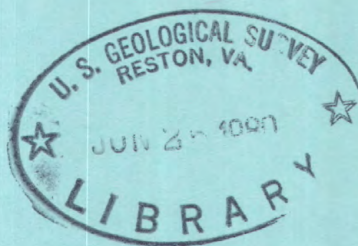


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Water Resources Data for New York

Volume 1. New York excluding Long Island



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-79-1
WATER YEAR 1979

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

CALENDAR FOR WATER YEAR 1979

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Water Resources Data for New York

Volume 1. New York excluding Long Island

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-79-1

WATER YEAR 1979

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For information on the water program in New York write to
District Chief, Water Resources Division
U.S. Geological Survey
U.S. Post Office and Courthouse
P.O. Box 1350
Albany, New York 12201

or

For information on the water program in Long Island write to
Hydrologist-in-Charge, Long Island Program
Water Resources Division
U.S. Geological Survey
5 Aerial Way
Syosset, New York 11791

1980

PREFACE

This report was prepared by personnel of the New York district of the Water Resources Division of the U.S. Geological Survey under the supervision of L. A. Martens, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of New York and with other agencies.

This report is one of a series issued by State. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and S. M. Lang, Acting Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New York are in two volumes as follows:

- Volume 1. New York excluding Long Island
- Volume 2. Long Island

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16. Abstract (Limit: 200 words) Water resources data for the 1979 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; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 187 gaging stations; stage only at 22 gaging stations; stage and contents at 12 gaging stations and 18 other lakes and reservoirs; water quality at 60 gaging stations and 43 wells; and water levels at 44 observation wells. Also included are data for 133 crest-stage and 15 low-flow 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. These data together with the data in Volume 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.			
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WATER RESOURCES DATA FOR NEW YORK, 1979
Volume 1.--New York excluding Long Island

INTRODUCTION

Water resources data for the 1979 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; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 187 gaging stations; stage only at 22 gaging stations; stage and contents at 12 gaging stations and 18 other lakes and reservoirs; water quality at 60 gaging stations and 43 wells; and water levels at 44 observation wells. Locations of these sites are shown on figures 6A, 6B, and 6C. Also included are data for 133 crest-stage and 15 low-flow 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. These data together with the data in Volume 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released in separate reports.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official 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-79-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

SIGNIFICANT HYDROLOGIC EVENTS

Annual precipitation during the 1979 water year was above normal and caused annual runoff to be slightly higher than average in most parts of upstate New York. Stream discharges generally mirrored the normal seasonal fluctuations (figs. 2-5); however, significant local variations in this pattern were noted throughout the year. Despite a dryer than normal summer in most parts of the State, no seriously low streamflow levels were recorded, and water supplies in reservoirs were generally adequate.

Two widespread storms in January (one near the beginning of the month and one near the end) caused local lowland flooding and greater than normal streamflow, particularly in the central and southern parts of the State. Parts of Westchester and Rockland Counties in southeastern New York suffered flood damage.

Despite the thawing temperatures associated with the two January storms, upstate New York entered February with an abnormally high snow pack. A cold spell in the first 3 weeks of the month resulted in severe stream-ice buildup and caused hydrographs to drop sharply from their high January levels. The warming trend and generally widespread but moderate rainfall at the end of February and beginning of March culminated in flooding throughout the State on March 5-7. Flooding in many areas was aggravated by ice jams, and, as a result, many gaging stations recorded their peak stage of the year even though their highest peak discharge occurred at another time.

A late May storm in the southeastern part of the State deposited as much as 4.5 inches of rain in 3 days and caused moderate flooding. In August, thunderstorms deluged parts of Chautauqua County with up to 6 inches of rain in 2 hours. Flash flooding that resulted from these storms claimed one life and caused extensive property damage, including several bridge and culvert washouts.

In September, remnants of hurricane Frederic swept through the western and northwestern parts of New York, dropping 6 inches of rain and causing substantial flood damage in the Buffalo area. The peak discharge on September 14 at the gaging station on Cayuga Creek in Lancaster was the highest in the 43 years of record.

The chemical quality of surface waters statewide showed little change from previous years. A sample from Cattaraugus Creek at Gowanda in September showed a lead concentration in excess of the Public Health Standard of 50 micrograms per liter; that sample was collected 5 days after the peak flows caused by hurricane Frederic. A sample collected in March from the Mohawk River at Cohoes also showed a lead concentration in excess of the Public Health Standard. Both samples were collected during or immediately after high runoff; the elevated concentrations were probably associated with sediment suspended by the high flows.

Polychlorinated biphenyl (PCB) concentrations at various discharges of the Hudson River confirm predictions made by a computer model developed from 1977-78 data. The highest concentrations occur at both low and high discharges, and low concentrations occur at intermediate discharges. The data indicate that annual transport of PCB's from the upper Hudson River to the estuary beginning at Troy is approximately 5,000 pounds.

Data indicate that, of the total amount of PCB's transported to the estuary from upriver, about 20 percent was carried by high discharges associated with the spring snowmelt. This percentage was less than in 1977 but greater than in 1978. Three discharges were monitored during spring 1979--in early and late March and in late April. The high water in early March came predominantly from just above the estuary, whereas the high water of late March and late April originated in the upper reaches of the river above Rogers Island at Fort Edward. Because the events of late March and late April affected the upper reaches containing the more highly contaminated sediments, the PCB concentrations downstream during these events were higher than those observed during the early March event.

Chemical data from five stations in the estuary show that PCB concentrations decrease by about 50 percent in the 88-mile reach from Castleton-on-Hudson, 15 miles south of Troy, to Highland Falls, near West Point. In addition, measurements on August 15 at Castleton-on-Hudson indicate that PCB concentration remains constant over a tidal cycle.

Precipitation and water samples from three Adirondack lake watersheds were analyzed to determine the range in concentrations and movement of metals. Of the lakes studied, one was acidic with a pH of 4, one was neutral with a pH of 7, and the other was intermediate with a pH of 5 to 6. Analyses show that zinc and manganese are transported more rapidly from the most acidic lake watershed. Although no relationship was observed between degree of acidity and transport rate of iron and lead from the basins, all three watersheds showed a retention of the atmospherically derived lead.

Ground-water levels were normal throughout upstate New York in October but were well below normal (within the lowest 25 percent of range) in some parts of the State by November and December. During the remainder of the water year, levels were generally normal except where associated with recharge from the September hurricanes David and Frederic.

Chemical analyses of water from the shallow aquifer in the Pine Bush area of the City of Albany indicated low concentrations of all constituents except chloride. Chloride concentrations of 100-200 milligrams per liter were present in water from wells near and downgradient from major thoroughfares, which suggests contamination from road salt.

Water samples from two domestic wells downgradient from a small municipal landfill in Greene County were collected for the first time since 1975; no chemical changes attributable to the landfill were evident.

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 1979, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Education Department
County of Chautauqua, Planning Department
County of Cortland, Planning Department
County of Dutchess
County of Monroe, Water Authority
County of Onondaga, Department of Public Works
County of Onondaga, Water Authority Commission
County of Putnam, Board of Supervisors
County of Rockland, Drainage Agency
County of Ulster, County Legislature
County of Westchester, Department of Public Works
City of Albany, Department of Water and Water Supply
City of Auburn
City of New York, Bureau of Water Resources Development
City of New York, Department of Environmental Protection
City of Rochester, Water Bureau
Town of Clarkstown
Town of Warwick
Village of New Paltz
Village of Nyack
Board of Hudson River-Black River Regulating District
Central New York State Parks Commission
Irondequoit Bay Pure Waters District
Oswegatchie River-Cranberry Reservoir Commission
Power Authority of the State of New York

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Soil Conservation Service, the Environmental Protection Agency, and the St. Lawrence Seaway Development Corp.

The following organizations aided in collecting records:

Municipalities of Batavia, Canandaigua, Cortland, Jamestown, Lancaster, Mamaroneck, Oneida, Plattsburgh, Rochester, Rome, Rye, Syracuse, Tarrytown, and Yonkers; Cornell University; Central Hudson Gas and Electric Corp.; Indian River Co.; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Rochester Gas and Electric Corp.; Orange and Rockland Utilities, Inc.; and Power Authority of the State of New York.

Organizations that supplied data are acknowledged in station descriptions.

NOTICE

During the previous water year (1978), revisions were made in the terminology used to define 139 of the water-quality parameter codes that have been used by the Geological Survey in its publication of water-quality data and in its WATSTORE data system. These revisions were made to achieve consistency in terminology and to conform to a joint USGS-EPA agreement on terminology. They do not represent a change in the way the codes have been used in the past or in the association of specific code numbers with identified analytical procedures.

Use of the new terminology began with data for the 1978 water year, and therefore, it first appears in that publication. Definitions on which the terminology is based are included in the "Definitions" section of this report, and a table showing both old and new terminology is attached as an appendix to the report.

DEFINITION OF TERMS

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

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

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

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

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

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C \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.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C \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 (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

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

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

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

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

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

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

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

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

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

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

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

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

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

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 (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

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

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

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO₃).

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

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

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

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

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

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

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

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

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

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

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

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

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

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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 micromhos 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 micromhos). 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 work "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, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization 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.

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

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

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

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

Kingdom.....Animal
Phylum.....Arthropoda
Class.....Insecta
Order.....Ephemeroptera
Family.....Ephemeridae
Genus.....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 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.)

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

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

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

DOWNSTREAM ORDER AND STATION NUMBERS

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

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. 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". 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.

NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, 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. See figure 1 below.

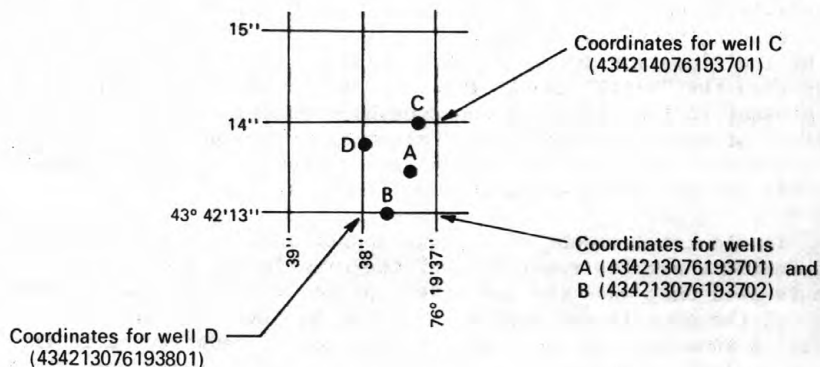


Figure 1. System for numbering wells (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program 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 STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

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 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

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 engineers 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.

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

base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

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

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.

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 on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations 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 revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

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. 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.

Accuracy of Field Data and Computed Results

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

The station description under "REMARKS" states the degree of accuracy of the records. "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.

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 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

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

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, 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 may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

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.

Arrangement of Records

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

Descriptive Headings

For continuing record stations, data is preceded by information pertinent to the history of station operation. 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. Headings for precipitation-quality records include location information and a description of the sample collector.

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), 1977-79(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the three most recent years.

Categories of Water-Quality Data

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

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

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

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

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

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

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

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

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

Frequency-of-Sampling Notation

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

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

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

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.

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.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

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 hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

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.

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 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.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Ground-water level data from observation wells are published herein. 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 1.

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 altitude 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 for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth 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.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing 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) is on 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 Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering 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 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, 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-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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- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
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- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

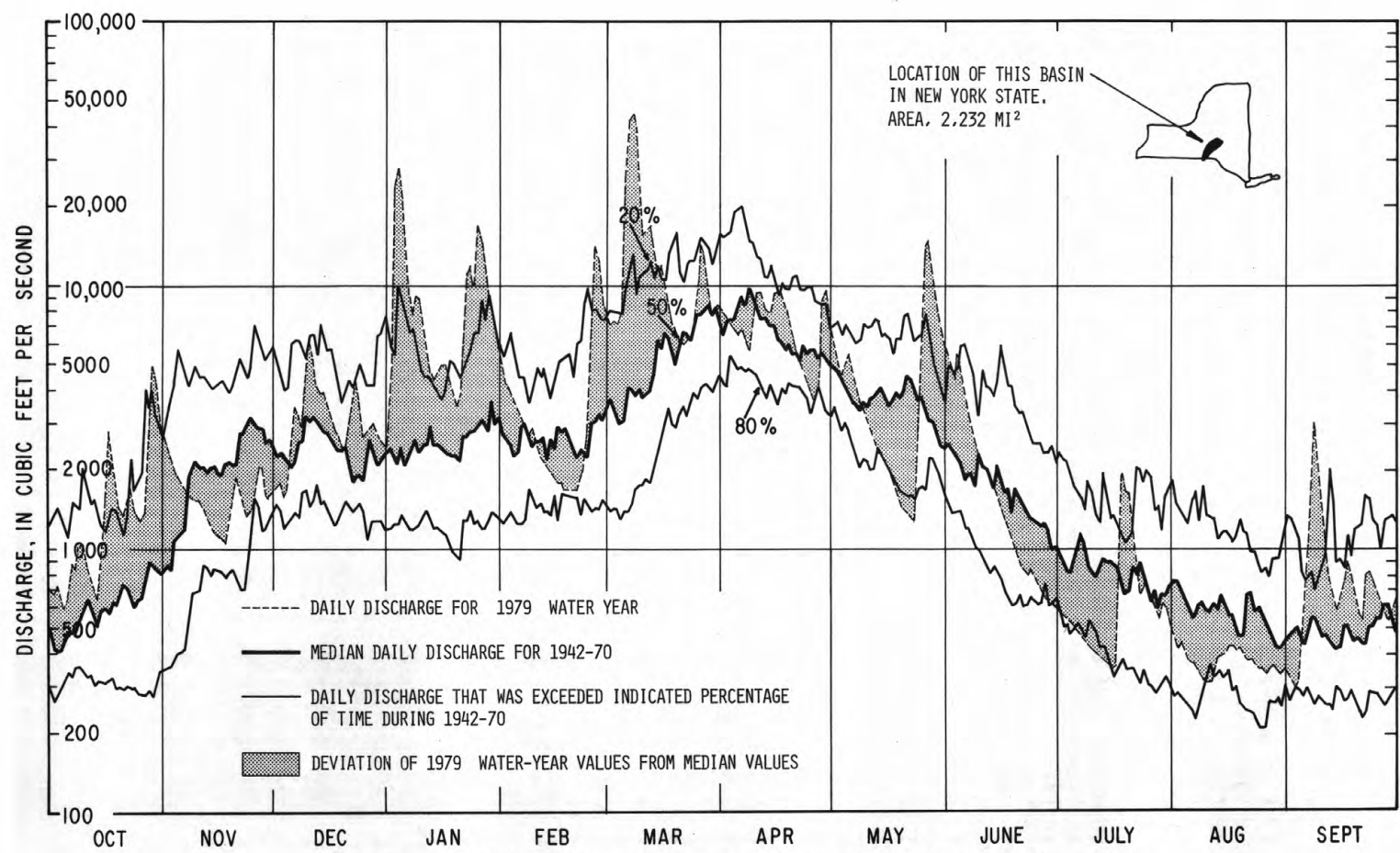


Figure 2.-- Hydrographic comparisons, Susquehanna River at Conklin, N Y

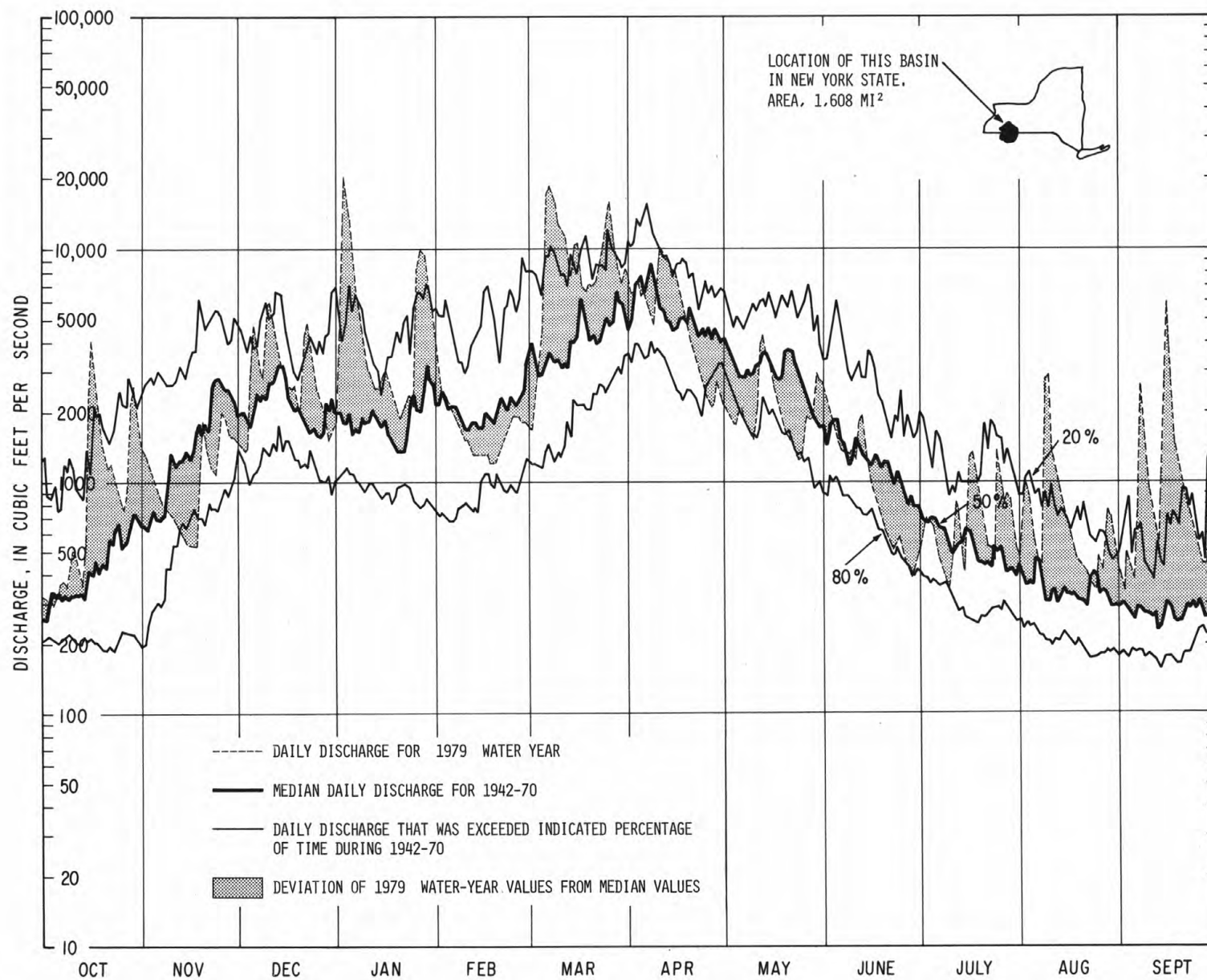


Figure 3.-- Hydrographic comparisons, Allegheny River at Salamanca, N Y

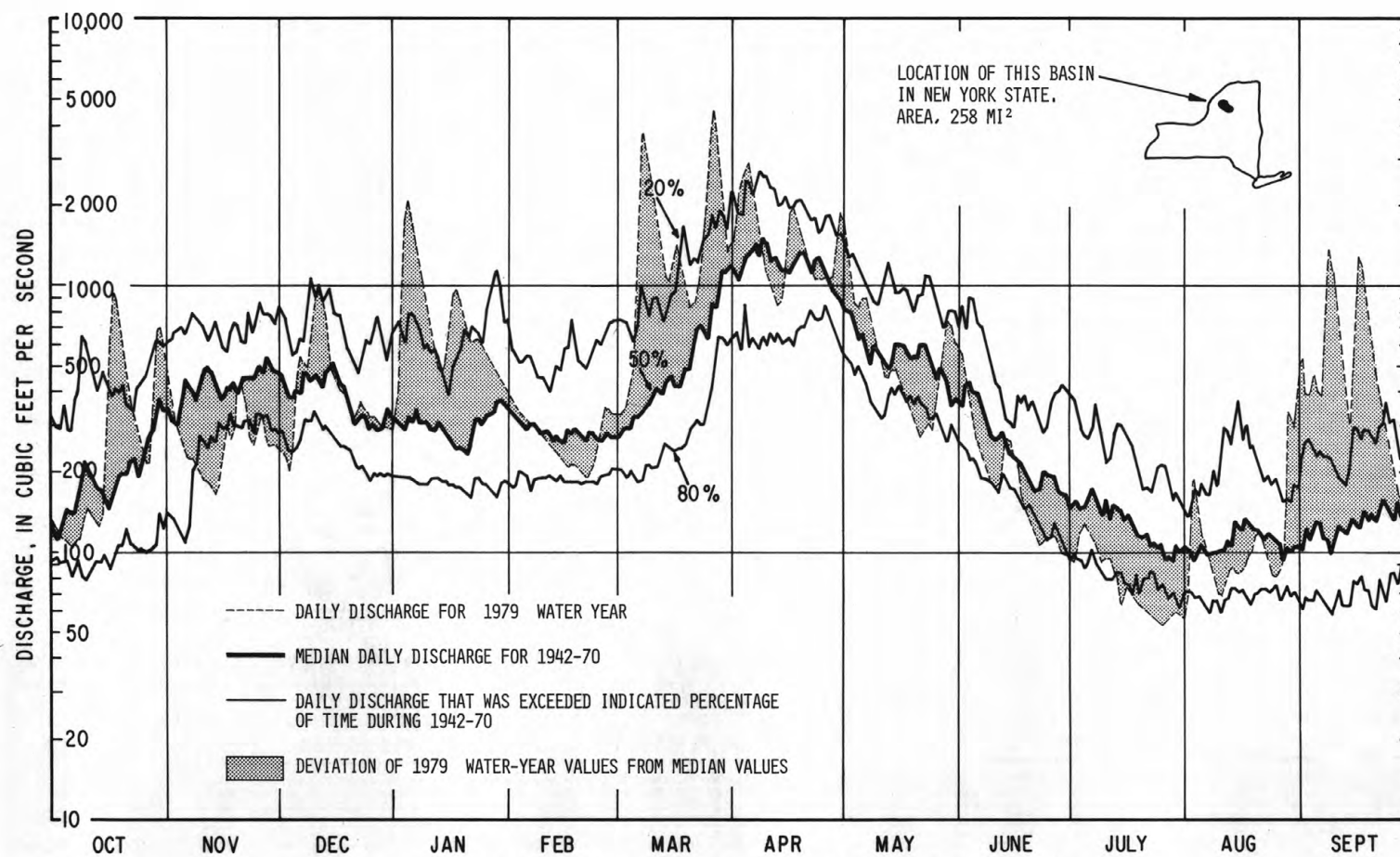


Figure 4.-- Hydrographic comparisons, West Branch Oswegatchie River near Harrisville, N Y

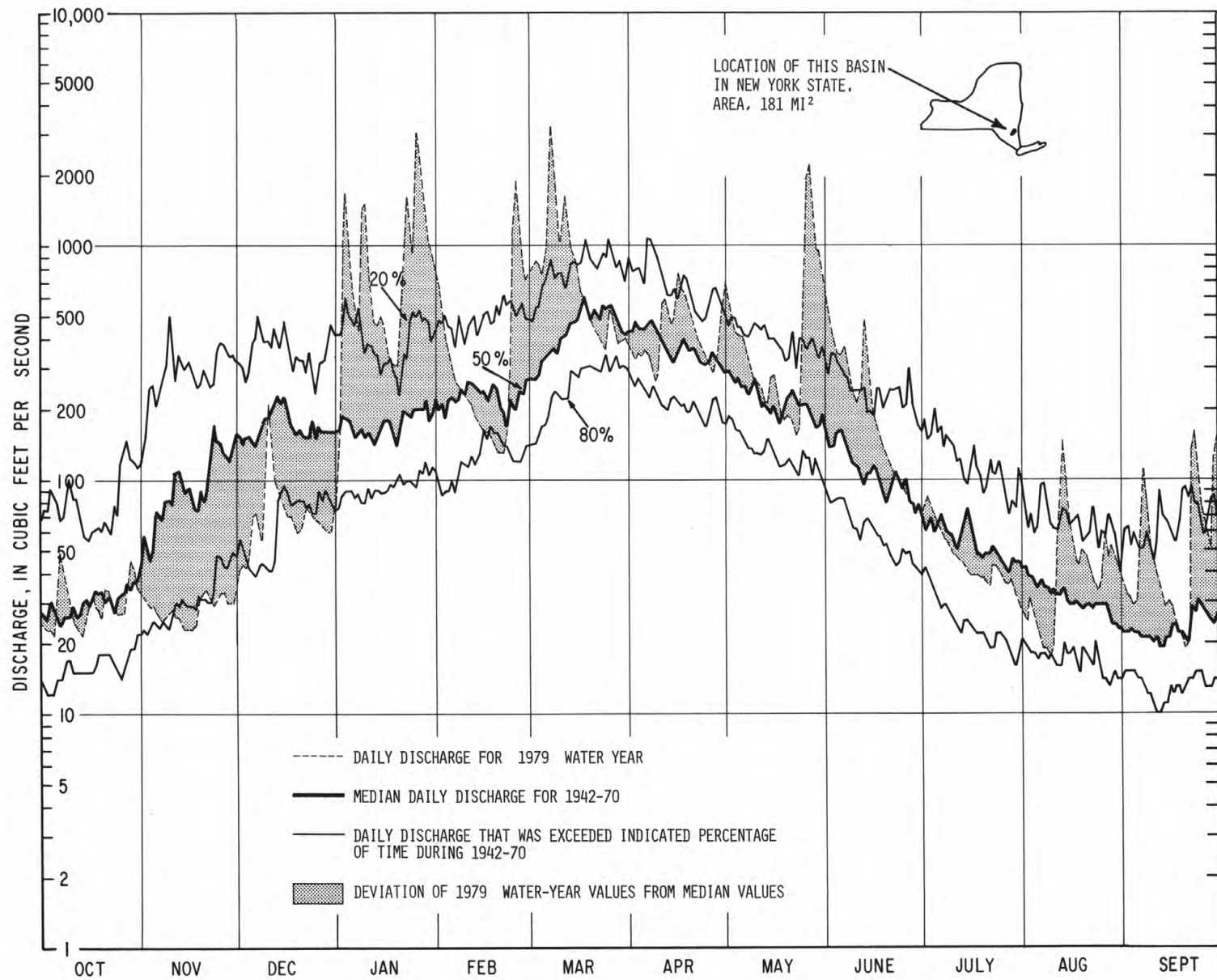
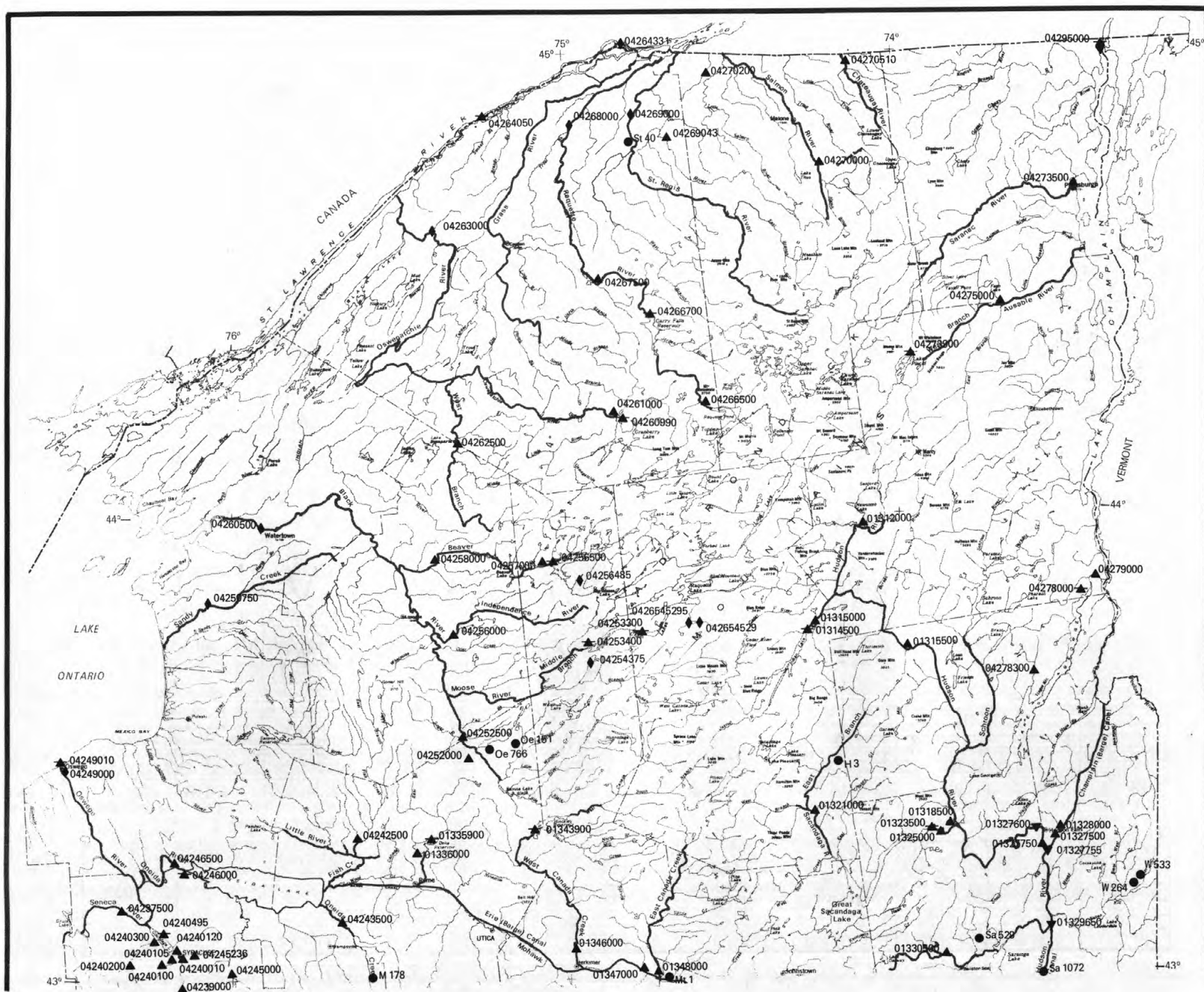


Figure 5.-- Hydrographic comparisons, Wappinger Creek near Wappingers Falls, NY



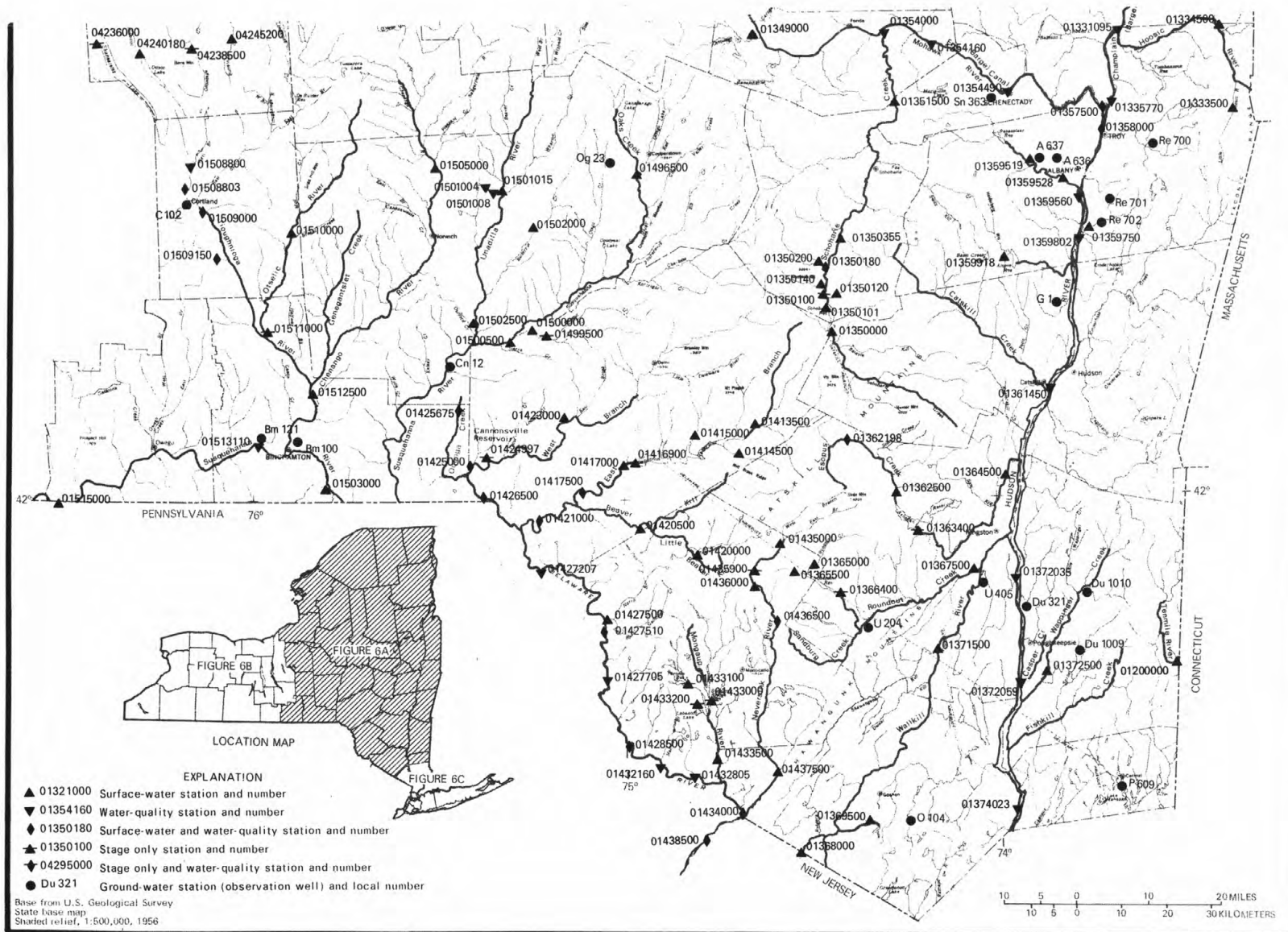


FIGURE 6A.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

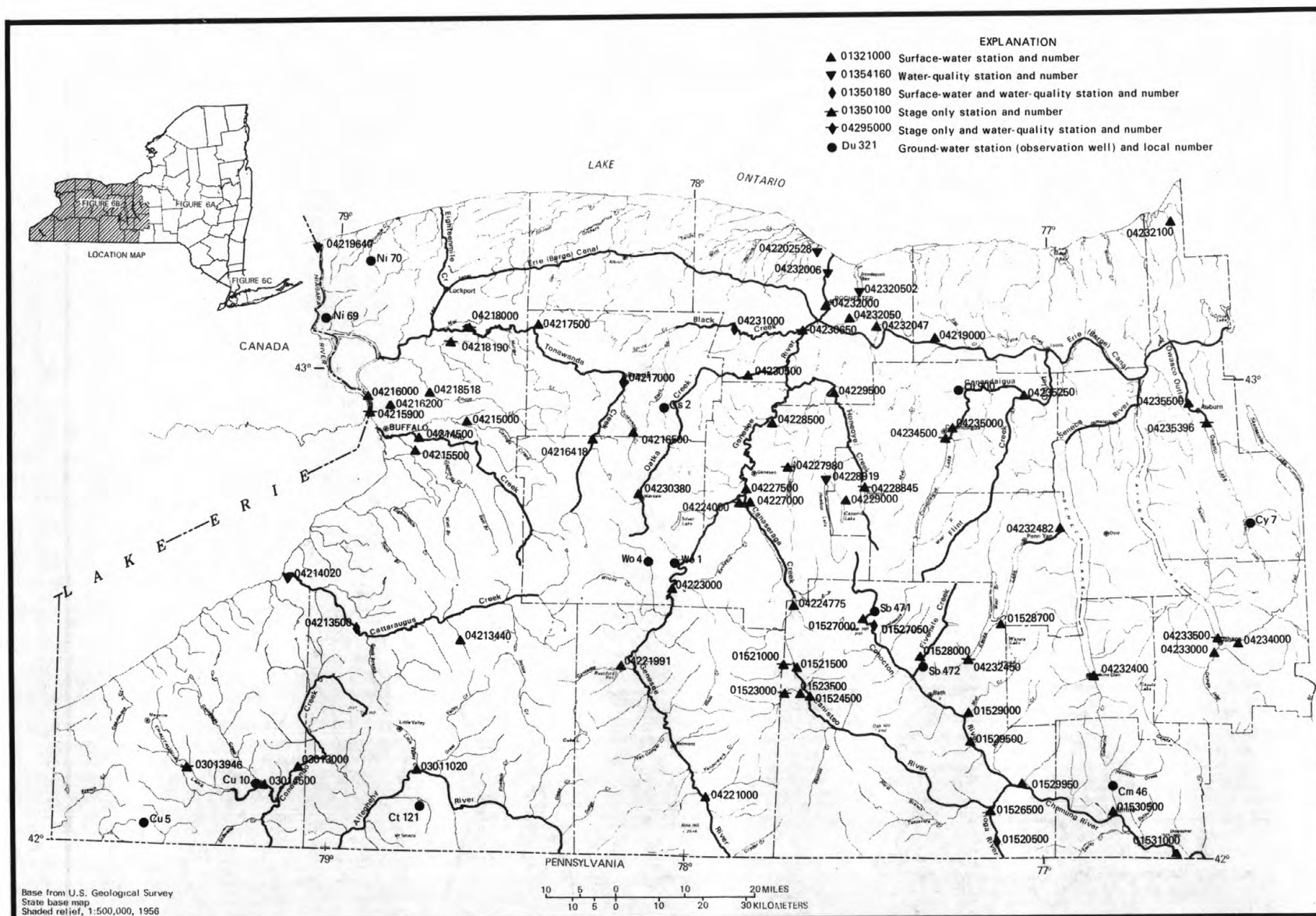


FIGURE 6B.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

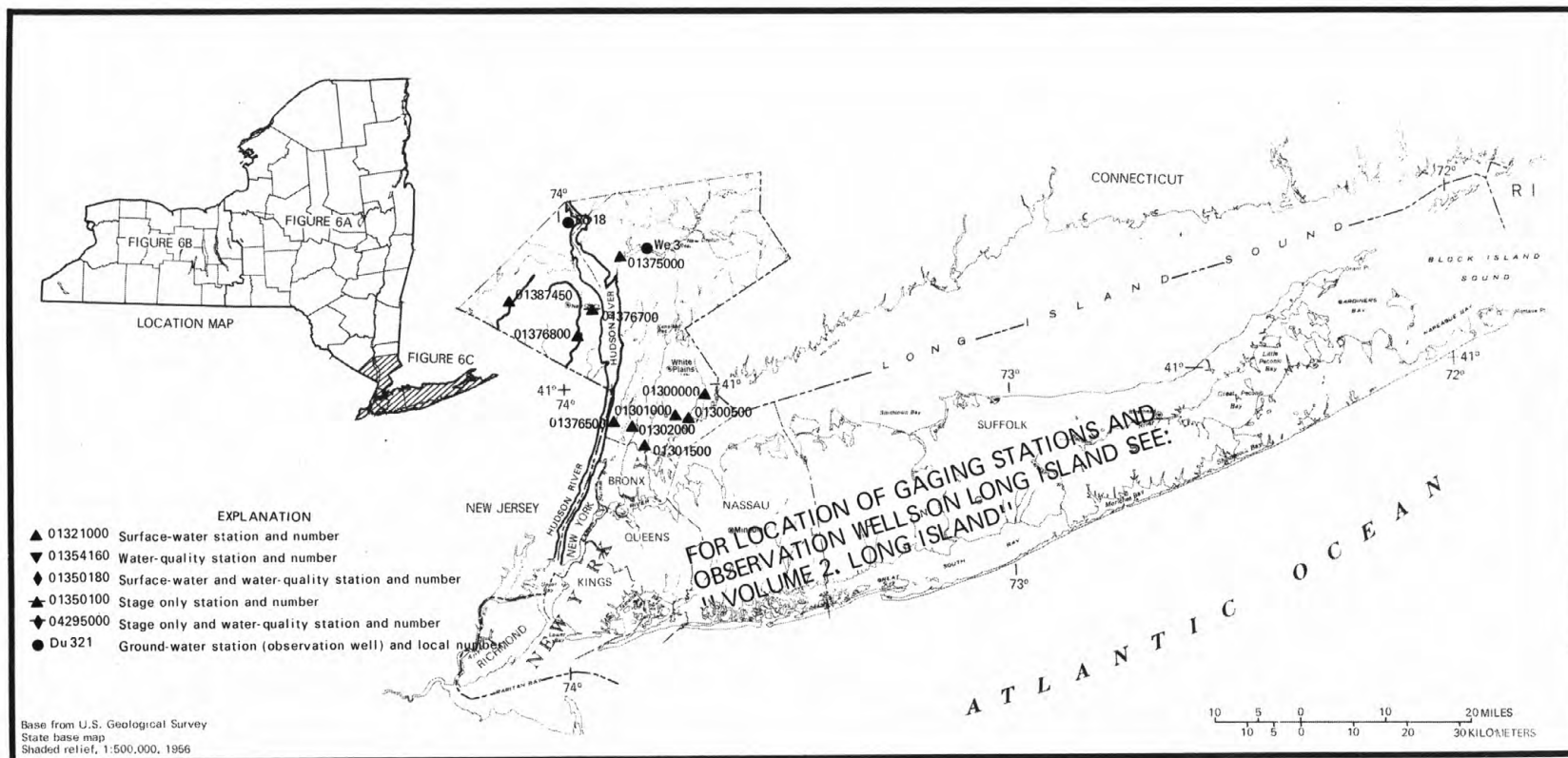


FIGURE 6C.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

HOUSATONIC RIVER BASIN

01200000 TENMILE RIVER NEAR GAYLORDSVILLE, CT

LOCATION.--Lat 41°39'32", long 73°31'44", Dutchess County, New York, Hydrologic Unit 01100005, on right bank 0.1 mi (0.2 km) downstream from Deuel Hollow Brook, 1.2 mi (1.9 km) upstream from New York-Connecticut State line, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) northwest of Gaylordsville.

DRAINAGE AREA.--203 mi² (526 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for period October to December 1929, published in WSP 1301.

REVISED RECORDS.--WSP 1201: 1939. WSP 1701: 1955-56, 1957(M), 1958-59. WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 304.4 ft (92.78 m), National Geodetic Vertical Datum of 1929, (levels by Connecticut Light and Power Company).

REMARKS.--Records good. Infrequent regulation at low flow. Records of iron, specific conductance, and pH of daily samples for 1958-59 available in district office at Hartford, Connecticut. Chemical analyses available for water years 1959 (WSP 1641), 1968 (WSP 2091), 1973-74 (WRDC 1973-74), 1975 (WDR CT-75-1) and water temperatures available for water year 1959 (WSP 1641).

AVERAGE DISCHARGE.--50 years, 305 ft³/s (8.638 m³/s), 20.40 in/yr (518 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s (493 m³/s) Aug. 19, 1955, gage height, 14.9 ft (4.54 m), from high-water mark, from rating curve extended above 9,800 ft³/s (278 m³/s); minimum, 5 ft³/s (0.14 m³/s) Sept. 8, 1957; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 26, 1939; minimum daily discharge, 7 ft³/s (0.20 m³/s) Oct. 7, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	2330	1880 53.2	5.08 1.548	Feb. 24	2400	3860 109	7.00 2.134
8	2300	2880 81.6	6.13 1.868	Mar. 7	1200	4940 140	7.87 2.399
21	2230	2370 67.1	5.62 1.713	11	1530	2100 59.5	5.32 1.622
25	2200	*4990 141	*7.91 2.411	May 25	2130	2140 60.6	5.37 1.637

Minimum discharge, 30 ft³/s (0.850 m³/s) Aug. 9, gage height, 0.74 ft (0.226 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	54	82	256	539	698	524	741	523	92	36	47
2	45	52	77	1070	438	729	505	642	459	102	40	42
3	43	51	71	1610	406	727	535	575	417	90	60	42
4	42	49	81	963	363	713	553	600	384	77	130	41
5	43	50	128	687	312	1200	557	551	360	71	70	39
6	48	49	109	543	265	2600	489	496	365	66	52	106
7	51	54	91	496	250	4560	440	450	321	62	44	185
8	49	61	84	2160	240	2450	416	417	285	59	37	106
9	51	53	172	2060	230	1410	446	386	256	56	30	77
10	51	52	282	1150	220	1150	687	361	245	54	35	63
11	45	49	184	793	194	1900	656	340	264	52	60	57
12	42	49	158	589	193	1510	574	307	420	50	150	51
13	40	47	141	576	190	1060	530	307	289	48	300	47
14	42	46	127	701	180	936	663	345	235	46	230	44
15	47	45	117	648	170	868	854	363	199	47	150	46
16	53	45	109	481	165	671	799	306	173	49	120	48
17	52	45	115	386	160	624	841	265	156	51	100	45
18	48	55	112	370	150	564	721	241	144	50	90	42
19	46	65	101	261	145	518	627	250	133	48	130	39
20	48	59	137	344	140	489	563	244	122	45	90	37
21	52	54	128	839	135	463	516	220	112	43	70	42
22	51	54	149	1830	130	444	480	201	105	43	58	226
23	48	54	125	1160	315	431	456	198	107	45	52	212
24	47	57	111	813	1050	428	426	585	101	50	49	125
25	52	60	111	3710	2860	811	398	1720	94	54	53	91
26	49	56	127	3140	1390	736	408	1780	88	48	54	77
27	66	57	132	1680	871	619	722	1170	83	52	48	69
28	80	55	130	1130	681	546	865	935	80	45	46	62
29	68	54	164	884	---	534	1120	998	76	42	47	164
30	61	68	191	742	---	551	897	755	75	40	59	193
31	57	---	130	626	---	537	---	619	---	37	59	---
TOTAL	1562	1599	3976	32698	12382	31477	18268	17368	6671	1714	2549	2465
MEAN	50.4	53.3	128	1055	442	1015	609	560	222	55.3	82.2	82.2
MAX	80	68	282	3710	2860	4560	1120	1780	523	102	300	226
MIN	40	45	71	256	130	428	398	198	75	37	30	37
CFSM	.25	.26	.63	5.20	2.18	5.00	3.00	2.76	1.09	.27	.41	.41
IN.	.29	.29	.73	5.99	2.27	5.77	3.35	3.18	1.22	.31	.47	.45

CAL YR 1978	TOTAL	106424	MEAN 292	MAX 2970	MIN 35	CFSM 1.44	IN 19.50
WTR YR 1979	TOTAL	132729	MEAN 364	MAX 4560	MIN 30	CFSM 1.79	IN 24.32

BLIND BROOK BASIN

33

01300000 BLIND BROOK AT RYE, NY

LOCATION.--Lat 40°59'00", long 73°41'14", Westchester County, Hydrologic Unit 02030102, on left bank at Rye, just upstream from bridge on Theodore Fremd Avenue, 0.25 mi (0.40 km) southwest of Penn Central Transportation Co. railroad station, and 0.85 mi (1.37 km) upstream from mean high tide in Milton Harbor.

DRAINAGE AREA.--9.20 mi² (23.8 km²).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 13.05 ft (3.978 m) National Geodetic Vertical Datum of 1929 (levels by City of Rye).

REMARKS.--Records fair. Medium and high flows affected by detention reservoir 2 mi (3 km) upstream (capacity, about 26 acre-ft (32,100 m³) at spillway level or 50 acre-ft (61,700 m³) at crest of concrete dam).

AVERAGE DISCHARGE.--35 years, 15.7 ft³/s (0.445 m³/s), 23.17 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 ft³/s (65.7 m³/s) June 19, 1972, gage height, 12.44 ft (3.792 m), from floodmark in gage house, from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of indirect measurement of peak flow; minimum, 0.12 ft³/s (0.003 m³/s) July 5, 1953, gage height, 0.80 ft (0.244 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 406 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 21	1145	*2,120 60.0	*11.35 3.460	Mar. 6	1530	649 18.4	5.28 1.609
Jan. 25	0145	851 24.1	6.26 1.908	May 24	0130	410 11.6	4.00 1.219

Minimum discharge, 0.89 ft³/s (0.025 m³/s) Aug. 9, 10, Sept. 20, 21; minimum gage height, 0.96 ft (0.293 m), Aug. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.7	11	21	22	24	11	19	12	6.8	1.3	1.9
2	5.2	2.9	8.0	60	18	24	13	16	10	27	1.2	1.7
3	3.3	2.7	7.1	71	16	23	17	15	18	7.4	1.4	5.7
4	2.9	2.7	14	20	15	22	14	15	18	4.7	4.5	3.3
5	3.1	2.6	16	15	14	24	17	13	14	5.0	2.4	2.1
6	31	2.6	9.7	15	12	436	13	11	12	3.7	1.8	19
7	7.4	2.6	7.7	30	12	192	10	11	9.7	2.9	1.7	6.8
8	4.7	2.6	14	199	12	52	10	10	8.7	2.6	1.2	3.1
9	3.9	2.4	100	52	11	35	32	10	7.7	2.4	.99	2.2
10	3.5	2.4	53	27	10	30	35	9.3	7.4	2.2	3.9	1.9
11	3.3	2.4	19	19	10	76	17	8.7	9.3	2.1	6.5	1.8
12	3.3	2.4	14	15	9.5	35	15	8.7	13	2.2	33	1.5
13	3.1	2.4	13	31	9.0	26	13	11	7.1	2.1	23	1.4
14	3.7	2.4	11	68	8.7	26	46	16	6.0	1.8	4.5	2.4
15	4.3	3.7	10	23	8.5	23	38	15	5.5	1.9	3.1	4.1
16	3.3	3.7	9.3	17	8.1	19	27	9.7	5.0	2.4	2.2	1.9
17	2.9	5.2	14	15	7.9	19	29	8.3	5.2	2.2	1.8	1.4
18	2.7	34	10	14	7.7	18	20	11	11	2.4	2.1	1.2
19	2.9	8.0	8.7	12	7.6	16	17	21	11	1.9	5.7	1.1
20	2.9	5.2	9.0	12	7.5	14	15	13	4.7	1.8	3.3	.99
21	2.9	5.0	30	853	10	11	14	10	4.1	1.5	2.2	9.7
22	2.9	5.2	14	120	16	11	13	8.7	3.7	1.4	2.1	101
23	2.9	5.5	11	34	14	10	13	49	3.9	1.4	1.8	13
24	2.9	32	11	132	164	12	11	164	3.7	1.7	11	6.8
25	3.1	9.0	87	391	112	19	11	95	3.3	2.7	7.1	5.2
26	4.3	6.5	27	81	196	13	21	39	2.9	2.9	3.5	4.5
27	17	6.0	16	52	48	11	101	23	2.7	2.1	2.4	3.9
28	5.7	8.3	13	38	30	11	51	19	2.7	1.7	2.6	3.5
29	3.7	15	11	31	---	13	41	18	6.5	1.5	2.1	3.9
30	3.1	29	10	26	---	12	23	16	4.5	1.5	2.4	7.7
31	3.1	---	11	26	---	11	---	15	---	1.4	2.2	---
TOTAL	152.5	217.1	599.5	2520	816.5	1268	708	708.4	233.3	105.3	144.99	224.69
MEAN	4.92	7.24	19.3	81.3	29.2	40.9	23.6	22.9	7.78	3.40	4.68	7.49
MAX	31	34	100	853	196	436	101	164	18	27	33	101
MIN	2.7	2.4	7.1	12	7.5	10	10	8.3	2.7	1.4	.99	.99
CFSM	.54	.79	2.10	8.84	3.17	4.45	2.57	2.49	.85	.37	.51	.81
IN.	.62	.88	2.42	10.19	3.30	5.13	2.86	2.86	.94	.43	.59	.91

CAL YR 1978	TOTAL	6214.60	MEAN 17.0	MAX 535	MIN 1.4	CFSM 1.85	IN 25.13
WTR YR 1979	TOTAL	7698.28	MEAN 21.1	MAX 853	MIN .99	CFSM 2.29	IN 31.12

BEAVER SWAMP BROOK BASIN

01300500 BEAVER SWAMP BROOK AT MAMARONECK, NY

LOCATION.--Lat 40°57'21", long 73°43'07", Westchester County, Hydrologic Unit 02030102, on right bank just downstream from bridge on Short Street, in Mamaroneck, 0.2 mi (0.3 km) downstream from Brentwood Brook, and 0.2 mi (0.3 km) upstream from tidal barrier in Guion Creek, Mamaroneck Harbor.

DRAINAGE AREA.--4.71 mi² (12.2 km²).

PERIOD OF RECORD.--November 1943 to current year. Prior to October 1967, published as "near Harrison."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.99 ft (7.617 m) National Geodetic Vertical Datum of 1929. Prior to June 8, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period and period of no gage-height record June 7 to Aug. 29, which are poor. Flow affected by natural storage in swampy areas above station.

AVERAGE DISCHARGE.--35 years, 6.54 ft³/s (0.185 m³/s), 18.86 in/yr (479 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 288 ft³/s (8.16 m³/s) Jan. 21, 1979, gage height, 4.28 ft (1.305 m); no flow at times during 1944, 1953, 1959, 1964, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 86 ft³/s (2.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 21	2030	*288 8.16	*4.28 1.305	Feb. 26	0845	100 2.83	1.88 0.573
Jan. 25	0630	158 4.47	2.65 .808	Mar. 6	2145	150 4.25	2.37 .722

Minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.4	6.4	8.3	10	12	5.4	8.8	5.1	3.5	.66	.78
2	1.5	1.0	5.1	19	7.9	11	7.5	7.5	4.3	13	.60	.67
3	1.4	1.1	3.8	25	7.1	10	7.5	6.8	11	4.5	.70	1.8
4	1.2	1.1	6.4	12	6.4	10	6.4	6.4	8.8	2.3	2.2	.89
5	1.6	1.6	7.5	8.3	5.6	9.7	6.8	5.7	7.5	2.5	1.4	.78
6	15	1.4	5.1	7.5	5.2	130	5.1	5.1	5.7	1.8	.90	8.8
7	4.5	1.4	4.0	15	4.7	80	4.3	4.5	4.5	1.4	.84	4.0
8	1.9	1.4	9.2	60	4.4	37	4.3	4.3	4.1	1.3	.66	3.1
9	1.6	1.5	30	34	4.1	19	12	4.5	3.9	1.2	.50	2.5
10	1.5	1.2	25	16	3.7	14	14	4.0	3.6	1.1	1.8	2.1
11	1.5	1.2	11	12	3.3	28	9.2	4.3	4.5	1.0	3.0	1.8
12	1.5	1.5	7.9	9.2	3.1	18	7.5	3.3	6.2	1.1	16	1.6
13	1.4	1.2	6.8	15	2.9	12	6.8	4.3	3.5	1.0	11	1.4
14	1.6	1.2	5.7	29	2.8	12	17	6.4	3.0	.90	4.0	2.5
15	1.9	1.2	4.8	13	2.7	11	15	5.1	2.7	.94	1.5	2.7
16	1.2	1.2	4.3	9.2	2.7	9.7	12	3.8	2.5	1.2	1.1	1.6
17	1.1	2.5	5.7	7.5	2.6	9.2	11	3.1	2.6	1.1	.90	1.9
18	1.0	11	4.5	6.8	2.6	8.3	9.2	4.5	5.2	1.2	1.0	1.9
19	1.5	5.1	3.8	6.2	2.6	7.9	7.9	5.1	5.4	1.0	2.8	1.6
20	1.2	2.9	3.8	5.6	2.6	6.8	6.8	3.8	2.4	.88	1.7	1.4
21	1.1	2.3	11	205	3.8	6.8	6.1	3.3	2.0	.76	1.1	7.9
22	1.1	1.9	7.1	180	9.0	6.8	5.4	2.9	1.8	.70	1.0	40
23	1.0	2.3	5.4	37	7.0	6.4	5.1	14	1.9	.70	.90	13
24	.78	6.4	5.7	38	56	7.5	4.5	53	1.8	.80	5.2	4.5
25	.89	4.3	30	138	48	7.5	4.5	35	1.6	1.3	4.0	3.1
26	1.9	2.7	15	60	74	6.8	7.5	18	1.4	1.4	2.2	2.5
27	7.1	2.5	9.2	27	31	5.7	26	11	1.3	1.1	1.2	2.1
28	2.9	4.0	6.8	18	17	5.4	19	9.2	1.3	.86	1.3	2.1
29	2.1	3.8	5.7	14	---	6.1	15	7.5	3.2	.74	1.1	2.1
30	1.5	12	5.1	12	---	5.7	11	7.1	2.2	.72	1.0	4.8
31	1.8	---	5.4	11	---	5.4	---	6.4	---	.70	.89	---
TOTAL	68.07	84.3	267.2	1058.6	332.8	525.7	279.8	268.7	115.0	52.70	73.15	125.92
MEAN	2.20	2.81	8.62	34.1	11.9	17.0	9.33	8.67	3.83	1.70	2.36	4.20
MAX	15	12	30	205	74	130	26	53	11	13	16	40
MIN	.78	1.0	3.8	5.6	2.6	5.4	4.3	2.9	1.3	.70	.50	.67
CFSM	.47	.60	1.83	7.24	2.53	3.61	1.98	1.84	.81	.36	.50	.89
IN.	.54	.67	2.11	8.36	2.63	4.15	2.21	2.12	.91	.42	.58	.99

CAL YR 1978	TOTAL	2746.07	MEAN 7.52	MAX 140	MIN .58	CFSM 1.60	IN 21.68
WTR YR 1979	TOTAL	3251.94	MEAN 8.91	MAX 205	MIN .50	CFSM 1.89	IN 25.68

MAMARONECK RIVER BASIN

35

01301000 MAMARONECK RIVER AT MAMARONECK, NY

LOCATION.--Lat 40°57'14", long 73°44'06", Westchester County, Hydrologic Unit 02030102, on left bank in Mamaroneck, 113 ft (34 m) downstream from bridge on Halstead Avenue, 700 ft (213 m) downstream from Sheldrake River, and 0.3 mi (0.5 km) upstream from mean high tide in Mamaroneck Harbor.

DRAINAGE AREA.--23.4 mi² (60.6 km²).

PERIOD OF RECORD.--November 1943 to July 1953, September 1954 to current year.

REVISED RECORDS.--WSP 1502: 1944(M), 1951(M). WDR NY-76-1; 1972(M), 1973(M), 1974(M), 1975(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 11.46 ft (3.493 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1954, water-stage recorder at same site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records fair. Storage in former water-supply reservoir on Mamaroneck River, affect unknown.

AVERAGE DISCHARGE.--33 years (1944-52, 1954-79), 34.8 ft³/s (0.986 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s (105 m³/s) Sept. 26, 1975, gage height, 10.15 ft (3.094 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of indirect measurement of peak flow at 10.15 ft (3.094 m); minimum, 0.06 ft³/s (0.002 m³/s) Sept. 30, 1965; minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 29, 30, 1965; minimum gage height since Sept. 9, 1954, 0.10 ft (0.030 m) July 21, 22, Aug. 18, 19, 1957, Aug. 14, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Backwater from hurricane wave reached a stage of about 11.5 ft (3.51 m) present datum, Sept. 21, 1938, from information by officials of village of Mamaroneck.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,410 ft³/s (96.6 m³/s) Jan. 21, gage height, 9.31 ft (2.838 m); minimum, 3.1 ft³/s (0.088 m³/s) Aug. 9, 10, gage height, 0.30 ft (0.091 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	5.2	25	57	60	91	24	47	32	22	5.2	7.9
2	11	4.9	17	160	57	84	28	40	28	70	4.9	7.4
3	6.5	4.5	15	155	45	66	37	38	51	18	5.6	19
4	6.0	5.2	30	66	42	62	33	39	45	13	14	11
5	6.0	5.2	34	57	38	63	45	37	37	14	5.6	14
6	70	4.9	20	54	36	823	27	33	32	11	4.5	73
7	15	4.9	16	87	32	475	23	29	26	9.4	5.2	18
8	8.9	4.9	33	468	31	169	21	24	23	8.4	4.1	9.4
9	7.4	4.9	229	143	29	121	73	22	21	7.9	3.4	7.9
10	6.5	4.1	125	89	24	101	70	20	20	7.9	7.9	6.9
11	8.9	4.5	55	70	25	192	40	26	27	8.4	16	6.5
12	8.9	4.1	45	57	23	107	37	20	30	12	87	6.0
13	8.9	4.1	48	97	21	85	33	25	18	14	73	6.5
14	9.4	4.1	44	146	21	80	105	34	16	7.9	19	7.9
15	11	4.1	35	70	20	65	82	31	14	7.4	14	12
16	7.9	4.5	27	55	20	52	66	21	14	7.4	12	5.6
17	6.0	11	40	47	19	47	80	18	14	7.9	11	5.2
18	5.6	76	30	42	18	43	57	30	23	18	7.9	4.9
19	6.0	17	22	37	16	39	48	44	30	8.9	19	5.2
20	5.6	12	24	34	16	37	42	27	14	7.4	8.9	4.5
21	4.9	12	75	1700	28	34	35	22	12	6.5	7.4	19
22	4.9	11	38	332	57	33	32	20	12	6.5	6.9	227
23	4.9	9.4	27	141	57	35	31	121	12	7.9	6.5	29
24	6.9	70	27	348	342	51	29	361	11	9.4	28	14
25	5.2	18	205	1070	255	57	28	205	11	7.9	19	14
26	6.5	12	62	275	486	30	42	103	9.9	6.9	11	13
27	39	15	48	174	150	25	143	71	9.4	6.9	8.4	12
28	8.9	23	39	134	109	23	84	65	8.9	6.0	8.4	11
29	6.5	20	32	111	---	28	73	57	16	6.0	7.4	12
30	5.6	55	29	93	---	26	52	43	11	6.9	9.4	23
31	5.6	---	31	76	---	24	---	42	---	6.0	9.4	---
TOTAL	323.3	435.5	1527	6445	2077	3168	1520	1715	628.2	357.8	450.0	612.8
MEAN	10.4	14.5	49.3	208	74.2	102	50.7	55.3	20.9	11.5	14.5	20.4
MAX	70	76	229	1700	486	823	143	361	51	70	87	227
MIN	4.9	4.1	15	34	16	23	21	18	8.9	6.0	3.4	4.5

CAL YR 1978 TOTAL 15414.7 MEAN 42.2 MAX 972 MIN 4.0
WTR YR 1979 TOTAL 19259.6 MEAN 52.8 MAX 1700 MIN 3.4

HUTCHINSON RIVER BASIN

01301500 HUTCHINSON RIVER AT PELHAM, NY

LOCATION.--Lat 40°54'41", long 73°48'55", Westchester County, Hydrologic Unit 02030102, on right bank in Pelham, just upstream from Penn Central Transportation Co. bridge, 100 ft (30 m) downstream from Pelham Lake, and 1.5 mi (2.4 km) west of New Rochelle.

DRAINAGE AREA.--5.76 mi² (14.9 km²).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.92 ft (3.938 m) National Geodetic Vertical Datum of 1929 (levels by county of Westchester).

REMARKS.--Records poor. Flow controlled by Pelham Lake and three reservoirs above station.

AVERAGE DISCHARGE.--35 years (1944-79), 7.07 ft³/s (0.200 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft³/s (14.9 m³/s) Aug. 28, 1971, gage height, 5.18 ft (1.579 m), from rating curve extended above 200 ft³/s (5.66 m³/s), maximum gage height, 5.38 ft (1.640 m) Jan. 21, 1979; minimum, 0.01 ft³/s (<0.001 m³/s) July 27, 1957; minimum daily, 0.02 ft³/s (0.001 m³/s) Aug. 2-6, 1955, July 26, 27, 1957, Oct. 26-30, 1964; minimum gage height, 1.86 ft (0.567 m) Aug. 2, 5, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 478 ft³/s (13.5 m³/s) Jan. 21, gage height, 5.39 ft (1.643 m); minimum, 0.08 ft³/s (0.002 m³/s) Aug. 9, 10, gage height, 2.20 ft (0.671 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	.47	6.1	7.9	8.9	11	5.1	6.7	6.4	2.1	.47	1.6
2	1.6	.54	5.1	23	7.3	9.9	7.6	5.6	6.0	3.9	.47	1.1
3	1.3	.62	3.7	27	6.4	8.9	8.5	5.1	20	2.3	.54	2.9
4	1.4	.62	5.6	13	6.0	8.5	6.7	4.8	14	2.9	.71	2.3
5	1.4	1.1	7.0	7.6	5.6	8.2	7.3	4.4	10	2.5	.47	.91
6	11	.80	4.8	6.4	5.4	100	5.6	4.1	8.6	1.9	.40	11
7	6.4	.91	3.9	16	5.2	76	5.6	3.9	8.0	1.9	.32	4.4
8	4.6	.91	8.2	65	5.0	26	5.8	3.7	7.0	1.7	.32	4.4
9	2.5	1.0	38	30	4.8	16	13	3.7	5.8	1.7	.24	2.8
10	1.9	1.1	31	14	4.5	12	13	3.7	5.3	1.3	.16	2.1
11	1.7	1.6	12	8.9	4.3	24	9.2	4.8	7.3	1.0	2.3	1.9
12	1.7	1.0	7.0	7.0	4.1	18	7.0	3.9	5.6	1.9	15	1.7
13	1.4	1.0	5.3	14	3.9	12	5.6	4.6	5.1	2.3	16	1.4
14	1.9	1.0	4.4	22	3.7	11	18	6.7	4.8	.80	9.2	3.1
15	1.3	1.1	3.9	13	3.5	9.6	16	5.8	4.6	.71	5.1	2.9
16	.91	1.3	3.3	7.9	3.4	8.2	14	5.1	4.1	.62	3.5	1.3
17	.91	3.7	5.6	6.4	3.3	7.3	14	3.9	4.1	.54	2.3	1.1
18	.80	13	5.3	5.8	3.2	6.7	10	4.8	3.7	.80	2.5	1.0
19	.71	9.2	4.1	5.3	3.1	6.4	8.5	26	3.3	.91	3.5	.91
20	.71	4.1	3.5	5.1	3.0	6.4	7.3	13	3.1	.71	2.1	.80
21	.54	1.9	14	298	5.6	6.4	5.8	9.0	3.1	.36	1.9	9.9
22	.54	1.0	6.4	79	9.9	6.4	5.3	5.6	2.9	.40	1.7	47
23	.54	1.9	4.8	19	9.2	5.6	4.8	4.0	2.8	.91	1.4	19
24	.62	12	4.8	57	55	7.9	4.6	45	2.3	1.4	7.6	7.9
25	.24	7.3	32	204	57	8.5	4.4	35	2.1	.80	3.3	4.6
26	.71	5.3	16	44	74	7.3	9.6	22	1.9	.71	3.3	3.3
27	3.9	4.1	8.5	23	30	6.1	26	16	1.4	.71	2.9	2.8
28	.62	4.8	6.4	15	16	5.3	19	13	1.3	.71	3.3	2.5
29	1.1	3.7	4.6	13	---	5.8	13	10	3.7	1.0	2.8	2.8
30	.80	8.9	3.5	11	---	5.3	8.9	8.0	1.3	1.0	2.5	5.6
31	.71	---	4.4	9.9	---	5.3	---	7.0	---	.54	2.1	---
TOTAL	56.56	95.97	273.2	1078.2	351.3	456.0	289.2	298.9	159.6	41.03	98.40	155.02
MEAN	1.82	3.20	8.81	34.8	12.5	14.7	9.64	9.64	5.32	1.32	3.17	5.17
MAX	11	13	38	298	74	100	26	45	20	3.9	16	47
MIN	.24	.47	3.3	5.1	3.0	5.3	4.4	3.7	1.3	.36	.16	.80

CAL YR 1978 TOTAL 2981.96 MEAN 8.17 MAX 201 MIN .24
WTR YR 1979 TOTAL 3353.38 MEAN 9.19 MAX 298 MIN .16

BRONX RIVER BASIN

37

01302000 BRONX RIVER AT BRONXVILLE, NY

LOCATION.--Lat 40°56'09", long 73°50'10", Westchester County, Hydrologic Unit 02030102, on right bank in Bronxville, just upstream from Penn Central Transportation Co. bridge, and 800 ft (244 m) downstream from Grassy Sprain Brook.

DRAINAGE AREA.--26.5 mi² (68.6 km²), not including 18.1 mi² (46.9 km²), from which the entire flow is diverted for municipal water supply and drainage purposes.

PERIOD OF RECORD.--November 1943 to current year.

REVISED RECORDS.--WSP 1382: Drainage area. WRD NY 1971: 1961-67(P), 1968(M), 1970(M). WRD NY 1972: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 73.74 ft (22.476 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diversions from 18.1 mi² (46.9 km²) for municipal water supply and flood control use. Included in these diversions is drainage from 12.8 mi² (33.2 km²) from Kensico Reservoir for City of New York, 4.58 mi² (11.9 km²) from Grassy Sprain Reservoir for Yonkers, 0.67 mi² (1.74 km²) for White Plains, and 0.1 mi² (0.3 km²) for flood control from outflow from Grassy Sprain Reservoir.

AVERAGE DISCHARGE.--35 years (1944-79), 41.5 ft³/s (1.175 m³/s), 21.27 in/yr (540 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) June 19, 1972, gage height, 9.63 ft (2.935 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of flow through culvert computation of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Sept. 10, 1944, gage height, 0.14 ft (0.043 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s or 16.99 m³/s (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 21	1100	*2,060 58.3	*8.80 2.682	Mar. 6	1045	749 21.2	4.39 1.338
Jan. 25	0315	1,790 50.7	7.98 2.432	May 23	2215	832 23.6	4.72 1.439
Feb. 24	0915	786 22.3	4.54 1.387	Sept. 22	0130	796 22.5	4.58 1.396
Feb. 26	0630	764 21.6	4.45 1.356				

Minimum discharge, 6.6 ft³/s (0.19 m³/s) Nov. 13, gage height, 0.45 ft (0.137 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	8.3	21	53	76	69	41	53	48	22	10	11
2	22	8.3	16	145	67	67	47	48	45	29	11	10
3	12	7.9	15	112	63	61	52	47	90	21	54	39
4	11	7.9	38	45	59	60	42	47	61	20	45	16
5	11	7.9	36	40	55	60	48	42	55	22	14	11
6	69	7.9	19	36	50	546	38	39	49	16	14	121
7	16	8.3	16	79	45	293	34	38	40	15	13	27
8	12	7.9	50	353	42	166	36	37	37	14	10	16
9	11	7.9	220	108	40	123	96	36	34	14	9.6	13
10	10	7.4	85	72	38	103	76	34	33	13	22	12
11	10	7.9	38	55	36	212	45	41	47	13	32	11
12	14	7.4	32	45	34	114	41	35	44	17	168	10
13	14	7.4	30	70	32	90	38	38	29	18	100	10
14	21	7.4	27	122	30	93	117	50	26	12	24	15
15	22	7.4	25	57	30	81	73	41	25	12	18	18
16	50	7.9	24	48	28	67	67	31	25	12	15	12
17	36	37	37	40	28	64	72	28	25	13	14	12
18	18	101	25	37	27	61	50	47	35	35	17	11
19	21	20	21	35	26	58	47	105	31	16	34	11
20	21	14	24	33	25	55	44	38	22	12	15	10
21	19	12	75	1250	35	52	42	31	22	12	13	81
22	21	11	31	247	65	49	40	29	21	11	12	284
23	9.7	21	25	117	52	47	40	184	22	15	11	40
24	13	64	31	355	359	55	37	253	20	16	47	21
25	9.3	17	186	901	220	67	36	206	19	22	27	17
26	14	12	49	259	385	46	72	102	18	12	17	16
27	64	12	37	172	117	43	205	72	18	12	12	15
28	15	20	30	138	79	41	90	71	17	11	11	14
29	10	20	28	113	---	46	75	69	26	11	20	17
30	9.7	60	26	95	---	43	58	60	18	12	23	37
31	9.7	---	26	85	---	41	---	61	---	10	18	---
TOTAL	616.4	546.1	1343	5317	2143	2973	1799	2013	1002	490	850.6	938
MEAN	19.9	18.2	43.3	172	76.5	95.9	60.0	64.9	33.4	15.8	27.4	31.3
MAX	69	101	220	1250	385	546	205	253	90	35	168	284
MIN	9.3	7.4	15	33	25	41	34	28	17	10	9.6	10
CFSM	.75	.69	1.63	6.49	2.89	3.62	2.26	2.45	1.26	.60	1.03	1.18
IN.	.87	.77	1.89	7.46	3.01	4.17	2.53	2.83	1.41	.69	1.19	1.32

CAL YR 1978	TOTAL	16892.5	MEAN 46.3	MAX 870	MIN 7.4	CFSM 1.75	IN 23.71
WTR YR 1979	TOTAL	20031.1	MEAN 54.9	MAX 1250	MIN 7.4	CFSM 2.07	IN 28.12

HUDSON RIVER BASIN

01312000 HUDSON RIVER NEAR NEWCOMB, NY

LOCATION.--Lat 43°58'00", long 74°07'55", Essex County, Hydrologic Unit 02020001, on right bank 30 ft (9 m) downstream from bridge on State Highway 28N, 0.5 mi (0.8 km) downstream from outlet of Harris Lake, 2 mi (3 km) east of Newcomb, and 4 mi (6 km) upstream from Wolf Creek.

DRAINAGE AREA.--192 mi² (497 km²).

PERIOD OF RECORD.--September 1925 to current year.

REVISED RECORDS.--WSP 696: 1928(M). WSP 711: 1930(M).

GAGE.--Water-stage recorder. Datum of gage is 1,550.38 ft (472.556 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1931, nonrecording gage at site 125 ft (38 m) downstream at same datum. Aug. 6, 1931 to Nov. 4, 1960, water-stage recorder on left bank at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Flow slightly regulated by small reservoirs above station.

AVERAGE DISCHARGE.--54 years, 396 ft³/s (11.21 m³/s), 28.01 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft³/s (211 m³/s) Jan. 1, 1949, gage height, 11.40 ft (3.475 m); minimum, 11 ft³/s (0.31 m³/s) Sept. 3, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (71 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 26	1900	3,570 101	7.41 2.259	Apr. 28	1900	*5,350 152	*9.54 2.908
Apr. 4	0100	2,560 72.5	6.05 1.844				

Minimum discharge, 40 ft³/s (1.13 m³/s) July 26, gage height 1.08 ft (0.329 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	255	97	94	124	97	1780	2140	808	140	72	505
2	67	213	92	238	119	89	2160	1580	620	219	79	366
3	68	183	83	976	114	80	2430	1150	488	282	203	342
4	68	159	87	1240	110	73	2410	1080	378	299	252	421
5	69	140	97	921	100	107	1940	1280	302	246	174	358
6	105	130	103	657	96	339	1480	1060	261	197	125	358
7	252	125	102	508	94	1460	1140	798	225	159	101	1130
8	292	120	107	439	92	2130	875	647	194	132	87	1320
9	262	110	155	366	90	1850	728	711	180	113	87	850
10	214	110	206	310	88	1390	611	956	174	99	91	547
11	176	110	197	267	84	989	514	1030	174	89	132	406
12	150	110	197	220	82	714	462	867	180	87	150	308
13	137	100	182	200	80	552	459	726	191	84	132	252
14	240	100	165	190	78	475	490	704	186	79	119	219
15	946	100	147	190	76	437	529	580	168	73	113	429
16	1060	100	130	180	76	404	584	456	147	72	137	555
17	714	110	120	180	74	369	759	370	130	70	191	441
18	514	150	120	170	74	332	879	305	119	72	168	338
19	403	220	110	160	74	302	945	264	109	67	150	276
20	337	250	110	160	78	282	975	240	99	61	147	228
21	282	210	110	169	80	275	1050	226	89	57	140	191
22	243	180	110	181	84	311	1220	224	84	51	123	165
23	215	160	100	184	86	456	1360	206	82	48	107	140
24	195	140	98	178	90	856	1740	190	80	45	105	125
25	173	130	100	184	96	1970	2020	235	77	42	209	119
26	161	120	110	178	100	3320	2200	353	75	44	464	109
27	232	120	100	166	110	3100	2660	435	70	62	489	95
28	381	110	96	155	107	2090	4510	544	70	67	805	87
29	395	110	94	148	---	1450	4210	613	113	64	628	89
30	346	104	90	140	---	1080	2950	719	132	61	514	87
31	304	---	90	131	---	1080	---	882	---	59	615	---
TOTAL	9068	4279	3705	9480	2556	28459	46070	21571	6005	3240	6909	10856
MEAN	293	143	120	306	91.3	918	1536	696	200	105	223	362
MAX	1060	255	206	1240	124	3320	4510	2140	808	299	805	1320
MIN	67	100	83	94	74	73	459	190	70	42	72	87
CFSM	1.53	.75	.63	1.59	.48	4.78	8.00	3.63	1.04	.55	1.16	1.89
IN.	1.76	.83	.72	1.84	.50	5.51	8.93	4.18	1.16	.63	1.34	2.10

CAL: YR 1978 TOTAL 140692 MEAN 385 MAX 2900 MIN 58 CFSM 2.01 IN 27.26
WTR: YR 1979 TOTAL 152198 MEAN 417 MAX 4510 MIN 42 CFSM 2.17 IN 29.49

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 (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--131 mi² (339 km²).

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

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by masonry dam, completed in 1898. Usable capacity, about 4,500 mil ft³ (127 hm³) at elevation, 1,651.29 ft or 503.313 m (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft (492.404 m). 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 furnished by Indian River Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft (504.965 m) Mar. 28, 1913, contents, 5,781 mil ft³ (164 hm³); minimum observed, 1,616.81 ft (492.804 m), estimated, Feb. 13, 1948, contents, 199 mil ft³ (5.64 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,652.64 ft (503.725 m) May 1, contents, 4,936 mil ft³ (140 hm³); minimum observed, 1,630.71 ft (497.04 m) Mar. 3, contents 1,339 mil ft³ (37.9 hm³).

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

1,635.0	1.958	1,643.0	3.221
1,636.0	2.110	1,648.0	4.068
1,638.0	2.417	1,653.0	5.007

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
INSTANTANEOUS OBSERVATIONS AT 0630

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1648.86	1648.74	1644.21	1639.41	1636.21	1630.92	1643.53	1652.64	1650.12	1649.42	1649.67	1650.06
2	1648.75	1648.57	1644.05	1639.36	1636.08	1630.75	1644.24	1652.60	1649.96	1649.57	1649.72	1650.04
3	1648.67	1648.37	1643.88	1639.80	1635.80	1630.71	1645.03	1652.48	1649.81	1649.68	1649.75	1650.06
4	1648.58	1648.19	1643.74	1640.13	1635.64	1630.73	1645.57	1652.44	1649.66	1649.76	1649.76	1650.02
5	1648.49	1648.04	1643.66	1640.24	1635.47	1630.88	1645.89	1652.34	1649.52	1649.83	1649.77	1650.02
6	1648.53	1647.88	1643.58	1640.15	1635.26	1632.19	1646.05	1652.24	1649.44	1649.80	1649.73	1649.96
7	1648.60	1647.67	1643.39	1640.11	1635.11	1633.74	1646.02	1652.08	1649.32	1649.80	1649.73	1650.29
8	1648.64	1647.47	1643.20	1640.08	1634.88	1634.05	1645.97	1651.94	1649.26	1649.80	1649.72	1650.48
9	1648.62	1647.33	1643.13	1639.93	1634.68	1635.86	1645.83	1651.80	1649.19	1649.80	1649.69	1650.54
10	1648.59	1647.11	1643.07	1639.77	1634.46	1636.28	1645.75	1651.67	1649.16	1649.81	1649.72	1650.56
11	1648.54	1646.95	1643.01	1639.56	1634.28	1636.48	1645.58	1651.54	1649.13	1649.81	1649.78	1650.51
12	1648.47	1646.70	1642.92	1639.37	1634.10	1636.54	1645.49	1651.46	1649.03	1649.75	1649.80	1650.51
13	1648.37	1646.51	1642.80	1639.18	1633.90	1636.56	1645.48	1651.30	1649.06	1649.73	1649.80	1650.46
14	1648.47	1646.37	1642.67	1639.09	1633.72	1636.51	1645.56	1651.13	1649.08	1649.70	1649.86	1650.48
15	1648.83	1646.13	1642.57	1638.99	1633.51	1636.50	1645.61	1649.96	1649.11	1649.66	1649.89	1650.53
16	1649.00	1645.92	1642.43	1638.91	1633.29	1636.07	1645.68	1650.82	1649.14	1649.70	1649.79	1650.56
17	1649.06	1645.78	1642.27	1638.69	1633.09	1636.35	1645.81	1650.57	1649.16	1649.72	1649.79	1650.54
18	1649.10	1645.86	1642.11	1638.52	1632.91	1636.41	1645.96	1650.37	1649.18	1649.72	1649.76	1650.49
19	1649.11	1645.84	1641.92	1638.33	1632.72	1636.28	1646.12	1650.15	1649.19	1649.71	1649.77	1650.44
20	1649.08	1645.78	1641.72	1638.12	1632.53	1636.26	1646.29	1649.99	1649.20	1649.67	1649.80	1650.44
21	1649.06	1645.67	1641.53	1638.02	1632.30	1636.19	1646.52	1649.85	1649.21	1649.64	1649.78	1650.38
22	1649.05	1645.53	1641.34	1637.91	1632.06	1636.32	1646.81	1649.71	1649.22	1649.59	1649.76	1650.31
23	1649.01	1645.40	1641.16	1637.76	1631.90	1636.60	1647.14	1649.66	1649.25	1649.55	1649.74	1650.25
24	1648.97	1645.33	1641.01	1637.63	1631.72	1637.16	1647.77	1649.61	1649.26	1649.53	1649.73	1650.19
25	1648.93	1645.12	1640.75	1637.56	1631.58	1638.39	1648.46	1649.69	1649.27	1649.55	1649.76	1650.13
26	1648.92	1644.92	1640.59	1637.39	1631.45	1640.14	1649.13	1649.76	1649.23	1649.57	1649.81	1650.07
27	1648.91	1644.71	1640.37	1637.19	1631.30	1641.14	1649.84	1649.84	1649.24	1649.58	1649.87	1649.98
28	1648.95	1644.50	1640.19	1636.98	1631.09	1641.68	1651.36	1649.88	1649.24	1649.58	1649.92	1649.91
29	1648.98	1644.40	1639.94	1636.79	---	1642.03	1652.29	1650.06	1649.30	1649.61	1649.95	1649.88
30	1648.98	1644.30	1639.69	1636.60	---	1642.31	1652.62	1650.13	1649.31	1649.60	1650.07	1649.81
31	1648.88	---	1639.47	1636.44	---	1642.80	---	1650.13	---	1649.59	1650.06	---
MEAN	1648.81	1646.37	1642.14	1638.65	1633.61	1636.28	1646.78	1650.90	1649.31	1649.67	1649.80	1650.26
MAX	1649.11	1648.74	1644.21	1640.24	1636.21	1642.80	1652.62	1652.64	1650.12	1649.83	1650.07	1650.56
MIN	1648.37	1644.30	1639.47	1636.44	1631.09	1630.71	1643.53	1649.61	1649.03	1649.42	1649.67	1649.81
†	4.192	3.423	2.639	2.142	1.367	3.273	4.930	4.440	4.315	4.367	4.440	4.367
‡	-13.1	-296.7	-292.7	-185.5	-320.4	+711.6	+639.3	-182.9	-48.2	+19.4	+27.3	-28.2
CAL YR 1978	MEAN	1645.90	MAX	1652.68	MIN	1635.19	‡	-35.6				
WTR YR 1979	MEAN	1645.28	MAX	1652.64	MIN	1630.71	‡	+4.4				

† 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.

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 (1.3 km) downstream from Indian Lake Dam, 1.0 mi (1.6 km) upstream from Big Brook, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--132 mi² (342 km²).

PERIOD OF RECORD.--July 1912 to June 1914, June 1915 to current year. Monthly discharge only for some periods published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 1,604.23 ft (488.969 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Indian Lake (see station 01314500).

AVERAGE DISCHARGE.--65 years (1913, 1916-79), 295 ft³/s (8.354 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft³/s (98.0 m³/s) Mar. 28, 1913, gage height, 7.8 ft (2.38 m); minimum, less than 1 ft³/s (0.028 m³/s) frequently, when entire flow of river is being stored in Indian Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 973 ft³/s (27.6 m³/s) May 1, gage height, 3.94 ft (1.201 m); minimum, 19 ft³/s (0.54 m³/s) June 25, gage height, 0.62 ft (0.189 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	507	463	531	481	400	188	919	624	22	25	136
2	190	506	462	540	478	350	310	936	623	21	26	136
3	190	505	459	540	476	68	686	883	619	20	26	136
4	190	504	457	544	474	68	699	838	543	28	25	136
5	190	502	454	544	470	75	703	837	453	63	25	136
6	200	500	453	543	468	90	703	833	351	62	25	145
7	200	498	452	543	465	84	700	791	351	62	25	139
8	200	480	452	542	462	80	696	750	317	62	25	138
9	200	495	451	540	459	161	696	705	232	62	24	138
10	200	494	449	538	457	396	694	671	232	72	26	138
11	200	491	449	535	450	399	626	658	232	102	25	136
12	200	489	447	533	450	399	408	645	189	102	25	136
13	195	489	444	530	450	398	408	641	21	102	25	138
14	204	486	437	529	440	400	411	640	20	102	25	176
15	198	483	437	526	440	399	410	636	20	102	47	201
16	197	477	435	524	440	398	412	631	20	103	62	200
17	197	481	434	522	440	396	414	627	20	102	62	199
18	197	485	466	518	430	396	415	624	20	102	63	187
19	197	479	560	508	430	395	417	622	20	102	62	145
20	197	478	560	508	430	393	418	539	20	102	62	145
21	197	478	558	508	420	322	420	451	20	102	62	157
22	197	476	556	508	420	90	423	326	20	102	62	200
23	195	476	552	507	420	94	426	200	20	86	62	200
24	195	475	550	504	410	100	432	201	20	24	62	199
25	195	473	550	503	410	113	436	351	20	24	63	198
26	195	471	546	499	410	102	502	483	20	25	62	197
27	195	471	543	495	410	98	740	481	20	24	73	197
28	195	469	541	492	410	99	787	484	21	24	104	197
29	195	468	538	489	---	99	893	485	21	24	105	197
30	261	465	535	486	---	136	940	546	20	24	108	197
31	508	---	532	483	---	185	---	622	---	25	136	---
TOTAL	6460	14551	15222	16112	12400	7183	16413	19056	5129	1979	1609	4980
MEAN	208	485	491	520	443	232	547	615	171	63.8	51.9	166
MAX	508	507	560	544	481	400	940	936	624	103	136	201
MIN	190	465	434	483	410	68	188	200	20	20	24	136

CAL YR 1978 TOTAL 119900 MEAN 328 MAX 752 MIN 11
WTR YR 1979 TOTAL 121094 MEAN 332 MAX 940 MIN 20

HUDSON RIVER BASIN

41

01315500 HUDSON RIVER AT NORTH CREEK, NY

LOCATION.--Lat 43°42'03", long 73°59'02", Warren County, Hydrologic Unit 02020001, on left bank 125 ft (38 m) upstream from bridge on State Highway 28N in village of North Creek, 500 ft (152 m) upstream from North Creek, and 26 mi (42 km) downstream from Indian Lake.

