Sep 10		8.1	Sep 1 1981
10 PERCENT EXCEEDS	407		217			344	
50 PERCENT EXCEEDS	87		65			86	
90 PERCENT EXCEEDS	22		14			17	

## PASSAIC RIVER BASIN

01387420 RAMAPO RIVER AT SUFFERN, NY

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 264.44 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow affected by diversion from United Water New York well field upstream from station and by occasional regulation by Lake Sebago.

AVERAGE DISCHARGE.--16 years, 166 ft<sup>3</sup>/s, unadjusted.

COOPERATION.--Figures of pumpage from well field provided by United Water New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft<sup>3</sup>/s, Apr. 5, 1984, gage height, 15.38 ft, from rating curve extended above 5,400 ft<sup>3</sup>/s; minimum discharge, 1.7 ft<sup>3</sup>/s, Sept. 7, 1995, gage height, 1.04 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 6,600 ft<sup>3</sup>/s, Mar. 12, 1936, by computation of flow over dam at site 0.65 mi upstream, drainage area, 90.6 mi<sup>2</sup>.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum(\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 21	1200	1,490	6.48	Mar. 9	1615	*1,630	*6.78

Minimum discharge, 1.7 ft<sup>3</sup>/s, Sept. 7, gage height, 1.04 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	41	268	177	167	264	85	148	37	13	13	13
2	68	43	228	277	145	217	78	149	31	15	13	13
3	57	38	202	271	124	180	72	122	29	9.9	12	12
4	43	28	175	215	e130	156	73	105	27	10	12	12
5	36	23	230	179	e145	143	80	99	25	11	18	12
6	30	21	321	162	e120	143	69	107	22	12	36	4.9
7	26	21	253	286	e110	153	65	97	20	12	28	2.3
8	23	20	220	319	e100	250	64	84	19	12	19	3.1
9	20	18	185	247	e94	1430	76	76	20	11	15	3.1
10	21	25	175	212	e90	1030	139	76	16	10	13	3.3
11	23	32	323	189	e88	562	115	86	15	11	14	3.3
12	20	28	291	181	e85	418	107	88	33	11	14	3.1
13	17	24	233	196	e80	345	275	88	46	11	13	3.7
14	15	22	206	216	e76	295	266	80	34	9.2	12	4.2
15	15	22	189	236	e72	262	220	73	25	10	16	3.9
16	14	21	166	265	87	237	188	69	20	9.5	12	3.9
17	13	20	156	286	93	226	144	63	17	11	13	5.8
18	12	20	164	248	88	206	128	67	14	95	12	5.6
19	12	20	154	223	87	180	141	70	13	52	12	4.7
20	13	19	137	499	91	161	154	80	12	26	13	4.1
21	15	72	129	1400	101	163	129	69	11	18	12	3.9
22	16	332	126	1030	99	179	125	56	11	15	12	9.2
23	17	218	120	638	93	161	115	47	12	13	12	18
24	32	142	172	470	118	140	107	40	10	13	12	13
25	33	111	228	381	135	126	99	53	12	13	13	12
26	25	97	184	320	114	115	89	82	11	14	13	14
27	22	84	147	272	99	106	82	76	11	15	13	19
28	24	418	134	247	183	96	83	60	10	13	13	14
29	26	560	125	221	---	90	84	54	7.6	21	12	11
30	38	342	105	198	---	88	81	53	5.9	17	13	10
31	37	---	95	179	---	90	---	45	---	12	13	---
TOTAL	816	2882	5841	10240	3014	8212	3533	2462	576.5	525.6	448	245.1
MEAN	26.3	96.1	188	330	108	265	118	79.4	19.2	17.0	14.5	8.17
MAX	68	560	323	1400	183	1430	275	149	46	95	36	19
MIN	12	18	95	162	72	88	64	40	5.9	9.2	12	2.3
‡	12	13	15	14	13	13	15	14	11	8.6	9.0	4.2

e Estimated

‡ Diversion, in cubic feet per second, by pumpage from well field upstream of station.

## PASSAIC RIVER BASIN

01387420 RAMAPO RIVER AT SUFFERN, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	89.3	169	212	168	205	325	356	217	104	50.3	52.3	56.2
MAX	389	323	693	330	475	816	862	777	269	234	305	219
(WY)	1990	1989	1984	1995	1981	1983	1984	1989	1982	1984	1990	1987
MIN	11.0	17.1	29.6	6.84	49.7	128	77.1	79.4	19.2	8.03	7.40	8.17
(WY)	1985	1985	1981	1981	1980	1981	1985	1995	1995	1993	1993	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1979 - 1995			
ANNUAL TOTAL	59656.4				38795.2							
ANNUAL MEAN	163				106				166			
ANNUAL MEAN (+)	12				12							
HIGHEST ANNUAL MEAN									295			
LOWEST ANNUAL MEAN									78.2			
HIGHEST DAILY MEAN	1320				Mar 29				7110			
LOWEST DAILY MEAN	6.9				Aug 12				2.3			
ANNUAL SEVEN-DAY MINIMUM	8.3				Aug 8				3.1			
10 PERCENT EXCEEDS	433				247				359			
50 PERCENT EXCEEDS	88				67				85			
90 PERCENT EXCEEDS	13				11				13			

+ Diversion, in cubic feet per second, by pumpage from well field upstream of station.

## PASSAIC RIVER BASIN

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft upstream from bridge on U.S. Highway 202, 2.5 mi northeast of Suffern, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--12.3 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1958 to March 1995 (discontinued).

REVISED RECORDS.--WDR NY-79-1: 1977(P). WDR NY-87-1: 1986.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 321.57 ft above sea level. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft downstream, at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation from unknown source. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--36 years (water years 1959-94), 24.2 ft<sup>3</sup>/s, 26.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft<sup>3</sup>/s, Nov. 8, 1977, gage height, 9.91 ft, from rating curve extended above 850 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 9.91 ft; minimum discharge, 0.05 ft<sup>3</sup>/s, Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 20	1600	*342	*4.36	No other peak greater than base discharge.			
Minimum discharge, 0.30 ft <sup>3</sup> /s, Nov. 9; minimum gage height, 1.41 ft, Oct. 14, 15, 16.							

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.8	28	21	19	39	---	---	---	---	---	---
2	3.7	4.4	22	35	18	29	---	---	---	---	---	---
3	2.8	1.9	19	25	16	25	---	---	---	---	---	---
4	2.2	1.7	16	20	e15	23	---	---	---	---	---	---
5	2.3	1.7	38	17	e14	21	---	---	---	---	---	---
6	2.8	1.3	41	16	e13	22	---	---	---	---	---	---
7	2.6	1.2	28	59	e12	22	---	---	---	---	---	---
8	2.0	1.2	23	39	e12	31	---	---	---	---	---	---
9	1.7	1.2	20	28	e11	123	---	---	---	---	---	---
10	1.6	2.2	20	23	11	58	---	---	---	---	---	---
11	1.4	2.3	51	21	12	44	---	---	---	---	---	---
12	1.4	1.8	31	21	e10	37	---	---	---	---	---	---
13	1.3	1.6	25	22	e9.2	32	---	---	---	---	---	---
14	1.3	1.6	22	25	e8.8	27	---	---	---	---	---	---
15	1.3	1.5	20	26	e8.5	25	---	---	---	---	---	---
16	1.4	1.4	18	28	12	23	---	---	---	---	---	---
17	1.4	1.2	18	30	13	23	---	---	---	---	---	---
18	1.6	1.1	19	25	12	20	---	---	---	---	---	---
19	1.8	1.0	16	23	12	18	---	---	---	---	---	---
20	1.9	1.0	15	124	13	17	---	---	---	---	---	---
21	2.2	23	13	201	15	19	---	---	---	---	---	---
22	2.4	84	13	96	15	18	---	---	---	---	---	---
23	2.8	32	12	65	13	16	---	---	---	---	---	---
24	2.7	19	17	52	20	15	---	---	---	---	---	---
25	2.2	15	18	43	19	14	---	---	---	---	---	---
26	2.0	13	15	36	16	13	---	---	---	---	---	---
27	1.7	11	13	31	14	12	---	---	---	---	---	---
28	1.8	94	13	27	39	11	---	---	---	---	---	---
29	1.4	71	12	24	---	11	---	---	---	---	---	---
30	1.2	40	10	21	---	11	---	---	---	---	---	---
31	1.3	---	9.6	20	---	11	---	---	---	---	---	---
TOTAL	60.5	436.1	635.6	1244	402.5	810	---	---	---	---	---	---
MEAN	1.95	14.5	20.5	40.1	14.4	26.1	---	---	---	---	---	---
MAX	3.7	94	51	201	39	123	---	---	---	---	---	---
MIN	1.2	1.0	9.6	16	8.5	11	---	---	---	---	---	---
CFSM	.16	1.18	1.67	3.26	1.17	2.12	---	---	---	---	---	---
IN.	.18	1.32	1.92	3.76	1.22	2.45	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995, BY WATER YEAR (WY)

	13.1	25.7	29.3	27.2	31.4	45.1	42.0	30.5	17.6	10.1	8.76	9.49
MEAN	13.1	25.7	29.3	27.2	31.4	45.1	42.0	30.5	17.6	10.1	8.76	9.49
MAX	43.4	100	88.8	104	76.2	113	115	105	82.7	45.4	37.9	57.3
(WY)	1990	1978	1984	1979	1970	1983	1983	1989	1972	1984	1990	1971
MIN	1.94	2.31	5.72	2.02	7.68	15.0	8.14	12.5	3.92	1.31	.90	.68
(WY)	1981	1965	1981	1981	1980	1985	1985	1965	1991	1977	1993	1980

e Estimated

## PASSAIC RIVER BASIN

01387450 MAHWAH RIVER NEAR SUFFERN, NY--Continued

## SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

WATER YEARS 1958 - 1995

ANNUAL TOTAL	7503.7		
ANNUAL MEAN	20.6		
HIGHEST ANNUAL MEAN			24.3
LOWEST ANNUAL MEAN			41.4
HIGHEST DAILY MEAN			11.2
LOWEST DAILY MEAN	156	Mar 29	1040
ANNUAL SEVEN-DAY MINIMUM	1.0	Nov 19	
ANNUAL RUNOFF (CFSM)	1.3	Sep 16	
ANNUAL RUNOFF (INCHES)	1.67		.12
10 PERCENT EXCEEDS	22.69		.48
50 PERCENT EXCEEDS	57		1.97
90 PERCENT EXCEEDS	10		26.81
	1.6		52
			14
			2.3



## PASSAIC RIVER BASIN

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft downstream from State Highway 17, 0.6 mi downstream from Mahwah River, and 1.0 mi west of Mahwah. Water-quality samples collected at bridge, 350 ft upstream from gage, at high flows.

DRAINAGE AREA.--120 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year. October 1902 to February 1905 monthly discharge only, published in WSP 1302. Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used. Gage-height records for 1903-14 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M). WDR NJ-82-1: Drainage area. WDR-NJ-87-1: 1986.

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft above sea level. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft downstream at different datum. Sept. 1, 1922, to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--No estimated daily discharges. Records fair. Flow affected by diversion from United Water New York well field upstream from station (see station 01387420). Occasional regulation from lakes and ponds upstream from the station. Several measurements of water temperature were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 21	1200	*1,790	*6.89	Mar. 9	1530	1,780	6.88

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	71	292	211	210	350	108	193	46	26	16	16
2	95	70	243	338	190	272	100	176	40	35	15	14
3	75	57	210	309	164	226	93	141	42	20	15	13
4	57	36	188	232	201	203	92	121	45	17	15	14
5	48	30	311	190	185	189	99	113	38	17	31	14
6	42	28	405	166	222	192	88	126	31	18	41	7.6
7	38	29	283	441	177	201	85	110	29	19	33	2.7
8	36	28	238	416	133	317	86	95	27	19	21	2.8
9	32	24	201	285	122	1580	103	86	30	17	17	3.3
10	34	48	212	232	116	1180	190	91	25	17	14	3.9
11	36	51	429	204	115	670	144	104	23	28	15	3.5
12	30	41	339	203	110	502	129	107	62	19	15	3.3
13	27	34	255	218	108	416	372	107	62	17	14	6.3
14	25	32	222	249	94	357	331	93	46	15	13	5.0
15	24	30	204	269	89	314	261	86	35	17	19	3.8
16	23	29	184	308	124	283	217	80	28	16	13	4.0
17	23	28	180	340	127	268	175	77	25	19	15	18
18	20	26	190	276	120	238	155	83	26	124	13	6.4
19	19	27	173	244	117	212	179	87	23	58	12	5.1
20	26	27	155	701	125	193	191	94	20	29	14	4.3
21	28	186	148	1680	140	200	163	78	19	22	13	3.7
22	27	525	144	1230	136	212	157	65	24	18	12	36
23	37	305	137	780	125	193	143	56	20	15	13	27
24	54	190	190	578	161	173	131	50	19	16	12	14
25	48	142	246	470	180	155	121	74	38	19	15	13
26	36	119	196	393	150	143	109	132	26	27	15	43
27	32	103	166	336	130	133	101	96	22	19	14	27
28	33	631	150	302	276	121	102	73	20	15	13	17
29	34	756	141	267	---	114	100	67	16	25	13	13
30	54	414	121	237	---	112	103	65	13	20	13	11
31	53	---	110	222	---	113	---	56	---	15	13	---
TOTAL	1224	4117	6663	12327	4147	9832	4428	2982	920	758	507	355.7
MEAN	39.5	137	215	398	148	317	148	96.2	30.7	24.5	16.4	11.9
MAX	95	756	429	1680	276	1580	372	193	62	124	41	43
MIN	19	24	110	166	89	112	85	50	13	15	12	2.7
CFSM	.33	1.14	1.79	3.31	1.23	2.64	1.23	.80	.26	.20	.14	.10
IN.	.38	1.28	2.07	3.82	1.29	3.05	1.37	.92	.29	.23	.16	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1995, BY WATER YEAR (WY)

	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
MEAN	141	222	274	263	278	446	404	257	151	97.0	102	108
MAX	954	736	873	877	701	1151	1055	994	735	602	755	478
(WY)	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
MIN	13.8	24.4	43.4	16.5	70.8	144	88.4	79.5	30.7	15.8	11.3	11.1
(WY)	1942	1965	1981	1981	1980	1985	1985	1905	1995	1993	1993	1964

## PASSAIC RIVER BASIN

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1903 - 1995	
ANNUAL TOTAL	80222		48260.7			
ANNUAL MEAN	220		132		228	
HIGHEST ANNUAL MEAN					461	1903
LOWEST ANNUAL MEAN					99.5	1985
HIGHEST DAILY MEAN	1580	Mar 29	1680	Jan 21	8920	Oct 9 1903
LOWEST DAILY MEAN	12	Aug 12	2.7	Sep 7	1.2	Aug 12 1993
ANNUAL SEVEN-DAY MINIMUM	17	Aug 7	3.7	Sep 7	3.7	Sep 7 1995
INSTANTANEOUS PEAK FLOW			1790	Jan 21	a15500	Apr 5 1984
INSTANTANEOUS PEAK STAGE			6.89	Jan 21	13.35	Apr 5 1984
INSTANTANEOUS LOW FLOW			2.2	Sep 7	.20	Aug 11 1993
ANNUAL RUNOFF (CFSM)	1.83		1.10		1.90	
ANNUAL RUNOFF (INCHES)	24.87		14.96		25.84	
10 PERCENT EXCEEDS	585		288		505	
50 PERCENT EXCEEDS	129		83		137	
90 PERCENT EXCEEDS			14		28	

a From rating curve extended above 6,500 ft<sup>3</sup>/s.

## DELAWARE RIVER BASIN

01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY

LOCATION.--Lat 42°08'41", long 74°39'14", Delaware County, Hydrologic Unit 02040102, on right bank at downstream side of bridge on Fair Street at intersection with Main Street at Margaretville, 0.2 mi upstream from unnamed tributary, and 1.6 mi downstream from Dry Brook.

DRAINAGE AREA.--163 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR NY-87-1: 1948(M), 1951(P), 1953(M), 1955-56(M), 1974-75(M), 1977(M), 1978(P), 1980-81(M), 1986(M).

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft above sea level. Prior to Sept. 9, 1937, nonrecording gage and Sept. 9, 1937 to Aug. 17, 1944, water-stage recorder, at same site at datum 1.00 ft higher.

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

AVERAGE DISCHARGE.--58 years, 303 ft<sup>3</sup>/s, 25.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,600 ft<sup>3</sup>/s, Nov. 25, 1950, gage height, 13.84 ft, from rating curve extended above 8,700 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow at gage height 12.88 ft and does not include undetermined amount of flow bypassing gaging station; minimum discharge, 5.0 ft<sup>3</sup>/s, Aug. 5, 1964; minimum gage height, 0.89 ft, Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2100	*2,570	*6.50				

Minimum discharge, 7.8 ft<sup>3</sup>/s, Aug. 31, gage height, 1.63 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	74	383	491	269	e280	230	224	104	41	22	12
2	240	185	343	432	245	e240	210	208	98	51	21	12
3	203	142	309	340	198	e225	193	192	123	40	24	12
4	183	116	280	299	195	e220	244	176	119	36	22	11
5	172	109	448	e240	182	e220	e235	182	104	33	32	10
6	159	110	543	e250	e150	258	e175	176	95	32	53	9.4
7	147	118	477	432	e140	319	e200	156	88	52	37	9.1
8	136	113	474	326	e140	1220	197	142	84	56	28	8.5
9	130	111	407	274	e130	1580	218	135	81	41	22	12
10	141	124	393	e220	e125	1080	267	135	75	35	20	16
11	126	115	483	e220	e120	804	223	137	88	32	19	14
12	114	109	e380	269	e110	679	222	139	123	32	19	13
13	107	107	e315	446	e120	783	647	130	118	28	18	15
14	103	106	e285	403	e120	869	520	119	92	26	17	15
15	98	104	e265	533	e110	899	493	117	85	25	28	14
16	93	101	e250	688	e115	952	447	112	75	24	23	13
17	88	98	e235	599	e120	876	398	106	70	37	19	14
18	83	97	e225	525	e110	740	362	106	65	64	17	14
19	83	97	e210	477	e110	615	526	107	61	41	15	13
20	85	94	e200	854	130	527	424	104	58	32	14	12
21	83	103	192	1060	139	537	391	96	54	28	13	11
22	78	157	181	889	e110	549	394	89	50	26	12	16
23	75	128	175	746	120	460	357	84	49	25	11	50
24	73	118	647	635	241	404	328	84	47	30	10	31
25	70	115	783	542	e155	361	302	125	47	52	9.7	24
26	68	e115	646	471	e135	327	278	106	54	75	9.2	22
27	66	e105	e520	412	139	300	261	103	52	44	9.1	22
28	65	458	e460	e320	345	278	272	89	43	58	9.1	20
29	63	569	e440	e290	---	260	246	93	39	41	8.6	17
30	59	432	e310	e280	---	258	224	153	37	32	8.5	16
31	58	---	e310	284	---	256	---	120	---	25	8.7	---
TOTAL	3485	4530	11569	14247	4323	17376	9484	4045	2278	1194	578.9	478.0
MEAN	112	151	373	460	154	561	316	130	75.9	38.5	18.7	15.9
MAX	240	569	783	1060	345	1580	647	224	123	75	53	50
MIN	58	74	175	220	110	220	175	84	37	24	8.5	8.5
CFSM	.69	.93	2.29	2.82	.95	3.44	1.94	.80	.47	.24	.11	.10
IN.	.80	1.03	2.64	3.25	.99	3.97	2.16	.92	.52	.27	.13	.11

e Estimated

## DELAWARE RIVER BASIN

01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	170	307	365	306	321	556	730	405	199	111	78.9	104
MAX	1059	761	1191	924	1144	1486	1808	879	554	538	674	685
(WY)	1956	1952	1974	1979	1981	1977	1958	1989	1972	1938	1955	1938
MIN	9.24	10.1	86.4	54.9	55.0	181	187	129	42.9	17.2	13.6	8.52
(WY)	1965	1965	1965	1961	1980	1965	1946	1987	1965	1965	1993	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1937 - 1995			
ANNUAL TOTAL	117320				73587.9							
ANNUAL MEAN	321				202				303			
HIGHEST ANNUAL MEAN									489			
LOWEST ANNUAL MEAN									138			
HIGHEST DAILY MEAN	3560				1580				10000			
LOWEST DAILY MEAN	37				8.5				6.0			
ANNUAL SEVEN-DAY MINIMUM	45				9.0				6.8			
ANNUAL RUNOFF (CFSM)	1.97				1.24				1.86			
ANNUAL RUNOFF (INCHES)	26.77				16.79				25.25			
10 PERCENT EXCEEDS	649				486				694			
50 PERCENT EXCEEDS	157				119				166			
90 PERCENT EXCEEDS	62				17				29			

## DELAWARE RIVER BASIN

01414500 MILL BROOK NEAR DUNRAVEN, NY

LOCATION.--Lat 42°06'22", long 74°43'51", Delaware County, Hydrologic Unit 02040102, on left bank 0.4 mi upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi southwest of Dunraven.

DRAINAGE AREA.--25.2 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937. WDR NY-82-1: Drainage area. WDR NY-84-1: 1979-83.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,298.54 ft Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

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

AVERAGE DISCHARGE.--58 years, 54.5 ft<sup>3</sup>/s, 29.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft<sup>3</sup>/s, Sept. 21, 1938, from rating curve extended above 960 ft<sup>3</sup>/s on basis of velocity-area study; maximum gage height, 9.92 ft, Nov. 25, 1950; minimum discharge observed, 1.2 ft<sup>3</sup>/s, Sept. 25, 26, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 740 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2045	*520	*5.89				

a Recorded; outside gage height was 6.40 ft, from crest-stage gage.

Minimum discharge, 1.6 ft<sup>3</sup>/s, Aug. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	27	84	58	e32	e62	41	38	28	8.0	5.8	3.3
2	42	50	72	e49	e30	e44	38	35	26	7.9	5.5	2.7
3	37	41	62	e42	e24	e40	35	33	32	7.2	5.3	2.8
4	34	37	55	e38	e23	e39	40	30	28	6.6	5.2	2.5
5	33	35	94	e34	e21	e21	37	32	25	6.3	7.9	2.3
6	30	35	104	e38	e18	46	e32	30	23	6.2	11	2.1
7	28	35	99	76	e18	69	e32	28	22	11	7.7	1.9
8	26	33	89	55	e18	273	33	26	20	8.7	6.6	1.9
9	26	31	78	e44	e17	291	38	25	18	7.2	5.7	3.7
10	27	35	74	e36	e17	179	45	26	17	6.3	5.2	2.8
11	24	31	88	e36	e16	126	39	25	21	6.1	4.7	2.9
12	23	30	e64	52	e16	109	43	25	27	6.8	4.6	2.7
13	22	29	e55	75	e15	120	129	23	23	5.8	4.3	3.5
14	21	28	e50	81	e15	131	108	21	21	5.1	4.1	2.8
15	20	27	e45	141	e15	152	95	21	19	4.8	3.9	2.8
16	20	26	e42	215	e17	172	83	19	16	4.4	3.7	2.6
17	19	25	e36	164	e21	157	72	19	15	24	3.7	3.0
18	19	24	e38	132	e24	128	64	19	14	25	3.4	2.6
19	19	23	e36	112	e27	105	77	19	13	13	3.2	2.5
20	19	22	35	185	32	92	68	18	13	9.9	3.1	2.5
21	19	29	33	206	e29	96	65	17	11	8.6	2.9	2.5
22	18	33	31	163	e26	103	63	16	11	7.8	2.6	5.8
23	17	29	29	132	e30	90	58	15	11	7.5	2.6	7.3
24	16	28	53	e90	e50	79	53	16	9.9	9.3	2.4	6.5
25	15	e26	e52	e75	e36	69	49	22	9.9	9.7	2.3	5.6
26	15	e25	e46	e60	e29	63	45	18	10	8.1	2.3	5.2
27	14	e24	e44	e52	e26	57	42	17	9.6	8.8	2.2	4.5
28	14	e95	e40	e45	120	53	44	16	8.6	9.9	2.2	4.1
29	13	139	e37	e39	---	48	39	20	8.1	7.9	2.1	3.8
30	13	104	e36	e36	---	48	37	32	7.6	7.1	2.0	3.4
31	13	---	e38	e34	---	46	---	29	---	6.3	2.4	---
TOTAL	698	1156	1739	2595	762	3108	1644	730	517.7	271.3	130.6	102.6
MEAN	22.5	38.5	56.1	83.7	27.2	100	54.8	23.5	17.3	8.75	4.21	3.42
MAX	42	139	104	215	120	291	129	38	32	25	11	7.3
MIN	13	22	29	34	15	21	32	15	7.6	4.4	2.0	1.9
CFSM	.89	1.53	2.23	3.32	1.08	3.98	2.17	.93	.68	.35	.17	.14
IN.	1.03	1.71	2.57	3.83	1.12	4.59	2.43	1.08	.76	.40	.19	.11

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

MEAN	33.0	63.0	67.2	51.8	55.6	94.5	128	71.5	34.6	21.8	15.3	20.5
MAX	128	158	210	139	206	216	294	171	84.4	136	87.9	116
(WY)	1978	1960	1974	1979	1981	1948	1940	1940	1972	1945	1955	1938
MIN	1.80	1.68	20.0	6.64	12.4	27.3	34.6	23.5	7.49	3.29	2.47	1.77
(WY)	1965	1965	1944	1981	1987	1965	1946	1995	1962	1993	1993	1964

e Estimated



## DELAWARE RIVER BASIN

01414500 MILL BROOK NEAR DUNRAVEN, NY--Continued

## SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1937 - 1995

ANNUAL TOTAL	21118.9		13454.2			
ANNUAL MEAN	57.9		36.9			
HIGHEST ANNUAL MEAN					54.5	
LOWEST ANNUAL MEAN					83.3	1960
HIGHEST DAILY MEAN	653	Apr 7	291	Mar 9	28.1	1965
LOWEST DAILY MEAN	8.2	Jul 14	1.9	Sep 7	1700	Mar 21 1980
ANNUAL SEVEN-DAY MINIMUM	9.4	Jul 12	2.2	Aug 24	1.2	Sep 25 1939
ANNUAL RUNOFF (CFSM)	2.30		1.46		1.4	Nov 12 1964
ANNUAL RUNOFF (INCHES)	31.18		19.86		2.16	
10 PERCENT EXCEEDS	122		89		29.40	
50 PERCENT EXCEEDS	33		26		120	
90 PERCENT EXCEEDS	13		3.7		31	
					5.8	

## DELAWARE RIVER BASIN

01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 ft upstream from bridge on County Highway 1, about 1,700 ft upstream from Pepacton Reservoir, and 5 mi south of Andes.

DRAINAGE AREA.--33.2 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Nov. 1937. Datum of gage is 1,285.87 ft above sea level. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi downstream at different datum.

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

AVERAGE DISCHARGE.--58 years, 58.3 ft<sup>3</sup>/s, 23.85 in/yr.

EXTREMES FOR PERIOD OF RECORD:--Maximum discharge, 4,250 ft<sup>3</sup>/s, Sept. 21, 1938, gage height, 7.12 ft, from rating curve extended above 1,500 ft<sup>3</sup>/s; maximum gage height, 7.92 ft, Jan. 26, 1976 (ice jam); minimum discharge, 0.5 ft<sup>3</sup>/s, Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 30	1315	ice jam	*4.29	Mar. 8	1900	*413	3.98

Minimum discharge, 1.1 ft<sup>3</sup>/s, Aug. 31, gage height, 2.14 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	10	64	e60	e38	e55	40	42	19	33	3.4	3.9
2	18	43	56	e54	e34	e45	36	38	18	38	6.7	2.8
3	14	31	50	e50	e31	e41	33	36	21	16	8.0	2.2
4	13	23	45	e38	e29	e39	48	33	21	11	6.0	1.9
5	12	22	100	e37	e27	e38	e38	37	17	9.3	6.7	1.7
6	12	23	94	e35	e26	50	e37	33	15	8.9	9.7	1.6
7	10	24	101	55	e25	75	e37	28	13	14	6.4	1.4
8	11	20	90	38	e23	270	38	26	12	12	5.0	1.3
9	8.9	20	79	35	e21	269	49	25	11	8.9	4.1	4.6
10	9.0	23	75	e33	e20	208	61	26	10	7.8	3.8	5.2
11	8.3	19	101	e32	e19	151	50	29	11	7.2	3.6	3.3
12	8.0	18	72	46	e18	131	56	29	24	7.7	3.6	2.8
13	9.3	16	e64	88	18	249	165	25	18	6.4	3.6	5.0
14	9.3	14	e52	70	e19	183	128	22	13	5.7	3.1	4.6
15	9.1	16	e44	132	e18	191	115	22	12	6.0	3.1	3.5
16	8.6	16	e36	183	e20	191	97	21	9.1	5.5	3.1	2.8
17	8.4	16	e32	154	e20	161	82	19	8.3	18	2.8	3.0
18	7.9	16	e30	128	e20	134	71	20	7.5	27	2.3	2.9
19	8.6	15	e29	105	e22	111	112	21	7.0	12	2.1	2.4
20	9.1	15	e27	171	28	90	83	19	6.5	8.5	1.9	2.2
21	10	24	e26	180	29	100	78	17	6.0	7.6	1.8	2.2
22	9.5	29	e25	151	e23	108	77	15	5.8	7.1	1.7	7.0
23	8.3	23	e25	125	25	88	68	14	5.7	6.7	1.6	15
24	8.5	21	e48	105	45	77	61	16	5.4	7.2	1.6	6.7
25	8.5	e20	e45	88	e32	68	56	30	8.5	7.2	1.4	5.0
26	8.1	e20	e42	76	e25	62	50	21	13	6.7	1.4	4.1
27	9.0	e18	e41	66	e22	57	45	19	8.1	6.4	1.4	4.0
28	8.2	e50	e41	e58	e60	52	53	16	6.2	5.9	1.5	3.4
29	8.3	84	e38	e54	---	48	43	21	5.2	5.2	1.4	3.0
30	7.7	72	e48	e48	---	47	39	29	4.8	4.2	1.3	2.7
31	7.5	---	e36	e44	---	45	---	21	---	3.7	1.5	---
TOTAL	303.1	761	1656	2539	737	3434	1946	770	342.1	330.8	105.6	112.2
MEAN	9.78	25.4	53.4	81.9	26.3	111	64.9	24.8	11.4	10.7	3.41	3.74
MAX	18	84	101	183	60	270	165	42	24	38	9.7	15
MIN	7.5	10	25	32	18	38	33	14	4.8	3.7	1.3	1.3
CFSM	.29	.76	1.61	2.47	.79	3.34	1.95	.75	.34	.32	.10	.11
IN.	.34	.85	1.86	2.84	.83	3.85	2.18	.86	.38	.37	.12	.13

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

MEAN	34.5	62.6	71.3	60.2	65.3	112	128	70.7	34.7	19.3	17.0	24.8
MAX	158	152	151	174	186	260	284	178	97.7	67.7	91.6	152
(WY)	1978	1960	1973	1979	1981	1977	1956	1984	1972	1945	1955	1938
MIN	1.26	1.43	19.5	8.45	11.9	37.9	36.7	17.9	6.32	2.18	1.71	.96
(WY)	1965	1965	1965	1977	1980	1965	1946	1987	1965	1965	1964	1964

e Estimated

DELAWARE RIVER BASIN  
01415000 TREMPER KILL NEAR ANDES, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1937 - 1995	
ANNUAL TOTAL	21781.8		13036.8			
ANNUAL MEAN	59.7		35.7		58.2	
HIGHEST ANNUAL MEAN					89.6	
LOWEST ANNUAL MEAN					26.6	
HIGHEST DAILY MEAN	564	Apr 7	270	Mar 8	1830	Mar 22 1948
LOWEST DAILY MEAN	7.5	Oct 31	1.3	Aug 30		Sep 17 1964
ANNUAL SEVEN-DAY MINIMUM	8.2	Oct 25	1.4	Aug 25		Sep 17 1964
ANNUAL RUNOFF (CFSM)	1.80		1.08			
ANNUAL RUNOFF (INCHES)	24.41		14.61			
10 PERCENT EXCEEDS	163		88		134	
50 PERCENT EXCEEDS	29		21		33	
90 PERCENT EXCEEDS	11		3.4		5.3	

MEAN	174	126	52.6	88.3	88.9	125	512	358	177	168	179	198
MAX	714	492	787	1258	1208	621	1871	1379	763	739	739	668
(WY)	1962	1978	1978	1978	1976	1975	1993	1984	1972	1962	1956	1964
MIN	4.39	6.86	6.13	6.33	6.62	6.54	13.6	18.6	18.0	18.0	17.9	18.1
(WY)	1955	1966	1984	1964	1992	1981	1965	1966	1974	1974	1974	1974

## DELAWARE RIVER BASIN

01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1955 - 1995	
ANNUAL TOTAL	48285		40785		187	
ANNUAL MEAN	132		112		507	1956
HIGHEST ANNUAL MEAN					65.3	1992
LOWEST ANNUAL MEAN					9340	May 30 1984
HIGHEST DAILY MEAN	4830	Apr 16	633	Sep 13	.60	Oct 10 1954
LOWEST DAILY MEAN	36	Oct 20	36	Oct 20	1.5	Oct 6 1954
ANNUAL SEVEN-DAY MINIMUM	37	Nov 7	37	Nov 7	574	
10 PERCENT EXCEEDS	95		353		53	
50 PERCENT EXCEEDS	49		44		7.4	
90 PERCENT EXCEEDS	38		38			





## DELAWARE RIVER BASIN

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1955 - 1995	
ANNUAL TOTAL	108348		77485			
ANNUAL MEAN	297		212		316	
HIGHEST ANNUAL MEAN					688	1956
LOWEST ANNUAL MEAN					178	1985
HIGHEST DAILY MEAN	5890	Apr 17	831	Mar 9	10800	May 30 1984
LOWEST DAILY MEAN	53	Oct 27	53	Oct 27	7.6	Oct 13 1954
ANNUAL SEVEN-DAY MINIMUM	54	Oct 25	54	Oct 25	8.6	Oct 8 1954
10 PERCENT EXCEEDS	529		521		701	
50 PERCENT EXCEEDS	154		144		170	
90 PERCENT EXCEEDS	84		81		76	

## DELAWARE RIVER BASIN

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1978 to current year.

INSTRUMENTATION.--Water-temperature satellite telemeter provides 15-minute-interval readings. From May 1985 to June 1994, water-temperature satellite telemeter provided one-hour-interval readings. Prior to June 1994, water-temperature digital recorder provided one-hour-interval punches.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1978, 1981-82, 1984-95), 28.0°C, June 30, 1981; minimum (water years 1979-87, 1989-95), 0.0°C on many days during winter periods, except 1989.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 25.5°C, July 14, 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.5	10.0	10.5	11.0	8.5	10.0	3.5	2.5	3.0	1.0	.5	.5
2	11.5	9.0	10.5	10.0	7.0	8.5	3.5	2.0	3.0	2.0	1.0	1.5
3	11.5	7.5	9.5	8.5	6.0	7.0	4.0	2.0	3.0	1.0	.5	.5
4	10.0	9.0	9.5	10.5	8.0	9.0	5.0	3.0	4.0	.5	.0	.5
5	10.5	9.0	9.5	11.5	9.5	10.5	7.0	4.5	6.0	.5	.0	.5
6	11.0	7.5	9.0	11.0	10.0	10.5	7.5	7.0	7.0	.5	.0	.5
7	12.0	8.5	10.0	10.5	7.5	8.5	7.5	5.0	6.5	.5	.5	.5
8	13.5	9.5	11.0	8.5	6.5	7.5	5.0	2.5	3.5	.5	.5	.5
9	13.5	11.0	12.5	8.0	7.5	7.5	2.5	1.5	2.0	.5	.0	.5
10	13.0	10.0	11.5	8.0	5.5	7.0	3.5	2.5	3.0	.5	.0	.5
11	11.0	8.0	9.5	6.0	4.0	5.0	4.0	2.0	3.5	.5	.5	.5
12	10.5	7.0	8.5	5.5	3.0	4.0	2.0	.5	1.0	.5	.5	.5
13	10.0	7.0	8.5	6.5	4.5	5.5	.5	.0	.5	1.0	.5	.5
14	10.5	8.0	9.0	8.5	6.5	7.5	2.5	.5	1.5	4.0	.5	1.5
15	11.0	8.0	9.5	9.0	8.0	8.5	2.5	1.5	2.0	8.0	4.0	6.5
16	10.0	7.0	8.5	8.0	6.5	7.0	2.0	.5	1.0	8.0	6.5	7.5
17	10.0	6.5	8.5	6.5	5.0	6.0	3.0	1.5	2.0	6.5	5.0	5.5
18	11.0	7.5	9.5	8.5	5.5	7.5	4.5	3.0	3.5	5.0	4.5	5.0
19	11.5	9.5	10.5	8.5	6.0	7.5	4.0	2.5	3.5	5.5	5.0	5.0
20	12.0	11.0	11.5	6.5	5.0	5.5	3.5	2.5	2.5	5.5	5.0	5.5
21	12.0	10.5	11.5	6.5	5.0	5.5	3.0	1.5	2.0	5.5	4.5	5.0
22	12.0	10.5	11.5	7.0	4.5	6.0	2.5	1.0	2.0	4.5	2.5	3.5
23	11.5	10.0	10.5	4.5	1.5	3.0	2.5	1.0	2.0	3.0	2.0	2.5
24	11.5	9.0	10.0	1.5	.5	1.0	3.5	2.5	3.0	3.0	2.5	2.5
25	10.0	8.5	9.0	2.5	.5	1.5	5.0	3.5	4.0	3.0	2.0	2.5
26	9.0	7.5	8.5	2.5	1.0	2.0	3.5	2.0	2.5	2.5	1.5	2.0
27	8.5	7.0	7.5	1.0	.0	.5	2.5	1.0	1.5	2.0	.5	1.5
28	9.0	6.5	7.5	3.5	.0	2.0	3.0	1.0	2.0	.5	.0	.5
29	8.5	6.0	7.0	4.0	3.0	3.5	3.0	.0	1.5	.5	.0	.5
30	8.5	6.0	7.0	4.0	3.0	3.5	1.0	.5	.5	.5	.0	.0
31	8.5	7.0	8.0	---	---	---	.5	.5	.5	.5	.0	.5
MONTH	13.5	6.0	9.5	11.5	.0	6.0	7.5	.0	2.5	8.0	.0	2.0

## DELAWARE RIVER BASIN

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	.5	.5	.0	.5	8.0	4.0	6.0	11.0	8.5	9.5
2	2.0	.5	1.0	1.0	.0	.5	7.5	3.5	5.5	10.0	8.0	9.0
3	.5	.0	.0	1.5	.0	.5	7.0	3.0	5.0	11.5	7.5	9.5
4	.0	.0	.0	1.5	.0	.5	7.0	3.5	6.0	13.0	8.0	10.5
5	.0	.0	.0	2.5	.0	1.5	3.5	.5	1.5	12.0	10.0	10.5
6	.0	.0	.0	3.0	2.0	2.5	4.0	.0	2.0	13.0	8.5	10.5
7	.5	.0	.0	3.5	2.5	3.0	6.5	3.0	4.5	14.0	8.0	11.0
8	.5	.0	.0	4.0	.5	3.0	4.5	1.5	2.5	14.5	8.0	11.0
9	.5	.0	.0	1.0	.0	.0	3.5	2.0	2.5	15.0	9.5	12.5
10	.5	.0	.0	1.5	.0	.5	6.0	1.5	4.0	14.0	10.5	12.0
11	.5	.0	.0	3.0	.5	1.5	9.0	3.0	6.0	11.0	9.5	10.5
12	.5	.0	.0	5.0	1.5	3.0	7.5	6.0	7.0	11.5	10.0	10.5
13	.5	.0	.0	7.0	3.5	5.0	7.0	6.0	6.5	15.0	10.0	12.0
14	.5	.0	.0	7.0	4.0	5.5	6.5	5.0	6.0	14.0	12.0	13.0
15	.5	.0	.0	8.0	5.0	6.0	7.0	4.5	5.5	13.5	11.0	12.0
16	.5	.0	.0	8.0	5.5	6.5	8.5	4.0	6.0	16.0	9.5	13.0
17	.5	.0	.0	6.5	5.0	6.0	10.5	5.0	7.5	15.0	12.5	13.0
18	.5	.0	.0	6.5	4.0	5.0	12.5	7.0	9.5	13.0	11.5	12.0
19	.5	.0	.0	6.5	3.5	5.0	11.0	9.0	10.0	12.0	10.5	11.0
20	1.0	.0	.0	7.0	4.5	6.0	12.0	7.5	10.0	15.5	9.0	12.0
21	.0	.0	.0	7.0	5.5	6.0	11.0	9.0	10.0	17.0	11.0	14.0
22	.5	.0	.0	6.0	5.0	5.5	10.5	8.0	9.0	16.5	12.5	14.5
23	.5	.0	.0	5.0	4.0	4.5	11.0	7.0	8.5	17.5	11.5	14.5
24	.5	.0	.0	4.5	3.0	3.5	13.0	7.0	10.0	18.5	14.0	16.5
25	.5	.0	.0	6.0	1.5	3.5	13.0	7.5	10.5	17.5	15.0	16.5
26	.5	.0	.0	7.5	2.5	5.0	12.0	9.0	10.5	16.0	14.0	15.0
27	.0	.0	.0	8.0	3.5	6.0	13.5	8.5	11.0	18.5	12.5	15.5
28	.5	.0	.0	9.0	4.0	6.5	13.5	11.0	12.0	16.5	13.5	15.0
29	---	---	---	9.0	4.0	6.5	12.0	9.5	11.0	15.5	12.5	14.0
30	---	---	---	8.0	6.0	7.0	10.5	8.0	9.5	15.0	13.0	14.0
31	---	---	---	7.5	5.5	6.5	---	---	---	19.0	12.0	15.0
MONTH	2.0	.0	.0	9.0	.0	4.0	13.5	.0	7.0	19.0	7.5	12.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.0	14.5	17.5	21.5	19.0	20.5	21.5	17.0	19.5	10.0	7.5	8.5
2	19.0	16.5	18.0	19.5	16.5	18.0	20.0	16.0	18.0	10.0	7.0	8.5
3	19.5	15.5	17.5	21.0	14.5	17.5	20.0	16.0	18.0	10.0	6.5	8.5
4	20.5	16.0	18.0	20.0	16.0	18.0	21.0	16.5	18.5	9.5	6.5	---
5	20.5	15.0	17.5	19.0	17.0	18.0	19.0	15.5	17.0	10.5	6.5	8.5
6	20.0	15.0	17.5	18.5	16.5	17.5	18.5	14.0	16.0	10.5	---	---
7	21.0	15.5	18.0	17.0	15.5	16.5	21.5	16.0	18.5	10.0	---	---
8	19.5	16.0	17.5	18.5	15.0	16.5	22.0	17.0	19.5	---	---	---
9	19.5	13.5	16.5	18.5	15.0	16.5	21.5	16.5	19.0	---	---	---
10	18.5	15.5	16.5	20.5	15.5	18.0	19.5	17.0	18.0	---	---	---
11	17.5	13.5	15.0	22.0	17.5	19.5	19.0	16.0	17.5	---	---	---
12	16.5	14.0	15.0	23.0	18.0	20.5	18.0	15.5	16.5	---	---	---
13	18.0	12.0	14.5	24.5	18.5	21.5	20.0	14.0	17.0	---	---	---
14	18.5	13.0	16.0	25.5	20.0	22.5	20.5	15.0	18.0	---	---	---
15	20.0	14.0	17.0	25.5	20.5	23.0	20.5	16.5	18.5	---	---	---
16	20.5	14.5	17.5	23.0	19.5	21.5	21.0	16.5	18.5	---	---	---
17	22.0	15.5	18.5	21.5	17.0	18.5	20.5	15.5	18.5	---	---	---
18	22.0	16.5	19.5	20.0	14.0	17.0	18.0	11.5	13.0	9.5	---	---
19	23.0	17.0	20.0	21.0	16.5	18.5	13.0	9.5	11.5	9.5	6.0	8.0
20	23.5	18.0	20.5	20.5	17.5	19.0	13.0	9.5	11.0	8.5	8.0	8.5
21	22.5	17.5	20.0	19.5	17.5	18.5	13.0	9.0	11.0	8.5	7.5	8.0
22	20.5	17.5	18.0	18.5	15.5	17.0	12.5	9.0	11.0	9.0	7.0	8.0
23	19.5	15.0	17.5	18.0	15.5	17.0	11.5	8.5	10.0	8.0	6.5	7.5
24	22.0	16.0	18.5	20.0	16.0	18.0	12.5	8.5	10.5	8.5	6.0	7.5
25	22.5	17.5	19.5	20.0	16.0	18.0	12.0	8.0	10.0	8.0	6.5	7.0
26	20.5	18.0	19.0	19.5	17.0	18.5	10.0	7.5	9.0	7.5	6.5	7.0
27	20.0	16.5	18.0	18.5	16.5	18.0	10.0	8.0	9.0	9.5	6.5	8.0
28	22.0	16.0	19.0	22.0	16.0	18.5	10.5	7.5	9.0	9.0	6.5	8.0
29	23.5	17.0	20.5	22.5	18.5	20.5	11.5	8.0	10.0	9.5	7.0	8.5
30	22.5	19.0	21.0	24.0	18.0	21.0	10.5	7.0	9.0	9.5	7.0	8.5
31	---	---	---	23.5	18.0	20.5	---	6.5	---	---	---	---
MONTH	23.5	12.0	18.0	25.5	14.0	19.0	---	6.5	---	---	---	---

## DELAWARE RIVER BASIN

01420500 BEAVER KILL AT COOKS FALLS, NY

LOCATION.--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 125 ft downstream from highway bridge in Cooks Falls, and 5.5 mi downstream from Willowemoc Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--241 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1913 to current year.

REVISED RECORDS.--WSP 521: Drainage area. WSP 781: 1933(M). WSP 891: 1936-39(M). WSP 1202: 1950.  
WSP 1232: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 1,151.70 ft above sea level. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft upstream at same datum.

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

AVERAGE DISCHARGE.--81 years (water years 1915-95), 553 ft<sup>3</sup>/s, 31.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft<sup>3</sup>/s, Mar. 31, 1951, gage height, 16.02 ft, from rating curve extended above 13,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 15.52 ft; maximum gage height, 17.8 ft, Aug. 24, 1930, from floodmark at site then in use; minimum discharge, 16 ft<sup>3</sup>/s, Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2215	*5,480	*7.97	No other peak greater than base discharge.			

Minimum discharge, 45 ft<sup>3</sup>/s, Sept. 8, gage height, 0.79 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	152	846	627	e440	623	423	446	300	121	135	71
2	412	548	697	678	e400	e370	387	416	269	126	127	63
3	326	432	605	e520	e310	e280	360	380	318	111	160	54
4	288	325	547	e460	e320	e260	397	351	325	102	132	50
5	263	283	1290	e350	e250	e290	e380	357	264	97	171	49
6	240	266	1710	e315	e200	e330	e330	347	237	95	338	48
7	221	280	1200	e530	e260	371	339	309	222	177	207	47
8	207	257	1030	e470	e280	2100	336	283	206	180	152	46
9	203	247	830	e390	e270	3160	346	266	196	129	130	51
10	221	292	758	e290	e270	1690	489	280	183	111	116	59
11	200	276	959	e300	e260	1210	494	305	194	108	111	51
12	182	251	e750	e380	e200	991	501	301	242	103	106	47
13	174	240	e610	e510	e175	1090	1680	273	262	94	100	60
14	169	232	578	720	e185	1410	1210	253	198	88	94	73
15	164	227	522	1390	e175	1860	944	254	180	83	99	59
16	157	219	476	2450	e260	2080	785	243	162	77	94	51
17	151	209	458	1720	e240	1740	681	231	152	317	91	61
18	147	204	442	1300	e200	1340	603	231	142	1590	84	86
19	150	205	415	1080	e195	1060	874	234	136	438	77	66
20	149	195	375	1550	e210	895	811	231	130	276	72	55
21	153	233	349	2220	e210	949	711	218	121	209	68	51
22	143	421	328	1630	e190	1130	774	204	115	176	65	65
23	137	329	316	1270	e190	937	657	191	115	160	62	167
24	134	295	470	1050	e240	792	592	188	109	175	60	102
25	129	272	727	888	e210	682	543	243	112	174	57	85
26	124	267	551	768	e190	603	496	226	229	173	55	75
27	121	e235	e470	e660	e180	549	461	226	307	229	54	75
28	118	1350	e400	e510	389	503	490	203	174	297	54	65
29	115	1770	e325	e460	---	466	450	226	137	217	53	58
30	114	1100	e290	e460	---	454	413	493	121	175	51	53
31	111	---	382	e480	---	476	---	366	---	152	51	---
TOTAL	5743	11612	19706	26426	6899	30691	17957	8775	5858	6560	3226	1943
MEAN	185	387	636	852	246	990	599	283	195	212	104	64.8
MAX	412	1770	1710	2450	440	3160	1680	493	325	1590	338	167
MIN	111	152	290	290	175	260	330	188	109	77	51	46
CFSM	.77	1.61	2.64	3.54	1.02	4.11	2.48	1.17	.81	.88	.43	.27
IN.	.89	1.79	3.04	4.08	1.06	4.74	2.77	1.35	.90	1.01	.50	.30

e Estimated



## DELAWARE RIVER BASIN

01420500 BEAVER KILL AT COOKS FALLS, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	376	597	625	502	490	968	1289	686	380	272	217	242
MAX	1535	1427	1940	1368	2026	2485	2581	1584	1271	1329	1037	946
(WY)	1978	1973	1974	1979	1981	1977	1940	1989	1928	1945	1938	1938
MIN	31.3	42.4	140	93.5	107	289	347	224	107	54.0	40.4	31.8
(WY)	1965	1965	1923	1981	1920	1932	1946	1941	1991	1962	1962	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1913 - 1995			
ANNUAL TOTAL	218533				145396							
ANNUAL MEAN	599				398				553			
HIGHEST ANNUAL MEAN									937			
LOWEST ANNUAL MEAN									277			
HIGHEST DAILY MEAN	6960				3160				14100			
LOWEST DAILY MEAN	101				46				23			
ANNUAL SEVEN-DAY MINIMUM	118				49				26			
ANNUAL RUNOFF (CFSM)	2.48				1.65				2.29			
ANNUAL RUNOFF (INCHES)	33.73				22.44				31.16			
10 PERCENT EXCEEDS	1270				940				1230			
50 PERCENT EXCEEDS	326				260				314			
90 PERCENT EXCEEDS	140				74				84			

## DELAWARE RIVER BASIN

01420500 BEAVER KILL AT COOKS FALLS, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1987 to current year.

INSTRUMENTATION.--Water-temperature satellite and telephone telemeter since June 1986, provides 15-minute-interval readings.

REMARKS.--Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1991, 1993-95), 31.0°C, July 9, 1993; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 29.5°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	10.5	11.0	11.5	9.0	10.5	3.5	2.5	3.0	1.5	.0	.5
2	12.5	10.0	11.0	10.5	7.0	8.5	3.0	1.5	2.5	1.5	.0	1.5
3	11.5	8.0	9.5	8.5	5.5	7.0	3.5	2.0	2.5	.0	.0	.0
4	10.5	8.5	9.5	11.0	8.5	9.5	5.0	3.0	4.0	.0	.0	.0
5	10.5	9.0	9.5	11.5	9.5	10.5	6.0	5.0	5.5	.0	.0	.0
6	10.5	7.5	9.0	11.0	9.5	10.5	6.5	6.0	6.5	.0	.0	.0
7	12.0	8.0	10.0	10.5	7.0	8.5	6.5	4.5	6.0	.0	.0	.0
8	13.0	9.0	11.0	8.0	6.0	7.0	4.5	1.5	2.5	.0	.0	.0
9	13.5	11.0	12.0	8.0	7.0	7.5	2.0	.5	1.5	.0	.0	.0
10	12.5	9.5	11.0	8.0	5.5	7.0	3.0	2.0	2.5	.0	.0	.0
11	10.5	7.5	9.0	5.5	4.0	4.5	3.5	1.5	3.0	.0	.0	.0
12	10.0	6.0	8.0	5.0	3.0	4.0	1.5	.0	.0	.0	.0	.0
13	9.5	6.0	8.0	6.5	4.5	5.5	.5	.0	.0	1.0	.0	.5
14	10.0	7.5	9.0	8.5	6.0	7.0	2.0	.5	1.5	---	---	---
15	11.0	7.5	9.0	9.5	8.0	8.5	2.0	.5	1.5	---	---	---
16	10.0	6.5	8.5	8.0	6.5	7.0	1.0	.0	.5	---	---	---
17	---	6.0	---	6.5	4.5	5.5	2.5	1.0	1.5	---	---	---
18	11.0	8.0	9.5	8.5	6.0	7.5	3.5	2.5	3.0	---	---	---
19	12.0	9.5	11.0	8.5	6.0	7.5	3.0	1.5	2.5	---	---	---
20	12.5	11.5	12.0	6.5	5.0	5.5	2.5	1.5	2.0	---	---	---
21	12.5	11.0	11.5	6.5	5.0	5.5	2.0	.5	1.0	5.0	3.5	4.0
22	12.5	10.5	11.5	7.0	4.5	6.5	2.0	.5	1.0	3.5	2.0	3.0
23	11.5	9.5	10.0	4.5	1.0	3.0	2.0	.5	1.0	2.5	1.5	2.0
24	11.0	8.5	9.5	1.5	.0	.5	3.5	2.0	3.0	2.0	1.5	2.0
25	10.5	8.0	9.0	2.5	.5	1.5	4.5	3.0	4.0	2.5	1.5	2.0
26	8.5	7.0	8.0	2.5	1.0	2.0	3.0	1.5	2.0	2.0	1.0	1.5
27	8.0	6.5	7.5	1.0	.0	.5	2.0	.5	1.0	1.5	.0	.5
28	9.0	6.0	7.5	3.0	.0	1.5	2.5	1.0	1.5	.0	.0	.0
29	8.5	5.5	7.0	3.5	2.5	3.0	2.5	.0	1.5	.0	.0	.0
30	9.0	5.5	7.5	3.5	2.0	3.0	.0	.0	.0	.0	.0	.0
31	9.0	7.5	8.0	---	---	---	.0	.0	.0	1.0	.0	.0
MONTH	---	5.5	---	11.5	.0	6.0	6.5	.0	2.0	---	---	---

## DELAWARE RIVER BASIN

01420500 BEAVER KILL AT COOKS FALLS, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	.0	1.0	.0	.0	.0	7.0	3.5	5.0	10.0	7.5	8.5
2	2.0	.0	1.0	.0	.0	.0	6.5	3.0	4.5	9.0	7.0	7.5
3	.0	.0	.0	.5	.0	.0	6.0	2.0	4.5	11.5	7.0	9.0
4	.0	.0	.0	.5	.0	.0	6.5	3.0	5.5	12.0	7.5	10.0
5	.0	.0	.0	1.0	.0	.5	3.0	.0	1.0	11.0	9.5	10.0
6	.0	.0	.0	1.0	.0	.5	4.0	.0	1.5	12.5	8.0	10.0
7	.0	.0	.0	2.5	1.0	1.5	6.0	2.5	4.0	13.0	7.5	10.0
8	.0	.0	.0	2.5	.0	2.0	4.5	.5	2.0	13.5	6.5	10.0
9	.0	.0	.0	1.0	.0	.0	3.5	1.0	2.5	14.5	8.5	11.5
10	.0	.0	.0	1.5	.0	.5	6.0	1.5	4.0	13.0	10.0	11.0
11	.0	.0	.0	2.5	.0	1.0	8.5	3.0	5.5	10.5	9.0	9.5
12	.0	.0	.0	4.5	1.0	2.5	7.0	5.5	6.0	12.0	9.5	10.5
13	.0	.0	.0	6.5	3.0	4.5	6.0	5.0	5.5	15.0	9.5	12.0
14	.0	.0	.0	6.5	2.0	4.5	6.0	4.5	5.0	13.5	11.5	12.5
15	.0	.0	.0	7.0	3.5	5.5	6.5	4.0	5.0	14.0	11.0	12.0
16	.0	.0	.0	7.0	4.0	5.5	8.0	3.0	5.5	16.5	10.0	13.0
17	.0	.0	.0	6.5	5.0	5.5	9.5	4.0	7.0	15.0	12.5	13.0
18	.0	.0	.0	6.5	3.5	5.0	11.5	6.5	9.0	12.5	11.5	12.0
19	.5	.0	.0	6.5	3.0	5.0	10.5	8.5	9.0	12.0	11.0	11.5
20	.5	.0	.0	6.5	4.0	5.5	11.5	7.0	9.0	16.5	9.5	12.5
21	.0	.0	.0	6.5	5.5	5.5	10.5	8.5	9.0	16.5	11.5	14.0
22	.0	.0	.0	5.5	4.5	5.0	10.0	8.0	9.0	17.0	12.0	14.5
23	.5	.0	.0	5.0	4.0	4.0	10.5	6.5	8.5	18.0	11.5	14.5
24	.0	.0	.0	4.0	2.5	3.5	12.0	6.5	9.0	18.0	14.0	16.5
25	.0	.0	.0	5.0	1.0	3.0	12.0	6.5	9.5	18.0	15.5	16.5
26	.5	.0	.0	7.0	2.0	4.5	11.0	7.5	9.5	16.0	14.0	14.5
27	.0	.0	.0	7.0	3.0	5.0	12.5	7.5	10.0	19.5	12.5	15.5
28	.0	.0	.0	7.5	3.5	5.5	13.0	10.0	11.5	17.0	14.0	15.0
29	---	---	---	8.0	3.0	5.5	11.0	8.5	10.0	17.0	13.0	14.5
30	---	---	---	6.5	5.0	6.0	9.5	7.0	8.5	15.5	13.0	14.0
31	---	---	---	6.5	4.5	5.5	---	---	---	18.5	12.0	15.0
MONTH	2.0	.0	.0	8.0	.0	3.5	13.0	.0	6.5	19.5	6.5	12.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	20.5	14.5	17.5	23.0	20.0	21.5	25.0	19.5	22.5	22.0	19.0	20.5
2	19.0	16.5	18.0	21.5	18.5	20.0	26.0	21.0	23.5	21.5	17.5	19.5
3	21.0	17.0	18.5	23.5	16.0	19.5	26.0	21.5	23.5	22.5	15.5	18.5
4	21.0	16.5	19.0	22.5	17.5	20.0	26.0	22.0	24.0	22.5	15.5	18.5
5	20.5	15.5	18.0	22.5	19.5	21.0	24.0	21.0	22.5	23.5	17.5	20.0
6	20.5	15.5	18.0	21.0	19.5	20.5	23.0	19.5	21.0	24.0	17.5	20.5
7	22.5	16.5	19.0	19.5	18.0	18.5	24.0	19.0	21.0	23.0	18.0	20.5
8	20.0	17.5	18.5	21.0	17.5	19.0	23.5	18.0	20.5	20.5	17.5	19.0
9	21.0	15.0	18.0	20.5	16.5	18.5	23.5	18.0	20.5	17.5	16.0	17.0
10	19.0	15.5	17.0	22.5	16.5	19.5	22.5	18.0	20.5	18.5	14.0	16.0
11	18.5	14.5	16.5	24.0	18.0	21.0	24.0	19.5	21.5	19.0	12.5	15.0
12	18.0	15.0	16.5	24.5	18.5	21.5	23.5	20.5	21.5	19.5	12.5	16.0
13	18.5	13.0	16.0	26.5	19.5	23.0	25.5	19.5	22.0	17.5	16.0	17.0
14	19.0	14.5	17.0	28.0	21.5	24.5	26.0	19.5	22.5	19.5	16.0	17.5
15	20.0	14.5	17.5	29.5	23.5	26.0	26.5	22.5	24.0	19.5	14.5	16.5
16	20.5	14.0	17.5	27.0	23.0	24.5	27.5	22.5	24.5	16.5	12.5	14.5
17	22.5	16.0	19.5	24.0	19.0	22.0	28.0	22.0	24.5	17.0	14.0	15.0
18	23.0	17.0	20.0	21.0	18.0	19.5	26.0	20.5	23.5	18.5	14.5	16.0
19	25.5	18.5	22.0	21.5	18.0	19.5	26.5	20.5	23.0	18.5	13.0	15.5
20	26.5	21.0	23.5	21.0	17.5	19.5	26.0	19.0	22.5	15.5	14.0	15.0
21	25.0	20.5	22.5	20.0	18.5	19.5	26.0	19.0	22.5	16.5	14.5	15.5
22	21.5	19.0	20.0	21.5	18.0	19.5	24.0	19.5	21.5	17.0	15.5	16.0
23	23.0	17.0	19.5	---	---	---	24.0	17.0	20.0	15.5	12.5	14.0
24	22.5	18.0	20.5	23.0	---	---	23.5	17.5	20.0	15.0	11.0	13.0
25	25.0	19.0	21.5	25.0	20.0	22.5	23.0	16.0	19.0	13.5	12.0	12.5
26	22.0	19.0	20.5	23.5	21.5	22.0	21.5	15.5	18.5	14.5	12.5	13.5
27	21.0	18.0	19.0	23.0	20.5	21.5	22.0	17.5	19.5	17.0	13.0	14.5
28	22.5	16.5	19.5	24.0	19.5	21.5	22.5	17.5	20.0	17.5	13.0	15.0
29	23.5	17.0	20.0	25.5	21.0	22.5	24.5	18.5	21.0	16.0	11.0	13.0
30	23.0	18.0	20.5	25.5	20.0	22.5	24.5	18.0	21.0	16.5	11.0	13.0
31	---	---	---	25.5	19.5	22.5	23.5	16.0	19.5	---	---	---
MONTH	26.5	13.0	19.0	---	---	---	28.0	15.5	21.5	24.0	11.0	16.0

## DELAWARE RIVER BASIN

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY

LOCATION.--Lat 41°58'23", long 75°10'28", Delaware County, Hydrologic Unit 02040102, on left bank 3,000 ft upstream from bridge on County Highway 28 at Fishs Eddy, 0.6 mi upstream from Fish Creek, 4.2 mi downstream from Beaver Kill, and 11 mi upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--784 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft above sea level. Prior to Sept. 27, 1928, nonrecording gage and Sept. 26, 1928 to Nov. 1, 1967, water-stage recorder at site 3,000 ft downstream at datum 5.0 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to September 1954, entire flow from 371 mi<sup>2</sup> of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft<sup>3</sup>/s, Aug. 24, 1933, gage height, 20.60 ft, at former site and datum, from rating curve extended above 22,000 ft<sup>3</sup>/s; minimum discharge, 52 ft<sup>3</sup>/s, July 23, 1964, gage height, 1.16 ft, at former site and datum; minimum daily discharge, 68 ft<sup>3</sup>/s, Aug. 28, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft, at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft<sup>3</sup>/s, from rating curve extended above 22,000 ft<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,860 ft<sup>3</sup>/s, Mar. 9, gage height, 7.35 ft; maximum gage height, 8.01 ft, Jan. 11 (ice jam); minimum discharge not determined; minimum daily, about 190 ft<sup>3</sup>/s, Oct. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446	263	1390	e915	e720	e940	684	701	542	283	324	665
2	520	921	1170	e950	e650	e650	625	692	518	300	323	654
3	439	803	1010	e780	e510	e540	587	630	568	277	345	639
4	388	613	899	e700	e480	e500	627	608	589	261	325	629
5	360	527	1730	e520	e430	e520	649	610	508	257	367	626
6	335	491	2630	e500	e360	e600	e550	598	465	258	535	624
7	316	493	1910	e520	e420	e680	e570	545	439	307	404	621
8	300	451	1680	e725	e430	2450	570	509	414	348	325	621
9	296	421	1370	e610	e410	4780	582	489	393	284	286	654
10	308	468	1260	e500	e390	2810	762	503	377	260	269	655
11	292	459	1510	e480	e370	2040	790	541	388	253	278	637
12	274	416	1240	e590	e310	1610	959	550	457	245	279	636
13	264	398	e990	e820	e270	1680	2620	514	509	243	272	714
14	255	392	e950	e1100	e290	2240	2020	486	402	238	262	725
15	249	378	e840	e1900	e300	2740	1590	489	360	244	269	707
16	238	360	e760	e3500	e380	3100	1310	480	343	238	264	697
17	232	346	735	e3100	e370	2700	1130	461	324	327	255	700
18	228	333	708	e2400	e340	2130	1000	462	310	1980	398	725
19	229	332	667	e2000	e330	1660	1380	466	312	702	449	708
20	233	322	606	e2500	e350	1370	1160	465	304	471	445	421
21	241	351	562	e3400	e350	1360	1100	437	294	390	442	388
22	227	604	532	e2850	e340	1680	1110	412	276	360	438	670
23	218	514	509	e2300	e340	1410	982	387	273	334	435	796
24	214	468	641	e1900	e440	1220	935	384	266	344	431	726
25	208	434	974	e1600	e410	1080	871	478	280	356	429	686
26	205	e430	786	e1300	e360	968	798	456	366	385	491	679
27	e200	e375	691	e1100	e350	889	742	450	547	433	498	669
28	e200	e1700	e650	e870	e640	819	770	421	362	503	499	655
29	e195	2780	e590	e790	---	757	734	438	299	414	500	392
30	e195	1800	e380	e760	---	734	676	714	276	354	617	372
31	e190	---	e560	e750	---	748	---	634	---	318	630	---
TOTAL	8495	18643	30930	42730	11340	47405	28883	16010	11761	11967	12084	19091
MEAN	274	621	998	1378	405	1529	963	516	392	386	390	636
MAX	520	2780	2630	3500	720	4780	2620	714	589	1980	630	796
MIN	190	263	380	480	270	500	550	384	266	238	255	372

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1995, BY WATER YEAR (WY)

	787	1096	1118	881	985	1632	2571	1430	779	484	485	548
MEAN	787	1096	1118	881	985	1632	2571	1430	779	484	485	548
MAX	2531	2316	3043	2931	3297	4239	5957	3465	2426	1219	1707	1838
(WY)	1956	1960	1974	1978	1976	1977	1993	1984	1973	1973	1955	1960
MIN	163	458	404	277	213	578	808	432	229	157	136	139
(WY)	1974	1961	1961	1981	1980	1970	1985	1987	1977	1966	1965	1972

e Estimated

## DELAWARE RIVER BASIN

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1955 - 1995	
ANNUAL TOTAL	387597		259339			
ANNUAL MEAN	1062		711		1065	
HIGHEST ANNUAL MEAN					1586	1973
LOWEST ANNUAL MEAN					604	1965
HIGHEST DAILY MEAN	11100	Apr 16	4780	Mar 9	21500	Mar 14 1977
LOWEST DAILY MEAN	190	Oct 31	190	Oct 31	72	Jul 24 1964
ANNUAL SEVEN-DAY MINIMUM	199	Oct 25	199	Oct 25	84	Oct 9 1954
10 PERCENT EXCEEDS	2230		1450		2310	
50 PERCENT EXCEEDS	561		508		640	
90 PERCENT EXCEEDS	272		270		233	



## DELAWARE RIVER BASIN

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.

CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).

MINOR ELEMENTS DATA: 1971-74 (a).

ORGANIC DATA: OC--1974 (a), 1975 (c).

NUTRIENT DATA: 1971-75 (d).

BIOLOGICAL DATA:

Bacteria--1971 (c), 1973-75 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1967 to current year.

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings. Prior to June 1993, water-temperature digital recorder since October 1975, provided one-hour-interval punches. Prior to October 1975, water-temperature recorder provided continuous recordings.

REMARKS.--Water temperature is affected by release of water from upstream reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-75, 1978, 1980-82, 1984, 1986-95), 31.5°C, Aug. 2, 1975; minimum (water years 1968-76, 1978-79, 1981-95), 0.0°C on many days during winter periods, except 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 30.5°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	11.0	11.5	12.0	9.0	10.5	3.5	2.5	3.0	1.0	.0	.5
2	13.0	10.5	11.5	10.5	7.0	8.5	4.0	2.0	3.0	1.0	.0	1.0
3	12.5	8.5	10.5	9.0	6.0	7.5	3.5	2.0	3.0	.0	.0	.0
4	10.5	9.5	10.0	11.0	8.5	10.0	5.0	3.0	4.0	.0	.0	.0
5	10.5	9.0	10.0	12.0	10.0	11.0	6.5	4.5	6.0	.0	.0	.0
6	11.5	8.0	9.5	11.5	10.0	11.0	7.0	6.5	6.5	.0	.0	.0
7	13.0	8.5	10.5	10.5	7.5	9.0	7.0	5.0	6.0	.0	.0	.0
8	14.0	10.0	12.0	9.0	6.5	7.5	5.0	2.0	3.0	.5	.0	.0
9	14.5	12.0	13.0	8.5	7.5	8.0	2.5	1.5	2.0	.5	.0	.0
10	13.0	10.0	11.5	8.5	6.0	7.5	3.5	2.5	3.0	.0	.0	.0
11	12.0	8.5	10.0	6.5	4.0	5.5	3.5	2.0	3.0	.0	.0	.0
12	11.5	7.5	9.5	6.0	3.5	4.5	2.0	.0	.5	.0	.0	.0
13	10.5	7.0	9.0	6.5	5.0	6.0	.5	.0	.0	.0	.0	.0
14	11.0	8.5	9.5	9.0	6.5	7.5	2.0	.5	1.5	4.0	.0	1.5
15	12.0	8.0	10.0	9.5	8.0	9.0	2.5	1.0	1.5	7.0	4.0	6.0
16	11.5	8.0	9.5	8.0	6.5	7.5	1.5	.0	1.0	7.0	6.0	6.5
17	11.0	7.0	9.0	7.5	5.0	6.0	2.5	1.0	1.5	6.0	4.5	5.0
18	11.5	8.5	10.0	9.0	6.5	7.5	4.0	2.5	3.0	4.5	4.0	4.5
19	12.0	10.0	11.0	9.0	6.0	8.0	3.5	2.0	2.5	5.0	4.5	4.5
20	12.5	11.5	12.0	7.0	5.0	6.0	3.0	1.5	2.0	5.0	4.5	5.0
21	12.5	11.5	12.0	7.0	5.0	6.0	2.5	.5	1.5	5.0	3.5	4.5
22	13.0	11.5	12.0	7.5	4.5	6.5	2.5	.5	1.0	3.5	2.0	3.0
23	11.5	10.5	11.0	4.5	1.0	3.0	2.0	.5	1.0	2.5	1.5	2.0
24	13.0	9.5	11.0	2.0	.0	1.0	3.0	1.5	2.5	2.5	2.0	2.0
25	12.0	9.0	10.0	2.5	.5	1.5	4.5	3.0	3.5	2.5	1.5	2.0
26	10.0	8.0	9.0	2.5	1.0	1.5	3.0	1.5	2.5	2.0	1.0	1.5
27	8.5	7.5	8.0	1.0	.0	.5	2.0	.5	1.5	1.5	.0	1.0
28	10.5	7.0	8.5	3.0	.0	2.0	2.5	.5	1.5	.5	.0	.0
29	9.5	6.5	8.0	4.0	3.0	3.5	2.5	.0	1.5	.5	.0	.0
30	9.5	6.5	8.0	3.5	2.5	3.0	.0	.0	.0	.5	.0	.0
31	9.0	7.5	8.5	---	---	---	.0	.0	.0	1.0	.0	.0
MONTH	14.5	6.5	10.0	12.0	.0	6.0	7.0	.0	2.5	7.0	.0	1.5

## DELAWARE RIVER BASIN

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	.0	1.0	.0	.0	.0	8.0	4.0	6.0	11.0	8.0	9.5
2	2.0	.0	1.0	.0	.0	.0	8.0	4.0	5.5	9.5	8.0	9.0
3	.0	.0	.0	.0	.0	.0	6.5	3.0	5.0	12.0	7.5	9.5
4	.0	.0	.0	.0	.0	.0	7.0	3.5	6.0	12.5	8.5	10.5
5	.0	.0	.0	.5	.0	.0	3.5	1.0	1.5	12.0	10.0	11.0
6	.0	.0	.0	1.0	.0	.5	4.0	.0	2.0	13.5	8.5	11.0
7	.0	.0	.0	1.0	.5	.5	6.0	3.0	4.5	14.0	8.5	11.0
8	.0	.0	.0	3.0	.0	2.0	4.5	1.0	2.5	14.0	8.0	11.0
9	.0	.0	.0	1.0	.0	.5	3.5	2.0	2.5	14.5	9.5	12.0
10	.0	.0	.0	2.0	.0	.5	6.0	1.5	4.0	13.5	11.0	12.0
11	.0	.0	.0	3.0	.0	1.5	9.0	3.5	6.0	11.0	10.0	10.5
12	.0	.0	.0	5.0	1.5	3.0	7.0	6.0	6.5	12.5	10.0	11.0
13	.0	.0	.0	6.5	3.5	4.5	6.5	5.5	6.0	15.5	10.5	13.0
14	.0	.0	.0	7.0	3.5	5.0	6.5	5.0	5.5	14.0	12.0	13.0
15	.0	.0	.0	7.5	4.5	6.0	6.5	4.5	5.5	14.5	11.5	12.5
16	.0	.0	.0	7.5	5.0	6.5	8.5	3.5	6.0	17.0	10.5	14.0
17	.0	.0	.0	6.5	5.5	6.0	10.0	4.5	7.5	15.0	13.0	13.5
18	.0	.0	.0	6.5	4.5	5.5	11.5	7.0	9.5	13.0	12.0	12.5
19	.0	.0	.0	6.5	3.5	5.0	10.5	9.0	10.0	13.0	11.0	12.0
20	.0	.0	.0	7.0	4.5	5.5	11.5	8.0	9.5	16.0	10.0	13.0
21	.0	.0	.0	6.5	5.5	6.0	10.5	9.0	9.5	17.0	12.0	14.5
22	.5	.0	.0	6.0	5.0	5.5	10.5	8.5	9.5	17.5	12.5	15.0
23	.5	.0	.0	5.0	4.0	4.5	10.5	7.5	9.0	18.0	12.0	15.5
24	.0	.0	.0	4.5	3.0	3.5	12.5	7.5	10.0	19.0	15.0	17.0
25	.5	.0	.0	6.0	1.5	3.5	12.0	7.5	10.0	19.0	15.5	17.0
26	.5	.0	.0	7.5	2.5	5.0	12.0	9.0	10.5	16.5	15.0	15.5
27	.0	.0	.0	8.0	3.5	5.5	13.0	8.5	11.0	19.5	13.5	16.5
28	.0	.0	.0	8.5	4.0	6.0	13.0	11.0	12.0	17.0	14.5	15.5
29	---	---	---	9.0	4.0	6.5	11.5	9.5	10.5	17.5	13.5	15.0
30	---	---	---	8.0	6.0	7.0	10.0	8.0	9.5	16.0	14.5	15.0
31	---	---	---	7.0	5.5	6.0	---	---	---	19.0	13.0	16.0
MONTH	2.0	.0	.0	9.0	.0	3.5	13.0	.0	7.0	19.5	7.5	13.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.0	15.5	18.5	24.5	21.5	23.0	26.5	21.0	24.0	13.5	11.5	12.5
2	20.5	17.5	19.0	22.5	20.0	21.5	26.0	21.5	23.5	13.5	10.5	11.5
3	21.0	18.0	19.5	24.0	17.5	20.5	26.0	21.5	23.5	13.0	10.0	11.5
4	22.0	17.5	19.5	23.5	19.0	21.0	26.5	22.0	24.0	12.5	10.0	11.0
5	21.5	17.0	19.0	23.0	20.5	21.5	23.5	20.5	22.0	13.5	10.0	11.5
6	21.5	17.0	19.0	23.5	20.5	21.5	23.0	19.5	21.0	13.5	10.5	12.0
7	22.5	17.5	20.5	21.5	19.5	20.5	24.5	19.5	22.0	12.5	10.5	11.5
8	21.0	17.5	19.5	22.0	19.0	20.0	24.5	19.5	22.0	11.5	9.5	10.5
9	22.0	16.0	18.5	20.5	17.5	19.0	24.5	19.0	22.0	10.0	9.0	9.5
10	20.0	16.5	18.0	23.0	17.5	20.5	22.5	19.5	21.0	11.5	8.5	9.5
11	20.0	15.5	17.5	25.0	19.5	22.0	24.0	20.0	21.5	11.5	8.0	10.0
12	19.0	15.5	17.0	26.0	20.5	23.5	23.0	20.5	21.5	12.0	8.5	10.5
13	19.5	14.0	17.0	27.5	21.5	24.5	25.5	19.0	22.0	11.0	9.5	10.0
14	20.0	15.5	17.5	29.0	23.0	26.5	25.5	20.0	23.0	12.5	9.0	10.5
15	21.5	15.5	18.5	30.5	25.0	27.5	26.5	22.0	24.0	11.5	9.0	10.0
16	21.5	16.0	19.0	28.0	24.0	26.0	27.5	22.5	24.5	10.0	8.5	9.0
17	23.5	17.5	20.5	25.5	20.5	23.5	27.0	21.5	24.5	10.0	9.0	9.5
18	24.5	18.5	21.5	21.5	18.5	20.0	23.5	18.5	21.0	12.0	9.0	10.5
19	26.0	20.0	23.0	22.5	19.0	20.5	20.0	15.5	17.5	11.5	8.5	10.0
20	27.0	22.0	24.5	22.5	19.0	21.0	19.5	14.5	16.5	11.5	10.0	10.5
21	26.0	21.5	23.5	22.0	20.0	21.0	19.0	14.0	16.0	11.0	10.0	10.5
22	22.5	20.0	21.0	23.0	19.5	21.0	17.5	14.0	15.5	11.5	9.5	10.0
23	23.5	18.0	20.5	22.5	20.5	21.5	17.5	12.5	15.0	10.5	8.5	9.5
24	25.0	19.5	22.0	24.0	20.0	22.0	18.0	13.0	15.0	10.5	8.0	9.0
25	25.0	21.0	22.5	25.0	20.5	23.0	17.0	12.0	14.5	9.5	8.5	9.0
26	23.5	21.0	22.0	24.0	21.5	22.5	14.5	11.5	13.0	10.0	8.5	9.0
27	22.0	19.0	20.5	23.0	20.5	22.0	14.0	11.5	13.0	11.5	8.5	10.0
28	23.5	18.0	20.5	25.0	20.0	22.5	14.0	11.0	12.5	11.5	9.0	10.0
29	25.0	19.0	22.0	25.5	22.0	23.5	16.0	12.0	13.5	13.0	8.5	10.5
30	25.0	20.5	22.5	27.0	21.0	24.0	14.0	11.0	12.5	13.0	9.0	10.5
31	---	---	---	27.0	20.5	24.0	13.5	10.0	12.0	---	---	---
MONTH	27.0	14.0	20.0	30.5	17.5	22.5	27.5	10.0	19.0	13.5	8.0	10.5

## DELAWARE RIVER BASIN

01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY

LOCATION.--Lat 42°09'58", long 75°08'25", Delaware County, Hydrologic Unit 02040101, on left bank at west end of fairgrounds at Walton, and 100 ft downstream from West Brook.

DRAINAGE AREA.--332 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft above sea level.

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

AVERAGE DISCHARGE.--45 years, 573 ft<sup>3</sup>/s, 23.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft<sup>3</sup>/s, Mar. 15, 1986, gage height, 14.84 ft, from floodmark in gage well; minimum discharge, 12 ft<sup>3</sup>/s, Sept. 15, Nov. 22, 1964; minimum gage height, 1.86 ft, Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2245	*3,610	*7.75				

Minimum discharge, 14 ft<sup>3</sup>/s, Aug. 31, gage height, 2.22 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	129	566	715	e500	e860	420	336	200	64	39	20
2	112	533	503	e700	e420	e590	370	319	188	104	47	20
3	107	416	454	e490	e300	e490	333	294	288	85	48	20
4	97	289	406	e410	e320	e480	476	270	301	67	50	19
5	91	243	774	e310	e220	e500	e510	290	238	59	55	18
6	89	222	1130	388	e190	630	e390	315	204	55	56	17
7	85	214	970	529	e250	887	445	260	184	56	57	16
8	80	198	1010	e560	e300	2760	413	232	169	55	47	16
9	78	186	822	e390	e290	2920	452	219	160	54	39	22
10	87	192	783	e310	e280	2150	580	224	146	50	36	26
11	92	173	1020	368	e270	1670	498	243	151	46	34	26
12	84	160	828	457	e250	1440	476	267	270	43	33	26
13	77	152	e610	e1000	e240	1750	1380	243	307	42	31	28
14	74	145	e600	855	e230	2100	1150	215	199	38	30	28
15	72	140	e560	1040	e220	1960	1050	206	171	36	31	27
16	69	133	490	1490	e230	1930	931	200	147	36	32	25
17	67	128	466	1340	e270	1740	811	188	131	89	31	24
18	66	124	468	1160	e250	1480	721	187	119	131	30	22
19	66	121	445	1030	e270	1220	777	188	110	73	27	21
20	69	115	384	1400	e280	1030	706	180	103	56	25	19
21	77	128	341	1980	e310	1020	603	164	93	49	24	19
22	75	177	313	1520	e280	1140	587	153	84	44	23	31
23	69	160	299	1300	e290	936	536	146	81	42	21	82
24	66	137	513	1140	e520	809	481	143	78	43	20	68
25	64	141	1070	989	e440	705	430	204	73	49	19	47
26	61	e135	765	866	e380	630	389	202	86	92	18	39
27	60	e120	e660	e760	e360	563	361	203	101	127	18	34
28	60	537	e580	e580	e580	514	424	166	79	84	17	31
29	58	922	e540	e520	---	465	388	180	67	63	17	29
30	56	646	e350	e520	---	459	333	309	64	52	16	26
31	56	---	434	e520	---	484	---	233	---	44	17	---
TOTAL	2372	7116	19154	25637	8740	36312	17421	6979	4592	1928	988	846
MEAN	76.5	237	618	827	312	1171	581	225	153	62.2	31.9	28.2
MAX	112	922	1130	1980	580	2920	1380	336	307	131	57	82
MIN	56	115	299	310	190	459	333	143	64	36	16	16
CFSM	.23	.71	1.86	2.49	.94	3.53	1.75	.68	.46	.19	.10	.08
IN.	.27	.80	2.15	2.87	.98	4.07	1.95	.78	.51	.22	.11	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1995, BY WATER YEAR (WY)

	338	619	727	589	673	1116	1295	662	338	181	149	201
MEAN	338	619	727	589	673	1116	1295	662	338	181	149	201
MAX	2013	1456	2002	1702	2052	2935	2953	1564	1111	666	942	1332
(WY)	1978	1960	1974	1979	1981	1977	1958	1984	1968	1976	1955	1977
MIN	15.4	17.3	163	94.6	147	371	452	190	70.6	38.9	24.2	15.8
(WY)	1965	1965	1965	1961	1980	1965	1986	1987	1964	1965	1964	1964

e Estimated

## DELAWARE RIVER BASIN

01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1951 - 1995	
ANNUAL TOTAL	206036		132085			
ANNUAL MEAN	564		362		573	
HIGHEST ANNUAL MEAN					833	1976
LOWEST ANNUAL MEAN					263	1965
HIGHEST DAILY MEAN	5380	Apr 7	2920	Mar 9	16000	Mar 15 1986
LOWEST DAILY MEAN	56	Oct 30	16	Aug 30	13	Sep 24 1964
ANNUAL SEVEN-DAY MINIMUM	59	Oct 25	17	Aug 25	13	Sep 21 1964
ANNUAL RUNOFF (CFSM)	1.70		1.09		1.73	
ANNUAL RUNOFF (INCHES)	23.09		14.80		23.44	
10 PERCENT EXCEEDS	1310		933		1320	
50 PERCENT EXCEEDS	284		204		305	
90 PERCENT EXCEEDS	106		30		57	

## DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY

LOCATION.--Lat 42°04'29", long 75°23'47", Delaware County, Hydrologic Unit 02040101, on right bank at Stilesville, 0.5 mi upstream from Cold Spring Creek, 1.4 mi downstream from Cannonsville Dam, and 2.0 mi northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 992.23 ft above sea level (levels by Board of Water Supply, City of New York). Prior to Oct. 1, 1964, at site 600 ft downstream at datum 1.37 ft higher.

REMARKS.--No estimated daily discharges. Records good except those below 100 ft<sup>3</sup>/s, which are fair. Subsequent to October 1963, entire flow from 454 mi<sup>2</sup> of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft<sup>3</sup>/s, Mar. 16, 1986, gage height, 13.07 ft; minimum daily, 7.2 ft<sup>3</sup>/s, Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,600 ft<sup>3</sup>/s, Mar. 10, gage height, 9.30 ft; minimum daily, 36 ft<sup>3</sup>/s, Nov. 8, 11-17, 23-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	128	38	40	572	259	275	55	116	910	577	873
2	43	62	37	40	603	313	241	54	168	1010	492	887
3	43	38	37	39	564	304	187	54	64	964	479	844
4	43	37	37	38	520	285	134	52	51	907	693	821
5	62	37	43	38	469	269	123	53	98	850	596	826
6	50	37	42	38	394	276	110	53	148	898	306	865
7	43	37	41	39	351	330	74	52	166	1070	291	853
8	43	36	40	38	344	930	55	52	250	953	290	845
9	44	37	39	38	344	2270	54	53	455	827	531	846
10	44	37	39	38	344	2520	56	54	554	907	816	839
11	43	36	40	38	344	2240	55	53	384	808	917	770
12	43	36	39	39	336	1870	55	53	380	335	877	771
13	275	36	38	40	314	1750	85	52	464	359	915	680
14	322	36	38	40	297	1910	316	52	329	641	937	649
15	220	36	38	43	286	2000	543	53	496	368	1080	498
16	212	36	38	44	292	2060	674	52	482	401	979	498
17	251	36	38	43	296	2020	680	52	359	408	1040	281
18	416	112	38	42	299	1840	534	53	369	362	814	368
19	249	153	38	42	299	1580	453	53	420	309	756	479
20	612	92	38	47	295	1320	399	52	382	309	661	851
21	659	39	38	51	256	1130	325	52	499	348	684	903
22	608	37	38	54	222	1110	271	52	723	570	742	613
23	306	36	38	383	183	1030	217	104	763	347	784	400
24	280	36	39	714	175	893	172	201	888	347	818	369
25	540	36	38	827	186	754	162	179	924	346	907	514
26	605	36	38	823	163	627	122	65	667	345	841	423
27	539	36	38	753	134	520	88	53	403	345	836	537
28	648	41	38	631	144	435	59	53	444	348	975	556
29	426	39	38	474	---	365	53	54	873	350	1000	895
30	386	38	38	409	---	324	54	55	839	349	846	884
31	312	---	38	493	---	299	---	53	---	494	862	---
TOTAL	8411	1469	1195	6416	9026	33833	6626	1978	13158	17785	23342	20438
MEAN	271	49.0	38.5	207	322	1091	221	63.8	439	574	753	681
MAX	659	153	43	827	603	2520	680	201	924	1070	1080	903
MIN	43	36	37	38	134	259	53	52	51	309	290	281

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	MEAN	530	235	281	317	423	772	1206	672	512	617	600	552
MAX	1593	1155	1757	1910	2309	2879	4389	1806	1593	1646	1675	1606	
(WY)	1970	1978	1978	1978	1976	1986	1993	1983	1968	1971	1968	1972	
MIN	26.2	21.5	9.10	10.3	9.89	11.1	19.7	25.2	72.7	63.9	92.3	34.0	
(WY)	1964	1966	1966	1967	1967	1989	1985	1966	1965	1965	1985	1964	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1964 - 1995		
ANNUAL TOTAL	115500			143677					
ANNUAL MEAN	316			394			560		
HIGHEST ANNUAL MEAN							1038		
LOWEST ANNUAL MEAN							87.3		
HIGHEST DAILY MEAN	5360	Apr 14		2520	Mar 10		14800	Mar 16	1986
LOWEST DAILY MEAN	34	Jan 19		36	Nov 8		7.2	Feb 8	1966
ANNUAL SEVEN-DAY MINIMUM	35	Jan 18		36	Nov 11		8.1	Jan 20	1966
10 PERCENT EXCEEDS	542			894			1400		
50 PERCENT EXCEEDS	53			299			309		
90 PERCENT EXCEEDS	36			38			19		



## DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

CHEMICAL DATA: 1959-60 (a) unpublished, 1969 (a), 1970 (a) unpublished, 1971, 1973 (b), 1974 (d), 1975 (b).

MINOR ELEMENTS DATA: 1971 (b).

NUTRIENT DATA: 1970 (a) unpublished, 1971, 1973 (b), 1974 (d), 1975 (b).

BIOLOGICAL DATA:

Bacteria--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1962 to current year.

INSTRUMENTATION.--Water-temperature recorder provides 15-minute-interval readings. Prior to March 1993, water-temperature digital recorder since October 1975, provided one-hour-interval punches. Prior to October 1975, water-temperature recorder provided continuous recordings.

REMARKS.--Water temperature is affected by release of water from upstream reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1963-78, 1980-82, 1984-86, 1988, 1990-92, 1994-95), 30.5°C July 2, 1963; minimum, 0.0°C on many days during winter periods, except 1969, 1973, 1986-87, 1990-91, 1994-95.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES; Maximum, 20.0°C, Sept. 27, 28; minimum, 0.5°C, on several days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.5	7.5	8.0	9.5	7.5	8.5	5.5	4.0	5.0	4.0	3.5	4.0
2	10.5	7.0	8.5	8.5	6.0	7.5	6.5	4.5	5.5	4.0	2.5	3.5
3	10.5	5.5	8.0	9.5	5.0	7.5	6.0	4.5	5.5	3.0	2.0	2.5
4	8.0	7.0	7.5	11.5	8.5	9.5	6.5	5.0	5.5	3.0	2.0	2.5
5	7.5	7.0	7.5	11.0	9.5	10.0	7.5	6.5	7.0	3.0	1.0	2.0
6	9.0	6.0	7.5	11.0	8.5	10.0	8.0	7.0	7.5	2.5	1.5	2.0
7	10.0	7.0	8.0	9.5	6.5	8.0	8.0	4.0	6.5	3.0	2.0	2.5
8	10.5	7.0	8.5	9.0	5.5	7.5	5.0	3.5	4.5	4.0	2.0	3.0
9	9.5	8.5	9.0	8.5	7.0	7.5	4.5	3.5	4.0	3.5	2.5	3.0
10	9.0	6.5	8.0	8.5	6.0	7.5	5.0	4.0	4.5	3.0	2.0	2.5
11	8.5	5.0	6.5	7.0	5.0	6.0	4.5	3.5	4.5	3.0	2.5	2.5
12	9.0	5.0	7.0	7.5	4.0	5.5	3.5	2.0	3.0	3.0	2.0	2.5
13	8.0	5.5	6.5	7.5	6.5	7.0	4.5	2.0	3.0	4.0	3.0	3.5
14	7.0	6.0	6.5	9.5	7.5	8.5	5.0	3.0	4.0	5.5	3.5	4.0
15	8.0	6.0	7.0	9.5	8.0	9.0	6.0	3.5	4.5	7.0	5.5	6.0
16	8.0	6.0	7.0	8.0	6.5	7.0	5.5	2.5	4.0	6.5	5.0	6.0
17	8.5	6.0	7.0	8.0	5.0	6.5	4.5	3.5	4.0	5.0	4.5	5.0
18	8.5	6.5	7.0	8.0	7.0	7.5	6.0	4.5	5.0	5.0	4.5	4.5
19	8.5	7.0	7.5	8.5	7.0	7.5	5.0	4.0	4.5	5.0	4.5	4.5
20	9.0	7.5	7.5	7.5	6.0	7.0	6.0	3.5	4.5	5.0	4.5	5.0
21	8.0	7.5	7.5	7.5	5.5	6.5	6.5	3.5	4.5	5.0	3.5	4.5
22	8.0	7.5	7.5	8.0	5.5	7.5	5.5	3.5	4.5	4.0	1.5	3.5
23	8.0	7.0	7.5	5.5	4.5	5.0	5.0	3.0	4.5	3.5	1.5	3.0
24	9.0	7.0	7.5	5.0	4.0	4.5	4.5	4.0	4.0	3.5	3.0	3.5
25	8.5	7.0	7.5	5.5	4.0	5.0	6.5	3.5	5.0	3.5	3.0	3.0
26	8.0	7.5	7.5	5.5	4.0	5.0	5.5	2.5	4.0	3.5	3.0	3.0
27	8.0	7.0	7.5	5.0	3.5	4.5	5.0	3.5	4.0	3.5	2.5	3.0
28	8.5	7.5	7.5	5.5	3.5	4.5	5.0	3.5	4.0	3.0	2.0	2.5
29	8.5	7.0	7.5	6.0	4.5	5.0	4.5	2.0	3.0	3.0	1.5	2.0
30	8.0	7.0	7.5	5.5	4.5	5.0	3.5	2.0	2.5	3.5	1.5	2.5
31	8.0	7.5	7.5	---	---	---	3.5	2.5	3.0	3.0	2.0	2.5
MONTH	10.5	5.0	7.5	11.5	3.5	7.0	8.0	2.0	4.5	7.0	1.0	3.5

## DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	2.5	3.0	2.5	2.0	2.0	6.0	3.0	4.0	9.0	6.0	7.5
2	3.5	1.5	2.5	3.0	1.5	2.0	6.0	3.0	4.0	8.0	6.0	7.0
3	2.5	1.5	2.0	4.0	1.5	2.5	5.5	3.0	4.0	11.0	6.0	8.5
4	2.0	1.5	1.5	3.5	1.5	2.5	6.0	2.5	4.5	11.5	6.0	8.5
5	1.5	.5	1.0	4.0	2.0	3.0	3.5	.5	2.0	8.5	7.0	8.0
6	1.5	.5	1.0	3.5	2.5	3.0	5.0	1.5	3.5	12.0	6.5	8.5
7	2.0	.5	1.0	3.5	3.0	3.0	7.0	3.5	5.0	12.0	6.0	8.5
8	1.5	.5	1.0	3.5	2.0	3.0	5.0	2.0	3.0	12.0	6.0	8.5
9	1.5	.5	1.0	3.0	2.5	2.5	5.0	3.5	4.0	11.0	6.0	8.5
10	2.0	1.0	1.5	3.0	2.5	2.5	8.5	2.0	5.0	8.5	7.5	8.0
11	3.0	1.0	2.0	3.0	2.5	3.0	12.0	3.5	7.0	8.5	7.5	8.0
12	1.5	.5	1.0	3.5	2.5	3.0	7.5	6.0	6.5	8.5	7.5	8.0
13	2.0	.5	1.0	3.5	3.0	3.0	7.5	5.0	6.5	11.0	7.0	9.0
14	2.5	1.0	1.5	3.5	3.0	3.0	5.0	4.0	4.5	9.5	8.0	9.0
15	2.0	1.0	1.5	3.5	3.0	3.0	5.5	4.0	4.5	10.0	7.5	8.5
16	3.0	2.0	2.5	3.5	3.0	3.0	6.0	4.0	4.5	11.5	7.0	9.0
17	3.5	1.5	2.0	3.5	3.0	3.0	6.0	4.0	5.0	10.0	8.0	9.0
18	3.5	1.5	2.0	3.5	3.0	3.0	7.5	4.5	5.5	9.0	8.0	8.5
19	3.5	1.5	2.5	4.0	3.0	3.5	7.5	5.0	6.0	9.5	7.5	8.5
20	4.0	2.0	2.5	4.0	3.0	3.5	8.5	4.5	6.5	12.0	7.5	9.5
21	2.5	2.0	2.5	3.5	3.5	3.5	7.5	6.5	7.0	12.0	7.5	9.5
22	3.5	1.5	2.0	3.5	3.0	3.5	7.5	6.0	6.5	11.5	8.0	9.5
23	3.0	2.0	2.5	3.5	3.0	3.0	8.5	5.5	6.5	10.0	7.5	8.5
24	2.5	1.0	2.0	3.5	2.5	3.0	10.5	5.0	7.5	10.0	5.5	7.5
25	3.0	.5	1.5	4.0	2.5	3.0	11.0	6.5	8.0	10.5	5.5	7.5
26	3.5	1.0	2.0	4.5	3.0	3.5	9.0	5.5	7.0	10.0	7.5	8.5
27	1.5	1.0	1.5	5.0	3.0	3.5	12.5	6.0	8.5	14.5	7.5	10.5
28	3.0	1.5	2.0	5.0	3.0	4.0	10.5	7.0	8.0	10.5	8.0	9.0
29	---	---	---	6.0	3.0	4.0	9.5	6.0	7.5	11.5	8.5	9.5
30	---	---	---	5.0	4.0	4.0	9.0	5.0	7.0	10.5	8.5	9.5
31	---	---	---	5.0	3.5	4.0	---	---	---	13.5	8.0	10.5
MONTH	4.0	.5	2.0	6.0	1.5	3.0	12.5	.5	5.5	14.5	5.5	8.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	11.0	7.5	9.0	7.5	6.0	6.5	9.0	7.0	8.0	11.5	10.0	11.0
2	12.0	6.0	8.5	7.0	6.0	6.5	9.0	7.5	8.0	12.0	11.0	11.5
3	15.5	8.0	11.0	8.0	6.0	7.0	10.5	7.0	8.0	12.5	10.5	11.5
4	16.5	9.0	11.5	8.0	6.0	7.0	9.5	7.0	8.0	12.5	11.0	11.5
5	11.0	7.5	9.0	8.0	6.5	7.0	8.0	7.5	7.5	13.0	11.5	12.0
6	13.0	6.0	9.0	8.5	6.5	7.0	10.0	7.0	8.0	13.5	12.0	12.5
7	13.0	5.5	9.0	7.5	6.5	7.0	10.0	7.0	8.5	13.0	12.0	12.5
8	12.5	6.0	7.0	7.5	6.5	6.5	10.5	7.0	8.5	13.5	12.5	13.0
9	8.5	5.5	7.0	8.0	6.5	7.0	9.5	7.0	8.0	13.5	12.5	13.0
10	7.0	5.5	6.5	8.0	6.5	7.0	9.0	7.5	8.0	14.0	13.0	13.5
11	9.5	6.0	7.0	8.0	6.5	7.0	9.5	7.5	8.0	15.0	13.0	14.0
12	9.5	5.5	6.5	10.0	6.5	7.5	9.0	8.0	8.0	15.5	13.5	14.5
13	8.5	5.5	6.5	9.5	6.5	7.5	9.5	8.0	8.5	15.0	14.0	14.5
14	7.5	5.5	6.5	9.0	6.5	7.5	10.0	8.0	8.5	16.0	14.0	15.0
15	8.0	5.5	6.5	10.5	7.0	8.0	10.0	8.0	9.0	16.0	14.0	15.0
16	8.5	5.5	6.5	9.5	6.5	8.0	10.0	8.5	9.0	16.0	14.5	15.0
17	8.5	5.5	7.0	9.5	7.0	8.0	10.0	8.0	9.0	16.5	14.5	15.5
18	8.5	6.0	7.0	10.0	7.0	8.0	10.0	8.0	9.0	17.0	15.0	15.5
19	9.0	6.0	7.0	9.0	6.5	7.5	10.5	8.5	9.0	17.5	14.5	16.0
20	8.5	6.0	7.0	9.0	6.5	7.5	10.5	8.5	9.0	17.0	15.5	16.5
21	9.0	6.0	7.0	8.0	6.5	7.5	10.5	8.5	9.0	17.5	16.5	17.0
22	7.5	6.0	6.5	9.0	6.5	7.5	10.5	8.5	9.5	18.0	17.0	17.5
23	8.0	6.0	6.5	9.0	7.0	7.5	10.0	8.5	9.5	17.5	16.5	17.0
24	7.5	6.0	6.5	9.0	6.5	7.5	10.5	8.5	9.5	19.0	16.5	17.5
25	7.5	6.0	6.5	9.5	7.0	8.0	11.0	8.5	9.5	18.0	16.5	17.5
26	8.0	6.0	6.5	8.5	6.5	7.5	10.5	9.0	9.5	18.5	17.5	17.5
27	8.5	6.0	7.0	9.0	7.0	7.5	10.5	9.5	10.0	20.0	17.0	18.0
28	9.0	6.0	7.0	11.0	6.5	8.5	11.0	9.5	10.0	20.0	16.5	18.0
29	8.5	6.0	7.0	10.0	7.0	8.0	11.0	10.0	10.5	18.5	16.5	17.5
30	8.0	6.0	7.0	10.0	7.0	8.0	12.0	9.5	10.5	19.5	17.0	18.0
31	---	---	---	9.5	6.5	8.0	12.0	10.0	11.0	---	---	---
MONTH	16.5	5.5	7.5	11.0	6.0	7.5	12.0	7.0	9.0	20.0	10.0	15.0

## DELAWARE RIVER BASIN

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY

LOCATION.--Lat 42°00'11", long 75°23'02", Delaware County, Hydrologic Unit 02040101, on left bank at downstream side of bridge on County Highway 56 in Hale Eddy, and 9 mi upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--595 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 871: 1916. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft above sea level. Prior to Sept. 8, 1928, nonrecording gage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to October 1963, entire flow from 454 mi<sup>2</sup> drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Satellite gage-height and temperature telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft<sup>3</sup>/s, Mar. 22, 1948, gage height, 15.69 ft; maximum gage height, 15.8 ft, Sept. 30, 1924, from graph based on gage readings; minimum discharge, 17 ft<sup>3</sup>/s, Oct. 20, 1963; minimum gage height, 1.03 ft, Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft, from floodmarks, discharge, about 46,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,380 ft<sup>3</sup>/s, Mar. 9, gage height, 6.16 ft; minimum discharge, 61 ft<sup>3</sup>/s, Dec. 30, result of freezeup, gage height, 1.36 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	236	306	e220	721	e480	425	177	194	836	553	834
2	139	478	262	e190	737	e465	369	168	262	922	509	868
3	113	292	230	e175	e670	e420	310	158	166	895	478	808
4	103	222	209	e160	e625	e410	343	148	139	871	660	781
5	106	189	745	e150	e600	422	e295	164	152	785	626	778
6	107	170	796	e145	e520	517	e260	158	221	814	396	844
7	88	172	637	e200	e480	707	238	143	226	949	324	817
8	84	148	521	e170	e480	2120	215	133	279	869	316	811
9	84	139	410	e150	e475	3270	232	127	427	793	502	840
10	90	161	e360	e140	e450	3130	370	147	551	803	810	817
11	84	139	e350	e200	e425	2710	342	168	470	755	810	750
12	81	128	e320	e230	e420	2330	364	176	360	361	888	742
13	238	123	e295	e370	e415	2300	1050	162	569	352	881	711
14	415	116	259	590	e375	2520	1020	155	356	549	892	655
15	255	111	231	525	e350	2710	1070	171	515	400	982	527
16	250	106	e205	704	376	2760	1060	156	482	375	997	531
17	267	101	e190	558	378	2580	977	151	380	409	1020	318
18	370	121	e180	453	380	2280	791	155	384	401	735	371
19	377	204	e170	384	379	1950	800	160	420	316	806	463
20	482	201	e160	693	393	1650	660	153	393	310	639	796
21	737	113	e150	1080	368	1470	558	138	470	345	660	904
22	642	154	148	839	314	1530	495	128	644	500	712	705
23	415	123	142	892	278	1410	410	157	737	378	747	450
24	273	119	178	1170	388	1220	342	266	786	349	733	441
25	470	114	e200	1200	e330	1030	315	321	933	349	866	506
26	680	114	e175	1130	e290	875	262	207	742	356	858	453
27	531	e135	e155	1010	e265	750	216	170	449	360	808	565
28	625	e450	e140	e750	e250	644	219	152	431	364	867	581
29	516	495	e130	e620	---	549	188	178	832	360	996	865
30	412	370	e155	e145	---	501	172	196	799	356	819	938
31	338	---	e240	657	---	479	---	162	---	440	851	---
TOTAL	9489	5744	8649	15900	12132	46189	14368	5205	13769	16922	22741	20470
MEAN	306	191	279	513	433	1490	479	168	459	546	734	682
MAX	737	495	796	1200	737	3270	1070	321	933	949	1020	938
MIN	81	101	130	140	250	410	172	127	139	310	316	318

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
MEAN	671	505	572	538	699	1229	1680	936	639	679	654	627
MAX	2123	1641	2350	2494	3107	3617	5167	2244	1899	1456	1698	1604
(WY)	1976	1978	1978	1978	1976	1986	1993	1984	1968	1971	1968	1972
MIN	33.2	41.8	172	127	94.2	158	194	122	132	76.2	107	45.4
(WY)	1964	1965	1982	1970	1989	1981	1985	1985	1965	1965	1985	1964

e Estimated

## DELAWARE RIVER BASIN

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	219610		191578			
ANNUAL MEAN	602		525		786	
HIGHEST ANNUAL MEAN					1411 1978	
LOWEST ANNUAL MEAN					204 1965	
HIGHEST DAILY MEAN	6650	Apr 14	3270	Mar 9	15900	Mar 16 1986
LOWEST DAILY MEAN	79	Sep 22	81	Oct 12	18	Oct 20 1963
ANNUAL SEVEN-DAY MINIMUM	88	Oct 6	88	Oct 6	26	Oct 15 1963
10 PERCENT EXCEEDS	1020		911		1710	
50 PERCENT EXCEEDS	360		393		475	
90 PERCENT EXCEEDS	113		143		120	

## DELAWARE RIVER BASIN

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.

CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).

MINOR ELEMENTS DATA: 1971-74 (a).

ORGANIC DATA: OC--1974 (a), 1975 (c).

NUTRIENT DATA: 1971-74 (d), 1975 (c).

BIOLOGICAL DATA:

Bacteria--1971, 1973 (c); 1974 (d); 1975 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-77).

INSTRUMENTATION.--Water-temperature satellite telemeter provides one-hour-interval readings. Prior to May 1993, water-temperature recorder since October 1976, provided one-hour-interval readings. Prior to October 1976, water-temperature recorder provided continuous recordings.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. Interruption of record was due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-77, 1979-83, 1985, 1988-95), 30.5°C, July 22, 23, 1972, June 16, 1981; minimum (water years 1968, 1978-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 24.5°C, June 1; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	11.0	11.0	11.5	8.5	10.0	4.0	2.0	2.5	.0	.0	.0
2	14.0	9.5	11.0	9.5	7.0	8.5	4.5	1.5	2.5	.5	.0	.0
3	13.5	7.5	10.5	9.0	5.5	7.5	4.0	1.5	2.5	.0	.0	.0
4	10.0	9.0	9.5	13.0	8.5	10.5	5.0	2.5	3.5	.5	.0	.0
5	10.5	8.0	9.0	13.5	10.5	12.0	6.5	5.0	6.0	.5	.0	.0
6	12.5	7.0	9.5	13.0	10.5	11.5	7.5	6.5	7.0	.0	.0	.0
7	15.5	8.0	11.5	11.0	7.5	9.0	7.5	4.0	6.0	.0	.0	.0
8	16.5	9.5	12.5	9.5	6.0	8.0	4.0	1.5	2.5	.5	.0	.0
9	15.0	11.5	13.0	8.5	8.0	8.0	2.0	1.0	1.5	.5	.0	.0
10	12.5	8.5	11.0	9.0	6.0	7.5	3.5	2.0	2.5	.0	.0	.0
11	12.5	6.5	9.0	7.0	4.5	5.5	3.5	1.0	3.0	.0	.0	.0
12	13.0	6.0	9.0	6.5	3.0	5.0	1.0	.0	.0	.0	.0	.0
13	9.5	6.0	8.0	7.5	5.5	6.5	.5	.0	.0	.0	.0	.0
14	9.0	6.0	7.5	10.5	7.0	8.5	1.5	.0	1.0	1.0	.0	.0
15	10.5	6.0	8.0	10.5	8.0	9.5	3.0	.5	1.5	7.0	1.0	5.0
16	10.5	6.0	8.0	8.0	6.0	7.0	1.5	.0	1.0	6.5	5.5	6.0
17	10.5	5.0	7.5	8.0	4.0	6.5	2.0	.5	1.5	5.5	3.5	4.0
18	9.5	7.0	8.0	9.0	6.5	8.0	4.5	2.0	3.0	4.0	3.5	4.0
19	9.0	6.5	8.0	9.0	6.5	8.0	3.5	2.0	3.0	4.0	3.5	4.0
20	9.5	7.5	9.0	8.0	5.0	6.0	3.5	1.5	2.0	5.0	4.0	4.5
21	9.0	7.5	8.0	7.0	5.0	6.0	3.0	.5	1.5	4.5	3.0	4.0
22	9.0	7.5	8.0	8.0	4.5	6.5	3.0	.0	1.5	3.0	1.5	2.5
23	8.5	7.0	7.5	4.5	.0	2.5	2.5	.0	1.0	3.0	1.0	2.0
24	10.5	7.0	8.5	1.5	.0	.5	2.5	1.5	2.0	3.0	2.0	2.5
25	10.0	6.5	8.0	3.0	.0	1.5	4.5	2.5	3.0	3.0	2.5	2.5
26	9.0	6.5	7.5	2.5	.5	2.0	3.0	.5	2.0	3.0	2.0	2.5
27	8.0	6.5	7.0	1.0	.0	.5	2.5	.0	1.5	3.5	1.5	2.0
28	9.5	6.5	7.5	3.0	.0	1.5	2.5	.0	1.5	2.5	.5	1.5
29	9.5	6.0	7.5	4.5	2.0	3.0	2.5	.0	1.0	2.5	.0	1.0
30	8.5	5.5	7.5	3.5	2.0	3.0	.5	.0	.0	3.0	.0	1.0
31	8.5	7.0	7.5	---	---	---	.0	.0	.0	3.0	1.0	2.0
MONTH	16.5	5.0	9.0	13.5	.0	6.5	7.5	.0	2.0	7.0	.0	1.5



## DELAWARE RIVER BASIN

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	1.5	2.5	2.0	1.0	1.5	8.5	3.0	5.5	12.0	8.5	10.0
2	3.5	.5	2.5	3.0	.0	1.0	8.0	2.5	5.0	10.0	8.0	9.0
3	2.5	.0	1.0	4.5	.0	1.5	7.0	2.0	4.5	13.5	7.5	10.5
4	1.0	.0	.5	3.5	.0	1.5	7.0	3.0	5.5	14.0	8.5	11.5
5	.5	.0	.0	4.5	1.0	2.5	3.0	.0	1.5	12.5	10.0	11.5
6	.0	.0	.0	3.5	2.5	3.0	4.0	.0	2.0	15.0	8.5	11.5
7	.5	.0	.0	3.5	2.5	3.0	7.0	2.5	4.5	15.5	8.5	11.5
8	.5	.0	.0	3.5	.5	2.5	4.5	.5	2.0	16.0	7.5	11.5
9	.5	.0	.0	2.5	.5	1.5	3.5	1.5	2.5	16.5	9.5	13.0
10	1.5	.0	.5	3.5	1.5	2.5	6.0	1.0	3.5	13.5	10.0	11.5
11	3.5	.0	1.5	4.0	2.0	2.5	9.5	2.5	5.5	11.5	9.5	10.5
12	.5	.0	.0	5.0	2.0	3.0	7.5	6.0	6.5	12.5	10.5	11.0
13	1.0	.0	.0	5.5	3.0	3.5	6.5	5.0	6.0	16.5	10.5	13.0
14	2.0	.0	.5	5.5	2.5	3.5	6.0	4.5	5.5	14.5	12.0	13.0
15	1.0	.0	.0	5.5	3.0	4.0	6.5	3.5	5.0	15.0	11.0	12.5
16	3.5	1.0	2.0	5.5	3.0	4.0	8.5	3.0	5.5	19.0	10.0	14.5
17	4.0	.0	2.0	4.5	3.5	4.0	9.0	3.5	6.0	16.0	13.5	14.0
18	4.5	.0	2.0	4.5	3.0	3.5	10.0	4.5	7.0	13.5	12.0	12.5
19	4.5	.0	2.5	5.5	2.5	4.0	9.5	7.0	8.0	14.0	11.0	12.0
20	5.0	1.0	3.0	6.0	3.0	4.5	11.0	5.5	8.0	18.5	10.0	14.0
21	3.0	1.5	2.0	5.0	4.0	4.0	9.0	7.0	8.0	20.0	12.5	16.0
22	4.0	.0	2.0	5.0	3.5	4.0	9.0	7.0	8.0	19.0	13.0	16.0
23	3.0	1.5	2.0	4.0	3.0	3.5	11.0	5.5	8.0	20.0	12.0	16.0
24	2.5	.0	1.5	4.5	2.5	3.0	13.0	6.0	9.5	15.5	13.0	14.0
25	2.0	.0	.5	6.5	1.5	3.5	13.0	6.5	10.0	13.5	12.0	13.0
26	3.5	.0	1.0	7.5	2.0	4.5	13.0	8.0	10.0	15.0	13.0	13.5
27	1.0	.0	.0	8.0	2.0	4.5	16.0	7.5	11.5	21.5	12.5	16.5
28	1.5	.0	1.0	8.5	2.5	5.0	14.5	11.5	13.0	17.5	13.5	15.0
29	---	---	---	9.0	2.5	5.5	13.0	9.0	11.0	19.0	12.5	15.0
30	---	---	---	7.5	4.5	6.0	11.0	8.0	9.5	17.0	14.5	15.5
31	---	---	---	6.5	4.0	5.0	---	---	---	22.5	13.0	17.5
MONTH	5.0	.0	1.0	9.0	.0	3.5	16.0	.0	6.5	22.5	7.5	13.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	24.5	16.0	19.5	11.0	6.5	8.5	15.0	7.5	11.0	14.0	10.5	12.0
2	17.5	14.0	15.0	9.5	6.0	7.5	13.5	8.0	10.5	15.0	10.5	12.5
3	22.5	15.5	18.5	11.5	5.5	8.0	15.5	8.5	11.5	16.0	10.5	12.5
4	24.0	17.5	20.5	10.0	6.0	8.0	14.0	8.0	11.0	15.5	10.5	12.5
5	24.0	17.0	20.0	10.5	6.5	8.0	11.0	9.0	9.5	16.5	11.5	13.5
6	19.0	14.0	16.5	11.5	7.5	9.0	16.5	9.0	12.0	16.5	11.5	13.5
7	19.0	15.0	16.5	9.5	7.0	8.0	17.5	10.5	14.0	16.0	12.0	13.5
8	17.5	10.5	14.5	10.0	6.5	8.0	17.5	10.0	13.5	14.0	13.0	13.5
9	13.5	10.0	11.0	11.0	6.5	8.5	14.5	8.5	11.5	14.0	12.5	13.5
10	10.5	7.5	8.5	12.0	6.5	9.0	12.0	8.0	9.5	16.0	12.5	14.0
11	14.0	7.5	10.0	12.0	6.5	9.0	13.0	8.0	10.0	17.5	12.0	14.0
12	13.0	8.5	11.5	17.0	7.0	11.5	11.5	8.0	9.5	18.0	12.5	14.5
13	14.5	6.5	10.0	17.5	8.0	12.5	13.5	8.0	10.5	16.0	14.0	15.0
14	13.0	8.0	10.5	14.5	8.0	11.5	13.0	8.0	10.0	17.5	14.0	15.5
15	13.5	6.0	10.0	18.5	8.0	13.0	14.0	9.0	11.0	19.0	13.0	15.5
16	14.0	6.0	10.0	15.5	9.5	13.0	13.5	9.0	10.5	16.5	13.0	14.5
17	16.0	7.0	11.5	14.0	10.0	12.0	13.5	8.5	10.5	17.5	14.5	15.5
18	16.0	7.5	11.5	17.0	9.5	13.0	15.0	8.5	11.0	18.5	14.5	16.5
19	---	---	---	15.5	9.5	12.5	15.0	9.0	11.5	19.0	12.5	15.5
20	---	---	---	15.5	9.0	12.5	16.0	8.5	11.5	17.0	14.5	16.0
21	---	---	---	13.5	9.5	11.0	14.5	8.5	11.0	17.5	16.0	16.5
22	---	---	---	13.0	8.0	10.5	14.0	8.5	11.0	18.0	16.0	17.0
23	---	---	---	14.0	8.5	11.0	14.0	8.5	11.0	16.5	14.5	15.5
24	---	---	---	13.0	9.0	11.5	14.5	9.0	11.0	19.0	14.5	16.0
25	---	---	---	16.5	9.0	12.5	14.5	8.5	11.0	17.0	14.5	16.0
26	---	---	---	14.5	9.5	12.0	13.5	9.0	11.0	18.0	16.0	17.0
27	13.5	9.0	11.0	13.0	9.5	11.5	13.0	9.5	11.0	19.5	16.0	17.5
28	16.0	7.5	11.0	17.0	9.5	13.0	13.0	9.5	11.0	19.5	15.0	17.0
29	12.5	6.0	9.0	16.0	10.5	13.5	14.5	10.0	12.0	19.0	14.0	16.5
30	11.0	6.0	8.5	17.5	9.0	13.5	15.0	10.0	12.0	19.0	15.5	17.0
31	---	---	---	15.5	9.0	12.0	16.0	10.0	12.5	---	---	---
MONTH	---	---	---	18.5	5.5	11.0	17.5	7.5	11.0	19.5	10.5	15.0

## DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'02", long 75°12'51", Wayne County, Pa., Hydrologic Unit 02040101, on right bank at site of the Lordville-Equinunk Interstate Bridge at Lordville, 9.7 mi southeast of Hancock.

DRAINAGE AREA.--1,590 mi<sup>2</sup>.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

INSTRUMENTATION.--Water-temperature satellite telemeter since June 1989, provides 15-minute-interval readings. From June 1987 to June 1989, water-temperature satellite telemeter provided one-hour-interval readings. From June 1973 to November 1989, water-temperature digital recorder provided one-hour-interval readings. Prior to August 1971, water-temperature recorder provided continuous recordings.

REMARKS.--Water temperature is affected by release of water from upstream reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-70, 1973, 1975-86, 1989, 1991-95) 30.5°C, June 16, 1976, July 10, 1981; minimum (water years 1968-71, 1974, 1977-78, 1980-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C, July 14; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.0	12.5	12.5	11.0	9.0	10.0	3.0	2.0	2.5	.0	.0	.0
2	13.0	11.5	12.0	11.0	8.0	9.5	2.5	1.5	2.0	.0	.0	.0
3	12.5	10.0	11.5	9.0	7.0	8.0	3.0	1.5	2.0	.0	.0	.0
4	11.5	10.5	11.0	11.0	9.0	10.0	4.0	2.5	3.0	.0	.0	.0
5	11.5	10.0	10.5	12.0	10.5	11.0	6.0	4.0	5.0	.0	.0	.0
6	12.0	9.0	10.0	12.0	11.0	11.5	7.0	6.0	6.5	.0	.0	.0
7	13.0	10.0	11.5	11.0	8.5	9.5	7.0	5.0	6.0	.0	.0	.0
8	14.5	11.5	13.0	8.5	7.0	8.0	5.0	2.0	3.0	.0	.0	.0
9	14.5	13.0	13.5	8.5	8.0	8.0	2.0	1.0	1.5	.0	.0	.0
10	14.0	11.5	13.0	8.5	6.5	7.5	2.5	1.5	2.0	.0	.0	.0
11	12.0	9.5	11.0	6.5	5.0	6.0	3.0	2.0	2.5	.0	.0	.0
12	12.0	9.0	10.0	5.5	4.0	4.5	2.0	.0	.5	.0	.0	.0
13	12.0	8.5	10.0	6.0	5.0	5.5	.0	.0	.0	.0	.0	.0
14	11.0	9.5	10.5	8.5	6.0	7.0	1.0	.0	.5	.0	.0	.0
15	11.5	9.0	10.0	9.5	8.5	8.5	1.0	.5	1.0	2.0	.0	.5
16	11.5	9.0	10.0	8.5	7.0	7.5	1.0	.0	.5	6.5	2.0	5.5
17	11.0	8.5	9.5	7.0	5.5	6.5	1.0	.5	.5	6.0	4.5	5.5
18	11.0	9.5	10.0	8.0	6.5	7.0	2.5	1.0	2.0	4.5	4.5	4.5
19	11.0	10.5	11.0	8.0	7.0	7.5	3.0	2.0	2.5	4.5	4.5	4.5
20	12.0	11.0	11.5	7.0	5.5	6.0	2.5	1.5	2.0	5.0	4.5	4.5
21	12.0	10.5	11.0	6.5	5.5	5.5	1.5	.5	1.0	5.0	4.0	4.5
22	11.5	10.5	11.0	7.0	5.5	6.5	1.0	.5	1.0	4.0	2.5	3.0
23	11.0	10.0	10.5	5.5	2.0	4.0	1.0	.0	.5	2.5	1.5	2.0
24	12.0	9.5	10.5	2.0	.5	1.0	2.0	1.0	1.5	2.0	2.0	2.0
25	11.5	10.0	10.5	1.5	.5	1.0	3.5	2.0	3.0	2.0	2.0	2.0
26	10.0	8.5	9.0	1.5	1.0	1.0	3.0	2.0	2.5	2.0	1.5	2.0
27	9.0	8.0	8.5	1.0	.0	.0	2.0	.5	1.0	1.5	.5	1.0
28	9.0	7.0	8.0	2.0	.0	1.0	2.0	.5	1.0	.5	.0	.0
29	8.5	7.0	8.0	3.5	1.5	2.5	2.0	.0	1.0	.0	.0	.0
30	9.0	7.0	8.0	3.0	2.5	2.5	.0	.0	.0	.0	.0	.0
31	9.0	8.0	8.5	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	14.5	7.0	10.5	12.0	.0	6.0	7.0	.0	2.0	6.5	.0	1.5

## DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	.5	1.0	.0	.0	.0	8.0	5.0	6.5	12.0	9.5	10.5
2	1.5	.5	1.0	.5	.0	.0	8.0	5.0	6.5	11.0	9.5	10.0
3	.5	.0	.0	.5	.0	.0	7.5	4.5	6.0	12.5	9.0	10.5
4	.0	.0	.0	.0	.0	.0	8.0	5.5	7.0	13.0	10.0	11.5
5	.0	.0	.0	.5	.0	.0	5.5	2.0	3.0	13.0	12.0	12.5
6	.0	.0	.0	.5	.0	.5	3.0	.5	2.0	14.0	11.0	12.0
7	.0	.0	.0	1.5	.5	1.0	6.5	3.0	4.5	14.0	10.0	12.0
8	.0	.0	.0	2.5	.0	2.0	5.0	1.5	3.0	14.0	9.5	12.0
9	.0	.0	.0	1.0	.0	.5	3.0	2.0	2.5	15.0	11.0	13.0
10	.0	.0	.0	2.0	.0	1.0	5.0	1.5	3.5	14.5	12.0	13.5
11	.0	.0	.0	3.0	1.0	2.0	8.0	3.5	6.0	12.0	11.5	11.5
12	.0	.0	.0	4.5	2.0	3.0	7.5	7.0	7.0	13.5	11.5	12.5
13	.0	.0	.0	6.0	3.0	4.5	7.0	6.0	6.5	15.5	12.0	13.5
14	.0	.0	.0	6.0	3.5	5.0	7.0	5.5	6.0	15.0	14.0	14.5
15	.0	.0	.0	6.5	4.0	5.5	7.0	5.0	6.0	15.5	13.0	14.0
16	.0	.0	.0	6.5	5.0	6.0	8.0	4.5	6.5	17.0	12.5	15.0
17	.5	.0	.0	6.0	5.5	5.5	9.5	5.5	7.5	16.5	15.0	15.5
18	.5	.0	.0	6.0	4.0	5.0	11.0	8.0	9.5	15.0	14.0	14.5
19	.0	.0	.0	6.0	4.0	5.0	11.5	10.0	10.5	14.0	13.0	13.5
20	.5	.0	.0	6.5	4.5	5.5	11.5	9.0	10.5	17.0	12.0	14.5
21	.0	.0	.0	6.5	5.5	6.0	11.5	10.0	10.5	18.5	14.5	16.5
22	.0	.0	.0	6.0	5.0	5.5	10.5	9.5	10.0	18.5	15.0	17.0
23	.0	.0	.0	5.5	4.0	4.5	11.0	8.5	9.5	19.0	15.0	17.0
24	.0	.0	.0	4.5	3.0	4.0	12.5	8.5	10.5	20.5	17.5	19.0
25	.0	.0	.0	5.0	2.0	4.0	13.0	9.5	11.5	20.0	18.0	19.0
26	.0	.0	.0	6.5	3.5	5.0	13.0	10.5	11.5	18.5	17.0	17.5
27	.0	.0	.0	7.5	4.5	6.0	14.0	10.5	12.0	20.5	16.0	18.0
28	.0	.0	.0	8.0	5.5	6.5	15.0	12.5	13.5	19.5	16.5	18.0
29	---	---	---	8.5	5.5	7.0	13.5	11.5	12.5	19.0	15.5	17.0
30	---	---	---	8.5	7.5	8.0	12.0	10.0	11.0	18.5	17.0	17.5
31	---	---	---	8.0	6.5	7.0	---	---	---	20.5	15.5	18.0
MONTH	1.5	.0	.0	8.5	.0	3.5	15.0	.5	8.0	20.5	9.0	14.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	23.0	18.5	20.5	19.0	17.0	17.5	24.5	21.0	22.5	17.5	16.0	16.5
2	23.0	21.0	22.0	17.5	15.5	16.5	22.5	20.0	21.5	16.0	14.5	15.5
3	24.0	21.0	22.0	17.5	13.5	15.5	23.5	20.0	21.5	16.5	14.0	15.5
4	24.0	21.0	22.5	17.0	15.5	16.0	24.5	21.5	22.5	16.0	14.0	15.0
5	23.5	20.0	22.0	17.5	15.5	16.0	21.5	18.0	19.5	17.0	14.5	15.5
6	24.0	20.5	22.0	18.5	16.0	17.0	21.0	17.5	19.0	17.0	15.0	16.0
7	24.5	21.5	23.0	17.5	15.5	17.0	24.0	20.0	22.0	17.0	16.0	16.5
8	24.0	21.0	22.5	17.0	14.5	15.5	23.5	20.5	22.0	16.5	14.5	15.5
9	22.5	18.5	20.5	16.0	14.0	15.0	23.0	20.5	21.5	14.5	13.5	14.0
10	21.5	16.5	19.0	18.5	14.5	16.0	21.0	17.0	19.0	14.5	12.5	13.5
11	18.5	15.0	16.5	18.5	16.0	17.0	19.0	16.0	17.0	15.0	12.0	13.5
12	18.0	17.0	17.5	21.0	16.0	18.5	17.5	16.0	16.5	16.0	13.5	14.5
13	18.0	15.0	16.5	24.5	20.0	22.0	19.5	15.5	17.5	16.0	15.0	15.5
14	19.5	16.0	17.5	26.5	22.5	24.5	19.0	16.5	18.0	16.0	14.0	15.0
15	20.0	16.5	18.0	25.0	21.5	23.5	19.5	17.5	18.5	16.0	14.0	15.0
16	20.0	16.0	18.0	25.5	23.0	24.0	18.5	18.0	18.5	15.0	13.5	14.0
17	22.0	17.0	19.5	24.5	22.5	23.0	19.5	17.5	18.5	14.5	13.5	14.0
18	23.5	19.0	21.5	22.5	20.5	22.0	20.5	16.5	18.0	16.0	13.5	14.5
19	25.0	20.5	22.5	22.5	20.0	21.5	20.5	17.5	19.0	15.5	13.0	14.5
20	26.0	21.5	23.5	23.0	20.5	21.5	20.5	17.0	18.5	15.0	14.5	14.5
21	25.0	22.0	23.5	22.0	21.0	21.5	21.0	17.5	19.0	16.0	15.0	15.5
22	22.5	18.0	20.0	22.0	19.5	21.0	19.0	17.0	18.0	16.5	15.5	16.0
23	18.5	15.5	17.0	21.0	19.0	20.0	18.0	15.0	16.5	15.5	13.0	14.0
24	20.5	16.0	18.0	22.5	19.5	21.0	19.0	15.5	17.0	13.5	11.0	12.5
25	19.5	15.5	17.0	24.0	20.5	22.0	17.5	14.5	16.0	13.5	12.5	13.0
26	17.5	16.5	16.5	24.0	21.5	23.0	16.0	14.0	15.0	14.0	13.0	13.5
27	20.0	16.0	18.0	24.0	22.0	23.0	17.0	15.0	16.0	15.5	13.0	14.0
28	21.5	17.5	19.5	24.0	20.5	22.5	16.0	14.5	15.5	16.0	14.0	15.0
29	21.5	19.0	20.0	26.0	22.5	24.0	17.0	14.5	15.5	15.5	13.0	14.0
30	19.5	17.0	18.0	26.0	22.0	24.0	17.5	15.0	16.5	16.5	14.0	15.0
31	---	---	---	25.5	21.5	23.5	17.0	14.5	15.5	---	---	---
MONTH	26.0	15.0	20.0	26.5	13.5	20.0	24.5	14.0	18.5	17.5	11.0	14.5

## DELAWARE RIVER BASIN

01427301 DELAWARE RIVER NEAR HANKINS, NY

LOCATION.--Lat 41°49'25", long 75°06'48", Sullivan County, Hydrologic Unit 02040101, on left bank 5 ft downstream from Kellams Bridge, and 1.5 mi northwest of Hankins.

DRAINAGE AREA.--1,668 mi<sup>2</sup>.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1993 to current year.

INSTRUMENTATION.--Water-temperature satellite telemeter since March 1994, provides 15-minute-interval readings. From August 1993 to March 1994, water-temperature recorder provided 15-minute-interval readings.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1994-95), 27.5°C, July 15, 1995; minimum (water years 1994-95), 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.5°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.0	12.0	12.5	---	---	---	3.0	2.5	3.0	.5	.0	.5
2	13.0	11.0	12.0	---	---	---	3.0	2.0	2.5	.5	.0	.5
3	12.5	10.0	11.5	---	---	---	3.0	2.0	2.5	.0	.0	.0
4	11.5	10.5	11.0	---	---	---	4.0	2.5	3.5	.0	.0	.0
5	11.0	9.5	10.5	---	---	---	6.0	4.0	5.0	.0	.0	.0
6	11.5	9.0	10.0	---	---	---	7.0	6.0	6.5	.0	.0	.0
7	13.0	10.0	11.0	---	---	---	7.0	5.5	6.5	.0	.0	.0
8	14.5	11.5	12.5	---	---	---	5.5	2.5	3.5	.5	.0	.0
9	14.5	13.0	13.5	---	---	---	2.5	1.5	2.0	.5	.0	.0
10	14.0	11.5	13.0	---	---	---	2.5	2.0	2.0	.5	.5	.5
11	13.0	10.0	11.0	---	---	---	3.5	2.5	3.0	.5	.0	.0
12	12.0	9.0	10.5	---	---	---	2.5	.0	1.0	.0	.0	.0
13	12.0	9.0	10.0	---	---	---	.0	.0	.0	.5	.0	.0
14	11.5	10.0	10.5	---	---	---	1.0	.0	.5	.5	.0	.5
15	12.0	9.5	10.5	---	---	---	1.0	.5	1.0	2.0	.5	1.0
16	12.0	9.0	10.5	---	---	---	1.0	.0	.5	6.5	1.0	4.5
17	---	---	---	---	---	---	1.5	.5	1.0	6.0	5.0	5.5
18	---	---	---	---	---	---	2.5	1.5	2.0	5.0	4.5	4.5
19	---	---	---	---	---	---	3.0	2.0	2.5	---	---	---
20	---	---	---	---	---	---	2.5	2.0	2.0	---	---	---
21	---	---	---	---	---	---	2.0	1.0	1.5	---	---	---
22	---	---	---	---	---	---	1.5	.5	1.0	---	---	---
23	---	---	---	---	---	---	1.5	.5	1.0	---	---	---
24	---	---	---	---	---	---	2.5	1.0	2.0	---	---	---
25	---	---	---	---	---	---	3.5	2.5	3.0	---	---	---
26	---	---	---	---	---	---	3.0	2.0	2.5	---	---	---
27	---	---	---	---	---	---	2.0	1.0	1.5	1.5	.5	1.0
28	---	---	---	---	---	---	2.0	1.0	1.5	.5	.0	.0
29	---	---	---	3.5	2.0	2.5	2.0	.0	1.5	.5	.0	.0
30	---	---	---	3.5	2.5	3.0	.0	.0	.0	.5	.0	.0
31	---	---	---	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	---	---	---	---	---	---	7.0	.0	2.0	---	---	---

## DELAWARE RIVER BASIN

01427301 DELAWARE RIVER NEAR HANKINS, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.0	.0	.0	.0	7.5	5.0	6.5	11.0	9.5	10.5
2	1.0	.0	.5	.5	.0	.0	7.5	5.5	6.5	11.0	10.0	10.0
3	.5	.0	.0	1.0	.0	.0	7.0	4.5	6.0	12.5	9.0	10.5
4	.0	.0	.0	.5	.0	.0	7.5	5.0	6.5	12.5	10.0	11.5
5	.0	.0	.0	1.0	.0	.0	5.0	2.0	3.0	12.5	12.0	12.0
6	.0	.0	.0	.5	.0	.0	3.0	1.0	2.0	13.5	11.0	12.0
7	.0	.0	.0	.5	.0	.0	5.5	2.5	4.0	13.5	10.5	12.0
8	.0	.0	.0	1.5	.0	.5	5.0	2.0	3.0	13.5	10.0	12.0
9	.0	.0	.0	.5	.0	.0	3.0	1.5	2.5	14.5	11.0	13.0
10	.0	.0	.0	1.5	.0	.5	4.5	2.0	3.5	14.0	12.0	13.0
11	.5	.0	.0	2.5	.5	1.5	7.0	3.5	5.5	12.0	11.5	11.5
12	.0	.0	.0	3.5	1.5	2.5	7.0	6.5	6.5	13.5	11.5	12.0
13	.0	.0	.0	5.5	3.5	4.5	6.5	6.0	6.5	15.0	12.0	13.5
14	.5	.0	.0	5.5	4.0	5.0	6.5	5.5	6.0	15.0	13.5	14.0
15	.0	.0	.0	6.5	4.5	5.5	6.5	5.0	6.0	15.5	13.0	14.0
16	.5	.0	.0	6.5	5.5	6.0	7.5	5.0	6.0	16.5	12.5	14.5
17	.5	.0	.0	6.5	5.5	6.0	9.0	6.0	7.5	16.0	15.0	15.5
18	.5	.0	.0	6.0	4.5	5.5	10.5	8.0	9.5	15.0	14.0	14.5
19	.5	.0	.0	6.0	4.0	5.0	11.0	9.5	10.5	14.0	13.0	13.5
20	.5	.0	.0	6.0	5.0	5.5	11.5	9.5	10.5	16.0	12.0	14.0
21	.0	.0	.0	6.5	6.0	6.0	11.0	10.0	10.5	17.5	14.5	16.0
22	.5	.0	.0	6.0	5.5	5.5	11.0	9.5	10.0	18.5	15.0	17.0
23	.5	.0	.0	5.5	4.0	4.5	10.5	8.5	9.5	18.5	15.0	17.0
24	.5	.0	.0	4.5	3.5	4.0	12.0	9.0	10.5	19.5	17.0	18.5
25	.5	.0	.0	5.0	2.5	3.5	12.5	9.5	11.0	19.5	18.5	19.0
26	1.0	.0	.0	6.5	3.5	5.0	12.5	10.5	11.5	18.5	17.0	17.5
27	.0	.0	.0	7.0	4.5	6.0	13.5	10.5	12.0	20.0	16.0	18.0
28	.5	.0	.0	8.0	5.5	6.5	14.5	12.5	13.5	19.0	17.0	18.0
29	---	---	---	8.0	5.5	7.0	13.0	12.0	12.5	18.5	16.0	17.0
30	---	---	---	8.0	7.0	7.5	12.0	10.5	11.0	18.5	17.0	17.5
31	---	---	---	7.5	6.5	7.0	---	---	---	20.0	16.0	18.0
MONTH	1.0	.0	.0	8.0	.0	3.5	14.5	1.0	7.5	20.0	9.0	14.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.5	18.5	20.5	20.0	18.5	19.0	26.0	23.5	25.0	18.5	16.5	17.5
2	22.5	20.5	21.5	19.5	17.5	18.5	24.5	22.0	23.5	17.5	15.5	16.5
3	24.0	21.0	22.5	18.5	15.5	17.0	24.5	22.5	23.5	17.5	14.5	16.0
4	23.5	21.0	22.0	19.0	16.5	17.5	26.0	23.0	24.5	17.0	15.0	16.0
5	23.5	20.5	22.0	18.5	16.5	17.5	25.0	20.5	22.5	18.0	15.0	16.5
6	23.5	20.5	22.0	18.5	17.0	18.0	21.0	19.0	20.0	19.0	16.0	17.5
7	25.0	21.5	23.0	19.0	18.0	18.5	23.5	20.0	21.5	18.0	16.5	17.0
8	24.5	21.5	23.0	18.0	16.5	17.5	24.5	21.0	23.0	17.5	15.5	16.5
9	23.0	20.0	21.5	17.5	16.0	16.5	24.5	21.0	23.0	15.5	14.0	14.5
10	22.0	18.0	20.0	19.0	15.5	17.5	23.0	21.0	21.5	14.5	13.0	13.5
11	19.0	17.0	18.0	20.5	17.5	18.5	21.0	18.0	19.5	15.5	12.5	14.0
12	18.5	17.0	17.5	21.0	17.0	19.5	20.0	18.0	19.0	16.0	13.5	14.5
13	19.0	16.0	17.5	24.0	20.0	22.0	21.0	16.5	19.0	16.0	15.0	15.5
14	19.0	16.5	18.0	27.0	23.5	25.0	21.5	18.5	20.0	16.5	14.5	15.5
15	20.5	17.0	19.0	27.5	25.0	26.5	21.5	19.0	20.0	16.5	14.5	15.5
16	20.0	17.0	19.0	26.0	24.0	25.0	22.0	19.0	20.5	15.5	13.5	14.5
17	22.0	18.0	20.0	25.5	21.0	24.0	22.0	18.5	20.0	14.5	13.5	14.0
18	23.5	20.0	21.5	24.0	21.0	22.5	20.5	18.0	19.5	16.0	13.5	15.0
19	25.0	21.5	23.5	23.0	20.5	22.0	22.0	19.5	20.5	16.0	13.0	14.5
20	26.0	23.0	24.5	23.5	21.0	22.5	21.5	18.5	20.0	15.0	14.5	14.5
21	25.5	23.5	24.5	23.0	22.0	22.5	21.5	18.5	20.0	15.5	14.5	15.0
22	23.5	20.0	21.5	23.0	21.0	22.0	21.0	19.0	20.0	16.0	15.5	15.5
23	20.0	18.5	19.5	22.5	21.0	21.5	19.5	16.5	18.5	15.5	13.5	14.5
24	20.5	17.5	19.0	23.0	20.5	21.5	19.5	16.5	18.0	13.5	12.0	12.5
25	21.0	18.5	20.0	24.5	21.5	23.0	18.5	16.5	18.0	13.5	12.5	13.0
26	19.5	17.5	18.0	24.5	23.0	23.5	17.5	15.5	16.5	13.5	12.5	13.0
27	19.5	16.5	17.5	24.5	23.0	23.5	18.5	15.5	17.0	15.0	13.0	14.0
28	21.5	18.0	19.5	24.5	22.0	23.5	17.5	16.0	17.0	16.5	14.0	15.0
29	23.0	19.0	21.0	26.0	23.5	24.5	18.0	15.5	16.5	15.5	13.0	14.5
30	22.0	19.0	20.0	26.5	23.5	25.0	19.0	16.0	17.5	16.0	13.5	14.5
31	---	---	---	26.5	23.0	25.0	18.0	15.5	17.0	---	---	---
MONTH	26.0	16.0	20.5	27.5	15.5	21.5	26.0	15.5	20.0	19.0	12.0	15.0



## DELAWARE RIVER BASIN

01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'28", Wayne County, Pennsylvania, Hydrologic Unit 02040101, on right bank, 0.5 mi downstream from Callicoon Creek, 0.5 mi downstream from Interstate Bridge 7, and 0.8 mi southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,820 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area. WDR NY-86-1: 1975-84 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 734.88 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to September 1954, entire flow from 371 mi<sup>2</sup> of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi<sup>2</sup> of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Satellite gage-height and temperature telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,000 ft<sup>3</sup>/s, Mar. 15, 1986, gage-height, 13.42 ft; maximum gage height, 14.83 ft, Jan. 9, 1979 (ice jam); minimum discharge, 307 ft<sup>3</sup>/s, Aug. 23, 1985; minimum gage height, 2.20 ft, Sept. 13, 1977, Aug. 23, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft<sup>3</sup>/s, Mar. 9, gage height, 6.21 ft; minimum, 476 ft<sup>3</sup>/s, Oct. 13, 14, gage height, 2.51 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	918	741	3450	e1300	e1700	e1800	1660	1340	978	1200	920	1550
2	1040	2270	2710	2320	e1600	e1600	1490	1340	919	1270	995	1590
3	967	2280	2270	e1900	e1500	e1500	1340	1250	1020	1320	970	1470
4	804	1590	1970	e1400	e1300	e1400	1280	1150	1020	1230	978	1460
5	719	1300	3700	e1100	e1200	e1500	1430	1150	903	1170	1190	1440
6	648	1160	6870	e1100	e1200	e1600	1250	1190	813	1110	1350	1460
7	615	1090	5010	e1400	e1200	2010	1200	1070	818	1280	1050	1470
8	571	1020	4290	e1800	e1300	5380	1170	972	786	1450	842	1450
9	548	932	3340	e1600	e1300	11800	1200	912	813	1310	748	1480
10	543	981	2930	e1500	e1400	8880	1620	907	979	1120	957	1550
11	551	1000	3780	e1200	e1300	7030	1940	1010	1060	1200	1140	1460
12	520	898	3350	e1200	e1200	5990	1940	1130	1050	1030	1260	1390
13	491	855	e2450	e1400	e1100	6040	5500	1090	1230	652	1200	1500
14	634	812	2260	e1800	e1000	7010	5850	985	1120	664	1210	1470
15	751	790	2000	3910	e1100	7470	4770	952	919	870	1270	1410
16	609	739	1760	6950	e1100	7960	4090	957	964	655	1380	1240
17	592	705	1640	6110	e1300	7400	3590	902	921	1050	1240	1240
18	591	697	1570	4750	e1200	6320	3090	911	802	2600	1200	1070
19	738	722	1500	3860	e1200	5330	3080	920	798	1860	1310	1160
20	662	759	1400	4670	e1300	4460	3410	934	811	1110	1210	1210
21	1020	801	1270	8250	e1300	4050	2790	866	771	909	1110	1240
22	997	1130	1170	7100	e1200	4510	2790	801	845	864	1190	1400
23	934	1190	1130	5420	e1100	4280	2490	734	1050	1000	1200	1530
24	687	1010	1260	4770	e1300	3680	2180	738	1020	824	1190	1320
25	597	922	1820	4280	e1400	3160	1970	987	1210	830	1280	1160
26	855	896	1770	3740	e1200	2730	1790	1080	1350	821	1360	1290
27	866	844	1490	3300	e1100	2400	1610	929	1550	985	1330	1180
28	830	3640	e1300	e2300	e1300	2150	1530	829	1150	1270	1340	1260
29	912	6840	e1200	e1900	---	1930	1520	822	996	1070	1510	1210
30	697	4680	e1000	e1700	---	1780	1360	1010	1210	928	1470	1260
31	671	---	e960	e1800	---	1770	---	1190	---	833	1500	---
TOTAL	22578	43294	72620	95830	35400	134920	70930	31058	29876	34485	36900	40920
MEAN	728	1443	2343	3091	1264	4352	2364	1002	996	1112	1190	1364
MAX	1040	6840	6870	8250	1700	11800	5850	1340	1550	2600	1510	1590
MIN	491	697	960	1100	1000	1400	1170	734	771	652	748	1070

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	2102	2572	2470	2182	2651	4576	5688	3266	1611	1224	1310	1456									
MAX	6545	4508	6065	7594	7993	11080	14500	7866	3228	2406	2710	3716									
(WY)	1978	1987	1978	1978	1976	1977	1993	1984	1984	1976	1994	1977									
MIN	701	1130	1127	587	611	1177	1496	935	734	777	560	839									
(WY)	1992	1979	1990	1977	1980	1981	1985	1985	1985	1981	1985	1994									

e Estimated

## DELAWARE RIVER BASIN

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995	
ANNUAL TOTAL	927392		648811			
ANNUAL MEAN	2541		1778		2584	
HIGHEST ANNUAL MEAN					3972	1978
LOWEST ANNUAL MEAN					1434	1985
HIGHEST DAILY MEAN	26700	Apr 14	11800	Mar 9	54800	Mar 15 1986
LOWEST DAILY MEAN	426	Sep 22	491	Oct 13	312	Aug 23 1985
ANNUAL SEVEN-DAY MINIMUM	548	Oct 7	548	Oct 7	354	Aug 17 1985
10 PERCENT EXCEEDS	5740		3810		5700	
50 PERCENT EXCEEDS	1300		1230		1380	
90 PERCENT EXCEEDS	697		800		771	

## DELAWARE RIVER BASIN

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

## WATER-QUALITY RECORDS

## PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1975 to current year.

INSTRUMENTATION.--Water-temperature satellite telemeter since May 1989, provides 15-minute-interval readings. Prior to May 1989, water-temperature digital recorder provided one-hour-interval punches.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. Interruptions of record were due to malfunction of recording instrument.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, (water years 1976-95), 30.5°C, July 12, 1987; minimum, 0.0°C on many days during winter periods.

## EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 30.0°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.5	12.5	13.0	11.5	9.5	10.5	3.0	2.0	2.5	.0	.0	.0
2	14.0	11.5	12.5	11.0	8.5	9.5	3.0	1.5	2.0	.5	.0	.0
3	13.5	10.5	12.0	9.5	8.0	8.5	3.0	1.5	2.5	.0	.0	.0
4	12.5	10.5	11.5	11.5	8.5	10.0	3.5	2.0	3.0	.0	.0	.0
5	12.0	10.5	11.0	12.0	10.0	11.0	5.5	3.5	4.5	.0	.0	.0
6	12.0	9.0	10.5	12.5	10.5	11.5	6.5	5.5	6.0	.0	.0	.0
7	14.0	10.0	12.0	11.0	8.5	9.5	7.0	5.5	6.5	.0	.0	.0
8	15.0	11.5	13.0	9.5	7.5	8.5	5.5	2.0	3.5	.0	.0	.0
9	15.0	12.5	14.0	9.0	8.0	8.5	2.0	1.5	2.0	.0	.0	.0
10	14.5	11.5	13.0	8.5	7.0	8.0	2.0	1.5	2.0	.5	.0	.0
11	12.5	10.0	11.5	7.0	5.0	6.0	3.0	2.0	2.5	.0	.0	.0
12	12.0	9.0	10.5	6.0	4.0	5.0	2.0	.0	1.0	.0	.0	.0
13	12.0	9.0	10.5	7.0	5.5	6.0	.0	.0	.0	.0	.0	.0
14	12.5	10.0	11.5	9.0	6.5	7.5	.5	.0	.5	.0	.0	.0
15	12.5	9.5	11.0	9.5	8.0	8.5	1.0	.0	.5	2.5	.0	1.0
16	11.5	9.0	10.5	8.5	7.5	8.0	.5	.0	.0	6.0	1.5	3.5
17	11.5	8.5	10.5	7.5	6.0	7.0	1.0	.0	.5	6.0	5.0	5.5
18	12.5	10.0	11.5	8.5	7.0	7.5	2.0	1.0	1.5	5.0	4.5	4.5
19	13.0	11.0	12.0	8.0	7.0	7.5	2.5	1.5	2.0	4.5	4.5	4.5
20	13.0	12.0	12.5	7.0	5.5	6.5	2.5	1.5	2.0	5.0	4.5	4.5
21	13.0	11.5	12.5	7.0	5.5	6.0	2.0	.5	1.5	5.0	4.0	4.5
22	13.0	11.0	12.0	7.0	4.5	6.5	1.5	.0	1.0	4.0	2.5	3.5
23	12.0	10.5	11.0	4.5	2.0	4.0	1.5	.0	1.0	2.5	2.0	2.0
24	12.5	10.0	11.5	2.0	1.0	1.5	2.5	1.0	2.0	2.0	1.5	2.0
25	11.5	9.5	10.5	2.5	.5	1.5	3.5	2.5	2.5	2.0	1.5	---
26	10.5	8.5	9.5	1.5	.5	1.0	3.0	1.5	2.5	2.0	1.0	1.5
27	10.0	8.5	9.0	.5	.0	.0	2.0	1.0	1.5	1.5	.0	1.0
28	9.5	7.5	8.5	1.5	.0	1.0	2.0	.5	1.5	.0	.0	.0
29	10.0	7.0	8.5	3.0	1.5	2.0	2.0	.0	1.0	.0	.0	.0
30	10.0	7.0	8.5	3.0	2.5	3.0	.0	.0	.0	.5	.0	.0
31	9.5	8.5	9.0	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	15.0	7.0	11.0	12.5	.0	6.5	7.0	.0	2.0	6.0	.0	---

## DELAWARE RIVER BASIN

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	.5	.0	.0	.0	9.0	5.5	7.0	12.5	10.0	11.0
2	1.0	.0	.5	.0	.0	.0	9.0	5.0	7.0	11.0	9.5	10.0
3	.5	.0	.0	.5	.0	.0	9.0	4.5	7.0	14.0	9.5	11.5
4	.0	.0	.0	.0	.0	.0	8.0	5.0	7.0	14.5	10.0	12.0
5	---	.0	---	.5	.0	.0	5.0	2.5	3.5	13.5	12.0	12.5
6	---	---	---	.0	.0	.0	5.0	1.0	3.0	15.0	11.0	12.5
7	---	.0	---	.5	.0	.0	7.0	2.5	5.0	15.0	10.0	12.5
8	.0	.0	.0	1.0	.0	.5	5.5	2.0	3.0	15.5	9.5	12.5
9	.0	.0	.0	.5	.0	.0	3.5	2.5	3.0	16.0	11.0	13.5
10	.0	.0	.0	1.0	.0	.5	6.5	1.5	4.0	15.0	12.5	13.0
11	.0	.0	.0	2.0	1.0	1.5	8.5	3.5	6.0	12.5	11.5	12.0
12	.0	.0	.0	4.0	2.0	3.0	7.5	6.5	7.0	14.0	11.5	12.5
13	.0	.0	.0	5.5	3.5	4.5	7.0	6.5	7.0	17.0	12.0	14.5
14	.0	.0	.0	6.0	4.5	5.0	7.5	6.0	6.5	15.5	13.5	14.5
15	---	.0	---	6.5	5.0	6.0	7.5	5.5	6.5	17.0	13.0	15.0
16	.0	.0	.0	7.0	6.0	6.5	8.5	5.5	6.5	19.0	12.5	16.0
17	.0	.0	.0	7.0	6.0	6.5	10.0	6.0	8.0	17.0	14.5	15.5
18	.0	.0	.0	6.5	5.0	6.0	12.0	8.0	10.0	15.5	14.5	15.0
19	.0	.0	.0	6.0	5.0	5.5	12.0	10.0	11.0	14.5	13.5	14.0
20	.5	.0	.0	7.0	5.5	6.0	13.0	10.0	11.5	18.5	12.0	15.5
21	.0	.0	.0	7.0	6.0	6.5	11.5	10.5	11.0	19.5	14.0	17.0
22	.0	.0	.0	6.5	5.5	6.0	12.5	10.0	11.0	19.5	15.0	17.5
23	.0	.0	.0	5.5	4.5	5.0	12.0	9.0	10.5	21.0	15.0	18.0
24	.0	.0	.0	4.5	3.5	4.0	14.0	9.0	11.0	21.5	17.0	19.5
25	.5	.0	.0	5.5	2.5	4.0	14.5	9.5	12.0	20.5	18.0	19.5
26	.0	.0	.0	7.5	3.5	5.0	14.0	10.5	12.0	19.0	17.5	18.0
27	.0	.0	.0	8.5	4.5	6.5	15.5	10.5	13.0	21.5	16.0	19.0
28	.0	.0	.0	9.0	5.5	7.0	15.5	12.5	14.0	20.0	17.0	18.0
29	---	---	---	10.0	5.5	7.5	14.5	12.0	13.0	20.0	16.5	18.0
30	---	---	---	9.5	7.0	8.0	12.5	10.5	11.5	19.0	17.0	18.0
31	---	---	---	8.5	7.0	7.5	---	---	---	22.5	16.0	19.0
MONTH	---	---	---	10.0	.0	4.0	15.5	1.0	8.5	22.5	9.5	15.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	24.5	17.5	21.0	22.5	20.5	21.5	28.0	23.5	26.0	19.5	17.5	18.5
2	23.5	20.5	22.0	21.5	19.0	20.5	27.0	24.0	25.5	19.0	16.5	18.0
3	25.5	21.0	23.0	22.0	17.0	19.5	27.0	23.5	25.5	19.0	15.0	17.0
4	25.0	20.5	23.0	21.0	17.0	19.5	27.5	23.5	25.5	19.0	15.5	17.0
5	25.0	20.0	22.5	21.0	18.5	19.5	26.0	22.5	24.5	19.5	16.0	18.0
6	25.0	20.0	22.5	20.5	18.5	19.5	23.5	---	---	20.5	16.5	18.5
7	26.5	21.0	24.0	20.5	18.5	19.0	24.5	---	---	20.0	17.0	18.5
8	25.0	22.0	23.5	20.5	18.0	19.0	25.0	20.5	23.0	18.5	16.5	17.5
9	25.0	20.5	23.0	20.0	16.5	18.0	25.0	21.0	23.5	16.5	15.0	15.5
10	23.5	19.5	21.0	21.5	16.5	19.0	24.5	21.5	23.0	16.0	13.5	14.5
11	22.0	18.0	20.0	22.0	18.0	20.0	23.0	21.0	22.0	16.5	12.0	14.5
12	21.0	18.0	19.0	23.5	18.5	21.0	22.0	20.0	20.5	17.5	13.5	15.5
13	21.5	16.0	18.5	26.0	20.0	23.0	23.0	18.5	20.5	16.5	15.5	16.0
14	21.0	16.5	19.0	28.5	23.0	26.0	24.0	19.0	21.5	18.0	15.5	16.5
15	22.5	16.5	20.0	30.0	25.5	28.0	24.0	21.0	22.5	17.5	14.5	16.0
16	23.5	17.5	20.5	28.5	25.0	26.5	24.0	21.0	22.5	16.0	14.0	15.0
17	24.0	18.5	21.5	26.0	23.5	24.5	24.5	20.5	22.5	15.5	14.5	15.0
18	25.5	19.5	22.5	26.0	22.0	23.5	23.5	20.0	21.5	17.5	14.5	16.0
19	27.0	21.5	24.5	24.5	21.0	23.0	24.0	20.0	22.0	17.0	13.0	15.5
20	28.0	23.5	26.0	25.0	21.0	23.0	24.0	19.5	21.5	16.0	14.5	15.0
21	27.0	23.5	---	24.5	22.0	23.0	24.0	19.5	22.0	16.5	14.5	15.5
22	---	---	---	25.0	21.5	23.5	22.5	19.5	21.0	16.5	15.5	16.0
23	24.0	20.0	---	24.0	22.5	23.0	22.0	17.5	20.0	16.0	14.0	15.0
24	23.5	19.0	21.5	24.5	21.0	23.0	21.0	17.5	19.5	15.0	12.0	13.5
25	24.0	20.0	22.5	26.0	22.0	24.0	21.0	17.0	19.0	14.0	12.5	13.0
26	23.0	19.0	21.0	26.5	23.5	25.0	20.0	16.0	18.0	14.0	13.0	13.5
27	20.0	18.0	18.5	26.5	23.5	25.0	19.5	16.5	18.5	16.5	13.0	14.5
28	22.5	17.5	20.0	26.5	22.5	24.5	19.5	17.0	18.0	17.0	13.5	15.0
29	25.0	19.0	21.5	27.5	23.5	25.5	20.0	17.0	18.5	16.0	13.0	14.5
30	24.5	20.5	22.5	28.0	23.5	26.0	20.5	16.5	18.5	16.0	13.0	14.5
31	---	---	---	28.0	23.0	26.0	20.5	16.0	18.5	---	---	---
MONTH	---	---	---	30.0	16.5	22.5	28.0	---	---	20.5	12.0	16.0

## DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'32", long 74°59'10", Sullivan County, Hydrologic Unit 02040101, on left bank, 1.6 mi upstream from Lackawaxen River, and 4.6 mi northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,020 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to September 1954, entire flow from 371 mi<sup>2</sup> of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi<sup>2</sup> of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft<sup>3</sup>/s, Aug. 19, 1955, gage height, 26.40 ft, from floodmarks in gage house, from rating curve extended above 55,000 ft<sup>3</sup>/s, on basis of slope-area measurement at gage height 23.19 ft; minimum discharge, 122 ft<sup>3</sup>/s, Sept. 5, 1953, gage height, 1.11 ft; minimum daily, 126 ft<sup>3</sup>/s, Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,700 ft<sup>3</sup>/s, Mar. 9, gage height, 8.19 ft; minimum daily discharge, 619 ft<sup>3</sup>/s, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	791	4530	e1600	e2500	e1900	2080	1620	1240	1280	910	1610
2	1430	2260	3660	e3000	e2200	e1800	1850	1660	1090	1370	1060	1590
3	1260	3050	3110	e2400	e1800	e1700	1650	1540	1240	1400	1070	1600
4	1070	2100	2690	e1800	e1500	e1600	1530	1380	1300	1310	1030	1510
5	944	1600	3780	e1300	e1500	e1600	1650	1350	1170	1270	1130	1480
6	850	1370	8190	e1100	e1400	e1600	1580	1410	1010	1210	1430	1460
7	796	1270	6180	e1500	e1400	e2200	1390	1310	1000	1290	1250	1520
8	741	1220	5280	e2000	e1500	5000	1390	1180	950	1540	990	1490
9	707	1130	4300	e1800	e1500	14000	1430	1100	908	1430	846	1480
10	700	1150	3770	e1600	e1600	10900	1830	1090	1040	1270	870	1600
11	682	1190	4940	e1400	e1500	8310	2450	1170	1180	1220	1170	1530
12	673	1110	4610	e1300	e1400	6960	2380	1340	1220	1200	1170	1430
13	630	1030	e3200	e1500	e1300	6950	5260	1320	1220	873	1300	1500
14	619	982	e2900	e2300	e1200	8100	6840	1200	1440	736	1220	1590
15	897	945	e2700	4150	e1200	8480	5560	1130	1090	832	1270	1470
16	768	912	e2400	7970	e1300	8940	4740	1140	1110	851	1330	1310
17	713	865	2200	7350	e1500	8510	4160	1100	1060	726	1360	1360
18	699	842	2090	5790	e1400	7330	3700	1110	944	2170	1330	1180
19	728	842	1980	4760	e1400	6160	3500	1130	901	2830	1180	1130
20	904	895	1830	5160	e1400	5250	3990	1150	922	1360	1370	1230
21	835	942	1640	9740	e1400	4800	3410	1090	865	1040	1180	1250
22	1210	1360	1460	9070	e1300	5210	3340	997	900	960	1170	1320
23	1080	1450	1390	6730	e1300	5100	3100	926	1030	1020	1210	1610
24	940	1270	1510	5780	e1300	4460	2680	876	1140	1050	1220	1410
25	704	1140	2540	5190	e1400	3920	2350	1170	1140	943	1200	1290
26	761	1090	e2400	4620	e1300	3460	2120	1360	1340	944	1330	1250
27	1060	1050	e1900	e3900	e1200	3090	1880	1210	1770	1020	1420	1220
28	904	3790	e1600	e3100	e1300	2790	1750	1080	1370	1780	1350	1280
29	975	8490	e1400	e2400	---	2460	1780	1030	1040	1320	1390	1270
30	955	6110	e1100	e2100	---	2230	1630	1230	1270	1100	1540	1250
31	758	---	e1000	e2300	---	2180	---	1420	---	961	1480	---
TOTAL	27163	52246	92280	114710	41000	156990	83000	37819	33900	38306	37776	42220
MEAN	876	1742	2977	3700	1464	5064	2767	1220	1130	1236	1219	1407
MAX	1430	8490	8190	9740	2500	14000	6840	1660	1770	2830	1540	1610
MIN	619	791	1000	1100	1200	1600	1390	876	865	726	846	1130

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
MEAN	2041	2679	2991	2541	2950	5099	6490	3908	2222	1536	1401	1518
MAX	7404	6481	7375	8335	9389	12050	16500	8615	6701	3911	3033	4186
(WY)	1978	1973	1974	1978	1976	1977	1993	1984	1972	1973	1994	1987
MIN	527	610	1181	687	712	1399	1878	1161	673	328	465	448
(WY)	1964	1965	1989	1977	1980	1981	1985	1965	1965	1965	1965	1965

e Estimated



## DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	1101610		757410		2945	
ANNUAL MEAN	3018		2075		4650	1973
HIGHEST ANNUAL MEAN					1297	1965
LOWEST ANNUAL MEAN					62800	Mar 15 1986
HIGHEST DAILY MEAN	31900	Apr 14	14000	Mar 9	250	Oct 27 1963
LOWEST DAILY MEAN	503	Sep 22	619	Oct 14	264	Oct 23 1963
ANNUAL SEVEN-DAY MINIMUM	679	Oct 8	679	Oct 8	6370	
10 PERCENT EXCEEDS	6420		4670		1620	
50 PERCENT EXCEEDS	1510		1370		848	
90 PERCENT EXCEEDS	838		906			

## DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

CHEMICAL DATA: 1971-73 (a).

NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-76).

INSTRUMENTATION.--Water-temperature recorder since October 1975, provides one-hour-interval readings. Prior to October 1975, water-temperature recorder provided continuous recordings.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-75, 1980-81, 1983, 1985-95), 32.5°C, July 9, 10, 1993; minimum (water years 1968, 1977-95), 0.0°C, on many days during winter periods, each year except water years 1980-82.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 32.0°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	13.5	13.5	12.0	10.5	11.0	3.5	2.5	3.0	1.0	.0	.5
2	15.0	12.5	13.5	11.0	9.5	10.5	3.5	2.5	3.0	.5	.0	.5
3	15.0	11.5	13.0	10.5	9.0	9.5	3.0	2.5	3.0	.0	.0	.0
4	13.5	11.5	12.5	12.0	9.5	10.5	4.0	2.5	3.5	.0	.0	.0
5	13.0	11.0	12.0	12.5	10.5	11.5	5.0	3.5	4.5	.0	.0	.0
6	14.5	10.0	12.0	12.5	11.0	11.5	7.0	5.0	6.0	.0	.0	.0
7	15.0	11.0	12.5	12.0	10.0	11.0	7.0	6.0	7.0	.0	.0	.0
8	15.5	11.5	13.5	11.5	9.0	10.0	6.0	3.5	5.0	.0	.0	.0
9	15.5	13.0	14.5	10.0	9.0	9.5	3.5	2.5	2.5	.0	.0	.0
10	15.5	12.5	14.0	10.0	8.0	9.0	2.5	2.5	2.5	.5	.0	.0
11	15.0	11.0	12.5	9.0	6.5	7.5	3.5	2.5	3.0	.0	.0	.0
12	14.0	10.5	12.0	8.0	5.5	6.5	2.5	1.0	1.5	.0	.0	.0
13	13.0	10.5	12.0	7.5	6.0	6.5	1.0	.0	.5	.5	.0	.0
14	13.0	11.5	12.0	10.0	7.0	8.0	1.0	.5	.5	1.0	.0	.5
15	14.5	10.5	12.5	10.0	8.0	9.0	1.5	.0	.5	1.5	.5	1.0
16	14.5	10.5	12.0	9.0	8.0	8.5	1.0	.0	.5	4.5	1.0	2.5
17	13.5	10.0	11.5	9.0	7.0	8.0	1.0	.5	1.0	6.0	4.5	5.5
18	13.0	11.0	12.0	9.0	8.0	8.5	2.5	1.0	1.5	5.5	5.0	5.0
19	13.5	11.5	13.0	10.5	7.5	8.5	2.5	1.5	2.0	5.0	4.5	4.5
20	14.0	13.0	13.5	8.5	6.5	7.5	3.0	1.5	2.0	5.0	4.5	4.5
21	15.0	12.5	13.5	7.5	6.5	7.0	3.0	1.0	2.0	5.0	4.5	4.5
22	14.0	12.0	13.0	8.5	6.0	7.0	2.5	1.0	1.5	4.5	3.0	3.5
23	13.0	12.0	12.0	6.5	3.5	5.0	2.0	.5	1.5	3.0	2.0	2.5
24	14.5	11.0	12.5	4.0	2.5	3.0	2.5	1.5	2.0	2.5	2.0	2.0
25	13.5	10.5	12.0	4.0	2.0	2.5	4.0	2.5	3.0	2.0	2.0	2.0
26	11.5	10.0	11.0	3.0	1.5	2.0	3.5	2.0	3.0	2.0	1.5	2.0
27	10.5	9.5	10.0	1.5	.5	1.0	3.0	1.5	2.0	1.5	1.0	1.5
28	12.0	8.5	10.0	2.0	1.0	1.5	2.5	1.5	2.0	1.0	.0	.5
29	11.5	8.0	9.5	3.0	2.0	2.5	2.5	.0	1.5	1.0	.0	.0
30	12.5	8.5	10.0	3.5	2.5	3.0	.5	.0	.0	1.0	.0	.5
31	10.5	9.5	10.0	---	---	---	.5	.0	.5	1.0	.0	.5
MONTH	15.5	8.0	12.0	12.5	.5	7.0	7.0	.0	2.5	6.0	.0	1.5

## DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.5	.5	.0	.0	10.0	7.5	8.5	13.5	11.5	12.5
2	1.0	.0	.5	.5	.0	.0	9.5	7.0	8.0	12.5	11.5	11.5
3	.5	.0	.0	1.5	.0	.5	9.5	6.0	8.0	14.0	10.0	12.0
4	.0	.0	.0	1.0	.0	.0	10.5	7.5	8.5	15.0	11.0	13.0
5	.0	.0	.0	1.5	.0	.5	7.5	4.5	6.0	14.0	13.0	13.5
6	.0	.0	.0	1.5	.5	.5	6.5	3.5	5.0	15.5	12.0	13.5
7	.0	.0	.0	1.0	.5	1.0	8.5	4.5	6.0	15.5	11.5	13.5
8	.0	.0	.0	2.0	.0	1.0	7.0	4.5	5.0	16.5	11.0	13.5
9	.0	.0	.0	.5	.0	.0	6.0	4.5	5.0	16.5	12.0	14.5
10	.0	.0	.0	1.0	.0	.5	6.5	3.0	5.0	15.0	13.5	14.0
11	.0	.0	.0	2.0	.5	1.5	8.5	4.5	6.0	14.0	13.0	13.0
12	.0	.0	.0	3.5	1.5	2.5	8.0	6.5	7.5	14.5	12.5	13.5
13	.0	.0	.0	5.0	3.0	4.0	8.0	7.5	7.5	17.0	13.0	15.0
14	.0	.0	.0	6.5	4.5	5.5	8.0	7.0	7.5	16.0	14.0	15.0
15	.0	.0	.0	7.0	5.5	6.5	8.0	7.0	7.5	17.5	14.0	15.5
16	.0	.0	.0	7.5	6.0	7.0	8.5	6.5	7.5	18.5	13.5	16.0
17	.0	.0	.0	7.5	7.0	7.5	9.5	7.5	8.5	17.0	15.5	16.5
18	.0	.0	.0	7.5	6.0	7.0	11.5	9.0	10.0	16.5	15.5	16.0
19	.0	.0	.0	7.0	5.5	6.5	13.0	11.0	12.0	16.0	14.5	15.0
20	.0	.0	.0	7.5	5.5	6.5	13.0	11.5	12.0	19.0	13.5	16.0
21	.0	.0	.0	7.0	6.5	7.0	12.5	11.5	12.0	20.0	15.0	17.5
22	.0	.0	.0	7.5	6.5	7.0	12.5	11.5	12.0	21.5	16.0	18.5
23	.0	.0	.0	7.0	5.5	6.0	13.0	11.0	12.0	22.0	16.0	19.0
24	1.0	.0	.0	5.5	4.5	5.0	14.0	11.0	12.0	23.0	18.0	20.5
25	.5	.0	.0	6.0	4.0	5.0	15.0	11.5	13.0	21.0	19.5	20.5
26	1.0	.0	.0	7.0	4.5	5.5	15.0	12.0	13.0	19.5	18.5	19.0
27	.0	.0	.0	8.5	6.0	7.0	15.5	12.0	13.5	22.5	17.5	19.5
28	.5	.0	.0	9.5	6.5	8.0	17.0	13.5	15.0	20.5	18.5	19.5
29	---	---	---	10.0	7.0	8.5	16.0	13.5	14.5	22.5	17.5	19.5
30	---	---	---	10.0	8.0	9.0	14.5	12.5	13.5	20.0	18.0	19.0
31	---	---	---	9.5	8.0	9.0	---	---	---	22.0	17.0	19.5
MONTH	1.0	.0	.0	10.0	.0	4.5	17.0	3.0	9.5	23.0	10.0	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	24.5	19.0	21.5	25.5	23.0	24.0	30.5	24.5	27.5	21.5	20.0	21.0
2	24.0	21.0	22.5	24.0	22.5	23.5	29.5	25.5	27.5	21.0	18.5	20.0
3	26.0	22.0	23.5	24.5	20.0	22.0	29.5	25.5	27.5	22.0	17.5	19.5
4	26.0	22.0	24.0	24.0	20.0	22.0	29.0	25.5	27.0	21.0	17.5	19.0
5	26.5	21.5	23.5	24.0	21.0	22.5	27.5	25.5	26.0	22.0	18.0	19.5
6	26.5	21.5	24.0	23.0	21.5	22.0	26.0	24.0	25.0	23.0	18.0	20.0
7	27.5	22.5	24.5	22.0	21.0	21.5	26.0	22.0	24.0	22.0	19.0	20.5
8	27.5	23.0	24.5	23.0	20.0	21.5	26.5	21.0	24.0	21.0	19.0	20.0
9	27.5	21.5	24.0	22.5	20.0	21.0	26.5	21.5	24.0	19.0	17.5	18.0
10	24.0	21.5	22.5	23.5	18.5	21.0	25.0	21.5	23.5	18.5	15.5	17.0
11	24.0	20.0	21.5	24.5	20.5	22.0	26.5	22.5	24.5	18.5	14.0	16.0
12	22.0	20.0	21.0	26.5	20.5	23.0	26.0	23.5	24.5	19.0	14.0	16.5
13	22.5	18.5	20.0	28.0	22.0	25.0	26.5	22.0	24.5	18.5	16.0	17.5
14	22.0	18.5	20.5	30.0	24.0	27.0	26.0	22.0	24.0	19.0	17.0	18.0
15	24.5	18.5	21.5	32.0	26.0	29.0	27.0	23.0	25.0	20.0	16.5	18.0
16	24.5	19.0	21.5	30.0	26.5	28.0	27.0	24.0	25.5	18.0	15.5	17.0
17	25.5	20.0	23.0	28.5	25.5	27.0	28.0	24.0	26.0	17.5	16.0	16.5
18	27.0	21.0	24.0	27.0	25.0	26.0	27.0	23.0	25.0	19.5	15.5	17.5
19	29.0	22.5	25.5	25.5	23.5	24.5	27.0	22.5	24.5	18.0	15.5	17.0
20	30.0	24.5	27.0	26.5	22.5	24.5	26.0	21.5	24.0	17.5	16.5	17.0
21	28.0	24.5	26.5	26.0	23.5	24.5	26.5	21.5	24.0	18.0	16.5	17.0
22	25.0	23.0	24.0	27.5	23.0	25.0	25.0	21.5	23.5	17.5	16.5	17.0
23	26.0	21.5	23.5	26.5	24.0	25.0	24.5	20.0	22.5	17.0	15.5	16.0
24	25.5	22.0	23.5	28.5	23.5	25.5	24.0	20.0	22.0	16.0	14.0	15.5
25	27.0	22.5	24.5	28.5	24.0	26.0	23.5	19.0	21.0	15.5	14.5	15.0
26	26.0	24.0	25.0	28.0	24.5	26.0	23.0	18.5	21.0	15.0	14.0	14.5
27	24.5	21.0	23.0	29.5	25.0	27.0	22.0	19.5	21.0	16.5	14.0	15.0
28	24.0	19.0	21.0	26.5	24.5	25.5	21.0	19.0	20.0	16.5	14.5	15.5
29	25.5	19.5	22.5	28.5	24.0	26.0	23.0	18.5	20.5	16.0	14.0	15.5
30	25.5	21.5	23.0	29.5	24.5	27.0	23.5	19.0	21.0	16.0	14.0	15.5
31	---	---	---	30.5	24.0	27.0	23.0	18.0	20.5	---	---	---
MONTH	30.0	18.5	23.0	32.0	18.5	24.5	30.5	18.0	24.0	23.0	14.0	17.5

## DELAWARE RIVER BASIN

01432160 DELAWARE RIVER AT BARRYVILLE, NY

LOCATION.--Lat 41°28'31", long 74°54'46", Pike County, Pa., Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft upstream from Shohola Creek.

DRAINAGE AREA.--2,659 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1958, 1968 to current year.

CHEMICAL DATA: 1958 (d), 1969 (a), 1973 (b), 1974 (d), 1975 (b).

NUTRIENT DATA: 1973 (b), 1974 (d), 1975 (b).

BIOLOGICAL DATA:

Bacteria.--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to September 1973, March 1975 to current year.

INSTRUMENTATION.--Water-temperature recorder since February 1994, provides 15-minute-interval readings. From March 1975 to February 1994, water-temperature digital recorder provided one-hour-interval punches. Prior to September 1973, water-temperature recorder provided continuous recordings.

REMARKS.--Unpublished records of daily temperatures for May to September 1964-66 are available in files of the Geological Survey. Temperature probe may be influenced by solar radiation during periods of low flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78, 1980-82, 1986-88, 1990-95), 32.0°C, July 20, 21, 1980; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 31.0°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.0	13.5	14.0	12.0	10.0	11.5	4.0	2.5	3.0	2.0	1.0	1.5
2	13.5	12.5	13.0	11.5	9.5	10.5	4.0	2.5	3.0	2.0	.5	1.0
3	13.0	11.5	12.5	10.5	8.5	9.5	4.0	2.5	3.5	1.0	.0	.5
4	12.5	11.5	12.0	12.0	9.5	10.5	4.5	3.0	3.5	1.0	.0	.5
5	12.0	11.0	11.5	12.0	10.5	11.5	5.5	4.0	5.0	.5	.0	.0
6	12.0	10.0	11.0	12.0	10.5	11.5	6.5	5.5	6.0	.5	.0	.0
7	13.0	11.0	12.0	11.5	9.5	10.5	7.0	5.5	6.5	.5	.0	.0
8	14.0	11.5	13.0	10.0	9.0	9.5	6.0	3.5	4.5	.5	.0	.0
9	15.0	12.5	14.0	10.0	9.5	10.0	4.0	3.0	3.5	.5	.0	.0
10	14.5	12.0	13.5	10.0	8.5	9.5	4.0	2.5	3.5	.5	.0	.0
11	12.5	10.5	11.5	9.0	7.0	7.5	4.0	2.5	3.5	.5	.0	.0
12	13.0	10.0	11.0	7.5	6.0	6.5	3.0	1.0	2.0	.5	.0	.0
13	13.0	9.0	11.0	7.0	6.0	6.5	2.5	1.0	2.0	1.5	.0	.5
14	13.5	9.5	11.5	9.0	6.5	7.5	3.0	2.0	2.5	1.5	.5	1.0
15	12.5	10.0	11.5	10.0	9.0	9.5	3.0	1.5	2.0	3.5	1.5	2.5
16	12.5	10.0	11.0	9.5	8.0	9.0	2.5	1.5	2.0	4.0	2.5	3.5
17	12.5	9.0	10.5	8.5	7.5	8.0	3.0	1.0	2.0	5.5	3.0	4.5
18	13.5	10.0	11.5	9.5	8.0	9.0	3.5	2.0	2.5	5.0	3.5	4.5
19	13.5	11.0	12.0	9.5	7.5	8.5	3.5	2.0	2.5	4.5	3.5	4.0
20	13.5	12.5	13.0	8.0	6.5	7.0	3.0	1.5	2.5	4.5	3.5	4.0
21	14.0	12.0	13.0	7.5	6.0	6.5	3.5	1.5	2.5	4.5	3.5	4.0
22	13.0	11.5	12.5	8.0	6.5	7.5	3.0	1.5	2.5	4.0	2.5	3.5
23	12.5	11.5	12.0	7.0	4.5	5.5	3.0	1.0	2.0	3.0	1.5	2.0
24	12.5	10.5	11.5	4.5	2.0	3.5	3.5	2.0	2.5	2.5	1.5	2.0
25	12.5	9.5	11.0	3.0	1.5	2.5	4.0	2.5	3.5	2.5	1.5	2.0
26	11.0	9.0	10.0	2.5	1.5	2.0	3.0	2.0	2.5	2.0	1.0	1.5
27	10.0	9.0	9.5	2.0	.0	1.0	3.0	1.0	2.0	2.0	.5	1.0
28	10.0	8.0	9.0	3.0	.5	1.5	3.0	1.5	2.0	1.0	.0	.0
29	10.5	8.5	9.5	3.5	2.5	3.0	3.0	1.0	2.0	.5	.0	.0
30	10.0	8.5	9.0	4.0	2.5	3.5	1.5	.0	.5	1.0	.0	.0
31	10.5	9.0	9.5	---	---	---	2.0	.0	.5	1.5	.0	.5
MONTH	15.0	8.0	11.5	12.0	.0	7.5	7.0	.0	3.0	5.5	.0	1.5

## DELAWARE RIVER BASIN

01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	.0	.5	1.5	.0	.5	8.5	6.0	7.5	12.5	11.0	12.0
2	1.5	.0	1.0	1.0	.0	.5	8.0	6.0	7.5	12.0	10.5	11.0
3	1.0	.0	.0	1.5	.0	.5	8.0	5.0	6.5	13.0	10.0	11.5
4	.5	.0	.0	1.0	.0	.5	8.5	6.0	7.5	13.0	10.5	12.0
5	.5	.0	.0	2.0	.0	1.0	6.5	3.5	5.0	13.0	12.0	12.5
6	.5	.0	.0	2.0	1.0	1.5	6.5	3.0	4.5	14.5	11.5	13.0
7	.5	.0	.0	2.5	1.0	2.0	7.5	4.5	6.0	14.0	11.5	13.0
8	.5	.0	.0	3.5	.5	2.5	7.0	4.0	5.0	15.0	11.0	13.0
9	.5	.0	.0	1.0	.0	.5	5.5	4.0	4.5	15.5	12.5	14.0
10	1.0	.0	.0	1.5	.0	.5	6.5	3.5	5.0	15.0	13.0	13.5
11	1.0	.0	.5	2.5	.0	1.0	8.0	4.0	6.0	13.0	12.0	12.5
12	.5	.0	.0	3.5	1.0	2.5	7.5	6.0	6.5	13.5	12.0	13.0
13	.5	.0	.0	5.0	3.0	4.0	8.0	6.5	7.0	15.5	12.5	14.0
14	.5	.0	.0	6.0	3.5	5.0	8.0	6.5	7.0	15.5	14.0	14.5
15	.5	.0	.0	7.0	5.0	6.0	8.5	6.0	7.0	16.0	13.5	14.5
16	1.5	.0	1.0	7.5	5.5	6.5	8.5	6.0	7.5	17.0	13.5	15.5
17	2.0	.0	1.0	7.5	6.5	7.0	10.0	6.5	8.5	16.5	15.5	16.0
18	1.5	.0	.5	7.5	5.5	6.5	11.5	8.5	10.0	16.0	15.0	15.5
19	1.0	.0	.5	6.5	5.0	6.0	13.0	10.5	11.5	15.0	14.0	14.5
20	1.5	.0	.5	7.0	5.0	6.0	12.5	10.5	11.5	17.0	13.5	15.0
21	1.5	.0	.5	7.0	6.0	6.5	12.0	10.5	11.5	18.0	15.0	16.5
22	1.5	.0	.5	7.0	6.0	6.5	12.5	10.5	11.5	19.0	16.0	17.5
23	2.0	.5	1.0	6.5	5.0	5.5	12.5	10.0	11.0	20.0	16.0	18.0
24	2.0	.0	1.0	5.5	4.0	4.5	13.0	10.0	11.5	21.5	17.5	19.5
25	1.0	.0	.5	6.0	3.5	4.5	13.5	10.5	12.0	20.5	19.0	20.0
26	1.0	.0	.5	7.0	3.5	5.5	13.0	10.5	12.0	19.5	17.5	18.5
27	.5	.0	.0	7.5	5.0	6.0	14.0	11.0	13.0	20.5	17.0	19.0
28	.5	.0	.0	8.5	5.0	6.5	15.0	13.0	14.0	20.0	18.0	19.0
29	---	---	---	8.5	5.5	7.0	15.5	12.5	14.0	20.0	17.5	18.5
30	---	---	---	8.5	6.5	7.5	14.0	12.0	13.0	19.5	18.0	18.5
31	---	---	---	8.5	7.0	7.5	---	---	---	21.0	17.0	19.0
MONTH	2.0	.0	.5	8.5	.0	4.0	15.5	3.0	9.0	21.5	10.0	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.5	19.0	20.5	25.0	22.5	23.5	29.5	23.0	26.0	22.0	20.5	21.0
2	23.0	20.5	22.0	24.5	23.0	23.5	28.5	24.0	26.0	21.0	19.5	20.5
3	24.0	21.0	22.5	24.0	21.0	22.5	28.5	23.5	26.0	20.5	18.0	19.5
4	24.5	22.0	23.0	23.5	21.0	22.5	28.0	24.0	26.0	20.5	18.0	19.5
5	24.5	21.5	23.0	23.5	22.0	22.5	26.5	23.5	25.0	21.0	18.5	20.0
6	24.5	21.5	23.0	23.0	22.0	22.5	26.0	24.5	25.0	21.5	18.5	20.5
7	25.5	22.5	24.0	22.0	21.0	21.5	25.0	23.0	24.0	21.5	19.5	20.5
8	25.0	22.5	23.5	23.0	20.5	22.0	26.0	21.5	23.5	21.0	19.0	20.0
9	26.0	21.5	23.5	22.0	20.0	21.0	27.5	21.5	24.0	19.5	18.0	18.5
10	23.5	21.0	22.5	22.5	19.5	21.5	25.5	21.5	23.5	18.5	16.5	17.0
11	22.5	20.0	21.5	23.5	20.5	22.0	25.5	22.5	24.0	17.5	14.5	16.0
12	22.0	19.5	21.0	25.0	21.0	23.0	26.0	23.5	25.0	17.5	15.0	16.5
13	21.0	18.5	20.0	28.0	22.5	25.0	25.5	23.5	24.5	18.0	16.5	17.5
14	21.0	19.0	20.0	29.5	21.5	25.5	25.5	23.0	24.5	18.5	17.0	18.0
15	22.5	19.0	20.5	31.0	22.5	26.5	26.5	22.5	24.5	18.5	16.5	17.5
16	23.0	19.5	21.5	29.0	25.5	27.0	27.0	24.5	26.0	17.5	16.0	17.0
17	24.5	20.0	22.5	28.0	23.0	25.5	27.0	23.0	25.0	17.0	16.0	16.5
18	25.5	21.5	23.5	27.0	22.5	25.0	26.5	23.0	25.0	18.0	15.5	17.0
19	27.5	22.5	25.0	25.5	22.5	24.0	27.0	23.0	25.0	18.0	15.0	16.5
20	28.5	24.0	26.5	25.5	21.5	23.5	25.0	22.5	24.0	17.5	16.5	17.0
21	27.0	24.0	25.5	25.0	22.0	23.5	25.5	22.0	24.0	17.5	16.0	17.0
22	24.0	22.5	23.5	26.5	21.5	24.0	25.0	22.5	23.5	17.5	16.5	17.0
23	25.0	21.5	23.5	26.5	23.5	25.0	23.5	20.5	22.5	16.5	15.0	16.0
24	24.5	22.0	23.5	27.5	23.5	25.0	23.5	21.0	22.0	16.0	14.0	15.0
25	25.5	22.5	24.0	28.0	22.0	24.5	23.0	20.0	21.5	15.5	14.5	15.0
26	25.0	24.0	24.5	27.5	22.5	24.5	22.0	19.5	21.0	15.0	14.0	14.5
27	24.5	22.0	23.0	28.0	23.0	25.5	22.0	20.5	21.5	16.5	14.0	15.0
28	22.5	19.5	21.0	26.5	23.5	25.0	21.5	20.0	21.0	16.5	14.5	15.5
29	24.5	20.0	22.0	27.0	23.0	25.0	22.0	19.0	20.5	16.0	14.0	15.5
30	24.5	21.5	23.0	28.0	25.0	26.5	22.0	19.5	21.0	16.0	14.0	15.0
31	---	---	---	30.0	25.0	27.5	22.0	19.0	21.0	---	---	---
MONTH	28.5	18.5	23.0	31.0	19.5	24.0	29.5	19.0	23.5	22.0	14.0	17.5





## DELAWARE RIVER BASIN

01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.5	.5	1.0	1.5	.5	1.0	10.0	8.0	---	---	12.0	---
2	2.0	1.5	1.5	1.0	.0	.5	9.5	8.5	---	12.5	11.5	12.0
3	---	---	---	1.5	.0	.5	---	---	7.5	---	---	---
4	---	---	---	1.0	.5	.5	---	---	8.0	13.5	12.0	12.5
5	---	---	---	2.0	.5	1.0	7.0	5.0	6.0	14.0	13.0	13.5
6	---	---	---	2.0	1.5	2.0	6.0	4.5	5.0	15.0	12.5	13.5
7	---	---	---	2.5	2.0	2.0	---	---	---	15.0	12.5	13.5
8	---	---	---	---	---	---	7.5	5.0	6.0	15.5	12.0	13.5
9	---	---	---	---	---	---	6.5	4.5	5.5	16.5	13.0	14.5
10	---	---	---	---	---	---	6.5	5.0	6.0	15.0	14.0	14.5
11	---	---	---	---	---	---	8.0	5.5	6.5	14.0	13.0	13.5
12	---	---	---	---	---	---	8.0	7.0	7.5	14.0	13.0	13.5
13	---	---	---	---	---	---	8.0	7.5	8.0	16.5	13.5	14.5
14	---	---	---	---	---	---	8.5	7.5	8.0	16.0	15.0	15.5
15	---	---	---	---	---	---	8.5	7.0	8.0	17.0	14.5	15.5
16	---	---	---	---	---	---	9.0	7.0	8.0	17.0	13.5	15.5
17	---	---	---	---	---	---	10.0	7.5	9.0	16.0	15.0	15.5
18	---	---	---	---	---	---	11.5	9.0	10.5	---	15.0	---
19	---	---	---	9.0	6.5	7.0	13.0	11.0	12.0	15.5	14.0	15.0
20	1.5	.0	1.0	8.0	6.5	7.5	13.0	11.5	12.5	17.5	13.5	15.0
21	1.0	.5	1.0	9.0	7.5	8.0	12.5	12.0	12.5	18.0	15.0	16.5
22	1.5	.0	1.0	9.0	8.5	9.0	12.5	11.5	12.0	20.0	15.5	17.5
23	1.5	.5	1.0	8.5	7.5	8.5	13.0	11.0	12.0	21.5	16.5	18.5
24	2.5	1.0	1.5	7.5	7.0	7.5	13.5	11.0	12.5	22.0	---	---
25	1.0	.0	.5	---	---	---	14.0	11.5	13.0	---	---	---
26	1.0	.0	.5	---	---	---	14.0	11.5	13.0	---	---	---
27	.5	.0	.0	---	---	---	15.0	12.5	13.5	22.0	17.0	---
28	.5	.0	.5	9.5	7.5	8.5	16.0	14.0	15.0	---	---	---
29	---	---	---	10.0	6.0	8.5	15.5	14.0	14.5	---	17.5	---
30	---	---	---	10.0	9.0	9.5	15.0	13.0	14.0	---	---	---
31	---	---	---	10.0	9.0	9.5	---	---	---	21.0	17.0	19.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.5	19.0	21.0	25.5	23.0	24.0	28.5	25.0	27.0	23.0	21.5	22.0
2	23.5	21.0	22.0	24.5	23.0	24.0	28.0	25.0	26.5	23.0	20.0	21.0
3	25.0	22.0	23.0	25.0	21.5	23.0	27.5	24.5	26.0	22.0	18.5	20.0
4	25.0	22.5	23.5	24.5	22.0	23.0	28.0	26.0	27.0	22.0	19.0	20.0
5	24.5	22.0	23.0	24.0	22.0	23.0	26.5	25.0	25.5	23.0	19.5	20.5
6	25.5	22.0	23.5	23.5	22.5	23.0	26.0	24.5	25.0	23.5	19.5	21.0
7	26.0	22.5	24.0	22.5	21.5	22.0	26.0	23.5	24.5	23.0	20.5	21.5
8	26.5	23.5	24.5	24.0	21.0	22.0	27.0	22.5	24.5	21.0	19.5	20.5
9	26.0	22.0	23.5	23.0	21.0	21.5	27.0	22.0	24.0	19.5	18.5	19.0
10	24.0	22.0	22.5	24.5	20.5	22.0	25.5	22.5	24.0	19.0	17.0	18.0
11	23.0	20.5	21.5	25.5	21.0	22.5	25.5	23.0	24.0	20.0	15.5	17.0
12	22.0	20.0	21.5	26.5	22.0	24.0	27.5	24.5	25.5	19.0	16.0	17.0
13	22.0	19.0	20.0	28.0	23.0	25.0	28.0	24.0	26.0	18.5	17.0	17.5
14	21.0	19.5	20.0	28.5	25.0	26.5	28.0	24.0	25.5	19.5	18.0	18.5
15	23.5	19.0	21.0	29.5	25.5	27.5	27.0	24.5	25.5	20.0	17.0	18.0
16	23.5	19.5	21.5	29.0	26.5	27.5	29.0	25.0	26.5	19.0	16.5	17.5
17	25.0	20.5	22.5	28.0	25.5	26.5	27.5	25.0	26.5	20.0	17.0	17.5
18	28.0	22.0	24.5	27.0	23.5	25.5	27.5	25.0	26.0	20.0	16.0	17.5
19	28.0	23.0	25.5	26.5	23.0	25.0	28.5	24.5	26.0	19.5	16.0	17.5
20	29.5	24.5	26.5	25.5	22.5	24.0	27.5	23.5	25.0	18.5	17.0	18.0
21	27.5	25.0	26.0	25.0	23.5	24.5	27.5	23.0	25.0	19.0	17.0	18.0
22	25.0	23.0	24.0	26.0	23.5	24.5	27.0	23.5	25.0	19.0	17.5	18.0
23	25.0	22.0	23.5	27.0	24.0	25.5	26.0	22.0	23.5	18.0	16.0	17.5
24	24.5	22.5	23.5	27.0	24.5	25.5	26.0	22.0	23.5	17.0	15.0	16.0
25	27.0	22.5	24.5	27.5	24.5	26.0	25.5	20.5	22.5	16.5	15.5	16.0
26	25.5	24.0	24.5	26.5	24.0	25.5	24.5	20.5	22.0	16.0	15.5	15.5
27	24.5	22.5	23.5	27.5	24.5	25.5	24.0	21.0	22.5	19.0	15.0	16.5
28	23.0	20.5	22.0	26.5	24.0	25.5	23.5	21.0	22.0	20.0	16.5	17.5
29	25.5	20.5	22.5	27.0	24.0	25.5	24.0	20.5	22.0	21.0	17.0	18.0
30	25.0	21.0	23.0	30.0	25.0	27.0	24.0	21.0	22.0	18.0	15.5	17.0
31	---	---	---	31.0	25.0	27.5	23.5	20.0	21.5	---	---	---
MONTH	29.5	19.0	23.0	31.0	20.5	24.5	29.0	20.0	24.5	23.5	15.0	18.5

## DELAWARE RIVER BASIN

01433500 MONGAUP RIVER NEAR MONGAUP, NY

LOCATION.--Lat 41°27'41", long 74°45'33", Sullivan County, Hydrologic Unit 02040104, on right bank 300 ft downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi downstream from Bush Kill, and 2.8 mi upstream from mouth and Mongaup.

DRAINAGE AREA.--200 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1939 to March 1995 (discontinued).

REVISED RECORDS.--WDR NY-71-1: 1970. WDR NY-81-1: 1980. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft above sea level (levels by Orange and Rockland Utilities, Inc.). Prior to July 6, 1956, water-stage recorders at sites 25 ft upstream on Rio Tailrace and 200 ft upstream on natural channel, at datum 4.0 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Entire flow regulated by Rio Hydroelectric plant except for runoff from about 7 mi<sup>2</sup> of drainage area downstream from Rio Dam of Orange and Rockland Utilities, Inc., and during periods of spill from Rio Reservoir. Flow also regulated by storage in Cliff Lake, Swinging Bridge, and Toronto Reservoirs (see Reservoirs in Delaware River Basin) and small reservoirs upstream from station.

AVERAGE DISCHARGE.--55 years (water years 1940-94), 344 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft<sup>3</sup>/s, Aug. 19, 1955, gage height, 15.22 ft, present datum; minimum daily, 6 ft<sup>3</sup>/s, Oct. 1, 1939.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Maximum discharge, 1,010 ft<sup>3</sup>/s, Mar. 9, gage height, 4.38 ft; minimum daily, 30 ft<sup>3</sup>/s, Nov. 17, Feb. 23, 27.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	814	477	215	558	439	335	---	---	---	---	---	---
2	379	420	305	420	368	78	---	---	---	---	---	---
3	557	352	457	423	524	362	---	---	---	---	---	---
4	633	302	456	588	618	34	---	---	---	---	---	---
5	635	416	512	708	305	32	---	---	---	---	---	---
6	696	366	730	635	481	464	---	---	---	---	---	---
7	500	435	606	494	475	499	---	---	---	---	---	---
8	491	616	720	496	406	221	---	---	---	---	---	---
9	478	47	717	375	498	896	---	---	---	---	---	---
10	202	40	716	471	498	969	---	---	---	---	---	---
11	489	35	681	468	52	951	---	---	---	---	---	---
12	588	33	716	527	33	946	---	---	---	---	---	---
13	523	31	712	520	333	922	---	---	---	---	---	---
14	408	31	609	49	421	843	---	---	---	---	---	---
15	122	33	42	40	550	945	---	---	---	---	---	---
16	124	31	221	503	353	864	---	---	---	---	---	---
17	272	30	573	627	34	739	---	---	---	---	---	---
18	500	45	607	534	32	479	---	---	---	---	---	---
19	415	35	584	486	32	539	---	---	---	---	---	---
20	469	74	221	488	32	643	---	---	---	---	---	---
21	339	140	335	736	34	722	---	---	---	---	---	---
22	36	127	338	729	32	721	---	---	---	---	---	---
23	39	58	508	669	30	709	---	---	---	---	---	---
24	41	32	470	568	34	636	---	---	---	---	---	---
25	73	171	497	598	202	600	---	---	---	---	---	---
26	51	31	418	670	123	554	---	---	---	---	---	---
27	37	122	386	533	30	513	---	---	---	---	---	---
28	167	416	246	525	307	713	---	---	---	---	---	---
29	119	413	199	392	---	594	---	---	---	---	---	---
30	35	443	488	552	---	406	---	---	---	---	---	---
31	359	---	500	601	---	656	---	---	---	---	---	---
TOTAL	10591	5802	14785	15983	7276	18585	---	---	---	---	---	---
MEAN	342	193	477	516	260	600	---	---	---	---	---	---
MAX	814	616	730	736	618	969	---	---	---	---	---	---
MIN	35	30	42	40	30	32	---	---	---	---	---	---

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	217	273	394	350	374	493	640	430	323	237	217	186
MAX	1177	751	1046	853	756	1152	1688	969	1018	917	976	600
(WY)	1956	1973	1974	1979	1990	1977	1993	1989	1972	1945	1955	1960
MIN	36.6	41.6	83.8	103	64.2	175	236	147	45.1	43.3	70.9	15.9
(WY)	1981	1983	1942	1989	1980	1969	1988	1957	1962	1978	1962	1958

## DELAWARE RIVER BASIN

01433500 MONGAUP RIVER NEAR MONGAUP, NY--Continued

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## WATER YEARS 1939 - 1995

ANNUAL TOTAL	155755			
ANNUAL MEAN	427			344
HIGHEST ANNUAL MEAN				530 1973
LOWEST ANNUAL MEAN				155 1965
HIGHEST DAILY MEAN	2610	Apr 14		12300 Aug 19 1955
LOWEST DAILY MEAN	30	Jan 12		6.0 Oct 1 1939
ANNUAL SEVEN-DAY MINIMUM	32	Nov 11		9.6 Aug 27 1958
10 PERCENT EXCEEDS	911			712
50 PERCENT EXCEEDS	322			282
90 PERCENT EXCEEDS	47			40

## DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi upstream from Neversink River, and 6.5 mi downstream from Mongaup River.

DRAINAGE AREA.--3,070 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 1031: 1905-36. WDR NY-71-1: 1970. WDR NY-82-1: Drainage area. WDR NY-86-1: 1979-80.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft above sea level. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Service prior to June 20, 1914.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi<sup>2</sup> of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi<sup>2</sup> of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft<sup>3</sup>/s, Aug. 19, 1955, gage height, 23.91 ft, from floodmarks in gage house, from rating curve extended above 89,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; maximum gage height, 26.6 ft, Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft<sup>3</sup>/s, Sept. 23, 1908, gage height, 0.6 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft<sup>3</sup>/s, Oct. 10, 1903, gage height, 23.1 ft, from rating curve extended above 70,000 ft<sup>3</sup>/s, by velocity-area studies; maximum gage height, 25.5 ft, Mar. 8, 1904 (ice jam).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,300 ft<sup>3</sup>/s, Mar. 9, gage height, 7.42 ft; minimum, 1,000 ft<sup>3</sup>/s, Aug. 10, gage height, 1.99 ft; minimum daily, 1,110 ft<sup>3</sup>/s, Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4250	2040	8000	3920	4550	3710	3500	2620	1890	1680	1980	1970
2	3650	3550	6550	5280	e4200	3570	3050	2620	1590	1770	2160	1770
3	3590	4910	5760	5470	e4000	3440	3440	2470	1830	1760	2500	1740
4	3130	3850	4870	4900	e3600	2840	2950	2300	1890	1730	2300	1630
5	2720	3260	5650	4630	e3000	2650	3210	2180	1950	1650	2330	1610
6	2540	2600	13800	4030	e3200	3100	3360	2050	1680	1720	1830	1590
7	2210	2510	11200	3500	e3400	3710	3160	1920	1600	1780	1770	1630
8	2040	2940	9900	3610	e3500	5980	2740	1740	1610	1960	1620	1620
9	2040	2380	8340	4310	e3700	20000	2460	1900	1310	1930	1150	1630
10	1720	2340	6900	3940	4130	16600	3350	1710	1310	1850	1110	1670
11	1930	2460	8800	3620	e2800	12700	4390	1980	1430	1770	1450	1670
12	1970	2280	9210	3530	e2200	10300	4280	2120	1730	1870	1480	1790
13	1800	1820	7540	3730	e2800	10300	6810	2050	1650	1610	1600	1590
14	1660	1770	6740	3800	e3100	11800	9640	1820	1900	1840	1680	1700
15	1540	2050	5760	4580	e3400	12200	7500	1860	1640	1900	2240	1810
16	1590	1970	5240	11000	e3100	12300	6070	1910	1520	1640	1720	1520
17	1460	1890	4590	11600	3030	11700	5820	1590	1700	1530	2350	1550
18	1770	1850	4680	9310	2830	10000	5000	1760	1680	2850	2020	1420
19	1650	1800	4640	7760	2090	8450	4760	1820	1600	4100	1620	1210
20	1860	1510	3940	7640	2050	7590	5450	1720	1600	2810	1620	1320
21	1690	1640	4540	14100	2390	6930	4690	1640	1410	2240	1560	1350
22	1730	2890	4260	13900	2810	7450	4010	1520	1220	1950	1450	1420
23	1690	3010	3730	11400	2730	7420	3840	1470	1300	1270	1530	1630
24	1670	2640	3820	9560	2780	6750	3600	1340	1530	1750	1530	1620
25	1400	2200	5150	8630	2470	6350	3340	1490	1500	2090	1470	1430
26	1290	1940	4540	7830	2540	5260	3600	1940	1770	2140	1630	1370
27	1490	1910	4210	6960	2050	4730	2760	1920	2060	1850	1680	1650
28	1610	5170	4150	5570	2300	4710	2600	1760	1980	3020	1500	1580
29	1810	15200	3840	4390	---	4210	2370	1560	1490	3020	1500	1410
30	1510	11400	3640	5140	---	3810	2320	1710	1560	2040	1670	1410
31	1530	---	3360	4940	---	3940	---	2100	---	1590	1600	---
TOTAL	62540	97780	187350	202580	84750	234500	124070	58590	48930	62710	53650	47310
MEAN	2017	3259	6044	6535	3027	7565	4136	1890	1631	2023	1731	1577
MAX	4250	15200	13800	14100	4550	20000	9640	2620	2060	4100	2500	1970
MIN	1290	1510	3360	3500	2050	2650	2320	1340	1220	1270	1110	1210

e Estimated



## DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2991	4009	5045	4513	5085	7971	9514	5950	3782	2590	2260	2435
MAX	10440	10310	12320	12750	13730	17520	23650	12670	12650	6680	4513	7928
(WY)	1978	1973	1974	1978	1976	1977	1993	1984	1972	1973	1969	1987
MIN	1001	884	1866	1216	1601	2583	2954	1890	993	699	963	1144
(WY)	1965	1965	1965	1981	1980	1981	1985	1995	1965	1965	1965	1965

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1964 - 1995			
ANNUAL TOTAL	1877050				1264760							
ANNUAL MEAN	5143				3465				4673			
HIGHEST ANNUAL MEAN									7216			
LOWEST ANNUAL MEAN									2028			
HIGHEST DAILY MEAN	43600				20000				78300			
LOWEST DAILY MEAN	1260				1110				385			
ANNUAL SEVEN-DAY MINIMUM	1520				1400				432			
10 PERCENT EXCEEDS	11300				7430				9950			
50 PERCENT EXCEEDS	2940				2280				2800			
90 PERCENT EXCEEDS	1690				1520				1490			

## DELAWARE RIVER BASIN

0143400680 EAST BRANCH NEVERSINK RIVER NORTHEAST OF DENNING, NY

LOCATION.--Lat 41°58'01", long 74°26'54", Ulster County, Hydrologic Unit 02040104, on right bank 0.3 mi upstream from Tray Mill Brook, and 2.3 mi northeast of Denning.

DRAINAGE AREA.--8.93 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1990 to current year. Occasional discharge measurements, water years 1988-90.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,140 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and those above 300 ft<sup>3</sup>/s, which are poor. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 26.8 ft<sup>3</sup>/s, 40.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,830 ft<sup>3</sup>/s, Nov. 28, 1993, gage height, 5.88 ft; minimum, 2.0 ft<sup>3</sup>/s, Aug. 7, 8, 9, 1991; minimum gage height, 1.05 ft, Aug. 29, 30, 31, Sept. 1, 2, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1900	*1,020	*4.94	No other peak greater than base discharge.			
Minimum discharge, 3.3 ft <sup>3</sup> /s, Sept. 5, 7, 12, 15, 16, 17; minimum gage height, 1.22 ft, Sept. 5, 7, 12.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	13	27	e38	e21	15	18	20	14	6.9	6.8	5.2
2	24	12	23	e29	20	11	17	19	13	6.7	7.0	4.1
3	20	9.8	21	e27	e19	e9.5	16	17	16	6.1	7.1	3.9
4	19	9.1	21	e25	e18	e9.0	19	17	13	6.0	7.3	3.8
5	18	8.8	104	e21	e17	e8.5	e17	17	12	6.1	11	3.7
6	17	8.7	75	e40	e16	8.9	e16	16	12	6.9	12	3.6
7	16	8.6	46	e47	e15	10	15	15	11	11	9.1	3.6
8	15	8.2	39	e30	e14	263	15	15	11	7.3	7.6	3.7
9	15	8.2	32	e23	e14	151	17	14	11	6.1	6.8	5.2
10	16	9.9	29	e20	e13	e80	20	15	11	5.7	6.6	4.5
11	14	8.3	38	e23	e13	e54	17	16	11	10	6.5	3.7
12	13	7.9	32	e28	13	e40	17	16	14	9.1	6.4	3.5
13	13	7.8	e29	39	e12	34	41	15	12	6.3	6.1	5.5
14	12	7.6	23	56	e12	45	25	14	11	5.6	5.8	4.4
15	12	7.5	21	104	e11	72	21	14	10	5.3	6.6	3.6
16	11	7.3	20	115	e13	78	19	14	9.3	5.2	7.5	3.4
17	11	7.1	e19	67	e12	62	18	13	8.8	9.0	7.4	7.8
18	11	7.8	e18	51	e11	47	17	13	8.5	11	5.6	5.4
19	11	8.2	18	43	e10	38	40	14	8.2	6.5	5.3	3.9
20	11	7.6	16	126	e9.8	34	32	13	7.9	5.6	5.1	3.6
21	11	12	16	102	e9.6	40	28	12	7.5	5.4	5.0	3.6
22	10	20	16	60	e9.5	42	32	12	7.7	5.2	4.7	20
23	9.8	12	15	47	e9.3	32	27	12	7.5	5.8	4.7	20
24	9.6	10	93	41	e9.0	28	24	12	7.1	6.8	4.6	7.5
25	9.2	9.8	71	36	8.9	25	22	14	8.0	5.7	4.4	5.5
26	e9.1	9.4	42	32	8.6	23	21	13	12	14	4.4	5.8
27	9.1	9.1	33	30	8.4	22	20	13	12	24	4.4	5.8
28	9.0	97	30	e28	23	21	20	12	7.8	22	4.3	4.7
29	8.8	62	27	e26	---	20	19	16	7.0	14	4.2	4.2
30	8.6	35	e25	e24	---	20	18	26	6.7	9.2	4.0	4.0
31	8.4	---	e24	e23	---	20	---	17	---	7.4	4.0	---
TOTAL	405.6	449.7	1043	1401	370.1	1362.9	648	466	308.0	261.9	192.3	167.2
MEAN	13.1	15.0	33.6	45.2	13.2	44.0	21.6	15.0	10.3	8.45	6.20	5.57
MAX	24	97	104	126	23	263	41	26	16	24	12	20
MIN	8.4	7.1	15	20	8.4	8.5	15	12	6.7	5.2	4.0	3.4
CFSM	1.47	1.68	3.77	5.06	1.48	4.92	2.42	1.68	1.15	.95	.69	.62
IN.	1.69	1.87	4.34	5.84	1.54	5.68	2.70	1.94	1.28	1.09	.80	.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	22.8	34.0	34.9	30.9	14.7
MAX	45.3	51.5	53.7	46.5	19.0
(WY)	1991	1994	1991	1993	1991
MIN	12.8	15.0	25.6	15.8	11.1
(WY)	1994	1995	1992	1994	1993

e Estimated

## DELAWARE RIVER BASIN

0143400680 EAST BRANCH NEVERSINK RIVER NORTHEAST OF DENNING, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1991 - 1995	
ANNUAL TOTAL	10646.1		7075.7			
ANNUAL MEAN	29.2		19.4		26.8	
HIGHEST ANNUAL MEAN					32.3	
LOWEST ANNUAL MEAN					19.4	
HIGHEST DAILY MEAN	386	Apr 16	263	Mar 8	612	Nov 28 1993
LOWEST DAILY MEAN	7.1	Nov 17	3.4	Sep 16	2.1	Aug 8 1991
ANNUAL SEVEN-DAY MINIMUM	7.5	Jan 21	3.8	Sep 2	2.4	Aug 27 1993
ANNUAL RUNOFF (CFSM)	3.27		2.17		3.00	
ANNUAL RUNOFF (INCHES)	44.35		29.48		40.77	
10 PERCENT EXCEEDS	65		39		50	
50 PERCENT EXCEEDS	16		13		16	
90 PERCENT EXCEEDS	9.0		5.3		5.2	

## DELAWARE RIVER BASIN

01434017 EAST BRANCH NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°55'31", long 74°32'26", Ulster County, Hydrologic Unit 02040104, on left bank at downstream side of bridge on Denning Road, 1.6 mi southwest of Ladleton, and 1.9 mi northeast of the village of Claryville.

DRAINAGE AREA.--22.9 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 1,740 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--4 years, 62.4 ft<sup>3</sup>/s, 37.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,510 ft<sup>3</sup>/s, Nov. 28, 1993, gage height, 10.47 ft; minimum discharge, 5.8 ft<sup>3</sup>/s, Aug. 9, 1991, Aug. 31, Sept. 1, 1993; minimum gage height, 5.33 ft, Aug. 9, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1915	*1,670	*9.44	No other peak greater than base discharge.			

Minimum discharge, 8.3 ft<sup>3</sup>/s, Sept. 5, 6, 7, 8, 12, 13, gage height, 5.43 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	33	73	e100	e56	e70	47	49	34	18	19	13
2	54	31	63	88	e52	50	44	45	32	19	18	10
3	44	24	57	71	e49	e42	42	42	46	16	19	9.4
4	40	21	55	64	e47	e36	48	40	35	15	20	9.1
5	38	20	207	e60	e45	37	46	42	31	15	33	8.7
6	38	20	174	e110	e43	31	e44	39	29	16	38	8.4
7	37	20	115	e130	e41	34	40	37	28	27	25	8.4
8	33	19	96	82	e39	466	40	35	27	22	21	8.4
9	33	19	80	e62	e37	363	47	34	26	17	18	11
10	36	24	74	e57	e36	139	60	36	26	15	17	12
11	32	21	105	e62	e34	109	48	38	26	22	17	9.0
12	29	19	75	75	e32	85	49	38	35	26	16	8.4
13	29	19	72	96	e31	95	104	35	30	17	16	13
14	28	19	61	125	e30	125	68	33	24	15	15	12
15	27	19	56	198	e29	171	59	34	23	13	15	9.3
16	26	18	53	248	e28	172	54	31	22	12	18	8.7
17	25	18	52	158	e29	141	50	31	21	24	20	19
18	25	19	52	121	e30	111	48	31	19	38	15	16
19	25	21	48	104	e32	91	92	32	19	19	14	11
20	26	19	44	260	e35	81	74	31	18	15	13	9.5
21	25	28	43	237	e34	95	67	29	17	14	12	9.4
22	23	47	42	150	e32	99	73	29	17	14	12	34
23	23	31	43	118	e30	79	63	28	17	14	11	46
24	22	26	251	101	e29	69	57	28	16	20	11	19
25	21	25	190	89	e28	63	54	34	18	16	11	14
26	21	24	114	81	e28	58	51	32	24	44	10	14
27	21	25	90	74	e35	55	48	31	35	68	10	15
28	20	223	79	e70	e80	52	50	29	19	60	10	12
29	19	161	70	e65	---	50	46	39	17	37	9.9	11
30	19	93	e65	e62	---	52	44	64	16	27	9.7	10
31	19	---	e60	e60	---	52	---	41	---	22	9.4	---
TOTAL	909	1106	2659	3378	1051	3173	1657	1117	747	717	503.0	398.7
MEAN	29.3	36.9	85.8	109	37.5	102	55.2	36.0	24.9	23.1	16.2	13.3
MAX	54	223	251	260	80	466	104	64	46	68	38	46
MIN	19	18	42	57	28	31	40	28	16	12	9.4	8.4
CFSM	1.28	1.61	3.75	4.76	1.64	4.47	2.41	1.57	1.09	1.01	.71	.58
IN.	1.48	1.80	4.32	5.49	1.71	5.15	2.69	1.81	1.21	1.16	.82	.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	36.2	74.4	75.8	78.3	35.4
MAX	48.2	103	86.9	115	43.5
(WY)	1992	1993	1994	1995	1996
MIN	29.2	36.9	61.4	34.0	29.6
(WY)	1994	1995	1996	1997	1998

e Estimated

## DELAWARE RIVER BASIN

01434017 EAST BRANCH NEVERSINK RIVER NEAR CLARYVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1991 - 1995	
ANNUAL TOTAL	24573		17415.7			
ANNUAL MEAN	67.3		47.7		62.4	
HIGHEST ANNUAL MEAN					72.8 1994	
LOWEST ANNUAL MEAN					47.7 1995	
HIGHEST DAILY MEAN	824	Apr 16	466	Mar 8	1010	Nov 28 1993
LOWEST DAILY MEAN	18	Nov 16	8.4	Sep 6	5.9	Sep 1 1993
ANNUAL SEVEN-DAY MINIMUM	19	Nov 12	8.9	Sep 2	6.3	Aug 27 1993
ANNUAL RUNOFF (CFSM)	2.94		2.08		2.72	
ANNUAL RUNOFF (INCHES)	39.92		28.29		37.02	
10 PERCENT EXCEEDS	133		95		119	
50 PERCENT EXCEEDS	39		33		36	
90 PERCENT EXCEEDS	21		14		12	



## DELAWARE RIVER BASIN

01434021 WEST BRANCH NEVERSINK RIVER AT WINNISOOK LAKE NEAR FROST VALLEY, NY

LOCATION.--Lat 42°00'40", long 74°24'53", Ulster County, Hydrologic Unit 02040104, on right bank 0.1 mi southwest of Winnisook Lake, and 4.5 mi northeast of Frost Valley.

DRAINAGE AREA.--0.77 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR NY-94-1: 1992-93(P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,680 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those above 60 ft<sup>3</sup>/s, which are poor. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--4 years, 2.15 ft<sup>3</sup>/s, 37.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121 ft<sup>3</sup>/s, Nov. 28, 1993, gage height, 2.39 ft; maximum gage height, 2.74 ft, Mar. 29, 1993 (ice jam); minimum discharge, 0.05 ft<sup>3</sup>/s, Aug. 6, 7, 8, 1991, gage height, 0.93 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1645	*80	*1.96	No other peak greater than base discharge.			
Minimum discharge, 0.16 ft <sup>3</sup> /s, Sept. 4, 5, 6, 7, 8, 12, 13, 15, 16, 17, 19, 20; minimum gage height, 1.02 ft, Sept. 19, 20.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	.67	2.3	2.5	1.8	e.80	1.3	1.1	1.2	.47	.38	.29
2	2.6	.77	1.9	2.0	1.6	e.72	1.2	1.0	1.2	.46	.45	.22
3	2.2	.75	1.6	1.7	1.5	e.70	1.2	.99	1.2	.41	.43	.19
4	1.9	.70	1.5	e1.8	e1.3	e.68	e1.2	.96	1.3	.36	.40	.17
5	1.7	.70	7.3	e2.5	e1.2	e.68	e1.1	.98	1.2	.36	.51	.17
6	1.5	.70	7.2	e4.5	e1.1	.70	e1.1	.95	1.2	.39	.51	.16
7	1.4	.75	4.6	e7.0	e1.0	.80	1.1	.95	1.1	.53	.44	.16
8	1.3	.66	3.6	e2.0	e.98	25	1.1	1.1	.99	.41	.41	.18
9	1.3	.64	2.8	e1.8	e.90	8.3	1.2	1.1	.93	.34	.40	.25
10	1.2	.73	2.4	e1.6	e.86	3.2	1.1	1.1	.89	.32	.41	.24
11	1.1	.66	2.6	e1.7	e.82	2.3	1.1	1.1	.89	.34	.40	.19
12	1.1	.62	2.2	1.8	e.78	1.7	1.2	1.1	1.0	.32	.41	.18
13	.99	.55	2.1	4.0	e.75	1.8	3.8	1.1	.90	.28	.37	.28
14	.98	.54	1.7	6.9	e.72	2.2	2.0	1.1	.86	.26	.37	.21
15	.95	.51	1.5	12	e.70	4.0	1.5	1.0	.75	.26	.38	.17
16	.91	.47	1.4	11	e.75	6.6	1.5	.98	.70	.29	.43	.16
17	.89	.47	1.4	6.7	e.78	5.9	1.5	.98	.69	.49	.39	.36
18	.89	.41	1.3	4.8	e.82	3.9	1.4	.97	.67	.51	.31	.24
19	.89	.41	1.2	3.9	e.88	2.8	4.5	.98	.65	.35	.31	.18
20	.89	.37	1.2	9.2	.89	2.3	2.8	.97	.64	.28	.30	.19
21	.89	.53	1.1	8.3	.87	2.9	2.2	.98	.54	.26	.30	.19
22	.85	.80	1.1	5.1	.79	3.1	2.5	.96	.54	.26	.29	.65
23	.71	.73	1.1	4.1	.79	2.5	1.8	.93	.52	.27	.29	.69
24	.70	.69	4.0	3.5	.79	2.1	1.3	.97	.51	.26	.30	.34
25	.69	.64	4.4	3.1	.76	1.9	1.1	.99	.54	.26	.30	.25
26	.64	.59	2.8	2.8	.70	1.7	1.0	.99	.57	.46	.30	.32
27	.62	.74	2.2	2.6	.70	1.6	1.0	.98	.56	.84	.31	.36
28	.62	8.5	1.9	e2.4	1.1	1.5	1.1	.96	.50	.81	.29	.33
29	.62	6.4	1.7	e2.1	---	1.4	1.1	1.4	.47	.59	.25	.31
30	.58	3.3	2.6	e1.9	---	1.4	1.0	2.8	.47	.49	.23	.31
31	.54	---	2.9	e1.8	---	1.4	---	1.7	---	.44	.25	---
TOTAL	35.05	35.00	77.6	127.1	26.63	96.58	47.0	34.17	24.18	12.37	11.12	7.94
MEAN	1.13	1.17	2.50	4.10	.95	3.12	1.57	1.10	.81	.40	.36	.26
MAX	2.9	8.5	7.3	12	1.8	25	4.5	2.8	1.3	.84	.51	.69
MIN	.54	.37	1.1	1.6	.70	.68	1.0	.93	.47	.26	.23	.16
CFSM	1.47	1.52	3.25	5.32	1.24	4.05	2.03	1.43	1.05	.52	.47	.34
IN.	1.69	1.69	3.75	6.14	1.29	4.67	2.27	1.65	1.17	.60	.54	.38

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

MEAN	1.75	2.65	1.98	2.34	.85	3.04	6.47	1.95	1.28	.65	.88	.78
MAX	3.16	3.78	2.50	4.10	1.17	4.09	12.1	2.55	3.70	1.43	2.03	2.04
(WY)	1992	1993	1995	1995	1991	1992	1993	1992	1992	1994	1994	1994
MIN	1.02	1.17	1.54	1.11	.51	1.79	1.57	1.10	.34	.14	.18	.26
(WY)	1994	1995	1992	1994	1992	1993	1995	1995	1991	1991	1993	1995

e Estimated

## DELAWARE RIVER BASIN

01434021 WEST BRANCH NEVERSINK RIVER AT WINNISOOK LAKE NEAR FROST VALLEY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1991 - 1995
ANNUAL TOTAL	856.68	534.74	
ANNUAL MEAN	2.35	1.47	2.15
HIGHEST ANNUAL MEAN			2.50
LOWEST ANNUAL MEAN			1.47
HIGHEST DAILY MEAN	35 Apr 16	25 Mar 8	60 Apr 16 1993
LOWEST DAILY MEAN	.35 Jan 24	.16 Sep 6	.07 Jul 29 1991
ANNUAL SEVEN-DAY MINIMUM	.36 Jan 21	.18 Sep 2	.08 Aug 2 1991
ANNUAL RUNOFF (CFSM)	3.05	1.90	2.79
ANNUAL RUNOFF (INCHES)	41.39	25.83	37.94
10 PERCENT EXCEEDS	6.2	2.9	4.2
50 PERCENT EXCEEDS	1.0	.93	.99
90 PERCENT EXCEEDS	.60	.29	.26

## DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK AT FROST VALLEY, NY  
(Hydrologic bench-mark station)  
(National trends network station)

LOCATION.--Lat 41°59'43", long 74°30'05", Ulster County, Hydrologic Unit 02040104, on right bank 0.2 mi upstream from Pigeon Brook, 0.6 mi upstream from mouth, and 0.8 mi northeast of Frost Valley. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.72 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year. February to May 1983 (occasional discharge measurements).

REVISED RECORDS.--WDR NY-91-1: Drainage area. WDR NY-94-1: 1984(P), 1985(M), 1987(P), 1989(P), 1993(P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,060 ft above sea level, from topographic map. Prior to Sept. 11, 1987, at datum 1.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite gage-height telemeter at station. Also published as a chemical-quality-of-precipitation site (National trends network station number 00336840).

AVERAGE DISCHARGE.--12 years, 10.1 ft<sup>3</sup>/s, 37.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 815 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 4.37 ft, present datum; minimum discharge, 0.24 ft<sup>3</sup>/s, Sept. 2, 3, 1991, gage height, 0.75 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1830	*194	*2.98				

Minimum discharge, 0.34 ft<sup>3</sup>/s, Aug. 30, 31, Sept. 5, 6, 7, 8, 12, 13; minimum gage height, 0.88 ft, Aug. 22, 23, 24, 30, 31, Sept. 5, 6, 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.2	12	18	7.1	6.2	6.9	7.2	5.0	2.1	.96	1.0
2	9.6	6.0	11	13	e6.2	e4.4	6.4	5.9	5.0	2.0	1.0	.49
3	7.7	4.2	9.6	e11	e5.7	e4.1	6.0	5.5	18	1.8	1.1	.41
4	7.3	3.7	9.4	e8.8	e5.4	e3.8	e7.0	5.2	9.5	1.7	.98	.38
5	6.8	3.5	46	e7.0	e4.7	3.8	e6.5	5.4	7.8	1.8	1.7	.36
6	6.4	3.6	34	e7.2	e4.0	4.0	e6.0	4.9	6.8	1.9	1.7	.34
7	6.1	4.1	22	e21	e4.0	5.2	6.1	4.6	6.2	3.9	1.0	.35
8	5.8	3.6	17	e12	e4.2	85	5.9	4.4	5.7	2.2	.85	.36
9	5.8	3.6	14	e9.2	e4.5	55	8.0	4.3	5.2	1.8	.76	.73
10	5.8	5.5	13	e8.2	4.8	29	8.8	4.7	5.0	1.6	.74	.64
11	5.0	4.1	17	e7.8	4.4	17	7.1	4.6	5.3	2.9	.75	.46
12	5.0	3.8	13	e8.8	4.0	13	8.0	4.5	9.4	2.0	.73	.39
13	4.7	3.7	e10	20	4.4	17	21	4.1	6.4	1.6	.68	1.0
14	4.5	3.5	9.1	33	4.5	26	13	3.9	5.3	1.4	.64	.70
15	4.3	3.4	8.3	60	4.4	45	11	4.3	4.7	1.4	.68	.46
16	4.0	3.3	7.9	58	e5.2	46	9.4	3.7	4.2	1.3	.93	.42
17	3.9	3.1	7.5	31	4.2	34	8.7	3.6	3.9	3.1	1.1	1.7
18	3.8	3.5	7.3	21	3.8	23	8.1	3.6	3.6	3.1	.59	.85
19	3.9	3.6	6.6	17	3.7	18	16	3.6	3.3	1.6	.52	.49
20	4.2	3.2	6.1	47	3.7	15	11	3.3	3.1	1.4	.49	.43
21	3.8	7.3	5.9	40	3.6	18	11	3.1	2.8	1.3	.47	.46
22	3.3	8.1	6.0	24	3.2	17	11	3.0	2.8	1.3	.43	6.5
23	3.1	5.8	5.9	19	3.2	14	9.7	2.8	2.7	1.4	.40	2.7
24	3.0	5.0	39	15	3.3	12	8.9	3.2	2.4	1.5	.42	.97
25	2.8	4.9	29	13	3.0	11	8.2	3.8	4.5	1.5	.44	.73
26	2.7	4.5	18	12	2.9	9.7	7.7	3.9	3.6	2.3	.45	1.0
27	e2.5	4.7	14	e10	2.8	8.9	7.3	3.6	3.3	2.2	.48	1.1
28	e2.3	49	12	e9.0	e8.5	8.2	7.5	3.0	2.4	1.8	.47	.74
29	e2.2	30	11	e8.8	---	7.7	6.6	7.9	2.2	1.4	.43	.62
30	e2.2	16	e9.5	e8.2	---	8.2	6.1	10	2.1	1.1	.38	.56
31	2.2	---	e8.2	e7.8	---	7.7	---	6.2	---	1.0	.55	---
TOTAL	144.7	215.5	439.3	585.8	123.4	576.9	264.9	141.8	152.2	57.4	22.82	27.34
MEAN	4.67	7.18	14.2	18.9	4.41	18.6	8.83	4.57	5.07	1.85	.74	.91
MAX	10	49	46	60	8.5	85	21	10	18	3.9	1.7	6.5
MIN	2.2	3.1	5.9	7.0	2.8	3.8	5.9	2.8	2.1	1.0	.38	.34
TPSM	1.25	1.93	3.81	5.08	1.18	5.00	2.37	1.23	1.36	.50	.20	.24
IN.	1.45	2.15	4.39	5.86	1.23	5.77	2.65	1.42	1.52	.57	.23	.27

e Estimated

## DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK AT FROST VALLEY, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.36	12.9	12.2	8.62	8.90	16.8	23.1	13.3	5.62	3.75	3.82	4.97
MAX	15.2	20.8	23.8	18.9	28.3	30.3	54.3	33.1	11.3	7.12	9.31	17.4
(WY)	1988	1993	1991	1995	1984	1986	1993	1989	1992	1985	1990	1987
MIN	1.00	3.24	4.43	2.65	2.26	9.49	8.83	4.57	1.82	.74	.65	.86
(WY)	1985	1985	1990	1989	1987	1984	1995	1995	1991	1991	1993	1983

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1983 - 1995

ANNUAL TOTAL	4025.5	2752.06	
ANNUAL MEAN	11.0	7.54	10.2
HIGHEST ANNUAL MEAN			12.3
LOWEST ANNUAL MEAN			6.76
HIGHEST DAILY MEAN	156	Apr 16	431
LOWEST DAILY MEAN	2.0	Jun 11	.27
ANNUAL SEVEN-DAY MINIMUM	2.4	Oct 25	.31
ANNUAL RUNOFF (CFSM)	2.96		2.73
ANNUAL RUNOFF (INCHES)	40.25		37.09
10 PERCENT EXCEEDS	21		19
50 PERCENT EXCEEDS	5.8		5.7
90 PERCENT EXCEEDS	3.0		1.5

## DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK, AT FROST VALLEY, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1983 to September 1987, November 1992 to current year.

CHEMICAL DATA: 1983-87 (e), 1993-95 (b).

MINOR ELEMENTS DATA, 1983-87 (e), 1993-95 (b).

RADIOCHEMICAL DATA: 1993-95 (a).

ORGANIC DATA: 1983-87 (e).

NUTRIENT DATA: 1983-87 (e), 1993-95 (b).

BIOLOGICAL DATA:

Bacteria--1993-95 (b).

SEDIMENT DATA: 1993-95 (b).

REMARKS.--All anion and cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter. Also published as a chemical-quality-of-precipitation site (National trends network station number 00336840).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 29...	1218	27	18	5.6	3.5	0.40	--	16.6	--	<1	K1
FEB 28...	1300	E8.5	19	6.1	0.5	0.30	752	10.3	73	10	28
MAY 02...	1120	5.9	15	6.4	6.0	0.10	720	11.3	96	<1	19
AUG 29...	1100	0.47	27	6.5	14.0	0.30	723	14.8	151	4	5

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
NOV 29...	8	2.4	0.53	0.30	0.30	2	2	ND	4.8	0.60	<0.10
FEB 28...	9	2.6	0.57	0.40	0.30	1	2	0	5.0	0.60	<0.10
MAY 02...	8	2.4	0.55	0.40	0.20	1	1	0	4.9	0.70	0.10
AUG 29...	10	2.9	0.65	0.50	0.10	3	3	0	5.7	0.90	<0.10

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 29...	1.9	16	14	0.54	<0.015	<0.20	<0.01	<0.01	<0.01	100	46
FEB 28...	1.9	17	15	0.52	<0.015	<0.20	<0.01	<0.01	<0.01	60	46
MAY 02...	1.6	17	13	0.28	<0.015	<0.20	<0.01	<0.01	<0.01	50	44
AUG 29...	2.8	12	17	0.35	<0.015	<0.20	<0.01	<0.01	<0.01	30	49

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 29...	<3	<3	<4	26	<10	1	<1	<1.0	10	<6
FEB 28...	<3	<3	<4	8	<10	1	<1	<1.0	11	<6
MAY 02...	<3	<3	<4	2	<10	1	<1	<1.0	11	<6
AUG 29...	<3	<3	<4	<1	<10	<1	<1	<1.0	13	<6

K Results based on colony count outside the acceptable range (non-ideal colony count).  
E Estimated daily.  
ND Not detected.



## DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK, AT FROST VALLEY, NY--Continued

## RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
AUG 29...	1100	0.47	0.02	0.010	0	<0.01

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- SOLVED, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 29...	1218	27	1	0.07	57
FEB 28...	1300	88.5	1	0.02	80
MAY 02...	1120	5.9	1	0.02	33

E Estimated daily.

## DELAWARE RIVER BASIN

01434105 HIGH FALLS BROOK AT FROST VALLEY, NY

LOCATION.--Lat 41°58'38", long 74°31'21", Ulster County, Hydrologic Unit 02040104, on left bank 0.1 mi upstream from county highway bridge, and 0.9 mi southwest of Frost Valley.

DRAINAGE AREA.--2.74 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1990 to September 1995 (discontinued).

REVISED RECORDS.--WDR NY-93-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,940 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--5 years, 6.88 ft<sup>3</sup>/s, 34.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108 ft<sup>3</sup>/s, Nov. 10, 1990, gage height, 2.01 ft; maximum gage height, 2.30 ft, Jan. 7, 1995 (ice jam); minimum discharge, 0.39 ft<sup>3</sup>/s, Aug. 30, 31, Sept. 1, 1991; minimum gage height, 0.66 ft, Sept. 9, 11, 12, 1991; minimum daily discharge, 0.41 ft<sup>3</sup>/s, Aug. 30, Sept. 1, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 7	0045	ice jam	*2.30	Mar. 8	1845	*61	1.69

Minimum discharge, 0.62 ft<sup>3</sup>/s, Sept. 5, 6, 7, 8, 11, 12, 19, gage height, 0.74 ft; minimum daily discharge, 0.65 ft<sup>3</sup>/s, Sept. 12, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.8	7.1	e12	e6.2	4.7	6.5	6.7	3.8	2.7	1.2	.99
2	4.6	4.3	6.6	9.4	e6.2	4.2	6.1	6.0	4.3	2.5	1.5	.78
3	4.1	3.2	6.4	e8.5	e5.5	e4.0	5.8	5.8	7.4	2.4	1.3	.73
4	4.2	2.9	6.6	e7.2	e5.3	e3.8	7.3	5.4	4.6	2.2	1.3	.72
5	4.2	2.6	24	e6.2	e4.9	e3.7	e6.2	5.7	4.2	2.3	2.2	.69
6	4.2	2.6	18	e8.0	e4.5	3.8	e5.8	5.3	4.1	2.5	1.7	.66
7	4.3	2.8	14	e14	e4.2	4.4	5.7	5.0	4.1	4.8	1.2	.66
8	4.2	2.5	11	12	e4.0	e26	5.5	5.0	4.0	2.7	1.1	.67
9	4.2	2.6	10	9.7	e4.2	e21	6.7	4.9	3.8	2.2	1.0	.95
10	4.2	3.2	9.7	e8.0	e4.5	e16	6.8	5.3	3.9	1.9	1.0	.77
11	3.9	2.8	12	e7.0	e4.5	e12	6.0	5.2	4.1	2.8	1.0	.67
12	3.9	2.5	e9.5	e8.0	e4.3	9.8	7.1	5.1	6.1	2.4	1.0	.65
13	3.9	2.6	e8.0	e9.0	e4.0	13	12	4.6	4.4	1.9	.97	1.3
14	3.9	2.6	7.4	13	e4.1	17	8.1	4.4	4.1	1.8	.94	.86
15	3.6	2.7	6.5	20	e4.2	25	7.5	4.7	3.8	1.7	.99	.72
16	3.8	2.6	6.2	24	e4.0	26	7.2	4.2	3.6	1.7	1.3	.69
17	3.9	2.6	6.1	18	e3.8	22	6.9	4.2	3.6	3.8	1.1	1.8
18	3.9	3.1	6.5	15	e4.0	18	6.8	4.2	3.4	3.2	.91	.80
19	3.9	3.0	5.8	13	4.3	15	12	4.1	3.4	1.8	.87	.65
20	4.0	2.7	5.5	24	4.2	13	8.4	3.8	3.2	1.6	.85	.66
21	3.7	4.7	5.4	22	4.0	15	8.7	3.7	3.1	1.6	.83	.68
22	3.5	3.9	5.3	18	3.6	14	8.7	3.6	3.1	1.5	.80	5.1
23	3.3	3.2	5.3	15	3.5	11	7.9	3.5	3.0	1.8	.78	2.0
24	2.9	5.1	22	13	3.6	9.7	7.6	4.0	2.8	1.9	.77	1.1
25	2.8	3.1	14	11	3.3	9.1	7.3	4.4	4.3	1.7	.75	1.0
26	2.7	3.1	9.8	e10	e3.1	8.8	7.0	4.2	3.8	2.4	.77	1.2
27	2.6	8.4	e8.8	e9.0	3.2	8.3	6.9	3.9	3.6	2.5	.76	1.1
28	2.5	20	e8.0	e8.0	10	7.8	7.3	3.6	3.0	1.9	.73	.96
29	2.5	12	e7.2	e7.2	---	7.4	6.5	7.2	2.8	1.5	.72	.92
30	2.4	8.7	e7.0	e6.8	---	7.7	6.3	6.1	2.7	1.3	.73	.90
31	2.3	---	e10	e6.5	---	7.2	---	4.2	---	1.3	.82	---
TOTAL	113.0	130.9	289.7	372.5	125.2	368.4	218.6	148.0	116.1	68.3	31.89	31.38
MEAN	3.65	4.36	9.35	12.0	4.47	11.9	7.29	4.77	3.87	2.20	1.03	1.05
MAX	4.9	20	24	24	10	26	12	7.2	7.4	4.8	2.2	5.1
MIN	2.3	2.5	5.3	6.2	3.1	3.7	5.5	3.5	2.7	1.3	.72	.65
CFSM	1.33	1.59	3.41	4.39	1.63	4.34	2.66	1.74	1.41	.80	.38	.38
IN.	1.53	1.78	3.93	5.06	1.70	5.00	2.97	2.01	1.58	.93	.43	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
MEAN	4.88	9.30	10.7	9.28	4.92	9.81	16.1	6.42	4.30	2.31	2.37	2.10			
MAX	8.64	13.8	15.3	13.1	6.69	13.4	28.4	7.67	9.27	4.14	5.29	3.87			
(WY)	1991	1993	1991	1993	1991	1991	1993	1992	1992	1994	1994	1994			
MIN	3.54	4.36	8.21	5.03	3.05	5.67	7.29	4.77	1.89	.70	.77	1.05			
(WY)	1994	1995	1992	1994	1993	1993	1995	1995	1991	1991	1991	1995			

e Estimated

## DELAWARE RIVER BASIN

01434105 HIGH FALLS BROOK AT FROST VALLEY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1991 - 1995
ANNUAL TOTAL	2547.2	2013.97	
ANNUAL MEAN	6.98	5.52	6.88
HIGHEST ANNUAL MEAN			7.55 1994
LOWEST ANNUAL MEAN			5.52 1995
HIGHEST DAILY MEAN	53 Apr 16	26 Mar 8	67 Apr 11 1993
LOWEST DAILY MEAN	2.3 Oct 31	.65 Sep 12	.41 Aug 30 1991
ANNUAL SEVEN-DAY MINIMUM	2.5 Oct 25	.70 Sep 2	.42 Aug 28 1991
ANNUAL RUNOFF (CFSM)	2.55	2.01	2.51
ANNUAL RUNOFF (INCHES)	34.58	27.34	34.12
10 PERCENT EXCEEDS	12	12	14
50 PERCENT EXCEEDS	4.6	4.2	4.9
90 PERCENT EXCEEDS	2.8	.97	1.0

## DELAWARE RIVER BASIN

01434498 WEST BRANCH NEVERSINK RIVER AT CLARYVILLE, NY

LOCATION.--Lat 41°55'13", long 74°34'30", Sullivan County, Hydrologic Unit 02040104, on left bank about 100 ft downstream from bridge on County Highway 157 in Claryville.

DRAINAGE AREA.--33.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above sea level, from topographic map.

REMARKS.--Records good except those above 1,600 ft<sup>3</sup>/s and those for estimated daily discharges, which are poor. Diversion upstream from station to maintain lake volume at Frost Valley YMCA camp. Excess lake water is diverted back into the river upstream from station.

AVERAGE DISCHARGE.--4 years, 94.1 ft<sup>3</sup>/s, 37.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,970 ft<sup>3</sup>/s, Nov. 28, 1993, gage height, 10.00 ft, from rating curve extended above 800 ft<sup>3</sup>/s on basis of runoff comparisons with nearby stations; minimum discharge, 5.9 ft<sup>3</sup>/s, result of freezeup, Mar. 14, 1993; minimum gage height, 4.22 ft, Sept. 14, 15, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1915	*2,110	*8.55	No other peak greater than base discharge.			
Minimum discharge, 9.0 ft <sup>3</sup> /s, Sept. 7, 8, gage height, 4.42 ft.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	46	117	164	80	e78	72	74	49	24	17	13
2	76	53	101	132	73	53	67	67	46	24	17	11
3	62	40	93	105	e58	47	64	63	97	22	19	10
4	57	35	90	92	e56	45	76	59	66	21	19	10
5	54	33	373	74	e50	45	68	60	57	21	24	9.7
6	51	33	312	e74	e48	47	64	56	52	21	31	9.5
7	49	35	201	e180	e48	52	63	52	49	38	21	9.3
8	47	33	164	e110	e52	636	61	50	46	30	18	9.3
9	46	32	134	e92	e54	528	70	48	44	22	17	11
10	48	40	123	85	58	204	88	52	43	21	16	11
11	44	36	163	82	e56	152	73	51	44	25	16	10
12	42	34	119	89	e52	124	70	51	66	28	15	9.6
13	41	34	104	125	e50	143	168	47	54	21	15	13
14	40	33	96	191	e50	203	113	44	44	18	14	12
15	39	33	89	340	e42	323	99	47	42	17	15	10
16	37	32	82	430	e44	345	91	43	38	16	14	9.7
17	36	32	81	260	e44	266	84	42	35	27	19	18
18	36	33	79	193	e44	196	79	42	34	45	15	16
19	35	35	73	163	e46	158	144	42	32	23	13	12
20	37	33	67	376	e46	136	115	40	31	19	13	11
21	36	48	64	368	e44	155	109	37	28	17	12	10
22	34	73	63	238	42	158	112	36	28	17	12	35
23	33	51	63	186	40	131	99	34	29	18	11	43
24	32	46	309	158	44	114	91	34	27	21	11	19
25	31	45	269	137	38	102	85	44	37	19	11	14
26	30	44	167	123	36	94	80	40	39	28	11	14
27	30	42	132	110	35	88	76	40	44	38	11	14
28	29	349	116	93	e86	83	79	35	30	34	10	12
29	27	271	101	94	---	78	72	54	25	24	10	11
30	26	152	81	88	---	81	68	99	24	20	10	11
31	26	---	94	87	---	80	---	59	---	18	10	---
TOTAL	1281	1836	4120	5039	1416	4945	2600	1542	1280	737	467	408.1
MEAN	41.3	61.2	133	163	50.6	160	86.7	49.7	42.7	23.8	15.1	13.6
MAX	76	349	373	430	86	636	168	99	97	45	31	43
MIN	26	32	63	74	35	45	61	34	24	16	10	9.3
CFSM	1.22	1.81	3.93	4.81	1.50	4.72	2.56	1.47	1.26	.70	.45	.40
IN.	1.41	2.02	4.53	5.55	1.56	5.44	2.86	1.70	1.41	.81	.51	.45

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	50.2	117	115	119	52.0
MAX	62.4	162	135	175	69.1
(WY)	1992	1994	1994	1993	1994
MIN	40.9	61.2	94.2	53.8	40.2
(WY)	1994	1995	1992	1994	1993

e Estimated

## DELAWARE RIVER BASIN

01434498 WEST BRANCH NEVERSINK RIVER AT CLARYVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1991 - 1995	
ANNUAL TOTAL	38208		25671.1			
ANNUAL MEAN	105		70.3		94.0	
HIGHEST ANNUAL MEAN					113	1994
LOWEST ANNUAL MEAN					70.3	1995
HIGHEST DAILY MEAN	1570	Apr 16	636	Mar 8	1770	Apr 11 1993
LOWEST DAILY MEAN	24	Sep 21	9.3	Sep 7	6.8	Sep 14 1991
ANNUAL SEVEN-DAY MINIMUM	28	Sep 16	9.8	Sep 2	7.3	Sep 8 1991
ANNUAL RUNOFF (CFSM)	3.10		2.08		2.78	
ANNUAL RUNOFF (INCHES)	42.05		28.25		37.79	
10 PERCENT EXCEEDS	200		152		173	
50 PERCENT EXCEEDS	57		46		51	
90 PERCENT EXCEEDS	31		14		13	



## DELAWARE RIVER BASIN

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, on left bank 50 ft downstream from covered bridge, 300 ft upstream from small tributary, 2.2 mi downstream from confluence of East and West Branches, and 2.2 mi southwest of Claryville.

DRAINAGE AREA.--66.6 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,522.37 ft above sea level. Prior to October 1, 1974, at datum 6.00 ft higher. Oct. 1, 1974 to Sept. 30, 1979 at datum 5.00 ft higher.

REMARKS.--Records good below 2,000 ft<sup>3</sup>/s and fair above, except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--44 years, 186 ft<sup>3</sup>/s, 37.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft<sup>3</sup>/s, Apr. 4, 1987, gage height, 13.26 ft; maximum gage height, 13.83 ft, present datum, July 10, 1952; minimum discharge, 6.8 ft<sup>3</sup>/s, Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 15.0 ft, present datum, from floodmarks, discharge, 23,400 ft<sup>3</sup>/s, by slope-area measurement.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	2000	*4,140	*10.00	No other peak greater than base discharge.			
Minimum discharge, 19 ft <sup>3</sup> /s, Sept. 5, 6-8, 9, 12, 13; minimum gage height, 6.04 ft, Sept. 7, 8, 12, 13.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	80	223	323	157	149	141	139	89	44	46	28
2	144	95	190	267	144	e110	132	128	83	49	44	24
3	117	e75	171	206	e130	e98	125	120	153	40	46	22
4	108	e73	161	183	e120	e96	142	114	109	38	50	21
5	103	e64	598	e160	e110	e88	133	117	93	38	73	20
6	98	e59	567	e160	e100	86	e130	111	87	39	95	19
7	94	e56	365	e350	e98	95	119	104	83	64	62	19
8	91	e55	302	246	e100	1150	118	100	81	58	51	19
9	91	e52	245	196	e105	1060	132	97	78	42	45	23
10	94	e72	225	e180	e110	442	183	101	77	38	42	25
11	84	e60	308	170	e100	319	148	101	79	43	41	21
12	79	e61	225	175	e98	263	141	100	103	60	39	20
13	78	e59	191	251	e94	290	315	94	93	40	38	27
14	76	55	180	357	e90	389	217	90	79	35	35	29
15	74	55	164	587	e76	546	189	92	e72	32	36	22
16	72	53	151	797	e74	575	171	88	e68	30	35	20
17	70	52	147	500	e74	465	158	85	e62	74	45	37
18	66	52	143	380	e75	365	149	86	e59	123	35	39
19	64	57	131	322	e80	299	260	86	e56	59	31	25
20	66	53	121	698	90	259	220	85	e53	46	30	22
21	66	72	116	710	89	292	202	82	49	41	28	21
22	62	137	114	462	e82	309	213	79	48	38	27	59
23	61	98	114	366	76	252	189	78	49	39	26	107
24	60	88	578	311	e72	224	173	77	46	53	25	44
25	57	85	541	271	e72	199	161	89	53	44	24	32
26	56	84	330	240	e70	184	151	84	67	90	24	31
27	54	80	260	219	e72	172	143	84	90	128	24	33
28	53	610	229	e200	156	162	147	78	54	124	23	26
29	51	513	207	e190	---	152	135	94	46	81	22	24
30	49	291	192	e190	---	155	129	182	43	63	22	22
31	49	---	182	171	---	158	---	107	---	52	21	---
TOTAL	2418	3296	7671	9838	2714	9403	4966	3072	2202	1745	1185	881
MEAN	78.0	110	247	317	96.9	303	166	99.1	73.4	56.3	38.2	29.4
MAX	144	610	598	797	157	1150	315	182	153	128	95	107
MIN	49	52	114	160	70	86	118	77	43	30	21	19
CFSM	1.17	1.65	3.72	4.77	1.46	4.55	2.49	1.49	1.10	.85	.57	.44
IN.	1.35	1.84	4.28	5.50	1.52	5.25	2.77	1.72	1.23	.97	.66	.49

e Estimated

## DELAWARE RIVER BASIN

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	142	204	214	162	169	276	439	249	138	80.8	71.9	85.5
MAX	613	409	565	430	747	681	899	608	483	290	430	336
(WY)	1956	1973	1974	1979	1981	1977	1993	1989	1972	1952	1955	1979
MIN	12.4	18.4	71.9	41.8	48.4	85.8	160	99.1	37.3	19.3	16.8	10.6
(WY)	1965	1965	1981	1961	1980	1958	1981	1995	1991	1991	1953	1964

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1951 - 1995

ANNUAL TOTAL	69568	49391	
ANNUAL MEAN	191	135	186
HIGHEST ANNUAL MEAN			280
LOWEST ANNUAL MEAN			100
HIGHEST DAILY MEAN	2600	Apr 16	1150
LOWEST DAILY MEAN	42	Sep 22	19
ANNUAL SEVEN-DAY MINIMUM	50	Sep 16	20
ANNUAL RUNOFF (CFSM)	2.86		2.03
ANNUAL RUNOFF (INCHES)	38.86		27.59
10 PERCENT EXCEEDS	381		291
50 PERCENT EXCEEDS	103		90
90 PERCENT EXCEEDS	56		31



## DELAWARE RIVER BASIN

01436000 NEVERSINK RIVER AT NEVERSINK, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1954 - 1995	
ANNUAL TOTAL	18029		13716			
ANNUAL MEAN	49.4		37.6		48.4	
HIGHEST ANNUAL MEAN					158	1956
LOWEST ANNUAL MEAN					11.4	1971
HIGHEST DAILY MEAN	1560	Apr 17	98	Aug 1	3700	Jun 23 1972
LOWEST DAILY MEAN	21	Apr 27	21	Dec 11	.00	Oct 27 1954
ANNUAL SEVEN-DAY MINIMUM	22	Dec 11	22	Dec 11	.23	Dec 12 1958
10 PERCENT EXCEEDS	58		66		80	
50 PERCENT EXCEEDS	26		25		21	
90 PERCENT EXCEEDS	23		23		5.0	

## DELAWARE RIVER BASIN

01436690 NEVERSINK RIVER AT BRIDGEVILLE, NY

LOCATION.--Lat 41°38'15", long 74°37'04", Sullivan County, Hydrologic Unit 02040104, on left bank 0.1 mi upstream from State Highway 17 bridge, 0.25 mi upstream from Bridgeville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--171 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,080 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to June 1953, entire flow from 92.5 mi<sup>2</sup> of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Satellite gage-height and temperature telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft<sup>3</sup>/s, Apr. 17, 1993, gage height, 11.70 ft; minimum, 40 ft<sup>3</sup>/s, Oct. 11, 1993, gage height, 4.37 ft; minimum daily discharge, 42 ft<sup>3</sup>/s, Oct. 11, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,790 ft<sup>3</sup>/s, Mar. 8, gage height, 9.24 ft; minimum, 52 ft<sup>3</sup>/s, Sept. 12, gage height, 4.47 ft; minimum daily discharge, 53 ft<sup>3</sup>/s, Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	91	190	281	e140	266	102	137	135	79	135	72
2	220	121	167	310	e130	e170	97	147	117	91	130	63
3	161	106	154	234	e120	e140	96	132	126	87	119	60
4	135	111	146	e180	e120	e130	106	116	121	82	114	59
5	119	111	329	e160	e110	e120	112	119	105	81	125	58
6	106	100	415	e170	e110	e140	96	122	95	82	192	58
7	100	95	272	274	e100	176	97	119	87	97	111	59
8	95	85	249	232	e110	859	100	118	103	88	89	58
9	97	85	207	181	e110	1180	113	109	84	72	82	58
10	119	105	198	156	e120	535	232	120	76	66	82	57
11	99	101	320	137	e120	398	183	132	75	89	106	55
12	89	90	247	137	e120	345	159	120	94	111	107	53
13	84	85	e180	187	e110	378	336	107	98	99	105	63
14	89	81	e160	223	e110	406	251	98	82	104	114	62
15	86	78	e150	276	e100	380	209	96	85	101	128	56
16	81	72	e140	358	e92	339	181	96	77	99	110	55
17	80	69	e140	295	e92	303	155	92	87	105	104	76
18	80	71	e140	250	e94	258	135	103	88	257	102	77
19	77	70	e130	224	e100	224	178	104	97	116	100	62
20	76	68	e120	444	e110	202	177	104	98	95	98	63
21	75	84	e120	686	e110	219	159	94	118	101	98	59
22	73	142	120	499	e110	250	170	94	89	102	95	61
23	74	104	119	374	e98	210	143	88	84	103	65	75
24	88	91	253	313	e94	185	129	87	83	142	60	64
25	81	87	307	269	e92	167	115	132	83	158	60	60
26	75	83	218	238	e92	151	101	124	85	138	60	66
27	74	84	188	e190	e94	134	100	111	e120	171	60	68
28	71	346	170	e170	210	112	103	92	e80	293	60	63
29	70	365	e140	e160	---	107	99	117	e70	183	59	59
30	68	233	e120	e160	---	106	95	314	66	127	58	58
31	68	---	e130	e150	---	107	---	178	---	122	61	---
TOTAL	3012	3414	5939	7918	3118	8697	4329	3722	2808	3641	2989	1857
MEAN	97.2	114	192	255	111	281	144	120	93.6	117	96.4	61.9
MAX	220	365	415	686	210	1180	336	314	135	293	192	77
MIN	68	68	119	137	92	106	95	87	66	66	58	53

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	89.1	174	208	209	103	291	607	141	101	113	115	92.0
MAX	97.2	209	237	263	111	328	1022	166	118	132	168	121
(WY)	1995	1994	1994	1993	1995	1994	1993	1994	1994	1994	1994	1994
MIN	79.1	114	192	110	90.2	263	144	120	90.8	89.2	79.0	61.9
(WY)	1994	1995	1995	1994	1993	1993	1995	1995	1993	1993	1993	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	FOR 1996 WATER YEAR	FOR 1997 WATER YEAR	FOR 1998 WATER YEAR	FOR 1999 WATER YEAR	FOR 2000 WATER YEAR	FOR 2001 WATER YEAR	FOR 2002 WATER YEAR	FOR 2003 WATER YEAR	FOR 2004 WATER YEAR	FOR 2005 WATER YEAR
ANNUAL TOTAL	70212	51444										
ANNUAL MEAN	192	141										
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	2350	Apr 17	1180	Mar 9	4170	Apr 17	1993					
LOWEST DAILY MEAN	68	Oct 30	53	Sep 12	42	Oct 11	1993					
ANNUAL SEVEN-DAY MINIMUM	72	Oct 25	57	Sep 6	50	Oct 5	1993					
10 PERCENT EXCEEDS	379		252		336							
50 PERCENT EXCEEDS	113		109		111							
90 PERCENT EXCEEDS	77		67		73							

e Estimated



## DELAWARE RIVER BASIN

01436690 NEVERSINK RIVER AT BRIDGEVILLE, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1992 to current year.

INSTRUMENTATION.--Water-temperature satellite telemeter provides 15-minute-interval readings. Prior to May 1993, satellite telemeter provided one-hour-interval readings.

REMARKS.--Interruptions of record were due to malfunction of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.5°C, July 15, 1995; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C, July 15; minimum, 0.0°C on many days during winter period.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	11.5	12.0	12.0	10.0	11.0	3.5	1.5	2.5	1.0	.5	.5
2	13.5	10.5	11.5	11.0	8.0	9.5	3.5	1.5	2.5	2.0	.5	1.0
3	13.0	9.0	10.5	10.0	6.5	8.5	4.0	1.5	2.5	.5	.0	.0
4	13.0	9.5	11.0	12.5	9.0	10.5	4.5	2.5	3.5	.5	.0	.0
5	12.5	10.0	11.0	13.0	10.0	11.5	6.0	4.5	5.5	.0	.0	.0
6	12.5	8.5	10.0	12.0	10.0	11.0	7.0	6.0	6.5	.0	.0	.0
7	13.0	8.0	10.5	11.0	7.5	9.5	7.0	5.0	6.5	.5	.0	.0
8	14.0	9.0	11.5	9.5	6.5	8.0	5.0	1.0	2.5	.5	.0	.0
9	14.5	11.5	13.0	9.0	7.5	8.5	2.0	.5	1.5	1.0	.0	.0
10	13.5	10.5	12.0	9.0	6.5	8.0	3.0	2.0	2.5	.5	.0	.0
11	12.0	8.0	10.0	7.0	4.5	5.5	3.5	1.5	3.0	.0	.0	.0
12	11.5	7.0	9.0	6.0	3.0	4.5	1.5	.0	.5	.5	.0	.0
13	11.0	6.5	9.0	7.0	5.0	6.0	.5	.0	.0	1.5	.5	.5
14	11.0	8.0	9.5	9.0	5.5	7.0	1.0	.5	.5	1.5	.5	1.0
15	12.5	8.0	10.0	10.0	8.0	9.0	1.5	.0	.5	5.0	1.5	3.5
16	11.5	6.5	9.0	8.5	7.0	7.5	1.0	.0	.5	5.5	5.0	5.0
17	11.0	6.5	8.5	7.5	5.5	6.5	1.5	.5	1.0	5.5	4.5	5.0
18	11.5	8.5	10.0	8.5	7.0	7.5	3.0	1.5	2.0	4.5	4.0	4.5
19	13.0	10.5	11.5	9.5	6.5	8.0	3.0	1.0	2.0	4.5	3.5	4.0
20	13.0	12.5	13.0	7.5	5.0	6.0	2.5	.5	1.5	4.0	4.0	4.0
21	14.5	11.5	12.5	7.0	5.0	6.0	2.5	.5	1.0	4.0	3.0	3.5
22	12.5	9.5	11.0	8.0	4.5	6.5	2.5	.0	1.0	3.0	1.5	2.5
23	11.5	10.0	10.5	4.5	1.5	3.5	2.5	.5	1.5	2.0	1.0	1.5
24	12.5	9.0	10.5	2.0	.0	1.0	4.0	2.0	3.5	2.0	1.0	1.5
25	12.0	8.5	10.0	3.0	.0	1.5	4.5	3.0	4.0	2.5	1.0	1.5
26	9.0	7.0	8.5	3.0	1.0	1.5	3.5	2.0	2.5	1.5	.5	1.0
27	8.5	7.0	8.0	1.0	.0	.5	2.5	1.0	1.5	1.5	.0	.5
28	9.5	5.5	7.0	2.5	.0	1.5	3.0	1.0	2.0	1.0	.0	.0
29	9.5	5.5	7.5	3.5	2.0	2.5	2.5	.0	1.5	.5	.0	.0
30	10.5	6.0	8.0	3.5	2.0	2.5	.5	.0	.0	1.0	.0	.0
31	10.0	8.0	9.0	---	---	---	.5	.0	.0	1.0	.0	.0
MONTH	14.5	5.5	10.0	13.0	.0	6.5	7.0	.0	2.0	5.5	.0	1.5

## DELAWARE RIVER BASIN

01436690 NEVERSINK RIVER AT BRIDGEVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	.5	1.0	.0	.5	10.0	4.5	7.0	11.5	9.0	10.5
2	2.0	.0	.5	1.5	.0	.5	8.5	4.0	6.0	10.5	---	---
3	.5	.0	.0	2.0	.0	.5	8.5	3.0	6.0	13.0	7.0	10.0
4	.0	.0	.0	1.0	.0	.5	---	---	---	14.5	8.5	11.5
5	.0	.0	.0	2.5	.0	1.0	---	---	---	12.5	11.0	11.5
6	.0	.0	.0	2.0	1.0	1.5	---	---	---	14.5	9.0	11.5
7	.0	.0	.0	2.5	1.0	2.0	9.5	3.5	6.0	15.0	8.5	11.5
8	.0	.0	.0	3.5	.0	2.5	6.5	2.5	3.5	16.0	8.0	12.0
9	.0	.0	.0	1.5	.0	.5	5.0	2.5	4.0	16.5	10.0	13.0
10	.0	.0	.0	1.5	.0	.5	7.0	2.5	5.0	14.5	11.0	12.5
11	.0	.0	.0	3.0	.5	1.5	9.5	4.0	6.5	11.0	10.5	10.5
12	.0	.0	.0	4.5	1.0	2.5	7.5	7.0	7.0	12.5	10.0	11.0
13	.0	.0	.0	6.5	3.0	4.5	7.5	6.5	6.5	16.0	9.5	13.0
14	.5	.0	.0	6.5	3.0	5.0	8.5	5.5	7.0	15.0	12.0	13.5
15	.0	.0	.0	8.0	5.0	6.0	10.0	6.0	7.5	16.0	12.0	13.5
16	.0	.0	.0	9.0	5.5	7.0	11.0	5.0	8.0	18.0	11.0	14.5
17	.5	.0	.0	9.5	6.5	7.5	12.5	6.0	9.0	16.5	13.5	14.5
18	.5	.0	.0	9.0	4.5	6.5	14.0	8.0	11.0	14.5	13.0	13.5
19	.5	.0	.0	8.5	4.5	6.5	12.5	10.5	11.5	13.0	11.5	12.5
20	.5	.0	.0	8.0	5.0	6.5	14.0	9.0	11.5	17.5	10.0	13.0
21	.0	.0	.0	7.5	6.0	6.5	12.5	10.5	11.0	17.5	12.0	15.0
22	.5	.0	.0	7.0	5.0	6.0	13.0	9.5	11.0	19.5	13.0	16.0
23	.5	.0	.5	6.0	5.0	5.5	13.5	9.0	10.5	19.5	12.5	16.0
24	1.0	.0	.5	5.0	3.0	4.0	15.5	9.0	12.0	20.0	15.0	17.5
25	1.0	.0	.0	7.0	1.5	4.0	15.5	9.0	12.0	18.5	16.5	17.0
26	1.5	.0	.5	8.5	3.0	5.5	15.5	10.0	12.5	16.5	14.0	15.0
27	.0	.0	.0	9.5	3.5	6.5	15.5	10.0	13.0	19.0	13.0	15.5
28	.5	.0	.5	10.0	4.5	7.0	16.0	12.5	14.0	16.5	14.0	15.5
29	---	---	---	10.5	4.0	7.0	15.5	11.0	13.0	17.5	14.0	15.0
30	---	---	---	9.0	6.5	7.5	13.0	10.0	11.5	16.0	14.0	15.0
31	---	---	---	9.0	6.0	7.5	---	---	---	20.0	13.0	16.5
MONTH	2.0	.0	.0	10.5	.0	4.0	---	---	---	20.0	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.0	15.5	18.5	21.5	20.0	21.0	23.0	18.5	21.0	23.0	19.0	20.5
2	20.5	17.5	19.0	20.5	18.0	19.5	23.0	18.5	20.5	21.5	17.5	19.5
3	22.0	18.0	20.0	22.0	15.0	18.5	24.0	19.0	21.0	21.0	15.0	18.0
4	23.5	18.5	20.5	22.0	16.5	19.0	24.0	19.0	21.5	21.0	15.0	18.0
5	23.0	17.0	20.0	20.5	18.0	19.0	21.5	18.5	20.0	22.5	16.5	19.5
6	22.5	17.0	20.0	18.5	17.5	18.0	20.0	17.0	18.0	23.0	17.0	20.0
7	24.0	18.5	21.0	17.5	16.5	17.0	23.0	17.5	19.5	22.0	18.5	20.0
8	23.0	18.5	20.5	22.0	16.0	18.5	23.5	17.5	20.0	20.5	16.5	18.5
9	23.0	16.0	19.5	21.5	17.5	19.0	23.5	17.5	20.5	17.0	15.5	16.0
10	19.5	17.0	18.5	22.0	16.5	19.5	21.0	18.0	20.0	19.0	13.5	15.5
11	20.0	16.0	17.5	23.0	18.5	20.5	22.0	18.5	20.5	18.0	11.5	14.5
12	18.5	15.5	17.0	23.0	18.0	20.5	22.0	18.5	20.0	18.5	12.0	15.0
13	19.5	14.0	16.5	24.5	18.5	21.5	23.0	17.0	20.0	17.5	15.5	16.5
14	18.0	15.0	16.5	25.5	20.5	23.0	23.5	18.0	20.5	19.5	16.0	17.5
15	20.5	14.5	17.5	26.5	21.5	23.5	23.5	20.0	21.5	19.5	14.5	16.5
16	20.5	14.5	17.5	23.5	20.5	21.5	23.0	19.0	21.0	16.0	13.0	14.5
17	23.0	16.5	19.5	20.5	18.5	19.5	24.5	19.5	21.5	16.0	14.0	15.0
18	23.0	17.0	20.0	22.5	15.0	19.0	23.5	18.5	21.0	19.0	14.0	16.0
19	24.5	18.0	21.0	24.0	18.5	21.0	23.0	18.0	20.0	17.0	12.5	14.5
20	25.0	19.5	22.0	23.0	19.0	21.5	22.5	16.5	19.5	15.5	14.0	15.0
21	21.5	18.0	19.5	22.0	20.0	21.0	22.5	16.5	19.5	16.5	14.5	15.5
22	18.5	16.5	17.5	22.0	18.0	20.0	22.0	17.5	19.5	16.5	15.5	16.0
23	20.0	15.5	17.5	21.5	19.0	20.5	22.0	16.0	18.5	16.0	13.0	14.5
24	21.0	16.5	18.5	22.0	18.0	20.0	23.0	17.0	19.5	15.0	10.5	13.0
25	22.0	17.5	19.5	24.0	20.0	21.5	22.5	16.0	19.0	13.5	12.0	13.0
26	22.5	19.0	20.5	23.0	21.0	22.0	21.0	16.0	18.5	13.5	12.5	13.0
27	---	---	---	24.0	20.0	21.5	21.0	17.5	19.0	17.0	12.5	14.0
28	---	---	---	23.5	21.0	22.0	22.5	17.5	19.5	17.0	12.0	14.0
29	---	---	---	25.0	21.5	23.0	23.0	17.5	20.0	16.0	10.5	13.0
30	23.5	18.5	21.0	25.0	20.0	22.5	23.5	17.5	20.0	15.5	10.5	12.5
31	---	---	---	24.5	18.5	21.5	22.5	16.5	19.5	---	---	---
MONTH	---	---	---	26.5	15.0	20.5	24.5	16.0	20.0	23.0	10.5	16.0

## DELAWARE RIVER BASIN

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'08", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi downstream from Basher Kill, 0.8 mi southeast of Godeffroy, 1.7 mi south of Cuddebackville, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--307 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1937 to current year. Gage heights and discharge measurements, August to October 1903 and August 1909 to April 1914, and twice-daily figures of discharge for January 1911 to December 1912 (which do not represent daily mean discharges because of diurnal fluctuation) are published in WSP 97, 261, 321, 351, and 381. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 1502: 1951(M). WDR NY-82-1: Drainage area. WDR NY-87-1: 1986.

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft above sea level (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft higher).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Prior to 1949, diurnal fluctuations at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 92.5 mi<sup>2</sup> of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft<sup>3</sup>/s, Aug. 19, 1955, gage height, 12.49 ft, from rating curve extended above 11,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; minimum discharge observed, no flow July 21, 22, 28, 1911, result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,720 ft<sup>3</sup>/s, Mar. 9, gage height, 7.11 ft; minimum, 61 ft<sup>3</sup>/s, Sept. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	195	587	e500	e380	509	271	269	240	128	182	e108
2	512	250	536	e650	e340	e370	259	288	217	150	180	105
3	395	246	502	e540	e320	e330	250	270	218	143	172	93
4	e312	232	473	e450	e310	e320	253	251	215	137	164	90
5	e275	235	653	e420	e310	318	266	245	196	134	163	e86
6	e244	224	994	e420	e300	337	246	247	180	135	234	82
7	e224	213	734	e490	e290	372	242	238	168	165	182	e77
8	e212	204	673	e470	e280	1120	241	233	169	165	137	81
9	e220	198	603	466	e300	3070	253	224	165	137	124	78
10	e298	251	571	408	e290	1610	369	231	150	124	118	e75
11	e270	256	751	387	e280	1220	339	248	145	136	130	e71
12	e236	229	701	385	e280	1000	307	244	161	168	146	66
13	e220	217	e550	434	e270	948	468	230	179	160	147	74
14	e212	209	e510	491	e260	975	433	216	161	149	144	e80
15	e208	204	e490	544	e240	872	376	209	158	154	179	71
16	e197	196	e470	682	e230	762	338	206	147	147	170	65
17	e193	188	470	610	e220	677	314	202	141	156	155	90
18	197	183	460	554	e230	599	286	209	147	288	149	116
19	197	184	446	514	e240	522	310	217	148	198	147	88
20	200	178	424	735	e250	470	345	214	153	147	142	80
21	204	205	402	1390	288	466	308	197	160	144	140	78
22	200	348	389	1140	278	517	326	189	154	138	138	88
23	209	301	379	923	269	463	300	181	137	144	128	107
24	242	275	493	801	e250	419	280	175	135	182	98	97
25	233	267	660	702	e240	383	264	238	137	230	94	85
26	219	262	527	619	e230	354	243	233	139	195	e91	97
27	207	245	475	e540	e220	333	238	222	164	226	e86	110
28	200	636	e420	e470	365	307	242	199	156	424	e80	98
29	192	916	e370	e420	---	292	237	204	128	294	e77	88
30	191	667	e350	e370	---	282	229	385	121	197	e77	84
31	185	---	e360	e380	---	279	---	293	---	173	e86	---
TOTAL	7583	8414	16423	17905	7760	20496	8833	7207	4889	5468	4260	2608
MEAN	245	280	530	578	277	661	294	232	163	176	137	86.9
MAX	512	916	994	1390	380	3070	468	385	240	424	234	116
MIN	185	178	350	370	220	279	229	175	121	124	77	65

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1995, BY WATER YEAR (WY)

MEAN	294	370	437	354	404	684	851	533	368	229	229	212
MAX	2033	1094	1227	1053	981	1370	2080	1392	1722	652	1327	705
(WY)	1956	1956	1974	1979	1976	1977	1993	1989	1972	1972	1955	1960
MIN	94.9	86.3	119	72.6	118	297	248	180	111	54.2	76.0	71.1
(WY)	1985	1966	1981	1981	1980	1981	1985	1962	1957	1966	1968	1972

e Estimated

## DELAWARE RIVER BASIN

01437500 NEVERSINK RIVER AT GODEFFROY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1954 - 1995	
ANNUAL TOTAL	160145		111846			
ANNUAL MEAN	439		306		413	
HIGHEST ANNUAL MEAN					704	1956
LOWEST ANNUAL MEAN					215	1965
HIGHEST DAILY MEAN	3540	Apr 17	3070	Mar 9	15900	Aug 19 1955
LOWEST DAILY MEAN	121	Sep 20	65	Sep 16	32	Aug 17 1965
ANNUAL SEVEN-DAY MINIMUM	130	Sep 15	72	Sep 10	38	Aug 11 1965
10 PERCENT EXCEEDS	907		546		867	
50 PERCENT EXCEEDS	240		237		266	
90 PERCENT EXCEEDS	160		109		106	

## DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Pike County, PA, Hydrologic Unit 02040104, on right bank 1,500 ft upstream from toll bridge (on U.S. Route 206) between Montague, NJ and Milford, PA, 0.8 mi downstream from Sawkill Creek, and at river mile 246.3.

DRAINAGE AREA.--3,480 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR-NJ-81-2: 1980.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft above sea level. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft lower.

REMARKS.--Records good except for estimated daily discharges and periods of shifting control, Oct. 1-24, and June 12 to Sept. 30, which are fair. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, Cliff Lake, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, and Neversink Reservoirs (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River basin, diversions). Several measurements of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft, from floodmark, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5780	2360	9410	4770	5710	4480	4290	3190	2610	1930	2140	2030
2	4810	3620	7870	6270	5560	4490	3670	3400	2160	1890	2210	1910
3	4480	5330	6960	6460	5200	4200	3850	3220	2330	1890	2780	1840
4	3840	4320	6010	5900	e4800	3660	3570	2980	2410	1860	2510	1730
5	3320	3790	6350	5530	e4100	3320	3680	2830	2410	1740	2600	1710
6	3060	3060	13200	4920	e4300	3670	3930	2800	2300	1760	2020	1680
7	2670	2870	12300	4540	e4800	4370	3720	2560	1930	1860	2020	1720
8	2450	3310	11000	4590	e4400	6510	3430	2350	2090	2100	1830	1700
9	2440	2840	9750	5100	e4500	21700	2960	2400	1610	2060	1300	1730
10	2220	2740	8200	4940	e4800	19400	3800	2310	1590	1880	1180	1750
11	2320	2900	9680	4360	e4200	15100	5100	2540	1620	1830	1420	1800
12	2350	2770	10500	4230	e3000	12300	4950	2810	1930	1940	1700	1930
13	2150	2190	9020	4420	e3600	11900	7020	2680	1880	1790	1720	1720
14	1960	2080	8070	4830	e4300	13000	10400	2430	2080	1930	1770	1840
15	1880	2410	7150	5260	e4400	13400	8480	2400	1930	1990	2440	1980
16	1870	2310	6440	10500	e3900	13400	6980	2470	1660	1700	1900	1680
17	1610	2220	5840	12100	e3800	12600	6600	2170	1860	1670	2580	1700
18	2020	2160	5730	10300	e3600	11100	5830	2280	1940	2860	2230	1650
19	1820	2140	5600	8850	e2700	9630	5560	2360	1800	4290	1980	1400
20	2040	1730	4740	8550	e2650	8690	6240	2360	1790	3180	1730	1460
21	1930	1900	5260	14700	2820	7980	5670	2220	1690	2440	1690	1520
22	1930	3370	4960	15500	3330	8470	4960	2020	1430	2160	1610	1610
23	1890	3620	4430	12900	3270	8450	4720	1960	1460	1520	1660	1820
24	1940	3280	4490	11100	3430	7640	4350	1860	1690	1820	1660	1880
25	1690	2690	6290	10100	2980	7290	4050	1960	1740	2350	1600	1670
26	1530	2390	5530	9270	3220	6320	4410	2480	1930	2410	1710	1620
27	1680	2280	5030	8340	2550	5410	3490	2530	2160	2130	1750	1870
28	1890	4960	4970	7060	2730	5460	3350	2320	2260	3120	1690	1810
29	2080	14900	4570	5480	---	4930	3190	2100	1750	3560	1600	1770
30	1790	12400	4350	5970	---	4490	3040	2370	1490	2400	1750	1660
31	1770	---	3890	6010	---	4580	---	2720	---	1840	1710	---
TOTAL	75210	108940	217590	232850	108650	267940	145290	77080	57530	67900	58490	52190
MEAN	2426	3631	7019	7511	3880	8643	4843	2486	1918	2190	1887	1740
MAX	5780	14900	13200	15500	5710	21700	10400	3400	2610	4290	2780	2030
MIN	1530	1730	3890	4230	2550	3320	2960	1860	1430	1520	1180	1400

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

	3306	5059	6126	5669	5929	9999	12040	7322	4354	2994	2615	2653
MEAN	15690	11760	14050	15050	15120	24480	31560	16090	15200	11220	14230	9167
MAX (WY)	1956	1952	1974	1949	1976	1945	1940	1943	1972	1945	1955	1960
MIN	807	995	1968	1318	1748	3191	3322	2215	1214	864	715	892
(WY)	1942	1965	1965	1981	1980	1981	1985	1965	1965	1954	1954	1941

e Estimated



## DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1940 - 1995	
ANNUAL TOTAL	2192200		1469660			
ANNUAL MEAN	6006		4026		5666	
HIGHEST ANNUAL MEAN					8621	1952
LOWEST ANNUAL MEAN					2309	1965
HIGHEST DAILY MEAN	47600	Apr 14	21700	Mar 9	187000	Aug 19 1955
LOWEST DAILY MEAN	1530	Oct 26	1180	Aug 10	412	Aug 23 1954
ANNUAL SEVEN-DAY MINIMUM	1780	Oct 25	1560	Aug 8	565	Jul 1 1965
INSTANTANEOUS PEAK FLOW			24500	Mar 9	a250000	Aug 19 1955
INSTANTANEOUS PEAK STAGE			11.56	Mar 9	35.15	Aug 19 1955
INSTANTANEOUS LOW FLOW			1100	Aug 10	382	Aug 24 1954
10 PERCENT EXCEEDS	12900		8460		12000	
50 PERCENT EXCEEDS	3570		2740		3400	
90 PERCENT EXCEEDS	1990		1700		1580	

a from rating curve extended above 90,000 ft<sup>3</sup>/s on basis of flood-routing study.

## DELAWARE RIVER BASIN

## RESERVOIRS IN DELAWARE RIVER BASIN

- 01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near release chamber at Downsview Dam on East Branch Delaware River, and 1.6 mi east of Downsview. DRAINAGE AREA, 372 mi<sup>2</sup>, revised. PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by Board of Water Supply, City of New York).  
Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190 mil gal between minimum operating level, elevation, 1,152.0 ft and crest of spillway, elevation, 1,280.0 ft. Capacity: at crest of spillway 149,799 mil gal; at minimum operating level, 9,609 mil gal; at sill of diversion tunnel, elevation, 1,143.0 ft, 6,098 mil gal; in dead storage below release outlet, elevation, 1,126.50 ft, 1,898 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this section), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records provided by New York City Department of Environmental Protection.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 154,027 mil gal, Apr. 5, 1960, elevation, 1,282.27 ft; minimum observed (after first filling), 9,575 mil gal, Dec. 26, 1964, elevation, 1,151.92 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 140,120 mil gal, May 22, elevation, 1,274.65 ft; minimum observed, 75,238 mil gal, Sept. 30, elevation, 1,231.44 ft.
- 01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi southeast of Stilesville. DRAINAGE AREA, 454 mi<sup>2</sup>. PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WDR NY-71-1: 1966. GAGE, water-stage recorder. Datum of gage is sea level (levels by Board of Water Supply, City of New York).  
Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 30, 1963. Usable capacity 95,706 mil gal between minimum operating level, elevation, 1,040.0 ft and crest of spillway, elevation, 1,150.0 ft. Capacity, at crest of spillway, 98,618 mil gal; at minimum operating level, 2,912 mil gal; at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft, 1,892 mil gal; in dead storage below release outlet elevation, 1,020.5 ft, 328 mil gal. Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records provided by New York City Department of Environmental Protection.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,617 mil gal, Mar. 16, 1986, elevation, 1,156.73 ft; minimum observed (after first filling), 11,901 mil gal, Nov. 7, 1968, elevation, 1,066.24 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 101,966 mil gal, Mar. 10, elevation, 1,152.08 ft; minimum observed, 28,287 mil gal, Sept. 30, elevation, 1,091.17 ft.
- 01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'21", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi northwest of Fowlersville. DRAINAGE AREA, 116 mi<sup>2</sup>, excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-86-1: 1985. WDR NY-90-1: Drainage area. GAGE, nonrecording gage, daily readings at 0900. Datum of gage is sea level (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft.  
Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft<sup>3</sup> between elevations 1,010.0 ft, minimum operating pool, and 1,071.2 ft, top of flashboards. Capacity below elevation 1,010.0 ft, minimum operating pool, about 212.7 mil ft<sup>3</sup>. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft. Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records provided by Orange and Rockland Utilities, Inc.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,461.6 mil ft<sup>3</sup>, Mar. 14, 1977, elevation, 1,071.8 ft; minimum observed (after first filling), -141.4 mil ft<sup>3</sup>, Dec. 2, 1938, elevation, 987.5 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 1,319.0 mil ft<sup>3</sup>, Mar. 17, elevation, 1,068.3 ft; minimum observed, 952.2 mil ft<sup>3</sup>, Apr. 21, elevation, 1,058.3 ft.
- 01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi southeast of village of Black Lake. DRAINAGE AREA, 22.9 mi<sup>2</sup>. PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M). WDR NY-85-1: 1984. WDR NY-86-1: 1985. WDR NY-90-1: Drainage area. GAGE, nonrecording gage, daily readings at 0900. Datum of gage is sea level (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft.  
Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft<sup>3</sup> between elevations 1,165.0 ft, minimum operating pool, and 1,220.0 ft, top of permanent flashboards. Capacity below elevation 1,165.0 ft, minimum operating pool, about 26.8 mil ft<sup>3</sup>. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft. Records provided by Orange and Rockland Utilities, Inc.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,171.2 mil ft<sup>3</sup>, July 20, 1945, elevation, 1,222.0 ft; minimum observed (after first filling), -26.8 mil ft<sup>3</sup>, Nov. 15, 1928, elevation, 1,144.5 ft.  
EXTREMES OF CURRENT YEAR.--Maximum contents observed, 769.6 mil ft<sup>3</sup>, June 5, 7, 12, elevation, 1,209.6 ft; minimum observed, 248.5 mil ft<sup>3</sup>, Nov. 14, 16, 23, elevation, 1,187.2 ft.
- 01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi northwest of Fowlersville. DRAINAGE AREA, 6.46 mi<sup>2</sup>, excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WDR NY-75-1: 1974(m). WDR NY-86-1: 1985. GAGE, nonrecording gage, daily readings at 0900. Datum of gage is sea level (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft.  
Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft<sup>3</sup> between elevations 1,043.3 ft, minimum operating pool, and 1,072.0 ft, top of permanent flashboards. Capacity below elevation 1,043.3 ft, minimum operating pool, about 6.54 mil ft<sup>3</sup>. Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft. Records provided by Orange and Rockland Utilities, Inc.  
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 145.44 mil ft<sup>3</sup>, July 30, 31, 1945, elevation, 1,073.1 ft; minimum observed (after first filling), about -6.54 mil ft<sup>3</sup>, Mar. 16, 1963, elevation, 1,038.0 ft.  
EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 117.32 mil ft<sup>3</sup>, Oct. 14, elevation, 1,069.7 ft; minimum observed, 47.45 mil ft<sup>3</sup>, Apr. 21, elevation, 1,058.7 ft.

## DELAWARE RIVER BASIN

## RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01435900 NEVERSINK RESERVOIR.--Lat 41°49'27", long 74°38'20", Sullivan County, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi southwest of Neversink. DRAINAGE AREA, 92.5 mi<sup>2</sup>. PERIOD OF RECORD, June 1953 to current year. REVISED RECORDS, WDR NY-85-1: Drainage area. GAGE, nonrecording gage read daily at 0900. Datum of gage is sea level (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal between minimum operating level, elevation, 1,319.0 ft and crest of spillway, elevation, 1,440.0 ft. Capacity at crest of spillway 37,146 mil gal; at minimum operating level, 2,205 mil gal; dead storage below diversion sill and outlet sill, elevation 1,314.0 ft, 1,680 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records provided by New York City Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,983 mil gal, Apr. 17, 1993, elevation, 1,441.68 ft; minimum observed (after first filling), 1,985 mil gal, Nov. 25, 1964, elevation, 1,316.98 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 34,032 mil gal, May 22, elevation, 1,433.53 ft; minimum observed, 11,225 mil gal, Sept. 30, elevation, 1,369.42 ft.

## MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	Elevation (feet) ‡	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ‡	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ‡	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)
<u>01416900 Pepacton Reservoir</u>				<u>01424997 Cannonsville Reservoir</u>			<u>01433000 Swinging Bridge Reservoir</u>		
Sept. 30	1,263.35	120,861		1,141.61	86,112		1,065.4	1,206.5	
Oct. 31	1,257.09	110,867	- 499	1,132.20	73,170	-646	1,063.9	1,150.2	-21.0
Nov. 30	1,253.43	105,253	- 290	1,131.36	72,058	- 57.4	1,067.3	1,279.7	+50.0
Dec. 31	1,256.28	109,610	+ 217	1,140.65	84,725	+632	1,063.9	1,150.2	-48.4
CAL YR 1994	-	-	+ 94.4	-	-	+111	-	-	+12.3
Jan. 31	1,263.35	120,861	+ 562	1,150.71	99,760	+750	1,065.3	1,202.7	+19.6
Feb. 28	1,259.92	115,326	- 306	1,150.36	99,197	- 31.1	1,062.0	1,080.9	-50.4
Mar. 31	1,268.05	128,679	+ 666	1,150.46	99,358	+ 8.04	1,063.9	1,150.2	+25.9
Apr. 30	1,272.93	137,086	+ 434	1,149.61	98,025	- 68.8	1,062.3	1,091.8	-22.5
May 31	1,273.13	137,438	+ 17.6	1,144.98	90,983	-351	1,066.5	1,248.6	+58.5
June 30	1,269.39	130,960	- 334	1,134.82	76,640	-740	1,064.3	1,165.1	-32.2
July 31	1,261.35	117,616	- 666	1,124.61	63,412	-660	1,065.9	1,225.5	+22.5
Aug. 31	1,249.40	99,274	- 915	1,108.42	44,728	-933	1,062.5	1,099.0	-47.2
Sept. 30	1,230.81	74,470	-1,279	1,090.47	27,691	-879	1,061.3	1,056.0	-16.6
WTR YR 1995	-	-	- 197	-	-	-248	-	-	- 4.8
Date	Elevation (feet) ‡	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ‡	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ‡	Contents (million gallons)	Change in contents (equivalent in ft <sup>3</sup> /s)
<u>01433100 Toronto Reservoir</u>				<u>01433200 Cliff Lake</u>			<u>01435900 Neversink Reservoir</u>		
Sept. 30	1,204.2	623.5		1,066.4	93.02		1,415.74	26,293	
Oct. 31	1,191.8	333.1	-108	1,067.7	102.20	+ 3.4	1,410.93	24,384	- 95.3
Nov. 30	1,188.5	271.3	- 23.8	1,067.2	98.60	- 1.4	1,408.61	23,492	- 46.0
Dec. 31	1,194.3	384.8	+ 42.4	1,064.8	82.38	- 6.1	1,415.21	26,075	+129
CAL YR 1994	-	-	- 9.1	-	-	- 0.8	-	-	+ 37.9
Jan. 31	1,200.1	518.8	+ 50.0	1,066.0	90.26	+ 2.9	1,423.86	29,682	+180
Feb. 28	1,201.2	546.3	+ 11.4	1,061.5	62.21	-11.6	1,420.37	28,197	- 82.1
Mar. 31	1,207.3	706.2	+ 59.7	1,065.0	83.66	+ 8.0	1,428.16	31,570	+168
Apr. 30	1,209.1	755.6	+ 19.1	1,062.3	66.86	- 6.5	1,431.64	33,152	+ 81.6
May 31	1,209.4	764.0	+ 3.1	1,066.4	93.02	+ 9.8	1,430.31	32,542	- 30.4
June 30	1,209.2	758.4	- 2.2	1,064.2	78.54	- 5.6	1,426.26	30,727	- 93.6
July 31	1,200.7	533.7	- 83.9	1,068.0	104.36	+ 9.6	1,406.67	22,760	-398
Aug. 31	1,196.1	424.5	- 40.8	1,062.4	67.46	-13.8	1,381.38	14,420	-416
Sept. 30	1,196.0	422.2	- 0.9	1,061.5	62.21	- 2.0	1,368.73	11,053	-174
WTR YR 1995	-	-	- 6.4	-	-	- 1.0	-	-	- 64.6

‡‡ Elevation at 0800 hours on first day of following month.

‡ Elevation at 0900 hours.

## DELAWARE RIVER BASIN

## DIVERSIONS FROM DELAWARE RIVER BASIN

- 01415200 Diversion from Pepacton Reservoir (see preceding pages) on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 6, 1955. Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.  
REVISED RECORDS, WDR NY-71-1: 1970. WDR NY-81-1: 1980.
- 01423900 Diversion from Cannonsville Reservoir (see preceding pages) on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 29, 1964. Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.  
REVISED RECORDS, WDR NY-81-1: 1980.
- 01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.  
REVISED RECORDS, WDR NY-82-1: 1976, 1977.

## DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Month	01415200 <u>Pepacton Reservoir</u>	01423900 <u>Cannonsville Reservoir</u>	01435800 <u>Neversink Reservoir</u>
October.....	694	454	161
November.....	668	365	160
December.....	584	209	152
CAL YR 1994	540	371	158
January.....	478	200	181
February.....	671	132	191
March.....	614	458	191
April.....	325	694	115
May.....	227	659	102
June.....	413	486	120
July.....	700	182	445
August.....	699	202	397
September.....	767	211	157
WTR YR 1995	569	355	198

## STREAMS TRIBUTARY TO LAKE ONTARIO

04250200 SALMON RIVER AT PINEVILLE, NY

LOCATION.--Lat 43°32'00", long 76°02'20", Oswego County, Hydrologic Unit 04140102, on right bank 0.8 mi upstream from Trout Brook, 2.3 mi northwest of Altmar, and 30 ft downstream from County Highway 48 in Pineville.

DRAINAGE AREA.--238 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 477.54 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Seasonal regulation of flow by Salmon River Reservoir at Redfield. Extensive diurnal fluctuation caused by powerplants at Bennett Bridge and Lighthouse Hill operated by Niagara Mohawk Power Corporation. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,060 ft<sup>3</sup>/s, Apr. 11, 1993, gage height, 11.63 ft; minimum daily, 64 ft<sup>3</sup>/s, Aug. 21, 1995.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 24,800 ft<sup>3</sup>/s, Dec. 29, 1984, gage height, 16.36 ft, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,630 ft<sup>3</sup>/s, Jan. 16, gage height, 8.22 ft; minimum daily, 64 ft<sup>3</sup>/s, Aug. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1760	612	563	459	638	616	486	448	346	77	73	772
2	1280	1130	494	e440	637	613	475	438	330	74	71	454
3	902	1100	494	e420	e540	815	466	455	338	71	70	415
4	890	1000	605	e410	e500	619	479	426	340	70	74	408
5	878	1020	726	e400	e480	605	475	420	342	70	79	394
6	858	1130	2110	e390	e470	906	455	414	331	72	80	381
7	858	1900	2080	e380	e460	893	441	419	344	72	76	393
8	680	1620	1690	e430	e450	942	431	423	338	72	72	401
9	670	1580	1250	e420	e450	936	458	398	339	71	70	452
10	851	1560	1080	e410	e450	927	464	404	305	71	68	435
11	857	1530	991	e410	444	967	449	417	332	70	67	404
12	667	1110	916	404	462	1700	458	401	337	69	80	390
13	648	926	854	488	434	1640	566	379	331	68	79	402
14	558	905	491	812	438	1300	933	370	317	70	78	403
15	544	605	470	1030	416	1010	907	762	321	79	72	409
16	539	570	713	2460	446	1080	484	422	318	74	69	403
17	526	568	740	2520	444	1620	463	314	87	78	68	403
18	521	565	743	2120	617	1610	477	354	75	77	67	412
19	523	567	742	1580	618	1440	821	356	73	72	66	408
20	529	564	740	1710	615	1010	468	345	71	70	65	394
21	534	580	735	2130	616	1060	461	335	70	75	64	406
22	549	613	714	2070	606	1080	544	334	70	76	65	448
23	553	619	706	1640	609	1490	480	327	162	75	66	513
24	540	719	705	995	610	1440	471	326	71	75	66	484
25	537	723	700	e900	606	808	433	344	70	73	66	458
26	424	722	699	e840	604	550	428	328	77	78	66	420
27	427	708	694	e760	607	503	519	327	74	82	66	401
28	437	721	700	e720	616	479	456	331	71	79	65	401
29	449	763	478	e680	---	467	459	362	71	87	65	379
30	446	815	467	e660	---	476	450	397	72	83	65	516
31	439	---	467	644	---	490	---	376	---	76	85	---
TOTAL	20874	27545	25557	29732	14883	30092	15357	12152	6423	2306	2183	12959
MEAN	673	918	824	959	532	971	512	392	214	74.4	70.4	432
MAX	1760	1900	2110	2520	638	1700	933	762	346	87	85	772
MIN	424	564	467	380	416	467	428	314	70	68	64	379

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	745	799	920	946	543	697	1971	602	452	205	194	508
MAX	817	918	1140	1330	554	971	2818	814	768	318	333	609
(WY)	1994	1995	1994	1993	1994	1995	1993	1994	1993	1994	1994	1994
MIN	673	680	795	548	532	549	512	392	214	74.4	70.4	432
(WY)	1995	1994	1993	1994	1995	1993	1995	1995	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL TOTAL	276609	200063	
ANNUAL MEAN	758	548	663
HIGHEST ANNUAL MEAN			777
LOWEST ANNUAL MEAN			548
HIGHEST DAILY MEAN	6300	2520	7670
LOWEST DAILY MEAN	74	64	64
ANNUAL SEVEN-DAY MINIMUM	86	65	65
10 PERCENT EXCEEDS	1570	1020	1340
50 PERCENT EXCEEDS	522	458	494
90 PERCENT EXCEEDS	354	71	88

e Estimated



## STREAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY

LOCATION.--Lat 43°48'48", long 76°04'30", Jefferson County, Hydrologic Unit 04140102, on left bank 250 ft upstream from highway bridge on Liberty Street, 0.2 mi downstream from tributary, 2.5 mi downstream from Adams, and 10.0 mi upstream from mouth.

DRAINAGE AREA.--128 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1957 to March 1995 (discontinued).

REVISED RECORDS.--WDR NY-85-1: 1963-64(M), 1976-77(M), 1980(M), 1984(M). WDR NY-92-1: 1963, 1976-77, 1984.

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Moderate diurnal fluctuation at low flow caused by mills upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 277 ft<sup>3</sup>/s, 29.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,690 ft<sup>3</sup>/s, Feb. 25, 1985, gage height, 11.05 ft, from rating curve extended above 5,500 ft<sup>3</sup>/s on basis of flow-over-dam measurement of peak flow; minimum discharge, 1.5 ft<sup>3</sup>/s, Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft<sup>3</sup>/s, Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Peak discharges greater than base discharge of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 15	1230	*4,610	*8.10	No other peak greater than base discharge.			

Minimum discharge, 18 ft<sup>3</sup>/s, Oct. 12, 13; minimum daily discharge, 21 ft<sup>3</sup>/s, Oct. 17-19.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	879	e230	e90	e130	e110	---	---	---	---	---	---
2	121	1260	224	e90	e130	e100	---	---	---	---	---	---
3	81	736	252	e82	e120	e98	---	---	---	---	---	---
4	60	456	293	e76	e120	e94	---	---	---	---	---	---
5	54	1000	653	e80	e120	e90	---	---	---	---	---	---
6	38	1370	962	e84	e110	e82	---	---	---	---	---	---
7	34	1230	729	e86	e110	e110	---	---	---	---	---	---
8	32	639	456	e88	e110	e700	---	---	---	---	---	---
9	31	501	359	e82	e110	1340	---	---	---	---	---	---
10	29	426	e240	e78	e110	918	---	---	---	---	---	---
11	29	335	e190	e76	e110	786	---	---	---	---	---	---
12	30	285	e170	e78	e110	686	---	---	---	---	---	---
13	23	252	e160	e120	e110	934	---	---	---	---	---	---
14	24	220	e170	e900	e100	1230	---	---	---	---	---	---
15	23	199	e160	4340	e100	1390	---	---	---	---	---	---
16	22	173	e160	2630	e100	1480	---	---	---	---	---	---
17	21	152	e150	1180	e100	1250	---	---	---	---	---	---
18	21	139	e150	735	e100	799	---	---	---	---	---	---
19	21	152	e160	578	e110	637	---	---	---	---	---	---
20	30	133	e150	581	e120	713	---	---	---	---	---	---
21	56	153	e140	884	e140	900	---	---	---	---	---	---
22	44	362	e130	807	e130	835	---	---	---	---	---	---
23	38	265	e120	578	e120	596	---	---	---	---	---	---
24	33	168	e120	470	e120	445	---	---	---	---	---	---
25	31	181	e110	397	e120	352	---	---	---	---	---	---
26	35	165	e110	e230	e110	314	---	---	---	---	---	---
27	60	e94	e100	e170	e110	282	---	---	---	---	---	---
28	53	e170	e96	e160	e110	255	---	---	---	---	---	---
29	44	420	e90	e150	---	233	---	---	---	---	---	---
30	39	297	e80	e140	---	228	---	---	---	---	---	---
31	37	---	e84	e130	---	245	---	---	---	---	---	---
TOTAL	1388	12812	7198	16170	3190	18232	---	---	---	---	---	---
MEAN	44.8	427	232	522	114	588	---	---	---	---	---	---
MAX	194	1370	962	4340	140	1480	---	---	---	---	---	---
MIN	21	94	80	76	100	82	---	---	---	---	---	---
CFSM	.35	3.34	1.81	4.08	.89	4.59	---	---	---	---	---	---
IN.	.40	3.72	2.09	4.70	.93	5.30	---	---	---	---	---	---

e Estimated

## STREAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	183	365	376	277	309	583	703	237	103	60.8	51.8	83.2
MAX	568	725	793	684	1166	1571	1695	720	349	455	248	367
(WY)	1977	1993	1974	1990	1981	1977	1993	1976	1972	1972	1981	1958
MIN	5.56	95.6	82.7	76.8	60.4	144	311	63.0	21.9	6.41	7.11	3.96
(WY)	1964	1961	1961	1961	1980	1967	1968	1987	1962	1966	1978	1960

## SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

WATER YEARS 1957 - 1995

ANNUAL TOTAL	95342.0		
ANNUAL MEAN	261		277
HIGHEST ANNUAL MEAN			425
LOWEST ANNUAL MEAN			173
HIGHEST DAILY MEAN	3830	Apr 14	6440
LOWEST DAILY MEAN	8.4	Sep 23	2.2
ANNUAL SEVEN-DAY MINIMUM	8.9	Sep 19	3.3
ANNUAL RUNOFF (CFSM)	2.04		2.17
ANNUAL RUNOFF (INCHES)	27.71		29.45
10 PERCENT EXCEEDS	655		668
50 PERCENT EXCEEDS	110		136
90 PERCENT EXCEEDS	12		14

## STREAMS TRIBUTARY TO LAKE ONTARIO

04252500 BLACK RIVER NEAR BOONVILLE, NY

LOCATION.--Lat 43°30'42", long 75°18'25", Oneida County, Hydrologic Unit 04150101, on left bank at downstream side of bridge on Moose River Road, 0.8 mi upstream from Sugar River, and 2 mi northeast of Boonville.