DRAINAGE AREA.--792 mi² (2,051 km²).

PERIOD OF RECORD.--September 1907 to current year.

REVISED RECORDS.--WSP 621: Drainage area. WSP 1432: 1908-18, 1920, 1922. WDR NY-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 987.51 ft (300.993 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1930, nonrecording gages at sites 80 ft (24 m) and 125 ft (38 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Appreciable regulation by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--72 years, 1,559 ft³/s (44.15 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft³/s (818 m³/s) Dec. 31, 1948, gage height, 12.14 ft (3.700 m); minimum, 112 ft³/s (3.17 m³/s) July 26, 1934, gage height, 1.96 ft (0.597 m); minimum daily, 114 ft³/s (3.23 m³/s) July 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,000 ft³/s (708 m³/s) Apr. 28, gage height, 11.30 ft (3.444 m) from graph based on recorder readings; minimum, 220 ft³/s (6.23 m³/s) July 26, gage height, 2.17 ft (0.661 m); minimum daily, 227 ft³/s (6.43 m³/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	1200	930	1050	900	800	6610	6530	2410	463	333	1460
2	432	1010	922	2100	850	990	7220	5210	2050	871	383	1100
3	422	1060	879	3960	820	1300	8530	4320	1520	887	491	992
4	422	1120	939	4120	800	1200	7020	4100	1420	806	561	1020
5	442	1050	1000	3680	770	1980	6320	4160	1350	708	502	930
6	586	974	1070	3000	750	5090	5090	3770	1180	625	407	1270
7	913	929	1050	2450	720	6560	4220	3150	1040	555	333	4590
8	1000	913	1050	2190	700	6320	3570	2750	896	491	304	3930
9	913	895	1320	1920	690	5340	3190	2670	862	442	292	2810
10	806	873	1350	1660	670	4470	2960	2780	862	402	308	1850
11	723	853	1250	1450	650	3630	2640	2860	767	383	364	1340
12	666	835	1200	1310	640	2960	2190	2780	652	378	427	1060
13	632	815	1120	1280	640	2480	2360	2520	593	373	392	896
14	965	801	1100	1220	640	2270	2710	2330	537	359	355	838
15	3070	804	1020	1220	640	2220	2640	2170	480	346	324	1570
16	3090	788	1000	1200	620	2080	3020	1920	437	369	324	1770
17	2300	783	940	1130	600	1890	3630	1770	407	355	346	1470
18	1690	1130	900	1110	600	1740	3870	1530	373	364	387	1170
19	1360	1560	910	1100	600	1650	4100	1340	346	364	387	957
20	1190	1570	940	1100	600	1600	4040	1510	346	337	392	854
21	1060	1170	980	1120	620	1690	4380	1190	329	316	383	701
22	948	1180	980	1200	640	1880	5010	1070	312	304	364	645
23	871	1200	1000	1140	660	2710	5620	1150	304	288	329	659
24	822	1140	980	1100	670	4650	6780	2310	292	273	312	625
25	783	1050	950	1100	700	11500	7220	2400	288	240	392	599
26	760	969	950	1100	710	13000	7770	2480	277	227	992	580
27	913	873	940	1100	720	8760	10800	2830	265	288	1120	1350
28	1260	974	940	1020	760	5950	20000	3200	277	308	1750	540
29	1270	992	970	1000	---	4490	14100	3750	324	280	1560	580
30	1160	965	940	1030	---	3810	9070	3610	392	254	1830	560
31	1440	---	930	970	---	4360	---	2910	---	240	1920	---
TOTAL	33341	30476	31450	50130	19380	119370	176680	87070	21588	12896	18564	38716
MEAN	1076	1016	1015	1617	692	3851	5889	2809	720	416	599	1291
MAX	3090	1570	1350	4120	900	13000	20000	6530	2410	887	1920	4590
MIN	422	783	879	970	600	800	2190	1070	265	227	292	540
CAL YR 1978	TOTAL	590374	MEAN	1617	MAX	8010	MIN	244				
WTR YR 1979	TOTAL	639661	MEAN	1752	MAX	20000	MIN	227				

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 (122 m) downstream from outlet of Lake Luzerne, and 0.3 mi (0.5 km) upstream from Sacandaga River.

DRAINAGE AREA.--1,664 mi² (4,310 km²).

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 (171.904 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are fair. Some diurnal fluctuation caused by powerplant on Schroon River. Flow regulated by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--58 years, 2,915 ft³/s (82.55 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft³/s (1,210 m³/s) Jan. 1, 1949, gage height, 21.21 ft (6.465 m); minimum, 281 ft³/s (7.96 m³/s) Sept. 3, 1934, gage height, 0.94 ft (0.287 m); minimum daily, 292 ft³/s (8.27 m³/s) July 24, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (420 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 25	1200	25,800 731	14.31 4.362	Apr. 28	1800	*27,400 776	*14.98 4.566
Apr. 3	1100	16,200 459	10.35 3.155				

Minimum discharge, 440 ft³/s (12.5 m³/s) July 26, gage height, 1.46 ft (0.445 m); minimum daily, 477 ft³/s (13.5 m³/s) July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651	1860	1510	1640	1600	1000	12400	13200	6120	775	491	2020
2	640	1450	1450	2730	1500	1300	13200	10900	5190	1260	669	1670
3	629	1510	1270	5150	1500	1500	15800	9350	4550	1600	875	1510
4	571	1500	1170	5270	1500	1480	14900	8410	4070	1410	972	1470
5	581	1560	1480	4720	1500	2020	13300	8040	3390	1270	965	1430
6	775	1450	1590	4130	1400	5750	11500	7460	3220	1160	839	2090
7	1060	1400	1640	3590	1300	11000	9950	6560	2960	1040	700	6080
8	1270	1380	1600	3200	1300	11500	8600	5650	2630	920	607	5850
9	1220	1350	1820	3000	1300	10600	7700	5230	2390	832	550	4650
10	1100	1320	1990	2700	1200	9600	7080	5090	2150	756	581	3660
11	980	1300	1470	2400	1200	8950	6520	4990	2080	712	724	2950
12	897	1270	1600	2200	1200	7810	5870	4860	2080	687	743	2490
13	846	1240	1700	2100	1200	6740	5870	4500	1910	669	756	2160
14	912	1220	1700	2200	1200	6310	6100	4140	1670	640	681	1990
15	2410	1200	1500	2470	1100	6060	6630	3890	1530	607	613	2500
16	3540	1190	1500	2200	1100	5410	6290	3590	1400	1220	555	2950
17	3010	1180	1500	2100	1100	5150	7520	3270	1280	1060	536	2680
18	2370	1380	1200	2000	1100	4780	7660	2990	1190	810	555	2300
19	1990	1840	1100	2000	1100	4500	7970	2670	1120	762	629	1980
20	1790	2030	1200	1900	1200	4420	7810	2540	1030	687	618	1760
21	1640	1920	1400	1900	1300	4610	7970	2570	927	618	618	1600
22	1520	1600	1540	2260	1300	5330	8570	2160	860	571	592	1450
23	1410	1300	1560	2530	1300	6520	9240	2080	817	536	545	1360
24	1400	1400	1560	2450	1200	9700	10300	1950	769	504	513	1290
25	1390	1500	1470	2200	1300	19600	11200	3150	731	477	504	1220
26	1340	1300	1400	2170	1300	23200	11400	4760	693	522	712	1160
27	1380	1100	1400	2300	1300	18200	13900	4140	645	597	1340	1100
28	1620	1000	1300	2260	1100	13800	24800	4280	613	623	1760	1130
29	1830	1400	1300	2180	---	11500	23300	5150	675	602	2020	1140
30	1730	1500	1300	2070	---	10000	16700	6040	718	550	1880	1100
31	1800	---	1400	1800	---	10300	---	6960	---	509	2330	---
TOTAL	44302	42650	45620	81820	35700	248640	320050	160570	59408	24986	26473	66740
MEAN	1429	1422	1472	2639	1275	8021	10670	5180	1980	806	854	2225
MAX	3540	2030	1990	5270	1600	23200	24800	13200	6120	1600	2330	6080
MIN	571	1000	1100	1640	1100	1000	5870	1950	613	477	491	1100

CAL YR 1978 TOTAL 1102304 MEAN 3020 MAX 14900 MIN 440
WTR YR 1979 TOTAL 1156959 MEAN 3170 MAX 24800 MIN 477

HUDSON RIVER BASIN

43

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 (2.4 km) downstream from West Branch Sacandaga River, on State Highway 30, and 4.5 mi (7.2 km) upstream from Hope.

DRAINAGE AREA.--491 mi² (1,272 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 881.31 ft (268.623 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1929, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Some seasonal regulation at Piseco Lake Outlet and, since 1959, intermittent regulation by Lake Algonquin at Wells 4 mi (6 km) upstream. Infrequent minor fluctuations by mill upstream.

AVERAGE DISCHARGE.--68 years, 1,104 ft³/s (31.27 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft³/s (906 m³/s) Mar. 27, 1913, gage height, 11.0 ft (3.35 m), from floodmarks at site then in use; minimum, about 16 ft³/s (0.45 m³/s) Sept. 30, 1913, gage height, 1.17 ft (0.357 m); minimum daily, 18 ft³/s (0.51 m³/s) Sept. 20, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,100 ft³/s (258 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 6	0830	12,000 340	7.29 2.222	Apr. 28	0730	14,200 402	7.79 2.374
Mar. 25	0830	*15,200 430	*7.98 2.432				

Minimum discharge, 62 ft³/s (1.76 m³/s) Aug. 10, gage height, 1.37 ft (0.418 m); minimum daily, 68 ft³/s (1.93 m³/s) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	537	406	1700	700	960	6940	4040	1410	211	117	287
2	144	487	382	4500	620	900	6240	3370	1170	517	126	256
3	141	447	355	4630	560	800	7600	2720	963	457	160	537
4	137	421	421	2990	480	1200	5970	2840	729	323	152	454
5	148	402	619	2370	420	3000	4760	2410	689	247	122	371
6	390	378	668	1920	340	9640	3630	2140	697	204	102	2530
7	647	366	614	1630	280	7510	3090	1900	606	172	85	2810
8	487	361	628	1500	240	5580	2790	1660	533	147	79	1340
9	404	355	1060	1330	220	4170	2320	1460	493	132	68	1230
10	355	330	1000	1180	200	3610	2050	1300	478	118	128	978
11	324	318	800	1000	180	3200	1950	1170	493	115	340	757
12	301	306	740	920	160	2660	1840	1060	470	144	236	612
13	295	295	660	860	160	2280	2010	993	429	142	189	499
14	1320	284	600	860	160	2160	2410	939	401	132	160	434
15	2340	279	540	860	180	2020	2680	838	354	131	140	619
16	1380	269	500	840	250	1810	2680	582	294	484	126	543
17	1120	284	460	840	330	1680	3140	628	228	338	113	446
18	970	814	420	840	440	1560	3270	597	209	362	113	382
19	768	1100	400	820	600	1460	3450	561	201	294	139	335
20	786	789	450	820	800	1190	3600	540	182	228	141	289
21	698	666	460	860	1000	1530	4000	511	155	173	128	264
22	606	572	520	880	1100	2540	4620	524	153	157	115	267
23	550	475	560	880	1200	3840	5480	485	151	139	104	248
24	508	510	580	880	1200	5700	6270	535	144	117	98	228
25	466	547	620	860	1200	12500	6230	1320	134	103	112	216
26	447	442	700	840	1100	9260	6290	1790	121	281	134	204
27	632	434	740	840	1100	5690	9070	1730	113	451	255	190
28	741	456	800	820	1000	4100	11700	2490	108	278	480	184
29	715	447	900	780	---	3500	7330	2550	116	201	410	207
30	658	435	1000	760	---	3460	5670	2140	120	160	387	213
31	598	---	1300	740	---	5340	---	1920	---	133	334	---
TOTAL	19220	13806	19903	41550	16220	114850	139080	47743	12344	7091	5393	17930
MEAN	620	460	642	1340	579	3705	4636	1540	411	229	174	598
MAX	2340	1100	1300	4630	1200	12500	11700	4040	1410	517	480	2810
MIN	137	269	355	740	160	800	1840	485	108	103	68	184

CAL YR 1978 TOTAL 354683 MEAN 972 MAX 6690 MIN 34
WTR YR 1979 TOTAL 455130 MEAN 1247 MAX 12500 MIN 68

01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

LOCATION.--Lat 43°18'57", long 73°55'39", Saratoga County, Hydrologic Unit 02020002, 800 ft (244 m) upstream from right end of Conklingville Dam on Sacandaga River at Conklingville.

DRAINAGE AREA.--1,044 mi² (2,704 km²).

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 National Geodetic Vertical Datum, adjustment of 1912. Prior to Apr. 23, 1930, nonrecording gage at same datum in outlet channel 800 ft (244 m) 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 mil ft³ (840.3 hm³) between elevations 735.0 ft (224.03 m) and 768.0 ft (234.09 m). Between elevations 768.0 ft (234.09 m) and 771.0 ft (235.00 m) (spillway crest) an additional 3,450 mil ft³ (97.7 hm³) is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft (213.06 m). Capacity of 4,600 mil ft³ (130 hm³) below elevation 735.0 ft (224.03 m) 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 (235.00 m), is 41.7 mi² (108 km²).

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 770.78 ft (234.934 m) June 26, 1972, contents, 37,470 mil ft³ (1,061 hm³); minimum since first filling, 729.55 ft (222.367 m) Mar. 30, 1940, contents, 2,100 mil ft³ (59.5 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 770.23 ft (234.766 m) Apr. 30, contents, 36,830 mil ft³ (1,043 hm³); minimum, 744.17 ft (226.823 m) Mar. 5, contents, 10,970 mil ft³ (310.7 hm³).

Capacity table, current water year
(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	20.16		

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	753.42	751.08	747.84	746.28	750.14	745.39	763.20	770.00	767.70	764.98	761.80	757.42
2	753.34	750.97	747.65	746.83	750.01	745.04	763.78	769.66	767.74	764.99	761.63	757.39
3	753.15	750.81	747.60	747.90	749.85	744.70	764.64	769.25	767.81	764.88	761.45	757.51
4	752.96	750.65	747.65	748.47	749.82	744.35	765.20	768.86	767.82	764.77	761.27	757.50
5	752.82	750.61	747.53	748.80	749.85	744.24	765.63	768.43	767.77	764.72	761.20	757.38
6	752.78	750.59	747.43	748.97	749.64	745.35	765.84	767.86	767.69	764.56	761.09	757.43
7	752.75	750.42	747.33	749.20	749.47	747.35	765.92	767.44	767.62	764.40	760.90	758.03
8	752.70	750.26	747.26	749.46	749.34	748.75	765.88	767.30	767.55	764.43	760.74	758.20
9	752.68	750.12	747.29	749.59	749.15	749.75	765.85	767.20	767.46	764.27	760.46	758.33
10	752.54	749.96	747.43	749.65	748.93	750.48	765.80	767.10	767.45	764.12	760.31	758.42
11	752.35	749.77	747.49	749.67	748.85	751.16	765.69	767.00	767.49	763.98	760.17	758.28
12	752.20	749.68	747.42	749.64	748.78	751.72	765.57	766.90	767.42	763.82	760.10	758.18
13	752.04	749.67	747.36	749.64	748.50	752.14	765.46	766.94	767.27	763.69	760.05	758.06
14	751.92	749.55	747.28	749.76	748.27	752.55	765.52	766.94	767.14	763.50	759.97	757.98
15	752.20	749.38	747.16	749.91	748.02	752.95	765.65	766.84	766.98	763.43	759.76	757.90
16	752.31	749.15	747.07	749.94	747.79	753.26	765.75	766.75	766.82	763.56	759.54	757.88
17	752.25	749.04	747.09	749.96	747.58	753.55	765.92	766.59	766.73	763.55	759.32	757.87
18	752.23	748.99	747.08	749.97	747.45	753.84	766.10	766.46	766.66	763.50	759.14	757.75
19	752.14	749.05	746.93	749.93	747.36	754.10	766.20	766.33	766.48	763.38	759.09	757.60
20	752.04	749.02	746.78	749.88	747.13	754.35	766.30	766.30	766.31	763.25	759.02	757.43
21	751.95	748.90	746.70	750.02	746.89	754.57	766.42	766.33	766.17	763.09	758.84	757.29
22	751.94	748.81	746.64	750.23	746.63	754.90	766.71	766.22	766.06	763.05	758.64	757.14
23	751.93	748.66	746.52	750.25	746.35	755.45	766.90	766.10	765.94	762.97	758.46	757.07
24	751.77	748.58	746.50	750.28	746.13	756.32	767.25	766.02	765.85	762.79	758.32	757.02
25	751.63	748.47	746.68	750.42	746.05	758.15	767.60	766.18	765.75	762.64	758.16	756.89
26	751.55	748.41	746.74	750.42	746.10	760.25	767.94	766.43	765.62	762.48	758.05	756.74
27	751.46	748.36	746.61	750.36	745.90	761.39	768.46	766.69	765.48	762.42	758.05	756.58
28	751.34	748.24	746.48	750.41	745.70	761.99	769.42	766.94	765.30	762.29	757.94	756.45
29	751.32	748.10	746.33	750.48	---	762.23	770.06	767.25	765.16	762.25	757.84	756.34
30	751.30	747.97	746.17	750.38	---	762.34	770.18	767.46	765.02	762.17	757.72	756.32
31	751.20	---	746.13	750.26	---	762.60	---	767.65	---	762.00	757.56	---
MEAN	752.20	749.44	747.04	749.58	748.06	753.07	766.36	767.21	766.74	763.55	759.57	757.48
MAX	753.42	751.08	747.84	750.48	750.14	762.60	770.18	770.00	767.82	764.99	761.80	758.42
MIN	751.20	747.97	746.13	746.28	745.70	744.24	763.20	766.02	765.02	762.00	757.56	756.32
†	16.96	14.10	12.62	16.12	12.11	28.61	36.71	33.92	30.88	27.60	23.05	21.92
‡	-795	-1103	-553	+1307	-1658	+6160	+3125	-1042	-1173	-1225	-1699	-436

CAL YR 1978 MEAN 754.93 MAX 767.83 MIN 738.41 † -347
WTR YR 1979 MEAN 756.73 MAX 770.18 MIN 744.24 ‡ +90

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

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 (1.6 km) downstream from Stewarts Bridge, 1.1 mi (1.8 km) west of Hadley, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.--1,055 mi² (2,732 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 582.00 ft (177.394 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi (2 km) upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 8.82 ft (2.688 m) lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi (5.8 km) upstream at datum 85.47 ft (26.051 m) higher than present datum.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s) and fair below. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); no discharge over spillway during year. Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station as directed by Board of Hudson River-Black River Regulating District, and through Stewarts Bridge hydroelectric station.

COOPERATION.--Since Oct. 1, 1932, discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey.

AVERAGE DISCHARGE.--72 years, 2,148 ft³/s (60.83 m³/s), adjusted for storage since 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,500 ft³/s (1,010 m³/s) Mar. 28, 1913, gage height, 12.36 ft (3.767 m) site and datum then in use; minimum, 5.3 ft³/s (0.15 m³/s) Mar. 17, 18, 1964, Apr. 29 to May 4, May 5, 6, 1965; minimum daily, 5.3 ft³/s (0.15 m³/s) Apr. 30 to May 3, 1965. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft³/s (377 m³/s) July 1, 1968, gage height, 9.54 ft (2.908 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft³/s (309 m³/s) Apr. 30, gage height, 8.61 ft (2.624 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Mar. 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	2180	2200	26	2520	4110	5410	10600	2070	49	2430	2040
2	2160	2170	2240	1950	2560	4580	5400	10200	2090	2260	2400	43
3	2190	2200	47	1390	2550	4380	5470	10300	53	2140	2420	27
4	2220	2220	2020	1580	46	4510	5420	10300	2080	45	2400	2000
5	2230	44	2100	1570	2500	5160	5390	10300	2070	2040	48	2010
6	2260	2190	2000	1550	2560	4230	5390	10300	2080	2010	2400	2030
7	2250	2250	2020	32	2570	1410	5390	7040	2070	2000	2370	1520
8	43	2210	2130	1580	2550	19	5380	4120	2080	48	2420	1490
9	2170	2180	1980	1510	2960	7.6	5430	4090	2140	2040	2320	44
10	2230	2200	45	1550	3080	7.6	5510	3060	47	2010	2430	1960
11	2200	2220	2060	1530	168	7.6	5440	3120	2080	2170	2380	1990
12	2240	42	2020	1680	2970	7.6	5440	3030	2120	2020	49	1990
13	2290	2190	2050	1540	3100	7.6	5430	103	2610	2160	2360	2040
14	2250	2180	2050	33	3110	7.6	5530	2910	2610	2210	2420	2000
15	44	2270	2010	1550	3110	7.6	5430	2690	2600	49	2400	2120
16	2260	2210	2060	1520	3110	7.6	5420	2570	2560	2200	2390	39
17	2180	2210	45	1540	3080	7.6	3140	2560	47	2110	2390	1920
18	2220	2210	2050	1710	162	7.0	5210	2560	2530	2080	2380	1970
19	2200	44	2030	1740	3020	7.0	5520	2560	2530	2040	47	1990
20	2170	2180	2050	1750	3070	7.0	5510	60	2020	2110	2360	2010
21	2190	2210	2010	35	3120	8.1	5400	2080	2010	2280	2310	1990
22	42	2200	2060	1900	3100	168	5370	2110	1980	57	2380	1980
23	2160	2200	2060	1900	3080	2640	5330	2130	2000	2270	2380	48
24	2160	2200	93	1890	3110	726	5140	2090	44	2300	2370	1960
25	2200	2220	27	1960	205	64	5500	2100	2020	2470	2360	2010
26	2180	44	2050	2560	2950	150	5500	2120	2010	2440	44	1990
27	2190	2180	2060	2570	3010	110	6510	66	1990	2500	2360	1970
28	2140	2200	2070	46	3070	2120	8200	2080	2190	2470	2020	2010
29	41	2250	2060	2550	---	4750	8070	2090	2190	55	2280	1250
30	2180	2240	2120	2540	---	5240	9450	2060	2160	2440	2100	36
31	2170	---	58	2510	---	5410	---	2040	---	2480	2010	---
TOTAL	57573	57544	51875	47792	70441	49874.5	170730	123439	57081	55553	63428	46477
MEAN	1857	1918	1673	1542	2516	1609	5691	3982	1903	1792	2046	1549
MAX	2290	2270	2240	2570	3120	5410	9450	10600	2610	2500	2430	2120
MIN	41	42	27	26	46	7.0	3140	60	44	45	44	27

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

MEAN	1057	815	1121	2849	856	7769	8817	2940	730	567	350	1113
CFSM	1.00	.77	1.06	2.70	.81	7.36	8.36	2.79	.69	.54	.33	1.06
IN.	1.15	.86	1.22	3.11	.85	8.49	9.32	3.21	.77	.62	.38	1.18

Observed

Adjusted

CAL YR 1978	TOTAL	838920.0	MEAN	2298	MAX	5290	MIN	11	MEAN	1951	CFSM	1.85	IN	25.10
WTR YR 1979	TOTAL	851807.5	MEAN	2334	MAX	10600	MIN	7.0	MEAN	2423	CFSM	2.30	IN	31.18

HUDSON RIVER BASIN

01327500 GLENS FALLS FEEDER AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'15", long 73°32'49", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 100 ft (30 m) upstream from Bond Creek, 2.0 mi (3.2 km) east of courthouse at Hudson Falls, and 8.0 mi (12.9 km) downstream from Hudson River feeder dam at Glens Falls.

PERIOD OF RECORD.--September 1945 to current year (navigation seasons only).

GAGE.--Water-stage recorder. Datum of gage is 139.88 ft (42.635 m) Barge Canal datum.

REMARKS.--Records fair. Feeder flow during navigation season is net diversion from Hudson River basin to the summit level of the Champlain (Barge) Canal, 0.4 mi (0.6 km) downstream, and is diverted in accordance with requirements of the canal. Flow during remainder of year consists of leakage through headgates and inflow from area tributary to feeder above station, which may continue during period of nonoperation. During navigation season a portion of the flow is rediverted into Lake Champlain basin; the remainder returns to the Hudson River in southbound lockages.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	90					---	98	52	82	80	118
2	84	88					---	95	78	103	80	105
3	82	86					---	93	69	67	82	99
4	96	78					---	91	61	73	80	85
5	80	78					---	89	65	77	89	92
6	100	77					---	87	61	89	77	105
7	88	90					---	85	59	89	85	66
8	82	104					---	72	56	94	92	94
9	84	84					---	70	58	85	94	96
10	86	75					---	85	58	92	96	92
11	86	73					---	78	58	89	108	96
12	84	77					---	75	56	94	110	91
13	78	75					---	73	56	91	110	85
14	84	75					---	67	55	89	110	85
15	98	68					---	72	55	98	107	84
16	98	51					---	70	52	94	96	82
17	110	57					---	70	69	105	96	87
18	54	77					---	70	124	91	99	89
19	60	66					---	67	87	85	105	89
20	68	63					31	64	69	91	103	85
21	82	70					87	58	65	77	99	78
22	78	66					87	34	65	84	96	77
23	82	62					90	33	75	75	89	72
24	84	62					92	53	72	82	80	64
25	70	60					93	127	77	82	78	65
26	71	60					93	80	77	114	94	91
27	82	---					97	44	72	103	84	103
28	58	---					103	49	73	91	96	107
29	82	---					106	114	64	91	108	112
30	86	---					102	190	65	85	114	77
31	86	---					---	67	---	84	114	---
TOTAL	2565	---	---	---	---	---	---	2420	2003	2746	2951	2671
MEAN	82.7	---	---	---	---	---	---	78.1	66.8	88.6	95.2	89.0
MAX	110	---	---	---	---	---	---	190	124	114	114	118
MIN	54	---	---	---	---	---	---	33	52	67	77	64

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LOCATION.--Lat 43°18'20", long 73°36'58", at Warren-Saratoga County line, Hydrologic Unit 02020003, at road and quarry conveyor bridge, 0.1 mi (0.2 km) east of Glens Falls, 1.4 mi (2.3 km) downstream from bridge on U.S. Highway 9-State Highway 32, and 4.3 mi (6.9 km) upstream from discharge station (01327750, Hudson River at Fort Edward).

REMARKS.--Water-discharge records for Hudson River at Fort Edward (station 01327750) are used to compute sediment discharges.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)
DEC 05...	0915	2780	7	2	260	35	40	.1	.00	.00	.0
APR 13...	0900	10200	2	0	150	4	30	.0	.00	.00	.0
28...	1745	31700	51	6	1000	0	70	.0	.00	.00	.0
29...	1030	32000	57	9	850	1	90	.0	.00	.00	.0
30...	1015	26300	42	10	390	3	50	.0	.00	.00	.0
JUN 07...	0745	6000	27	15	400	5	20	.0	.00	.00	.0
21...	0800	4500	4	2	190	3	20	.0	.00	.00	.0
25...	0800	3200	6	5	160	0	0	.0	.00	.00	--
JUL 05...	0915	3920	6	0	640	3	20	.0	.00	.00	--
AUG 12...	1115	1650	8	7	160	0	40	.0	.00	.00	--

[illegible]

HUDSON RIVER BASIN

01327600 HUDSON RIVER AT GLENS FALLS, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
DEC				
05...	0915	2780	1	7.5
17...	1355	1220	6	20
MAR				
10...	1440	8960	46	1110
12...	1555	7890	9	192
APR				
13...	0900	10200	3	83
28...	1745	31700	24	2050
29...	1030	32000	28	2420
30...	1015	26300	8	568
JUN				
07...	0745	6000	7	113
21...	0800	4500	1	12
25...	0800	3200	2	17
JUL				
05...	0915	3920	1	11
AUG				
12...	1115	1650	2	8.9

HUDSON RIVER BASIN

49

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 (12 m) upstream from Scott Paper Mill, 150 ft (46 m) south of River Street in Fort Edward, and 0.4 mi (0.6 km) upstream from bridge on State Highway 197.

DRAINAGE AREA.--2,817 mi² (7,296 km²).

PERIOD OF RECORD.--December 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. 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 (see station 01327500), Bond Creek (see station 01328000), and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s (963 m³/s) Apr. 29, 1979, gage height 28.09 ft (8.562 m); maximum gage height, 28.71 ft (8.751 m) Jan. 11, 1978, ice jam; minimum discharge, 400 ft³/s (11.3 m³/s) Sept. 4, 1978, gage height, 19.33 ft (5.892 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,000 ft³/s (963 m³/s) Apr. 29, gage height, 28.09 ft (8.562 m); minimum discharge, 665 ft³/s (18.8 m³/s) July 4, gage height, 19.83 ft (6.044 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	3510	3360	1400	4120	4120	17500	23100	8260	1600	2800	4350
2	1870	3510	3190	3160	3970	4890	18800	20800	8910	3420	2800	2350
3	2550	3360	1670	5700	4060	5280	21300	19200	5550	3450	3130	2020
4	2700	3240	2350	6980	2350	5360	20600	18400	5080	1490	3190	2670
5	2750	2020	2860	7280	3690	6350	19300	17800	5820	3190	1840	3390
6	2370	2940	3190	6250	4490	9540	17100	17500	5370	3190	2860	4000
7	2750	2520	3360	4620	4420	11200	14700	14700	5510	3050	2970	6370
8	1840	3390	3480	3540	3780	12600	12900	9100	5180	1360	3020	7670
9	2370	3390	3080	4450	4420	10100	12100	8630	4320	2550	2800	5590
10	3100	3330	2670	4620	4600	9050	11600	7630	2970	3190	2650	4620
11	2880	3080	2500	4400	1700	8440	11100	7500	4000	2830	2940	5150
12	2910	1380	3050	4300	4500	7540	10300	7670	4250	3270	1340	4450
13	2650	2670	3220	4200	4600	6210	10200	6050	4420	2730	2520	4290
14	2780	3160	3570	2230	4600	5890	10300	5260	4190	1530	3100	4120
15	2370	2990	3600	3970	4500	5660	11200	6370	4490	1510	3300	4030
16	3540	2700	3220	4250	4500	5400	10400	5590	3690	2730	2940	3630
17	4720	2860	1380	4290	4400	4590	9790	5860	1030	3420	2880	3840
18	4450	3240	3100	4200	1600	4550	11500	5370	3270	3480	2800	4420
19	4160	2230	3240	4200	4500	4090	12400	5440	3750	2570	1300	4190
20	3750	2750	3390	4100	4600	4000	12300	3330	3660	2860	2450	3900
21	3480	4090	2940	2300	4700	4320	12200	4120	3220	2650	2990	3570
22	1600	3540	3100	3690	4700	4090	12600	4090	2970	1280	3190	3540
23	2700	3540	3220	3840	3990	7110	13700	3660	2780	2300	3050	2000
24	3360	2910	1510	4090	3980	9640	14600	4220	1300	2650	2910	3080
25	3240	3330	1670	3810	2100	16400	16400	4970	2700	2800	2520	3390
26	3300	1820	2730	3750	3210	23700	16600	6530	3050	3080	1230	3270
27	3100	2470	3390	4120	3920	19600	19100	5290	2700	3220	2940	3130
28	3270	2830	4120	3220	3920	15000	29500	4930	2650	2860	3300	3160
29	2000	2860	3930	3720	---	15400	31700	6730	2780	1380	3970	2550
30	3020	3220	3810	4060	---	14400	25400	8160	2800	2860	4000	1670
31	3360	---	1770	4160	---	14300	---	8810	---	2830	4090	---
TOTAL	90150	88880	91670	128900	109920	278820	467190	276810	120670	81330	87820	114410
MEAN	2908	2963	2957	4158	3926	8994	15570	8929	4022	2624	2833	3814
MAX	4720	4090	4120	7280	4700	23700	31700	23100	8910	3480	4090	7670
MIN	1210	1380	1380	1400	1600	4000	9790	3330	1030	1290	1230	1670
CAL YR 1978 TOTAL	1878602			MEAN 5147	MAX 17400	MIN 652						
WTR YR 1979 TOTAL	1936570			MEAN 5306	MAX 31700	MIN 1030						

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 (0.6 km) downstream from discharge station (01327750, Hudson River at Fort Edward), and 0.6 mi (1.0 km) upstream from Champlain Canal.

DRAINAGE AREA.--2,817 mi² (7,296 km²), at gage.

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

CHEMICAL DATA: 1975-76 (a).

MINOR ELEMENTS DATA: 1975 (b), 1976-77 (a), 1978-79 (e).

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

ORGANIC DATA: OC--1975 (a).

PCB--1975, 1977 (a); 1978-79 (e).

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

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

SEDIMENT DATA: 1975 (b).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1978 to current year.

REMARKS.--Water-discharge records for Hudson River at Fort Edward (station 01327750) are used to compute sediment discharges. No sediment data Jan. 11 to 25, Feb. 5 to 23 due to ice cover. Supplemental samples collected from navigation canal (east channel) are designated by the value 40 for sample source code.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 133 mg/L Dec. 4, 1978; minimum daily mean, 1 mg/L on several days in 1978 and 1979.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 4,790 tons (4,340 Mg) April 29, 1979; minimum daily, 3 tons (3 Mg) estimated July 2, 1978.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 133 mg/L Dec. 4; minimum daily mean, 1 mg/L on several days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 4,790 tons (4,340 Mg) Apr. 29; minimum daily, 3.7 tons (3.4 Mg) July 8.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE SOURCE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDE (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDE (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)
OCT												
23...	1330	--	3300	6	6	200	5	40	.0	.00	.00	.0
NOV												
08...	1430	--	3240	5	4	180	18	20	.0	.00	.00	.0
DEC												
05...	1100	--	2780	5	5	240	190	40	.0	.00	.00	.0
MAR												
05...	1100	--	4690	9	0	640	7	30	.0	.00	.00	.0
06...	1615	--	9040	1	0	240	3	20	.0	.00	.00	.0
08...	1000	40	--	--	--	--	--	--	.4	.00	.00	.0
08...	1045	--	11700	12	1	660	7	90	.4	.00	.00	.0
26...	1045	--	24100	51	9	1200	10	120	.2	.00	.00	.0
27...	0930	--	20300	14	2	650	2	80	.1	.00	.00	.0
27...	1045	40	--	--	--	--	--	--	2.5	.00	.00	.0
APR												
12...	1000	--	11000	5	1	140	1	10	.0	.00	.00	.0
12...	1030	40	--	--	--	--	--	--	.3	.00	.00	.0
24...	0915	--	14000	10	2	200	11	20	.0	.00	.00	.0
28...	1845	40	--	--	--	--	--	--	2.2	.00	.00	.0
28...	1915	--	32000	63	6	1300	5	80	.0	.00	.00	.0
29...	0915	--	32400	65	13	1500	5	90	.3	.00	.00	.0
29...	0945	40	--	--	--	--	--	--	.6	.00	.00	.0
30...	0900	--	27100	48	5	650	0	50	.2	.00	.00	.0
30...	0945	40	--	--	--	--	--	--	.9	.00	.00	.0
MAY												
08...	1215	--	10100	36	10	150	0	0	.0	.00	.00	.0
17...	0845	--	3630	11	2	200	0	30	.0	.00	.00	.0
25...	0900	--	3630	11	7	130	3	20	.0	.00	.00	.0
JUN												
07...	0830	--	6210	8	2	320	5	30	.2	.00	.00	.0
07...	0900	40	--	--	--	--	--	--	.3	.00	.00	.0
21...	0845	--	4520	6	3	190	3	20	.0	.00	.00	.0
21...	0915	40	--	--	--	--	--	--	.3	.00	.00	.0
25...	0845	--	3220	8	6	240	0	0	.2	.00	.00	--
25...	0915	40	--	--	--	--	--	--	.3	.00	.00	--

HUDSON RIVER BASIN

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01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)
OCT												
23...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
NOV												
08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
DEC												
05...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
MAR												
05...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
06...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
26...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
27...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
27...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
APR												
12...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
12...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
28...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
28...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
30...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
MAY												
08...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
25...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
JUN												
07...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
07...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
21...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
21...	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	.00	0
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	SAMPLE SOURCE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	PCB, DIS- SOLVED (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)
JUL												
05...	0800	--	4490	10	0	720	2	30	.0	--	.00	.00
05...	0830	40	--	9	0	--	--	--	.1	--	.00	.00
16...	0800	40	--	4	4	--	--	--	.4	--	.00	.00
16...	0830	--	2620	5	4	180	0	30	.1	--	.00	.00
23...	0830	--	2940	6	6	230	4	40	.0	--	.00	.00
23...	0915	40	--	3	3	--	--	--	.2	--	.00	.00
AUG												
06...	0800	--	3190	6	4	140	0	20	.1	--	.00	.00
06...	0830	40	--	--	--	--	--	--	.2	--	.00	.00
09...	0745	--	3420	1	1	160	0	30	.1	--	.00	.00
09...	0830	40	--	--	--	--	--	--	.2	--	.00	.00
12...	1230	40	--	2	2	--	--	--	.2	--	.00	.00
12...	1300	--	1750	2	2	130	0	30	.1	--	.00	.00
12...	1500	--	1750	3	2	140	0	40	.1	.1	.00	.00
20...	0950	--	3230	4	2	200	4	50	.1	--	.00	.00
20...	1030	40	--	3	2	--	--	--	.2	--	.00	.00
21...	0945	--	3750	3	2	160	5	40	.2	--	.00	.00
21...	1015	40	--	3	2	--	--	--	.2	--	.00	.00
23...	0930	--	3730	4	3	110	4	10	.1	--	.00	.00
23...	1025	40	--	3	2	--	--	--	.1	--	.00	.00
27...	0815	--	4000	1	--	180	6	40	.1	--	.00	.00
27...	0900	40	--	4	3	--	--	--	.3	--	.00	.00

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH												
1	6	20	4	38	7	64	4	15	3	33	23	256
2	4	20	2	19	3	26	8	68	2	21	8	106
3	4	28	4	36	90	406	21	323	3	33	5	71
4	6	44	4	35	133	844	11	207	7	44	5	72
5	3	22	6	33	30	232	9	177	---	---	8	137
6	2	13	5	40	108	930	27	456	---	---	10	258
7	5	37	4	27	50	454	7	87	---	---	21	635
8	3	15	6	55	7	66	8	76	---	---	42	1430
9	2	13	8	73	6	50	10	120	---	---	7	191
10	3	25	4	36	9	65	8	100	---	---	10	244
11	5	39	30	249	7	47	---	---	---	---	7	160
12	5	39	47	175	65	535	---	---	---	---	19	387
13	3	21	11	79	20	174	---	---	---	---	8	134
14	3	23	19	162	5	48	---	---	---	---	4	64
15	9	58	52	420	3	29	---	---	---	---	8	122
16	5	48	35	255	38	330	---	---	---	---	6	87
17	4	51	8	62	62	231	---	---	---	---	3	37
18	4	48	2	17	14	117	---	---	---	---	1	12
19	5	56	6	36	2	17	---	---	---	---	4	44
20	4	40	14	104	3	27	---	---	---	---	3	32
21	12	113	8	88	3	24	---	---	---	---	4	47
22	6	26	4	38	7	59	---	---	---	---	5	55
23	6	44	6	57	7	61	---	---	---	---	4	77
24	4	36	5	39	3	12	---	---	6	64	10	260
25	5	44	3	27	6	27	---	---	8	45	64	2830
26	5	45	4	20	6	44	5	51	8	69	53	3390
27	6	50	4	27	6	55	3	33	8	85	18	953
28	6	53	4	31	6	67	3	26	9	95	8	324
29	5	27	3	23	5	53	2	20	---	---	7	291
30	6	49	4	35	5	51	3	33	---	---	5	194
31	4	36	---	---	3	14	3	34	---	---	6	232
TOTAL	---	1183	---	2336	---	5159	---	1826	---	489	---	13132
DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
APRIL MAY JUNE JULY AUGUST SEPTEMBER												
1	6	283	16	998	4	89	1	4.3	2	15	9	106
2	8	406	16	899	3	72	2	18	2	15	6	38
3	15	863	12	622	4	60	2	19	2	17	2	11
4	9	501	10	497	3	41	1	4.0	2	17	4	29
5	6	313	8	384	4	63	2	17	2	9.9	2	18
6	5	231	7	331	4	58	4	34	3	23	3	32
7	8	318	9	357	3	45	4	33	6	48	3	52
8	7	244	9	221	4	56	1	3.7	5	41	5	104
9	4	131	7	163	4	47	2	14	3	23	3	45
10	3	94	4	82	3	24	4	34	3	21	6	75
11	2	60	5	101	5	54	3	23	2	16	6	83
12	2	56	8	166	4	46	4	35	4	14	5	60
13	5	138	6	98	13	155	4	29	3	20	7	81
14	11	306	5	71	8	91	4	17	4	33	11	122
15	8	242	4	69	4	48	4	16	3	27	6	65
16	3	84	5	75	3	30	3	22	3	24	10	98
17	3	79	5	79	2	5.6	4	37	4	31	7	73
18	4	124	4	58	2	18	3	28	5	38	3	36
19	31	1040	3	44	2	20	3	21	4	14	4	45
20	26	863	3	27	2	20	6	46	6	40	5	53
21	7	231	4	44	1	8.7	4	29	5	40	5	48
22	5	170	6	66	2	16	4	14	4	34	2	19
23	4	148	4	40	4	30	3	19	5	41	3	16
24	4	158	5	57	3	11	3	21	4	31	4	33
25	5	221	3	40	2	15	3	23	2	14	1	9.2
26	4	179	6	106	2	16	7	58	2	6.6	2	18
27	9	464	5	71	1	7.3	6	52	4	32	1	8.5
28	31	2470	3	40	1	7.2	4	31	3	27	2	17
29	56	4790	5	91	2	15	2	7.5	3	32	2	14
30	25	1710	5	110	2	15	2	15	3	32	3	14
31	---	---	5	119	---	---	2	15	4	44	---	---
TOTAL	---	16917	---	6126	---	1183.8	---	739.5	---	820.5	---	1422.7

HUDSON RIVER BASIN

53

01328000 BOND CREEK AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'22", long 73°32'56", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 800 ft (244 m) upstream from bridge on State Highway 196, 0.2 mi (0.3 km) upstream from Glens Falls feeder and abandoned Champlain Canal, 0.5 mi (0.8 km) upstream from Champlain (Barge) Canal, and 1.9 mi (3.1 km) east of courthouse at Hudson Falls.

DRAINAGE AREA.--14.7 mi² (38.1 km²).

PERIOD OF RECORD.--June 1943 to current year. Prior to October 1950, published as "Bond Brook at Dunham Basin."

GAGE.--Water-stage recorder. Datum of gage is 140.30 ft (42.763 m) Barge Canal datum.

REMARKS.--Records fair except those for winter periods, which are poor. During canal navigation season, an indeterminate portion of flow is diverted at a point 0.5 mi (0.8 km) below gage into Lake Champlain basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--32 years, 18.1 ft³/s (0.513 m³/s), 16.70 in/yr (424 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft³/s (38.8 m³/s) Dec. 31, 1948 gage height, 8.52 ft (2.597 m); maximum gage height, 8.66 ft (2.640 m) Mar. 5, 1964 (backwater from ice); minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 1, 2, 1965, Aug. 25, Sept. 19, 20, 1968, Sept. 12, 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1400	502 14.2	5.37 1.637	Mar. 5	1430	*828 23.4	*6.54 1.993

Minimum discharge, 1.0 ft³/s (0.028 m³/s) May 20, 21, 22, 23; minimum gage height, 1.52 ft (0.463 m) Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	6.2	3.8	14	36	26	30	17	26	1.8	4.3	1.6
2	2.1	6.2	4.2	334	29	50	61	12	16	2.0	4.3	2.0
3	2.4	5.7	5.2	163	24	72	100	10	10	2.6	4.3	2.9
4	2.6	4.9	7.0	112	20	140	35	13	8.1	2.0	3.3	2.0
5	2.4	5.3	13	75	17	560	52	12	7.2	2.0	2.3	1.6
6	35	4.9	21	51	13	558	46	9.0	7.2	1.8	1.8	34
7	23	4.5	24	35	11	292	29	7.6	5.9	1.8	1.8	56
8	8.3	5.7	40	25	10	185	20	7.6	5.1	1.8	1.4	18
9	5.3	5.3	78	21	9.0	182	19	7.6	4.7	1.8	1.4	11
10	3.8	4.5	34	18	8.4	175	57	6.8	4.0	2.0	2.6	7.2
11	4.1	4.1	20	17	7.6	172	85	5.5	9.0	2.0	2.9	5.1
12	3.5	4.1	18	16	6.4	88	52	4.3	19	2.3	2.9	4.0
13	3.8	4.1	16	15	5.8	72	30	4.7	9.0	2.6	2.9	2.9
14	41	4.1	14	20	5.2	154	44	4.7	5.5	3.6	2.9	3.6
15	71	3.8	14	18	4.5	94	47	4.3	4.3	3.6	2.6	5.1
16	26	3.8	11	17	3.7	69	42	4.3	3.6	3.6	2.0	4.0
17	21	4.1	9.0	16	3.2	63	43	3.3	2.9	5.5	1.8	3.3
18	11	34	7.6	15	2.7	66	25	1.6	2.9	5.1	1.8	2.6
19	11	20	6.2	15	2.1	69	18	1.6	2.9	4.3	2.3	2.3
20	10	11	5.4	30	1.9	76	14	1.4	2.9	4.3	2.0	2.3
21	8.9	7.7	7.0	91	1.8	79	12	1.4	2.3	4.3	1.8	2.6
22	8.3	5.7	14	207	1.8	75	9.0	1.2	2.0	4.3	1.8	2.9
23	12	5.3	12	188	1.8	65	7.6	1.0	2.0	4.0	1.6	2.6
24	28	5.7	9.5	164	13	60	6.8	10	1.8	3.3	1.6	2.3
25	16	6.2	13	156	16	57	6.8	71	1.8	2.9	1.6	2.0
26	11	5.3	15	181	15	48	6.3	50	1.8	13	1.4	2.0
27	21	4.5	14	100	13	30	31	23	1.8	16	2.3	2.0
28	16	4.4	12	76	12	21	79	26	1.6	9.5	2.3	2.0
29	10	4.2	9.4	56	---	20	49	72	1.8	7.2	2.0	2.9
30	7.7	4.0	9.0	46	---	29	26	115	1.8	6.3	1.8	3.3
31	6.7	---	8.8	42	---	33	---	50	---	5.9	1.6	---
TOTAL	435.5	199.3	475.1	2334	294.9	3680	1082.5	558.9	174.9	133.2	71.4	196.1
MEAN	14.0	6.64	15.3	75.3	10.5	119	36.1	18.0	5.83	4.30	2.30	6.54
MAX	71	34	78	334	36	560	100	115	26	16	4.3	56
MIN	2.1	3.8	3.8	14	1.8	20	6.3	1.0	1.6	1.8	1.4	1.6
CFSM	.95	.45	1.04	5.12	.71	8.10	2.46	1.22	.40	.29	.16	.45
IN.	1.10	.50	1.20	5.91	.75	9.31	2.74	1.41	.44	.34	.18	.50

CAL YR 1978	TOTAL	5427.7	MEAN 14.9	MAX 249	MIN 1.6	CFSM 1.01	IN 13.73
WTR YR 1979	TOTAL	9635.8	MEAN 26.4	MAX 560	MIN 1.0	CFSM 1.80	IN 24.38

HUDSON RIVER BASIN

01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

GAGE.--Water-stage recorder. Datum of gage is 596.68 ft (181.868 m), revised, National Geodetic Vertical Datum of 1929.

Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REMARKS.--Records good except those for winter period, which are fair. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--51 years, 341 ft³/s (9.657 m³/s), 30.47 in/yr (774 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s (314 m³/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft³/s (170 m³/s) on basis of slope-area measurement at gage height 10.8 ft (3.29 m) and computation of peak flow over dam; minimum, 37 ft³/s (1.05 m³/s) Sept. 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0030	*2810 79.6	8.26 2.518	Mar. 25	2100	2340 66.3	7.88 2.402
Mar. 7	0730	2350 66.6	7.89 2.405	Sept. 6	1930	2280 64.6	7.82 2.384

Minimum discharge, 63 ft³/s (1.78 m³/s) Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	259	167	380	231	228	1600	709	551	167	84	92
2	117	234	159	2030	215	234	1350	595	443	190	86	82
3	110	218	148	2300	215	231	1180	527	391	184	84	167
4	110	205	238	1200	211	255	1000	619	359	146	79	194
5	190	199	376	750	205	912	837	532	343	131	74	133
6	315	190	262	500	205	1700	709	456	355	126	72	889
7	343	184	228	370	205	2290	600	423	319	119	69	1290
8	218	211	252	1000	208	1760	532	415	288	113	69	615
9	175	215	514	772	205	1190	509	384	259	108	66	321
10	156	190	407	542	200	948	491	355	241	104	70	214
11	148	178	281	427	200	1160	486	331	238	100	102	156
12	138	172	259	363	200	1000	500	311	327	96	96	128
13	133	164	259	359	200	740	504	304	270	94	178	111
14	319	170	241	363	200	740	491	308	224	90	156	113
15	509	170	221	395	200	895	482	281	202	86	143	318
16	319	159	215	355	199	673	575	266	184	88	124	189
17	241	156	218	315	199	595	605	241	172	124	108	141
18	205	391	185	285	199	546	566	221	164	121	96	120
19	193	388	160	281	199	509	561	208	159	106	124	108
20	255	270	150	277	195	514	570	205	148	94	148	106
21	228	224	235	255	180	542	634	199	141	90	117	104
22	196	199	220	347	180	648	756	199	138	88	96	238
23	190	193	170	351	175	826	960	190	138	84	84	190
24	262	199	160	292	311	1130	1140	500	133	79	79	141
25	218	202	165	277	452	2010	1120	1690	131	81	90	124
26	215	159	202	300	335	2090	1200	1820	124	88	111	113
27	877	148	187	288	270	1380	1560	1100	119	208	105	106
28	600	167	175	281	238	912	1570	740	113	143	246	105
29	391	170	170	273	---	772	1360	1030	202	110	170	225
30	315	172	170	259	---	924	954	810	159	98	119	189
31	277	---	178	241	---	1360	---	709	---	90	111	---
TOTAL	8065	6156	6972	16428	6232	29714	25402	16678	7035	3546	3356	7022
MEAN	260	205	225	530	223	959	847	538	235	114	108	234
MAX	877	391	514	2300	452	2290	1600	1820	551	208	246	1290
MIN	102	148	148	241	175	228	482	190	113	79	66	82
CFSM	1.71	1.35	1.48	3.49	1.47	6.31	5.57	3.54	1.55	.75	.71	1.54
IN.	1.97	1.51	1.71	4.02	1.53	7.27	6.22	4.08	1.72	.87	.82	1.72
CAL YR 1978	TOTAL	115215	MEAN 316	MAX 1440	MIN 71	CFSM 2.08	IN 28.20					
WTR YR 1979	TOTAL	136606	MEAN 374	MAX 2300	MIN 66	CFSM 2.46	IN 33.43					

LOCATION.--Lat 43°05'54", long 73°34'25", at Saratoga-Washington County line, Hydrologic Unit 02020003, at bridge on State Highway 29, 0.2 mi (0.3 km) east of Schuylerville, 0.8 mi (1.3 km) downstream from Batten Kill, and 1.0 mi (1.6 km) downstream from Champlain (Barge) Canal lock 5.

NUTRIENT DATA: 1977 (e), 1978 (d).

SUSPENDED-SEDIMENT DISCHARGE: March 1977 to September 1979 (discontinued).

COOPERATION.--Staff-gage records furnished by the New York State Department of Transportation.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,900 tons (9,890 Mg) Mar. 6, 1979; minimum daily, 8.5 tons (7.7 Mg) Oct. 23, 1978.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,900 tons (9,890 Mg) Mar. 6; minimum daily, 8.5 tons (7.7 Mg) Oct. 23.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	PCB, DIS- SOLVED (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, DIS- SOLVED (UG/L)
DEC 05...	1300	4110	12	5	360	19	30	.5	--	.00	.00	--
MAR 08...	0845	22200	23	4	1700	30	90	.9	--	.00	.00	--
26...	1130	26500	54	8	2100	14	130	3.7	--	.00	.00	--
27...	1145	23500	20	3	780	17	80	2.2	--	.00	.00	--
APR 13...	1030	13400	36	21	200	45	40	.0	--	.00	.00	--
29...	1215	32700	64	6	1700	10	100	--	--	.00	.00	--
MAY 17...	0945	7240	14	1	330	1	40	.3	--	.00	.00	--
JUN 07...	1000	5900	3	1	240	2	20	.6	--	.00	.00	--
21...	1030	3330	16	12	230	1	30	.7	--	.00	.00	--
25...	1000	580	16	8	620	4	60	1.4	--	.00	.00	--
JUL 05...	1030	2740	13	13	230	4	40	.9	--	.00	.00	--
AUG 09...	0920	2870	2	1	220	4	30	.7	--	.00	.00	--
12...	1600	1310	7	3	300	3	40	.5	.4	.00	.00	.00
27...	1015	2660	8	4	310	4	50	.8	--	.00	.00	--

[illegible]

HUDSON RIVER BASIN

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	1880	4	20	4760	7	90	4310	3	35
2	1770	5	24	4900	8	106	4170	3	34
3	3060	4	33	4600	10	124	3060	3	25
4	3210	3	26	4510	14	170	2600	3	21
5	3600	5	49	3360	19	172	4210	6	68
6	3800	4	41	3700	9	90	4760	4	51
7	3980	10	107	3600	6	58	4900	7	93
8	3600	15	146	4170	7	79	5160	5	70
9	2770	8	60	4650	7	88	5590	6	91
10	3980	5	54	4410	6	71	4900	9	119
11	3840	3	31	4170	6	68	4350	5	59
12	3650	5	49	2850	7	54	4600	4	50
13	3700	7	70	2770	9	67	4810	3	39
14	3700	23	230	4120	5	56	5110	3	41
15	4170	11	124	3980	8	86	5160	3	42
16	5010	8	108	3700	52	519	4650	3	38
17	5860	1	16	3750	24	243	3600	3	29
18	5980	3	48	4210	10	114	3840	4	41
19	5540	13	194	4080	11	121	3930	4	42
20	5220	9	127	3560	9	87	3880	4	42
21	4850	2	26	4960	60	804	4350	4	47
22	3460	1	9.3	4810	34	442	4560	3	37
23	3150	1	8.5	4700	8	102	4650	4	50
24	4700	1	13	4170	4	45	3510	5	47
25	4650	1	13	4460	4	48	2680	5	36
26	4510	1	12	3320	3	27	3410	6	55
27	4900	1	13	2630	4	28	4510	7	85
28	5490	1	15	3650	5	49	4510	7	85
29	4080	1	11	3800	4	41	4310	8	93
30	3980	1	11	4170	4	45	4120	14	156
31	4700	1	13	---	---	---	3260	26	229
TOTAL	126790	---	1701.8	120520	---	4094	131460	---	1950
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	3840	87	902	6150			5590	---	---
2	10700	216	6240	5810			6790	---	---
3	14000	142	5370	5540			7590	---	---
4	11100	17	509	4410			8360	---	---
5	10600	---	---	4170			16700	---	---
6	8830	---	---	5160			25200	160	10900
7	7400	---	---	5160			26500	109	7800
8	6610	---	---	5060			22600	50	3050
9	7840	---	---	5160			18000	28	1360
10	6850	---	---	4960			16000	20	864
11	6270	---	---	4030			15900	26	1120
12	5590	---	---	3880			13700	16	592
13	5590	---	---	4760			11100	11	330
14	5010	---	---	4700			11100	16	480
15	5490	---	---	4760			10900	19	559
16	5650	---	---	4810			9800	8	212
17	5010	---	---	4810			8500	5	115
18	5060	---	---	4710			8030	9	195
19	5470	---	---	2020			7460	6	121
20	5750	---	---	4900			7280	5	98
21	5530	---	---	4960			7460	6	121
22	5810	---	---	5110			7530	8	163
23	5750	---	---	5110			9610	11	285
24	6220	---	---	5980			12400	11	368
25	6790	---	---	5700			16900	43	1960
26	7040	---	---	4900			27600	79	5890
27	7340	---	---	5650			24900	29	1950
28	6790	---	---	5700			19100	13	670
29	6270	---	---	---			18200	8	393
30	6910	---	---	---			17600	6	285
31	6550	---	---	---			17000	6	275
TOTAL	213660	---	13021	138070			435400	---	40156

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL									
1	18800	20	1020	26100	20	1410	11100	11	330
2	20800	14	786	22900	14	866	9900	26	695
3	23500	28	1780	20400	10	551	8360	9	203
4	24500	18	1190	19200	7	363	6210	6	101
5	22100	16	955	18600	8	402	7220	9	175
6	20300	11	603	18200	9	442	6670	8	144
7	18100	8	391	17400	8	376	6320	8	137
8	16100	5	217	12300	7	232	5980	10	161
9	15100	6	245	10300	5	139	5490	7	104
10	14700	11	437	9590	5	129	4810	8	104
11	14900	10	402	8900	6	144	4350	15	176
12	13700	6	222	8700	6	141	6040	10	163
13	12900	3	104	8170	5	110	6040	17	277
14	13200	5	178	6150	6	100	5590	12	181
15	14100	5	190	6790	11	202	5160	7	98
16	14000	4	151	6850	11	203	5220	5	70
17	13400	4	145	6610	7	125	3210	5	43
18	13500	6	219	6270	6	102	2630	8	57
19	14500	6	235	6270	8	135	4310	7	81
20	14600	5	197	4900	6	79	4260	8	92
21	14300	4	154	3880	7	73	3930	3	32
22	14300	3	116	4700	6	76	3510	4	38
23	15200	3	123	4810	6	78	3410	5	46
24	15700	5	212	5110	16	221	2900	12	94
25	17000	5	229	7970	8	172	2010	12	65
26	17500	5	236	10700	18	520	3360	7	64
27	18800	8	406	9310	10	251	3210	6	52
28	27800	67	5030	7720	12	250	2900	11	86
29	35200	77	7320	9030	11	268	3100	10	84
30	30300	30	2450	11300	13	397	3260	4	35
31	---	---	---	11600	10	313	---	---	---
TOTAL	538900	---	25943	330730	---	8870	150460	---	3988
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
1	2770	5	37	3360	5	45	4650	5	63
2	3000	5	40	3320	6	54	3510	4	38
3	4080	5	55	3510	6	57	2280	3	18
4	3000	8	65	3650	5	49	3000	4	32
5	2720	6	44	2550	9	62	3510	5	47
6	3840	4	41	2460	9	60	5010	11	149
7	3510	3	28	2720	6	44	8700	20	470
8	2510	3	20	2650	4	29	9240	16	399
9	2100	5	28	3060	6	50	7220	8	156
10	3460	6	56	2720	4	29	5490	7	104
11	3360	5	45	3060	6	50	5920	7	112
12	3360	5	45	2100	8	45	5370	7	101
13	3560	4	38	2050	5	28	4850	5	65
14	1960	3	16	3460	5	47	4810	5	65
15	1640	4	18	3510	5	47	4700	7	89
16	2140	6	35	3210	5	43	4760	7	90
17	3930	15	159	3210	4	35	4120	7	78
18	3980	11	118	3060	4	33	4560	7	86
19	3060	5	41	2330	5	31	4760	6	77
20	3000	5	40	1850	6	30	4170	2	23
21	2850	5	38	3410	7	64	4030	5	54
22	2010	3	16	3600	6	58	3800	5	51
23	1880	5	25	3410	5	46	3100	3	25
24	2630	5	36	3210	5	43	2820	8	61
25	2900	4	31	2850	4	31	3460	7	65
26	3560	14	135	2140	3	17	3700	9	90
27	4410	10	119	2600	6	42	3360	6	54
28	3700	4	40	3650	4	39	3360	4	36
29	2630	3	21	4120	5	56	3360	5	45
30	2680	5	36	4760	5	64	2100	7	40
31	3410	6	55	4260	5	58	---	---	---
TOTAL	93640	---	1521	95850	---	1386	133720	---	2783

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 (183 m) downstream from Glowegee Creek, 1.0 mi (1.6 km) east of West Milton, and 3.5 mi (5.6 km) northwest of Ballston Spa.

DRAINAGE AREA.--90.1 mi² (233.4 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 376.06 ft (114.623 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter periods, which are poor. Slight occasional diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--52 years, 137 ft³/s (3.880 m³/s), 20.67 in/yr (525 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,710 ft³/s (133 m³/s) Mar. 18, 1936, gage height, 10.78 ft (3.286 m), from floodmarks; maximum gage height, 11.20 ft (3.414 m) Mar. 14, 1977, from floodmarks; minimum discharge, 6.1 ft³/s (0.17 m³/s) Aug. 23, 1927, gage height, 0.86 ft (0.262 m); minimum daily, 12 ft³/s (0.34 m³/s) Aug. 5-9, Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 7	1115	ice jam	*6.18 1.884	Mar. 25	1000	*1,470 41.6	5.73 1.747

Minimum discharge, 26 ft³/s (0.74 m³/s) Aug. 10, gage height, 1.29 ft (0.393 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	63	62	151	120	170	495	235	172	62	39	36
2	31	59	58	628	110	230	538	203	137	67	39	33
3	31	59	62	737	110	300	747	185	121	57	61	55
4	34	57	79	660	100	400	479	243	106	48	47	48
5	47	55	95	540	94	800	460	203	99	45	37	40
6	190	53	83	440	90	1200	424	168	110	43	35	316
7	166	53	80	320	88	1400	356	154	95	42	33	386
8	93	59	92	240	84	1100	302	145	89	38	31	150
9	74	59	183	200	82	700	292	139	90	37	28	96
10	63	54	140	150	78	430	321	129	91	36	32	76
11	60	53	100	110	74	390	402	121	128	38	45	67
12	54	52	88	88	72	320	396	112	172	38	47	54
13	54	51	80	84	70	290	370	114	114	37	56	51
14	122	51	78	100	68	270	526	118	91	33	44	50
15	158	55	74	130	66	260	549	107	79	33	40	71
16	102	52	72	110	64	244	405	109	71	51	37	59
17	81	54	70	100	62	217	354	100	65	270	33	52
18	72	164	90	90	60	208	311	93	62	93	37	46
19	68	136	140	84	58	224	274	92	61	69	61	43
20	73	96	170	80	58	275	245	92	56	53	51	40
21	67	80	180	120	58	395	228	89	53	45	43	42
22	63	69	179	400	58	574	215	84	52	43	37	53
23	61	60	119	300	58	699	205	81	59	41	33	48
24	63	71	91	200	90	855	191	297	55	38	32	42
25	60	75	93	230	150	1360	175	619	52	47	35	40
26	65	64	105	350	140	967	175	448	49	109	39	40
27	130	86	95	280	130	534	354	260	45	146	69	37
28	103	70	88	230	130	372	684	268	46	67	82	37
29	81	67	84	200	---	359	452	261	62	56	55	63
30	71	66	80	150	---	420	304	337	56	48	47	59
31	66	---	80	130	---	472	---	252	---	42	40	---
TOTAL	2434	2043	3090	7632	2422	16435	11229	5858	2538	1872	1345	2230
MEAN	78.5	68.1	99.7	246	86.5	530	374	189	84.6	60.4	43.4	74.3
MAX	190	164	183	737	150	1400	747	619	172	270	82	386
MIN	31	51	58	80	58	170	175	81	45	33	28	33
CFSM	.87	.76	1.11	2.73	.96	5.88	4.15	2.10	.94	.67	.48	.83
IN.	1.00	.84	1.28	3.15	1.00	6.79	4.64	2.42	1.05	.77	.56	.92
CAL YR 1978	TOTAL	48330	MEAN 132	MAX	855	MIN 21	CFSM 1.47	IN 19.95				
WTR YR 1979	TOTAL	59128	MEAN 162	MAX	1400	MIN 28	CFSM 1.80	IN 24.41				

01331095 HUDSON RIVER AT STILLWATER, NY

LOCATION.--Lat 42°56'16", long 73°39'04" at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on State Highway 67 in Stillwater, 0.4 mi (0.6 km) upstream from Champlain (Barge) Canal lock 4, and 0.9 mi (1.4 km) upstream from Hoosic River.

DRAINAGE AREA.--3,773 mi² (9,772 km²).

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

CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c).

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

PESTICIDE DATA: 1977-79 (e).

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

PCB--1977-79 (e).

PCN--1977-79 (e).

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

SEDIMENT DATA: 1977 (d), 1978 (a).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

REMARKS.--Water-stage recorder installed Jan. 8, 1978. Water-discharge records are good. Streamflow affected by regulation for power generation and diversion for canal operations. No sediment data Feb. 12-22, 24-Mar. 4 due to ice cover.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 189 mg/L Jan. 4, 1979; minimum daily mean, 1 mg/L on several days each year.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,600 tons (9,620 Mg) Apr. 29, 1979; minimum daily 7.5 (6.8 Mg) July 10, 1978.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 189 mg/L Jan. 4; minimum daily mean, 1 mg/L on several days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,600 tons (9,620 Mg) Apr. 29; minimum daily, 7.8 tons (7.1 Mg) Nov. 13.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDE (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)
OCT								
23...	1530	3900	8	6	600	9	10	.4
NOV								
09...	1245	4700	1	0	270	11	30	.3
DEC								
06...	0915	4650	3	0	250	75	40	.2
JAN								
03...	0800	14900	104	10	3900	20	170	.1
24...	1215	6840	15	13	280	20	40	.0
FEB								
23...	1415	5300	4	0	200	2	30	.2
MAR								
05...	0930	17400	137	9	5100	5	150	.1
06...	1400	27000	168	14	6200	26	270	.4
07...	0645	29900	121	5	4000	8	170	.3
08...	0800	26500	65	4	2000	12	100	.4
26...	1215	30700	87	21	2300	11	140	5.1
27...	1245	25700	20	5	1100	9	80	.6
APR								
12...	1145	14800	5	0	450	3	10	.2
24...	1015	16600	5	3	210	7	20	.1
29...	1245	39300	78	8	1800	12	90	1.9
30...	1330	32200	60	10	830	3	60	.6
MAY								
08...	1315	12600	35	8	460	2	20	.0
17...	1030	8150	15	3	280	1	40	.3
25...	0945	7940	42	11	1000	5	60	.1
JUN								
07...	1030	6870	6	2	280	16	30	.2
21...	1115	3950	14	9	320	2	20	.7
25...	1030	1390	10	3	430	3	10	.8
JUL								
05...	1630	3500	11	0	330	6	30	.7
16...	0645	1660	4	4	240	0	30	.6
23...	1100	1330	2	2	250	11	30	.6
AUG								
06...	1145	2740	12	5	180	3	20	.6
09...	1015	2920	2	1	440	3	30	.7
13...	0815	1710	4	2	250	0	40	.6
20...	0845	1450	7	5	270	1	40	.5
20...	1245	2180	3	1	270	0	40	.5
21...	0845	3700	7	6	300	0	40	.6
21...	1230	3800	6	5	270	1	40	.4
23...	0815	3550	2	2	180	4	20	.6
27...	0745	1880	2	2	200	7	40	.7
SEP								
04...	0645	2650	4	3	--	--	--	.6

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

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WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

HUDSON RIVER BASIN

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	1960	26	138	4950	14	187	4480	4	48
2	1840	10	50	5100	20	275	4340	4	47
3	3180	7	60	4790	7	91	3180	5	43
4	3340	15	135	4690	1	13	2700	6	44
5	3750	3	30	3500	1	9.5	4380	4	47
6	3950	7	75	3850	1	10	4950	3	40
7	4140	18	201	3750	1	10	5100	2	28
8	3750	46	466	4340	1	12	5370	3	43
9	2880	33	257	4840	6	78	5820	7	110
10	4140	83	928	4590	2	25	5100	7	96
11	4000	26	281	4340	2	23	4530	7	86
12	3800	4	41	2970	1	8.0	4790	4	52
13	3850	4	42	2880	1	7.8	5000	15	202
14	3850	6	62	4290	11	127	5320	4	57
15	4340	7	82	4140	6	67	5370	4	58
16	5210	7	98	3850	6	62	4840	8	105
17	6100	8	132	3900	5	53	3750	7	71
18	6220	7	118	4380	4	47	4000	6	65
19	5760	13	202	4240	6	69	4090	19	210
20	5430	12	176	3700	10	100	4040	30	327
21	5050	4	55	5160	30	418	4530	12	147
22	3600	4	39	5000	11	148	4740	21	269
23	3280	6	53	4890	5	66	4840	17	222
24	4890	10	132	4340	15	176	3650	2	20
25	4840	9	118	4640	11	138	2790	7	53
26	4690	6	76	3450	6	56	3550	21	201
27	5100	4	55	2740	6	44	4690	34	431
28	5710	1	15	3800	5	51	4690	11	139
29	4240	4	46	3950	4	43	4480	15	181
30	4140	6	67	4340	4	47	4290	5	58
31	4890	1	13	---	---	---	3390	4	37
TOTAL	131920	---	4243	125400	---	2461.3	136790	---	3537
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	4000	51	551	6400	3	52	5820	---	---
2	11100	70	2100	6050	5	82	7070	---	---
3	14600	79	3110	5760	4	62	7900	---	---
4	11600	189	5920	4590	5	62	8700	---	---
5	11000	50	1490	4340	7	82	17400	96	4510
6	9190	6	149	5370	8	116	26200	97	6860
7	7700	8	166	5370	6	87	27600	105	7820
8	6880	6	111	5260	10	142	23500	47	2980
9	8160	5	110	5370	6	87	18700	28	1410
10	7130	9	173	5160	10	139	16600	23	1030
11	6520	7	123	4190	21	238	16500	26	1160
12	5820	38	597	4040	14	153	14300	11	425
13	5820	40	629	4950	---	---	11600	11	345
14	5210	24	338	4890	---	---	11600	27	846
15	5710	14	216	4950	---	---	11300	7	214
16	5880	10	159	5000	---	---	10200	6	165
17	5210	10	141	5000	---	---	8840	5	119
18	5260	10	142	4900	---	---	8360	5	113
19	5690	10	154	2100	---	---	7760	5	105
20	5980	10	161	5100	---	---	7570	6	123
21	5750	10	155	5160	---	---	7760	5	105
22	6040	10	163	5320	---	---	7830	4	85
23	5980	18	291	5320	4	57	10000	3	81
24	6470	10	175	6220	---	---	12900	14	488
25	7070	8	153	5930	---	---	17600	19	903
26	7320	8	158	5100	---	---	28700	77	5970
27	7640	15	309	5880	---	---	25900	44	3080
28	7070	5	95	5930	---	---	19900	16	860
29	6520	3	53	---	---	---	18900	9	459
30	7190	4	78	---	---	---	18300	7	346
31	6820	6	110	---	---	---	17700	8	382
TOTAL	222330	---	18280	143650	---	1359	453010	---	40984

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	19600	9	476	27200	16	1180	11600	9	282
2	21600	9	525	23800	9	578	10300	7	195
3	24500	9	595	21200	9	515	8700	6	141
4	25500	12	826	20000	8	432	6460	8	140
5	23000	8	497	19400	12	629	7510	10	203
6	21100	5	285	18900	8	408	6940	22	412
7	18800	5	254	18100	8	391	6580	12	213
8	16800	3	136	12800	7	242	6220	15	252
9	15700	5	212	10700	9	260	5710	9	139
10	15300	4	165	9980	7	189	5000	15	202
11	15500	5	209	9260	5	125	4530	11	135
12	14300	3	116	9050	7	171	6280	15	254
13	13400	5	181	8500	38	872	6280	10	170
14	13700	4	148	6400	19	328	5820	10	157
15	14700	3	119	7070	5	95	5370	15	217
16	14600	6	237	7130	6	116	5430	15	220
17	13900	7	263	6880	5	93	3340	8	72
18	14000	5	189	6520	5	88	2740	7	52
19	15100	6	245	6520	5	88	4480	7	85
20	15200	6	246	5100	6	83	4430	4	48
21	14900	6	241	4040	6	65	4090	4	44
22	14900	7	282	4890	5	66	3650	4	39
23	15800	6	256	5000	5	67	3550	3	29
24	16300	5	220	5320	7	101	3020	3	24
25	17700	7	335	8290	21	470	2090	7	40
26	18200	23	1130	11100	11	330	3500	3	28
27	19600	40	2120	9690	11	288	3340	5	45
28	28900	50	3900	8030	8	173	3020	4	33
29	36600	107	10600	9400	14	355	3230	4	35
30	31500	40	3400	11800	27	860	3390	3	27
31	---	---	---	12100	13	425	---	---	---
TOTAL	560700	---	28408	344170	---	10083	156600	---	3933
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	2880	5	39	3500	10	94	4840	5	65
2	3120	5	42	3450	7	65	3650	8	79
3	4240	5	57	3650	5	49	2370	14	90
4	3120	6	51	3800	6	62	3120	12	101
5	2830	4	31	2650	5	36	3650	10	99
6	4000	5	54	2560	8	55	5210	5	70
7	3650	5	49	2830	11	84	9050	10	244
8	2610	4	28	2760	6	45	9610	36	934
9	2180	3	18	3180	5	43	7510	24	487
10	3600	8	78	2830	5	38	5710	14	216
11	3500	14	132	3180	5	43	6160	8	133
12	3500	9	85	2180	9	53	5590	5	75
13	3700	5	50	2130	7	40	5050	7	95
14	2040	3	17	3600	6	58	5000	8	108
15	1710	3	14	3650	7	69	4890	6	79
16	2230	4	24	3340	6	54	4950	5	67
17	4090	8	88	3340	7	63	4290	7	81
18	4140	7	78	3180	7	60	4740	48	614
19	3180	16	137	2420	11	72	4950	18	241
20	3120	11	93	1920	7	36	4340	11	129
21	2970	4	32	3550	5	48	4190	8	91
22	2090	4	23	3750	5	51	3950	3	32
23	1960	3	16	3550	5	48	3230	5	44
24	2740	4	30	3340	3	27	2930	11	87
25	3020	4	33	2970	5	40	3600	7	68
26	3700	5	50	2230	5	30	3850	4	42
27	4590	26	322	2700	6	44	3500	3	28
28	3850	23	239	3800	3	31	3500	5	47
29	2740	15	111	4290	7	81	3500	4	38
30	2790	10	75	4950	10	134	2180	4	24
31	3550	8	77	4430	7	84	---	---	---
TOTAL	97440	---	2173	99710	---	1737	139110	---	4508

HUDSON RIVER BASIN

01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'01", long 73°09'34", Berkshire County, Hydrologic Unit 02020003, on left bank 0.3 mi (0.5 km) downstream from Sherman Brook and 2.7 mi (4.3 km) east of junction of U.S. Highway 7 and State Highway 2 in Williamstown.

DRAINAGE AREA.--126 mi² (326 km²). Area at site used prior to June 6, 1979, 132 mi² (342 km²).

PERIOD OF RECORD.--Discharge: July 1940 to current year.

Water-quality records: Water years 1953-54, 1957-58, 1967-69.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 616.11 ft (187.790 m), Corps of Engineers datum. Prior to June 6, 1979, at site 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records good except those for October to December and February (no gage-height record during most of each of these months), which are fair. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 16 mi (26 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 277 ft³/s (7.845 m³/s), 28.50 in/yr (724 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 31, 1948, gage height, 14.85 ft (4.526 m), former site and datum, from rating curve extended above 4,300 ft³/s (120 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5.8 ft³/s (0.16 m³/s) Aug. 30, 31, Oct. 26, 1940; minimum daily, 25 ft³/s (0.71 m³/s) Sept. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	2045	4350 123	7.65 2.332	May 25	1600	2840 80.4	6.06 1.847
Mar. 7	0045	a*5970 169	9.21 2.807	Sept. 6	1730	2740 77.6	8.45 2.576
Mar. 25	0745	3660 104	6.95 2.118				

a From rating curve extended above 2,700 ft³/s (76 m³/s) on basis of slope-area measurements at gage heights 11.80 ft (3.597 m) and 13.02 ft (3.968 m).

Minimum discharge, 34 ft³/s (0.96 m³/s) July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	130	98	508	210	214	1390	500	316	73	79	67
2	56	120	95	3050	200	226	1040	386	271	99	76	61
3	52	110	83	1920	200	214	1010	325	248	79	73	219
4	60	100	155	759	200	263	828	487	229	64	70	133
5	80	98	230	582	190	1050	820	355	217	52	64	92
6	120	95	165	462	180	3110	692	277	190	52	55	1190
7	100	92	150	370	175	3340	565	255	158	55	52	876
8	72	135	190	1310	170	1410	483	223	146	61	55	323
9	62	120	634	779	165	977	474	207	141	49	55	209
10	58	105	420	513	160	991	453	184	137	49	64	158
11	60	98	270	424	150	1570	454	172	133	49	82	129
12	56	94	220	391	145	961	495	165	200	47	86	110
13	56	87	217	353	140	749	515	170	150	44	167	103
14	150	90	200	324	135	888	536	190	133	44	96	141
15	210	90	175	334	135	786	526	170	121	41	96	348
16	120	92	165	321	135	609	650	160	114	82	89	172
17	90	98	160	289	130	573	632	146	99	612	76	133
18	76	160	130	266	130	525	590	133	89	244	73	117
19	76	140	125	230	130	534	529	133	82	176	114	129
20	115	120	130	220	130	520	505	125	79	106	103	106
21	92	115	190	300	130	606	528	121	86	86	86	181
22	78	105	235	515	130	809	554	110	73	106	73	1170
23	72	100	180	292	130	1100	623	107	70	82	64	487
24	80	115	155	240	400	1440	625	785	70	92	61	288
25	74	130	180	454	548	2970	550	2120	67	103	70	214
26	150	84	165	322	344	1540	500	1500	67	121	73	181
27	659	88	150	261	251	946	853	756	64	255	64	154
28	270	94	140	250	219	722	874	545	64	133	64	137
29	190	96	130	240	---	668	1060	592	79	103	61	204
30	160	100	130	226	---	796	651	466	67	89	70	176
31	140	---	130	220	---	1080	---	411	---	82	79	---
TOTAL	3686	3201	5797	16725	5362	32187	20005	12276	3960	3330	2390	8008
MEAN	119	107	187	540	192	1038	667	396	132	107	77.1	267
MAX	659	160	634	3050	548	3340	1390	2120	316	612	167	1190
MIN	52	84	83	220	130	214	453	107	64	41	52	61
CFSM	.90	.81	1.42	4.09	1.46	7.86	5.05	3.00	1.03	.85	.61	2.12
IN.	1.04	.90	1.63	4.71	1.51	9.07	5.64	3.46	1.15	.98	.71	2.36

CAL YR 1978 TOTAL 86500 MEAN 237 MAX 2500 MIN 50 CFSM 1.80 IN 24.38
WTR YR 1979 TOTAL 116927 MEAN 320 MAX 3340 MIN 41 CFSM 2.44 IN 33.17

HUDSON RIVER BASIN

65

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 (0.2 km) upstream from bridge on State Highway 2 at Williamstown and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--42.6 mi² (110.3 km²).

PERIOD OF RECORD.--Discharge: September 1949 to current year.

Water-quality records: Water years 1967-69.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (187 m), from topographic map.

REMARKS.--Records good except those for winter period and period of no gage-height record, July 28 to Sept. 6, which are poor. Slight diurnal fluctuation at times caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--30 years, 84.4 ft³/s (2.390 m³/s), 26.91 in/yr (684 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft³/s (115 m³/s) Dec. 21, 1973, gage height, 5.68 ft (1.731 m) in gage well, from rating curve extended above 750 ft³/s (21 m³/s) on basis of slope-area measurement at gage height 4.94 ft (1.506 m); maximum gage height, 6.35 ft (1.935 m) Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft³/s (0.088 m³/s) Sept. 20, 22, 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft (2.3 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft³/s (24 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1730	a2180 61.7	4.61 1.405	May 25	1500	1100 31.2	3.78 1.152
Mar. 6	1730	a*2740 77.6	4.95 1.509				

a From rating curve extended as explained above.

Minimum discharge, 4.0 ft³/s (0.11 m³/s) Aug. 10, based on minimum-stage indicator.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	33	23	290	77	78	299	170	116	27	10	12
2	11	30	22	1610	72	85	241	150	100	28	10	10
3	8.7	28	21	777	72	88	226	137	89	21	10	56
4	10	26	39	313	74	198	189	152	81	18	8.0	35
5	16	25	44	205	71	1210	198	127	77	18	7.0	23
6	28	24	36	168	64	2240	167	113	74	17	6.0	290
7	21	23	34	160	62	1410	150	102	65	16	5.3	120
8	17	29	41	477	60	609	131	94	60	15	4.8	56
9	15	25	125	211	58	376	134	87	56	14	4.4	40
10	14	24	97	164	54	483	126	81	54	13	5.0	32
11	13	23	75	125	50	630	136	74	62	12	7.0	27
12	13	23	66	108	47	360	142	69	63	12	11	23
13	13	21	61	127	45	273	136	72	51	11	35	21
14	40	21	56	132	43	355	161	72	47	9.8	20	41
15	42	21	49	97	41	245	164	65	43	10	22	77
16	29	20	46	80	39	195	195	60	40	13	21	41
17	24	21	51	78	38	170	195	55	37	37	18	34
18	22	29	40	75	36	155	173	53	35	31	17	29
19	21	25	32	68	36	150	155	51	33	25	30	35
20	26	24	33	145	36	150	144	49	31	17	25	27
21	22	23	62	215	37	164	134	47	29	17	20	72
22	20	23	51	238	39	185	129	45	27	22	17	313
23	20	23	46	115	45	241	134	44	27	15	15	144
24	21	26	42	98	160	331	139	192	26	19	13	97
25	19	27	45	332	137	623	131	630	25	18	15	77
26	35	20	42	159	87	408	136	375	23	26	18	63
27	151	18	39	121	69	265	223	220	22	30	15	53
28	69	25	37	109	67	202	219	191	22	17	13	48
29	51	23	35	99	---	189	336	201	21	13	13	58
30	42	24	35	89	---	198	205	155	20	12	15	47
31	37	---	35	83	---	257	---	137	---	11	15	---
TOTAL	878.6	727	1460	7068	1716	12523	5248	4070	1456	564.8	445.5	2001
MEAN	28.3	24.2	47.1	228	61.3	404	175	131	48.5	18.2	14.4	66.7
MAX	151	33	125	1610	160	2240	336	630	116	37	35	313
MIN	7.9	18	21	68	36	78	126	44	20	9.8	4.4	10
CFSM	.66	.57	1.11	5.35	1.44	9.48	4.11	3.08	1.14	.43	.34	1.57
IN.	.77	.63	1.27	6.17	1.50	10.94	4.58	3.55	1.27	.49	.39	1.75
CAL YR 1978	TOTAL	23900.3	MEAN	65.5	MAX	997	MIN	5.9	CFSM	1.54	IN	20.87
WTR YR 1979	TOTAL	38157.9	MEAN	105	MAX	2240	MIN	4.4	CFSM	2.47	IN	33.32

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 (30 m) downstream from highway bridge on dirt road, 1.0 mi (1.6 km) downstream from Petersburg, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--56.1 mi² (145 mi²).

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

REVISED RECORDS.--WSP 1702: 1959.

GAGE.--Water-stage recorder. Datum of gage is 587.40 ft (179.039 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--28 years, 95.7 ft³/s (2.710 m³/s), 23.17 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s (142 m³/s) June 30, 1973, gage height, 9.20 ft (2.804 m); minimum, 1.9 ft³/s (0.054 m³/s) Sept. 11, 12, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of 9.4 ft (2.87 m), from floodmarks, discharge, 7,470 ft³/s (212 m³/s), on basis of contracted-opening measurements of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,250 ft³/s (35 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1415	1,740 49.3	6.08 1.853	Mar. 6	2045	*2,880 81.6	*7.41 2.259

Minimum discharge 4.4 ft³/s (0.12 m³/s) Oct. 4, gage height 1.88 ft (0.573 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	22	15	200	110	92	172	162	109	17	10	6.7
2	4.6	20	14	1300	100	110	162	144	95	17	9.8	6.4
3	4.6	18	15	560	96	130	155	133	86	14	9.2	17
4	4.8	17	30	310	90	279	140	142	78	13	8.9	12
5	5.5	16	42	210	86	1290	153	127	70	13	8.6	8.9
6	7.7	15	32	180	84	1930	144	114	65	12	8.3	165
7	6.9	14	29	160	80	1290	131	107	55	12	7.7	94
8	6.0	18	36	330	78	613	120	99	48	11	7.7	46
9	5.5	17	121	220	74	422	121	91	45	11	7.4	31
10	5.5	15	96	200	72	408	121	84	42	10	7.7	24
11	5.5	14	84	170	70	531	127	78	58	9.8	8.0	21
12	5.3	14	72	150	66	369	155	69	70	9.5	11	17
13	6.0	13	62	140	64	298	172	67	47	9.5	13	16
14	21	12	56	130	60	306	201	69	39	9.2	11	26
15	23	12	52	130	58	244	228	60	35	9.2	11	49
16	12	12	50	120	56	201	258	52	30	9.5	9.5	27
17	9.2	12	50	115	54	180	275	47	27	19	8.6	22
18	8.3	17	52	115	52	160	241	43	25	14	8.9	19
19	8.0	17	58	110	50	144	210	41	23	12	10	21
20	9.8	14	78	110	48	137	185	39	21	10	9.8	18
21	8.6	14	120	270	46	137	167	36	19	9.8	8.6	43
22	7.7	14	100	200	45	142	150	35	18	11	8.0	244
23	8.0	14	82	120	54	155	137	34	18	9.5	7.7	139
24	10	15	64	110	90	182	127	121	17	23	7.4	97
25	8.6	16	56	340	80	265	118	369	16	14	8.3	76
26	19	17	48	210	72	265	110	318	15	30	8.0	60
27	121	31	41	160	68	198	123	210	15	33	7.7	48
28	58	20	69	140	80	162	144	165	14	16	7.2	43
29	38	14	90	120	---	153	222	165	14	13	7.4	67
30	30	15	140	110	---	146	180	142	13	12	7.4	49
31	25	---	100	110	---	146	---	133	---	11	6.9	---
TOTAL	497.7	479	1954	6850	1983	11085	4949	3496	1227	424.0	270.7	1513.0
MEAN	16.1	16.0	63.0	221	70.8	358	165	113	40.9	13.7	8.73	50.4
MAX	121	31	140	1300	110	1930	275	369	109	33	13	244
MIN	4.6	12	14	110	45	92	110	34	13	9.2	6.9	6.4
CFSM	.29	.29	1.12	3.94	1.26	6.38	2.94	2.01	.73	.24	.16	.90
IN.	.33	.32	1.30	4.54	1.31	7.35	3.28	2.32	.81	.28	.18	1.00

CAL. YR 1978 TOTAL 22930.1 MEAN 62.8 MAX 961 MIN 4.6 CFSM 1.12 IN 15.20
WTR YR 1979 TOTAL 34728.4 MEAN 95.1 MAX 1930 MIN 4.6 CFSM 1.70 IN 23.03

HUDSON RIVER BASIN

67

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.