DRAINAGE AREA.--304 mi<sup>2</sup>.

PERIOD OF RECORD.--January to February 1911 (monthly discharges only, published in WSP 1307), March 1911 to current year.

REVISED RECORDS.--WSP 784: 1934. WSP 1084: 1912(M), 1913, 1917-1919(M), 1922(M), 1924(M), 1926(M), 1928(M), 1930(M), 1933(M). WSP 1307: 1914(M). WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 935.50 ft above sea level. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi upstream. That portion of diverted water which does not pass Black River Canal (flowing south), returns to Black River downstream from station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill upstream from station. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--84 years, 715 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft<sup>3</sup>/s, Apr. 18, 1982, Dec. 30, 1984, gage heights, 11.31 ft and 11.41 ft, respectively; maximum gage height, 13.10 ft, Feb. 21, 1981 (ice jam); minimum observed discharge, about 5 ft<sup>3</sup>/s, Aug. 26, 1918, gage height, 2.40 ft; minimum daily, 7 ft<sup>3</sup>/s, Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	1900	*5,180	*9.12	No other peak greater than base discharge.			
Minimum discharge, 58 ft <sup>3</sup> /s, Aug. 24, 25, 26, gage height, 3.42 ft; minimum daily, 59 ft <sup>3</sup> /s, Aug. 25.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2290	1030	1040	e380	e520	e350	622	678	400	119	175	276
2	1660	2500	815	e400	e460	e340	568	595	361	127	148	255
3	1180	2280	800	e420	e420	e320	537	548	801	116	166	185
4	937	1550	782	e380	e470	e310	596	512	895	111	449	144
5	809	1290	1370	e370	e460	e300	654	505	654	106	406	123
6	704	1210	3100	e390	e440	e320	560	419	473	144	319	117
7	611	1550	2690	e410	e420	e420	549	381	393	470	263	111
8	545	1490	1940	e410	e420	e840	522	371	343	416	201	155
9	508	1260	1480	e400	e420	e1500	501	359	334	279	163	320
10	526	1040	1320	e380	e410	e1800	530	370	315	219	136	555
11	513	932	e860	e360	e410	e1400	591	425	294	183	123	402
12	489	687	e720	e360	e400	e1300	566	605	362	160	136	267
13	443	653	e680	e400	e380	e1400	1180	508	311	139	170	217
14	429	628	e660	e640	e380	e1500	1250	468	209	124	159	396
15	409	581	e660	1710	e370	e1300	878	430	231	170	140	560
16	407	564	e640	4360	e370	1690	706	490	186	224	122	408
17	397	534	e640	4130	e370	2380	669	442	164	238	109	275
18	391	511	e640	2660	e380	2360	610	446	187	293	93	213
19	404	560	e640	1780	e380	1880	621	430	182	228	83	190
20	436	555	618	1420	e390	1640	659	379	174	175	75	168
21	480	558	614	1770	e390	1770	631	366	150	172	73	171
22	513	637	582	1470	e390	2190	945	336	87	189	67	215
23	550	701	571	1230	e380	1830	874	323	97	181	64	530
24	398	617	563	1040	e370	1460	716	314	114	217	64	610
25	307	622	e520	e740	e360	1190	669	465	122	252	59	445
26	346	619	e480	e580	e350	1000	630	447	120	362	62	398
27	359	461	e450	e500	e340	854	588	372	117	640	106	420
28	355	731	e410	e470	e330	755	763	364	101	498	140	409
29	351	1540	e360	e490	---	686	907	361	96	396	123	365
30	338	1410	e310	e520	---	627	680	468	98	308	102	321
31	345	---	e340	e560	---	655	---	462	---	228	115	---
TOTAL	18430	29301	27295	31130	11180	36367	20772	13639	8371	7484	4611	9221
MEAN	595	977	880	1004	399	1173	692	440	279	241	149	307
MAX	2290	2500	3100	4360	520	2380	1250	678	895	640	449	610
MIN	307	461	310	360	330	300	501	314	87	106	59	111

e Estimated

## STREAMS TRIBUTARY TO LAKE ONTARIO

04252500 BLACK RIVER NEAR BOONVILLE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	530	737	731	632	566	1019	1890	979	501	349	283	383
MAX	1695	1480	1759	1837	1410	2394	3313	2402	1707	980	760	1157
(WY)	1946	1960	1974	1913	1981	1921	1993	1972	1917	1947	1986	1975
MIN	55.0	149	260	158	167	302	692	328	55.0	55.4	41.5	49.4
(WY)	1915	1931	1961	1931	1931	1931	1995	1941	1920	1913	1913	1913

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1911 - 1995
ANNUAL TOTAL	340934	217801	
ANNUAL MEAN	934	597	716
HIGHEST ANNUAL MEAN			1119
LOWEST ANNUAL MEAN			448
HIGHEST DAILY MEAN	7650	4360	11100
LOWEST DAILY MEAN	277	59	7.0
ANNUAL SEVEN-DAY MINIMUM	312	66	19
10 PERCENT EXCEEDS	1890	1340	1540
50 PERCENT EXCEEDS	637	425	469
90 PERCENT EXCEEDS	357	138	166

e Estimated



## STREAMS TRIBUTARY TO LAKE ONTARIO

04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1942 - 1995	
ANNUAL TOTAL	84798		55525			
ANNUAL MEAN	232		152		196	
HIGHEST ANNUAL MEAN					292	1947
LOWEST ANNUAL MEAN					132	1961
HIGHEST DAILY MEAN	2590	Apr 17	1790	Jan 16	5410	Dec 30 1984
LOWEST DAILY MEAN	47	Aug 12	20	Aug 25	18	Aug 4 1949
ANNUAL SEVEN-DAY MINIMUM	58	Aug 7	22	Aug 20	20	Aug 4 1949
ANNUAL RUNOFF (CFSM)	2.62		1.72		2.21	
ANNUAL RUNOFF (INCHES)	35.56		23.29		29.96	
10 PERCENT EXCEEDS	508		307		418	
50 PERCENT EXCEEDS	125		110		120	
90 PERCENT EXCEEDS	68		31		42	

## STREAMS TRIBUTARY TO LAKE ONTARIO

## 04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam on Beaver River, 2.5 mi upstream from Moshier Creek, and 7.5 mi west of Beaver River Post Office.

DRAINAGE AREA.--171 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, month-end contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

REVISED RECORDS.--WDR NY-85-1: Drainage area.

GAGE.--Nonrecording gage read once daily and prior to reservoir gate changes. Datum of gage is sea level, adjustment of 1912.

REMARKS.--Reservoir originally formed about 1885; enlarged at various times and in 1924 enlarged to a usable capacity of 4,623 mil ft<sup>3</sup> between elevations 1,650.3 ft and 1,679.3 ft (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft. Capacity below elevation 1,650.3 ft, 90 mil ft<sup>3</sup>, is included in records presented herein, but is not ordinarily available for release. Reservoir is used to regulate flow of Beaver and Black Rivers for flood control, power development, and general public welfare. Satellite gage-height and rain-gage telemeter at station.

COOPERATION.--Records provided by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft, May 20, 1969, contents, 4,939 mil ft<sup>3</sup>; minimum observed since first filling, 1,644.80 ft, Mar. 25-27, 1949, contents, 8 mil ft<sup>3</sup>.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,676.91 ft, May 11, contents, 4,047 mil ft<sup>3</sup>; minimum observed, 1,668.78 ft, Sept. 26, contents, 2,189 mil ft<sup>3</sup>.

Capacity table (elevation, in feet, and contents, in millions of cubic feet)

1,658.0	604	1,670.0	2,431
1,660.0	821	1,675.0	3,556
1,665.0	1,518	1,680.0	4,916

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1672.14	1669.87	1670.38	1670.62	1674.00	1672.87	1675.63	1676.79	1676.33	1673.92	1673.62	1671.38
2	1672.30	1670.07	1670.43	1670.51	1674.01	1672.80	1675.68	1676.83	1676.30	1673.78	1673.65	1671.26
3	1672.39	1670.45	1670.47	1670.38	1674.00	1672.74	1675.74	1676.85	1676.28	1673.65	1673.67	1671.12
4	1672.48	1670.56	1670.57	1670.26	1673.97	1672.67	1675.77	1676.86	1676.28	1673.51	1673.66	1670.96
5	1672.53	1670.58	1670.66	1670.20	1673.96	1672.59	1675.79	1676.88	1676.22	1673.37	1673.70	1670.80
6	1672.58	1670.70	1671.14	1670.15	1673.95	1672.53	1675.84	1676.89	1676.18	1673.22	1673.75	1670.66
7	1672.62	1670.90	1671.68	1670.12	1673.92	1672.50	1675.88	1676.90	1676.12	1673.13	1673.79	1670.50
8	1672.68	1671.34	1671.98	1670.07	1673.88	1672.46	1675.91	1676.89	1676.07	1673.09	1673.78	1670.40
9	1672.71	1671.47	1672.13	1670.02	1673.81	1672.57	1675.93	1676.89	1676.05	1672.99	1673.76	1670.23
10	1672.77	1671.55	1672.22	1669.97	1673.79	1672.61	1675.97	1676.89	1676.01	1672.84	1673.72	1670.13
11	1672.72	1671.54	1672.30	1669.91	1673.77	1672.64	1675.99	1676.91	1675.94	1672.73	1673.65	1669.98
12	1672.58	1671.54	1672.37	1669.86	1673.74	1672.65	1675.99	1676.88	1675.89	1672.58	1673.60	1669.80
13	1672.47	1671.49	1672.42	1669.82	1673.67	1672.64	1676.05	1676.86	1675.83	1672.44	1673.61	1669.65
14	1672.33	1671.46	1672.43	1669.85	1673.64	1672.65	1676.14	1676.85	1675.76	1672.30	1673.55	1669.53
15	1672.21	1671.36	1672.43	1670.00	1673.60	1672.71	1676.23	1676.80	1675.67	1672.16	1673.48	1669.54
16	1672.07	1671.33	1672.42	1670.70	1673.56	1672.85	1676.27	1676.78	1675.61	1672.12	1673.40	1669.49
17	1671.91	1671.23	1672.37	1671.61	1673.51	1673.12	1676.33	1676.76	1675.53	1671.99	1673.32	1669.40
18	1671.77	1671.13	1672.24	1672.18	1673.45	1673.39	1676.34	1676.72	1675.45	1672.03	1673.22	1669.32
19	1671.61	1671.01	1672.23	1672.54	1673.40	1673.59	1676.37	1676.70	1675.38	1671.92	1673.12	1669.21
20	1671.49	1670.93	1672.14	1672.83	1673.34	1673.72	1676.38	1676.67	1675.32	1671.79	1673.00	1669.13
21	1671.40	1670.84	1672.03	1673.13	1673.28	1673.91	1676.42	1676.64	1675.24	1671.67	1672.88	1669.03
22	1671.33	1670.72	1671.92	1673.42	1673.23	1674.22	1676.43	1676.58	1675.13	1672.12	1672.77	1668.95
23	1671.20	1670.66	1671.81	1673.65	1673.17	1674.48	1676.51	1676.54	1675.00	1672.28	1672.64	1668.90
24	1671.06	1670.59	1671.66	1673.81	1673.12	1674.70	1676.53	1676.48	1674.87	1672.35	1672.51	1668.88
25	1670.92	1670.47	1671.56	1673.90	1673.07	1674.88	1676.56	1676.50	1674.74	1672.38	1672.38	1668.80
26	1670.77	1670.40	1671.43	1673.96	1673.01	1675.02	1676.56	1676.49	1674.63	1672.39	1672.23	1668.78
27	1670.62	1670.29	1671.30	1673.99	1672.94	1675.15	1676.58	1676.46	1674.49	1672.80	1672.07	1668.82
28	1670.45	1670.20	1671.15	1674.02	1672.92	1675.27	1676.58	1676.40	1674.33	1673.07	1671.98	1668.85
29	1670.30	1670.18	1671.05	1674.02	---	1675.37	1676.69	1676.38	1674.19	1673.22	1671.82	1668.87
30	1670.11	1670.31	1670.91	1674.00	---	1675.44	1676.74	1676.35	1674.06	1673.45	1671.66	1668.85
31	1669.97	---	1670.76	1674.00	---	1675.55	---	1676.36	---	1673.57	1671.51	---
MEAN	1671.76	1670.84	1671.63	1671.73	1673.56	1673.56	1676.19	1676.70	1675.50	1672.74	1673.08	1669.71
MAX	1672.77	1671.55	1672.43	1674.02	1674.01	1675.55	1676.74	1676.91	1676.33	1673.92	1673.79	1671.38
MIN	1669.97	1669.87	1670.38	1669.82	1672.92	1672.46	1675.63	1676.35	1674.06	1671.67	1671.51	1668.78
+	2411	2505	2569	3313	3055	3706	4009	3896	3306	3219	2728	2199
++	-170	+36.3	+23.9	+278	-107	+243	+117	-42.2	-228	-32.5	-183	-204
CAL YR 1994	MEAN 1671.63	MAX 1678.99	MIN 1658.85	++ - 6.28								
WTR YR 1995	MEAN 1673.08	MAX 1676.91	MIN 1668.78	++ -21.2								

+ Contents, in millions of cubic feet, at 2400 hours on last day of month by interpolation.  
++ Change in contents, equivalent in cubic feet per second.



STREAMS TRIBUTARY TO LAKE ONTARIO  
04260500 BLACK RIVER AT WATERTOWN, NY

LOCATION.--Lat 43°59'08", long 75°55'30", Jefferson County, Hydrologic Unit 04150101, on right bank 200 ft downstream from Vanduzee Street Bridge at Watertown, and 3.5 mi upstream from Philomel Creek.

DRAINAGE AREA.--1,864 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WDR NY-77-1: 1974. WDR NY-85-1: Drainage area. WDR NY-93-1: 1955, 1958-60, 1962-64, 1969, 1971-72, 1974, 1976-77, 1979-82, 1984-87, 1989-92.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft above sea level. Prior to Sept. 3, 1921, nonrecording gage, and from Sept. 3, 1921 to Mar. 15, 1977, recording gage at same site at datum 1.00 ft higher. Prior to June 13, 1992, at site 200 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Stillwater Reservoir (see station 04256500), Fulton Chain of Lakes, and other reservoirs. Extensive diurnal fluctuation at low and medium flow caused by mills and powerplants in and above Watertown. During canal season, water is diverted out of basin through Forestport feeder and Black River Canal (flowing south). Several measurements of water temperature were made during the year. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--75 years, 4,097 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,600 ft<sup>3</sup>/s, Apr. 12, 1993, gage height, 14.2 ft; minimum, 10 ft<sup>3</sup>/s, Sept. 2, 1934, gage height, 0.81 ft, present datum; minimum daily discharge, 137 ft<sup>3</sup>/s, Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 39,700 ft<sup>3</sup>/s, Apr. 23, 1869 (from New York State Museum Bulletin 85).

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 18	0330	*22,600	*9.50	No other peak greater than base discharge.			

Minimum discharge, 390 ft<sup>3</sup>/s, Aug. 12, gage height, 1.65 ft; minimum daily discharge, 793 ft<sup>3</sup>/s, June 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8940	3090	7500	e2200	e3100	2140	3600	3670	2250	1140	2100	1070
2	9590	7930	7090	e2300	e2900	2210	3480	3450	1990	1060	1540	1100
3	9620	9540	6130	e2500	e2600	2180	3150	2940	1840	1020	1460	1200
4	8360	10400	5440	e2400	e2400	2220	3080	2480	2160	926	1360	1220
5	6310	10800	5690	e2300	e2300	2210	3150	2440	2670	889	1420	1130
6	4410	10800	9130	e2500	e2100	2070	3160	2250	2490	847	1680	1120
7	3290	10500	10100	e2400	e2200	2300	3070	2160	2080	857	1850	1130
8	2890	10200	11600	e2300	e2400	5370	2630	1980	1610	1380	1770	1080
9	2510	9890	12500	e2300	e2300	2620	7190	2800	1960	1480	1490	1130
10	2620	9290	11500	e2400	e2400	2660	6620	2660	1710	1430	1450	1580
11	2680	8250	9920	e2300	e2300	2620	6700	2640	1800	1530	1370	1250
12	2770	7010	8020	e2300	e2300	2640	6360	2850	1840	1420	1150	804
13	2620	5780	5780	2520	2610	6250	3110	2310	1350	917	1190	1550
14	2340	4910	4500	5720	2690	7070	5060	2250	1320	1140	1200	1380
15	2310	4370	4600	12300	2490	8450	5400	2090	1160	1110	1180	1710
16	2380	3820	4680	17500	2480	10200	4820	2030	1210	926	1160	1930
17	2380	3430	4400	19900	2340	12800	3870	2000	1140	1460	1170	1820
18	2130	3140	4270	21800	2390	13100	3550	1920	979	1580	1100	1570
19	2220	3350	4570	19200	2400	13200	3180	1950	1050	1640	1030	1440
20	2270	3220	4240	15800	2380	12800	2960	1900	990	1630	1020	1220
21	2250	3240	3830	13500	2330	12000	2940	1820	793	1920	993	1320
22	2560	3830	3720	12200	2450	11300	3280	1880	864	1840	984	1210
23	2580	4680	3660	11100	2510	10400	4290	1760	934	2190	923	1500
24	2770	4480	3690	9930	2440	9900	4420	1680	982	2210	934	1840
25	2430	4050	3550	8480	2450	8950	3680	1670	1040	1990	934	2150
26	2270	3880	3430	6990	2550	7560	3270	1990	1050	1740	920	2040
27	2060	3650	3080	5430	2310	6130	3020	2010	1070	2080	902	1580
28	2100	3330	3110	3870	2170	5020	2760	2120	1110	3090	859	1620
29	2120	5810	2860	3640	---	4220	3720	1860	1060	3620	1040	1530
30	2020	7220	2050	3150	---	3790	4200	1910	1120	3470	1340	1310
31	2040	---	e2100	3180	---	3660	---	1800	---	2570	1390	---
TOTAL	107840	183890	176740	224410	69530	214370	103800	65630	42172	50702	38433	44260
MEAN	3479	6130	5701	7239	2483	6915	3460	2117	1406	1636	1240	1475
MAX	9620	10800	12500	21800	3100	13200	5400	3670	2670	3620	2100	2150
MIN	2020	3090	2050	2200	2100	2070	2630	1670	793	847	804	1070

e Estimated

## STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3094	4321	4417	3950	3557	6058	9898	5316	2686	1981	1744	2166
MAX	9058	8440	9129	8658	9181	13590	19180	12790	8235	5266	4083	5011
(WY)	1946	1989	1928	1937	1981	1921	1993	1943	1947	1972	1986	1975
MIN	1149	1116	1403	1173	1289	1776	3460	1600	991	925	730	919
(WY)	1964	1931	1923	1961	1931	1940	1995	1941	1941	1965	1923	1923
SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR					FOR 1995 WATER YEAR				WATER YEARS 1920 - 1995		
ANNUAL TOTAL	1856180					1321777						
ANNUAL MEAN	5085					3621				4097		
HIGHEST ANNUAL MEAN										6392		
LOWEST ANNUAL MEAN										2579		
HIGHEST DAILY MEAN	34900					21800				41000		
LOWEST DAILY MEAN	1520					793				137		
ANNUAL SEVEN-DAY MINIMUM	1760					922				637		
10 PERCENT EXCEEDS	10300					8940				8700		
50 PERCENT EXCEEDS	3400					2400				2780		
90 PERCENT EXCEEDS	1880					1110				1260		



## STREAMS TRIBUTARY TO LAKE ONTARIO

## LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04253300 SIXTH LAKE.--Lat 43°44'43", long 74°46'58", Hamilton County, Hydrologic Unit 04150101, on dam at outlet of Sixth Lake at Inlet, and 11.2 mi upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi<sup>2</sup>. PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is sea level (levels by Hudson River-Black River Regulating District).

The Sixth and Seventh Lakes of Fulton Chain Lakes are partially formed and controlled by the concrete dam at Inlet, while the Eighth Lake is upstream and at approximately 5 ft higher elevation. Storage began around 1881. The present structure is a concrete dam with control gates which were installed in 1938. Usable capacity 296.6 mil ft<sup>3</sup> between minimum operating level, elevation 1,775.1 ft and crest of spillway, elevation 1,786.0 ft; no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, provided, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 332 mil ft<sup>3</sup>, Oct. 3, 1945, elevation, 1,787.1 ft; minimum observed, less than 0.90 mil ft<sup>3</sup>, Nov. 18, 1943, water level below elevation 1,775.6 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 287.0 mil ft<sup>3</sup>, Oct. 1-7, elevation, 1,785.70 ft; minimum observed, 138.2 mil ft<sup>3</sup>, Feb. 20-27, elevation, 1,780.90 ft.

04253400 FIRST LAKE (formerly published as "Old Forge Reservoir").--Lat 43°42'44", long 74°58'12", Herkimer County, Hydrologic Unit 04150101, at dam on Middle Branch Moose River, 100 ft downstream from bridge on State Highway 28 at Old Forge, and 11.2 mi downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 53.6 mi<sup>2</sup>. PERIOD OF RECORD, November 1911 to current year. REVISED RECORDS, WDR NY-85-1: Drainage area. GAGE, nonrecording gage read daily at 0800. Datum of gage is sea level (levels by Hudson River-Black River Regulating District).

The First through Fifth Lakes of Fulton Chain Lakes are partially formed and controlled by a concrete dam with 12-inch flashboards. Storage began around 1881 or 1882 with a wooden crib dam. This dam was replaced with a concrete dam in 1905 and gates were installed in 1927. Usable capacity with flashboards, 895.6 mil ft<sup>3</sup>, elevation, 1,707.0 ft. Usable capacity without flashboards, 764.3 mil ft<sup>3</sup>, elevation, 1,706.1 ft; no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, provided, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,019 mil ft<sup>3</sup>, June 17, 1972, elevation, 1,707.9 ft; minimum observed, 6.50 mil ft<sup>3</sup>, Nov. 3, 1939, elevation, 1,699.8 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 895.8 mil ft<sup>3</sup>, Sept. 18-20, elevation, 1,707.04 ft; minimum observed, 295.4 mil ft<sup>3</sup>, Feb. 24, elevation, 1,702.36 ft.

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

## MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	Elevation (feet) ‡	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) ‡	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)
	04253300	Sixth Lake		04253400	First Lake	
Sept. 30	1,785.78	289.5		1,706.99	888.8	
Oct. 31	1,784.48	248.2	-15.4	1,705.46	686.5	-75.5
Nov. 30	1,783.60	220.8	-10.6	1,704.02	500.6	-71.7
Dec. 31	1,781.97	170.6	-18.7	1,702.61	326.4	-65.0
CAL YR 1994	-	-	+ 0.02	-	-	- 1.45
Jan. 31	1,781.15	145.7	- 9.29	1,702.49	311.4	- 5.61
Feb. 28	1,780.95	139.7	- 2.48	1,702.51	314.0	+ 1.08
Mar. 31	1,782.88	198.5	+22.0	1,703.83	476.8	+60.8
Apr. 30	1,784.38	245.1	+18.0	1,704.83	604.6	+49.3
May 31	1,785.23	271.9	+10.0	1,705.43	682.6	+29.1
June 30	1,785.40	277.4	+ 2.12	1,705.59	703.4	+ 8.03
July 31	1,785.48	279.9	+ 0.93	1,705.33	669.6	-12.6
Aug. 31	1,785.40	277.4	- 0.93	1,706.55	829.2	+59.6
Sept. 30	1,785.55	282.2	+ 1.85	1,706.98	887.4	+22.5
WTR YR 1995	-	-	- 0.23	-	-	- 0.04

‡ Elevation at 2400 hours, by interpolation.

## ST. LAWRENCE RIVER BASIN

04262000 OSWEGATCHIE RIVER NEAR OSWEGATCHIE, NY

LOCATION.--Lat 44°13'21", long 75°04'29", St. Lawrence County, Hydrologic Unit 04150302, on left bank, 300 ft downstream from Niagara Mohawk Power Corporation Flat Rock powerplant, and 2.8 mi north of Oswegatchie.

DRAINAGE AREA.--259 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1924 to September 1968, July 1987 to current year. Prior to October 1958, published as East Branch Oswegatchie River near Oswegatchie.

REVISED RECORDS.--WDR NY-88-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,016.52 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Extensive diurnal fluctuation at low and medium flow caused by powerplant. Since 1867, flow regulated by Cranberry Lake. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--52 years (water years 1925-68, 1988-95), 517 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,090 ft<sup>3</sup>/s, Apr. 12, 1947; maximum gage height, 7.3 ft, Apr. 26, 1926; minimum daily discharge, 1.0 ft<sup>3</sup>/s, July 25, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,580 ft<sup>3</sup>/s, Jan. 16, gage height, 5.73 ft; minimum, 76 ft<sup>3</sup>/s, Sept. 30, gage height, 1.61 ft; minimum daily, 77 ft<sup>3</sup>/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	658	704	339	572	230	481	262	302	83	349	197
2	215	1140	256	500	563	230	343	302	356	83	279	185
3	201	1250	362	475	366	248	436	301	365	95	505	82
4	206	885	296	416	342	237	311	270	392	85	469	82
5	310	1070	701	324	536	237	327	284	292	83	469	143
6	260	1550	1270	317	472	293	301	262	440	84	463	187
7	226	1510	1390	233	437	359	265	251	602	87	389	188
8	178	1470	1090	288	538	911	285	294	637	103	453	188
9	177	1170	827	479	753	820	292	245	287	149	444	123
10	209	1020	966	377	701	668	298	203	275	96	356	84
11	327	855	1110	337	293	388	285	261	271	247	214	185
12	276	936	999	408	291	324	275	251	196	201	197	248
13	177	1130	950	563	480	698	326	243	193	196	198	189
14	351	946	934	716	472	621	298	226	193	128	198	190
15	315	643	814	1700	717	853	254	252	193	82	198	189
16	250	659	907	2460	755	960	195	202	192	87	198	188
17	299	714	831	1950	452	901	194	201	192	117	198	186
18	175	851	778	1440	237	671	204	250	192	137	199	186
19	179	629	723	1240	238	683	271	286	123	123	199	187
20	203	391	547	1400	251	688	291	251	84	104	200	186
21	280	666	579	1530	332	655	312	250	88	256	336	186
22	290	687	584	1500	389	902	327	239	90	200	205	187
23	264	499	459	1450	286	862	333	251	90	136	200	123
24	294	446	385	1140	263	584	334	272	101	158	200	87
25	358	350	422	828	273	672	323	369	96	205	203	233
26	288	261	281	736	254	699	257	340	270	205	203	208
27	327	243	345	753	259	759	244	268	196	205	202	205
28	266	463	323	730	228	742	337	263	196	205	382	198
29	202	915	354	550	---	686	297	249	196	208	193	127
30	171	861	321	565	---	755	367	319	130	207	193	77
31	198	---	319	498	---	340	---	307	---	206	191	---
TOTAL	7745	24868	20827	26242	11750	18676	9063	8224	7230	4561	8683	5024
MEAN	250	829	672	847	420	602	302	265	241	147	280	167
MAX	358	1550	1390	2460	755	960	481	369	637	256	505	248
MIN	171	243	256	233	228	230	194	201	84	82	191	77

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995, BY WATER YEAR (WY)

	394	496	509	538	521	690	1009	682	411	320	307	327
MEAN	394	496	509	538	521	690	1009	682	411	320	307	327
MAX	685	1048	1097	1094	970	1161	1787	1659	1218	590	632	719
(WY)	1946	1989	1928	1937	1947	1990	1947	1943	1947	1947	1989	1957
MIN	189	177	239	230	225	288	302	219	170	131	152	152
(WY)	1942	1940	1935	1931	1931	1931	1995	1941	1988	1991	1991	1990

## SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1925 - 1995	
ANNUAL TOTAL	193637		152893		517	
ANNUAL MEAN	531		419		884	
HIGHEST ANNUAL MEAN					311	
LOWEST ANNUAL MEAN					1931	
HIGHEST DAILY MEAN	3210	Apr 16	2460	Jan 16	3790	Apr 12 1947
LOWEST DAILY MEAN	64	Sep 24	77	Sep 30	1.0	Jul 25 1926
ANNUAL SEVEN-DAY MINIMUM	145	Sep 20	86	Jul 1	71	Jul 24 1991
10 PERCENT EXCEEDS	1130		871		948	
50 PERCENT EXCEEDS	383		291		420	
90 PERCENT EXCEEDS	200		166		198	

## ST. LAWRENCE RIVER BASIN

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", St. Lawrence County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi northeast of Geers Corners, 1.5 mi downstream from Big Creek, and 4.0 mi downstream from Harrisville.

DRAINAGE AREA.--244 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 784: 1934. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 738.51 ft above sea level. Prior to Nov. 30, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since June 1985, extensive diurnal fluctuation and slight regulation caused by powerplant upstream from station. Several measurements of water temperature were made during the year. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--79 years, 522 ft<sup>3</sup>/s, 29.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,090 ft<sup>3</sup>/s, Apr. 11, 1993, gage height, 9.52 ft in gage well, 10.03 ft from crest-stage gage; minimum discharge prior to regulation, 25 ft<sup>3</sup>/s, Sept. 1, 1934, gage height, 0.86 ft; minimum discharge since regulation, 20 ft<sup>3</sup>/s, Aug. 11, 1985, gage height, 0.83 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 17	0045	*5,100	a*7.95	No other peak greater than base discharge.			

a Recorded in well; outside gage height was 8.24 ft, from crest-stage gage.

Minimum discharge, 38 ft<sup>3</sup>/s, July 5, gage height, 0.98 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	950	406	794	237	338	213	395	602	334	58	476	74
2	913	1450	699	254	330	210	388	507	281	55	322	89
3	719	2180	597	253	308	201	372	432	256	53	236	92
4	514	1840	536	252	298	192	397	372	265	53	209	85
5	377	1490	579	239	298	187	449	326	259	52	266	80
6	299	1490	987	241	279	201	420	293	221	54	331	74
7	255	1710	1590	252	264	278	399	269	189	63	346	82
8	218	1750	1580	255	267	734	378	246	166	82	286	97
9	193	1540	1250	247	265	1120	361	226	153	97	218	109
10	188	1270	1010	229	263	1360	340	212	145	88	168	109
11	209	1000	807	215	263	1260	321	207	135	84	142	105
12	193	752	e680	226	256	1110	317	215	129	70	146	96
13	183	590	e570	342	250	1030	408	230	123	68	199	96
14	168	497	e500	685	246	1100	554	228	114	63	258	119
15	158	444	424	1850	241	1290	579	234	104	82	244	203
16	151	397	395	4270	238	1480	524	251	97	133	194	195
17	146	363	373	4720	242	1600	463	248	92	163	154	178
18	143	336	386	3450	240	1600	407	246	90	204	130	161
19	139	319	393	2330	238	1400	368	245	75	241	111	156
20	146	302	359	1580	243	1170	354	232	88	163	97	140
21	187	303	344	1280	249	999	357	229	78	151	86	129
22	229	368	323	1220	244	927	407	231	77	467	71	128
23	214	432	307	1140	238	954	441	218	73	752	71	232
24	201	411	301	996	239	902	418	208	67	728	66	317
25	187	368	289	830	233	796	376	266	63	599	64	265
26	175	354	254	608	224	616	340	346	65	500	61	223
27	170	288	257	560	210	543	335	312	62	610	66	200
28	165	342	256	493	210	471	422	272	64	703	78	183
29	154	557	e250	403	---	415	656	244	56	706	75	158
30	148	778	e240	339	---	382	692	277	58	824	68	141
31	143	---	229	335	---	383	---	367	---	741	68	---
TOTAL	8235	24327	17559	30331	7214	25124	12638	8791	3979	8707	5307	4316
MEAN	266	811	566	978	258	810	421	284	133	281	171	144
MAX	950	2180	1590	4720	338	1600	692	602	334	824	476	317
MIN	139	288	229	215	210	187	317	207	56	52	61	74
CFSM	1.09	3.32	2.32	4.01	1.06	3.32	1.73	1.16	.54	1.15	.70	.59
IN.	1.26	3.71	2.68	4.62	1.10	3.83	1.93	1.34	.61	1.33	.81	.66

e Estimated

## ST. LAWRENCE RIVER BASIN

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	381	576	580	482	421	840	1355	679	345	211	173	217
MAX	1047	1324	1474	1434	1488	1949	2676	1772	1135	601	763	670
(WY)	1946	1928	1984	1930	1954	1921	1993	1971	1947	1947	1986	1981
MIN	64.4	165	145	105	130	160	421	236	94.1	61.8	36.9	49.0
(WY)	1964	1931	1923	1918	1920	1941	1995	1941	1941	1949	1934	1939

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1916 - 1995			
ANNUAL TOTAL	193853				156528							
ANNUAL MEAN	531				429				522			
HIGHEST ANNUAL MEAN									833			
LOWEST ANNUAL MEAN									333			
HIGHEST DAILY MEAN	5850				4720				6820			
LOWEST DAILY MEAN	79				52				21			
ANNUAL SEVEN-DAY MINIMUM	84				55				34			
ANNUAL RUNOFF (CFSM)	2.18				1.76				2.14			
ANNUAL RUNOFF (INCHES)	29.55				23.86				29.05			
10 PERCENT EXCEEDS	1220				997				1180			
50 PERCENT EXCEEDS	300				257				320			
90 PERCENT EXCEEDS	128				82				98			

## ST. LAWRENCE RIVER BASIN

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY

LOCATION.--Lat 44°35'58", long 75°22'45", St. Lawrence County, Hydrologic Unit 04150302, on right bank 1.5 mi downstream from Beaver Creek, and 2.5 mi upstream from Heuvelton.

DRAINAGE AREA.--965 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft above sea level. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since 1867, seasonal flow regulated by Cranberry Lake; slight diurnal fluctuation at low flow and medium flow caused by powerplants. During high stages on Grass River, part of flow of that stream may pass through Upper Lake, Indian Creek and Lower Lake and enter Oswegatchie River at Rensselaer Falls, 4.5 mi upstream from station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--79 years, 1,736 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft<sup>3</sup>/s, Apr. 6, 1960, gage height, 10.36 ft; minimum, 99 ft<sup>3</sup>/s, Aug. 4, 1991, gage height, 0.49 ft; minimum gage height, 0.47 ft, Aug. 17, 1949, but may have been less during period of no gage-height record Sept. 7, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,070 ft<sup>3</sup>/s, Jan. 19, gage height, 6.66 ft; minimum, 133 ft<sup>3</sup>/s, July 4, 5, 8, gage height, 0.58 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	529	2230	e860	1420	684	1470	1570	803	353	1080	308
2	1410	900	2260	e820	e1200	675	1220	1520	902	290	971	311
3	1400	2630	1870	e800	e1100	671	1170	1320	876	235	883	316
4	1220	3840	1450	e840	e1000	659	1140	1160	941	148	735	328
5	989	3850	1430	e900	e940	635	1240	1100	885	153	821	309
6	815	3620	1890	e860	e920	628	1180	999	845	184	850	229
7	790	4040	3370	e820	e900	873	1180	898	764	162	952	204
8	687	4230	4150	e780	e880	2560	1120	779	936	146	948	287
9	619	4210	4020	e760	e880	3790	1050	748	936	192	865	389
10	523	3800	3320	e740	e860	3870	1010	777	996	206	791	366
11	509	3190	2880	e780	e840	3610	967	689	796	224	687	299
12	489	2680	e2200	e840	e820	3290	989	714	661	280	689	253
13	575	2250	e2000	1010	e780	3180	1110	741	654	254	461	232
14	603	2140	e1900	1870	e780	3390	1250	723	516	319	390	249
15	523	1990	e1800	4060	e780	3710	1380	739	473	319	437	343
16	577	1670	e1800	6250	e800	4020	1430	728	446	292	487	376
17	637	1410	1880	7920	e800	4470	1270	784	378	230	485	429
18	554	1370	1910	8680	e800	4580	1140	746	361	238	439	467
19	550	1410	1850	8980	e800	4170	1070	765	348	286	437	479
20	478	1450	1760	7770	e800	3660	980	823	356	380	395	434
21	466	1200	1650	6340	e800	3260	966	828	334	436	372	421
22	456	1030	1450	5790	e780	2910	1100	798	279	353	336	438
23	559	1280	1420	5360	e780	2790	1200	757	257	468	391	406
24	674	1320	1410	4780	e760	2760	1210	778	253	763	375	389
25	649	1230	1240	4100	e740	2680	1230	800	265	933	308	422
26	667	1140	1130	3300	e740	2270	1160	910	257	931	300	492
27	632	1020	1080	2620	720	2080	1060	1000	244	932	321	679
28	626	935	908	2030	696	1940	1080	979	310	823	298	589
29	676	985	e900	1830	---	1850	1180	851	388	965	305	495
30	541	1620	e860	1760	---	1680	1450	764	350	1080	363	429
31	464	---	e800	1510	---	1560	---	750	---	1070	373	---
TOTAL	21758	62969	58818	95760	24116	78905	35002	27538	16810	13645	17545	11368
MEAN	702	2099	1897	3089	861	2545	1167	888	560	440	566	379
MAX	1410	4230	4150	8980	1420	4580	1470	1570	996	1080	1080	679
MIN	456	529	800	740	696	628	966	689	244	146	298	204

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1995, BY WATER YEAR (WY)

MEAN	1132	1773	1911	1774	1610	3113	4260	2125	1110	712	614	708
MAX	3563	4284	4522	5369	4800	6327	8867	5243	4481	2096	2196	2420
(WY)	1978	1928	1928	1930	1954	1977	1993	1976	1947	1947	1981	1981
MIN	327	552	582	507	538	972	1167	620	391	319	278	278
(WY)	1964	1957	1923	1961	1934	1940	1995	1941	1941	1965	1934	1990

e Estimated



## ST. LAWRENCE RIVER BASIN

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1916 - 1995	
ANNUAL TOTAL	600491		464234			
ANNUAL MEAN	1645		1272		1736	
HIGHEST ANNUAL MEAN					2952	1947
LOWEST ANNUAL MEAN					1029	1931
HIGHEST DAILY MEAN	10900	Apr 19	8980	Jan 19	19200	Apr 6 1960
LOWEST DAILY MEAN	294	Jul 30	146	Jul 8	107	Aug 4 1991
ANNUAL SEVEN-DAY MINIMUM	347	Jul 27	170	Jul 4	133	Jul 30 1991
10 PERCENT EXCEEDS	3680		3180		3960	
50 PERCENT EXCEEDS	1020		845		1100	
90 PERCENT EXCEEDS	454		311		432	

## ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY  
(National stream-quality accounting network station)  
(National radiochemical network station)

LOCATION.--Lat 45°00'22", long 74°47'43", Stormont County, Ontario--St. Lawrence County, NY, Hydrologic Unit 04150301, at Robert Moses-Robert H. Saunders power dam on Lake St. Lawrence at the International Boundary at Cornwall, Ontario, 2.9 mi upstream from Grass River, 6.2 mi upstream from Raquette River, and 5.9 mi northeast of Massena, NY. Water-quality samples collected at power dam from taps at generators 17 and 30.

DRAINAGE AREA.--298,800 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1860 to September 1935 (monthly discharges only, published in WSP 1307), October 1935 to current year. Prior to October 1970 published as 04264000 "St. Lawrence River at Ogdensburg."

REVISED RECORDS.--WSP 1437: 1870, 1875, 1881, 1883, 1884, 1890.

GAGE.--There is no gage. Discharge is determined from summation of discharge through the Robert Moses-Robert H. Saunders power dam, the Long Sault Dam, the Massena Diversion, the Rasin River Diversion, the Cornwall and Massena municipal water supply, and the Cornwall and the Wiley-Dondero navigation canals. U.S.-Canada coordinated discharge figures supplied by Corps of Engineers. Prior to 1956, base gage at lock 25 at Iroquois Ont. with supplementary gages. August 1956 to June 1958, base gage at lock 24 between Iroquois and Morrisburg, Ont., and supplementary gages. Prior to Aug. 1956, these were gages of the Canadian Hydrographic Service and from August 1956 to June 1958, were gages of the Hydro-Electric Power Commission of Ontario. Discharge in the reach of river at Cornwall, Ont.--near Massena, NY is considered to be the same as discharge at Ogdensburg, NY when adjusted for storage in Lake St. Lawrence.

REMARKS.--Since July 1958, flow regulated by international agreement administered by International St. Lawrence River Board of Control under the International Joint Commission. 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. 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.

COOPERATION.--Records of daily discharge provided by Buffalo District, Corps of Engineers through International St. Lawrence River Board of Control.

AVERAGE DISCHARGE.--135 years (water years 1861-1995), 245,900 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 378,000 ft<sup>3</sup>/s, May 20, 28, June 8, 1993; minimum daily, 139,000 ft<sup>3</sup>/s, Feb. 7, 1936; maximum monthly discharge, 353,500 ft<sup>3</sup>/s, May and June 1993; minimum monthly, 153,800 ft<sup>3</sup>/s, Feb. 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 279,000 ft<sup>3</sup>/s, Oct. 12; minimum daily, 220,000 ft<sup>3</sup>/s, Jan. 17-31, Feb. 3-13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266000	260000	257000	257000	225000	265000	267000	230000	231000	233000	243000	244000
2	266000	260000	257000	257000	228000	265000	266000	226000	235000	233000	242000	236000
3	266000	260000	251000	257000	220000	265000	267000	226000	236000	234000	242000	236000
4	266000	259000	251000	257000	220000	263000	267000	226000	236000	233000	242000	239000
5	266000	259000	251000	257000	220000	263000	267000	237000	237000	233000	243000	248000
6	266000	259000	251000	257000	220000	263000	267000	236000	236000	233000	243000	254000
7	267000	259000	251000	230000	220000	263000	266000	226000	236000	233000	243000	252000
8	266000	259000	251000	229000	220000	263000	257000	226000	236000	233000	243000	248000
9	265000	259000	251000	230000	220000	263000	258000	226000	234000	233000	243000	247000
10	265000	259000	258000	230000	220000	263000	257000	226000	234000	233000	243000	243000
11	267000	259000	257000	230000	220000	263000	249000	226000	234000	234000	243000	239000
12	279000	265000	257000	230000	220000	264000	250000	235000	234000	233000	245000	240000
13	271000	265000	257000	229000	220000	263000	249000	234000	234000	233000	245000	242000
14	266000	265000	257000	230000	230000	263000	244000	233000	234000	234000	245000	244000
15	266000	266000	258000	230000	230000	263000	241000	226000	234000	233000	245000	243000
16	272000	265000	257000	230000	240000	263000	250000	226000	235000	233000	245000	244000
17	272000	265000	257000	220000	239000	263000	265000	226000	234000	233000	245000	243000
18	272000	266000	258000	220000	251000	265000	265000	226000	234000	233000	245000	244000
19	273000	264000	257000	220000	251000	265000	243000	226000	234000	233000	246000	243000
20	264000	264000	257000	220000	250000	264000	242000	226000	238000	233000	246000	244000
21	269000	263000	258000	220000	261000	265000	243000	227000	238000	234000	246000	252000
22	272000	264000	257000	220000	262000	265000	240000	226000	237000	239000	246000	252000
23	272000	264000	257000	220000	261000	265000	240000	226000	236000	238000	246000	241000
24	259000	264000	258000	220000	261000	265000	240000	226000	236000	238000	246000	241000
25	260000	264000	258000	220000	265000	267000	240000	226000	231000	238000	246000	240000
26	264000	258000	258000	220000	265000	267000	234000	226000	231000	238000	244000	241000
27	270000	257000	257000	220000	265000	266000	233000	230000	232000	239000	244000	241000
28	260000	257000	257000	220000	265000	267000	233000	229000	232000	238000	244000	240000
29	260000	257000	257000	220000	---	266000	230000	230000	232000	242000	244000	236000
30	261000	257000	257000	220000	---	266000	231000	229000	232000	242000	244000	242000
31	260000	---	258000	220000	---	266000	---	230000	---	242000	244000	---
TOTAL	8268000	7842000	7933000	7140000	6669000	8197000	7501000	7074000	7033000	7291000	7571000	7299000
MEAN	266700	261400	255900	230300	238200	264400	250000	228200	234400	235200	244200	243300
MAX	279000	266000	258000	257000	265000	267000	267000	237000	238000	242000	246000	254000
MIN	259000	257000	251000	220000	220000	263000	230000	226000	231000	233000	242000	236000

## ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	249900	245800	240800	227100	233200	244900	257100	266800	271000	267600	262300	256900
MAX	323800	338100	327000	298700	287500	314400	325100	353500	353500	350000	330300	326400
(WY)	1987	1987	1987	1987	1986	1987	1973	1993	1993	1973	1974	1986
MIN	182600	176100	174700	168700	153800	179800	179200	176500	188600	200600	200000	194900
(WY)	1936	1936	1936	1936	1936	1965	1964	1965	1965	1964	1936	1936

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1936 - 1995
ANNUAL TOTAL	96209000	89818000	
ANNUAL MEAN	263600	246100	252000
HIGHEST ANNUAL MEAN			309300
LOWEST ANNUAL MEAN			191800
HIGHEST DAILY MEAN	295000	May 24	378000
LOWEST DAILY MEAN	200000	Jan 1	139000
ANNUAL SEVEN-DAY MINIMUM	216000	Jan 5	148000
10 PERCENT EXCEEDS	286000		300000
50 PERCENT EXCEEDS	265000		252000
90 PERCENT EXCEEDS	243000		206000

## ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1966 to current year. Prior to October 1970, published as "near Massena, NY".  
 CHEMICAL DATA: 1955 (a), 1974 (c), 1975-81 (d), 1982-86 (c), 1987 (b), 1988-89 (c), 1990 (b), 1991 (d), 1992-94 (b), 1995 (c).  
 MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a), 1979 (b), 1980 (c), 1981-87 (b), 1988-90 (c), 1991 (d), 1992-94 (b), 1995 (c).  
 RADIOCHEMICAL DATA: 1974-95 (a).  
 PESTICIDE DATA: 1988-90 (b), 1995 (a).  
 ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-81 (d), 1995 (a).  
 NUTRIENT DATA: 1974-75 (c), 1976-81 (d), 1982-86 (c), 1987 (b), 1988-91 (c), 1992-94 (b), 1995 (c).  
 BIOLOGICAL DATA:  
 Bacteria--1974 (c), 1975-81 (d), 1982-86 (c), 1987-94 (b), 1995 (c).  
 Phytoplankton--1974 (a), 1975-77 (d), 1978-81 (c).  
 Periphyton--1974 (a), 1975 (c), 1976-80 (b).  
 SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d), 1982-86 (c), 1987-90 (b), 1991 (d), 1992-95 (b).

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1986.

WATER TEMPERATURES: October 1955 to October 1958, unpublished; January 1966 to September 1986.

REMARKS.--Temperature observations from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station and those from January 1966 to September 1986 made approximately 68 ft below normal forebay level. Samples collected at dam from U.S. side. Samples collected at dam from both U.S. and Canadian sides denoted by #. Samples collected at boat cross section denoted by ##.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 400 microsiemens Aug. 7, 1978, Mar. 29, 1979; minimum daily, 250 microsiemens Dec. 21, 1978.

WATER TEMPERATURES: Maximum daily, 24.5°C on several days in August and September 1973 and August 1975; minimum daily, 0.0°C on many days during winter periods except 1972-74, 1979, 1982-85.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	*DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM HG)	OXYGEN, DIS- SOLVED OF (MG/L)	OXYGEN, DIS- SOLVED CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 01...	0845	260000	312	7.8	12.0	0.40	747	8.0	76	K4
APR #17...	1015	265000	309	7.8	3.5	0.30	762	12.3	93	K2
17...	1030	265000	304	7.8	3.5	0.20	762	9.5	72	K2
JUN 20...	1030	238000	287	7.7	17.0	0.90	760	8.1	84	K1
AUG #07...	0945	243000	298	8.2	22.0	0.80	767	8.2	93	K15
07...	1015	243000	292	8.2	22.0	0.50	767	8.2	93	K8
SEP ##26...	1300	241000	291	8.0	16.0	0.60	759	8.8	90	--
**26...	1308	--	--	--	--	--	--	--	--	--

DATE	STREP- TOCOC FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 01...	K3	130	37	8.0	11	1.6	90	110	ND	26
APR #17...	K1	130	38	8.1	11	1.5	91	111	0	24
17...	K1	130	37	8.1	11	1.5	92	113	0	24
JUN 20...	<1	120	35	7.6	11	1.4	86	105	0	24
AUG #07...	K6	120	34	8.0	11	1.8	89	109	0	24
07...	K2	120	33	8.0	11	1.4	88	108	0	24
SEP ##26...	--	110	32	8.3	12	1.3	100	122	0	25
**26...	--	0	0.02	0.00	0.14	--	--	--	--	--

\* Daily discharge.

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

\*\* Quality assurance sample -- field blank.

ND Not detected.

## ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)
NOV 01...	20	0.10	0.51	170	159	--	0.20	0.02	0.30	0.01
APR #17...	21	0.10	0.37	166	160	--	0.23	<0.015	<0.20	<0.01
17...	20	0.10	0.38	173	159	0.33	0.34	0.02	<0.20	<0.01
JUN 20...	21	0.10	0.44	168	154	--	0.25	0.02	0.20	<0.01
AUG #07...	20	0.10	0.59	170	154	--	0.20	0.04	0.30	0.02
07...	20	0.10	0.58	179	157	--	1.3	<0.015	0.20	0.02
SEP ##26...	20	<0.10	0.52	164	160	0.18	0.19	0.02	0.30	0.03
**26...	--	--	<0.02	--	--	--	<0.005	<0.002	--	--

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 01...	0.01	<0.01	<10	22	--	--	--	<3	--	16
APR #17...	<0.01	<0.01	30	22	--	--	--	<3	--	<3
17...	<0.01	<0.01	<10	22	--	--	--	<3	--	6
JUN 20...	<0.01	<0.01	20	21	--	--	--	<3	--	4
AUG #07...	<0.01	<0.01	20	21	--	--	--	<3	--	<3
07...	<0.01	<0.01	<10	20	--	--	--	<3	--	3
SEP ##26...	0.02	<0.01	<10	20	--	--	--	<3	--	5
**26...	--	<0.001	2	0	<0.2	<0.3	0	0	0	26

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 01...	--	<4	2	10	1	<1	<1.0	170	<6	--
APR #17...	--	8	<1	<10	<1	<1	<1.0	170	<6	--
17...	--	7	2	10	<1	<1	<1.0	170	<6	--
JUN 20...	--	<4	3	10	<1	<1	<1.0	170	<6	--
AUG #07...	--	<4	1	<10	<1	<1	<1.0	160	<6	--
07...	--	5	1	<10	<1	<2	<1.0	160	<6	--
SEP ##26...	--	<4	2	<10	<1	<1	<1.0	160	<6	--
**26...	1	--	2	0	2	--	<0.2	0	--	25

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	*DIS- CHARGE, INST. CUBIC FEET PER SECOND	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
APR 17...	1030	265000	--	--	0.0	0.24
JUN 20...	1030	238000	0.04	0.010	0.0	0.27
AUG 07...	1015	243000	0.03	0.010	0.0	0.27

\*\* Quality assurance sample -- field blank.

\* Daily discharge.



## ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

## PESTICIDE ANALYSES, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	PROP- CHLOR, WATER, DISS, REC (UG/L)	BUTYL- ATE, WATER, DISS, REC (UG/L)	SI- MAZINE, WATER, DISS, REC (UG/L)	PRO- METON, WATER, DISS, REC (UG/L)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L)	CYANA- ZINE, WATER, DISS, REC (UG/L)	FONOFOS WATER DISS REC (UG/L)	ALPHA BHC DIS- SOLVED (UG/L)	P,P' DDE DISSOLV (UG/L)	CHLOR- PYRIFOS DIS- SOLVED (UG/L)	LINDANE DIS- SOLVED (UG/L)
		DI- ELDRIN DIS- SOLVED (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	MALA- THION, DIS- SOLVED (UG/L)	PARA- THION, DIS- SOLVED (UG/L)	DI- AZINON, DIS- SOLVED (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	ALA- CHLOR, WATER, DISS, REC (UG/L)	ACETO- CHLOR, WATER FLTRD REC (UG/L)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L)	2,6-DI- ETHYL ANILINE WAT FLT GF, REC (UG/L)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L)
SEP ##26...	1300	<0.007	<0.002	0.012	e0.009	e0.022	0.016	<0.003	<0.002	<0.006	<0.004	<0.004
SEP ##26...	<0.001	0.022	<0.005	<0.004	<0.002	0.110	e0.003	<0.002	<0.004	<0.003	<0.002	<0.004
SEP ##26...	<0.002	<0.007	<0.002	<0.006	<0.002	<0.004	<0.010	<0.004	<0.003	<0.002	<0.003	<0.013
SEP ##26...	<0.003	<0.017	<0.001	<0.004	<0.003	<0.002	e0.002	<0.004	<0.003	<0.013	<0.001	<0.005

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	*DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 01...	0845	260000		1 702	88
APR 17...	1015	265000		1 715	89
JUN 20...	1030	238000		3 1930	84
AUG 07...	0945	243000		2 1310	87
SEP ##26...	1300	241000		3 1950	61

e Estimated.

\* Daily discharge.

## ST. LAWRENCE RIVER BASIN

04266500 RAQUETTE RIVER AT PIERCEFIELD, NY

LOCATION.--Lat 44°14'05", long 74°34'20", St. Lawrence County, Hydrologic Unit 04150305, on left bank 0.5 mi downstream from powerplant at Piercefield, and 1.5 mi upstream from Dead Creek.

DRAINAGE AREA.--721 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 1387: 1910, 1913, 1914(M), 1916, 1921. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft above sea level. Prior to Jan. 1, 1911, nonrecording gage at present site at datum 2.00 ft higher and Jan. 1, 1911 to Oct. 21, 1912, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Seasonal distribution of flow modified by natural storage in lakes and ponds upstream from station and by regulation of Forked Lake, Round Lake, Lows Lake, and Raquette Pond (Tupper Lake) at Setting Pole Dam. Extensive diurnal fluctuation caused by powerplant at Piercefield. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--87 years, 1,317 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft<sup>3</sup>/s, Apr. 27, 1993, gage height, 12.04 ft; maximum gage height, 12.25 ft, May 8, 1972; minimum daily, 4.1 ft<sup>3</sup>/s, Oct. 12, 1947.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 7,000 ft<sup>3</sup>/s, May 1, 1900 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,270 ft<sup>3</sup>/s, Jan. 20, gage height, 8.29 ft; minimum daily, 112 ft<sup>3</sup>/s, July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	736	584	1140	836	2180	514	1480	1150	775	190	1380	262
2	826	1150	1220	879	2080	584	1480	938	853	171	1180	254
3	993	1480	1300	879	1960	541	1480	917	933	171	1160	248
4	1120	1850	1320	843	1900	632	1490	1140	928	170	1160	234
5	730	2060	1350	881	1840	631	1360	1110	771	170	1130	190
6	818	1900	1510	875	1740	709	1320	1370	922	171	1140	173
7	808	2190	1970	859	1660	967	1380	1230	874	162	1150	182
8	764	2130	2230	856	1360	1130	1240	1230	833	174	1080	221
9	815	2100	2270	810	753	1340	1180	1050	814	190	1020	256
10	758	2050	2280	792	835	1180	1070	920	745	190	1130	256
11	706	2010	2330	814	874	1130	1120	1000	640	190	1030	254
12	793	1980	2300	809	915	1120	1170	805	761	190	948	232
13	786	1910	2190	989	961	1170	1120	733	594	165	812	214
14	789	1850	2100	1200	934	1040	1100	751	394	147	719	215
15	738	1630	2060	1340	971	1190	1150	769	394	112	561	255
16	726	1470	2000	1630	972	1310	1150	805	394	173	713	295
17	785	1460	1920	2410	999	1630	1210	834	472	186	233	300
18	643	1450	1810	2860	992	2030	1000	797	192	177	234	299
19	775	1450	1700	2900	970	2340	948	701	178	194	245	299
20	758	1340	1650	2880	952	2470	975	819	168	217	246	299
21	665	1190	1590	2980	932	2430	1070	869	164	242	246	299
22	766	1280	1480	2940	927	2380	1050	854	150	283	291	300
23	754	1200	1280	2940	896	2340	1130	850	172	308	282	301
24	643	1060	1080	2890	908	2290	1180	802	193	349	256	356
25	755	1050	1100	2840	890	2230	1370	793	193	489	281	397
26	639	981	1050	2780	856	2190	1450	823	193	558	301	586
27	640	945	1120	2690	721	2160	1430	865	182	796	301	584
28	461	1040	873	2570	477	2090	1350	610	199	837	290	525
29	538	1070	807	2450	---	2040	1290	1140	219	727	281	535
30	461	1170	795	2340	---	1960	1160	877	218	815	273	550
31	444	---	806	2250	---	1790	---	859	---	1140	265	---
TOTAL	22633	45030	48631	56012	32455	47558	36903	28411	14518	10054	20338	9371
MEAN	730	1501	1569	1807	1159	1534	1230	916	484	324	656	312
MAX	1120	2190	2330	2980	2180	2470	1490	1370	933	1140	1380	586
MIN	444	584	795	792	477	514	948	610	150	112	233	173

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1995, BY WATER YEAR (WY)

MEAN	869	1149	1251	1069	921	1283	3119	2918	1296	722	586	610
MAX	3292	2676	3439	2934	2148	3577	5405	6094	3982	2461	1867	1614
(WY)	1946	1989	1984	1985	1916	1921	1993	1943	1947	1972	1986	1938
MIN	54.7	133	348	343	319	325	1230	878	396	324	182	112
(WY)	1948	1909	1931	1918	1961	1940	1995	1987	1941	1995	1934	1913

## ST. LAWRENCE RIVER BASIN

04266500 RAQUETTE RIVER AT PIERCEFIELD, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1908 - 1995	
ANNUAL TOTAL	539308		371914		1317	
ANNUAL MEAN	1478		1019		2030	1976
HIGHEST ANNUAL MEAN					734	1965
LOWEST ANNUAL MEAN					8500	Apr 27 1993
HIGHEST DAILY MEAN	7610	Apr 21	2980	Jan 21	4.1	Oct 12 1947
LOWEST DAILY MEAN	150	Aug 3	112	Jul 15	4.6	Oct 10 1947
ANNUAL SEVEN-DAY MINIMUM	178	Jul 31	164	Jul 12		
10 PERCENT EXCEEDS	2890		2080		2870	
50 PERCENT EXCEEDS	898		881		930	
90 PERCENT EXCEEDS	551		218		358	

LOCATION.--Lat 44°30'42", long 74°53'00", St. Lawrence County, Hydrologic Unit 04150305, on left bank 300 ft upstream from bridge on State Highway 56 at South Colton, 500 ft downstream from Niagara Mohawk Power Corporation powerplant, and 0.8 mi upstream from Cold Brook.

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft above sea level.

REMARKS.--No estimated daily discharges. Records good except those below 800 ft<sup>3</sup>/s, which are poor. Flow regulated 16 mi upstream by Carry Falls Reservoir since 1953; considerable natural storage in large lakes upstream from Piercefield. Large diurnal fluctuation caused by five powerplants upstream from gage. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft<sup>3</sup>/s, May 11, 1971, gage height, 9.80 ft; minimum, 1.3 ft<sup>3</sup>/s, Feb. 1, 1962, Aug. 8, 1964; minimum gage height, 1.38 ft, Nov. 16, 1994; minimum daily discharge, 4.6 ft<sup>3</sup>/s, June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,400 ft<sup>3</sup>/s, Nov. 16, gage height, 6.73 ft; minimum, 8.3 ft<sup>3</sup>/s, Nov. 16, gage height, 1.38 ft; minimum daily, 188 ft<sup>3</sup>/s, Oct. 14.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	787	1880	1910	2670	1600	1270	1240	1570	577	1020	622
2	1390	1190	2660	2670	2710	1390	1310	1590	1490	430	1100	438
3	1300	983	2650	1820	2580	1920	1350	1140	1240	517	949	489
4	1040	1560	2480	1890	2350	1520	668	1120	1290	528	843	593
5	873	1110	2690	2180	2490	1550	969	1000	1380	606	511	386
6	855	1230	2770	1530	2630	1340	905	935	1570	1060	913	668
7	758	1250	2750	1610	2600	1790	917	1050	1550	1080	1260	531
8	990	1190	2730	1590	2610	1130	993	866	1550	524	1540	632
9	921	1380	2700	1570	2500	1200	823	1130	1420	493	1550	584
10	887	1300	2620	1380	2720	1520	740	989	1350	719	1250	623
11	880	1570	2790	1400	2440	1500	1070	1020	1320	948	1390	391
12	585	1580	2890	1590	2540	1350	1000	1060	1470	1100	914	267
13	792	1520	2620	1420	2630	1510	990	974	1180	963	975	638
14	188	1580	2730	1180	2610	1800	835	763	1350	1190	1450	323
15	802	1620	2900	1160	2600	1970	898	792	1280	560	1440	580
16	651	1080	2830	1610	1960	1920	1010	1120	1470	443	1220	499
17	567	1420	2640	2190	1500	1850	972	939	1040	635	1520	846
18	404	1440	2790	2680	1490	1900	732	1150	770	417	1630	1360
19	867	1700	2720	2550	1580	1890	1070	786	857	538	1160	503
20	660	1590	2590	2500	1560	2050	1020	509	1060	487	1170	558
21	589	1960	2610	2370	1600	2290	1060	754	1050	459	979	402
22	649	1400	2890	2490	1560	2010	902	1370	926	723	991	652
23	393	1490	3110	2280	1550	1690	990	1710	1090	407	1290	588
24	1190	1620	2550	2510	1450	1950	980	1320	470	567	938	438
25	1070	1540	2670	2640	1530	1350	987	1450	464	667	1080	555
26	652	1510	2430	2560	1510	1320	1050	1400	646	902	370	422
27	393	1480	2820	2650	1550	1270	905	1630	997	935	562	686
28	402	1480	2530	2430	1660	1230	932	1310	1010	995	838	439
29	510	1630	2550	2550	---	1200	937	1540	1080	417	970	470
30	502	1690	1990	2320	---	1530	1120	1410	1110	456	1000	541
31	699	---	1770	2520	---	1330	---	1600	---	735	959	---
TOTAL	23769	42880	81350	63750	59180	49870	29405	35667	35050	21078	33782	16724
MEAN	767	1429	2624	2056	2114	1609	980	1151	1168	680	1090	557
MAX	1390	1960	3110	2680	2720	2290	1350	1710	1570	1190	1630	1360
MIN	188	787	1770	1160	1450	1130	668	509	464	407	370	267

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1995, BY WATER YEAR (WY)

MEAN	1419	1597	1775	1653	1601	2009	3168	3112	1744	1225	1134	1102
MAX	3849	3248	4208	4138	3005	3985	5568	6260	3496	3356	2990	1816
(WY)	1978	1986	1984	1985	1978	1990	1954	1971	1972	1972	1986	1986
MIN	625	386	435	673	595	657	980	1041	656	462	535	557
(WY)	1965	1965	1965	1956	1961	1956	1995	1987	1962	1988	1985	1995

## ST. LAWRENCE RIVER BASIN

04267500 RAQUETTE RIVER AT SOUTH COLTON, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1953 - 1995	
ANNUAL TOTAL	675347		492505		1798	
ANNUAL MEAN	1850		1349		2661	1976
HIGHEST ANNUAL MEAN					984	1965
LOWEST ANNUAL MEAN					9060	May 14 1971
HIGHEST DAILY MEAN	6940	Apr 28	3110	Dec 23		
LOWEST DAILY MEAN	188	Oct 14	188	Oct 14	4.6	Jun 2 1954
ANNUAL SEVEN-DAY MINIMUM	530	Sep 7	474	Sep 10	239	Nov 1 1964
10 PERCENT EXCEEDS	3340		2580		3410	
50 PERCENT EXCEEDS	1460		1230		1530	
90 PERCENT EXCEEDS	859		526		597	



## ST. LAWRENCE RIVER BASIN

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY

LOCATION.--Lat 44°50'20", long 74°58'45", St. Lawrence County, Hydrologic Unit 04150305, on right bank 250 ft upstream from bridge on Grant Road at Raymondville, 0.3 mi downstream from Trout Brook, 0.4 mi downstream from Niagara Mohawk Power Corporation powerplant, and 18.0 mi upstream from mouth.

DRAINAGE AREA.--1,125 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1943 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area. WDR NY-85-1: 1983-84.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Extensive diurnal fluctuation caused by power and industrial operations. Flow regulated since 1953 by Carry Falls Reservoir, about 46 mi upstream and by Niagara Mohawk Power Corporation powerplant, 0.4 mi upstream; considerable natural storage in large lakes upstream from Pierceland. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--51 years (water years 1945-95), 2,103 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft<sup>3</sup>/s, Apr. 5, 1974, gage height, 8.40 ft; maximum gage height, 9.24 ft, Feb. 22, 1954 (ice jam); minimum discharge, 2.2 ft<sup>3</sup>/s, Sept. 18, 19, 1966; minimum gage height, 0.42 ft, July 13, 1950; minimum daily discharge, 7.0 ft<sup>3</sup>/s, Oct. 15, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,340 ft<sup>3</sup>/s, Jan. 16, gage height, 4.39 ft; maximum gage height, 5.71 ft, Feb. 9 (ice jam); minimum discharge, 18 ft<sup>3</sup>/s, May 10, gage height, 0.56 ft; minimum daily, 197 ft<sup>3</sup>/s, Sept. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1190	1790	e2300	e2700	e1700	1420	1530	1750	648	1010	490
2	1500	1470	2710	e2200	e2700	e1900	1470	1610	1440	532	990	515
3	1300	1750	2960	e2200	e2800	e2000	1360	1280	1560	583	1060	578
4	1300	1630	2940	e2200	e2900	e1800	940	1370	1890	463	1320	516
5	870	1710	2990	e2100	e2900	e1700	1010	1340	1750	664	822	526
6	621	1690	3280	e2000	e3000	e1600	1020	897	1670	1050	1140	603
7	991	1660	3560	e1700	e3000	e1600	1110	1000	1510	1020	1250	535
8	1010	1610	3420	e1600	e3100	e1400	1010	1010	1640	680	1520	555
9	999	1550	3110	e1600	e3200	e1500	1150	996	1620	528	1520	618
10	928	1610	3190	e1600	e3200	e1600	935	883	1310	687	1360	459
11	831	1720	e3000	e1500	e3300	e1500	1120	1040	1370	939	1310	618
12	730	1680	e2800	e1700	e3200	e1600	942	1070	1460	1090	1070	463
13	458	1640	e2900	e1600	e3200	e1800	1380	1080	1300	1010	1090	580
14	555	1640	e3000	e1400	e3100	e2500	1200	974	1430	1050	1130	1360
15	436	1690	e3000	e2200	e3000	3270	1120	977	1370	496	1530	1020
16	894	1460	3180	3810	e2300	3300	1080	1010	1330	705	1510	635
17	545	1320	3150	4130	e2000	3120	1130	1180	1110	541	1420	500
18	489	1760	3190	3560	e1800	2850	758	1100	872	505	1540	197
19	945	1700	3250	3280	e1700	2600	1130	984	941	577	1220	581
20	888	1690	3050	3210	e1700	2520	1150	762	972	588	1130	506
21	775	1700	3100	3330	e1700	3110	1150	633	1030	498	877	539
22	500	1760	3150	3370	e1600	2490	1230	1410	929	574	1110	566
23	518	1700	3180	3180	e1700	2410	1200	1570	1020	566	1110	531
24	732	1690	3140	e2800	e1700	2260	1160	1700	635	503	940	554
25	1360	1690	3050	e2700	e1700	1840	1180	1570	614	590	1140	544
26	585	1680	2900	e2600	e1700	1450	1080	1500	685	1150	494	551
27	376	1590	2860	e2600	e1800	1440	1130	1630	976	847	611	514
28	400	1680	e2600	e2500	e1800	1550	1170	1530	903	1230	652	451
29	516	1770	e2500	e2600	---	1430	1180	1520	961	770	1050	629
30	411	1770	e2400	e2600	---	1460	1290	1630	973	545	1090	461
31	865	---	e2400	e2600	---	1480	---	1510	---	705	989	---
TOTAL	24728	49200	91750	76770	68500	62780	34205	38296	37021	22334	35005	17195
MEAN	798	1640	2960	2476	2446	2025	1140	1235	1234	720	1129	573
MAX	1500	1770	3560	4130	3300	3300	1470	1700	1890	1230	1540	1360
MIN	376	1190	1790	1400	1600	1400	758	633	614	463	494	197

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1995, BY WATER YEAR (WY)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
MEAN	1636	1934	2103	1926	1918	2568	3910	3497	1987	1360	1263	1270
MAX	4545	3776	5228	5021	3575	4723	7005	6768	3602	3623	3454	2244
(WY)	1978	1986	1984	1985	1978	1990	1993	1971	1972	1972	1986	1981
MIN	756	500	684	699	672	866	1140	1209	807	518	630	573
(WY)	1965	1965	1965	1956	1956	1956	1995	1987	1962	1988	1993	1995

e Estimated

## ST. LAWRENCE RIVER BASIN

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1954 - 1995	
ANNUAL TOTAL	800830		557784		2114	
ANNUAL MEAN	2194		1528		3022	1976
HIGHEST ANNUAL MEAN					1148	1965
LOWEST ANNUAL MEAN					11100	Apr 26 1993
HIGHEST DAILY MEAN	7900	Apr 28	4130	Jan 17	8.1	Jul 30 1962
LOWEST DAILY MEAN	376	Oct 27	197	Sep 18	345	Nov 22 1953
ANNUAL SEVEN-DAY MINIMUM	584	Sep 7	489	Sep 17	4000	
10 PERCENT EXCEEDS	4420		3000		1700	
50 PERCENT EXCEEDS	1630		1380		843	
90 PERCENT EXCEEDS	1000		549			

## ST. LAWRENCE RIVER BASIN

04268800 WEST BRANCH ST. REGIS RIVER NEAR PARISHVILLE, NY

LOCATION.--Lat 44°35'55", long 74°44'15", St. Lawrence County, Hydrologic Unit 04150306, on right bank 25 ft upstream from highway bridge, 4.1 mi downstream from Mud Pond Outlet, 4.8 mi upstream from Niagara Mohawk Power Corp. dam, and 4.2 mi southeast of Parishville.

DRAINAGE AREA.--171 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1958 to September 1968, June 1991 to current year. Annual maximum, water years 1969-91.

GAGE.--Water-stage recorder. Datum of gage is 971.64 ft above sea level. October 1968 to May 1991, crest-stage gage at present site and datum.

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

AVERAGE DISCHARGE.--14 years (water years 1959-68, 1992-95), 301 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,960 ft<sup>3</sup>/s, Dec. 29, 1984, gage height, 7.37 ft; maximum gage height, 7.51 ft, Feb. 25, 1985 (ice jam); minimum recorded discharge, 50 ft<sup>3</sup>/s, Aug. 1, 2, 1965, Sept. 5, 1995, gage height, 0.92 ft; minimum daily discharge, about 46 ft<sup>3</sup>/s, Feb. 1, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	1615	*2,480	*4.47	No other peak greater than base discharge.			

Minimum discharge, 50 ft<sup>3</sup>/s, Sept. 5, gage height, 0.92 ft; minimum daily, 52 ft<sup>3</sup>/s, Sept. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	533	382	e150	286	e170	267	310	246	59	121	59
2	263	1380	328	e140	268	e170	251	279	204	60	98	60
3	200	1280	302	e140	e200	e160	236	259	290	58	91	56
4	169	1070	327	e140	e190	e150	e250	240	498	54	441	53
5	146	1090	474	e130	e190	e150	e260	220	386	53	833	52
6	136	1170	1000	e130	e190	e170	e260	206	277	57	868	53
7	126	1120	1060	e130	e190	e220	273	193	214	79	690	56
8	117	963	902	e130	e190	e450	252	179	177	81	410	86
9	115	778	e540	e120	e190	e700	259	170	157	87	273	108
10	119	622	e400	e120	e190	e1000	260	163	140	83	184	90
11	116	491	e320	e120	e190	e840	263	167	155	74	139	75
12	108	401	e280	e150	e190	e700	272	193	158	65	122	67
13	101	346	e260	e300	e180	e660	421	207	141	63	143	71
14	97	306	e280	e500	e180	e700	468	196	125	56	146	114
15	93	284	e300	1090	e180	e800	406	196	111	66	141	220
16	90	262	e290	2140	e180	e980	346	210	99	96	117	202
17	87	241	e280	2010	e180	1240	315	206	93	113	101	160
18	86	227	e270	1450	e180	1090	316	241	86	237	89	141
19	89	227	e260	1050	e170	898	314	234	81	320	82	119
20	103	219	262	794	e180	736	331	274	78	254	74	101
21	131	213	254	735	e190	673	332	325	73	167	70	89
22	138	282	243	678	e180	655	373	299	69	114	65	111
23	126	299	231	575	e180	616	382	253	66	124	61	212
24	112	218	220	481	e180	553	339	233	65	290	59	203
25	108	243	e200	e300	e170	476	291	282	64	210	58	144
26	107	212	e180	e270	e170	408	265	271	67	174	57	129
27	105	e200	e180	e250	e160	357	273	231	69	236	59	143
28	102	e260	e180	e240	e160	321	346	197	63	214	60	129
29	98	442	e170	e230	---	293	384	203	59	220	60	111
30	94	444	e160	260	---	279	349	287	57	228	56	97
31	91	---	e150	288	---	273	---	314	---	172	57	---
TOTAL	3905	15823	10685	15241	5284	16888	9354	7238	4368	4164	5825	3311
MEAN	126	527	345	492	189	545	312	233	146	134	188	110
MAX	332	1380	1060	2140	286	1240	468	325	498	320	868	220
MIN	86	200	150	120	160	150	236	163	57	53	56	52
CFSM	.74	3.08	2.02	2.88	1.10	3.19	1.82	1.37	.85	.79	1.10	.65
IN.	.85	3.44	2.32	3.32	1.15	3.67	2.03	1.57	.95	.91	1.27	.72

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1995, BY WATER YEAR (WY)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
MEAN	223	322	250	215	177	326	965	409	240	154	167	152
MAX	380	557	345	492	256	545	1780	534	360	292	292	233
(WY)	1963	1993	1968	1995	1960	1995	1993	1994	1993	1961	1962	1992
MIN	97.8	185	111	67.0	106	149	312	233	123	75.0	69.9	91.6
(WY)	1965	1961	1961	1961	1963	1965	1995	1995	1991	1966	1960	1964

e Estimated

## ST. LAWRENCE RIVER BASIN

04268800 WEST BRANCH ST. REGIS RIVER NEAR PARISHVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1959 - 1995	
ANNUAL TOTAL	134736		102086			
ANNUAL MEAN	369		280		301	
HIGHEST ANNUAL MEAN					413	1993
LOWEST ANNUAL MEAN					198	1965
HIGHEST DAILY MEAN	3680	Apr 17	2140	Jan 16	3680	Apr 17 1994
LOWEST DAILY MEAN	77	Aug 12	52	Sep 5	46	Feb 1 1961
ANNUAL SEVEN-DAY MINIMUM	88	Sep 20	56	Sep 1	47	Jan 28 1961
ANNUAL RUNOFF (CFSM)	2.16		1.64		1.76	
ANNUAL RUNOFF (INCHES)	29.31		22.21		23.93	
10 PERCENT EXCEEDS	857		635		595	
50 PERCENT EXCEEDS	220		200		191	
90 PERCENT EXCEEDS	101		69		88	

## ST. LAWRENCE RIVER BASIN

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY

LOCATION.--Lat 44°51'49", long 74°46'45", St. Lawrence County, Hydrologic Unit 04150306, on left bank 600 ft upstream from highway bridge at Brasher Center, and 6.5 mi downstream from West Branch.

DRAINAGE AREA.--612 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1910 to October 1917, November 1917 to December 1918 (monthly discharges only, published in WSP 1307), January 1919 to current year.

REVISED RECORDS.--WSP 1387: 1910-16, 1917(M), WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 217.23 ft above sea level. Prior to June 24, 1916, nonrecording gage at site 600 ft downstream at different datum. June 24, 1916 to Nov. 10, 1917, and Jan. 1, 1919 to Aug. 13, 1920, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation caused by powerplant operations upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--85 years (water years 1911-95), 1,051 ft<sup>3</sup>/s, 23.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft<sup>3</sup>/s, Apr. 6, 1937, gage height, 12.82 ft; maximum gage height recorded, about 15.3 ft, Apr. 6, 1937 (ice jam); minimum discharge observed, about 34 ft<sup>3</sup>/s, Aug. 8, 1917, gage height, 5.25 ft; minimum daily, 37 ft<sup>3</sup>/s, Aug. 8, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,600 ft<sup>3</sup>/s, and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	Unknown	*7,730	a*10.02	No other peak greater than base discharge.			

a From peak-stage indicator.

Minimum discharge, 142 ft<sup>3</sup>/s, June 30, July 1, gage height, 5.72 ft; minimum daily, 153 ft<sup>3</sup>/s, June 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	978	558	1290	e480	e960	e620	853	1070	788	158	396	194
2	877	3090	1140	e460	e920	e600	803	996	635	172	320	189
3	752	3590	1030	e450	e860	e580	756	941	946	168	271	174
4	399	2810	1020	e450	e740	e560	799	824	2060	165	998	163
5	447	2750	1200	e440	e700	e580	867	725	1740	163	3010	182
6	394	3120	2470	e430	e680	e640	862	679	1180	179	3000	171
7	412	2990	2900	e440	e700	e860	863	617	852	202	2510	214
8	400	2680	2490	e440	e700	e1100	825	585	682	227	1730	251
9	379	2270	1910	e450	e680	e1400	805	540	559	214	1170	261
10	358	1840	e1500	e420	e660	e1700	802	517	496	210	855	272
11	342	1650	e1300	e390	e660	e1600	812	522	458	228	706	257
12	397	1330	e1200	e400	e660	e1500	774	556	549	214	583	237
13	369	1160	e1100	e540	e700	e1700	1100	578	443	189	487	227
14	348	1100	e1100	e1100	e620	e2200	1400	612	459	183	469	265
15	318	961	e1100	e2500	e620	e2700	1290	589	378	186	520	424
16	345	893	e1000	e7000	e600	3340	1210	584	350	196	493	494
17	310	823	e1000	e5800	e600	4000	1050	611	306	228	399	459
18	329	732	994	e4100	e580	3500	1030	701	279	280	341	435
19	308	718	963	e3000	e600	2840	1010	718	304	461	302	381
20	338	683	e880	e2100	e620	2260	985	676	270	641	281	341
21	396	697	818	e1800	e620	2080	1020	668	245	524	235	295
22	419	770	e800	e1500	e580	1980	1210	731	228	395	206	297
23	391	791	804	e1300	e600	1940	1200	695	250	350	211	451
24	377	766	739	e1200	e600	1780	1210	640	223	409	203	544
25	403	708	e700	e1000	e620	1610	1040	736	173	679	196	523
26	373	713	e660	e960	e600	1360	921	761	202	521	190	415
27	362	530	e620	e900	e580	1280	891	688	202	487	191	401
28	355	732	e580	e900	e600	1040	1040	609	212	500	197	434
29	343	1210	e560	e860	---	1010	1240	574	191	718	215	383
30	332	1420	e540	e900	---	912	1220	637	153	663	189	319
31	327	---	e520	e940	---	830	---	806	---	549	171	---
TOTAL	12878	44085	34928	43650	18660	50102	29888	21186	15813	10459	21045	9653
MEAN	415	1469	1127	1408	666	1616	996	683	527	337	679	322
MAX	978	3590	2900	7000	960	4000	1400	1070	2060	718	3010	544
MIN	308	530	520	390	580	560	756	517	153	158	171	163
CFSM	.68	2.40	1.84	2.30	1.09	2.64	1.63	1.12	.86	.55	1.11	.53
IN.	.78	2.68	2.12	2.65	1.13	3.05	1.82	1.29	.96	.64	1.28	.59

e Estimated



## ST. LAWRENCE RIVER BASIN

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	751	1004	982	862	758	1508	2811	1547	828	526	474	523
MAX	2203	2467	2674	2678	2268	3434	5576	4512	2848	1364	1564	1541
(WY)	1978	1928	1984	1913	1981	1913	1993	1971	1947	1947	1986	1981
MIN	296	374	367	273	304	337	996	495	247	225	129	155
(WY)	1965	1931	1961	1931	1931	1941	1995	1941	1941	1941	1934	1934

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1910 - 1995			
ANNUAL TOTAL	410644				312347							
ANNUAL MEAN	1125				856				1047			
HIGHEST ANNUAL MEAN									1884			
LOWEST ANNUAL MEAN									581			
HIGHEST DAILY MEAN	9710				7000				13000			
LOWEST DAILY MEAN	257				153				37			
ANNUAL SEVEN-DAY MINIMUM	318				165				49			
ANNUAL RUNOFF (CFSM)	1.84				1.40				1.71			
ANNUAL RUNOFF (INCHES)	24.96				18.99				23.24			
10 PERCENT EXCEEDS	2420				1730				2220			
50 PERCENT EXCEEDS	700				620				680			
90 PERCENT EXCEEDS	350				215				287			

## ST. LAWRENCE RIVER BASIN

04270000 SALMON RIVER AT CHASM FALLS, NY

LOCATION.--Lat 44°45'22", long 74°13'09", Franklin County, Hydrologic Unit 04150307, on right bank 0.1 mi downstream from Niagara Mohawk Power Corp. powerplant at Chasm Falls, and 3.0 mi downstream from Duane Stream.

DRAINAGE AREA.--132 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1925 to September 1982, October 1986 to current year.

REVISED RECORDS.--WSP 729: 1931 (m). WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,011.52 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Seasonal regulation of flow by upstream reservoirs. Diurnal fluctuation at low and medium flow caused by powerplant. A small diversion from tributary upstream from station is used as water supply for village of Malone.

AVERAGE DISCHARGE.--66 years (water years 1926-82, 1987-95), 230 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft<sup>3</sup>/s, Apr 25, 1926, gage height, 5.0 ft; minimum, 9.8 ft<sup>3</sup>/s, Sept. 26, 27, 1963; minimum daily, 28 ft<sup>3</sup>/s, Sept. 4, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 29, 1984, reached a stage of 5.63 ft, from floodmarks, discharge, 3,700 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,950 ft<sup>3</sup>/s, Aug. 6, gage height, 4.15 ft; minimum, 24 ft<sup>3</sup>/s, Aug. 30; minimum daily, 68 ft<sup>3</sup>/s, Aug. 30-31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	316	251	142	154	147	185	242	186	115	85	69
2	180	575	233	139	145	143	178	220	174	94	94	83
3	138	530	225	134	133	138	174	210	352	90	87	72
4	135	394	243	131	134	140	181	197	645	80	460	71
5	137	373	317	122	141	142	184	185	458	88	1180	72
6	122	411	530	131	149	144	172	177	336	81	1540	86
7	103	444	492	132	141	159	172	168	275	95	1130	78
8	101	401	365	133	141	252	151	160	232	97	638	107
9	105	342	276	133	140	291	150	153	201	101	375	97
10	109	309	297	123	140	268	149	151	179	90	212	85
11	114	276	251	128	139	254	145	149	164	81	187	84
12	110	254	199	131	137	216	147	159	178	89	183	84
13	106	237	207	179	135	232	210	161	155	81	171	92
14	105	234	217	299	134	356	217	156	144	81	151	133
15	104	225	225	592	132	529	194	160	133	81	157	154
16	104	139	216	1070	133	634	186	165	125	94	151	128
17	103	134	208	1030	135	698	186	163	118	109	133	128
18	104	135	213	777	134	614	218	189	113	153	120	134
19	108	136	199	572	136	521	227	174	111	148	109	120
20	120	131	188	467	158	455	243	164	106	114	105	118
21	113	134	200	488	163	437	235	156	91	106	96	116
22	111	180	191	482	155	432	281	158	86	91	92	128
23	107	167	185	423	155	415	277	158	86	97	84	162
24	107	140	184	373	156	392	249	163	95	137	81	134
25	108	164	173	340	143	350	224	201	94	122	81	121
26	112	148	118	300	147	296	211	177	85	108	80	123
27	123	130	132	282	144	214	215	162	89	116	80	133
28	121	188	140	257	147	203	263	148	90	104	79	124
29	120	266	117	234	---	189	282	151	79	130	79	116
30	120	285	117	145	---	190	263	202	92	121	68	115
31	121	---	133	146	---	197	---	222	---	102	68	---
TOTAL	3684	7798	7042	10035	4001	9648	6169	5401	5272	3196	8156	3267
MEAN	119	260	227	324	143	311	206	174	176	103	263	109
MAX	213	575	530	1070	163	698	282	242	645	153	1540	162
MIN	101	130	117	122	132	138	145	148	79	80	68	69

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995, BY WATER YEAR (WY)

MEAN	192	215	201	187	165	271	543	332	199	152	147	156
MAX	540	446	401	379	409	637	890	948	540	393	350	322
(WY)	1978	1928	1928	1937	1981	1976	1960	1971	1947	1947	1981	1981
MIN	98.4	93.5	106	101	90.7	102	206	129	89.8	79.3	65.4	87.0
(WY)	1958	1935	1935	1961	1936	1940	1995	1941	1941	1941	1934	1941

ST. LAWRENCE RIVER BASIN  
04270000 SALMON RIVER AT CHASM FALLS, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1925 - 1995	
ANNUAL TOTAL	88291		73669			
ANNUAL MEAN	242		202		230	
HIGHEST ANNUAL MEAN					364	1947
LOWEST ANNUAL MEAN					152	1965
HIGHEST DAILY MEAN	1970	Apr 17	1540	Aug 6	2670	Apr 25 1926
LOWEST DAILY MEAN	88	Sep 26	68	Aug 30	28	Sep 4 1934
ANNUAL SEVEN-DAY MINIMUM	105	Oct 13	72	Aug 30	55	Aug 5 1941
10 PERCENT EXCEEDS	400		373		406	
50 PERCENT EXCEEDS	164		149		172	
90 PERCENT EXCEEDS	119		90		103	

## ST. LAWRENCE RIVER BASIN

04270200 LITTLE SALMON RIVER AT BOMBAY, NY

LOCATION.--Lat 44°56'24", long 74°33'26", Franklin County, Hydrologic Unit 04150307, on right bank 50 ft downstream from bridge on road to Fort Covington Center, 0.5 mi east of village of Bombay, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--92.2 mi<sup>2</sup>.

PERIOD OF RECORD.--August to November 1957, July 1958 to March 1995 (discontinued). Occasional low-flow measurements, water years 1954-55, 1957.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 173.91 ft above sea level. August to November 1957, at site 100 ft upstream at datum 0.72 ft higher.

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

AVERAGE DISCHARGE.--36 years (water years 1959-94), 120 ft<sup>3</sup>/s, 17.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft<sup>3</sup>/s, Apr. 4, 1974, gage height, 12.90 ft; minimum, 8.0 ft<sup>3</sup>/s, Aug. 6, 7, 1965.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s, and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	Unknown	a*1,000	b*9.34	No other peak greater than base discharge.			
	a	About.					
	b	Ice jam.					

Minimum discharge, 25 ft<sup>3</sup>/s, Oct. 14, 15, 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	76	94	e46	e82	e49	---	---	---	---	---	---
2	42	392	79	e50	e70	e46	---	---	---	---	---	---
3	36	311	72	e54	e68	e45	---	---	---	---	---	---
4	34	175	76	e56	e66	e44	---	---	---	---	---	---
5	33	161	104	e54	e66	e44	---	---	---	---	---	---
6	31	243	326	e52	e64	e48	---	---	---	---	---	---
7	29	215	274	e56	e64	e58	---	---	---	---	---	---
8	30	170	176	e56	e62	e72	---	---	---	---	---	---
9	28	128	137	e54	e62	e360	---	---	---	---	---	---
10	30	114	e100	e50	e60	e300	---	---	---	---	---	---
11	33	91	e86	e47	e58	e270	---	---	---	---	---	---
12	31	77	e66	e46	e56	e260	---	---	---	---	---	---
13	29	70	e60	e60	e56	e280	---	---	---	---	---	---
14	26	65	e64	e100	e56	e310	---	---	---	---	---	---
15	27	62	e70	e250	e58	e350	---	---	---	---	---	---
16	26	59	e74	e900	e58	e430	---	---	---	---	---	---
17	26	55	e80	e540	e58	441	---	---	---	---	---	---
18	27	52	e90	309	e58	352	---	---	---	---	---	---
19	29	51	e100	221	e58	285	---	---	---	---	---	---
20	33	48	e100	194	e60	228	---	---	---	---	---	---
21	39	46	e98	292	e58	198	---	---	---	---	---	---
22	38	e50	e88	320	e56	185	---	---	---	---	---	---
23	34	e54	e80	208	e54	180	---	---	---	---	---	---
24	32	e52	e74	163	e54	169	---	---	---	---	---	---
25	32	e46	e64	e120	e52	139	---	---	---	---	---	---
26	31	e51	e58	e90	e52	119	---	---	---	---	---	---
27	32	e47	e56	e76	e50	106	---	---	---	---	---	---
28	32	63	e58	e64	e49	96	---	---	---	---	---	---
29	31	151	e62	e60	---	90	---	---	---	---	---	---
30	30	120	e42	e66	---	86	---	---	---	---	---	---
31	30	---	e44	e76	---	86	---	---	---	---	---	---
TOTAL	992	3295	2952	4730	1665	5726	---	---	---	---	---	---
MEAN	32.0	110	95.2	153	59.5	185	---	---	---	---	---	---
MAX	51	392	326	900	82	441	---	---	---	---	---	---
MIN	26	46	42	46	49	44	---	---	---	---	---	---
CFSM	.35	1.19	1.03	1.65	.64	2.00	---	---	---	---	---	---
IN.	.40	1.33	1.19	1.91	.67	2.31	---	---	---	---	---	---

e Estimated

## ST. LAWRENCE RIVER BASIN

04270200 LITTLE SALMON RIVER AT BOMBAY, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	81.7	129	127	92.0	104	215	317	137	78.0	52.1	53.9	51.0
MAX	297	273	309	191	315	386	920	315	244	174	218	233
(WY)	1978	1989	1984	1993	1984	1985	1993	1971	1973	1972	1981	1981
MIN	19.5	38.2	36.8	31.2	28.7	92.4	137	61.3	25.9	15.8	14.5	19.9
(WY)	1958	1979	1961	1961	1964	1960	1987	1980	1965	1965	1960	1960

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## WATER YEARS 1957 - 1995

ANNUAL TOTAL	43016		
ANNUAL MEAN	118		120
HIGHEST ANNUAL MEAN			178
LOWEST ANNUAL MEAN			75.9
HIGHEST DAILY MEAN	944	Apr 10	2620
LOWEST DAILY MEAN	20	Sep 22	9.0
ANNUAL SEVEN-DAY MINIMUM	22	Sep 19	9.6
ANNUAL RUNOFF (CFSM)	1.28		1.31
ANNUAL RUNOFF (INCHES)	17.36		17.75
10 PERCENT EXCEEDS	286		250
50 PERCENT EXCEEDS	67		68
90 PERCENT EXCEEDS	29		26



## ST. LAWRENCE RIVER BASIN

04270510 CHATEAUGAY RIVER BELOW CHATEAUGAY, NY

LOCATION.--Lat 44°57'49", long 74°07'53", Franklin County, Hydrologic Unit 04150307, on left bank 10 ft downstream from bridge on Sam Cook Road, 0.2 mi downstream from Marble River, 2.4 mi upstream from international boundary, and 4.1 mi northwest of Chateaugay.

DRAINAGE AREA.--151 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1965 to March 1995 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated at Forge Dam on Upper and Lower Chateaugay Lakes. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years (water years 1967-94), 249 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft<sup>3</sup>/s, Apr. 4, 1974, gage height, 7.33 ft, from rating curve extended above 1,600 ft<sup>3</sup>/s; maximum gage height, 10.99 ft, Feb. 11, 1966 (ice jam); minimum discharge, 12 ft<sup>3</sup>/s, Sept. 20, 1994, gage height, 2.30 ft; minimum daily discharge, 37 ft<sup>3</sup>/s, Aug. 23, 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to March, about 1,200 ft<sup>3</sup>/s, Jan. 17; maximum gage height, 6.59 ft, Mar. 8 (ice jam); minimum discharge, 47 ft<sup>3</sup>/s, Oct. 3, gage height, 2.61 ft; minimum daily discharge, 65 ft<sup>3</sup>/s, Oct. 1, 3.

DISCHARGE, CUBIC FEET PER SECOND, OCTOBER 1994 TO MARCH 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	165	163	e120	e220	e170	---	---	---	---	---	---
2	66	221	166	e120	e210	e160	---	---	---	---	---	---
3	65	221	158	e130	e210	e150	---	---	---	---	---	---
4	67	225	163	e120	e200	e150	---	---	---	---	---	---
5	68	235	209	e130	e200	e170	---	---	---	---	---	---
6	69	237	289	e120	e190	e210	---	---	---	---	---	---
7	69	219	303	e120	e180	e240	---	---	---	---	---	---
8	69	239	288	e110	e170	e260	---	---	---	---	---	---
9	72	225	e270	e100	e170	e240	---	---	---	---	---	---
10	71	207	e240	e96	e170	e240	---	---	---	---	---	---
11	69	182	e230	e100	e170	e260	---	---	---	---	---	---
12	69	197	e200	e110	e160	e270	---	---	---	---	---	---
13	71	180	e180	e130	e150	e320	---	---	---	---	---	---
14	70	182	e190	e180	e150	419	---	---	---	---	---	---
15	69	156	e220	e260	e150	474	---	---	---	---	---	---
16	70	159	e230	e400	e150	522	---	---	---	---	---	---
17	70	154	e210	e480	e160	610	---	---	---	---	---	---
18	71	159	e190	e400	e160	602	---	---	---	---	---	---
19	73	139	165	e370	e150	568	---	---	---	---	---	---
20	77	119	198	e340	e150	529	---	---	---	---	---	---
21	75	151	156	e430	e160	482	---	---	---	---	---	---
22	75	125	154	e560	e150	441	---	---	---	---	---	---
23	75	117	147	e460	e150	431	---	---	---	---	---	---
24	76	116	138	e380	e140	397	---	---	---	---	---	---
25	76	127	136	e320	e150	337	---	---	---	---	---	---
26	76	117	132	e280	e150	308	---	---	---	---	---	---
27	75	e120	138	e250	e160	289	---	---	---	---	---	---
28	76	e130	129	e230	e170	268	---	---	---	---	---	---
29	76	161	e120	e240	---	254	---	---	---	---	---	---
30	75	164	e110	e230	---	242	---	---	---	---	---	---
31	77	---	e110	e220	---	220	---	---	---	---	---	---
TOTAL	2222	5149	5732	7536	4700	10233	---	---	---	---	---	---
MEAN	71.7	172	185	243	168	330	---	---	---	---	---	---
MAX	77	239	303	560	220	610	---	---	---	---	---	---
MIN	65	116	110	96	140	150	---	---	---	---	---	---

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	191	232	239	208	202	332	600	350	193	139	135	156																		
MAX	658	542	544	350	412	729	1180	1010	455	352	339	347																		
(WY)	1978	1989	1984	1985	1984	1976	1993	1971	1973	1972	1981	1979																		
MIN	71.7	99.0	107	99.2	103	120	312	133	116	58.5	52.3	70.9																		
(WY)	1995	1972	1979	1976	1968	1970	1981	1980	1968	1979	1979	1968																		

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## WATER YEARS 1966 - 1995

ANNUAL TOTAL	89694		
ANNUAL MEAN	246		249
HIGHEST ANNUAL MEAN			348
LOWEST ANNUAL MEAN			181
HIGHEST DAILY MEAN	1710	Apr 16	3210
LOWEST DAILY MEAN	42	Sep 20	37
ANNUAL SEVEN-DAY MINIMUM	56	Sep 20	39
10 PERCENT EXCEEDS	425		470
50 PERCENT EXCEEDS	165		180
90 PERCENT EXCEEDS	76		93

e Estimated

## ST. LAWRENCE RIVER BASIN

04271500 GREAT CHAZY RIVER AT PERRY MILLS, NY

LOCATION.--Lat 45°00'00", long 73°30'05", Clinton County, Hydrologic Unit 02010006, on left bank 500 ft upstream from highway bridge at Perry Mills, and 7.5 mi upstream from Corbeau Creek.

DRAINAGE AREA.--247 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1928 to September 1968, October 1986 to September 1989 (annual maximum only), March 1990 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 164.93 ft above sea level. April 1987 to February 1990, crest-stage gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Records prior to October 1968 affected by diurnal fluctuation at low and medium flow by sawmill immediately upstream. Occasional regulation by Chazy Lake (usable capacity, about 765 mil ft<sup>3</sup>) from which the Clinton Correctional Facility at Dannemora (Saranac River basin) obtains its water supply (about 1 ft<sup>3</sup>/s). Several measurements of water temperature were made during the year. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--45 years (water years 1928-68, 1991-95), 265 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft<sup>3</sup>/s, Apr. 7, 1937, gage height, 9.74 ft, from rating curve extended above 3,200 ft<sup>3</sup>/s; maximum gage height, 11.5 ft, Mar. 9, 1946, from floodmark (ice jam); minimum discharge, 0.8 ft<sup>3</sup>/s (estimated), Sept. 18, 1932; minimum gage height, 1.31 ft, Aug. 31, 1966; minimum daily discharge, 8.7 ft<sup>3</sup>/s, July 30, 1991.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	--	a*2,600	ice jam	Mar. 15	1215	ice jam	*8.12
Jan. 22	0115	2,520	6.48				

a About.

Minimum discharge, 27 ft<sup>3</sup>/s, Sept. 12, 13, gage height, 1.59 ft; minimum daily, 28 ft<sup>3</sup>/s, Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	277	192	e120	e200	e150	229	398	101	49	40	31
2	57	856	157	e140	e190	e130	201	320	85	72	33	31
3	49	584	144	e130	e160	e120	174	263	480	45	31	30
4	45	352	149	e120	e150	e130	176	231	1670	40	61	29
5	42	272	254	e130	e150	e140	e140	208	769	37	373	30
6	40	263	791	e120	e150	e170	e130	193	398	50	822	29
7	40	291	617	e140	e150	e190	153	176	276	68	971	31
8	40	269	e280	e130	e140	e300	150	155	212	66	440	35
9	45	221	e250	e100	e140	e600	157	143	178	50	250	36
10	41	190	e230	e96	e140	e560	150	150	160	44	171	34
11	39	162	e210	e90	e140	e500	144	155	158	38	173	32
12	38	141	e180	e100	e140	e450	142	165	162	36	545	28
13	38	128	e160	e150	e140	e540	207	172	140	34	452	29
14	38	122	e180	e250	e130	e1000	281	173	114	32	248	32
15	37	116	e230	e800	e130	e1800	226	203	103	32	178	41
16	36	107	e310	e2400	e130	e2400	211	198	95	35	177	41
17	36	98	e300	e2000	e130	e2200	211	183	84	39	130	37
18	38	93	e270	1160	e130	1620	218	221	76	49	90	40
19	40	94	e260	780	e140	1080	237	202	70	50	73	41
20	50	89	e240	655	e140	818	248	174	64	50	63	36
21	57	82	e230	1920	e150	748	224	152	57	42	53	34
22	52	89	e210	2240	e160	719	275	140	52	38	45	37
23	49	96	e200	1250	e170	587	310	133	50	38	40	46
24	45	63	e180	813	e160	486	277	130	47	51	38	50
25	44	76	e170	619	e140	402	246	148	44	68	37	45
26	42	e68	e160	e330	e120	359	224	141	40	65	35	39
27	41	e60	e150	e270	e110	314	217	117	37	59	36	44
28	40	86	e130	e230	e130	284	362	101	33	52	36	46
29	39	210	e120	e230	---	259	656	102	32	56	35	40
30	39	251	e110	e220	---	247	505	112	31	65	33	36
31	40	---	e94	e210	---	244	---	111	---	51	31	---
TOTAL	1342	5806	7158	17943	4060	19547	7081	5470	5818	1501	5740	1090
MEAN	43.3	194	231	579	145	631	236	176	194	48.4	185	36.3
MAX	65	856	791	2400	200	2400	656	398	1670	72	971	50
MIN	36	60	94	90	110	120	130	101	31	32	31	28

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

MEAN	130	193	195	238	202	484	918	372	185	107	87.3	82.3
MAX	589	544	550	775	553	1217	2377	969	852	823	274	368
(WY)	1955	1955	1991	1930	1930	1936	1993	1947	1947	1947	1962	1954
MIN	22.3	35.8	41.1	51.7	46.5	70.5	236	97.2	43.5	23.1	26.2	20.2
(WY)	1967	1931	1967	1956	1956	1956	1995	1941	1941	1965	1966	1966

e Estimated

## ST. LAWRENCE RIVER BASIN

04271500 GREAT CHAZY RIVER AT PERRY MILLS, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1928 - 1995	
ANNUAL TOTAL	122643		82556		265	
ANNUAL MEAN	336		226		514	1947
HIGHEST ANNUAL MEAN					97.2	1965
LOWEST ANNUAL MEAN					5590	Mar 16 1929
HIGHEST DAILY MEAN	3660	Apr 17	2400	Jan 16	8.7	Jul 30 1991
LOWEST DAILY MEAN	35	Sep 12	28	Sep 12	11	Jul 26 1991
ANNUAL SEVEN-DAY MINIMUM	37	Oct 12	30	Aug 31	600	
10 PERCENT EXCEEDS	806		492		135	
50 PERCENT EXCEEDS	150		140		44	
90 PERCENT EXCEEDS	46		37			

## ST. LAWRENCE RIVER BASIN

04271815 LITTLE CHAZY RIVER NEAR CHAZY, NY

LOCATION.--Lat 44°54'08", long 73°24'56", Clinton County, Hydrologic Unit 02010006, on right bank at downstream side of bridge on Stetson Road, 0.2 mi upstream from abandoned dam, 1.4 mi northeast of Chazy, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--52.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 115 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation at low flow by dams and reservoirs upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 50.7 ft<sup>3</sup>/s, 13.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 766 ft<sup>3</sup>/s, Mar. 17, 1990, gage height, 9.20 ft; maximum gage height, 9.49 ft, Apr. 23, 1993, Apr. 17, 1994; minimum discharge, 0.42 ft<sup>3</sup>/s, Sept. 7, 8, 1991, gage height, 1.36 ft; minimum gage height, 1.36 ft, several days during August and September, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 22	2045	*657	*8.73	No other peak greater than base discharge.			

Minimum discharge, 1.1 ft<sup>3</sup>/s, Sept. 11, 12, gage height, 1.52 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	80	41	e18	52	24	51	80	14	3.2	3.5	1.9
2	9.7	227	37	e19	52	26	47	68	12	4.3	2.8	1.6
3	8.9	168	34	e19	e44	24	44	58	26	4.1	2.5	1.4
4	8.3	114	34	e19	e35	24	42	49	107	4.1	4.2	1.4
5	8.0	80	52	e18	e31	26	e28	42	98	3.6	10	1.3
6	7.9	61	159	e17	e29	26	e27	38	60	3.2	29	1.3
7	8.4	59	142	e17	e28	33	35	35	39	2.9	85	1.3
8	8.9	52	98	e16	e28	121	36	31	28	2.8	79	1.3
9	8.7	44	62	e15	e27	101	37	29	22	2.8	43	1.2
10	7.9	38	e52	e15	e27	77	36	27	18	2.7	27	1.2
11	7.4	34	e48	e14	e26	68	34	26	16	2.1	35	1.1
12	6.9	15	e40	e17	e26	67	34	27	15	1.8	83	1.4
13	6.3	22	34	e22	e26	e88	41	27	13	1.6	56	1.6
14	6.3	22	31	e30	e26	e140	49	27	12	1.6	34	1.6
15	6.3	23	32	e60	e26	e230	46	30	11	1.4	24	1.7
16	6.3	22	34	e140	e26	e310	43	31	9.9	1.2	20	1.7
17	6.6	20	34	e360	e26	e350	42	30	9.2	1.2	16	1.7
18	7.1	20	36	306	e26	e280	40	30	8.4	1.4	12	1.7
19	7.1	20	39	164	e27	e210	37	30	8.2	3.0	8.9	1.7
20	10	18	36	132	e27	e170	37	28	6.4	4.3	7.5	1.8
21	12	18	34	393	e28	e150	36	25	5.4	3.5	6.2	2.3
22	13	18	37	628	e29	e140	43	26	5.1	2.9	4.6	2.3
23	12	19	37	589	e30	e120	48	24	4.9	2.7	3.4	2.3
24	10	16	37	413	31	121	43	22	4.7	3.0	2.9	2.3
25	10	15	37	176	28	99	38	21	4.4	2.8	2.4	2.7
26	10	17	35	e96	25	64	35	19	4.0	2.7	2.2	2.9
27	9.7	16	33	e68	23	68	31	18	3.3	2.8	1.9	3.3
28	9.3	18	31	e54	23	66	50	16	3.2	2.9	1.8	3.2
29	8.7	35	e27	51	---	60	97	15	2.8	3.5	1.7	3.2
30	8.6	43	e22	51	---	56	96	17	2.7	3.4	1.7	3.2
31	9.4	---	e19	51	---	54	---	17	---	3.6	1.9	---
TOTAL	269.7	1354	1424	3988	832	3393	1303	963	573.6	87.1	613.1	57.6
MEAN	8.70	45.1	45.9	129	29.7	109	43.4	31.1	19.1	2.81	19.8	1.92
MAX	13	227	159	628	52	350	97	80	107	4.3	85	3.3
MIN	6.3	15	19	14	23	24	27	15	2.7	1.2	1.7	1.1
CFSM	.16	.85	.87	2.44	.56	2.07	.82	.59	.36	.05	.37	.04
IN.	.19	.95	1.00	2.81	.59	2.39	.92	.68	.40	.06	.43	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	24.0	51.7	43.2	50.3	30.4	99.2
MAX	81.9	89.5	99.0	129	75.6	196
(WY)	1991	1992	1993	1994	1995	1996
MIN	5.74	7.76	10.5	12.2	7.45	20.8
(WY)	1992	1993	1994	1995	1996	1997

e Estimated

## ST. LAWRENCE RIVER BASIN

04271815 LITTLE CHAZY RIVER NEAR CHAZY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	21077.3		14858.1		50.7	
ANNUAL MEAN	57.7		40.7		69.4	
HIGHEST ANNUAL MEAN					28.1	
LOWEST ANNUAL MEAN					1991	
HIGHEST DAILY MEAN	730	Apr 17	628	Jan 22	730	Apr 17 1994
LOWEST DAILY MEAN	3.0	Jul 15	1.1	Sep 11	.43	Sep 7 1991
ANNUAL SEVEN-DAY MINIMUM	6.5	Oct 12	1.2	Sep 5	.45	Sep 2 1991
ANNUAL RUNOFF (CFSM)	1.09		.77		.96	
ANNUAL RUNOFF (INCHES)	14.85		10.47		13.05	
10 PERCENT EXCEEDS	143		86		130	
50 PERCENT EXCEEDS	25		24		23	
90 PERCENT EXCEEDS	9.0		2.3		3.8	





## ST. LAWRENCE RIVER BASIN

04273500 SARANAC RIVER AT PLATTSBURGH, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1903 - 1995	
ANNUAL TOTAL	340328		229237		841	
ANNUAL MEAN	932		628		1458	1947
HIGHEST ANNUAL MEAN					460	1965
LOWEST ANNUAL MEAN					8600	Apr 8 1928
HIGHEST DAILY MEAN	7040	Apr 17	2610	Jan 17	3.6	Jun 26 1979
LOWEST DAILY MEAN	208	Oct 27	170	Aug 25	38	Jun 21 1979
ANNUAL SEVEN-DAY MINIMUM	333	Oct 25	196	Aug 30	1610	
10 PERCENT EXCEEDS	1680		1080		630	
50 PERCENT EXCEEDS	620		540		320	
90 PERCENT EXCEEDS	382		226			

## ST. LAWRENCE RIVER BASIN

04273700 SALMON RIVER AT SOUTH PLATTSBURGH, NY

LOCATION.--Lat 44°38'24", long 73°29'43", Clinton County, Hydrologic Unit 02010004, on left bank 32 ft upstream from bridge on Salmon River Road, 0.4 mi west of State Highway 22, and 3.9 mi upstream from mouth, at South Plattsburgh.

DRAINAGE AREA.--61.9 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1959 to September 1968 (no winter records prior to October 1965), March 1990 to current year. Occasional low-flow measurements, water years 1954, 1957-58. Annual maximum, water years 1968-86.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 220.53 ft above sea level. October 1968 to September 1986, crest-stage gage at present site and datum.

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

AVERAGE DISCHARGE.--8 years, 51.2 ft<sup>3</sup>/s, 11.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,220 ft<sup>3</sup>/s (result of ice jam release), Mar. 27, 1992, gage height, 5.66 ft; maximum gage height, 7.31 ft, Apr. 3, 1960 (ice jam); minimum discharge, 3.0 ft<sup>3</sup>/s, Sept. 17, 1967; minimum daily, 3.6 ft<sup>3</sup>/s, Sept. 17, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 21	1800	*295	2.54	Mar. 15	2245	ice jam	a*4.95

a Recorded; outside gage height was 5.21 ft, from crest-stage gage.

Minimum discharge, 7.4 ft<sup>3</sup>/s, July 14, 15; minimum daily, 8.1 ft<sup>3</sup>/s, June 29, July 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	71	34	e23	e50	e23	38	59	18	15	11	11
2	19	96	31	e23	e42	e21	36	48	18	19	9.8	10
3	16	58	28	e21	e35	e20	34	42	46	11	10	9.5
4	16	41	30	e20	e31	e20	e34	38	88	11	106	9.5
5	17	39	63	e19	e30	e20	e33	35	48	9.7	160	9.6
6	17	41	125	e19	e29	e24	e32	33	31	10	169	11
7	16	37	75	e18	e28	e50	e32	29	24	11	178	12
8	16	31	e49	e18	e27	e86	32	28	20	11	78	15
9	16	28	e45	e17	e26	e130	33	27	19	9.5	43	14
10	17	25	e42	e16	e25	e120	32	26	17	8.7	30	13
11	17	28	e40	e17	e25	e110	31	27	18	8.6	24	11
12	17	22	e37	e18	e24	e100	31	29	18	8.6	31	10
13	17	22	e36	e19	e24	e110	48	29	17	8.3	26	12
14	17	24	e35	e23	e23	e120	47	29	15	8.1	20	16
15	17	22	e34	e100	e23	e160	41	31	14	8.8	22	18
16	18	21	e34	e210	e22	e190	41	29	13	11	21	13
17	17	21	e33	e230	e22	e240	40	28	12	27	17	12
18	22	20	e32	243	e22	155	37	30	12	33	15	13
19	20	20	e30	194	e22	120	37	28	11	16	13	12
20	24	19	e28	152	e21	105	39	26	10	12	12	12
21	30	19	e27	251	e21	103	38	26	9.8	11	12	12
22	25	21	e26	224	e21	97	53	25	9.8	10	11	14
23	22	20	e25	148	e21	84	47	23	9.7	9.9	10	22
24	21	32	e25	e84	e20	68	40	23	9.9	15	10	19
25	19	25	e25	e72	e21	54	34	24	9.7	13	9.4	15
26	19	e21	e26	e62	e22	49	33	23	9.6	17	10	16
27	20	e24	e26	e60	e23	46	34	21	9.1	25	11	19
28	19	44	e25	e58	e23	43	82	21	8.2	18	11	17
29	19	62	e24	e56	---	41	103	20	8.1	19	10	15
30	19	41	e22	e54	---	41	74	26	8.2	17	9.8	14
31	19	---	e22	e52	---	40	---	22	---	13	9.7	---
TOTAL	592	995	1134	2521	723	2590	1266	905	561.1	425.2	1109.7	406.6
MEAN	19.1	33.2	36.6	81.3	25.8	83.5	42.2	29.2	18.7	13.7	35.8	13.6
MAX	30	96	125	251	50	240	103	59	88	33	178	22
MIN	16	19	22	16	20	20	31	20	8.1	8.1	9.4	9.5
CFSM	.31	.54	.59	1.31	.42	1.35	.68	.47	.30	.22	.58	.22
IN.	.36	.60	.68	1.52	.43	1.56	.76	.54	.34	.26	.67	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1966	30.5	69.5	1991	11.7	1967
1967	41.8	72.9	1991	14.3	1967
1968	43.6	89.2	1991	14.0	1967
1969	46.5	81.3	1995	21.5	1967
1970	34.8	55.3	1966	15.2	1967
1971	106	189	1992	22.1	1967
1972	168	364	1993	42.2	1995
1973	64.4	104	1994	29.2	1995
1974	35.3	52.3	1993	18.7	1995
1975	17.7	31.4	1990	7.16	1966
1976	22.2	44.0	1990	7.82	1966
1977	16.0	24.8	1991	10.1	1966

e Estimated

## ST. LAWRENCE RIVER BASIN

04273700 SALMON RIVER AT SOUTH PLATTSBURGH, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1966 - 1995
ANNUAL TOTAL	24018	13228.6	
ANNUAL MEAN	65.8	36.2	50.9
HIGHEST ANNUAL MEAN			69.3 1994
LOWEST ANNUAL MEAN			28.0 1967
HIGHEST DAILY MEAN	746 Apr 16	251 Jan 21	1280 Mar 28 1992
LOWEST DAILY MEAN	13 Aug 12	8.1 Jun 29	3.6 Sep 17 1967
ANNUAL SEVEN-DAY MINIMUM	15 Sep 7	8.7 Jul 9	4.5 Sep 14 1967
ANNUAL RUNOFF (CFSM)	1.06	.59	.82
ANNUAL RUNOFF (INCHES)	14.43	7.95	11.18
10 PERCENT EXCEEDS	150	76	103
50 PERCENT EXCEEDS	29	23	30
90 PERCENT EXCEEDS	17	11	11

## ST. LAWRENCE RIVER BASIN

04273800 LITTLE AUSABLE RIVER NEAR VALCOUR, NY

LOCATION.--Lat 44°35'39", long 73°29'48", Clinton County, Hydrologic Unit 02010004, on left bank at upstream side of bridge on Fuller Road, 2.8 mi southwest of Valcour, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--67.8 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1956-1961, 1966, 1973-1974. October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 260 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--4 years, 41.3 ft<sup>3</sup>/s, 8.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft<sup>3</sup>/s, Apr. 23, 1993, gage height, 4.37 ft; maximum gage height, 5.48 ft, Mar. 30, 1993 (ice jam); minimum discharge, 2.8 ft<sup>3</sup>/s, July 31, 1992, gage height, 1.02 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 12	0400	ice jam	*4.25	Mar. 16	1615	*218	2.31

Minimum discharge not determined; minimum daily, about 4.2 ft<sup>3</sup>/s, Sept. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	31	42	e16	e27	e15	40	55	16	e8.0	e10	e4.8
2	8.1	46	37	e15	e24	e15	39	45	13	e11	e9.0	e5.2
3	7.6	44	33	e15	e22	e15	34	42	20	e7.0	e15	e4.7
4	7.7	35	33	e15	e20	e14	33	39	43	e8.0	e30	e4.5
5	8.0	25	45	e14	e20	e14	e32	35	32	e7.0	e70	e4.5
6	7.3	23	89	e14	e20	e16	e30	34	21	e7.0	e80	e5.2
7	7.1	20	74	e14	e20	e30	30	30	18	e8.0	e90	e6.0
8	7.9	20	59	e13	e19	e60	30	28	e17	e9.0	e60	e7.0
9	8.7	18	e35	e13	e18	e80	29	27	e16	e8.0	e34	e6.4
10	11	15	e27	e12	e17	e88	29	27	e14	e7.0	e22	e6.0
11	11	13	e27	e12	e17	e76	29	27	e13	e6.8	e20	e5.6
12	10	13	e26	e13	e17	e66	29	26	e12	e6.4	e23	e4.7
13	11	13	e26	e15	e16	e74	34	24	e13	e6.4	e19	e4.2
14	11	12	e25	e35	e16	e94	39	24	e12	e6.2	e16	e8.0
15	11	13	e25	104	e16	114	39	24	e11	e7.0	e17	e14
16	10	13	e25	94	e16	173	38	23	e10	e9.0	e15	e11
17	11	12	e24	89	e15	165	37	23	e13	e9.6	e13	e10
18	11	12	e24	79	e15	128	37	23	e9.0	21	e12	e12
19	11	12	e24	67	e15	102	37	23	e8.6	18	e11	e11
20	14	12	e24	63	e14	89	36	22	e7.8	10	e10	e10
21	16	13	e22	119	e14	84	36	22	e7.4	8.2	e9.0	e10
22	16	18	e20	142	e14	96	38	22	e7.0	11	e8.4	e12
23	16	31	e19	124	e14	83	42	22	e7.0	10	e8.0	e18
24	15	34	e19	104	e14	62	40	21	e7.0	7.7	e7.4	e16
25	15	27	e19	e64	e14	55	34	21	e7.0	6.0	e7.0	e15
26	15	25	e19	e52	e15	52	32	21	e6.4	10	e6.0	e15
27	13	e27	e19	e45	e14	48	31	21	e6.0	17	e5.0	e17
28	12	e34	e19	e40	e14	43	45	18	e5.8	15	e4.3	e15
29	12	44	e18	e37	---	42	64	17	e5.6	15	e4.7	e14
30	12	49	e17	e34	---	42	64	17	e5.6	14	e5.0	e13
31	12	---	e16	e32	---	41	---	17	---	e11	e4.3	---
TOTAL	346.8	704	931	1505	477	2076	1107	820	380.8	308.7	645.1	289.8
MEAN	11.2	23.5	30.0	48.5	17.0	67.0	36.9	26.5	12.7	9.96	20.8	9.66
MAX	16	49	89	142	27	173	64	55	43	21	90	18
MIN	7.1	12	16	12	14	14	29	17	5.6	6.0	4.3	4.2
CFSM	.17	.35	.44	.72	.25	.99	.54	.39	.19	.15	.31	.14
IN.	.19	.39	.51	.83	.26	1.14	.61	.45	.21	.17	.35	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	1992	1993	1994	1995
MEAN	17.2	30.3	30.6	39.3
MAX	22.6	41.1	36.4	48.5
(WY)	1992	1993	1992	1995
MIN	11.2	23.0	27.7	15.5
(WY)	1995	1992	1994	1994

e Estimated



## ST. LAWRENCE RIVER BASIN

04273800 LITTLE AUSABLE RIVER NEAR VALCOUR, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1992 - 1995	
ANNUAL TOTAL	16461.6		9591.2			
ANNUAL MEAN	45.1		26.3		41.3	
HIGHEST ANNUAL MEAN					54.7	1993
LOWEST ANNUAL MEAN					26.3	1995
HIGHEST DAILY MEAN	565	Apr 17	173	Mar 16	933	Apr 23 1993
LOWEST DAILY MEAN	5.0	Aug 13	4.2	Sep 13	3.5	Aug 27 1992
ANNUAL SEVEN-DAY MINIMUM	7.0	Jul 15	4.7	Aug 28	4.1	Aug 21 1992
ANNUAL RUNOFF (CFSM)	.67		.39		.61	
ANNUAL RUNOFF (INCHES)	9.03		5.26		8.28	
10 PERCENT EXCEEDS	92		59		80	
50 PERCENT EXCEEDS	22		17		22	
90 PERCENT EXCEEDS	8.9		7.0		7.7	

## ST. LAWRENCE RIVER BASIN

04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY

LOCATION.--Lat 44°26'20", long 73°40'55", Essex County, Hydrologic Unit 02010004, on left bank 700 ft upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 545.37 ft above sea level. Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft upstream from confluence with West Branch at datum 3.54 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown. Several measurements of water temperature were made during the year. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--71 years, 314 ft<sup>3</sup>/s, 21.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft<sup>3</sup>/s, Sept. 22, 1938, gage height, 12.91 ft, from rating curve extended above 5,800 ft<sup>3</sup>/s, on basis of velocity-area studies; maximum gage height, 13.96 ft, Feb. 23, 1990 (ice jam); minimum discharge observed, 20 ft<sup>3</sup>/s, Aug. 11, 14, 28, 1934.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 15	0115	ice jam	*6.27	Jan. 16	0430	*2,970	5.31

Minimum discharge, 23 ft<sup>3</sup>/s, Sept. 4, 5, 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	400	281	e92	e160	e92	182	326	221	43	97	27
2	171	1130	231	e92	e140	e90	165	277	172	48	75	26
3	144	600	206	e90	e130	e88	157	252	174	43	67	24
4	129	420	213	e88	e120	e84	e150	249	386	39	119	24
5	118	369	561	e86	e120	e82	e140	247	302	37	197	23
6	111	316	1670	e84	e120	e80	e130	243	210	38	237	24
7	107	528	932	e82	e120	e80	158	216	159	56	240	26
8	104	402	555	e80	e110	e130	146	181	131	66	157	37
9	101	317	e340	e78	e110	e200	149	161	117	59	113	47
10	107	259	e260	e78	e110	e180	135	155	103	60	87	47
11	107	217	e180	e76	e100	e170	136	173	95	54	71	45
12	97	185	e160	e78	e100	e160	138	267	91	47	75	40
13	94	171	e160	e86	e100	e150	276	263	93	42	70	41
14	91	159	e150	e250	e98	e350	331	256	86	40	62	49
15	86	152	e150	e800	e96	e800	254	303	78	39	57	99
16	84	145	e150	2210	e94	1260	218	335	70	56	54	88
17	82	136	e140	1280	e92	1060	188	268	64	59	50	70
18	80	132	e140	756	e92	709	192	240	60	180	46	59
19	84	131	e130	500	e90	505	195	222	54	154	44	54
20	88	131	e130	422	e90	418	300	251	50	106	42	50
21	91	125	e120	1580	e88	410	308	259	46	87	41	46
22	91	246	e120	928	e86	461	756	215	43	190	38	47
23	89	269	e110	594	e86	391	527	179	42	171	35	86
24	87	191	e110	426	e84	331	351	162	41	138	33	86
25	83	e170	e110	e250	e84	272	275	238	40	107	33	68
26	81	e160	e110	e180	e88	250	239	213	39	144	30	62
27	81	e140	e110	e150	e92	226	227	193	38	144	34	78
28	79	200	e110	e130	e98	209	497	171	38	120	39	102
29	78	585	e100	e150	---	198	630	157	37	143	33	77
30	75	366	e96	e190	---	195	424	253	37	198	29	65
31	74	---	e90	e180	---	191	---	302	---	135	27	---
TOTAL	3109	8752	7925	12066	2898	9822	7974	7227	3117	2843	2332	1617
MEAN	100	292	256	389	103	317	266	233	104	91.7	75.2	53.9
MAX	215	1130	1670	2210	160	1260	756	335	386	198	240	102
MIN	74	125	90	76	84	80	130	155	37	37	27	23
FSM	.51	1.47	1.29	1.97	.52	1.60	1.34	1.18	.52	.46	.38	.27
N.	.58	1.64	1.49	2.27	.54	1.85	1.50	1.36	.59	.53	.44	.30

e Estimated

## ST. LAWRENCE RIVER BASIN

04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	226	308	239	181	163	375	900	699	262	140	122	154
MAX	867	874	692	485	674	1203	1680	1558	811	607	356	627
(WY)	1978	1928	1928	1930	1981	1936	1960	1972	1947	1947	1943	1938
MIN	48.1	91.1	65.7	44.0	36.9	59.9	266	162	59.7	41.3	27.6	40.5
(WY)	1965	1940	1931	1931	1931	1940	1995	1941	1941	1934	1934	1939

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1924 - 1995			
ANNUAL TOTAL	119578				69682							
ANNUAL MEAN	328				191				314			
HIGHEST ANNUAL MEAN									483			
LOWEST ANNUAL MEAN									169			
HIGHEST DAILY MEAN	4230				2210				8200			
LOWEST DAILY MEAN	69				23				20			
ANNUAL SEVEN-DAY MINIMUM	71				25				23			
ANNUAL RUNOFF (CFSM)	1.65				.96				1.59			
ANNUAL RUNOFF (INCHES)	22.47				13.09				21.57			
10 PERCENT EXCEEDS	741				376				734			
50 PERCENT EXCEEDS	140				120				150			
90 PERCENT EXCEEDS	84				43				56			

## ST. LAWRENCE RIVER BASIN

04275500 AUSABLE RIVER NEAR AU SABLE FORKS, NY

LOCATION.--Lat 44°27'05", long 73°38'35", Clinton County, Hydrologic Unit 02010004, on left bank 1.8 mi downstream from confluence of East and West Branches, and 1.8 mi east of Au Sable Forks.

DRAINAGE AREA.--448 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1910 to September 1968, March 1990 to current year. Prior to October 1924, published as "at Au Sable Forks". Monthly discharge only for winter periods during 1911 and 1913 water years, published in WSP 1307.

REVISED RECORDS.--WSP 1307: 1911-19 (M), 1922-24 (M).

GAGE.--Water-stage recorder. Datum of gage is 505.65 ft above sea level. Prior to Oct. 1, 1924, chain gage at site 1.5 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation by Fern Lake and Taylor Pond in Black Brook basin and Upper and Lower Ausable Lakes. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--63 years (water years 1911-68, 1991-95), 664 ft<sup>3</sup>/s, 20.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,200 ft<sup>3</sup>/s, Sept. 22, 1938, gage height, 11.65 ft, from rating curve extended above 9,100 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 11.39 ft; maximum gage height, at least 14.5 ft, 200 ft upstream from gage, Mar. 13, 1990 (ice jam); practically no flow July 21, 1912, result of unusual regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 23, 1990 (ice jam), reached a stage of 14.5 ft, from floodmark 200 ft upstream from gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 16	0700	*5,660	*5.71				

Minimum discharge, 96 ft<sup>3</sup>/s, Sept. 5, 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	652	587	e210	e340	e210	424	739	520	145	236	103
2	373	2230	487	e210	e320	e210	394	626	428	149	189	100
3	315	1330	442	e200	e300	e210	371	570	445	135	173	100
4	284	924	443	e200	e290	e200	e350	559	878	127	359	100
5	269	827	866	e200	e280	e200	e340	561	763	123	613	98
6	258	758	3290	e200	e270	e200	e340	548	559	123	730	96
7	249	1220	1990	e190	e270	e230	379	495	441	144	715	103
8	243	969	1220	e190	e260	e300	349	424	375	197	476	125
9	242	750	e760	e180	e250	e460	357	381	338	165	333	147
10	253	614	e600	e180	e240	e430	330	358	304	154	266	144
11	266	515	e420	e180	e240	e400	327	373	283	139	223	139
12	244	449	e370	e180	e230	e350	322	547	271	128	235	128
13	235	413	e350	e200	e230	e450	569	533	273	122	238	133
14	227	379	e340	e500	e220	e760	792	523	259	118	216	155
15	220	358	e330	e1500	e220	e1800	594	592	240	115	202	266
16	233	346	e330	4510	e220	2640	512	680	213	137	181	232
17	229	325	e320	2720	e210	2350	452	553	196	172	168	185
18	217	314	e310	1770	e210	1620	456	506	186	435	159	168
19	249	306	e290	1100	e210	1160	461	480	173	347	150	156
20	212	304	e250	933	e200	949	664	503	165	233	144	148
21	221	291	e250	2930	e200	916	693	566	156	193	139	139
22	225	416	e240	2100	e200	1070	1550	501	149	295	125	142
23	219	499	e240	1390	e200	949	1190	436	145	282	117	303
24	210	385	e240	1000	e200	796	796	397	142	274	115	315
25	201	e360	e240	e600	e200	631	622	566	140	259	115	238
26	196	e340	e250	e400	e200	580	538	536	135	384	115	203
27	196	e310	e260	e350	e210	524	521	481	129	536	122	201
28	195	e350	e250	e300	e210	487	932	435	128	361	125	239
29	191	1160	e230	e380	---	460	1400	396	125	377	115	220
30	187	781	e220	e470	---	446	970	555	126	499	107	186
31	187	---	e220	e360	---	439	---	683	---	319	103	---
TOTAL	7503	18875	16635	25833	6630	22427	17995	16103	8685	7187	7304	5012
MEAN	242	629	537	833	237	723	600	519	289	232	236	167
MAX	457	2230	3290	4510	340	2640	1550	739	878	536	730	315
MIN	187	291	220	180	200	200	322	358	125	115	103	96
CFSM	.54	1.40	1.20	1.86	.53	1.61	1.34	1.16	.65	.52	.53	.37
IN.	.62	1.57	1.38	2.15	.55	1.86	1.49	1.34	.72	.60	.61	.42

e Estimated

## ST. LAWRENCE RIVER BASIN

04275500 AUSABLE RIVER NEAR AU SABLE FORKS, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	484	582	514	415	343	839	1865	1371	589	339	283	331
MAX	1637	1729	1659	1075	1010	3288	3436	3101	1831	1444	718	1255
(WY)	1919	1928	1921	1949	1925	1921	1960	1947	1947	1947	1943	1938
MIN	175	229	169	132	118	167	600	359	182	150	99.4	96.5
(WY)	1915	1940	1923	1918	1931	1940	1995	1921	1941	1965	1923	1921

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1910 - 1995			
ANNUAL TOTAL	265863				160189							
ANNUAL MEAN	728				439				664			
HIGHEST ANNUAL MEAN									1087			
LOWEST ANNUAL MEAN									380			
HIGHEST DAILY MEAN	9120				4510				15000			
LOWEST DAILY MEAN	180				96				9.0			
ANNUAL SEVEN-DAY MINIMUM	190				100				72			
ANNUAL RUNOFF (CFSM)	1.63				.98				1.48			
ANNUAL RUNOFF (INCHES)	22.08				13.30				20.13			
10 PERCENT EXCEEDS	1660				808				1480			
50 PERCENT EXCEEDS	340				295				340			
90 PERCENT EXCEEDS	220				139				164			



## ST. LAWRENCE RIVER BASIN

04276069 HIGHLANDS FORGE LAKE OUTLET NEAR WILLSBORO, NY

LOCATION.--Lat 44°25'29", long 73°25'35", Essex County, Hydrologic Unit 02010001, on left bank 5.0 ft downstream from bridge on Highlands Road, 0.8 mi upstream from mouth, and 4.9 mi northwest of Willsboro.

DRAINAGE AREA.--10.9 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 280 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional regulation from Long Pond, Highland Forge Lake, and Hadley Pond upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 8.98 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 149 ft<sup>3</sup>/s, Apr. 4, 1990, gage height, 6.21 ft; maximum gage height, 7.77 ft, Mar. 21, 1994 (ice jam); minimum discharge, 0.06 ft<sup>3</sup>/s, Sept. 2, 3, 4, 5, 6, 7, 1995, gage height, 4.23 ft; minimum daily discharge, 0.07 ft<sup>3</sup>/s, Aug. 25, Sept. 2-6, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33 ft<sup>3</sup>/s, Jan. 21, gage height, 5.43 ft; maximum gage height, 6.15 ft, Jan. 30, Feb. 7 (ice jam); minimum discharge, 0.06 ft<sup>3</sup>/s, Sept. 2, 3, 4, 5, 6, 7, gage height, 4.23 ft; minimum daily, 0.07 ft<sup>3</sup>/s, Aug. 25, Sept. 2-6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.2	3.2	5.1	e3.0	e6.2	5.0	9.4	8.3	1.2	.92	.18	.10
2	e1.0	3.0	4.5	e2.9	e6.0	4.8	8.8	7.4	1.2	.76	.17	.07
3	e.90	2.0	4.1	e2.9	e6.0	4.6	8.4	7.3	1.8	.66	.20	.07
4	e.82	1.8	3.9	e2.8	e6.0	4.3	e7.6	6.8	2.0	.65	1.2	.07
5	e.84	1.7	5.5	e2.8	e6.0	4.2	e7.4	6.4	1.5	.69	.56	.07
6	.76	1.6	7.5	e2.7	e5.8	4.1	7.3	6.3	1.3	.62	2.4	.07
7	.73	1.6	7.2	e2.7	e5.8	4.2	7.6	5.2	1.4	.41	1.2	.12
8	.66	1.5	6.3	e2.6	e5.6	e4.7	8.1	4.4	1.2	.36	.64	.20
9	.65	2.4	5.6	e2.6	e5.6	e9.0	7.7	4.1	1.2	.27	.44	.18
10	.86	3.5	5.1	e2.5	e5.4	e8.6	7.2	4.7	1.1	.24	.32	.15
11	.76	3.1	e4.9	e2.5	e5.2	e8.2	6.8	4.9	1.0	.27	.53	.11
12	.73	2.8	e4.1	e2.5	e5.2	e7.8	6.6	4.9	1.3	.28	.74	.11
13	.70	2.7	e4.4	e2.6	e5.2	e9.2	8.6	4.7	1.1	.25	.50	.22
14	.78	2.4	e4.3	e2.8	5.5	e13	8.5	4.9	1.0	.23	.35	.40
15	.78	2.0	4.5	e3.0	5.5	e20	8.4	5.6	.93	.31	.29	.25
16	.75	2.0	4.7	e3.5	5.5	e26	7.9	5.2	.90	.26	.24	.16
17	.78	2.0	4.7	e4.0	5.3	27	7.8	4.7	.88	.61	.19	.16
18	.78	1.9	4.7	e4.5	5.3	21	7.0	4.4	.84	.35	.17	.25
19	.93	1.9	4.4	e5.4	5.3	19	7.1	3.4	.82	.25	.15	.18
20	1.1	1.9	4.1	e6.6	5.2	17	6.7	2.8	.78	.26	.14	.19
21	1.1	1.8	3.9	21	5.1	16	6.8	3.0	.75	.32	.13	.23
22	1.1	2.1	3.9	27	5.2	17	7.9	2.7	.73	.27	.11	.81
23	1.1	2.0	3.9	18	5.1	16	7.6	2.3	.75	.43	.11	.61
24	1.1	1.8	3.8	e10	5.1	15	6.4	1.5	.76	.55	.10	.33
25	1.7	1.7	3.7	e8.2	4.9	14	6.2	1.4	.76	.29	.07	.31
26	1.2	1.8	e3.3	e7.6	e5.0	12	6.0	1.3	.74	.91	.09	.55
27	1.1	e2.0	e3.2	e8.0	e5.2	12	6.2	1.2	.72	.53	.12	.59
28	1.1	e2.4	e3.1	e8.0	5.0	11	9.6	1.2	.73	.42	.10	.39
29	1.0	3.9	e3.0	e8.0	---	10	9.8	1.4	.74	.35	.08	.34
30	.96	5.8	e2.8	e8.0	---	10	9.1	1.4	.75	.24	.08	.38
31	1.1	---	e2.7	e6.4	---	10	---	1.4	---	.20	.08	---
TOTAL	29.07	70.3	136.9	195.1	152.2	364.7	230.5	125.2	30.88	13.16	11.68	7.67
MEAN	.94	2.34	4.42	6.29	5.44	11.8	7.68	4.04	1.03	.42	.38	.26
MAX	1.7	5.8	7.5	27	6.2	27	9.8	8.3	2.0	.92	2.4	.81
MIN	.65	1.5	2.7	2.5	4.9	4.1	6.0	1.2	.72	.20	.07	.07

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1990	3.50	9.36	1991	.94	1995
1991	8.86	21.5	1991	2.34	1995
1992	8.49	18.3	1991	4.42	1995
1993	7.76	13.2	1991	3.75	1994
1994	5.69	10.4	1991	3.25	1994
1995	17.0	36.7	1990	5.55	1995
1996	35.5	67.6	1993	7.68	1995
1997	15.6	19.7	1990	4.04	1995
1998	6.75	11.3	1990	1.03	1995
1999	2.67	7.11	1990	.42	1995
2000	3.02	9.45	1990	.38	1995
2001	1.36	3.12	1990	.26	1995

## SUMMARY STATISTICS

## FOR 1994 CALENDAR YEAR

## FOR 1995 WATER YEAR

## WATER YEARS 1990 - 1995

ANNUAL TOTAL	3056.07	1367.36	8.99
ANNUAL MEAN	8.37	3.75	12.1
HIGHEST ANNUAL MEAN			3.75
LOWEST ANNUAL MEAN			115
HIGHEST DAILY MEAN	95	Apr 14	Apr 4 1990
LOWEST DAILY MEAN	.62	Sep 21	Aug 25 1995
ANNUAL SEVEN-DAY MINIMUM	.73	Oct 7	Aug 31 1995
10 PERCENT EXCEEDS	21		24
50 PERCENT EXCEEDS	3.6		5.0
90 PERCENT EXCEEDS	1.1		.73

e Estimated



ST. LAWRENCE RIVER BASIN  
04276500 BOUQUET RIVER AT WILLSBORO, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1923 - 1995	
ANNUAL TOTAL	117328		67335			
ANNUAL MEAN	321		184		292	
HIGHEST ANNUAL MEAN					468	1928
LOWEST ANNUAL MEAN					122	1965
HIGHEST DAILY MEAN	3860	Apr 17	1300	Mar 17	8400	Oct 1 1924
LOWEST DAILY MEAN	45	Oct 14	17	Sep 5	12	Sep 19 1957
ANNUAL SEVEN-DAY MINIMUM	48	Oct 11	21	Sep 1	20	Sep 23 1941
ANNUAL RUNOFF (CFSM)	1.17		.67		1.06	
ANNUAL RUNOFF (INCHES)	15.87		9.11		14.42	
10 PERCENT EXCEEDS	737		395		675	
50 PERCENT EXCEEDS	161		130		145	
90 PERCENT EXCEEDS	77		32		60	

## ST. LAWRENCE RIVER BASIN

04276645 HOISINGTON BROOK AT WESTPORT, NY

LOCATION.--Lat 44°11'15", long 73°27'19", Essex County, Hydrologic Unit 02010001, on right bank 30 ft downstream from Ledge Hill Road, 500 ft west of State Route 9N, and 0.1 mi west of Westport.

DRAINAGE AREA.--6.47 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 246 ft above sea level, from topographic map.

REMARKS.--Records poor. Slight diversion at unknown location upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 6.18 ft<sup>3</sup>/s, 12.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 444 ft<sup>3</sup>/s, Aug. 13, 1990, gage height, 5.90 ft, from rating curve extended above 50 ft<sup>3</sup>/s; maximum gage height, 6.39 ft, Mar. 11, 1992 (ice jam); minimum discharge, 0.06 ft<sup>3</sup>/s, Sept. 30, 1995, gage height, 3.53 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 20	2100	*56	4.96	Mar. 8	0015	ice jam	*5.67

Minimum discharge, 0.06 ft<sup>3</sup>/s, Sept. 30, gage height, 3.53 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	11	2.2	e2.2	e3.7	e2.0	5.0	4.6	1.8	1.1	.46	.55
2	.75	10	1.8	e2.2	e3.4	e1.7	4.7	4.2	1.8	.97	.46	.46
3	.77	2.9	1.5	e2.1	e3.2	e1.6	4.4	3.8	2.0	.62	1.1	.39
4	.74	2.0	1.4	e2.0	e3.3	e1.6	e4.3	3.5	2.1	.61	2.7	.33
5	.70	1.5	13	e2.0	e3.3	e1.6	e4.2	3.3	1.7	.50	1.9	.37
6	.71	1.3	10	e2.0	e3.3	e1.6	e4.1	3.1	1.6	.54	6.0	.45
7	.70	1.3	5.5	e2.0	e3.1	e1.8	e4.0	2.8	1.4	1.4	2.8	.93
8	.69	1.1	e4.4	e1.9	e3.0	e6.2	4.0	2.8	1.3	.77	1.4	2.3
9	.70	1.1	e3.3	e1.6	e2.9	e8.6	3.9	2.7	1.2	.58	1.0	1.1
10	.71	.97	e2.9	e1.6	e2.8	e7.4	3.7	2.6	1.1	.58	.79	1.1
11	.57	.90	e2.8	e1.8	e2.6	e5.6	3.4	2.8	1.1	.55	.89	.58
12	.65	.90	e2.7	e2.0	e2.5	e4.7	3.6	2.9	1.7	.57	1.6	.61
13	.67	.88	e2.4	e2.2	e2.3	e6.0	12	2.6	1.3	.49	.97	.68
14	.68	.81	e2.2	e6.0	e2.2	e11	6.4	2.4	1.1	.45	.71	.93
15	.66	.86	e2.1	e10	e2.1	e19	5.3	3.8	1.0	.60	.63	.92
16	.67	.78	e2.1	12	e2.1	e23	4.8	2.9	.97	.80	.55	.62
17	.69	.75	e2.1	10	e2.1	26	4.4	2.7	.91	2.6	.48	.57
18	.72	.82	e2.2	6.3	e2.0	19	4.0	2.6	.85	e2.5	.46	.69
19	.77	.81	2.4	5.5	e2.0	14	4.1	2.5	.78	1.2	.48	.60
20	.84	.76	e2.2	14	e1.9	13	3.8	4.2	.74	.74	.46	.56
21	.84	.82	e2.4	33	e1.9	13	4.6	3.0	.65	1.3	.40	.59
22	.79	1.4	e2.3	25	e1.9	12	6.1	2.5	.64	.89	.37	1.1
23	.79	.95	e2.2	15	e1.9	10	4.4	2.4	.66	.74	.34	1.7
24	.74	.84	e2.6	10	e1.9	8.6	3.9	2.4	.64	.89	.36	.87
25	.75	.84	e4.4	7.8	e1.7	7.4	3.7	2.7	.53	.69	.35	.69
26	.71	e.88	e3.5	e7.0	1.5	6.8	3.7	2.2	.54	1.0	.37	.73
27	.70	e.96	e2.5	e5.9	e1.5	6.3	3.3	2.2	.51	.94	1.0	1.1
28	.70	5.9	e2.2	e5.2	e1.8	5.9	8.9	2.1	.46	.83	.70	.89
29	.71	6.1	e2.0	e4.7	---	5.8	6.9	2.3	.45	1.4	.49	.80
30	.72	3.2	e2.0	e4.2	---	5.8	5.3	2.6	.49	.86	.44	.62
31	.76	---	e2.0	e4.0	---	5.5	---	2.1	---	.59	.44	---
TOTAL	22.40	63.33	97.3	211.2	67.9	262.5	144.9	89.3	32.02	28.30	31.10	23.83
MEAN	.72	2.11	3.14	6.81	2.42	8.47	4.83	2.88	1.07	.91	1.00	.79
MAX	.84	11	13	33	3.7	26	12	4.6	2.1	2.6	6.0	2.3
MIN	.57	.75	1.4	1.6	1.5	1.6	3.3	2.1	.45	.45	.34	.33
CFSM	.11	.33	.49	1.05	.37	1.31	.75	.45	.16	.14	.16	.12
IN.	.13	.36	.56	1.21	.39	1.51	.83	.51	.18	.16	.18	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	4.13	6.21	5.58	5.19	3.12	12.2
MAX	12.0	14.1	15.2	9.36	6.62	20.4
(WY)	1991	1991	1991	1991	1990	1993
MIN	.72	2.11	2.47	1.40	1.73	4.79
(WY)	1995	1995	1994	1994	1992	1994

e Estimated

## ST. LAWRENCE RIVER BASIN

04276645 HOISINGTON BROOK AT WESTPORT, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1990 - 1995
ANNUAL TOTAL	1980.91	1074.08	
ANNUAL MEAN	5.43	2.94	6.18
HIGHEST ANNUAL MEAN			8.89
LOWEST ANNUAL MEAN			2.94
HIGHEST DAILY MEAN	93	33	216
LOWEST DAILY MEAN	.57	.33	.33
ANNUAL SEVEN-DAY MINIMUM	.66	.38	.38
ANNUAL RUNOFF (CFSM)	.84	.45	.95
ANNUAL RUNOFF (INCHES)	11.39	6.18	12.97
10 PERCENT EXCEEDS	12	6.1	15
50 PERCENT EXCEEDS	1.9	1.8	2.7
90 PERCENT EXCEEDS	.83	.57	.92



## ST. LAWRENCE RIVER BASIN

04276770 MILL BROOK AT PORT HENRY, NY

LOCATION.--Lat 44°03'09", long 73°28'47", Essex County, Hydrologic Unit 02010001, on left bank 30 ft downstream from bridge on Forge Hollow Road, and 2.0 mi upstream from mouth at Port Henry.

DRAINAGE AREA.--27.0 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 150 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--5 years, 20.1 ft<sup>3</sup>/s, 15.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,240 ft<sup>3</sup>/s, Apr. 17, 1993, gage height, 4.22 ft; maximum gage height, 4.44 ft, Mar. 11, 1992; minimum discharge, 1.9 ft<sup>3</sup>/s, July 5, 1995; minimum gage height, 0.66 ft, Aug. 3, Sept. 8, 9, 10, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 8	1015	ice jam	*3.16	Mar. 16	1645	*230	2.37

Minimum discharge, 1.9 ft<sup>3</sup>/s, July 5, gage height, 0.71 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	49	22	e21	e22	e20	36	30	9.7	2.6	4.6	3.4
2	6.6	47	19	e20	e22	e17	32	28	9.1	2.8	4.0	3.2
3	6.2	21	17	e19	e21	e15	30	26	9.7	2.3	4.8	2.8
4	6.2	16	18	e19	e20	e13	31	25	10	2.2	17	2.7
5	6.4	14	84	e19	e20	e14	e25	24	9.0	2.1	19	2.8
6	6.4	12	87	e19	e20	e13	e25	22	8.1	2.3	117	3.0
7	6.4	13	51	e19	e20	e14	25	19	7.3	4.3	58	3.6
8	6.4	11	e29	e19	e20	e14	25	18	6.9	4.2	24	6.2
9	6.8	10	e27	e19	e19	e40	25	17	6.6	3.4	14	7.5
10	7.4	11	30	e17	e18	e37	24	17	6.0	2.8	10	6.5
11	6.7	8.9	30	e16	e18	e28	23	19	6.0	2.5	8.3	4.6
12	6.7	8.8	e28	e19	e16	e23	24	22	7.7	3.0	8.6	4.0
13	6.7	8.8	e26	e24	e16	e27	70	20	6.8	2.6	8.3	3.8
14	6.7	8.8	e24	e28	e15	e38	43	18	5.9	2.5	7.3	5.7
15	6.7	8.8	e24	e45	e16	125	36	20	5.3	4.0	6.6	5.6
16	6.7	8.8	e23	e80	e16	189	33	19	5.0	3.9	6.5	4.2
17	8.3	8.8	23	e50	e15	178	30	18	4.8	7.4	5.6	3.9
18	6.7	8.8	23	e43	e14	140	29	17	4.6	7.6	5.2	3.7
19	6.9	8.8	21	e42	e15	110	29	16	4.2	5.1	4.9	3.2
20	7.7	8.7	e21	e45	e15	98	29	17	3.8	4.0	4.5	3.2
21	8.2	9.4	e20	e100	e15	94	33	16	3.3	11	4.4	3.1
22	8.2	15	e19	e96	e14	85	43	14	3.3	8.7	4.0	6.1
23	8.1	11	e19	92	e14	74	34	13	3.2	5.4	3.8	9.8
24	8.0	9.9	e18	69	e14	63	30	13	3.1	5.3	3.7	5.6
25	7.4	9.9	e23	57	e13	55	28	14	3.1	4.6	3.2	4.8
26	7.2	9.6	e22	41	e12	51	27	13	2.9	11	3.3	4.4
27	7.0	e11	e20	e35	e11	48	26	13	2.8	12	5.6	7.0
28	7.2	e20	e19	e30	e26	44	42	12	2.5	18	4.6	5.6
29	7.7	41	e18	e27	---	42	38	11	2.5	11	3.9	4.5
30	8.4	27	e18	e25	---	41	33	11	2.6	7.5	3.5	4.2
31	8.2	---	e19	e23	---	39	---	10	---	5.5	3.1	---
TOTAL	221.3	455.8	842	1178	477	1795	958	552	165.8	171.6	381.3	138.7
MEAN	7.14	15.2	27.2	38.0	17.0	57.9	31.9	17.8	5.53	5.54	12.3	4.62
MAX	8.4	49	87	100	26	189	70	30	10	18	117	9.8
MIN	6.2	8.7	17	16	11	13	23	10	2.5	2.1	3.1	2.7
CFSM	.26	.56	1.01	1.41	.63	2.14	1.18	.66	.20	.21	.46	.17
IN.	.30	.63	1.16	1.62	.66	2.47	1.32	.76	.23	.24	.53	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	20.2	29.6	31.3	28.3	15.7	56.1
MAX	55.1	62.5	66.4	38.0	28.1	98.2
(WY)	1991	1992	1993	1994	1995	1996
MIN	7.14	13.7	15.7	10.3	9.08	18.6
(WY)	1990	1991	1992	1993	1994	1995

e Estimated

## ST. LAWRENCE RIVER BASIN

04276770 MILL BROOK AT PORT HENRY, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	11345.0		7336.5			
ANNUAL MEAN	31.1		20.1		31.4	
HIGHEST ANNUAL MEAN					37.7	1991
LOWEST ANNUAL MEAN					20.1	1995
HIGHEST DAILY MEAN	510	Apr 16	189	Mar 16	915	Apr 17 1993
LOWEST DAILY MEAN	4.8	Sep 22	2.1	Jul 5	2.1	Sep 9 1991
ANNUAL SEVEN-DAY MINIMUM	5.4	Sep 16	2.4	Jun 30	2.4	Jun 30 1995
ANNUAL RUNOFF (CFSM)	1.15		.74		1.16	
ANNUAL RUNOFF (INCHES)	15.63		10.11		15.80	
10 PERCENT EXCEEDS	69		42		76	
50 PERCENT EXCEEDS	13		14		17	
90 PERCENT EXCEEDS	6.8		3.7		5.7	

## ST. LAWRENCE RIVER BASIN

04276842 PUTNAM CREEK EAST OF CROWN POINT CENTER, NY

LOCATION.--Lat 43°56'31", long 73°27'54", Essex County, Hydrologic Unit 02010001, on right bank 200 ft upstream from bridge at Fish Hatchery, 200 ft downstream from Rennie Brook, and 0.2 mi east of Crown Point Center.

DRAINAGE AREA.--51.6 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 220 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--5 years, 69.7 ft<sup>3</sup>/s, 18.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 2,500 ft<sup>3</sup>/s, Apr. 17, 1993, gage height, 7.5 ft, from reconstructed graph, 8.14 ft from crest-stage gage; minimum discharge, 0.53 ft<sup>3</sup>/s, July 14, 15, 1995; minimum gage height, 3.02 ft, July 26, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 7	2100	ice jam	*5.96	Mar. 17	0115	*543	5.78

Minimum discharge, 0.53 ft<sup>3</sup>/s, July 14, 15, gage height, 3.05 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	23	64	e39	e50	28	67	63	20	1.2	4.5	1.3
2	10	63	58	e35	e47	27	63	57	17	1.2	3.6	1.7
3	8.8	61	54	e32	e43	25	57	52	17	.92	3.3	1.4
4	8.3	47	50	e28	e42	24	e50	48	18	.73	5.0	1.2
5	8.2	38	75	e25	e42	24	e48	44	16	.71	12	1.2
6	7.4	35	150	e26	e42	24	48	40	14	.73	130	.98
7	7.4	36	150	e26	e42	26	45	35	13	1.1	86	1.3
8	7.2	36	120	28	e41	e40	44	32	11	1.4	58	3.0
9	7.3	31	90	28	e40	e80	44	31	9.7	1.0	36	4.3
10	7.2	27	e66	22	e38	e70	47	29	8.5	.86	24	5.4
11	6.6	24	e58	23	e37	e60	44	30	8.3	.73	21	3.0
12	6.4	22	e54	28	e35	e52	45	35	11	.75	34	2.2
13	6.4	21	e50	32	e33	e45	116	36	12	.72	21	2.1
14	6.5	20	e47	42	e31	e90	108	39	10	.62	16	3.2
15	5.9	20	e45	162	e33	223	93	35	8.6	.59	12	3.4
16	5.9	20	46	219	e33	375	78	33	7.7	.69	9.3	2.9
17	5.9	18	46	221	e31	482	70	32	6.7	3.3	7.0	2.7
18	5.7	17	44	189	e30	424	64	29	5.9	3.8	5.6	2.6
19	5.8	17	44	158	e29	314	62	27	5.1	2.8	4.7	2.4
20	6.2	16	40	147	e29	255	59	28	4.4	2.8	3.9	2.2
21	7.2	16	39	227	e29	226	62	26	3.6	3.3	3.3	2.0
22	7.0	21	38	250	e28	204	82	23	3.4	3.5	2.8	3.3
23	7.0	21	37	217	e27	181	78	21	3.1	3.0	2.4	6.8
24	7.4	18	e35	177	e27	151	71	20	2.6	2.6	2.1	4.8
25	7.1	20	e45	142	e27	127	64	20	2.4	2.3	1.8	4.2
26	6.6	18	e45	109	e25	110	57	20	2.9	10	1.6	4.1
27	6.4	e15	e41	89	e23	95	53	21	2.6	11	1.7	4.8
28	6.1	e25	e38	63	e27	84	73	20	1.6	11	1.8	4.6
29	6.4	67	e36	59	---	76	79	21	1.2	11	1.6	4.0
30	6.3	73	e33	e56	---	74	71	22	1.1	8.8	1.4	3.4
31	6.2	---	e30	e58	---	71	---	23	---	6.1	1.2	---
TOTAL	218.8	886	1768	2957	961	4087	1942	992	248.4	99.25	518.6	90.48
MEAN	7.06	29.5	57.0	95.4	34.3	132	64.7	32.0	8.28	3.20	16.7	3.02
MAX	12	73	150	250	50	482	116	63	20	11	130	6.8
MIN	5.7	15	30	22	23	24	44	20	1.1	.59	1.2	.98
CFSM	.14	.57	1.11	1.85	.67	2.56	1.25	.62	.16	.06	.32	.06
IN.	.16	.64	1.27	2.13	.69	2.95	1.40	.72	.18	.07	.37	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	42.3	72.1	78.9	63.2	36.6	126
MAX	128	167	188	102	75.7	210
(WY)	1991	1991	1991	1991	1991	1991
MIN	7.06	29.5	45.8	22.1	17.8	48.9
(WY)	1995	1995	1993	1994	1992	1993

e Estimated

## ST. LAWRENCE RIVER BASIN

04276842 PUTNAM CREEK EAST OF CROWN POINT CENTER, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	24390.4		14768.53			
ANNUAL MEAN	66.8		40.5		69.7	
HIGHEST ANNUAL MEAN					93.3 1991	
LOWEST ANNUAL MEAN					40.5 1995	
HIGHEST DAILY MEAN	1110	Apr 16	482	Mar 17	2200	Apr 17 1993
LOWEST DAILY MEAN	3.1	Sep 22	.59	Jul 15	.59	Jul 15 1995
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 16	.71	Jul 10	.71	Jul 10 1995
ANNUAL RUNOFF (CFSM)	1.30		.78		1.35	
ANNUAL RUNOFF (INCHES)	17.58		10.65		18.35	
10 PERCENT EXCEEDS	143		85		175	
50 PERCENT EXCEEDS	25		25		32	
90 PERCENT EXCEEDS	7.4		2.2		5.8	

## ST. LAWRENCE RIVER BASIN

04278000 LAKE GEORGE AT ROGERS ROCK, NY

LOCATION.--Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft north of Hooper's dock at Rogers Rock, and 0.4 mi west of Baldwin.

DRAINAGE AREA.--233 mi<sup>2</sup> at outlet at Ticonderoga.

PERIOD OF RECORD.--July 1913 to current year.

REVISED RECORDS.--WDR NY-87-1: Datum.

GAGE.--Water-stage recorder. Datum of gage is 316.06 ft above sea level, adjustment of 1912. Prior to Nov. 4, 1929, nonrecording gages at several sites within a half mile of present site at same datum. Nov. 4, 1929 to Sept. 26, 1936, nonrecording gage at present site and datum.

REMARKS.--Elevation of lake regulated by floodgates at Ticonderoga. Prior to October 1974, lake was regulated by powerplant wheel gate and floodgates. Lake George has been controlled by a dam at its outlet for more than 100 years. Area of water surface is 44 mi<sup>2</sup>. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.09 ft, Apr. 9, 1936; minimum, 0.64 ft, Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.90 ft, May 28; minimum, 2.78 ft, Feb. 27.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.48	3.27	3.29	3.42	3.23	2.88	3.31	3.78	3.76	3.62	3.57	3.21
2	3.46	3.42	3.31	3.44	3.12	2.87	3.33	3.78	3.74	3.62	3.48	3.17
3	3.43	3.37	3.28	3.47	3.12	2.86	3.36	3.78	3.76	3.57	3.53	3.17
4	3.41	3.36	3.29	3.44	3.11	2.86	3.39	3.78	3.74	3.57	3.65	3.16
5	3.40	3.35	3.33	3.43	3.17	2.85	3.37	3.77	3.79	3.57	3.62	3.17
6	3.40	3.38	3.44	3.39	3.11	2.87	3.36	3.75	3.76	3.59	3.64	3.12
7	3.39	3.39	3.41	3.34	3.09	2.88	3.33	3.72	3.73	3.58	3.64	3.15
8	3.40	3.34	3.45	3.38	3.04	2.92	3.38	3.71	3.67	3.57	3.64	3.07
9	3.41	3.29	3.45	3.36	3.02	3.05	3.40	3.74	3.72	3.54	3.61	3.16
10	3.38	3.29	3.39	3.30	3.01	3.05	3.40	3.75	3.74	3.52	3.59	3.12
11	3.34	3.27	3.45	3.30	2.99	3.05	3.41	3.74	3.78	3.50	3.58	3.15
12	3.35	3.27	3.41	3.33	2.96	3.08	3.44	3.77	3.75	3.50	3.56	3.15
13	3.35	3.24	3.38	3.31	2.93	3.10	3.54	3.76	3.73	3.51	3.51	3.16
14	3.28	3.28	3.36	3.28	2.90	3.11	3.56	3.80	3.69	3.50	3.51	3.13
15	3.28	3.25	3.31	3.31	2.89	3.15	3.59	3.83	3.72	3.50	3.55	3.10
16	3.26	3.23	3.34	3.30	2.90	3.23	3.58	3.78	3.72	3.47	3.51	3.13
17	3.26	3.24	3.35	3.28	2.89	3.31	3.59	3.77	3.72	3.56	3.48	3.10
18	3.28	3.24	3.34	3.32	2.88	3.36	3.60	3.77	3.72	3.59	3.43	3.01
19	3.28	3.25	3.35	3.32	2.89	3.42	3.65	3.76	3.71	3.57	3.45	3.05
20	3.29	3.22	3.35	3.29	2.88	3.46	3.64	3.75	3.61	3.57	3.46	3.04
21	3.29	3.24	3.36	3.35	2.88	3.46	3.68	3.77	3.64	3.56	3.45	3.04
22	3.28	3.27	3.34	3.40	2.87	3.47	3.74	3.76	3.65	3.54	3.39	3.09
23	3.30	3.25	3.26	3.42	2.87	3.45	3.75	3.76	3.66	3.55	3.38	3.09
24	3.30	3.23	3.23	3.40	2.88	3.41	3.73	3.74	3.66	3.53	3.36	3.08
25	3.30	3.22	3.32	3.41	2.87	3.41	3.75	3.71	3.65	3.53	3.28	3.07
26	3.28	3.18	3.37	3.40	2.85	3.38	3.75	3.74	3.62	3.55	3.29	3.08
27	3.27	3.17	3.43	3.36	2.87	3.34	3.72	3.73	3.63	3.58	3.27	3.10
28	3.28	3.27	3.43	3.31	2.88	3.31	3.78	3.78	3.64	3.58	3.27	3.05
29	3.28	3.35	3.43	3.28	---	3.33	3.80	3.81	3.62	3.62	3.27	3.06
30	3.25	3.31	3.40	3.27	---	3.34	3.78	3.77	3.62	3.58	3.19	3.05
31	3.22	---	3.44	3.25	---	3.34	---	3.79	---	3.58	3.24	---
MEAN	3.33	3.28	3.36	3.35	2.97	3.18	3.56	3.76	3.70	3.56	3.46	3.11
MAX	3.48	3.42	3.45	3.47	3.23	3.47	3.80	3.83	3.79	3.62	3.65	3.21
MIN	3.22	3.17	3.23	3.25	2.85	2.85	3.31	3.71	3.61	3.47	3.19	3.01

CAL YR 1994 MEAN 3.44 MAX 4.39 MIN 2.80  
WTR YR 1995 MEAN 3.39 MAX 3.83 MIN 2.85



## ST. LAWRENCE RIVER BASIN

04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY

LOCATION.--Lat 43°39'48", long 73°36'14", Warren County, Hydrologic Unit 02010001, on left bank 10 ft downstream from county bridge on Padanarum Road, 7.7 mi north of Bolton Landing.

DRAINAGE AREA.--22.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to September 1968, October 1968 to September 1971 (annual maximum only), October 1971 to current year.

REVISED RECORDS.--WDR NY-90-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 423.60 ft above sea level. Prior to Oct. 1, 1973, at datum 1.00 ft higher.

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

AVERAGE DISCHARGE.--27 years (water years 1966-68, 1972-95), 35.5 ft<sup>3</sup>/s, 21.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft<sup>3</sup>/s, Feb. 11, 1981; gage height, 6.35 ft, from rating curve extended above 590 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 5.53 ft; maximum gage height, 7.14 ft, Feb. 11, 1981 (ice jam); minimum discharge, 0.28 ft<sup>3</sup>/s, Sept. 27, 28, 29, 1968, gage height, 0.18 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 5	1900	*267	2.83	Jan. 15	1015	ice jam	*2.93

Minimum discharge, 0.65 ft<sup>3</sup>/s, Sept. 4, 5-6, 7, gage height, 0.51 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	14	33	e25	e31	e12	22	27	7.2	1.8	1.3	.94
2	4.4	53	27	e21	e28	e10	21	24	6.6	2.6	1.2	.82
3	3.7	25	24	e16	e27	e9.0	21	22	9.1	1.5	5.4	.73
4	3.4	18	24	e14	e26	e9.0	21	21	9.2	1.2	16	.71
5	3.4	15	111	e13	e25	e9.0	e19	20	7.3	1.1	7.4	.65
6	3.2	14	134	e13	e24	10	e16	18	6.2	1.1	58	.65
7	3.2	16	79	e16	e23	11	e16	16	5.6	1.3	25	.71
8	3.1	14	56	e14	e21	35	e16	15	7.0	1.3	12	.94
9	3.1	12	47	e12	e19	92	19	14	6.8	1.1	7.3	3.6
10	3.4	11	38	e11	e18	81	18	14	5.5	.97	5.2	2.9
11	3.2	9.8	44	e13	e18	52	17	19	5.7	1.3	4.0	1.6
12	3.2	9.4	e38	e14	e17	33	41	18	7.8	1.5	3.4	1.3
13	3.1	8.6	e35	e16	e17	39	66	16	6.9	1.2	3.3	1.4
14	3.1	7.9	e31	e30	e17	104	44	16	5.3	1.0	2.8	2.5
15	3.0	7.7	28	e140	e16	226	34	20	4.5	1.3	2.5	2.3
16	2.9	7.4	25	123	e16	219	29	17	4.0	1.2	2.1	1.6
17	2.8	7.2	24	104	e15	201	26	15	3.5	5.1	1.8	1.4
18	2.8	7.2	23	73	e14	140	24	14	3.2	3.6	1.6	1.4
19	3.0	7.3	21	58	e12	99	25	14	2.9	2.2	1.3	1.2
20	3.3	7.0	20	73	e12	77	23	13	2.4	1.7	1.2	1.1
21	5.5	7.3	18	126	e11	71	33	12	2.0	2.1	1.1	1.1
22	4.6	11	17	109	e11	66	38	10	1.9	1.8	.95	3.8
23	3.9	9.3	17	90	e10	53	31	9.7	1.9	1.5	.87	8.0
24	3.7	8.0	28	67	e10	41	27	9.2	1.7	1.5	.86	3.6
25	3.5	e7.5	56	53	e10	36	25	9.1	1.6	1.4	.82	2.8
26	3.4	e7.2	43	e50	e10	32	23	11	1.4	3.4	.84	2.9
27	3.3	e7.5	34	e45	e11	30	21	9.8	1.3	3.2	1.1	4.0
28	3.3	45	30	e40	e12	27	36	8.5	1.1	3.0	.97	3.4
29	3.3	73	e26	e38	---	26	34	9.9	1.1	3.1	.86	2.6
30	3.2	45	e22	e36	---	26	28	10	1.1	2.2	.82	2.3
31	3.0	---	e24	e34	---	24	---	8.3	---	1.5	.86	---
TOTAL	107.0	492.3	1177	1487	481	1900.0	814	460.5	131.8	58.77	172.85	62.95
MEAN	3.45	16.4	38.0	48.0	17.2	61.3	27.1	14.9	4.39	1.90	5.58	2.10
MAX	5.5	73	134	140	31	226	66	27	9.2	5.1	58	8.0
MIN	2.8	7.0	17	11	10	9.0	16	8.3	1.1	.97	.82	.65
CFSM	.16	.75	1.73	2.18	.78	2.79	1.23	.68	.20	.09	.25	.10
IN.	.18	.83	1.99	2.51	.81	3.21	1.38	.78	.22	.10	.29	.11

e Estimated

## ST. LAWRENCE RIVER BASIN

04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.6	39.3	40.9	31.2	30.3	75.0	89.7	46.2	19.1	9.43	10.7	10.2
MAX	83.6	93.9	131	90.7	168	187	176	95.0	43.4	32.1	62.4	45.5
(WY)	1978	1973	1974	1978	1981	1979	1994	1983	1968	1972	1990	1975
MIN	1.65	6.22	15.3	5.08	5.81	23.5	27.1	11.1	3.38	1.71	.93	.89
(WY)	1983	1983	1989	1981	1977	1967	1995	1987	1988	1977	1985	1982

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1966 - 1995	
ANNUAL TOTAL	11790.1		7345.17			
ANNUAL MEAN	32.3		20.1		35.5	
HIGHEST ANNUAL MEAN					50.8	1990
LOWEST ANNUAL MEAN					20.1	1995
HIGHEST DAILY MEAN	556	Apr 16	226	Mar 15	1300	Mar 6 1979
LOWEST DAILY MEAN	2.5	Sep 22	.65	Sep 5	.42	Sep 28 1968
ANNUAL SEVEN-DAY MINIMUM	3.0	Oct 13	.74	Sep 1	.56	Sep 8 1982
ANNUAL RUNOFF (CFSM)	1.47		.91		1.61	
ANNUAL RUNOFF (INCHES)	19.94		12.42		21.90	
10 PERCENT EXCEEDS	73		45		81	
50 PERCENT EXCEEDS	12		10		17	
90 PERCENT EXCEEDS	3.5		1.3		2.6	

ST. LAWRENCE RIVER BASIN  
04279040 MILL BROOK AT PUTNAM, NY

LOCATION.--Lat 43°44'01", long 73°23'20", Washington County, Hydrologic Unit 02010001, on right bank 50 ft downstream from bridge on County Highway 3 and 1.0 mi southeast of Putnam.

DRAINAGE AREA.--10.3 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 120 ft above sea level, from topographic map. Prior to March 30, 1993, at datum 1.00 ft higher.

REMARKS.--Records good except those below 0.1 ft<sup>3</sup>/s and those for estimated daily discharges, which are poor. Flows can be modified by natural storage in small pond 150 ft upstream from station.

AVERAGE DISCHARGE.--5 years, 11.2 ft<sup>3</sup>/s, 14.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 454 ft<sup>3</sup>/s, Oct. 24, 1990, gage height, 4.67 ft, present datum; maximum gage height, 4.71 ft, present datum, Jan. 23, 1992 (ice jam); no flow for part of each day, Aug. 30, 31, 1993; minimum gage height, 0.86 ft, Aug. 31, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft<sup>3</sup>/s, and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 8	1915	*92	3.18	Mar. 10	0830	ice jam	a*3.31

a Recorded; outside gage height was 3.50 ft, from crest-stage gage.

Minimum discharge, 0.02 ft<sup>3</sup>/s, Sept. 6, gage height, 1.03 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.0	7.7	6.1	e10	e3.8	8.8	9.0	2.5	.27	.29	.06
2	2.6	8.6	6.2	6.7	e9.0	e3.7	8.2	8.4	2.5	.22	.30	.06
3	3.1	4.8	5.4	5.9	e8.2	e3.6	7.8	8.0	3.6	.22	1.9	.07
4	1.8	3.6	4.9	e4.9	e7.8	e3.5	7.8	7.2	4.7	.21	4.9	.06
5	1.6	3.2	29	e4.2	e7.4	e3.4	7.1	6.7	3.7	.16	2.6	.04
6	1.7	3.0	31	e3.5	e7.2	e3.8	e6.0	6.2	2.9	.12	6.6	.04
7	1.6	3.3	18	e3.9	e6.8	e6.0	e6.0	6.5	2.3	.10	4.5	.05
8	1.6	2.7	14	e4.2	e6.5	e50	e6.0	4.9	2.9	.10	2.8	.05
9	1.6	2.7	9.9	e4.0	e6.2	e35	7.2	4.9	3.5	.11	1.8	.58
10	1.8	2.2	9.6	e3.7	e6.0	e26	8.3	4.7	2.8	.11	1.2	.82
11	1.6	2.0	e12	e3.5	e5.6	e22	7.0	5.5	2.6	.10	.78	.63
12	1.6	2.0	e12	e3.6	e5.2	17	6.7	6.4	3.0	.09	.64	.40
13	1.6	2.5	e8.8	e8.0	e4.9	e25	27	6.0	2.9	.06	.53	.29
14	1.6	1.7	e8.8	e14	e4.8	32	16	5.3	2.4	.05	.49	.31
15	1.5	2.0	e8.8	e37	e4.5	44	12	7.0	2.0	.08	.39	.30
16	1.4	2.0	8.5	39	e4.4	51	9.8	6.7	1.7	.10	.32	.23
17	2.2	1.9	8.3	32	e4.3	49	8.5	5.5	1.4	.47	.25	.16
18	1.4	2.0	9.2	22	e4.1	36	8.0	5.2	1.3	1.2	.18	.12
19	1.0	1.9	9.4	19	e4.0	27	8.0	4.7	.95	1.0	.14	.10
20	1.4	1.9	8.2	26	e3.8	24	8.2	4.9	.85	.41	.12	.08
21	1.9	1.8	7.7	44	e3.6	23	9.7	4.6	.72	.45	.09	.08
22	1.8	2.6	7.5	45	e3.6	22	15	3.9	.65	.39	.08	.51
23	1.6	2.6	7.5	36	e3.4	18	11	3.8	.59	.31	.07	1.5
24	1.5	e2.2	14	27	e3.3	16	8.3	3.7	.50	.23	.06	.98
25	1.5	e2.1	21	e22	e3.2	15	7.8	4.1	.49	.18	.05	.62
26	2.3	e2.0	13	e19	e3.2	13	7.2	4.1	.48	.50	.05	.57
27	1.5	2.0	10	e17	e3.2	12	6.6	4.1	.34	.81	.06	2.3
28	.99	9.9	e9.0	e15	e3.5	11	16	3.9	.35	.85	.06	1.0
29	1.3	21	e8.0	e13	---	9.8	16	3.6	.33	.75	.06	.84
30	1.2	12	e6.0	e12	---	9.5	11	3.8	.33	.52	.05	1.1
31	2.3	---	e5.0	e11	---	9.4	---	3.1	---	.32	.05	---
TOTAL	53.89	116.2	338.4	512.2	147.7	624.5	293.0	166.4	55.28	10.49	31.41	13.95
MEAN	1.74	3.87	10.9	16.5	5.27	20.1	9.77	5.37	1.84	.34	1.01	.46
MAX	3.3	21	31	45	10	51	27	9.0	4.7	1.2	6.6	2.3
MIN	.99	1.7	4.9	3.5	3.2	3.4	6.0	3.1	.33	.05	.05	.04
CFSM	.17	.38	1.06	1.60	.51	1.96	.95	.52	.18	.03	.10	.05
IN.	.19	.42	1.22	1.85	.53	2.26	1.06	.60	.20	.04	.11	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	7.10	12.4	15.6	11.0	6.49	25.0
MAX	19.4	28.0	37.4	16.5	13.5	46.6
(WY)	1991	1992	1993	1994	1995	1996
MIN	1.03	3.87	9.24	3.39	4.39	16.5
(WY)	1990	1991	1992	1993	1994	1995

e Estimated

## ST. LAWRENCE RIVER BASIN

04279040 MILL BROOK AT PUTNAM, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	4388.82		2363.42		11.2	
ANNUAL MEAN	12.0		6.48		14.8	
HIGHEST ANNUAL MEAN					6.48	
LOWEST ANNUAL MEAN					1991	
HIGHEST DAILY MEAN	115	Apr 13	51	Mar 16	286	Apr 4 1990
LOWEST DAILY MEAN	.63	Jul 18	.04	Sep 5	.01	Aug 30 1993
ANNUAL SEVEN-DAY MINIMUM	.79	Jul 14	.05	Sep 2	.05	Aug 25 1993
ANNUAL RUNOFF (CFSM)	1.17		.63		1.08	
ANNUAL RUNOFF (INCHES)	15.85		8.54		14.73	
10 PERCENT EXCEEDS	30		16		31	
50 PERCENT EXCEEDS	4.3		3.6		5.2	
90 PERCENT EXCEEDS	1.6		.15		.40	

## ST. LAWRENCE RIVER BASIN

04279125 MOUNT HOPE BROOK AT SOUTH BAY NEAR WHITEHALL, NY

LOCATION.--Lat 43°31'19", long 73°30'27", Washington County, Hydrologic Unit 02010001, on right bank 10 ft downstream from bridge on County Highway 16, 400 ft upstream from confluence with Spectacle Brook, and 5.6 mi southwest of Whitehall at South Bay.

DRAINAGE AREA.--11.6 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--5 years, 18.9 ft<sup>3</sup>/s, 22.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 731 ft<sup>3</sup>/s, Apr. 17, 1993, gage height, 6.95 ft; minimum daily, 0.04 ft<sup>3</sup>/s, Aug. 3, Sept. 8-9, 1991, Sept. 6, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 30	1500	ice jam	*5.23	Mar. 16	1730	*88	4.58

Minimum daily discharge, 0.04 ft<sup>3</sup>/s, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.5	e10	e25	e16	e14	e5.5	13	13	8.5	.76	.37	.09
2	e4.5	e30	e22	e13	e13	e4.8	12	12	7.4	.77	.28	.08
3	e4.0	e18	e19	e11	e12	e4.5	11	11	16	.60	2.0	.06
4	e3.7	e12	e17	e10	e11	e4.3	e11	10	13	.56	7.3	.05
5	e3.4	e11	e40	e9.0	e11	e4.3	e10	9.9	9.2	.51	2.8	.05
6	e3.1	e10	e70	e9.0	e10	e4.7	e10	9.2	7.4	.51	2.6	.04
7	e3.0	e11	e45	e10	e9.5	e6.0	10	8.1	6.3	.51	2.2	.05
8	e2.9	e10	e34	e9.0	e9.0	e17	9.9	7.5	6.3	.52	1.4	.12
9	e3.0	e9.0	30	e8.5	e8.5	e60	11	7.3	5.8	.41	1.0	.24
10	e3.1	e8.0	27	e7.2	e8.0	40	12	7.5	4.8	.34	.82	.26
11	e3.2	e7.2	36	e8.0	e7.8	25	10	9.1	4.7	.41	.69	.16
12	e3.1	e6.8	32	e9.0	e7.2	20	11	10	6.4	.37	.60	.14
13	e3.0	e6.2	e28	e10	e7.0	22	30	9.4	5.7	.32	.56	.18
14	e3.0	e6.0	e24	e22	e6.8	38	23	8.7	4.4	.28	.47	.21
15	e2.8	e5.8	e22	e62	e6.5	e67	19	17	3.9	.37	.40	.17
16	e2.7	e5.7	19	60	e6.5	e86	16	15	3.4	.27	.36	.13
17	e2.7	e5.5	19	48	e6.2	74	15	12	2.8	1.6	.30	.12
18	e2.8	e5.5	20	34	e6.0	55	13	11	2.5	1.0	.25	.15
19	e2.9	e5.7	19	29	e5.5	39	14	9.7	2.2	.75	.20	.13
20	e3.1	e5.4	16	34	e5.3	33	13	8.8	1.9	.55	.17	.12
21	e4.5	e6.0	16	45	e5.0	32	15	7.9	1.6	.54	.14	.11
22	e4.0	e8.0	15	44	e4.8	32	21	6.9	1.4	.47	.12	.59
23	e3.5	e7.0	15	36	e4.6	28	17	6.2	1.3	.37	.10	1.1
24	e3.2	e6.0	17	29	e4.5	24	14	6.2	1.2	.37	.09	.59
25	e3.1	e5.8	21	25	e4.5	22	13	6.6	1.1	.33	.08	.42
26	e3.0	e5.5	19	e22	e4.6	20	12	10	1.1	.90	.08	.38
27	e3.2	e6.0	17	e20	e4.8	18	11	9.9	1.0	1.8	.16	.41
28	e3.0	e25	17	e18	e5.0	16	19	7.7	.90	1.1	.14	.33
29	e2.9	e45	e14	e17	---	15	18	13	.81	.89	.10	.24
30	e2.8	e30	e14	e16	---	15	15	17	.77	.66	.08	.21
31	e2.7	---	e14	e15	---	15	---	11	---	.46	.08	---
TOTAL	101.4	333.1	743	705.7	208.6	847.1	428.9	308.6	133.78	19.30	25.94	6.93
MEAN	3.27	11.1	24.0	22.8	7.45	27.3	14.3	9.95	4.46	.62	.84	.23
MAX	5.5	45	70	62	14	86	30	17	16	1.8	7.3	1.1
MIN	2.7	5.4	14	7.2	4.5	4.3	9.9	6.2	.77	.27	.08	.04
CFSM	.28	.96	2.07	1.96	.64	2.36	1.23	.86	.38	.05	.07	.02
IN.	.33	1.07	2.38	2.26	.67	2.72	1.38	.99	.43	.06	.08	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	12.9	24.6	25.0	15.9	9.69	32.9
MAX	28.9	39.8	41.3	22.8	15.1	48.9
(WY)	1991	1993	1991	1995	1991	1990
MIN	2.49	11.1	15.5	8.47	7.15	26.0
(WY)	1994	1995	1993	1994	1993	1992

e Estimated



## ST. LAWRENCE RIVER BASIN

04279125 MOUNT HOPE BROOK AT SOUTH BAY NEAR WHITEHALL, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	9429.4		3862.35			
ANNUAL MEAN	25.8		10.6		18.9	
HIGHEST ANNUAL MEAN					26.4	1994
LOWEST ANNUAL MEAN					10.6	1995
HIGHEST DAILY MEAN	310	Apr 16	86	Mar 16	458	Apr 17 1993
LOWEST DAILY MEAN	2.0	Sep 22	.04	Sep 6	.04	Aug 3 1991
ANNUAL SEVEN-DAY MINIMUM	2.6	Sep 16	.06	Sep 1	.06	Aug 2 1991
ANNUAL RUNOFF (CFSM)	2.23		.91		1.63	
ANNUAL RUNOFF (INCHES)	30.24		12.39		22.14	
10 PERCENT EXCEEDS	54		25		44	
50 PERCENT EXCEEDS	11		6.6		10	
90 PERCENT EXCEEDS	3.5		.26		.75	

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi downstream from Carver Falls, 1.9 mi upstream from Hubbardton River, and 3.2 mi northwest of Fair Haven.

DRAINAGE AREA.--187 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: October 1928 to current year. Water-quality records: Water year 1954.

PERIOD OF RECORD.--Discharge: October 1928 to  
REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Elevation of gage is 105 ft above sea level, from topographic map.

REMARKS.--Records good except for periods of estimated daily discharges which are fair. Flow regulated by powerplant upstream and Lake Bomoseen. Water-quality records for some prior periods have been collected at this location.

upstream and Lake Bosomson. Water quality records for some prior periods have been collected at this location.

EXTREMES FOR PERIOD OF RECORD:--Maximum discharge, 14,800  $\text{ft}^3/\text{s}$ , July 20, 1945, gage height, 24.36 ft, from high-water mark in well, from rating curve extended above 2,600  $\text{ft}^3/\text{s}$  on basis of computations of flow over dam at gage heights 16.10 ft, 21.40 ft, and 24.36 ft; minimum daily, 2.1  $\text{ft}^3/\text{s}$ , Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 9	0630	*1,080	*6.56				

Minimum daily discharge, 6.9 ft<sup>3</sup>/s, Sept. 18-20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	72	157	119	219	126	250	198	107	21	8.4	7.4
2	113	65	116	128	209	124	234	210	100	20	8.9	7.4
3	112	72	110	130	161	156	209	176	122	20	11	7.2
4	97	65	103	116	193	157	205	172	173	19	94	7.3
5	79	61	181	119	201	142	209	161	118	19	52	7.4
6	101	61	560	121	e160	156	172	136	113	13	79	7.4
7	77	126	493	116	e170	177	177	149	94	9.1	84	7.3
8	90	124	419	122	e170	442	161	137	88	8.4	46	7.3
9	77	121	250	100	e171	933	169	136	79	8.8	37	7.8
10	71	101	229	e80	e170	532	195	115	84	9.0	38	7.9
11	82	61	268	e93	e169	406	185	107	75	9.3	39	7.7
12	59	65	279	e103	e160	358	159	123	72	9.5	21	7.4
13	67	52	216	131	e157	493	388	122	90	9.6	21	7.4
14	65	60	281	341	e150	685	336	95	67	10	21	7.4
15	87	58	274	777	e147	785	290	151	62	10	21	7.4
16	48	57	253	759	175	906	275	184	81	9.9	21	7.4
17	56	57	252	667	190	953	291	145	44	33	21	7.4
18	58	54	205	616	164	992	282	145	50	26	16	6.9
19	56	60	224	544	145	814	273	116	51	23	12	6.9
20	52	50	195	511	165	730	273	127	51	24	12	6.9
21	74	51	186	607	176	690	267	144	40	8.5	12	7.4
22	49	56	189	664	151	764	369	104	24	8.7	12	8.1
23	58	65	178	646	139	620	298	100	43	9.3	12	9.9
24	57	53	190	547	141	404	286	96	28	30	12	13
25	51	54	208	460	147	359	275	120	28	8.4	11	12
26	51	54	192	340	120	336	259	106	23	8.9	7.8	8.7
27	50	55	173	299	127	324	193	126	21	64	7.9	9.8
28	49	75	156	264	127	307	226	104	21	23	7.9	9.9
29	49	219	146	283	---	291	281	107	21	30	7.9	9.9
30	47	216	99	241	---	274	251	195	22	16	7.9	9.8
31	47	---	111	212	---	280	---	133	---	8.0	7.6	---
TOTAL	2301	2340	6893	10256	4574	14716	7438	4240	1992	526.4	769.3	245.7
MEAN	74.2	78.0	222	331	163	475	248	137	66.4	17.0	24.8	8.19
MAX	272	219	560	777	219	992	388	210	173	64	94	13
MIN	47	50	99	80	120	124	159	95	21	8.0	7.6	6.9
CFSM	.40	.42	1.19	1.77	.87	2.54	1.33	.73	.36	.09	.13	.04
IN.	.46	.47	1.37	2.04	.91	2.93	1.48	.84	.40	.10	.15	.00

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1995, BY WATER YEAR (WY)

MEAN	142	225	259	245	256	526	675	315	161	99.9	79.2	92.8
MAX	721	760	1018	766	800	1627	1441	902	776	639	629	666
(WY)	1978	1973	1984	1973	1984	1986	1977	1983	1947	1976	1976	1938
MIN	18.2	21.4	38.4	42.0	26.8	113	231	71.5	19.4	7.08	3.94	8.19
(WY)	1974	1965	1965	1931	1980	1940	1966	1941	1965	1965	1965	1995

SUMMARY STATISTICS                      FOR 1994 CALENDAR YEAR                      FOR 1995 WATER YEAR                      WATER YEARS 1929 - 1995

ANNUAL TOTAL	111704		56291.4				
ANNUAL MEAN	306		154			256	
HIGHEST ANNUAL MEAN						527	1976
LOWEST ANNUAL MEAN						66.9	1965
HIGHEST DAILY MEAN	3660	Apr 7	992	Mar 18	6880		Sep 22 1938
LOWEST DAILY MEAN	33	Jul 21	a 6.9	Sep 18		2.1	Aug 8 1965
ANNUAL SEVEN-DAY MINIMUM	41	Jul 15	7.2	Sep 14		3.0	Aug 13 1965
INSTANTANEOUS PEAK FLOW			1080	Mar 9	b 14800		Jul 20 1945
INSTANTANEOUS PEAK STAGE			6.56	Mar 9		c 24.36	Jul 20 1945
INSTANTANEOUS LOW FLOW			5.1	Sep 7			
ANNUAL RUNOFF (CFSM)	1.64		.82			1.37	
ANNUAL RUNOFF (INCHES)	22.22		11.20			18.60	
10 PERCENT EXCEEDS	686		338			606	
50 PERCENT EXCEEDS	178		107			134	
90 PERCENT EXCEEDS	58		8.9			28	

e Estimated

a Also occurred on Sept. 19, 20.

b See 'EXTREMES FOR PERIOD OF RECORD' paragraph above.

c From high-water mark in well.

## ST. LAWRENCE RIVER BASIN

04280450 METTAWEE RIVER NEAR MIDDLE GRANVILLE, NY

LOCATION.--Lat 43°27'50", long 73°17'05", Washington County, Hydrologic Unit 02010001, on right bank 110 ft downstream from bridge on County Highway 21 and 2.2 mi north of Middle Granville.

DRAINAGE AREA.--167 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 320 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--5 years, 237 ft<sup>3</sup>/s, 19.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft<sup>3</sup>/s, Mar. 29, 1993, gage height, 8.56 ft; minimum, 8.9 ft<sup>3</sup>/s, Sept. 7, 1995, gage height, 2.81 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 31, 1984, reached a discharge of 5,380 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow 2.8 mi upstream at Middle Granville (drainage area 156 mi<sup>2</sup>).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 14	2030	ice jam	*6.81	Mar. 9	0115	*1,500	6.02

Minimum discharge, 8.9 ft<sup>3</sup>/s, Sept. 7, gage height, 2.81 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	108	129	e170	e220	e170	249	218	109	26	17	16
2	115	95	116	e160	e210	e150	226	202	94	26	15	17
3	102	91	109	e150	e200	e140	208	192	141	24	19	15
4	95	82	104	e140	e180	e140	224	179	148	22	389	13
5	91	77	206	e130	e170	e150	e190	171	114	22	184	11
6	87	78	441	e150	e160	e170	e170	170	98	21	118	10
7	82	91	413	e190	e150	184	e170	155	90	22	88	9.8
8	78	83	364	e180	e150	661	177	150	88	25	69	12
9	77	79	300	e150	e140	970	184	132	89	25	56	18
10	95	75	279	e120	e130	590	210	129	79	21	49	21
11	86	72	380	e110	e130	495	188	132	80	19	42	18
12	79	76	e310	e160	e120	438	181	135	104	21	39	16
13	74	75	e270	e300	e120	561	404	128	104	19	38	15
14	73	66	259	e550	e110	655	333	118	85	16	34	15
15	69	63	238	805	e120	728	287	151	78	15	33	16
16	68	61	217	677	e140	818	265	147	73	18	31	14
17	66	60	206	697	e120	795	246	123	65	31	27	13
18	64	59	213	561	e110	736	229	118	59	35	25	15
19	63	58	214	486	e100	615	237	112	53	27	24	13
20	64	57	188	475	e100	543	235	108	49	23	22	13
21	76	58	178	560	e100	558	245	101	44	21	20	12
22	68	70	174	579	e98	596	333	95	43	22	18	19
23	64	65	171	557	e95	511	281	92	39	20	17	39
24	62	e55	199	478	e120	454	254	92	40	18	18	29
25	59	e52	231	425	e110	394	234	125	38	19	16	22
26	57	e50	206	369	e110	354	218	114	40	26	17	21
27	56	e52	184	e330	e140	323	208	111	34	70	19	21
28	55	99	176	e300	e180	299	268	94	32	36	19	18
29	53	218	e160	e280	---	273	263	101	31	28	17	16
30	51	152	e150	e260	---	265	234	162	29	23	15	16
31	59	---	e160	e250	---	276	---	127	---	19	14	---
TOTAL	2318	2377	6945	10749	3833	14012	7151	4184	2170	760	1509	503.8
MEAN	74.8	79.2	224	347	137	452	238	135	72.3	24.5	48.7	16.8
MAX	130	218	441	805	220	970	404	218	148	70	389	39
MIN	51	50	104	110	95	140	170	92	29	15	14	9.8
CFSM	.45	.47	1.34	2.08	.82	2.71	1.43	.81	.43	.15	.29	.10
IN.	.52	.53	1.55	2.39	.85	3.12	1.59	.93	.48	.17	.34	.11

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	130	266	326	278	182	500
MAX	308	455	505	347	285	667
(WY)	1991	1991	1991	1995	1991	1990
MIN	63.6	79.2	224	179	116	243
(WY)	1993	1995	1995	1994	1992	1995

e Estimated

## ST. LAWRENCE RIVER BASIN

04280450 METTAWEE RIVER NEAR MIDDLE GRANVILLE, NY--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	106534		56511.8			
ANNUAL MEAN	292		155		237	
HIGHEST ANNUAL MEAN					312	1994
LOWEST ANNUAL MEAN					155	1995
HIGHEST DAILY MEAN	2900	Apr 7	970	Mar 9	4410	Mar 30 1993
LOWEST DAILY MEAN	43	Jul 21	9.8	Sep 7	9.8	Sep 7 1995
ANNUAL SEVEN-DAY MINIMUM	51	Jul 15	13	Sep 2	13	Sep 2 1995
ANNUAL RUNOFF (CFSM)	1.75		.93		1.42	
ANNUAL RUNOFF (INCHES)	23.73		12.59		19.25	
10 PERCENT EXCEEDS	600		366		545	
50 PERCENT EXCEEDS	160		104		155	
90 PERCENT EXCEEDS	64		18		35	





## ST. LAWRENCE RIVER BASIN

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY  
(National stream-quality accounting network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi<sup>2</sup>.

## WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to October 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point". Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is sea level. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft higher.

REMARKS.--Area of lake surface about 490 mi<sup>2</sup>. Total volume below 92.5 ft elevation, reported by Lake Champlain Studies Center, 902.2 bil ft<sup>3</sup>. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.88 ft, Apr. 25, 1993; minimum observed, 92.17 ft, Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft, May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 97.27 ft, Mar. 30; minimum, 93.79 ft, Sept. 18.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.19	94.50	94.53	94.82	96.31	95.40	96.91	96.07	95.39	94.77	94.47	94.62
2	95.14	94.54	94.64	94.81	96.21	95.36	96.88	96.06	95.36	94.72	94.35	94.58
3	95.10	94.71	94.52	94.83	96.22	95.35	96.95	96.04	95.35	94.67	94.41	94.55
4	95.08	94.76	94.51	94.78	96.17	95.30	96.75	96.01	95.43	94.71	94.54	94.55
5	95.06	94.74	94.56	94.82	96.17	95.26	96.53	95.98	95.54	94.70	94.53	94.55
6	95.08	94.88	94.69	94.84	96.17	95.25	96.65	95.79	95.55	94.76	94.68	94.46
7	95.11	94.72	94.79	94.69	96.16	95.29	96.57	95.76	95.55	94.76	94.93	94.55
8	95.14	94.90	94.94	94.73	96.11	95.27	96.60	95.76	95.40	94.60	95.12	94.41
9	95.15	94.82	95.23	94.66	96.10	95.43	96.45	95.79	95.44	94.54	95.16	94.41
10	94.91	94.79	95.02	94.63	96.03	95.54	96.41	95.80	95.48	94.52	95.18	94.32
11	94.88	94.78	95.06	94.63	96.00	95.59	96.38	95.79	95.59	94.52	95.25	94.38
12	94.90	94.88	95.08	94.70	95.95	95.69	96.55	95.68	95.37	94.50	95.31	94.44
13	94.89	94.80	95.09	94.68	95.95	95.67	96.31	95.63	95.39	94.50	95.23	94.50
14	94.75	95.00	95.07	94.75	95.88	95.76	96.24	95.70	95.30	94.46	95.26	94.31
15	94.76	94.74	95.06	94.96	95.93	95.89	96.25	95.68	95.29	94.41	95.44	94.26
16	94.73	94.75	95.13	95.09	95.78	96.09	96.23	95.58	95.30	94.34	95.29	94.52
17	94.72	94.77	95.30	95.40	95.76	96.33	96.23	95.65	95.28	94.55	95.24	94.43
18	94.72	94.92	95.04	95.66	95.72	96.57	96.19	95.58	95.24	94.58	95.13	94.14
19	94.73	94.63	95.00	95.81	95.69	96.73	96.37	95.60	95.20	94.47	95.17	94.19
20	94.76	94.62	95.09	95.80	95.63	96.88	96.08	95.58	95.10	94.52	95.28	94.20
21	94.68	95.05	95.09	95.99	95.59	96.91	96.24	95.60	95.07	94.48	95.17	94.16
22	94.65	94.54	95.01	96.17	95.58	96.97	96.15	95.55	95.06	94.47	94.97	94.21
23	94.69	94.45	94.90	96.34	95.57	97.03	96.06	95.55	95.03	94.48	94.98	94.17
24	94.65	94.52	94.81	96.41	95.53	97.08	96.09	95.53	95.02	94.45	94.87	94.18
25	94.63	94.55	94.89	96.44	95.48	97.10	96.09	95.47	94.98	94.44	94.83	94.23
26	94.60	94.38	94.92	96.46	95.45	97.11	96.07	95.48	94.87	94.48	94.85	94.21
27	94.55	94.42	94.97	96.41	95.46	97.09	96.03	95.43	94.97	94.46	94.80	94.23
28	94.65	94.66	94.97	96.42	95.41	97.07	96.04	95.52	94.94	94.49	94.80	94.11
29	94.67	94.50	94.67	96.41	---	97.07	96.06	95.58	94.87	94.55	94.78	94.20
30	94.46	94.43	94.83	96.37	---	97.09	96.06	95.35	94.79	94.45	94.68	94.20
31	94.42	---	94.90	96.38	---	96.96	---	95.40	---	94.48	94.76	---
MEAN	94.82	94.69	94.91	95.45	95.86	96.20	96.35	95.68	95.24	94.54	94.95	94.34
MAX	95.19	95.05	95.30	96.46	96.31	97.11	96.95	96.07	95.59	94.77	95.44	94.62
MIN	94.42	94.38	94.51	94.63	95.41	95.25	96.03	95.35	94.79	94.34	94.35	94.11

AL YR 1994 MEAN 96.34 MAX 101.39 MIN 94.38

TR YR 1995 MEAN 95.25 MAX 97.11 MIN 94.11

## ST. LAWRENCE RIVER BASIN

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to August 1995 (discontinued).

CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-82 (c), 1983-86 (b), 1987 (c), 1988 (d), 1989 (c), 1990-95 (b).

MINOR ELEMENTS DATA: 1974-86 (b), 1987 (c), 1988 (d), 1989 (c), 1990-95 (b).

PESTICIDE DATA: 1976-79 (b), 1980 (a), 1982 (b).

ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979-81 (c).

PCB--1978-79 (b), 1980 (a), 1982 (b).

NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-82 (c), 1983-86 (b), 1987-89 (c), 1990-95 (b).

BIOLOGICAL DATA:

Bacteria--1974 (a), 1975-82 (c), 1983-89 (b), 1990-95 (b).

Phytoplankton--1974 (a), 1975-78 (c), 1979 (b), 1980-81 (c).

Periphyton--1975 (c), 1976-80 (b).

SEDIMENT DATA: 1975-82 (c), 1983-95 (b).

## WATER-QUALITY DATA, OCTOBER 1994 TO AUGUST 1995

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)
NOV 02...	0915	167	7.5	10.5	0.90	749	11.4	104	38	10	65
APR 18...	1030	130	7.1	4.5	0.70	770	8.9	68	<1	<1	62
JUN 21...	0930	159	7.5	20.5	0.50	770	--	--	<1	<1	59
AUG 08...	0915	158	7.9	23.0	0.40	771	8.6	99	K5	K4	59

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
NOV 02...	19	4.2	7.6	1.4	51	62	ND	11	11	<0.10	1.2
APR 18...	18	4.1	7.2	1.3	52	63	ND	11	11	<0.10	0.87
JUN 21...	17	3.9	7.1	1.3	46	56	ND	10	11	<0.10	0.43
AUG 08...	17	4.0	7.5	1.2	50	61	ND	10	11	<0.10	2.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 02...	91	86	0.06	0.02	0.30	0.02	<0.01	<0.01	<10	8
APR 18...	92	85	0.18	<0.015	0.30	<0.01	<0.01	<0.01	<10	7
JUN 21...	90	79	0.09	0.04	0.40	<0.01	<0.01	<0.01	20	7
AUG 08...	92	84	0.10	0.02	0.40	0.02	0.02	<0.01	<10	7

K Results based on colony count outside the acceptable range (non-ideal colony count).  
 ND Not detected.

## ST. LAWRENCE RIVER BASIN

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY DATA, OCTOBER 1994 TO AUGUST 1995

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 02...	<3	16	<4	3	<10	<1	<1	<1.0	83	<6
APR 18...	<3	4	5	1	<10	<1	<1	<1.0	84	<6
JUN 21...	<3	46	<4	7	10	1	<1	<1.0	81	<6
AUG 08...	3	6	<4	<1	<10	<1	<1	<1.0	82	<6

SUSPENDED SEDIMENT DISCHARGE, OCTOBER 1994 TO AUGUST 1995

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM
NOV 02...	0915	1	80
JUN 21...	0930	1	65
AUG 08...	0915	1	89

## STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

## LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04260990 CRANBERRY LAKE AT CRANBERRY LAKE, NY--Lat 44°13'14", long 74°50'55", St. Lawrence County, Hydrologic Unit 04150302, on right wall at outlet structure, at village of Cranberry Lake. DRAINAGE AREA, 140 mi<sup>2</sup>. PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft above sea level.

Dam completed in 1867 and controlled storage for which records are available began in 1923. Usable capacity above elevation 1,475.25 ft is 2,530 mil ft<sup>3</sup>. Crest at spillway is at elevation, 1,486.43 ft. Length of spillway is 110 ft. Area of water surface at crest elevation is 10.9 mi<sup>2</sup>. Records provided by Oswegatchie River-Cranberry Reservoir Commission.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 2,985 mil ft<sup>3</sup>, May 13-15, 1971, gage height, 18.5 ft; minimum observed, 70 mil ft<sup>3</sup>, Apr. 1-4, 1956, gage height, 6.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 2,470 mil ft<sup>3</sup>, July 29-31, Aug. 1-2, gage height, 16.8 ft; minimum observed, 1,606 mil ft<sup>3</sup>, Feb. 23-26, gage height, 13.6 ft.

04266700 CARRY FALLS RESERVOIR NEAR SOUTH COLTON, NY--Lat 44°26'07", long 74°44'50", St. Lawrence County, Hydrologic Unit 04150305, near center of upstream wall of dam between Carry Falls and Stark Falls Reservoirs, 2.0 mi southeast of Stark, and 8.8 mi southeast of South Colton. DRAINAGE AREA, 872 mi<sup>2</sup>. PERIOD OF RECORD, October 1954 to March 1995, discontinued. REVISED RECORDS, WDR NY-86-1: Drainage area. GAGE, nonrecording gage read daily at 0800 hours. Datum of gage is sea level.

Dam completed January 1953 and controlled storage for which records are available began in October 1954. Usable capacity above elevation 1,332.0 ft is 5,114.9 mil ft<sup>3</sup>. Crest at spillway is at elevation 1,386.0 ft. Length of spillway is 830 ft. Area of water surface at crest elevation is 5.16 mi<sup>2</sup> (3,300 acres). The pond has a length of 6 mi and a perimeter of 25 mi. Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft, and 2 sluice gates, 10 ft x 10 ft. Records provided by Niagara Mohawk Power Corporation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 5,146 mil ft<sup>3</sup>, June 1, 5, 6, 1955, elevation, 1,386.1 ft; minimum observed, 8.64 mil ft<sup>3</sup>, Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft.

EXTREMES FOR CURRENT PERIOD.--Oct. 1994 to Mar. 1995: Maximum contents observed, 4,496 mil ft<sup>3</sup>, Nov. 21, elevation, 1,381.4 ft; minimum observed, 1,477 mil ft<sup>3</sup>, Mar. 8, elevation, 1,354.6 ft.

04278000 LAKE GEORGE AT ROGERS ROCK, NY (see station for daily mean gage heights).

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT (see station for daily mean gage heights).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY (see station for daily mean elevations).

## MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	Gage height (feet) *	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)	Elevation (feet) *	Contents (million ft <sup>3</sup> )	Change in contents (equivalent in ft <sup>3</sup> /s)
<u>04260990 Cranberry Lake</u>				<u>04266700 Carry Falls Reservoir</u>		
Sept. 30	15.2	2,022		1,363.5	2,350	
Oct. 31	15.3	2,048	+ 9.71	1,366.7	2,682	+124
Nov. 30	15.2	2,022	- 10.0	1,380.6	4,386	+657
Dec. 31	14.4	1,814	- 77.6	1,367.1	2,724	-621
CAL YR 1994	-	-	- 2.47	-	-	- 29.1
Jan. 31	14.6	1,866	+ 19.4	1,374.2	3,551	+309
Feb. 28	13.7	1,632	- 96.7	1,358.6	1,854	-701
Mar. 31	15.2	2,022	+146	1,371.3	3,199	+502
Apr. 30	16.0	2,240	+ 84.1	-	-	-
May 31	16.5	2,380	+ 52.3	-	-	-
June 30	16.0	2,240	- 54.0	-	-	-
July 31	16.8	2,470	+ 85.9	-	-	-
Aug. 31	15.5	2,100	-138	-	-	-
Sept. 30	15.3	2,048	- 20.1	-	-	-
WTR YR 1995	-	-	+ 0.82	-	-	-

\* Gage heights or elevations at 2400 hours, by interpolation.

## 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 partial-record stations are usually presented in two tables. The first is usually a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table. No discharge measurements were made at low-flow partial-record stations for the 1995 water year.

## Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which 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 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
Housatonic River basin								
Stony Brook near Dover Plains, NY (01199477)	Lat 41°42'38", long 73°37'18", Dutchess County, Hydrologic Unit 01100005, on town road, 100 ft upstream from mouth, and 2.9 mi southwest of Dover Plains. Drainage area is 1.93 mi <sup>2</sup> .	1976-95	12-25-94	1.21	75	4- 4-87	6.40	532
Hudson River basin								
Arbutus Pond Outlet near Newcomb, NY (01311992)	Lat 43°58'56", long 74°14'09", Essex County, Hydrologic Unit 02020001, on right bank at outlet of Arbutus Pond, 0.4 mi upstream from mouth at Fishing Brook, and 3.7 mi northwest of Newcomb. Drainage area is 1.22 mi <sup>2</sup> .	1991-92†, 1993-95	1-17-95	1.59	9.5	4-17-94	2.13	26
Hudson River near Newcomb, NY (01312000)	Lat 43°58'00", long 74°07'55", Essex County, Hydrologic Unit 02020001, on right bank 30 ft downstream from bridge on State Highway 28N, 0.5 mi downstream from outlet of Harris Lake, 2.0 mi east of Newcomb, and 4.0 mi upstream from Wolf Creek. Drainage area is 192 mi <sup>2</sup> .	1926-31, 1932-87†, 1988-95	1-17-95	6.14	2,750	1- 1-49	11.40	7,440
Schroon River at Riverbank, NY (01317000)	Lat 43°36'34", long 73°44'17", Warren County, Hydrologic Unit 02020001, on right bank 11.8 mi downstream from Schroon Lake, and 30 ft up- stream from highway bridge at Riverbank. Drainage area is 527 mi <sup>2</sup> .	1908-25, 1926-70†, 1987-95	3-18-95	4.83	2,020	3-21-36	112.18	12,100
Steele Brook at Shushan, NY (01329154)	Lat 43°05'35", long 73°19'38", Washington County, Hydrologic Unit 02020003, at bridge on county road, 1.1 mi upstream from mouth, and 0.8 mi east of Shushan. Drainage area is 2.85 mi <sup>2</sup> .	1979-95	3- 8-95	3.35	20	1-26-90 11-23-91	5.62 c6.11	118 -
Batten Kill at Battenville, NY (01329500)**	Lat 43°06'05", long 73°25'55", Washington County, Hydrologic Unit 02020003, on left bank 1.2 mi upstream from Trout Brook, and 1.0 mi southwest of Battenville. Drainage area is 394 mi <sup>2</sup> .	1923-68†, 1987-95	1-14-95 3- 9-95	68.04 5.51	- 2,850	11- 4-27	117.7	21,300

† Operated as a continuous-record gaging station.

f From floodmark.

c Result of culvert obstruction.

b Ice jam.

\*\* Also a NAWQA miscellaneous site.



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 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
Hudson River basin--Continued								
Saratoga Lake tributary near Bemis Heights, NY (01330880)	Lat 42°59'43", long 73°43'06", Saratoga County, Hydrologic Unit 02020003, at culvert on State Highway 423, 1.4 mi up- stream from mouth, and 4.6 mi northwest of Bemis Heights. Drainage area is 2.98 mi <sup>2</sup> .	1968-95	3- 8-95 3-15-95	b11.37 11.24	- 43	8- 7-86	f19.94	448
Vly Brook near Morehouseville, NY (01342797)	Lat 43°23'43", long 74°50'00", Hamilton County, Hydrologic Unit 02020004, at culvert on State Highway 8, 0.6 mi up- stream from mouth, and 3.1 mi west of Morehouseville. Drainage area is 3.28 mi <sup>2</sup> .	1993-95	12- 5-94 3-16-95	8.82 b9.52	71 -	1- 5-93 6-30-94	b9.63 9.34	- 128
West Canada Creek at Nobleboro, NY (01342800)	Lat 43°23'47", long 74°51'35", Herkimer County, Hydrologic Unit 02020004, at bridge on State Highway 8, 2.9 mi northeast of Wilmurt, in village of Nobleboro. Drainage area is 193 mi <sup>2</sup> .	1958-66, 1967-68†, 1969-76, 1987-95	12- 5-94	7.19	5,530	12-31-57 12-29-84	9.99 f13.93	11,000 q20,000
North Creek near Ephratah, NY (01348420)	Lat 43°00'28", long 74°33'54", Fulton County, Hydrologic Unit 02020004, at culvert on town road, 0.4 mi upstream from mouth, and 1.2 mi northwest of Ephratah. Drainage area is 6.52 mi <sup>2</sup> .	1975-95	4-13-95	4.23	133	6-29-82	8.95	540
Normans Kill at Albany, NY (01359528)	Lat 42°38'00", long 73°48'22", Albany County, Hydrologic Unit 02020006, on left bank 0.35 mi upstream from bridge on Normans Kill Road at Normansville, and 0.40 mi upstream from Delaware Avenue bridge in Albany. Drainage area is 168 mi <sup>2</sup> .	1980-83†, 1992-95	3- 8-95	5.71	1,400	3-22-80	13.41	11,600
Kinderhook Creek at Rossman, NY (01361000)**	Lat 42°19'50", long 73°44'40", Columbia County, Hydrologic Unit 02020006, on right bank 1.0 mi upstream from Claverack Creek, 2.25 mi downstream from Stuyvesant Falls, at Rossman. Drainage area is 329 mi <sup>2</sup> .	1906-14, 1929-68†, 1988-95	3- 8-95	7.58	5,910	12-31-48	f19.8	29,800
Catskill Creek at Oak Hill, NY (01361500)	Lat 42°24'16", long 74°09'07", Greene County, Hydrologic Unit 02020006, on right bank 250 ft downstream from small tributary, and 150 ft down- stream from highway bridge in southernmost part of Oak Hill. Drainage area is 98.0 mi <sup>2</sup> .	1929-77†, 1987-95	12-24-94	7.63	2,680	4- 4-87	f16.6	15,400
Roeliff Jansen Kill near Hillsdale, NY (01362100)	Lat 42°09'14", long 73°31'14", Columbia County, Hydrologic Unit 02020006, at bridge on county highway off State Highway 22, 1.8 mi south of Hillsdale. Drainage area is 27.5 mi <sup>2</sup> .	1958-60†, 1961-95	3- 9-95	4.10	724	6-30-73	9.78	3,280
Bushnellville Creek at Shandaken, NY (01362197)	Lat 42°07'25", long 74°24'02", Ulster County, Hydrologic Unit 02020006, on right bank along State Highway 42, 0.4 mi upstream from Esopus Creek, and 0.6 mi northwest of Shandaken. Drainage area is 11.4 mi <sup>2</sup> .	1972-87, 1994-95	3- 8-95	6.75	132	10-15-55 4- 4-87	f12.40 10.66	q1,830 1,000

b Ice jam.

f From floodmark.

† Operated as a continuous-record gaging station.

q Peak outside period of record.

\*\* Also a NAWQA miscellaneous site.

## 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 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
Hudson River basin--Continued								
Rutgers Creek at Gardnerville, NY (01368500)	Lat 41°20'40", long 74°29'10", Orange County, Hydrologic Unit 02020007, on right bank 8 mi southwest of Middletown, 2.2 mi upstream from mouth at highway bridge in Gardnerville. Drainage area is 59.7 mi <sup>2</sup> .	1944-48, 1949-68†, 1987-90, 1994-95	3- 9-95	5.91	1,590	8-19-55	f12.38	8,490
Fishkill Creek at Hopewell Junction, NY (01372800)	Lat 41°34'22", long 73°48'25", Dutchess County, Hydrologic Unit 02020008, on right bank 400 ft upstream from bridge on State Highway 376, 500 ft upstream from small tributary, 0.6 mi south of State Highway 82, at Hopewell Junction. Drainage area is 57.3 mi <sup>2</sup> .	1958-75†, 1987-95	12-25-94	4.84	370	12-21-73 4- 5-87	9.19 f9.62	2,770 2,710
Peekskill Hollow Creek at Tompkins Corners, NY (01374250)	Lat 41°23'18", long 73°48'47", Putnam County, Hydrologic Unit 02030101, at bridge on Bryant Pond Road, 1.1 mi downstream from Wiccopee Brook, and 0.9 mi southwest of Tompkins Corners. Drainage area is 14.9 mi <sup>2</sup> .	1975-95	12-25-94	2.29	164	8- 7-90	4.77	1,120
Passaic River basin								
Torne Brook at Ramapo, NY (01387410)	Lat 41°08'34", long 74°09'44", Rockland County, Hydrologic Unit 02030103, 0.3 mi up- stream from mouth, and 0.5 mi east of Ramapo. Drainage area is 2.60 mi <sup>2</sup> .	1960-95	3- 9-95	5.57	196	11- 8-77	11.02	1,520
Delaware River basin								
Callicoon Creek at Callicoon, NY (01427500)	Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank 0.9 mi upstream from mouth, 1.0 mi southwest of Hortonville, and 0.7 mi southeast of Callicoon. Drainage area is 110 mi <sup>2</sup> .	1941-82†, 1983-95	3- 8-95	4.11	1,730	8-17-47	9.68	16,000
East Branch Neversink River at Denning, NY (01434010)	Lat 41°57'30", long 74°28'26", Ulster County, Hydrologic Unit 02040104, on downstream side of bridge on private road at Strauss Estate, 0.9 mi upstream from Erts Brook, 0.4 mi downstream from Riley Brook, and 1.0 mi northeast of Denning. Drainage area is 13.3 mi <sup>2</sup> .	1984-95	3- 8-95	3.82	1,410	4- 4-87	f6.39	4,460
Streams tributary to Lake Ontario								
North Branch Grindstone Creek near Altmar, NY (042490673)	Lat 43°29'31", long 76°05'41", Oswego County, Hydrologic Unit 04140102, at culvert on Hong Kong Road, 4.1 mi up- stream from confluence with South Branch Grindstone Creek, and 4.1 mi southwest of Altmar. Drainage area is 11.2 mi <sup>2</sup> .	1976-95	11- 6-94	6.48	124	3-13-77	15.03	482
North Branch Salmon River at Redfield, NY (04249200)	Lat 43°32'32", long 75°48'51", Oswego County, Hydrologic Unit 04140102, at bridge on Harvester Mill Road, 0.7 mi northeast of Redfield. Drainage area is 82.5 mi <sup>2</sup> .	1962-64, 1987-95	1-15-95	15.78	4,070	12-29-84 4-11-93	f19.15 16.66	q13,600 5,830

f From floodmark.

† Operated as a continuous-record gaging station.

q Peak outside period of record.

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 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
Streams tributary to Lake Ontario--Continued								
Moose River at McKeever, NY (04254500)	Lat 43°36'36", long 75°06'35", Herkimer County, Hydrologic Unit 04150101, on left bank 1.9 mi downstream from con- fluence of Middle and South Branches, and 0.5 mi west of McKeever. Drainage area is 363 mi <sup>2</sup> .	1901-22, 1923-70†, 1987-95	1-16-95 3-17-95	10.11 b10.65	7,640 -	6- 3-47 12-29-84	f17.45 f16.00	d18,700 q15,800
Tributary to Mill Creek Tributary near Lowville, NY (04256040)	Lat 43°45'43", long 75°31'13", Lewis County, Hydrologic Unit 04150101, at culvert on West Road, 0.85 mi above mouth, and 2.0 mi southwest of Lowville. Drainage area is 1.66 mi <sup>2</sup> .	1976-86, 1993-95	3- 8-95	10.66	116	3- 5-79	13.41	312
Deer River at Deer River, NY (04258700)	Lat 43°55'49", long 75°35'27", Lewis County, Hydrologic Unit 04150101, on left bank 2.0 mi upstream from mouth and 350 ft upstream from bridge on State Highway 26 at Deer River. Drainage area is 94.8 mi <sup>2</sup> .	1957-68†, 1969-95	1-15-95	5.26	5,280	3- 6-79 12-29-84	b11.10 f10.63	- 17,200
St. Lawrence River basin								
Elm Creek near Hermon, NY (04265100)	Lat 44°26'15", long 75°12'49", St. Lawrence County, Hydro- logic Unit 04150304, at bridge 6.8 mi upstream from conflu- ence with Tanner Creek, and 2.7 mi southeast of Hermon. Drainage area is 32.6 mi <sup>2</sup> .	1959-68†, 1969-95	1-16-95	6.45	497	4- 6-74	9.07	e1,270
Plum Brook near Grantville, NY (04268200)	Lat 44°52'46", long 74°54'54", St. Lawrence County, Hydro- logic Unit 04150305, on right bank 430 ft upstream from bridge at junction of Brouse and Grant Roads, 0.7 mi down- stream from unnamed tributary, 1.0 mi upstream from mouth, 2.3 mi southwest of Massena city limits, and 1.4 mi north of Grantville. Drainage area is 43.9 mi <sup>2</sup> .	1959-63†, 1964-95	1-16-95	<4.58	<403	3-30-63 3-11-92	6.94 b7.86	1,920 -
Duane Stream southeast of Duane Center, NY (04269856)	Lat 44°39'12", long 74°13'42", Franklin County, Hydrologic Unit 04150307, on left bank at culvert on County Highway 26, and 1.8 mi southeast of Duane Center. Drainage area is 1.80 mi <sup>2</sup> .	1995	8- 6-95	20.35	33	8- 6-95	20.35	33
Trout River at Trout River, NY (04270700)	Lat 44°59'23", long 74°17'56", Franklin County, Hydrologic Unit 04150307, on right bank at downstream side of bridge on county highway, 0.5 mi upstream from international boundary, 1.5 mi downstream from unnamed tributary, 3.3 mi downstream from Little Trout River, and 0.2 mi east of State High- way 30, at Trout River. Drainage area is 107 mi <sup>2</sup> .	1960-66†, 1967-95	1-16-95 3-15-95	b5.65 b6.45	e2,100 -	4- 5-74 3-10-92	9.10 b10.43	6,490 -
West Branch Ausable River near Lake Placid, NY (04274000)	Lat 44°18'40", long 73°55'00", Essex County, Hydrologic Unit 02010004, on right bank 4 mi downstream from Lake Placid outlet, 150 ft upstream from Monument Falls, and 4 mi northeast of Lake Placid. Drainage area is 116 mi <sup>2</sup> .	1917, 1920-27, 1928-68†, 1983-95	1-16-95	7.65	3,310	9-22-38	12.20	10,800

f From floodmark.  
d Dam failure.  
† Operated as a continuous-record gaging station.  
b Ice jam.  
q Peak outside period of record.  
e Estimated.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1995

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Housatonic River basin						
01197930 Green River	Housatonic River	Lat 42°16'07", long 73°28'16", Columbia County, Hydrologic Unit 01100005, at bridge on dirt road, 0.4 mi north of Green River.	11.7	1963-65, 1994	10- 6-94 6- 7-95 6-20-95 8- 3-95 8-10-95 8-23-95 9- 6-95	*6.74 *6.27 *3.26 .97 *1.66 *.83 *.86
01197935 Green River	Housatonic River	Lat 42°13'59", long 73°27'17", Columbia County, Hydrologic Unit 01100005, 200 ft downstream of private wooden bridge on dirt road off State Highway 71, 50 ft west of New York-Massachusetts State line, 2.3 mi southeast of Green River.	20.5	1994	10- 6-94 6- 7-95 6-20-95 7- 6-95 8- 3-95 8-10-95 8-23-95 9- 6-95	*13.6 *11.9 *6.16 *3.31 1.55 *2.09 *1.10 *.82
Hudson River basin						
01330800 Bog Meadow Brook	Kayaderosseras Creek	Lat 43°06'18", long 73°43'36", Saratoga County, Hydrologic Unit 02020003, at culvert on County Highway 102, 1.6 mi northwest of Hickeys Corners, 2.4 mi northeast of Saratoga Springs, and 3.1 mi upstream from Lake Lonely.	3.75	1962, 1965, 1992-94	11-29-94 3-16-95 9-15-95	7.62 *10.4 *4.59
01330812 Bog Meadow Brook	Kayaderosseras Creek	Lat 43°05'24", long 73°43'33", Saratoga County, Hydrologic Unit 02020003, at bridge on town road, 1.1 mi west of Hickeys Corners, and 1.5 mi east of Saratoga Springs.	5.52	1992-94	11-29-94 3-16-95 9-15-95	10.3 *15.5 *3.10
0134907130 Canajoharie Creek	Mohawk River	Lat 42°51'13", long 74°44'00", Otsego County, Hydrologic Unit 02020004, at culvert on County Road 32A, 0.7 mi southeast of Salt Springville.	3.66	1994	6-20-95 6-22-95	*1.44 *1.38
0134907140 Salt Spring Brook	Canajoharie Creek	Lat 42°51'05", long 74°43'45", Otsego County, Hydrologic Unit 02020004, at culvert on County Road 32A, 1.2 mi southeast of Salt Springville.	1.72	1994	6-20-95	*0.060
0134907160 Canajoharie Creek	Mohawk River	Lat 42°50'30", long 74°42'22", Otsego County, Hydrologic Unit 02020004, at culvert on Mill Road, 1.2 mi southwest of Sprout Brook.	10.2	1994	6-20-95 8-22-95	*1.83 *.70
0134907170 Van Deusen Brook	Canajoharie Creek	Lat 42°49'59", long 74°41'43", Otsego County, Hydrologic Unit 02020004, at culvert on Barringer Road, 1.3 mi southwest of Sprout Brook.	3.09	1994	6-21-95	*0.29
0134907173 Van Deusen Brook	Canajoharie Creek	Lat 42°50'15", long 74°41'14", Otsego County, Hydrologic Unit 02020004, at culvert on Keller Road, 0.9 mi south of Sprout Brook.	4.86	1994	6-21-95	*0.38
0134907270 Canajoharie Creek	Mohawk River	Lat 42°50'56", long 74°40'26", Montgomery County, Hydrologic Unit 02020004, at culvert on County Road 81, 0.6 mi east of Sprout Brook.	22.7	1994	5-11-95 5-16-95 5-23-95 5-30-95 6- 3-95 6- 7-95 6-12-95 6-19-95 6-27-95 7-18-95	10.1 7.27 *5.20 8.65 15.4 5.27 7.82 *2.74 *2.22 1.74
01349073 Canajoharie Creek	Mohawk River	Lat 42°50'44", long 74°39'06", Montgomery County, Hydrologic Unit 02020004, at culvert on town road, 0.2 mi south of State Highway 163, and 1.7 mi southeast of Sprout Brook.	28.7	1982, 1994	6-21-95	*2.64

\* Base flow.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1995--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Hudson River basin--Continued						
01349075 Brimstone Creek	Canajoharie Creek	Lat 42°48'00", long 74°37'01", Schoharie County, Hydrologic Unit 02020004, at bridge on State Highway 10, 0.1 mi north of Sharon Springs, and 0.8 mi north of U.S. Highway 20.	2.44	1976-77, 1980-81, 1994	6-20-95	*1.28
0134909502 Brimstone Creek	Canajoharie Creek	Lat 42°50'25", long 74°36'36", Montgomery County, Hydrologic Unit 02020004, at culvert on County Road 88, 0.4 mi northwest of Ames.	14.7	1994	6-20-95 8-22-95	*1.90 *.63
01349100 Canajoharie Creek	Mohawk River	Lat 42°50'48", long 74°36'12", Montgomery County, Hydrologic Unit 02020004, at bridge on State High- way 10, 0.3 mi north of town line of Ames.	49.2	1994	6-21-95 8-22-95	*4.02 *.55
01349108 Canajoharie Creek Tributary	Canajoharie Creek	Lat 42°50'41", long 74°34'47", Montgomery County, Hydrologic Unit 02020004, at culvert on East Sharron Road, 0.5 mi east of Waterville.	1.55	1994	6-21-95	* < 0.01
01349240 Flat Creek	Mohawk River	Lat 42°51'09", long 74°31'27", Montgomery County, Hydrologic Unit 02020004, at bridge on Sprakers Road, 1.3 mi northwest of Flat Creek, and 4.0 mi northeast of Ames.	46.1	1993-94	6-20-95	*0.96
01359060 Horse Heaven Brook	Wynants Kill	Lat 42°38'20", long 73°32'17", Rensselaer County, Hydrologic Unit 02020006, 200 ft downstream from unnamed tributary, 0.4 mi upstream from mouth, and 100 ft downstream from bridge on town road in Sand Lake.	1.40	1973-74	7-23-95 8- 2-95 8-15-95 8-25-95 8-30-95	*0.029 *.083 *.14 *.031 *.020
01359063 Wynants Kill	Hudson River	Lat 42°38'02", long 73°32'58", Rensselaer County, Hydrologic Unit 02020006, in back of American Legion Hall south of Route 43, 0.2 mi east of Averill Park.			7-22-95 7-23-95 8- 2-95 8-11-95 8-15-95 8-25-95 8-30-95 9- 7-95	*0.34 *.34 *.45 *1.15 *.76 *.34 *.30 *.34
01359074 Wynants Kill	Hudson River	Lat 42°37'59", long 73°34'28", Rensselaer County, Hydrologic Unit 02020006, just downstream from tributary flowing west, 0.1 mi east of Springer Road, and 1.0 mi west of Averill Park.	15.6	1962	7-22-95 7-23-95 8- 2-95 8-11-95 8-15-95 8-25-95 8-30-95 9- 8-95	*0.39 *.40 *.50 *1.74 *1.15 *.39 *.31 *.35
01359078 Wynants Kill Tributary No. 3	Wynants Kill	Lat 42°38'40", long 73°36'08", Rensselaer County, Hydrologic Unit 02020006, at bridge on town road, 0.1 mi upstream from mouth, at West Sand Lake.	1.18	1962, 1967	8- 1-95	*0.46
01359080 Wynants Kill	Hudson River	Lat 42°38'48", long 73°36'33", Rensselaer County, Hydrologic Unit 02020006, at bridge at Brookside Park Road, at West Sand Lake.	18.7	1962, 1965, 1967	7-22-95 7-23-95 8- 1-95 8- 2-95 (0630) 8- 2-95 (1200) 8-11-95 8-15-95 8-25-95 8-31-95 9- 8-95	*0.98 *2.02 *1.98 *2.07 *.83 *4.10 *3.06 *1.86 *1.72 *1.64
01359750 Moordener Kill	Hudson River	Lat 42°32'02", long 73°44'15", Rensselaer County, Hydrologic Unit 02020006, on left bank 800 ft down- stream from bridge on State High- way 150, 0.2 mi east of village of Castleton-on-Hudson, 0.5 mi down- stream from unnamed tributary, and 1.2 mi upstream from mouth.	32.6	1958-94†	7-22-95 7-23-95 8-25-95 9- 8-95	*3.64 *3.52 *2.79 *2.67

\* Base flow.

† Operated as a continuous-record gaging station.



## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1995--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Hudson River basin--Continued						
01376452# Saw Mill River	Hudson River	Lat 40°58'58", long 73°51'57", Westchester County, Hydrologic Unit 02030101, at bridge on Farragut Avenue at Mount Hope.		1994	10-14-94	*6.54
					11-17-94	*7.49
					12-15-94	*30.3
					1-27-95	*40.7
					2- 9-95	*19.5
					3-15-95	33.5
Delaware River basin						
01421200 Cadosia Creek	East Branch Delaware River	Lat 41°58'03", long 75°15'51", Delaware County, Hydrologic Unit 02040102, at bridge on State Highway 236, 0.3 mi upstream from mouth, at Cadosia.	17.9	1949-50, 1955, 1957-71, 1973-94	5-26-95	18.3
					6-16-95	6.10
					7- 5-95	*2.62
					8-15-95	*1.67
					8-29-95	*.89
01424997 Cannonsville Reservoir	Delaware River	Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, on West Branch Delaware River, at outlet of Cannonsville Dam, 1.8 mi southeast of Stilesville.	454	1992-94	11- 8-94	*34.1
01426000 Oguaga Creek	West Branch Delaware River	Lat 42°03'31", long 75°25'42", Broome County, Hydrologic Unit 02040101, on left bank, 150 ft down- stream from Bone Creek, 0.3 mi up- stream from mouth, 0.1 mi upstream from Mill Street bridge, in Deposit.	67.6	1941-73†, 1975-76, 1979-94	4-20-95	124
					5-26-95	82.2
					5-31-95	51.8
					7- 5-95	*7.52
					8-15-95	*3.32
01428000 Tenmile River	Delaware River	Lat 41°33'51", long 75°00'56", Sullivan County, Hydrologic Unit 02040101, on left bank, 0.5 mi downstream from East Branch Tenmile River, 0.8 mi upstream from mouth, and 0.6 mi northeast of Tusten.	45.6	1946-73†, 1978-94	5- 3-95	43.8
					7- 6-95	*5.92
					8-16-95	7.50
					8-30-95	*2.37
01434070 South Shelter Brook	Hemlock Brook	Lat 41°58'20", long 74°30'10", Ulster County, Hydrologic Unit 02040104, 0.35 mi upstream from mouth, 1.1 mi upstream from mouth of Hemlock Brook, and 1.1 mi southwest of Frost Valley.		1992-94	10- 5-94	*0.26
					11- 2-94	.16
					11-30-94	*.67
					12-28-94	*.48
					1-23-95	.76
					3-22-95	.54
					4-19-95	.70
0143407250 North Shelter Brook	South Shelter Brook	Lat 41°58'23", long 74°30'05", Ulster County, Hydrologic Unit 02040104, 0.5 mi upstream from mouth, and 1.0 mi southeast of Frost Valley.		1992-94	10- 5-94	*0.25
					11- 2-94	.24
					11-30-94	*.76
					12-28-94	*.52
					1-23-95	.88
					2-21-95	*.21
					3-22-95	.53
					4-19-95	.72
					9- 6-95	*.045
					9-19-95	.040
0143407405 North Shelter Brook	South Shelter Brook	Lat 41°58'19", long 74°30'34", Ulster County, Hydrologic Unit 02040104, at mouth, 0.82 mi up- stream from mouth of Hemlock Brook, and 1.0 mi south of Frost Valley.		1993-94	10- 5-94	*0.40
					11- 2-94	.41
					11-30-94	*1.38
					12-28-94	*.98
					1-23-95	1.32
					2-21-95	*.26
					3-22-95	.99
					4-19-95	1.21
					5-17-95	.31
					6-14-95	.30
					7-12-95	.21
01434110 Pete Brook	West Branch Neversink River	Lat 41°57'58", long 74°31'10", Ulster County, Hydrologic Unit 02040104, 0.71 mi upstream from mouth of West Branch Neversink River, and 1.5 mi southwest of Frost Valley.		1993-94	10- 5-94	*0.15
					10-19-94	*.028
					11-16-94	*.056
					11-30-94	*.76
					12-12-94	.24
					12-27-94	*.44
					1-10-95	*.18
1-23-95	.46					
3- 8-95	.40					
3-22-95	.34					

# Also published as a continuous-record station.

\* Base flow.

† Operated as a continuous-record gaging station.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1995--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Delaware River basin--Continued						
01434110 Pete Brook (continued)	West Branch Neversink River	(see previous page)			4- 4-95 4-20-95 5- 3-95 5-17-95 5-31-95 6-27-95 7-12-95 7-26-95 8-23-95	0.16 .26 *.13 .026 .026 .027 .015 .014 *.044
01434112 Pete Brook	West Branch Neversink River	Lat 41°58'10", long 74°31'17", Ulster County, Hydrologic Unit 02040104, 0.45 mi upstream from mouth of West Branch Neversink River, and 1.3 mi southwest of Frost Valley.		1992-94	10- 5-94 10-19-94 11-16-94 11-30-94 12-12-94 12-27-94 1-23-95 3- 8-95 3-15-95 3-22-95 4- 4-95 4-20-95 5- 3-95 5-17-95 5-31-95 6-27-95 7-12-95 7-26-95 8- 9-95 8-23-95 9- 6-95 9-19-95	*0.46 *.22 *.18 *1.16 .61 *.89 1.28 1.25 *2.35 .67 .44 .57 *.31 .18 .19 .10 .10 2.24 *.052 *.044 *.018 .033
01438000 Neversink River	Delaware River	Lat 41°21'40", long 74°41'07", Orange County, Hydrologic Unit 02040104, at Tristates Bridge on East Main Street (U.S. Highway 6), 0.1 mi upstream from Clove Brook, and 0.6 mi upstream from mouth, in Port Jervis.	336	1902-03, 1943, 1945, 1960-62, 1965-94	10-21-94 11-16-94 5- 4-95 6-13-95 7-12-95 7-26-95 8-10-95 8-28-95 9-28-95	232 *219 291 220 178 211 *129 *82.7 109
Streams tributary to Lake Ontario						
04257000 Beaver River	Black River	Lat 43°53'56", long 75°03'08", Herkimer County, Hydrologic Unit 04150101, at logging bridge about 0.2 mi downstream from Stillwater Dam, 7.5 mi west of Beaver River Post Office, and 2.5 mi upstream from Moshier Creek.	171	1909-94	10-12-94 11-16-94 1- 4-95 2-14-95 3-29-95 5-10-95 6-20-95 8- 1-95 9- 5-95	520 *472 322 312 *56.8 *171 *262 *215 *429

\* Base flow.

## ALBANY COUNTY

424114073495402. Local number, A 636.

LOCATION.--Lat 42°41'14", long 73°49'54", Hydrologic Unit 02020006, Fuller Road, Albany.

Owner: State University of New York at Albany.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 20.9 ft in July 1995, filled in from original depth of 24 ft, cased to 22 ft, 2-in. jet point (60-gauze screen 22 ft to 24 ft). Well gravel packed from original depth of 26 ft.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 260 ft above sea level, from topographic map.

Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Well was drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft north, which has a period of record from November 1965 to May 1974 (unpublished).

PERIOD OF RECORD.--May 1974 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft below land-surface datum, Apr. 12, 13, 1978, June 5, 6-7, 8, 1984; lowest, 13.13 ft below land-surface datum, Oct. 29, Nov. 25, 26-Dec. 17, 18, 20, 21-22, 23, 1981.

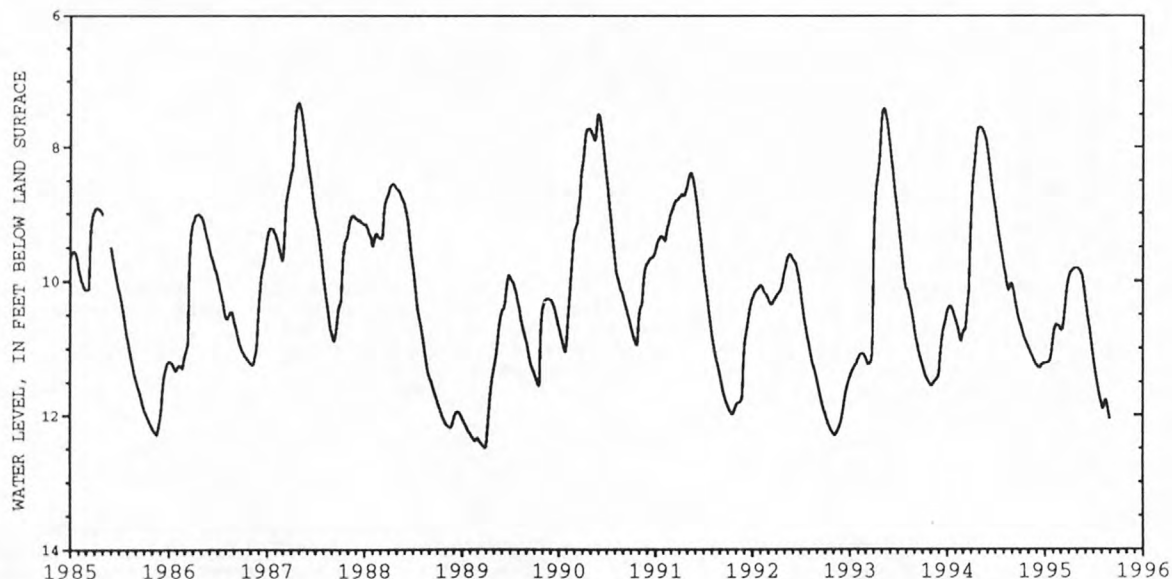
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.62	10.99	11.23	11.22	10.83	10.72	9.94	9.81	10.25	11.14	11.84	---
2	10.63	10.99	11.24	11.22	10.80	10.73	9.93	9.81	10.29	11.17	11.86	---
3	10.64	11.00	11.25	11.22	10.78	10.73	9.92	9.81	10.32	11.19	11.87	---
4	10.66	11.01	11.25	11.22	10.75	10.73	9.90	9.82	10.35	11.22	11.89	---
5	10.67	11.02	11.26	11.21	10.73	10.73	9.89	9.82	10.38	11.25	11.90	---
6	10.69	11.03	11.27	11.21	10.71	10.72	9.89	9.82	10.41	11.28	11.90	---
7	10.70	11.04	11.27	11.21	10.70	10.72	9.88	9.82	10.44	11.31	11.89	---
8	10.72	11.05	11.27	11.21	10.69	10.71	9.87	9.83	10.47	11.34	11.88	---
9	10.73	11.06	11.28	11.21	10.68	10.69	9.86	9.83	10.50	11.36	11.86	---
10	10.75	11.07	11.28	11.21	10.67	10.67	9.86	9.84	10.53	11.39	11.85	---
11	10.76	11.08	11.27	11.21	10.66	10.64	9.86	9.84	10.55	11.41	11.83	---
12	10.78	11.09	11.27	11.21	10.65	10.61	9.85	9.85	10.57	11.43	11.81	---
13	10.79	11.10	11.28	11.21	10.65	10.57	9.85	9.85	10.60	11.46	11.79	---
14	10.80	11.11	11.28	11.21	10.65	10.54	9.84	9.86	10.62	11.48	11.78	---
15	10.82	11.11	11.27	11.20	10.65	10.50	9.83	9.87	10.65	11.50	11.78	---
16	10.83	11.12	11.27	11.20	10.65	10.45	9.83	9.88	10.67	11.53	11.77	---
17	10.84	11.13	11.26	11.19	10.65	10.41	9.83	9.89	10.70	11.55	11.77	---
18	10.85	11.14	11.25	11.19	10.66	10.37	9.83	9.90	10.73	11.57	11.78	---
19	10.86	11.15	11.24	11.18	10.66	10.33	9.82	9.91	10.76	11.59	11.79	---
20	10.87	11.16	11.24	11.17	10.67	10.28	9.82	9.92	10.79	11.61	11.81	---
21	10.88	11.17	11.24	11.15	10.67	10.24	9.82	9.94	10.82	11.64	11.83	---
22	10.89	11.18	11.24	11.14	10.67	10.20	9.81	9.96	10.86	11.66	11.86	---
23	10.90	11.19	11.23	11.12	10.68	10.16	9.81	9.99	10.89	11.68	11.88	---
24	10.91	11.20	11.23	11.10	10.68	10.12	9.81	10.01	10.92	11.70	11.90	---
25	10.92	11.20	11.22	11.08	10.69	10.09	9.81	10.04	10.96	11.73	11.93	---
26	10.93	11.21	11.22	11.05	10.70	10.07	9.81	10.07	10.99	11.75	11.95	---
27	10.94	11.23	11.22	11.01	10.71	10.04	9.81	10.10	11.03	11.76	11.97	---
28	10.95	11.23	11.22	10.98	10.72	10.02	9.81	10.13	11.06	11.78	11.99	---
29	10.96	11.24	11.22	10.94	---	10.00	9.81	10.16	11.08	11.79	12.01	---
30	10.97	11.23	11.22	10.91	---	9.98	9.81	10.19	11.11	11.80	12.03	---
31	10.98	---	11.22	10.87	---	9.96	---	10.22	---	11.82	12.05	---

OCT. 1994 to AUG. 1995

HIGHEST 9.81 Apr. 22, 23-30, May 1-3, 4, 1995

LOWEST 12.06 Aug. 31, 1995



## GROUND-WATER LEVELS

377

## ALBANY COUNTY

424044073535101. Local number, A 637.

LOCATION.--Lat 42°40'44", long 73°53'51", Hydrologic Unit 02020006, Dr. Shaw Road, Guilderland.

Owner: Whitfield Development Corporation.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 199 ft, cased to 193 ft, 30-slot plastic screen 193 ft to 198 ft.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 220 ft above sea level, from topographic map.

Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Water level affected by pumping from municipal well field 0.5 mi north-northwest.

PERIOD OF RECORD.--September 1976 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 104.71 ft below land-surface datum, May 17, 1995; lowest recorded, 132.44 ft below land-surface datum, Mar. 29, 1990.

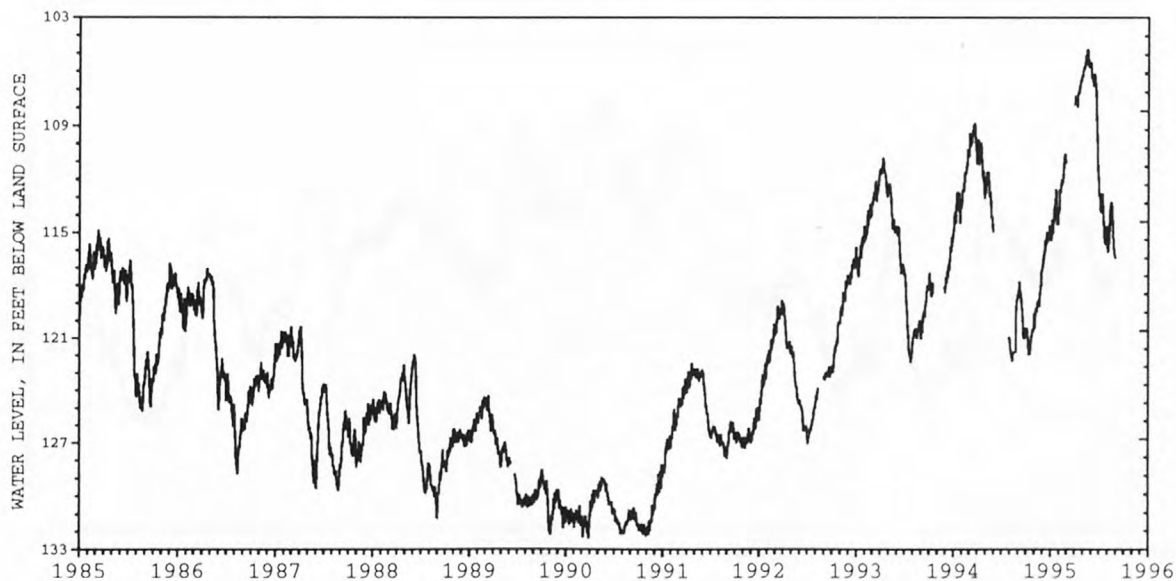
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120.55	119.62	117.19	115.03	113.59	---	107.79	106.10	105.75	112.63	115.49	---
2	120.48	119.98	116.88	115.09	113.65	---	107.84	105.97	106.36	112.94	115.87	---
3	120.48	120.44	116.98	115.46	113.75	---	107.79	105.94	106.34	112.85	116.12	---
4	120.44	120.16	116.95	115.32	112.86	---	107.38	105.99	106.38	112.86	116.05	---
5	120.47	119.86	116.47	115.26	112.57	---	107.77	105.79	106.30	113.20	115.90	---
6	120.68	119.47	116.41	114.90	112.75	---	107.78	105.71	106.17	113.45	115.67	---
7	121.00	119.71	116.27	114.27	112.77	---	107.82	105.78	106.22	113.84	115.58	---
8	121.07	119.40	116.52	114.68	112.66	---	107.79	105.81	106.55	113.87	115.26	---
9	120.96	119.30	116.28	114.86	112.50	---	107.56	105.75	106.83	113.64	114.74	---
10	121.25	119.47	115.97	115.03	112.28	---	107.95	105.51	106.65	113.32	114.30	---
11	121.68	119.52	115.49	114.91	112.02	---	107.95	105.25	106.37	113.06	113.93	---
12	121.97	119.26	116.01	114.34	112.22	---	107.58	105.17	106.19	113.03	113.67	---
13	121.93	119.02	115.90	114.15	112.30	---	107.26	105.32	106.15	112.90	113.58	---
14	121.82	118.98	115.73	114.06	112.26	---	107.21	105.30	106.16	112.84	113.46	---
15	121.89	118.90	115.58	113.63	112.04	---	107.16	105.07	106.33	113.07	113.40	---
16	121.82	118.97	115.69	113.47	111.72	---	107.13	105.06	106.49	113.67	113.32	---
17	121.69	118.99	115.35	113.81	111.95	---	107.20	104.85	106.68	114.16	113.30	---
18	121.57	118.89	114.98	113.95	111.87	---	107.12	104.76	106.82	114.33	113.40	---
19	121.34	118.82	115.01	113.63	111.46	---	106.76	104.80	106.96	114.61	113.75	---
20	121.22	119.21	115.35	112.87	111.03	---	106.92	104.91	107.40	114.97	114.10	---
21	121.09	118.98	115.47	112.57	110.73	---	106.73	105.04	108.11	115.28	114.36	---
22	120.95	118.62	115.50	112.84	111.02	---	106.54	105.62	108.54	115.48	114.92	---
23	120.81	118.44	115.26	113.34	110.82	---	106.61	105.75	108.97	115.51	115.32	---
24	120.78	118.41	115.04	113.95	110.57	---	106.42	105.57	109.41	115.68	115.37	---
25	120.59	118.01	115.19	114.53	110.87	---	106.41	105.65	110.02	115.54	115.81	---
26	120.55	118.12	115.39	114.56	111.11	---	106.54	105.63	110.83	115.24	115.96	---
27	120.54	118.19	115.15	114.40	110.94	---	106.40	105.66	111.49	115.09	116.14	---
28	120.69	117.13	114.59	114.35	---	---	106.24	105.78	111.72	114.86	116.26	---
29	120.56	117.15	114.73	114.55	---	---	106.29	105.56	111.89	114.65	116.19	---
30	120.47	117.15	115.02	114.27	---	---	106.25	105.48	112.18	114.96	116.40	---
31	120.30	---	115.06	113.91	---	---	---	105.53	---	115.30	116.45	---

OCT. 1994 to AUG. 1995

HIGHEST RECORDED 104.71 May 17, 1995

LOWEST 122.04 Oct. 12, 1994



## DELAWARE COUNTY

420748075043101. Local number, D 492.

LOCATION.--Lat 42°07'48", long 75°04'31", Hydrologic Unit 02040102, near Walton.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in shale and sandstone of Devonian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 180 ft in August 1994, filled in from original depth of 199 ft, cased to 30 ft, open hole.

INSTRUMENTATION.--Weekly tape measurement by observer.

DATUM.--Elevation of land-surface datum is 2,180 ft above sea level, from topographic map.

Measuring point: Top of casing, 0.75 ft above land-surface datum.

REMARKS.--Water levels subject to rapid response from heavy rains or snowmelt. Pump installed in well in spring 1986 for summer campground use. Water levels may be affected by recent pumping.

PERIOD OF RECORD.--September 1977 to August 1983, October 1984 to August 1995 (discontinued). Records prior to water year 1982 are unpublished and unreliable, and should not be used.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.2 ft below land-surface datum, Mar. 31, 1986; lowest measured, 180 ft below land-surface datum, Aug. 20, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1994	122	JAN 09, 1995	109	APR 04, 1995	109	JUN 26, 1995	129
NOV 07	134	18	104	MAY 03	112 Z	JUL 02	124
14	129	23	99	09	119	11	159
21	119	FEB 21	134	16	119	18	161
28	124	MAR 01	129	23	124	25	149
DEC 05	119	06	119	30	144	AUG 01	149
12	114	14	109	JUN 05	119	08	154
27	109	22	99	13	124	15	149
JAN 03, 1995	109	28	109	19	125	26	144

Z Measured by USGS personnel.



## DUTCHESS COUNTY

414737073563301. Local number, Du 321.

LOCATION.--Lat 41°47'37", long 73°56'33", Hydrologic Unit 02020008, near Hyde Park.

Owner: U.S. National Park Service.

AQUIFER.--Confined aquifer in shale of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 127 ft, cased to unknown depth, open hole.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 170 ft above sea level, from topographic map.

Measuring point: Top of extended casing, 3.10 ft above land-surface datum.

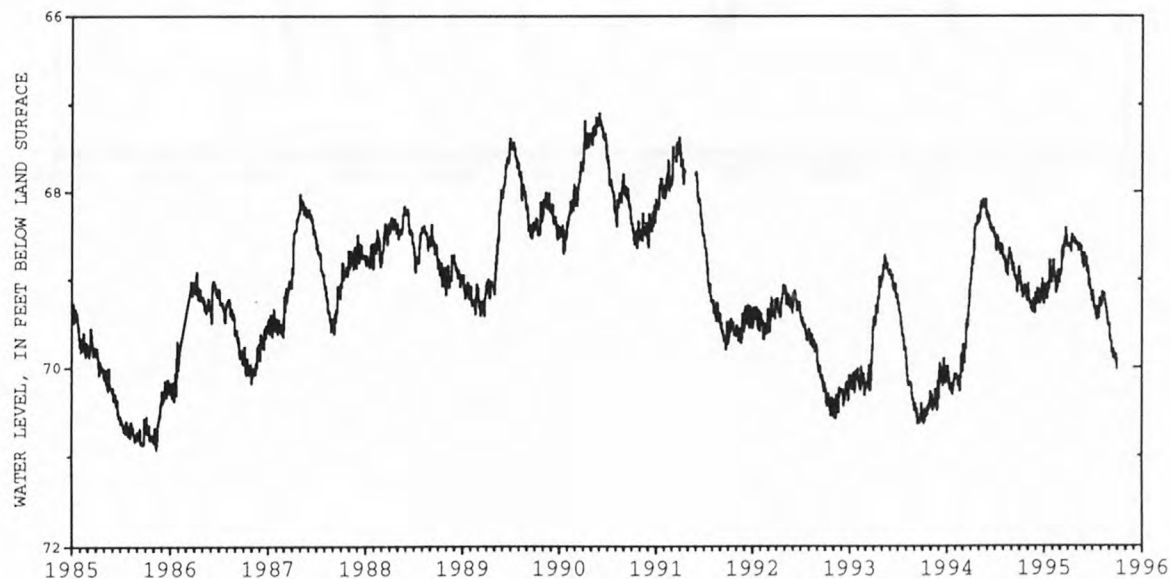
REMARKS.--Water level responds to semidiurnal earth tides (approximately 0.05 ft).

PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft below land-surface datum, June 22, 1953; lowest, 73.85 ft below land-surface datum, Sept. 13, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.93	69.13	69.22	69.20	68.90	68.90	68.59	68.60	68.73	69.21	69.31	69.50
2	68.94	69.04	69.26	69.09	68.89	68.89	68.61	68.58	68.76	69.13	69.31	69.51
3	68.97	69.12	69.27	69.08	68.96	68.93	68.64	68.58	68.77	69.15	69.30	69.57
4	69.01	69.20	69.29	69.10	68.92	68.95	68.60	68.61	68.77	69.22	69.29	69.63
5	69.02	69.23	69.25	69.14	68.78	68.95	68.59	68.61	68.79	69.29	69.25	69.68
6	69.05	69.22	69.14	69.17	68.82	68.90	68.63	68.60	68.79	69.32	69.14	69.70
7	69.10	69.22	69.10	69.07	68.90	68.86	68.62	68.62	68.75	69.32	69.15	69.70
8	69.14	69.27	69.15	69.05	68.95	68.79	68.62	68.65	68.75	69.30	69.20	69.70
9	69.12	69.24	69.22	69.09	68.98	68.63	68.59	68.68	68.83	69.30	69.22	69.71
10	69.07	69.24	69.23	69.17	68.99	68.64	68.61	68.67	68.91	69.32	69.21	69.73
11	69.10	69.28	69.11	69.23	68.97	68.71	68.67	68.63	68.92	69.33	69.19	69.79
12	69.17	69.34	69.13	69.22	68.98	68.75	68.69	68.59	68.87	69.37	69.16	69.84
13	69.21	69.34	69.21	69.17	69.06	68.75	68.59	68.61	68.85	69.40	69.15	69.82
14	69.19	69.34	69.26	69.16	69.12	68.72	68.50	68.66	68.86	69.41	69.18	69.79
15	69.18	69.33	69.27	69.12	69.16	68.66	68.48	68.66	68.92	69.41	69.22	69.82
16	69.18	69.35	69.28	69.05	69.09	68.60	68.50	68.66	69.01	69.44	69.24	69.90
17	69.17	69.37	69.24	69.03	69.10	68.56	68.54	68.66	69.07	69.46	69.25	69.87
18	69.15	69.37	69.14	69.08	69.12	68.56	68.58	68.63	69.08	69.33	69.26	69.80
19	69.11	69.32	69.12	69.11	69.11	68.58	68.57	68.62	69.05	69.31	69.30	69.85
20	69.08	69.35	69.16	69.01	69.03	68.58	68.54	68.63	69.00	69.36	69.33	69.89
21	69.06	69.36	69.22	68.82	68.92	68.50	68.55	68.68	69.04	69.40	69.32	69.89
22	69.07	69.25	69.24	68.78	68.91	68.42	68.52	68.74	69.09	69.44	69.33	69.88
23	69.08	69.22	69.20	68.82	68.93	68.41	68.53	68.81	69.13	69.45	69.37	69.86
24	69.09	69.25	69.08	68.87	68.89	68.45	68.53	68.83	69.13	69.41	69.39	69.91
25	69.11	69.26	68.99	68.92	68.90	68.51	68.54	68.80	69.12	69.40	69.42	69.92
26	69.15	69.30	69.04	68.96	68.97	68.56	68.58	68.81	69.13	69.37	69.46	69.89
27	69.19	69.39	69.12	68.97	69.04	68.61	68.61	68.83	69.18	69.21	69.46	69.85
28	69.23	69.29	69.12	69.00	68.98	68.63	68.60	68.87	69.23	69.22	69.50	69.88
29	69.24	69.15	69.12	69.04	---	68.64	68.60	68.84	69.25	69.23	69.52	69.97
30	69.24	69.16	69.22	69.04	---	68.63	68.61	68.73	69.24	69.26	69.53	70.02
31	69.23	---	69.28	68.97	---	68.60	---	68.70	---	69.29	69.53	---
WTR YEAR 1995	HIGHEST	68.39	Mar. 22, 23, 1995	LOWEST	70.05	Sept. 30, 1995						



## GREENE COUNTY

422319073482001. Local number, G 1.

LOCATION.--Lat 42°23'19", long 73°48'20", Hydrologic Unit 02020006, near West Coxsackie.

Owner: Harry Andrews.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in., depth 17.3 ft, filled in from original depth of 19 ft, tile-lined to 2 ft, stone-lined to 19 ft.

INSTRUMENTATION.--Weekly tape measurement by observer.

DATUM.--Elevation of land-surface datum is 130 ft above sea level, from topographic map.

Measuring point: Chiseled square on top of inner step on curb, 0.18 ft below land-surface datum.

REMARKS.--The wrong measuring point value was used for water years 1984 to 1989. A +.24 ft correction should be applied to all published record from 1984 through 1989 water years.

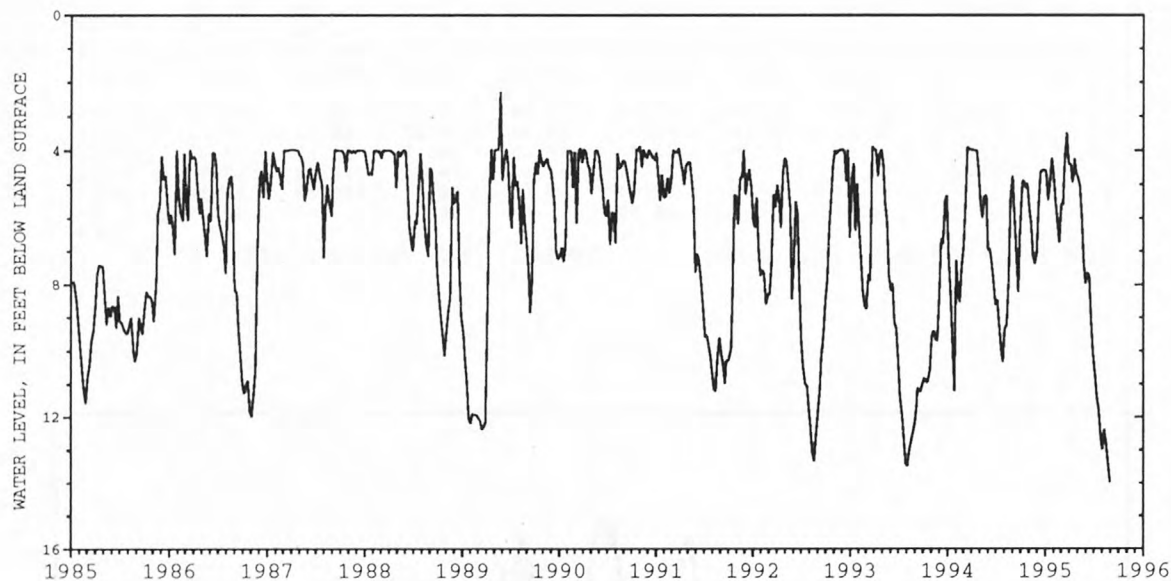
PERIOD OF RECORD.--December 1945 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft below land-surface datum, Mar. 15, 1962; lowest measured, 15.56 ft below land-surface datum, Feb. 27, 1963.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1994	4.94	JAN 04, 1995	4.61	MAR 29, 1995	4.37	JUN 14, 1995	7.71
12	4.88	11	5.46	APR 07	4.43	21	9.07
19	5.11	18	4.99	12	4.93	28	10.06
26	4.97	25	4.22	19	4.63	JUL 06	10.74
NOV 02	5.70	FEB 01	4.69	20	4.25 Z	12	11.36
09	6.16	08	5.48	26	4.64	19	11.76
16	7.14	15	6.12	MAY 03	4.80	27	12.66
23	7.36	22	6.73	10	5.03	AUG 02	12.99
30	7.05	MAR 02	5.58	17	5.93	09	12.40
DEC 07	5.56	08	5.60	24	7.28	16	12.81
14	4.63	15	4.18	31	7.96	22	13.33
21	4.58	22	3.49	JUN 07	7.66	30	13.98
30	4.58						

Z Measured by USGS personnel.



## HAMILTON COUNTY

432832074122201. Local number, H 3.

LOCATION.--Lat 43°28'32", long 74°12'22", Hydrologic Unit 02020002, near Griffin.

Owner: F. B. Girard.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in., depth 16.1 ft in July 1994, filled in from original depth of 19 ft, cased to 16 ft, 1.25-in. well point (60-gauze screen 16 ft to 19 ft, damaged during well installation).

INSTRUMENTATION.--Tape measurement by USGS personnel every six weeks.

DATUM.--Elevation of land-surface datum is 1,290 ft above sea level, from topographic map.

Measuring point: Top of casing, 1.55 ft above land-surface datum as of October 1984.

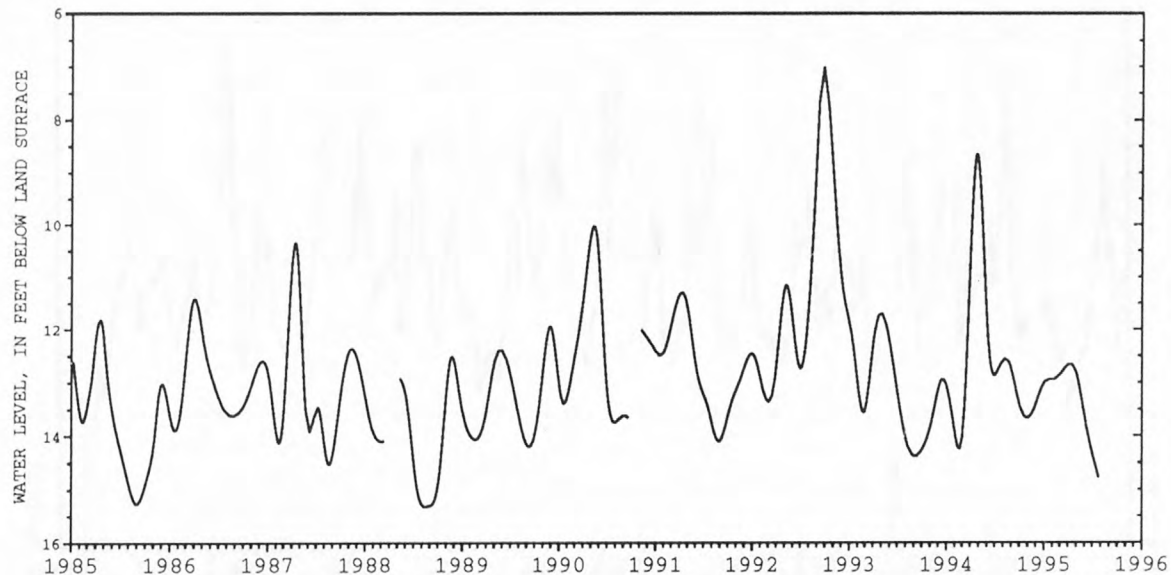
REMARKS.--Well casing believed to have settled about 0.75 ft shortly after installation. All published records prior to 1985 water year should be adjusted accordingly.

PERIOD OF RECORD.--November 1965 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.38 ft below land-surface datum, June 6, 1980; lowest measured, 16.19 ft below land-surface datum, Oct. 21, 1969.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1994	13.45	JAN 04, 1995	12.99	MAR 21, 1995	12.73	JUN 05, 1995	13.73
NOV 14	13.61	FEB 08	12.94	MAY 01	12.81	JUL 25	14.78



## MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.

LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.

Owner: Keith Handy.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 24 in., depth 12.0 ft, stone-lined.

INSTRUMENTATION.--Tape gage read weekly by observer.

DATUM.--Elevation of land-surface datum is 710 ft above sea level, from topographic map.

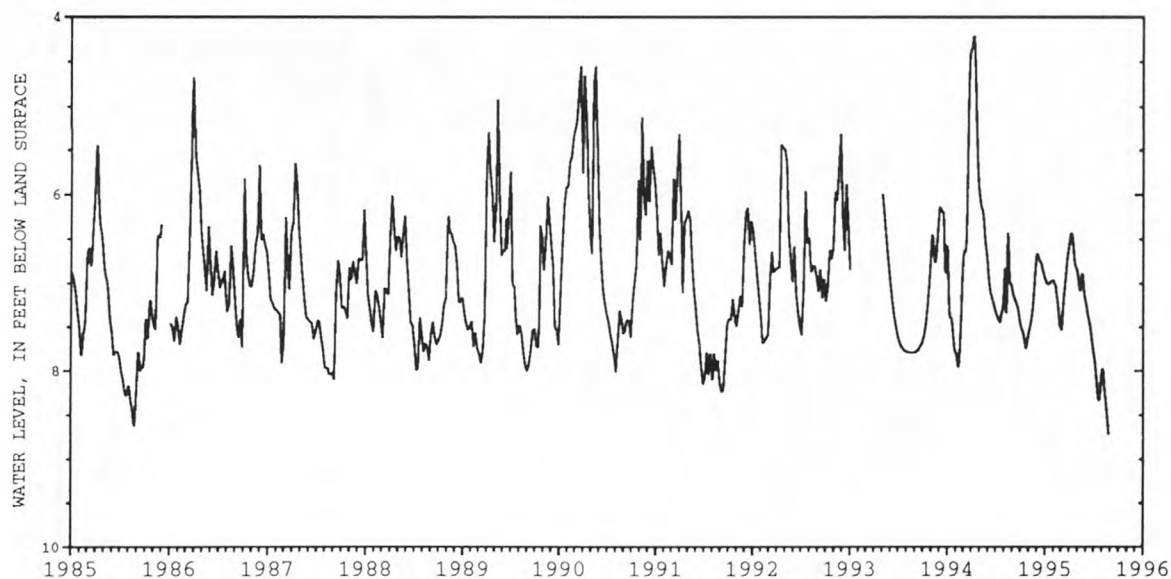
Measuring point: Top edge of limestone slab at northeast corner of well opening, at land-surface datum.

PERIOD OF RECORD.--October 1942 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.74 ft below land-surface datum, Apr. 10, 1971;  
lowest measured, 9.99 ft below land-surface datum, Aug. 28, 1949.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1994	7.46	DEC 16, 1994	6.76	APR 08, 1995	6.43	JUN 24, 1995	7.62
08	7.53	23	6.84	15	6.52	30	7.76
15	7.62	30	6.92	22	6.77	JUL 07	7.92
22	7.74	JAN 06, 1995	6.99	29	6.83	15	8.21
28	7.64	FEB 18	7.23	MAY 06	6.98	22	8.33
NOV 04	7.53	25	7.48	13	7.08	29	8.11
11	7.41	MAR 04	7.53	20	6.89	AUG 05	7.98
18	7.22	11	7.21	27	7.10	12	8.23
25	6.89	18	6.97	JUN 03	7.22	19	8.45
DEC 02	6.66	25	6.72	10	7.36	26	8.72
09	6.72	APR 01	6.56	17	7.46		



## ONEIDA COUNTY

433112075091501. Local number, Oe 151.

LOCATION.--Lat 43°31'12", long 75°09'15", Hydrologic Unit 04150101, at Woodgate.

Owner: Henry Rubyor.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in., depth 31.1 ft in July 1984, stone-lined.

INSTRUMENTATION.--Water-stage recorder--hourly punch. Tape gage read weekly by observer through September 7, 1991.

DATUM.--Elevation of land-surface datum is 1,484.94 ft above sea level.

Measuring point: Top of 2-ft square concrete well cover at midpoint of south side of rectangular opening,

1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1926 to August 1945, October 1948 to current year.

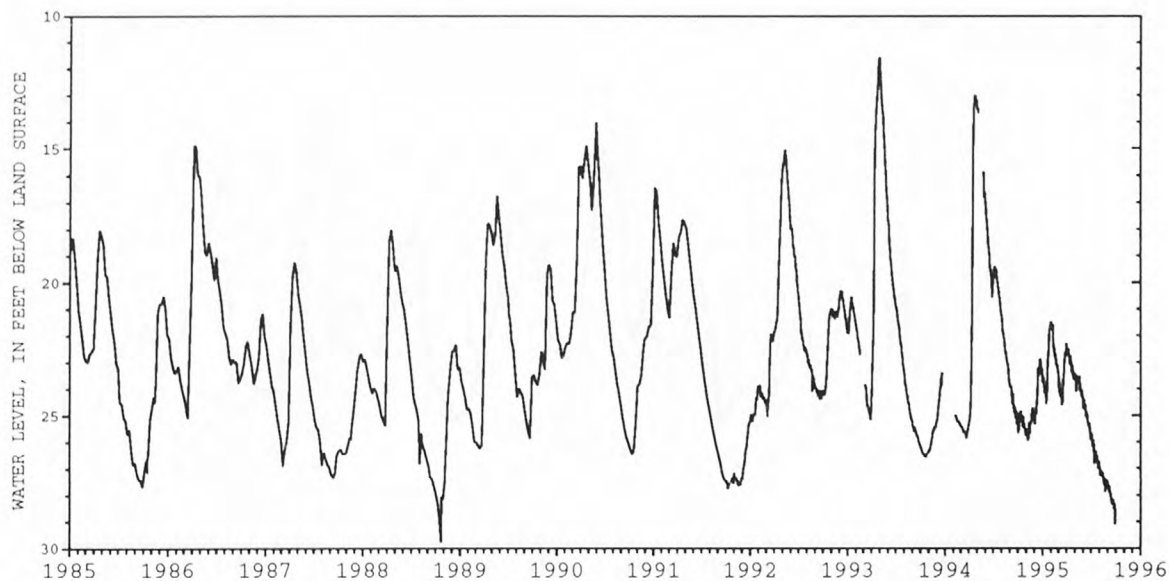
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.43 ft below land-surface datum, Apr. 3, 1976;  
lowest measured, 30.31 ft below land-surface datum, Feb. 25, 1961.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.96	25.60	25.07	23.71	21.57	23.36	22.39	23.47	24.36	25.78	26.91	27.56
2	25.48	25.69	25.12	23.76	21.49	23.46	22.31	23.44	24.74	25.67	26.99	27.59
3	25.58	25.56	25.26	23.53	21.53	23.49	22.59	23.56	24.50	25.73	27.26	27.66
4	25.65	25.73	25.10	23.73	21.67	23.98	22.63	23.62	24.47	25.74	27.17	27.65
5	25.66	25.55	25.34	23.72	21.60	24.13	22.56	23.55	24.40	25.73	27.13	27.72
6	25.40	25.52	25.12	23.61	21.60	23.81	22.69	23.99	24.55	26.17	27.07	27.87
7	25.16	25.95	24.90	23.92	21.60	23.83	22.52	24.10	24.80	26.11	27.20	27.69
8	24.95	25.80	24.82	23.94	21.62	24.07	22.62	23.78	24.71	25.98	27.28	27.66
9	25.19	25.52	24.73	24.15	21.62	24.30	22.53	23.53	24.68	25.94	27.20	27.88
10	25.16	25.95	24.97	24.09	21.62	24.23	22.65	23.55	24.60	26.06	27.19	27.96
11	24.94	25.73	24.74	23.96	22.26	24.02	22.80	23.54	24.70	26.36	27.16	27.92
12	25.14	25.50	24.51	23.91	22.34	24.09	22.81	23.71	25.06	26.11	27.25	28.02
13	24.84	25.31	24.20	23.93	22.54	24.14	22.89	23.74	25.00	26.57	27.26	27.96
14	24.95	25.31	24.23	24.18	22.64	24.33	23.13	23.75	24.85	26.82	27.26	28.18
15	25.26	25.55	23.85	24.31	22.50	24.63	22.87	23.63	24.99	26.43	27.19	28.13
16	25.19	25.69	23.45	24.58	22.51	24.47	22.79	23.59	24.98	26.34	27.31	28.13
17	24.98	25.33	23.24	24.35	22.75	24.14	22.92	23.63	25.15	26.43	27.61	28.34
18	25.14	25.34	23.33	23.99	22.86	24.51	22.94	23.82	25.00	26.35	27.34	28.14
19	25.00	25.22	23.52	24.11	22.68	24.26	23.12	23.71	25.27	26.62	27.42	28.17
20	25.45	25.24	23.20	23.58	22.90	23.87	23.42	23.53	25.29	26.44	27.43	28.29
21	25.32	25.31	23.42	23.33	23.09	23.59	23.38	23.57	25.36	26.59	27.39	28.19
22	25.10	24.95	23.33	22.95	23.00	23.50	23.12	24.08	25.43	26.77	27.87	28.21
23	25.06	25.07	23.14	22.81	22.91	23.43	23.11	24.07	25.36	26.64	27.73	28.21
24	25.28	25.14	22.90	22.61	23.12	23.32	23.23	24.06	25.31	26.53	27.63	28.50
25	25.51	24.87	22.92	22.77	23.19	22.97	23.52	24.11	25.35	26.69	27.80	28.32
26	25.32	24.71	22.98	22.32	23.22	22.82	23.51	24.18	25.36	26.80	27.78	28.33
27	25.49	24.87	23.13	21.95	23.13	22.85	23.35	24.28	25.55	27.02	27.54	28.33
28	25.49	24.94	23.41	21.81	23.19	22.63	23.61	24.04	25.92	26.98	27.52	29.12
29	25.56	24.86	23.24	21.78	---	22.71	23.66	24.11	25.73	26.73	27.43	28.51
30	25.66	25.19	23.25	21.71	---	22.80	23.48	24.16	25.74	26.80	27.45	28.51
31	25.79	---	23.27	21.78	---	22.60	---	24.29	---	26.81	27.56	---

WTR YEAR 1995

HIGHEST 21.47 Feb. 1, 1995

LOWEST 29.55 Sept. 28, 1995





## ONEIDA COUNTY

433012075134202. Local number, Oe 766.

LOCATION.--Lat 43°30'12", long 75°13'42", Hydrologic Unit 04150101, near Hawkinsville.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven-washed observation well, diameter 6 in., depth 30.9 ft in May 1992, filled in from original depth of 33 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 1,190.22 ft above sea level.

Measuring point: Top of extended casing, 2.63 ft above land-surface datum.

REMARKS.--Well was driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft east, which has a period of record from November 1965 to November 1968 (unpublished).

PERIOD OF RECORD.--November 1968 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.87 ft below land-surface datum, May 21, 1972; lowest recorded, 23.58 ft below land-surface datum, Feb. 20, 21, 22, 1981.

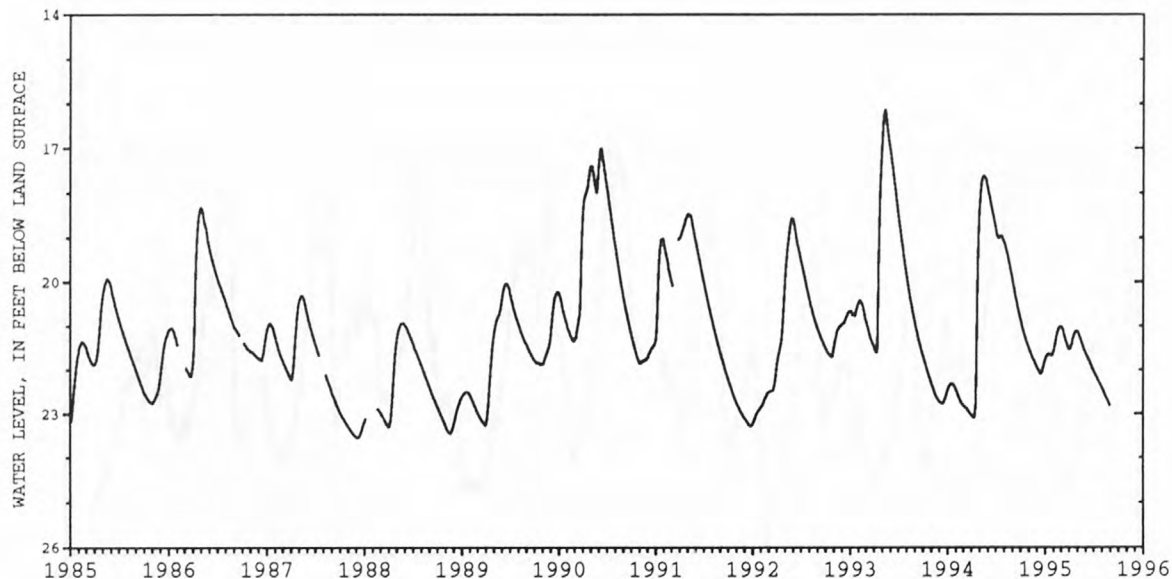
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.85	21.49	21.95	21.77	21.59	21.01	21.54	21.13	21.63	22.02	22.41	---
2	20.87	21.52	21.96	21.75	21.58	21.02	21.54	21.13	21.64	22.04	22.43	---
3	20.90	21.54	21.97	21.74	21.56	21.03	21.55	21.14	21.65	22.05	22.43	---
4	20.93	21.56	21.98	21.72	21.52	21.04	21.53	21.16	21.66	22.07	22.44	---
5	20.96	21.57	21.99	21.71	21.49	21.05	21.53	21.17	21.68	22.08	22.46	---
6	20.98	21.58	22.00	21.69	21.46	21.05	21.52	21.18	21.69	22.09	22.47	---
7	21.01	21.60	22.01	21.67	21.43	21.07	21.50	21.20	21.70	22.10	22.49	---
8	21.03	21.62	22.03	21.68	21.38	21.08	21.47	21.22	21.71	22.11	22.51	---
9	21.05	21.63	22.03	21.67	21.35	21.10	21.44	21.24	21.73	22.12	22.52	---
10	21.07	21.65	22.04	21.67	21.31	21.14	21.43	21.25	21.74	22.13	22.53	---
11	21.11	21.67	22.04	21.66	21.28	21.16	21.40	21.26	21.75	22.15	22.54	---
12	21.13	21.68	22.07	21.64	21.25	21.19	21.36	21.28	21.76	22.16	22.56	---
13	21.15	21.70	22.07	21.64	21.23	21.21	21.33	21.30	21.78	22.17	22.58	---
14	21.17	21.71	22.08	21.64	21.20	21.24	21.30	21.32	21.79	22.18	22.59	---
15	21.19	21.72	22.09	21.64	21.17	21.25	21.28	21.33	21.81	22.19	22.61	---
16	21.22	21.74	22.09	21.64	21.15	21.27	21.26	21.36	21.83	22.21	22.62	---
17	21.24	21.75	22.08	21.65	21.13	21.29	21.24	21.37	21.84	22.22	22.63	---
18	21.25	21.76	22.07	21.66	21.11	21.32	21.22	21.38	21.85	22.23	22.64	---
19	21.27	21.78	22.07	21.66	21.08	21.34	21.19	21.40	21.86	22.25	22.65	---
20	21.29	21.80	22.07	21.65	21.06	21.36	21.19	21.43	21.88	22.26	22.66	---
21	21.31	21.80	22.05	21.65	21.05	21.36	21.17	21.45	21.90	22.28	22.68	---
22	21.33	21.81	22.01	21.66	21.05	21.38	21.15	21.47	21.91	22.29	22.69	---
23	21.35	21.83	21.98	21.67	21.03	21.41	21.15	21.50	21.93	22.30	22.70	---
24	21.37	21.85	21.96	21.68	21.02	21.44	21.14	21.50	21.94	22.31	22.72	---
25	21.38	21.86	21.94	21.68	21.02	21.46	21.13	21.52	21.95	22.32	22.74	---
26	21.41	21.88	21.93	21.68	21.02	21.48	21.13	21.54	21.96	22.33	22.75	---
27	21.43	21.90	21.90	21.67	21.02	21.50	21.13	21.56	21.98	22.35	22.76	---
28	21.44	21.89	21.86	21.67	21.01	21.51	21.13	21.57	21.99	22.36	22.78	---
29	21.46	21.92	21.85	21.66	---	21.53	21.13	21.57	22.00	22.37	22.79	---
30	21.48	21.93	21.83	21.64	---	21.53	21.13	21.59	22.01	22.39	22.80	---
31	21.49	---	21.80	21.61	---	21.53	---	21.61	---	22.40	22.81	---

OCT. 1994 to AUG. 1995

HIGHEST 20.84 Oct. 1, 1994

LOWEST 22.81 Aug. 30, 31, 1995



## PUTNAM COUNTY

412450073413101. Local number, P 609.

LOCATION.--Lat 41°24'50", long 73°41'31", Hydrologic Unit 02030101, near Carmel.

Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in., depth 16.1 ft in September 1993, original depth reported to be 16.6 ft, filled in to 16.2 ft as of September 1981, stone-lined.

INSTRUMENTATION.--Weekly tape measurement by observer and tape measurement by USGS personnel every six weeks.

DATUM.--Elevation of land-surface datum is 540 ft above sea level, from topographic map.

Measuring point: Top (north side) of 3-in. coupling set in concrete well cover, at land-surface datum.

PERIOD OF RECORD.--January 1935 to September 1945, September 1950 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.84 ft below land-surface datum, June 2, 1984; lowest measured, dry, Oct. 1, 1935, Nov. 1, 30, 1935, Jan. 7, 1936, Sept. 1, 1939, Sept. 30, 1953, several days in water year 1954, Sept. 20, 27, 1957, Oct. 4, 10, 1957, Nov. 1, 9, 15, 1957, Sept. 26, 1964, several days in water year 1965, Sept. 19, 26, 1966, Oct. 3, 10, 17, 1966, Nov. 3, 1973, Dec. 1, 1973, Sept. 17, 24, 1977, Nov. 18, 25, 1978, Dec. 2, 8, 1978, Sept. 25, 1980, several days in water year 1981, Oct. 2, 9, 16, 23, 30, 1981, Oct. 1, 8, 15, 22, 1983, Sept. 14, 1993.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1994	12.20 Z	FEB 01, 1995	5.50	MAR 15, 1995	7.64 Z	MAY 31, 1995	11.67 Z
27	13.12 Z	08	6.55	22	8.04	JUN 07	11.90
DEC 19	8.66 Z	15	7.80	APR 12	9.97	14	11.30
JAN 11, 1995	6.66	MAR 01	8.40	24	10.26 Z	JUL 27	14.13 Z
18	6.45	08	8.26	MAY 10	10.70	AUG 22	13.92 Z
30	5.12 Z						

Z Measured by USGS personnel.

## RENSSELAER COUNTY

423834073391001. Local number, Re 700.

LOCATION.--Lat 42°38'34", long 73°39'10", Hydrologic Unit 02020006, near Defreestville.

Owner: William P. Hofmann.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 4 ft, depth 15.9 ft in June 1988, stone-lined.

INSTRUMENTATION.--Weekly tape measurement by observer.

DATUM.--Elevation of land-surface datum is 405 ft above sea level, from topographic map.

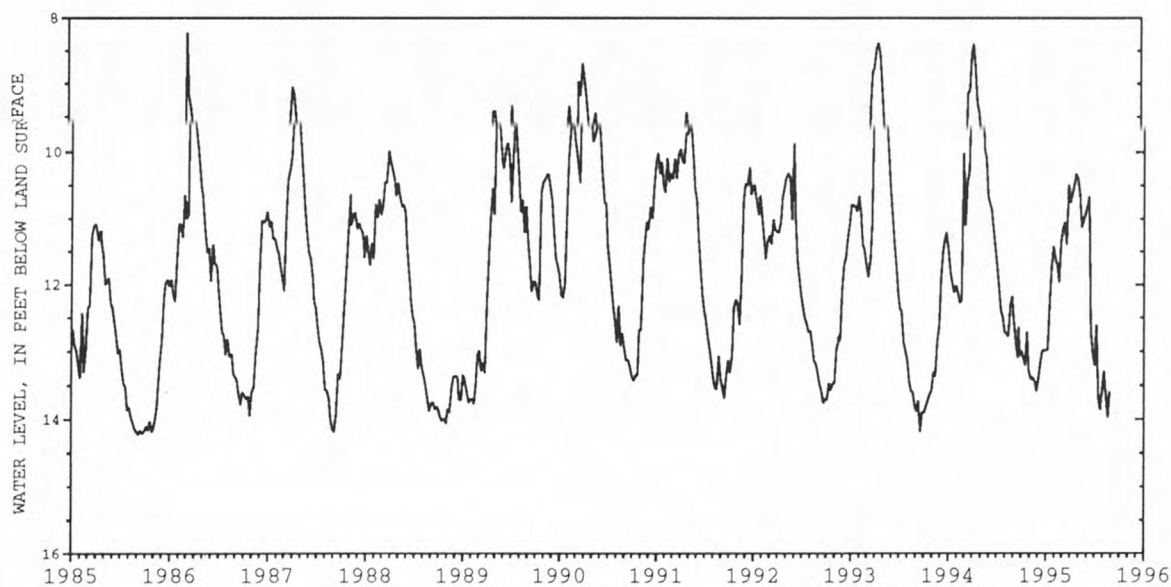
Measuring point: Top edge of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1954 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.23 ft below land-surface datum, Mar. 15, 1986; lowest measured, 15.49 ft below land-surface datum, Oct. 3, 1964.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1994	12.99	DEC 18, 1994	13.00	MAR 05, 1995	11.15	JUN 11, 1995	10.67
09	13.10	25	12.99	12	11.05	18	12.70
16	13.20	JAN 01, 1995	12.98	19	11.39	25	13.03
23	12.71	08	12.98	26	10.49	JUL 02	13.20
29	13.28	15	12.29	APR 02	10.76	09	12.60
NOV 06	13.41	22	11.73	09	10.64	16	13.70
13	13.38	29	11.42	23	10.33	23	13.85
20	13.44	FEB 06	11.62	30	10.40	AUG 06	13.29
27	13.58	12	11.71	MAY 07	10.62	13	13.66
DEC 04	13.42	19	11.96	14	11.13	20	13.97
11	13.19	26	11.35	JUN 04	10.82	27	13.59



## RENSSELAER COUNTY

423534073423401. Local number, Re 703.

LOCATION.--Lat 42°35'34", long 73°42'34", Hydrologic Unit 02020006, in East Greenbush.

Owner: Town of East Greenbush.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 80 ft, cased to 78 ft, 50-slot plastic screen 78 ft to 80 ft.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 275 ft above sea level, from topographic map.

Measuring point: Top of flange, 2.9 ft above land-surface datum.

REMARKS.--The wrong measuring point value was used from November 1982 through the 1985 water year. A -.20 ft correction should be applied to all published record prior to the 1985 water year. Well was drilled October 1982 as a replacement for 423532073423701 (local number Re 701), located about 300 ft southwest and 15.8 ft lower in land-surface datum, which has a period of record from March 1961 to May 1980. Water level may be affected by nearby pumping.

PERIOD OF RECORD.--October 1982 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 32.86 ft below land-surface datum, June 4, 5, 6, 7, 8, 9, July 11, 1984; lowest recorded, 41.93 ft below land-surface datum, Jan. 23, 24, 1986.

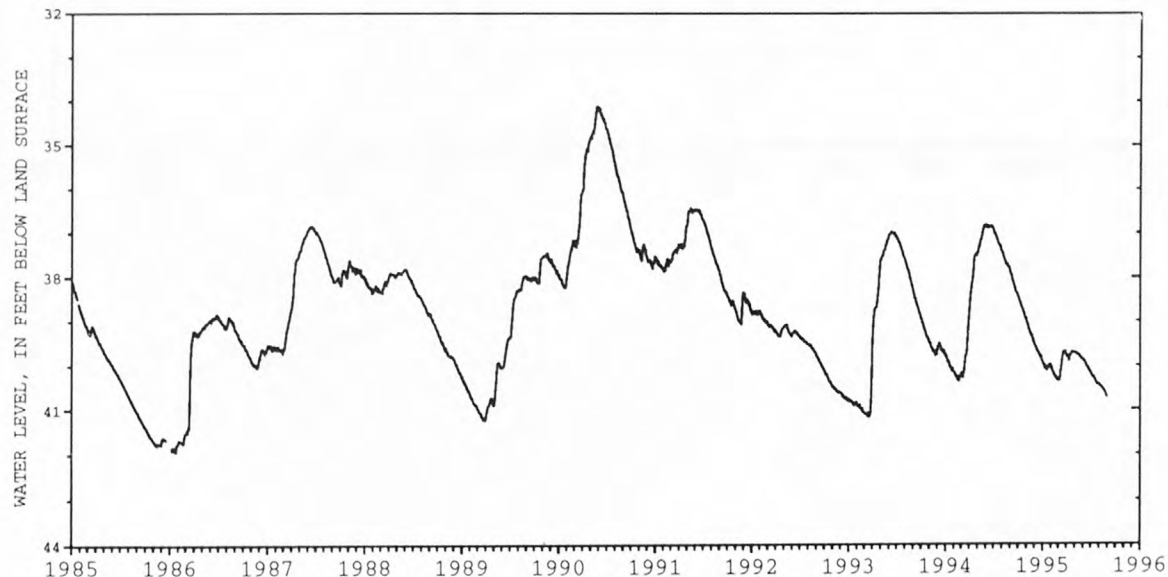
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.43	38.93	39.52	39.90	39.99	40.33	39.78	39.71	39.89	40.17	40.44	---
2	38.45	38.98	39.52	39.92	40.05	40.35	39.80	39.71	39.89	40.19	40.45	---
3	38.46	39.03	39.54	39.96	40.09	40.36	39.81	39.72	39.89	40.21	40.46	---
4	38.48	39.04	39.56	39.97	40.04	40.35	39.79	39.73	39.90	40.23	40.46	---
5	38.49	39.05	39.55	39.99	40.05	40.34	39.83	39.72	39.91	40.24	40.47	---
6	38.52	39.05	39.58	39.99	40.11	40.32	39.84	39.73	39.90	40.25	40.47	---
7	38.55	39.10	39.59	39.97	40.13	40.32	39.84	39.74	39.89	40.25	40.49	---
8	38.56	39.10	39.62	40.03	40.14	40.29	39.85	39.75	39.92	40.25	40.49	---
9	38.56	39.11	39.62	40.05	40.15	40.26	39.84	39.76	39.96	40.27	40.49	---
10	38.59	39.15	39.63	40.07	40.16	40.16	39.89	39.75	39.96	40.28	40.49	---
11	38.63	39.18	39.61	40.08	40.17	40.12	39.90	39.73	39.96	40.29	40.50	---
12	38.65	39.19	39.68	40.07	40.20	40.08	39.86	39.74	39.96	40.25	40.50	---
13	38.65	39.21	39.69	40.09	40.22	40.04	39.82	39.77	39.97	40.29	40.51	---
14	38.67	39.22	39.70	40.10	40.24	39.99	39.81	39.78	39.99	40.31	40.53	---
15	38.69	39.24	39.71	40.08	40.23	39.92	39.80	39.76	40.01	40.29	40.54	---
16	38.70	39.27	39.72	40.02	40.23	39.88	39.78	39.78	40.04	40.32	40.55	---
17	38.72	39.29	39.70	40.10	40.27	39.83	39.78	39.77	40.04	40.33	40.55	---
18	38.72	39.29	39.71	40.13	40.28	39.81	39.76	39.77	40.04	40.34	40.57	---
19	38.73	39.30	39.74	40.10	40.27	39.78	39.73	39.77	40.04	40.36	40.58	---
20	38.75	39.34	39.77	40.06	40.26	39.75	39.75	39.80	40.05	40.38	40.59	---
21	38.76	39.33	39.79	40.06	40.27	39.71	39.72	39.81	40.08	40.39	40.59	---
22	38.79	39.30	39.79	40.08	40.31	39.70	39.70	39.83	40.09	40.40	40.61	---
23	38.81	39.35	39.79	40.07	40.30	39.70	39.71	39.84	40.10	40.40	40.63	---
24	38.83	39.39	39.79	40.04	40.30	39.71	39.70	39.83	40.10	40.42	40.63	---
25	38.85	39.40	39.82	40.03	40.33	39.72	39.70	39.85	40.11	40.43	40.66	---
26	38.88	39.44	39.85	40.01	40.35	39.73	39.73	39.86	40.13	40.43	40.66	---
27	38.90	39.47	39.86	39.99	40.34	39.74	39.72	39.87	40.15	40.43	40.67	---
28	38.92	39.41	39.79	40.01	40.30	39.69	39.71	39.88	40.16	40.43	40.69	---
29	38.93	39.47	39.88	40.00	---	39.74	39.72	39.84	40.16	40.42	40.69	---
30	38.95	39.49	39.92	39.99	---	39.75	39.72	39.84	40.17	40.42	40.71	---
31	38.96	---	39.92	39.98	---	39.76	---	39.87	---	40.43	40.71	---

OCT. 1994 to AUG. 1995

HIGHEST 38.42 Oct. 1, 1994

LOWEST 40.71 Aug. 30, 31, 1995



## ST. LAWRENCE COUNTY

444904074455201. Local number, St 40.

LOCATION.--Lat 44°49'04", long 74°45'52", Hydrologic Unit 04150306, near Brasher Falls.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in., depth 11.3 ft in October 1985, filled in from original depth of 12 ft, concrete cased to 12 ft, open end.

INSTRUMENTATION.--Tape gage read weekly by observer.

DATUM.--Elevation of land-surface datum is 300 ft above sea level, from topographic map.

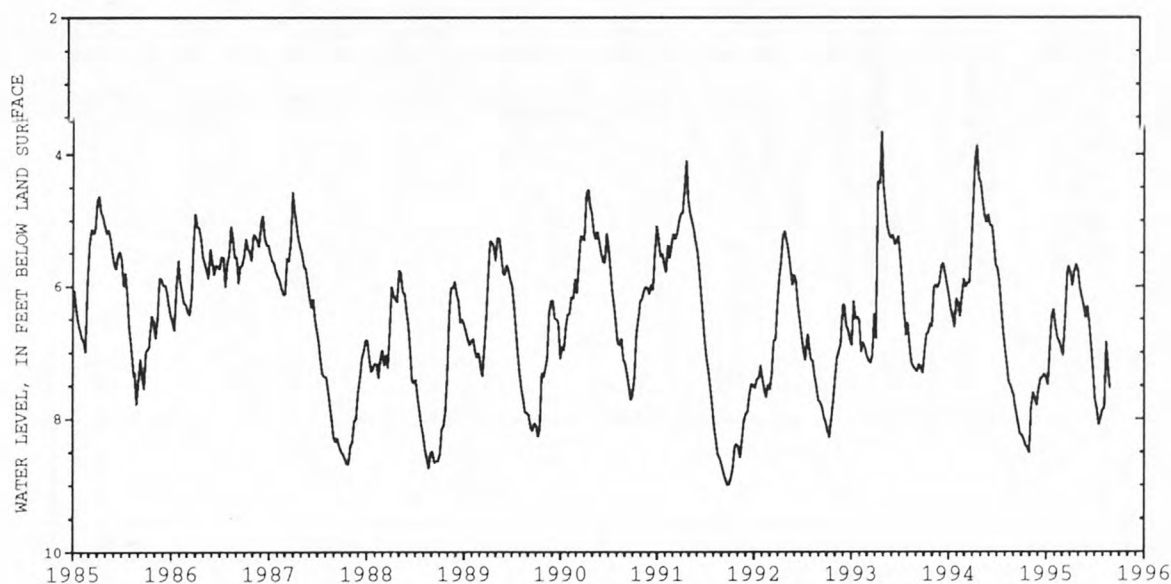
Measuring point: Chiseled mark on top edge of 6-in. by 8-in. opening of concrete well cover, 0.65 ft above land-surface datum.

PERIOD OF RECORD.--May 1953 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.24 ft below land-surface datum, Apr. 21, 1971; lowest measured, 9.38 ft below land-surface datum, Oct. 24, 1964.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1994	8.24	DEC 25, 1994	7.33	MAR 21, 1995	5.77	JUN 11, 1995	6.55
09	8.31	JAN 01, 1995	7.39	26	5.69	18	6.89
16	8.40	08	7.49	APR 02	5.80	25	7.26
23	8.44	15	6.90	09	5.99	JUL 02	7.70
30	8.51	22	6.45	16	5.77	09	7.85
NOV 06	7.83	29	6.35	23	5.67	16	8.09
13	7.61	FEB 05	6.60	30	5.76	23	8.00
20	7.70	12	6.78	MAY 07	6.03	30	7.87
27	7.80	19	6.84	14	6.16	AUG 06	7.84
DEC 04	7.55	26	6.94	21	6.30	13	6.84
11	7.40	MAR 05	7.05	28	6.48	20	7.20
18	7.38	12	6.56	JUN 04	6.30	27	7.54





## ST. LAWRENCE COUNTY

445216074593001. Local number, St 404.

LOCATION.--Lat 44°52'16", long 74°59'30", Hydrologic Unit 04150305, near Raymondville.