DRAINAGE AREA.--111 mi² (287 km²).

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. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records good except those for winter period, 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. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--48 years, 223 ft³/s (6.315 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft³/s (239 m³/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft³/s (79 m³/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft³/s (0.1 m³/s) Sept. 27, 1932; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 22, 23, 1964, July 12, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1915	2730 77.3	6.55 1.996	Mar. 25	0545	2410 68.3	6.14 1.871
Mar. 6	2215	*3430 97.1	7.40 2.256	Sept. 6	1715	3300 93.5	7.21 2.198

Minimum discharge, 35 ft³/s (0.99 m³/s) Oct. 5; minimum daily, 42 ft³/s (1.19 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	136	75	371	192	189	1130	432	225	114	65	58
2	44	123	74	2110	178	209	758	360	210	130	60	54
3	42	114	69	1160	162	216	659	328	200	105	84	287
4	43	107	123	517	145	312	556	385	190	86	63	133
5	59	102	178	375	145	1250	518	320	180	78	55	92
6	110	97	120	300	145	2260	450	277	170	74	59	1300
7	102	92	102	270	140	2150	381	251	152	68	63	801
8	71	120	138	673	140	1020	336	233	135	65	60	333
9	62	118	381	448	140	692	332	212	130	59	57	208
10	56	104	268	320	140	607	332	199	127	58	73	161
11	54	92	176	255	140	999	328	189	144	56	65	134
12	52	86	151	210	135	633	332	173	216	54	88	116
13	54	83	149	246	135	486	340	186	158	53	150	105
14	201	81	136	265	135	537	348	192	130	49	117	112
15	246	84	124	235	135	509	336	170	112	48	109	316
16	131	79	117	200	135	389	432	152	102	61	113	167
17	97	78	123	192	135	352	432	141	95	357	84	127
18	83	140	105	182	130	328	385	133	88	129	74	110
19	82	127	84	170	130	312	372	133	86	110	102	102
20	110	103	84	160	130	312	368	127	78	81	97	98
21	90	95	145	220	130	332	398	135	74	69	77	100
22	83	87	142	421	130	423	468	127	70	66	67	495
23	83	85	120	305	130	581	581	509	72	63	63	284
24	113	90	106	228	250	878	692	1320	74	81	56	180
25	89	91	105	663	400	1940	670	878	70	91	62	141
26	129	79	109	456	292	1070	670	472	65	93	67	122
27	876	66	102	348	230	627	1130	385	63	176	98	110
28	355	81	97	295	196	472	932	537	100	109	122	102
29	226	81	94	261	---	428	902	377	176	85	81	316
30	174	79	94	227	---	703	566	320	107	72	74	223
31	150	---	98	205	---	968	---	262	---	75	66	---
TOTAL	4110	2900	3989	12288	4625	22184	16134	9915	3799	2815	2471	6887
MEAN	133	96.7	129	396	165	716	538	320	127	90.8	79.7	230
MAX	876	140	381	2110	400	2260	1130	1320	225	357	150	1300
MIN	42	66	69	160	130	189	328	127	63	48	55	54

CAL YR 1978 TOTAL 67711 MEAN 186 MAX 2000 MIN 33
WTR YR 1979 TOTAL 92117 MEAN 252 MAX 2260 MIN 42

HUDSON RIVER BASIN

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY

LOCATION.--Lat 42°56'19", long 73°22'39", Rensselaer County, Hydrologic Unit 02020003, on right bank 0.5 mi (0.8 km) upstream from Case Brook, 1.2 mi (1.9 km) downstream from Walloomsac River, and 1.2 mi (1.9 km) southeast of Eagle Bridge.

DRAINAGE AREA.--510 mi² (1,321 km²).

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 (108.329 m) National Geodetic Vertical Datum of 1929. Prior to March 1922, nonrecording gage and July 24, 1923 to July 18, 1936, water-stage recorder, at site 0.2 mi (0.3 km) upstream at different datums.

REMARKS.--Records fair except those for winter periods, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants above station.

AVERAGE DISCHARGE.--67 years (1910-21, 1923-79), 948 ft³/s (26.85 m³/s), 25.22 in/yr (641 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,400 ft³/s (1,570 m³/s) Dec. 31, 1948, gage height, 21.15 ft (6.447 m), from highwater mark in gage house, from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of peak flow over downstream dams and contracted-opening measurements at gage heights 17.8 ft (5.42 m) and 21.15 ft (6.447 m); minimum, 24 ft³/s (0.68 m³/s) Sept. 14, 1913; minimum daily, 30 ft³/s (0.85 m³/s) Sept. 14, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,400 ft³/s (210 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0015	14,700 416	11.59 3.533	Mar. 7	0415	*21,000 595	*13.48 4.109
Jan. 11	1400	ice jam	8.88 2.707	Mar. 25	1130	9,010 255	9.36 2.853
Jan. 22	0445	ice jam	9.73 2.966	May 25	2145	7,760 220	8.80 2.682
Jan. 25	1500	15,200 430	11.76 3.584	Sept. 6	2215	7,870 223	8.85 2.697

Minimum discharge, 146 ft³/s (4.13 m³/s) Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	655	491	1660	1300	1400	3990	1680	1300	357	229	180
2	310	613	477	9870	1200	1500	3010	1440	1110	448	213	162
3	310	582	452	9140	1100	1600	2820	1280	984	357	225	489
4	312	554	525	2500	1100	1800	2430	1460	893	285	202	495
5	344	536	851	1900	1000	7580	2360	1300	792	254	180	304
6	441	521	719	1600	1000	13100	2110	1110	770	242	169	2170
7	541	503	640	1500	920	16200	1800	1010	676	229	169	3290
8	419	553	668	2700	880	6630	1590	917	615	217	166	1160
9	375	586	1430	2000	840	4100	1570	846	576	210	159	719
10	359	548	1300	1800	800	3540	1580	777	550	198	166	556
11	352	512	1000	1600	760	5910	1590	711	563	191	194	454
12	347	487	900	1600	740	3740	1730	635	854	183	210	388
13	343	471	840	1500	700	2770	1760	621	635	176	394	347
14	502	466	760	1500	680	3010	1890	683	531	173	342	327
15	905	466	720	1500	660	2900	1930	628	466	169	304	926
16	625	453	660	1500	640	2140	2250	556	437	176	267	595
17	508	443	660	1500	640	1970	2300	507	399	1080	242	448
18	451	588	640	1500	640	1820	2060	466	362	563	206	388
19	434	656	620	1600	640	1700	1870	448	337	550	250	367
20	491	562	660	1700	660	1700	1750	432	318	347	308	357
21	490	525	760	2600	660	1730	1730	415	299	267	246	323
22	442	503	940	5000	660	2100	1780	421	290	259	210	2280
23	426	491	820	3300	680	2660	1860	388	281	254	191	1550
24	481	497	720	2800	700	3630	2020	1210	276	242	176	934
25	462	549	660	10600	1500	7480	1890	5420	267	318	180	711
26	472	493	660	9300	1400	5040	1770	4820	250	308	202	595
27	2010	507	640	2770	1300	2980	2500	2460	238	697	191	519
28	1280	485	620	1790	1300	2260	2770	1830	304	443	272	466
29	929	494	620	1710	---	2050	3100	2200	550	327	206	815
30	781	489	640	1550	---	2350	2130	1740	337	267	194	704
31	701	---	660	1470	---	2920	---	1610	---	246	198	---
TOTAL	17149	15788	22753	93060	25100	120310	63940	40021	16260	10033	6861	23019
MEAN	553	526	734	3002	896	3881	2131	1291	542	324	221	767
MAX	2010	656	1430	10600	1500	16200	3990	5420	1300	1080	394	3290
MIN	306	443	452	1470	640	1400	1570	388	238	169	159	162
CFSM	1.08	1.03	1.44	5.89	1.76	7.61	4.18	2.53	1.06	.64	.43	1.50
IN.	1.25	1.15	1.66	6.79	1.83	8.78	4.66	2.92	1.19	.73	.50	1.68

CAL YR 1978 TOTAL 363164 MEAN 995 MAX 9000 MIN 294 CFSM 1.95 IN 26.49
WTR YR 1979 TOTAL 454294 MEAN 1245 MAX 16200 MIN 159 CFSM 2.44 IN 33.14

HUDSON RIVER BASIN

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01335770 HUDSON RIVER AT WATERFORD, NY

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 (0.6 km) upstream from first branch of Mohawk River, and 2.8 mi (4.5 km) downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,620 mi² (11,966 km²).

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

CHEMICAL DATA: 1975-76 (b), 1977 (c), 1978-79 (d).

MINOR ELEMENTS DATA: 1975-76 (c), 1977-79 (e).

PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e).

ORGANIC DATA: OC--1975-77 (c), 1978 (d), 1979 (c).

PCB--1975 (b), 1976 (d), 1977-79 (e).

PCN--1977-79 (e).

NUTRIENT DATA: 1975-76 (c), 1977-78 (e), 1979 (d).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978 (d), 1979 (e).

SEDIMENT DATA: 1975 (b), 1976-77 (e), 1978 (a), 1979 (b).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--During periods of ice effect, sediment samples collected from intake of Waterford water treatment plant (station 01335769). Water discharge data based on records obtained at site 3.2 mi (5.1 km) upstream. Water-discharge records are poor. Streamflow affected by regulation for power generation and diversion for canal operations.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L March 14, 1977; minimum daily mean, 1 mg/L Dec. 27, 1976, March 2, 6, 1978, Sept. 3, 1979.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons (108,000 Mg) March 14, 1977; minimum daily, 6.4 tons (5.8 Mg) Sept. 3, 1979.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 354 mg/L March 3; minimum daily mean, 1 mg/L Sept. 3.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 42,000 tons (38,100 Mg) March 7; minimum daily, 6.4 tons (5.8 Mg) Sept. 3.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PEN- DED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PEN- DED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DATE	TIME						
MAR							
06...	1000	31500	425	36100	22	33	47
07...	1330	47400	244	31200	24	37	54
07...	2130	42500	214	24600	23	40	57
08...	1700	31800	84	7210	24	37	54
		SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
DATE							1.00 MM
MAR							
06...	63	73	82	87	98	100	--
07...	72	83	92	97	99	100	--
07...	79	92	94	98	100	--	--
08...	73	86	90	95	97	99	100

HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)
OCT												
27...	1000	4410	165	6.8	10.5	5.0	11.6	104	K360	16	3.0	7.0
NOV												
09...	1030	4850	--	--	--	--	--	--	--	--	--	--
28...	1230	3550	160	7.2	2.0	4.0	14.2	100	270	--	--	--
DEC												
06...	0730	5530	--	--	--	--	--	--	--	--	--	--
13...	1130	5620	175	7.0	.5	6.0	14.2	103	1100	--	--	--
JAN												
02...	1315	21500	--	--	--	--	--	--	--	--	--	--
03...	0915	30400	--	--	--	--	--	--	--	--	--	--
23...	1430	16500	140	6.5	.0	14	15.0	103	K600	15	3.8	7.3
FEB												
27...	1300	9200	195	6.4	.0	8.0	14.3	99	K700	--	--	--
MAR												
05...	0815	19200	--	--	--	--	--	--	--	--	--	--
06...	1000	31500	--	--	--	--	--	--	--	--	--	--
06...	1100	31700	--	--	--	--	--	--	--	--	--	--
07...	1330	47400	--	--	--	--	--	--	--	--	--	--
07...	2130	42500	--	--	--	--	--	--	--	--	--	--
08...	1245	34700	--	--	--	--	--	--	--	--	--	--
08...	1700	31800	--	--	--	--	--	--	--	--	--	--
15...	0830	17400	140	6.9	1.0	15	14.4	100	2200	--	--	--
26...	1345	38000	--	--	--	--	--	--	--	--	--	--
27...	0800	31400	--	--	--	--	--	--	--	--	--	--
APR												
12...	1330	16700	--	--	--	--	--	--	--	--	--	--
18...	1300	15400	113	7.5	5.0	3.0	13.0	102	1000	--	--	--
24...	1115	18400	--	--	--	--	--	--	--	--	--	--
29...	1530	39800	--	--	--	--	--	--	--	--	--	--
30...	1445	34900	--	--	--	--	--	--	--	--	--	--
MAY												
08...	1030	5270	--	--	--	--	--	--	--	--	--	--
17...	1130	8750	--	--	--	--	--	--	--	--	--	--
25...	1100	14300	--	--	--	--	--	--	--	--	--	--
JUN												
05...	1330	8920	108	--	20.0	2.0	9.2	101	K200	--	--	--
07...	1130	7560	--	--	--	--	--	--	--	--	--	--
19...	1300	4890	160	7.6	22.0	2.0	9.2	106	K260	--	--	--
21...	1400	3510	--	--	--	--	--	--	--	--	--	--
25...	1330	1640	--	--	--	--	--	--	--	--	--	--
JUL												
05...	1315	2540	--	--	--	--	--	--	--	--	--	--
16...	0815	1720	--	--	--	--	--	--	--	--	--	--
16...	1145	1810	--	--	--	--	--	--	--	--	--	--
19...	1300	3360	180	7.5	26.0	3.0	9.0	105	--	17	3.7	9.5
23...	1230	1860	--	--	--	--	--	--	--	--	--	--
AUG												
02...	1500	3070	172	7.5	29.0	15	8.1	101	3300	--	--	--
06...	1330	2300	--	--	--	--	--	--	--	--	--	--
09...	1215	2800	--	--	--	--	--	--	--	--	--	--
13...	0915	1600	--	--	--	--	--	--	--	--	--	--
20...	0745	1580	--	--	--	--	--	--	--	--	--	--
20...	1415	1790	--	--	--	--	--	--	--	--	--	--
21...	0750	3670	--	--	--	--	--	--	--	--	--	--
21...	1315	3280	--	--	--	--	--	--	--	--	--	--
23...	1245	3320	--	--	--	--	--	--	--	--	--	--
27...	0845	1700	--	--	--	--	--	--	--	--	--	--
SEP												
11...	1300	6410	116	7.5	21.0	5.0	8.9	98	310	--	--	--

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

HUDSON RIVER BASIN

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01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
OCT 27...	.8	34	19	12	98	5	--	.51	.28	.32	.60	1.1
NOV 09...	--	--	--	--	--	2	0	.43	--	--	.59	1.0
28...	--	--	--	--	102	6	--	.33	.28	.26	.54	.87
DEC 06...	--	--	--	--	--	11	3	.43	--	--	.79	1.2
13...	--	--	--	--	98	0	--	.45	.28	.31	.59	1.0
JAN 02...	--	--	--	--	--	170	9	--	--	--	--	--
03...	--	--	--	--	--	156	18	--	--	--	--	--
23...	1.0	37	16	12	99	41	--	.60	.20	.36	.56	1.2
FEB 27...	--	--	--	--	124	16	--	.64	.39	.30	.69	1.3
MAR 05...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	295	27	--	--	--	--	--
07...	--	--	--	--	--	377	20	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	7	1	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	76	21	--	.61	.13	.23	.36	.97
26...	--	--	--	--	--	69	11	--	--	--	--	--
27...	--	--	--	--	--	55	7	--	--	--	--	--
APR 12...	--	--	--	--	--	14	1	--	--	--	--	--
18...	--	--	--	--	66	6	--	.41	.11	.25	.36	.77
24...	--	--	--	--	--	4	2	--	--	--	--	--
29...	--	--	--	--	--	76	9	--	--	--	--	--
30...	--	--	--	--	--	56	6	--	--	--	--	--
MAY 08...	--	--	--	--	--	35	7	--	--	--	--	--
17...	--	--	--	--	--	12	5	--	--	--	--	--
25...	--	--	--	--	--	20	11	--	--	--	--	--
JUN 05...	--	--	--	--	77	6	--	.45	.05	.29	.34	.79
07...	--	--	--	--	--	6	4	--	--	--	--	--
19...	--	--	--	--	111	13	--	.26	.06	.28	.34	.60
21...	--	--	--	--	--	15	10	--	--	--	--	--
25...	--	--	--	--	--	4	1	--	--	--	--	--
JUL 05...	--	--	--	--	--	16	0	--	--	--	--	--
16...	--	--	--	--	--	0	0	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
19...	.8	42	22	12	125	5	--	.60	.10	.49	.59	1.2
23...	--	--	--	--	--	7	5	--	--	--	--	--
AUG 02...	--	--	--	--	199	26	--	.44	.00	.67	.67	1.1
06...	--	--	--	--	--	5	4	--	--	--	--	--
09...	--	--	--	--	--	2	1	--	--	--	--	--
13...	--	--	--	--	--	3	2	--	--	--	--	--
20...	--	--	--	--	--	5	3	--	--	--	--	--
20...	--	--	--	--	--	5	4	--	--	--	--	--
21...	--	--	--	--	--	5	4	--	--	--	--	--
21...	--	--	--	--	--	1	1	--	--	--	--	--
23...	--	--	--	--	--	6	2	--	--	--	--	--
27...	--	--	--	--	--	3	1	--	--	--	--	--
SEP 11...	--	--	--	--	85	5	--	.22	.05	.42	.47	.69

HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT											
27...	.04	0	0	<10	3	330	6	--	<.5	0	0
NOV											
09...	.02	--	--	--	--	670	8	30	--	--	--
28...	.03	1	2	<10	3	360	6	--	<.5	0	50
DEC											
06...	.03	--	--	--	--	370	300	40	--	--	--
13...	.03	1	2	10	2	390	20	--	<.5	0	30
JAN											
02...	--	--	--	--	--	6200	40	320	--	--	--
03...	--	--	--	--	--	6500	30	300	--	--	--
23...	.07	1	0	<10	3	590	2	--	--	--	20
FEB											
27...	.06	3	0	20	5	400	2	--	<.5	--	20
MAR											
05...	--	--	--	--	--	13000	12	380	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	11000	21	410	--	--	--
07...	--	--	--	--	--	9500	20	420	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	3900	6	130	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
15...	.02	2	1	<10	4	800	11	--	<.5	0	60
26...	--	--	--	--	--	2600	11	160	--	--	--
27...	--	--	--	--	--	1700	7	110	--	--	--
APR											
12...	--	--	--	--	--	460	3	30	--	--	--
18...	.02	3	0	10	110	300	10	--	<.5	--	120
24...	--	--	--	--	--	280	5	30	--	--	--
29...	--	--	--	--	--	2000	15	90	--	--	--
30...	--	--	--	--	--	1200	5	70	--	--	--
MAY											
08...	--	--	--	--	--	250	0	20	--	--	--
17...	--	--	--	--	--	290	1	40	--	--	--
25...	--	--	--	--	--	1000	4	70	--	--	--
JUN											
05...	.03	5	0	10	3	360	1	--	<.5	0	20
07...	--	--	--	--	--	350	3	40	--	--	--
19...	.03	2	1	30	6	330	6	--	<.5	--	10
21...	--	--	--	--	--	270	2	40	--	--	--
25...	--	--	--	--	--	210	1	0	--	--	--
JUL											
05...	--	--	--	--	--	270	3	40	--	--	--
16...	--	--	--	--	--	280	10	50	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
19...	.05	3	0	20	7	330	0	--	<.5	--	10
23...	--	--	--	--	--	230	10	40	--	--	--
AUG											
02...	.05	4	0	10	8	1000	4	--	<.5	--	10
06...	--	--	--	--	--	210	2	40	--	--	--
09...	--	--	--	--	--	260	3	30	--	--	--
13...	--	--	--	--	--	240	0	50	--	--	--
20...	--	--	--	--	--	250	6	50	--	--	--
20...	--	--	--	--	--	280	5	50	--	--	--
21...	--	--	--	--	--	280	4	50	--	--	--
21...	--	--	--	--	--	240	4	40	--	--	--
23...	--	--	--	--	--	180	6	20	--	--	--
27...	--	--	--	--	--	170	5	40	--	--	--
SEP											
11...	.04	3	0	20	10	440	0	--	<.5	--	20

HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUORUM (UG/L)
OCT											
27...	--	--	--	--	--	--	--	--	--	1.89	.000
NOV											
09...	.00	.00	.00	.00	.00	.00	.00	.00	0	--	--
28...	--	--	--	--	--	--	--	--	--	2.43	.000
DEC											
06...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
13...	--	--	--	--	--	--	--	--	--	1.16	.000
JAN											
02...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
03...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
23...	--	--	--	--	--	--	--	--	--	1.26	.000
FEB											
27...	--	--	--	--	--	--	--	--	--	.000	.000
MAR											
05...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
07...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
08...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
26...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
27...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
APR											
12...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
18...	--	--	--	--	--	--	--	--	--	.820	.000
24...	.00	.00	.00	.00	.00	.00	.00	.00	0	--	--
29...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
30...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
MAY											
08...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
17...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
25...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
JUN											
05...	--	--	--	--	--	--	--	--	--	2.97	.000
07...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
19...	--	--	--	--	--	--	--	--	--	7.81	.030
21...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUL											
05...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	6.08	.000
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	--	--	--	--	--	--	--	--	--	15.7	.000
06...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	.00	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	1.30	.000

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	1920	5	26	5130	5	69	4600	14	174
2	1700	16	73	5280	16	228	4470	69	833
3	2720	14	103	4900	36	476	3600	29	282
4	2960	12	96	4720	19	242	2730	4	29
5	3330	11	99	3600	5	49	4540	7	86
6	3560	7	67	3410	11	101	5650	9	137
7	3800	4	41	3880	11	115	5470	9	133
8	4090	8	88	4190	10	113	5760	8	124
9	2520	14	95	4810	8	104	6460	5	87
10	3700	9	90	4510	8	97	6350	9	154
11	3650	10	99	4340	8	94	5080	17	233
12	3440	2	19	3340	6	54	5320	19	273
13	3570	11	106	2740	19	141	5720	15	232
14	3660	8	79	4180	13	147	5840	12	189
15	4440	11	132	4240	14	160	10400	11	309
16	5190	9	126	3820	16	165	6840	9	166
17	6130	10	166	3280	12	106	6700	19	344
18	5960	11	177	4160	11	124	6470	17	297
19	5580	8	121	4360	12	141	6620	8	143
20	5480	13	192	3600	14	136	6840	8	148
21	4940	14	187	5280	14	200	7240	8	156
22	3670	8	79	5310	20	287	7110	6	115
23	2990	9	73	4980	52	699	6840	9	166
24	4820	10	130	4480	156	1890	5760	15	233
25	4750	10	128	4700	132	1680	4230	12	137
26	4600	9	112	3800	57	585	5270	9	128
27	5550	13	195	2790	15	113	7110	8	154
28	7650	11	227	3650	13	128	7190	8	155
29	5430	8	117	3860	12	125	6840	5	92
30	4050	8	87	4300	8	93	6810	6	110
31	5200	7	98	---	---	---	5310	14	201
TOTAL	131050	---	3428	125640	---	8662	185170	---	6020
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	5420	28	410	10300	12	334	9210	16	398
2	18300	155	7660	9720	12	315	10100	113	3080
3	29500	243	19400	9620	11	286	12400	354	11900
4	20200	254	13900	8440	10	228	14100	62	2360
5	16600	157	7040	8290	9	201	32000	280	24200
6	13400	38	1370	9570	9	233	41800	339	38300
7	12200	10	329	10100	8	218	53800	289	42000
8	10800	59	1720	9620	8	208	37400	122	12300
9	14200	70	2680	10000	3	81	26600	76	5460
10	12100	12	392	6490	3	53	22300	33	1990
11	10600	7	200	5590	3	45	24400	50	3290
12	8890	7	168	4460	3	36	20500	43	2380
13	8950	7	169	5900	3	48	16000	26	1120
14	8750	8	189	6010	5	81	15200	20	821
15	7880	8	170	6000	30	486	15700	23	975
16	8940	9	217	6100	6	99	12900	22	766
17	6150	9	149	6200	6	100	11200	13	393
18	6240	6	101	5760	5	78	10400	8	225
19	6060	6	98	2380	2	13	9620	8	208
20	5890	5	80	5920	5	80	9480	8	205
21	6060	6	98	6600	3	53	9720	7	184
22	9880	9	240	7100	11	211	10300	12	334
23	13300	30	1080	7000	3	57	12700	15	514
24	10900	26	765	8480	5	114	17100	30	1390
25	10800	26	758	10100	9	245	19800	100	5350
26	13800	25	931	9120	10	246	37300	108	10900
27	14000	24	907	9260	5	125	30400	50	4100
28	12000	21	680	9200	5	124	22600	26	1590
29	10500	20	567	---	---	---	20900	48	2710
30	10900	20	589	---	---	---	20600	22	1220
31	10800	18	525	---	---	---	20800	16	899
TOTAL	354010	---	63582	213330	---	4398	627330	---	181562

HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	23800	17	1090	32600	23	2020	14100	17	647
2	25400	19	1300	28800	20	1560	12400	14	469
3	28200	41	3120	25700	16	1110	10300	16	445
4	28000	22	1660	24300	19	1250	7470	6	121
5	26000	14	983	23200	16	1000	8300	8	179
6	23900	4	258	21900	9	532	7970	7	151
7	21100	10	570	20000	13	702	7470	5	101
8	18800	15	761	14200	12	460	6990	5	94
9	17600	16	760	12200	7	231	6000	16	259
10	17300	17	794	10800	6	175	5390	8	116
11	17600	19	903	10100	8	218	5070	7	96
12	16600	15	672	10100	11	300	7380	11	219
13	15800	15	640	9320	14	352	7000	10	189
14	16400	14	620	6920	16	299	6270	9	152
15	18300	14	692	7910	20	427	5390	7	102
16	19500	11	579	7370	10	199	5680	6	92
17	20800	13	730	7460	6	121	3170	6	51
18	14900	8	322	7020	6	114	2900	5	39
19	16800	8	363	7030	7	133	4610	5	62
20	16500	8	356	5220	7	99	4320	5	58
21	15500	8	335	4190	5	57	3950	6	64
22	15000	10	405	5050	5	68	3590	5	48
23	17800	11	529	5000	5	67	3540	7	67
24	18900	9	459	6240	8	135	2960	5	40
25	21400	15	867	14200	27	1040	2220	4	24
26	21800	9	530	18500	48	2400	3400	6	55
27	24600	10	664	13400	20	724	3160	5	43
28	34900	33	3110	10500	12	340	2900	5	39
29	39700	92	9860	13000	12	421	3330	6	54
30	36000	65	6320	15600	22	927	3490	11	104
31	---	---	---	15300	22	909	---	---	---
TOTAL	648900	---	40252	413130	---	18390	170720	---	4180
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	2740	11	81	3250	7	61	4470	5	60
2	3170	5	43	3100	20	167	3800	2	21
3	4300	5	58	3250	6	53	2360	1	6.4
4	3100	5	42	3390	4	37	3170	4	34
5	2650	8	57	2650	5	36	3640	5	49
6	3880	7	73	2420	5	33	4670	14	177
7	3390	4	37	3010	7	57	12700	60	2060
8	2860	4	31	2980	4	32	11400	38	1170
9	2080	5	28	2880	4	31	9450	16	408
10	3180	6	52	2650	6	43	6590	15	267
11	3350	7	63	2770	4	30	6080	10	164
12	2970	5	40	2350	5	32	6070	6	98
13	3360	11	100	2120	7	40	5340	10	144
14	2210	3	18	3640	6	59	4770	10	129
15	1770	3	14	3410	9	83	5080	10	137
16	2070	3	17	3230	7	61	5610	8	121
17	4300	16	186	3140	7	59	4360	7	82
18	4600	14	174	2940	6	48	4930	7	93
19	3350	16	145	2550	6	41	4900	7	93
20	3150	5	43	2100	5	28	4200	8	91
21	2990	5	40	3650	5	49	4000	8	86
22	2150	6	35	3400	5	46	4790	9	116
23	1890	6	31	3430	6	56	4530	8	98
24	2550	9	62	2950	6	48	3780	7	71
25	2750	32	238	2760	6	45	4060	7	77
26	3360	6	54	2210	5	30	4100	7	77
27	4510	27	329	2510	4	27	3720	6	60
28	3670	15	149	3520	10	95	3770	5	51
29	3170	17	146	3890	4	42	3860	5	52
30	2610	9	63	4770	6	77	2710	4	29
31	3230	6	52	4170	10	113	---	---	---
TOTAL	95380	---	2501	95090	---	1659	152910	---	6121.4

HUDSON RIVER BASIN

77

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 (1.6 km) downstream from Delta Dam, and 4.0 mi (6.4 km) north of Rome.

DRAINAGE AREA.--150 mi² (389 km²).

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 851: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 474.00 ft (144.475 m) Barge Canal datum. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft (61 m) downstream at same datum.

REMARKS.--Records good. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir (see station 04252000). Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft³ or 79.0 hm³) except for Mar. 26 to May 17, May 28 to June 3, when reservoir spilled. Small quantity of water diverted from Delta Reservoir for fish hatchery use and later returned to river, part above and part below station.

AVERAGE DISCHARGE.--58 years, 380 ft³/s (10.76 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft³/s (242 m³/s) Oct. 2, 1945, gage height, 11.18 ft (3.408 m); minimum, 30 ft³/s (0.85 m³/s) Sept. 27, 1945, gage height, 0.65 ft (0.198 m); minimum daily, 45 ft³/s (1.27 m³/s) Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,200 ft³/s (90.6 m³/s) Apr. 3, gage height, 7.13 ft (2.173 m); minimum, 150 ft³/s (4.25 m³/s) Dec. 15, 16, 17, 18, 20, gage height, 1.68 ft (0.512 m); minimum daily, 151 ft³/s (4.28 m³/s) Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	358	337	227	1020	167	2120	505	267	213	261	208
2	315	358	335	294	1020	176	2080	402	234	213	261	205
3	332	356	335	197	1010	179	2700	348	218	210	261	208
4	332	354	347	177	1000	190	1630	644	213	208	259	203
5	332	354	350	170	999	320	1310	615	213	208	259	203
6	334	352	342	169	992	307	1040	471	213	208	229	273
7	332	351	341	167	978	240	787	375	240	208	210	244
8	332	351	245	167	975	218	636	310	218	208	210	231
9	332	348	176	276	965	210	623	261	218	208	216	229
10	332	348	157	337	945	216	575	368	218	208	245	227
11	331	350	154	338	943	208	559	326	218	205	290	228
12	344	349	152	335	943	198	599	264	218	242	278	226
13	358	348	152	335	943	296	669	256	218	267	264	226
14	382	348	152	344	929	388	1210	248	218	267	264	234
15	371	346	152	341	898	381	1350	229	218	267	264	239
16	364	344	151	307	887	371	1150	221	216	264	261	231
17	363	344	153	301	872	361	1080	210	216	264	261	229
18	361	348	152	298	858	361	993	210	216	264	261	229
19	361	348	152	298	842	486	846	210	216	264	261	229
20	361	347	152	295	399	567	733	210	216	264	261	228
21	359	344	167	296	154	579	673	210	216	264	259	226
22	358	344	165	308	154	591	627	210	216	264	232	226
23	359	341	159	324	157	615	587	210	216	264	216	223
24	361	346	156	374	161	644	547	210	216	264	213	213
25	359	349	154	380	167	555	501	213	216	264	213	209
26	365	342	157	380	172	933	471	226	213	264	213	205
27	388	341	155	377	174	1000	720	259	213	267	216	205
28	366	341	153	375	169	791	1570	493	213	267	216	204
29	364	339	153	556	---	874	1020	478	213	267	213	205
30	361	338	153	923	---	1390	677	395	210	264	210	203
31	358	---	153	1030	---	2170	---	323	---	261	210	---
TOTAL	10860	10427	6212	10696	19726	15982	30083	9910	6564	7570	7487	6649
MEAN	350	348	200	345	705	516	1003	320	219	244	242	222
MAX	388	358	350	1030	1020	2170	2700	644	267	267	290	273
MIN	293	338	151	167	154	167	471	210	210	205	210	203

CAL YR 1978 TOTAL 139239 MEAN 381 MAX 1180 MIN 151 MEAN † 333 CFSM † 2.22 IN † 30.12
WTR YR 1979 TOTAL 142166 MEAN 389 MAX 2700 MIN 151 MEAN † 368 CFSM † 2.45 IN † 33.35

† Adjusted for change in contents in Delta Reservoir and diversion from Black River basin.

HUDSON RIVER BASIN

01346000 WEST CANADA CREEK AT KAST BRIDGE, NY

LOCATION.--Lat 43°04'08", long 74°59'26", Herkimer County, Hydrologic Unit 02020004, on left bank 600 ft (183 m) downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi (1.9 km) downstream from North Creek, 2.2 mi (3.5 km) north of Herkimer, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--556 mi² (1,440 km²).

PERIOD OF RECORD.--May 1905 to December 1906 (gage height and discharge measurements only), January 1907, April to December 1907, March 1908 to December 1909, April 1910 to December 1913, April to December 1914, April 1915 to January 1917, April to November 1917, April to June 1918, October 1920 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 438.99 ft (133.804 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1920, nonrecording gage at former highway bridge 500 ft (152 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi (50 km) above station (usable capacity, 3,320 mil ft³ or 94.0 hm³). During this year flow regulated except for Apr. 3-9, 27 to May 17, 27 to June 6, when reservoir spilled. Diurnal fluctuation at low and medium flow caused by powerplants above station. Diversion at Trenton Falls, 26 mi (42 km) above station, by Ninemile feeder since 1915 during canal navigation season. Diversion from Hinckley Reservoir for Utica water supply returned to Mohawk River.

AVERAGE DISCHARGE.--59 years (1920-79), 1,322 ft³/s (37.44 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft³/s (660 m³/s) Mar. 26, 1913, from reports of State Engineer and Surveyor; maximum gage height, 10.47 ft (3.191 m) probably Feb. 17, 1943, from floodmark in gage well (ice jam); minimum discharge, 20 ft³/s (0.57 m³/s) Sept. 3, 1929, gage height, 0.90 ft (0.274 m); minimum daily, 59 ft³/s (1.67 m³/s) Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,800 ft³/s (362 m³/s) Apr. 28, gage height, 6.65 ft (2.027 m); minimum, 160 ft³/s (4.53 m³/s) Aug. 6, 7, gage height, 1.77 ft (0.540 m); minimum daily, 210 ft³/s (5.95 m³/s) Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	762	834	2390	1100	1340	4120	4170	1520	603	430	257
2	498	751	822	5160	1100	1100	4410	3130	1400	694	345	233
3	515	859	786	2440	1000	1710	5810	2400	960	694	405	498
4	549	798	1160	1570	1200	1720	5980	2800	1100	728	345	447
5	532	762	1350	1320	1300	7430	5060	2950	1010	631	276	379
6	739	834	1230	1310	1300	5580	3720	2460	872	739	379	1230
7	661	834	910	1050	1100	3330	2930	2120	798	567	413	1400
8	549	798	1350	1230	1400	2700	2440	1830	798	661	421	481
9	567	798	1670	1150	1100	2460	2660	1660	884	603	362	362
10	558	774	1000	1340	1200	3290	3310	1510	774	523	362	370
11	549	762	920	1310	1300	3600	3480	1370	822	786	353	532
12	576	751	980	1200	1300	3310	3500	1290	859	640	210	481
13	576	751	980	1300	1300	3220	3550	1090	834	612	310	413
14	1380	786	1000	1590	1320	3950	4620	1100	786	594	338	421
15	1030	897	880	1760	1500	3600	3800	960	786	498	345	672
16	739	751	860	1600	1500	3200	3600	947	822	661	396	455
17	661	822	920	1300	1400	3040	3400	847	683	672	379	549
18	661	972	820	1300	1500	3040	2890	859	651	683	353	481
19	683	760	800	1200	1600	3110	2620	810	751	621	303	481
20	672	700	780	1300	1600	3430	2520	694	705	594	324	455
21	716	720	1100	1400	1600	3800	2520	694	716	540	379	438
22	694	740	1200	1820	1320	4140	2420	859	786	506	338	345
23	728	720	1000	1760	1560	4560	2400	762	683	612	317	303
24	716	700	920	1660	1660	5480	2460	822	1010	631	296	421
25	751	640	920	1830	1640	5980	2380	997	621	621	362	438
26	798	600	920	1690	1830	4260	2460	1800	672	683	216	473
27	1450	560	920	1410	1920	3550	3930	1640	672	651	447	430
28	923	920	840	1350	1560	3360	10700	2400	672	585	489	473
29	810	880	940	1340	---	4030	9650	2440	705	506	413	498
30	762	872	940	1200	---	4290	6320	2380	621	421	396	345
31	762	---	940	1200	---	4740	---	2160	---	370	331	---
TOTAL	22226	23274	30692	49470	39210	112350	119660	51951	24973	18930	11033	14761
MEAN	717	776	990	1596	1400	3624	3989	1676	832	611	356	492
MAX	1450	972	1670	5160	1920	7430	10700	4170	1520	786	489	1400
MIN	421	560	780	1050	1000	1100	2380	694	621	370	210	233
CAL YR 1978 TOTAL	438518			MEAN 1201	MAX 4330	MIN 239						
WTR YR 1979 TOTAL	518530			MEAN 1421	MAX 10700	MIN 210						

01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY

LOCATION.--Lat 43°00'52", long 74°46'48", Herkimer County, Hydrologic Unit 02020004, on left bank 1,800 ft (549 m) downstream from Rocky Rift Dam, 2.1 mi (3.4 km) upstream from East Canada Creek, and 4.5 mi (7.2 km) southeast of city of Little Falls.

DRAINAGE AREA.--1,348 mi² (3,491 km²).

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

REVISED RECORDS.--WSP 741: 1929(M), Drainage area. WSP 1302: 1901, 1932(M). WSP 1432: 1928-30.

GAGE.--Water-stage recorder. Datum of gage is 308.84 ft (94.134 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Record fair. Records of daily discharge do not include diversion at Rocky Rift Dam into Erie (Barge) Canal for lockages at lock 16, near St. Johnsville. Monthly and annual figures of diversion at Rocky Rift Dam are published separately below. During canal navigation season, water is received from Black River basin through Black River Canal flowing south (see station 04252000), 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 ft³ or 173 hm³) (see Reservoirs in Hudson River Basin).

AVERAGE DISCHARGE.--52 years, 2,813 ft³/s (79.66 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (river channel only), 33,100 ft³/s (937 m³/s) Mar. 14, 1977, gage height, 19.17 ft (5.843 m), from high-water mark in gage house; minimum (river channel only), 214 ft³/s (6.06 m³/s) Aug. 18, 1949, gage height, 3.75 ft (1.43 m); minimum daily (including canal), probably not less than 463 ft³/s (13.1 m³/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 16,000 ft³/s (450 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 6	2045	*22,700 643	*15.90 4.846	Apr. 28	2000	16,500 467	13.64 4.157

Minimum discharge recorded (river channel only), 564 ft³/s (15.97 m³/s) Sept. 2, but may have been less during period of no gage-height record July 24, gage height, 4.58 ft (1.396 m); minimum daily (river channel only), 583 ft³/s (16.5 m³/s) Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	848	1620	1590	3280	3100	4290	9480	6430	2730	1170	1050	689
2	867	1560	1500	13700	2900	4240	9150	4570	2310	1160	1050	583
3	972	1670	1510	10900	2800	4950	10800	3880	1730	1210	1060	985
4	1120	1570	1840	9340	2700	5890	11100	4360	1740	1260	1010	1030
5	1070	1520	3620	6960	2600	13700	10200	4950	1760	1060	873	905
6	1550	1580	3370	4480	2500	22100	8170	4220	1690	1180	880	2220
7	1600	1610	3310	3070	2400	19700	6580	3500	1440	992	992	4930
8	1290	1580	3530	2710	2500	13000	5470	2940	1480	1110	978	1930
9	1150	1530	5580	2480	2500	11000	5430	2630	1440	925	938	1160
10	1140	1500	3960	2540	2500	8600	6470	2480	1390	1040	892	938
11	1090	1470	2630	2440	2300	9000	7000	2340	1360	1110	1210	994
12	1080	1480	2210	2320	2200	7600	7570	2360	1510	1090	938	1070
13	1100	1440	2080	2310	2100	6200	7960	1920	1470	1050	836	969
14	2570	1490	2130	2550	2100	6000	9670	2000	1370	1070	958	884
15	3740	1580	1910	3120	2100	8000	9340	1870	1370	999	1030	1480
16	2200	1460	1790	3280	2200	6000	9070	1820	1390	1010	1060	1330
17	1660	1520	1700	2970	2200	5000	8550	1500	1290	1160	1040	1050
18	1480	1710	1700	2500	2200	4500	7300	1570	1220	1160	1040	1100
19	1470	1620	1600	2300	2100	4500	5530	1510	1340	1110	1040	978
20	1550	1480	1600	2200	2100	5200	3760	1480	1310	985	886	1010
21	1580	1570	2260	2200	2200	6400	4400	1350	1110	1040	999	882
22	1440	1520	3030	2940	2000	8000	4480	1590	1280	944	925	877
23	1440	1440	2740	3100	1900	10100	4290	1510	1290	918	892	798
24	1510	1650	2230	2910	2300	11700	4260	1700	1260	1260	800	711
25	1530	1920	1830	2980	3140	13300	3990	2230	1180	1090	958	853
26	1530	1720	1800	3460	4170	10700	4010	3140	1180	1230	818	877
27	3030	1510	1800	3380	5710	8050	5400	3660	1160	1170	812	862
28	2790	1620	1800	3200	5220	6120	15100	3850	1150	1010	1220	837
29	2050	1700	1700	3210	---	6640	14100	4030	1250	899	1030	1060
30	1740	1560	1700	3180	---	8110	9150	3760	1170	999	925	941
31	1640	---	1800	3280	---	9510	---	3660	---	944	765	---
TOTAL	49827	47200	71850	119290	74740	268100	227780	88810	43370	33355	29905	34933
MEAN	1607	1573	2318	3848	2669	8648	7593	2865	1446	1076	965	1164
MAX	3740	1920	5580	13700	5710	22100	15100	6430	2730	1260	1220	4930
MIN	848	1440	1500	2200	1900	4240	3760	1350	1110	899	765	583
†	20.1	8.5	0.4	0	0	0	0.2	14.9	17.9	18.3	18.9	20.6

CAL YR 1978 TOTAL 973252 MEAN 2666 MAX 11600 MIN 704 † 11.3
WTR YR 1979 TOTAL 1089160 MEAN 2984 MAX 22100 MIN 583 † 10.0

† Diversion, equivalent in cubic feet per second, at Rocky Rift Dam into Erie (Barge) Canal for lockages at Lock 16.

HUDSON RIVER BASIN

01348000 EAST CANADA CREEK AT EAST CREEK, NY

LOCATION.--Lat 43°01'00", long 74°44'28", Herkimer County, Hydrologic Unit 0202004, on right bank at village of East Creek, 0.2 mi (0.3 km) downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi (1.9 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of St. Johnsville.

DRAINAGE AREA.--291 mi² (754 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft (102.321 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Extensive diurnal fluctuation and slight regulation caused by powerplants above station. City of Little Falls diverts about 5 ft³/s (0.14 m³/s) for municipal supply.

AVERAGE DISCHARGE.--33 years (1947-79), 686 ft³/s (19.43 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s (377 m³/s) Mar. 14, 1977, gage height, 7.42 ft (2.262 m); minimum, 0.05 ft³/s (0.001 m³/s) July 9, 1978, gage height 0.47 ft (0.143 m); minimum gage height, 0.44 ft (0.134 m) July 29, 1977; minimum daily, 0.22 ft³/s (0.006 m³/s) July 9, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1945, reached a stage of 9.0 ft (2.74 m), from floodmarks (discharge, 24,000 ft³/s or 680 m³/s, from slope-area measurement of peak flow).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,780 ft³/s (249 m³/s) Mar. 6, gage height, 6.40 ft (1.951 m); minimum, 15.0 ft³/s (0.425 m³/s) Oct. 12, gage height, 1.00 ft (0.305 m); minimum daily, 17.0 ft³/s (0.481 m³/s) June 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	314	256	704	472	470	4890	1400	540	21	63	145
2	102	370	318	4220	413	480	4180	920	163	73	82	80
3	194	204	141	4080	237	690	4710	740	105	80	89	456
4	265	138	408	2290	105	495	3290	1200	408	21	80	450
5	374	272	519	1450	364	1660	2870	1200	408	87	21	426
6	508	436	405	1140	429	7360	2160	840	275	141	80	895
7	592	247	657	952	339	5560	1420	880	253	71	84	1470
8	653	334	807	840	287	4050	1390	720	271	52	113	933
9	594	326	940	895	279	2770	1440	640	262	31	77	611
10	461	315	617	736	289	2310	1140	580	20	53	77	369
11	441	326	734	656	56	1970	1100	450	266	77	80	443
12	186	20	713	461	318	1650	753	260	177	53	108	500
13	809	314	512	463	408	1180	664	370	173	82	135	633
14	816	484	577	482	323	1310	672	350	145	53	202	456
15	1490	395	229	678	343	1210	1800	420	110	53	177	21
16	1490	210	23	724	284	923	1600	19	20	258	89	21
17	997	270	262	696	46	876	1600	380	20	61	80	526
18	797	240	299	624	77	831	1600	320	145	119	80	21
19	672	450	358	486	497	867	1700	190	145	141	173	20
20	583	620	275	558	441	962	1900	310	159	92	155	19
21	357	620	574	513	346	1280	2200	250	145	108	145	19
22	254	600	576	757	190	1650	2700	310	166	20	69	19
23	516	470	475	774	256	2730	3000	580	17	132	209	19
24	448	470	221	773	281	4300	3300	540	17	155	173	19
25	419	296	391	549	374	7450	3200	462	135	99	82	138
26	374	207	537	464	539	5740	3000	942	80	80	20	19
27	922	415	441	689	593	3290	3700	1580	77	105	205	80
28	916	146	414	554	728	2130	7000	1470	53	163	343	205
29	772	407	381	574	---	2000	6800	1570	80	80	245	217
30	717	292	420	415	---	2210	3300	1000	82	105	241	19
31	616	---	284	391	---	3750	---	849	---	138	298	---
TOTAL	18417	10208	13764	29608	9314	74154	79079	21742	4917	2804	4075	9249
MEAN	594	340	444	955	333	2392	2636	701	164	90.5	131	308
MAX	1490	620	940	4220	728	7450	7000	1580	540	258	343	1470
MIN	82	20	23	391	46	470	664	19	17	20	20	19

CAL YR 1978 TOTAL 246070.47 MEAN 674 MAX 4970 MIN .22
WTR YR 1979 TOTAL 277331.00 MEAN 760 MAX 7450 MIN 17

HUDSON RIVER BASIN

81

01349000 OTSQUAGO CREEK AT FORT PLAIN, NY

LOCATION.--Lat 42°55'46", long 74°37'35", Montgomery County, Hydrologic Unit 02020004, on left bank 25 ft (8 m) downstream from bridge on State Highway 163 in Fort Plain, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--59.2 mi² (153 km²).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.16 ft (92.098 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records poor. Occasional diurnal fluctuation at low flow.

AVERAGE DISCHARGE.--30 years, 87.5 ft³/s (2.478 m³/s), 19.91 in.yr (506 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,640 ft³/s (273 m³/s) July 3, 1974, gage height, 9.67 ft (2.947 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurement at gage height 9.24 ft (2.816 m); minimum, 0.6 ft³/s (0.017 m³/s) Nov. 30, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1645	ice jam	5.37 1.637	Mar. 5	1900	2,280 64.6	5.49 1.673
Jan. 2	1015	2,080 58.9	5.34 1.628	Mar. 14	1700	*2,480 70.2	5.71 1.740
Mar. 5	0700	ice jam	*7.28 2.219	Apr. 27	2300	2,310 65.4	5.49 1.673

Minimum daily discharge, 3.6 ft³/s (0.10 m³/s) Oct. 1, 3; minimum gage height, 1.24 ft (0.378 m) Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	14	10	350	45	150	380	103	44	7.2	4.6	4.4
2	3.8	13	9.0	1530	32	150	250	90	34	7.2	5.2	4.4
3	3.6	12	8.0	312	26	160	170	80	32	6.5	5.2	14
4	3.8	11	45	100	22	200	150	90	26	5.8	4.6	6.8
5	4.4	11	85	60	19	1000	180	80	29	5.8	4.4	5.2
6	6.5	11	49	56	18	1740	150	70	44	5.8	4.4	165
7	5.5	11	51	50	16	830	130	60	24	5.8	4.1	109
8	4.9	12	201	56	15	515	120	54	20	5.5	4.4	23
9	4.6	12	297	60	14	403	120	50	19	5.2	4.4	11
10	4.6	11	103	50	14	515	150	45	20	4.9	5.8	8.0
11	4.4	10	62	45	13	707	230	40	18	4.9	6.1	6.1
12	4.4	10	54	42	13	265	373	35	17	5.5	5.8	5.5
13	4.6	9.6	45	42	13	176	258	37	15	5.2	5.8	5.2
14	80	10	40	45	13	1090	714	32	13	4.9	6.1	6.5
15	45	11	36	60	14	657	316	28	12	4.9	5.8	17
16	19	11	32	47	13	521	222	25	11	6.5	5.5	8.4
17	15	11	30	42	12	474	181	23	10	5.8	5.2	6.5
18	12	13	27	41	12	343	132	20	10	5.2	6.1	5.8
19	12	13	25	40	13	356	103	20	9.6	4.9	8.0	6.5
20	15	11	27	40	14	331	86	20	8.8	4.6	5.8	5.8
21	13	11	35	50	15	310	75	18	7.6	4.6	5.2	5.5
22	11	9.6	60	100	15	310	67	17	8.0	5.2	4.9	6.5
23	11	8.0	37	120	15	330	63	19	8.8	4.6	4.6	5.8
24	11	14	35	90	25	400	55	165	8.8	4.6	4.6	5.2
25	11	17	40	130	100	700	50	251	8.4	4.6	4.6	4.9
26	13	19	50	170	200	450	51	440	7.2	9.2	4.4	4.9
27	60	17	45	160	170	300	348	165	6.5	10	7.6	4.9
28	30	12	40	130	150	250	581	119	6.8	5.5	5.5	5.8
29	20	12	38	110	---	200	241	111	7.2	5.2	4.9	14
30	16	11	38	90	---	190	134	85	6.8	4.6	4.9	10
31	15	---	50	64	---	200	---	63	---	4.4	4.4	---
TOTAL	467.7	358.2	1704.0	4282	1041	14223	6080	2455	492.5	174.6	162.9	491.6
MEAN	15.1	11.9	55.0	138	37.2	459	203	79.2	16.4	5.63	5.25	16.4
MAX	80	19	297	1530	200	1740	714	440	44	10	8.0	165
MIN	3.6	8.0	8.0	40	12	150	50	17	6.5	4.4	4.1	4.4
CFSM	.26	.20	.93	2.33	.63	7.75	3.43	1.34	.28	.10	.09	.28
IN.	.29	.23	1.07	2.69	.65	8.94	3.82	1.54	.31	.11	.10	.31

CAL YR 1978	TOTAL	34363.3	MEAN 94.1	MAX 1800	MIN 3.6	CFSM 1.59	IN 21.59
WTR YR 1979	TOTAL	31932.5	MEAN 87.5	MAX 1740	MIN 3.6	CFSM 1.48	IN 20.07

01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY

LOCATION.--Lat 42°19'15", long 74°26'10", Greene County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) upstream from bridge on State Highway 23 in Prattsville, 0.2 mi (0.3 km) upstream from Schoharie Reservoir, 0.2 mi (0.3 km) downstream from Huntersfield, and 1.6 mi (2.6 km) downstream from Batavia Kill.

DRAINAGE AREA.--236 mi² (611 km²).

PERIOD OF RECORD.--November 1902 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 351: Drainage area. WSP 1432: 1937-38.

GAGE.--Water-stage recorder. Datum of gage is 1,131.57 ft (344.902 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1915, nonrecording gage, and Oct. 1, 1915 to July 17, 1936, water-stage recorder, at old highway bridge 80 ft (24 m) upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi (0.3 km) downstream, all at datum 1.56 ft (0.475 m) lower than present datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--76 years, 464 ft³/s (13.14 m³/s), 26.70 in/yr (678 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s (1,560 m³/s) Oct. 16, 1955, gage height, 19.14 ft (5.834 m), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 19.57 ft (5.965 m) Mar. 5, 1979 (ice jam); minimum daily discharge, 4.8 ft³/s (0.14 m³/s) Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft³/s (120 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1900	ice jam	8.75 2.667	Mar. 25	0315	18,600 527	11.46 3.493
Jan. 2	2030	7,660 217	8.34 2.542	Apr. 28	0015	4,600 130	7.00 2.134
Jan. 21	2100	ice jam	14.53 4.429	May 24	1930	4,620 131	7.01 2.137
Jan. 25	0630	ice jam	11.34 3.456	May 25	1300	4,660 132	7.03 2.143
Mar. 5	1400	ice jam	*19.57 5.965	May 26	0945	5,200 147	7.29 2.222
Mar. 6	0600	10,500 297	9.30 2.835	Sept. 6	1530	*20,400 578	11.87 3.618

Minimum discharge, 42 ft³/s (1.19 m³/s) Oct. 4, gage height, 2.58 ft (0.786 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	157	180	1300	350	600	1320	788	579	190	115	53
2	48	148	165	5410	330	720	1040	651	499	320	141	48
3	45	141	157	3460	290	820	993	585	511	230	121	59
4	43	136	229	1520	290	1500	835	679	415	166	97	62
5	49	130	435	1000	200	8600	811	554	358	135	81	53
6	101	125	331	780	210	7200	693	481	339	108	70	5530
7	133	122	285	880	220	5030	605	436	284	95	57	2000
8	94	135	292	3000	240	2390	529	399	250	86	55	749
9	77	134	882	1700	200	1570	566	358	226	79	48	464
10	68	124	837	1000	180	1810	605	325	230	68	48	342
11	64	116	580	680	180	2410	645	297	700	66	62	272
12	60	111	470	540	180	1330	758	267	908	62	118	224
13	58	106	400	600	170	1050	780	271	476	66	284	193
14	169	103	370	760	170	1380	1490	297	383	50	183	273
15	368	101	320	690	160	1270	1410	267	325	46	132	1170
16	238	100	280	410	140	967	1100	250	284	110	108	472
17	187	98	220	350	130	788	1010	238	250	108	88	348
18	160	320	180	290	130	693	850	223	223	121	83	282
19	151	315	150	230	130	631	736	280	208	147	110	254
20	178	229	190	310	180	624	645	334	179	100	108	217
21	160	195	480	860	200	700	585	284	153	86	88	214
22	142	172	360	2300	300	891	535	271	135	560	77	731
23	133	161	240	1100	320	1150	511	250	138	226	68	543
24	126	202	220	780	700	2130	505	1850	126	147	62	390
25	119	261	190	2400	1500	9350	511	3670	118	108	90	324
26	125	221	210	1500	920	3090	523	3010	105	150	147	280
27	257	203	200	960	700	1610	2200	1640	93	566	102	243
28	219	213	140	780	560	1130	2580	1440	93	267	83	220
29	189	200	110	620	---	1050	1450	1090	208	186	73	238
30	172	184	140	520	---	1100	993	975	124	147	66	220
31	163	---	200	450	---	1320	---	721	---	121	61	---
TOTAL	4145	4963	9443	37190	9280	64904	27814	23181	8920	4917	3026	16468
MEAN	134	165	305	1200	331	2094	927	748	297	159	97.6	549
MAX	368	320	882	5410	1500	9350	2580	3670	908	566	284	5530
MIN	43	98	110	230	130	600	505	223	93	46	48	48
CFSM	.57	.70	1.29	5.09	1.40	8.87	3.93	3.17	1.26	.67	.41	2.33
IN.	.65	.78	1.49	5.86	1.46	10.23	4.38	3.65	1.41	.78	.48	2.60
CAL YR 1978	TOTAL	211406	MEAN 579	MAX 13000	MIN 28	CFSM 2.45	IN 33.32					
WTR YR 1979	TOTAL	214251	MEAN 587	MAX 9350	MIN 43	CFSM 2.49	IN 33.77					

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 (2.6 km) north of junction of Intake Road and State Highway 23, 2.5 mi (4.0 km) upstream from Gilboa Dam, and 2.6 mi (4.2 km) east of Grand Gorge.

DRAINAGE AREA.--314 mi² (813 km²).

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (74.12 hm³) between minimum operating level, elevation, 1,050.00 ft (320.040 m), and crest of spillway, elevation, 1,130.00 ft (344.424 m). Dead storage below elevation 1,050.00 (320.040 m), 1,968 mil gal (7.449 hm³). 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 furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,135.17 ft (346.000 m) Oct. 16, 1955, contents, 23,566 mil gal (89.20 hm³); minimum observed (after initial filling), 1,062.00 ft (323.698 m) Aug. 20, 1970, contents, 1,520 mil gal (5.753 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,132.37 ft (345.146 m) Mar. 25, contents, 20,504 mil gal (77.61 hm³); minimum, 1,092.55 ft (333.009 m) Oct. 14, contents, 8,074 mil gal (30.56 hm³).

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

1,090.0	7,407	1,120.0	16,100
1,100.0	10,080	1,133.0	20,700

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1099.71	1103.15	1116.18	1130.30	1130.27	1130.27	1130.60	1130.45	1130.17	1125.93	1117.96	1098.11
2	1099.58	1103.62	1116.63	1131.35	1130.23	1130.32	1130.62	1130.42	1130.11	1125.91	1117.63	1097.31
3	1099.20	1104.07	1117.03	1131.04	1130.24	1130.34	1130.66	1130.36	1130.28	1125.88	1116.93	1096.58
4	1098.11	1104.50	1117.54	1130.54	1130.22	1130.43	1130.55	1130.40	1130.29	1125.64	1115.67	1095.85
5	1097.60	1104.91	1118.44	1130.39	1130.19	1131.43	1130.57	1130.37	1130.23	1125.33	1114.41	1095.11
6	1097.03	1105.29	1119.35	1130.33	1130.15	1131.91	1130.59	1130.32	1130.19	1124.87	1113.75	1097.57
7	1096.62	1105.67	1120.10	1130.35	1130.19	1131.34	1130.47	1130.31	1130.16	1123.84	1113.06	1108.75
8	1096.07	1106.07	1120.80	1130.80	1130.21	1130.84	1130.43	1130.29	1130.12	1122.83	1112.58	1110.68
9	1095.46	1106.47	1122.13	1130.52	1130.20	1130.63	1130.42	1130.28	1130.10	1122.49	1111.98	1110.96
10	1094.80	1106.83	1124.43	1130.43	1130.16	1130.65	1130.48	1130.27	1130.12	1122.13	1111.39	1111.12
11	1094.14	1107.17	1125.89	1130.35	1130.19	1130.85	1130.47	1130.25	1130.24	1121.75	1110.83	1111.18
12	1093.45	1107.49	1127.01	1130.30	1130.17	1130.59	1130.53	1130.16	1130.48	1121.36	1110.34	1111.07
13	1092.83	1107.80	1127.96	1130.31	1130.18	1130.43	1130.57	1130.16	1130.26	1120.96	1110.20	1110.75
14	1092.64	1108.09	1128.90	1130.31	1130.18	1130.45	1130.64	1130.18	1130.17	1120.55	1110.03	1110.41
15	1093.32	1108.35	1129.67	1130.35	1130.16	1130.59	1130.78	1130.17	1130.10	1120.13	1109.65	1111.55
16	1094.14	1108.62	1130.20	1130.28	1130.15	1130.45	1130.63	1130.17	1130.02	1119.75	1109.12	1112.34
17	1094.79	1108.90	1130.25	1130.24	1130.13	1130.43	1130.61	1130.16	1129.95	1119.53	1108.44	1112.45
18	1095.30	1109.35	1130.20	1130.24	1130.13	1130.41	1130.57	1130.15	1129.83	1119.30	1107.71	1112.30
19	1095.79	1110.25	1130.13	1130.18	1130.13	1130.40	1130.45	1130.16	1129.69	1119.17	1107.04	1112.14
20	1096.39	1110.89	1130.14	1130.20	1130.14	1130.44	1130.44	1130.21	1129.49	1118.92	1106.39	1111.87
21	1096.96	1111.42	1130.23	1130.33	1130.15	1130.44	1130.42	1130.18	1129.24	1118.58	1105.69	1111.54
22	1097.43	1111.87	1130.30	1130.72	1130.17	1130.47	1130.40	1130.17	1128.94	1118.89	1104.96	1111.90
23	1097.89	1112.28	1130.25	1130.47	1130.19	1130.51	1130.38	1130.16	1128.63	1119.16	1104.21	1112.79
24	1098.30	1112.74	1130.18	1130.38	1130.25	1130.52	1130.37	1130.60	1128.28	1119.03	1103.49	1113.03
25	1098.69	1113.38	1130.23	1130.72	1130.43	1132.37	1130.37	1131.13	1127.80	1118.77	1102.82	1113.12
26	1099.08	1113.90	1130.18	1130.56	1130.39	1131.06	1130.38	1131.00	1127.53	1118.46	1102.28	1113.08
27	1099.74	1114.30	1130.18	1130.45	1130.32	1130.68	1130.60	1130.67	1127.11	1118.78	1101.71	1112.95
28	1100.60	1114.76	1130.15	1130.39	1130.28	1130.60	1131.10	1130.62	1126.69	1119.03	1101.10	1112.73
29	1101.35	1115.24	1130.12	1130.36	---	1130.53	1130.70	1130.51	1126.49	1118.95	1100.46	1112.58
30	1102.04	1115.72	1130.13	1130.33	---	1130.52	1130.53	1130.51	1126.23	1118.75	1099.71	1112.41
31	1102.65	---	1130.16	1130.30	---	1130.55	---	1130.38	---	1118.38	1098.92	---
MEAN	1097.15	1109.10	1126.29	1130.45	1130.21	1130.69	1130.54	1130.36	1129.30	1121.07	1108.40	1108.81
MAX	1102.65	1115.72	1130.30	1131.35	1130.43	1132.37	1131.10	1131.13	1130.48	1125.93	1117.96	1113.12
MIN	1092.64	1103.15	1116.18	1130.18	1130.13	1130.27	1130.37	1130.15	1126.23	1118.38	1098.92	1095.11
†	10,830	14,696	19,649	19,680	19,680	19,796	19,738	19,738	18,275	15,636	9,834	13,733
‡	+38.9	+199	+247	+1.55	0	+5.79	-0.36	-2.55	-75.4	-132	-290	+201

CAL YR 1978 MEAN 1120.04 MAX 1132.08 MIN 1092.64 † -0.22
WTR YR 1979 MEAN 1120.97 MAX 1132.37 MIN 1092.64 ‡ +15.6

† Contents, in millions of gallons, on last day of month.
‡ Change in contents, equivalent in cubic feet per second.

Note.--Elevations for Oct. 27-31, Dec. 13-18, 21-23, 25, 26, Jan. 1, 7, 14, Feb. 5, 6, 21, 22, Mar. 5, 13, 14, Mar. 24 to Apr. 19, and Apr. 26 to May 11 are instantaneous wire-weight readings furnished by Department of Environmental Protection, City of New York.

HUDSON RIVER BASIN

85

01350120 PLATTER KILL AT GILBOA, NY

LOCATION.--Lat 42°24'18", long 74°26'36", Schoharie County, Hydrologic Unit 02020005, on right bank, 190 ft (58 m) upstream from culvert on County Highway 17, 0.5 mi (0.8 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Gilboa.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

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

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1976. Altitude of gage is 1,110 ft (338 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 ft³/s (19.5 m³/s) Oct. 17, 1977, gage height, 4.54 ft (1.384 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Oct. 6, 1976; minimum gage height, 0.12 ft (0.037 m) Sept. 8, 11, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s or 4.25 m³/s (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1400	176 4.98	3.00 0.914	Feb. 5	1015	ice jam	3.02 0.920
Jan. 6	1430	ice jam	3.98 1.213	Mar. 5	2130	*493 14.0	*3.89 1.186
Jan. 13	0545	ice jam	3.48 1.061	Mar. 25	0345	241 6.83	3.30 1.006
Jan. 21	2015	ice jam	3.59 1.094				

Minimum discharge, 2.2 ft³/s (0.062 m³/s) Sept. 1-3, 5, gage height, 1.10 ft (0.335 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	10	6.2	25	16	12	40	14	26	16	5.4	2.3
2	6.1	10	6.6	133	15	15	35	13	29	20	5.4	2.3
3	6.1	9.3	6.9	106	14	17	32	13	51	12	5.2	3.4
4	5.9	9.0	10	80	14	34	28	16	31	9.3	4.4	2.4
5	6.6	9.0	12	60	13	276	32	13	24	9.0	3.9	2.3
6	13	8.3	10	45	13	345	27	12	20	8.7	3.6	17
7	10	8.0	9.3	39	12	166	25	12	18	9.0	3.4	12
8	8.3	9.3	10	56	12	100	24	12	16	8.0	3.1	6.4
9	7.2	8.3	22	40	11	71	25	11	16	7.2	3.1	4.8
10	6.4	7.7	17	27	11	72	26	11	17	6.9	4.2	4.2
11	6.1	7.7	16	23	10	93	31	10	31	6.9	4.2	3.9
12	5.9	7.2	15	20	10	59	37	10	27	6.4	7.2	3.6
13	6.1	6.9	14	22	9.6	49	39	10	18	6.1	6.9	3.4
14	13	7.2	14	27	9.4	61	62	9.7	15	5.7	5.7	4.2
15	11	6.6	13	23	9.0	53	58	9.3	13	5.7	5.0	4.2
16	9.3	6.6	12	20	9.0	46	48	9.0	12	6.4	4.6	3.6
17	8.7	6.6	12	18	8.0	38	45	8.0	10	6.9	4.1	3.6
18	8.0	8.0	11	16	7.0	33	37	7.4	10	11	5.0	3.4
19	9.3	7.2	11	14	7.0	31	32	8.0	9.7	6.9	4.8	3.4
20	11	6.9	13	20	7.4	32	28	7.7	8.3	5.9	4.1	3.1
21	9.3	6.9	17	50	7.6	35	24	7.2	7.7	7.2	3.7	4.6
22	8.7	6.4	14	35	7.8	40	22	6.9	7.4	13	3.3	8.3
23	8.3	6.1	13	27	7.2	45	20	7.2	7.2	7.7	3.0	6.1
24	8.3	7.7	12	24	13	67	18	43	6.6	6.4	3.0	4.6
25	8.0	8.3	15	34	17	188	17	60	6.5	5.4	3.6	4.2
26	8.7	12	14	27	15	106	17	80	6.4	5.7	3.0	3.9
27	20	9.0	11	23	13	66	20	56	5.9	6.4	3.0	3.6
28	14	7.0	10	21	12	52	23	45	20	5.7	2.9	3.7
29	14	6.0	9.0	19	---	49	20	39	33	5.4	2.7	5.0
30	12	6.0	9.0	17	---	45	16	48	13	5.0	2.6	4.1
31	11	---	15	17	---	43	---	33	---	4.2	2.4	---
TOTAL	286.2	235.2	380.0	1108	310.0	2339	908	641.4	515.7	246.1	126.5	141.6
MEAN	9.23	7.84	12.3	35.7	11.1	75.5	30.3	20.7	17.2	7.94	4.08	4.72
MAX	20	12	22	133	17	345	62	80	51	20	7.2	17
MIN	5.9	6.0	6.2	14	7.0	12	16	6.9	5.9	4.2	2.4	2.3
CFSM	.83	.71	1.11	3.22	1.00	6.80	2.73	1.87	1.55	.72	.37	.43
IN.	.96	.79	1.27	3.71	1.04	7.84	3.04	2.15	1.73	.82	.42	.47

CAL YR 1978	TOTAL	7045.2	MEAN	19.3	MAX	209	MIN	2.9	CFSM	1.74	IN	23.61
WTR YR 1979	TOTAL	7237.7	MEAN	19.8	MAX	345	MIN	2.3	CFSM	1.78	IN	24.25

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 (61 m) upstream from bridge on State Highway 30, 0.6 mi (1.0 km) upstream from mouth, and 3.0 mi (4.8 km) southwest of North Blenheim.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

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

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1975. Altitude of gage is 1,060 ft (323 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) Mar. 14, 1977, gage height, 3.41 ft (1.039 m); minimum, 0.38 ft³/s (0.011 m³/s) Sept. 2, 3, 1979, gage height, 0.64 ft (0.195 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 5	1500	*899 25.5	*3.00 0.914	May 24	1530	594 16.8	2.56 0.780

Minimum discharge, 0.38 ft³/s (0.011 m³/s) Sept. 2, 3, gage height, 0.64 ft (0.195 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	25	9.0	132	23	37	53	28	40	2.7	1.2	.64
2	3.7	23	9.0	295	20	45	48	25	86	2.7	9.6	.46
3	3.7	21	8.9	147	18	56	46	24	123	3.3	10	2.0
4	3.4	21	26	84	17	140	35	42	64	2.2	3.0	1.4
5	6.0	19	29	76	16	560	61	27	47	1.6	1.8	.88
6	30	18	21	70	15	410	35	22	37	1.4	1.3	87
7	16	16	18	100	14	207	27	20	27	1.4	1.0	28
8	11	16	19	140	13	134	20	18	21	1.2	.75	8.9
9	9.6	16	55	54	13	99	23	16	19	1.2	.64	5.0
10	8.5	15	36	45	12	141	29	14	18	1.0	.75	3.3
11	7.7	13	28	40	12	179	40	13	20	1.0	1.3	2.7
12	5.4	13	25	37	11	97	58	12	18	1.0	4.5	2.0
13	4.2	11	24	45	11	86	59	9.6	13	.88	6.3	1.8
14	43	11	23	60	10	136	159	9.6	10	.75	2.7	3.0
15	37	11	22	54	9.0	90	95	9.5	8.9	.64	3.0	9.6
16	23	10	21	50	7.8	72	73	11	7.6	3.0	2.5	3.7
17	19	9.2	20	47	6.6	63	61	8.6	5.6	5.6	1.6	2.5
18	17	16	19	45	6.0	56	49	7.6	4.5	11	3.0	2.3
19	21	15	23	40	6.0	51	41	7.6	4.5	6.9	5.6	3.0
20	34	12	30	44	6.0	51	35	7.8	3.7	2.7	3.4	2.5
21	23	10	40	98	6.4	58	32	7.2	3.0	2.7	2.2	3.4
22	20	9.9	35	187	6.6	64	29	6.7	2.7	7.4	2.0	23
23	19	9.3	29	81	7.0	74	28	10	2.5	3.0	1.6	9.6
24	19	13	23	53	40	107	26	214	2.5	2.0	1.2	5.6
25	18	16	19	68	70	184	24	202	2.5	1.4	1.3	4.5
26	20	11	25	51	60	117	20	178	2.0	2.5	1.6	3.7
27	82	10	23	40	45	77	45	104	2.0	4.7	1.3	3.0
28	43	13	22	37	38	60	62	91	2.5	3.0	1.2	2.7
29	34	11	19	30	---	68	49	77	3.3	1.8	1.0	8.2
30	29	10	19	27	---	66	33	87	2.7	2.2	.88	5.6
31	27	---	27	25	---	60	---	56	---	1.3	1.2	---
TOTAL	640.9	424.4	746.9	2302	519.4	3645	1395	1365.2	603.5	84.17	79.42	239.98
MEAN	20.7	14.1	24.1	74.3	18.6	118	46.5	44.0	20.1	2.72	2.56	8.00
MAX	82	25	55	295	70	560	159	214	123	11	10	87
MIN	3.4	9.2	8.9	25	6.0	37	20	6.7	2.0	.64	.64	.46

CAL YR 1978 TOTAL 8991.33 MEAN 24.6 MAX 281 MIN .77
WTR YR 1979 TOTAL 12045.87 MEAN 33.0 MAX 560 MIN .46

HUDSON RIVER BASIN

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01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2300 ft (701 m) upstream from West Kill, and 1.2 mi (1.9 km) upstream from bridge on State Highway 30 in North Blenheim. Water-quality sampling site at discharge station.

DRAINAGE AREA.--359 mi² (930 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional measurements, water years 1969-70. October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map. Prior to Oct. 1, 1971, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 314 mi² (813 km²), 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.--9 years, 561 ft³/s (15.89 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,400 ft³/s (1,170 m³/s) June 23, 1972, gage height, 12.29 ft (3.746 m) from rating curve extended above 14,000 ft³/s (396 m³/s); maximum gage height, 13.75 ft (4.191 m) Nov. 8, 1977; no flow Oct. 21-28, 1972, Sept. 12-14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,700 ft³/s (473 m³/s) Mar. 25, gage height, 11.37 ft (3.466 m); minimum daily, 3.5 ft³/s (0.10 m³/s) July 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	12	2000	600	606	1700	964	304	80	6.6	4.8
2	13	25	14	8940	484	683	1420	902	322	20	8.2	4.6
3	7.6	22	33	4950	450	836	1330	760	948	8.0	5.9	4.8
4	6.6	15	93	1910	400	1290	1160	858	727	5.0	5.4	4.4
5	7.9	15	48	1370	350	8600	1180	753	446	3.5	8.5	4.8
6	67	16	37	1160	320	10600	987	600	415	4.6	19	162
7	33	16	35	1140	290	6720	850	572	398	4.8	20	39
8	21	17	23	3090	270	2950	787	433	271	4.8	6.3	10
9	17	17	191	1970	260	2080	850	474	231	4.4	4.6	6.1
10	16	17	93	1240	240	2220	948	465	261	4.4	6.1	5.6
11	17	17	32	972	240	3070	972	319	514	4.6	6.3	5.6
12	14	16	31	670	230	1790	1170	389	1310	4.8	8.8	5.6
13	8.2	43	58	887	220	1480	1240	349	535	4.8	12	5.6
14	142	111	30	1050	210	1760	2000	369	365	4.8	7.4	6.3
15	55	23	34	1050	200	1800	2070	304	185	4.6	10	19
16	35	11	311	677	200	1170	1560	326	34	7.1	11	21
17	21	13	430	545	190	1170	1430	280	65	9.1	4.8	15
18	20	24	292	529	190	972	1250	291	34	14	5.2	4.8
19	22	56	230	377	190	858	1080	243	17	17	6.3	5.2
20	41	30	253	428	190	858	917	357	7.9	15	5.9	5.2
21	63	9.1	556	872	187	964	858	353	5.4	12	4.8	5.8
22	30	9.1	560	2520	198	1190	780	261	5.2	61	5.0	19
23	36	9.4	400	1400	326	1340	773	287	5.0	41	5.0	13
24	36	22	300	1120	529	2080	801	2080	4.6	5.2	5.0	4.8
25	27	37	320	2460	1230	9430	780	3970	4.1	5.2	5.0	5.0
26	17	45	290	1810	1050	3690	689	3590	4.1	6.1	4.6	5.0
27	235	21	310	1310	740	2120	1680	2250	4.2	14	4.4	5.2
28	51	14	220	1100	556	1600	2950	1880	5.2	13	4.6	8.8
29	47	9.8	180	980	---	1490	1740	1560	25	10	4.6	6.1
30	48	9.4	210	721	---	1460	1250	1610	17	13	4.8	9.7
31	19	---	300	658	---	1630	---	1120	---	12	4.8	---
TOTAL	1188.3	710.8	5926	49906	10540	78507	37202	28969	7469.7	417.8	220.9	421.8
MEAN	38.3	23.7	191	1610	376	2532	1240	934	249	13.5	7.13	14.1
MAX	235	111	560	8940	1230	10600	2950	3970	1310	80	20	162
MIN	6.6	9.1	12	377	187	606	689	243	4.1	3.5	4.4	4.4

CAL YR 1978 TOTAL 180116.0 MEAN 493 MAX 8000 MIN 3.6
WTR YR 1979 TOTAL 221479.3 MEAN 607 MAX 10600 MIN 3.5

HUDSON RIVER BASIN

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1971-72 (a), 1975-76 (d).

NUTRIENT DATA: 1971 (a), 1975-76 (d).

BIOLOGICAL DATA:

Bacteria--1975-76 (d).

SEDIMENT DATA: 1975-76 (a).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1971 to current year.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Oct. 1 to Nov. 1, Feb. 16-22, Aug. 8 to Sept. 30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1973-76), 33.5°C Aug. 7, 1973; minimum, freezing point on many days during winter periods, except water years 1978-79.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum recorded, 0.5°C Jan. 19-21.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

HUDSON RIVER BASIN

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01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

HUDSON RIVER BASIN

01350200 WEST KILL AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°28'07", long 74°27'34", Schoharie County, Hydrologic Unit 02020005, on left bank 75 ft (23 m) upstream from highway bridge on State Highway 30, in North Blenheim, 100 ft (30 m) downstream from Mill Creek and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--44.6 mi² (115.5 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1970-72, July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 810 ft (247 m), from topographic map.

REMARKS.--Records fair, except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft³/s (343 m³/s) Oct. 18, 1975, gage height, 5.91 ft (1.801 m) from rating curve extended above 2,700 ft³/s (76 m³/s); maximum gage height, 7.82 ft (2.384 m) Oct. 17, 1977; minimum discharge, 1.4 ft³/s (0.040 m³/s) Aug. 24, 1975; minimum gage height, 0.68 ft (0.207 m) July 25, 1977.

EXTREMES FOR CURRENT YEAR: Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1200	2,320 65.7	5.37 1.637	Mar. 5	1700	*3,060 86.7	*5.76 1.756
Jan. 22	0730	ice jam	5.39 1.643				

Minimum discharge, 2.0 ft³/s (0.057 m³/s) Aug. 10; minimum gage height, 1.80 ft (0.549 m) Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	45	25	200	65	100	175	82	95	6.5	3.7	2.3
2	5.0	42	24	1300	62	130	155	75	203	6.5	13	2.1
3	4.8	38	22	577	59	150	146	72	254	6.2	13	4.2
4	4.8	36	58	200	56	240	120	112	127	4.7	6.2	4.2
5	9.6	33	63	150	52	1600	203	78	95	4.2	4.2	3.1
6	31	31	48	140	48	1980	135	68	78	3.9	3.5	158
7	21	30	46	150	45	808	122	63	65	3.7	2.9	65
8	15	37	58	250	42	472	112	57	56	3.5	2.6	33
9	12	33	128	140	39	309	127	52	51	3.3	2.3	19
10	9.6	29	92	120	37	445	138	47	46	2.9	3.9	13
11	8.1	26	70	110	34	651	155	50	56	2.9	8.5	9.9
12	7.2	25	66	100	32	314	200	51	46	2.7	12	8.1
13	7.2	23	62	120	31	227	215	43	36	2.6	17	6.9
14	68	23	58	170	30	458	500	41	31	2.4	9.4	8.1
15	64	22	54	140	29	293	351	36	26	2.3	12	24
16	40	20	50	120	26	207	268	40	21	4.4	8.1	11
17	32	19	45	110	24	168	219	33	18	11	5.6	8.5
18	27	35	42	100	23	146	168	29	15	15	5.0	7.2
19	30	31	45	90	23	135	138	30	15	11	11	7.6
20	51	26	54	150	25	141	117	29	12	5.3	7.7	6.5
21	37	24	80	350	26	171	101	26	10	9.0	5.6	7.0
22	32	22	70	200	26	215	89	24	9.0	32	4.4	27
23	30	21	65	133	26	283	82	29	9.4	9.9	3.7	17
24	32	30	56	115	100	458	72	408	8.5	5.9	3.1	11
25	28	38	59	151	200	800	65	479	8.1	4.4	3.9	8.4
26	29	22	63	115	170	465	60	493	6.5	4.4	3.5	7.4
27	148	30	56	100	130	259	112	314	5.9	5.6	3.1	6.5
28	77	37	47	87	100	189	175	240	7.7	4.2	3.5	6.1
29	61	30	35	80	---	211	120	192	8.1	4.4	3.1	19
30	52	27	35	75	---	215	91	189	6.2	5.3	2.9	14
31	48	---	45	70	---	196	---	125	---	3.5	2.6	---
TOTAL	1026.3	885	1721	5913	1560	12436	4731	3607	1425.4	193.6	191.0	525.1
MEAN	33.1	29.5	55.5	191	55.7	401	158	116	47.5	6.25	6.16	17.5
MAX	148	45	128	1300	200	1980	500	493	254	32	17	158
MIN	4.8	19	22	70	23	100	60	24	5.9	2.3	2.3	2.1
CFSM	.74	.66	1.24	4.28	1.25	8.99	3.54	2.60	1.07	.14	.14	.39
IN.	.86	.74	1.44	4.93	1.30	10.37	3.95	3.01	1.19	.16	.16	.44

CAL YR 1978 TOTAL 25224.3 MEAN 69.1 MAX 887 MIN 2.1 CFSM 1.55 IN 21.04
WTR YR 1979 TOTAL 34214.4 MEAN 93.7 MAX 1980 MIN 2.1 CFSM 2.10 IN 28.54

HUDSON RIVER BASIN

91

01350355 SCHOHARIE CREEK AT BREAKABEEN, NY

LOCATION.--Lat 42°32'10", long 74°24'40", Schoharie County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) downstream from bridge on State Highway 30, 0.9 mi (1.4 km) north of Breakabeen, and 1.1 mi (1.8 km) downstream from Keyser Kill.

DRAINAGE AREA.--443 mi² (1,147 km²), revised.

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213.4 m), from topographic map.

REMARKS.--Records poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi² (813 km²), 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Nov. 9, 1977, gage height, 16.50 ft (5.029 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 18, 19, 1975, gage height, 0.63 ft (0.192 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,400 ft³/s (578 m³/s) Mar. 25, gage height, 11.98 ft (3.652 m); minimum daily, 13 ft³/s (0.37 m³/s) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	85	56	1500	680	762	2220	1310	680	123	17	28
2	28	82	58	9340	552	915	1940	1260	659	104	32	27
3	24	79	58	6870	500	1140	1820	1100	1440	54	42	29
4	21	69	147	2260	450	1630	1620	1230	1120	43	24	33
5	24	66	142	1590	380	11400	1770	1110	740	29	15	30
6	80	63	108	1280	350	14900	1480	915	710	26	28	558
7	71	62	102	1230	320	9130	1340	864	617	24	45	213
8	45	69	102	3460	310	4130	1250	717	447	22	28	68
9	37	66	313	2230	290	2750	1260	732	415	21	13	46
10	34	62	246	1400	280	2850	1410	702	425	19	19	38
11	34	59	152	1140	270	4360	1430	527	652	20	39	33
12	33	56	140	824	260	2430	1720	597	1650	21	43	29
13	27	65	168	984	250	2000	1820	552	747	21	75	27
14	147	121	135	1120	240	2430	2810	552	492	18	40	25
15	163	84	119	1190	230	1700	2870	503	278	18	42	41
16	91	48	369	824	220	1400	2220	527	87	22	41	37
17	68	45	527	732	220	1200	2030	431	108	38	32	31
18	60	68	364	645	220	1140	1800	447	91	41	28	22
19	62	91	283	509	220	1200	1510	409	62	42	36	20
20	100	80	304	611	220	1190	1350	503	45	36	35	19
21	102	52	740	1000	220	1320	1230	521	35	28	28	19
22	80	48	702	2840	240	1600	1140	447	32	188	26	46
23	75	44	584	1590	296	1850	1060	447	32	125	24	46
24	77	59	452	1180	1170	2720	949	3450	30	32	23	27
25	69	89	558	2700	2010	12000	1040	5650	28	21	28	23
26	62	80	436	2080	1210	5390	1000	5010	26	20	26	21
27	340	62	447	1480	873	2350	1920	2970	24	36	26	20
28	168	59	394	1150	725	1920	3650	2420	39	28	28	21
29	117	58	313	1060	---	2040	2250	2060	77	19	28	30
30	125	55	389	808	---	2010	1670	2160	48	26	28	30
31	93	---	394	740	---	2130	---	1550	---	24	28	---
TOTAL	2486	2026	9302	56367	13206	103987	51579	41673	11836	1289	967	1637
MEAN	80.2	67.5	300	1818	472	3354	1719	1344	395	41.6	31.2	54.6
MAX	340	121	740	9340	2010	14900	3650	5650	1650	188	75	558
MIN	21	44	56	509	220	762	949	409	24	18	13	19
CAL YR 1978	TOTAL	236263	MEAN	647	MAX	11000	MIN	12				
WTR YR 1979	TOTAL	296355	MEAN	812	MAX	14900	MIN	13				

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 (0.6 km) south of Burtonsville, 2.7 mi (4.3 km) north of Esperance, and 13.5 mi (21.7 km) upstream from mouth.