Owner: New York Power Authority.

AQUIFER.--Confined aquifer in Beekmantown dolomite of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 178.9 ft (as of 1993), cased to 54 ft, open hole.

INSTRUMENTATION.--Monthly tape measurement by observer.

DATUM.--Elevation of land-surface datum is 247.7 ft above sea level.

Measuring point: Top of casing, 3.90 ft above land-surface datum.

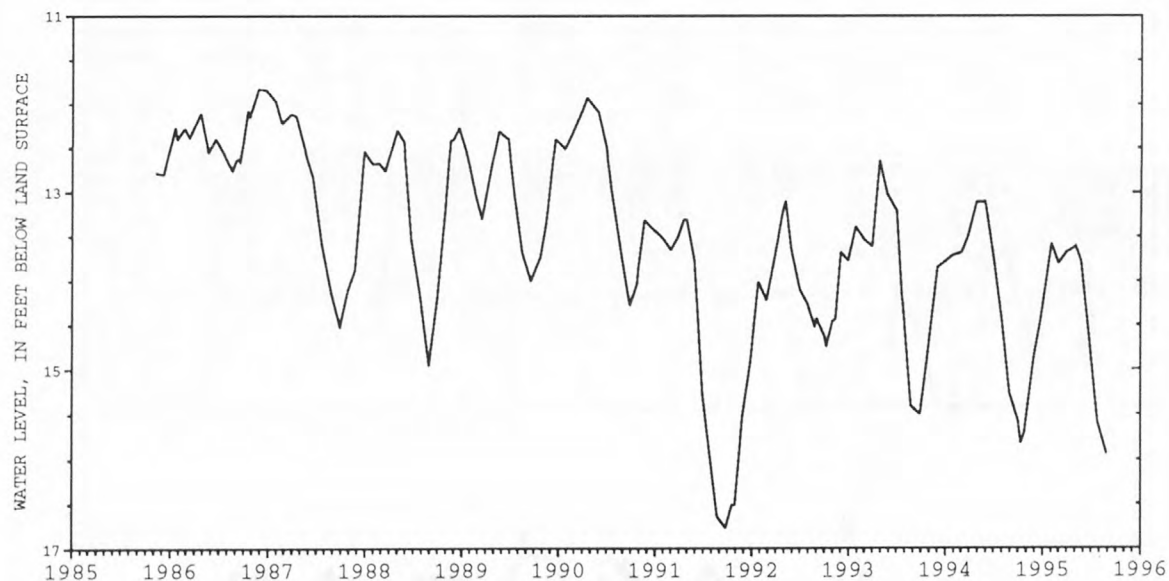
PERIOD OF RECORD.--June 1958 to November 1964, November 1985 to August 1995 (discontinued). Records prior to November 1985 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.83 ft below land-surface datum, Nov. 24, 1986; lowest measured, 16.77 ft below land-surface datum, Sept. 24, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11, 1994	15.82 Z	JAN 31, 1995	13.58	APR 30, 1995	13.62	JUN 26, 1995	14.72
24	15.71	FEB 27	13.80	MAY 01	13.60 Z	JUL 25	15.59
NOV 28	14.86	MAR 28	13.68	23	13.78	AUG 28	15.94
DEC 23	14.44						

Z Measured by USGS personnel.



## SARATOGA COUNTY

430327073475401. Local number, Sa 529.

LOCATION.--Lat 43°03'27", long 73°47'54", Hydrologic Unit 02020003, at Saratoga Springs.

Owner: Saratoga Springs Authority, New York State.

AQUIFER.--Confined aquifer in dolomite of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 288 ft as of March 1989, filled in from original depth of 304 ft, cased to 189 ft, open hole.

INSTRUMENTATION.--Water-stage recorder--15-minute punch.

DATUM.--Elevation of land-surface datum is 305 ft above sea level, from topographic map.

Measuring point: Top of casing, 3.38 ft above land-surface datum.

REMARKS.--Water level affected by earthquakes and distant pumping.

PERIOD OF RECORD.--May 1949 to November 1961, August 1964 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.70 ft below land-surface datum, Jan. 7, 1981; lowest, 56.20 ft below land-surface datum, July 29, 1949.

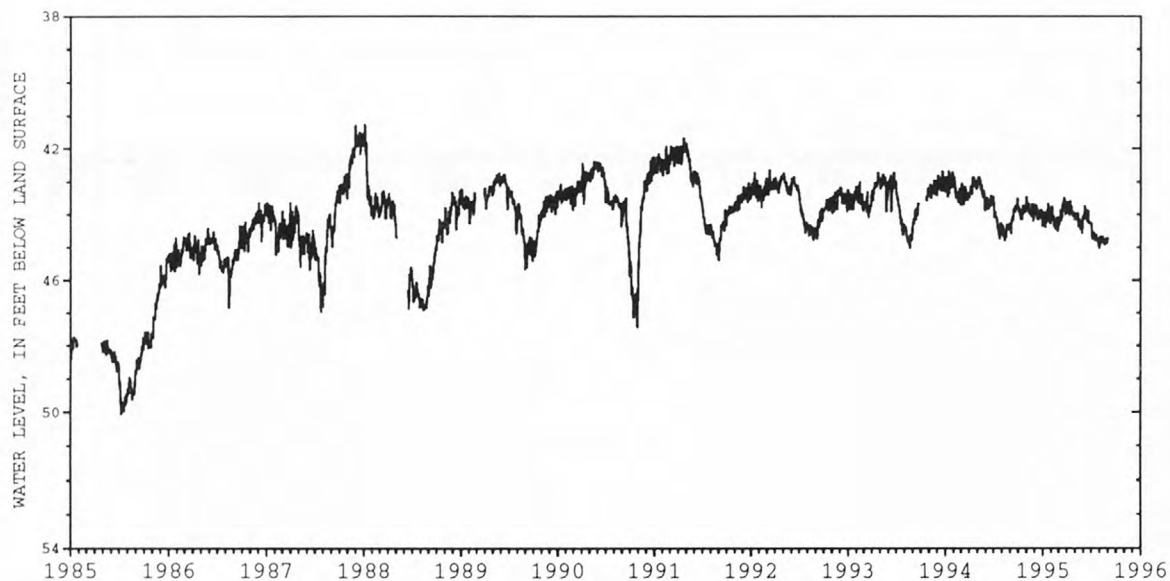
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.80	43.46	43.98	44.02	43.80	44.11	43.85	44.08	44.13	44.23	44.90	---
2	43.91	43.51	43.87	43.99	43.98	44.20	43.97	43.97	44.12	44.35	44.95	---
3	43.94	43.80	43.95	44.13	44.19	44.27	43.91	43.97	44.04	44.51	44.93	---
4	43.83	43.78	44.02	44.07	43.81	44.30	43.61	44.04	44.14	44.65	44.70	---
5	43.79	43.75	43.81	44.16	43.74	44.30	43.76	43.96	44.06	44.76	44.65	---
6	43.91	43.67	43.71	44.12	43.93	44.13	43.81	44.01	43.86	44.65	44.75	---
7	43.99	43.84	43.71	43.92	44.04	44.05	43.76	44.11	43.72	44.57	44.88	---
8	44.00	43.73	43.98	44.22	44.06	43.86	43.80	44.16	43.90	44.53	44.88	---
9	43.94	43.65	43.98	44.27	44.06	43.90	43.79	44.09	44.12	44.56	44.81	---
10	44.04	43.81	43.95	44.38	44.04	44.07	44.02	44.00	44.12	44.55	44.76	---
11	44.14	43.95	43.78	44.37	44.05	44.12	44.01	43.94	44.06	44.56	44.74	---
12	44.15	43.98	44.15	44.15	44.30	44.19	43.82	43.99	43.93	44.69	44.65	---
13	44.06	43.97	44.14	44.14	44.39	44.07	43.58	44.23	43.87	44.70	44.75	---
14	44.01	43.96	44.14	44.24	44.37	43.94	43.64	44.38	43.93	44.65	44.73	---
15	44.08	43.86	44.14	44.16	44.32	43.79	43.73	44.28	44.11	44.68	44.73	---
16	44.14	43.98	44.16	44.07	44.19	43.69	43.82	44.23	44.23	44.80	44.78	---
17	44.06	44.00	43.98	44.16	44.39	43.65	43.90	44.13	44.20	44.70	44.81	---
18	43.87	43.87	43.89	44.23	44.45	43.81	43.86	44.15	44.14	44.59	44.84	---
19	43.75	43.86	44.00	44.10	44.37	43.90	43.74	44.20	43.94	44.67	44.93	---
20	43.70	44.07	44.11	43.75	44.18	43.76	43.93	44.31	43.87	44.72	44.92	---
21	43.74	43.88	44.13	43.65	44.14	43.50	43.94	44.39	44.10	44.75	44.73	---
22	43.81	43.67	44.10	43.81	44.28	43.47	43.92	44.45	44.26	44.81	44.76	---
23	43.87	43.68	44.00	43.92	44.19	43.57	44.05	44.34	44.27	44.74	44.87	---
24	43.90	43.78	43.85	43.91	44.07	43.69	43.95	44.20	44.23	44.74	44.76	---
25	43.81	43.73	43.92	43.98	44.30	43.83	43.92	44.31	44.25	44.74	44.87	---
26	43.90	43.99	44.09	44.01	44.51	43.99	44.04	44.36	44.26	44.74	44.88	---
27	43.93	44.21	44.03	44.04	44.40	44.00	44.05	44.46	44.28	44.85	44.90	---
28	43.93	43.69	43.85	44.17	44.10	43.90	44.03	44.57	44.28	44.92	44.89	---
29	43.92	43.74	44.08	44.28	---	43.92	44.13	44.36	44.28	44.93	44.75	---
30	43.92	43.83	44.36	44.09	---	43.85	44.17	44.12	44.25	45.03	44.81	---
31	43.83	---	44.28	43.87	---	43.76	---	44.06	---	45.01	44.70	---

OCT. 1994 to AUG. 1995

HIGHEST 43.31 Nov. 2, 1994

LOWEST 45.12 July 30, 31, 1995



## SARATOGA COUNTY

430013073370401. Local number, Sa 1072.

LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, Saratoga National Historical Park near Stillwater.

Owner: U.S. National Park Service.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 19.6 ft (as of 1993), filled in from original depth of 24 ft, cased to 21 ft, 2-in. well point (30-gauze screen 21 ft to 24 ft).

INSTRUMENTATION.--Monthly tape measurement by observer and tape measurement by USGS personnel every six weeks.

DATUM.--Elevation of land-surface datum is 223.8 ft above sea level.

Measuring point: Top of casing, 3.31 ft above land-surface datum.

REMARKS.--Water level affected by pumping from adjacent wells.

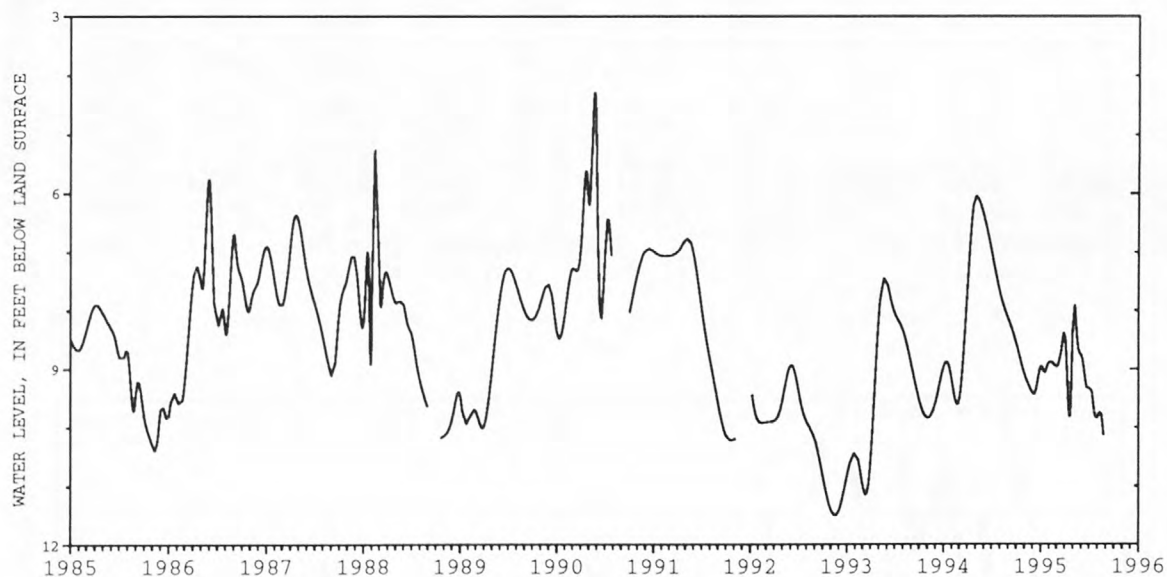
PERIOD OF RECORD.--July 1959 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft below land-surface datum, May 25, 1976; lowest, 11.91 ft below land-surface datum, Oct. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04, 1994	9.14 Z	JAN 19, 1995	9.04 Z	APR 03, 1995	8.48	JUN 22, 1995	9.32
18	9.30	FEB 02	8.88	25	9.37 Z	JUL 10	9.38 Z
DEC 06	9.44	21	8.93	30	8.34	23	9.81
09	9.43 Z	MAR 02	8.96 Z	MAY 17	8.47 Z	AUG 23	10.06 Z
JAN 04, 1995	8.95	22	8.56	JUN 04	8.79	24	10.13
18	9.06						

Z Measured by USGS personnel.



## SARATOGA COUNTY

425242073473201. Local number, Sa 1100.

LOCATION.--Lat 42°52'42", long 73°47'32", Hydrologic Unit 02020004, near Clifton Park.

Owner: Country Knolls Water Works.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 180 ft, cased to 180 ft, open end.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 248 ft above sea level, from topographic map.

Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby public-supply well.

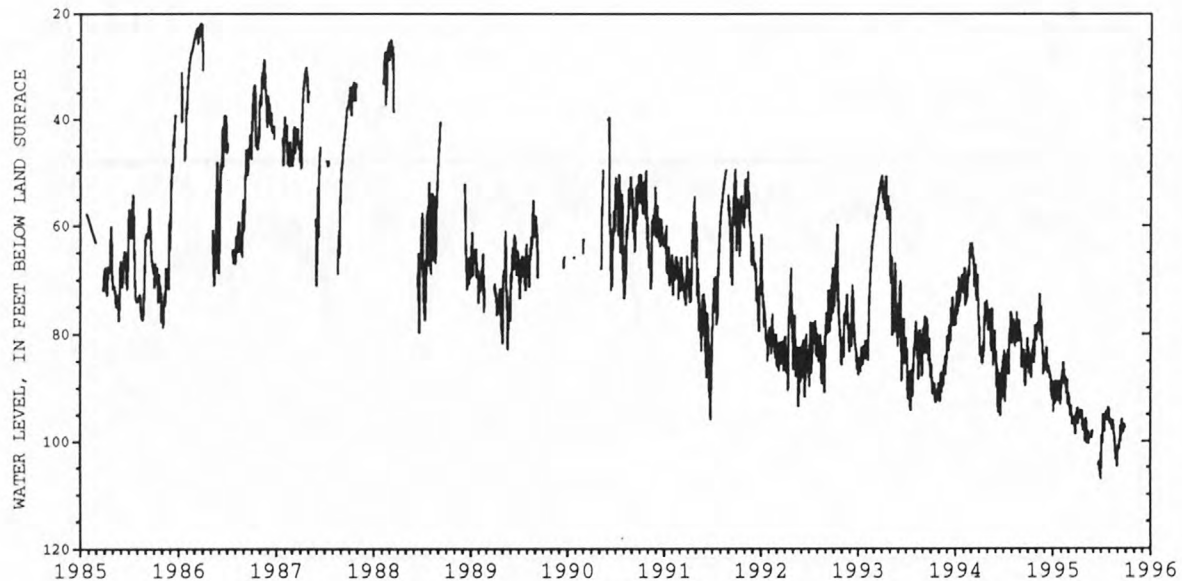
PERIOD OF RECORD.--April 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 21.84 ft below land-surface datum, Mar. 23, 24, 1986;  
lowest recorded, 107.38 ft below land-surface datum, June 30, July 1, 1995.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.52	79.41	84.75	91.81	90.08	91.10	95.66	98.94	---	106.12	96.02	102.20
2	82.61	81.13	84.74	91.42	89.99	91.21	95.25	100.06	---	102.17	96.42	101.71
3	83.31	79.89	85.39	92.28	90.06	91.39	94.92	99.40	---	99.91	96.75	100.97
4	83.97	78.25	85.43	94.41	89.63	92.47	93.67	97.22	---	99.06	96.39	100.91
5	87.31	78.10	85.03	92.09	89.09	92.92	94.37	97.42	---	98.90	96.42	100.83
6	85.66	78.07	84.42	89.71	86.72	93.68	96.81	95.62	---	100.44	95.81	101.53
7	85.64	79.34	84.66	88.87	88.14	93.39	94.61	96.20	---	98.37	96.22	101.21
8	85.71	79.37	85.09	89.75	88.90	95.12	94.60	99.48	---	96.32	96.32	100.64
9	85.55	77.47	82.41	90.92	86.67	94.30	94.13	100.41	---	94.91	97.01	100.01
10	85.51	77.64	83.21	92.83	85.21	94.93	95.05	98.85	---	95.75	97.27	99.39
11	86.16	75.51	85.28	90.39	86.42	93.27	94.26	100.07	---	96.64	97.86	97.17
12	86.46	73.92	86.56	88.61	86.53	94.62	94.53	97.99	---	95.95	96.68	97.67
13	88.06	72.63	87.21	89.17	89.19	94.91	95.82	99.57	---	96.68	96.17	99.98
14	83.81	76.24	86.44	92.52	88.24	95.73	94.67	99.66	99.23	98.23	96.01	98.25
15	83.84	78.27	86.00	91.58	88.04	96.27	95.00	98.35	---	96.43	96.98	97.20
16	84.36	80.32	85.78	91.27	87.77	96.86	94.05	100.48	---	95.33	96.88	96.86
17	84.39	77.49	86.41	91.22	87.94	96.43	95.02	99.15	---	95.11	98.53	95.84
18	82.86	74.93	86.60	90.24	88.71	95.37	95.76	98.97	---	95.87	98.74	96.35
19	82.25	76.48	86.94	92.39	88.45	96.19	94.50	99.65	---	95.57	98.46	97.40
20	83.44	77.57	86.71	89.31	89.77	96.66	94.24	---	---	94.61	100.23	97.05
21	81.33	78.90	88.19	89.29	89.22	96.83	94.40	---	---	94.37	99.28	96.59
22	81.15	81.59	87.09	89.98	91.05	96.51	95.30	---	104.65	94.59	100.74	98.40
23	81.94	81.30	87.38	89.64	89.04	96.11	96.94	---	103.91	95.33	101.71	97.94
24	85.38	81.92	87.98	88.64	88.46	96.38	97.66	---	103.93	95.24	102.13	97.70
25	82.70	83.49	88.34	90.00	88.51	97.00	97.96	---	104.29	94.92	103.52	97.58
26	80.88	84.28	88.51	92.58	89.38	97.52	96.36	---	105.67	96.12	103.44	97.18
27	78.49	87.44	91.52	90.27	93.05	98.04	96.52	99.27	105.15	95.06	102.88	96.76
28	78.52	84.48	90.09	90.64	93.10	98.72	96.87	99.38	106.06	93.61	102.91	97.29
29	79.61	83.75	89.93	90.61	---	96.45	96.23	98.06	106.07	94.01	102.96	97.45
30	79.61	86.84	90.32	93.15	---	95.43	95.98	98.17	107.11	93.88	104.26	97.17
31	81.28	---	92.11	92.19	---	94.54	---	98.05	---	94.81	104.81	---

WTR YEAR 1995 HIGHEST 71.84 Nov. 14, 1994

LOWEST RECORDED 107.38 June 30, July 1, 1995



## SCHENECTADY COUNTY

424910073591401. Local number, Sn 363.

LOCATION.--Lat 42°49'10", long 73°59'14", Hydrologic Unit 02020004, in Schenectady.

Owner: City of Schenectady.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 54.5 ft in April 1980, filled in from original depth of 57 ft, cased to 57 ft, open end.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 228.50 ft above sea level.

Measuring point: Top of casing, 2.47 ft above land-surface datum.

REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 16.292 Mgal/d in 1995) from adjacent municipal well field. Well was drilled June 1960 as a replacement for 424926073592201 (local number Sn 128), located 1,540 ft northwest, which has a period of record from April 1946 to March 1961.

PERIOD OF RECORD.--June 1960 to August 1995 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft below land-surface datum, Feb. 10, 1966.

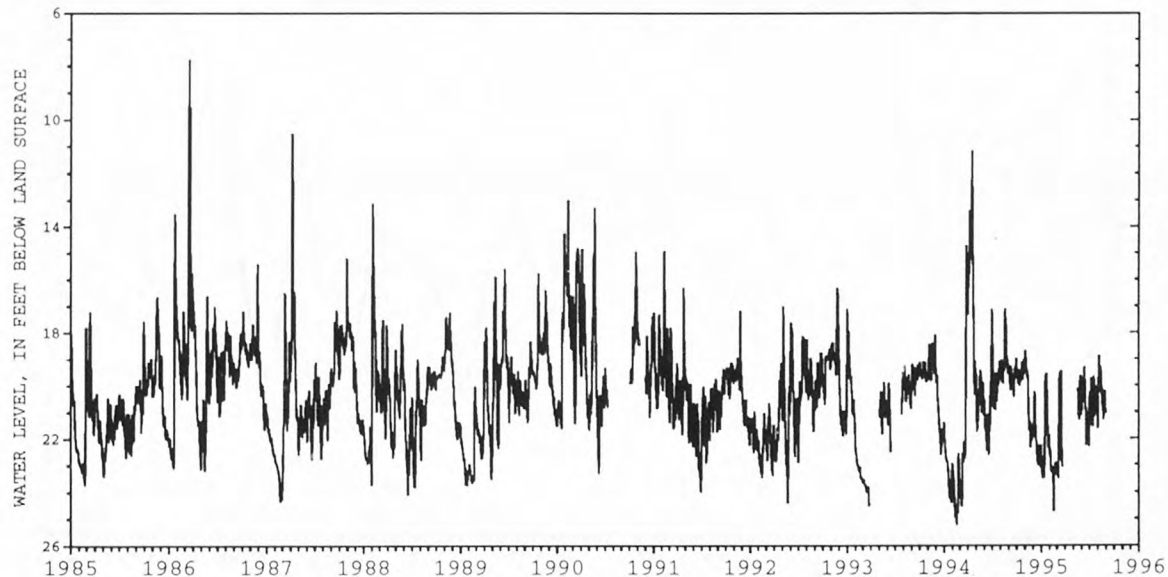
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.99	19.28	21.47	22.27	21.89	23.37	---	---	20.87	21.89	21.54	---
2	19.10	19.20	21.67	22.65	22.25	23.31	---	---	21.13	20.46	21.61	---
3	19.41	18.70	21.68	22.98	22.62	23.31	---	---	20.57	20.27	20.95	---
4	19.64	18.79	21.87	23.09	22.73	23.35	---	---	19.74	20.87	20.18	---
5	19.72	18.79	21.97	23.29	22.48	23.19	---	---	19.76	21.09	19.48	---
6	19.63	19.15	21.55	23.49	22.97	23.41	---	---	20.16	21.45	18.96	---
7	19.61	19.33	20.59	23.16	23.18	23.48	---	---	20.66	21.15	18.87	---
8	19.95	19.45	20.26	22.99	23.28	22.89	---	---	20.56	20.13	19.37	---
9	19.86	19.46	20.25	23.10	23.25	21.06	---	---	20.15	19.73	19.62	---
10	19.62	19.38	20.96	23.29	23.22	20.19	---	---	20.20	20.09	19.91	---
11	19.43	19.69	21.16	23.26	23.24	19.78	---	---	19.87	20.67	20.27	---
12	19.86	19.66	21.79	23.40	23.11	19.54	---	---	19.65	20.56	19.68	---
13	20.02	19.63	22.04	23.46	23.31	20.11	---	---	19.31	20.93	19.31	---
14	19.86	19.86	22.13	23.29	23.33	20.49	---	---	19.80	21.55	19.67	---
15	19.55	20.35	22.12	21.85	23.49	20.53	---	---	19.79	21.28	19.82	---
16	19.72	21.23	22.50	20.33	24.55	19.89	---	---	20.33	20.25	20.10	---
17	19.65	21.34	22.61	19.95	24.72	19.61	---	---	20.89	19.67	20.48	---
18	19.49	21.72	22.47	19.62	23.72	19.46	---	---	20.96	19.72	20.68	---
19	19.86	21.62	22.83	20.16	23.39	20.35	---	20.12	21.49	20.61	20.75	---
20	19.63	21.37	22.95	20.94	23.37	22.44	---	20.27	22.28	21.20	20.46	---
21	19.37	21.65	22.83	20.68	23.10	23.07	---	20.75	21.84	21.05	20.66	---
22	19.27	22.18	23.05	19.55	23.27	23.06	---	21.16	22.05	20.95	21.30	---
23	19.14	22.37	22.91	19.89	23.02	---	---	20.78	22.16	21.04	21.20	---
24	19.45	22.14	22.71	20.31	23.06	---	---	21.29	22.17	20.42	21.10	---
25	19.65	21.92	22.47	20.80	22.93	---	---	20.57	22.19	20.26	21.02	---
26	19.80	21.76	22.28	21.45	23.08	---	---	20.18	21.98	20.72	20.76	---
27	19.35	21.67	22.57	21.97	23.03	---	---	19.85	21.00	20.12	20.33	---
28	19.56	22.10	22.49	22.39	23.22	---	---	19.95	21.05	20.05	20.20	---
29	19.05	22.04	22.56	22.37	---	---	---	19.65	21.70	20.26	20.63	---
30	19.05	21.55	23.11	22.13	---	---	---	19.67	22.29	20.37	20.85	---
31	19.57	---	22.37	22.28	---	---	---	19.86	---	20.79	21.05	---

OCT. 1994 to AUG. 1995

HIGHEST RECORDED 18.48 Nov. 3, 1994

LOWEST RECORDED 25.14 Feb. 16, 1995





## ULSTER COUNTY

414425074213601. Local number, U 204.

LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.

Owner: New York State Department of Correction.

AQUIFER.--Water-table aquifer in deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in., depth 45.6 ft, cased to unknown depth, filled in from original depth of 67 ft.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 300 ft above sea level, from topographic map.

Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1954 to September 1987, January 1990 to August 1995 (discontinued). Records prior to October 1976 and intermittent records for 1988 and 1989 water years are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft below land-surface datum, Mar. 24, 1955; lowest measured, 26.90 ft below land-surface datum, Dec. 29, 1964.

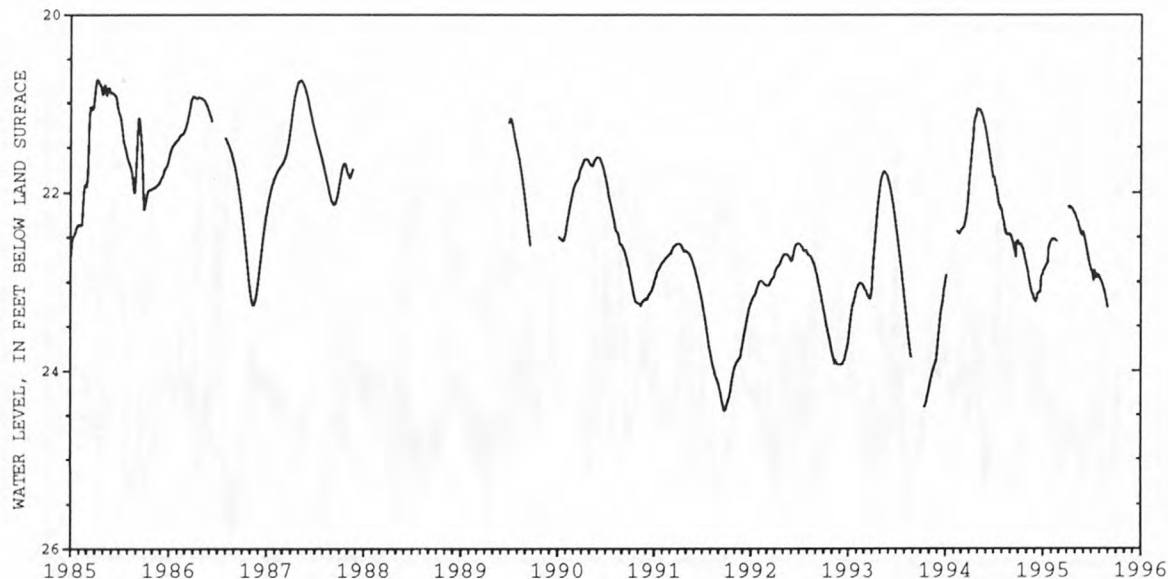
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.55	22.82	23.20	22.89	22.53	---	---	22.24	22.45	22.88	22.95	---
2	22.56	22.83	23.21	22.88	22.53	---	---	22.25	22.46	22.87	22.96	---
3	22.56	22.84	23.22	22.87	22.53	---	---	22.26	22.48	22.88	22.97	---
4	22.57	22.86	23.22	22.87	22.53	---	---	22.27	22.49	22.90	22.98	---
5	22.57	22.87	23.22	22.86	22.52	---	---	22.28	22.50	22.91	22.98	---
6	22.58	22.89	23.20	22.86	22.52	---	22.15	22.29	22.51	22.93	22.98	---
7	22.58	22.92	23.20	22.85	22.52	---	22.16	22.30	22.53	22.94	22.99	---
8	22.59	22.94	23.20	22.85	22.52	---	22.16	22.30	22.54	22.95	23.00	---
9	22.59	22.95	23.19	22.84	22.52	---	22.17	22.31	22.56	22.98	23.01	---
10	22.56	22.97	23.18	22.83	22.52	---	22.16	22.32	22.57	22.99	23.02	---
11	22.57	22.98	23.13	22.83	22.52	---	22.17	22.32	22.60	22.96	23.03	---
12	22.58	23.00	23.13	22.82	22.52	---	22.17	22.33	22.61	22.87	23.04	---
13	22.59	23.02	23.13	22.81	22.52	---	22.16	22.35	22.62	22.88	23.05	---
14	22.60	23.03	23.13	22.81	22.53	---	22.16	22.36	22.64	22.90	23.06	---
15	22.61	23.05	23.12	22.80	22.53	---	22.16	22.37	22.66	22.91	23.07	---
16	22.62	23.06	23.12	22.80	22.53	---	22.16	22.38	22.67	22.92	23.08	---
17	22.62	23.08	23.12	22.79	22.53	---	22.17	22.39	22.69	22.93	23.09	---
18	22.63	23.09	23.11	22.78	22.53	---	22.17	22.40	22.71	22.91	23.10	---
19	22.65	23.11	23.11	22.78	22.53	---	22.18	22.41	22.72	22.91	23.11	---
20	22.66	23.12	23.11	22.71	22.54	---	22.18	22.43	22.74	22.93	23.13	---
21	---	23.13	23.11	22.63	22.54	---	22.18	22.44	22.75	22.94	23.14	---
22	---	23.12	23.11	22.61	22.54	---	22.19	22.45	22.76	22.95	23.15	---
23	22.69	23.13	23.11	22.60	---	---	22.19	22.46	22.78	22.96	23.17	---
24	22.71	23.14	23.00	22.59	---	---	22.20	22.47	22.80	22.93	23.18	---
25	22.72	23.15	22.93	22.58	---	---	22.21	22.44	22.81	22.92	23.20	---
26	22.74	23.17	22.93	22.57	---	---	22.21	22.45	22.82	22.92	23.21	---
27	22.75	23.19	22.93	22.56	---	---	22.22	22.46	22.83	22.92	23.23	---
28	22.76	23.18	22.92	22.55	---	---	22.23	22.48	22.84	22.93	23.25	---
29	22.78	23.18	22.92	22.55	---	---	22.23	22.48	22.86	22.93	23.26	---
30	22.79	23.19	22.92	22.54	---	---	22.23	22.43	22.87	22.94	23.28	---
31	22.80	---	22.92	22.54	---	---	---	22.44	---	22.95	23.29	---

OCT. 1994 to AUG. 1995

HIGHEST RECORDED 22.15 Apr. 6, 7, 1995

LOWEST 23.29 Aug. 31, 1995



## ULSTER COUNTY

414948074035101. Local number, U 405.

LOCATION.--Lat 41°49'48", long 74°03'51", Hydrologic Unit 02020007, Grist Mill Road, Tillson.

Owner: City School District of Kingston.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in., depth 33.3 ft in June 1994, cased to 34 ft, 2-in. well point (60-gauze screen 34 ft to 36 ft).

INSTRUMENTATION.--Tape measurement by USGS personnel every six weeks.

DATUM.--Elevation of land-surface datum is 240 ft above sea level, from topographic map.

Measuring point: Top of casing, 0.47 ft above land-surface datum.

REMARKS.--Originally a dug well, diameter 36 in., depth 21 ft, stone-lined. Well deepened by power auger, October 1965.

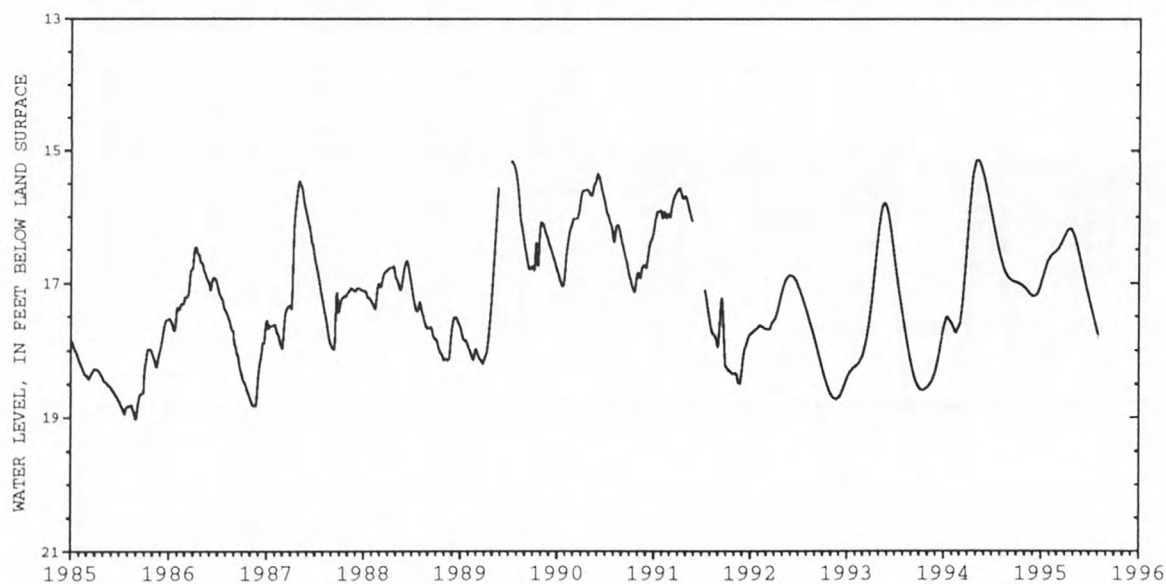
PERIOD OF RECORD.--October 1964 to July 1965, March 1966 to December 1974, April 1976 to August 1995 (discontinued).

Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level measured, 13.80 ft below land-surface datum, June 9, 1984; lowest measured, 20.71 ft below land-surface datum, Jan. 24, 1967.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02, 1994	17.07	JAN 26, 1995	16.66	APR 19, 1995	16.19	JUL 11, 1995	17.42
DEC 15	17.17	MAR 08	16.47	MAY 31	16.73	AUG 02	17.77



## WASHINGTON COUNTY

431030073192101. Local number, W 533.

LOCATION.--Lat 43°10'30", long 73°19'21", Hydrologic Unit 02020003, in Salem.

Owner: Salem Central High School.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 15.2 ft, cased to 16 ft, open end. Well backfilled 1.6 ft with coarse gravel.

INSTRUMENTATION.--Water-stage recorder--hourly punch.

DATUM.--Elevation of land-surface datum is 489.5 ft above sea level.

Measuring point: Top of casing, 3.10 ft above land-surface datum.

REMARKS.--Well was drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft northwest, which has a period of record from October 1965 to June 1973 (unpublished).

PERIOD OF RECORD.--March 1974 to August 1995 (discontinued). Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.30 ft below land-surface datum, Apr. 14, 1994, but may have been higher during period of no water level record all or part of each day Mar. 30 to Apr. 4, 1993, Mar. 31 to Apr. 11, 1994; lowest recorded, 7.77 ft below land-surface datum, Aug. 3, 1995.

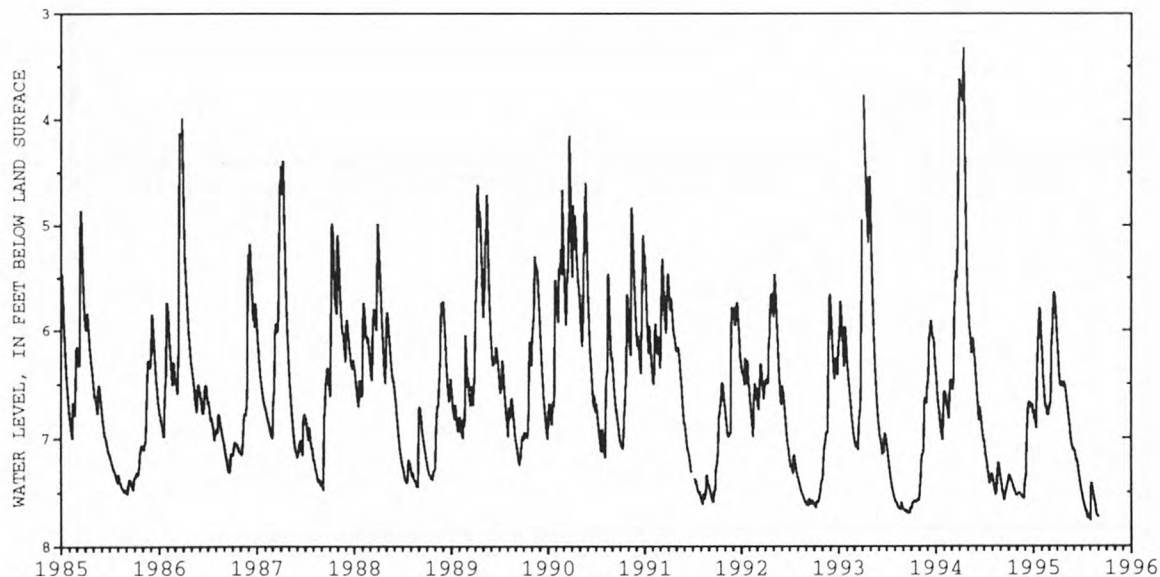
DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1994 TO AUGUST 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.36	7.53	7.39	6.76	6.09	6.73	6.09	6.54	7.11	7.50	7.74	---
2	7.35	7.52	7.38	6.75	6.13	6.73	6.13	6.56	7.12	7.51	7.76	---
3	7.34	7.52	7.37	6.75	6.19	6.71	6.18	6.58	7.12	7.53	7.76	---
4	7.34	7.51	7.36	6.78	6.24	6.70	6.22	6.60	7.11	7.54	7.49	---
5	7.35	7.51	7.34	6.81	6.28	6.69	6.26	6.62	7.12	7.55	7.42	---
6	7.35	7.51	7.21	6.83	6.35	6.68	6.31	6.64	7.14	7.57	7.41	---
7	7.36	7.51	7.10	6.83	6.42	6.66	6.36	6.66	7.15	7.58	7.42	---
8	7.37	7.51	6.99	6.81	6.46	6.59	6.40	6.68	7.17	7.59	7.43	---
9	7.38	7.50	6.92	6.83	6.49	6.34	6.44	6.70	7.19	7.60	7.45	---
10	7.38	7.50	6.87	6.86	6.53	6.16	6.47	6.73	7.20	7.61	7.46	---
11	7.38	7.51	6.82	6.88	6.56	6.10	6.49	6.75	7.22	7.62	7.48	---
12	7.39	7.51	6.74	6.91	6.60	6.08	6.52	6.77	7.21	7.63	7.50	---
13	7.40	7.51	6.70	6.87	6.64	6.04	6.50	6.79	7.20	7.64	7.51	---
14	7.41	7.51	6.69	6.71	6.67	5.95	6.48	6.82	7.21	7.65	7.52	---
15	7.42	7.52	6.68	6.42	6.70	5.86	6.48	6.84	7.23	7.66	7.54	---
16	7.42	7.52	6.67	6.36	6.72	5.79	6.48	6.86	7.25	7.67	7.55	---
17	7.43	7.53	6.67	6.25	6.70	5.72	6.49	6.88	7.26	7.67	7.57	---
18	7.44	7.53	6.67	6.15	6.71	5.67	6.50	6.91	7.28	7.67	7.58	---
19	7.45	7.54	6.67	6.09	6.72	5.64	6.51	6.94	7.30	7.68	7.59	---
20	7.46	7.54	6.68	6.06	6.73	5.65	6.52	6.97	7.32	7.71	7.60	---
21	7.46	7.54	6.69	5.99	6.74	5.67	6.53	6.99	7.34	7.72	7.62	---
22	7.47	7.54	6.71	5.92	6.77	5.67	6.50	7.01	7.35	7.73	7.64	---
23	7.48	7.54	6.72	5.85	6.79	5.69	6.48	7.03	7.37	7.74	7.67	---
24	7.48	7.54	6.72	5.80	6.75	5.73	6.48	7.05	7.39	7.72	7.69	---
25	7.49	7.55	6.70	5.79	6.72	5.77	6.48	7.07	7.41	7.73	7.70	---
26	7.50	7.55	6.69	5.81	6.75	5.81	6.49	7.07	7.43	7.72	7.71	---
27	7.51	7.55	6.69	5.84	6.78	5.85	6.50	7.08	7.44	7.70	7.71	---
28	7.51	7.55	6.69	5.89	6.78	5.90	6.51	7.10	7.46	7.71	7.71	---
29	7.52	7.47	6.70	5.95	---	5.95	6.50	7.11	7.48	7.72	7.72	---
30	7.53	7.42	6.73	6.01	---	6.00	6.52	7.09	7.49	7.73	7.72	---
31	7.53	---	6.77	6.05	---	6.05	---	7.09	---	7.74	7.73	---

OCT. 1994 to AUG. 1995

HIGHEST 5.64 Mar. 19, 20, 1995

LOWEST 7.77 Aug. 3, 1995



## WESTCHESTER COUNTY

411421073481201. Local number, We 3.

LOCATION.--Lat 41°14'21", long 73°48'12", Hydrologic Unit 02030101, near Yorktown Heights.

Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in., depth 17.0 ft in July 1994, original depth reported to be 18.2 ft, filled in to 17.1 ft as of November 1956, to 16.3 ft as of June 1971, to 15.5 ft as of October 1977, to 15.3 ft as of November 1978, cleaned out to 16.1 ft September 23, 1981, and 17.6 ft November 9, 1981, stone lined.

INSTRUMENTATION.--Tape measurement by USGS personnel every six weeks.

DATUM.--Elevation of land-surface datum is 252.5 ft above sea level.

Measuring point: Top edge of hole in wooden well cover, 1.13 ft above land-surface datum.

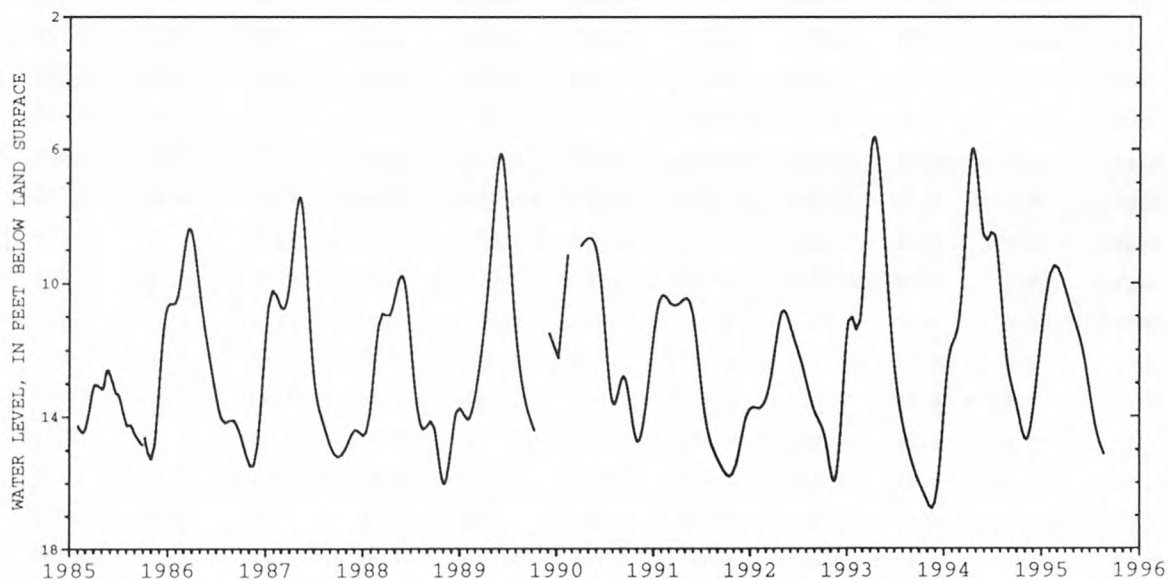
PERIOD OF RECORD.--April 1934 to September 1937, April 1938 to September 1945, March 1951 to August 1995 (discontinued).

Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.58 ft below land-surface datum, Apr. 26, 1983; lowest measured, dry, Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6, 13, 20, 27, 1965, Feb. 4, 1965, Nov. 12, 1970, Dec. 7, 1973, Sept. 10, 15, 20, 25, 30, 1977, Oct. 5, 10, 15, 20, 25, 1977, many days in water years 1979, 1980, 1981, and several days in water year 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1994 TO AUGUST 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 09, 1994	14.66	FEB 01, 1995	9.70	APR 26, 1995	10.94	JUL 20, 1995	14.24
DEC 21	12.23	MAR 15	9.81	JUN 08	12.19	AUG 22	15.14



DATE	TOTAL	SPEC.	PH		CALCIUM	MAG-	SODIUM	POTAS-	SULFATE	CHLO-	NI-	NI-	PHOS-
	PRECIP-	CONDC-	FIELD	FIELD	ATM	NESIUM	ATM	SIUM	ATM	RIDE	TROGEN	TROGEN	PHORUS
	ITATION	TANCE	ATM	ATM	ATM	ATM	ATM	ATM	ATM	ATM	NITRATE	AMMON.	ORTHO
	FOR	FIELD	WET	WET	WET	WET	WET	WET	WET	WET	AS	AS	AS
	DEFINED	ATM	ATM	ATM	ATM	ATM	ATM	ATM	ATM	ATM	NO3	NH4	PO4
	PERIOD	WET	WET	WET	WET	WET	WET	WET	WET	WET	AS	AS	AS
	(IN)	TOT	T	DIS	DIS	DIS	DIS	DIS	DIS	DIS	(MG/L)	(MG/L)	(MG/L)
OCT													
04-11	0.17	28.5	4.30	0.110	0.034	0.163	0.019	2.61	0.23	1.85	0.470	<0.003	
OCT													
11-18	0.02	--	--	--	--	--	--	--	--	--	--	--	
OCT													
18-25	0.26	52.2	3.91	0.130	0.015	0.031	0.008	3.61	0.21	3.65	0.110	<0.003	
OCT 25-													
NOV 01	0.42	27.4	4.24	0.050	0.039	0.314	0.014	1.60	0.52	1.89	0.160	<0.003	
NOV													
01-08	--	14.0	4.54	0.070	0.049	0.049	0.056	1.30	0.09	1.14	0.120	<0.003	
NOV													
08-15	0.36	9.0	4.74	0.030	0.005	0.020	<0.003	0.55	0.03	0.68	0.040	<0.003	
NOV													
15-22	1.02	9.8	4.82	0.040	0.053	0.451	0.033	0.57	0.86	0.49	0.050	0.004	
NOV													
22-29	2.15	8.8	4.91	<0.010	<0.003	0.024	0.003	0.33	0.05	0.26	0.040	<0.003	
NOV 29-													
DEC 06	1.43	8.9	4.67	0.010	<0.003	0.018	<0.003	0.58	0.05	0.49	0.030	<0.003	
DEC													
06-13	1.06	28.3	4.22	0.020	0.004	0.009	0.006	1.62	0.08	2.24	0.190	<0.003	
DEC													
13-20	0.22	26.8	4.20	0.030	0.025	0.206	0.013	1.95	0.50	1.20	0.080	<0.003	
DEC													
20-27	1.58	2.8	5.15	0.030	<0.003	0.030	0.018	0.11	0.06	0.16	<0.020	0.005	
DEC 27-													
JAN 03	1.19	9.7	4.59	<0.010	<0.003	0.026	0.003	0.42	0.05	0.83	0.070	<0.003	
JAN													
03-10	1.07	8.1	4.73	0.040	0.005	0.015	<0.003	0.38	0.04	0.64	0.030	<0.003	
JAN													
10-17	1.34	33.7	3.98	0.060	0.124	1.61	0.043	2.08	1.90	2.52	0.290	<0.003	
JAN													
17-24	1.67	9.1	4.68	<0.010	0.005	0.047	<0.003	0.29	0.08	0.82	0.030	<0.003	
JAN													
24-31	0.06	--	--	--	--	--	--	--	--	--	--	--	
JAN 31-													
FEB 07	1.00	7.5	4.71	0.020	<0.003	0.048	0.006	0.31	0.09	0.68	0.070	0.003	
FEB													
14-21	0.69	7.8	4.74	0.020	0.003	0.014	<						



## CHEMICAL QUALITY OF PRECIPITATION

## DELAWARE RIVER BASIN

BISCUIT BROOK ABOVE PIGEON BROOK AT FROST VALLEY, NY--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TOTAL PRECIP- ITATION FOR DEFINED PERIOD (IN)	SPEC. CONDUCT- TANCE FIELD ATM DEP WET TOT (US/CM)	PH FIELD ATM DEP WET T (UNITS)	CALCIUM ATM DEP WET DIS (MG/L)	MAG- NESIUM ATM DEP WET DIS (MG/L)	SODIUM ATM DEP WET DIS (MG/L)	POTAS- SIUM ATM DEP WET DIS (MG/L)	SULFATE ATM DEP WET DIS AS SO4 (MG/L)	CHLO- RIDE ATM DEP WET DIS (MG/L)	NI- TROGEN NITRATE ATM DEP WET DIS AS NO3 (MG/L)	NI- TROGEN AMMON. ATM DEP WET DIS AS NH4 (MG/L)	PHOS- PHORUS ORTHO ATM DEP WET DIS AS PO4 (MG/L)
MAY												
02-09	0.23	32.1	4.09	0.090	0.017	0.090	0.006	1.52	0.16	3.78	0.110	0.003
MAY												
09-16	0.48	31.9	4.21	0.130	0.018	0.032	0.023	2.17	0.06	2.53	0.450	<0.003
MAY												
16-23	0.19	39.1	4.11	0.270	0.061	0.054	0.086	3.40	0.11	2.69	0.340	<0.003
MAY												
23-30	1.82	28.2	4.24	0.120	0.022	0.066	0.036	2.75	0.12	1.43	0.340	<0.003
MAY 30-												
JUN 06	1.02	16.8	4.44	0.040	0.010	0.028	0.012	1.43	0.06	1.02	0.260	<0.003
JUN												
06-13	0.75	46.1	4.02	0.090	0.013	0.054	0.022	4.01	0.12	2.42	0.630	<0.003
JUN												
13-20	0.15	12.4	4.71	0.310	0.037	0.050	0.028	1.17	0.08	1.08	0.290	<0.003
JUN												
20-27	1.89	12.0	4.60	0.010	0.004	0.024	0.003	0.40	0.04	0.64	0.080	<0.003
JUN 27-												
JUL 05	0.11	72.0	3.88	0.090	0.025	0.106	0.020	6.06	0.25	3.89	0.870	<0.003
JUL												
05-11	0.98	29.7	4.23	0.060	0.012	0.053	0.016	2.40	0.10	1.58	0.270	<0.003
JUL												
11-18	1.37	29.2	4.19	0.060	0.010	0.066	0.011	2.49	0.10	1.63	0.290	<0.003
JUL												
18-25	0.44	44.1	4.05	0.040	0.009	0.012	<0.003	4.23	0.06	1.71	0.320	<0.003
JUL 25-												
AUG 01	0.86	47.7	4.02	0.090	0.015	0.052	0.013	3.86	0.13	2.99	0.530	<0.003
AUG												
01-08	0.85	25.5	--	0.030	0.006	0.029	0.007	1.36	0.05	0.86	0.160	<0.003
AUG												
08-15	0.10	90.0	--	0.340	0.060	0.125	0.023	6.08	0.30	6.52	0.660	<0.003
AUG												
15-22	0.29	49.8	--	0.130	0.022	0.053	0.017	5.01	0.10	2.70	0.870	<0.003
AUG												
22-29	0.00	--	--	--	--	--	--	--	--	--	--	--
AUG 29-												
SEP 05	0.53	35.1	--	0.110	0.014	0.022	0.004	3.39	0.08	1.35	0.440	<0.003
SEP												
05-12	0.31	112.8	3.71	0.100	0.025	0.148	0.018	8.95	0.49	4.73	1.15	<0.003
SEP												
12-19	1.34	12.4	4.48	0.010	0.005	0.051	<0.003	0.99	0.07	0.60	0.210	<0.003
SEP												
19-26	1.72	25.3	4.27	0.010	0.008	0.092	0.003	1.63	0.13	1.53	0.210	<0.003
SEP 26-												
OCT 03	0.16	14.9	4.44	0.020	0.006	0.058	0.027	1.00	0.07	0.87	0.170	<0.003

## NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM

## HUDSON RIVER BASIN

## Introduction

In 1991, the U.S. Geological Survey began full-scale implementation of a National Water-Quality Assessment (NAWQA) program. The long-term goals of the NAWQA program are to describe the physical, chemical, and biological conditions for a large part of the Nation's surface-water and ground-water resources, and to identify the major natural and human factors that influence the quality of these resources. Sixty study units, ranging in size from 1,200 to more than 60,000 square miles and representing major river or aquifer systems in the United States, will be investigated for the NAWQA program. Water-quality information collected during the program will be useful to policy makers and managers at all levels of government as well as to other water-resource professionals.

Assessment of the 13,400 square mile Hudson River basin began in 1991 and is currently in an intensive data-collection phase. Intensive sampling will be followed in 1996 by a 6-year period of low-intensity sampling, evaluation, and assessment with intensive sampling planned to resume in 2002.

Surface-water, ground-water, and biological data collected in the Hudson River basin for selected sampling activities during the 1994 and 1995 water years are compiled in the following tables. Surface-water samples were collected during medium-flow conditions at 14 fixed sites to relate physical and chemical characteristics of stream water to the human and natural factors that may affect them. Stream-bed sediment samples were collected during low-flow conditions at 5 sites to determine concentrations of trace elements and hydrophobic organic compounds in stream bed sediments at selected sites in the basin. Fish specimens were collected from selected sites during September 1994 and May 1995 for analysis of organochlorine compounds, metals and trace elements in fish tissues. Ground-water samples were collected from wells in Albany, Columbia, Herkimer, Montgomery, Oneida, Orange, Rensselaer, and Schenectady counties and two springs in Herkimer County to characterize the ground-water quality of the Mohawk and Hudson valleys. Ground-water and surface-water samples were also collected in a flowpath study conducted in the Canajoharie Creek watershed to investigate the source and the transport of agricultural chemicals and to determine the extent and role of the interaction between shallow ground water and surface water.

Data for the sampling activities are compiled in the following tables with additional information describing data-collection methods summarized at the beginning of each table. More detailed explanations of the data-collection methods are available in the following reports:

American Fisheries Society, 1991, Common and scientific names of fishes from the United States and Canada (5th ed.): American Fisheries Society special publication 20, 183 p.

Crawford, K.J. and Luoma, S.N., 1993, Guidelines for studies of contaminants in biological tissues for the National Water-Quality Assessment program: U.S. Geological Survey Open-File Report 92-494, 69 p.

Koterba, M., Wilde, F., and Lapham, W., 1995, Ground-water data collection protocols and procedures for the National Water-Quality Assessment program: Collection and documentation of water-quality samples and related data: U.S. Geological Survey Open-File Report 95-399, 113 p.

Lapham, W., Wilde, F., and Koterba, M., 1995, Ground-water data collection protocols and procedures for the National Water-Quality Assessment program: Selection, installation, and documentation of wells, and collection of related data: U.S. Geological Survey Open-File Report 95-398, 69 p.

Shelton, L.R., 1994, Field guide for collecting and processing stream-water samples for the National Water-Quality Assessment program: U.S. Geological Survey Open-File Report 94-455, 42 p.

Shelton, L.R. and Capel, P.D., 1994, Guidelines for collecting and processing samples of stream bed sediment for analysis of trace elements and organic contaminants for the National Water-Quality Assessment program: U.S. Geological Survey Open-File Report 94-458, 20 p.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organic contaminants in stream bed sediments - Hudson River basin  
(National water-quality assessment program)

Stream bed sediment samples were collected during low-flow conditions in the Hudson River basin at 5 sites in October 1994 to determine concentrations of trace elements and hydrophobic organic compounds in stream bed sediments at selected sites in the basin. Composite bed sediment samples were collected at each site through collection of the top 1 to 2 centimeters of material from at least 5 different depositional areas within the stream reach. A subsample from the composite sample collected at each site was shipped to the Pennsylvania District sediment laboratory for particle-size analysis. Additionally, subsamples from the composite were: (1) processed using a 2.0-millimeter stainless-steel mesh sieve for preparation of material for organic contaminant analysis, and (2) processed using a 63-micrometer nylon-cloth sieve for preparation of material for trace element analysis. More specific details describing the guidelines used in collecting and in processing the stream bed sediment samples can be found in Shelton and Capel (1994).

Results of the laboratory analyses and the field measurements recorded at the time of sample collection are summarized in the following tables. Additional surface-water and/or water-quality data for some of these sampling sites can be found in the continuous-record station section of this report.

## WATER-QUALITY DATA, OCTOBER 1994

STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	DATE	TIME
01328700	MOSES KILL NEAR FORT MILLER NY	43 12 20 N	073 33 06 W	10-25-94	1500
01329500	BATTEN KILL AT BATTENVILLE NY	43 06 05 N	073 25 55 W	10-25-94	1015
01361000	KINDERHOOK CREEK AT ROSSMAN NY	42 19 50 N	073 44 40 W	10-26-94	1330
01367500	RONDOUT CREEK AT ROSENDALE NY	41 50 35 N	074 05 11 W	10-28-94	1030
01372500	WAPPINGER CREEK NEAR WAPPINGERS FALLS NY	41 39 11 N	073 52 23 W	10-27-94	1030
01372500	WAPPINGER CREEK NEAR WAPPINGERS FALLS NY	41 39 11 N	073 52 23 W	10-27-94	1031

STATION NUMBER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CALCIUM BOT MAT <63U WS FIELD PERCENT	MAGNE- SIUM BOT MAT <63U WS FIELD PERCENT	SODIUM BOT MAT <63U WS FIELD PERCENT
01328700	10-25-94	488	7.7	18.0	12.5	758	9.8	93	0.87	0.92	0.86
01329500	10-25-94	235	7.5	8.5	10.0	751	11.2	101	2.6	1.3	0.99
01361000	10-26-94	238	7.5	10.0	10.5	766	10.3	92	0.48	0.93	1.2
01367500	10-28-94	134	7.3	7.0	9.0	769	11.4	98	--	--	--
01372500	10-27-94	382	7.5	6.5	9.5	766	10.8	94	1.2	1.1	0.94
01372500	*10-27-94	382	7.5	6.5	9.5	766	10.8	94	1.2	1.2	0.95

STATION NUMBER	DATE	POTAS- SIUM BOT MAT <63U WS FIELD PERCENT	SULFUR BOT MAT <63U WS FIELD PERCENT	PHOS- PHORUS BOT MAT <63U WS FIELD PERCENT	ALUM- INUM BOT MAT <63U WS FIELD PERCENT	ANTI- MONY BOT MAT <63U WS FIELD (UG/G)	ARSENIC BOT MAT <63U WS FIELD (UG/G)	BARIUM BOT MAT <63U WS FIELD (UG/G)	BERYL- LIUM BOT MAT <63U WS FIELD (UG/G)	BISMUTH BOT MAT <180UWS FIELD (UG/G)	CADMIUM BOT MAT <63U WS FIELD (UG/G)
01328700	10-25-94	2.1	0.14	0.14	6.6	1	7	570	2	<10	1
01329500	10-25-94	2.6	0.06	0.11	7.5	<1	6	650	2	<10	<1
01361000	10-26-94	2.0	0.09	0.12	7.2	1	9	570	2	<10	<1
01367500	10-28-94	--	--	--	--	--	--	--	--	--	--
01372500	10-27-94	1.7	0.16	0.15	6.0	1	7	520	1	<10	1
01372500	*10-27-94	1.7	0.17	0.15	6.3	1	8	520	1	<10	1

STATION NUMBER	DATE	CERIUM BOT MAT <63U WS FIELD (UG/G)	CHRO- MIUM BOT MAT <63U WS FIELD (UG/G)	COBALT BOT MAT <63U WS FIELD (UG/G)	COPPER BOT MAT <63U WS FIELD (UG/G)	EURO- PIUM BOT MAT <63U WS FIELD (UG/G)	GALLIUM BOT MAT <63U WS FIELD (UG/G)	GOLD BOT MAT <63U WS FIELD (UG/G)	HOLMIUM BOT MAT <63U WS FIELD (UG/G)	IRON BOT MAT <63U WS FIELD PERCENT	LANTHA- NUM BOT MAT <63U WS FIELD (UG/G)
01328700	10-25-94	94	57	17	23	<2	17	<8	<4	4.0	44
01329500	10-25-94	89	68	18	20	<2	18	<8	<4	4.1	43
01361000	10-26-94	82	62	17	38	<2	17	<8	<4	4.2	40
01367500	10-28-94	--	--	--	--	--	--	--	--	--	--
01372500	10-27-94	66	57	14	53	<2	14	<8	<4	3.7	33
01372500	*10-27-94	78	59	16	55	<2	13	<8	<4	3.9	38

\* Replicate sample

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organic contaminants in stream bed sediments - Hudson River basin--Continued

## WATER-QUALITY DATA, OCTOBER 1994

STATION NUMBER	DATE	LEAD BOT MAT <63U WS FIELD (UG/G)	LITHIUM BOT MAT <63U WS FIELD (UG/G)	MANGA- NESE BOT MAT <63U WS FIELD (UG/G)	MERCURY BOT MAT <63U WS FIELD (UG/G)	MOLYB- DENUM BOT MAT <63U WS FIELD (UG/G)	NEODYM- IUM BOT MAT <63U WS FIELD (UG/G)	NICKEL BOT MAT <63U WS FIELD (UG/G)	NIOBIUM BOT MAT <63U WS FIELD (UG/G)	SCAN- DIUM BOT MAT <63U WS FIELD (UG/G)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G)
01328700	10-25-94	38	60	2200	0.07	<2	41	29	4	11	0.8
01329500	10-25-94	19	50	1500	0.03	<2	39	35	10	12	0.3
01361000	10-26-94	40	60	3100	0.08	<2	37	32	9	12	0.3
01367500	10-28-94	--	--	--	--	--	--	--	--	--	--
01372500	10-27-94	90	60	3500	0.16	<2	31	35	5	10	1.0
01372500	*10-27-94	93	60	3600	0.17	<2	35	7	6	11	1.0

STATION NUMBER	DATE	SILVER BOT MAT <63U WS FIELD (UG/G)	STRON- TIUM BOT MAT <63U WS FIELD (UG/G)	TANTA- LUM BOT MAT <63U WS FIELD (UG/G)	THORIUM BOT MAT <63U WS FIELD (UG/G)	TIN BOT MAT <63U WS FIELD (UG/G)	TITA- NIUM, S ED, BMW S, <63U DRY WGT REC PERCENT	URANIUM BOT MAT <63U WS FIELD (UG/G)	VANA- DIUM BOT MAT <63U WS FIELD (UG/G)	YTTER- BIUM BOT MAT <63U WS FIELD (UG/G)	YTTRIUM BOT MAT <63U WS FIELD (UG/G)
01328700	10-25-94	0.2	81	<40	14	<10	0.23	3	67	2	19
01329500	10-25-94	0.1	140	<40	11	<10	0.42	3	88	3	25
01361000	10-26-94	0.2	92	<40	13	<10	0.35	3	78	3	25
01367500	10-28-94	--	--	--	--	--	--	--	--	--	--
01372500	10-27-94	0.2	75	<40	10	<10	0.23	3	76	2	23
01372500	*10-27-94	0.2	76	<40	11	<10	0.26	3	79	2	25

STATION NUMBER	DATE	ZINC BOT MAT <63U WS FIELD (UG/G)	CARBON, ORG + INORG, SED, BM WS, <63U DW, REC PERCENT	CARBON, ORGANIC SED, BM WS, <63U DW, REC (PER- CENT)	CARBON, INORG, SED, BM WS, <63U DW, REC (PER- CENT)	CARBON, ORG + INORG SED, BM WS, <2MM DW, REC (G/KG)	CARBON, ORGANIC SED, BM WS, <2MM DW, REC (G/KG)	CARBON, INORG, SED, BM WS, <2MM DW, REC (G/KG)	PCB, SED, BM WS, <2MM DW, REC (UG/KG)	ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG)	ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG)
01328700	10-25-94	180	5.0	4.9	0.13	28	23	4.6	<50	<50	<50
01329500	10-25-94	110	2.6	1.9	0.69	42	42	0.5	<50	<50	<50
01361000	10-26-94	180	3.2	3.2	0.04	13	13	<0.1	<50	<50	<50
01367500	10-28-94	--	--	--	--	20	20	0.2	<50	<50	<50
01372500	10-27-94	200	7.0	6.7	0.24	100	98	1.5	62	190	59
01372500	*10-27-94	200	7.1	6.9	0.26	100	99	1.2	<50	230	93

STATION NUMBER	DATE	ACRI- DINE SED, BM WS, <2MM DW, REC (UG/KG)	ALDRIN, SED, BM WS, <2MM DW, REC (UG/KG)	PHENOL C8- ALKYL- SED, BM WS, <2MM DW, REC (UG/KG)	ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG)	9,10- ANTHRA- QUINONE SED, BM WS, <2MM DW, REC (UG/KG)	AZO- BENZENE SED, BM WS, <2MM DW, REC (UG/KG)	BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG)	BENZOC NOLINE BED MAT WS <2MM DRY WGT REC (UG/KG)	BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG)	BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG)
01328700	10-25-94	<50	<1.0	<50	<50	<50	<50	63	<50	<50	<50
01329500	10-25-94	<50	<1.0	<50	<50	<50	<50	100	<50	58	80
01361000	10-26-94	<50	<1.0	<50	<50	<50	<50	97	<50	65	72
01367500	10-28-94	<50	<1.0	<50	<50	<50	<50	94	<50	58	74
01372500	10-27-94	80	<3.0	<50	230	210	<50	610	<50	510	470
01372500	*10-27-94	<50	<1.0	<50	780	<50	<50	1300	<50	1200	1000

\* Replicate sample

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organic contaminants in stream bed sediments - Hudson River basin--Continued

## WATER-QUALITY DATA, OCTOBER 1994

STATION NUMBER	DATE	BENZO(G HI)PERY LENE SED, BM WS,<2MM DW, REC (UG/KG)	BENZO (A) PYRENE SED, BM WS,<2MM DW, REC (UG/KG)	2,2'-BI QUINO- LINE, SED, BM WS,<2MM DW, REC (UG/KG)	4-BROMO PHNPHNL ETHER SED, BM WS,<2MM DW, REC (UG/KG)	PHTHALA TEBUTYL BENZYL- SED, BM WS,<2MM DW, REC (UG/KG)	CARBA- ZOLE SED, BM WS,<2MM DW, REC (UG/KG)	CIS- CHLOR- DANE, SED, BM WS,<2MM DW, REC (UG/KG)	TRANS- CHLOR- DANE, SED, BM WS,<2MM DW, REC (UG/KG)	METHANE 2CHLORO ETHOXY SED, BM WS,<2MM DW, REC (UG/KG)	M-CRE- SOL, 4- CHLORO- SED, BM WS,<2MM DW, REC (UG/KG)
01328700	10-25-94	<50	<50	<50	<50	69	<50	<1.0	<1.0	<50	<50
01329500	10-25-94	<50	55	<50	<50	79	<50	<1.0	<1.0	<50	<50
01361000	10-26-94	<50	57	<50	<50	62	<50	<1.0	<1.0	<50	<50
01367500	10-28-94	<50	54	<50	<50	74	<50	<1.0	<1.0	<50	<50
01372500	10-27-94	290	460	<50	<50	270	110	E1.8	2.2	<50	<50
01372500	*10-27-94	370	840	<50	<50	<50	190	E1.5	E1.4	<50	<50

STATION NUMBER	DATE	NAPTHAL ENE, 2- CHLORO- SED, BM WS,<2MM DW, REC (UG/KG)	CHLORO- NEB, SED, BM WS,<2MM DW, REC (UG/KG)	PHENOL, 2CHLORO BED MAT WS <2MM DRY WGT REC (UG/KG)	4CHLORO PHNPHN LEATHER SED, BM WS,<2MM DW, REC (UG/KG)	CHRY- SENE SED, BM WS,<2MM DW, REC (UG/KG)	P- CRESOL SED, BM WS,<2MM DW, REC (UG/KG)	DCPA, SED, BM WS,<2MM DW, REC (UG/KG)	O, P'- DDD, SED, BM WS,<2MM DW, REC (UG/KG)	P, P'- DDD, SED, BM WS,<2MM DW, REC (UG/KG)	O, P'- DDE, SED, BM WS,<2MM DW, REC (UG/KG)
01328700	10-25-94	<50	<5.0	<50	<50	<50	<50	<5.0	<1.0	<1.0	<1.0
01329500	10-25-94	<50	<5.0	<50	<50	73	<50	<5.0	<1.0	<1.0	<1.0
01361000	10-26-94	<50	<5.0	<50	<50	68	<50	<5.0	<1.0	1.7	<1.0
01367500	10-28-94	<50	<5.0	<50	<50	70	<50	<5.0	<1.0	2.7	<1.0
01372500	10-27-94	<50	<5.0	<50	<50	590	100	<5.0	<3.0	9.5	<3.0
01372500	*10-27-94	<50	<5.0	<50	<50	1400	110	<5.0	<3.0	11	<3.0

STATION NUMBER	DATE	P, P'- DDE, SED, BM WS,<2MM DW, REC (UG/KG)	O, P'- DDT, SED, BM WS,<2MM DW, REC (UG/KG)	P, P'- DDT, SED, BM WS,<2MM DW, REC (UG/KG)	DIBENZ (AH), AN THRACEN SED, BM WS,<2MM DW, REC (UG/KG)	THIOPH ENE, DI- BENZO- SED, BM WS,<2MM DW, REC (UG/KG)	PHTHAL- ATE, DIBUTYL SED, BM WS,<2MM DW, REC (UG/KG)	BENZENE O-DI- CHLORO- SED, BM WS,<2MM DW, REC (UG/KG)	BENZENE M-DI- CHLORO- SED, BM WS,<2MM DW, REC (UG/KG)	BENZENE P-DI- CHLORO- SED, BM WS,<2MM DW, REC (UG/KG)	DIEL- DRIN, SED, BM WS,<2MM DW, REC (UG/KG)
01328700	10-25-94	<1.0	<2.0	<2.0	<50	<50	69	<50	<50	<50	<1.0
01329500	10-25-94	1.3	<2.0	<2.0	<50	<50	98	<50	<50	<50	<1.0
01361000	10-26-94	6.2	<2.0	4.6	<50	<50	67	<50	<50	<50	<1.0
01367500	10-28-94	8.8	<2.0	4.1	<50	<50	80	<50	<50	<50	<1.0
01372500	10-27-94	23	<4.0	19	260	<50	240	<50	<50	<50	2.1
01372500	*10-27-94	30	<5.0	18	310	67	210	<50	<50	<50	E1.6

STATION NUMBER	DATE	PHTHAL- ATE, DI- ETHYL SED, BM WS,<2MM DW, REC (UG/KG)	NAPTHAL ENE 1,2 DIMETHL SED, BM WS,<2MM DW, REC (UG/KG)	NAPTHAL ENE 1,6 DIMETHL SED, BM WS,<2MM DW, REC (UG/KG)	NAPTHAL ENE 2,6 DIMETHL SED, BM WS,<2MM DW, REC (UG/KG)	3,5- XYLENOL SED, BM WS,<2MM DW, REC (UG/KG)	PHTHAL- ATE, DI- METHYL SED, BM WS,<2MM DW, REC (UG/KG)	TOLUENE 2,4-DI- NITRO- SED, BM WS,<2MM DW, REC (UG/KG)	TOLUENE 2,6-DI- NITRO- SED, BM WS,<2MM DW, REC (UG/KG)	PHTHAL ATE, D IOCTYL SED, BM WS,<2MM DW, REC (UG/KG)
01328700	10-25-94	<50	<50	<50	130	<50	<50	<50	<50	<50
01329500	10-25-94	<50	<50	<50	95	<50	<50	<50	<50	<50
01361000	10-26-94	<50	<50	<50	65	<50	<50	<50	<50	<50
01367500	10-28-94	<50	<50	<50	<50	<50	<50	<50	<50	<50
01372500	10-27-94	<50	<50	<50	180	<50	<50	<50	<50	<50
01372500	*10-27-94	<50	<50	81	270	<50	<50	<50	<50	<50

E Estimated

\* Replicate sample



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organic contaminants in stream bed sediments - Hudson River basin--Continued

## WATER-QUALITY DATA, OCTOBER 1994

STATION NUMBER	DATE	ENDO- SULFAN I, SED, BM WS, <2MM DW, REC (UG/KG)	ENDRIN, SED, BM WS, <2MM DW, REC (UG/KG)	PHTHALA TE, BIS2 ETHHEXL SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTHAL ENE, 2- ETHYL- SED BM WS <2MM DW REC (UG/KG)	FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG)	9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG)	ALPHA- BHC, SED, BM WS, <2MM DW, REC (UG/KG)	BETA- BHC, SED, BM WS, <2MM DW, REC (UG/KG)	LINDANE SED, BM WS, <2MM DW, REC (UG/KG)
01328700	10-25-94	<1.0	<2.0	310	<50	<50	<50	<1.0	<1.0	<1.0
01329500	10-25-94	2.9	<2.0	680	<50	110	<50	<1.0	<1.0	<1.0
01361000	10-26-94	<1.0	<2.0	380	<50	97	<50	<1.0	<1.0	<1.0
01367500	10-28-94	<1.0	<2.0	360	<50	97	<50	<1.0	<1.0	<1.0
01372500	10-27-94	<3.0	<4.0	1200	<50	1200	<50	<1.0	<3.0	<3.0
01372500	*10-27-94	<3.0	<5.0	770	<50	2700	130	<3.0	<3.0	<3.0
STATION NUMBER	DATE	HEPTA- CHLOR, SED, BM WS, <2MM DW, REC (UG/KG)	HEPTA- CHLOR EPOXIDE SED, BM WS, <2MM DW, REC (UG/KG)	BENZENE HEXA- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG)	INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG)	ISODRIN SED, BM WS, <2MM DW, REC (UG/KG)	ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG)	ISO- QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG)	METHOXY CHLOR, O, P'-, SED, BM WS, <2MM DW, REC (UG/KG)	METHOXY CHLOR P, P'-, SED, BM WS, <2MM DW, REC (UG/KG)
01328700	10-25-94	<1.0	<1.0	<50	<50	<1.0	<50	<50	<5.0	<5.0
01329500	10-25-94	<1.0	<1.0	<50	<50	<1.0	<50	<50	<5.0	<5.0
01361000	10-26-94	<1.0	<1.0	<50	55	<1.0	<50	<50	<5.0	<5.0
01367500	10-28-94	<1.0	<1.0	<50	<50	<1.0	<50	<50	<5.0	<5.0
01372500	10-27-94	<3.0	<3.0	<50	430	<3.0	<50	<50	<5.0	<5.0
01372500	*10-27-94	<1.0	<3.0	<50	960	<1.0	<50	<50	<5.0	<5.0
STATION NUMBER	DATE	ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG)	4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG)	9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG)	PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG)	PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG)	MIREX, SED, BM WS, <2MM DW, REC (UG/KG)	NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG)	BENZENE NITRO- SED, BM WS, <2MM DW, REC (UG/KG)	DIPHNYL AMINE, N NITROSO SED, BM WS, <2MM DW, REC (UG/KG)
01328700	10-25-94	<50	<50	<50	<50	<50	<1.0	<50	<50	<50
01329500	10-25-94	<50	<50	<50	<50	<50	<1.0	<50	<50	<50
01361000	10-26-94	<50	<50	<50	<50	<50	<1.0	<50	<50	<50
01367500	10-28-94	<50	<50	<50	<50	<50	<1.0	<50	<50	<50
01372500	10-27-94	140	140	<50	93	180	<3.0	<50	<50	<50
01372500	*10-27-94	210	300	<50	140	180	<1.0	<50	<50	<50
STATION NUMBER	DATE	DPROPYL AMINE, N NITROSO SED, BM WS, <2MM DW, REC (UG/KG)	CIS- NONA- CHLOR, SED, BM WS, <2MM DW, REC (UG/KG)	TRANS- NONA- CHLOR, SED, BM WS, <2MM DW, REC (UG/KG)	OXY- CHLOR- DANE, SED, BM WS, <2MM DW, REC (UG/KG)	PENTA- CHLORO- ANISOLE SED, BM WS, <2MM DW, REC (UG/KG)	BENZENE PNTCHLR NITRO- SED, BM WS, <2MM DW, REC (UG/KG)	CIS- PER- METHRIN SED, BM WS, <2MM DW, REC (UG/KG)	TRANS- PER- METHRIN SED, BM WS, <2MM DW, REC (UG/KG)	PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG)
01328700	10-25-94	<50	<1.0	<1.0	<1.0	<50	<50	<5.0	<5.0	<50
01329500	10-25-94	<50	<1.0	1.1	<1.0	<50	<50	<5.0	<5.0	71
01361000	10-26-94	<50	<1.0	<1.0	<1.0	<50	<50	<5.0	<5.0	53
01367500	10-28-94	<50	<1.0	<1.0	<1.0	<50	<50	<5.0	<5.0	53
01372500	10-27-94	<50	<3.0	4.3	<3.0	<50	<50	<15	--	440
01372500	*10-27-94	<50	<3.0	3.5	<3.0	<50	<50	<15	<30	1700

\* Replicate sample

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organic contaminants in stream bed sediments - Hudson River basin--Continued

WATER-QUALITY DATA, OCTOBER 1994

STATION NUMBER	DATE	PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG)	PHENOL SED, BM WS, <2MM DW, REC (UG/KG)	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG)	QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG)	TOXA- PHENE SED, BM WS, <2MM DW, REC (UG/KG)	BENZENE 124TRI- CHLORO- SED, BM WS, <2MM DW, REC (UG/KG)	NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM
01328700	10-25-94	<50	<50	<50	<50	<200	<50	<50	28	73
01329500	10-25-94	<50	<50	110	<50	<200	<50	<50	4	29
01361000	10-26-94	<50	<50	100	<50	<200	<50	<50	2	10
01367500	10-28-94	<50	<50	100	<50	<200	<50	<50	3	24
01372500	10-27-94	<50	89	980	<50	<200	<50	<50	4	35
01372500	*10-27-94	<50	110	95	<50	<200	<50	<50	4	33

\* Replicate sample

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Wastewater treatment plant samples - Hudson River basin  
(National water-quality assessment program)

Waste water treatment plant samples were collected to examine the effects of sewage effluent on stream and river chemistry during low-flow conditions in the Hudson River Basin. The wastewater treatment plants were chosen for sampling based on whether these plants discharged into streams or rivers that had been previously sampled for water chemistry data as part of monthly or basin-wide sampling events. There were a total of 17 sites sampled and samples were analyzed for major inorganic constituents, nutrients, and dissolved organic carbon.

STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	DATE
412342074203701	GOSHEN WWTP TO WALLKILL RIVER	41 23 42 N	074 20 37 W	08-02-95
412535074252701	MIDDLETOWN WWTP TO WALLKILL RIVER	41 25 35 N	074 25 27 W	07-27-95
414718073415101	MILLBROOK WWTP TO WAPPINGER CREEK	41 47 18 N	073 41 51 W	07-27-95
415818074000501	ESOPUS NYC-DEP PINEHILL WWTP TO BIRCH CREEK	41 58 18 N	074 00 05 W	08-03-95
424036074283701	COBLESKILL WWTP TO COBLESKILL CREEK	42 40 36 N	074 28 37 W	07-19-95
424038073434301	ALBANY NORTH WWTP TO HUDSON RIVER	42 40 38 N	073 43 43 W	07-25-95
424038073434301	ALBANY NORTH WWTP TO HUDSON RIVER	42 40 38 N	073 43 43 W	07-26-95
424055073425301	RENSSELAER WWTP TO HUDSON RIVER	42 40 55 N	073 42 53 W	07-18-95
424055073425301	RENSSELAER WWTP TO HUDSON RIVER	42 40 55 N	073 42 53 W	08-03-95
424318073124201	HOOSIC WATER QUALITY DISTRICT WWTP TO HOOSIC RIVER	42 43 18 N	073 12 42 W	07-18-95
424318073124201	HOOSIC WATER QUALITY DISTRICT WWTP TO HOOSIC RIVER	42 43 18 N	073 12 42 W	08-07-95
424807074364801	SHARON SPRINGS WWTP TO BRIMSTONE CREEK	42 48 07 N	074 36 48 W	07-19-95
425025073551001	SCHENECTADY WWTP TO MOHAWK RIVER	42 50 25 N	073 55 10 W	07-18-95
425025073551001	SCHENECTADY WWTP TO MOHAWK RIVER	42 50 25 N	073 55 10 W	08-07-95
425245073411701	SARATOGA WWTP TO HUDSON RIVER	42 52 45 N	073 41 17 W	08-01-95
425522074100001	AMSTERDAM WWTP TO MOHAWK RIVER	42 55 22 N	074 10 00 W	07-19-95
425522074100001	AMSTERDAM WWTP TO MOHAWK RIVER	42 55 22 N	074 10 00 W	08-07-95
430558075114301	ONEIDA COUNTY WWTP TO MOHAWK RIVER	43 05 58 N	075 11 43 W	07-26-95
431551073350001	FORT EDWARD WASH CO. SEWER WWTP TO HUDSON RIVER	43 15 51 N	073 35 00 W	08-01-95
431828073372601	GLENS FALLS WWTP TO HUDSON RIVER	43 18 28 N	073 37 26 W	08-01-95
432857073475501	WARRENSBURG WWTP TO SCHROON RIVER	43 28 57 N	073 47 55 W	07-25-95
435721074070501	NEWCOMB WWTP TO WINE BROOK	43 57 21 N	074 07 05 W	07-25-95

STATION NUMBER	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)
412342074203701	08-02-95	1100	1.9	760	6.5	34.0	28.5	753	3.6	47
412535074252701	07-27-95	1200	7.1	538	6.3	30.0	27.0	749	6.0	77
414718073415101	07-27-95	1430	0.19	604	6.6	30.0	25.0	749	2.2	27
415818074000501	08-03-95	1100	0.15	270	6.6	28.0	19.5	762	6.2	67
424036074283701	07-19-95	1100	2.8	1190	7.1	26.0	25.0	735	7.5	94
424038073434301	07-25-95	0900	26	680	7.0	23.0	23.0	744	7.6	91
424038073434301	07-26-95	1330	26	690	7.1	26.5	25.5	749	5.5	69
424055073425301	07-18-95	1100	23	556	7.1	32.0	25.0	741	3.9	49
424055073425301	08-03-95	1400	28	1020	6.7	28.0	25.0	762	4.5	55
424318073124201	07-18-95	0930	7.0	516	7.4	24.0	20.5	741	8.4	97
424318073124201	08-07-95	1000	5.8	500	7.2	22.5	18.5	755	5.5	59
424807074364801	07-19-95	1000	0.31	412	7.3	26.0	21.0	735	5.8	68
425025073551001	07-18-95	1315	16	811	7.4	34.5	25.0	750	5.2	64
425025073551001	08-07-95	1300	16	801	7.1	22.5	20.5	755	4.5	51
425245073411701	08-01-95	1230	14	1010	7.0	--	25.0	760	4.8	58
425522074100001	07-19-95	1330	15	374	7.5	29.0	25.0	735	8.0	101
425522074100001	08-07-95	1430	15	354	7.3	25.5	24.5	756	4.6	56
430558075114301	07-26-95	1030	43	609	7.0	26.0	22.0	747	4.0	47
431551073350001	08-01-95	0930	2.0	634	5.5	--	23.0	760	5.2	60
431828073372601	08-01-95	1030	8.7	680	6.9	--	27.5	760	3.8	49
432857073475501	07-25-95	1030	0.15	807	7.0	30.0	26.5	744	5.5	71
435721074070501	07-25-95	1330	0.02	454	7.0	32.0	17.0	744	8.9	95

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Wastewater treatment plant samples - Hudson River basin--Continued

STATION NUMBER	DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
412342074203701	08-02-95	300	100	12	35	19	0.9	13	325	30
412535074252701	07-27-95	92	29	4.7	54	53	2	8.7	62	39
414718073415101	07-27-95	140	39	9.2	46	40	2	9.9	79	29
415818074000501	08-03-95	52	15	3.5	18	41	1	3.2	51	19
424036074283701	07-19-95	160	49	9.5	170	68	6	8.7	90	95
424038073434301	07-25-95	140	43	8.2	76	52	3	9.5	112	66
424038073434301	07-26-95	140	44	7.9	71	49	3	12	134	65
424055073425301	07-18-95	130	39	7.2	46	43	2	6.4	107	42
424055073425301	08-03-95	210	70	8.4	120	55	4	5.6	42	210
424318073124201	07-18-95	130	32	11	48	43	2	9.2	126	36
424318073124201	08-07-95	140	37	11	42	39	2	4.4	138	24
424807074364801	07-19-95	140	47	5.3	76	54	3	3.5	110	63
425025073551001	07-18-95	220	68	11	63	38	2	6.4	203	42
425025073551001	08-07-95	200	62	10	61	39	2	6.2	187	43
425245073411701	08-01-95	190	58	12	100	51	3	13	214	65
425522074100001	07-19-95	97	29	5.9	32	41	1	3.7	54	27
425522074100001	08-07-95	82	25	4.7	28	41	1	4.2	56	25
430558075114301	07-26-95	110	35	6.0	61	52	3	6.9	100	37
431551073350001	08-01-95	150	49	6.0	50	40	2	11	84	42
431828073372601	08-01-95	87	26	5.3	86	66	4	6.6	92	45
432857073475501	07-25-95	130	38	7.7	96	60	4	12	78	36
435721074070501	07-25-95	70	25	1.9	45	55	2	7.3	106	22
STATION NUMBER	DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
412342074203701	08-02-95	36	0.2	17	446	448	<0.01	0.74	0.03	0.40
412535074252701	07-27-95	82	0.2	6.4	307	293	0.01	7.7	0.05	0.90
414718073415101	07-27-95	69	<0.1	7.8	374	353	<0.01	19	0.12	0.80
415818074000501	08-03-95	34	<0.1	5.9	140	119	0.01	1.1	5.8	6.6
424036074283701	07-19-95	220	1.0	6.6	704	675	<0.01	13	0.06	5.7
424038073434301	07-25-95	87	0.4	5.7	411	354	0.20	4.4	0.16	1.5
424038073434301	07-26-95	84	0.4	6.0	408	387	0.18	3.7	0.22	2.0
424055073425301	07-18-95	73	0.6	8.4	302	270	0.16	0.72	6.7	8.9
424055073425301	08-03-95	120	0.6	8.2	682	652	0.36	13	0.07	3.6
424318073124201	07-18-95	44	<0.1	6.2	271	268	0.03	0.80	0.38	1.0
424318073124201	08-07-95	53	0.1	5.9	281	267	<0.01	1.4	0.08	1.6
424807074364801	07-19-95	24	0.1	3.2	264	279	0.36	3.1	6.2	9.9
425025073551001	07-18-95	97	0.8	9.1	411	400	0.53	1.1	8.0	9.1
425025073551001	08-07-95	100	0.6	8.7	431	393	1.40	2.3	7.8	9.4
425245073411701	08-01-95	130	0.8	12	532	496	0.22	0.30	12	14
425522074100001	07-19-95	39	0.2	5.6	224	210	0.14	6.5	0.17	1.4
425522074100001	08-07-95	36	0.2	4.7	213	192	0.06	6.7	0.12	1.1
430558075114301	07-26-95	86	1.2	6.8	357	330	0.12	7.5	1.9	3.6
431551073350001	08-01-95	96	0.7	11	366	348	0.23	5.2	0.14	1.0
431828073372601	08-01-95	88	0.3	9.8	390	376	0.03	8.9	0.07	1.0
432857073475501	07-25-95	120	3.5	20	513	487	0.19	20	0.13	2.2
435721074070501	07-25-95	55	<0.1	11	238	208	0.04	0.10	9.5	11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES  
 Wastewater treatment plant samples - Hudson River basin--Continued

STATION NUMBER	DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
412342074203701	08-02-95	0.40	0.14	0.07	0.08	8	130	5.8	0.2
412535074252701	07-27-95	0.70	1.6	1.70	1.70	35	250	5.8	1.1
414718073415101	07-27-95	<0.20	3.5	3.3	3.7	9	240	4.8	0.3
415818074000501	08-03-95	6.5	0.83	0.80	0.79	690	69	8.8	4.4
424036074283701	07-19-95	5.1	2.6	2.5	1.10	56	3	13	0.3
424038073434301	07-25-95	1.3	1.5	1.50	1.40	55	18	9.3	0.7
424038073434301	07-26-95	1.6	1.3	1.20	1.30	42	72	9.0	0.9
424055073425301	07-18-95	7.8	0.95	0.78	0.77	77	140	10	2.2
424055073425301	08-03-95	3.0	7.6	7.7	7.5	20	140	15	1.4
424318073124201	07-18-95	0.80	0.18	0.15	0.12	3	<1	3.9	0.6
424318073124201	08-07-95	0.30	1.1	0.08	0.06	14	48	3.3	>3.8
424807074364801	07-19-95	7.9	1.2	0.23	0.27	130	240	7.2	>5.0
425025073551001	07-18-95	8.4	0.15	0.10	0.11	30	48	6.1	0.4
425025073551001	08-07-95	8.8	0.06	0.04	0.02	26	66	5.1	0.6
425245073411701	08-01-95	13	0.63	0.28	0.22	30	13	11	3.5
425522074100001	07-19-95	0.80	0.25	0.10	0.11	33	22	7.0	1.8
425522074100001	08-07-95	1.1	0.19	0.13	0.11	75	25	8.1	1.1
430558075114301	07-26-95	2.7	2.1	1.90	1.90	54	8	7.2	>2.5
431551073350001	08-01-95	0.90	1.9	2.0	1.90	16	10	6.4	0.5
431828073372601	08-01-95	1.0	4.3	3.3	3.6	52	5	8.8	0.6
432857073475501	07-25-95	1.5	5.3	5.9	5.8	28	5	11	1.4
435721074070501	07-25-95	9.6	0.76	0.28	0.04	59	57	8.4	4.7



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organochlorine compounds in  
fish tissue from selected sites in the Hudson River basin  
(National water-quality assessment program)

The purpose of this survey was to assess the occurrence and distribution of trace metals (table 1) and organochlorine compounds (table 2) in fish tissue. The following species were collected: white sucker (*Catostomus commersoni*), common carp (*Cyprinus carpio*), and rock bass (*Ambloplites rupestris*). Where more than one sample was collected on a particular site and date, the letter after species distinguishes each sample. More information regarding methods can be found in Crawford and Luoma, 1993 (see NAWQA section introductory text).

Table 1. Concentrations of trace elements in fish-liver composites

Each sample for trace elements analyses consisted of a composite of liver tissue from 5 or more fish. Note that, although sexually-mature fish were sought, some samples are composed of a large number of immature specimens. Laboratory procedures included (1) drying, (2) digestion, and (3) analysis by use of inductively coupled plasma emission spectrometry (for Al, Ba, B, Cr, Cu, Fe, Mn, Sr, and Zn), inductively coupled plasma mass spectrometry (for Sb, As, Be, Cd, Co, Pb, Mo, Ni, Se, Ag, U, and V), and cold vapor atomic absorption (for Hg). Constituent concentrations are provided on a dry-weight (DW) basis. (SDEV = Standard deviation, F = Female, M = Male).