DRAINAGE AREA.--883 mi² (2,287 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 507.98 ft (154.832 m) National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Records fair except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi² (813 km²), 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.--40 years, 1,015 ft³/s (28.74 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft³/s (2,170 m³/s) Oct. 16, 1955, gage height, 12.39 ft (3.776 m); minimum, 2.4 ft³/s (0.068 m³/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 (3.20 m) and 10.2 ft (3.11 m), respectively, from information furnished 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, 29,500 ft³/s (835 m³/s) Mar. 6, gage height, 7.15 ft (2.179 m); maximum gage height, 7.44 ft (2.268 m) Mar. 6 (ice jam); minimum discharge, 33 ft³/s (0.93 m³/s) Sept. 2, gage height, 0.71 ft (0.216 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	197	161	1500	1050	2640	3850	2030	2220	274	83	37
2	57	179	163	8000	920	2940	3420	1700	1200	327	103	34
3	53	174	167	12600	850	3050	3140	1480	1860	226	132	46
4	52	164	162	5100	800	3640	2640	1740	1670	158	112	67
5	51	151	424	3080	770	13800	3470	1620	1420	131	92	54
6	63	142	333	2280	720	28100	2720	1320	1000	108	75	581
7	107	136	279	2010	690	16500	2230	1200	1000	95	63	1830
8	128	140	279	3850	660	9920	1960	1060	745	87	62	587
9	95	155	562	2500	640	6240	2020	964	694	81	62	289
10	79	147	942	1600	620	5890	2380	817	645	75	56	197
11	70	136	518	1200	600	9650	2710	836	570	70	60	154
12	66	127	401	1100	580	5610	3510	645	2410	69	70	126
13	64	121	431	1200	560	3980	3810	694	1880	65	97	108
14	95	119	428	1700	540	5990	6120	661	1120	60	125	100
15	369	164	355	2100	520	6300	6560	645	728	53	99	119
16	263	149	354	1400	520	3480	4470	556	645	53	84	152
17	184	107	694	1200	500	3020	3760	542	298	62	77	136
18	149	133	731	1100	500	2610	3070	462	280	87	74	116
19	133	211	600	1000	490	2670	2520	475	280	106	75	101
20	136	187	550	900	480	2900	2130	425	193	109	77	90
21	174	169	1000	1300	470	3610	1830	542	163	88	75	87
22	169	141	2450	2500	470	4380	1670	528	143	648	67	94
23	150	122	1610	3730	470	5050	1540	413	130	372	57	141
24	134	127	1530	2460	700	6420	1390	1720	122	222	50	144
25	139	183	1130	3260	1500	15700	1280	9450	114	138	47	107
26	134	205	1150	4480	4160	10900	1250	8510	107	120	44	89
27	303	236	900	3060	3460	5670	1580	5610	98	253	49	79
28	602	198	820	2360	2830	3830	5250	4100	94	179	49	73
29	311	176	750	2090	---	3580	3810	3710	247	132	49	79
30	251	173	730	1700	---	3680	2610	4030	196	107	45	97
31	230	---	800	1300	---	3690	---	2850	---	90	40	---
TOTAL	4871	4769	21404	83660	27070	205440	88700	61335	22272	4645	2250	5914
MEAN	157	159	690	2699	967	6627	2957	1979	742	150	72.6	197
MAX	602	236	2450	12600	4160	28100	6560	9450	2410	648	132	1830
MIN	51	107	161	900	470	2610	1250	413	94	53	40	34
CAL YR 1978	TOTAL	442080	MEAN	1211	MAX	16100	MIN	26				
WTR YR 1979	TOTAL	532330	MEAN	1458	MAX	28100	MIN	34				

HUDSON RIVER BASIN

93

01354000 MOHAWK RIVER AT TRIBES HILL, NY

LOCATION.--Lat 42°56'42", long 74°17'21", Montgomery County, Hydrologic Unit 02020004, at bridge on highway between Tribes Hill and Fort Hunter, 0.3 mi (0.5 km) downstream from Schoharie Creek.

DRAINAGE AREA.--3,096 mi² (8,019 km²).

PERIOD OF RECORD.--Water years 1973 to August 1979 (discontinued).

CHEMICAL DATA: 1973 (b), 1974-75 (d), 1976-77 (b), 1978-79 (d).

MINOR ELEMENTS DATA: 1974-76 (d), 1977 (c), 1978-79 (d).

ORGANIC DATA: OC--1974 (c), 1975 (d), 1976-77 (c), 1978-79 (d).

NUTRIENT DATA: 1973 (b), 1974-76 (d), 1977 (c), 1978-79 (d).

BIOLOGICAL DATA:

Bacteria--1977-79 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
26...	0900	E2500	305	6.9	10.0	4.0	11.5	102	13	K81
NOV										
29...	1100	E2800	260	7.4	1.0	3.0	14.0	101	15	490
DEC										
11...	1500	E6200	285	7.3	.0	15	14.2	99	41	K2200
JAN										
24...	1000	E9100	270	8.5	.0	4.0	15.2	106	18	380
FEB										
26...	1230	E6800	245	6.8	.0	5.0	13.8	102	14	2000
MAR										
14...	1000	E14000	225	7.5	1.0	7.0	13.5	101	7	2500
APR										
12...	1400	E15000	223	7.6	4.5	8.0	13.1	105	15	1800
MAY										
25...	1030	E14000	262	--	16.0	50	10.2	100	22	3300
JUN										
13...	0830	E4600	215	7.4	17.5	5.0	8.7	88	15	1000
JUL										
17...	1030	E1800	266	8.0	23.5	2.0	7.2	85	10	K200
AUG										
06...	1030	E1900	283	7.8	31.0	4.0	8.5	113	16	K16
27...	1000	E1400	318	8.5	24.0	3.0	--	--	19	280

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
26...	34	6.2	12	1.5	81	35	16	175	1	.52
NOV										
29...	--	--	--	--	--	--	--	154	3	--
DEC										
11...	--	--	--	--	--	--	--	148	21	.54
JAN										
24...	20	3.7	8.6	1.0	80	25	15	158	8	.72
FEB										
26...	--	--	--	--	--	--	--	131	121	.75
MAR										
14...	--	--	--	--	--	--	--	132	22	.90
APR										
12...	--	--	--	--	--	--	--	130	26	.68
MAY										
25...	--	--	--	--	--	--	--	136	47	.80
JUN										
13...	--	--	--	--	--	--	--	149	15	.40
JUL										
17...	26	5.2	9.4	.8	76	27	14	164	5	.33
AUG										
06...	27	6.3	13	1.1	75	28	19	151	4	.19
27...	--	--	--	--	--	--	--	196	4	.48

E Estimated.

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

HUDSON RIVER BASIN

01354000 MOHAWK RIVER AT TRIBES HILL, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN. AMMONIA TOTAL (MG/L AS N)	NITRO- GEN. ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 26...	.48	.30	.78	1.3	.06	1	2	30	3	360
NOV 29...	--	--	--	--	--	1	2	30	7	350
DEC 11...	.33	.53	.86	1.4	.08	1	3	70	19	1000
JAN 24...	.35	.46	.81	1.5	.05	1	0	50	2	390
FEB 26...	.22	.18	.40	1.2	.05	2	0	10	4	520
MAR 14...	.20	.38	.58	1.5	.02	2	1	30	7	790
APR 12...	.14	.55	.69	1.4	.04	3	0	40	4	870
MAY 25...	.32	.78	1.1	1.9	.08	2	0	20	10	2800
JUN 13...	.22	.35	.57	.97	.03	3	0	20	13	450
JUL 17...	.28	.49	.77	1.1	.04	4	0	30	3	200
AUG 06...	.46	.64	1.1	1.3	.06	3	0	10	3	200
27...	.70	.70	1.4	1.9	.05	3	0	20	2	180

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT 26...	17	<.5	0	20	8.5	1	2.26	.000
NOV 29...	21	<.5	0	20	4.5	0	1.14	.000
DEC 11...	22	<.5	0	50	6.1	0	2.35	.000
JAN 24...	0	--	0	20	5.3	0	.000	.000
FEB 26...	3	<.5	--	10	3.9	0	.590	.000
MAR 14...	12	<.5	0	60	8.5	0	.000	.000
APR 12...	4	<.5	--	10	4.0	--	.430	.000
MAY 25...	5	<.5	--	80	5.1	0	10.1	.000
JUN 13...	6	<.5	--	30	4.9	0	3.37	.000
JUL 17...	0	<.5	--	10	12	0	7.37	.000
AUG 06...	2	<.5	--	10	4.4	0	19.9	.000
27...	0	<.5	--	10	7.1	0	26.0	3.52

01354160 MOHAWK RIVER AT LOCK 10 AT CRANESVILLE, NY

LOCATION.--Lat 42°55'03", long 74°08'31", Montgomery County, Hydrologic Unit 02020004, at Erie (Barge) Canal Lock 10, 0.2 mi (0.3 km) upstream from Evas Kill, 0.3 mi (0.5 km) west of Cranesville, and 0.8 mi (1.3 km) downstream from Terwilliger Creek.

DRAINAGE AREA.--3,220 mi² (8,340 km²).

PERIOD OF RECORD.--Water years 1969 to August 1979 (discontinued).

CHEMICAL DATA: 1969 (d), 1970-75 (e), 1976-77 (b), 1978-79 (d).

MINOR ELEMENTS DATA: 1971 (a), 1972 (c), 1973 (b), 1974-79 (d).

ORGANIC DATA: OC--1974 (c), 1975 (d), 1976-78 (c), 1979 (d).

NUTRIENT DATA: 1969-75 (e), 1976-78 (c), 1979 (d).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978-79 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
26...	1100	E2500	240	7.7	10.0	5.0	11.9	103	15	99
NOV										
29...	1300	E2800	265	7.5	1.0	2.0	14.0	100	13	390
DEC										
11...	1200	E6200	265	7.2	.5	15	14.4	101	28	K300
JAN										
24...	1200	E9100	225	6.6	.0	5.0	15.2	106	14	K1300
FEB										
26...	1400	E6800	240	6.9	.0	11	14.4	101	7	3200
MAR										
14...	1300	E14000	185	7.7	2.0	20	14.0	101	4	K800
APR										
12...	1000	E15000	190	7.4	4.5	20	12.8	100	16	2000
MAY										
25...	1530	E14000	240	--	15.0	15	10.4	102	11	K1500
JUN										
13...	1030	E4600	218	7.7	18.0	4.0	9.7	100	15	K150
JUL										
17...	1300	E1800	270	7.7	24.5	3.0	7.0	82	13	160
AUG										
06...	1300	E1900	279	8.2	27.0	2.0	9.9	124	16	K16
27...	1300	E1400	289	8.3	23.0	3.0	9.9	115	17	160

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
26...	30	5.1	6.8	1.5	71	28	9.5	142	3	.38
NOV										
29...	--	--	--	--	--	--	--	150	7	.46
DEC										
11...	--	--	--	--	--	--	--	142	21	.53
JAN										
24...	24	4.3	7.9	1.1	62	21	12	134	8	.64
FEB										
26...	--	--	--	--	--	--	--	145	22	.77
MAR										
14...	--	--	--	--	--	--	--	108	26	.70
APR										
12...	--	--	--	--	--	--	--	113	41	.55
MAY										
25...	--	--	--	--	--	--	--	138	24	.56
JUN										
13...	--	--	--	--	--	--	--	146	17	.40
JUL										
17...	27	5.3	9.4	1.0	74	26	13	165	16	.38
AUG										
06...	29	6.8	14	1.1	74	30	20	157	2	.29
27...	--	--	--	--	--	--	--	177	11	.58

E Estimated.

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

HUDSON RIVER BASIN

01354160 MOHAWK RIVER AT LOCK 10 AT CRANVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN. AMMONIA TOTAL (MG/L AS N)	NITRO- GEN. ORGANIC TOTAL (MG/L AS N)	NITRO- GEN.AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 26...	.23	.47	.70	1.1	.04	1	1	20	3	390
NOV 29...	.15	.14	.29	.75	.04	1	8	<10	3	290
DEC 11...	.10	.27	.37	.90	.07	1	3	30	11	1300
JAN 24...	.15	.15	.30	.94	.02	0	0	20	0	340
FEB 26...	.27	.42	.69	1.5	.07	3	0	50	6	750
MAR 14...	.07	.27	.34	1.0	.02	2	1	10	6	1500
APR 12...	.05	.48	.53	1.1	.05	3	0	20	4	1400
MAY 25...	.17	.56	.73	1.3	.05	3	0	40	4	920
JUN 13...	.19	.34	.53	.93	.03	2	0	20	9	350
JUL 17...	.21	.72	.93	1.3	.07	3	0	20	3	280
AUG 06...	.23	.59	.82	1.1	.04	3	0	10	4	230
27...	.19	.46	.65	1.2	.03	3	0	10	2	200

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT 26...	9	<.5	0	0	11	0	2.19	.000
NOV 29...	31	<.5	0	10	4.3	0	1.38	.000
DEC 11...	25	<.5	0	240	4.1	0	2.53	.000
JAN 24...	1	--	--	20	4.9	0	.040	.000
FEB 26...	4	<.5	--	10	5.9	0	.000	.000
MAR 14...	0	<.5	0	60	4.0	0	.000	.000
APR 12...	5	<.5	--	10	2.7	0	1.25	.000
MAY 25...	3	<.5	--	20	6.1	1	6.96	.000
JUN 13...	6	<.5	--	40	4.2	0	4.86	.000
JUL 17...	1	<.5	--	0	4.9	0	9.71	1.35
AUG 06...	1	<.5	--	10	4.0	1	34.2	.000
27...	0	<.5	--	10	15	0	12.1	.000

01354490 MOHAWK RIVER AT SCHENECTADY, NY

LOCATION.--Lat 42°49'06", long 73°57'04", Schenectady County, Hydrologic Unit 02020004, at new (1977) Schenectady-Scotia bridge, 0.5 mi (0.8 km) upstream from railroad bridge, and 1.0 mi (1.6 km) upstream from Collins Creek.

DRAINAGE AREA.--3,302 mi² (8,552 km²).

PERIOD OF RECORD.--Water years 1969 to current year.

CHEMICAL DATA: 1969 (d), 1970-72 (e), 1973 (d), 1974 (e), 1975 (d), 1976-77 (b), 1978-79 (d).

MINOR ELEMENTS DATA: 1972 (c), 1973 (b), 1974-75 (d), 1976-77 (c), 1978-79 (d).

ORGANIC DATA: OC--1974 (c), 1975 (d), 1976-77 (c), 1978-79 (d).

NUTRIENT DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (c), 1978-79 (d).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978-79 (d).

REMARKS.--Water-discharge data are based on records for 01357499 diversion from Mohawk River at Crescent Dam, and 01357500 Mohawk River at Cohoes. Prior to January 1977, sampling site was 0.2 mi (0.3 km) upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
26...	1300	E2500	260	6.9	10.0	4.0	11.9	107	16	68
NOV										
30...	0900	E2500	325	7.6	2.0	2.0	13.6	104	17	K25
DEC										
12...	0930	E4600	280	7.4	.0	9.0	14.2	102	33	K3400
JAN										
25...	1300	E7800	255	7.3	.0	4.0	14.2	101	20	470
FEB										
23...	0800	E3700	265	7.0	.0	4.0	13.4	96	8	K500
MAR										
14...	1400	E14000	205	7.7	2.0	15	13.7	101	4	K1400
APR										
11...	1600	E13000	210	7.9	4.0	7.0	12.6	98	14	1300
MAY										
21...	1545	E2200	255	8.3	20.0	6.0	10.2	111	13	200
JUN										
12...	0930	E3300	236	8.0	19.0	3.0	8.9	95	14	K60
JUL										
16...	1100	E1400	289	8.0	24.5	3.0	7.2	86	15	K180
AUG										
07...	0930	E1800	284	7.9	25.0	3.0	7.6	90	14	44
28...	1000	E1500	300	7.8	23.0	2.0	7.3	84	22	180

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
26...	29	5.0	9.9	1.5	68	29	15	150	3	.47
NOV										
30...	--	--	--	--	--	--	--	162	3	.50
DEC										
12...	--	--	--	--	--	--	--	150	11	.59
JAN										
25...	24	4.4	12	1.1	65	22	19	140	10	.63
FEB										
23...	--	--	--	--	--	--	--	143	5	.71
MAR										
14...	--	--	--	--	--	--	--	120	24	.77
APR										
11...	--	--	--	--	--	--	--	120	20	.61
MAY										
21...	--	--	--	--	--	--	--	153	13	.60
JUN										
12...	--	--	--	--	--	--	--	152	15	.42
JUL										
16...	30	5.8	9.0	1.0	100	23	15	198	6	.29
AUG										
07...	30	6.8	17	1.0	74	28	19	171	3	.30
28...	--	--	--	--	--	--	--	185	4	.62

E Estimated.

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

HUDSON RIVER BASIN

01354490 MOHAWK RIVER AT SCHENECTADY, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 26...	.28	.28	.56	1.0	.05	1	1	10	4	360
NOV 30...	.27	.26	.53	1.0	.04	1	2	20	3	300
DEC 12...	.20	.35	.55	1.1	.07	1	2	30	4	650
JAN 25...	.18	.29	.47	1.1	.02	0	0	10	1	290
FEB 23...	.35	.16	.51	1.2	.03	3	0	10	3	190
MAR 14...	.09	.26	.35	1.1	.02	2	1	10	6	710
APR 11...	.10	.51	.61	1.2	.04	3	0	30	3	760
MAY 21...	.13	1.4	1.5	2.1	.04	3	0	30	5	190
JUN 12...	.21	.64	.85	1.3	.03	2	0	20	6	350
JUL 16...	.06	.39	.45	.74	.04	3	22	20	4	230
AUG 07...	.06	.42	.48	.78	.04	3	1	<10	4	140
28...	.14	.53	.67	1.3	.03	3	0	10	2	160

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV- ERABLE GRAVI- METRIC (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT 26...	6	<.5	0	0	5.9	0	3.39	.000
NOV 30...	13	<.5	0	30	4.7	1	.000	.000
DEC 12...	21	<.5	0	80	4.0	0	.350	.000
JAN 25...	1	--	--	10	3.4	0	.000	.000
FEB 23...	0	<.5	--	10	5.2	0	.000	.000
MAR 14...	12	<.5	0	70	3.8	0	.000	.000
APR 11...	11	<.5	--	10	4.2	0	.620	.000
MAY 21...	0	<.5	--	40	3.8	0	17.4	.000
JUN 12...	5	<.5	--	20	4.9	0	10.9	.000
JUL 16...	1	<.5	--	10	5.5	0	14.6	.490
AUG 07...	3	<.5	--	10	3.8	2	14.2	.000
28...	0	<.5	--	30	3.2	0	4.16	.000

01357500 MOHAWK RIVER AT COHOES, NY

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 (3.2 km) upstream from mouth. Water-quality sampling site at bridge on State Highway 32, 0.7 mi (1.1 km) downstream from discharge station.

DRAINAGE AREA.--3,456 mi² (8,951 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1917 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to July 17, 1925, published as "at Crescent Dam".

REVISED RECORDS.--WSP 741: Drainage area. WSP 1302: 1919-23 (M).

GAGE.--Water-stage recorder. Datum of gage is 49.13 ft (14.975 m) National Geodetic Vertical Datum of 1929. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi (2.74 km) upstream at Crescent Dam at datum 130.87 ft (39.889 m) higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records fair. 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. Prior to 1925 records published as total flow. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

COOPERATION.--Diversions through Barge Canal at Lock 6 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--7 years (1919-25), 5,820 ft³/s (164.8 m³/s), includes diversion at Lock 6; 54 years (1926-79), 5,759 ft³/s (163.1 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s (4,050 m³/s) Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft (7.056 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum, 6 ft³/s (0.17 m³/s) Sept. 18, 1941, gage height, 3.40 ft (1.036 m); minimum daily, 23 ft³/s (0.65 m³/s) Aug. 24, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 41,000 ft³/s (1,160 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0145	51,600 1,461	17.97 5.477	Mar. 26	0115	45,900 1,300	17.49 5.331
Mar. 7	0030	*71,600 2,028	*19.41 5.916				

Minimum discharge, 411 ft³/s (11.64 m³/s) Sept. 27, gage height, 6.37 ft (1.942 m); minimum daily, 780 ft³/s (22.09 m³/s) July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	2810	2760	3400	5990	9390	19100	11000	7170	1240	1890	1610
2	1080	2390	2220	15200	5600	8350	18200	7810	4260	1310	1580	1490
3	1310	2130	2200	34300	5040	8470	19600	6530	3820	1960	1700	1390
4	1170	2350	4190	21400	4820	9940	18600	7070	4770	1690	1960	1880
5	1370	2040	7600	13700	4750	15200	19300	8240	3720	1270	1890	1600
6	2300	2410	9090	10000	4540	59200	17000	7430	3720	1430	1800	2730
7	2380	2600	8060	7330	4410	63200	13100	5340	3430	1520	1720	10100
8	2160	2500	5570	6470	4520	43400	10800	5340	2380	1460	1480	6590
9	2290	2390	6470	7850	4570	28200	9900	4150	2670	1460	1330	2620
10	2420	2510	8390	7070	4610	22500	10600	4090	2420	1460	1240	2350
11	1890	2220	6170	5110	4340	25600	12600	4130	2570	1490	1570	2130
12	1670	2200	4610	4700	3960	21000	14600	3010	3080	1400	1590	2050
13	2200	2290	4040	3900	3880	15000	14700	3490	4480	1430	1780	1980
14	2630	2210	3640	4190	3900	13800	17300	2810	3150	823	1620	2250
15	4550	2420	3740	4920	4000	22100	23600	2810	2350	780	1490	2320
16	5490	2440	3280	5660	4100	15700	17500	3010	2140	1230	1470	1460
17	4060	2350	3260	5850	4200	12500	15800	2710	2130	1540	1460	1880
18	2460	2440	3030	4960	4000	11100	13300	2310	2070	1470	1480	2140
19	2610	2570	2930	4340	3700	11300	10100	2220	1990	1700	1490	2120
20	2780	2510	2950	4000	4000	13000	8540	2270	1780	1640	1560	1950
21	2640	2500	3210	3940	4300	16500	7990	2130	1610	1570	1530	1730
22	2410	2540	4190	4820	4000	19600	8580	2160	1530	1820	1600	1450
23	2130	2500	5470	7740	3700	22300	7170	2130	1530	1840	1570	1040
24	2450	2480	4890	9090	4020	26000	4390	4170	1530	1640	1490	1610
25	2620	2530	3760	7850	4920	38500	6020	13600	1490	1600	1350	1250
26	2390	2730	3250	9470	6780	39100	7360	14200	1750	1920	1120	1010
27	3060	2650	3400	10000	9240	22600	8060	14700	1800	2200	1290	1040
28	5290	2630	3400	8540	10200	15500	23700	9700	1520	2310	1420	1420
29	4170	2760	3190	7880	---	12800	24600	10600	1230	2070	1400	1690
30	3050	2440	3140	7130	---	14600	15400	10100	1180	1920	1880	1530
31	3100	---	3340	6470	---	16200	---	8840	---	1720	1970	---
TOTAL	81590	73540	135440	257280	136090	672650	417510	188100	79270	48913	48720	66410
MEAN	2632	2451	4369	8299	4860	21700	13920	6068	2642	1578	1572	2214
MAX	5490	2810	9090	34300	10200	63200	24600	14700	7170	2310	1970	10100
MIN	1080	2040	2200	3400	3700	8350	4390	2130	1180	780	1120	1010

CAL YR 1978 TOTAL 2016933 MEAN 5526 MAX 39500 MIN 740
WTR YR 1979 TOTAL 2205513 MEAN 6043 MAX 63200 MIN 780

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 1978 to September 1979

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	102	84	3.0	3.0	3.0	3.0	96	114	102	114	126
2	132	90	78	3.0	3.0	3.0	3.0	108	96	108	120	144
3	132	90	84	3.0	3.0	3.0	3.0	96	108	114	132	144
4	138	90	78	3.0	3.0	3.0	3.0	108	96	138	126	169
5	126	108	72	3.0	3.0	3.0	3.0	108	114	138	108	120
6	144	114	90	3.0	3.0	3.0	3.0	90	114	114	108	102
7	126	90	72	3.0	3.0	3.0	3.0	96	96	108	108	114
8	138	84	84	3.0	3.0	3.0	3.0	84	96	126	138	126
9	138	120	72	3.0	3.0	3.0	3.0	102	108	126	108	114
10	126	102	78	3.0	3.0	3.0	3.0	102	96	114	102	102
11	138	96	72	3.0	3.0	3.0	3.0	120	90	96	114	114
12	120	90	3.0	3.0	3.0	3.0	3.0	90	248	120	114	114
13	138	84	3.0	3.0	3.0	3.0	3.0	84	114	126	132	120
14	120	90	3.0	3.0	3.0	3.0	3.0	102	114	102	144	108
15	108	102	3.0	3.0	3.0	3.0	3.0	102	114	126	102	108
16	84	96	3.0	3.0	3.0	3.0	562	108	108	132	114	96
17	102	90	3.0	3.0	3.0	3.0	72	108	102	248	108	102
18	138	78	3.0	3.0	3.0	3.0	72	120	114	108	108	126
19	114	78	3.0	3.0	3.0	3.0	72	108	114	120	108	120
20	138	108	3.0	3.0	3.0	3.0	72	90	120	90	102	144
21	108	96	3.0	3.0	3.0	3.0	72	84	96	108	120	156
22	108	90	3.0	3.0	3.0	3.0	72	90	102	126	126	108
23	138	78	3.0	3.0	3.0	3.0	78	114	120	114	126	120
24	108	78	3.0	3.0	3.0	3.0	78	84	96	108	114	102
25	132	90	3.0	3.0	3.0	3.0	84	84	108	96	126	102
26	96	90	3.0	3.0	3.0	3.0	72	96	96	144	132	138
27	102	84	3.0	3.0	3.0	3.0	78	108	96	120	90	120
28	96	90	3.0	3.0	3.0	3.0	72	102	96	108	114	84
29	108	90	3.0	3.0	---	3.0	72	108	96	126	126	102
30	96	108	3.0	3.0	---	3.0	138	108	96	132	114	96
31	126	---	3.0	3.0	---	3.0	---	108	---	102	114	---
TOTAL	3744	2796	924.0	93.0	84.0	93.0	1711.0	3108	3278	3740	3612	3541
MEAN	121	93.2	29.8	3.00	3.00	3.00	57.0	100	109	121	117	118
MAX	144	120	90	3.0	3.0	3.0	562	120	248	248	144	169
MIN	84	78	3.0	3.0	3.0	3.0	3.0	84	90	90	90	84

CAL YR 1978 TOTAL 27607.0 MEAN 75.6 MAX 601 MIN 3.0
 WTR YR 1979 TOTAL 26724.0 MEAN 73.2 MAX 562 MIN 3.0

01357500 MOHAWK RIVER AT COHOES, NY

REGULATION

(see Reservoirs in Hudson River Basin)

Delta Dam.
 Hinckley Reservoir.
 Schoharie Reservoir.

DIVERSIONS

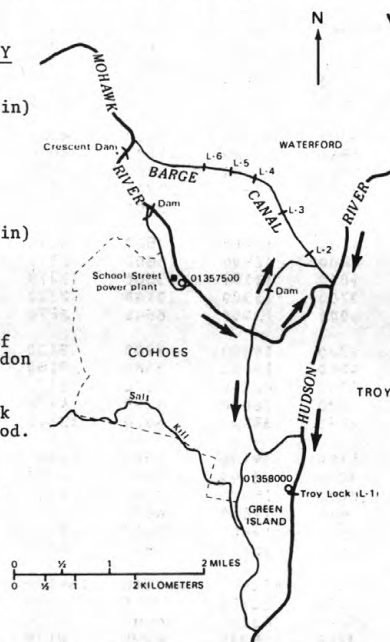
(see Reservoirs in Hudson River Basin)

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
 (see station 01327500).
 Bond Creek at Dunham Basin (see
 station 01328000).
 Champlain (Barge) Canal (see station
 01327500).

From St. Lawrence River basin through
 summit level of Champlain (Barge)
 Canal at Dunham Basin.

Figure 7.--Gaging stations and diversions near mouth of Mohawk River.

01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-59, 1970, 1976 to current year.

CHEMICAL DATA: 1955, 1957 (a); 1958-59 (b); 1970 (a); 1977 (b); 1978 (d); 1979 (a).

MINOR ELEMENTS DATA: 1976 (a), 1977 (c), 1978-79 (d).

PESTICIDE DATA: 1976 (a), 1977 (c), 1979 (d).

ORGANIC DATA: OC--1976 (a), 1977 (c), 1978-79 (d).

PCB--1976 (a), 1977 (c), 1979 (d).

PCN--1979 (d).

NUTRIENT DATA: 1970, 1976 (a); 1977 (c); 1978 (d); 1979 (a).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978 (d), 1979 (a).

SEDIMENT DATA: 1956 (d), 1958-59 (b), 1976 (c), 1977 (e), 1978 (a), 1979 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1954 to June 1959, unpublished.

pH: January 1954 to April 1956, unpublished.

WATER TEMPERATURES: May 1956 to June 1959.

SUSPENDED-SEDIMENT DISCHARGE: January 1954 to June 1959, August 1976 to March 1978, November 1978 to September 1979 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: 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: Maximum daily, 300,000 tons (272,000 Mg) Oct. 17, 1955; minimum daily, 0.8 tons (0.7 Mg) Aug. 7, 1955.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 482 mg/L Mar. 6; minimum daily mean, 2 mg/L Jan. 24, July 20.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 83,400 tons (75,700 Mg) Mar. 6; minimum daily, 8.9 tons (8.1 Mg) July 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)
OCT											
26...	1600	2910	265	7.5	10.5	7.0	11.5	104	K120	32	5.7
NOV											
30...	1100	2160	300	7.8	2.0	2.0	13.7	99	100	--	--
DEC											
06...	1330	8110	--	--	--	--	--	--	--	--	--
12...	1400	4890	280	7.6	1.0	15	13.9	101	K700	--	--
JAN											
02...	0915	5570	--	--	--	--	--	--	--	--	--
02...	1545	21500	--	--	--	--	--	--	--	--	--
03...	1015	32600	--	--	--	--	--	--	--	--	--
25...	1000	7850	245	6.6	.0	5.0	15.2	106	K1700	36	6.4
FEB											
23...	1030	3640	255	7.1	.0	3.0	13.6	102	58	--	--
MAR											
05...	0645	12900	--	--	--	--	--	--	--	--	--
06...	0900	63400	--	--	--	--	--	--	--	--	--
07...	1045	64900	--	--	--	--	--	--	--	--	--
08...	1330	42900	--	--	--	--	--	--	--	--	--
14...	1700	13800	205	7.9	.5	15	15.4	108	K1100	--	--
26...	1430	37700	--	--	--	--	--	--	--	--	--
27...	1345	21700	--	--	--	--	--	--	--	--	--
APR											
11...	1200	12800	225	7.8	4.0	6.0	13.0	107	K600	--	--
12...	1415	15200	--	--	--	--	--	--	--	--	--
24...	1315	5190	--	--	--	--	--	--	--	--	--
29...	1600	24100	--	--	--	--	--	--	--	--	--
MAY											
21...	1130	2170	230	8.2	20.0	2.0	9.6	104	620	--	--
25...	1130	15300	--	--	--	--	--	--	--	--	--
JUN											
07...	1300	3440	--	--	--	--	--	--	--	--	--
12...	1330	3260	220	8.0	20.0	9.0	8.8	94	K200	--	--
21...	1300	E1700	--	--	--	--	--	--	--	--	--
25...	1130	E1600	--	--	--	--	--	--	--	--	--
JUL											
05...	1430	E1700	--	--	--	--	--	--	--	--	--
16...	1400	E1700	300	7.5	26.0	3.0	6.6	--	K280	28	6.2
AUG											
07...	1300	2110	309	7.8	27.0	1.0	6.7	82	62	31	7.3
12...	1715	E1900	--	--	--	--	--	--	--	--	--
27...	0930	E1200	--	--	--	--	--	--	--	--	--
28...	1300	E1600	305	7.7	24.0	2.0	6.7	79	K60	--	--

E Estimated.

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

HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT											
26...	8.3	1.6	74	30	11	157	12	--	.29	.24	.43
NOV											
30...	--	--	--	--	--	175	3	--	.58	.30	.25
DEC											
06...	--	--	--	--	--	--	10	4	.52	--	--
12...	--	--	--	--	--	169	6	--	.66	.12	.34
JAN											
02...	--	--	--	--	--	--	20	4	--	--	--
02...	--	--	--	--	--	--	81	1	--	--	--
03...	--	--	--	--	--	--	209	10	--	--	--
25...	13	1.3	63	21	16	135	10	--	.37	.14	.01
FEB											
23...	--	--	--	--	--	148	6	--	.75	.35	.15
MAR											
05...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	373	12	--	--	--
08...	--	--	--	--	--	--	202	13	--	--	--
14...	--	--	--	--	--	118	22	--	.73	.03	.38
26...	--	--	--	--	--	--	235	18	--	--	--
27...	--	--	--	--	--	--	59	41	--	--	--
APR											
11...	--	--	--	--	--	128	8	--	.62	.12	.38
12...	--	--	--	--	--	--	44	21	--	--	--
24...	--	--	--	--	--	--	14	1	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
MAY											
21...	--	--	--	--	--	138	18	--	.47	.10	1.1
25...	--	--	--	--	--	--	29	13	--	--	--
JUN											
07...	--	--	--	--	--	--	10	5	--	--	--
12...	--	--	--	--	--	140	86	--	.39	.18	.45
21...	--	--	--	--	--	--	19	7	--	--	--
25...	--	--	--	--	--	--	10	7	--	--	--
JUL											
05...	--	--	--	--	--	--	23	0	--	--	--
16...	15	1.2	80	25	21	176	11	--	.31	.31	.50
AUG											
07...	18	1.2	78	29	20	169	1	--	.29	.17	.22
12...	--	--	--	--	--	--	7	4	--	--	--
27...	--	--	--	--	--	--	3	1	--	--	--
28...	--	--	--	--	--	183	4	--	.45	.28	.37

HUDSON RIVER BASIN

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01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
OCT											
26...	.67	.96	.07	1	1	10	3	690	10	--	<.5
NOV											
30...	.55	1.1	.04	1	2	<10	3	270	16	--	<.5
DEC											
06...	--	--	.05	--	--	--	--	380	71	40	--
12...	.46	1.1	.06	1	1	20	3	610	8	--	<.5
JAN											
02...	--	--	--	--	--	--	--	350	3	50	--
02...	--	--	--	--	--	--	--	2000	8	110	--
03...	--	--	--	--	--	--	--	8600	23	290	--
25...	.15	.52	.03	1	0	10	0	320	0	--	--
FEB											
23...	.50	1.3	.04	3	0	10	3	210	0	--	<.5
MAR											
05...	--	--	--	--	--	--	--	830	5	50	--
06...	--	--	--	--	--	--	--	26000	55	910	--
07...	--	--	--	--	--	--	--	14000	19	400	--
08...	--	--	--	--	--	--	--	7800	11	220	--
14...	.41	1.1	.01	2	1	10	5	800	6	--	<.5
26...	--	--	--	--	--	--	--	6000	6	210	--
27...	--	--	--	--	--	--	--	2400	15	80	--
APR											
11...	.50	1.1	.03	3	0	10	3	580	2	--	<.5
12...	--	--	--	--	--	--	--	580	8	10	--
24...	--	--	--	--	--	--	--	770	7	70	--
29...	--	--	--	--	--	--	--	2500	0	80	--
MAY											
21...	1.2	1.7	.06	3	1	30	11	600	2	--	<.5
25...	--	--	--	--	--	--	--	1100	4	80	--
JUN											
07...	--	--	--	--	--	--	--	490	7	50	--
12...	.63	1.0	.07	3	0	20	10	1000	5	--	<.5
21...	--	--	--	--	--	--	--	320	5	40	--
25...	--	--	--	--	--	--	--	490	2	20	--
JUL											
05...	--	--	--	--	--	--	--	620	3	60	--
16...	.81	1.1	.07	3	6	20	4	240	0	--	<.5
AUG											
07...	.39	.68	.04	4	1	10	5	140	4	--	<.5
12...	--	--	--	--	--	--	--	170	1	60	--
27...	--	--	--	--	--	--	--	270	6	60	--
28...	.65	1.1	.06	4	0	10	3	260	1	--	--

HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT											
26...	0	10	7.8	1	--	--	--	--	--	--	--
NOV											
30...	0	20	11	0	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	.2	.00	.00	.0	.00	.00	.00
12...	0	60	4.5	0	--	--	--	--	--	--	--
JAN											
02...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
02...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
03...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
25...	--	10	4.0	0	--	--	--	--	--	--	--
FEB											
23...	--	30	5.3	0	--	--	--	--	--	--	--
MAR											
05...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
06...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	.1	.00	.00	.0	.00	.00	.00
08...	--	--	--	--	.1	.00	.00	.0	.00	.00	.00
14...	0	70	4.8	0	--	--	--	--	--	--	--
26...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
27...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
APR											
11...	--	10	2.8	0	--	--	--	--	--	--	--
12...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
24...	--	--	--	--	.1	.00	.00	.0	.00	.00	.00
29...	--	--	--	--	.1	.00	.00	.0	.00	.00	.00
MAY											
21...	--	20	3.8	3	--	--	--	--	--	--	--
25...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
JUN											
07...	--	--	--	--	.0	.00	.00	.0	.00	.00	.00
12...	--	30	7.6	0	--	--	--	--	--	--	--
21...	--	--	--	--	.1	.00	.00	.0	.00	.00	.00
25...	--	--	--	--	.0	.00	.00	--	--	--	--
JUL											
05...	--	--	--	--	.0	.00	.00	--	--	--	--
16...	--	10	4.4	0	--	--	--	--	--	--	--
AUG											
07...	--	10	3.2	2	--	--	--	--	--	--	--
12...	--	--	--	--	.0	.00	.00	--	--	--	--
27...	--	--	--	--	.2	.00	.00	--	--	--	--
28...	--	20	5.3	1	--	--	--	--	--	--	--

HUDSON RIVER BASIN

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01357500 MOHAWK RIVER AT COHOES, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT											
26...	--	--	--	--	--	--	--	--	--	14.2	.000
NOV											
30...	--	--	--	--	--	--	--	--	--	5.79	.000
DEC											
06...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
12...	--	--	--	--	--	--	--	--	--	1.35	.000
JAN											
02...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
02...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
03...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
25...	--	--	--	--	--	--	--	--	--	.000	.000
FEB											
23...	--	--	--	--	--	--	--	--	--	.000	.000
MAR											
05...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
07...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
08...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
14...	--	--	--	--	--	--	--	--	--	.000	.000
26...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
27...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
APR											
11...	--	--	--	--	--	--	--	--	--	.100	.000
12...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
24...	.00	.00	.00	.00	.00	.00	.00	.00	0	--	--
29...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
MAY											
21...	--	--	--	--	--	--	--	--	--	13.8	.000
25...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
JUN											
07...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
12...	--	--	--	--	--	--	--	--	--	2.80	.000
21...	.00	.00	.00	.00	.00	.00	--	.00	0	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUL											
05...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	9.93	.000
AUG											
07...	--	--	--	--	--	--	--	--	--	2.08	.000
12...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	2.91	.000

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAK							
06...	0900	63400	691	118000	25	38	52
07...	1045	64900	472	82700	25	36	49
07...	2200	54000	337	49100	22	35	49
08...	1630	40400	263	28700	27	37	54
10...	0845	22900	75	4640	28	46	63

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM
MAK							
06...	67	79	87	98	99	100	--
07...	62	76	91	98	99	100	--
07...	65	79	91	97	99	100	--
08...	68	78	83	94	96	97	100
10...	81	91	95	98	100	--	--

HUDSON RIVER BASIN

01357500 MOHAWK RIVER AT COHOES, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH												
1			---	---	20	149	9	83	5	81	7	177
2			---	---	12	72	39	1600	6	91	7	158
3			---	---	4	24	196	18200	7	95	8	183
4			---	---	6	68	95	5490	8	104	10	268
5			---	---	10	205	47	1740	8	103	23	944
6			---	---	9	221	22	594	10	123	482	83400
7			14	98	13	283	10	198	15	179	481	82100
8			12	81	11	165	20	349	12	146	272	31900
9			12	77	8	140	18	382	5	62	243	18500
10			9	61	18	408	---	---	---	---	203	12300
11			8	48	15	250	---	---	---	---	163	11300
12			10	59	14	174	---	---	---	---	122	6920
13			11	68	14	153	---	---	---	---	80	3240
14			10	60	11	108	---	---	---	---	44	1640
15			7	46	9	91	---	---	---	---	33	1970
16			10	66	7	62	---	---	---	---	28	1190
17			8	51	6	53	---	---	---	---	24	810
18			10	66	15	123	---	---	---	---	15	450
19			10	69	16	127	---	---	---	---	9	275
20			7	47	15	119	---	---	---	---	11	386
21			12	81	15	130	12	128	---	---	27	1200
22			11	75	14	158	25	325	---	---	48	2540
23			6	40	8	118	7	146	---	---	58	3490
24			7	47	7	92	2	49	---	---	85	5970
25			32	219	7	71	4	85	---	---	159	16500
26			34	251	8	70	6	153	---	---	144	15200
27			10	72	11	101	7	189	---	---	51	3110
28			9	64	6	55	9	208	---	---	28	1170
29			12	89	5	43	9	191	---	---	36	1240
30			8	53	3	25	9	173	---	---	22	867
31			---	---	3	27	7	122	---	---	35	1530
TOTAL			---	1888	---	3885	---	30405	---	984	---	310928
DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
APRIL MAY JUNE JULY AUGUST SEPTEMBER												
1	37	1910	37	1100	22	426	12	40	6	31	5	22
2	31	1520	31	654	21	242	10	35	11	47	5	20
3	28	1480	27	476	15	155	11	58	9	41	4	15
4	27	1360	26	496	13	167	10	46	10	53	7	36
5	19	990	26	578	11	110	7	24	4	20	10	43
6	28	1290	19	381	11	110	9	35	4	19	14	103
7	24	849	17	245	11	102	9	37	4	19	22	600
8	18	525	16	231	12	77	9	35	6	24	15	267
9	12	321	23	258	13	94	9	35	7	25	7	50
10	9	258	19	210	15	98	9	35	4	13	10	63
11	11	374	16	178	15	104	8	32	4	17	12	69
12	11	434	19	154	12	100	8	30	4	17	15	83
13	18	714	30	283	7	85	8	31	4	19	7	37
14	20	934	21	159	14	119	7	16	5	22	10	61
15	21	1340	12	91	15	95	6	13	7	28	6	38
16	22	1040	16	130	8	46	6	20	7	28	6	24
17	23	981	15	110	7	40	5	21	9	35	6	30
18	26	934	15	94	6	34	4	16	7	28	7	40
19	29	791	13	78	7	38	3	14	7	28	10	57
20	23	530	11	67	5	24	2	8.9	6	25	10	53
21	17	367	13	75	5	22	5	21	6	25	6	28
22	20	463	11	64	6	25	7	34	7	30	5	20
23	19	368	13	75	7	29	9	45	5	21	8	22
24	17	202	28	315	6	25	6	27	6	24	9	39
25	18	293	36	1320	10	40	14	60	14	51	10	34
26	24	477	25	958	7	33	16	83	7	21	6	16
27	25	544	44	1750	6	29	7	42	8	28	7	20
28	38	2430	30	786	7	29	9	56	6	23	7	27
29	53	3520	34	973	9	30	13	73	4	15	7	32
30	51	2120	30	818	10	32	15	78	5	25	8	33
31	---	---	25	597	---	---	12	56	6	32	---	---
TOTAL	---	29359	---	13704	---	2560	---	1156.9	---	834	---	1982

HUDSON RIVER BASIN

107

01358000 HUDSON RIVER AT GREEN ISLAND, NY
(National stream-quality accounting network station)
(National pesticide network station)
(National radiochemical network station)

LOCATION.--Lat 42°45'08", long 73°41'22", Albany County, Hydrologic Unit 02020003, on right bank at Green Island, just upstream from Troy lock and dam, and 0.5 mi (0.8 km) downstream from 5th branch Mohawk River. Water-quality sampling site at bridge on State Highway 7, 1.7 mi (2.7 km) downstream from discharge station.

DRAINAGE AREA.--8,090 mi² (20,953 km²), approximately (including that above site of former auxiliary gage).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft (0.094 m) below National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark), corrected. From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft (3.228 m) higher.

REMARKS.--Records fair above 15,000 ft³/s (424.8 m³/s), and poor below. Records include flow over spillway, estimates of flow through lock, and flow through powerplant. Powerplant, located on right bank just downstream from gage, was inoperative from Nov. 20, 1960 to Feb. 23, 1971. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

AVERAGE DISCHARGE.--33 years, 13,900 ft³/s (393.6 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft³/s (5,130 m³/s) Dec. 31, 1948, gage height, 27.05 ft (8.245 m), from high-water mark in gage well; maximum daily, 152,000 ft³/s (4,305 m³/s) Mar. 14, 1977; minimum daily, 882 ft³/s (25.0 m³/s) Sept. 2, 1968; minimum gage height 13.92 ft (4.243 m) Sept. 2, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 29.48 ft (8.986 m) at gage on opposite bank, from information by Corps of Engineers (discharge, 215,000 ft³/s or 6,090 m³/s). Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy lock and dam, reached a stage about 0.2 ft (0.06 m) higher upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft (1.01 m) higher than flood in 1936, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121,000 ft³/s (3,427 m³/s) Mar. 7, gage height, 23.64 ft (7.205 m); minimum daily, 2,350 ft³/s (66.6 m³/s) July 14; minimum gage height, 14.14 ft (4.310 m) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5320	9450	8290	9020	14700	18600	45000	43400	22100	4000	3430	7630
2	4200	8600	7840	36200	14400	19300	46900	35800	17100	5010	4410	7080
3	5080	7270	7490	68800	13400	20900	51900	31200	14300	6360	4650	5540
4	5610	7900	8200	47800	11400	24000	51800	30700	12900	5030	3030	6620
5	6120	6750	13500	33100	10700	47200	48000	31200	12700	3860	2900	8110
6	6120	6940	17400	23800	11800	101000	45200	29500	11900	5460	3850	10800
7	5630	8050	15600	19100	11400	112000	37500	26200	11100	4440	4760	19000
8	8680	8490	13000	17000	11500	83700	32400	19500	9360	3490	4940	15700
9	7660	8320	14400	22700	11400	59200	30700	17000	8960	3700	4700	11000
10	10100	8260	17100	19500	11100	48800	30700	15500	8110	4900	4210	9330
11	7170	7660	13600	13900	9930	53800	32800	15000	7730	4800	4460	8410
12	6510	6860	11000	13300	8420	46000	33900	13200	10700	4400	4060	7950
13	6530	5930	11000	12000	9780	33500	32800	13500	12100	4420	3440	7080
14	6980	7450	9430	12500	9910	30900	35700	10300	9770	2350	6250	7180
15	10800	8260	10800	12800	10000	41600	45700	10900	7950	2450	6450	7430
16	14700	7110	8820	14600	10200	32100	37000	10800	7850	3220	6450	6610
17	11400	7450	8420	12000	10400	26200	36600	10500	5110	5590	6330	6310
18	10100	8010	7820	11200	9760	23700	32800	9690	4200	5600	6090	7060
19	10400	8470	10600	10400	6720	23000	30100	9710	6060	4900	5760	7620
20	10100	8350	9870	9890	9920	24200	28200	7660	5880	4910	4470	6390
21	9300	9590	9760	10000	10900	28900	26900	6340	4940	7330	6210	5820
22	7490	8130	10300	14700	11100	32200	27600	6910	4770	3920	6260	6300
23	5860	9160	12200	21000	10700	37800	27300	6610	4800	2940	6210	7040
24	7770	8840	12200	20000	12500	46000	24600	10100	4270	4460	5950	5490
25	9530	8910	9800	18700	15900	66200	27800	27600	2760	4480	5860	7300
26	8110	8670	8790	23300	15900	80500	29500	33200	4950	4990	3930	5430
27	10800	7090	9380	23000	18500	57500	31900	29100	4680	5960	4350	5630
28	15900	8370	9600	20500	19400	41400	59500	20500	3950	5590	6610	6080
29	13000	8260	8680	18700	---	36100	69500	23800	4080	5370	7080	6730
30	9190	8000	8120	18600	---	36400	53400	26600	4460	4820	7980	5340
31	10700	---	8600	16900	---	38300	---	24700	---	5200	7610	---
TOTAL	266860	240600	331610	625010	331740	1371500	1143700	606720	249540	143950	162690	234010
MEAN	8608	8020	10700	20160	11850	44240	38120	19570	8318	4644	5248	7800
MAX	15900	9590	17400	68800	19400	112000	69500	43400	22100	7330	7980	19000
MIN	4200	5930	7490	9020	6720	18600	24600	6340	2760	2350	2900	5340
CAL YR 1978 TOTAL	5129120			MEAN 14050	MAX 66500	MIN 2740						
WTR YR 1979 TOTAL	5707930			MEAN 15640	MAX 112000	MIN 2350						

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.

CHEMICAL DATA: 1963 (a), 1964-65 (e), 1966-77 (d), 1978 (c), 1979 (d).

MINOR ELEMENTS DATA: 1970-71 (a); 1972-73, 1975-79 (b).

RADIOCHEMICAL DATA: 1968-71 (c), 1973-75 (a), 1976 (d), 1977 (a), 1978 (b), 1979 (a).

PESTICIDE DATA: 1976-77 (b), 1978 (a), 1979 (c).

ORGANIC DATA: OC--1974 (a), 1975 (c), 1976-77 (b), 1978 (a), 1979 (c).

PCB--1978 (a), 1979 (b).

NUTRIENT DATA: 1968 (b), 1969-76 (d), 1977-79 (c).

BIOLOGICAL DATA:

Bacteria--1971 (a), 1973-74 (d), 1975 (a), 1976-78 (c), 1979 (d).

Phytoplankton--1975 (a), 1976-77 (c), 1978-79 (b).

Periphyton--1976-77 (b), 1978 (a), 1979 (b).

SEDIMENT DATA: 1975 (b), 1976 (d), 1977 (b), 1978 (c), 1979 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1965, once-daily measurements, unpublished.

pH: October 1964 to September 1965, once-daily measurements, unpublished.

WATER TEMPERATURES: April 1947 to September 1954, once-daily measurements, unpublished; October 1954 to current year.

REMARKS.--Daily water-temperature measurements (at 0800 hours) made at Troy lock and dam. Prior to October 1968 sampling site at old bridge on State Highway 7 about 100 ft (33 m) upstream, and between April 1971 and September 1973 sampling site at bridge on road between Green Island and Troy at Starbuck Island. No record Dec. 27 to Apr. 23 (stream frozen during winter period).

COOPERATION.--Water-temperature record furnished by the Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily (water years 1947-76, 1978-79), 29.0°C Aug. 8, 9, 1949; minimum daily, freezing point on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 28.0°C Aug. 2-7; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT												
12...	1200	6510	235	7.5	14.0	7.0	10.4	100	11000	250	76	22
NOV												
13...	1200	5930	240	7.6	8.0	5.0	--	--	8400	K850	92	38
DEC												
06...	1100	17400	150	7.3	12.5	8.0	--	--	900	110	82	24
MAR												
21...	1100	28900	205	7.4	3.5	8.0	14.0	104	540	K200	78	24
APR												
17...	1000	36600	150	7.2	4.0	15	14.2	108	2800	350	58	18
MAY												
30...	1100	26600	163	7.2	16.0	8.0	9.9	102	K1200	K320	68	17
JUN												
14...	1030	9770	205	7.6	18.0	7.0	9.4	99	3000	K160	77	22
JUL												
09...	1100	3700	223	7.9	27.0	3.0	8.8	109	--	9600	80	22
AUG												
09...	1100	4700	188	7.7	26.0	2.0	7.9	96	490	K9	70	25
SEP												
05...	1100	8110	215	7.9	24.0	5.0	8.6	101	2300	68	77	25

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 12...	0	<.5	<.5	0	0	0	0	30	10	--	6.5	.9
NOV 13...	--	--	--	--	--	--	--	--	--	6.2	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 21...	30	<.5	<.5	0	0	0	0	20	10	--	6.2	.1
APR 17...	--	--	--	--	--	--	--	--	--	6.7	--	--
MAY 30...	10	<.5	<.5	0	0	0	0	50	10	--	5.5	--
JUN 14...	--	--	--	--	--	--	--	--	--	5.1	--	--
JUL 09...	2	<.5	<.5	0	0	0	0	30	10	--	4.3	--
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 05...	--	--	--	--	--	--	--	--	--	4.9	--	--

DATE	TIME	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
JUN					AUG				
14...	0915	8.00	60	225	09...	1211	20.5	454	190
14...	0925	14.0	120	233	09...	1220	19.0	536	191
14...	0940	23.0	180	220	09...	1240	17.5	598	195
14...	0950	24.0	240	220	09...	1252	16.5	660	195
14...	1010	26.0	300	215	SEP				
14...	1015	26.0	360	203	05...	1010	22.1	328	208
14...	1025	24.5	420	173	05...	1040	5.00	70	217
14...	1040	23.5	480	178	05...	1250	11.0	130	220
14...	1050	21.0	540	175	05...	1300	21.0	215	215
14...	1055	21.0	600	168	05...	1310	23.0	266	215
AUG					05...	1320	25.5	391	215
09...	1011	23.5	328	191	05...	1330	24.5	454	210
09...	1047	6.00	68	200	05...	1345	23.5	536	210
09...	1055	9.50	121	198	05...	1350	22.0	598	190
09...	1106	19.0	215	195	05...	1400	22.0	660	205
09...	1130	20.0	265	195					
09...	1154	22.0	391	190					

HUDSON RIVER BASIN

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01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

PESTICIDE ANALYSES, MARCH 1978 TO SEPTEMBER 1979

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
MAR , 1978									
27...	1130	ND	ND	ND	ND	ND	ND	ND	ND
MAY									
31...	1130	ND	ND	ND	ND	ND	ND	--	ND
AUG									
22...	1230	--	ND	ND	ND	ND	ND	ND	ND
SEP									
22...	1230	--	--	--	--	--	--	--	--
MAR , 1979									
21...	1100	ND	ND	ND	ND	ND	ND	ND	ND
MAY									
30...	1100	ND	ND	ND	ND	ND	ND	ND	ND
AUG									
09...	1100	ND	ND	ND	ND	ND	ND	ND	ND

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)
MAR , 1978									
27...	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY									
31...	ND	--	ND	ND	ND	--	ND	--	--
AUG									
22...	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP									
22...	--	--	--	--	--	--	--	--	--
MAR , 1979									
21...	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY									
30...	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG									
09...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)
MAR , 1978								
27...	ND	ND	ND	ND	ND	ND	ND	ND
MAY								
31...	--	ND	--	ND	ND	ND	ND	ND
AUG								
22...	ND	ND	ND	--	--	--	--	--
SEP								
22...	--	--	--	ND	ND	ND	ND	ND
MAR , 1979								
21...	ND	ND	ND	--	--	--	--	--
MAY								
30...	ND	ND	ND	--	--	--	--	--
AUG								
09...	ND	ND	ND	--	--	--	--	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
MAR											
21...	1100	<1.6	--	.6	--	1.8	<.4	1.7	<.4	.03	.21
MAY											
30...	1100	<1.2	<.8	.8	.5	1.3	1.0	1.2	1.1	.05	.14

ND Material specifically analyzed for, but not detected.

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT				MAY			
12...	1200	8	141	30...	1100	20	1440
NOV				JUN			
13...	1200	6	96	14...	1030	13	343
DEC				JUL			
06...	1100	8	376	09...	1100	4	40
MAR				AUG			
21...	1100	16	1250	09...	1100	5	63
APR				SEP			
17...	1000	14	1380	05...	1100	8	175

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 13,78 1200	JUL 27,78 1130	AUG 22,78 1230	NOV 13,78 1200
TOTAL CELLS/ML	65000	100000	7700	6500
DIVERSITY: DIVISION	1.5	1.0	1.5	1.5
..CLASS	1.5	1.0	1.5	1.5
..ORDER	1.8	1.7	2.1	2.3
...FAMILY	2.0	1.9	2.4	2.9
....GENUS	2.8	2.2	3.2	3.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...OOCYSTACEAE								
....GLOEOACTINIUM	--	-	2200	2	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	730	11
...MICRACTINIACEAE								
....GOLENKINIA	* 0		* 0		* 0		* 0	
...MICRACTINIUM	2000	3	--	-	--	-	180	3
...OOCYSTACEAE								
....ANKISTRODESMUS	* 0		1600	2	45	1	69	1
...CHODATELLA	--	-	--	-	* 0		* 0	
...DICTYOSPHAERIUM	--	-	--	-	360	5	--	-
...KIRCHNERIELLA	510	1	1100	1	--	-	--	-
...OOCYSTIS	--	-	--	-	--	-	110	2
...SELENASTRUM	--	-	--	-	68	1	--	-
...TETRAEDRON	--	-	* 0		--	-	--	-
...TREUBARIA	--	-	* 0		--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	4100	6	--	-	--	-	--	-
...CRUCIGENIA	--	-	--	-	--	-	--	-
...SCENEDESMUS	760	1	2700	3	990	13	570	9
...TETRASTRUM	--	-	--	-	90	1	--	-
...TETRASPORALES								
...PALMELLACEAE								
...SPHAEROCYSTIS	--	-	--	-	270	3	180	3
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
...CHLAMYDOMONAS	1000	2	--	-	68	1	300	5
...VOLVOCAEAE								
...GONIUM	1000	2	--	-	--	-	--	-
...PANDORINA	--	-	--	-	--	-	--	-
...ZYGNEMATALES								
...DESMIDIACEAE								
...COSMARIVUM	--	-	* 0		--	-	--	-

NOTE:

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 13,78 1200		JUL 27,78 1130		AUG 22,78 1230		NOV 13,78 1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCEAE								
...CYCLOTELLA	16000#	25	2900	3	920	12	1200#	19
...MELOSIRA	--	-	--	-	810	10	1400#	22
...SKELETONEMA	1800	3	8200	8	--	-	--	-
...STEPHANODISCUS	--	-	--	-	45	1	69	1
..PENNALES								
...ACHNANTHACEAE								
...ACHNANTHES	*	0	--	-	--	-	*	0
...COCONEIS	--	-	--	-	45	1	--	-
...DIATOMACEAE								
...DIATOMA	*	0	--	-	--	-	*	0
...FRAGILARIACEAE								
...ASTERIONELLA	--	-	--	-	--	-	210	3
...FRAGILARIA	--	-	--	-	--	-	--	-
...SYNEDRA	--	-	--	-	--	-	*	0
...NAVICULACEAE								
...NAVICULA	--	-	--	-	110	1	46	1
...NITZSCHIA								
...NITZSCHIA	1300	2	1300	1	*	0	110	2
...TABELLARIACEAE	--	-	--	-	45	1	--	-
...TABELLARIA								
..CHRYSOPHYCEAE								
...CHRYSONOMADALES								
...OCHROMONADACEAE								
...OCHROMONAS	510	1	*	0	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
...CRYPTOMONADACEAE								
...CRYPTOMONAS	*	0	*	0	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
...CHROOCOCCACEAE								
...AGMENELLUM	1000	2	61000#	60	2200#	28	--	-
...ANACYSTIS	21000#	33	2000	2	1200#	15	550	9
...HORMOGONALES								
...NOSTOCACEAE								
...ANABAENA	--	-	5100	5	450	6	--	-
...APHANIZOMENON	--	-	--	-	--	-	570	9
...OSCILLATORIA								
...OSCILLATORIA	--	-	12000	12	--	-	--	-
...CHROOCOCCALES								
...CHROOCOCCACEAE								
...GOMPHOSPHAERIA	12000#	19	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
...EUGLENA	--	-	--	-	*	0	--	-
...TRACHELOMONAS	*	0	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...GYMNODINIALES								
...GYMNODINIACEAE								
...GYMNODINIUM	--	-	--	-	--	-	--	-
...PERIDINIALES								
...GLENODINIACEAE								
...GLENODINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON-

DATE TIME	MAY 30.79 1100	JUN 14.79 1030	AUG 9.79 1100	SEP 5.79 1100
TOTAL CELLS/ML	1300	4200	40000	160000
DIVERSITY: DIVISION	1.5	1.4	1.5	1.3
...CLASS	1.5	1.4	1.5	1.3
...ORDER	2.3	2.1	1.6	1.3
...FAMILY	2.7	2.3	1.8	1.4
...GENUS	3.1	2.7	2.5	1.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...CHARACIACEAE								
...SCHROEDERIA	--	-	--	-	--	-	*	0
...HYDRODICTYACEAE								
...PEDIASTRUM	--	-	--	-	--	-	*	0
...MICRACTINIACEAE								
...GOLINKINIA	--	-	--	-	--	-	*	0
...MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
...ANKISTRODESMUS	13	1	90	2	550	1	1000	1
...CHLORELLA	--	-	--	-	--	-	2300	1
...CHODATELLA	--	-	--	-	--	-	--	-
...DICTYOSPHAERIUM	52	4	--	-	--	-	--	-
...GLOEOACTINIUM	--	-	--	-	--	-	--	-
...KIRCHNERIELLA	--	-	77	2	1100	3	*	0
...OOCYSTIS	--	-	--	-	--	-	--	-
...SELENASTRUM	--	-	*	0	3200	8	--	-
...TETRAEDRON	--	-	--	-	--	-	*	0
...TREUBARIA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
...ACTINASTRUM	--	-	--	-	--	-	--	-
...CRUCIGENIA	--	-	90	2	--	-	--	-
...SCENEDESMUS	--	-	100	2	3700	9	6400	4
...TETRASTRUM	--	-	52	1	--	-	*	0
...TETRASPORALES								
...PALMELLACEAE								
...SPHAEROCYSTIS	--	-	--	-	--	-	--	-
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
...CHLAMYDOMONAS	13	1	*	0	--	-	*	0
...VOLVOCAEAE								
...GONIUM	--	-	--	-	--	-	--	-
...PANDORINA	210#	16	--	-	--	-	--	-
...ZYGNEMATALES								
...DESMIDIACEAE								
...COSMARIUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
...CYCLOTELLA	130	10	360	9	2200	6	6900	4
...MELOSIRA	160	12	450	11	10000#	26	--	-
...SKELETONEMA	--	-	--	-	--	-	62000#	38
...STEPHANODISCUS	39	3	--	-	--	-	--	-
...PENNALES								
...ACHNANTHACEAE								
...ACHNANTHES	13	1	--	-	--	-	--	-
...COCCONEIS	--	-	--	-	--	-	--	-
...DIATOMACEAE								
...DIATOMA	13	1	--	-	--	-	--	-
...FRAGILARIACEAE								
...ASTERIONELLA	52	4	--	-	--	-	--	-
...FRAGILARIA	--	-	270	7	280	1	--	-
...SYNEDRA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
...NAVICULA	26	2	26	1	--	-	--	-
...NITZSCHIA	91	7	100	2	*	0	--	-
...NITZSCHIA								
...TABELLARIACEAE								
...TABELLARIA	--	-	--	-	--	-	--	-
..CHRYSOPHYCEAE								
...CHRYSONOMADALES								
...OCHROMONADACEAE								
...OCHROMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

HUDSON RIVER BASIN

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01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 30,79 1100		JUN 14,79 1030		AUG 9,79 1100		SEP 5,79 1100	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
...CHROMONAS	--	-	--	-	--	-	*	0
...CRYPTOMONADACEAE								
...CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCALES								
...CHROCOCCACEAE								
...AGMENELLUM					4400	11	2000	1
...ANACYSTIS	65	5	540	13	14000#	35	80000#	49
...GOMPHOSPHAERIA	--	-	--	-	--	-	--	-
...HORMOGONALES								
...NOSTOCACEAE								
...ANABAENA	--	-	--	-	--	-	--	-
...APHANIZOMENON	--	-	--	-	--	-	--	-
...OSCILLATORIA								
...OSCILLATORIA	390#	31	1900#	46	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
...EUGLENA	--	-	--	-	--	-	--	-
...TRACHELOMONAS	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DIVOPHYCEAE								
...GYMNODINIALES								
...GYMNODINIACEAE								
...GYMNODINIUM	--	-	*	0	--	-	--	-
...PERIDINIALES								
...GLENODINIACEAE								
...GLENODINIUM	--	-	26	1	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Sampling method
		Dry weight	Ash weight			
June 5 to June 19, 1979	14	0.550	0.470	1.69	0.490	Polyethylene strip
June 19 to July 19, 1979	30	5.28	3.86	23.0	9.07	Polyethylene strip
Aug. 2 to Sept. 11, 1979	40	1.81	1.34	10.2	.000	Polyethylene strip

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	8.0	4.0				---	10.0	16.0	22.0	27.0	23.0
2	15.0	9.0	4.0				---	10.0	16.0	22.0	28.0	23.0
3	16.0	9.0	4.0				---	10.0	17.0	23.0	28.0	23.0
4	16.0	10.0	4.0				---	10.0	19.0	23.0	28.0	23.0
5	16.0	10.0	2.0				---	10.0	20.0	23.0	28.0	23.0
6	16.0	10.0	2.0				---	10.0	20.0	23.0	28.0	23.0
7	15.0	10.0	2.0				---	10.0	20.0	22.0	28.0	23.0
8	15.0	10.0	2.0				---	10.0	21.0	22.0	26.0	22.0
9	14.0	8.0	3.0				---	13.0	21.0	22.0	26.0	22.0
10	14.0	8.0	4.0				---	15.0	24.0	22.0	26.0	22.0
11	14.0	8.0	4.0				---	16.0	24.0	22.0	26.0	22.0
12	14.0	8.0	2.0				---	17.0	18.0	24.0	26.0	21.0
13	14.0	8.0	2.0				---	18.0	18.0	24.0	26.0	21.0
14	13.0	8.0	2.0				---	17.0	18.0	24.0	25.0	22.0
15	12.0	8.0	2.0				---	17.0	19.0	24.0	25.0	20.0
16	12.0	8.0	2.0				---	18.0	19.0	26.0	25.0	20.0
17	11.0	8.0	2.0				---	18.0	22.0	26.0	25.0	19.0
18	11.0	8.0	2.0				---	18.0	22.0	26.0	26.0	19.0
19	10.0	8.0	1.0				---	18.0	22.0	25.0	26.0	19.0
20	10.0	8.0	1.0				---	18.0	22.0	25.0	26.0	19.0
21	9.0	8.0	.0				---	18.0	22.0	25.0	26.0	19.0
22	9.0	8.0	.0				---	18.0	22.0	25.0	26.0	18.0
23	9.0	5.0	.0				---	18.0	22.0	25.0	25.0	18.0
24	9.0	5.0	.0				12.0	18.0	21.0	25.0	24.0	16.0
25	9.0	5.0	.0				12.0	16.0	21.0	25.0	23.0	16.0
26	9.0	4.0	.0				11.0	---	21.0	25.0	23.0	16.0
27	9.0	4.0	---				11.0	---	21.0	25.0	22.0	18.0
28	9.0	4.0	---				10.0	---	21.0	25.0	23.0	18.0
29	9.0	4.0	---				10.0	16.0	22.0	25.0	23.0	18.0
30	8.0	4.0	---				---	16.0	22.0	25.0	23.0	18.0
31	8.0	---	---				---	16.0	---	27.0	23.0	---
MEAN	12.0	7.5	2.0				11.0	15.0	20.5	24.0	25.5	20.0
WTR YR 1979	MEAN	16.0		MAX	28.0		MIN	.0				

HUDSON RIVER BASIN

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01359519 NORMANS KILL NEAR WESTMERE, NY

LOCATION.--Lat 42°40'43", long 73°54'25", Albany County, Hydrologic Unit 02020006, on right bank, 100 ft (30 m) upstream from bridge on State Highway 155 (State Farm Road), 1.6 mi (2.6 km) southwest of Westmere, and 1.8 mi (2.9 km) southeast of Guilderland.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--October 1967 to September 1979 (discontinued).

REVISED RECORDS.--WRD NY 1972: 1968(P), 1969(M), 1970(P).

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (40 m), from topographic map.

REMARKS.--Records fair except those above 1,000 ft³/s (28 m³/s), and those for winter periods, which are poor. Diversion above station for municipal supply by city of Watervliet and town of Guilderland.

AVERAGE DISCHARGE.--12 years, 167 ft³/s (4.729 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,580 ft³/s (158 m³/s) Oct. 18, 1975, gage height, 11.86 ft (3.615 m); minimum, 5.0 ft³/s (0.14 m³/s) July 29, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 26	0930	2,340 66.3	7.28 2.219	Mar. 25	0845	2,910 82.4	8.17 2.490
Mar. 6	1230	*3,010 85.2	*8.34 2.542				

Minimum discharge, 13 ft³/s (0.37 m³/s) Sept. 1, 2, gage height, 1.25 ft (0.381 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	30	30	77	230	220	333	169	135	38	25	14
2	14	31	29	575	196	349	314	130	94	36	22	14
3	15	31	28	719	165	441	406	109	76	34	21	18
4	16	31	31	354	155	583	269	128	62	33	19	14
5	17	32	30	266	133	1610	529	119	57	34	19	14
6	21	32	29	191	109	2860	381	94	49	33	18	55
7	17	32	29	163	90	2000	257	82	45	32	18	30
8	16	33	30	161	70	1240	191	74	40	32	18	27
9	18	33	35	165	60	899	205	70	43	32	18	25
10	18	33	32	169	52	747	311	64	40	33	19	25
11	17	33	27	160	45	1000	556	55	96	33	19	25
12	18	33	27	150	42	579	640	49	218	35	25	26
13	18	34	27	140	41	387	552	49	99	37	21	26
14	26	35	27	130	40	462	1110	49	64	38	23	28
15	21	36	27	120	38	640	922	45	51	40	32	27
16	19	36	27	110	35	349	482	59	48	40	31	26
17	21	37	28	110	34	274	400	40	42	41	30	26
18	28	39	29	120	33	257	283	35	40	44	23	24
19	28	37	33	140	34	317	213	33	38	42	20	25
20	28	37	40	160	40	419	174	39	36	39	19	25
21	28	37	31	257	50	670	145	41	35	38	26	27
22	27	39	29	504	70	856	126	41	35	39	25	29
23	29	41	29	700	100	891	114	39	36	37	16	23
24	29	42	31	493	333	963	96	208	35	34	15	23
25	30	41	60	917	751	1910	85	1230	35	34	16	23
26	32	36	40	1330	772	843	85	763	34	41	15	23
27	37	30	32	552	518	458	132	393	35	40	15	22
28	30	28	30	465	215	304	441	260	35	36	15	16
29	29	30	31	441	---	320	375	223	35	36	15	19
30	30	29	40	346	---	363	236	301	35	35	15	15
31	30	---	56	274	---	327	---	230	---	31	15	---
TOTAL	721	1028	1004	10459	4451	23538	10363	5221	1723	1127	628	714
MEAN	23.3	34.3	32.4	337	159	759	345	168	57.4	36.4	20.3	23.8
MAX	37	42	60	1330	772	2860	1110	1230	218	44	32	55
MIN	14	28	27	77	33	220	85	33	34	31	15	14
†	6.50	7.18	7.04	7.40	7.62	7.47	7.81	7.59	7.99	8.45	8.64	8.04

CAL YR 1978	TOTAL	55328	MEAN	152	MAX	2440	MIN	14	†	7.15
WTR YR 1979	TOTAL	60977	MEAN	167	MAX	2860	MIN	14	†	7.64

† Diversion, equivalent in cubic feet per second, by city of Watervliet and town of Guilderland for water supply (figures furnished by city of Watervliet and town of Guilderland Water Departments).

HUDSON RIVER BASIN

01359528 NORMANS KILL AT ALBANY, NY

LOCATION.--Lat 42°38'00", long 73°48'22", Albany County, Hydrologic Unit 02020006, on left bank, 0.35 mi (0.56 km) upstream from bridge on Normans Kill Road, and 0.40 mi (0.64 km) upstream from Delaware Avenue bridge in Albany.

DRAINAGE AREA.--169 mi² (435 km²).

PERIOD OF RECORD.--May to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Records good. Diversion above station for municipal supply by city of Watervliet and town of Guilderland. Seasonal diversions for two golf courses.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 2,270 ft³/s (64.3 m³/s) May 25, gage height, 6.76 ft (2.060 m); minimum discharge, 14 ft³/s (0.40 m³/s) Aug. 7, 8, 9, 10, gage height, 2.99 ft (0.911 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	188	47	31	15
2								---	133	51	33	15
3								---	110	41	22	43
4								---	92	37	20	22
5								---	105	37	19	18
6								---	85	36	17	114
7								---	67	35	16	93
8								---	58	33	16	47
9								---	58	34	15	37
10								---	57	35	17	34
11								---	158	36	23	34
12								---	326	36	32	33
13								---	162	39	42	34
14								---	105	42	29	39
15								60	81	42	36	50
16								69	67	47	41	37
17								62	58	49	37	36
18								48	52	53	38	35
19								41	49	50	41	37
20								50	45	45	23	34
21								50	42	47	29	38
22								56	42	56	33	62
23								50	44	46	27	41
24								194	40	41	18	37
25								1510	39	39	19	35
26								1290	39	46	19	35
27								537	38	64	18	34
28								337	39	43	18	29
29								283	40	41	18	43
30								329	40	40	18	28
31								310	---	39	17	---
TOTAL								---	2459	1327	782	1189
MEAN								---	82.0	42.8	25.2	39.6
MAX								---	326	64	42	114
MIN								---	38	33	15	15

HUDSON RIVER BASIN

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01359560 HUDSON RIVER AT GLENMONT, NY

LOCATION.--Lat 42°35'43", long 73°45'43", Albany County, Hydrologic Unit 02020006, at Niagara Mohawk Glenmont Power Station (intake), 0.2 mi (0.3 km) downstream from lower mouth of Normans Kill, and 0.9 mi (1.4 km) southeast of Glenmont.

DRAINAGE AREA.--8,476 mi² (21,953 km²).

PERIOD OF RECORD.--Water years 1969 to September 1979 (discontinued).

CHEMICAL DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (b), 1978-79 (d).

MINOR ELEMENTS DATA: 1971 (a), 1972 (c), 1973 (b), 1974-75 (d), 1976-77 (c), 1978-79 (d).

ORGANIC DATA: OC-1974 (c), 1975 (d), 1976-77 (c), 1978-79 (d).

NUTRIENT DATA: 1969 (d), 1970-74 (e), 1975 (d), 1976-77 (c), 1978 (d).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978-79 (d).

REMARKS.--Water-discharge data are based on records for 01358000 Hudson River at Green Island.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
27...	1300	E10800	220	6.2	11.0	5.0	11.0	99	15	10100
NOV										
28...	1000	E8370	210	7.3	3.0	3.0	12.2	97	21	K1600
DEC										
13...	0830	E11000	235	7.2	1.0	10	14.2	100	32	K5700
JAN										
23...	1030	E21000	240	7.0	.5	6.0	14.8	101	19	K3600
FEB										
27...	0930	E18500	235	7.0	.0	8.0	14.7	100	20	K3300
MAR										
15...	1200	E41600	200	6.9	.0	20	14.8	101	6	K1700
APR										
18...	1030	E32800	160	7.4	4.5	9.0	13.2	102	10	K1000
JUN										
05...	0900	E12700	172	7.5	18.0	6.0	9.0	96	--	1200
19...	1000	E6060	190	7.1	17.0	4.0	7.4	75	20	K2000
JUL										
19...	0900	E4900	205	7.7	25.0	6.0	5.7	68	13	--
AUG										
02...	1000	E4410	221	7.3	27.0	3.0	6.3	78	19	K4000
SEP										
11...	1000	E8410	181	7.5	20.0	5.0	8.3	89	18	2500

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
27...	22	4.3	8.2	1.2	50	24	12	120	11	.59
NOV										
28...	--	--	--	--	--	--	--	134	7	.60
DEC										
13...	--	--	--	--	--	--	--	141	4	.64
JAN										
23...	20	4.5	11	1.1	52	21	18	131	10	.39
FEB										
27...	--	--	--	--	--	--	--	130	10	.70
MAR										
15...	--	--	--	--	--	--	--	113	45	.65
APR										
18...	--	--	--	--	--	--	--	94	18	.45
JUN										
05...	--	--	--	--	--	--	--	107	10	.58
19...	--	--	--	--	--	--	--	128	20	.68
JUL										
19...	18	4.0	12	.9	45	22	15	132	17	.53
AUG										
02...	--	--	--	--	--	--	--	237	5	.58
SEP										
11...	--	--	--	--	--	--	--	118	5	.46

E Estimated.

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

HUDSON RIVER BASIN

01359560 HUDSON RIVER AT GLENMONT, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
OCT									
27...	.57	.43	1.0	1.6	.65	1	1	<10	5
NOV									
28...	.32	.26	.58	1.2	.07	1	1	10	3
DEC									
13...	.22	.48	.70	1.3	.06	1	3	10	5
JAN									
23...	.16	.22	.38	.77	.04	1	0	20	0
FEB									
27...	.36	.31	.67	1.4	.07	3	0	10	5
MAR									
15...	.14	.21	.35	1.0	.02	2	1	10	6
APR									
18...	.09	.12	.21	.66	.01	3	10	10	13
JUN									
05...	.08	.43	.51	1.1	.06	4	59	10	12
19...	.18	1.0	1.2	1.9	.16	1	20	20	29
JUL									
19...	.19	.55	.74	1.3	.07	4	7	30	19
AUG									
02...	.17	.59	.76	1.3	.08	3	11	10	10
SEP									
11...	--	.60	.74	1.2	.06	3	2	10	11

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT									
27...	410	9	<.5	0	30	26	0	6.30	.000
NOV									
28...	300	7	<.5	0	40	11	0	5.04	.000
DEC									
13...	480	42	<.5	0	30	3.5	0	1.53	.000
JAN									
23...	290	1	--	--	20	4.2	0	.080	.000
FEB									
27...	480	4	<.5	0	10	6.0	0	.700	.000
MAR									
15...	1300	7	<.5	0	80	5.0	0	.240	.000
APR									
18...	600	3	<.5	--	60	6.2	0	.550	.000
JUN									
05...	490	7	<.5	0	40	5.3	--	3.47	.000
19...	490	18	<.5	--	30	5.1	0	5.05	.000
JUL									
19...	470	5	<.5	--	30	9.4	0	3.74	.000
AUG									
02...	320	3	<.5	--	10	8.1	1	2.28	.000
SEP									
11...	400	12	<.5	--	20	4.0	--	.000	.000

HUDSON RIVER BASIN

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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 (244 m) downstream from bridge on State Highway 150, 0.2 mi (0.3 km) east of village of Castleton-on-Hudson, 0.5 mi (0.8 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--32.6 mi² (84.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 98.72 ft (30.090 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation of low flow by mills upstream and occasional regulation at dam 800 ft (244 m) upstream.

AVERAGE DISCHARGE.--22 years, 38.6 ft³/s (1.093 m³/s), 16.08 in/yr (408 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s (38.2 m³/s) Jan. 22, 1959, gage height, 3.63 ft (1.106 m); maximum gage height, 4.02 ft (1.225 m) Jan. 27, 1976 (ice jam); minimum discharge, 0.30 ft³/s (0.008 m³/s) Aug. 9, 10, 1964, gage height, 0.25 ft (0.076 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 8	2030	ice jam	2.47 0.753	Feb. 25	0230	ice jam	2.92 0.890
Jan. 22	2030	777 22.0	2.93 .893	Mar. 2	2130	ice jam	2.29 .698
Jan. 25	1000	ice jam	*3.33 1.015	Mar. 5	2000	*783 22.2	2.94 .896

Minimum discharge, 4.1 ft³/s (0.12 m³/s) Aug. 4, gage height, 0.59 ft (0.180 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	8.4	7.9	55	80	250	46	73	71	9.6	5.8	5.0
2	5.5	7.9	7.3	249	76	200	43	60	52	10	5.7	5.0
3	5.5	7.3	6.8	226	70	153	47	51	43	9.1	5.5	7.5
4	5.9	6.8	8.4	150	66	216	41	54	37	8.2	5.2	6.3
5	6.8	6.4	10	120	60	596	55	47	32	8.4	5.1	5.8
6	10	6.4	9.0	90	50	607	49	41	31	8.1	4.9	25
7	8.4	6.4	8.4	70	40	452	41	37	25	7.7	4.8	19
8	7.3	6.8	7.9	76	30	237	36	34	24	7.2	4.8	9.9
9	6.4	7.3	21	80	25	162	42	31	21	7.1	4.7	7.7
10	6.8	6.8	26	74	22	134	74	29	20	6.9	5.3	6.7
11	6.8	6.4	18	70	19	179	100	26	42	6.7	5.6	6.4
12	5.9	5.9	16	64	17	125	108	23	74	6.6	7.7	6.5
13	6.8	6.4	15	60	15	93	86	24	37	6.4	9.2	6.3
14	11	5.5	13	58	14	98	114	25	25	6.1	7.3	9.0
15	14	5.9	11	56	14	84	126	23	20	6.5	6.9	13
16	11	5.5	10	54	13	66	101	21	18	6.5	6.5	8.9
17	9.0	5.9	11	52	12	56	100	18	16	6.9	6.0	7.3
18	7.9	7.3	9.0	50	12	51	79	17	14	10	7.1	6.7
19	7.9	6.8	9.0	50	13	47	64	18	14	8.2	8.5	7.0
20	9.0	6.4	10	80	30	46	55	17	12	6.9	7.2	6.7
21	8.4	6.4	23	265	60	47	49	16	11	8.0	6.5	8.0
22	7.9	5.9	22	737	100	47	44	16	12	8.3	5.9	24
23	7.9	5.9	17	647	160	46	41	15	11	7.0	6.1	18
24	7.3	6.8	15	473	350	46	37	63	11	7.0	5.9	12
25	6.8	7.9	20	600	560	62	34	247	10	6.5	6.8	9.5
26	7.3	7.9	15	350	424	55	33	184	9.4	7.5	6.1	8.2
27	13	6.4	11	210	336	44	67	93	8.8	8.7	5.8	7.7
28	15	6.4	11	186	280	38	150	64	8.8	6.9	5.5	7.4
29	12	6.4	12	164	---	41	152	57	8.8	6.5	5.4	8.8
30	9.0	7.3	13	121	---	46	97	81	8.8	6.1	5.4	9.0
31	7.9	---	18	105	---	45	---	115	---	5.8	5.1	---
TOTAL	259.5	199.8	411.7	5642	2948	4369	2111	1620	727.6	231.4	188.3	288.3
MEAN	8.37	6.66	13.3	182	105	141	70.4	52.3	24.3	7.46	6.07	9.61
MAX	15	8.4	26	737	560	607	152	247	74	10	9.2	25
MIN	5.1	5.5	6.8	50	12	38	33	15	8.8	5.8	4.7	5.0
CFSM	.26	.20	.41	5.58	3.22	4.33	2.16	1.60	.75	.23	.19	.30
IN.	.30	.23	.47	6.44	3.36	4.99	2.41	1.85	.83	.26	.21	.33

CAL YR 1978 TOTAL 12977.4 MEAN 35.6 MAX 480 MIN 4.1 CFSM 1.09 IN 14.81
WTR YR 1979 TOTAL 18996.6 MEAN 52.0 MAX 737 MIN 4.7 CFSM 1.60 IN 21.68

HUDSON RIVER BASIN

01359802 HUDSON RIVER BELOW CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°31'07", long 73°46'00", Albany-Rensselaer Counties, Hydrologic Unit 02020006, at navigation light 52, 0.5 mi (0.8 km) southwest of Castleton-on-Hudson, 0.6 mi (1.0 km) downstream from Vlochie Kill, and 1.7 mi (2.7 km) downstream from Vlochan Kill.

PERIOD OF RECORD.--Water year 1978 to current year.

MINOR ELEMENT DATA: 1978-79 (c).

PESTICIDE DATA: 1978-79 (c).

ORGANIC DATA: PCB--1978-79 (c).

PCN--1978-79 (c).

NUTRIENT DATA: 1978 (c), 1979 (a).

SEDIMENT DATA: 1978-79 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOL- TILE, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
OCT									
05...	0900	8	0	.87	.76	1.6	.08	490	7
NOV									
16...	1115	10	9	.65	.83	1.5	.08	580	9
MAR									
10...	1400	64	2	--	--	--	--	2400	7
28...	1030	35	3	--	--	--	--	1500	8
JUL									
10...	1000	173	20	--	--	--	--	540	7
AUG									
15...	0800	29	7	--	--	--	--	580	0
15...	1045	--	--	--	--	--	--	--	--
15...	1350	--	--	--	--	--	--	--	--
15...	1735	--	--	--	--	--	--	--	--

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
OCT									
05...	90	.5	.00	.00	.0	.00	.00	.00	.00
NOV									
16...	60	.3	.00	.00	.0	.00	.00	.00	.00
MAR									
10...	110	.1	.00	.00	.0	.00	.00	.00	.00
28...	70	.1	.00	.00	.0	.00	.00	.00	.00
JUL									
10...	60	.2	.00	.00	--	--	--	--	--
AUG									
15...	100	.4	.00	.00	--	--	--	--	--
15...	--	.4	.00	.00	--	--	--	--	--
15...	--	.4	.00	.00	--	--	--	--	--
15...	--	.3	.00	.00	--	--	--	--	--

DATE	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	SEDI- MENT, SUS- PENDED (MG/L)
OCT								
05...	.00	.00	.00	.00	.00	.00	0	15
NOV								
16...	.00	.00	.00	.00	.00	.00	0	10
MAR								
10...	.00	.00	.00	.00	--	.00	0	71
28...	.00	.00	.00	.00	--	.00	0	39
JUL								
10...	--	--	--	--	--	--	--	8
AUG								
15...	--	--	--	--	--	--	--	18
15...	--	--	--	--	--	--	--	8
15...	--	--	--	--	--	--	--	13
15...	--	--	--	--	--	--	--	13

HUDSON RIVER BASIN

123

01359918 SILVER CREEK AT DORMANSVILLE, NY

LOCATION.--Lat 42°29'17", long 73°58'56", Albany County, Hydrologic Unit 02020006, on left bank 17 ft (5.2 m) upstream from culvert on County Highway 411, 300 ft (91.4 m) downstream from unnamed tributary, 0.6 mi (0.97 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Dormansville.

DRAINAGE AREA.--2.90 mi² (7.51 km²).

PERIOD OF RECORD.--June 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 720 ft (219 m), from topographic map.

REMARKS.--Records fair except those for winter period, which are poor. Water diverted from Basic Creek Reservoir, through tunnel, enters basin upstream from station and is included in records of daily discharge.

EXTREMES FOR CURRENT PERIOD.--June to September 1978. Maximum discharge during period, 126 ft³/s (3.57 m³/s) Aug. 9, gage height 3.48 ft (1.061 m); minimum daily, 0.35 ft³/s (0.010 m³/s) Sept. 5; minimum gage height 0.75 ft (0.229 m) July 2.

Water year 1979: Maximum discharge 400 ft³/s (11.3 m³/s) Mar. 7, gage height 5.85 ft (1.783 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Nov. 19, 20; minimum gage height, 0.77 ft (0.235 m) Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									1.6	1.0	1.2	60
2									1.6	.67	1.2	1.4
3									1.6	.75	1.0	.75
4									1.6	1.6	1.5	.46
5									1.7	1.5	1.1	.35
6									1.6	1.1	2.4	.40
7									1.6	1.0	1.7	.46
8									2.0	1.0	33	.46
9									2.2	.75	122	.46
10									2.1	.82	58	.46
11									1.8	1.1	1.0	.46
12									1.4	.91	.75	.67
13									1.6	.91	.67	.53
14									1.7	.75	.67	.60
15									1.7	.91	.60	.53
16									1.6	.82	.60	.53
17									1.4	1.7	.67	.75
18									1.3	1.6	.67	.75
19									1.8	1.2	.60	2.4
20									2.7	1.1	.60	1.0
21									1.6	1.0	.53	.82
22									1.5	1.0	.60	.60
23									1.5	.91	.60	.60
24									1.5	.82	.91	.60
25									1.3	.75	.91	.60
26									1.2	.74	.82	.60
27									1.1	.67	.75	.67
28									1.1	1.2	.82	.74
29									1.4	1.0	.91	.74
30									1.2	1.2	27	.67
31									---	1.1	116	---
TOTAL									48.0	31.58	379.78	80.06
MEAN									1.60	1.02	12.3	2.67
MAX									2.7	1.7	122	60
MIN									1.1	.67	.53	.35

HUDSON RIVER BASIN

01359918 SILVER CREEK AT DORMANSVILLE, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	1.3	57	2.3	5.0	63	52	5.6	87	2.1	2.6	1.0
2	.53	1.3	2.9	35	4.0	66	54	4.2	4.2	1.7	2.2	1.0
3	.60	1.2	1.6	42	3.5	70	56	3.5	7.7	1.7	1.4	1.5
4	.82	1.1	1.5	16	3.0	73	52	4.2	4.2	1.4	1.2	1.2
5	.91	1.1	1.4	6.0	2.5	135	57	3.7	3.2	1.5	1.2	1.0
6	1.7	.82	1.2	5.2	2.2	227	53	2.8	3.1	1.2	1.2	28
7	1.0	1.0	1.1	5.0	1.9	364	49	15	2.7	1.1	1.0	14
8	.91	1.2	1.2	24	1.7	276	48	47	2.6	1.3	.91	3.2
9	.91	.91	2.2	48	1.6	69	52	47	2.3	1.3	.91	1.9
10	.91	.75	2.4	92	1.5	67	58	46	2.2	1.3	.53	1.5
11	1.1	.75	2.1	90	1.5	83	65	46	17	1.5	.46	1.5
12	1.1	.82	1.9	90	1.5	60	62	45	16	1.5	1.7	1.5
13	.75	.75	1.7	3.5	1.4	55	56	46	5.6	1.5	1.6	1.4
14	1.6	1.0	1.9	5.0	1.4	61	89	26	3.5	1.6	1.7	1.5
15	1.5	.91	1.5	4.0	1.3	56	72	2.3	2.8	1.6	1.5	2.1
16	1.2	.67	1.5	3.5	1.3	52	59	2.0	2.7	3.1	1.4	1.6
17	1.1	.46	1.5	3.2	1.2	51	56	1.6	2.3	3.5	1.1	1.4
18	.91	.67	1.5	3.1	1.2	52	53	1.5	2.1	3.1	1.4	1.2
19	1.2	.40	1.3	3.0	1.3	52	50	1.5	1.9	2.4	1.9	1.4
20	1.3	.40	1.5	3.0	1.3	54	48	1.6	1.7	2.0	1.5	1.3
21	1.2	18	1.6	10	1.6	57	48	1.5	1.6	21	1.4	2.0
22	.82	94	1.6	35	4.2	57	47	1.5	1.5	59	1.2	4.0
23	.82	91	1.5	5.0	20	57	46	1.6	1.6	10	.92	4.5
24	1.0	61	1.4	3.0	81	59	45	19	1.5	4.2	.91	2.5
25	1.2	2.8	2.7	15	74	103	45	44	1.4	2.4	1.0	1.9
26	1.2	1.5	1.5	64	70	63	46	19	1.4	2.0	1.0	1.6
27	1.5	1.3	1.5	62	66	55	56	8.1	1.4	2.1	1.0	1.4
28	1.3	14	1.5	20	63	52	68	53	1.5	1.9	1.0	1.3
29	1.1	89	1.6	15	---	54	57	124	1.4	1.5	1.0	1.6
30	1.2	81	1.7	10	---	53	38	122	1.5	1.4	1.0	1.8
31	1.2	---	1.7	7.0	---	52	---	117	---	1.2	1.1	---
TOTAL	33.19	471.11	107.2	729.8	420.1	2548	1637	863.2	189.6	143.1	38.94	91.8
MEAN	1.07	15.7	3.46	23.5	15.0	85.4	54.6	27.8	6.32	4.62	1.26	3.06
MAX	1.7	94	57	92	81	364	89	124	87	59	2.6	28
MIN	.53	.40	1.1	2.3	1.2	51	38	1.5	1.4	1.1	.46	1.0
†	0	12.72	2.30	8.07	7.93	63.98	44.59	15.60	0	0	0	0

WTR YR 1979 TOTAL 7373.04 MEAN 20.2 MAX 364 MIN .40 † 12.96

† Diversion, equivalent in cubic feet per second, from Basic Creek Reservoir, by city of Albany, Department of Water and Water Supply.

HUDSON RIVER BASIN

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01361450 HUDSON RIVER AT CATSKILL, NY

LOCATION.--Lat 42°12'36", long 73°51'12", Greene-Columbia Counties, Hydrologic Unit 02020006, at Greene County Highway Department Dock in Catskill, 600 ft (183 m) upstream from Catskill Creek, and 0.9 mi (1.4 km) downstream from Rip Van Winkle Bridge.

DRAINAGE AREA.--9,336 mi² (24,180 km²).

PERIOD OF RECORD.--Water years 1969-75, 1978 to current year.

CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c).

MINOR ELEMENT DATA: 1972-74 (b), 1978-79 (c).

PESTICIDE DATA: 1978-79 (c).

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

PCB--1978-79 (c).

PCN--1978-79 (c).

NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975, 1978 (c), 1979 (a).

SEDIMENT DATA: 1978 (b), 1979 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
OCT 05...	1100	6	0	.73	.50	1.2	.05	250	5
NOV 16...	0915	21	5	.68	.64	1.3	.08	780	7
MAR 10...	1030	44	2	--	--	--	--	3400	6
28...	1400	63	6	--	--	--	--	2300	7
JUL 10...	1330	22	22	--	--	--	--	550	4
AUG 15...	1200	16	7	--	--	--	--	300	1

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
OCT 05...	40	.3	.00	.00	.0	.00	.00	.00	.00
NOV 16...	60	.2	.00	.00	.0	.00	.00	.00	.00
MAR 10...	110	.1	.00	.00	.0	.00	.00	.00	.00
28...	80	.2	.00	.00	.0	.00	.00	.00	.00
JUL 10...	50	.1	.00	.00	--	--	--	--	--
AUG 15...	100	.1	.00	.00	--	--	--	--	--

DATE	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	SEDI- MENT, SUS- PENDED (MG/L)
OCT 05...	.00	.00	.00	.00	.00	.00	0	14
NOV 16...	.00	.00	.00	.00	.00	.00	0	27
MAR 10...	.00	.00	.00	.00	--	.00	0	81
28...	.00	.00	.00	.00	--	.00	0	71
JUL 10...	--	--	--	--	--	--	--	26
AUG 15...	--	--	--	--	--	--	--	12

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY
(Hydrologic bench-mark station)

LOCATION.--Lat 42°06'59", long 74°23'20", Ulster County, Hydrologic Unit 02020006, on left bank 2,400 ft (732 m) downstream from bridge on State Highway 28, at Shandaken, 0.5 mi (0.8 km) downstream from Bushnellville Creek, 0.5 mi (0.8 km) upstream from Fox Hollow Creek, and 5.2 mi (8.4 km) northwest of Phoenicia. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.5 mi² (154.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,017.27 ft (310.064 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Occasional slight regulation when filling or draining swimming pools or small ponds above station.

AVERAGE DISCHARGE.--16 years, 143 ft³/s (4.050 m³/s), 32.64 in/yr (829 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,870 ft³/s (223 m³/s) July 28, 1969, gage height, 10.88 ft (3.316 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 2.8 ft³/s (0.079 m³/s) Nov. 22, 23, 1964, result of freezeup, gage height, 4.15 ft (1.265 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1545	2,250 63.7	7.83 2.387	Mar. 25	0145	*3,710 105	*8.88 2.707
Jan. 25	0315	1,110 31.4	6.88 2.097	Sept. 6	1315	2,560 72.5	8.20 2.499
Mar. 6	0600	2,320 65.7	7.88 2.402				

Minimum daily discharge, 5.0 ft³/s (0.142 m³/s) Sept. 2; minimum gage height, 4.80 ft (1.463 m) July 13, 14, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	55	55	116	140	119	388	238	215	40	18	5.5
2	15	53	55	1490	130	125	325	211	190	38	41	5.0
3	14	51	53	1200	130	128	289	197	166	31	33	8.3
4	14	47	67	600	110	153	255	208	146	28	26	5.8
5	17	45	90	394	90	1260	234	183	131	25	20	5.3
6	33	43	88	299	80	2080	211	160	119	25	19	1000
7	26	43	92	279	70	1240	193	140	108	23	17	364
8	22	41	105	656	64	736	176	130	97	20	15	173
9	20	40	219	469	60	504	183	120	90	19	14	116
10	19	38	230	358	60	532	176	110	83	19	18	90
11	19	36	200	284	62	673	173	100	122	19	15	74
12	18	34	180	255	64	497	176	92	108	20	36	63
13	19	33	163	200	64	376	176	98	88	17	47	53
14	43	33	146	190	64	364	251	94	81	17	29	78
15	51	33	128	190	60	336	294	86	76	17	22	131
16	45	31	116	163	56	274	294	78	72	18	18	95
17	43	31	108	160	54	238	274	76	65	19	13	83
18	40	67	100	137	54	211	251	76	63	18	17	74
19	40	63	98	130	54	190	226	88	57	17	23	67
20	43	57	110	120	54	176	208	90	53	12	18	61
21	41	57	90	246	56	176	193	83	49	11	12	63
22	38	55	84	284	66	193	180	83	49	45	11	134
23	38	55	80	219	80	238	176	88	47	20	8.3	113
24	36	63	80	234	110	584	173	242	45	17	7.8	97
25	34	67	76	768	130	1980	163	569	41	13	19	88
26	36	65	70	443	150	968	163	728	40	12	18	81
27	65	61	68	336	140	592	279	569	36	23	13	72
28	59	61	64	279	119	418	353	483	36	17	11	65
29	57	59	64	230	---	358	309	364	33	17	9.4	70
30	55	57	64	197	---	341	265	320	33	18	8.3	61
31	55	---	70	176	---	406	---	255	---	18	6.4	---
TOTAL	1070	1474	3213	11102	2371	16466	7007	6359	2539	653	583.2	3395.9
MEAN	34.5	49.1	104	358	84.7	531	234	205	84.6	21.1	18.8	113
MAX	65	67	230	1490	150	2080	388	728	215	45	47	1000
MIN	14	31	53	116	54	119	163	76	33	11	6.4	5.0
CFSM	.58	.83	1.75	6.02	1.42	8.92	3.93	3.45	1.42	.36	.32	1.90
IN.	.67	.92	2.01	6.94	1.48	10.29	4.38	3.98	1.59	.41	.36	2.12

CAL YR 1978 TOTAL 57108.0 MEAN 156 MAX 2630 MIN 11 CFSM 2.62 IN 35.70
WTR YR 1979 TOTAL 56233.1 MEAN 154 MAX 2080 MIN 5.0 CFSM 2.59 IN 35.16

HUDSON RIVER BASIN

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01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

CHEMICAL DATA: 1963-65 (a), 1966-67 (b), 1968-79 (d).

MINOR ELEMENTS DATA: 1964-65, 1967-73, 1975-76 (a); 1977 (b); 1978-79 (a).

RADIOCHEMICAL DATA: 1967-77, 79 (a).

PESTICIDE DATA: 1967-72, 1974-77 (a).

ORGANIC DATA: OC--1979 (a).

PCB--1974-77, 79 (a).

PCN--1977, 79 (a).

NUTRIENT DATA: 1968 (a), 1969-71 (d), 1972 (c), 1974 (a), 1975-79 (d).

BIOLOGICAL DATA:

Bacteria--1968-69 (d), 1970-72 (c), 1973-79 (d).

SEDIMENT DATA: 1969-71 (c); 1972-75, 1977-79 (d).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1963 to July 1968, January 1970 to current year.

INSTRUMENTATION.--Temperature recorder since July 1963.

REMARKS.--No temperature record Oct. 1-13, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1964-68, 1970-76, 1978-79), 28.5°C Aug. 16, 1965; minimum, freezing point on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C Aug. 5; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT											
19...	1200	47	60	6.2	10.0	11.9	102	100	K5	K7	21
NOV											
21...	1100	57	55	6.3	5.0	15.8	109	135	K5	K2	18
DEC											
05...	1300	88	62	6.3	3.0	13.3	103	K130	K2	K6	17
JAN											
16...	1000	173	53	6.0	.0	14.9	104	K12	K3	K4	18
FEB											
13...	1400	65	53	6.1	.0	--	--	--	--	--	17
MAR											
22...	1200	180	47	5.6	5.5	13.8	115	K1	K1	K3	15
APR											
04...	1300	260	44	5.5	5.5	13.0	106	K16	K5	K6	14
MAY											
31...	1200	246	44	6.3	12.0	11.2	102	K220	K5	K9	15
JUN											
20...	1100	55	58	6.8	15.5	10.4	106	K340	K5	K5	17
JUL											
10...	1700	20	61	6.3	19.0	9.2	102	90	--	140	19
AUG											
15...	1100	21	61	6.7	14.0	10.5	105	2100	K10	K10	20
SEP											
26...	1100	80	43	6.3	11.0	11.6	109	100	K1	K8	16

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

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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 (MG/L AS CAC03)	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)
OCT 19...	10	6.0	1.4	2.6	.6	11	7.3	3.1	.0	2.2
NOV 21...	8	5.3	1.2	2.0	.5	10	7.0	2.7	.0	2.0
DEC 05...	6	4.9	1.2	2.6	.5	11	8.3	4.5	.0	2.5
JAN 16...	9	5.4	1.1	2.0	.4	9	7.0	3.6	.1	2.9
FEB 13...	9	4.8	1.1	2.4	.3	8	7.0	3.6	.0	2.8
MAR 22...	6	4.2	1.0	2.0	.2	9	6.7	3.2	.0	2.6
APR 04...	0	4.1	.9	1.7	.3	16	6.2	2.6	.0	2.6
MAY 31...	3	4.2	1.0	1.6	.2	12	6.9	2.2	.0	2.8
JUN 20...	6	5.1	1.1	2.4	.3	11	6.8	3.2	.0	3.0
JUL 10...	9	5.4	1.3	2.9	.4	10	7.4	3.9	.0	2.7
AUG 15...	7	6.0	1.2	2.6	.4	13	6.6	3.6	.0	2.6
SEP 26...	6	4.6	1.0	1.9	.3	10	6.3	2.2	.1	2.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
OCT 19...	29	30	.28	--	.00	--	--	--	--	--
NOV 21...	30	27	--	--	--	--	--	--	--	--
DEC 05...	36	31	.53	--	.12	--	--	--	--	--
JAN 16...	32	28	.47	--	.00	--	--	--	--	--
FEB 13...	34	27	.31	--	.00	--	--	--	--	--
MAR 22...	30	25	.39	--	.01	2	0	0	20	1
APR 04...	24	28	.37	--	.01	--	--	--	--	--
MAY 31...	28	26	.21	--	.01	--	--	--	--	--
JUN 20...	45	29	.12	--	.01	--	--	--	--	--
JUL 10...	36	30	.07	--	.01	--	--	--	--	--
AUG 15...	42	31	.12	--	.00	4	0	6	<10	2
SEP 26...	32	26	.13	.19	.00	--	--	--	--	--

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
OCT 19...	--	--	--	--	--	--	--	--	--	--
NOV 21...	--	--	--	--	--	--	--	--	--	--
DEC 05...	--	--	--	--	--	--	--	4.7	.7	--
JAN 16...	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	--	--	--	--	--	--	--
MAR 22...	90	1	0	<.5	0	0	10	--	--	.00
APR 04...	--	--	--	--	--	--	--	--	--	--
MAY 31...	--	--	--	--	--	--	--	--	--	--
JUN 20...	--	--	--	--	--	--	--	--	--	--
JUL 10...	--	--	--	--	--	--	--	--	--	--
AUG 15...	80	1	20	<.5	0	0	10	--	--	.01
SEP 26...	--	--	--	--	--	--	--	--	--	--

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	
MAR 22...	1200	.0	0	.00	.00	.0	.0	67	.00	.0	
DATE		DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
MAR 22...	.00	1.3	.00	.0	.00	.00	.0	.00	.00	.00	.0
DATE		ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- EPOXIDE TOTAL (UG/L)	HEPTA- EPOXIDE MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)
MAR 22...	.00	.00	.00	.0	.00	.0	.00	.0	.00	.00	.00
DATE		MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	
MAR 22...		.00	.00	.00	0	0	.00	.00	.00	.00	

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DIS- TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS- TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, DIS- TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
MAR 22...	1200	<.5	<.4	.7	<.4	.7	<.4	.07	.03

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	1200	47	2	.25	--	APR 04...	1300	260	4	2.8	--
NOV 21...	1100	57	165	25	99	MAY 31...	1200	246	4	2.7	--
DEC 05...	1300	88	1	.24	--	AUG 15...	1100	21	5	.28	84
FEB 13...	1400	65	34	6.0	88	SEP 26...	1100	80	2	.43	--
MAR 22...	1200	180	2	.97	--						

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	13.5	8.0	10.0	18.5	14.5	16.5	25.5	19.5	22.0	23.5	16.0	19.5
2	12.0	8.5	10.5	18.0	14.0	15.5	24.5	19.5	21.5	21.0	17.5	19.5
3	12.0	10.0	10.5	21.5	14.5	17.5	25.0	18.5	21.5	23.5	18.0	20.5
4	14.0	9.0	11.0	18.0	12.5	14.5	25.5	18.0	21.5	23.5	17.0	20.0
5	14.5	9.0	11.5	15.5	11.0	13.5	26.5	18.0	21.5	22.0	18.0	20.0
6	13.5	9.5	11.5	16.5	11.0	14.0	23.0	18.0	20.5	20.5	16.0	18.0
7	14.5	10.0	12.0	20.0	10.5	15.0	23.5	15.0	19.0	17.5	15.5	16.5
8	15.5	11.5	13.0	22.5	12.0	17.0	23.5	17.5	20.0	16.5	14.0	15.0
9	15.0	11.5	13.0	21.5	14.0	17.5	25.0	16.5	20.0	16.5	12.5	14.0
10	14.5	12.0	13.5	20.0	14.5	17.0	21.5	16.5	19.0	17.0	11.5	14.0
11	13.5	11.0	12.5	23.0	15.5	19.0	19.5	17.0	18.0	17.0	10.5	15.0
12	14.0	10.0	12.0	23.5	16.5	19.5	16.5	15.0	16.0	17.0	11.0	14.0
13	14.5	10.0	12.0	25.5	16.5	20.5	21.5	14.5	17.5	17.5	12.0	15.0
14	16.5	10.0	13.0	25.0	17.5	21.0	19.5	15.0	17.0	17.0	14.5	15.5
15	17.5	11.5	14.0	23.5	18.5	20.5	15.5	14.0	14.5	16.5	10.0	14.5
16	18.0	13.5	15.5	20.5	15.0	19.5	20.0	13.5	16.0	15.0	11.5	13.5
17	19.0	14.0	16.0	25.5	15.0	20.5	20.0	11.5	16.0	16.5	11.5	14.0
18	16.5	14.5	15.0	19.5	15.0	18.0	15.0	10.0	13.5	17.0	10.0	14.0
19	18.0	13.0	15.0	24.5	15.5	19.5	20.0	14.0	16.5	15.0	10.5	13.5
20	21.0	12.5	16.0	23.5	16.0	19.5	19.5	14.0	17.0	14.5	9.0	11.5
21	21.0	11.5	16.0	23.0	17.0	20.0	21.5	15.0	18.0	13.0	10.5	11.5
22	17.0	13.0	15.0	23.0	17.5	20.0	23.0	15.0	18.5	13.0	10.0	12.5
23	17.5	13.5	15.0	23.5	16.5	19.5	22.5	15.5	19.0	14.0	10.0	11.5
24	14.0	11.5	13.0	25.5	17.5	21.5	20.0	15.0	18.5	13.5	9.0	11.0
25	19.5	9.5	14.0	24.0	18.5	21.0	22.5	18.0	20.0	14.0	9.0	11.0
26	20.5	10.0	15.0	23.0	19.0	20.5	24.0	16.5	20.0	15.0	10.5	12.5
27	21.5	11.5	16.0	22.5	18.5	20.5	23.0	18.5	20.5	14.0	9.5	12.0
28	18.0	13.0	15.0	23.0	17.5	20.0	22.5	17.5	20.0	12.5	10.5	11.5
29	20.5	13.5	16.5	21.5	17.5	19.5	21.5	18.5	20.0	14.0	12.0	13.0
30	18.5	14.5	15.5	24.5	17.0	20.5	24.5	18.5	21.0	13.5	12.5	13.0
31	---	---	---	25.5	18.5	21.5	23.5	17.5	20.0	---	---	---
MONTH	21.5	8.0	13.5	25.5	10.5	18.5	26.5	10.0	19.0	23.5	9.0	14.5

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 (0.5 km) downstream from Little Beaver Kill, 1.5 mi (2.4 km) upstream from Ashokan Reservoir, and 2.5 mi (4.0 km) south of Mount Tremper.

DRAINAGE AREA.--192 mi² (497 km²).

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 621.54 ft (189.445 m) National Geodetic Vertical Datum of 1929.
Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Since 1924, water diverted from Schoharie Reservoir through Shandaken Tunnel (see Reservoirs in Hudson River Basin) enters Esopus Creek 10.5 mi (16.9 km) above station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,600 ft³/s (1,690 m³/s) Mar. 30, 1951, gage height, 20.70 ft (6.309 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-area measurements at gage heights 12.39 ft (3.776 m), 15.15 ft (4.618 m), and 20.70 ft (6.309 m); minimum daily, 8 ft³/s (0.23 m³/s) Oct. 14, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,900 ft³/s (507 m³/s) Sept. 6, gage height, 13.60 ft (4.145 m) from rating curve extended as explained above; minimum daily, 68 ft³/s (1.93 m³/s) Nov. 16; minimum gage height, 4.41 ft (1.344 m) Nov. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	109	195	400	500	560	992	927	1140	497	417	456
2	183	106	184	4040	430	560	883	758	1040	521	462	445
3	339	103	196	3800	380	580	848	674	874	451	660	456
4	459	99	240	1930	350	600	750	704	440	434	798	434
5	445	96	358	1310	320	3200	766	584	468	429	696	429
6	498	94	309	980	300	7260	653	521	440	503	401	6520
7	458	91	297	900	280	4390	578	473	407	758	396	2290
8	440	94	321	2330	270	2400	515	429	391	639	391	1420
9	428	89	865	1500	260	1560	618	391	407	312	385	1090
10	418	84	910	1100	250	1630	660	360	391	360	391	719
11	412	80	686	800	240	2030	597	331	750	355	407	632
12	407	77	575	720	240	1340	584	308	618	350	462	584
13	384	73	508	680	240	1000	558	326	521	345	473	597
14	383	70	443	640	240	1040	848	317	485	340	423	814
15	315	69	388	600	240	900	973	286	539	340	417	1120
16	166	68	351	580	240	720	883	270	578	774	445	831
17	128	76	335	520	250	646	814	250	558	412	473	758
18	116	343	290	500	250	571	727	254	545	584	491	696
19	111	248	260	480	260	527	653	326	533	521	509	653
20	114	214	260	520	260	497	591	365	515	417	485	604
21	103	200	300	1100	270	497	539	326	503	380	479	604
22	98	189	270	1710	330	539	497	317	497	552	473	774
23	92	185	250	1070	300	660	462	331	491	423	462	696
24	86	244	240	992	450	1510	445	1220	479	396	451	646
25	83	268	250	3960	740	7630	429	2950	468	391	468	591
26	88	230	240	1960	660	2840	456	2980	451	401	468	571
27	130	220	240	1400	620	1710	2300	2050	434	445	445	545
28	127	210	240	1130	580	1210	2570	1660	434	385	434	527
29	118	200	250	910	---	1030	1670	1180	434	370	451	545
30	113	200	250	742	---	936	1170	964	434	365	479	527
31	110	---	280	620	---	1000	---	798	---	412	462	---
TOTAL	7519	4429	10781	39924	9750	51573	25029	23630	16265	13862	14654	27574
MEAN	243	148	348	1288	348	1664	834	762	542	447	473	919
MAX	498	343	910	4040	740	7630	2570	2980	1140	774	798	6520
MIN	83	68	184	400	240	497	429	250	391	312	385	429
CAL YR 1978	TOTAL	240352	MEAN 658	MAX	11400	MIN 25						
WTR YR 1979	TOTAL	244990	MEAN 671	MAX	7630	MIN 68						

HUDSON RIVER BASIN

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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 (1.3 km) east of Mount Marion, 1.6 mi (2.6 km) downstream from Plattekill Creek, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--419 mi² (1,085 km²).

PERIOD OF RECORD.--May 1907 to March 1918 (monthly discharge only, published in WSP 1302) occasional miscellaneous measurements, 1951, 1956, 1966, 1967, 1969. March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.16 ft (12.241 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1970, nonrecording gage at same site (at different datum May 1907 to March 1908, and at present datum June 9, 1966 to Aug. 12, 1970).

REMARKS.--Records fair except those for winter periods, which are poor. Flow from 256 mi² (663 km²) 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 (31.6 km) above Ashokan Reservoir. Diversion from Plattekill Creek for water supply of Saugerties. 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 mi² (290 km²), together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--9 years (1971-79), 609 ft³/s (17.25 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 ft³/s (793 m³/s) Apr. 26, 1910, gage height, 25.10 ft (7.650 m), datum then in use; minimum, 10 ft³/s (0.28 m³/s) Aug. 20-22, 1970, gage height, 11.77 ft (3.587 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,190 ft³/s (232 m³/s) Sept. 6, gage height, 20.43 ft (6.227 m); minimum discharge, 26 ft³/s (0.74 m³/s) Nov. 7; minimum gage height, 12.16 ft (3.706 m) Oct. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	36	149	207	499	596	365	1810	1150	94	95	50
2	32	35	142	2510	384	682	351	1460	1040	106	137	45
3	30	35	133	3880	344	749	413	1070	1000	96	109	45
4	30	35	138	1690	280	742	375	1040	920	81	87	57
5	33	34	194	995	250	1860	440	977	668	71	78	49
6	47	32	201	642	210	3630	415	728	463	65	65	3010
7	67	30	191	542	190	3370	342	531	299	59	57	1910
8	51	35	186	1890	170	1830	314	437	215	54	52	632
9	43	36	371	1670	160	1230	373	361	177	50	49	358
10	38	35	556	1070	150	1150	785	306	159	46	48	256
11	35	35	387	702	140	1730	799	255	319	45	57	197
12	35	31	300	454	130	1180	656	207	934	43	86	156
13	34	35	262	420	120	824	530	197	527	41	156	134
14	38	35	234	515	120	717	722	244	350	38	110	128
15	76	32	202	520	110	676	991	231	273	34	84	321
16	68	32	182	376	110	488	787	204	224	643	70	195
17	57	36	178	294	100	435	684	177	190	218	60	152
18	55	152	140	291	96	374	549	158	189	211	61	130
19	52	160	120	279	96	354	457	161	225	355	107	116
20	50	127	120	298	96	333	379	185	168	199	97	101
21	49	110	188	728	96	327	333	183	139	145	81	99
22	48	98	230	2270	100	333	299	164	120	558	70	266
23	44	91	210	1420	110	348	277	160	115	313	63	267
24	41	118	180	936	513	375	256	662	105	212	58	197
25	40	174	170	3430	991	1070	239	2540	96	261	63	165
26	39	161	150	2750	791	868	244	2280	89	182	71	143
27	42	139	140	1630	763	610	992	2960	79	197	69	125
28	44	132	130	1170	592	472	1740	3080	73	158	62	111
29	42	129	120	923	---	442	1600	2520	68	129	60	140
30	40	133	130	737	---	437	2030	2000	67	112	66	143
31	39	---	141	611	---	398	---	1530	---	98	57	---
TOTAL	1371	2303	6175	35850	7711	28630	18737	28818	10441	4914	2385	9698
MEAN	44.2	76.8	199	1156	275	924	625	930	348	159	76.9	323
MAX	76	174	556	3880	991	3630	2030	3080	1150	643	156	3010
MIN	30	30	120	207	96	327	239	158	67	34	48	45
CAL YR 1978	TOTAL	233511	MEAN	640	MAX	10600	MIN	29				
WTR YR 1979	TOTAL	157033	MEAN	430	MAX	3880	MIN	30				

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 (30 m) downstream from small tributary, 350 ft (107 m) upstream from bridge on county road, 1.1 mi (1.8 km) upstream from Sugarloaf Brook, 1.1 mi (1.8 km) east of Lowes Corners, and 1.9 mi (3.1 km) southwest of Sundown.

DRAINAGE AREA.--38.5 mi² (99.7 km²).

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

REVISED RECORDS.--WSP 1702: 1952.

GAGE.--Water-stage recorder. Datum of gage is 874.44 ft (266.529 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft (107 m) downstream at datum 847.00 ft (258.166 m) NGVD (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 (1.9 km) downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft (258.166 m) NGVD and July 4, 1949 to July 5, 1951, datum 846.00 ft (257.861 m) NGVD (levels by Board of Water Supply, City of New York).

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 99.0 ft³/s (2.804 m³/s), 34.92 in/yr (887 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,600 ft³/s (215 m³/s) July 22, 1938, from rating curve extended above 2,600 ft³/s (73.6 m³/s); maximum gage height, 10.38 ft (3.164 m) Oct. 15, 1955; minimum discharge, 4.2 ft³/s (0.12 m³/s) Nov. 13, 15, 21, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1445	1,680 47.6	5.98 1.823	Mar. 25	0115	2,020 57.2	6.34 1.932
Mar. 6	1045	1,280 36.2	5.52 1.682	Sept. 6	1315	*3,130 88.6	*7.35 2.240

Minimum discharge, 13 ft³/s (0.37 m³/s) Oct. 3; minimum gage height, 2.90 ft (0.884 m), Sept. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	22	46	209	110	122	223	173	137	42	36	24
2	14	22	45	1090	100	137	212	153	122	35	51	22
3	13	22	46	571	94	129	208	160	106	31	33	27
4	14	22	69	302	86	140	183	231	97	30	28	24
5	16	22	80	219	80	595	190	173	86	28	25	22
6	22	22	70	186	74	1050	166	160	81	27	24	1020
7	17	22	70	204	68	669	140	144	73	25	22	144
8	16	24	97	560	64	460	122	129	66	25	21	197
9	16	23	263	302	60	339	153	115	64	24	21	129
10	16	23	198	236	56	430	160	102	61	24	28	100
11	16	22	152	183	52	526	149	94	227	22	30	76
12	16	22	135	150	50	339	144	86	157	22	48	61
13	16	22	123	130	48	263	133	94	100	21	42	46
14	26	23	113	120	46	263	219	91	86	20	28	70
15	23	22	102	110	45	231	215	78	78	21	25	66
16	20	22	97	98	43	197	193	78	70	24	24	42
17	19	24	97	94	42	176	179	70	64	25	22	33
18	19	67	89	88	40	166	160	70	58	86	31	30
19	19	36	81	82	39	160	144	88	55	44	40	30
20	19	32	86	78	38	157	125	83	48	28	28	22
21	19	32	129	259	50	169	115	76	46	25	25	106
22	19	34	102	240	64	190	106	70	46	25	25	179
23	19	35	94	169	61	227	100	91	51	24	24	102
24	20	57	92	190	169	354	94	240	42	22	24	81
25	20	52	101	460	166	900	88	306	40	21	31	76
26	23	45	92	259	157	473	97	344	36	30	27	66
27	29	44	89	208	122	320	297	284	35	35	31	53
28	23	47	83	183	118	252	293	276	35	25	28	53
29	22	46	78	163	---	252	236	223	35	22	25	102
30	22	49	74	144	---	244	193	193	36	22	28	70
31	22	---	70	133	---	236	---	163	---	21	25	---
TOTAL	589	957	3063	7420	2142	10166	5037	4638	2238	876	900	3073
MEAN	19.0	31.9	98.8	239	76.5	328	168	150	74.6	28.3	29.0	102
MAX	29	67	263	1090	169	1050	297	344	227	86	51	1020
MIN	13	22	45	78	38	122	88	70	35	20	21	22
CFSM	.49	.83	2.57	6.21	1.99	8.52	4.36	3.90	1.94	.74	.75	2.65
IN.	.57	.92	2.96	7.17	2.07	9.82	4.87	4.48	2.16	.85	.87	2.97

CAL. YR 1978 TOTAL 38173 MEAN 105 MAX 1090 MIN 13 CFSM 2.73 IN 36.88
WTR. YR 1979 TOTAL 41099 MEAN 113 MAX 1090 MIN 13 CFSM 2.94 IN 39.71

01365500 CHESTNUT CREEK AT GRAHAMSVILLE, NY

LOCATION.--Lat 41°50'42", long 74°32'27", Sullivan County, Hydrologic Unit 02020007, on right bank just downstream from bridge in Grahamsville, 600 ft (183 m) downstream from Red Brook, and 0.6 mi (1.0 km) upstream from bridge on State Highway 55.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 880.96 ft (268.516 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for the winter periods, which are poor. Slight seasonal regulation caused by Beaverdam Pond on Red Brook.

AVERAGE DISCHARGE.--41 years, 39.4 ft³/s (1.116 m³/s), 25.60 in/yr (650 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft³/s (131 m³/s) Oct. 15, 1955, gage height, 5.02 ft (1.530 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement at gage height 4.68 ft (1.426 m); minimum, 1.4 ft³/s (0.040 m³/s) Nov. 1, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1300	ice jam	*2.34 0.713	Sept. 6	1200	*754 21.4	2.31 0.704

Minimum discharge, 4.8 ft³/s (0.14 m³/s) Oct. 2, 4, gage height, 0.54 ft (0.164 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	9.1	18	119	43	31	60	55	53	17	7.2	5.9
2	5.5	8.6	16	417	41	32	63	49	46	15	7.2	5.9
3	5.1	8.1	15	228	38	30	65	54	42	14	7.6	6.7
4	5.5	8.1	28	158	36	32	57	78	37	12	7.2	5.9
5	6.7	7.6	31	108	35	250	66	57	34	11	6.7	5.5
6	21	8.1	22	62	34	300	55	49	33	9.1	6.3	250
7	9.7	8.1	21	70	33	200	49	45	30	9.1	6.3	66
8	7.6	9.7	37	200	32	140	47	39	28	9.1	5.9	36
9	6.7	8.6	153	130	30	100	78	36	26	9.1	5.5	23
10	6.7	8.6	86	90	28	198	93	33	25	9.1	10	18
11	6.7	8.1	53	76	27	218	80	30	89	9.1	11	15
12	6.3	8.1	44	66	26	115	69	30	60	8.6	22	13
13	8.1	8.1	37	56	25	85	57	36	41	8.6	16	13
14	36	8.1	32	47	24	95	137	34	32	8.6	10	16
15	34	8.1	28	41	23	77	105	30	27	8.6	8.6	14
16	31	8.1	28	36	22	68	83	27	24	14	7.6	12
17	17	9.7	26	32	21	56	66	24	22	11	6.7	11
18	11	31	21	28	20	51	55	26	21	27	13	10
19	9.1	19	18	25	20	49	49	36	20	15	16	11
20	8.1	15	20	22	19	50	45	31	17	10	9.1	9.7
21	8.1	14	48	140	19	53	39	27	17	9.1	7.6	32
22	7.2	13	34	100	18	57	37	24	18	9.1	7.2	55
23	7.2	14	27	80	18	59	33	47	19	9.1	6.7	27
24	6.7	28	24	84	40	134	33	154	16	12	6.7	20
25	7.2	28	24	111	50	243	31	136	15	10	9.1	17
26	9.7	20	22	91	45	124	39	116	14	15	7.2	15
27	19	17	21	70	35	84	136	90	13	15	10	14
28	13	18	19	64	30	68	114	100	15	11	7.2	14
29	11	17	18	56	---	83	86	82	17	10	6.7	28
30	10	19	18	50	---	75	66	92	17	9.1	6.3	27
31	9.7	---	17	46	---	66	---	64	---	8.6	5.9	---
TOTAL	355.7	395.9	1006	2903	832	3223	1993	1731	868	353.0	270.5	796.6
MEAN	11.5	13.2	32.5	93.6	29.7	104	66.4	55.8	28.9	11.4	8.73	26.6
MAX	36	31	153	417	50	300	137	154	89	27	22	250
MIN	5.1	7.6	15	22	18	30	31	24	13	8.6	5.5	5.5
CFSM	.55	.63	1.56	4.48	1.42	4.98	3.18	2.67	1.38	.55	.42	1.27
IN.	.63	.70	1.79	5.17	1.48	5.74	3.55	3.08	1.54	.63	.48	1.42

CAL YR 1978	TOTAL	14785.4	MEAN	40.5	MAX	608	MIN	4.8	CFSM	1.94	IN	26.32
WTR YR 1979	TOTAL	14727.7	MEAN	40.3	MAX	417	MIN	5.1	CFSM	1.93	IN	26.21

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 (9 m) upstream from bridge on James Street in Rosendale, and 3 mi (5 km) upstream from Wallkill River.

DRAINAGE AREA.--386 mi² (1,000 km²) (see REMARKS below).

PERIOD OF RECORD.--July 1901 to November 1903, October 1905 to January 1919, August 1926, to current year. Monthly discharge only for some periods, published in WSP 1302, and WRD NY 1970.

REVISED RECORDS.--WSP 641: Drainage Area. WSP 756: 1933.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft (10.007 m) National Geodetic Vertical Datum of 1929. Prior to January 1919, nonrecording gage at site 150 ft (46 m) downstream at datum 38.83 ft (11.835 m) NGVD. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 42.83 ft (13.055 m) NGVD. 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 (0.3 km) upstream at datum 44.03 ft (13.420 m) NGVD.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation from hydroelectric plant upstream from station. Diversion from Rondout Creek through the emergency connection to the Delaware Aqueduct at Lackawack for New York City water supply during period 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 272 mi² (704 km²), together with spillage during high flow from Rondout Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 ft³/s (1,010 m³/s) Oct. 16, 1955, gage height, 36.8 ft (11.22 m), datum then in use, from floodmarks, from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of contracted-opening measurement at gage height 33.93 ft (10.342 m); minimum, 2.2 ft³/s (0.062 m³/s) July 16, 1965; minimum daily, 3.0 ft³/s (0.085 m³/s) July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,500 ft³/s (297 m³/s) Jan. 25, gage height, 16.81 ft (5.124 m); minimum, 47 ft³/s (1.33 m³/s) Aug. 10, gage height, 8.83 ft (2.691 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	90	218	800	822	1100	761	896	613	182	60	60
2	59	87	185	6160	640	1100	700	741	500	208	57	57
3	58	85	175	6500	580	1000	794	649	439	171	58	57
4	58	83	187	2350	520	1400	690	796	394	139	56	58
5	58	92	426	1480	470	3380	747	687	424	122	55	59
6	60	93	364	1110	440	6370	685	577	552	113	53	3310
7	90	92	308	991	410	4960	592	481	378	105	53	2160
8	70	95	310	3640	380	2950	535	430	313	97	55	791
9	60	98	1350	2740	360	2230	743	389	284	92	51	391
10	58	98	1670	1750	340	2170	1470	352	268	88	53	263
11	60	95	918	1250	330	3400	1230	322	1270	85	73	194
12	58	93	657	900	320	2190	1010	292	2540	83	124	160
13	56	89	534	800	310	1500	877	322	1140	80	288	137
14	58	81	468	700	290	1330	1440	466	706	75	178	129
15	130	79	397	800	280	1360	1830	413	496	70	107	177
16	137	79	360	540	270	944	1360	342	424	72	87	154
17	114	82	304	450	260	842	1170	299	368	104	87	119
18	111	187	275	410	250	745	934	276	333	105	76	105
19	106	267	289	390	250	699	796	371	399	114	85	99
20	107	174	359	370	600	675	693	509	283	106	104	96
21	105	153	419	1500	500	675	607	398	232	84	84	98
22	104	153	597	3440	450	712	517	349	213	80	74	651
23	102	146	435	1880	410	731	457	343	209	77	69	632
24	97	187	362	1430	1000	754	414	2550	200	70	67	337
25	93	303	257	8100	2390	2930	382	4770	183	66	73	251
26	84	259	350	4560	1750	2050	400	3410	167	62	101	215
27	95	203	330	2640	1550	1290	1580	2310	152	78	109	180
28	127	193	310	1960	1200	953	2180	1620	144	74	100	157
29	115	208	300	1530	---	928	1710	1150	139	70	77	221
30	102	209	330	1170	---	939	1150	977	144	67	68	279
31	93	---	500	985	---	837	---	770	---	64	64	---
TOTAL	2684	4153	13944	63326	17372	53144	28454	28257	13907	3003	2646	11597
MEAN	86.6	138	450	2043	620	1714	948	912	464	96.9	85.4	387
MAX	137	303	1670	8100	2390	6370	2180	4770	2540	208	288	3310
MIN	56	79	175	370	250	675	382	276	139	62	51	57
CAL YR 1978	TOTAL	219467	MEAN	601	MAX	7850	MIN	56				
WTR YR 1979	TOTAL	242487	MEAN	664	MAX	8100	MIN	51				

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville.

DRAINAGE AREA.--140 mi² (363 km²).

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

REVISED RECORDS.--WSP 2102: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.28 ft (115.605 m) National Vertical Geodetic Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor, and periods of recession above 600 ft³/s (17 m³/s), which may be as much as 35 percent in error. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority for municipal use in New Jersey. After use, the water is released into Paulins Kill (Delaware River basin). Diversion records available from the Delaware River Basin Commission.

AVERAGE DISCHARGE.--42 years, 218 ft³/s (6.174 m³/s), 21.15 in/yr (537 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft³/s (195 m³/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Aug. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 10	0230	1,200 34.0	7.68 2.341	Feb. 27	0130	2,080 58.9	9.36 2.853
Jan. 23	0830	1,420 40.2	8.19 2.496	May 27	2315	1,240 35.1	7.76 2.365
Jan. 25	2100	*a2,500 70.8	*10.78 3.286				

a About.

Minimum discharge, 21 ft³/s (0.59 m³/s) Nov. 9, 10; minimum gage height, 3.04 ft (0.927 m), Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	26	80	171	420	1000	282	263	361	122	49	54
2	26	26	71	617	350	800	278	230	297	110	45	43
3	28	25	65	1020	300	700	308	207	278	95	56	45
4	37	25	72	1000	250	573	328	217	299	81	54	54
5	54	24	127	800	210	542	333	211	263	95	48	45
6	67	24	113	600	180	781	310	184	265	81	41	271
7	78	24	86	383	170	1120	267	173	252	69	38	730
8	53	24	75	700	160	1000	232	159	203	63	37	800
9	40	23	175	1080	140	880	292	150	178	57	32	600
10	33	23	363	1100	130	700	491	139	175	53	31	280
11	33	25	312	700	120	660	491	135	303	50	40	177
12	35	31	211	450	120	700	396	127	724	49	103	133
13	33	26	161	360	110	600	333	140	700	50	258	108
14	32	32	148	330	110	459	373	165	560	52	186	96
15	34	30	124	300	110	411	530	178	380	74	108	142
16	34	25	110	280	100	323	514	144	258	85	74	137
17	31	27	106	250	96	284	433	117	209	254	59	103
18	31	53	90	220	94	258	375	103	186	260	50	86
19	30	88	80	190	92	232	326	144	177	258	65	75
20	30	75	75	180	90	211	288	230	159	167	67	74
21	28	63	106	428	90	196	258	188	137	115	53	72
22	26	54	190	1080	120	186	234	150	124	91	47	333
23	26	49	135	1410	150	180	220	157	129	80	42	461
24	26	75	98	1280	504	190	203	571	120	83	39	380
25	25	91	100	2400	1470	470	190	940	108	77	49	247
26	25	69	144	2730	1970	511	194	1170	95	67	81	180
27	29	53	122	1700	1800	420	306	1000	86	65	63	155
28	40	54	86	1300	1200	342	413	900	80	57	60	140
29	34	56	76	1100	---	317	396	700	90	52	50	184
30	30	63	76	900	---	323	323	598	106	59	67	205
31	28	---	78	634	---	301	---	428	---	57	78	---
TOTAL	1080	1283	3855	25693	10656	15670	9917	10218	7302	2928	2070	6410
MEAN	34.8	42.8	124	829	381	505	331	330	243	94.5	66.8	214
MAX	78	91	363	2730	1970	1120	530	1170	724	260	258	800
MIN	24	23	65	171	90	180	190	103	80	49	31	43
CFSM	.25	.31	.89	5.92	2.72	3.61	2.36	2.36	1.74	.68	.48	1.53
IN.	.29	.34	1.02	6.83	2.83	4.16	2.64	2.72	1.94	.78	.55	1.70

CAL YR 1978	TOTAL	79543	MEAN 218	MAX 2000	MIN 21	CFSM 1.56	IN 21.14
WTR YR 1979	TOTAL	97082	MEAN 266	MAX 2730	MIN 23	CFSM 1.90	IN 25.80

01369500 QUAKER CREEK AT FLORIDA, NY

LOCATION.--Lat 41°20'21", long 74°21'45", Orange County, Hydrologic Unit 02020007, on right bank at downstream side of private bridge, just downstream from Browns Creek, at Florida; and 5.0 mi (8.0 km) southwest of Goshen.

DRAINAGE AREA.--9.74 mi² (25.2 km²).

PERIOD OF RECORD.--September 1937 to September 1979 (discontinued).

REVISED RECORDS.--WSP 951: 1938(M).

GAGE.--Water-stage recorder. Concrete control since August 1943. Datum of gage is 393.32 ft (119.884 m) National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service). Prior to Dec. 12, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Minor amount of diversion upstream during low-flow periods for irrigation purposes. Some diversion from Glenmore Lake for village of Florida water supply.

AVERAGE DISCHARGE.--42 years, 12.8 ft³/s (0.362 m³/s), 17.85 in/yr (453 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Sept. 21, 1938, gage height, 6.0 ft (1.83 m), from floodmarks, from rating curve extended above 230 ft³/s (6.51 m³/s) on basis of contracted-opening measurement at gage height 5.8 ft (1.77 m); minimum, no flow Aug. 30, 1966 (result of temporary pumping from gage pool).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 24	2315	ice jam	*3.81 1.161	Feb. 26	0645	260 7.36	3.30 1.006
Jan. 25	0500	*304 8.61	3.51 1.070	Sept. 6	0945	*304 8.61	3.51 1.070
Feb. 24	2300	248 7.02	3.24 .988				

Minimum discharge, 0.13 ft³/s (0.004 m³/s) Oct. 2; minimum gage height, 1.31 ft (0.399 m), Oct. 2, Nov. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	.64	1.8	20	20	34	17	10	17	2.6	.67	3.2
2	.40	.61	1.3	70	15	34	17	9.0	14	2.0	.65	2.5
3	.41	.61	1.3	56	13	29	20	8.6	14	1.3	.62	3.8
4	.56	.65	2.9	18	10	26	18	9.8	13	1.3	.60	2.5
5	.50	.63	3.3	13	9.0	39	21	7.7	11	1.3	.59	2.0
6	1.2	.63	2.0	10	7.6	102	15	6.3	9.5	1.0	.91	135
7	.78	.66	1.7	11	6.8	79	12	5.5	8.1	.91	.69	61
8	.55	.65	2.7	80	6.8	45	11	5.0	6.7	.83	.97	29
9	.52	.64	18	30	6.4	34	35	4.4	5.9	.77	.81	20
10	.62	.62	8.8	16	5.8	43	40	3.8	5.2	.72	.64	16
11	.63	.64	3.4	11	5.6	72	24	3.2	27	.70	1.3	13
12	.68	.60	2.5	8.0	5.0	34	20	3.0	18	.68	9.0	10
13	.68	.58	2.5	8.4	3.8	28	17	4.7	9.3	.65	9.3	8.9
14	1.1	.59	2.3	10	3.6	30	53	6.0	7.2	.63	2.3	9.1
15	1.0	.57	2.0	9.0	3.2	23	42	5.0	5.7	.60	1.5	8.7
16	.99	.62	1.8	8.4	3.0	17	32	3.4	4.6	6.4	1.1	6.5
17	.77	.90	1.7	7.6	2.8	17	28	2.6	3.7	4.5	.93	5.3
18	.81	1.8	1.5	7.2	2.4	16	22	2.9	3.1	6.0	1.1	4.7
19	.78	1.0	1.1	6.6	2.3	14	18	8.2	2.3	3.5	2.1	3.9
20	.78	.78	1.0	6.0	2.3	13	16	5.2	1.9	1.5	1.2	3.1
21	.71	.71	5.0	80	2.4	13	14	3.7	1.7	1.1	2.9	6.4
22	.69	.69	3.0	75	3.0	12	12	3.1	1.6	2.1	12	35
23	.71	.78	2.2	33	3.5	12	11	15	1.7	1.7	8.0	14
24	.64	1.1	1.6	60	100	32	9.8	109	1.4	1.4	6.5	9.5
25	.71	.92	1.9	150	100	72	9.1	113	1.4	1.0	5.8	8.0
26	.65	.74	1.8	99	130	31	10	78	1.2	1.4	4.9	7.1
27	.88	.62	1.7	69	51	23	25	55	1.1	1.3	4.0	5.8
28	.70	.80	1.5	51	44	20	18	38	1.0	.93	3.2	5.1
29	.63	.92	1.1	40	---	26	19	30	1.1	.90	3.4	16
30	.63	2.0	1.0	32	---	21	13	26	1.3	.96	5.9	9.9
31	.63	---	1.2	27	---	19	---	22	---	.79	5.0	---
TOTAL	21.95	23.70	85.6	1122.2	568.3	1010	618.9	607.1	200.7	51.47	98.58	465.0
MEAN	.71	.79	2.76	36.2	20.3	32.6	20.6	19.6	6.69	1.66	3.18	15.5
MAX	1.2	2.0	18	150	130	102	53	113	27	6.4	12	135
MIN	.40	.57	1.0	6.0	2.3	12	9.1	2.6	1.0	.60	.59	2.0
CAL YR 1978	TOTAL	4567.73	MEAN	12.5	MAX	217	MIN	.40				
WTR YR 1979	TOTAL	4873.50	MEAN	13.4	MAX	150	MIN	.40				

HUDSON RIVER BASIN

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01371500 WALLKILL RIVER AT GARDINER, NY

LOCATION.--Lat 41°41'10", long 74°09'56", Ulster County, Hydrologic Unit 02020007, on left bank 400 ft (122 m) upstream from bridge on U.S. Highway 44, 500 ft (152 m) downstream from Shawangunk Kill, and 0.7 mi (1.1 km) northwest of Gardiner.

DRAINAGE AREA.--711 mi² (1,841 km²).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.70 ft (56.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--55 years, 1,061 ft³/s (30.05 m³/s), 20.27 in/yr (515 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft³/s (872 m³/s) Oct. 16, 1955, gage height, 19.81 ft (6.038 m); minimum, 9.5 ft³/s (0.27 m³/s) Sept. 28, 1964; minimum gage height, 1.59 ft (0.48 m) Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,400 ft³/s (181 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0100	all,000 312	10.19 3.106	Feb. 3	1330	ice jam	9.47 2.886
Jan. 12	1130	ice jam	10.10 3.078	Feb. 27	1800	ice jam	*17.79 5.422
Jan. 16	0730	ice jam	9.24 2.816	Mar. 6	2230	8,560 242	9.16 2.792
Jan. 22	0430	ice jam	13.54 4.127	May 25	0930	8,750 248	9.27 2.825
Jan. 25	1830	*a17,000 481	16.68 5.084				

a About.

Minimum discharge, 107 ft³/s (3.03 m³/s), Oct. 2, 3, Aug. 11, gage height, 2.22 ft (0.677 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	157	240	1000	2000	2600	1520	1590	1820	351	167	276
2	109	154	250	8000	1500	2500	1390	1300	1460	370	161	238
3	109	151	260	10000	1200	2400	1510	1100	1220	346	151	221
4	122	148	278	3500	940	2300	1540	1200	1130	293	144	212
5	124	148	404	1300	760	3900	1670	1130	1060	268	141	201
6	169	143	459	1100	660	6230	1590	948	948	268	144	2690
7	234	132	395	1400	560	7430	1320	819	886	255	144	3400
8	216	129	345	3700	500	5560	1110	748	786	225	129	2550
9	182	129	813	4500	450	4690	1580	690	683	204	124	2240
10	157	127	1550	3300	400	4330	3810	642	621	185	113	1730
11	146	132	1130	2500	350	5230	3160	589	1300	174	126	1120
12	137	127	740	1800	330	4250	2260	533	4380	171	242	819
13	137	122	600	1200	290	3400	1800	564	3120	161	608	669
14	143	122	500	900	270	2950	2420	718	2070	154	711	570
15	135	127	430	1000	260	2590	3650	762	1540	154	509	509
16	135	127	390	860	250	1930	3220	683	1010	164	375	497
17	132	129	350	660	240	1660	2830	557	748	284	288	463
18	132	160	320	500	240	1480	2160	486	642	527	242	389
19	132	227	300	400	240	1350	1750	589	589	557	251	346
20	143	227	290	350	800	1230	1490	967	521	545	264	305
21	143	216	280	2500	760	1160	1300	957	463	415	246	305
22	143	188	600	3500	700	1110	1140	778	415	319	229	1200
23	143	172	450	3000	660	1090	1030	794	405	264	233	1590
24	137	198	350	2600	2300	1090	948	5400	394	268	212	1310
25	135	286	300	14000	3000	3280	861	8390	370	328	246	1010
26	143	313	400	10000	2900	3240	852	6820	341	268	255	786
27	151	230	350	8000	2800	2510	1930	5480	305	229	280	635
28	160	220	320	6200	2700	1950	3080	4610	284	204	272	539
29	166	220	300	4500	---	1830	2860	4020	272	185	242	844
30	172	230	290	3300	---	1900	2030	3510	276	171	216	1020
31	163	---	280	2500	---	1710	---	2460	---	167	229	---
TOTAL	4562	5191	13964	108070	28060	88880	57811	59834	30059	8474	7694	28684
MEAN	147	173	450	3486	1002	2867	1927	1930	1002	273	248	956
MAX	234	313	1550	14000	3000	7430	3810	8390	4380	557	711	3400
MIN	109	122	240	350	240	1090	852	486	272	154	113	201
CAL YR 1978	TOTAL	423771	MEAN	1161	MAX	12800	MIN	88				
WTR YR 1979	TOTAL	441283	MEAN	1209	MAX	14000	MIN	109				

HUDSON RIVER BASIN

01372035 HUDSON RIVER AT STAATSBURG, NY

LOCATION.--Lat 41°50'06", long 73°56'34", Dutchess-Ulster Counties, Hydrologic Unit 02020008, 0.3 mi (0.5 km) upstream from the stage gage at Norrie Yacht Basin in Norrie State Park at mouth of Indian Kill, and 1.1 mi (1.8 km) southwest of Staatsburg.

DRAINAGE AREA.--11,629 mi² (30,119 km²).

PERIOD OF RECORD.--Water year 1978 to current year.

MINOR ELEMENT DATA: 1978-79 (c).

PESTICIDE DATA: 1978-79 (c).

ORGANIC DATA: PCB--1978-79 (c).

PCN--1978-79 (c).

NUTRIENT DATA: 1978 (c), 1979 (a).

SEDIMENT DATA: 1978 (b), 1979 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
OCT									
03...	1415	27	0	.36	.70	1.1	.09	1200	20
NOV									
15...	0845	23	6	.74	.70	1.4	.05	700	9
MAR									
11...	0930	105	7	--	--	--	--	4500	8
29...	0900	98	10	--	--	--	--	4100	16
JUL									
11...	0900	22	18	--	--	--	--	400	4
AUG									
16...	1245	14	10	--	--	--	--	450	1

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
OCT									
03...	90	.3	.00	.00	.0	.00	.00	.00	.00
NOV									
15...	50	.2	.00	.00	.0	.00	.00	.00	.00
MAR									
11...	130	.2	.00	.00	.0	.00	.00	.00	.00
29...	130	.1	.00	.00	.0	.00	.00	.00	.00
JUL									
11...	50	.1	.00	.00	--	--	--	--	--
AUG									
16...	70	.1	.00	.00	--	--	--	--	--

DATE	ENDRI- N, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	SEDI- MENT, SUS- PENDE (MG/L)
OCT								
03...	.00	.00	.00	.00	.00	.00	0	29
NOV								
15...	.00	.00	.00	.00	.00	.00	0	21
MAR								
11...	.00	.00	.00	.00	--	.00	0	193
29...	.00	.00	.00	.00	--	.00	0	105
JUL								
11...	--	--	--	--	--	--	--	20
AUG								
16...	--	--	--	--	--	--	--	22

HUDSON RIVER BASIN

141

01372059 HUDSON RIVER AT CLINTON POINT NEAR NEW HAMBURG, NY

LOCATION.--Lat 41°37'27", long 73°56'55", Dutchess-Ulster Counties, Hydrologic Unit 02020008, opposite northernmost building of New York Trap Rock Corporation's crushing plant, 600 ft (183 m) downstream from stage gage, 2.3 mi (3.7 km) north of New Hamburg, and 2.8 mi (4.5 km) upstream from Wappinger Creek.

DRAINAGE AREA.--11,745 mi² (30,420 km²).

PERIOD OF RECORD.--Water years 1964, 1965, 1978 to current year.

CHEMICAL DATA: 1964-65 (a).

MINOR ELEMENT DATA: 1978-79 (c).

PESTICIDE DATA: 1978-79 (c).

ORGANIC DATA: PCB--1978-79 (c).

PCN--1978-79 (c).

NUTRIENT DATA: 1978 (c), 1979 (a).

SEDIMENT DATA: 1978-79 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	SOLIDS, VOL- TILE, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
OCT 03...	1130	7	0	.39	.37	.76	.06	330	16
NOV 15...	1030	18	12	.84	.53	1.4	.04	490	8
MAR 11...	1130	131	14	--	--	--	--	5600	9
29...	1015	43	2	--	--	--	--	1600	6
JUL 11...	1030	19	12	--	--	--	--	400	4
AUG 16...	1050	17	10	--	--	--	--	600	2

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
OCT 03...	40	.2	.00	.00	.0	.00	.00	.00	.00
NOV 15...	30	.1	.00	.00	.0	.00	.00	.00	.00
MAR 11...	170	.1	.00	.00	.0	.00	.00	.00	.00
29...	60	.1	.00	.00	.0	.00	.00	.00	.00
JUL 11...	40	.0	.00	.00	--	--	--	--	--
AUG 16...	60	.1	.00	.00	--	--	--	--	--

DATE	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	SEDI- MENT, SUS- PENDE (MG/L)
OCT 03...	.00	.00	.00	.00	.00	.00	0	12
NOV 15...	.00	.00	.00	.00	.00	.00	0	15
MAR 11...	.00	.00	.00	.00	--	.00	0	122
29...	.00	.00	.00	.00	--	.00	0	66
JUL 11...	--	--	--	--	--	--	--	10
AUG 16...	--	--	--	--	--	--	--	15

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 (213 m) downstream from Red Oak Mill dam, and 4.5 mi (7.2 km) northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--May 1903 to June 1905 (gage heights only during some winter months), 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 (34.860 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi (4.0 km) downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi (3 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--51 years (1929-79), 255 ft³/s (7.222 m³/s), 19.13 in/yr (486 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft³/s (527 m³/s) Aug. 19, 1955, gage height, 19.60 ft (5.974 m), from floodmarks in gage shelter, from rating curve extended above 5,000 ft³/s (140 m³/s) on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft (5.492 m) and contracted-opening and flow-over-road measurement at gage height 19.60 ft (5.974 m); minimum, 0.90 ft³/s (0.025 m³/s) Sept. 20, 21, 1964, gage height, 2.05 ft (0.625 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0730	1,850 52.4	6.37 1.942	Feb. 25	1130	2,300 65.1	7.80 2.377
Jan. 8	2100	2,030 57.5	6.61 2.015	Mar. 7	0830	3,640 103	8.50 2.591
Jan. 22	0315	1,900 53.8	6.68 2.036	Mar. 11	1545	1,740 49.3	6.22 1.896
Jan. 25	1515	*4,020 114	*8.89 2.710	May 26	0030	2,600 73.6	7.34 2.237

a About.

Minimum discharge, 15 ft³/s (0.425 m³/s) Aug. 10, gage height, 2.46 ft (0.750 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	31	42	150	663	800	355	567	507	76	26	35
2	23	30	44	961	480	871	330	480	431	85	25	32
3	23	29	42	1690	400	840	351	426	385	80	31	31
4	22	29	47	981	350	755	338	412	347	72	27	29
5	31	27	70	670	300	955	355	412	343	65	23	30
6	48	26	72	512	270	1760	343	355	368	60	21	61
7	42	25	61	441	250	3160	299	322	303	56	19	109
8	35	26	56	1400	240	1850	270	295	259	54	19	76
9	29	27	113	1520	230	1250	291	277	232	50	17	58
10	26	28	213	800	220	1070	562	259	213	48	19	45
11	24	26	120	600	210	1620	596	249	239	46	47	41
12	23	26	100	470	190	1300	523	213	485	45	82	35
13	22	24	90	450	180	981	470	213	322	44	145	31
14	25	23	80	500	170	890	501	273	242	41	92	29
15	29	23	74	450	160	811	762	280	199	39	68	30
16	34	23	70	350	160	639	663	229	174	39	54	29
17	29	24	70	320	150	590	639	196	154	39	45	25
18	28	29	64	310	140	534	579	180	141	38	43	23
19	26	32	60	310	130	480	512	188	135	38	50	21
20	34	34	62	500	130	445	450	185	121	36	48	19
21	34	32	70	800	130	417	412	167	109	35	44	20
22	30	31	76	1600	150	394	381	154	102	43	39	133
23	28	29	74	1140	300	376	351	169	100	43	36	159
24	27	31	70	935	1100	368	330	545	95	41	34	108
25	27	33	68	2990	1900	534	307	1920	88	40	40	82
26	27	33	66	2390	1050	501	291	2210	83	36	59	68
27	33	30	64	1610	800	431	330	1360	77	36	45	59
28	45	30	62	1290	720	381	455	981	73	37	52	52
29	42	30	60	1050	---	390	579	955	72	33	48	130
30	35	35	60	928	---	403	708	755	72	30	44	154
31	34	---	79	783	---	376	---	608	---	28	41	---
TOTAL	939	856	2299	28901	11173	26172	13333	15835	6471	1453	1383	1754
MEAN	30.3	28.5	74.2	932	399	844	444	511	216	46.9	44.6	58.5
MAX	48	35	213	2990	1900	3160	762	2210	507	85	145	159
MIN	22	23	42	150	130	368	270	154	72	28	17	19
CFSM	.17	.16	.41	5.15	2.20	4.66	2.45	2.82	1.19	.26	.25	.32
IN.	.19	.18	.47	5.94	2.30	5.38	2.74	3.25	1.33	.30	.28	.36

CAL YR 1978 TOTAL 84821 MEAN 232 MAX 2200 MIN 18 CFSM 1.28 IN 17.43
WTR YR 1979 TOTAL 110569 MEAN 303 MAX 3160 MIN 17 CFSM 1.67 IN 22.72

HUDSON RIVER BASIN

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01374023 HUDSON RIVER AT HIGHLAND FALLS, NY

LOCATION.--Lat 41°22'13", long 73°57'29", Orange County, Hydrologic Unit 02020008, in Highland Falls, 0.1 mi (0.2 km) upstream from Highland Brook and 1.0 mi (1.6 km) downstream from West Point South Dock.

PERIOD OF RECORD.--October 1978 to September 1979.

MINOR ELEMENT DATA: 1979 (c).

PESTICIDE DATA: 1979 (c).

ORGANIC DATA: PCB--1979 (c).

PCN--1979 (c).

NUTRIENT DATA: 1979 (a).

SEDIMENT DATA: 1979 (c).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDE (MG/L)	SOLIDS, VOLATILE TILE, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
OCT 04...	1045	25	0	.36	.56	.92	.13	1200	40
NOV 15...	1700	46	5	.67	.53	1.2	.10	1800	7
MAR 11...	1330	108	12	--	--	--	--	5000	9
29...	1300	48	10	--	--	--	--	2200	10
JUL 11...	1415	41	20	--	--	--	--	1100	7
AUG 16...	0915	23	10	--	--	--	--	800	5

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
OCT 04...	100	.4	.00	.00	.0	.00	.00	.00	.00
NOV 15...	110	.2	.00	.00	.0	.00	.00	.00	.00
MAR 11...	140	.1	.00	.00	.0	.00	.00	.00	.00
29...	90	.1	.00	.00	.0	.00	.00	.00	.00
JUL 11...	130	.1	.00	.00	--	--	--	--	--
AUG 16...	60	.1	.00	.00	--	--	--	--	--

DATE	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	SEDI- MENT, SUS- PENDE (MG/L)
OCT 04...	.00	.00	.00	.00	.00	.00	0	40
NOV 15...	.00	.00	.00	.00	.00	.00	0	53
MAR 11...	.00	.00	.00	.00	--	.00	0	98
29...	.00	.00	.00	.00	--	.00	0	36
JUL 11...	--	--	--	--	--	--	--	38
AUG 16...	--	--	--	--	--	--	--	28

01375000 CROTON RIVER AT NEW CROTON DAM, NEAR CROTON-ON-HUDSON, NY

LOCATION.--Lat 41°13'32", long 73°51'32", Westchester County, Hydrologic Unit 02030101, on left bank 1,000 ft (305 m) downstream from New Croton Dam, and 1.8 mi (2.9 km) northeast of Croton-On-Hudson.

DRAINAGE AREA.--378 mi² (979 km²).

PERIOD OF RECORD.--August 1933 to current year. Prior to Oct. 1, 1941, published as "at Quaker Bridge," (low-flow records at this site are not equivalent owing to well pumpage upstream). Fragmentary records published during August 1933 to September 1941 for "at Cornell Dam near Croton" and "at New Croton near Croton" are equivalent. Oct. 1, 1941 to Sept. 30, 1955 published as "at New Croton Dam near Croton".

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Oct. 1, 1941, supplementary water-stage recorder and concrete control at site 1.1 mi (1.8 km) downstream at Quaker Bridge.

REMARKS.--Records poor. Entire flow, except for periods of spilling and releases to augment Croton-on-Hudson water supply, diverted from New Croton Reservoir for municipal supply of City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,400 ft³/s (1,290 m³/s) Oct. 16, 1955, gage height, 18.44 ft (5.621 m), from floodmarks, from rating curve extended above 9,700 ft³/s (275 m³/s) on basis of slope-area measurements of peak flow; minimum daily, 0.1 ft³/s (0.003 m³/s) Mar. 14, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,740 ft³/s (276 m³/s) Jan. 25, gage height, 9.24 ft (2.816 m); minimum daily, 0.47 ft³/s (0.013 m³/s) Nov. 23, 26; minimum gage height, 0.61 ft (0.186 m) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	201	.78	4.7	1210	1290	491	1210	970	125	1.6	.99
2	93	201	.67	4.0	1010	1130	461	1060	664	125	1.6	.99
3	547	201	.67	2.4	756	1040	491	918	735	93	2.0	93
4	1010	201	.88	600	600	894	515	894	846	69	1.8	135
5	996	201	1.5	500	500	858	523	746	664	66	1.3	44
6	983	201	3.0	400	400	2970	469	590	674	55	.78	321
7	983	201	3.9	350	350	5800	412	515	581	55	.73	556
8	969	197	2.6	300	300	4110	355	461	454	50	.73	315
9	969	197	1.9	250	250	2810	484	412	380	44	.73	159
10	957	197	1.2	200	200	2130	811	374	338	43	.73	41
11	944	197	.83	150	150	2570	674	338	332	42	.78	13
12	944	197	.67	110	110	2240	556	284	461	42	1.6	1.6
13	944	197	2.3	100	100	1770	499	305	374	43	1.1	1.6
14	944	197	3.9	90	90	1560	684	332	274	37	.78	1.6
15	944	197	2.5	80	80	1420	1040	349	229	34	.67	1.8
16	931	197	.62	74	74	1190	1010	326	189	32	.62	1.6
17	931	197	.62	70	70	1060	1060	289	165	28	.62	1.6
18	918	197	2.2	70	70	906	906	265	168	24	.67	1.6
19	918	197	3.7	70	70	735	735	332	182	21	.73	1.6
20	906	197	3.7	76	74	664	617	305	120	18	.73	1.6
21	906	69	4.0	120	120	590	547	260	89	15	.78	1.6
22	906	.62	4.0	180	180	515	484	260	65	12	.78	823
23	894	.47	4.0	150	150	484	447	361	61	9.0	.78	1100
24	704	.62	4.0	250	250	539	386	1420	57	6.0	.83	469
25	507	.52	5.1	8560	1660	983	355	3900	68	3.0	.99	255
26	393	.47	4.4	6360	2640	870	386	2980	38	1.5	.98	172
27	233	.52	4.2	4390	2580	491	1340	2350	33	1.6	1.1	93
28	233	.57	4.2	2960	1680	564	1770	1910	33	1.6	.98	57
29	233	.57	4.2	2160	---	564	1730	1580	47	1.6	.99	60
30	229	.99	4.2	1700	---	564	1430	1330	65	1.6	.90	101
31	216	---	4.2	1410	---	507	---	1160	---	1.6	.99	---
TOTAL	22287.8	4042.35	84.64	31741.1	15724	43818	21668	27816	9356	1100.5	30.40	4825.18
MEAN	719	135	2.73	1024	562	1413	722	897	312	35.5	.98	161
MAX	1010	201	5.1	8560	2640	5800	1770	3900	970	125	2.0	1100
MIN	2.8	.47	.62	2.4	70	484	355	260	33	1.5	.62	.99
CAL YR 1978	TOTAL	173249.13	MEAN	475	MAX	3860	MIN	.47				
WTR YR 1979	TOTAL	182493.97	MEAN	500	MAX	8560	MIN	.47				

HUDSON RIVER BASIN

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01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION (REVISED).--Lat 40°56'14", long 73°53'21", Westchester County, Hydrologic Unit 02030101, on right bank in Yonkers, 1,200 ft (366 m) downstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Walsh Avenue, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--November 1943 to September 1973, April 1974 to current year.

REVISED RECORDS.--WRD NY 1971: 1965, 1966.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 80.10 ft (24.414 m) National Geodetic Vertical Datum of 1929. Prior to August 17, 1978, water-stage recorder and concrete control 1,300 ft (396 m) upstream at datum 10.89 ft (3.319 m) higher.

REMARKS.--Records poor. Flow affected by diversion by city of Yonkers, village of Tarrytown, and several industries for water supply and industrial purposes. Diurnal fluctuations caused by water supply and industrial operations.

COOPERATION.--Figures for diversion and return in upstream water supply furnished by city of Yonkers and village of Tarrytown.

AVERAGE DISCHARGE.--34 years (1944-73, 1975-79), 32.6 ft³/s (0.923 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s (28.9 m³/s) Sept. 27, 1975, gage height, 7.26 ft (2.213 m); minimum, 0.05 ft³/s (0.001 m³/s) Dec. 27, 1946, gage height, 0.37 ft (0.113 m); minimum daily, 0.2 ft³/s (0.006 m³/s) Jan. 1, 1944, Sept. 5, Oct. 19, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 920 ft³/s (26.1 m³/s) Jan. 21, gage height, 5.29 ft (1.612 m); minimum daily, 0.6 ft³/s (0.017 m³/s) Sept. 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.7	11	25	82	80	38	66	55	15	7.3	70
2	11	4.9	8.0	50	74	77	42	53	50	18	4.0	40
3	4.9	3.5	7.0	64	66	70	50	47	100	10	56	120
4	6.7	3.5	17	53	62	68	40	42	79	9.0	25	22
5	6.7	3.5	14	42	60	67	47	40	55	10	20	15
6	25	3.5	11	35	56	400	40	38	62	6.0	15	136
7	5.0	6.0	6.7	60	50	200	35	37	55	4.0	12	62
8	4.0	2.3	4.9	200	45	150	37	37	26	3.5	5.5	35
9	3.8	11	80	80	42	127	100	37	21	3.0	5.0	25
10	3.5	11	35	60	38	110	80	37	17	2.8	20	18
11	8.7	10	24	48	36	250	60	56	18	2.8	25	7.3
12	11	9.0	17	36	34	150	42	50	37	4.0	200	4.0
13	11	8.7	11	60	33	99	36	45	18	4.0	151	2.8
14	12	6.7	11	100	33	92	150	37	18	2.5	31	1.8
15	13	6.7	6.7	56	32	80	100	60	18	2.5	12	8.0
16	16	11	6.0	40	30	74	59	37	18	5.5	12	3.5
17	11	11	8.0	34	29	60	80	37	18	9.5	12	1.8
18	6.7	40	4.9	36	28	60	59	37	31	45	20	1.1
19	3.5	25	4.9	44	27	60	53	100	26	20	30	.60
20	8.7	17	6.7	60	26	60	42	45	22	17	15	.60
21	8.0	6.7	42	790	35	58	42	32	17	10	12	.60
22	9.0	4.9	17	640	51	54	42	32	17	3.5	7.3	250
23	3.5	10	10	150	40	51	42	32	20	4.0	4.0	40
24	3.5	32	11	107	320	60	42	276	17	12	1.8	18
25	11	9.0	17	700	200	80	33	256	14	12	60	12
26	14	5.0	68	390	344	60	32	200	12	18	10	12
27	25	3.5	42	200	150	50	237	150	12	12	2.5	1.8
28	10	6.7	24	150	100	45	120	100	12	10	1.8	1.8
29	7.0	6.7	17	127	---	50	100	94	14	8.0	2.9	2.5
30	4.9	30	15	107	---	45	80	62	10	7.3	101	6.0
31	8.0	---	15	94	---	38	---	62	---	7.3	107	---
TOTAL	286.1	315.5	572.8	4638	2123	2925	1960	2234	889	298.2	988.1	919.20
MEAN	9.23	10.5	18.5	150	75.8	94.4	65.3	72.1	29.6	9.62	31.9	30.6
MAX	25	40	80	790	344	400	237	276	100	45	200	250
MIN	3.5	2.3	4.9	25	26	38	32	32	10	2.5	1.8	.60
†	6.18	3.75	12.02	7.80	3.00	1.11	4.98	7.98	1.57	1.84	4.61	9.48

CAL YR 1978 TOTAL 14431.20 MEAN 39.5 MAX 460 MIN 2.3 † 6.31

WTR YR 1979 TOTAL 18148.90 MEAN 49.7 MAX 790 MIN .60 † 5.39

† Indicated net diversion, in cubic feet per second, for diversion and return in upstream supply.

RESERVOIRS IN HUDSON RIVER BASIN

01335900 DELTA RESERVOIR.--Lat 43°16'20", long 75°25'50", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi (6 km) upstream from Rome. DRAINAGE AREA, 145 mi² (376 km²). PERIOD OF RECORD, May 1913 to current year. 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 ft³ (79.3 hm³) at crest of spillway, elevation 550.0 ft (167.64 m). Reservoir is used for navigation in Barge Canal. Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD (1951-79): Maximum contents observed, 3,136 mil ft³ (88.8 hm³) June 22, 1972, elevation, 552.8 ft (168.49 m); minimum observed 2.0 mil ft³ (0.0566 hm³) Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft (149.96 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,052 mil ft³ (86.4 hm³) Apr. 3, elevation, 552.1 ft (168.28 m); minimum observed, 622 mil ft³ (17.6 hm³) Feb. 24, elevation, 523.3 ft (159.50 ft).

01343900 HINCKLEY RESERVOIR.--Lat 43°18'45", long 75°06'25", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi (3.5 km) east of Prospect. DRAINAGE AREA, 374 mi² (969 km²). PERIOD OF RECORD, March 1914 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Reservoir is formed by earth and concrete dam; storage began March 1914. Usable capacity 3,320 mil ft³ (94.0 hm³) between elevation 1,173.5 (357.68 m) and 1,225.0 ft (373.38 m). Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft (356.46 m), and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft (354.863 m). Crest of Ogee spillway is at elevation 1,225.0 ft (373.38 m). Length of spillway is 400 ft (122 m). Area of water surface at crest elevation is 4.46 mi² (11.6 km²). Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 4,041 mil ft³ (114 hm³) Oct. 2, 1945, elevation, 1,230.2 ft (374.96 m); minimum observed (after initial filling), not determined.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,818 mil ft³ (108 hm³) Apr. 28, elevation, 1,228.7 ft (374.51 m); minimum observed, 704 mil ft³ (19.9 hm³) Mar. 5, elevation, 1,193.5 ft (363.78 m).

01350100 SHOHARIE 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 (2.6 km) south of Shokan. DRAINAGE AREA, 256 mi² (663 km²). PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WRD NY 1972: 1968. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (178.6 hm³) between minimum operating level elevation 495.50 ft (151.028 m) and crest of spillway to East basin, elevation 590.00 ft (179.832 m); dead storage below minimum operating level 2,237 mil gal (8.467 hm³). Usable capacity of East basin 80,678 mil gal (305.4 hm³) between elevation 500.00 ft (152.400 m) and crest of spillway, elevation 587.10 ft (178.948 m); 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 furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, in West basin, 54,001 mil gal (204.4 hm³) Mar. 31, 1951, elevation, 594.33 ft (181.152 m), in East basin, 89,411 mil gal (338.4 hm³) Mar. 31, 1951, elevation, 592.23 ft (180.512 m); minimum observed, in West basin, 9,098 mil gal (34.44 hm³) Oct. 24, 1926, elevation, 530.56 ft (161.715 m), in East basin, 8,394 mil gal (31.77 hm³) Oct. 24, 1926, elevation, 525.91 ft (160.297 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, in West basin, 50,508 mil gal (191.2 hm³) May 26, elevation, 591.03 ft (180.146 m), in East basin, 82,356 mil gal (311.7 hm³) May 27, elevation, 588.10 ft (179.253 m); minimum observed, in West basin, 27,825 mil gal (105.3 hm³) Dec. 19, elevation, 565.43 ft (172.343 m), in East basin, 41,804 mil gal (158.2 hm³) Jan. 1, elevation, 560.58 ft (170.865 m).

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 (1.8 km) upstream from Brandy Brook, and 1.3 mi (2.1 km) northwest of Lackawack. DRAINAGE AREA, 94.4 mi² (244 km²). PERIOD OF RECORD, May 1951 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (189 hm³) between minimum operating level, elevation, 720.00 ft (219.45 m) and crest of spillway, elevation, 840.00 ft (256.03 m). Dead storage below elevation 720.00 ft (219.45 m), 2,387 mil gal (9.03 hm³). 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 furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 53,355 mil gal (201.9 hm³) June 23, 1972, elevation, 841.34 ft (256.440 m); minimum observed (after initial filling), 8,335 mil gal (31.55 hm³) Oct. 15, 1957, elevation, 748.75 ft (228.219 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 52,067 mil gal (197.1 hm³) May 1, elevation, 839.46 ft (255.867 m); minimum, 31,728 mil gal (120.1 hm³) Nov. 13, elevation, 805.90 ft (245.638 m).

HUDSON RIVER BASIN

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RESERVOIRS IN HUDSON RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)
	01335900 Delta Reservoir †			01343900 Hinckley Reservoir †		
Sept. 30	542.0	1,940		1,212.3	2,023	
Oct. 31	536.9	1,482	-171	1,221.3	2,893	+325
Nov. 30	531.5	1,075	-157	1,212.9	2,075	-316
Dec. 31	535.0	1,330	+ 95.2	1,208.4	1,702	-139
CAL YR 1978	-	-	- 45.1	-	-	- 39.5
Jan. 31	543.4	2,080	+280	1,216.3	2,380	+253
Feb. 28	525.4	720	-562	1,196.2	857	-630
Mar. 31	551.8	3,016	+857	1,221.6	2,926	+772
Apr. 30	550.8	2,896	- 46.3	1,227.1	3,598	+259
May 31	550.3	2,836	- 22.4	1,226.0	3,450	- 55.3
June 30	546.7	2,427	-158	1,218.4	2,590	-332
July 31	540.8	1,822	-226	1,208.5	1,710	-329
Aug. 31	536.0	1,410	-154	1,204.5	1,404	-114
Sept. 30	538.0	1,570	+ 61.7	1,211.4	1,944	+208
WTR YR 1979	-	-	- 11.7	-	-	- 2.5

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)
	01363398 Ashokan Reservoir ‡ West Basin			01363399 Ashokan Reservoir ‡ East Basin			01366400 Rondout Reservoir ‡		
Sept. 30	577.79	37,872		576.85	64,228		822.95	41,430	
Oct. 31	572.96	33,765	-205	571.97	57,012	-360	812.37	35,231	-309
Nov. 30	567.32	29,278	-231	565.84	48,579	-435	810.00	33,922	- 67.5
Dec. 31	566.01	28,271	- 50.3	560.67	41,919	-332	821.10	40,308	+319
CAL YR 1978	-	-	- 89.9	-	-	-166	-	-	- 43.3
Jan. 31	578.76	38,718	+521	570.18	54,435	+625	835.01	49,085	+438
Feb. 28	576.87	37,070	- 91.1	570.99	55,601	+ 64.4	822.27	41,017	-446
Mar. 31	590.53	49,979	+644	582.56	73,217	+879	833.75	48,256	+361
Apr. 30	590.67	50,127	+ 7.63	587.88	81,987	+452	839.46	52,067	+197
May 31	590.50	49,947	- 8.98	587.75	81,769	- 10.9	838.76	51,592	- 23.7
June 30	590.29	49,725	- 11.4	585.29	77,642	-213	836.37	49,987	- 82.8
July 31	586.25	45,683	-202	583.43	74,621	-151	827.90	44,498	-274
Aug. 31	583.30	42,861	-141	580.65	70,134	-224	818.34	38,657	-292
Sept. 30	584.13	43,631	+ 39.7	583.30	74,411	+221	817.93	38,415	- 12.5
WTR YR 1979	-	-	+ 24.4	-	-	+ 43.2	-	-	- 12.8

† Elevation at 2400 hours by interpolation.

‡ Elevation at 0900 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.
- 04252000 Diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin (see station).
- 01327500 Diversion from Hudson River basin to summit level of Champlain (Barge) Canal (see station).
- 01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records furnished by Utica Board of Water Supply.
- Diversion from Schoharie Reservoir (see preceding pages) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at, 01362230 Lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924. Records furnished by Department of Environmental Protection, City of New York.
- 01359498 Diversion from Watervliet Reservoir from municipal supply of city of Watervliet and town of Guilderland (see station 01359519).
- 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 furnished 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 furnished 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 1978 TO SEPTEMBER 1979

Month	01343899	01362230	01363401	01366399	
	<u>Hinckley Reservoir</u>	<u>Schoharie Reservoir</u>	<u>Ashokan Reservoir</u>	<u>Rondout Reservoir</u>	
				(a)	(b)
October.....	32.2	161	882	1,350	26.8
November.....	30.3	0	913	1,340	57.9
December.....	29.6	0	913	1,330	181
CAL YR 1978	31.6	146	823	1,350	199
January.....	29.3	0	599	1,360	571
February.....	30.7	0	526	1,370	187
March.....	35.0	0	637	1,360	661
April.....	34.1	0	724	1,370	345
May.....	33.3	11.8	726	1,370	313
June.....	33.7	277	834	1,360	144
July.....	34.2	340	925	1,360	27.8
August.....	36.8	417	928	1,350	6.7
September.....	35.5	404	928	1,350	176
WTR YR 1979	32.9	134	795	1,360	225

a Total diversion.

b Diversion contributed by Rondout Creek.

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LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

PERIOD OF RECORD.--December 1958 to current year.