STATION NUMBER	STATION NAME	DATE	SPECIES	NUMBER IN COMPOSITE			
				MATURE F	IMMA- M	TURE	TOTAL
01348995	OTSQUAGO CREEK AT VALLEY BROOK NR PORT PLAIN NY	09-15-94	WHITE SUCKER	2	1	5	8
01356200	LISHA KILL AT NISKAYUNA NY	09-22-94	WHITE SUCKER (a)	4	3	0	7
01356200	LISHA KILL AT NISKAYUNA NY	09-22-94	WHITE SUCKER (b)	4	2	1	7
01359131	PATROON CREEK AT CENTRAL AVE IN ALBANY NY	09-14-94	WHITE SUCKER	6	3	1	10
01360515	KINDERHOOK CREEK NEAR BRAINARD NY	09-12-94	WHITE SUCKER	1	1	4	6
01361200	CLAVERACK CREEK AT CLAVERACK NY	09-13-94	WHITE SUCKER (a)	1	1	4	6
01361200	CLAVERACK CREEK AT CLAVERACK NY	09-13-94	WHITE SUCKER (b)	0	2	5	7
01361200	CLAVERACK CREEK AT CLAVERACK NY	09-13-94	WHITE SUCKER (c)	0	2	4	6
01361500	CATSKILL CREEK AT OAK HILL NY	09-09-94	WHITE SUCKER	0	1	8	9
0136215855	ROELIFF JANSEN KILL NEAR ANCRAM NY	09-20-94	WHITE SUCKER	0	0	14	14
01362200	ESOPUS CREEK AT ALLABEN NY	09-06-94	WHITE SUCKER	1	4	0	5
01372051	FALL KILL AT POUGHKEEPSIE NY	09-20-94	WHITE SUCKER	0	1	11	12
01372200	WAPPINGER CREEK NEAR CLINTON CORNERS NY	09-21-94	WHITE SUCKER	0	0	14	14
01372306	WAPPINGER CREEK NEAR SALT POINT NY	09-21-94	WHITE SUCKER	0	0	15	15

STATION NUMBER	SPECIES	TOTAL LENGTH OF FISH				WATER, PRESENT BIO TIS DRY WGT (PERCENT)	ALUMI- NUM, BIOTA, TISSUE, DRY WGT (UG/G)	ANTI- MONY, BIOTA, TISSUE, DRY WGT (UG/G)	ARSENIC BIOTA, TISSUE, DRY WGT (UG/G)	BARIUM, BIOTA, TISSUE, DRY WGT (UG/G)	BERYL- LIUM- BIOTA, TISSUE, DRY WGT (UG/G)
		MEAN (MM)	SDEV (MM)	MIN (MM)	MAX (MM)						
01348995	WHITE SUCKER	183	20	153	215	81	<1.0	<0.4	<0.4	0.2	<0.4
01356200	WHITE SUCKER (a)	223	16	197	240	81	<1.0	<0.5	<0.5	<0.1	<0.5
01356200	WHITE SUCKER (b)	227	11	212	247	81	<1.0	<0.5	<0.5	<0.1	<0.5
01359131	WHITE SUCKER	204	19	169	232	82	<1.0	<0.2	0.3	0.1	<0.2
01360515	WHITE SUCKER	222	98	153	413	80	2.0	<0.4	<0.4	<0.1	<0.4
01361200	WHITE SUCKER (a)	229	20	199	265	78	<1.0	<0.4	<0.4	<0.1	<0.4
01361200	WHITE SUCKER (b)	232	31	180	282	76	<1.0	<0.3	<0.3	0.1	<0.3
01361200	WHITE SUCKER (c)	206	17	185	232	79	1.5	<0.3	<0.3	0.2	<0.3
01361500	WHITE SUCKER	173	24	146	211	80	<1.0	<0.2	<0.2	0.3	<0.2
0136215855	WHITE SUCKER	154	12	139	180	82	<1.0	<0.3	0.3	0.1	<0.3
01362200	WHITE SUCKER	411	25	390	453	77	<1.0	<0.3	<0.3	<0.1	<0.3
01372051	WHITE SUCKER	131	14	106	158	81	<1.0	<0.5	<0.5	0.1	<0.5
01372200	WHITE SUCKER	119	6	105	129	83	<1.0	<0.6	<0.6	0.2	<0.6
01372306	WHITE SUCKER	125	12	107	153	81	2.2	<0.5	<0.5	0.5	<0.5

STATION NUMBER	SPECIES	BORON, BIOTA, TISSUE, DRY WGT REC (UG/G)	CADMIUM BIOTA, TISSUE, DRY WGT REC (UG/G)	CHROM- IUM, BIOTA, TISSUE, DRY WGT REC (UG/G)	COBALT, BIOTA, TISSUE, DRY WGT REC (UG/G)	COPPER, BIOTA, TISSUE, DRY WGT REC (UG/G)	IRON, BIOTA, TISSUE, DRY WGT REC (UG/G)	LEAD, BIOTA, TISSUE, DRY WGT REC (UG/G)	MANGAN- ESE, BIOTA, TISSUE, DRY WGT REC (UG/G)	MERCURY BIOTA, TISSUE, DRY WGT REC (UG/G)
01348995	WHITE SUCKER	1.5	<0.4	0.7	<0.4	46.1	625	<0.4	11.3	0.2
01356200	WHITE SUCKER (a)	2.3	0.7	0.8	<0.5	90.5	793	<0.5	9.4	0.3
01356200	WHITE SUCKER (b)	0.6	0.6	0.8	<0.5	119	858	<0.5	8.7	0.3
01359131	WHITE SUCKER	0.8	0.4	0.6	<0.2	48.1	387	<0.2	25.8	0.3
01360515	WHITE SUCKER	0.9	0.9	0.7	<0.4	50.6	239	<0.4	17.2	0.7
01361200	WHITE SUCKER (a)	0.7	<0.4	0.7	<0.4	29.6	382	<0.4	10.3	0.2
01361200	WHITE SUCKER (b)	0.8	0.3	0.7	<0.3	38.9	498	<0.3	11.7	0.2
01361200	WHITE SUCKER (c)	1.0	0.4	0.7	<0.3	29.1	356	<0.3	16.2	0.2
01361500	WHITE SUCKER	0.9	0.3	0.6	<0.2	54.4	319	<0.2	14.6	0.2
0136215855	WHITE SUCKER	0.9	0.3	0.7	<0.3	21.0	242	<0.3	43.0	<0.1
01362200	WHITE SUCKER	0.4	2.8	0.5	<0.3	32.2	519	<0.3	7.7	0.3
01372051	WHITE SUCKER	2.1	<0.5	0.7	<0.5	42.5	473	<0.5	12.3	<0.1
01372200	WHITE SUCKER	1.8	<0.6	0.7	<0.6	22.3	235	<0.6	29.7	0.1
01372306	WHITE SUCKER	1.3	<0.5	0.8	<0.5	23.1	346	<0.5	105	0.1

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organochlorine compounds in fish tissue from selected sites in the Hudson River basin--Continued

Table 1. Concentrations of trace elements in fish-liver composites--Continued

STATION NUMBER	SPECIES	MOLYB- DENUM, BIOTA, TISSUE, DRY WGT REC (UG/G)	NICKEL, BIOTA, TISSUE, DRY WGT REC (UG/G)	SELEN- IUM, BIOTA, TISSUE, DRY WGT REC (UG/G)	SILVER, BIOTA, TISSUE, DRY WGT REC (UG/G)	STRON- TIUM, BIOTA, TISSUE, DRY WGT REC (UG/G)	URANIUM BIOTA, TISSUE, DRY WGT REC (UG/G)	VANA- DIUM BIO TIS LIVER TISSUE, DRY WGT REC (UG/G)	ZINC, BIOTA, TISSUE, DRY WGT REC (UG/G)
01348995	WHITE SUCKER	1.2	0.6	2.6	<0.4	8.6	<0.4	<0.4	142
01356200	WHITE SUCKER(a)	1.6	2.6	3.1	0.5	0.5	<0.5	<0.5	215
01356200	WHITE SUCKER(b)	1.3	1.2	3.7	0.6	0.5	<0.5	<0.5	233
01359131	WHITE SUCKER	1.2	0.7	2.6	<0.2	0.6	<0.2	<0.2	131
01360515	WHITE SUCKER	1.0	1.0	4.2	0.5	0.2	<0.4	<0.4	132
01361200	WHITE SUCKER(a)	1.3	1.2	3.0	<0.4	0.3	<0.4	<0.4	112
01361200	WHITE SUCKER(b)	1.1	0.5	4.0	<0.3	0.3	<0.3	<0.3	122
01361200	WHITE SUCKER(c)	1.3	0.8	3.3	<0.3	0.4	<0.3	<0.3	120
01361500	WHITE SUCKER	1.2	0.5	2.7	0.4	0.3	<0.2	<0.2	130
0136215855	WHITE SUCKER	1.0	0.3	2.7	<0.3	0.5	<0.3	<0.3	104
01362200	WHITE SUCKER	0.9	0.8	3.2	<0.3	0.2	<0.3	<0.3	109
01372051	WHITE SUCKER	1.6	2.5	4.2	<0.5	0.7	<0.5	<0.5	132
01372200	WHITE SUCKER	1.0	0.7	3.5	<0.6	0.7	<0.6	<0.6	107
01372306	WHITE SUCKER	1.1	1.2	2.7	<0.5	1.2	<0.5	<0.5	115

Table 2. Concentrations of organochlorine compounds in whole fish

Each sample for organochlorine analyses consisted of a composite of 5 or more whole fish. Note that, although sexually-mature fish were sought, some samples are composed of a large number of immature specimens. Laboratory procedures included (1) homogenization, (2) extraction by use of methylene chloride in a soxhlet apparatus, (3) clean-up by use of gel permeation chromatography, (4) fractionation by use of alumina/silica gel, and (5) analysis by gas chromatography with two dissimilar capillary columns coupled with an electron capture detector. Constituent concentrations are provided on a wet-weight (WW) basis. Constituent names are abbreviated as follows: DDD, dichlorodiphenyl-dichloroethane; DDE, dichlorodiphenyldichloroethene; DCPA, dimethyl tetrachloroterephthalate; DDT, dichlorodiphenyl-trichloroethane; HCH, hexachlorocyclohexane; PCB, polychlorinated biphenyls. (SDEV = Standard deviation, F = female, M = male).

STATION NUMBER	STATION NAME	DATE	SPECIES	NUMBER IN COMPOSITE			
				MATURE F	MATURE M	IMMA- TURE	TOTAL
01325010	HUDSON RIVER SOUTH OF LAKE LUZERNE NY	09-27-94	WHITE SUCKER	3	3	0	6
01325010	HUDSON RIVER SOUTH OF LAKE LUZERNE NY	05-23-95	CARP	0	7	0	7
01325010	HUDSON RIVER SOUTH OF LAKE LUZERNE NY	05-23-95	WHITE SUCKER(a)	1	5	0	6
01325010	HUDSON RIVER SOUTH OF LAKE LUZERNE NY	05-23-95	WHITE SUCKER(b)	1	5	0	6
01342702	MOHAWK RIVER AT FRANKFORT NY	09-28-94	WHITE SUCKER	5	0	0	5
01342702	MOHAWK RIVER AT FRANKFORT NY	09-28-94	CARP	2	6	0	8
01342702	MOHAWK RIVER AT FRANKFORT NY	05-22-95	CARP(a)	1	5	0	6
01342702	MOHAWK RIVER AT FRANKFORT NY	05-22-95	CARP(b)	2	5	0	7
01342702	MOHAWK RIVER AT FRANKFORT NY	05-22-95	WHITE SUCKER	-	-	0	5
01348995	OTSQUAGO CREEK AT VALLEY BROOK NR FORT PLAIN NY	09-15-94	WHITE SUCKER	0	5	3	8
01356200	LISHA KILL AT NISKAYUNA NY	09-22-94	WHITE SUCKER(a)	6	1	0	7
01356200	LISHA KILL AT NISKAYUNA NY	09-22-94	WHITE SUCKER(b)	7	0	0	7
01359131	PATROON CREEK AT CENTRAL AVE IN ALBANY NY	09-14-94	WHITE SUCKER	5	2	0	7
01360515	KINDERHOOK CREEK NEAR BRAINARD NY	09-12-94	ROCK BASS	1	6	0	7
01361200	CLAVERACK CREEK AT CLAVERACK NY	09-13-94	WHITE SUCKER(a)	3	3	2	8
01361200	CLAVERACK CREEK AT CLAVERACK NY	09-13-94	WHITE SUCKER(b)	3	3	2	8
01361200	CLAVERACK CREEK AT CLAVERACK NY	09-13-94	WHITE SUCKER(c)	2	4	1	7
01361500	CATSKILL CREEK AT OAK HILL NY	09-09-94	WHITE SUCKER	1	2	15	18
0136215855	ROELIFF JANSEN KILL NEAR ANCRAM NY	09-20-94	WHITE SUCKER	0	4	1	5
01362200	ESOPUS CREEK AT ALLABEN NY	09-06-94	WHITE SUCKER	1	7	0	8
01372043	HUDSON RIVER NEAR POUGHKEEPSIE NY	05-19-95	WHITE SUCKER(a)	4	2	0	6
01372043	HUDSON RIVER NEAR POUGHKEEPSIE NY	05-19-95	WHITE SUCKER(b)	-	-	0	7
01372043	HUDSON RIVER NEAR POUGHKEEPSIE NY	05-19-95	CARP	1	4	0	5
01372051	FALL KILL AT POUGHKEEPSIE NY	09-20-94	WHITE SUCKER	3	3	0	6
01372306	WAPPINGER CREEK NEAR SALT POINT NY	09-21-94	ROCK BASS	4	4	0	8
01372800	FISHKILL CREEK AT HOPEWELL JUNCTION NY	09-21-94	ROCK BASS	4	2	0	6
01374494	HAVILAND HOLLOW BROOK NEAR PUTNAM LAKE NY	09-22-94	WHITE SUCKER	0	0	11	11

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organochlorine compounds in fish tissue from selected sites in the Hudson River basin--Continued

Table 2. Concentrations of organochlorine compounds in whole fish--Continued

STATION NUMBER	SPECIES	TOTAL LENGTH OF FISH				LIPIDS, BIOTA, WH ORG WW, REC (PERCENT)	ALDRIN, BIOTA, WH ORG WW, REC (UG/KG)	CIS- CHLOR- DANE, BIOTA, WH ORG WW, REC (UG/KG)	TRANS- CHLOR- DANE, BIOTA, WH ORG WW, REC (UG/KG)	DCPA, BIOTA, WH ORG WW, REC (UG/KG)
		MEAN (MM)	SDEV (MM)	MIN (MM)	MAX (MM)					
01325010	WHITE SUCKER	465	27	442	504	6.3	<5.0	<5.0	<5.0	<5.0
01325010	CARP	553	75	494	702	4.7	--	<5.0	<5.0	<5.0
01325010	WHITE SUCKER (a)	461	36	390	490	4.7	--	<5.0	<5.0	<5.0
01325010	WHITE SUCKER (b)	473	22	445	505	4.9	--	<5.0	<5.0	<5.0
01342702	WHITE SUCKER	393	15	378	414	3.5	<5.0	<5.0	<5.0	<5.0
01342702	CARP	559	35	500	610	9.6	<5.0	11	6.6	<5.0
01342702	CARP (a)	564	17	535	585	9.5	<5.0	16	7.7	<5.0
01342702	CARP (b)	572	72	445	689	8.8	--	14	7.6	<5.0
01342702	WHITE SUCKER	400	20	373	425	4.2	--	5.8	5.4	<5.0
01348995	WHITE SUCKER	224	30	173	281	1.6	<5.0	<5.0	<5.0	<5.0
01356200	WHITE SUCKER (a)	282	33	238	321	2.8	<5.0	14	<5.0	<5.0
01356200	WHITE SUCKER (b)	283	32	233	331	1.8	<5.0	12	<5.0	<5.0
01359131	WHITE SUCKER	265	29	232	314	3.0	<5.0	11	5.3	<5.0
01360515	ROCK BASS	181	23	148	209	4.6	<5.0	<5.0	<5.0	<5.0
01361200	WHITE SUCKER (a)	305	46	263	400	2.6	<5.0	<5.0	<5.0	<5.0
01361200	WHITE SUCKER (b)	312	54	264	423	3.5	<5.0	<5.0	<5.0	<5.0
01361200	WHITE SUCKER (c)	329	72	258	416	3.6	<5.0	<5.0	<5.0	<5.0
01361500	WHITE SUCKER	190	76	97	319	2.8	<5.0	<5.0	<5.0	<5.0
0136215855	WHITE SUCKER	235	23	203	259	3.8	<5.0	<5.0	<5.0	<5.0
01362200	WHITE SUCKER	402	11	390	423	4.8	<5.0	<5.0	<5.0	<5.0
01372043	WHITE SUCKER (a)	402	30	363	449	3.6	--	7.2	<5.0	<5.0
01372043	WHITE SUCKER (b)	407	21	384	441	3.9	--	9.7	<5.0	<5.0
01372043	CARP	690	74	576	763	13.9	--	22	8.7	<5.0
01372051	WHITE SUCKER	248	35	212	298	2.8	<5.0	<5.0	<5.0	<5.0
01372306	ROCK BASS	165	17	146	193	4.6	<5.0	<5.0	<5.0	<5.0
01372800	ROCK BASS	177	18	161	208	4.4	<5.0	<5.0	<5.0	<5.0
01374494	WHITE SUCKER	117	12	104	146	2.3	<5.0	<5.0	<5.0	<5.0
STATION NUMBER	SPECIES	O,P'- DDD, BIOTA, WH ORG WW, REC (UG/KG)	P,P'- DDD, BIOTA, WH ORG WW, REC (UG/KG)	O,P'- DDE, BIOTA, WH ORG WW, REC (UG/KG)	P,P'- DDE, BIOTA, WH ORG WW, REC (UG/KG)	O,P'- DDT, BIOTA, WH ORG WW, REC (UG/KG)	P,P'- DDT, BIOTA, WH ORG WW, REC (UG/KG)	DIEL- DRIN, BIOTA, WH ORG WW, REC (UG/KG)	ENDRIN, BIOTA, WH ORG WW, REC (UG/KG)	
01325010	WHITE SUCKER	<5.0	11	<5.0	31	<5.0	<5.0	<5.0	<5.0	
01325010	CARP	<5.0	17	<5.0	54	<5.0	<5.0	<5.0	<5.0	
01325010	WHITE SUCKER (a)	<5.0	17	<5.0	42	<5.0	<5.0	<5.0	<5.0	
01325010	WHITE SUCKER (b)	<5.0	20	<5.0	48	<5.0	<5.0	<5.0	<5.0	
01342702	WHITE SUCKER	<5.0	6.8	<5.0	16	<5.0	<5.0	<5.0	<5.0	
01342702	CARP	8.6	48	<5.0	200	<5.0	<5.0	<5.0	<5.0	
01342702	CARP (a)	7.3	26	--	59	<5.0	<5.0	<5.0	<5.0	
01342702	CARP (b)	5.8	27	--	45	--	<5.0	<5.0	<5.0	
01342702	WHITE SUCKER	<5.0	13	--	28	--	<5.0	<5.0	<5.0	
01348995	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
01356200	WHITE SUCKER (a)	<5.0	21	<5.0	56	<5.0	7.6	6.9	<5.0	
01356200	WHITE SUCKER (b)	<5.0	19	<5.0	48	<5.0	6.0	<5.0	<5.0	
01359131	WHITE SUCKER	<5.0	7.6	<5.0	9.0	<5.0	<5.0	<5.0	<5.0	
01360515	ROCK BASS	<5.0	<5.0	<5.0	31	<5.0	<5.0	<5.0	<5.0	
01361200	WHITE SUCKER (a)	<5.0	18	<5.0	99	<5.0	10	31	<5.0	
01361200	WHITE SUCKER (b)	<5.0	24	<5.0	110	<5.0	12	41	<5.0	
01361200	WHITE SUCKER (c)	<5.0	17	<5.0	130	<5.0	9.8	43	<5.0	
01361500	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
0136215855	WHITE SUCKER	<5.0	<5.0	<5.0	10	<5.0	<5.0	<5.0	<5.0	
01362200	WHITE SUCKER	<5.0	7.3	<5.0	85	<5.0	10	<5.0	<5.0	
01372043	WHITE SUCKER (a)	<5.0	17	--	71	--	16	<5.0	<5.0	
01372043	WHITE SUCKER (b)	13	58	--	170	<5.0	61	10	<5.0	
01372043	CARP	26	200	--	700	--	6.0	13	<5.0	
01372051	WHITE SUCKER	<5.0	20	<5.0	19	<5.0	9.1	<5.0	<5.0	
01372306	ROCK BASS	<5.0	<5.0	<5.0	18	<5.0	<5.0	<5.0	<5.0	
01372800	ROCK BASS	<5.0	12	<5.0	39	<5.0	<5.0	<5.0	<5.0	
01374494	WHITE SUCKER	<5.0	<5.0	<5.0	11	<5.0	<5.0	<5.0	<5.0	

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Concentrations of trace elements and organochlorine compounds in fish tissue from selected sites in the Hudson River basin--Continued

Table 2. Concentrations of organochlorine compounds in whole fish--Continued

STATION NUMBER	SPECIES	ALPHA- HCH, BIOTA, WH ORG	BETA- HCH, BIOTA, WH ORG	DELTA- HCH, BIOTA, WH ORG	GAMMA- HCH, (LINDANE), BIOTA, WH ORG	HEPTA- CHLOR, BIOTA, WH ORG	HEPTA- CHLOR EPOXIDE, BIOTA, WH ORG	HEXA- CHLORO- BENZENE, BIOTA, WH ORG	METHOXY CHLOR, O, P'-, BIOTA, WH ORG
		WW, REC (UG/KG)	WW, REC (UG/KG)	WW, REC (UG/KG)	WW, REC (UG/KG)	WW, REC (UG/KG)	WW, REC (UG/KG)	WW, REC (UG/KG)	WW, REC (UG/KG)
01325010	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01325010	CARP	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01325010	WHITE SUCKER (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01325010	WHITE SUCKER (b)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01342702	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01342702	CARP	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01342702	CARP (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01342702	CARP (b)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01342702	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01348995	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01356200	WHITE SUCKER (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01356200	WHITE SUCKER (b)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01359131	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01360515	ROCK BASS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01361200	WHITE SUCKER (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01361200	WHITE SUCKER (b)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01361200	WHITE SUCKER (c)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01361500	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
0136215855	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01362200	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01372043	WHITE SUCKER (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01372043	WHITE SUCKER (b)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01372043	CARP	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01372051	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01372306	ROCK BASS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01372800	ROCK BASS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
01374494	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
STATION NUMBER	SPECIES	METHOXY CHLOR, P, P'-, BIOTA, WH ORG WW, REC (UG/KG)	MIREX, BIOTA, WH ORG WW, REC (UG/KG)	CIS- NONA- CHLOR, BIOTA, WH ORG WW, REC (UG/KG)	TRANS- NONA- CHLOR, BIOTA, WH ORG WW, REC (UG/KG)	OXY- CHLOR DANE, BIOTA, WH ORG WW, REC (UG/KG)	PENTA CHLORO ANISOLE BIOTA, WH ORG WW, REC (UG/KG)	PCB, BIOTA, WH ORG WW, REC (UG/KG)	TOXA- PHENE, BIOTA, WH ORG WW, REC (UG/KG)
01325010	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	78	<200
01325010	CARP	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	110	<200
01325010	WHITE SUCKER (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	99	<200
01325010	WHITE SUCKER (b)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	110	<200
01342702	WHITE SUCKER	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1700	<20



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

Surface-water synoptic-sampling studies - Canajoharie Creek watershed  
(National water-quality assessment program)

The Canajoharie Creek watershed was studied intensively as part of the Hudson River basin NAWQA program. Surface-water data was collected on both temporal and spatial scales to understand the sources, sinks and processing of non-point agricultural contaminants. Temporal data collected at the watershed outlet (01349150 Canajoharie Creek near Canajoharie) can be found in the continuous-record station section of this report.

Results of laboratory analysis and field measurements recorded at the time of sample collection were separated according to synoptic sampling events and summarized in the following tables (1-4).

Table 1. Base-flow pesticide synoptic

Depth-integrated cross-sectional composite water samples were collected at the following sites across Canajoharie Creek watershed and analyzed for major inorganic constituents, nutrients, organic carbon, chlorophyll-a, chlorophyll-b, pesticides, suspended sediment, and stable isotopes.

STATION NUMBER	STATION NAME	DATE	TIME	DRAIN- AGE AREA (SQ.MI.)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)
01348995	OTSQUAGO CREEK AT VALLEY BROOK NR FORT PLAIN NY	06-20-95	1050	58.0	e7.3	1220
0134907130	CANAJOHARIE CREEK AT SALT SPRINGVILLE NY	06-20-95	1350	3.66	1.4	1620
0134907140	SALT SPRING BROOK AT SALT SPRINGVILLE NY	06-20-95	1450	3.66	0.06	487
0134907160	CANAJOHARIE CREEK NEAR SPROUT BROOK NY	06-20-95	1610	10.2	1.8	1340
0134907170	VAN DEUSEN BROOK NEAR SPROUT BROOK NY	06-21-95	1110	3.09	0.29	530
0134907173	VAN DEUSEN BROOK AT SPROUT BROOK NY	06-21-95	1330	4.86	0.38	501
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-19-95	1050	22.7	2.7	1050
01349073	CANAJOHARIE CREEK AT SOUTH BUEL ROAD NY	06-21-95	1505	28.7	2.6	1020
01349075	BRIMSTONE CREEK AT SHARON SPRINGS NY	06-20-95	1535	2.92	1.3	1510
0134909502	BRIMSTONE CREEK AT AMES NY	06-20-95	1310	14.7	1.9	1090
01349100	CANAJOHARIE CREEK AT AMES NY	06-21-95	1000	49.2	4.0	1010
01349108	CANAJOHARIE CREEK TRIB AT WATERVILLE NY	06-21-95	1205	1.55	<0.01	481
01349150	CANAJOHARIE CREEK NR CANAJOHARIE NY	06-19-95	1355	59.7	5.3	845
01349240	FLAT CREEK NEAR AMES NY	06-20-95	1000	46.1	0.96	324
425000074390001	TRI COUNTY CREEK NEAR BUEL	06-21-95	1520	--	0.04	391
425051074393401	EAST DITCH OUTLET TO CANAJOHARIE CREEK	06-19-95	1140	--	0.10	310
425051074393701	WEST DITCH OUTLET TO CANAJOHARIE CREEK	06-19-95	1330	--	0.09	460
425121074454001	CANAJOHARIE CREEK TRIB NEAR SALT SPRINGVILLE NY	06-22-95	1600	--	0.46	1680

STATION NUMBER	DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
01348995	06-20-95	7.9	29.5	27.0	747	8.5	110	650	210	31	10
0134907130	06-20-95	7.8	34.5	27.0	742	8.0	104	960	310	45	5.9
0134907140	06-20-95	7.9	34.5	24.0	742	6.9	84	210	70	7.6	15
0134907160	06-20-95	8.0	27.0	27.0	742	8.2	106	690	220	35	13
0134907170	06-21-95	8.1	24.0	19.0	744	9.7	107	240	76	11	14
0134907173	06-21-95	8.2	27.0	24.5	744	10.7	131	230	72	12	11
0134907270	06-19-95	8.0	27.5	25.5	744	10.8	135	530	170	26	14
01349073	06-21-95	7.7	27.0	26.5	749	8.1	102	500	160	25	13
01349075	06-20-95	7.5	29.0	13.0	735	7.3	73	770	260	30	24
0134909502	06-20-95	8.3	37.0	30.5	745	11.7	162	490	160	22	26
01349100	06-21-95	7.6	21.0	23.0	749	8.2	97	470	150	22	19
01349108	06-21-95	7.4	25.5	20.0	749	5.3	60	230	74	11	5.1
01349150	06-19-95	7.9	33.5	29.5	745	8.4	112	380	120	20	19
01349240	06-20-95	8.0	26.5	27.5	742	9.0	118	130	40	6.3	10
425000074390001	06-21-95	8.0	27.5	23.5	744	7.5	91	190	54	14	4.1
425051074393401	06-19-95	8.6	32.0	30.5	742	>15.0	--	130	36	10	6.9
425051074393701	06-19-95	7.8	35.5	35.0	742	11.1	164	200	60	12	8.9
425121074454001	06-22-95	7.9	--	15.5	--	9.4	--	--	--	--	--

e Estimated.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES  
Surface-water synoptic-sampling studies - Canajoharie Creek watershed--Continued

Table 1. Base-flow pesticide synoptic--Continued

STATION NUMBER	DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
01348995	06-20-95	3	0.2	3.2	123	530	14	0.2	0.01	7.2
0134907130	06-20-95	1	0.1	2.3	156	790	6.5	0.4	0.02	6.1
0134907140	06-20-95	13	0.5	2.8	194	20	24	<0.1	<0.01	6.7
0134907160	06-20-95	4	0.2	2.5	147	580	20	0.3	0.02	7.0
0134907170	06-21-95	11	0.4	1.1	183	50	27	0.1	<0.01	5.4
0134907173	06-21-95	9	0.3	1.7	184	52	19	<0.1	<0.01	4.9
0134907270	06-19-95	5	0.3	2.3	150	390	23	0.2	--	3.8
01349073	06-21-95	5	0.3	2.5	151	360	22	0.2	0.03	6.4
01349075	06-20-95	6	0.4	1.3	200	650	37	0.5	0.06	7.4
0134909502	06-20-95	10	0.5	2.4	112	410	41	0.3	0.02	3.6
01349100	06-21-95	8	0.4	2.6	135	340	32	0.3	0.02	3.2
01349108	06-21-95	5	0.1	2.0	231	18	6.7	<0.1	0.03	6.8
01349150	06-19-95	10	0.4	2.5	136	260	31	0.2	--	1.4
01349240	06-20-95	14	0.4	2.6	98	13	17	<0.1	<0.01	2.2
425000074390001	06-21-95	4	0.1	2.1	193	17	2.8	0.1	<0.01	5.0
425051074393401	06-19-95	10	0.3	0.50	81	39	18	<0.1	0.02	0.53
425051074393701	06-19-95	9	0.3	0.40	96	53	29	<0.1	0.11	2.6
425121074454001	06-22-95	--	--	--	--	--	--	--	--	--
STATION NUMBER	DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)
01348995	06-20-95	972	878	<0.01	0.08	0.05	--	<0.20	--	0.01
0134907130	06-20-95	1410	1270	0.02	0.45	0.12	--	0.30	--	0.04
0134907140	06-20-95	286	268	<0.01	0.66	0.04	--	<0.20	--	0.02
0134907160	06-20-95	1100	971	0.01	0.52	0.05	--	0.20	--	0.02
0134907170	06-21-95	340	298	<0.01	0.22	0.02	--	<0.20	--	0.01
0134907173	06-21-95	304	281	<0.01	0.11	0.04	--	0.20	--	0.04
0134907270	06-19-95	778	724	0.01	0.32	0.05	0.30	0.20	0.02	0.02
01349073	06-21-95	756	685	0.02	0.42	0.07	--	0.30	--	0.01
01349075	06-20-95	1260	1140	0.03	0.89	0.05	--	<0.20	--	0.02
0134909502	06-20-95	808	738	0.02	0.20	0.06	--	0.30	--	0.03
01349100	06-21-95	729	656	0.01	0.11	0.04	--	0.30	--	<0.01
01349108	06-21-95	275	264	<0.01	<0.05	0.02	--	0.20	--	0.01
01349150	06-19-95	578	538	<0.01	<0.05	0.04	0.40	0.30	0.02	0.03
01349240	06-20-95	182	167	<0.01	0.06	0.05	--	0.40	--	0.01
425000074390001	06-21-95	227	214	<0.01	0.16	0.03	--	<0.20	--	<0.01
425051074393401	06-19-95	205	163	0.09	0.45	0.06	--	0.40	--	0.01
425051074393701	06-19-95	311	260	0.11	7.7	0.16	--	0.50	--	0.02
425121074454001	06-22-95	--	--	--	--	--	--	--	--	--
STATION NUMBER	DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)		
01348995	06-20-95	<0.01	9	5	-68.3	-9.87	3.9	--		
0134907130	06-20-95	0.02	9	210	-72.4	-10.94	1.8	--		
0134907140	06-20-95	0.02	3	1	-65.5	-9.56	2.5	--		
0134907160	06-20-95	0.01	<3	6	-70.6	-10.53	2.0	--		
0134907170	06-21-95	<0.01	4	3	-68.4	-10.05	2.2	--		
0134907173	06-21-95	0.02	7	19	-68.0	-10.07	2.8	--		
0134907270	06-19-95	0.01	13	24	-68.6	-10.29	2.6	0.3		
01349073	06-21-95	<0.01	19	52	-67.9	-9.84	2.8	--		
01349075	06-20-95	0.01	17	18	-71.5	-10.53	1.2	--		
0134909502	06-20-95	0.02	12	19	-67.8	-9.92	5.3	--		
01349100	06-21-95	<0.01	27	110	-65.5	-9.32	3.4	--		
01349108	06-21-95	<0.01	8	6	-63.9	-9.44	2.8	--		
01349150	06-19-95	<0.01	30	100	-63.7	-8.91	3.5	0.8		
01349240	06-20-95	<0.01	28	20	-55.3	-7.65	5.3	--		
425000074390001	06-21-95	<0.01	5	5	-71.3	-10.47	2.0	--		
425051074393401	06-19-95	<0.01	55	48	-68.2	-9.51	4.0	--		
425051074393701	06-19-95	<0.01	80	34	-69.7	-10.06	3.6	--		
425121074454001	06-22-95	--	--	--	--	--	--	--		

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES

## Surface-water synoptic-sampling studies - Canajoharie Creek watershed--Continued

Table 1. Base-flow pesticide synoptic--Continued

STATION NUMBER	STATION NAME	DATE	TIME	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-A PHYTO- PLANK- TON CHROMO. FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO. FLUOROM (UG/L)
01348995	OTSQUAGO CREEK AT VALLEY BROOK NR FORT PLAIN NY	06-20-95	1050	--	--	0.50	0.10
01348995	OTSQUAGO CREEK AT VALLEY BROOK NR FORT PLAIN NY	06-27-95	0937	67.0	11.0	--	--
0134907130	CANAJOHARIE CREEK AT SALT SPRINGVILLE NY	06-20-95	1350	--	--	0.30	<0.10
0134907130	CANAJOHARIE CREEK AT SALT SPRINGVILLE NY	06-22-95	1120	--	--	--	--
0134907130	CANAJOHARIE CREEK AT SALT SPRINGVILLE NY	06-27-95	1247	53.0	12.0	--	--
0134907140	SALT SPRING BROOK AT SALT SPRINGVILLE NY	06-20-95	1450	--	--	<0.10	<0.10
0134907140	SALT SPRING BROOK AT SALT SPRINGVILLE NY	06-27-95	1547	9.70	2.10	--	--
0134907160	CANAJOHARIE CREEK NEAR SPROUT BROOK NY	06-20-95	1610	--	--	0.50	<0.10
0134907160	CANAJOHARIE CREEK NEAR SPROUT BROOK NY	06-21-95	1237	50.0	12.0	--	--
0134907170	VAN DEUSEN BROOK NEAR SPROUT BROOK NY	06-21-95	1110	--	--	0.20	<0.10
0134907170	VAN DEUSEN BROOK NEAR SPROUT BROOK NY	06-22-95	1407	64.0	17.0	--	--
0134907173	VAN DEUSEN BROOK AT SPROUT BROOK NY	06-21-95	1330	--	--	1.10	0.10
0134907173	VAN DEUSEN BROOK AT SPROUT BROOK NY	06-21-95	1607	54.0	12.0	--	--
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-27-95	1015	--	--	1.10	0.10
01349073	CANAJOHARIE CREEK AT SOUTH BUEL ROAD NY	06-21-95	1505	--	--	0.60	<0.10
01349073	CANAJOHARIE CREEK AT SOUTH BUEL ROAD NY	06-22-95	1137	100	27.0	--	--
01349075	BRIMSTONE CREEK AT SHARON SPRINGS NY	06-20-95	1535	--	--	0.40	0.20
01349075	BRIMSTONE CREEK AT SHARON SPRINGS NY	06-21-95	0937	170	64.0	--	--
0134909502	BRIMSTONE CREEK AT AMES NY	06-20-95	1237	170	22.0	--	--
0134909502	BRIMSTONE CREEK AT AMES NY	06-20-95	1310	--	--	1.80	0.20
01349100	CANAJOHARIE CREEK AT AMES NY	06-20-95	1617	59.0	10.0	--	--
01349100	CANAJOHARIE CREEK AT AMES NY	06-20-95	1627	53.0	10.0	--	--
01349100	CANAJOHARIE CREEK AT AMES NY	06-20-95	1637	78.0	14.0	--	--
01349100	CANAJOHARIE CREEK AT AMES NY	06-21-95	1000	--	--	4.00	0.70
01349108	CANAJOHARIE CREEK TRIB AT WATERVILLE NY	06-20-95	1507	20.0	4.50	--	--
01349108	CANAJOHARIE CREEK TRIB AT WATERVILLE NY	06-21-95	1205	--	--	0.20	<0.10
01349150	CANAJOHARIE CREEK NR CANAJOHARIE NY	06-21-95	1227	28.0	10.0	--	--
01349150	CANAJOHARIE CREEK NR CANAJOHARIE NY	06-27-95	1325	--	--	15.0	2.70
01349240	FLAT CREEK NEAR AMES NY	06-20-95	0917	60.0	9.50	--	--
01349240	FLAT CREEK NEAR AMES NY	06-20-95	0927	97.0	14.0	--	--
01349240	FLAT CREEK NEAR AMES NY	06-20-95	0937	110	9.60	--	--
01349240	FLAT CREEK NEAR AMES NY	06-20-95	1000	--	--	1.90	0.40
425000074390001	TRI COUNTY CREEK NEAR BUEL	06-21-95	1520	--	--	0.20	<0.10
425000074390001	TRI COUNTY CREEK NEAR BUEL	06-22-95	0937	23.0	1.70	--	--

Table 2. Mainstem synoptic

Depth-integrated cross-sectional composite water samples were collected at the following sites along Canajoharie Creek mainstem and analyzed for major inorganic constituents, nutrients, organic carbon, and stable isotopes. (\* indicates station inspection only; no water-quality data collected)

es station inspection only; no water-quality data collected)										
STATION NUMBER	STATION NAME	DATE	TIME	DRAIN- AGE AREA (SQ.MI.	DIS- CHARGE, INST. CUBIC FEET PER SECOND					
0134907160	CANAJOHARIE CREEK NEAR SPROUT BROOK NY	08-22-95	1210	10.2	0.70					
0134907270	*CANAJOHARIE CREEK AT SPROUT BROOK NY	08-22-95	1255	22.7	--					
01349073	*CANAJOHARIE CREEK AT SOUTH BUEL ROAD NY	08-22-95	1305	28.7	--					
0134909502	BRIMSTONE CREEK AT AMES NY	08-22-95	1610	14.7	0.63					
01349100	CANAJOHARIE CREEK AT AMES NY	08-22-95	1810	49.2	0.55					
01349150	CANAJOHARIE CREEK NR CANAJOHARIE NY	08-22-95	1900	59.7	0.77					
425057074373201	CANAJOHARIE CREEK NEAR AMES NY	08-22-95	1410	--	0.09					
425121074454001	CANAJOHARIE CREEK TRIB NEAR SALT SPRINGVILLE NY	08-22-95	1040	0.7	0.36					
STATION NUMBER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE OF HG	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
0134907160	08-22-95	1820	8.2	25.5	22.0	--	11.6	--	1100	340
0134907270	*08-22-95	1700	7.6	--	22.5	--	8.6	--	--	--
01349073	*08-22-95	1560	7.1	--	22.0	--	6.3	--	--	--
0134909502	08-22-95	1590	8.2	28.0	25.5	745	10.3	129	880	290
01349100	08-22-95	1550	8.0	22.5	23.5	744	8.2	100	830	270
01349150	08-22-95	1430	7.9	21.0	24.0	746	6.0	73	810	260
425057074373201	08-22-95	1640	8.5	29.5	26.5	743	12.3	157	940	300
425121074454001	08-22-95	1890	7.9	21.0	15.0	733	8.7	90	1200	400

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES  
Surface-water synoptic-sampling studies - Canajoharie Creek watershed--Continued

Table 2. Mainstem synoptic--Continued

STATION NUMBER	DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
0134907160	08-22-95	52	11	2	0.1	3.0	112	960	15
0134907270	*08-22-95	--	--	--	--	--	--	--	--
01349073	*08-22-95	--	--	--	--	--	--	--	--
0134909502	08-22-95	37	26	6	0.4	3.3	77	770	33
01349100	08-22-95	37	26	6	0.4	3.8	89	740	35
01349150	08-22-95	39	25	6	0.4	4.4	74	670	33
425057074373201	08-22-95	47	13	3	0.2	7.0	49	870	20
425121074454001	08-22-95	58	4.5	1	0.1	1.7	128	1000	3.2

STATION NUMBER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
0134907160	08-22-95	0.3	0.03	6.1	1640	1460	<0.01	0.13	0.07
0134907270	*08-22-95	--	--	--	--	--	--	--	--
01349073	*08-22-95	--	--	--	--	--	--	--	--
0134909502	08-22-95	0.4	0.03	3.6	1340	1220	<0.01	0.11	0.08
01349100	08-22-95	0.3	0.02	2.7	1300	1170	<0.01	<0.05	0.05
01349150	08-22-95	0.2	0.02	3.2	1170	1080	<0.01	<0.05	0.04
425057074373201	08-22-95	0.2	<0.01	5.4	1460	1300	<0.01	<0.05	0.04
425121074454001	08-22-95	0.5	0.03	6.9	1730	1560	<0.01	0.22	0.05

STATION NUMBER	DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
0134907160	08-22-95	<0.20	0.01	0.01	<3	10	-71.2	-10.44	1.7
0134907270	*08-22-95	--	--	--	--	--	--	--	--
01349073	*08-22-95	--	--	--	--	--	--	--	--
0134909502	08-22-95	0.30	0.01	<0.01	13	39	-63.2	-8.78	3.0
01349100	08-22-95	0.30	0.01	<0.01	31	83	-60.3	-8.19	3.5
01349150	08-22-95	0.40	0.01	<0.01	19	110	-49.0	-5.43	4.5
425057074373201	08-22-95	0.70	0.04	0.01	88	170	-52.5	-6.32	6.4
425121074454001	08-22-95	<0.20	<0.01	<0.01	<3	1	-73.6	-11.24	0.50

Table 3. Isotope synoptic

Grab water samples were collected at the following sites and analyzed for Tritium and stable isotopes.

STATION NUMBER	STATION NAME	DATE	TIME	DRAIN- AGE AREA (SQ. MI.)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)
0134907130	CANAJOHARIE CREEK AT SALT SPRINGVILLE NY	09-07-95	1040	3.66	2040	7.6
0134907160	CANAJOHARIE CREEK NEAR SPROUT BROOK NY	09-07-95	1055	10.2	1860	8.1
0134907173	VAN DEUSEN BROOK AT SPROUT BROOK NY	09-07-95	1120	4.86	575	7.7
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	09-07-95	1200	22.7	1790	7.8
01349073	CANAJOHARIE CREEK AT SOUTH BUEL ROAD NY	09-07-95	1225	28.7	1740	7.8
0134909502	BRIMSTONE CREEK AT AMES NY	09-07-95	1310	14.7	1660	8.2
01349100	CANAJOHARIE CREEK AT AMES NY	09-07-95	1330	49.2	1660	7.9
01349150	CANAJOHARIE CREEK NR CANAJOHARIE NY	09-07-95	1355	59.7	1560	7.9
425121074454001	CANAJOHARIE CREEK TRIB NEAR SALT SPRINGVILLE NY	09-07-95	1020	0.7	1910	7.7
425057074373201	CANAJOHARIE CREEK NEAR AMES NY	09-07-95	1250	--	1740	8.5

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES  
Surface-water synoptic-sampling studies - Canajoharie Creek watershed--Continued

Table 3. Isotope synoptic--Continued

STATION NUMBER	DATE	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE OF (MM HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	TRITIUM TOTAL (PCI/L)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL
0134907130	09-07-95	24.5	18.0	730	10	111	40	2.6	-74.0	-11.00
0134907160	09-07-95	--	19.0	730	10.1	115	44	2.6	-71.3	-10.56
0134907173	09-07-95	26.0	19.0	730	6.7	76	57	3.8	-66.2	-9.75
0134907270	09-07-95	--	20.5	730	8.8	103	46	3.2	-68.2	-9.71
01349073	09-07-95	31.0	21.0	730	8.1	95	50	3.2	--	--
0134909502	09-07-95	29.0	23.0	730	10.6	130	47	3.2	-63.9	-8.96
01349100	09-07-95	--	23.0	730	10.7	131	44	3.2	-57.3	-7.75
01349150	09-07-95	32.0	23.0	730	9.5	116	51	3.2	-46.7	-5.07
425121074454001	09-07-95	20.0	14.5	730	9.2	96	48	3.2	-76.0	-11.31
425057074373201	09-07-95	30.0	23.0	730	9.8	120	53	3.2	-54.0	-7.13

Table 4. Miscellaneous surface water sites

Depth-integrated cross-sectional composite water samples were collected at the following sites and analyzed for major inorganic constituents, nutrients, organic carbon, pesticides, and stable isotopes. (\* indicates station inspection only; no water-quality data collected.)

STATION NUMBER	STATION NAME	DATE	TIME	DRAIN- AGE AREA (SQ. MI.)	DIS- CHARGE, INST. CUBIC FEET PER SECOND
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	05-11-95	1050	22.7	10
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	05-16-95	0910	22.7	7.3
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	05-23-95	1220	22.7	5.2
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	05-30-95	1210	22.7	8.6
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-03-95	1825	22.7	15
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-07-95	1030	22.7	5.3
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-12-95	1220	22.7	7.8
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-19-95	1050	22.7	2.7
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	06-27-95	1015	22.7	2.2
0134907270	CANAJOHARIE CREEK AT SPROUT BROOK NY	07-18-95	1420	22.7	1.7
425121074454001	*CANAJOHARIE CREEK TRIB NEAR SALT SPRINGVILLE NY	07-12-95	1640	0.7	0.39
425121074454001	CANAJOHARIE CREEK TRIB NEAR SALT SPRINGVILLE NY	07-18-95	1620	0.7	0.42
425121074454001	*CANAJOHARIE CREEK TRIB NEAR SALT SPRINGVILLE NY	08-10-95	1330	0.7	0.34

STATION NUMBER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
0134907270	05-11-95	760	7.9	13.0	10.5	738	10.6	98	370	120
0134907270	05-16-95	769	7.9	13.5	11.5	742	11.4	108	370	120
0134907270	05-23-95	882	8.1	--	18.0	748	10.4	113	440	140
0134907270	05-30-95	758	8.0	17.0	16.5	742	10.2	108	380	120
0134907270	06-03-95	646	8.1	26.0	23.5	742	7.6	92	290	92
0134907270	06-07-95	842	8.0	21.0	20.0	735	10.3	118	430	140
0134907270	06-12-95	951	8.0	16.0	18.0	738	10.2	112	490	160
0134907270	06-19-95	1050	8.0	27.5	25.5	744	10.8	135	530	170
0134907270	06-27-95	1170	7.9	20.0	22.0	751	10.1	118	630	200
0134907270	07-18-95	1360	8.0	31.0	31.0	737	7.6	106	750	240
425121074454001	*07-12-95	1780	--	--	15.5	--	--	--	--	--
425121074454001	07-18-95	1790	7.8	25.0	18.0	--	8.3	--	1100	340
425121074454001	*08-10-95	1840	7.8	26.0	16.0	--	9.2	--	--	--



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SITES  
Surface-water synoptic-sampling studies - Canajoharie Creek watershed--Continued

Table 4. Miscellaneous surface water sites--Continued

STATION NUMBER	DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
0134907270	05-11-95	18	11	6	0.2	1.5	173	200	20	0.1
0134907270	05-16-95	18	11	6	0.2	1.7	168	210	21	0.1
0134907270	05-23-95	21	12	6	0.3	1.7	168	280	20	0.2
0134907270	05-30-95	19	15	8	0.3	2.1	174	190	26	0.2
0134907270	06-03-95	14	20	13	0.5	2.3	162	120	34	0.1
0134907270	06-07-95	19	17	8	0.4	2.0	--	220	31	0.1
0134907270	06-12-95	23	14	6	0.3	2.5	169	320	22	0.1
0134907270	06-19-95	26	14	5	0.3	2.3	150	390	23	0.2
0134907270	06-27-95	31	14	5	0.2	2.7	144	470	23	0.2
0134907270	07-18-95	37	12	3	0.2	3.7	131	610	19	0.2
425121074454001	*07-12-95	--	--	--	--	--	--	--	--	--
425121074454001	07-18-95	54	4.4	1	0.1	1.9	138	950	3.1	0.5
425121074454001	*08-10-95	--	--	--	--	--	--	--	--	--
STATION NUMBER	DATE	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
0134907270	05-11-95	--	1.9	520	483	0.71	<0.01	0.64	0.02	<0.20
0134907270	05-16-95	--	1.2	539	490	0.73	0.01	0.51	0.02	0.40
0134907270	05-23-95	--	0.79	615	578	0.84	0.01	0.47	0.03	<0.20
0134907270	05-30-95	--	2.9	521	486	0.71	<0.01	0.44	0.04	<0.20
0134907270	06-03-95	--	4.7	423	390	0.58	0.07	0.58	0.05	0.30
0134907270	06-07-95	--	2.5	591	542	0.80	0.02	0.45	0.05	<0.20
0134907270	06-12-95	--	4.2	702	652	0.95	0.01	0.48	0.05	0.40
0134907270	06-19-95	--	3.8	778	724	1.06	0.01	0.32	0.05	0.20
0134907270	06-27-95	--	6.0	906	837	1.23	<0.01	0.24	0.04	0.30
0134907270	07-18-95	--	7.7	1110	1010	1.51	0.04	0.32	0.17	0.50
425121074454001	*07-12-95	--	--	--	--	--	--	--	--	--
425121074454001	07-18-95	0.03	6.7	1600	1440	2.18	<0.01	0.23	0.06	<0.20
425121074454001	*08-10-95	--	--	--	--	--	--	--	--	--
STATION NUMBER	DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)	
0134907270	05-11-95	0.02	<0.01	9	9	--	--	1.9	0.1	
0134907270	05-16-95	0.01	<0.01	4	11	-72.7	-10.76	3.2	0.2	
0134907270	05-23-95	<0.01	<0.01	8	13	--	--	3.2	0.3	
0134907270	05-30-95	<0.01	<0.01	10	14	-69.2	-10.09	2.7	0.2	
0134907270	06-03-95	<0.01	<0.01	23	21	-62.5	-9.50	4.5	0.4	
0134907270	06-07-95	<0.01	<0.01	5	24	-70.4	-10.27	2.7	0.2	
0134907270	06-12-95	0.02	0.02	15	17	-68.2	-9.95	2.5	0.4	
0134907270	06-19-95	0.02	0.01	13	24	-68.6	-10.29	2.6	0.3	
0134907270	06-27-95	0.02	0.01	10	31	-69.8	-10.21	2.4	0.2	
0134907270	07-18-95	0.06	0.06	6	75	-64.5	-9.67	2.7	0.3	
425121074454001	*07-12-95	--	--	--	--	--	--	--	--	
425121074454001	07-18-95	<0.01	<0.01	<3	<1	--	--	0.6	--	
425121074454001	*08-10-95	--	--	--	--	--	--	--	--	



## QUALITY OF GROUND WATER

Flowpath study  
(National water-quality assessment program)

The flowpath study was designed to examine the relation between water quality and land use in greater detail than possible in the land-use surveys. This flowpath study was conducted to gain an understanding of the source and transport of contaminants through the shallow ground-water system over time of an intensively agricultural area in the Canajoharie Creek watershed in Montgomery County. An additional objective was to determine the extent and role of the interaction between shallow ground-water and surface-water. Samples were collected from 4 tile drains and 4 sites along three drainage ditches and were analyzed for major inorganic constituents, and nutrients. In addition to these samples, 3 wells(\*) installed by Cornell University were sampled and analyzed for major inorganic constituents and nutrients.

## DRAINAGE DITCHES

STATION NUMBER	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CaCO3)
425026074395901	05-30-95	1440	0.03	225	8.3	24.0	22.5	739	8.8	105	100
425026074395901	06-03-95	1910	0.14	207	7.7	23.0	18.5	742	--	--	95
425026074395901	06-07-95	1620	0.04	230	8.5	31.0	29.0	734	6.9	94	97
425026074395901	06-12-95	1750	0.05	217	8.3	16.5	18.5	737	8.2	91	100
425026074395901	06-19-95	1620	0.00	300	8.5	34.0	30.5	742	5.8	79	150
425032074393901	05-16-95	1400	0.20	296	8.5	--	23.0	740	12.7	152	93
425032074393901	05-23-95	1500	0.16	333	8.1	26.0	26.0	746	10.3	129	150
425032074393901	05-30-95	1340	0.12	390	8.0	--	20.0	739	11.3	129	190
425032074393901	06-07-95	1420	0.19	344	8.2	30.0	28.0	734	10.6	141	150
425032074393901	06-12-95	1510	0.13	367	8.2	20.0	20.0	737	12.3	140	170
425032074393901	06-19-95	1440	0.06	328	8.2	35.5	31.5	742	>15.0	--	150
425032074393901	06-27-95	1410	0.10	319	8.4	26.5	30.0	750	12.5	167	140
425051074393401	05-16-95	0900	0.19	400	7.5	15.5	10.5	740	10.2	94	190
425051074393401	05-23-95	1230	0.20	345	8.5	25.0	24.0	746	>15.0	--	160
425051074393401	05-30-95	1045	0.25	406	8.0	16.0	17.5	739	14.5	156	190
425051074393401	06-07-95	1120	0.27	365	8.4	27.5	25.5	734	>16.0	--	160
425051074393401	06-12-95	1310	0.21	346	8.2	19.0	20.0	737	14.2	162	160
425051074393401	06-19-95	1140	0.10	310	8.6	32.0	30.5	742	>15.0	--	130
425051074393401	06-27-95	1140	0.05	303	8.0	27.5	27.5	750	14.8	190	130
425051074393701	05-16-95	1030	0.13	592	8.1	10.5	20.5	740	17.2	196	280
425051074393701	05-23-95	1345	0.10	521	8.2	28.0	29.5	746	>15.0	--	240
425051074393701	05-30-95	0950	0.12	608	8.1	--	16.0	739	17.0	177	270
425051074393701	06-07-95	1210	0.12	461	8.9	31.0	29.0	734	>16.0	--	170
425051074393701	06-12-95	1400	0.15	531	8.2	18.5	20.0	737	15.5	177	250
425051074393701	06-19-95	1330	0.09	460	7.8	35.5	35.0	742	11.1	164	200
425051074393701	06-27-95	1240	0.12	483	7.6	29.0	31.0	750	12.4	170	220

STATION NUMBER	DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)
425026074395901	05-30-95	31	6.4	4.4	8	0.2	1.2	91	20	1.6
425026074395901	06-03-95	28	6.1	4.0	8	0.2	1.4	84	18	1.3
425026074395901	06-07-95	29	6.0	4.4	9	0.2	1.4	90	20	1.5
425026074395901	06-12-95	31	6.4	4.4	8	0.2	1.4	95	20	1.5
425026074395901	06-19-95	46	8.7	7.2	9	0.3	1.7	136	33	2.6
425032074393901	05-16-95	--	--	--	--	--	--	127	46	10
425032074393901	05-23-95	47	9.1	4.8	6	0.2	0.8	100	40	11
425032074393901	05-30-95	58	10	5.1	6	0.2	0.8	136	38	10
425032074393901	06-07-95	43	9.2	5.1	7	0.2	0.6	100	38	12
425032074393901	06-12-95	53	10	5.1	6	0.2	0.6	118	37	10
425032074393901	06-19-95	41	11	5.5	7	0.2	0.5	82	45	14
425032074393901	06-27-95	39	11	5.5	8	0.2	0.6	94	42	15
425051074393401	05-16-95	60	10	6.0	6	0.2	0.9	150	35	12
425051074393401	05-23-95	47	9.4	5.7	7	0.2	0.6	108	39	13
425051074393401	05-30-95	58	10	5.9	6	0.2	0.6	146	36	13
425051074393401	06-07-95	47	9.8	6.3	8	0.2	0.4	108	37	15
425051074393401	06-12-95	48	9.8	6.2	8	0.2	0.4	114	35	14
425051074393401	06-19-95	36	10	6.9	10	0.3	0.5	81	39	18
425051074393401	06-27-95	35	11	6.9	10	0.3	0.5	100	32	17
425051074393701	05-16-95	92	12	8.5	6	0.2	0.7	169	53	29
425051074393701	05-23-95	76	12	8.4	7	0.2	0.9	138	54	29
425051074393701	05-30-95	89	11	7.6	6	0.2	0.6	201	49	27
425051074393701	06-07-95	51	11	8.2	9	0.3	0.5	75	53	30
425051074393701	06-12-95	79	12	8.5	7	0.2	0.6	154	50	28
425051074393701	06-19-95	60	12	8.9	9	0.3	0.4	96	53	29
425051074393701	06-27-95	68	12	8.5	8	0.2	0.3	133	51	29

QUALITY OF GROUND WATER  
Flowpath study--Continued

## DRAINAGE DITCHES--Continued

STATION NUMBER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
425026074395901	05-30-95	0.2	<0.01	4.2	134	125	0.18	<0.01	<0.05	<0.01
425026074395901	06-03-95	<0.1	<0.01	5.8	127	118	0.17	<0.01	0.17	0.03
425026074395901	06-07-95	<0.1	<0.01	3.5	137	123	0.19	<0.01	<0.05	0.02
425026074395901	06-12-95	<0.1	<0.01	3.8	140	128	0.19	<0.01	<0.05	<0.01
425026074395901	06-19-95	<0.1	0.01	2.5	196	184	0.27	<0.01	<0.05	0.06
425032074393901	05-16-95	<0.1	<0.01	0.77	182	159	0.25	0.03	2.0	0.03
425032074393901	05-23-95	<0.1	<0.01	1.0	204	187	0.28	0.05	2.3	0.04
425032074393901	05-30-95	<0.1	<0.01	2.6	236	220	0.32	0.07	2.0	0.03
425032074393901	06-07-95	<0.1	<0.01	1.9	215	187	0.29	0.13	2.8	0.02
425032074393901	06-12-95	<0.1	<0.01	1.8	234	208	0.32	0.11	2.2	0.02
425032074393901	06-19-95	<0.1	<0.01	0.99	210	179	0.29	0.18	1.2	0.06
425032074393901	06-27-95	<0.1	<0.01	1.5	201	171	0.27	0.04	0.07	0.04
425051074393401	05-16-95	<0.1	0.02	1.0	252	227	0.34	0.05	1.9	0.03
425051074393401	05-23-95	<0.1	0.02	0.77	208	188	0.28	0.05	1.4	0.03
425051074393401	05-30-95	<0.1	0.02	2.3	254	226	0.35	0.06	1.1	0.03
425051074393401	06-07-95	<0.1	0.02	0.92	227	196	0.31	0.08	1.9	0.03
425051074393401	06-12-95	<0.1	0.01	1.0	213	190	0.29	0.10	1.3	0.04
425051074393401	06-19-95	<0.1	0.02	0.53	205	163	0.28	0.09	0.45	0.06
425051074393401	06-27-95	<0.1	<0.01	0.65	190	159	0.26	0.02	0.08	0.03
425051074393701	05-16-95	<0.1	0.13	2.4	381	346	0.52	0.04	10	0.03
425051074393701	05-23-95	<0.1	0.10	1.2	340	304	0.46	0.07	9.0	0.03
425051074393701	05-30-95	<0.1	0.12	2.3	384	342	0.52	0.08	8.4	0.04
425051074393701	06-07-95	<0.1	0.11	2.4	276	239	0.38	0.09	7.2	0.03
425051074393701	06-12-95	<0.1	0.12	2.7	353	305	0.48	0.08	7.1	0.07
425051074393701	06-19-95	<0.1	0.11	2.6	311	260	0.42	0.11	7.7	0.16
425051074393701	06-27-95	<0.1	0.11	3.5	312	279	0.42	0.10	6.7	0.12

STATION NUMBER	DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL
425026074395901	05-30-95	<0.20	<0.01	<0.01	43	11	2.7	-67.9	-10.08
425026074395901	06-03-95	<0.20	<0.01	<0.01	44	17	3.3	-66.0	-9.75
425026074395901	06-07-95	<0.20	<0.01	<0.01	27	13	3.0	-67.6	-9.94
425026074395901	06-12-95	<0.20	<0.01	<0.01	21	10	2.5	-67.4	-9.92
425026074395901	06-19-95	0.20	0.04	0.01	10	22	2.9	-64.9	-9.42
425032074393901	05-16-95	0.30	<0.01	<0.01	62	19	2.8	-71.9	-10.28
425032074393901	05-23-95	0.30	<0.01	<0.01	99	35	3.3	-73.4	-10.46
425032074393901	05-30-95	<0.20	<0.01	<0.01	63	38	3.0	-67.6	-10.07
425032074393901	06-07-95	<0.20	<0.01	<0.01	62	14	2.5	-71.1	-10.49
425032074393901	06-12-95	<0.20	<0.01	<0.01	53	11	2.5	-68.1	-10.07
425032074393901	06-19-95	0.30	0.02	<0.01	43	8	3.2	-74.5	-11.03
425032074393901	06-27-95	0.30	<0.01	<0.01	30	14	3.4	-71.1	-9.81
425051074393401	05-16-95	0.20	<0.01	<0.01	96	190	4.9	-71.1	-10.41
425051074393401	05-23-95	0.30	<0.01	<0.01	120	86	3.7	-71.1	-10.10
425051074393401	05-30-95	0.20	<0.01	<0.01	71	190	4.2	-65.2	-9.60
425051074393401	06-07-95	0.20	<0.01	<0.01	60	31	3.3	-67.1	-10.08
425051074393401	06-12-95	0.30	<0.01	<0.01	66	44	3.0	-65.4	-9.80
425051074393401	06-19-95	0.40	0.01	<0.01	55	48	4.0	-68.2	-9.51
425051074393401	06-27-95	0.50	0.01	<0.01	54	37	4.6	-68.3	-9.53
425051074393701	05-16-95	0.40	<0.01	<0.01	61	81	2.4	-71.4	-10.49
425051074393701	05-23-95	0.40	<0.01	<0.01	65	39	3.6	-71.1	-10.18
425051074393701	05-30-95	0.30	<0.01	<0.01	79	130	2.8	-72.4	-10.58
425051074393701	06-07-95	0.30	<0.01	<0.01	100	16	3.7	-71.7	-10.57
425051074393701	06-12-95	0.30	<0.01	<0.01	83	56	3.0	-69.4	-10.03
425051074393701	06-19-95	0.50	0.02	<0.01	80	34	3.6	-69.7	-10.06
425051074393701	06-27-95	1.1	0.02	<0.01	71	24	3.6	-70.8	-10.18

QUALITY OF GROUND WATER  
Flowpath study--Continued

## TILE DRAINS AND GROUND-WATER WELLS

STATION NUMBER	DATE	TIME	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
425030074393901	05-16-95	1140	0.9	602	7.7	--	11.0	740	--	--
425030074393901	05-23-95	1010	0.5	580	7.8	22.0	11.0	746	--	--
425030074393901	05-30-95	1220	1.2	577	7.5	16.0	12.0	739	--	--
425030074393901	06-03-95	1350	--	598	7.2	26.0	11.5	742	--	--
425030074393901	06-07-95	1450	4.5	600	7.5	30.5	15.0	734	6.6	68
425030074393901	06-12-95	1540	3.6	580	7.2	19.5	14.0	737	7.0	71
425030074393901	06-19-95	1510	1.6	624	7.1	35.0	16.0	742	7.5	78
425030074393901	06-27-95	1000	0.4	608	7.6	23.5	17.0	750	9.0	95
425030074400001	05-16-95	1300	6.0	424	7.8	--	9.5	740	--	--
425030074400001	05-23-95	0920	3.7	430	6.5	16.0	10.0	749	--	--
425030074400001	05-30-95	0850	2.5	423	6.9	13.5	10.5	739	--	--
425030074400001	06-03-95	1320	3.6	443	7.5	25.0	11.0	742	--	--
425030074400001	06-07-95	1530	4.2	444	7.2	30.5	12.0	734	9.0	87
425030074400001	06-12-95	1710	2.5	439	7.1	17.5	12.5	737	9.0	87
425030074400001	06-19-95	1650	1.0	442	7.4	33.0	14.0	742	9.3	93
425030074400001	06-27-95	1510	0.1	439	7.7	27.0	17.0	750	8.5	90
425031074394001	06-03-95	1930	--	587	6.8	22.0	11.5	742	--	--
425031074394001	06-07-95	0940	2.7	500	6.9	23.5	16.5	734	6.6	71
425031074394001	06-12-95	1200	0.5	503	6.9	17.5	14.5	737	6.6	67
425031074394001	06-19-95	1040	0.4	545	7.1	29.5	15.5	742	8.1	84
425041074393201	06-07-95	1020	5.3	566	7.0	24.5	13.0	734	8.2	81
425041074393201	06-12-95	1620	1.7	591	7.1	18.5	13.5	737	8.2	82
425041074393201	06-19-95	1000	2.1	591	7.1	29.0	14.5	742	8.3	83
425041074393201	06-27-95	1050	0.3	548	7.5	25.0	16.5	750	9.2	96
425052074393601*	06-22-95	1300	--	1010	7.4	28.0	12.0	748	--	--
425052074393602*	06-22-95	1400	--	1280	7.5	27.0	12.5	748	--	--
425052074393603*	06-22-95	1500	--	1590	7.5	27.0	13.0	748	--	--

STATION NUMBER	DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
425030074393901	05-16-95	300	100	12	3.3	2	0.1	0.9	219	53
425030074393901	05-23-95	280	95	11	3.4	3	0.1	0.9	220	57
425030074393901	05-30-95	300	100	12	3.4	2	0.1	1.2	215	49
425030074393901	06-03-95	300	99	12	2.9	2	0.1	1.3	206	33
425030074393901	06-07-95	270	91	11	2.9	2	0.1	1.2	206	35
425030074393901	06-12-95	300	100	12	3.2	2	0.1	1.2	207	39
425030074393901	06-19-95	300	100	12	3.6	3	0.1	1.3	230	51
425030074393901	06-27-95	320	110	12	4.2	3	0.1	1.1	228	63
425030074400001	05-16-95	210	71	7.7	3.7	4	0.1	0.8	172	17
425030074400001	05-23-95	210	70	7.5	3.7	4	0.1	0.8	183	18
425030074400001	05-30-95	210	73	7.7	3.9	4	0.1	0.8	174	18
425030074400001	06-03-95	230	77	8.2	3.9	4	0.1	0.8	180	18
425030074400001	06-07-95	210	71	7.7	3.8	4	0.1	1.0	178	18
425030074400001	06-12-95	220	75	8.0	4.1	4	0.1	0.8	183	18
425030074400001	06-19-95	220	76	7.9	4.1	4	0.1	0.9	174	19
425030074400001	06-27-95	220	75	7.5	4.1	4	0.1	0.7	180	18
425031074394001	06-03-95	270	83	16	7.1	5	0.2	0.6	161	32
425031074394001	06-07-95	250	76	15	7.7	6	0.2	0.4	187	34
425031074394001	06-12-95	270	84	15	7.0	5	0.2	0.5	220	30
425031074394001	06-19-95	270	82	15	6.9	5	0.2	0.5	194	29
425041074393201	06-07-95	280	88	14	9.9	7	0.3	0.3	210	33
425041074393201	06-12-95	290	90	15	11	8	0.3	0.4	212	33
425041074393201	06-19-95	270	85	14	12	9	0.3	0.4	204	36
425041074393201	06-27-95	270	86	14	13	9	0.3	0.4	202	38
425052074393601*	06-22-95	410	140	15	43	18	0.9	1.6	282	90
425052074393602*	06-22-95	500	170	19	69	23	1	2.1	336	120
425052074393603*	06-22-95	490	160	22	130	36	3	1.9	342	150

QUALITY OF GROUND WATER  
Flowpath study--Continued

## TILE DRAINS AND GROUND-WATER WELLS--Continued

STATION NUMBER	DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
425030074393901	05-16-95	23	<0.1	0.05	5.7	386	346	<0.01	5.1	0.02
425030074393901	05-23-95	24	<0.1	0.04	6.0	381	327	0.01	4.1	<0.01
425030074393901	05-30-95	21	<0.1	0.03	6.3	385	348	<0.01	5.5	<0.01
425030074393901	06-03-95	21	<0.1	0.03	5.7	374	343	<0.01	10	0.02
425030074393901	06-07-95	21	<0.1	0.04	5.3	385	323	<0.01	10	0.02
425030074393901	06-12-95	20	<0.1	0.04	6.1	387	340	<0.01	8.8	0.02
425030074393901	06-19-95	21	<0.1	0.05	6.5	389	359	<0.01	5.9	0.03
425030074393901	06-27-95	24	<0.1	0.05	7.4	376	336	0.01	1.8	0.02
425030074400001	05-16-95	9.5	<0.1	0.03	5.8	262	252	<0.01	5.7	<0.01
425030074400001	05-23-95	9.1	<0.1	0.02	6.2	263	251	<0.01	5.8	<0.01
425030074400001	05-30-95	9.5	<0.1	0.02	6.6	266	255	<0.01	5.7	<0.01
425030074400001	06-03-95	9.2	<0.1	0.02	6.6	266	260	<0.01	5.5	0.02
425030074400001	06-07-95	9.3	<0.1	0.02	6.3	264	254	0.06	5.7	<0.01
425030074400001	06-12-95	9.4	<0.1	0.02	6.8	278	258	<0.01	5.5	0.02
425030074400001	06-19-95	9.9	<0.1	0.03	6.8	268	262	<0.01	5.9	0.03
425030074400001	06-27-95	9.3	<0.1	0.02	6.9	268	256	0.01	5.7	0.02
425031074394001	06-03-95	30	0.2	0.03	7.5	414	351	0.10	17	0.02
425031074394001	06-07-95	23	0.2	0.05	6.1	349	323	0.02	9.2	0.02
425031074394001	06-12-95	21	0.2	0.04	6.4	337	318	<0.01	7.7	0.02
425031074394001	06-19-95	19	0.2	0.04	6.6	335	316	<0.01	7.8	0.03
425041074393201	06-07-95	31	0.1	0.11	7.2	372	332	<0.01	5.5	0.02
425041074393201	06-12-95	33	0.2	0.11	8.0	389	344	<0.01	4.3	0.02
425041074393201	06-19-95	33	0.2	0.14	8.1	366	334	<0.01	3.1	0.03
425041074393201	06-27-95	36	0.2	0.16	8.7	361	335	0.01	2.2	0.02
425052074393601*	06-22-95	100	0.1	0.80	7.1	638	584	0.10	3.6	0.19
425052074393602*	06-22-95	150	<0.1	1.2	8.4	814	734	<0.01	<0.05	0.59
425052074393603*	06-22-95	220	0.1	1.9	10	1010	893	<0.01	0.05	0.38

STATION NUMBER	DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL
425030074393901	05-16-95	<0.20	<0.01	<0.01	8	31	1.6	-72.7	-10.81
425030074393901	05-23-95	<0.20	<0.01	<0.01	9	22	1.6	-73.0	-10.56
425030074393901	05-30-95	<0.20	<0.01	<0.01	5	14	1.6	-73.8	-10.90
425030074393901	06-03-95	<0.20	<0.01	<0.01	17	21	2.0	-75.7	-11.02
425030074393901	06-07-95	<0.20	<0.01	<0.01	22	16	1.4	-75.4	-11.04
425030074393901	06-12-95	<0.20	<0.01	<0.01	9	23	1.5	-74.6	-11.04
425030074393901	06-19-95	<0.20	0.01	<0.01	4	26	1.6	-74.6	-10.87
425030074393901	06-27-95	0.20	<0.01	<0.01	<3	5	2.4	-68.9	-10.39
425030074400001	05-16-95	<0.20	<0.01	<0.01	18	5	0.9	-76.0	-11.10
425030074400001	05-23-95	<0.20	<0.01	<0.01	4	4	0.9	-70.0	-10.00
425030074400001	05-30-95	<0.20	0.03	<0.01	4	3	2.9	-76.4	-11.01
425030074400001	06-03-95	<0.20	<0.01	<0.01	<3	3	1.0	-73.2	-10.81
425030074400001	06-07-95	<0.20	<0.01	<0.01	<3	1	0.8	-73.3	-11.02
425030074400001	06-12-95	<0.20	<0.01	<0.01	<3	2	0.9	-74.2	-11.00
425030074400001	06-19-95	<0.20	0.01	<0.01	<3	1	0.8	-75.4	-10.95
425030074400001	06-27-95	<0.20	0.01	<0.01	<3	<1	0.8	-73.4	-11.04
425031074394001	06-03-95	0.30	<0.01	<0.01	<3	3	2.5	-67.0	-10.19
425031074394001	06-07-95	<0.20	<0.01	<0.01	5	2	3.0	-67.7	-10.15
425031074394001	06-12-95	<0.20	<0.01	0.01	<3	<1	2.0	-69.3	-10.27
425031074394001	06-19-95	0.20	0.02	<0.01	<3	<1	1.4	-68.7	-10.37
425041074393201	06-07-95	<0.20	<0.01	<0.01	15	12	2.0	-65.8	-9.88
425041074393201	06-12-95	<0.20	<0.01	<0.01	<3	5	2.0	-65.6	-9.89
425041074393201	06-19-95	<0.20	<0.01	<0.01	<3	3	2.6	-64.7	-9.67
425041074393201	06-27-95	<0.20	0.02	0.01	<3	<1	1.8	-64.4	-9.59
425052074393601*	06-22-95	0.70	<0.01	<0.01	<3	1800	3.6	-70.0	-10.39
425052074393602*	06-22-95	1.3	<0.01	<0.01	5	1200	4.6	-68.5	-10.16
425052074393603*	06-22-95	1.1	<0.01	0.01	10	1000	6.3	-70.0	-10.34



## QUALITY OF GROUND WATER

Study-unit survey  
(National water-quality assessment program)

The study-unit survey was designed to examine the ground-water quality of wells across the Mohawk and Hudson River basins. The survey included wells located in Oneida, Herkimer, Montgomery, Schenectady, Albany, Rensselaer, Columbia, and Orange Counties. The well in Westchester County (station number 411030073392701) was sampled as part of the Connecticut River NAWQA study-unit survey and is included in this table. The Hudson River basin study-unit survey samples were collected from 48 wells and 2 springs(\*\*), and were analyzed for major inorganic constituents, dissolved organic carbon, volatile organic carbons, and radon. For most of the Montgomery County sites, the volatile organic carbons were collected at a later date than the other constituents(#). Samples were collected using protocols established at the national level to ensure the consistency of the results. Details on these protocols are available from this office. (\* = Replicate sample)

STATION NUMBER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)
ALBANY COUNTY											
422846073593501	11-28-94	1530	335	850	1.2	465	7.7	9.5	10.0	724	0.1
422950073591201	11-16-94	1200	407	780	1.2	180	5.8	7.5	10.0	750	0.2
423241074064901	11-28-94	1300	175	1440	1.1	200	6.3	8.5	9.5	710	3.1
423416073553201	11-16-94	0930	100	410	2.3	639	7.0	7.0	10.5	761	0.1
423847074043701	11-28-94	1030	175	1380	0.5	604	7.3	4.0	8.5	714	4.4
423851073545201	11-16-94	1430	100	340	1.5	1300	7.0	8.5	10.5	761	0.1
424354073532101	11-17-94	1230	25	330	1.0	518	7.7	11.5	11.0	764	5.8
424429073585801	11-17-94	1000	235	310	1.4	849	7.9	3.5	11.0	766	0.1

## COLUMBIA COUNTY

421130073412001	11-14-94	1430	100	510	1.5	282	7.6	17.0	11.5	752	0.3
421150073353001	11-14-94	1130	150	1020	1.0	233	6.9	13.0	10.0	741	0.2
421909073382001	11-15-94	1200	70	380	1.0	840	6.9	16.0	11.5	755	2.8
422415073251001	11-18-94	1400	70	1020	1.0	394	6.8	13.0	11.5	737	0.4
422554073415601	11-15-94	0900	--	300	1.0	192	8.1	14.0	12.0	756	3.4
422753073240501	11-18-94	1130	102	690	1.5	219	7.8	13.0	10.0	743	0.1
422753073240501*	11-18-94	1135	102	690	1.5	219	7.8	13.0	10.0	743	0.1

## HERKIMER COUNTY

425659075013001**	10-20-94	1530	--	1420	0.6	485	7.2	17.0	13.5	741	4.9
425837074475101	10-19-94	1400	40	680	--	663	7.0	17.0	14.5	739	4.0
430302074462601	10-20-94	1000	150	620	1.0	572	7.4	13.5	11.5	739	0.1
430328074461501**	10-20-94	1230	--	620	1.0	478	7.4	16.5	8.5	739	1.4
430536075034501	10-21-94	0930	20	768	--	590	7.4	13.0	14.0	739	4.4
430549075031701	11-02-94	1430	325	886	1.2	1140	8.6	6.0	10.5	731	0.1
431157075015601	10-21-94	1300	15	669	0.5	365	7.3	17.5	16.0	742	3.0

STATION NUMBER	DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
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## ALBANY COUNTY

422846073593501	11-28-94	1	140	31	14	59	49	2	0.6	250	15
422950073591201	11-16-94	2	43	11	3.7	17	46	1	0.9	30	13
423241074064901	11-28-94	29	88	27	4.9	5.5	12	0.3	0.6	72	18
423416073553201	11-16-94	1	250	88	7.8	41	26	1	2.2	256	17
423847074043701	11-28-94	41	260	71	21	30	20	0.8	1.1	212	110
423851073545201	11-16-94	1	490	140	34	67	23	1	1.6	306	69
424354073532101	11-17-94	52	180	60	8.5	33	28	1	0.8	156	20
424429073585801	11-17-94	1	9	2.6	0.55	210	97	31	3.6	434	4.5

## COLUMBIA COUNTY

421130073412001	11-14-94	3	140	46	6.4	3.2	5	0.1	0.5	108	34
421150073353001	11-14-94	2	110	34	6.6	3.8	7	0.2	0.3	93	21
421909073382001	11-15-94	26	390	120	21	23	11	0.5	1.3	312	36
422415073251001	11-18-94	3	190	63	7.7	7.4	8	0.2	1.5	186	18
422554073415601	11-15-94	31	72	23	3.6	11	25	0.6	0.5	70	12
422753073240501	11-18-94	1	97	31	4.7	9.3	17	0.4	0.4	94	17
422753073240501*	11-18-94	1	96	31	4.6	9.2	17	0.4	0.4	94	17

## HERKIMER COUNTY

425659075013001**	10-20-94	48	260	81	13	3.9	3	0.1	0.5	244	14
425837074475101	10-19-94	40	330	110	14	9.1	6	0.2	2.2	298	17
430302074462601	10-20-94	1	300	69	30	11	7	0.3	1.5	314	17
430328074461501**	10-20-94	12	260	73	19	4.5	4	0.1	0.8	228	27
430536075034501	10-21-94	44	270	90	12	12	9	0.3	4.0	224	20
430549075031701	11-02-94	1	16	4.0	1.4	260	97	29	2.6	496	19
431157075015601	10-21-94	31	190	66	5.5	5.6	6	0.2	0.8	184	8.9



QUALITY OF GROUND WATER  
Study-unit Survey--Continued

STATION NUMBER	DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO <sub>2</sub> )	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
ALBANY COUNTY										
422846073593501	11-28-94	1.4	0.1	0.03	11	273	282	<0.01	<0.05	0.28
422950073591201	11-16-94	20	<0.1	0.02	7.5	103	102	0.05	2.2	<0.01
423241074064901	11-28-94	5.1	<0.1	<0.01	7.1	116	116	<0.01	0.75	<0.01
423416073553201	11-16-94	49	0.1	0.09	8.8	362	367	0.01	<0.05	0.12
423847074043701	11-28-94	1.8	0.1	0.02	11	381	376	<0.01	<0.05	0.76
423851073545201	11-16-94	200	<0.1	0.37	8.4	722	698	0.12	3.3	<0.01
424354073532101	11-17-94	38	<0.1	0.03	14	307	308	<0.01	7.5	<0.01
424429073585801	11-17-94	23	1.4	0.15	7.5	506	522	<0.01	<0.05	1.3
COLUMBIA COUNTY										
421130073412001	11-14-94	1.1	<0.1	0.01	9.9	174	169	<0.01	<0.05	<0.01
421150073353001	11-14-94	5.9	<0.1	0.02	13	143	141	<0.01	<0.05	<0.01
421909073382001	11-15-94	63	<0.1	0.05	14	356	457	<0.01	0.83	0.06
422415073251001	11-18-94	5.1	<0.1	<0.01	8.6	227	227	0.02	<0.05	0.02
422554073415601	11-15-94	7.7	0.1	0.02	11	114	115	<0.01	<0.05	0.06
422753073240501	11-18-94	1.7	0.1	0.01	13	134	136	<0.01	<0.05	0.03
422753073240501*	11-18-94	1.6	0.1	<0.01	13	132	136	<0.01	<0.05	0.03
HERKIMER COUNTY										
425659075013001**	10-20-94	4.2	<0.1	0.02	5.2	281	266	<0.01	0.81	<0.01
425837074475101	10-19-94	21	<0.1	0.05	13	382	387	<0.01	5.0	<0.01
430302074462601	10-20-94	1.2	0.4	0.03	23	260	326	0.01	<0.05	0.24
430328074461501**	10-20-94	2.3	0.1	0.01	15	281	284	0.01	0.17	<0.01
430536075034501	10-21-94	28	0.1	0.03	7.6	338	338	0.02	6.0	0.13
430549075031701	11-02-94	81	4.6	1.6	7.4	643	669	<0.01	0.08	1.4
431157075015601	10-21-94	2.3	<0.1	0.02	9.6	210	212	<0.01	0.09	<0.01
STATION NUMBER	DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FEE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	RADON 222 TOTAL (PCT/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L)	CHLORO- FORM TOTAL (UG/L)
ALBANY COUNTY										
422846073593501	11-28-94	0.20	0.03	0.04	500	47	92	0.3	<0.2	<0.2
422950073591201	11-16-94	<0.20	<0.01	<0.01	53	67	360	0.9	<0.2	<0.2
423241074064901	11-28-94	<0.20	<0.01	<0.01	28	2	460	0.8	<0.2	<0.2
423416073553201	11-16-94	<0.20	0.02	0.02	33	21	280	1.1	<0.2	<0.2
423847074043701	11-28-94	0.70	<0.01	<0.01	360	380	1400	0.4	<0.2	<0.2
423851073545201	11-16-94	<0.20	<0.01	<0.01	89	180	89	0.4	<0.2	<0.2
424354073532101	11-17-94	<0.20	0.01	<0.01	5	<1	220	0.3	<0.2	<0.2
424429073585801	11-17-94	1.2	<0.01	<0.01	41	17	220	0.3	<0.2	<0.2
COLUMBIA COUNTY										
421130073412001	11-14-94	<0.20	<0.01	<0.01	13	3	800	0.3	<0.2	<0.2
421150073353001	11-14-94	<0.20	<0.01	<0.01	11	170	680	0.3	<0.2	<0.2
421909073382001	11-15-94	<0.20	<0.01	<0.01	840	360	490	0.8	<0.2	<0.2
422415073251001	11-18-94	<0.20	<0.01	<0.01	2500	2100	1600	2.1	<0.2	0.4
422554073415601	11-15-94	<0.20	0.02	0.01	31	65	160	0.2	<0.2	<0.2
422753073240501	11-18-94	<0.20	0.04	0.03	72	330	320	0.1	<0.2	<0.2
422753073240501*	11-18-94	<0.20	0.03	0.03	91	330	340	0.1	<0.2	<0.2
HERKIMER COUNTY										
425659075013001**	10-20-94	<0.20	<0.01	<0.01	4	<1	610	0.6	<0.2	<0.2
425837074475101	10-19-94	<0.20	<0.01	0.01	6	3	--	0.8	--	--
430302074462601	10-20-94	<0.20	<0.01	<0.01	1000	25	100	0.5	<0.2	<0.2
430328074461501**	10-20-94	<0.20	<0.01	<0.01	6	41	--	0.8	<0.2	<0.2
430536075034501	10-21-94	0.30	<0.01	0.01	9	38	--	1.4	--	--
430549075031701	11-02-94	1.7	0.07	0.03	32	13	<80	2.2	<0.2	<0.2
431157075015601	10-21-94	<0.20	<0.01	<0.01	<3	<1	--	1.0	<0.2	<0.2

QUALITY OF GROUND WATER  
Study-unit survey--Continued

STATION NUMBER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)
MONTGOMERY COUNTY											
425129074303501	10-26-94	1200	225	810	0.5	575	7.2	13.0	9.5	754	0.1
425129074303501*	10-26-94	1205	225	810	0.5	575	7.2	13.0	9.5	754	0.1
425129074303501#	11-01-94	1330	225	810	0.8	570	7.2	14.0	10.0	722	0.1
425235074204401	10-27-94	0900	--	810	0.5	996	8.4	4.5	10.5	742	0.1
425235074204401#	11-02-94	1030	--	810	0.8	1010	8.4	4.5	11.5	729	0.1
425454074322101	10-25-94	1430	180	710	1.3	659	7.4	11.0	10.0	740	0.1
425454074322101#	11-01-94	1430	180	710	1.0	653	7.5	15.0	11.0	723	0.1
425502074260601	10-27-94	1200	125	320	0.3	588	7.8	11.0	12.0	756	0.1
425502074260601#	11-02-94	1200	125	320	0.8	578	7.8	7.5	11.5	744	0.0
425515074254201	10-24-94	1430	60	320	0.8	541	7.2	17.5	9.5	751	4.5
425515074254201#	11-01-94	1200	60	320	0.4	535	7.3	15.5	10.5	738	3.8
425535074341501	11-03-94	1530	40	760	0.8	512	7.4	16.0	13.5	745	1.9
425545074185601	10-25-94	0900	138	330	1.2	430	7.6	8.0	10.5	750	0.1
425545074185601#	11-02-94	0830	138	330	1.0	423	7.6	4.5	10.5	740	0.1
425545074185602	10-25-94	1130	9.6	330	1.2	840	6.8	13.5	13.5	751	2.1
425545074185602#	11-02-94	0900	9.6	330	1.0	823	6.8	5.0	12.5	740	2.4
425657074174101	10-26-94	0900	30	420	0.8	250	7.7	2.0	13.5	754	9.1
425657074174101#	11-01-94	1100	30	420	0.8	258	7.7	15.0	14.0	736	8.6
425716074294901	10-27-94	1400	150	440	0.8	688	7.1	9.0	11.0	754	0.1
425731074172901	10-28-94	0830	150	470	0.5	575	7.2	1.0	10.5	753	0.1
425731074172901#	11-01-94	1000	150	470	0.8	568	7.1	13.5	11.0	735	0.1
425813074304201	11-03-94	1230	--	920	0.5	783	6.9	14.0	11.0	739	0.1
425851074085801	11-03-94	0930	37	740	1.0	755	7.2	7.0	12.0	745	0.1

## ONEIDA COUNTY

430001075131401	10-19-94	0930	168	1260	0.8	956	7.3	14.0	10.0	725	0.1
430158075154401	10-17-94	1330	48	760	0.1	568	7.5	14.5	14.0	747	0.1
430532075281101	10-18-94	1030	102	660	1.0	686	7.6	12.5	10.5	746	0.1
431212075191501	10-18-94	1500	6.2	480	0.1	369	7.1	15.0	16.5	748	1.2

STATION NUMBER	DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
MONTGOMERY COUNTY										
425129074303501	10-26-94	1	300	60	36	9.7	7	0.2	308	16
425129074303501*	10-26-94	1	300	61	36	9.8	7	0.2	308	16
425129074303501#	11-01-94	1	--	--	--	--	--	--	--	--
425235074204401	10-27-94	1	21	5.2	1.9	240	96	23	516	0.20
425235074204401#	11-02-94	1	--	--	--	--	--	--	--	--
425454074322101	10-25-94	1	110	34	6.1	110	67	5	312	37
425454074322101#	11-01-94	1	--	--	--	--	--	--	--	--
425502074260601	10-27-94	1	170	42	17	55	40	2	208	<0.10
425502074260601#	11-02-94	1	--	--	--	--	--	--	--	--
425515074254201	10-24-94	40	280	79	21	5.2	4	0.1	264	23
425515074254201#	11-01-94	35	--	--	--	--	--	--	--	--
425535074341501	11-03-94	18	270	70	23	4.0	3	0.1	222	37
425545074185601	10-25-94	1	180	40	20	21	20	0.7	230	3.0
425545074185601#	11-02-94	1	--	--	--	--	--	--	--	--
425545074185602	10-25-94	21	270	87	12	60	32	2	240	42
425545074185602#	11-02-94	23	--	--	--	--	--	--	--	--
425657074174101	10-26-94	88	110	40	2.5	7.2	12	0.3	90	9.2
425657074174101#	11-01-94	87	--	--	--	--	--	--	--	--
425716074294901	10-27-94	1	310	97	16	23	14	0.6	254	31
425731074172901	10-28-94	1	280	78	21	12	8	0.3	249	32
425731074172901#	11-01-94	1	--	--	--	--	--	--	--	--
425813074304201	11-03-94	1	430	98	44	6.3	3	0.1	370	49
425851074085801	11-03-94	1	340	80	35	27	14	0.6	272	39

QUALITY OF GROUND WATER  
Study-unit survey--Continued

STATION NUMBER	DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
MONTGOMERY COUNTY										
425129074303501	10-26-94	0.7	0.6	0.01	19	278	325	<0.01	<0.05	0.38
425129074303501*	10-26-94	0.7	0.5	0.03	19	259	322	<0.01	<0.05	0.39
425129074303501#	11-01-94	--	--	--	--	--	--	--	--	--
425235074204401	10-27-94	26	2.2	0.65	7.4	605	606	<0.01	<0.05	1.9
425235074204401#	11-02-94	--	--	--	--	--	--	--	--	--
425454074322101	10-25-94	2.5	1.2	0.02	5.5	344	390	<0.01	<0.05	1.0
425454074322101#	11-01-94	--	--	--	--	--	--	--	--	--
425502074260601	10-27-94	64	0.6	0.80	8.9	314	--	<0.01	<0.05	1.0
425502074260601#	11-02-94	--	--	--	--	--	--	--	--	--
425515074254201	10-24-94	7.6	<0.1	0.05	8.3	268	283	<0.01	1.1	<0.01
425515074254201#	11-01-94	--	--	--	--	--	--	--	--	--
425535074341501	11-03-94	6.5	0.4	0.03	12	290	296	<0.01	0.35	<0.01
425545074185601	10-25-94	5.5	0.5	0.05	9.7	232	239	<0.01	<0.05	1.4
425545074185601#	11-02-94	--	--	--	--	--	--	--	--	--
425545074185602	10-25-94	51	<0.1	0.05	11	507	495	0.02	16	0.11
425545074185602#	11-02-94	--	--	--	--	--	--	--	--	--
425657074174101	10-26-94	4.4	<0.1	0.01	8.6	154	151	<0.01	4.9	<0.01
425657074174101#	11-01-94	--	--	--	--	--	--	--	--	--
425716074294901	10-27-94	52	0.1	0.07	6.9	284	366	<0.01	<0.05	0.18
425731074172901	10-28-94	18	0.2	0.04	9.3	330	328	<0.01	<0.05	0.53
425731074172901#	11-01-94	--	--	--	--	--	--	--	--	--
425813074304201	11-03-94	9.9	<0.1	0.06	8.2	439	449	<0.01	3.0	0.10
425851074085801	11-03-94	62	0.2	0.07	13	345	425	<0.01	<0.05	0.10
ONEIDA COUNTY										
430001075131401	10-19-94	1.4	0.2	0.02	14	788	742	<0.01	<0.05	0.10
430158075154401	10-17-94	20	<0.1	0.05	7.6	278	333	0.02	0.56	<0.01
430532075281101	10-18-94	1.6	0.2	0.03	13	342	404	<0.01	<0.05	0.48
431212075191501	10-18-94	6.2	<0.1	0.01	7.4	218	214	<0.01	0.10	<0.01
STATION NUMBER	DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L)	CHLORO- FORM TOTAL (UG/L)
MONTGOMERY COUNTY										
425129074303501	10-26-94	0.40	<0.01	<0.01	900	16	<80	0.2	--	--
425129074303501*	10-26-94	0.40	<0.01	<0.01	1000	16	--	0.3	--	--
425129074303501#	11-01-94	--	--	--	--	--	--	--	<0.2	<0.2
425235074204401	10-27-94	2.5	0.03	0.01	130	7	<80	0.4	--	--
425235074204401#	11-02-94	--	--	--	--	--	--	--	<0.2	<0.2
425454074322101	10-25-94	1.1	0.03	<0.01	12	2	110	0.8	--	--
425454074322101#	11-01-94	--	--	--	--	--	--	--	<0.2	<0.2
425502074260601	10-27-94	1.0	0.03	0.02	1200	52	410	0.6	--	--
425502074260601#	11-02-94	--	--	--	--	--	--	--	<0.2	<0.2
425515074254201	10-24-94	<0.20	0.01	<0.01	11	<1	500	0.4	--	--
425515074254201#	11-01-94	--	--	--	--	--	--	--	<0.2	<0.2
425535074341501	11-03-94	<0.20	0.02	<0.01	5	1	120	0.5	<0.2	4.1
425545074185601	10-25-94	1.3	0.14	0.14	1500	16	140	0.8	--	--
425545074185601#	11-02-94	--	--	--	--	--	--	--	<0.2	<0.2
425545074185602	10-25-94	0.30	0.02	0.01	52	19	270	1.6	--	--
425545074185602#	11-02-94	--	--	--	--	--	--	--	<0.2	<0.2
425657074174101	10-26-94	<0.20	<0.01	0.01	<3	<1	300	0.7	--	--
425657074174101#	11-01-94	--	--	--	--	--	--	--	<0.2	<0.2
425716074294901	10-27-94	0.20	<0.01	<0.01	210	11	140	0.7	--	--
425731074172901	10-28-94	0.60	<0.01	<0.01	40	34	520	1.3	--	--
425731074172901#	11-01-94	--	--	--	--	--	--	--	<0.2	<0.2
425813074304201	11-03-94	<0.20	<0.01	<0.01	4	<1	740	1.1	<0.2	<0.2
425851074085801	11-03-94	<0.20	<0.01	<0.01	1000	55	400	0.6	<0.2	<0.2
ONEIDA COUNTY										
430001075131401	10-19-94	<0.20	<0.01	<0.01	630	8	130	0.3	<0.2	<0.2
430158075154401	10-17-94	<0.20	<0.01	<0.01	6	49	110	0.4	<0.2	<0.2
430532075281101	10-18-94	0.50	<0.01	<0.01	980	41	140	0.3	<0.2	<0.2
431212075191501	10-18-94	<0.20	<0.01	<0.01	14	29	190	0.8	<0.2	<0.2

QUALITY OF GROUND WATER  
Study-unit survey--Continued

STATION NUMBER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)
ORANGE COUNTY										
411631074284201	12-01-94	1230	255	400	e32	531	7.2	5.5	11.0	760
411728074100001	11-30-94	0930	120	880	1.0	496	7.0	4.0	11.0	739
411748074195601	12-01-94	0900	370	740	1.5	287	7.8	1.0	10.5	755
411938073595201	11-30-94	1500	280	280	0.7	1380	6.7	9.0	11.5	756
411939073595301	11-30-94	1300	280	300	0.5	1790	6.9	9.0	11.0	756
412536074324301	12-01-94	1500	280	860	1.5	494	7.2	5.0	10.5	746
413016074282101	11-29-94	0900	300	640	1.0	383	7.4	8.5	11.0	742
413050074084101	11-29-94	1200	180	440	1.2	582	6.7	12.0	12.0	748
413205074145101	11-29-94	1400	100	380	1.5	783	7.1	11.5	12.5	750
413400074212701	12-02-94	0900	360	500	1.0	424	7.3	3.0	10.0	753
RENSSELAER COUNTY										
424051073414501	09-21-95	1200	90	210	e60	745	7.3	19.5	10.5	758
SCHENECTADY COUNTY										
425217074061401	11-04-94	1000	111	650	1.2	646	7.4	13.0	11.0	746
WESTCHESTER COUNTY										
411030073392701	08-30-95	0850	705	368	--	254	8.0	--	13.5	757

STATION NUMBER	DATE	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
ORANGE COUNTY										
411631074284201	12-01-94	0.2	2	290	57	36	3.4	2	0.1	
411728074100001	11-30-94	0.3	3	230	70	14	11	9	0.3	
411748074195601	12-01-94	0.1	1	88	23	7.5	29	41	1	
411938073595201	11-30-94	6.9	64	320	100	17	150	50	4	
411939073595301	11-30-94	5.0	46	520	170	24	140	36	3	
412536074324301	12-01-94	0.1	1	240	70	16	18	14	0.5	
413016074282101	11-29-94	0.1	1	170	51	11	15	16	0.5	
413050074084101	11-29-94	2.7	25	230	65	16	18	14	0.5	
413205074145101	11-29-94	<0.1	1	340	82	32	22	12	0.5	
413400074212701	12-02-94	0.1	1	200	51	17	15	14	0.5	
RENSSELAER COUNTY										
424051073414501	09-21-95	2.8	25	300	82	23	25	15	0.6	
SCHENECTADY COUNTY										
425217074061401	11-04-94	<0.1	1	220	42	27	58	36	2	
WESTCHESTER COUNTY										
411030073392701	08-30-95	5.1	49	100	34	4.2	4.6	9	0.2	

e Estimated.

QUALITY OF GROUND WATER  
Study-unit survey--Continued

STATION NUMBER	DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
ORANGE COUNTY									
411631074284201	12-01-94	1.0	276	18	1.5	<0.1	0.03	17	296
411728074100001	11-30-94	0.8	188	30	23	0.4	0.04	16	283
411748074195601	12-01-94	0.9	132	29	2.3	0.2	0.01	11	178
411938073595201	11-30-94	6.4	222	48	280	<0.1	0.07	19	767
411939073595301	11-30-94	7.3	262	48	420	<0.1	0.09	15	1050
412536074324301	12-01-94	1.1	212	54	12	0.1	0.03	14	318
413016074282101	11-29-94	1.5	190	19	2.2	<0.1	0.02	15	227
413050074084101	11-29-94	5.2	100	31	75	<0.1	0.03	12	359
413205074145101	11-29-94	0.9	194	34	120	<0.1	0.06	16	440
413400074212701	12-02-94	1.1	202	31	3.5	<0.1	0.02	17	250

RENSSELAER COUNTY

424051073414501	09-21-95	1.1	141	54	110	<0.1	0.06	8.9	443
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SCHENECTADY COUNTY

425217074061401	11-04-94	3.3	328	34	5.4	1.4	0.01	11	370
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WESTCHESTER COUNTY

411030073392701	08-30-95	3.7	65	15	21	<0.1	0.02	11	150
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STATION NUMBER	DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
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ORANGE COUNTY

411631074284201	12-01-94	307	<0.01	0.24	<0.01	<0.20	<0.01	<0.01	--
411728074100001	11-30-94	288	<0.01	1.5	<0.01	<0.20	0.01	0.01	--
411748074195601	12-01-94	176	<0.01	<0.05	0.14	<0.20	<0.01	<0.01	--
411938073595201	11-30-94	767	<0.01	2.1	<0.01	<0.20	0.02	<0.01	--
411939073595301	11-30-94	987	<0.01	1.2	<0.01	<0.20	<0.01	<0.01	--
412536074324301	12-01-94	313	<0.01	<0.05	0.05	<0.20	<0.01	<0.01	--
413016074282101	11-29-94	229	<0.01	<0.05	0.15	<0.20	0.02	<0.01	--
413050074084101	11-29-94	328	<0.01	9.8	<0.01	<0.20	0.01	0.01	--
413205074145101	11-29-94	424	<0.01	<0.05	0.17	<0.20	0.01	<0.01	--
413400074212701	12-02-94	255	<0.01	<0.05	0.19	<0.20	<0.01	<0.01	--

RENSSELAER COUNTY

424051073414501	09-21-95	402	<0.01	<0.05	0.02	<0.20	<0.01	<0.01	--
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SCHENECTADY COUNTY

425217074061401	11-04-94	377	<0.01	<0.05	2.5	2.5	<0.01	0.01	--
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WESTCHESTER COUNTY

411030073392701	08-30-95	141	<0.01	2.0	<0.01	<0.20	<0.01	<0.01	<1
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QUALITY OF GROUND WATER  
Study-unit survey--Continued

STATION NUMBER	DATE	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	RADIUM		RADON 222 TOTAL (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	METHYL	CHLORO- FORM TOTAL (UG/L)
				228 SOLVED AS RA-228)	(PCI/L AS TOTAL (PCI/L)				TERT- BUTYL ETHER WAT UNF REC (UG/L)	
ORANGE COUNTY										
411631074284201	12-01-94	66	6	--	9300	--	--	0.2	<0.2	<0.2
411728074100001	11-30-94	17	18	--	32000	--	--	0.5	<0.2	<0.2
411748074195601	12-01-94	17	25	--	350	--	--	<0.1	<0.2	<0.2
411938073595201	11-30-94	8	8	--	140	--	--	3.1	0.2	0.9
411939073595301	11-30-94	7	<1	--	220	--	--	1.9	<0.2	<0.2
412536074324301	12-01-94	19	130	--	210	--	--	0.4	<0.2	<0.2
413016074282101	11-29-94	390	230	--	190	--	--	0.2	<0.2	<0.2
413050074084101	11-29-94	4	2	--	1800	--	--	0.7	<0.2	<0.2
413205074145101	11-29-94	77	270	--	180	--	--	0.4	<0.2	<0.2
413400074212701	12-02-94	130	55	--	120	--	--	0.1	<0.2	<0.2
RENSSELAER COUNTY										
424051073414501	09-21-95	23	180	--	79	--	--	0.2	<0.2	<0.2
SCHENECTADY COUNTY										
425217074061401	11-04-94	17	5	--	<80	--	--	0.2	<0.2	<0.2
WESTCHESTER COUNTY										
411030073392701	08-30-95	<3	<1	<1.0	2700	1.5	0.4	<0.2	<0.2	<0.2



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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton

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



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