REMARKS.--Records fair. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Reservoirs 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 ft³/s (43.9 m³/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft³/s (23.8 m³/s); minimum daily, 2.6 ft³/s (0.074 m³/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 940 ft³/s (26.3 m³/s) Jan. 25, gage height, 9.21 ft (2.809 m), from floodmarks on inside of gage door; minimum, 3.0 ft³/s (0.08 m³/s) Oct. 17; minimum gage height, 2.66 ft (0.811 m), Aug. 9.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	41	24	86	55	32	63	135	23	16	16
2	11	11	41	42	71	65	29	18	85	24	16	19
3	9.9	11	41	29	35	68	35	20	86	23	17	30
4	11	9.4	42	16	38	76	38	27	108	25	18	14
5	11	8.9	41	17	38	83	42	30	93	20	17	14
6	12	8.9	41	16	35	366	37	22	81	17	18	38
7	11	8.9	40	18	35	517	34	19	59	16	19	17
8	11	41	44	99	39	181	24	18	46	16	17	14
9	8.9	71	65	24	37	120	59	17	26	17	14	13
10	7.4	74	44	18	32	84	130	15	25	16	18	14
11	7.0	65	35	20	29	164	67	17	29	16	19	13
12	7.0	64	33	19	27	133	32	16	41	16	31	14
13	7.0	63	32	23	27	56	25	17	29	14	25	14
14	9.9	64	32	32	23	85	58	23	23	17	15	16
15	11	66	32	20	20	115	120	23	17	16	16	17
16	6.1	68	32	21	18	51	118	20	17	16	19	14
17	6.1	69	33	20	17	34	69	20	17	15	17	14
18	8.4	72	32	19	18	47	41	20	20	16	17	14
19	8.4	66	32	18	27	42	39	35	27	15	18	14
20	8.9	66	32	18	26	42	34	32	17	15	16	14
21	9.4	65	38	187	24	38	31	27	17	17	16	19
22	9.4	65	33	186	26	32	27	22	18	16	15	57
23	9.4	65	32	174	26	30	27	36	18	17	15	17
24	11	69	33	171	121	33	22	265	19	17	16	14
25	12	65	49	750	431	118	18	808	22	17	16	13
26	13	64	27	320	378	37	24	644	19	17	16	13
27	17	64	14	153	279	29	149	569	19	17	15	12
28	12	64	14	147	101	25	136	515	19	16	15	12
29	12	59	17	126	---	29	56	455	20	15	24	12
30	12	47	18	84	---	32	97	319	20	12	22	15
31	12	---	19	55	---	31	---	224	---	14	14	---
TOTAL	313.2	1546.1	1059	2866	2064	2818	1650	4356	1172	528	547	517
MEAN	10.1	51.5	34.2	92.5	73.7	90.9	55.0	141	39.1	17.0	17.6	17.2
MAX	17	74	65	750	431	517	149	808	135	25	31	57
MIN	6.1	8.9	14	16	17	25	18	15	17	12	14	12
CAL YR 1978	TOTAL	16924.1	MEAN	46.4	MAX	549	MIN	6.1				
WTR YR 1979	TOTAL	19436.3	MEAN	53.3	MAX	808	MIN	6.1				

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 (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi² (150.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records excellent. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--38 years, 90.3 m³/s (2.557 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s (49.3 m³/s) Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft³/s (34.8 m³/s) May 25, gage height, 5.34 ft (1.628 m); no flow part of May 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	98	55	48	93	174	62	118	258	45	103	116
2	67	96	53	70	116	118	64	93	171	45	103	116
3	96	98	53	78	80	129	70	64	196	45	100	118
4	107	105	57	48	64	118	82	60	168	45	105	59
5	106	103	57	45	64	129	82	59	147	46	113	55
6	105	105	53	45	72	500	74	55	150	45	127	89
7	105	105	53	45	59	943	64	53	159	45	135	51
8	104	100	57	135	60	593	59	51	127	43	132	48
9	103	100	105	59	59	251	78	50	124	43	150	48
10	103	100	59	48	70	200	190	48	82	43	153	48
11	103	98	35	46	60	265	196	48	89	43	156	46
12	101	98	32	45	55	265	124	48	93	43	150	46
13	100	98	30	57	51	141	76	48	59	43	80	45
14	102	98	30	72	53	118	89	50	51	42	48	46
15	101	98	30	50	48	171	174	50	48	42	46	50
16	98	98	29	46	48	121	193	48	46	50	45	46
17	98	100	30	46	53	78	203	46	46	46	45	46
18	96	103	29	46	46	80	118	46	46	68	46	51
19	97	87	29	45	46	72	72	72	45	72	50	96
20	96	87	28	45	46	72	66	100	43	45	46	110
21	83	82	42	247	48	68	60	91	45	57	45	110
22	60	82	57	91	51	64	59	80	45	82	45	141
23	43	82	57	57	51	62	59	76	45	98	45	53
24	40	100	57	89	174	62	57	369	43	129	48	48
25	40	84	84	635	531	118	55	704	43	132	46	48
26	58	76	51	961	775	150	53	342	43	144	45	48
27	92	66	43	416	566	68	100	308	43	156	48	46
28	92	68	42	251	372	60	174	251	43	153	82	46
29	89	66	45	210	---	60	206	254	45	153	116	48
30	88	70	42	171	---	62	141	279	45	141	144	55
31	87	---	42	108	---	62	---	272	---	118	129	---
TOTAL	2702	2751	1466	4355	3811	5374	3100	4233	2588	2302	2726	1973
MEAN	87.2	91.7	47.3	140	136	173	103	137	86.3	74.3	87.9	65.8
MAX	107	105	105	961	775	943	206	704	258	156	156	141
MIN	40	66	28	45	46	60	53	46	43	42	45	45
CAL YR 1978	TOTAL	35884	MEAN	98.3	MAX	891	MIN	28				
WTR YR 1979	TOTAL	37381	MEAN	102	MAX	961	MIN	28				

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06', long 73°57', Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 26.6 mi² (68.9 km²). PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm³), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49 mi² (127 km²). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm³), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi² (50.2 km²). PERIOD OF RECORD, December 1929 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm³), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi² (293 km²). PERIOD OF RECORD, December 1922 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm³), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)
01376700 DE FOREST LAKE †				01376950 LAKE TAPPAN †			01377450 WOODCLIFF LAKE †		
Sept. 30	83.14	5,054	-	51.82	2,495	-	82.15	275	-
Oct. 31	82.18	4,753	-15.0	46.67	1,161	-66.5	75.53	97	-9.9
Nov. 30	79.17	3,833	-47.4	44.88	790	-19.1	76.20	110	+7
Dec. 31	79.48	3,921	+4.4	47.45	1,348	+27.8	82.85	299	+9.4
CAL YR 1978	-	-	-7.6	-	-	-9.1	-	-	-2.2
Jan. 31	85.25	5,726	+90.0	55.01	3,488	+107	90.20	619	+15.9
Feb. 28	85.25	5,726	0	55.01	3,488	0	90.30	624	+3
Mar. 31	85.20	5,709	-8	54.99	3,482	-3	90.22	621	-2
Apr. 30	85.17	5,698	-6	55.01	3,488	+3	92.01	713	+8
May 31	85.15	5,691	-4	55.04	3,498	+5	90.12	616	-4.8
June 30	84.47	5,478	-11.0	54.51	3,321	-9.1	80.90	233	-19.8
July 31	82.80	4,939	-26.9	51.40	2,378	-47.0	75.76	102	-6.5
Aug. 31	82.50	4,844	-4.7	48.42	1,577	-39.9	77.61	142	+2.0
Sept. 30	83.29	5,095	+12.9	48.09	1,495	-4.2	84.88	375	+12.0
WTR YR 1979	-	-	+2	-	-	-4.2	-	-	+4
01378480 ORADELL RESERVOIR †									
Sept. 30	17.05	1,925	-						
Oct. 31	16.92	1,900	-1.2						
Nov. 30	16.85	1,877	-7						
Dec. 31	17.58	2,027	+7.0						
CAL YR 1978	-	-	-4.5						
Jan. 31	22.15	3,016	+49.3						
Feb. 28	21.26	2,809	-11.4						
Mar. 31	22.71	3,150	+17.0						
Apr. 30	23.18	3,272	+6.3						
May 31	23.28	3,297	+1.2						
June 30	21.39	2,840	-23.5						
July 31	18.52	2,218	-31.1						
Aug. 31	18.58	2,231	+6						
Sept. 30	19.93	2,514	+14.6						
WTR YR 1979	-	-	+2.5						

† Elevation at 0800 on first day of following month.

HACKENSACK RIVER BASIN

DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500).

01378520 Hackensack Water Co., 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 furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	01376699 SPRING VALLEY WATER CO.	01376810 WEST NYACK, NY	01378490 HACKENSACK WATER CO.
October.....	10.9	2.30	145
November.....	11.5	2.27	146
December.....	10.8	2.15	144
CAL YR 1978.....	11.4	2.59	157
January.....	9.70	2.19	144
February.....	9.50	2.23	144
March.....	11.0	2.14	141
April.....	11.0	2.23	139
May.....	11.4	2.27	148
June.....	14.3	2.50	163
July.....	19.1	2.79	175
August.....	12.2	2.59	167
September.....	7.95	2.40	147
WTR YR 1979.....	11.6	2.34	150

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October.....	0	0.71	10.3	1.71
November.....	0	1.09	10.6	1.67
December.....	0	1.90	15.3	1.67
CAL YR 1978.	0	0.92	7.93	0.84
January.....	0	1.39	8.27	0.32
February.....	0	0	1.60	0
March.....	0	0	3.54	0
April.....	0	0	0	0
May.....	0	0	0.54	0
June.....	0	0.38	7.47	0.59
July.....	0	1.15	14.1	1.54
August.....	0	0.34	12.6	1.46
September.....	0	0.01	18.2	1.38
WTR YR 1979.	0	0.59	8.60	0.87

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 (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--August 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those below 20 ft³/s (0.57 m³/s), which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--21 years, 24.9 ft³/s (0.705 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s (52.1 m³/s) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum, 0.05 ft³/s (0.001 m³/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.67 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0030	206 5.83	3.76 1.146	Feb. 26	0915	411 11.6	4.66 1.420
Jan. 8	1315	400 11.3	4.62 1.408	Mar. 6	2115	492 13.9	4.94 1.506
Jan. 21	1015	565 16.0	5.17 1.576	May 25	1000	507 14.4	4.99 1.521
Jan. 25	0130	*780 22.1	*5.80 1.768	Sept. 6	1215	350 9.91	4.43 1.350

Minimum daily discharge, 1.7 ft³/s (0.05 m³/s) Aug. 10; minimum gage height 1.40 ft (0.427 m), Aug. 10.

REVISIONS.--The peak discharges and annual maximum (*) for water year 1977 have been revised as shown in the following table. They supersede figures published in the report for 1977.

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 25	0245	*853 24.2	6.01 1.832	Mar. 22	2200	786 22.3	5.82 1.774
Mar. 5	0100	356 10.1	4.45 1.356	Sept. 26	2230	416 11.8	4.68 1.426
Mar. 14	0215	328 9.29	4.34 1.323				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.2	13	39	39	50	28	45	37	7.8	2.1	3.0
2	3.8	4.2	11	119	30	50	28	39	30	8.8	2.1	3.0
3	3.5	4.2	10	144	28	47	33	35	50	6.8	2.2	13
4	3.5	4.3	13	77	25	41	31	35	43	6.2	2.3	7.5
5	4.3	4.3	16	51	22	41	34	29	34	6.6	2.6	5.2
6	5.6	4.5	13	41	18	272	28	25	29	5.8	2.3	132
7	4.8	4.5	12	42	16	283	24	23	23	5.2	2.2	62
8	4.2	4.2	15	312	14	123	23	21	20	4.5	2.1	30
9	3.7	3.8	76	157	13	81	39	19	18	4.3	1.8	17
10	3.7	3.7	67	85	11	68	49	18	17	4.2	1.7	12
11	3.7	3.5	42	59	10	93	39	16	28	4.2	2.0	10
12	4.0	3.4	31	44	9.0	71	34	16	32	4.0	12	8.3
13	3.8	4.3	25	39	8.4	58	30	18	19	3.7	15	7.8
14	5.6	3.7	22	30	8.0	53	60	19	16	3.7	6.8	7.8
15	9.4	3.5	18	25	7.8	45	63	17	14	3.7	4.8	12
16	5.8	3.4	16	20	7.6	38	52	15	13	6.6	3.5	8.8
17	5.4	4.5	17	17	7.4	35	47	13	12	9.1	2.8	7.0
18	4.5	17	15	16	7.2	32	40	13	11	5.8	3.2	6.2
19	4.3	10	14	15	7.2	29	35	35	9.7	4.8	6.0	5.4
20	4.8	7.8	13	15	7.4	27	31	25	9.1	4.0	4.0	4.8
21	4.8	6.6	27	358	9.0	25	28	17	8.3	4.0	3.4	6.6
22	4.7	6.0	20	208	11	24	25	15	8.3	3.7	3.1	72
23	4.8	5.8	16	93	12	22	24	24	10	3.2	2.7	37
24	3.8	12	15	147	89	28	21	144	8.3	3.1	3.1	22
25	3.4	9.4	33	498	156	65	20	392	7.5	3.0	4.7	15
26	3.8	7.8	26	188	206	45	28	182	6.8	2.8	3.5	13
27	9.1	7.0	19	111	87	37	103	100	6.6	2.7	3.0	11
28	6.0	7.0	15	83	59	32	74	73	6.4	2.5	2.7	10
29	5.0	7.8	14	66	---	34	72	63	6.6	2.3	3.1	9.7
30	4.5	15	13	54	---	31	54	51	6.8	2.2	7.3	11
31	4.2	---	14	46	---	29	---	44	---	2.2	4.2	---
TOTAL	146.3	187.4	671	3209	925.0	1909	1197	1581	540.4	141.5	122.3	570.1
MEAN	4.72	6.25	21.6	104	33.0	61.6	39.9	51.0	18.0	4.56	3.95	19.0
MAX	9.4	17	76	498	206	283	103	392	50	9.1	15	132
MIN	3.4	3.4	10	15	7.2	22	20	13	6.4	2.2	1.7	3.0

CAL YR 1978 TOTAL 9772.4 MEAN 26.8 MAX 475 MIN 3.4
WTR YR 1979 TOTAL 11200.0 MEAN 30.7 MAX 498 MIN 1.7

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 (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah. Water-quality samples collected at bridge 350 ft (107 m) upstream from gage at high flows.

DRAINAGE AREA.--118 mi² (306 km²).

WATER-DISCHARGE RECORDS

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.

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).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Diurnal fluctuations occasionally at low flow caused by powerplants above station.

AVERAGE DISCHARGE.--61 years, 230 ft³/s (6.514 m³/s), 26.50 in/yr (673 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft³/s (352 m³/s) Oct. 9, 1903, (gage height, 11.0 ft or 3.35 m, from graph based on gage readings, site and datum then in use) from rating curve extended above 1,400 ft³/s (39.6 m³/s); maximum gage height, 12.44 ft (3.792 m) Nov. 8, 1977; minimum discharge, 7 ft³/s (0.20 m³/s) Dec. 16, 1930, Sept. 12, 1932; minimum daily discharge, 8 ft³/s (0.23 m³/s) Aug. 25, 1929, Sept. 5, 12, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage Height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage Height (ft) (m)
Jan. 3	Unknown	1450 41.1	Unknown	Feb. 26	0830	1670 47.3	7.48 2.280
Jan. 8	Unknown	2000 56.6	Unknown	Mar. 7	0045	2740 77.6	8.66 2.640
Jan. 21	1900	2380 67.4	8.34 2.542	May 25	0845	2900 82.1	8.79 2.679
Jan. 25	0930	*4750 135	9.90 3.018	Sept. 6	2245	1960 55.5	7.88 2.402

Minimum discharge, 19 ft³/s (0.54 m³/s) Nov. 13, Aug. 2, gage height, 2.51 ft (0.765 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	63	200	497	541	309	427	351	85	21	34
2	23	23	55	500	409	534	306	376	301	73	19	34
3	23	23	50	1410	359	517	327	330	340	58	23	79
4	26	22	64	724	332	472	343	325	335	55	66	46
5	26	22	70	475	304	491	338	291	283	57	63	36
6	29	21	64	375	249	1500	304	256	247	49	51	1140
7	27	22	55	322	237	2340	276	233	212	44	34	1440
8	26	22	77	1550	233	1300	256	217	191	42	27	558
9	25	22	230	1600	219	855	338	203	177	38	24	312
10	23	22	482	808	203	705	472	189	167	37	23	214
11	23	22	291	543	203	903	398	183	228	37	27	171
12	23	21	240	402	187	791	338	165	325	36	128	141
13	23	20	213	380	183	600	304	177	212	33	199	121
14	34	22	203	457	175	554	459	187	175	45	122	126
15	29	24	150	430	173	484	607	181	152	40	78	169
16	27	48	145	335	167	378	501	157	138	41	54	122
17	27	65	140	230	156	348	465	141	126	87	42	97
18	26	97	134	218	152	327	418	143	114	65	42	82
19	23	72	124	188	152	306	354	283	102	58	52	73
20	23	62	110	167	157	283	314	259	94	48	44	63
21	22	55	134	1560	159	244	283	193	89	41	37	105
22	21	35	124	1690	173	233	261	161	87	37	32	475
23	22	38	90	817	173	223	242	214	79	33	31	373
24	22	65	88	859	444	259	226	938	73	31	38	226
25	24	48	250	4240	1100	636	210	2610	66	30	34	169
26	23	41	157	2470	1410	568	247	1860	62	30	33	145
27	36	38	120	1310	928	424	752	1070	58	27	30	131
28	27	41	98	953	575	373	668	743	55	25	28	114
29	25	41	76	765	---	367	656	593	55	24	42	110
30	24	72	77	640	---	357	517	472	63	24	52	131
31	24	---	79	561	---	327	---	409	---	23	44	---
TOTAL	779	1150	4253	27179	9709	18240	11489	13986	4957	1353	1540	7037
MEAN	25.1	38.3	137	877	347	588	383	451	165	43.6	49.7	235
MAX	36	97	482	4240	1410	2340	752	2610	351	87	199	1440
MIN	21	20	50	167	152	223	210	141	55	23	19	34
CFSM	.21	.32	1.16	7.43	2.94	4.98	3.25	3.82	1.40	.37	.42	1.99
IN	.25	.36	1.34	8.57	3.06	5.75	3.62	4.41	1.56	.43	.49	2.22

CAL YR 1978 TOTAL 86177 MEAN 236 MAX 2970 MIN 20 CFSM 2.00 IN 27.16
WTR YR 1979 TOTAL 101672 MEAN 279 MAX 4240 MIN 19 CFSM 2.36 IN 32.06

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

DELAWARE RIVER BASIN

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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 (0.3 km) upstream from unnamed tributary, and 1.6 mi (2.6 km) downstream from Dry Brook.

DRAINAGE AREA.--163 mi² (422 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft (396.965 m) National Geodetic Vertical Datum of 1929. 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 (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 309 ft³/s (8.751 m³/s), 25.74 in/yr (654 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s (445 m³/s) Nov. 25, 1950, gage height, 13.84 ft (4.218 m), from rating curve extended above 8,700 ft³/s (246 m³/s); minimum, 5.0 ft³/s (0.14 m³/s) Aug. 5, 1964; minimum gage height, 0.89 ft (0.271 m) Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1615	5,000 142	9.04 2.755	Mar. 6	0515	*5,100 144	*9.12 2.780
Jan. 25	0445	3,530 100	7.74 2.359				

Minimum discharge, 26 ft³/s (0.74 m³/s) July 14; minimum gage height, 2.58 ft (0.786 m), July 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	210	130	730	370	200	692	471	573	79	46	35
2	55	191	124	3810	310	210	622	424	487	77	65	33
3	53	177	119	2690	300	398	579	403	526	73	69	45
4	52	165	201	1490	260	681	504	544	418	63	57	46
5	65	156	257	1070	240	3690	509	408	355	61	46	38
6	155	147	216	802	220	4690	444	365	315	57	43	1030
7	121	139	212	757	200	2710	408	337	273	54	40	622
8	91	147	253	1710	180	1620	374	310	237	50	36	324
9	83	135	617	999	170	1130	434	285	215	49	33	221
10	77	125	539	780	160	1190	487	261	205	47	36	173
11	74	116	457	580	150	1550	493	241	369	45	55	141
12	71	110	417	490	150	1020	538	219	323	44	85	120
13	71	103	391	500	140	854	526	219	237	44	105	103
14	168	101	357	647	130	913	802	208	208	30	67	158
15	203	99	315	450	120	779	819	188	188	35	57	292
16	149	96	270	350	120	641	774	194	168	51	51	169
17	136	93	240	300	110	591	730	168	153	69	46	138
18	129	162	210	250	100	521	628	156	144	111	48	123
19	131	141	200	220	96	465	549	168	135	103	67	117
20	164	128	200	200	90	429	487	153	119	61	53	103
21	139	110	419	800	88	408	439	141	109	51	46	120
22	126	111	318	1110	86	408	403	141	104	181	41	483
23	120	109	265	671	90	449	374	153	111	85	38	303
24	115	138	230	660	250	768	351	895	99	73	36	230
25	110	156	210	2360	220	2010	332	1300	92	65	51	204
26	130	125	200	1090	210	1250	328	1330	83	71	59	181
27	400	114	190	831	200	913	579	1080	75	138	46	158
28	280	128	180	708	190	735	752	1070	75	78	43	145
29	249	129	170	603	---	741	597	860	79	65	40	177
30	229	132	170	515	---	692	521	919	73	57	38	148
31	217	---	170	455	---	702	---	692	---	50	36	---
TOTAL	4219	3993	8247	28638	4950	33358	16075	14303	6548	2117	1579	6180
MEAN	136	133	266	924	177	1076	536	461	218	68.3	50.9	206
MAX	400	210	617	3810	370	4690	819	1330	573	181	105	1030
MIN	52	93	119	200	86	200	328	141	73	30	33	33
CFSM	.83	.82	1.63	5.67	1.09	6.60	3.29	2.83	1.34	.42	.31	1.26
IN.	.96	.91	1.88	6.54	1.13	7.61	3.67	3.26	1.49	.48	.36	1.41

CAL YR 1978	TOTAL	120766	MEAN 331	MAX 5150	MIN 37	CFSM 2.03	IN 27.56
WTR YR 1979	TOTAL	130207	MEAN 357	MAX 4690	MIN 30	CFSM 2.19	IN 29.72

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 (0.6 km) upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi (4.3 km) southwest of Dunraven.

DRAINAGE AREA.--25.0 mi² (64.7 km²).

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,298.54 ft (395.795 m) Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 56.1 ft³/s (1.589 m³/s), 30.47 in/yr (774 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s (127 m³/s) Sept. 21, 1938, from rating curve extended above 960 ft³/s (27.2 m³/s) on basis of velocity-area study; maximum gage height, 9.92 ft (3.024 m) Nov. 25, 1950; minimum discharge observed, 1.2 ft³/s (0.034 m³/s) Sept. 25, 26, 1939, gage height, 0.71 ft (0.216 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 740 ft³/s (21 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1530	1,100 31.2	a6.02 1.835	Sept. 6	1515	896 25.4	5.65 1.722
Mar. 6	0815	*1,110 31.4	*a6.10 1.859				

a Backwater from ice.

Minimum discharge, 4.7 ft³/s (0.13 m³/s) Aug. 8, 9, 10, gage height, 2.91 ft (0.887 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	32	24	600	48	56	118	118	102	14	6.1	5.9
2	10	31	23	728	39	54	104	98	84	15	8.4	5.7
3	10	29	22	273	38	52	94	94	69	13	7.0	5.9
4	9.6	27	36	146	36	70	83	113	59	11	6.1	5.9
5	11	26	44	100	32	400	81	92	52	9.7	5.7	5.9
6	23	24	40	96	30	700	69	81	46	9.0	5.4	294
7	17	23	39	94	29	247	60	71	42	8.1	5.0	125
8	15	24	44	199	28	144	54	62	37	7.8	4.9	54
9	14	23	109	129	27	129	71	55	34	7.0	4.5	37
10	14	22	88	106	26	132	79	49	32	7.0	5.4	29
11	14	20	68	84	25	164	76	44	50	6.1	5.9	24
12	14	20	59	74	25	134	77	42	46	6.7	13	21
13	14	19	56	72	24	139	77	41	36	6.7	15	20
14	33	18	54	70	23	136	123	39	31	6.5	9.3	44
15	33	17	47	60	22	118	127	35	29	5.9	7.5	68
16	27	17	44	46	21	113	123	36	27	6.3	7.0	42
17	26	16	41	42	20	106	115	31	24	6.5	6.7	35
18	25	29	34	41	19	96	100	29	23	7.0	6.7	30
19	24	26	28	40	19	88	86	31	22	7.0	7.5	27
20	25	23	31	50	19	79	77	28	20	6.3	7.0	24
21	23	22	60	315	19	74	69	26	18	6.1	6.7	29
22	22	22	42	193	19	74	62	25	18	7.8	6.5	84
23	21	22	37	109	18	79	57	29	18	6.5	6.3	64
24	20	28	33	132	120	187	57	184	16	7.5	6.1	50
25	19	29	31	232	100	347	52	247	15	6.7	7.5	44
26	22	27	30	141	90	146	56	199	14	6.5	7.2	37
27	55	25	28	113	76	149	167	170	13	7.2	6.7	33
28	43	26	26	96	62	127	219	181	12	6.1	6.5	30
29	38	25	26	81	---	129	167	162	13	5.7	6.3	35
30	35	24	26	69	---	118	139	151	12	5.6	6.3	30
31	33	---	25	58	---	123	---	125	---	5.4	6.1	---
TOTAL	699.6	716	1295	4589	1054	4710	2839	2688	1014	237.7	216.3	1339.3
MEAN	22.6	23.9	41.8	148	37.6	152	94.6	86.7	33.8	7.67	6.98	44.6
MAX	55	32	109	728	120	700	219	247	102	15	15	294
MIN	9.6	16	22	40	18	52	52	25	12	5.4	4.5	5.7
CFSM	.90	.96	1.67	5.92	1.50	6.08	3.78	3.47	1.35	.31	.28	1.78
IN.	1.04	1.07	1.93	6.83	1.57	7.01	4.22	4.00	1.51	.35	.32	1.99
CAL YR 1978 TOTAL	17905.2			MEAN 49.1	MAX 572	MIN 5.1	CFSM 1.96	IN 26.64				
WTR YR 1979 TOTAL	21397.9			MEAN 58.6	MAX 728	MIN 4.5	CFSM 2.34	IN 31.84				

01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 (152 m) upstream from bridge on County Highway 1, about 1,700 ft (518 m) upstream from Pepacton Reservoir, and 5 mi (8 km) south of Andes.

DRAINAGE AREA.--33.0 mi² (85.5 km²).

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

GAGE.--Water-stage recorder. Concrete control since Nov. 1937. Datum of gage is 1,285.87 ft (391.933 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft (152 m) downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum.

REMARKS.--Records good except for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 60.3 ft³/s (1.708 m³/s), 24.81 in/yr (630 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft³/s (120 m³/s) Sept. 21, 1938, gage height, 7.12 ft (2.170 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); minimum, 0.5 ft³/s (0.014 m³/s) Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (20 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1415	*1,380 39.1	*5.27 1.606	Mar. 5	2400	999 28.3	4.90 1.494
Jan. 21	1245	ice jam	4.75 1.448				

Minimum discharge, 1.4 ft³/s (0.040 m³/s) July 14, gage height, 2.35 ft (0.716 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	56	32	150	60	60	92	92	106	9.2	6.5	4.0
2	15	50	31	970	56	80	90	80	86	8.7	9.2	3.8
3	14	46	28	484	52	88	84	82	72	8.7	7.3	6.9
4	15	41	56	270	48	168	76	116	60	6.5	5.3	5.7
5	23	38	58	240	44	843	82	84	52	5.7	4.3	4.3
6	49	35	53	210	41	817	71	78	44	5.3	3.8	144
7	30	34	52	190	38	419	67	72	39	5.0	3.0	76
8	26	35	65	170	34	266	63	65	35	4.7	2.6	46
9	24	31	100	160	32	187	95	58	32	4.0	2.2	35
10	22	28	80	140	30	221	114	52	30	3.8	6.1	28
11	22	26	66	120	28	271	121	47	31	3.5	12	24
12	21	26	60	100	26	160	121	43	26	3.3	21	21
13	21	23	56	90	25	140	116	40	22	3.0	18	17
14	90	22	52	100	24	120	171	39	19	2.6	10	36
15	80	22	49	90	23	110	162	34	17	3.0	8.7	49
16	65	22	47	80	21	96	156	39	15	12	7.7	28
17	56	21	45	70	20	90	141	31	14	18	6.1	24
18	50	36	45	60	19	78	114	27	13	30	9.2	22
19	52	28	44	50	18	71	97	28	12	19	15	22
20	58	26	42	45	17	65	86	26	10	9.2	9.8	18
21	46	24	92	220	16	62	76	24	9.2	9.8	7.3	35
22	41	24	63	214	16	58	69	24	9.2	50	6.5	124
23	39	24	58	135	17	60	62	33	10	16	6.1	71
24	36	36	54	132	60	90	55	228	9.2	11	5.0	56
25	34	35	48	262	56	200	52	251	8.2	11	12	47
26	44	27	45	156	52	180	52	266	7.3	11	11	40
27	129	28	43	124	48	141	116	214	6.5	22	8.7	35
28	86	34	42	109	45	114	141	221	6.9	12	8.2	33
29	76	33	40	92	---	129	119	200	7.7	9.2	6.5	47
30	67	33	39	80	---	111	106	180	7.3	7.7	6.1	35
31	62	---	38	72	---	99	---	132	---	6.5	4.7	---
TOTAL	1408	944	1623	5385	966	5594	2967	2906	816.5	331.4	249.9	1137.7
MEAN	45.4	31.5	52.4	174	34.5	180	98.9	93.7	27.2	10.7	8.06	37.9
MAX	129	56	100	970	60	843	171	266	106	50	21	144
MIN	14	21	28	45	16	58	52	24	6.5	2.6	2.2	3.8
CFSM	1.38	.96	1.59	5.27	1.05	5.46	3.00	2.84	.82	.32	.24	1.15
IN.	1.59	1.06	1.83	6.07	1.09	6.31	3.34	3.28	.92	.37	.28	1.28

CAL YR 1978 TOTAL 20543.9 MEAN 56.3 MAX 920 MIN 4.0 CFSM 1.71 IN 23.16
WTR YR 1979 TOTAL 24328.5 MEAN 66.7 MAX 970 MIN 2.2 CFSM 2.02 IN 27.42

DELAWARE RIVER BASIN

01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY

LOCATION.--Lat 42°04'30", long 74°58'36", Delaware County, Hydrologic Unit 02040102, on left bank 0.5 mi (0.8 km) downstream from Downsville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi (1.6 km) east of Downsville.

DRAINAGE AREA.--371 mi² (961 km²).

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft (333.731 m) Board of Water Supply, City of New York datum. Prior to Sept. 26, 1941, nonrecording gage, and Sept. 26, 1941, to June 27, 1955, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 7.03 ft (2.143 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Subsequent to September 1954, entire flow from drainage area controlled by Pepacton 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 periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,900 ft³/s (677 m³/s) Nov. 26, 1950, gage height, 14.52 ft (4.426 m), site and datum then in use, from rating curve extended above 12,000 ft³/s (340 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Oct. 11, 1954; minimum daily, 0.6 ft³/s (0.017 m³/s) Oct. 10, 1954; minimum gage height, 1.39 ft (0.424 m) Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft or 5 m (at former datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,870 ft³/s (110 m³/s) May 26, gage height, 5.71 ft (1.740 m); minimum daily, 18 ft³/s (0.510 m³/s) May 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	350	73	60	52	57	686	713	926	75	125	74
2	75	445	57	62	52	57	589	577	624	75	122	74
3	75	544	57	62	51	57	513	513	454	73	122	74
4	75	600	54	60	51	57	419	686	350	77	122	75
5	75	612	52	60	54	60	445	589	286	77	122	77
6	75	589	55	60	52	60	419	473	221	80	110	78
7	75	589	57	58	52	60	387	379	173	73	86	77
8	75	636	58	60	52	58	365	317	113	75	77	77
9	119	544	55	60	52	60	436	252	77	75	77	77
10	162	402	54	60	49	60	589	203	75	77	77	77
11	162	419	57	58	49	60	624	162	77	75	78	76
12	119	419	57	60	50	60	713	125	77	73	78	77
13	73	419	58	60	50	60	740	86	75	99	77	77
14	75	410	57	62	50	60	912	77	75	128	77	76
15	75	252	58	62	50	57	1240	69	77	125	77	76
16	94	75	57	60	50	58	1260	60	75	125	78	76
17	110	58	57	60	50	60	1220	60	75	102	77	76
18	107	141	57	60	50	58	1030	60	75	77	77	76
19	91	221	58	63	50	58	845	63	75	80	77	76
20	77	203	57	69	50	58	686	40	75	102	77	76
21	77	194	57	75	50	58	544	18	75	125	77	77
22	67	128	58	80	50	60	427	18	75	122	77	77
23	58	57	60	67	54	58	350	18	75	122	77	77
24	58	57	60	55	57	58	292	75	75	125	77	76
25	110	57	60	57	57	63	231	1740	75	125	76	76
26	162	58	60	52	60	648	155	3270	75	122	76	76
27	110	86	60	54	60	1120	207	3300	75	122	76	76
28	58	84	60	52	54	1010	794	3050	77	125	76	76
29	58	55	60	51	---	926	940	2460	77	125	76	76
30	141	73	58	54	---	845	858	1870	77	125	75	76
31	268	---	58	52	---	726	---	1350	---	125	74	---
TOTAL	3031	8777	1796	1865	1458	6747	18916	22673	4811	3106	2650	2285
MEAN	97.8	293	57.9	60.2	52.1	218	631	731	160	100	85.5	76.2
MAX	268	636	73	80	60	1120	1260	3300	926	128	125	78
MIN	58	55	52	51	49	57	155	18	75	73	74	74
CAL YR 1978	TOTAL	119321	MEAN 327	MAX 5700	MIN 52							
WTR YR 1979	TOTAL	78115	MEAN 214	MAX 3300	MIN 18							

DELAWARE RIVER BASIN

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01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY

LOCATION.--Lat 42°01'28", long 75°07'10", Delaware County, Hydrologic Unit 02040102, on right bank 800 ft (244 m) downstream from Baxter Brook, and 1,100 ft (335 m) downstream from highway bridge at Harvard. Water-quality sampling site at discharge station.

DRAINAGE AREA.--457 mi² (1,184 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to June 1967, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,007.41 ft (307.059 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1958, water-stage recorder 1,100 ft (335 m) upstream at datum 0.65 ft (0.198 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) 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.

EXTREMES.--Maximum discharge, 31,400 ft³/s (889 m³/s) Sept. 22, 1938, gage height, 16.93 ft (5.160 m) site and datum then in use, from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement at gage height 15.58 ft (4.749 m); minimum, 7.2 ft³/s (0.20 m³/s) Oct. 13, 1954, gage height 1.63 ft (0.497 m); minimum daily 7.6 ft³/s (0.22 m³/s) Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,310 ft³/s (150 m³/s) May 26, gage height, 7.72 ft (2.353 m); minimum discharge, 79 ft³/s (2.24 m³/s) May 23, Sept. 1, 2, 3, 4, gage height 1.76 ft (0.536 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	438	169	200	221	333	970	994	1380	119	139	81
2	88	496	141	2580	195	363	897	850	1030	114	152	79
3	87	593	131	1630	180	325	812	750	850	108	142	81
4	93	634	151	831	170	337	709	988	669	106	139	79
5	102	652	214	551	160	1870	715	879	557	106	136	81
6	137	640	198	451	150	2940	686	756	460	103	133	225
7	121	604	202	391	150	1410	631	653	372	103	103	202
8	111	642	225	588	140	862	604	567	298	94	88	127
9	111	639	406	410	140	610	681	478	221	99	83	108
10	188	470	412	360	130	567	903	410	191	94	92	101
11	190	458	363	300	130	787	958	342	206	99	99	96
12	186	476	321	280	130	642	1020	281	188	92	108	92
13	108	458	289	270	120	521	1050	233	171	92	108	90
14	163	466	262	250	120	474	1170	195	161	145	96	106
15	225	419	228	230	110	405	1500	177	152	148	90	161
16	177	161	203	220	110	346	1520	161	142	152	90	116
17	188	117	191	210	110	317	1490	142	139	161	88	106
18	182	152	167	210	100	285	1280	133	133	106	92	101
19	173	306	148	200	100	258	1080	136	130	108	96	99
20	162	291	158	190	100	237	921	133	127	96	92	96
21	147	266	250	512	100	225	787	92	124	142	88	108
22	138	270	226	831	100	225	664	85	127	188	85	276
23	118	136	198	497	100	245	567	101	130	152	88	217
24	114	146	181	410	180	342	488	642	122	148	88	167
25	114	160	200	958	354	891	420	2420	119	142	94	148
26	234	148	184	686	551	1060	333	4530	114	142	92	136
27	432	140	167	521	442	1460	442	4580	114	148	90	127
28	303	200	151	433	325	1330	1140	4030	114	145	90	122
29	268	146	150	368	---	1220	1280	3450	122	142	88	148
30	244	141	140	317	---	1150	1170	2680	116	139	85	133
31	380	---	140	281	---	1010	---	1910	---	139	81	---
TOTAL	5373	10865	6566	16166	4918	23047	26888	33778	8779	3872	3135	3809
MEAN	173	362	212	521	176	743	896	1090	293	125	101	127
MAX	432	652	412	2580	551	2940	1520	4580	1380	188	152	276
MIN	87	117	131	190	100	225	333	85	114	92	81	79
CAL YR 1978	TOTAL	160994	MEAN	441	MAX	7200	MIN	78				
WTR YR 1979	TOTAL	147196	MEAN	403	MAX	4580	MIN	79				

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.--Temperature recorder since June 1978.

REMARKS.--No record May 16 to July 30, due to instrument malfunctions. Once-daily water-temperature observations for the period June 19 to July 30 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water year 1978), 24.5°C July 7, 1978; minimum, freezing point on many days during winter period.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	---	---	---	17.5	16.0	16.5	19.0	16.0	17.5
2	---	---	---	---	---	---	17.0	15.5	16.0	18.0	17.0	17.5
3	---	---	---	---	---	---	17.5	14.5	16.0	21.0	17.0	18.5
4	---	---	---	---	---	---	19.5	15.5	17.0	21.0	17.5	19.5
5	---	---	---	---	---	---	18.0	16.0	17.0	20.5	18.5	19.5
6	---	---	---	---	---	---	17.5	15.5	16.5	19.5	16.5	18.0
7	---	---	---	---	---	---	16.5	13.5	15.0	20.5	16.0	18.0
8	---	---	---	---	---	---	17.5	15.0	16.0	18.5	16.0	17.0
9	---	---	---	---	---	---	18.0	15.0	16.5	18.0	13.5	16.0
10	---	---	---	---	---	---	17.5	16.0	16.5	18.0	13.5	16.0
11	---	---	---	---	---	---	17.0	15.5	16.0	19.0	15.5	17.0
12	---	---	---	---	---	---	15.0	14.0	14.5	18.5	14.0	16.0
13	---	---	---	---	---	---	16.5	12.5	14.5	18.5	14.5	16.5
14	---	---	---	---	---	---	15.5	14.5	15.0	17.5	16.5	17.0
15	---	---	---	---	---	---	15.0	13.0	13.5	17.0	14.5	15.5
16	---	---	---	---	---	---	16.0	12.5	14.0	16.5	13.0	14.5
17	---	---	---	---	---	---	16.5	13.0	15.0	17.0	13.5	15.0
18	---	---	---	---	---	---	15.5	13.5	14.5	17.5	14.0	15.5
19	---	---	---	---	---	---	16.0	13.5	14.5	16.0	13.5	15.5
20	---	---	---	---	---	---	17.5	14.0	15.5	15.5	11.5	13.0
21	---	---	---	---	---	---	18.0	15.5	16.5	13.0	12.0	12.5
22	---	---	---	---	---	---	19.0	16.0	17.0	13.0	12.5	12.5
23	---	---	---	---	---	---	18.0	16.0	17.0	15.5	11.5	13.0
24	---	---	---	---	---	---	18.0	16.5	17.0	15.0	11.0	12.5
25	---	---	---	---	---	---	20.0	16.5	18.0	15.5	11.0	13.0
26	---	---	---	---	---	---	20.0	16.5	18.0	16.0	12.5	14.0
27	---	---	---	---	---	---	18.5	17.0	18.0	15.0	12.0	13.5
28	---	---	---	---	---	---	19.5	16.0	17.5	13.0	12.0	12.5
29	---	---	---	---	---	---	18.0	16.5	17.0	13.0	12.5	12.5
30	---	---	---	---	---	---	19.5	16.5	17.5	12.5	12.5	12.5
31	---	---	---	17.5	15.0	16.5	19.0	16.5	17.5	---	---	---
MONTH	---	---	---	17.5	15.0	16.5	20.0	12.5	16.0	21.0	11.0	15.5

DELAWARE RIVER BASIN

01420000 LITTLE BEAVER KILL NEAR LIVINGSTON MANOR, NY

LOCATION.--Lat 41°52'23", long 74°47'52", Sullivan County, Hydrologic Unit 02040102, on right bank 100 ft (30 m) downstream from private bridge, 0.2 mi (0.3 km) west from interchange 97 on State Highway 17, 2.5 (4.0 km) southeast of Livingston Manor, and 3 mi (5 km) upstream from Cattail Brook.

DRAINAGE AREA.--19.8 mi² (51.3 km²).

PERIOD OF RECORD.--July 1924 to current year.

REVISED RECORDS.--WSP 1302: 1930(M), 1933(M), 1936-37(M), 1942-46(M). WSP 1432: 1928(M).

GAGE.--Water-stage recorder. Concrete control since November 1933. Datum of gage is 1,496.69 ft (456.191 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1939, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Some diversion from Lily Pond for village of Liberty water supply.

AVERAGE DISCHARGE.--55 years, 45.2 ft³/s (1.280 m³/s), 31.00 in/yr (787 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft³/s (96.9 m³/s) Aug. 26, 1928, gage height, 8.7 ft (2.65 m), from floodmarks, from rating curve extended above 1,700 ft³/s (48.1 m³/s); minimum, 0.9 ft³/s (0.025 m³/s) July 10, 1962; minimum gage height, 1.23 ft (0.375 m) Aug. 1, 3, 5, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 730 ft³/s (20.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1500	867 24.6	4.32 1.317	Sept. 6	1330	*1,180 33.4	*4.98 1.518
Mar. 6	0330	774 21.9	4.20 1.280				

Minimum discharge, 3.2 ft³/s (0.09 m³/s) Aug. 9, 10, gage height, 1.39 ft (0.424 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	13	19	80	37	66	67	62	55	28	6.1	4.6
2	4.4	12	16	592	31	62	67	55	47	17	9.0	9.0
3	4.1	11	15	221	28	57	69	67	42	13	13	5.1
4	4.8	11	26	114	25	62	57	122	35	11	7.3	4.1
5	6.5	11	39	80	23	490	62	73	34	9.4	5.6	3.7
6	29	10	28	60	21	606	52	55	30	9.4	5.1	456
7	16	9.3	24	56	20	283	46	47	26	10	4.6	137
8	9.3	11	51	80	18	180	40	40	22	8.9	4.1	52
9	7.5	10	234	66	17	130	64	36	21	7.9	3.7	31
10	7.0	9.3	111	56	16	185	84	34	20	7.0	8.4	22
11	6.5	8.6	50	45	15	263	84	28	65	7.0	9.0	17
12	6.5	9.3	40	36	14	124	86	25	57	7.0	21	13
13	6.5	8.6	35	30	14	95	78	35	32	6.6	17	12
14	26	8.6	30	27	13	101	143	31	22	6.3	9.7	16
15	25	8.6	27	25	13	95	112	25	18	6.3	7.8	21
16	15	8.6	25	22	12	74	84	26	17	17	7.3	14
17	11	10	23	20	12	60	71	22	16	13	6.1	12
18	10	44	22	19	11	55	55	21	13	14	11	10
19	9.3	29	21	18	11	54	47	32	12	12	20	10
20	10	22	20	18	11	59	42	34	11	7.8	10	9.0
21	9.3	19	36	40	10	71	36	30	11	6.7	7.8	28
22	8.0	16	28	140	10	86	31	25	11	6.1	6.1	133
23	8.0	16	23	97	10	97	28	39	12	6.1	5.1	62
24	7.5	27	20	81	30	195	25	235	11	7.3	5.1	34
25	7.5	31	18	339	170	358	23	208	10	6.7	6.1	26
26	19	28	17	171	130	166	32	221	9.4	7.8	5.6	23
27	66	19	16	101	97	99	254	164	8.9	9.0	9.7	24
28	29	22	15	79	71	73	216	150	9.4	6.7	8.4	22
29	21	19	14	66	---	84	106	110	10	5.6	6.1	36
30	17	19	14	55	---	86	74	104	11	5.1	5.6	30
31	15	---	18	45	---	78	---	73	---	5.1	5.1	---
TOTAL	426.5	480.9	1075	2879	890	4494	2235	2229	698.7	290.8	256.5	1276.5
MEAN	13.8	16.0	34.7	92.9	31.8	145	74.5	71.9	23.3	9.38	8.27	42.6
MAX	66	44	234	592	170	606	254	235	65	28	21	456
MIN	4.1	8.6	14	18	10	54	23	21	8.9	5.1	3.7	3.7
CFSM	.70	.81	1.75	4.69	1.61	7.32	3.76	3.63	1.18	.47	.42	2.15
IN.	.80	.90	2.02	5.41	1.67	8.44	4.20	4.19	1.31	.55	.48	2.40
CAL YR 1978	TOTAL	16160.4	MEAN	44.3	MAX	800	MIN	3.8	CFSM	2.24	IN	30.36
WTR YR 1979	TOTAL	17231.9	MEAN	47.2	MAX	606	MIN	3.7	CFSM	2.38	IN	32.37

01420500 BEAVER KILL AT COOKS FALLS, NY

LOCATION.--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 66 ft or 20 m (revised) downstream from road bridge in Cooks Falls, and 5.5 mi (8.8 km) downstream from Willowemoc Creek.

DRAINAGE AREA.--241 mi² (624 km²).

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 (351.038 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft (38 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diversion at headwaters into Cooper Lake for water supply of Kingston.

AVERAGE DISCHARGE.--65 years, 562 ft³/s (15.92 m³/s), 31.64 in/yr (804 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft³/s (895 m³/s) Mar. 31, 1951, gage height, 16.02 ft (4.883 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-area measurement at gage height 15.52 ft (4.730 m); minimum, 16 ft³/s (0.45 m³/s) Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,700 ft³/s (130 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1530	*10,800 306	*10.50 3.200	Mar. 25	0315	7,280 206	8.94 2.725
Mar. 6	0530	10,300 292	10.32 3.146	Sept. 6	1630	9,640 273	10.04 3.060

Minimum discharge, 71 ft³/s (2.01 m³/s) Aug. 10; minimum gage height, 0.94 ft (0.287 m) Oct. 4.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	310	273	827	580	765	890	934	945	202	78	80
2	78	286	258	7270	470	780	819	794	784	247	293	77
3	77	275	238	3980	430	709	824	737	718	194	168	81
4	78	253	315	1770	380	700	718	1300	613	154	127	78
5	91	243	521	1170	360	5230	737	934	521	138	103	73
6	213	229	432	956	330	8780	669	784	472	127	90	3570
7	198	218	395	874	310	4150	609	691	427	121	83	2040
8	142	227	490	2710	290	2480	560	626	387	113	77	847
9	125	215	1790	1650	280	1790	691	564	358	107	73	548
10	115	200	1480	1100	260	1880	968	510	336	103	83	415
11	109	192	987	844	240	3050	895	465	452	104	133	359
12	105	184	827	620	230	1830	945	427	560	97	172	296
13	104	178	730	540	220	1320	885	475	367	93	240	258
14	263	172	644	450	210	1250	1250	462	306	88	154	291
15	391	165	520	380	200	1220	1340	399	275	86	126	610
16	255	164	450	350	200	912	1100	405	252	113	113	381
17	211	164	400	330	190	824	997	350	234	165	103	304
18	190	373	360	310	180	732	849	322	217	129	107	270
19	184	375	330	300	180	687	746	378	206	147	172	260
20	204	299	310	300	180	678	665	387	188	110	142	236
21	190	263	610	800	170	705	601	341	177	96	115	255
22	176	248	536	2210	170	809	545	322	175	91	101	1150
23	172	243	370	1200	170	906	499	384	196	95	92	782
24	160	326	330	1000	300	1480	462	2260	175	97	92	540
25	158	415	300	3570	700	4910	436	2930	163	96	104	446
26	204	329	270	2060	1200	2410	459	2940	149	88	110	391
27	817	278	250	1370	1190	1560	1680	2420	141	129	97	352
28	581	326	240	1090	844	1180	2670	2350	139	108	108	329
29	443	291	230	912	---	1130	1570	1760	151	91	95	391
30	381	288	220	775	---	1110	1150	1630	146	84	93	359
31	334	---	300	678	---	962	---	1190	---	77	86	---
TOTAL	6827	7729	15406	42396	10464	56929	27229	30471	10230	3690	3730	16069
MEAN	220	258	497	1368	374	1836	908	983	341	119	120	536
MAX	817	415	1790	7270	1200	8780	2670	2940	945	247	293	3570
MIN	77	164	220	300	170	678	436	322	139	77	73	73
CFSM	.91	1.07	2.06	5.68	1.55	7.62	3.77	4.08	1.42	.49	.50	2.22
IN.	1.05	1.19	2.38	6.54	1.62	8.79	4.20	4.70	1.58	.57	.58	2.48

CAL YR 1978 TOTAL 201845 MEAN 553 MAX 10200 MIN 77 CFSM 2.30 IN 31.16
WTR YR 1979 TOTAL 231170 MEAN 633 MAX 8780 MIN 73 CFSM 2.63 IN 35.68

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 (914 m) upstream from bridge on County highway 28 at Fishs Eddy, 0.6 mi (1.0 km) upstream from Fish Creek, 4.2 mi (6.8 km) downstream from Beaver Kill, and 11 mi (18 km) upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--783 mi² (2,028 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft (291.377 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1928, nonrecording gage and Sept. 28, 1928 to Nov. 1, 1967, water-stage recorder at site 3,000 ft (914 m) downstream at datum 5.0 ft (1.52 m) lower.

REMARKS.--Records fair except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft³/s (1,510 m³/s) Aug. 24, 1933, gage height, 20.60 ft (6.279 m) at former site and datum, from rating curve extended above 22,000 ft³/s (623 m³/s); minimum, 52 ft³/s (1.47 m³/s) July 23, 1964, gage height, 1.16 ft (0.354 m) at former site and datum; minimum daily, 68 ft³/s (1.93 m³/s) Aug. 29, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft (7.19 m) at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft³/s or 1,980 m³/s, from rating curve extended above 22,000 ft³/s or 623 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,600 ft³/s (442 m³/s) Mar. 6; maximum gage height, 14.01 ft (4.270 m) Jan. 22 (backwater from ice); minimum discharge, 166 ft³/s (4.70 m³/s) Aug. 9, 10, Sept. 5, gage height, 2.94 ft (0.896 m) Aug. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979.
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	827	521	800	898	1500	2100	2230	2720	347	220	173
2	188	857	488	10200	760	1500	1940	1870	2090	401	390	169
3	188	952	456	7080	700	1400	1870	1660	1760	358	322	180
4	194	963	501	2500	650	1500	1640	2490	1450	312	279	173
5	242	974	788	1900	610	5000	1660	2060	1210	284	249	166
6	366	952	706	1600	580	13900	1560	1740	1050	271	232	3030
7	409	887	672	1400	550	7190	1420	1520	911	257	209	2650
8	327	930	742	3440	520	4170	1340	1350	804	245	183	1050
9	299	941	2220	2000	500	2960	1510	1200	713	236	169	721
10	341	724	2290	1500	480	2740	2120	1070	651	232	183	593
11	346	681	1500	1100	470	4550	2100	958	697	228	232	530
12	341	698	1200	910	460	3070	2260	857	884	216	275	472
13	282	672	1000	830	450	2280	2230	839	666	209	353	430
14	432	672	900	760	440	2030	2630	822	578	232	284	454
15	760	640	720	730	430	1960	3190	737	537	245	240	762
16	542	404	650	700	420	1500	2940	721	498	249	224	593
17	488	346	580	670	410	1390	2790	659	472	332	205	498
18	462	501	520	640	400	1240	2410	614	442	257	205	460
19	438	724	460	620	400	1150	2060	651	430	275	257	442
20	438	632	430	600	390	1110	1780	674	401	236	253	424
21	409	571	847	1000	390	1110	1560	600	385	245	220	430
22	382	563	837	2800	390	1180	1360	571	374	279	201	1290
23	361	456	664	2000	400	1290	1200	600	401	262	190	1080
24	341	514	600	1400	600	1690	1090	3030	368	253	187	779
25	331	648	530	3900	1400	6500	987	6420	347	249	205	659
26	438	571	480	3250	2300	4120	930	8620	327	240	213	600
27	1390	501	420	2290	1900	3530	1850	7980	317	262	201	558
28	1050	593	400	1880	1500	2940	4450	7030	307	271	205	530
29	817	535	370	1540	---	2720	3340	5780	322	245	197	593
30	706	508	400	1270	---	2590	2700	4820	317	236	190	578
31	788	---	400	1100	---	2250	---	3590	---	228	180	---
TOTAL	14290	20437	23292	62410	19398	92060	61017	73763	22429	8192	7153	21067
MEAN	461	681	751	2013	693	2970	2034	2379	748	264	231	702
MAX	1390	974	2290	10200	2300	13900	4450	8620	2720	401	390	3030
MIN	188	346	370	600	390	1110	930	571	307	209	169	166
CAL YR 1978 TOTAL	398235			1091	MAX 16300	MIN 176						
WTR YR 1979 TOTAL	425508			1166	MAX 13900	MIN 166						

DELAWARE RIVER BASIN

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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.--Temperature recorder since November 1967.

REMARKS.--During periods of low flow the recorded temperature may not be representative of the mean stream temperature due to solar radiation and lack of mixing of the water near the temperature sensor with the water in the mainstream. Recorder malfunctioned August 20 to September 26.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-75, 1978), 31.5°C Aug. 2, 1975; minimum (water years 1968-76, 1978-79), freezing point on many days during winter periods, except water year 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 31.5°C July 13, 15; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.5	12.5	14.0	9.5	7.0	8.0	2.5	1.0	1.5	.0	.0	.0
2	14.5	11.0	12.5	8.5	5.5	7.0	2.0	1.0	1.5	2.0	.0	1.0
3	17.5	9.5	12.5	8.5	6.0	7.0	1.0	.0	.0	1.5	.0	.5
4	13.5	11.5	12.0	8.5	6.5	7.5	2.5	.0	1.5	.0	.0	.0
5	18.0	11.5	14.0	9.0	7.0	7.5	3.5	2.0	2.5	.0	.0	.0
6	16.0	13.5	14.5	9.5	7.0	8.0	3.0	1.0	2.0	.0	.0	.0
7	14.0	11.5	13.0	8.5	7.5	8.0	2.5	1.0	2.0	.0	.0	.0
8	12.0	8.5	10.5	8.0	7.0	7.5	4.5	2.5	3.5	.0	.0	.0
9	13.0	7.5	9.5	8.5	6.5	7.0	4.5	2.5	4.0	.0	.0	.0
10	12.5	8.0	10.0	8.5	6.0	7.0	2.0	.0	.5	.0	.0	.0
11	14.0	10.0	11.5	8.0	6.0	7.0	.0	.0	.0	.0	.0	.0
12	15.0	12.5	13.5	7.5	6.5	7.0	.5	.0	.0	.0	.0	.0
13	16.0	12.0	13.5	6.5	5.5	6.0	2.0	.5	1.0	.0	.0	.0
14	13.5	11.0	12.5	8.0	5.5	7.0	1.5	.0	1.0	.0	.0	.0
15	11.5	9.0	10.0	8.0	7.0	7.5	.0	.0	.0	.5	.0	.0
16	10.0	7.5	9.0	8.0	6.0	7.0	.0	.0	.0	.0	.0	.0
17	10.5	7.0	8.5	6.0	4.0	5.0	.5	.0	.5	.0	.0	.0
18	8.0	6.0	7.5	8.0	6.5	7.5	.0	.0	.0	.0	.0	.0
19	9.0	7.5	8.5	8.0	6.0	7.0	.5	.0	.0	.0	.0	.0
20	10.0	8.5	9.0	5.5	4.0	4.5	.5	.0	.5	.0	.0	.0
21	11.5	8.0	9.5	4.0	3.5	3.5	.5	.0	.0	.0	.0	.0
22	12.0	9.0	10.5	4.0	2.5	3.0	.0	.0	.0	.0	.0	.0
23	12.0	9.5	10.5	2.5	1.5	2.0	.5	.0	.0	.0	.0	.0
24	10.5	7.0	8.5	3.5	2.0	2.5	.5	.0	.0	.5	.0	.0
25	10.5	6.0	8.0	3.5	1.5	3.0	.0	.0	.0	1.0	.5	.5
26	10.0	9.0	9.5	1.5	.0	.5	.0	.0	.0	2.0	1.0	1.5
27	10.0	8.5	9.5	.0	.0	.0	.0	.0	.0	2.5	2.0	2.0
28	10.0	7.5	8.5	.5	.0	.0	.5	.0	.0	2.5	2.5	2.5
29	10.0	8.0	9.0	1.5	.0	1.0	.5	.0	.0	2.5	1.0	1.5
30	9.0	6.0	7.5	3.0	1.5	2.0	.5	.0	.5	1.0	.5	1.0
31	9.0	6.0	7.5	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	18.0	6.0	10.5	9.5	.0	5.5	4.5	.0	.5	2.5	.0	.5

DELAWARE RIVER BASIN

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.0	.5	.5	.5	9.0	8.0	8.5	13.0	11.0	12.0
2	.5	.0	.5	.5	.5	.5	8.0	6.5	7.0	13.0	9.0	11.0
3	1.0	.0	.5	.5	.5	.5	7.0	6.0	6.5	11.0	9.5	10.0
4	1.0	.0	.5	.5	.5	.5	6.0	5.0	5.5	11.5	10.5	10.5
5	.5	.0	.5	2.5	.5	2.0	6.0	5.0	5.5	12.0	8.5	10.5
6	.0	.0	.0	3.0	2.5	3.0	5.5	4.0	5.0	13.0	9.5	11.0
7	.0	.0	.0	4.5	3.0	3.5	5.0	2.0	3.5	15.5	10.5	13.0
8	.0	.0	.0	4.0	2.5	3.5	6.5	3.0	5.0	18.5	13.0	16.0
9	.0	.0	.0	5.0	3.0	4.0	5.5	3.5	4.5	20.0	15.5	18.0
10	.5	.5	.5	4.5	4.0	4.0	6.5	3.0	4.5	21.0	17.0	19.0
11	.5	.5	.5	4.5	1.5	3.0	8.0	3.5	6.0	21.0	18.0	19.5
12	.5	.5	.5	1.5	.5	1.0	8.0	5.5	7.0	19.5	17.0	18.0
13	.5	.5	.5	4.0	.5	2.5	8.5	6.0	7.5	17.5	16.0	17.0
14	.5	.5	.5	4.5	4.0	4.0	7.5	6.0	6.5	19.0	15.0	16.5
15	.5	.5	.5	3.5	.5	1.5	6.0	5.5	5.5	21.5	14.0	17.5
16	.5	.5	.5	2.0	.5	1.5	6.5	5.5	6.0	20.0	15.0	17.5
17	.5	.5	.5	4.0	1.5	2.5	6.5	5.5	6.0	21.0	12.5	16.5
18	.5	.5	.5	6.0	2.0	4.0	9.0	5.0	7.0	18.0	12.5	15.5
19	.5	.5	.5	7.0	2.5	4.5	9.5	5.0	7.5	17.5	14.5	16.0
20	.5	.5	.5	8.0	3.5	5.5	10.5	5.5	7.5	21.0	14.5	17.0
21	.5	.5	.5	9.0	4.5	6.5	11.5	6.5	9.0	17.0	15.0	16.5
22	.5	.5	.5	10.0	5.5	7.5	11.5	8.5	10.0	22.0	13.0	17.0
23	.5	.5	.5	9.5	6.0	7.5	14.0	9.5	12.0	16.0	13.5	14.5
24	.5	.5	.5	9.0	7.0	8.0	15.5	10.5	13.0	14.0	12.0	13.0
25	.5	.5	.5	7.5	6.0	6.5	14.0	12.5	13.0	13.5	11.5	12.5
26	.5	.5	.5	6.0	3.5	4.5	13.5	12.5	13.0	13.5	12.5	13.0
27	.5	.5	.5	4.5	2.5	3.5	13.0	12.0	12.5	13.0	12.0	12.5
28	.5	.5	.5	6.0	2.5	4.5	13.0	10.5	12.0	14.5	12.0	13.5
29	---	---	---	6.0	4.5	5.0	13.0	10.5	11.5	14.0	12.5	13.5
30	---	---	---	7.5	5.5	6.5	13.5	9.0	11.5	15.5	12.5	14.0
31	---	---	---	9.0	7.0	8.0	---	---	---	17.0	12.5	15.5
MONTH	1.0	.0	.5	10.0	.5	4.0	15.5	2.0	8.0	22.0	8.5	15.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	18.0	13.5	16.0	25.0	18.5	21.0	29.0	21.5	24.5	---	---	---
2	17.0	15.0	16.0	23.0	18.0	20.0	25.5	21.5	23.5	---	---	---
3	16.5	15.0	16.0	26.5	18.5	21.5	28.0	20.5	24.0	---	---	---
4	19.0	14.5	16.5	23.5	16.0	19.0	28.5	20.0	23.5	---	---	---
5	19.5	15.5	17.5	19.5	14.0	16.5	28.0	19.5	23.5	---	---	---
6	19.5	16.5	17.5	22.0	13.0	17.5	26.0	19.5	22.5	---	---	---
7	20.5	16.0	18.0	26.0	14.0	19.5	26.0	15.5	20.5	---	---	---
8	21.5	18.0	19.5	28.0	15.0	21.5	26.0	18.0	21.0	---	---	---
9	23.0	18.5	20.0	27.0	17.0	21.5	27.0	16.0	21.0	---	---	---
10	21.5	19.0	20.0	24.0	18.5	21.0	24.0	16.5	20.5	---	---	---
11	19.0	15.0	17.5	27.0	18.5	22.5	20.5	17.0	18.5	---	---	---
12	18.0	12.5	15.0	29.5	19.5	23.5	17.0	15.0	16.0	---	---	---
13	18.5	12.5	15.5	31.5	19.5	24.5	21.5	13.5	17.0	---	---	---
14	22.0	12.0	17.0	30.5	20.0	25.0	20.0	15.0	16.5	---	---	---
15	23.5	15.0	19.0	31.5	22.5	26.0	15.0	13.0	14.0	---	---	---
16	25.5	18.0	21.5	26.5	22.5	24.0	21.0	12.5	16.0	---	---	---
17	27.0	19.5	22.5	27.5	21.0	24.0	22.5	11.0	16.5	---	---	---
18	22.5	17.5	20.0	26.0	20.5	22.5	16.0	13.5	14.5	---	---	---
19	24.0	15.0	19.5	28.5	18.0	23.0	20.5	14.5	17.0	---	---	---
20	26.0	15.0	20.5	29.0	18.5	23.5	---	---	---	---	---	---
21	25.5	15.5	20.5	28.0	20.5	23.5	---	---	---	---	---	---
22	22.5	17.5	19.0	27.0	21.0	23.5	---	---	---	---	---	---
23	22.0	17.0	19.0	24.0	19.0	21.5	---	---	---	---	---	---
24	16.5	13.0	15.0	29.0	19.5	23.5	---	---	---	---	---	---
25	23.0	11.5	16.5	29.5	21.0	24.5	---	---	---	---	---	---
26	25.5	12.0	18.5	26.5	22.5	24.0	---	---	---	---	---	---
27	25.0	14.5	19.5	25.5	21.0	23.0	---	---	---	19.0	15.0	17.0
28	22.0	16.0	18.5	26.0	19.0	22.5	---	---	---	17.0	15.0	16.0
29	25.0	16.0	20.0	25.5	20.0	22.5	---	---	---	17.5	16.0	16.5
30	25.0	18.5	21.0	29.5	19.0	23.5	---	---	---	17.0	16.5	16.5
31	---	---	---	29.5	21.0	25.0	---	---	---	---	---	---
MONTH	27.0	11.5	18.5	31.5	13.0	22.5	29.0	11.0	19.5	19.0	15.0	16.5

DELAWARE RIVER BASIN

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01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY

LOCATION.--Lat 42°09'58", long 75°08'26", Delaware County, Hydrologic Unit 02040101, on left bank at west end of fairgrounds at Walton, and 100 ft (30 m) downstream from West Brook.

DRAINAGE AREA.--331 mi² (856 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft (362.803 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--29 years, 596 ft³/s (16.88 m³/s), 24.45 in/yr (621 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s (493 m³/s) Mar. 14, 1977, gage height, 14.16 ft (4.316 m); minimum, 12 ft³/s (0.34 m³/s) Sept. 15, Nov. 22, 1964; minimum gage height, 1.86 ft (0.567 m) Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft³/s (130 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1900	12,100 343	12.28 3.743	Mar. 5	2015	*12,800 362	*12.52 3.816
Jan. 25	0845	5,000 142	8.78 2.676				

Minimum discharge, 52 ft³/s (1.47 m³/s) Sept. 2, 3; minimum gage height, 2.53 ft (0.771 m), Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	521	326	1000	560	410	922	853	1100	113	87	58
2	112	469	305	9410	500	420	876	755	982	109	96	55
3	108	428	281	6840	460	430	847	699	1200	109	108	186
4	108	391	490	2500	420	1190	745	1030	859	101	98	143
5	130	361	672	1500	380	9760	916	755	704	93	81	98
6	219	334	505	1200	360	10900	771	660	627	87	73	958
7	228	311	487	1100	330	5300	704	609	538	84	68	1040
8	166	329	548	2720	310	3020	694	555	469	78	63	505
9	153	306	1210	1400	290	2030	887	505	424	74	60	367
10	138	276	900	1000	280	1950	1230	461	450	72	61	295
11	129	254	780	800	260	2870	1180	424	403	69	87	248
12	121	240	740	700	250	1780	1330	383	412	67	103	212
13	120	225	600	800	240	1490	1280	360	323	64	139	186
14	455	214	500	1000	230	1580	1500	345	279	62	113	214
15	680	208	520	900	220	1390	1550	312	248	58	99	473
16	427	200	400	600	210	1040	1410	309	225	143	93	276
17	369	195	350	520	200	995	1470	279	204	337	85	217
18	336	347	310	450	190	876	1150	245	188	260	81	191
19	330	304	330	400	180	787	989	239	181	334	99	193
20	482	252	450	450	170	724	870	234	165	176	98	186
21	384	240	600	1000	160	665	771	212	149	137	83	183
22	333	233	560	2860	160	641	689	209	149	309	72	641
23	311	230	470	1360	160	641	622	245	162	214	65	501
24	315	325	440	1400	500	798	560	1390	149	154	62	371
25	292	402	420	3820	460	1810	517	2470	135	127	94	323
26	303	309	390	1890	430	1830	513	3120	125	114	109	289
27	1330	280	350	1410	410	1360	782	2480	114	143	91	257
28	862	300	330	1200	400	1120	1600	2200	111	127	85	242
29	724	334	300	1020	---	1200	1090	2060	122	109	77	391
30	632	327	290	866	---	1080	958	1930	113	99	70	327
31	570	---	290	660	---	964	---	1390	---	90	65	---
TOTAL	10983	9145	15144	52776	8720	61051	29423	27718	11310	4113	2665	9626
MEAN	354	305	489	1702	311	1969	981	894	377	133	86.0	321
MAX	1330	521	1210	9410	560	10900	1600	3120	1200	337	139	1040
MIN	108	195	281	400	160	410	513	209	111	58	60	55
CFSM	1.07	.92	1.48	5.14	.94	5.95	2.96	2.70	1.14	.40	.26	.97
IN.	1.23	1.03	1.70	5.93	.98	6.86	3.31	3.12	1.27	.46	.30	1.08
CAL YR 1978	TOTAL	203532	MEAN 558	MAX 10600	MIN 71	CFSM 1.69	IN 22.87					
WTR YR 1979	TOTAL	242674	MEAN 665	MAX 10900	MIN 55	CFSM 2.01	IN 27.27					

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 (0.8 km) upstream from Cold Spring Creek, 1.4 mi (2.3 km) downstream from Cannonsville Dam, and 2.0 mi (3.2 km) northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 mi² (1,181 km²).

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 (302.432 m) National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York). Prior to Oct. 1, 1964, at site 600 ft (183 m) downstream at datum 1.37 ft (0.418 m) higher.

REMARKS.--Records good above 2,000 ft³/s (56.6 m³/s), poor below. Subsequent to October 1963, entire flow from 454 mi² (1,176 km²) 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, 17,500 ft³/s (496 m³/s) Jan. 22, 1959, gage height, 9.01 ft (2.746 m), site and datum then in use; minimum daily 7.2 ft³/s (0.20 m³/s) Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,900 ft³/s (337 m³/s) Mar. 6, gage height, 11.90 ft (3.627 m); minimum daily, 31 ft³/s (0.88 m³/s) May 21, 22; minimum gage height, 3.68 ft (1.122 m) May 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	980	37	35	39	41	44	1310	1010	2240	333	820	1190
2	1170	37	35	59	40	45	1210	1060	1850	555	762	1200
3	1260	37	35	52	40	53	1240	958	1740	357	677	1010
4	1170	37	36	43	40	283	1220	1030	1610	335	845	728
5	967	37	35	41	38	3710	1240	1010	1370	610	619	63
6	510	37	35	41	40	10800	1220	911	1190	797	682	53
7	520	37	35	42	40	9670	1180	809	1020	544	776	46
8	550	37	37	44	40	6500	1120	711	782	542	849	45
9	889	37	37	41	40	4580	1200	581	587	713	1230	45
10	902	241	36	40	39	3520	1470	386	455	766	1270	45
11	902	300	35	40	39	3580	1640	254	385	872	964	45
12	941	300	35	39	39	3300	1780	151	323	1040	621	58
13	622	300	36	41	40	2780	1850	98	517	1040	489	45
14	376	300	36	41	39	2400	1920	59	422	647	559	687
15	355	300	36	36	40	2260	2110	49	357	621	718	674
16	180	200	35	45	39	1890	2120	40	335	724	838	88
17	304	51	36	40	38	1670	2150	39	334	630	1020	52
18	335	330	36	39	39	1490	2010	39	334	508	1000	125
19	454	406	36	38	40	1330	1800	39	333	639	1070	254
20	560	300	36	39	40	1200	1600	32	331	576	1020	367
21	502	370	36	44	40	1110	1420	31	331	547	986	234
22	590	251	36	44	41	991	1280	31	334	566	1030	61
23	610	52	36	42	75	842	1120	32	333	605	1140	46
24	766	37	36	47	53	799	760	56	332	594	952	45
25	778	179	36	66	44	1320	436	265	369	683	927	45
26	634	60	36	50	50	1910	318	1950	566	922	1050	45
27	265	37	56	46	45	1990	301	3550	610	1020	1020	45
28	49	47	39	44	44	1770	623	3630	617	666	1010	316
29	37	37	36	42	---	1640	801	3380	563	627	1060	395
30	37	36	36	74	---	1570	844	3170	333	832	1050	75
31	37	---	36	44	---	1420	---	2740	---	812	1130	---
TOTAL	18252	4467	1132	1383	1183	76467	39293	28101	20903	20723	28184	8127
MEAN	589	149	36.5	44.6	42.3	2467	1310	906	697	668	909	271
MAX	1260	406	56	74	75	10800	2150	3630	2240	1040	1270	1200
MIN	37	36	35	36	38	44	301	31	323	333	489	45
CAL YR 1978 TOTAL	268128		MEAN 735	MAX 6400	MIN 35							
WTR YR 1979 TOTAL	248215		MEAN 680	MAX 10800	MIN 31							

DELAWARE RIVER BASIN

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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.--Temperature recorder since October 1962.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No data reported for May 14-25, Sept. 6-13, 17, 23, 26, 27, due to excessive effect of solar radiation on probe at low stages. No record Feb. 27 to Mar. 1, July 28 to Sept. 5, Sept. 24, 25, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1963-78), 30.5°C July 2, 1963; minimum, freezing point on many days during winter periods, except 1969 and 1973.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	17.5	14.5	16.0	8.0	5.5	6.5	---	---	---	---	---	---
2	18.5	16.0	17.0	6.5	5.0	5.5	---	---	---	---	---	---
3	17.5	16.0	17.0	8.0	5.0	6.5	---	---	---	---	---	---
4	19.0	16.0	17.0	7.5	5.0	6.0	---	---	---	---	---	---
5	19.0	16.0	17.0	6.0	5.0	5.5	---	---	---	---	---	---
6	19.5	15.5	18.0	6.5	5.0	5.5	---	---	---	---	---	---
7	20.5	18.0	19.0	8.0	5.0	6.0	---	---	---	---	---	---
8	21.0	19.5	20.0	7.5	5.0	6.0	---	---	---	---	---	---
9	21.0	19.0	20.0	7.0	5.5	6.0	---	---	---	---	---	---
10	20.5	19.0	19.5	7.5	5.5	6.0	---	---	---	---	---	---
11	19.5	15.0	18.0	7.0	5.5	6.0	---	---	---	---	---	---
12	16.5	13.5	15.5	6.5	5.5	6.0	---	---	---	---	---	---
13	14.0	8.5	10.5	8.0	5.5	6.5	---	---	---	---	---	---
14	10.5	8.0	9.0	8.0	5.5	6.5	---	---	---	11.5	8.0	9.5
15	8.5	6.0	7.0	8.0	5.5	6.5	---	---	---	9.0	7.5	8.0
16	8.0	5.0	6.0	7.0	5.5	6.0	---	---	---	12.5	7.0	9.5
17	8.5	5.0	6.5	8.0	5.5	6.5	---	---	---	---	---	---
18	6.5	5.0	5.5	7.5	5.5	6.0	---	---	---	10.0	7.5	9.0
19	7.5	4.5	6.0	7.5	5.5	6.0	---	---	---	10.0	6.5	8.0
20	9.0	4.5	6.0	8.0	5.5	6.5	---	---	---	9.5	6.5	7.5
21	8.0	4.5	6.0	7.5	5.5	6.5	---	---	---	9.0	7.0	8.0
22	7.0	5.0	5.5	7.5	5.5	6.5	---	---	---	11.5	8.5	9.5
23	7.0	5.0	5.5	7.5	5.5	6.0	---	---	---	---	---	---
24	6.0	5.0	5.5	7.5	5.5	6.5	---	---	---	---	---	---
25	8.0	4.5	6.0	8.0	5.5	6.5	---	---	---	---	---	---
26	8.0	5.0	6.0	7.0	6.0	6.5	---	---	---	---	---	---
27	7.5	5.0	6.0	6.0	5.5	6.0	---	---	---	---	---	---
28	6.5	5.0	5.5	---	---	---	---	---	---	8.5	7.5	7.5
29	8.5	5.0	6.0	---	---	---	---	---	---	9.0	7.5	8.0
30	7.5	5.5	6.0	---	---	---	---	---	---	10.0	8.5	9.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	21.0	4.5	11.0	8.0	5.0	6.0	---	---	---	12.5	6.5	8.5

DELAWARE RIVER BASIN

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01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY

LOCATION.--Lat 42°10'28", long 75°26'25", Broome County, Hydrologic Unit 02040101, on left bank 20 ft (6 m) downstream from culvert on North Sanford Road, 0.2 mi (0.3 km) upstream from outlet of Stilson Pond, 1.5 mi (2.4 km) north of North Sanford, and 4.1 mi (6.6 km) upstream from Dry Brook. Water-quality sampling site at discharge station.

DRAINAGE AREA.--4.71 mi² (12.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,480 ft (451 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor. Some regulation at low flow by dam above station.

AVERAGE DISCHARGE.--10 years, 9.49 ft³/s (0.269 m³/s), 27.26 in/yr (692 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 393 ft³/s (11.1 m³/s) Mar. 5, 1979, gage height, 3.03 ft (0.924 m) from rating curve extended above 100 ft³/s (2.83 m³/s); minimum discharge, 0.08 ft³/s (0.002 m³/s) Oct. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft³/s (3.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1015	195 5.52	2.36 0.719	May 26	0430	196 5.55	2.30 0.701
Mar. 5	1145	*393 11.1	*3.03 .924				

Minimum discharge, 0.47 ft³/s (0.013 m³/s) Oct. 5, 6, 7, 8; minimum gage height, 0.38 ft (0.116 m) Oct. 1, 2, 3, 4, 5, 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.77	1.5	15	9.0	11	15	11	12	1.0	1.0	1.3
2	.52	.70	1.5	158	8.0	14	14	9.3	9.3	1.0	1.1	1.3
3	.52	.70	1.4	63	7.4	13	13	8.6	8.2	1.0	1.0	1.6
4	.58	.70	1.7	40	6.8	21	11	12	7.5	1.0	1.0	1.4
5	.47	.64	2.3	35	6.6	237	13	10	6.9	1.0	1.0	1.2
6	.58	.64	3.4	30	6.2	191	11	8.6	6.2	1.0	1.0	2.8
7	.47	.64	4.5	25	5.8	57	10	7.9	5.6	1.0	1.1	3.4
8	.52	.64	5.4	20	5.4	35	9.7	7.5	5.1	1.0	1.1	3.8
9	.52	.64	13	17	5.0	24	17	7.2	4.6	1.0	1.1	3.6
10	.52	5.1	16	14	4.5	24	26	6.9	4.1	1.0	1.1	3.2
11	.52	15	11	12	4.0	36	24	7.5	3.6	1.0	1.1	2.8
12	.52	15	9.0	10	3.7	23	22	7.2	3.4	1.0	1.2	2.2
13	.52	7.4	8.0	9.0	3.3	18	19	6.9	3.0	1.0	1.2	2.1
14	.94	1.4	7.4	8.4	3.0	19	20	6.5	2.6	1.0	1.2	2.1
15	.70	1.3	7.0	8.0	2.8	18	19	5.9	2.2	.90	1.1	2.4
16	.70	1.3	6.4	7.8	2.6	14	20	5.6	2.1	.90	1.2	2.2
17	.64	1.4	6.0	7.6	2.3	12	22	5.1	1.9	.90	1.2	2.1
18	.52	2.0	5.2	7.4	2.1	10	17	4.6	1.6	1.0	1.2	1.8
19	.58	1.7	4.8	7.0	2.0	9.3	14	4.1	1.4	.90	1.2	1.6
20	.64	1.7	4.5	7.0	1.9	8.9	12	3.8	1.2	.90	1.2	1.5
21	.58	1.5	7.0	11	1.8	8.9	9.7	3.4	1.1	1.0	1.1	1.5
22	.58	1.5	6.0	30	1.8	9.3	8.9	3.0	1.1	.81	1.3	1.8
23	.58	1.5	5.4	19	2.1	10	8.2	3.0	1.1	.81	1.3	1.9
24	.58	1.7	5.0	18	3.4	14	7.9	14	1.0	.81	1.3	1.8
25	.58	1.7	4.7	77	5.7	40	7.5	70	1.0	.81	1.3	1.5
26	.64	1.5	4.5	36	8.2	41	7.2	163	1.0	.81	1.3	1.4
27	1.7	1.5	4.2	23	10	24	9.7	73	1.0	.81	1.3	1.2
28	1.0	1.5	3.9	19	10	18	22	48	1.0	.81	1.3	1.2
29	.94	1.5	3.7	16	---	21	16	32	1.0	.81	1.3	1.9
30	.85	1.5	3.6	14	---	21	13	23	1.0	.81	1.3	2.2
31	.77	---	3.5	13	---	18	---	17	---	.81	1.3	---
TOTAL	20.30	74.77	171.5	777.2	135.4	1020.4	438.8	595.6	102.8	28.60	36.4	60.8
MEAN	.65	2.49	5.53	25.1	4.84	32.9	14.6	19.2	3.43	.92	1.17	2.03
MAX	1.7	15	16	158	10	237	26	163	12	1.0	1.3	3.8
MIN	.47	.64	1.4	7.0	1.8	8.9	7.2	3.0	1.0	.81	1.0	1.2
CFSM	.14	.53	1.17	5.33	1.03	6.99	3.10	4.08	.73	.20	.25	.43
IN.	.16	.59	1.35	6.14	1.07	8.06	3.46	4.70	.81	.23	.29	.48

CAL YR 1978 TOTAL 2824.56 MEAN 7.74 MAX 99 MIN .47 CFSM 1.64 IN 22.30
WTR YR 1979 TOTAL 3462.57 MEAN 9.49 MAX 237 MIN .47 CFSM 2.02 IN 27.34

DELAWARE RIVER BASIN

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1971 (c), 1972 (a), 1973-74 (c), 1975 (d), 1976-79 (c).

NUTRIENT DATA: 1971, 1974 (c); 1975 (b); 1976-79 (c).

BIOLOGICAL DATA: 1974 (a), 1975-79 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1970 to current year.

INSTRUMENTATION.--Temperature recorder since October 1970.

REMARKS.--No temperature record Jan. 3-18, 26-31, Feb. 1-28, Mar. 1-14, May 1-3, June 19-21, and Sept. 5, 6, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1971-75, 1977-79), 21.0°C June 30, July 1, 1971, July 23, 24, 1972; minimum (except water year 1979), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 18.0°C Sept. 3, 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT 17...	1450	.71	80	6.4	7.5	1.0	12.1	99	K7	K18	33	4
MAR 22...	1730	9.3	47	6.6	3.5	3.0	13.2	100	48	K12	15	9
APR 05...	0900	14	46	6.0	4.0	--	13.0	100	27	20	--	--
MAY 31...	1645	15	48	6.8	13.0	5.0	10.7	101	K30	K14	16	6
JUN 21...	1030	1.1	67	6.4	11.5	4.0	10.8	101	K2	68	24	7
JUL 11...	1130	1.0	71	6.7	13.5	2.0	10.8	103	<1	1000	26	5
AUG 14...	1300	1.1	73	6.6	14.5	4.0	10.0	100	K22	K8	27	4
SEP 27...	0900	1.3	67	7.0	11.5	2.0	10.6	100	K4	K12	28	1

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 (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)
OCT 17...	9.4	2.3	2.5	.9	29	9.5	2.2	.1	3.0	49	47
MAR 22...	4.1	1.1	2.0	.6	6	7.6	3.2	.0	3.1	32	25
APR 05...	--	--	--	--	--	--	--	--	--	--	--
MAY 31...	4.4	1.1	1.8	.3	10	9.0	2.2	.0	3.0	32	28
JUN 21...	7.1	1.6	2.1	.5	17	7.4	2.4	.1	3.3	46	35
JUL 11...	7.5	1.7	2.2	.6	21	7.4	2.4	.0	3.3	46	38
AUG 14...	8.3	1.6	1.9	.6	23	6.1	1.9	.1	3.4	50	38
SEP 27...	8.1	1.8	2.6	.7	27	8.2	2.7	.1	2.6	48	43

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

DELAWARE RIVER BASIN

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01425675 QUAGA CREEK NEAR NORTH SANFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 17...	0	.08	.00	.08	.00	.16	.16	.24	.01	.00	.00
MAR 22...	0	.18	.00	.18	.00	.06	.06	.24	.01	.00	.00
APR 05...	--	.14	.00	.14	.00	.07	.07	.21	.01	.01	--
MAY 31...	8	.11	.00	.11	.01	.21	.22	.33	.03	.00	--
JUN 21...	9	.20	.01	.21	.02	.10	.12	.33	.01	.00	.00
JUL 11...	5	.24	.01	.25	.00	.14	.14	.39	.01	.00	.00
AUG 14...	3	.31	.00	.31	.01	.04	.05	.36	.01	.00	.00
SEP 27...	0	.16	.01	.17	.01	.15	.16	.33	.01	.00	.00

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DELAWARE RIVER BASIN

01425675 OQUAGA CREEK NEAR NORTH SANFORD, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.5	3.5	---	---	13.5	13.0	14.0	13.5	16.0	15.0	17.0	16.0
2	4.0	3.5	---	---	13.5	13.0	14.0	13.5	15.5	15.0	17.0	17.0
3	4.0	4.0	---	---	13.0	12.0	14.0	13.5	15.0	14.5	18.0	17.0
4	4.0	4.0	8.0	7.0	12.0	12.0	13.5	11.5	15.0	14.5	18.0	16.5
5	4.0	4.0	8.0	8.0	12.0	12.0	12.0	11.5	15.0	14.5	---	---
6	4.0	4.0	8.5	8.0	12.0	12.0	13.0	11.0	15.5	14.5	---	---
7	4.0	3.5	8.5	8.0	13.0	12.0	13.5	11.5	14.5	13.5	16.5	16.0
8	3.5	3.5	8.5	8.0	12.0	12.0	14.0	11.5	15.0	14.5	15.5	15.0
9	3.5	3.0	9.0	8.0	12.0	12.0	14.0	12.0	15.0	14.5	15.0	15.0
10	3.0	3.0	9.5	8.5	12.0	12.0	13.5	13.0	15.5	14.5	15.5	15.0
11	3.5	3.0	9.0	9.0	12.0	11.0	14.0	13.5	15.5	14.5	15.5	14.5
12	4.0	3.5	9.0	9.0	11.0	10.5	15.0	13.5	14.5	14.0	14.5	14.0
13	4.5	3.5	9.0	9.0	11.0	10.5	15.0	13.5	14.5	14.0	15.0	14.5
14	4.5	4.5	9.0	9.0	11.5	10.5	16.0	14.0	14.5	14.0	15.5	15.0
15	4.5	4.5	9.5	9.0	12.0	11.0	16.0	14.5	14.5	14.0	15.5	14.5
16	4.5	4.5	9.0	9.0	12.0	11.5	15.5	15.0	14.5	14.0	14.5	14.0
17	4.5	4.5	10.0	9.0	13.0	11.5	15.5	14.5	14.0	13.0	14.5	14.0
18	5.0	4.5	10.0	9.5	12.0	11.5	15.0	14.5	14.0	14.0	14.5	14.0
19	5.0	4.5	10.0	10.0	---	---	15.5	14.0	15.0	14.0	14.5	13.0
20	5.5	5.0	11.0	10.0	---	---	15.5	14.0	15.0	14.5	13.0	11.5
21	6.0	5.5	10.5	10.5	---	---	16.0	14.5	15.5	14.5	13.0	13.0
22	6.5	6.0	10.5	10.0	13.5	12.0	16.0	15.5	15.5	14.5	13.0	13.0
23	6.5	6.5	10.0	9.5	13.0	12.0	15.5	15.0	15.5	15.0	13.0	12.0
24	6.5	6.5	13.0	10.0	12.0	11.5	16.0	15.0	15.5	15.5	12.0	11.5
25	6.5	6.5	13.5	13.0	13.0	10.5	16.0	15.5	16.5	15.5	13.0	11.5
26	6.5	6.5	13.5	13.5	13.5	10.5	15.5	15.0	16.5	15.5	13.0	12.0
27	7.0	6.5	13.5	13.0	13.5	11.5	15.0	14.5	16.5	16.0	12.0	11.5
28	9.0	8.0	13.0	13.0	13.0	12.0	14.5	14.0	16.5	16.0	13.0	12.0
29	9.0	8.5	13.0	13.0	13.5	11.5	14.5	14.0	17.0	16.5	13.0	12.0
30	8.5	8.0	13.0	13.0	13.5	13.0	14.5	13.5	17.0	16.5	13.5	13.0
31	---	---	13.0	13.0	---	---	16.0	14.5	17.0	16.0	---	---
MONTH	9.0	3.0	13.5	7.0	13.5	10.5	16.0	11.0	17.0	13.0	18.0	11.5

DELAWARE RIVER BASIN

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01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY

LOCATION.--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 (14 km) upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--593 mi² (1,536 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 756: Drainage area. WSP 871: 1916.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft (288.481 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1928, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to October 1963, entire flow from 454 mi² (1,176 km²) 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft³/s (818 m³/s) Mar. 22, 1948, gage height, 15.69 ft (4.782 m); maximum gage height, 15.8 ft (4.82 m) Sept. 30, 1924, from graph based on gage readings; minimum discharge, 17 ft³/s (0.48 m³/s) Oct. 20, 1963; minimum gage height, 1.03 ft (0.314 m) Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft (6.19 m), from floodmarks, discharge, about 46,000 ft³/s (1,300 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,800 ft³/s (419 m³/s) Mar. 6, gage height, 12.21 ft (3.722 m); minimum, 57 ft³/s (1.61 m³/s) Sept. 13, 14, gage height, 1.30 ft (0.396 m); minimum daily, 60 ft³/s (1.70 m³/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	982	133	137	1000	330	620	1680	1260	2420	376	793	1130
2	1100	120	125	3000	310	600	1560	1270	2180	570	770	1110
3	1220	111	131	1730	290	580	1540	1170	2110	389	683	989
4	1150	105	172	700	270	580	1480	1350	1820	368	815	838
5	989	98	224	580	240	4500	1550	1250	1550	635	635	96
6	641	94	184	500	220	14100	1480	1120	1330	781	678	319
7	529	90	173	470	200	11000	1400	1010	1150	550	748	210
8	620	94	199	500	190	7270	1330	897	927	580	815	111
9	885	90	608	450	190	5050	1560	781	737	726	1130	85
10	903	243	450	380	180	4020	2030	595	615	748	1190	72
11	903	372	350	320	180	4330	2140	442	534	815	927	64
12	939	376	300	280	170	3810	2180	304	451	1020	678	72
13	705	376	293	300	170	3200	2190	226	590	1010	442	60
14	630	363	262	310	170	2890	2270	176	534	656	615	489
15	555	359	230	500	160	2690	2400	141	451	635	699	815
16	236	304	200	470	160	2240	2450	120	410	748	815	168
17	389	109	196	450	150	2000	2510	109	402	641	958	74
18	393	410	180	430	150	1790	2300	100	397	524	970	133
19	519	651	170	410	150	1600	2030	98	393	662	1030	243
20	662	461	220	390	150	1460	1800	90	389	600	976	393
21	630	461	380	380	140	1370	1610	81	384	560	939	359
22	635	470	320	370	140	1280	1440	77	393	605	976	233
23	683	165	280	360	140	1180	1280	103	397	600	1060	128
24	754	157	250	400	150	1220	995	715	384	635	951	92
25	827	339	240	2900	250	2450	683	1660	410	662	891	79
26	726	197	230	1360	800	2990	529	4540	595	856	989	72
27	776	320	220	873	700	2650	600	4760	635	982	1000	68
28	297	250	210	678	660	2250	1320	4330	646	721	964	312
29	200	146	200	540	---	2180	1250	3850	600	615	1010	529
30	165	137	200	465	---	2060	1180	3510	384	781	995	149
31	146	---	200	370	---	1840	---	2970	---	798	1050	---
TOTAL	20789	7601	7534	21866	7010	95800	48767	39105	24218	20849	27192	9492
MEAN	671	253	243	705	250	3090	1626	1261	807	673	877	316
MAX	1220	651	608	3000	800	14100	2510	4760	2420	1020	1190	1130
MIN	146	90	125	280	140	580	529	77	384	368	442	60
CAL YR 1978	TOTAL	368164	MEAN	1009	MAX	8090	MIN	90				
WTR YR 1979	TOTAL	330223	MEAN	905	MAX	14100	MIN	60				

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, except water years 1968 and 1978-79).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No data reported for May 14-23, Aug. 13, Sept. 5-14, 16-19, 23-28 due to excessive effect of solar radiation on probe at low stages. No record Oct. 1-Nov. 2, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-77, 1979), 30.5°C July 22, 23, 1972; minimum (water years 1968, 1978-79), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 23.5°C June 9; minimum recorded, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	19.0	14.5	16.5	14.5	9.5	12.0	11.5	7.0	9.0	12.5	8.0	9.5
2	19.0	16.0	17.5	11.5	8.0	9.5	11.5	7.5	9.5	11.0	8.5	9.5
3	18.0	16.0	17.0	17.0	7.0	11.5	13.5	7.5	10.0	13.5	8.5	10.0
4	20.5	15.5	17.5	12.5	7.0	9.5	13.5	7.0	9.5	12.5	8.5	10.5
5	20.0	16.0	18.0	9.5	6.0	8.0	14.5	7.0	10.0	---	---	---
6	20.0	16.0	18.0	11.0	5.0	8.0	13.0	7.0	9.5	---	---	---
7	22.0	17.5	19.5	15.0	5.5	9.5	12.5	6.5	9.0	---	---	---
8	22.0	18.5	20.5	14.0	6.0	9.5	12.5	7.0	9.5	---	---	---
9	23.5	19.0	21.0	12.5	6.0	8.5	11.5	6.5	8.5	---	---	---
10	22.0	19.5	21.0	11.0	6.5	8.0	11.0	7.0	8.5	---	---	---
11	20.5	16.5	19.0	11.5	6.5	8.5	8.0	7.0	7.5	---	---	---
12	20.0	13.5	16.5	11.0	6.0	8.0	9.0	7.0	8.0	---	---	---
13	15.5	11.5	14.0	12.0	6.0	8.5	---	---	---	---	---	---
14	17.0	8.5	12.5	14.5	6.0	10.0	12.0	7.5	9.5	---	---	---
15	17.0	8.5	12.5	14.0	7.5	10.5	9.5	7.5	8.0	12.0	9.5	10.5
16	17.0	9.0	13.0	10.0	7.5	8.5	13.0	7.0	9.5	---	---	---
17	17.5	8.5	13.0	14.0	6.5	10.0	11.5	6.5	8.5	---	---	---
18	13.0	8.5	10.0	12.0	8.5	10.0	8.0	7.0	7.5	---	---	---
19	16.0	6.5	11.0	13.0	6.5	9.5	10.5	7.5	8.5	---	---	---
20	16.5	7.0	11.5	14.5	6.5	10.0	12.0	7.5	9.0	14.0	7.5	10.5
21	15.0	7.5	11.5	12.5	8.0	10.0	12.5	7.5	9.5	10.5	8.0	9.5
22	12.0	8.0	10.0	12.5	7.0	9.5	12.0	7.0	9.0	15.5	11.0	13.0
23	13.0	7.5	10.0	10.5	7.0	9.0	11.5	7.5	9.0	---	---	---
24	10.0	7.5	9.0	13.5	7.0	9.5	10.5	8.5	9.5	---	---	---
25	16.0	5.5	10.5	13.5	7.0	10.0	11.5	8.5	9.5	---	---	---
26	15.5	5.5	10.0	9.5	7.5	8.5	12.5	7.5	9.5	---	---	---
27	14.0	6.0	9.5	8.5	7.0	7.5	11.5	8.0	9.5	---	---	---
28	9.0	6.5	7.5	11.0	6.5	8.5	12.5	8.0	9.5	---	---	---
29	13.5	6.0	9.5	11.0	7.5	9.0	11.5	8.0	9.5	11.0	9.5	10.0
30	13.5	9.0	11.0	13.5	7.0	9.5	12.0	8.5	9.5	14.0	11.0	12.5
31	---	---	---	14.5	7.0	10.0	12.5	7.5	9.5	---	---	---
MONTH	23.5	5.5	14.0	17.0	5.0	9.5	14.5	6.5	9.0	15.5	7.5	10.5

DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'05", long 75°12'50", Delaware County, Hydrologic Unit 02040101, at Lordville-Equinunk Interstate Bridge at Lordville, 50 ft (15 m) downstream from Humphries Brook, and 6.5 mi (10.4 km) southeast of Hancock.

DRAINAGE AREA.--1,587 mi² (4,110 km²).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Jan. 2 to July 17, due to instrument damage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-70, 73, 1975-79) 30.5°C June 16, 1976; minimum (water years 1968-71, 74, 77, 78), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 23.0°C July 25.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DELAWARE RIVER BASIN

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01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1				---	---	---	21.0	19.0	19.5	16.0	14.0	15.5
2				---	---	---	19.5	18.0	19.0	16.0	15.0	15.5
3				---	---	---	21.5	19.0	20.0	15.5	14.0	15.0
4				---	---	---	21.5	19.0	20.0	16.5	15.5	16.0
5				---	---	---	21.0	18.0	19.5	18.5	15.5	17.0
6				---	---	---	21.0	19.0	20.0	21.5	18.5	20.0
7				---	---	---	19.0	16.0	18.0	20.5	18.5	19.5
8				---	---	---	17.5	16.5	17.0	20.0	18.0	19.0
9				---	---	---	18.5	15.5	16.5	19.5	16.0	18.0
10				---	---	---	16.0	14.5	15.0	20.0	16.5	18.0
11				---	---	---	15.5	13.0	14.0	20.5	17.5	19.0
12				---	---	---	13.0	12.0	12.5	21.0	17.0	19.0
13				---	---	---	18.0	12.0	14.5	21.0	18.0	19.0
14				---	---	---	17.5	15.0	16.5	20.5	19.0	19.5
15				---	---	---	15.0	13.5	14.5	19.5	15.0	16.5
16				---	---	---	15.5	12.0	13.5	16.5	14.0	15.5
17				---	---	---	16.0	13.0	14.5	19.5	16.0	17.5
18				21.5	19.5	20.0	14.5	11.5	13.0	21.0	17.5	18.5
19				21.5	18.5	20.0	14.0	11.5	12.5	19.5	16.5	18.0
20				21.0	18.5	19.5	15.5	13.5	14.5	17.0	14.0	15.5
21				21.0	18.5	19.5	17.0	14.5	16.0	15.0	13.5	14.0
22				21.0	19.0	20.0	17.5	15.0	16.0	15.0	13.5	14.0
23				20.0	18.0	19.0	16.0	15.0	15.5	16.0	13.5	14.5
24				20.0	16.5	18.5	15.5	14.5	15.0	16.0	13.5	15.0
25				23.0	19.0	20.5	18.5	15.0	16.5	16.5	13.5	15.0
26				21.0	18.5	20.0	17.5	15.0	16.5	17.5	15.0	16.0
27				18.5	16.0	17.0	17.5	15.5	16.5	17.0	15.0	16.0
28				17.0	14.5	16.0	17.5	15.5	16.5	16.0	15.0	15.5
29				19.0	16.5	17.5	16.5	15.5	16.0	15.5	14.5	15.0
30				21.0	17.0	19.0	17.5	15.0	16.0	14.5	14.0	14.5
31				20.5	18.0	19.5	16.5	15.0	16.0	---	---	---
MONTH				23.0	14.5	19.0	21.5	11.5	16.0	21.5	13.5	16.5

DELAWARE RIVER BASIN

01427500 CALLICOON CREEK AT CALLICOON, NY

LOCATION.--Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank 0.7 mi (1.1 km) southeast of Callicoon, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) west of Hortonville.

DRAINAGE AREA.--111 mi² (287 km²).

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

GAGE.--Water-stage recorder. Concrete control since July 1944. Datum of gage is 759.84 ft (231.599 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation by small pond above station.

AVERAGE DISCHARGE.--39 years, 180 ft³/s (5.098 m³/s), 22.02 in/yr (559 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) Aug. 17, 1947, gage height, 9.68 ft (2.950 m), from rating curve extended above 5,100 ft³/s (144 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.0 ft³/s (0.11 m³/s) July 26, 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0830	3,370 95.4	5.27 1.606	Mar. 6	unknown	*4,060 115	*5.65 1.722
Jan. 25	0600	2,760 78.2	4.90 1.494	May 26	0615	2,290 64.9	4.58 1.396

Minimum discharge, 16 ft³/s (0.45 m³/s) Aug. 7, 8, 9, 10, Sept. 1, 2, 3, 4, 5, 6; minimum gage height, 1.15 ft (0.351 m) Aug. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	76	93	500	175	260	243	247	264	70	17	17
2	23	72	87	2720	136	240	252	207	215	118	19	16
3	20	69	82	1120	120	230	273	196	204	70	30	17
4	25	66	123	400	110	220	227	300	165	54	23	16
5	34	64	189	300	100	2000	291	211	139	47	18	16
6	145	61	133	250	96	3000	227	175	130	42	17	235
7	70	58	118	949	90	1200	196	155	116	38	16	125
8	54	63	162	857	82	600	171	139	108	35	16	72
9	48	61	644	457	74	450	401	128	101	32	16	50
10	43	58	429	230	70	500	623	120	97	31	16	38
11	39	55	250	190	66	760	481	116	121	30	20	35
12	36	54	200	160	62	420	359	111	116	29	40	29
13	35	51	170	140	60	329	300	127	97	27	51	25
14	207	50	150	120	58	334	524	115	87	26	31	30
15	136	50	139	110	56	286	475	93	79	25	26	46
16	93	50	120	100	54	211	364	103	76	25	23	31
17	85	53	105	98	52	196	310	89	70	27	19	25
18	70	111	92	92	52	178	256	85	64	31	23	23
19	61	93	80	88	50	161	215	108	61	34	38	25
20	67	78	106	86	49	155	189	110	55	26	30	23
21	60	70	235	450	48	151	171	97	53	25	24	34
22	53	67	193	785	47	155	155	89	53	24	20	200
23	48	67	140	396	47	155	145	139	64	23	23	103
24	44	106	120	369	90	380	133	942	54	29	25	70
25	42	142	110	1980	500	942	128	858	50	24	24	51
26	55	108	98	793	400	493	133	1320	44	24	20	42
27	231	95	90	487	330	339	569	801	42	27	26	34
28	125	95	82	374	280	264	762	724	42	24	27	31
29	103	89	76	305	---	310	417	543	50	22	23	46
30	89	92	72	247	---	314	310	512	50	20	20	46
31	82	---	66	215	---	273	---	349	---	19	18	---
TOTAL	2246	2224	4754	15368	3354	15506	9300	9309	2867	1078	739	1551
MEAN	72.5	74.1	153	496	120	500	310	300	95.6	34.8	23.8	51.7
MAX	231	142	644	2720	500	3000	762	1320	264	118	51	235
MIN	20	50	66	86	47	151	128	85	42	19	16	16
CFSM	.65	.67	1.38	4.47	1.08	4.51	2.79	2.70	.86	.31	.21	.47
IN.	.75	.75	1.59	5.15	1.12	5.20	3.12	3.12	.96	.36	.25	.52

CAL YR 1978 TOTAL 70733 MEAN 194 MAX 4500 MIN 17 CFSM 1.75 IN 23.70
WTR YR 1979 TOTAL 68296 MEAN 187 MAX 3000 MIN 16 CFSM 1.69 IN 22.89

DELAWARE RIVER BASIN

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01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'30", Wayne County, Pennsylvania, Hydrologic Unit 02040101, on right bank, 0.5 mi (0.8 km) downstream from Callicoon Creek, 0.5 mi (0.8 km) downstream from Interstate Bridge 7, and 0.8 mi (1.1 km) southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,882 mi² (4,719 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map (nearest 20 ft).

REMARKS.--Records fair except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,400 ft³/s (1,597 m³/s) Mar. 14, 1977, gage height, 11.49 ft (3.502 m), minimum 335 ft³/s (9.49 m³/s) Sept. 13, 1977, gage height, 2.20 ft (0.671 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,000 ft³/s (1,359 m³/s) Mar. 6; maximum gage height, 14.83 ft (4.520 m) Jan. 9 (ice jam); minimum, 469 ft³/s (13.3 m³/s) Sept. 14; minimum gage height, 2.42 ft (0.738 m), Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	1220	912	1500	2000	3300	5630	5270	7410	822	1040	1320
2	1080	1200	881	16000	1500	3400	5310	4680	5080	928	1240	1300
3	1360	1200	808	19100	1400	3700	5310	4190	6260	1120	1310	1390
4	1330	1220	866	8120	1400	4000	4850	5030	5200	822	1100	1260
5	1360	1220	1380	5410	1300	13000	4960	4850	4330	752	1080	905
6	1450	1220	1500	4260	1300	43500	4680	4190	3730	977	912	1180
7	1030	1180	1310	3700	1200	27700	4300	3730	3170	1080	881	5720
8	1040	1140	1380	6600	1200	17100	3970	3310	2700	822	960	2170
9	977	1160	3770	4500	1100	11800	4610	2930	2300	851	960	1090
10	1160	1120	5450	3500	1100	9710	6470	2580	1980	944	1330	780
11	1220	1100	3800	2400	1100	12500	6610	2170	1800	1100	1380	640
12	1200	1140	2900	1900	1000	10000	6290	1740	1830	1060	1290	543
13	1180	1140	2400	1800	1000	8000	6180	1580	1630	1270	1010	510
14	1380	1120	2200	2500	980	7060	6540	1450	1500	1220	993	489
15	2100	1100	1900	2100	960	6740	7540	1270	1290	881	897	1500
16	1430	1030	1700	1800	940	5590	7230	1160	1160	960	1010	1360
17	1030	752	1600	1600	920	5100	7030	1040	1060	1430	1030	707
18	1010	752	1200	1400	900	4540	6430	928	1010	1080	1200	543
19	993	1500	1100	2400	880	4120	5700	928	960	912	1290	532
20	1120	1480	1100	2000	860	3830	5030	1010	912	993	1380	590
21	1200	1220	1600	3000	1000	3630	4500	977	851	851	1330	735
22	1080	1220	2500	5000	1000	3560	3970	866	837	897	1240	1450
23	1120	1080	1800	4700	1100	3600	3520	960	912	897	1200	2240
24	1060	897	1400	4000	2300	4120	3000	5070	881	1010	1350	1240
25	1180	1220	1100	14000	2600	10900	2530	13400	822	977	1120	909
26	1180	1360	1200	9990	2800	10600	2270	22800	822	1010	1180	765
27	2400	944	1300	6540	2900	8550	4040	19800	944	1270	1370	680
28	2560	881	1200	5140	3200	7190	9160	16000	960	1290	1240	614
29	1690	1100	1100	4190	---	6670	7230	13600	1040	960	1260	943
30	1330	977	1100	3450	---	6740	6010	12000	960	928	1270	1130
31	1160	---	1100	3030	---	6110	---	9480	---	1080	1240	---
TOTAL	40630	33893	53557	155630	39940	276360	160900	168989	65341	31194	36093	35235
MEAN	1311	1130	1728	5020	1426	8915	5363	5451	2178	1006	1164	1175
MAX	2560	1500	5450	19100	3200	43500	9160	22800	7410	1430	1380	5720
MIN	977	752	808	1400	860	3300	2270	866	822	752	881	489

CAL YR 1978 TOTAL 1055777 MEAN 2893 MAX 30000 MIN 564
WTR YR 1979 TOTAL 1097762 MEAN 3008 MAX 43500 MIN 489

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.--Temperature recorder since June 1975.

REMARKS.--No record Oct. 1 to Nov. 3, Nov. 9 to Dec. 6, Jan. 20 to Mar. 9, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1976-79), 28.0°C July 16, 20, 1977; minimum freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 24.5°C June 17, July 19, 31, Aug. 1, 4; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1				---	---	---	---	---	---	.0	.0	.0
2				---	---	---	---	---	---	.0	.0	.0
3				---	---	---	---	---	---	.0	.0	.0
4				6.5	6.0	6.5	---	---	---	.0	.0	.0
5				6.5	6.0	6.5	---	---	---	.0	.0	.0
6				6.0	6.0	6.0	---	---	---	.0	.0	.0
7				6.0	6.0	6.0	1.0	.5	1.0	.0	.0	.0
8				6.0	6.0	6.0	2.5	1.0	1.5	.0	.0	.0
9				---	---	---	2.5	2.5	2.5	.0	.0	.0
10				---	---	---	2.5	.0	1.5	.0	.0	.0
11				---	---	---	.0	.0	.0	.0	.0	.0
12				---	---	---	.0	.0	.0	.0	.0	.0
13				---	---	---	.0	.0	.0	.0	.0	.0
14				---	---	---	.0	.0	.0	.0	.0	.0
15				---	---	---	.0	.0	.0	.0	.0	.0
16				---	---	---	.0	.0	.0	.0	.0	.0
17				---	---	---	.0	.0	.0	.0	.0	.0
18				---	---	---	.0	.0	.0	.0	.0	.0
19				---	---	---	.0	.0	.0	.0	.0	.0
20				---	---	---	.0	.0	.0	---	---	---
21				---	---	---	.0	.0	.0	---	---	---
22				---	---	---	.0	.0	.0	---	---	---
23				---	---	---	.0	.0	.0	---	---	---
24				---	---	---	.0	.0	.0	---	---	---
25				---	---	---	.0	.0	.0	---	---	---
26				---	---	---	.0	.0	.0	---	---	---
27				---	---	---	.0	.0	.0	---	---	---
28				---	---	---	.0	.0	.0	---	---	---
29				---	---	---	.0	.0	.0	---	---	---
30				---	---	---	.0	.0	.0	---	---	---
31				---	---	---	.0	.0	.0	---	---	---
MONTH				6.5	6.0	6.0	2.5	.0	.5	.0	.0	.0

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	16.5	14.5	15.5	20.5	18.0	19.0	24.5	21.0	22.5	19.0	15.5	17.5
2	16.5	16.0	16.0	20.5	18.0	19.5	23.5	20.5	22.0	18.0	16.0	17.0
3	17.0	16.0	16.5	22.0	18.5	20.5	23.5	19.5	21.5	18.0	16.0	17.0
4	18.0	16.0	17.0	19.5	17.5	18.0	24.5	20.0	22.5	19.5	15.5	17.5
5	20.0	17.0	18.0	17.5	15.5	16.5	24.0	20.0	22.5	18.5	17.0	18.0
6	19.0	17.5	18.0	18.0	14.5	16.5	23.0	20.0	21.5	19.5	18.0	18.5
7	20.0	17.0	18.5	19.5	14.0	17.0	22.5	18.5	20.5	19.0	18.0	18.5
8	20.5	18.5	19.5	21.0	15.0	18.0	21.5	18.5	20.0	19.0	16.5	18.0
9	21.5	19.0	20.0	22.5	17.5	20.0	21.5	17.5	19.5	19.0	14.5	17.0
10	21.5	20.0	20.5	21.0	19.0	20.0	20.0	17.5	19.0	19.0	15.0	17.0
11	20.0	16.5	18.5	22.0	18.5	20.0	18.0	15.5	16.5	19.5	16.5	18.0
12	18.0	15.0	16.0	21.5	18.0	20.0	15.0	13.0	14.0	19.5	15.5	17.5
13	18.5	14.0	16.0	23.0	18.0	20.5	17.0	12.0	14.5	19.0	16.0	18.0
14	20.5	14.0	17.5	23.0	18.5	20.5	17.0	14.5	15.5	19.0	18.0	18.5
15	21.5	15.5	19.0	23.5	19.5	21.5	16.0	14.0	15.0	18.5	16.0	17.5
16	24.0	18.5	21.5	23.0	21.5	22.0	17.5	13.0	15.0	17.0	13.5	15.0
17	24.5	20.0	22.5	24.0	20.0	22.0	17.5	12.5	15.0	18.0	14.0	16.0
18	22.0	19.5	21.0	22.5	20.0	20.5	15.5	13.5	14.5	18.5	15.5	17.0
19	22.5	17.5	20.0	24.5	19.0	21.5	16.0	13.0	14.5	17.5	14.5	16.5
20	23.0	17.0	20.5	23.5	20.5	22.0	17.5	13.5	15.5	16.0	13.0	14.5
21	23.0	18.0	20.5	23.5	20.0	22.0	19.5	14.5	17.0	14.5	13.0	13.5
22	20.5	19.0	19.5	23.5	20.0	22.0	20.5	16.0	18.0	14.0	13.5	13.5
23	20.0	18.0	18.5	23.0	20.0	21.5	19.0	16.5	18.0	15.0	12.5	13.5
24	17.5	15.0	16.0	24.0	20.0	21.5	18.0	16.5	17.0	15.0	12.0	13.5
25	19.0	13.5	16.5	23.5	20.0	22.0	19.5	16.0	17.5	15.0	12.0	13.5
26	21.0	15.0	18.0	23.5	21.0	22.5	21.0	16.5	18.5	16.0	13.0	14.5
27	22.0	16.0	19.5	23.5	20.5	22.0	20.0	18.0	19.0	16.5	13.0	15.0
28	18.5	17.0	18.0	21.5	18.0	20.0	20.0	17.0	18.5	15.5	14.0	14.5
29	20.5	16.5	18.5	19.0	17.5	18.5	18.5	17.5	18.0	16.0	14.5	15.0
30	19.0	17.0	18.0	23.5	18.0	20.0	19.0	17.0	18.0	15.0	14.0	14.5
31	---	---	---	24.5	20.5	22.0	20.0	16.0	18.0	---	---	---
MONTH	24.5	13.5	18.5	24.5	14.0	20.5	24.5	12.0	18.0	19.5	12.0	16.0

DELAWARE RIVER BASIN

01427705 DELAWARE RIVER AT SKINNERS FALLS, NY

LOCATION.--Lat 41°40'12", long 75°03'28", Sullivan County, Hydrologic Unit 02040101, at Skinners Falls Interstate Bridge No. 5 at Skinners Falls, 1,000 ft (305 m) downstream from Calkins Creek, and 5.3 miles (8.5 km) north of Narrowsburg.

DRAINAGE AREA.--1,902 mi² (4,926 km²).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to July 1970, June to September 1971, August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record May 30 to June 6, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 31.5°C Aug. 2, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C Aug. 1, 4; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.5	13.0	13.5	9.0	7.0	8.0	1.0	.0	.5	.5	.0	.0
2	14.5	12.5	13.5	8.5	6.0	7.5	1.0	.0	.5	.5	.0	.0
3	13.5	11.0	12.5	8.5	6.0	7.5	.5	.0	.0	1.0	.0	.5
4	13.0	11.5	12.0	7.5	6.5	7.0	1.0	.0	.5	.0	.0	.0
5	14.0	12.0	13.0	8.0	6.5	7.5	2.0	1.0	1.5	.0	.0	.0
6	15.5	13.0	14.0	9.0	7.0	8.0	2.5	.5	1.5	.0	.0	.0
7	14.5	13.0	13.5	8.5	7.5	8.0	2.0	1.0	1.5	.5	.0	.0
8	13.0	11.5	12.0	8.0	7.5	8.0	3.5	2.0	2.5	.0	.0	.0
9	12.5	9.5	11.0	8.5	6.5	7.5	3.5	3.0	3.5	.0	.0	.0
10	12.5	9.5	11.0	8.0	6.0	7.0	2.5	.5	1.5	.0	.0	.0
11	14.0	11.0	12.5	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
12	14.5	13.0	13.5	7.0	6.5	7.0	.5	.0	.0	.0	.0	.0
13	15.0	13.0	14.0	6.5	5.5	6.0	1.0	.0	.5	.0	.0	.0
14	14.0	11.5	13.0	7.5	5.5	6.5	1.5	.5	.5	.0	.0	.0
15	11.5	9.5	10.5	7.5	6.0	7.0	.5	.0	.0	.0	.0	.0
16	10.0	8.0	9.0	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
17	10.5	8.0	9.5	6.5	5.5	5.5	1.0	.0	.5	.0	.0	.0
18	9.0	7.0	8.0	8.0	6.0	7.0	.0	.0	.0	.0	.0	.0
19	9.0	8.0	8.5	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
20	10.0	8.5	9.0	6.5	5.5	6.0	.0	.0	.0	.0	.0	.0
21	11.0	8.0	9.5	6.0	4.0	5.0	.5	.0	.0	.0	.0	.0
22	12.0	9.0	10.5	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
23	11.5	10.5	11.0	3.5	2.0	3.0	1.0	.0	.5	.0	.0	.0
24	10.5	8.0	9.5	3.0	2.0	2.5	.5	.0	.5	.0	.0	.0
25	10.0	7.5	9.0	3.5	2.5	3.0	.5	.0	.5	.5	.0	.0
26	10.0	9.0	9.5	2.0	.5	1.0	.5	.0	.5	1.0	.5	.5
27	10.5	9.5	10.0	.5	.0	.5	.5	.0	.5	1.5	1.0	1.0
28	10.0	8.5	9.5	1.5	.0	.5	1.0	.0	.5	1.5	1.5	1.5
29	10.0	8.0	9.0	.0	.0	.0	1.0	.0	.5	1.5	1.0	1.5
30	9.0	7.0	8.0	1.0	.0	.5	.0	.0	.0	1.0	.5	.5
31	9.0	6.5	8.0	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	15.5	6.5	11.0	9.0	.0	5.5	3.5	.0	.5	1.5	.0	.0

01427705 DELAWARE RIVER AT SKINNERS FALLS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11" (revised), Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi (2.6 km) upstream from Lackawaxen River, and 4.6 mi (7.4 km) northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,023 mi² (5,240 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft³/s (3,680 m³/s) Aug. 19, 1955, gage height, 26.40 ft (8.047 m) from floodmarks in gage house, from rating curve extended above 55,000 ft³/s (1,560 m³/s) on basis of slope-area measurement at gage height 23.19 ft (7.068 m); minimum, 122 ft³/s (3.46 m³/s) Sept. 5, 1953, gage height, 1.11 ft (0.338 m); minimum daily, 126 ft³/s (3.57 m³/s) Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,200 ft³/s (1,365 m³/s) Mar. 6, gage height, 15.14 ft (4.615 m); minimum, 600 ft³/s (16.99 m³/s) Sept. 15, gage height, 2.31 ft (0.704 m); minimum daily, 633 ft³/s (17.93 m³/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	1350	1140	1600	2840	3700	5990	5790	8450	934	1140	1300
2	1230	1350	1110	17000	1950	3900	5540	5060	6610	1020	1210	1400
3	1300	1350	1030	24700	1600	4100	5600	4480	6430	1050	1340	1390
4	1460	1410	970	9900	1600	4500	5110	4930	5460	1100	1170	1300
5	1470	1420	1510	5940	1500	15000	5140	5380	4450	858	1170	1270
6	1640	1410	1810	4500	1500	45200	4960	4480	3830	866	1030	926
7	1340	1370	1610	3800	1400	32100	4450	3930	3290	1170	988	5110
8	1090	1330	1570	7850	1400	20100	4110	3490	2840	1050	988	2770
9	1110	1340	3310	8180	1300	13900	4550	3140	2430	850	1060	1530
10	1240	1330	6020	4880	1300	11000	7460	2790	2070	998	1270	1080
11	1310	1220	4060	3680	1300	13800	7780	2430	1890	1010	1510	866
12	1330	1330	3290	2590	1200	11900	7080	2100	1880	1240	1410	732
13	1350	1330	2990	2480	1200	9150	6860	1880	1890	1250	1390	674
14	1300	1280	2540	3230	1200	7850	7300	1760	1680	1300	891	633
15	2080	1290	2190	3160	1100	7620	8800	1620	1500	1140	1170	908
16	1870	1250	1810	2410	1100	6050	8450	1500	1330	943	979	1800
17	1190	1040	1700	2020	1000	5410	8010	1360	1220	1330	1140	1050
18	1190	883	1450	1740	1000	4750	7330	1220	1140	1420	1220	740
19	1120	1320	1140	3060	980	4290	6340	1160	1090	970	1360	646
20	1210	1770	1290	2460	960	3980	5490	1250	1040	1100	1410	660
21	1350	1470	1700	4200	1100	3760	4830	1250	998	1010	1390	842
22	1280	1360	2360	7720	1100	3700	4240	1110	952	883	1290	1430
23	1220	1420	2020	7300	1300	3720	3800	1110	1010	1030	1260	2250
24	1230	1110	1700	5060	2500	4000	3370	3370	1030	988	1340	1690
25	1240	1340	1300	16000	2800	11200	2860	15300	988	1090	1360	1210
26	1350	1620	1300	15300	3100	12800	2490	24300	926	1030	1150	988
27	1890	1270	1400	8350	3300	10000	3290	23100	988	1180	1300	866
28	2930	979	1300	6110	3500	8310	10400	17900	1100	1350	1360	778
29	1950	1310	1200	4850	---	7430	9010	15500	1130	1210	1260	891
30	1570	1250	1200	3960	---	7520	6950	13600	1210	935	1330	1330
31	1360	---	1200	3330	---	6710	---	11000	---	1030	1270	---
TOTAL	44510	39502	59220	197360	46130	307450	177590	187290	70852	33335	38156	39060
MEAN	1436	1317	1910	6366	1648	9918	5920	6042	2362	1075	1231	1302
MAX	2930	1770	6020	24700	3500	45200	10400	24300	8450	1420	1510	5110
MIN	1090	883	970	1600	960	3700	2490	1110	926	850	891	633
CAL YR 1978	TOTAL	1194225	MEAN	3272	MAX	33200	MIN	646				
WTR YR 1979	TOTAL	1240455	MEAN	3399	MAX	45200	MIN	633				

DELAWARE RIVER BASIN

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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 record for winter months each year except water years 1968, 1977-79).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Oct. 1 to Dec. 28, Mar. 11 to July 18, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-75), 32.0°C Aug. 2, 3 1975; minimum (water years 1968, 1977-79), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 29.5°C July 19; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1							---	---	---	.5	.0	.5
2							---	---	---	.5	.0	.5
3							---	---	---	1.0	.0	.5
4							---	---	---	.0	.0	.0
5							---	---	---	.5	.0	.5
6							---	---	---	.5	.0	.5
7							---	---	---	.5	.0	.5
8							---	---	---	.5	.0	.5
9							---	---	---	.5	.5	.5
10							---	---	---	.5	.5	.5
11							---	---	---	1.0	.5	.5
12							---	---	---	1.0	.5	.5
13							---	---	---	1.0	.5	.5
14							---	---	---	1.0	.5	.5
15							---	---	---	1.0	.5	1.0
16							---	---	---	1.0	.5	1.0
17							---	---	---	1.0	1.0	1.0
18							---	---	---	1.0	1.0	1.0
19							---	---	---	1.0	1.0	1.0
20							---	---	---	1.0	1.0	1.0
21							---	---	---	1.0	.5	1.0
22							---	---	---	1.0	.0	.5
23							---	---	---	1.5	.5	1.0
24							---	---	---	1.0	1.0	1.0
25							---	---	---	1.0	.0	.5
26							---	---	---	2.0	.0	.5
27							---	---	---	2.5	1.5	2.0
28							---	---	---	2.5	2.0	2.5
29							1.0	.5	.5	2.5	.0	2.0
30							1.0	.5	1.0	2.0	.0	1.0
31							1.0	.5	.5	1.5	.0	1.0
MONTH							1.0	.5	.5	2.5	.0	1.0

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	.0	.5	1.0	.0	.0						
2	1.5	.5	1.0	.0	.0	.0						
3	1.5	1.0	1.0	.0	.0	.0						
4	1.0	.5	1.0	.0	.0	.0						
5	1.0	.0	.5	.0	.0	.0						
6	.5	.5	.5	1.5	.0	1.0						
7	.5	.0	.5	2.0	1.5	2.0						
8	.5	.0	.5	2.5	2.0	2.0						
9	.5	.0	.5	2.5	1.5	2.0						
10	.5	.0	.0	3.0	2.5	3.0						
11	.5	.0	.5	---	---	---						
12	.5	.0	.0	---	---	---						
13	.0	.0	.0	---	---	---						
14	.0	.0	.0	---	---	---						
15	.0	.0	.0	---	---	---						
16	.0	.0	.0	---	---	---						
17	.0	.0	.0	---	---	---						
18	.0	.0	.0	---	---	---						
19	.0	.0	.0	---	---	---						
20	.0	.0	.0	---	---	---						
21	.0	.0	.0	---	---	---						
22	.0	.0	.0	---	---	---						
23	.0	.0	.0	---	---	---						
24	.0	.0	.0	---	---	---						
25	.0	.0	.0	---	---	---						
26	.0	.0	.0	---	---	---						
27	.0	.0	.0	---	---	---						
28	1.0	.0	.0	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	1.5	.0	.0	3.0	.0	1.0						

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

DELAWARE RIVER BASIN

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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 (305 m) upstream from Shohola Brook.

DRAINAGE AREA.--2,692 mi² (6,972 km²).

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.--Temperature recorder since October 1967.

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. No record Oct. 1 to Oct. 3, June 18 to Aug. 13, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78), 31.0°C July 16, 1977; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	9.0	8.0	8.5	1.5	.5	1.0	.5	.5	.5
2	---	---	---	8.5	7.5	8.0	1.5	.5	1.0	.5	.0	.5
3	---	---	---	8.5	7.0	8.0	.5	.5	.5	.5	.5	.5
4	14.5	13.5	13.5	9.0	7.5	8.0	3.0	.5	1.5	.5	.5	.5
5	14.5	13.0	14.0	8.5	7.0	8.0	2.5	2.0	2.0	.5	.0	.0
6	15.5	14.5	15.0	8.5	7.5	8.0	2.0	1.0	1.5	.0	.0	.0
7	15.0	13.5	14.0	8.5	8.0	8.5	2.0	1.5	2.0	.5	.0	.0
8	13.5	11.5	12.5	8.5	8.0	8.5	3.5	2.0	2.5	.5	.0	.5
9	13.0	11.0	11.5	8.5	7.5	8.0	3.5	3.0	3.5	.0	.0	.0
10	13.0	11.0	12.0	8.0	7.5	8.0	3.0	1.0	2.0	.0	.0	.0
11	14.0	12.0	13.0	9.0	7.5	8.0	1.0	.0	.5	.0	.0	.0
12	15.0	13.5	14.0	8.0	7.0	7.5	1.5	.5	.5	.0	.0	.0
13	15.5	14.0	15.0	7.0	6.5	6.5	1.5	.5	1.0	.0	.0	.0
14	15.0	13.0	14.5	8.5	6.5	7.5	1.5	.5	1.0	.5	.0	.0
15	13.0	11.0	12.0	8.0	7.0	7.5	.5	.5	.5	.0	.0	.0
16	11.0	9.5	10.5	8.0	6.5	7.5	.5	.5	.5	.5	.0	.0
17	10.5	9.5	10.0	7.0	6.0	6.5	1.0	.5	.5	.0	.0	.0
18	10.0	8.5	9.5	9.5	7.5	8.5	.5	.0	.5	.0	.0	.0
19	11.0	9.5	10.0	8.0	7.0	7.5	.5	.0	.0	.5	.0	.0
20	10.5	9.5	10.0	7.0	6.0	6.5	.5	.0	.0	.0	.0	.0
21	10.5	9.0	10.0	6.0	5.0	5.5	.5	.0	.0	.5	.0	.0
22	11.5	10.0	10.5	5.0	4.0	4.5	.5	.0	.5	.5	.0	.5
23	12.5	10.5	11.5	4.0	3.0	3.5	.5	.0	.0	1.0	.0	.5
24	10.0	9.0	9.5	4.5	3.0	3.5	.0	.0	.0	1.0	.5	1.0
25	10.0	8.0	9.5	4.0	2.5	3.5	.5	.0	.0	1.0	.0	.5
26	10.5	10.0	10.5	2.5	1.0	1.5	.5	.0	.0	1.0	.0	.5
27	10.5	10.0	10.0	1.0	.5	.5	.5	.0	.0	1.5	1.0	1.0
28	10.5	9.5	10.0	1.5	.5	1.0	.5	.0	.0	1.5	1.5	1.5
29	10.0	9.0	9.5	3.0	.5	1.5	.5	.0	.0	1.5	1.5	1.5
30	9.5	8.0	8.5	3.5	1.5	2.5	.5	.0	.5	1.5	1.0	1.0
31	9.0	8.0	9.0	---	---	---	.5	.5	.5	1.0	.5	1.0
MONTH	15.5	8.0	11.5	9.5	.5	6.0	3.5	.0	1.0	1.5	.0	.5

01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	18.0	16.0	17.0	---	---	---	---	---	---	24.5	21.5	23.0
2	18.5	16.5	17.5	---	---	---	---	---	---	23.0	22.0	22.5
3	19.0	17.0	18.0	---	---	---	---	---	---	24.5	22.0	23.0
4	19.0	16.5	17.5	---	---	---	---	---	---	24.5	21.5	22.5
5	19.5	17.0	18.0	---	---	---	---	---	---	23.0	21.0	22.0
6	19.5	18.0	18.5	---	---	---	---	---	---	22.0	20.5	21.0
7	20.5	17.5	19.0	---	---	---	---	---	---	22.0	20.5	21.5
8	21.0	18.5	20.0	---	---	---	---	---	---	21.0	20.0	20.5
9	22.5	19.0	21.0	---	---	---	---	---	---	20.5	18.5	19.5
10	23.0	21.5	22.0	---	---	---	---	---	---	21.5	18.0	19.5
11	22.0	18.0	20.5	---	---	---	---	---	---	23.0	19.0	20.5
12	19.0	16.5	17.5	---	---	---	---	---	---	23.5	16.0	19.5
13	19.0	16.0	17.5	---	---	---	---	---	---	24.0	16.0	19.5
14	20.0	16.5	18.5	---	---	---	21.0	18.0	19.0	22.0	19.0	20.5
15	22.5	18.5	20.5	---	---	---	18.5	16.5	17.5	22.5	17.0	19.0
16	24.5	20.0	22.5	---	---	---	21.5	16.0	18.5	20.5	18.0	19.5
17	25.5	22.5	24.0	---	---	---	21.5	16.5	19.0	21.0	18.0	19.0
18	---	---	---	---	---	---	19.0	18.0	18.5	23.0	16.5	19.0
19	---	---	---	---	---	---	21.0	17.5	19.0	19.5	17.0	18.5
20	---	---	---	---	---	---	21.5	18.5	20.0	21.0	12.5	16.5
21	---	---	---	---	---	---	23.0	19.5	21.0	17.0	15.0	16.0
22	---	---	---	---	---	---	24.5	20.0	22.0	17.0	16.5	17.0
23	---	---	---	---	---	---	24.0	21.0	22.5	17.0	15.5	16.5
24	---	---	---	---	---	---	23.5	22.0	22.5	17.0	15.0	16.0
25	---	---	---	---	---	---	25.0	22.0	23.0	17.0	15.5	16.5
26	---	---	---	---	---	---	25.5	21.0	23.5	19.0	16.0	17.5
27	---	---	---	---	---	---	25.5	22.5	24.0	19.5	16.0	17.5
28	---	---	---	---	---	---	26.0	23.0	24.5	18.0	16.5	17.0
29	---	---	---	---	---	---	24.5	23.0	24.0	20.0	17.5	18.5
30	---	---	---	---	---	---	25.5	22.5	23.5	18.0	17.0	17.5
31	---	---	---	---	---	---	25.0	22.0	23.5	---	---	---
MONTH	25.5	16.0	19.5	---	---	---	26.0	16.0	21.5	24.5	12.5	19.0

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LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, Pa. Hydrologic Unit 02040104, at interstate bridge, at Pond Eddy, 450 ft (137 m) downstream from Mill Brook and 4.5 mi (7.2 km) upstream from Mongaup River.

WATER TEMPERATURES: October 1973 to current year.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Oct. 1 to Oct. 16, Oct. 28 to July 18, July 25 to Aug. 21, due to instrument malfunctions.

WATER TEMPERATURES: Maximum (water years 1976, 1978) 28.5°C June 26-28, 1976 and July 23, 24, 1978; minimum (water years 1974, 1977-78), freezing point on many days during winter periods, except 1978.

[illegible]

DELAWARE RIVER BASIN

01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DELAWARE RIVER BASIN

193

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 (91 m) downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi (0.8 km) downstream from Bush Kill, and 2.8 mi (4.5 km) upstream from mouth and Mongaup.

DRAINAGE AREA.--202 mi² (523 km²).

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

REVISED RECORDS.--WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft (190.515 m) Orange and Rockland Utilities, Inc. datum. Prior to July 6, 1956, water-stage recorders at sites 25 ft (8 m) upstream on Rio Tailrace and 200 ft (61 m) upstream on natural channel, at datum 4.0 ft (1.22 m) higher.

REMARKS.--Records good above 70 ft³/s (1.98 m³/s) and fair below. Entire flow completely regulated by Rio hydroelectric plant except for runoff from about 7 mi² (11 km²) of drainage area below 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 above station.

AVERAGE DISCHARGE.--40 years, 342 ft³/s (9.69 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s (450 m³/s) Aug. 19, 1955; maximum daily, 12,300 ft³/s (348 m³/s), Aug. 19, 1955; minimum daily, 6 ft³/s (0.17 m³/s) Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft³/s (86.7 m³/s) Jan. 3, gage height, 7.49 ft (2.283 m); minimum daily, 20 ft³/s (0.57 m³/s) Nov. 11, 12, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	395	436	38	741	722	733	733	745	34	257	273
2	21	398	158	629	726	726	733	729	741	464	393	134
3	21	335	133	2420	726	699	733	729	267	361	391	30
4	21	160	153	1440	722	423	726	729	608	30	25	30
5	151	22	225	868	722	761	726	636	527	267	25	273
6	34	288	240	784	718	1010	726	570	504	401	271	598
7	23	21	246	733	695	1100	615	615	442	30	257	299
8	21	156	423	975	533	990	633	741	450	30	269	39
9	21	310	275	1500	447	891	722	706	40	304	322	32
10	21	331	44	1160	504	838	722	726	43	317	467	286
11	299	20	331	773	498	900	225	665	431	366	28	714
12	421	20	31	722	714	854	560	431	737	421	150	706
13	21	227	194	722	714	801	718	439	733	354	216	381
14	24	23	393	722	710	769	729	381	537	160	94	376
15	24	26	27	718	710	745	733	364	473	195	347	261
16	21	116	27	714	619	737	729	43	553	347	32	22
17	140	88	27	714	601	733	729	39	406	373	30	21
18	22	26	25	654	514	733	726	122	434	373	30	21
19	22	24	23	533	622	733	722	297	257	426	31	21
20	22	74	24	626	608	729	718	40	401	423	30	20
21	22	36	32	726	352	729	354	328	504	27	80	24
22	22	23	31	729	31	726	41	368	184	49	97	141
23	22	23	28	722	406	726	246	364	34	378	28	32
24	184	25	107	726	726	706	240	577	32	398	29	26
25	22	25	30	868	737	722	366	776	244	408	381	25
26	23	24	218	1010	737	745	202	776	143	310	29	25
27	24	288	464	937	726	737	68	765	178	340	28	24
28	23	280	421	895	722	745	69	757	246	27	28	24
29	22	359	473	829	---	741	59	753	442	28	28	30
30	64	383	26	789	---	737	455	753	36	261	30	27
31	335	---	26	761	---	737	---	745	---	164	189	---
TOTAL	2134	4526	5291	26437	17281	23945	15758	16697	11372	8066	4612	4915
MEAN	68.8	151	171	853	617	772	525	539	379	260	149	164
MAX	421	398	473	2420	741	1100	733	776	745	464	467	714
MIN	21	20	23	38	31	423	41	39	32	27	25	20

CAL YR 1978 TOTAL 134319 MEAN 368 MAX 1740 MIN 14
WTR YR 1979 TOTAL 141034 MEAN 386 MAX 2420 MIN 20

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 (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi² (7,967 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. 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 mi² (961 km²) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft³/s (6,600 m³/s) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 ft³/s (2,520 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft³/s (4.96 m³/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s (5,810 m³/s) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 ft³/s (1,980 m³/s) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68,000 ft³/s (1,930 m³/s) Mar. 6, gage height, 11.88 ft (3.621 m); minimum, 905 ft³/s (25.6 m³/s) Sept. 20, gage height, 1.81 ft (0.552 m); minimum daily, 1,210 ft³/s (34.3 m³/s) July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1450	1970	1970	2310	6550	8750	8350	9430	12400	1470	1600	1700
2	1530	2070	1650	18000	5660	9130	8230	8430	10200	1880	1680	1730
3	1470	1970	1580	41000	4980	8920	8800	7640	8750	2030	1880	1530
4	1680	1700	1530	17300	4850	7840	8310	7840	8960	1530	1550	1730
5	1720	1680	1930	10400	4790	19300	8230	8030	7450	1400	1370	2270
6	1930	1820	2710	7490	4100	63000	8150	6510	6550	1450	1450	4980
7	1840	1700	2570	6550	4100	47500	7010	6210	5840	1370	1480	7190
8	1370	1680	2480	10800	3600	29700	5910	5700	5250	1400	1320	5180
9	1510	1840	3630	14400	3100	20100	6780	5490	4080	1370	1500	2500
10	1450	1860	7990	10000	3300	15300	11200	5320	2990	1470	1720	2070
11	1730	1500	6550	7760	3100	17500	11300	4950	3610	1530	1990	2500
12	1950	1450	4950	5910	3200	17000	10400	3880	4470	1790	1950	2290
13	1560	1650	4230	5180	2900	13500	10100	3140	4350	1770	2170	1840
14	1630	1600	4080	5110	3000	11700	9690	3290	3370	1750	1480	1810
15	2190	1500	3420	6020	3100	11400	11900	3090	2850	1560	1680	1660
16	2570	1600	2710	5350	3000	9730	12100	2460	2890	1530	1240	2010
17	1950	1450	2570	4850	2900	8800	11700	2290	2190	1840	1340	1750
18	1480	1250	2710	4540	2800	7950	10800	2130	2090	2350	1360	1560
19	1400	1310	2330	3910	2800	7490	9560	2330	1970	2150	1600	1420
20	1430	2110	1860	4470	2800	7080	8590	2110	1810	1810	1600	1390
21	1580	1820	2500	4380	2700	6780	7160	2590	1790	1430	1730	1580
22	1630	1610	3940	11000	2900	6660	5590	2460	1610	1210	1580	2460
23	1430	1660	3370	12400	2800	6660	5590	2420	1370	1510	1430	3040
24	1630	1510	2710	10100	3700	6700	5150	6400	1390	1630	1500	2920
25	1400	1560	2290	29800	6000	13400	4660	23300	1650	1750	1990	2820
26	1580	2010	2420	29600	11000	18000	4110	33100	1700	1610	1470	2400
27	1680	2310	2920	16500	12200	14800	5450	31600	1370	1680	1450	2290
28	3370	1990	3010	12400	9640	12400	13700	23500	1530	1610	1630	2130
29	2640	2050	2480	10300	---	11000	12100	21000	2150	1530	1470	2110
30	2050	2640	1990	8880	---	10700	10300	19000	1750	1420	1510	1630
31	1990	---	1860	7870	---	9640	---	15900	---	1310	1580	---
TOTAL	54820	52870	92940	344580	125570	458430	260920	281540	118380	50140	49300	72490
MEAN	1768	1762	2998	11120	4485	14790	8697	9082	3946	1617	1590	2416
MAX	3370	2640	7990	41000	12200	63000	13700	33100	12400	2350	2170	7190
MIN	1370	1250	1530	2310	2700	6660	4110	2110	1370	1210	1240	1390
CAL YR 1978 TOTAL	1830015			MEAN 5014	MAX 43500	MIN 995						
WTR YR 1979 TOTAL	1961980			MEAN 5375	MAX 63000	MIN 1210						

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.

CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).

MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).

PESTICIDE DATA: 1974 (a).

ORGANIC DATA: OC--1974 (b), 1975 (d).

NUTRIENT DATA: 1968 (a), 1969-76 (d).

BIOLOGICAL DATA:

Bacteria--1973-76 (d).

Phytoplankton--1974 (b), 1975-76 (c).

Periphyton--1976 (a).

SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1973 to September 1973.

WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.

SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

REMARKS.--No temperature record Mar. 22, 23, Apr. 9-30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1957-59, 1973-79), 29.5°C July 19, 1959, Aug. 3, 1975; minimum (water years 1958-60, 1973, 1975-79), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 28.0°C Aug. 5; minimum, freezing point on several days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.0	15.0	15.5	10.0	9.0	9.5	4.0	2.5	3.0	1.0	.5	.5
2	16.5	15.0	16.0	10.0	8.5	9.0	3.0	2.0	2.5	1.0	.5	.5
3	15.5	14.0	15.0	9.5	8.5	9.0	2.5	1.0	1.5	1.0	.5	.5
4	15.0	14.0	14.0	9.5	8.0	9.0	3.0	1.5	2.0	.5	.5	.5
5	14.5	13.5	14.0	9.0	8.0	8.5	3.5	2.5	3.0	.5	.0	.5
6	16.0	14.5	15.0	9.5	8.0	8.5	3.0	2.0	2.5	.5	.5	.5
7	15.0	14.5	15.0	9.5	8.5	9.0	3.0	2.0	2.5	.5	.5	.5
8	14.5	12.5	13.5	9.0	8.5	9.0	4.0	2.5	3.5	.5	.5	.5
9	12.5	11.5	12.0	9.0	8.5	9.0	4.0	3.5	4.0	.5	.5	.5
10	13.0	11.5	12.5	9.0	8.0	8.5	3.5	1.5	2.5	.5	.5	.5
11	14.5	12.5	13.5	9.0	8.5	8.5	1.5	.5	1.0	.5	.5	.5
12	15.0	14.0	14.5	9.0	7.5	8.0	1.0	.0	.5	.5	.5	.5
13	15.5	14.0	15.0	7.5	7.0	7.0	2.0	1.0	1.5	.5	.5	.5
14	15.5	14.0	15.0	8.0	7.0	7.5	1.5	1.0	1.0	.5	.5	.5
15	14.0	11.5	12.5	8.0	8.0	8.0	1.0	.0	.5	.5	.5	.5
16	11.5	10.5	11.0	8.0	7.5	8.0	1.0	.5	.5	.5	.5	.5
17	11.5	10.0	11.0	7.5	7.0	7.0	2.0	.5	1.0	.5	.5	.5
18	11.0	9.5	10.0	9.0	7.5	8.5	1.0	.5	.5	.5	.5	.5
19	11.0	10.0	10.5	8.5	8.0	8.0	1.5	.5	.5	1.0	.5	.5
20	10.5	10.0	10.5	8.0	6.5	7.0	.5	.5	.5	.5	.5	.5
21	11.0	9.5	10.5	7.0	5.5	6.0	.5	.5	.5	.5	.0	.5
22	12.0	10.0	11.0	5.5	4.5	5.0	.5	.5	.5	.5	.0	.5
23	12.5	11.0	11.5	5.0	4.0	4.5	.5	.5	.5	1.0	.5	.5
24	11.5	10.0	10.5	4.5	4.0	4.0	.5	.5	.5	1.0	.5	.5
25	10.5	9.5	10.0	4.5	3.5	4.0	.5	.5	.5	1.0	.5	1.0
26	11.0	10.5	10.5	3.5	1.5	2.5	.5	.5	.5	1.0	.5	.5
27	11.0	10.0	10.5	2.0	1.0	1.0	.5	.5	.5	1.5	1.0	1.5
28	10.5	9.5	10.0	2.5	1.0	1.5	.5	.5	.5	2.0	1.5	1.5
29	10.5	9.5	10.0	3.0	2.0	2.5	.5	.0	.5	2.0	1.5	1.5
30	10.0	8.5	9.0	4.0	2.0	3.0	1.0	.0	.5	1.5	1.0	1.5
31	10.5	8.5	9.5	---	---	---	.5	.5	.5	1.5	1.0	1.0
MONTH	16.5	8.5	12.0	10.0	1.0	6.5	4.0	.0	1.5	2.0	.0	.5

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

DELAWARE RIVER BASIN

197

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 (15 m) downstream from covered bridge, 300 ft (91 m) upstream from small tributary, 2.2 mi (3.5 km) downstream from confluence of East and West Branches, and 2.2 mi (3.5 km) southwest of Claryville.

DRAINAGE AREA.--65.6 mi² (170 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,527.37 ft (465.542 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1974, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--28 years, 191 ft³/s (5.409 m³/s), 39.54 in/yr (1,000 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s (331 m³/s) Sept. 6, 1979, from rating curve extended above 2,200 ft³/s (62.3 m³/s); maximum gage height, 8.83 ft (2.691 m) present datum, July 10, 1952; minimum discharge, 6.8 ft³/s (0.19 m³/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 10.0 ft (3.05 m) present datum, from floodmarks, discharge, 23,400 ft³/s (663 m³/s) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s), and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1500	3,620 103	4.59 1.399	Mar. 25	0200	5,120 145	5.30 1.615
Mar. 6	0500	3,240 91.8	4.38 1.335	Sept. 6	1300	*11,700 331	*7.48 2.280

Minimum discharge, 24 ft³/s (0.68 m³/s) Oct. 3; minimum gage height, 0.49 ft (0.149 m), Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	71	86	140	140	98	455	271	239	90	195	57
2	27	67	82	2510	140	96	373	237	211	93	262	56
3	24	64	80	1090	140	94	357	244	192	74	118	62
4	29	62	122	350	130	92	302	467	172	64	87	57
5	40	62	167	260	130	1000	287	292	158	60	74	55
6	82	60	120	230	130	2730	247	252	146	58	66	3690
7	61	61	111	230	130	1220	217	226	137	55	60	891
8	48	62	157	1250	130	651	196	205	129	53	57	408
9	46	58	748	498	130	474	239	190	123	51	55	275
10	46	56	441	300	140	623	252	177	119	50	64	228
11	51	53	230	260	130	887	231	165	299	49	71	178
12	58	53	200	250	130	450	239	158	226	53	116	152
13	71	52	192	230	120	350	222	184	146	45	120	131
14	175	52	170	220	110	396	381	166	128	43	86	275
15	140	52	140	200	110	357	348	148	117	41	76	357
16	80	55	130	180	100	280	287	142	110	69	70	192
17	65	56	120	170	96	247	258	130	103	64	64	155
18	58	267	110	160	94	223	229	128	98	172	78	147
19	57	138	110	150	90	215	207	165	94	119	105	147
20	64	105	100	150	86	226	192	170	89	67	76	129
21	57	95	209	901	82	267	182	141	85	56	67	220
22	55	89	145	651	80	346	177	130	86	69	64	579
23	56	87	110	329	78	461	176	153	97	56	60	324
24	58	133	100	385	78	1230	178	449	82	52	62	239
25	56	124	100	763	120	2410	173	537	78	49	97	198
26	75	90	96	377	110	825	211	519	73	71	80	176
27	155	84	101	291	100	487	852	403	69	143	82	159
28	103	88	88	250	100	364	690	473	71	76	75	151
29	84	91	86	219	---	376	424	363	80	61	65	215
30	77	89	84	186	---	424	324	378	75	55	65	166
31	73	---	84	150	---	493	---	284	---	51	61	---
TOTAL	2102	2476	4819	13330	3154	18392	8906	7947	3832	2109	2678	10069
MEAN	67.8	82.5	155	430	113	593	297	256	128	68.0	86.4	336
MAX	175	267	748	2510	140	2730	852	537	299	172	262	3690
MIN	24	52	80	140	78	92	173	128	69	41	55	55
CFSM	1.03	1.26	2.36	6.56	1.72	9.04	4.53	3.90	1.95	1.04	1.32	5.12
IN.	1.19	1.40	2.73	7.56	1.79	10.43	5.05	4.51	2.17	1.20	1.52	5.71

CAL YR 1978	TOTAL	65607	MEAN 180	MAX 3050	MIN 24	CFSM 2.74	IN 37.20
WTR YR 1979	TOTAL	79814	MEAN 219	MAX 3690	MIN 24	CFSM 3.34	IN 45.26

DELAWARE RIVER BASIN

01436000 NEVERSINK RIVER AT NEVERSINK, NY

LOCATION.--Lat 41°49'12", long 74°38'09", Sullivan County, Hydrologic Unit 02040104, on right bank at downstream end of outlet channel, 1,650 ft (503 m) downstream from Neversink Dam and State Highway 55, 1.7 mi (2.7 km) southwest of Neversink, and 2.6 mi (4.2 km) upstream from Wynkoop Brook.

DRAINAGE AREA.--91.9 mi² (238 km²).

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD NY 1972: 1961 (M), 1968 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,255.24 ft (382.597 m) Board of Water Supply, City of New York datum. Prior to Jan. 17, 1953, water-stage recorder at site 650 ft (198 m) downstream at datum 0.20 ft (0.061 m) lower. Jan. 17, 1953 to Apr. 16, 1954, water-stage recorder at present site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records good. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink 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 release 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, 22,300 ft³/s (632 m³/s) Nov. 25, 1950, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of contracted-opening and critical-depth measurements of peak flow; maximum gage height, 11.65 ft (3.551 m) Sept. 27, 1942, site and datum then in use; no flow for all or part of each day Sept. 22-24, Oct. 26-29, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152 ft³/s (4.305 m³/s) Mar. 22, gage height, 3.65 ft (1.113 m); minimum, 6.6 ft³/s (0.187 m³/s) June 4, gage height, 2.60 ft (0.792 m).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	61	23	24	25	27	43	43	43	43	66	43
2	44	98	23	25	24	27	43	45	43	43	63	43
3	45	75	24	25	25	26	42	45	42	43	64	43
4	44	23	24	25	26	26	42	46	39	43	64	45
5	44	23	24	25	26	27	45	46	45	43	64	43
6	44	23	24	25	26	29	45	43	45	43	64	46
7	43	23	23	25	27	28	42	43	43	43	57	43
8	44	23	24	26	27	26	43	45	43	43	42	42
9	44	23	24	26	27	26	46	46	43	43	42	42
10	44	22	24	29	27	27	49	46	43	43	42	43
11	63	22	23	24	27	26	45	43	42	43	42	43
12	96	22	23	24	27	26	42	43	42	43	45	42
13	96	22	24	29	27	27	42	45	43	51	43	42
14	77	22	23	29	27	28	43	45	43	63	43	42
15	43	23	22	26	27	27	43	42	43	64	42	43
16	45	24	22	25	27	28	43	36	45	66	42	43
17	45	24	21	27	26	28	43	34	45	57	43	43
18	54	23	20	27	27	28	43	33	45	46	42	46
19	71	23	21	25	27	28	43	34	45	45	43	43
20	71	23	25	29	27	28	41	27	45	51	41	41
21	71	23	24	30	27	28	41	16	45	63	43	43
22	61	23	22	27	27	30	41	16	45	63	43	45
23	43	23	20	27	28	29	42	17	45	64	43	42
24	45	23	26	25	28	31	43	17	45	64	43	42
25	45	22	25	25	28	31	43	16	45	64	43	42
26	45	23	24	26	27	30	43	17	45	57	43	42
27	45	23	24	26	27	28	43	18	45	42	41	43
28	44	23	24	26	27	27	43	17	43	42	43	43
29	45	23	24	24	---	28	43	16	43	42	43	43
30	45	23	24	24	---	33	43	26	43	42	43	43
31	45	---	24	28	---	43	---	42	---	52	43	---
TOTAL	1636	851	722	808	748	881	1293	1048	1311	1554	1465	1289
MEAN	52.8	28.4	23.3	26.1	26.7	28.4	43.1	33.8	43.7	50.1	47.3	43.0
MAX	96	98	26	30	28	43	49	46	45	66	66	46
MIN	43	22	20	24	24	26	41	16	39	42	41	41
CAL YR 1978	TOTAL	18120	MEAN	49.6	MAX	1160	MIN	17				
WTR YR 1979	TOTAL	13606	MEAN	37.3	MAX	98	MIN	16				

DELAWARE RIVER BASIN

199

01436500 NEVERSINK RIVER AT WOODBOURNE, NY

LOCATION.--Lat 41°45'24", long 74°35'52", Sullivan County, Hydrologic Unit 02040104, on left bank 0.2 mi (0.3 km) downstream from highway bridge at Woodbourne, 0.3 mi (0.5 km) upstream from outlet of South Wind Lake.
Water-quality sampling site at discharge station.

DRAINAGE AREA.--113 mi² (293 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to September 1972, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map. Prior to Sept. 20, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir. 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.--Maximum discharge, 22,000 ft³/s (623 m³/s) Nov. 26, 1950, gage height, 11.19 ft (3.411 m); maximum gage height, 11.2 ft (3.414 m) July 22, 1938, from floodmarks and graph based on gage readings; minimum discharge, 6.7 ft³/s (0.19 m³/s) June 27, 1953; minimum daily, 8.2 ft³/s (0.23 m³/s) June 25, 1953; minimum gage height, 0.80 ft (0.244 m) Aug. 25, 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 900 ft³/s (25.5 m³/s) Jan. 25 gage height, 3.64 ft (1.109 m); minimum discharge 25 ft³/s (0.708 m³/s) Nov. 14 and 15, gage height, 1.27 ft (0.387 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	58	38	184	72	210	99	90	92	62	70	45
2	44	105	35	560	66	217	101	81	88	57	66	45
3	45	99	35	247	60	173	108	84	81	53	71	46
4	45	33	45	178	56	131	91	118	72	51	70	46
5	46	30	62	142	52	399	107	90	78	50	69	47
6	77	28	49	123	50	417	93	78	79	50	69	307
7	55	28	45	153	48	259	87	72	71	49	66	117
8	49	31	66	375	46	196	80	70	68	49	44	69
9	47	30	220	200	44	162	112	69	68	48	43	58
10	47	28	126	172	42	204	150	67	65	47	47	54
11	55	27	90	120	40	258	128	63	157	47	50	54
12	101	27	70	110	39	143	108	62	120	46	65	50
13	107	27	65	92	38	133	96	68	83	48	61	49
14	143	27	60	82	37	130	180	69	71	66	51	51
15	75	26	58	90	36	111	144	64	68	66	48	52
16	61	28	54	62	35	97	117	55	64	77	44	50
17	56	29	50	52	35	82	103	46	64	70	46	48
18	57	60	49	48	35	80	93	50	61	66	48	50
19	83	42	47	44	35	78	86	74	59	56	58	53
20	84	35	46	42	60	79	78	61	57	50	47	45
21	81	32	93	207	56	83	72	36	56	68	47	63
22	76	31	71	342	54	88	70	31	57	68	46	120
23	51	31	49	209	52	88	68	68	59	68	46	74
24	50	40	54	168	80	166	67	194	56	70	47	58
25	50	56	89	675	289	313	64	160	54	69	50	55
26	58	46	82	304	286	145	75	163	52	72	47	54
27	85	73	69	203	212	105	173	121	52	51	43	52
28	64	53	60	161	195	86	164	126	59	46	46	54
29	57	36	57	124	---	104	115	100	59	44	46	81
30	54	38	54	91	---	101	100	128	58	43	45	67
31	53	---	52	80	---	105	---	105	---	47	45	---
TOTAL	2000	1243	2040	5640	2150	4943	3129	2663	2128	1754	1641	2014
MEAN	64.5	41.4	65.8	182	76.8	159	104	85.9	70.9	56.6	52.9	67.1
MAX	143	105	220	675	289	417	180	194	157	77	71	307
MIN	44	26	35	42	35	78	64	31	52	43	43	45

CAL YR 1978 TOTAL 31971 MEAN 87.6 MAX 1310 MIN 26
WTR YR 1979 TOTAL 31345 MEAN 85.9 MAX 675 MIN 26

DELAWARE RIVER BASIN

01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1965, 1972, 1978 to current year.

CHEMICAL DATA: 1964 (b), 1965 (c), 1972 (a).

NUTRIENT DATA: 1964 (b), 1965 (c), 1972 (a).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July and August, 1978, May to September, 1979.

INSTRUMENTATION.--Temperature recorder since October, 1977.

REMARKS.--No record Oct. 1, 1977 to July 11, 1978 and Aug. 27, 1978 to May 10, 1979, due to instrument malfunctions.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 19.5°C May 22, July 3, 31.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE				JULY				AUGUST		
											SEPTEMBER	
1				---	---	---	14.5	11.5	12.5			
2				---	---	---	17.5	13.0	15.0			
3				---	---	---	18.5	14.5	16.5			
4				---	---	---	17.0	15.0	15.5			
5				---	---	---	15.5	13.5	14.5			
6				---	---	---	17.0	13.0	15.0			
7				---	---	---	17.0	14.5	15.5			
8				---	---	---	19.0	14.5	16.5			
9				---	---	---	18.0	14.5	16.5			
10				---	---	---	17.5	14.5	16.0			
11				---	---	---	15.0	11.5	13.0			
12				18.5	11.0	14.5	13.0	11.5	12.5			
13				19.0	13.0	16.0	16.0	12.5	14.0			
14				17.0	15.0	16.0	17.5	13.0	15.5			
15				17.5	13.5	15.5	17.5	14.0	16.0			
16				17.0	14.5	16.0	16.0	12.5	14.5			
17				15.5	14.0	15.0	17.5	12.5	15.0			
18				19.5	12.5	15.5	16.0	12.0	14.0			
19				19.0	14.0	16.5	16.0	10.5	13.5			
20				16.5	11.0	14.0	17.0	12.5	14.5			
21				16.5	11.0	14.0	16.0	11.0	14.0			
22				17.5	11.0	14.0	17.0	12.0	14.5			
23				18.5	12.5	15.5	17.5	12.5	15.0			
24				18.0	13.5	16.0	16.0	14.0	15.5			
25				16.0	12.0	14.0	15.5	13.0	14.5			
26				14.0	12.5	13.0	18.5	12.0	15.0			
27				17.0	12.5	14.0	18.0	13.5	16.0			
28				19.0	14.5	16.5	---	---	---			
29				16.5	13.0	15.0	---	---	---			
30				17.0	13.5	15.0	---	---	---			
31				15.0	12.0	13.0	---	---	---			
MONTH				19.5	11.0	15.0	19.0	10.5	15.0			

01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										18.0	13.0	15.5
12										15.5	12.0	13.0
13										13.0	11.5	12.0
14										13.0	11.0	12.0
15										16.5	10.0	13.5
16										16.0	12.0	14.0
17										17.5	10.0	14.0
18										14.5	10.5	12.0
19										12.0	11.0	11.5
20										16.0	11.0	13.0
21										14.5	12.5	13.5
22										19.5	11.5	15.0
23										16.0	11.5	13.0
24										11.5	11.5	11.5
25										12.5	11.0	12.0
26										13.0	11.5	12.0
27										12.0	10.0	11.0
28										14.5	10.5	12.5
29										15.5	11.0	13.0
30										17.0	11.5	14.0
31										18.0	10.5	14.0
MONTH										19.5	10.0	13.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	11.5	15.0	16.0	13.0	14.0	18.0	12.5	15.5	17.5	13.5	15.5
2	15.5	12.0	13.0	15.0	12.5	14.0	17.0	12.5	15.0	16.0	14.0	15.0
3	14.5	11.5	13.0	19.5	13.0	16.5	16.5	11.5	14.0	18.0	14.0	15.5
4	17.5	11.0	14.0	16.0	12.0	13.5	17.5	11.5	14.5	17.5	14.0	15.5
5	17.0	11.5	14.5	15.5	10.0	12.5	17.5	11.0	14.5	16.0	14.5	15.0
6	15.0	11.5	13.0	14.0	10.5	12.5	16.5	11.5	13.5	19.0	14.5	17.0
7	16.0	11.0	13.5	17.0	10.0	13.5	15.5	9.5	13.0	18.5	15.5	17.0
8	16.0	13.0	14.5	18.0	11.5	15.0	16.5	13.5	15.0	17.0	14.0	15.5
9	14.5	12.5	13.5	17.5	13.0	15.5	18.5	13.0	15.5	16.0	11.0	13.5
10	14.5	13.0	14.0	16.0	13.5	15.0	17.0	14.0	15.5	16.0	11.0	13.5
11	14.0	11.5	12.5	18.0	13.0	15.5	16.0	12.5	14.0	16.5	12.5	14.5
12	16.0	10.0	13.0	19.0	14.0	16.5	12.5	11.5	11.5	15.5	10.5	13.5
13	15.0	9.0	12.0	19.0	14.0	16.5	17.5	11.0	13.5	16.0	11.5	14.0
14	17.5	9.5	13.5	18.5	12.0	15.5	15.5	12.5	13.5	15.0	14.0	14.5
15	18.0	11.0	14.5	16.0	12.5	14.5	12.5	11.0	12.0	16.0	13.0	14.0
16	19.0	12.5	16.0	14.5	11.5	12.0	17.0	10.5	13.5	14.0	10.5	12.5
17	18.0	13.5	16.0	15.5	10.5	13.0	15.5	10.5	13.5	15.5	11.0	13.0
18	16.5	13.5	15.0	14.0	12.0	13.0	14.0	10.5	12.0	16.0	11.5	13.5
19	18.5	12.5	15.0	19.0	12.0	15.5	16.0	10.5	13.0	15.0	12.0	13.5
20	18.0	11.0	15.0	17.0	14.0	16.0	17.0	12.0	14.5	14.0	9.0	11.0
21	17.0	12.0	15.0	16.0	12.0	14.5	18.5	13.5	15.5	12.0	10.5	11.0
22	15.5	12.5	13.5	16.5	12.0	14.5	17.5	13.0	15.0	13.0	11.0	12.0
23	14.5	11.0	13.0	15.0	11.0	13.5	16.0	12.5	14.5	14.5	10.5	12.5
24	13.5	10.5	11.5	17.0	11.0	14.5	15.5	14.0	14.5	13.5	9.0	11.5
25	17.0	8.5	12.5	16.5	12.0	14.5	17.5	13.5	15.0	14.0	9.5	12.0
26	17.5	10.5	14.0	15.5	11.5	13.5	18.0	14.0	16.0	14.5	11.0	13.0
27	17.5	11.5	15.0	18.0	13.0	15.5	19.0	15.5	17.0	14.5	10.0	12.5
28	15.5	12.5	14.0	18.0	14.0	16.0	18.5	15.0	16.5	13.0	11.0	12.0
29	18.0	11.5	15.0	16.5	13.5	15.0	16.5	14.5	15.0	14.0	12.0	13.0
30	16.5	13.0	15.0	19.0	12.5	15.5	18.5	13.5	16.0	13.5	12.5	13.0
31	---	---	---	19.5	15.5	17.5	18.0	14.0	16.0	---	---	---
MONTH	19.0	8.5	14.0	19.5	10.0	14.5	19.0	9.5	14.5	19.0	9.0	13.5

DELAWARE RIVER BASIN

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice-daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Records good except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi² (237.8 km²) 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 ft³/s (935 m³/s) Aug. 19, 1955, gage height, 12.49 ft (3.087 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,700 ft³/s (105 m³/s) Jan. 2 (estimated); maximum gage height, 8.47 ft (2.582 m) Feb. 25 ice jam; minimum discharge, 81 ft³/s (2.29 m³/s) Oct. 4, Nov. 15; minimum gage height, 2.82 ft (0.860 m) Nov. 15.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	135	140	390	600	760	631	577	659	225	105	107
2	97	141	140	2300	520	780	590	500	570	205	121	107
3	86	174	153	2440	480	800	597	470	525	184	118	113
4	86	157	174	1300	430	800	544	583	470	167	124	110
5	97	105	280	1000	400	1500	544	525	418	157	118	107
6	157	97	248	904	360	2790	494	458	430	150	118	1250
7	181	94	216	792	340	2320	458	418	381	141	118	1010
8	129	94	224	1790	345	1820	430	386	340	132	107	519
9	111	100	712	1300	310	1530	488	355	320	127	88	402
10	111	94	784	950	280	1370	703	335	306	121	88	320
11	105	91	450	760	250	1880	725	325	512	118	115	274
12	114	88	400	660	230	1330	610	301	902	113	184	245
13	150	86	370	600	210	1060	563	330	583	110	249	217
14	232	100	350	540	190	1010	763	375	482	110	173	221
15	305	83	320	500	180	1010	971	340	413	121	144	237
16	202	83	280	450	170	763	803	311	360	150	129	205
17	171	88	250	420	160	688	725	279	320	213	118	184
18	188	160	220	390	160	631	645	261	292	187	118	167
19	185	188	200	360	150	590	570	386	270	180	138	170
20	192	138	190	330	250	570	512	452	241	147	135	160
21	178	120	300	450	230	557	464	360	228	135	118	170
22	188	114	250	900	220	557	430	311	217	141	113	617
23	160	111	230	840	210	557	413	355	225	138	107	476
24	138	138	220	880	600	652	381	1270	209	141	110	350
25	126	192	260	3100	3000	2050	360	1730	191	135	144	306
26	132	171	270	2440	1500	1230	375	1620	184	132	135	274
27	188	117	253	1730	900	927	827	1440	167	138	124	249
28	199	130	260	1370	760	771	1110	1210	154	115	113	233
29	157	140	240	1110	---	748	835	1030	202	110	113	311
30	141	140	230	920	---	740	674	971	202	107	115	320
31	132	---	220	740	---	681	---	787	---	102	110	---
TOTAL	4738	3669	8834	32656	13435	33472	18235	19051	10773	4452	3910	9431
MEAN	153	122	285	1053	480	1080	608	615	359	144	126	314
MAX	305	192	784	3100	3000	2790	1110	1730	902	225	249	1250
MIN	86	83	140	330	150	557	360	261	154	102	88	107

CAL YR 1978 TOTAL 156427 MEAN 429 MAX 3680 MIN 83
WTR YR 1979 TOTAL 162656 MEAN 446 MAX 3100 MIN 83

DELAWARE RIVER BASIN

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01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge on U.S. Route 206 at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

DRAINAGE AREA.--3,480 mi² (9,013 km²).

WATER-DISCHARGE RECORDS

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.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Water-discharge records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--40 years, 5,961 ft³/s (168.8 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s (7,080 m³/s) Aug. 19, 1955 (gage height, 35.15 ft or 10.714 m), from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of flood-routing study; minimum, 382 ft³/s (10.8 m³/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m); minimum daily, 412 ft³/s (11.7 m³/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage during period 1903-79, 35.5 ft (10.82 m) Oct. 10, 1903, present datum, from floodmark.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62,600 ft³/s (1,773 m³/s) Mar. 6, gage height, 17.58 ft (5.358 m); minimum, 1,150 ft³/s (32.6 m³/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	2140	2280	2500	7760	10300	9530	10500	13500	1890	1810	1950
2	1710	2280	1920	15800	6750	10600	9180	9410	11300	1940	1910	2000
3	1740	2220	1820	42200	5820	10600	9840	8540	9700	2520	2110	1810
4	1860	1990	1860	20900	5670	9440	9350	8750	9740	1900	1850	1850
5	1870	1930	2090	14200	5440	17900	9210	9020	8320	1660	1560	2260
6	2200	1890	2990	9230	4600	57200	9230	7350	7310	1660	1640	6390
7	2230	1970	2930	7970	4600	47700	7990	6900	6550	1690	1670	8770
8	1720	1780	2800	12100	4100	31400	6770	6450	5850	1640	1530	6830
9	1620	1980	3880	16800	3600	22500	7360	6180	4930	1540	1640	3470
10	1750	2030	8950	12400	3700	17500	12000	5950	3570	1710	1800	2490
11	1840	1800	7410	9830	3500	19400	12400	5590	4170	1690	2210	3060
12	2190	1580	5760	7160	3600	19100	11500	4550	5900	1960	2190	2770
13	1900	1670	4940	6290	3300	15200	11100	3750	5300	1980	2510	2300
14	1920	1890	4770	5800	3300	13200	10700	3770	4140	2000	2020	2140
15	2510	1620	4220	6400	3400	12900	13200	3800	3680	1790	1860	2170
16	2870	1650	3330	6000	3400	11100	13300	3050	3500	1770	1670	2100
17	2310	1740	3070	5200	3200	10100	12800	2860	2730	2100	1560	2000
18	1860	1530	2880	4900	3200	9190	11900	2460	2530	2710	1620	1910
19	1680	1530	3220	4200	3100	8520	10600	2960	2500	2640	1850	1700
20	1690	2210	2190	4900	3200	8070	9580	2790	2170	2110	1860	1600
21	1820	2090	3110	5000	3100	7750	8220	2930	2180	1820	2000	1750
22	1880	1830	4250	11000	3200	7610	6420	3160	2060	1500	1860	3120
23	1700	1840	4000	13900	3200	7570	6200	2750	1760	1720	1700	3680
24	1810	1810	3240	11400	4300	7650	5880	7590	1740	2070	1750	3360
25	1650	1750	2600	29900	7200	14900	5330	23500	1770	2020	2160	3270
26	1760	2220	2700	32700	12000	19700	4770	31900	2200	1900	1910	2810
27	1830	2350	3000	19700	14200	16300	6460	32300	1620	1960	1720	2650
28	3460	2430	3500	14700	11300	13700	14700	25100	1790	1970	1850	2470
29	3000	2120	2800	12200	---	12200	13700	22400	2360	1820	1750	2590
30	2320	3030	2300	10500	---	11700	11400	20400	2170	1630	1750	2000
31	2170	---	2100	9340	---	10900	---	17400	---	1580	1780	---
TOTAL	62580	58900	106910	385120	143740	491900	290620	304060	137040	58890	57100	87270
MEAN	2019	1963	3449	12420	5134	15870	9687	9808	4568	1900	1842	2909
MAX	3460	3030	8950	42200	14200	57200	14700	32300	13500	2710	2510	8770
MIN	1620	1530	1820	2500	3100	7570	4770	2460	1620	1500	1530	1600
CAL YR 1978	TOTAL	2124890	MEAN	5822	MAX	52400	MIN	1320				
WTR YR 1979	TOTAL	2184130	MEAN	5984	MAX	57200	MIN	1500				

(NOTE: WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

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 (2.6 km) east of Downsview, N.Y. DRAINAGE AREA, 371 mi² (961 km²). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (530.6 hm³) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm³); at minimum operating level, 9,609 mil gal (36.37 hm³); at sill of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm³); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm³). 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 furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm³) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm³) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 151,932 mil gal (575.1 hm³) May 27, elevation, 1,281.15 ft (390.495 m); minimum, 95,703 mil gal (362.2 hm³) Jan. 1, elevation, 1,246.92 ft (380.061 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, in emergency gate tower at Cannonville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, N.Y. DRAINAGE AREA, 454 mi² (1,176 km²). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (362.2 hm³) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm³); at minimum operating level, 2,912 mil gal (11.02 hm³); at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm³); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm³). 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 furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 108,116 mil gal (409.2 hm³) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm³) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 107,177 mil gal (405.7 hm³) Mar. 6, elevation, 1,155.30 ft (325.135 m); minimum, 50,192 mil gal (190.0 hm³) Dec. 4, 8, elevation, 1,113.42 ft (339.370 m).

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 118 mi² (306 km²) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (308 m).

Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft³ (40.7 hm³) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft³ (6.02 hm³). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft³ (41.4 hm³) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), 141.4 mil ft³ (4.00 hm³) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,396 mil ft³ (39.5 hm³) Jan. 3, elevation, 1,070.2 ft (326.20 m); minimum, 922 mil ft³ (26.1 hm³) Mar. 2, elevation, 1,057.4 ft (322.30 m).

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 (4.0 km) southeast of village of Black Lake, N.Y. DRAINAGE AREA, 23.2 mi² (60.1 km²). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft³ (31.1 hm³) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and 1,220.0 ft (371.86 m), top of permanent flashboards. Capacity below elevation 1,165.0 ft (355.09 m), minimum operating pool, about 26.8 mil ft³ (0.759 hm³). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft³ (33.2 hm³) July 20, 1945, elevation, 1,222.0 ft (372.47 m); minimum observed (after first filling), -26.8 mil ft³ (0.759 hm³) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 818 mil ft³ (23.2 hm³) June 4, elevation, 1,211.3 ft (369.20 m); minimum observed, 0.0 mil ft³ (0.0 hm³) Sept. 30, elevation, 1,165.0 ft (355.09 m).

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 (4.0 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 6.46 mi² (16.7 km²), 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). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (318.00 m).

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft³ (3.85 hm³) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft³ (0.185 hm³). 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 (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft³ (4.12 hm³) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about 6.54 mil ft³ (0.185 hm³) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 127.8 mil ft³ (3.62 hm³) Jan. 2, elevation, 1,071.0 ft (326.44 m); minimum observed, 43.7 mil ft³ (1.24 hm³) Mar. 5, elevation, 1,057.9 ft (322.45 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, Hydrologic Unit 02040104, at a gate-house at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, N.Y. DRAINAGE AREA, 91.8 mi² (238 km²). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (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 (132.25 hm³) between minimum operating level, elevation, 1,319.0 ft (402.03 m) and crest of spillway, elevation, 1,440.0 ft (438.91 m). Capacity at crest of spillway 37,146 mil gal (140.6 hm³); at minimum operating level, 2,205 mil gal (8.35 hm³); dead storage below diversion sill and outlet sill, elevation 1,314.0 ft (400.51 m), 1,680 mil gal (6.36 hm³). 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 furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm³) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 hm³) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,161 mil gal (140.7 hm³) May 27, elevation, 1,440.03 ft (438.921 m); minimum observed, 12,677 mil gal (48.0 hm³) Nov. 13, elevation, 1,375.04 ft (419.112 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)
01416900 Pepacton Reservoir †				01424997 Cannonsville Reservoir †			01433000 Swinging Bridge Reservoir †		
Sept. 30	1,257.75	111,898		1,128.60	68,473		1,065.0	1,191	
Oct. 31	1,254.22	106,449	- 272	1,122.44	60,762	- 385	1,066.9	1,264	+ 27.1
Nov. 30	1,248.73	98,300	- 420	1,114.04	50,881	- 510	1,064.3	1,165	- 38.2
Dec. 31	1,246.92	95,703	- 130	1,113.79	50,604	- 13.8	1,068.9	1,343	+ 66.4
CAL YR 1978	-	-	- 230	-	-	- 212	-	-	+ 6.9
Jan. 31	1,265.35	124,154	+1,420	1,142.38	87,225	+1,830	1,069.6	1,371	+ 10.5
Feb. 28	1,264.75	123,160	- 54.9	1,149.08	97,219	+ 552	1,057.5	926	-184
Mar. 31	1,280.37	150,484	+1,360	1,151.27	100,662	+ 172	1,068.4	1,323	+148
Apr. 30	1,280.42	150,577	+ 4.80	1,151.13	100,436	- 11.7	1,068.7	1,335	+ 4.8
May 31	1,280.46	150,651	+ 3.69	1,152.05	101,918	+ 74.0	1,066.5	1,249	- 32.4
June 30	1,276.69	143,765	- 355	1,147.95	95,500	- 331	1,062.0	1,081	- 64.7
July 31	1,268.75	129,868	- 694	1,140.80	84,942	- 527	1,060.3	1,021	- 22.4
Aug. 31	1,260.22	115,805	- 702	1,129.35	69,428	- 774	1,060.8	1,038	+ 6.4
Sept. 30	1,255.70	108,714	- 366	1,128.62	68,498	- 48.0	1,065.0	1,191	+ 59.1
WTR YR 1979	-	-	- 13.5	-	-	+ 0.11	-	-	0.0
Date	Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft ³ /s)
01433100 Toronto Reservoir †				01433200 Cliff Lake †			01435900 Neversink Reservoir †		
Sept. 30	1,177.2	94.9		1,064.9	83.0		1,387.89	16,353	
Oct. 31	1,177.8	103	+ 2.9	1,066.7	95.1	+ 4.5	1,377.28	13,282	-153
Nov. 30	1,178.3	109	+ 2.6	1,064.3	79.2	- 6.1	1,379.62	13,926	+ 33.2
Dec. 31	1,183.0	179	+ 26.0	1,067.7	102	+ 8.6	1,392.80	17,908	+199
CAL YR 1978	-	-	- 14.1	-	-	+ 0.5	-	-	- 61.6
Jan. 31	1,198.1	470	+109	1,070.6	124	+ 8.3	1,420.72	28,344	+521
Feb. 28	1,195.4	411	- 24.6	1,059.0	48.9	- 31.2	1,417.41	26,969	- 76.0
Mar. 31	1,205.6	660	+ 93.1	1,070.0	120	+ 26.4	1,438.82	36,565	+479
Apr. 30	1,208.9	750	+ 34.5	1,068.7	110	- 3.9	1,434.86	34,658	- 98.4
May 31	1,210.5	795	+ 16.8	1,066.9	96.5	- 4.9	1,439.38	36,840	+109
June 30	1,207.2	703	- 35.4	1,068.0	104	+ 3.0	1,428.60	31,767	-262
July 31	1,192.8	353	-131	1,064.1	78.0	- 9.9	1,415.56	26,216	-277
Aug. 31	1,179.8	130	- 83.3	1,061.6	63.0	- 5.6	1,402.73	21,313	-245
Sept. 30	1,178.7	115	- 5.9	1,065.0	83.7	+ 8.0	1,408.12	23,306	+103
WTR YR 1979	-	-	+ 0.6	-	-	0.0	-	-	+ 29.5

† Elevation at 2400 hours.

‡ Elevation at 0900 hours on first day of following month.

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 furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WRD NY 1972: 1970.

014239000 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 furnished by Bureau of Water Resources Development, City of New York.

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 furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	01415200 <u>Pepacton Reservoir</u>	01423900 <u>Cannonsville Reservoir</u>	01435800 <u>Neversink Reservoir</u>
October.....	576	275	170
November.....	446	748	41.6
December.....	750	733	.75
CAL YR 1978	645	214	249
January.....	586	554	58.5
February.....	523	0.44	214
March.....	720	87.9	288
April.....	561	172	457
May.....	452	368	216
June.....	614	127	386
July.....	744	0	313
August.....	746	0	303
September.....	743	178	251
WTR YR 1979	623	272	224

SUSQUEHANNA RIVER BASIN

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01496500 OAKS CREEK AT INDEX, NY

LOCATION.--Lat 42°39'56", long 74°57'36", Otsego County, Hydrologic Unit 02050101, on right bank 200 ft (61 m) upstream from bridge on State Highway 28 at Index, 0.5 mi (0.8 km) upstream from mouth, and 3 mi (5 km) southwest of Cooperstown.

DRAINAGE AREA.--102 mi² (264 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,174.50 ft (357.988 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1932, nonrecording gage at different datum.

REMARKS.--Records excellent except those for winter periods, which are fair. Prior to June 1964, flow regulated by natural storage in Canadarago Lake, thereafter by dam at outlet.

AVERAGE DISCHARGE.--44 years (1931-32, 1938-79), 173 ft³/s (4.899 m³/s), 23.03 in/yr (585 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s (94.0 m³/s) Oct. 17, 1977, gage height, 7.62 ft (2.323 m); minimum discharge, 1.3 ft³/s (0.037 m³/s) Aug. 4, 5, 1962, gage height, 1.79 ft (0.546 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 6	0600	*1,840 52.1	*6.10 1.859	Mar. 15	0130	902 25.5	4.94 1.506
Mar. 11	0700	1,160 32.9	5.28 1.609	Mar. 26	0300	992 28.1	5.06 1.542

Minimum discharge, 4.9 ft³/s (0.14 m³/s) Sept. 1, gage height, 2.10 ft (0.640 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	104	60	200	100	110	652	372	229	17	7.6	6.1
2	65	99	58	632	96	120	614	351	208	16	7.5	6.1
3	61	95	60	503	92	130	615	334	193	17	7.4	28
4	56	91	99	420	90	150	567	348	176	16	7.1	19
5	55	88	138	390	86	700	579	319	163	14	6.7	13
6	69	85	112	350	82	1690	532	297	95	13	6.5	62
7	65	83	114	310	78	1220	493	278	67	12	6.2	93
8	58	88	137	370	76	992	469	261	61	11	6.0	51
9	55	81	209	330	72	890	468	242	62	10	5.7	40
10	50	78	190	300	70	895	463	224	71	10	6.8	35
11	46	74	180	270	68	1100	453	207	63	9.8	9.5	31
12	43	72	170	250	66	860	459	193	63	9.8	8.5	28
13	41	70	160	220	64	767	460	177	57	9.4	8.3	24
14	107	68	150	220	64	775	503	166	50	8.8	8.1	24
15	119	64	140	230	64	800	497	102	46	8.2	7.8	44
16	88	62	130	240	62	698	482	77	42	11	7.3	35
17	79	60	164	230	62	641	483	76	41	10	6.7	30
18	75	72	125	200	62	583	454	74	39	11	7.2	26
19	76	68	127	180	60	545	430	75	38	10	8.8	23
20	86	63	140	170	60	533	407	78	34	8.9	8.2	22
21	78	60	204	190	68	544	385	77	30	9.0	7.2	18
22	74	57	194	210	120	577	367	77	28	24	6.6	19
23	73	54	178	200	160	621	349	76	27	15	6.0	19
24	81	73	170	190	160	733	328	123	25	12	5.8	17
25	73	93	160	170	150	928	311	187	24	10	5.9	15
26	79	75	150	160	140	950	296	209	22	10	5.7	13
27	175	70	140	150	130	795	334	267	19	11	9.4	12
28	135	66	130	140	120	704	540	271	18	10	13	12
29	117	64	120	130	---	680	423	271	17	9.3	9.4	20
30	111	62	130	120	---	681	392	270	17	8.7	7.6	21
31	107	---	150	110	---	669	---	261	---	8.0	6.7	---
TOTAL	2466	2239	4389	7785	2522	22081	13805	6340	2025	359.9	231.2	806.2
MEAN	79.5	74.6	142	251	90.1	712	460	205	67.5	11.6	7.46	26.9
MAX	175	104	209	632	160	1690	652	372	229	24	13	93
MIN	41	54	58	110	60	110	296	74	17	8.0	5.7	6.1
CFSM	.78	.73	1.39	2.46	.88	6.98	4.51	2.01	.66	.11	.07	.26
IN.	.90	.82	1.60	2.84	.92	8.05	5.03	2.31	.74	.13	.08	.29
CAL YR 1978	TOTAL	60186.2	MEAN 165	MAX 1420	MIN 8.3	CFSM 1.62	IN 21.95					
WTR YR 1979	TOTAL	65049.3	MEAN 178	MAX 1690	MIN 5.7	CFSM 1.75	IN 23.72					

SUSQUEHANNA RIVER BASIN

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY

LOCATION.--Lat 42°19'40", long 75°13'42", Delaware County, Hydrologic Unit 02050101, at East Sidney Dam on Ouleout Creek, 0.3 mi (0.5 km) upstream from bridge on County Highway 44 at East Sidney, 4.4 mi (7.1 km) upstream from mouth, and 4.5 mi (7.2 km) east of Unadilla.

DRAINAGE AREA.--103 mi² (267 km²).

PERIOD OF RECORD.--November 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "East Sidney Reservoir at East Sidney."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by concrete dam and rockfill dike, completed by Corps of Engineers in June 1950; regulation of outflow began in November 1949; first used for flood regulation on Mar. 28, 1950. Useable capacity, 33,550 acre-ft (41.4 hm³) between elevations 1,115.0 ft or 339.85 m (sill of conduits) and 1,203.0 ft or 366.67 m (crest of spillway). Dead storage, 56 acre-ft (0.07 hm³). Discharge is controlled by the operation of five gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,194.4 ft (364.05 m) Apr. 6, 1960, contents, 25,100 acre-ft (30.9 hm³); minimum, 1,115.0 ft (339.85 m) Aug. 31, 1953, Sept. 7-26, Nov. 4, 1964, contents, 56 acre-ft (0.07 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,184.32 ft (360.981 m) Mar. 8, contents, 17,280 acre-ft (21.3 hm³); minimum, 1,139.07 ft (347.189 m) Apr. 15, contents, 1,516 acre-ft (1.87 hm³).

Capacity table (elevation, in feet, and useable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,135.0	1,080	1,160.0	5,910
1,140.0	1,630	1,170.0	9,610
1,145.0	2,360	1,180.0	14,610
1,150.0	3,280	1,190.0	21,370

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1149.70	1150.17	1150.08	1141.51	1140.21	1140.78	1141.14	1149.67	1150.10	1150.29	1150.27	1150.80
2	1149.42	1150.08	1150.00	1154.65	1140.02	1141.03	1141.00	1149.84	1150.12	1150.36	1150.52	1150.74
3	1149.47	1150.27	1150.04	1167.33	1140.64	1140.43	1140.71	1150.09	1150.92	1150.42	1150.63	1150.80
4	1149.51	1150.37	1150.07	1164.26	1140.38	1141.70	1140.30	1150.78	1150.71	1150.48	1150.66	1150.38
5	1149.61	1150.38	1150.26	1156.22	1140.16	1155.64	1141.02	1150.40	1150.15	1150.52	1150.64	1150.15
6	1149.78	1150.28	1148.93	1144.91	1140.48	1174.96	1140.84	1150.13	1150.12	1150.54	1150.57	1150.60
7	1149.97	1150.12	1147.07	1140.67	1140.86	1181.29	1140.32	1150.14	1150.26	1150.55	1150.48	1150.36
8	1150.08	1150.04	1145.23	1142.21	1140.92	1183.86	1140.64	1150.27	1150.27	1150.56	1150.36	1151.06
9	1150.22	1150.18	1145.04	1140.84	1140.23	1181.56	1141.27	1150.28	1150.16	1150.56	1150.27	1150.90
10	1150.23	1150.26	1145.42	1140.16	1139.94	1179.94	1142.02	1150.16	1150.03	1150.55	1150.32	1150.43
11	1150.24	1150.27	1144.51	1140.56	1140.00	1172.52	1141.11	1150.19	1150.05	1150.53	1150.48	1150.16
12	1150.25	1150.20	1143.32	1139.98	1139.94	1166.36	1141.05	1150.38	1150.08	1150.52	1150.68	1149.99
13	1150.25	1150.12	1141.99	1140.14	1139.85	1158.55	1141.03	1150.50	1150.07	1150.50	1151.00	1150.19
14	1150.53	1150.04	1140.64	1140.87	1140.03	1148.88	1140.95	1150.61	1150.04	1150.47	1151.04	1150.42
15	1150.46	1149.93	1140.54	1140.15	1140.26	1139.62	1139.87	1150.62	1150.18	1150.43	1150.82	1150.92
16	1150.44	1149.89	1140.51	1139.92	1140.50	1140.47	1140.65	1150.55	1150.31	1151.10	1150.54	1150.32
17	1150.21	1150.05	1140.34	1140.14	1140.64	1140.88	1141.50	1150.43	1150.41	1150.69	1150.26	1150.06
18	1149.97	1150.87	1140.06	1140.79	1140.65	1140.33	1140.64	1150.24	1150.46	1150.95	1150.20	1150.24
19	1150.25	1150.92	1140.23	1140.48	1140.57	1140.18	1139.98	1150.02	1150.49	1150.65	1150.20	1150.50
20	1150.67	1150.28	1140.54	1140.09	1140.53	1139.81	1140.32	1149.86	1150.49	1150.37	1150.20	1150.76
21	1149.72	1150.02	1141.40	1140.87	1140.53	1140.10	1140.16	1149.92	1150.45	1150.08	1150.15	1150.91
22	1149.94	1149.86	1142.16	1143.56	1140.56	1140.30	1139.73	1150.03	1150.39	1150.74	1150.07	1151.07
23	1150.20	1149.94	1140.86	1144.37	1139.93	1140.44	1139.62	1150.18	1150.41	1151.32	1150.12	1151.20
24	1150.49	1150.34	1140.88	1141.01	1141.57	1140.82	1139.76	1151.45	1150.40	1151.33	1150.20	1151.01
25	1150.24	1150.85	1140.81	1146.76	1143.81	1142.03	1139.62	1150.61	1150.36	1151.15	1150.32	1150.68
26	1149.85	1150.14	1140.81	1150.59	1142.03	1140.68	1139.53	1151.84	1150.29	1150.97	1150.46	1150.30
27	1151.36	1150.02	1140.71	1144.11	1139.93	1140.27	1140.60	1150.53	1150.17	1151.35	1150.60	1150.00
28	1151.08	1150.28	1140.30	1142.29	1140.50	1140.65	1145.95	1150.81	1150.09	1150.68	1150.76	1150.15
29	1151.33	1150.64	1139.66	1141.11	---	1140.89	1148.58	1150.26	1150.15	1150.06	1150.87	1150.71
30	1151.40	1150.75	1140.15	1140.42	---	1140.26	1149.79	1150.29	1150.23	1149.99	1150.87	1151.13
31	1150.76	---	1140.25	1140.21	---	1140.24	---	1149.83	---	1150.14	1150.85	---
MEAN	1150.25	1150.25	1143.32	1144.23	1140.56	1150.18	1141.32	1150.35	1150.28	1150.61	1150.50	1150.56
MAX	1151.40	1150.92	1150.26	1167.33	1143.81	1183.86	1149.79	1151.84	1150.92	1151.35	1151.04	1151.20
MIN	1149.42	1149.86	1139.66	1139.92	1139.85	1139.62	1139.53	1149.67	1150.03	1149.99	1150.07	1149.99
†	3,370	3,386	1,580	1,678	1,739	1,587	3,227	3,281	3,336	3,321	3,456	3,479
‡	+1.3	+0.3	-29.4	+1.6	+1.1	-2.5	+27.6	+0.9	+0.9	-0.2	+2.2	+0.4

CAL YR 1978 MEAN 1147.35 MAX 1166.27 MIN 1139.65 † -0.1
WTR YR 1979 MEAN 1147.75 MAX 1183.86 MIN 1139.53 ‡ +0.3

† Contents, in acre-feet, at end of month.

‡ Change in contents, equivalent in cubic feet per second.

SUSQUEHANNA RIVER BASIN

209

01500000 OULEOUT CREEK AT EAST SIDNEY, NY

LOCATION.--Lat 42°20'00", long 75°14'07", Delaware County, Hydrologic Unit 02050101, on right bank 0.2 mi (0.3 km) downstream from bridge on County Highway 44, 0.4 mi (0.6 km) downstream from East Sidney Dam, at East Sidney, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--103 mi² (267 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,086.31 ft (331.107 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 13, 1947, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 27.30 ft (8.321 m) higher.

REMARKS.--Records good except those for period of no gage-height record, May 16 to June 22, which are fair. Since November 1949, flow regulated by East Sidney Lake (see station 01499500).

AVERAGE DISCHARGE.--39 years, 175 ft³/s (4.956 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft³/s (205 m³/s) Dec. 30, 1942, gage height, 7.62 ft (2.323 m) site and datum then in use, from rating curve extended above 4,000 ft³/s (113 m³/s); minimum, 1.2 ft³/s (0.034 m³/s), result of construction operations, Aug. 13, 14, 17, 1949, gage height, 0.32 ft (0.098 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft³/s (473 m³/s) in July 1935 was determined, by computation of flow over dam and from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft³/s (51.8 m³/s) Mar. 10, gage height, 4.81 ft (1.466 m); minimum, 10 ft³/s (0.28 m³/s) Aug. 22, 23, gage height, 0.92 ft (0.280 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	186	175	463	195	247	228	245	239	12	32	19
2	21	121	100	578	130	320	252	180	187	12	32	19
3	21	101	101	567	135	252	250	162	211	12	31	138
4	22	101	183	1670	151	459	201	256	243	13	31	76
5	22	101	265	1580	117	583	226	251	185	13	31	49
6	22	101	343	1200	80	16	251	184	134	13	31	425
7	22	101	332	290	93	15	211	149	102	13	31	291
8	23	86	320	702	136	658	184	132	103	13	31	137
9	23	67	319	355	126	1640	276	132	103	13	19	157
10	23	67	323	258	87	1760	534	123	81	13	13	136
11	23	67	318	217	87	1760	474	81	69	13	13	98
12	23	67	311	182	82	1700	501	71	66	13	13	54
13	24	67	303	217	67	1610	414	71	65	13	22	32
14	186	66	233	369	86	1490	593	71	42	13	52	33
15	204	67	156	326	49	587	475	71	30	13	65	148
16	130	43	156	171	48	232	407	71	31	206	65	123
17	130	30	155	151	52	294	523	71	30	230	42	55
18	75	121	109	136	54	291	409	71	30	308	30	31
19	48	185	79	150	49	233	306	71	30	248	30	31
20	210	162	91	149	49	174	255	50	30	128	30	32
21	147	128	107	444	49	175	255	35	30	64	30	45
22	66	101	244	733	69	176	220	35	30	31	21	100
23	67	87	170	609	90	177	175	36	30	46	11	101
24	96	88	126	529	175	197	158	496	30	68	11	100
25	128	185	134	301	433	535	158	923	30	68	11	100
26	128	180	134	704	535	537	129	1110	30	69	11	99
27	334	98	134	860	198	348	115	996	30	172	11	54
28	329	98	133	362	172	251	127	683	19	162	11	31
29	225	99	87	357	---	352	133	540	12	100	17	31
30	270	150	57	265	---	328	248	485	12	44	20	94
31	240	---	167	210	---	229	---	321	---	31	20	---
TOTAL	3373	3121	5865	15105	3594	17626	8688	8173	2264	2167	818	2839
MEAN	109	104	189	487	128	569	290	264	75.5	69.9	26.4	94.6
MAX	334	186	343	1670	535	1760	593	1110	243	308	65	425
MIN	21	30	57	136	48	15	115	35	12	12	11	19
CAL YR 1978	TOTAL	55458	MEAN 152	MAX 1370	MIN 12							
WTR YR 1979	TOTAL	73633	MEAN 202	MAX 1760	MIN 11							

SUSQUEHANNA RIVER BASIN

01500500 SUSQUEHANNA RIVER AT UNADILLA, NY

LOCATION.--Lat 42°19'17", long 75°19'01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft (8 m) downstream from bridge on Bridge Street at Unadilla, 1.0 mi (1.6 km) upstream from Carrs Creek, and 1.6 mi (2.6 km) downstream from Ouleout Creek.

DRAINAGE AREA.--982 mi² (2,543 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 996.08 ft (303.605 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Slight regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--41 years, 1,601 ft³/s (45.34 m³/s), 22.14 in/yr (562 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s (666 m³/s) Mar. 14, 1977, gage height, 14.64 ft (4.462 m); minimum, 39 ft³/s (1.10 m³/s) Oct. 17, 1964, gage height, 1.38 ft (0.421 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Mar. 18, 1936, reached a stage of 16.6 ft (5.060 m), from flood-marks, discharge, 31,300 ft³/s (886 m³/s), from publications of the Corps of Engineers, Baltimore District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft³/s (312 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0730	11,500 326	10.37 3.161	Mar. 6	1630	*21,200 600	*13.90 4.237

Minimum discharge, 130 ft³/s (3.68 m³/s) Sept. 2, gage height, 1.82 ft (0.555 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364	1130	832	2410	1590	1720	3940	2630	2230	234	206	140
2	290	992	717	9280	1350	2030	3700	2340	1900	230	202	132
3	274	904	687	10900	1300	2130	3650	2150	2330	230	198	289
4	266	835	864	7450	1200	2710	3330	2710	1940	221	197	367
5	278	799	1510	5310	1200	10700	3610	2520	1640	205	188	302
6	322	760	1470	4460	1000	20000	3500	2080	1420	198	178	704
7	400	735	1320	3210	1000	17800	3130	1880	1200	190	170	1690
8	373	741	1330	4600	1100	11700	2930	1720	1010	184	161	964
9	326	741	2100	3830	940	8770	3190	1580	910	180	148	632
10	294	680	2350	2940	880	7640	3900	1450	876	178	140	495
11	274	634	1820	2540	820	9480	3700	1300	812	173	148	413
12	258	606	1660	2080	780	8340	3880	1180	805	169	169	331
13	250	578	1750	2390	720	6830	3860	1120	728	167	190	273
14	557	552	1670	2780	680	6480	4400	1070	640	159	219	256
15	1300	542	1430	2800	660	6100	5090	1000	559	155	230	402
16	968	513	1370	2230	620	4550	4480	880	516	1230	222	493
17	729	482	1360	2070	640	4200	4590	801	479	1250	198	380
18	600	717	1230	1970	620	3760	3880	746	449	1180	175	295
19	541	958	1020	1700	600	3420	3330	712	433	1000	183	273
20	786	780	1180	1700	600	3220	2940	690	412	557	196	252
21	799	677	1530	2440	640	3200	2690	651	380	405	189	237
22	617	631	2120	4580	720	3420	2450	643	349	342	174	326
23	573	593	1760	3580	860	3710	2230	643	346	384	150	369
24	600	665	1550	2980	1500	4300	2030	1710	335	349	142	337
25	651	954	1310	3610	2680	6110	1810	4650	317	311	145	306
26	634	946	1430	3360	2430	7140	1630	4840	305	291	142	288
27	2060	656	1430	3170	1840	5720	1790	4480	283	386	148	243
28	2160	698	1340	2450	1620	4410	4010	3600	262	384	153	206
29	1530	747	1160	2280	---	4190	3530	3420	245	321	168	243
30	1370	774	1230	2000	---	4350	2950	3260	239	248	148	329
31	1230	---	1350	1790	---	4080	---	2740	---	215	150	---
TOTAL	21674	22020	43880	108890	30590	192210	100150	61196	24350	11726	5427	11967
MEAN	699	734	1415	3513	1093	6200	3338	1974	812	378	175	399
MAX	2160	1130	2350	10900	2680	20000	5090	4840	2330	1250	230	1690
MIN	250	482	687	1700	600	1720	1630	643	239	155	140	132
CFSM	.71	.75	1.44	3.58	1.11	6.31	3.40	2.01	.83	.39	.18	.41
IN.	.82	.83	1.66	4.12	1.16	7.28	3.79	2.32	.92	.44	.21	.45
CAL YR 1978	TOTAL	525539	MEAN	1440	MAX	9060	MIN	122	CFSM	1.47	IN	19.91
WTR YR 1979	TOTAL	634080	MEAN	1737	MAX	20000	MIN	132	CFSM	1.77	IN	24.02

01501004 MILL BROOK AT SHERBURNE TURNPIKE AT NEW BERLIN, NY

LOCATION.--Lat 42°38'13", long 75°21'07", Chenango County, Hydrologic Unit 02050101, at culvert on Sherburne Turnpike, 0.5 mi (0.8 km) northwest of New Berlin, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--1.78 mi² (4.61 km²).

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

CHEMICAL DATA: 1975-76 (b), 1977 (a), 1978-79 (b).

MINOR ELEMENTS DATA: 1975-76, 1978-79 (a).

NUTRIENT DATA: 1975-76 (b), 1977 (a), 1978-79 (b).

BIOLOGICAL DATA:

Bacteria--1975-76 (a), 1978 (b), 1979 (a).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
MAY 15...	1100	1.0	191	7.5	15.0	1	8.0	82	--	--	--
JUL 03...	1200	.22	191	7.2	16.5	10	7.9	84	530	26	53
AUG 10...	1200	.05	240	7.4	15.5	1	8.0	82	--	--	--
SEP 05...	1130	.05	217	6.3	16.0	5	8.1	84	4800	K140	66
24...	1100	.05	210	7.1	11.0	1	9.4	86	--	--	--

DATE	HARD- NESS (MG/L CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MAY 15...	67	8	23	2.4	1.8	.9	--	--	59	9.8	1.2
JUL 03...	92	12	32	3.0	1.9	1.0	98	0	80	11	2.1
AUG 10...	120	6	40	3.8	2.2	1.2	--	--	110	7.2	1.9
SEP 05...	100	26	36	3.5	2.3	1.1	96	0	79	17	1.7
24...	99	21	34	3.3	1.9	.9	--	--	78	13	2.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
MAY 15...	87	11	.20	.00	.20	.01	.09	.10	.30	.01	.00
JUL 03...	116	10	--	--	--	--	--	--	--	--	--
AUG 10...	141	2	.14	.00	.14	.00	.11	.11	.25	.02	.00
SEP 05...	126	1	--	--	--	--	--	--	--	--	--
24...	121	0	.10	.00	.10	.04	.09	.13	.23	.01	.00

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAY 15...	--	--	--	--	--	--	--	--	--	--	.00
JUL 03...	0	1	40	2	100	7	30	<.5	0	20	--
AUG 10...	--	--	--	--	--	--	--	--	--	--	.00
SEP 05...	0	1	<10	1	150	4	70	<.5	0	10	--
24...	--	--	--	--	--	--	--	--	--	--	.00

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

SUSQUEHANNA RIVER BASIN

01501008 MILL BROOK TRIBUTARY ABOVE NEW BERLIN, NY

LOCATION.--Lat 42°37'34", long 75°21'06", Chenango County, Hydrologic Unit 02050101, at culvert on town highway, 0.4 mi (0.6 km) west of New Berlin, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--1.70 mi² (4.40 km²).

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

CHEMICAL DATA: 1975-76 (b), 1977 (a), 1978-79 (b).

MINOR ELEMENTS DATA: 1975-76, 1978-79 (a).

NUTRIENT DATA: 1975-76 (b), 1977 (a), 1978-79 (b).

BIOLOGICAL DATA:

Bacteria--1975-76, 1978-79 (a).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS./ 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS./ PER 100 ML)
MAY											
15...	1000	1.6	242	8.0	15.0	1	8.2	84	--	--	--
JUL											
03...	1030	.49	266	7.8	17.0	10	8.5	91	650	390	200
AUG											
10...	1100	.20	303	7.5	15.5	1	8.1	84	--	--	--
SEP											
05...	1000	.20	295	6.6	16.0	5	7.7	79	6100	K120	230
24...	1000	.20	290	7.2	11.0	1	10.0	92	--	--	--

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MAY											
15...	110	16	38	3.3	3.5	.9	--	--	93	12	5.4
JUL											
03...	130	13	45	3.8	3.7	1.0	140	0	110	9.4	5.6
AUG											
10...	140	19	49	4.0	3.7	1.0	--	--	120	12	8.5
SEP											
05...	140	19	50	4.2	3.8	.9	150	0	120	11	5.4
24...	130	23	47	3.9	3.3	.9	--	--	110	11	6.6

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
MAY											
15...	134	15	.62	.00	.62	.00	.11	.11	.73	.00	.01
JUL											
03...	155	12	--	--	--	--	--	--	--	--	--
AUG											
10...	178	2	.77	.00	.77	.00	.11	.11	.88	.01	.01
SEP											
05...	161	1	--	--	--	--	--	--	--	--	--
24...	161	0	.51	.00	.51	.01	.03	.04	.55	.01	.00

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAY											
15...	--	--	--	--	--	--	--	--	--	--	.00
JUL											
03...	0	1	30	2	160	4	10	<.5	0	10	--
AUG											
10...	--	--	--	--	--	--	--	--	--	--	.00
SEP											
05...	0	1	10	1	120	2	10	<.5	0	10	--
24...	--	--	--	--	--	--	--	--	--	--	.00

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

SUSQUEHANNA RIVER BASIN

213

01501015 MILL BROOK AT NEW BERLIN, NY

LOCATION.--Lat 42°37'32", long 75°19'43", Chenango County, Hydrologic Unit 02050101, on left bank at downstream side of bridge on Academy Street at New Berlin and 80 ft (24 m) upstream from mouth.

DRAINAGE AREA.--4.64 mi² (12.02 km²).

PERIOD OF RECORD.--May 1974 to September 1976, October 1976 to current year (no winter records).

REVISED RECORDS.--WDR NY-76-1: 1974, 1975 (M, P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,088.89 ft (331.894 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 450 ft³/s (12.7 m³/s) Mar. 30, and Oct. 17, 1977; maximum gage height, 3.19 ft (0.972 m) Mar. 5, 1979 (backwater from ice); minimum daily discharge, 0.31 ft³/s (0.009 m³/s) Sept. 4, 1978; minimum gage height, 0.43 ft (0.131 m) Aug. 10, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft³/s (2.3 m³/s) and maximum(*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	unknown	187 5.30	1.99 0.607	Apr. 27	1900	90 2.55	1.59 0.485
Mar. 5	unknown	*a340 9.62	*b3.19 0.972				

a About.

b Backwater from ice.

Minimum daily discharge, 0.47 ft³/s (0.013 m³/s) Aug. 8, 9, Sept. 1; minimum gage height, 0.43 ft (0.131 m) Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	4.9				3.0	13	9.0	6.1	1.3	.78	.47
2	1.6	4.6				5.0	12	7.7	5.0	1.2	.78	2.0
3	1.5	4.6				7.0	12	8.1	4.6	1.2	.78	7.0
4	2.1	4.3				10	12	9.5	4.3	1.1	.69	1.5
5	2.5	4.3				190	11	6.9	4.0	.98	.61	1.1
6	9.0	4.3				127	11	6.1	3.8	.98	.54	9.2
7	3.0	4.3				51	10	5.7	3.5	.98	.54	3.0
8	2.5	3.7				31	10	5.0	3.2	.88	.47	1.8
9	2.3	3.4				24	12	4.6	3.2	.88	.47	1.3
10	2.1	3.0				35	14	4.3	3.0	.88	1.6	1.2
11	2.3	2.7				31	16	4.0	3.5	.88	1.1	1.2
12	2.5	2.7				19	15	3.8	3.0	.88	.98	.98
13	3.2	2.3				25	16	4.0	2.5	.78	.88	1.0
14	11	2.1				22	18	3.8	2.3	.78	.88	3.0
15	5.5	2.1				17	15	3.2	2.1	.78	.78	3.0
16	4.0	1.6				14	14	3.2	2.0	.93	.69	1.3
17	3.0	1.5				12	13	3.0	2.0	.88	.61	1.2
18	2.7	2.7				11	12	3.0	1.8	.98	1.0	1.2
19	3.2	2.3				10	9.5	3.0	1.8	.78	.98	1.1
20	3.7	1.8				12	8.6	3.0	1.5	.69	.78	.98
21	3.4	1.6				13	8.1	2.8	1.3	.61	.69	.88
22	3.4	1.6				14	7.3	2.8	1.6	.78	.69	.78
23	3.4	2.3				18	6.5	3.0	1.6	.69	.61	.69
24	3.7	5.2				20	6.1	8.6	1.5	.61	.69	.69
25	3.4	8.4				25	6.1	13	1.3	.54	.78	.78
26	5.9	4.3				19	6.5	35	1.2	.71	.69	.78
27	16	2.3				16	24	18	1.2	.88	1.9	.69
28	8.0	2.3				13	21	15	1.5	.78	1.2	1.1
29	6.2	2.5				16	13	12	1.5	.78	.88	2.1
30	5.2	2.1				17	11	9.5	1.3	.69	.78	1.3
31	5.5	---				15	---	7.7	---	.61	.54	---
TOTAL	133.6	95.8	---	---	---	840.0	363.7	228.3	77.2	26.42	25.39	53.32
MEAN	4.31	3.19	---	---	---	27.1	12.1	7.36	2.57	.85	.82	1.78
MAX	16	8.4	---	---	---	190	24	35	6.1	1.3	1.9	9.2
MIN	1.5	1.5	---	---	---	3.0	6.1	2.8	1.2	.54	.47	.47
CF5M	.93	.69	---	---	---	5.84	2.61	1.59	.55	.18	.18	.38
IN.	1.07	.77	---	---	---	6.73	2.92	1.83	.62	.21	.20	.43

SUSQUEHANNA RIVER BASIN

01502000 BUTTERNUT CREEK AT MORRIS, NY

LOCATION.--Lat 42°32'43", long 75°14'22", Otsego County, Hydrologic Unit 02050101, on right bank 15 ft (5 m) upstream from bridge on State Highway 23 at Morris, and 0.2 mi (0.3 km) upstream from Calhoun Creek.

DRAINAGE AREA.--59.7 mi² (155 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage 1096.21 ft (334.125 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of doubtful gage-height record June 5 to July 9 and those for winter periods, which are fair.

AVERAGE DISCHARGE.--41 years, 102 ft³/s (2.889 m³/s), 23.20 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,980 ft³/s (169 m³/s) Oct. 17, 1977, gage height, 9.44 ft (2.877 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 24, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1330	2,810 79.6	7.38 2.249	Mar. 5	1630	*4,330 123	*8.53 2.600

Minimum discharge, 5.8 ft³/s (0.16 m³/s) Aug. 9, 10, 26, gage height, 1.46 ft (0.445 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	71	44	213	90	80	190	139	98	15	8.0	7.1
2	21	67	44	1980	82	100	178	129	88	16	8.0	6.6
3	21	63	42	558	74	112	178	118	85	14	8.0	6.0
4	21	59	81	258	70	204	152	156	76	13	7.5	22
5	21	57	114	200	66	3100	190	121	70	12	7.5	14
6	39	53	84	180	62	3260	156	108	72	16	7.1	102
7	34	52	80	160	60	948	144	101	65	15	6.6	85
8	27	55	98	190	58	468	142	92	60	13	6.2	34
9	25	50	194	160	56	322	179	85	56	13	6.2	24
10	24	47	145	130	54	431	198	80	60	12	6.6	20
11	23	45	118	120	52	600	208	75	59	12	7.1	18
12	23	42	110	110	50	305	225	70	55	11	8.5	16
13	23	41	100	110	46	256	220	66	48	11	8.5	14
14	78	40	90	140	45	380	274	65	43	10	8.0	16
15	78	39	84	120	42	290	239	59	38	10	7.5	31
16	53	37	78	110	41	220	239	55	33	12	7.5	21
17	46	37	74	110	39	204	229	52	28	12	7.5	18
18	42	49	70	100	38	182	183	49	30	13	8.0	16
19	43	42	66	96	36	172	159	48	28	11	8.9	14
20	51	38	70	100	35	180	149	48	24	10	8.9	14
21	45	37	142	140	35	200	137	45	20	10	8.0	13
22	41	36	117	246	36	225	126	45	23	14	7.5	15
23	41	36	98	167	39	258	118	45	26	14	7.1	14
24	47	51	83	148	66	333	111	101	23	11	6.6	13
25	42	67	78	187	90	425	105	146	21	10	7.1	12
26	47	46	72	151	110	325	101	204	20	9.4	6.6	12
27	188	40	66	135	90	224	177	181	18	10	8.5	12
28	113	42	64	120	70	186	352	158	17	9.4	11	12
29	92	40	62	110	---	218	177	154	16	8.9	9.4	18
30	82	42	60	100	---	225	152	137	16	8.9	8.0	19
31	76	---	68	96	---	209	---	118	---	8.5	7.1	---
TOTAL	1528	1421	2696	6745	1632	14642	5388	3050	1316	365.1	239.0	692.7
MEAN	49.3	47.4	87.0	218	58.3	472	180	98.4	43.9	11.8	7.71	23.1
MAX	188	71	194	1980	110	3260	352	204	98	16	11	102
MIN	21	36	42	96	35	80	101	45	16	8.5	6.2	6.6
CFSM	.83	.79	1.46	3.65	.98	7.91	3.02	1.65	.74	.20	.13	.39
IN.	.95	.89	1.68	4.20	1.02	9.12	3.36	1.90	.82	.23	.15	.43
CAL YR 1978	TOTAL	40908.8	MEAN	112	MAX	2200	MIN	9.8	CFSM	1.88	IN	25.49
WTR YR 1979	TOTAL	39714.8	MEAN	109	MAX	3260	MIN	6.2	CFSM	1.83	IN	24.75

SUSQUEHANNA RIVER BASIN

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01502500 UNADILLA RIVER AT ROCKDALE, NY

LOCATION.--Lat 42°22'40", long 75°24'23", Chenango County, Hydrologic Unit 02050101, on right bank 400 ft (122 m) downstream from Chenango-Otsego County highway bridge at Rockdale, and 0.7 mi (1.1 km) downstream from Kent Brook.

DRAINAGE AREA.--520 mi² (1,347 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 992.11 ft (302.395 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1933, nonrecording gage at bridge 400 ft (122 m) upstream at datum 0.73 ft (0.223 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--45 years (1931-33, 1938-79), 851 ft³/s (24.10 m³/s), 22.22 in/yr (564 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft³/s (493 m³/s) Dec. 31, 1942, gage height, 12.98 ft (3.956 m); minimum daily, 27 ft³/s (0.76 m³/s) Sept. 20-27, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,700 ft³/s (161 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0200	8,860 251	9.77 2.978	Mar. 6	1200	*16,300 462	*12.62 3.847

Minimum discharge, 65 ft³/s (1.841 m³/s) Sept. 2, gage height, 3.60 ft (1.097 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	564	330	1300	760	900	2400	1440	929	152	86	72
2	162	514	330	6750	720	1000	2200	1280	787	149	86	71
3	155	467	334	7500	680	1200	2210	1180	700	149	84	259
4	155	438	452	4040	640	2000	2010	1470	611	139	80	236
5	158	416	1180	2500	600	8050	2080	1290	547	130	78	149
6	274	389	960	2000	580	15400	1940	1080	582	125	76	305
7	467	370	787	1800	540	12100	1660	990	573	122	72	980
8	322	377	814	1900	520	6860	1580	899	459	117	71	514
9	250	370	1650	1700	490	4560	1860	814	410	112	69	269
10	227	340	1500	1400	460	3730	2200	743	396	107	71	190
11	206	316	1000	1200	440	4610	2200	677	396	107	76	158
12	194	300	940	1000	410	3200	2270	600	410	104	93	136
13	187	284	900	1000	390	2590	2250	556	370	99	95	125
14	396	274	820	1100	370	2850	2410	556	316	97	93	122
15	1040	274	740	1200	360	3380	2610	506	284	95	86	202
16	708	279	680	1100	340	2460	2350	475	259	223	84	254
17	490	269	620	1000	330	2270	2460	438	240	165	82	187
18	403	322	580	860	320	2050	2100	403	223	240	86	149
19	377	358	540	740	320	1950	1790	377	218	152	88	130
20	438	311	726	820	320	1970	1580	370	206	117	93	114
21	452	279	909	900	320	2130	1420	358	190	114	93	114
22	389	264	1290	1100	340	2400	1290	346	183	133	84	119
23	352	250	1060	1900	370	2690	1200	346	187	198	78	114
24	370	322	879	1390	600	3160	1090	734	187	128	76	107
25	383	539	708	2290	1000	4200	1000	1580	183	107	76	99
26	364	490	708	1830	1300	4510	950	2780	168	99	72	97
27	1350	300	780	1300	1100	3060	1240	2520	158	102	84	93
28	1280	330	740	1100	900	2270	3190	1920	155	95	93	93
29	860	320	680	1000	---	2240	2270	1630	158	95	102	122
30	708	320	620	900	---	2530	1700	1340	158	93	90	142
31	611	---	580	840	---	2480	---	1120	---	86	80	---
TOTAL	13893	10646	24837	55460	15520	114800	57510	30818	10643	3951	2577	5722
MEAN	448	355	801	1789	554	3703	1917	994	355	127	83.1	191
MAX	1350	564	1650	7500	1300	15400	3190	2780	929	240	102	980
MIN	155	250	330	740	320	900	950	346	155	86	69	71
CFSM	.86	.68	1.54	3.44	1.07	7.12	3.69	1.91	.68	.24	.16	.37
IN.	.99	.76	1.78	3.97	1.11	8.21	4.11	2.20	.76	.28	.18	.41

CAL YR 1978	TOTAL	309095	MEAN 847	MAX	7880	MIN 85	CFSM 1.63	IN 22.11
WTR YR 1979	TOTAL	346377	MEAN 949	MAX	15400	MIN 69	CFSM 1.83	IN 24.78

SUSQUEHANNA RIVER BASIN

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

LOCATION.--Lat 42°02'07", long 75°48'12", Broome County, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft (152 m) upstream from bridge on County Highway 304 at Conklin, 0.7 mi (1.1 km) downstream from Little Snake Creek, and 3.5 mi (5.6 km) downstream from Pennsylvania-New York State line.

DRAINAGE AREA.--2,232 mi² (5,781 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 841.04 ft (256.349 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1914, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Minor regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--66 years (1914-79), 3,640 ft³/s (103.1 m³/s), 22.15 in/yr (563 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft³/s (1,740 m³/s) Mar. 18, 1936, gage height, 20.14 ft (6.139 m); maximum gage height, 20.83 ft (6.349 m) Mar. 22, 1948; minimum discharge, 85 ft³/s (2.41 m³/s) Oct. 14, 1964, gage height, 1.30 ft (0.396 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft³/s (510 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1800	31,300 886	14.21 4.331	Feb. 26	1200	ice jam	b11.04 3.365
Jan. 25	0700	a25,000 708	b15.70 4.785	Mar. 7	1500	*45,200 1,280	*17.25 5.258

a About.

b Backwater from ice.

Minimum discharge, 303 ft³/s (8.58 m³/s) Aug. 10, Sept. 2, gage height, 1.94 ft (0.591 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	684	2490	1710	4800	4800	7200	7760	5890	5250	582	456	334
2	729	2280	1790	23000	4200	7400	7390	5170	4480	560	430	308
3	668	2060	1600	28000	4000	7200	7050	4670	5350	550	451	315
4	599	1880	1670	21400	3700	7800	6790	5140	4650	528	415	451
5	651	1770	2210	12900	3400	25000	6590	5480	3810	511	386	784
6	876	1670	3460	9370	3200	42000	6790	4780	3250	486	375	1050
7	843	1600	3220	7870	2900	44500	6200	4140	2910	465	358	2040
8	1020	1540	2900	9200	2800	38000	5660	3770	2530	446	334	3050
9	1040	1520	4670	9000	2900	23200	6920	3430	2190	426	321	2010
10	864	1510	6280	7000	2600	16000	9420	3120	1990	410	313	1320
11	769	1420	5420	5600	2300	16500	9310	2900	1870	402	316	1010
12	699	1320	4260	4700	2200	16900	8370	2610	1820	394	349	815
13	658	1230	3930	4400	2100	13100	8090	2400	1700	390	390	694
14	928	1170	3970	4700	2000	11400	7990	2290	1560	373	399	603
15	1410	1140	3630	5000	1900	12000	9310	2180	1380	358	411	678
16	2730	1110	3140	5000	1800	10100	9310	2090	1220	367	429	746
17	2260	1080	2900	4500	1800	8210	9120	1870	1110	1100	427	916
18	1710	1360	2800	4000	1700	7510	8420	1700	1030	1890	418	834
19	1450	1600	2500	3600	1700	6720	7030	1560	956	1660	421	675
20	1350	1850	2400	4000	1700	6250	6080	1470	893	1630	391	588
21	1580	1660	2800	5800	1700	6080	5450	1410	842	1010	382	558
22	1740	1450	3800	11000	1800	6270	4990	1350	813	790	384	813
23	1450	1350	4400	12000	2000	6830	4600	1310	846	692	368	826
24	1320	1400	3800	10000	2700	7550	4210	2850	800	744	354	757
25	1280	1620	2700	17000	7000	10600	3850	8020	750	748	353	695
26	1380	2060	2800	15000	14000	14200	3550	14100	705	622	342	623
27	2420	2050	2900	11200	12800	13100	4360	14900	660	583	355	570
28	4880	1610	3000	8950	8600	9470	8880	10600	634	559	369	546
29	4370	1580	2800	7210	---	7960	9610	8760	622	633	352	598
30	3210	1680	2600	6400	---	8390	7080	7570	599	601	345	648
31	2760	---	2500	5400	---	8320	---	6400	---	523	354	---
TOTAL	48328	48060	98560	288000	104300	425760	210180	143930	57220	21033	11748	25855
MEAN	1559	1602	3179	9290	3725	13730	7006	4643	1907	678	379	862
MAX	4880	2490	6280	28000	14000	44500	9610	14900	5350	1890	456	3050
MIN	599	1080	1600	3600	1700	6080	3550	1310	599	358	313	308
CFSM	.70	.72	1.42	4.16	1.67	6.15	3.14	2.08	.85	.30	.17	.39
IN.	.81	.80	1.64	4.80	1.74	7.10	3.50	2.40	.95	.35	.20	.43

CAL YR 1978 TOTAL 1262589 MEAN 3459 MAX 24300 MIN 357 CFSM 1.55 IN 21.04
WTR YR 1979 TOTAL 1482974 MEAN 4063 MAX 44500 MIN 308 CFSM 1.82 IN 24.72

01505000 CHENANGO RIVER AT SHERBURNE, NY

LOCATION.--Lat 42°40'43", long 75°30'39", Chenango County, Hydrologic Unit 02050102, on right bank 20 ft (6 m) downstream from bridge on State Highway 80, 0.5 mi (0.8 km) west of Sherburne, and 0.5 mi (0.8 km) downstream from Handsome Brook.

DRAINAGE AREA.--263 mi² (681 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft (316.126 m) National Geodetic Vertical Datum of 1929. July 22 to Dec. 9, 1953, nonrecording gage or reference point and Dec. 10, 1953 to Jan. 26, 1955, water-stage recorder at temporary site 1.5 mi (2.4 km) downstream, at datum approximately 11.9 ft (3.63 m) lower, during period of construction of highway bridge.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation at low flow caused by mill several miles upstream from station. Small diversion during summer months for more than 100 years from Chenango River basin to Oriskany Creek through Oriskany Creek feeder at Solsville for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--41 years, 410 ft³/s (11.61 m³/s), 21.17 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) Mar. 6, 1979, gage height, 9.94 ft (3.030 m); maximum gage height, 9.99 ft (3.045 m) Dec. 30, 1942 (ice jam); minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 25, 1964; minimum gage height, 1.52 ft (0.436 m) Sept. 19, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 10.6 ft (3.23 m), from records of National Weather Service.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s (99.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1200	4,050 115	8.65 2.637	Mar. 6	0500	*10,400 295	*9.94 3.030

Minimum daily discharge, 36 ft³/s (1.02 m³/s) Sept. 1; minimum gage height, 1.99 ft (0.607 m) July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	222	140	600	390	380	1260	478	399	86	48	36
2	74	208	130	3250	370	420	1180	427	336	84	57	40
3	73	199	130	2260	350	520	1210	396	295	80	52	59
4	72	188	302	1430	340	900	1010	442	252	78	48	61
5	78	177	482	1200	320	5400	1110	396	233	75	45	54
6	192	170	365	997	300	8570	957	357	282	71	43	248
7	175	162	335	860	290	4760	854	330	224	69	43	330
8	146	161	386	760	280	3170	842	311	195	67	42	151
9	120	156	716	660	260	2350	930	276	183	66	39	105
10	104	147	556	600	250	2100	998	246	179	64	43	84
11	95	135	509	520	240	1890	1020	239	199	64	51	75
12	89	128	478	480	230	1460	1100	225	220	66	48	67
13	95	118	403	450	230	1270	1140	216	174	62	43	61
14	500	115	381	480	220	1540	1200	201	150	59	42	61
15	513	119	345	520	220	1480	1110	194	139	57	45	90
16	370	115	330	400	210	1180	1060	203	132	57	45	82
17	308	112	310	360	210	1080	1010	187	124	54	45	69
18	258	174	300	310	200	1010	871	180	120	56	49	62
19	229	160	290	300	200	975	777	178	117	57	57	59
20	249	133	300	350	190	1020	706	174	108	54	56	56
21	229	120	370	500	190	1150	614	178	101	51	52	54
22	207	106	380	800	190	1310	565	172	101	49	51	61
23	197	108	350	600	210	1530	525	174	120	46	43	54
24	202	176	300	500	240	2010	470	201	113	45	43	52
25	189	266	230	780	300	2680	425	308	103	45	43	48
26	194	190	250	660	500	2170	386	790	94	45	40	46
27	448	150	270	560	460	1620	525	765	88	48	46	45
28	369	160	270	520	370	1270	966	727	86	48	48	46
29	318	160	260	490	---	1280	653	579	97	46	45	56
30	273	150	240	460	---	1330	569	567	90	43	43	59
31	242	---	250	420	---	1310	---	506	---	42	39	---
TOTAL	6684	4685	10358	23077	7760	59135	26043	10623	5054	1834	1434	2371
MEAN	216	156	334	744	277	1908	868	343	168	59.2	46.3	79.0
MAX	513	266	716	3250	500	8570	1260	790	399	86	57	330
MIN	72	106	130	300	190	380	386	172	86	42	39	36
CFSM	.82	.59	1.27	2.83	1.05	7.26	3.30	1.30	.64	.23	.18	.30
IN.	.95	.66	1.47	3.26	1.10	8.36	3.68	1.50	.71	.26	.20	.34
CAL YR 1978	TOTAL	142562	MEAN 391	MAX 3710	MIN 30	CFSM 1.49	IN 20.16					
WTR YR 1979	TOTAL	159058	MEAN 436	MAX 8570	MIN 36	CFSM 1.66	IN 22.50					

SUSQUEHANNA RIVER BASIN

01508800 FACTORY BROOK AT HOMER, NY

LOCATION.--Lat 42°38'36", long 76°11'19", Cortland County, Hydrologic Unit 02050102, at bridge on State Highway 281, in Homer, 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--15.8 mi² (40.9 km²).

PERIOD OF RECORD.--Water years 1970, 1972 to current year.

CHEMICAL DATA: 1970 (a), 1972 (b), 1973-74 (d), 1975-79 (b).

NUTRIENT DATA: 1970 (a), 1973-74 (d), 1975-79 (b).

BIOLOGICAL DATA:

Bacteria--1973-74 (d), 1975-79 (b).

REMARKS.--Prior to November 1972, sampling site at bridge on State Highway 41, 0.1 mi (0.2 km) downstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 12...	1300	18	350	8.1	4.0	13.2	103	K150	240	510
MAR 20...	0900	45	280	7.5	3.0	--	--	73	38	37
JUN 12...	1300	12	336	7.5	11.0	10.7	100	750	K1900	330
SEP 04...	1300	6.0	340	7.2	18.0	9.5	101	4900	490	710

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
DEC 12...	140	30	41	8.4	3.9	1.2	130	0	110	17
MAR 20...	130	28	38	7.6	3.4	.9	120	0	98	14
JUN 12...	160	26	47	9.8	4.0	1.1	160	0	130	14
SEP 04...	160	21	43	13	11	1.1	170	0	140	17

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, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
DEC 12...	7.0	.0	4.7	147	2.8	.01	2.8	170	0
MAR 20...	8.3	.0	3.5	135	2.8	.00	2.8	120	0
JUN 12...	6.5	.0	4.3	166	--	--	--	200	10
SEP 04...	19	.0	3.0	191	.65	.02	.67	150	0

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

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, NY

LOCATION.--Lat 42°38'13", long 76°10'37", Cortland County, Hydrologic Unit 02050102, on left bank at downstream side of bridge on Wall Street at Homer and 3.4 mi (5.5 km) upstream from confluence with East Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--71.5 mi² (185 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1966 to September 1968, October 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,114.81 ft (339.794 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at bridge on Water Street 500 ft (152 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. A constant 2.8 ft³/s (0.079 m³/s) is diverted for manufacturing purposes from Gate House Pond upstream from station into Onondaga Creek basin (St. Lawrence River basin).

AVERAGE DISCHARGE.--8 years (1968, 1973-79), 142 ft³/s (4.021 m³/s), 26.97 in/yr (685 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,290 ft³/s (64.9 m³/s) Mar. 13, 1977, gage height, 8.08 ft (2.463 m); minimum discharge, 9.6 ft³/s (0.27 m³/s) Nov. 22, 1966, gage height, 1.98 ft (0.604 m) at site then in use; minimum gage height, 1.14 ft (0.347 m) Sept. 3, Oct. 27, 28, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1130	840 23.8	5.20 1.585	Mar. 6	0700	*1,830 51.8	*7.33 2.234

Minimum discharge, 20 ft³/s (0.57 m³/s) Sept. 27, minimum gage height, 1.33 ft (0.405 m) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	55	44	215	179	125	322	143	104	42	55	24
2	29	52	44	285	170	159	320	137	96	41	52	24
3	28	51	44	415	162	174	318	136	92	42	47	33
4	28	55	86	322	153	250	279	143	90	39	40	29
5	33	53	47	281	147	1060	283	131	85	36	37	27
6	30	51	77	246	144	1540	259	125	82	35	31	74
7	28	51	76	222	137	1000	236	121	79	34	27	68
8	31	50	97	213	134	772	229	114	76	29	26	50
9	31	47	147	189	127	620	255	111	75	31	25	40
10	27	44	104	167	124	556	285	106	73	31	30	34
11	26	43	90	156	123	498	279	102	90	33	33	31
12	25	42	86	149	118	418	285	96	85	35	33	28
13	29	39	87	140	109	372	283	96	76	34	30	25
14	69	39	85	150	106	402	279	95	71	33	29	35
15	74	39	80	160	101	366	274	92	68	31	29	55
16	59	38	77	150	99	316	293	90	65	32	29	42
17	55	40	79	140	95	293	299	86	64	32	26	37
18	85	50	71	130	97	274	250	83	63	32	27	32
19	63	47	69	130	90	263	231	80	61	30	29	31
20	63	43	73	130	86	263	212	79	57	28	27	28
21	58	42	115	153	85	270	197	77	56	26	25	26
22	55	40	101	174	83	295	189	76	61	27	24	27
23	53	40	95	150	86	335	179	65	64	26	22	25
24	68	45	88	162	100	452	168	75	59	25	22	24
25	64	53	87	392	106	525	150	109	56	25	22	23
26	62	47	91	329	133	444	149	161	52	25	26	23
27	105	42	87	277	134	342	174	147	50	28	37	21
28	73	47	83	255	123	289	198	152	50	25	34	23
29	76	45	76	234	---	320	165	137	50	27	31	28
30	70	45	82	213	---	348	155	123	44	25	28	26
31	58	---	82	197	---	355	---	113	---	26	26	---
TOTAL	1584	1375	2600	6926	3351	13736	7195	3401	2094	965	959	993
MEAN	51.1	45.8	83.9	223	120	443	240	110	69.8	31.1	30.9	33.1
MAX	105	55	147	685	179	1580	322	161	104	42	55	74
MIN	25	38	44	130	83	125	149	65	44	25	22	21
CFSM	.72	.64	1.17	3.12	1.68	6.20	3.36	1.54	.98	.44	.43	.46
IN.	.82	.72	1.35	3.60	1.74	7.15	3.74	1.77	1.09	.50	.50	.52

CAL YR 1978	TOTAL	44476	MEAN 122	MAX 1080	MIN 19	CFSM 1.71	IN 23.14
WTR YR 1979	TOTAL	45179	MEAN 124	MAX 1580	MIN 21	CFSM 1.73	IN 23.51

SUSQUEHANNA RIVER BASIN

01508803 WEST BRANCH TIOUGHNIAGA RIVER AT HOMER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1970, 1972 to current year.

CHEMICAL DATA: 1957, 1970, 1972 (a); 1973 (c); 1974-79 (b).

NUTRIENT DATA: 1970 (a), 1974-79 (b).

BIOLOGICAL DATA:

Bacteria--1973 (c), 1974-79 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, TOTAL (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 12...	1100	88	370	7.4	1.0	12.8	93	280	56	39	
MAR 20...	1100	255	340	7.6	2.0	--	--	28	K20	K7	
JUN 12...	1100	83	360	7.1	15.0	9.8	100	410	470	70	
SEP 04...	1030	31	380	6.6	20.0	7.8	87	4100	300	89	

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
DEC 12...	150	21	43	11	7.4	1.1	160	0	130	18
MAR 20...	150	32	43	9.5	7.3	1.0	140	0	110	14
JUN 12...	160	25	46	12	9.4	1.0	170	0	140	14
SEP 04...	170	27	50	10	3.4	1.0	170	0	140	15

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, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
DEC 12...	13	.0	4.5	177	1.5	.01	1.5	110	30
MAR 20...	14	.1	3.7	162	1.8	.01	1.8	150	0
JUN 12...	16	.0	2.9	185	.95	.01	.96	1600	10
SEP 04...	6.0	.0	3.1	172	1.8	.01	1.8	80	0

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

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi (0.6 km) downstream from confluence of East and West Branches. Water-quality sampling site at Cortland Sewage Treatment Plant, 0.4 mi (0.6 km) downstream from discharge station.

DRAINAGE AREA.--292 mi² (756 km²), including 14.0 mi² (36.3 km²), the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft (330.683 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft (1.219 m) higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. A constant 2.8 ft³/s (0.079 m³/s) is diverted for manufacturing purposes from Gate House Pond on West Branch upstream from station into Onondaga Creek basin (St. Lawrence River basin).

AVERAGE DISCHARGE.--41 years (1939-79), 503 ft³/s (14.24 m³/s), 23.39 in/yr (594 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Mar. 5, 1964, gage height, 12.49 ft (3.807 m); minimum, 9.8 ft³/s (0.28 m³/s) Sept. 20, 1939, Sept. 29, 1959; minimum daily, 17 ft³/s (0.48 m³/s) Sept. 26, 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft³/s (125 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	2230	4,860 138	8.76 2.670	Mar. 6	0600	*12,800 362	*12.42 3.786

Minimum discharge, 62 ft³/s (1.76 m³/s) Sept. 2, gage height, 2.62 ft (0.799 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	263	210	1000	620	519	1510	485	381	114	132	66
2	102	244	203	3790	560	719	1360	451	337	111	161	66
3	99	229	196	3560	540	781	1400	432	312	108	126	75
4	99	221	333	2010	520	1250	1100	499	287	108	108	75
5	114	210	680	1300	480	5830	1150	441	263	99	99	71
6	114	203	456	1000	450	11500	1010	399	263	96	88	263
7	108	203	399	860	450	5790	834	377	240	93	83	495
8	105	200	456	760	420	3500	828	355	221	88	80	225
9	111	189	900	660	400	2470	987	342	214	88	78	150
10	99	182	700	580	380	2120	1170	325	210	88	83	123
11	96	175	560	520	350	1910	1150	304	248	88	88	108
12	93	167	500	480	340	1440	1200	287	267	88	85	99
13	90	164	465	490	330	1260	1230	279	221	88	80	93
14	308	161	432	660	320	1470	1290	279	196	85	78	102
15	504	161	390	760	310	1400	1250	259	182	83	78	248
16	333	157	350	640	300	1100	1250	255	171	96	80	182
17	263	157	350	620	290	1010	1270	244	161	117	80	135
18	263	210	320	500	280	937	1040	229	157	96	78	117
19	232	214	310	480	270	906	882	214	154	85	78	108
20	255	182	340	500	260	931	776	207	144	80	80	102
21	240	171	539	540	250	1060	691	200	138	78	75	96
22	214	164	549	828	250	1290	631	196	150	75	73	93
23	200	167	456	680	260	1630	589	185	164	75	71	88
24	221	192	390	660	310	2370	539	203	157	73	71	85
25	210	283	320	1850	400	3200	495	355	141	71	69	83
26	210	244	340	1670	569	2530	475	805	132	71	69	83
27	534	196	360	1270	631	1500	519	846	126	73	83	78
28	432	214	350	1080	514	1100	816	787	123	71	88	80
29	350	218	330	931	---	1270	610	631	126	73	83	85
30	312	210	340	800	---	1520	519	524	123	73	75	88
31	283	---	346	700	---	1610	---	441	---	75	69	---
TOTAL	6699	5951	12870	32179	11054	65923	28571	11836	6009	2707	2669	3762
MEAN	216	198	415	1038	395	2127	952	382	200	87.3	86.1	125
MAX	534	283	900	3790	631	11500	1510	846	381	117	161	495
MIN	90	157	196	480	250	519	475	185	123	71	69	66
CFSM	.74	.68	1.42	3.56	1.35	7.28	3.26	1.31	.69	.30	.30	.43
IN.	.85	.76	1.64	4.10	1.41	8.40	3.64	1.51	.77	.34	.34	.48
CAL YR 1978	TOTAL	173991	MEAN	477	MAX	4810	MIN	66	CFSM	1.63	IN	22.17
WTR YR 1979	TOTAL	190230	MEAN	521	MAX	11500	MIN	66	CFSM	1.78	IN	24.23

SUSQUEHANNA RIVER BASIN

01509000 TIOUGHNIAGA RIVER AT CORTLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.

CHEMICAL DATA: 1957 (e), 1970, 1972 (a).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1957, once-daily measurements, unpublished.

pH: October 1956 to September 1957, once-daily measurements, unpublished.

WATER TEMPERATURES: October 1956 to current year.

REMARKS.--Daily water-temperature measurements made at 0900 hours.

COOPERATION.--Water-temperature records furnished by the city of Cortland.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 23.5°C July 22, 1957; minimum daily (except water year 1960), freezing point on many days during winter periods in water years 1957, 1959, 1962, 1967-79.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 21.0°C July 15; minimum daily, freezing point on several days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY AT 0900)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	8.0	3.5	1.0	1.0	4.0	7.0	5.0	15.0	16.5	20.0	17.0
2	16.0	8.5	4.5	.5	1.0	3.5	7.0	6.0	15.0	15.0	20.0	18.5
3	10.0	7.5	3.5	.0	1.0	3.5	6.0	6.0	15.0	15.0	19.0	18.0
4	11.0	8.0	5.0	.0	1.0	3.0	5.0	4.5	16.0	15.0	19.5	17.0
5	11.0	8.0	4.0	.0	.0	1.0	4.0	3.0	16.0	13.5	19.5	18.0
6	12.0	8.5	5.0	.5	.0	1.0	3.5	4.0	16.0	13.5	20.0	19.5
7	11.5	9.0	4.0	.5	1.5	2.0	2.0	4.5	15.0	16.0	18.0	18.5
8	10.0	8.5	6.0	.5	1.0	1.5	4.0	7.0	16.0	14.5	18.0	15.0
9	10.0	7.5	3.0	.5	1.0	2.5	4.0	8.5	16.0	17.0	18.0	14.5
10	10.5	8.0	1.0	.5	.5	4.0	4.0	9.0	17.0	16.5	18.0	13.0
11	11.5	8.0	.5	.0	.5	2.5	3.5	9.0	16.0	16.5	17.5	14.5
12	12.0	8.0	1.0	1.0	.0	2.0	5.0	7.5	13.0	17.0	17.5	13.5
13	12.5	6.0	2.0	1.0	1.0	2.0	4.0	7.0	14.0	17.0	15.0	14.0
14	10.5	8.0	1.0	2.5	1.0	4.0	4.0	6.0	14.0	20.0	17.0	16.5
15	9.0	8.0	1.5	.0	1.5	.5	4.0	6.0	15.5	21.0	16.5	16.0
16	9.0	7.0	3.0	.5	1.0	1.0	3.0	5.0	15.5	19.5	16.5	14.5
17	8.5	5.0	1.5	.0	1.0	3.0	3.5	4.0	16.0	18.5	13.0	13.5
18	8.0	8.0	.5	1.0	1.5	4.0	4.0	4.5	15.0	17.5	14.5	14.5
19	9.5	7.0	.5	.0	1.0	4.0	4.0	6.0	15.0	17.0	15.0	14.0
20	9.0	6.0	1.0	.0	1.0	4.5	4.0	5.5	15.0	17.5	16.0	12.0
21	9.0	4.5	1.5	2.0	2.0	5.0	5.5	15.0	16.0	19.0	16.0	12.5
22	10.0	4.5	1.0	2.0	3.0	5.5	6.0	15.0	15.5	18.0	17.0	14.0
23	9.5	4.5	1.0	1.0	3.0	5.0	6.0	13.0	13.5	19.0	16.5	13.0
24	8.0	5.5	1.0	1.0	4.0	7.0	6.0	13.0	13.0	18.5	18.0	12.0
25	7.0	4.0	.5	.0	3.5	7.0	8.0	12.5	13.0	19.5	18.5	12.5
26	7.5	3.0	.0	1.0	3.5	4.5	8.0	12.0	13.5	19.5	16.5	12.5
27	8.5	2.0	1.0	2.0	3.5	3.0	8.0	13.0	14.0	17.5	17.0	12.0
28	8.5	4.0	.0	3.0	4.0	4.0	6.0	12.0	14.0	17.0	18.5	13.0
29	8.5	3.5	1.0	2.0	---	5.0	6.0	12.5	14.5	17.5	18.5	13.0
30	7.5	5.0	1.0	1.5	---	5.0	5.0	13.5	16.0	17.5	18.5	14.0
31	7.5	---	1.0	2.0	---	8.0	---	13.5	---	19.5	19.5	---
MEAN	10.0	6.5	2.0	1.0	1.5	3.5	5.0	8.5	15.0	17.5	17.5	14.5
WTR YR 1979	MEAN	8.5	MAX	21.0	MIN	.0						

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY

LOCATION.--Lat 42°30'04", long 76°07'38", Cortland County, Hydrologic Unit 02050102, on right bank 100 ft (30 m) downstream from bridge on Tone Road, 250 ft (75 m) south of State Highway 90, 1.6 mi (2.6 km) northwest of East Virgil, 3.2 mi (5.1 km) northwest of Messengersville, and 3.5 mi (5.6 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--10.4 mi² (26.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge measurements, seepage investigation, water year 1974. July 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,270.00 ft (387.096 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--5 years, 25.7 ft³/s (0.728 m³/s), 33.56 in/yr (852 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft³/s (116 m³/s) Oct. 9, 1976; maximum gage height, 9.33 ft (3.844 m) Sept. 18, 1977; minimum discharge, 0.9 ft³/s (0.025 m³/s) Aug. 8, 1975, gage height, 4.74 ft (1.445 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0615	995 28.2	8.54 2.603	Mar. 5	0715	*1,790 50.7	*9.02 2.749

Minimum daily discharge, 1.1 ft³/s (0.03 m³/s) Nov. 16, July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.2	5.0	250	20	18	46	11	9.5	3.7	5.0	1.4
2	1.3	2.8	5.0	552	20	36	42	10	7.4	3.4	4.0	1.7
3	1.2	2.4	4.5	156	19	40	35	12	6.6	3.1	3.5	2.4
4	1.2	2.3	24	60	16	190	30	15	5.4	2.9	3.1	1.6
5	1.4	2.1	16	32	26	1000	35	12	4.4	2.7	2.6	1.5
6	2.3	2.0	9.2	26	18	290	26	10	4.0	2.4	2.4	15
7	1.3	1.8	8.6	20	14	102	22	9.2	3.8	2.2	2.1	4.6
8	1.7	2.0	19	24	10	64	21	8.7	3.6	2.1	1.8	2.5
9	1.8	1.8	57	18	7.0	48	39	8.0	3.4	1.8	1.5	2.2
10	1.4	1.8	21	17	6.0	46	40	7.5	3.6	1.9	1.9	2.1
11	1.3	1.7	14	15	5.0	40	41	6.9	7.0	3.2	1.7	2.0
12	1.2	1.6	13	13	5.2	30	40	6.3	4.4	2.2	1.7	2.0
13	2.8	1.6	13	13	5.6	28	38	6.1	3.6	2.0	1.6	1.9
14	24	1.4	11	15	6.0	46	38	5.6	3.2	1.8	1.7	3.3
15	11	1.2	10	20	6.4	32	35	5.3	3.0	1.6	1.7	2.7
16	5.1	1.1	8.9	13	6.2	26	38	5.1	2.8	1.5	1.7	2.2
17	2.8	1.4	9.1	12	6.0	22	32	4.8	2.6	1.6	1.5	2.0
18	2.1	10	8.4	14	5.6	24	26	4.6	2.6	1.8	1.7	2.0
19	3.2	4.9	10	13	6.0	24	23	4.5	2.6	1.6	1.6	1.9
20	5.1	2.8	6.3	11	6.2	29	20	4.2	3.0	1.4	1.5	1.9
21	3.9	2.1	28	11	6.6	36	18	4.2	3.2	1.3	1.5	2.0
22	3.4	1.8	16	12	7.4	48	15	4.0	10	1.2	1.5	1.9
23	3.2	1.8	11	13	8.4	66	14	3.8	5.4	1.1	1.5	1.9
24	3.2	10	8.6	50	10	87	12	5.4	4.6	1.6	1.5	1.9
25	3.1	15	45	218	14	87	12	43	4.0	1.5	1.5	1.8
26	6.2	7.6	22	82	36	55	12	40	3.2	2.1	1.5	1.8
27	26	4.9	17	58	27	38	20	27	3.0	1.8	1.8	1.8
28	8.9	5.2	13	40	14	31	18	25	3.1	1.7	1.6	2.4
29	6.2	5.0	10	30	---	57	12	19	5.4	1.6	1.5	2.7
30	4.7	5.2	11	24	---	67	12	16	4.0	1.5	1.5	2.1
31	3.9	---	7.1	22	---	57	---	12	---	1.4	1.4	---
TOTAL	146.4	108.5	461.7	1854	337.6	2764	812	356.2	132.4	61.7	61.1	77.2
MEAN	4.72	3.62	14.9	59.8	12.1	89.2	27.1	11.5	4.41	1.99	1.97	2.57
MAX	26	15	57	552	36	1000	46	43	10	3.7	5.0	15
MIN	1.2	1.1	4.5	11	5.0	18	12	3.8	2.6	1.1	1.4	1.4
CFSM	.45	.35	1.43	5.75	1.16	8.58	2.61	1.11	.42	.19	.19	.25
IN.	.52	.39	1.65	6.63	1.21	9.89	2.90	1.27	.47	.22	.22	.28
CAL YR 1978	TOTAL	6592.5	MEAN 18.1	MAX 325	MIN 1.1	CFSM 1.74	IN 23.59					
WTR YR 1979	TOTAL	7172.8	MEAN 19.7	MAX 1000	MIN 1.1	CFSM 1.89	IN 25.65					

SUSQUEHANNA RIVER BASIN

01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY--Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1975-79 (d).

NUTRIENT DATA: 1975-79 (d).

BIOLOGICAL DATA:

Bacteria--1975-79 (d).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW. INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV										
01...	1300	3.3	280	8.1	9.0	10.6	95	86	92	66
DEC										
12...	0900	11	142	7.2	2.0	11.5	86	710	K160	45
JAN										
16...	1400	14	165	7.1	.0	13.6	97	K1400	K1400	K1100
FEB										
14...	1400	6.0	230	7.6	.0	12.8	89	600	2500	900
MAR										
20...	1300	24	128	7.3	2.0	--	--	44	K13	67
APR										
17...	1400	32	116	6.9	6.5	12.2	103	37	38	K8
MAY										
17...	1400	4.8	230	8.4	16.5	10.7	113	--	K10	K9
JUN										
12...	0900	4.4	236	7.5	11.0	9.7	91	470	580	250
JUL										
11...	1200	3.4	303	8.1	16.0	9.7	102	39	K78	K110
AUG										
15...	1030	1.7	328	7.8	11.0	9.8	91	430	380	53
SEP										
04...	0830	1.6	335	6.9	14.0	8.6	86	3500	43	K130

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)
NOV										
01...	110	31	34	6.6	7.4	.9	99	0	81	16
DEC										
12...	54	17	16	3.4	4.0	.8	45	0	37	15
JAN										
16...	57	18	17	3.6	4.9	.9	48	0	39	14
FEB										
14...	83	20	25	4.9	5.4	.9	76	0	62	16
MAR										
20...	64	35	19	4.1	4.5	.7	36	0	30	12
APR										
17...	41	10	12	2.6	3.8	.7	38	0	31	12
MAY										
17...	130	47	41	6.8	--	1.8	89	6	83	14
JUN										
12...	96	21	29	5.7	7.2	1.1	91	0	75	14
JUL										
11...	140	13	41	8.1	9.6	1.1	150	0	120	15
AUG										
15...	140	26	43	8.2	7.7	.9	140	0	110	20
SEP										
04...	140	28	44	8.0	6.6	1.0	140	0	110	16

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

SUSQUEHANNA RIVER BASIN

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01509150 GRIDLEY CREEK ABOVE EAST VIRGIL, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 01...	12	.1	4.2	130	.44	.00	.44	130	0
DEC 12...	6.6	.0	4.5	72	.60	.00	.60	80	730
JAN 16...	9.0	.0	4.8	78	.73	.00	.73	90	0
FEB 14...	13	.0	4.4	107	.62	.00	.62	50	0
MAR 20...	6.6	.0	4.1	69	.54	.00	.54	150	0
APR 17...	6.5	.0	3.6	60	.38	.00	.38	180	20
MAY 17...	13	.0	3.3	--	.33	.01	.34	100	10
JUN 12...	13	.0	4.5	119	.43	.01	.44	400	10
JUL 11...	16	.0	4.9	170	.43	.01	.44	220	10
AUG 15...	29	.1	4.4	182	.00	.00	.00	110	0
SEP 04...	15	.1	4.9	165	.51	.00	.51	100	0

SUSQUEHANNA RIVER BASIN

01510000 OTSELIC RIVER AT CINCINNATUS, NY

LOCATION.--Lat 42°32'28", long 75°53'58", Cortland County, Hydrologic Unit 02050102, on right bank 150 ft (46 m) upstream from Mead Brook, and 300 ft (91 m) downstream from bridge on County Highway 159 at Cincinnatus.

DRAINAGE AREA.--147 mi² (381 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft (314.328 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--36 years (1939-64, 1970-79), 276 ft³/s (7.816 m³/s), 25.50 in/yr (648 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft³/s (238 m³/s) Dec. 30, 1942; maximum gage height, 10.68 ft (3.255 m) Apr. 4, 1950; minimum discharge, 3.8 ft³/s (0.11 m³/s) Sept. 25, 1939; minimum gage height, 0.24 ft (0.073 m) Sept. 2, 1979 (result of channel clearance).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1415	3,580 101	7.58 2.310	Mar. 25	0800	2,880 81.6	6.50 1.981
Mar. 6	0130	*6,720 190	*9.88 3.011				

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Sept. 27; minimum gage height, 0.24 ft (0.073 m) Sept. 2 (result of channel clearance).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	131	129	767	256	225	880	260	209	41	28	13
2	46	125	127	3190	240	303	740	241	180	40	26	12
3	45	120	123	1730	220	312	820	241	163	39	20	27
4	44	115	268	767	220	640	660	309	148	37	20	27
5	52	112	395	570	210	4410	720	248	135	35	17	20
6	62	107	248	468	190	5510	660	233	137	34	15	94
7	58	105	227	390	180	2430	540	210	120	33	14	172
8	54	104	315	390	170	1470	480	198	109	31	13	80
9	54	100	786	330	170	948	480	184	104	30	12	44
10	50	97	472	300	160	932	580	172	102	30	15	31
11	47	94	334	270	160	850	580	164	126	30	16	27
12	44	92	300	250	150	609	560	155	125	31	16	24
13	49	90	281	260	140	540	580	149	102	28	14	22
14	331	90	261	391	140	810	580	145	85	27	14	23
15	258	92	239	370	130	682	600	138	74	24	14	34
16	159	89	221	290	130	506	600	139	66	19	15	33
17	131	86	210	270	120	460	660	127	62	17	14	27
18	117	124	200	250	120	432	580	117	58	17	16	24
19	113	112	190	220	120	432	400	111	56	16	16	22
20	124	102	198	230	110	501	360	108	52	16	16	20
21	113	98	384	350	110	518	271	105	49	16	14	20
22	105	95	297	450	100	815	294	107	49	16	13	20
23	101	96	253	370	110	1110	276	104	62	16	12	15
24	102	121	220	380	140	1740	253	121	55	17	13	13
25	96	162	190	1330	180	2430	234	182	49	16	14	11
26	101	139	200	777	300	1960	236	574	45	16	13	11
27	265	124	210	519	261	748	340	536	42	17	16	10
28	188	136	200	432	219	548	532	479	42	16	17	13
29	159	133	190	367	---	739	324	336	46	16	16	22
30	144	132	200	318	---	1020	281	283	43	15	14	22
31	138	---	210	288	---	977	---	253	---	17	13	---
TOTAL	3396	3323	8078	17284	4756	35607	15101	6729	2695	753	486	933
MEAN	110	111	261	558	170	1149	503	217	89.8	24.3	15.7	31.1
MAX	331	162	786	3190	300	5510	880	574	209	41	28	172
MIN	44	86	123	220	100	225	234	104	42	15	12	10
CFSM	.75	.76	1.78	3.80	1.16	7.82	3.42	1.48	.61	.17	.11	.21
IN.	.86	.84	2.04	4.37	1.20	9.01	3.82	1.70	.68	.19	.12	.24

CAL YR 1978	TOTAL	92739	MEAN 254	MAX 2690	MIN 25	CFSM 1.73	IN 23.47
WTR YR 1979	TOTAL	99141	MEAN 272	MAX 5510	MIN 10	CFSM 1.85	IN 25.09

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY

LOCATION.--Lat 42°20'34", long 75°57'57", Broome County, Hydrologic Unit 02050102, on left bank at control-gate structure for Whitney Point Dam on Otselec River, 0.3 mi (0.5 km) upstream from spillway, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) north of Whitney Point.

DRAINAGE AREA.--257 mi² (666 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to October 1970, published as "Whitney Point Reservoir at Whitney Point."

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1942 for flood control; first used for flood regulation on Mar. 9, 1942. Usable capacity, 86,440 acre-ft (107 hm³) between elevations 950.0 ft or 289.56 m (sill of gates) and 1,010.0 ft or 307.85 m (crest of spillway). Dead storage, 28 acre-ft (34,500 m³). Figures given herein represent total contents. Discharge is controlled by operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,005.0 ft (306.32 m) Mar. 23, 1948, contents, 71,440 acre-ft (88.1 hm³); minimum, 950.4 ft (289.68 m) Sept. 2-4, 1953, contents, 36 acre-ft (44,400 m³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 998.15 ft (304.236 m) Mar. 8, contents, 55,170 acre-ft (68.0 hm³); minimum, 965.29 ft (294.220 m) Apr. 30, contents, 4,537 acre-ft (5.59 hm³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

960.0	1,250	980.0	22,240
965.0	4,260	985.0	30,200
970.0	9,270	990.0	38,980
975.0	15,290	1,000.0	59,220

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	973.18	972.92	972.97	966.31	966.64	965.98	966.10	965.62	973.16	973.19	973.19	973.16
2	973.21	972.93	972.96	971.46	965.90	966.30	965.94	965.91	973.14	973.21	973.24	973.12
3	973.22	972.92	972.95	978.68	966.03	966.58	965.99	966.14	973.03	973.19	973.15	973.25
4	973.25	972.93	972.95	978.78	966.17	966.91	965.78	966.63	972.89	973.10	973.03	973.27
5	973.27	972.93	973.45	976.07	966.27	972.32	965.89	967.13	972.93	973.00	972.98	973.27
6	973.28	972.91	972.91	973.08	966.11	986.22	965.96	967.43	973.01	972.95	972.95	973.32
7	973.21	972.88	971.25	970.07	965.97	994.82	965.85	967.93	973.08	972.96	972.94	973.13
8	973.15	972.90	968.29	967.49	965.93	997.74	965.87	968.45	973.11	972.99	972.95	972.84
9	973.07	972.91	966.50	966.15	965.90	997.56	966.09	968.93	973.14	973.02	972.97	972.91
10	973.04	972.91	966.12	965.90	965.88	995.89	966.16	969.34	973.14	973.05	973.02	973.01
11	973.02	972.91	965.84	966.30	965.84	993.75	966.09	969.71	973.14	973.08	973.09	973.10
12	973.03	972.92	966.05	966.40	965.85	990.82	965.93	970.02	973.00	973.11	973.12	973.13
13	973.08	972.88	966.23	966.32	966.03	987.45	965.83	970.35	972.90	973.13	973.15	973.16
14	973.35	972.86	966.33	966.41	966.10	984.22	966.00	970.64	973.01	973.13	973.18	973.20
15	973.64	972.97	966.33	966.44	966.14	981.46	966.22	970.91	973.14	973.13	973.18	973.11
16	972.98	973.07	966.21	966.01	966.19	978.10	966.01	971.19	973.24	973.15	973.19	973.06
17	972.85	973.16	966.08	966.06	966.21	974.64	965.87	971.43	973.29	973.20	973.18	973.09
18	972.97	973.32	965.95	966.03	966.17	971.24	965.90	971.65	973.32	973.19	973.18	973.10
19	973.10	973.29	965.85	966.00	966.10	968.24	965.93	971.85	973.20	973.17	973.19	973.11
20	973.26	973.13	966.02	965.89	966.04	966.97	965.89	972.03	973.07	973.13	973.20	973.08
21	973.40	972.97	966.41	966.06	965.99	966.34	966.08	972.22	973.01	973.10	973.21	973.08
22	973.32	972.96	966.36	966.56	965.94	966.18	966.10	972.39	973.06	973.06	973.20	973.08
23	973.17	972.95	966.08	966.22	965.92	966.37	965.97	972.56	973.05	973.01	973.18	973.05
24	973.04	973.09	965.92	965.94	966.01	966.86	965.84	972.79	972.95	972.99	973.19	973.03
25	972.99	973.40	965.96	968.37	966.40	968.30	966.02	973.08	972.86	972.96	973.21	973.03
26	973.00	973.56	965.97	973.63	967.12	969.36	966.13	973.24	972.87	972.98	973.21	973.06
27	973.38	973.07	966.07	976.07	967.34	968.24	966.16	973.11	972.94	973.02	973.25	973.08
28	973.19	972.94	966.15	976.10	966.56	966.71	966.35	972.94	973.03	973.05	973.25	973.10
29	972.89	972.94	966.09	974.53	---	966.69	965.95	973.09	973.10	973.07	973.23	973.15
30	972.89	972.95	965.98	972.00	---	966.75	965.40	972.93	973.17	973.09	973.22	973.13
31	972.88	---	965.98	969.04	---	966.40	---	973.05	---	973.10	973.20	---
MEAN	973.14	973.02	967.68	969.37	966.17	975.66	965.98	970.47	973.07	973.08	973.14	973.11
MAX	973.64	973.56	973.45	978.78	967.34	997.74	966.35	973.24	973.32	973.21	973.25	973.32
MIN	972.85	972.86	965.84	965.89	965.84	965.98	965.40	965.62	972.86	972.95	972.94	972.84
†	12,565	12,637	5,205	6,934	5,382	5,422	4,709	12,863	12,926	12,850	12,926	12,825
‡	-5.1	+1.2	-121	+28.1	-27.9	+0.7	-12.0	+133	+1.1	-1.2	+1.2	-1.7
CAL YR 1978	MEAN 971.21	MAX 987.68	MIN 965.12	‡ -0.5								
WTR YR 1979	MEAN 971.20	MAX 997.74	MIN 965.40	‡ -0.1								

† Contents, in acre-feet, at end of month.

‡ Change in contents, equivalent in cubic feet per second.

SUSQUEHANNA RIVER BASIN

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY

LOCATION.--Lat 42°13'05", long 75°50'55", Broome County, Hydrologic Unit 02050102, on left bank in Chenango Valley State Park, and 1.2 mi (1.9 km) downstream from Tioughnioga River and village of Chenango Forks.

DRAINAGE AREA.--1,483 mi² (3,841 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 871.73 ft (265.703 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, water-stage recorder at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 01511000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--66 years (1914-79), 2,442 ft³/s (69.16 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft³/s (2,720 m³/s) July 8, 1935, gage height, 20.3 ft (6.19 m), from floodmarks, from rating curve extended above 32,000 ft³/s (906 m³/s) on basis of slope-area measurement of peak flow; minimum, 84 ft³/s (2.38 m³/s) Sept. 19, 25, 1939, gage height, 2.24 ft (0.683 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 18,000 ft³/s (510 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1500	19,900 564	9.89 3.014	Mar. 6	1000	*39,400 1,120	*13.58 4.139

Minimum daily discharge, 210 ft³/s (5.95 m³/s) Aug. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	422	1310	1110	3060	3000	2500	6790	2450	2240	460	281	276
2	405	1210	1070	15400	2700	3000	5830	2190	1900	449	502	260
3	397	1130	1020	15300	2500	4000	5870	2030	1680	461	513	575
4	397	1050	1250	11500	2300	6000	5050	2630	1490	504	449	567
5	405	1010	2850	9050	2100	20600	5130	2390	1190	447	368	429
6	602	968	3130	7680	1900	37200	4720	1970	1140	411	336	961
7	887	929	3260	7250	1800	26500	4000	1660	1130	363	281	2100
8	720	918	3810	7200	1700	16400	3710	1490	1020	332	230	1390
9	650	891	5720	5720	1600	13300	4870	1380	965	320	226	680
10	593	843	4920	4520	1500	12100	6980	1280	923	308	220	527
11	537	801	3060	3430	1400	12200	6680	1190	1040	316	220	455
12	473	770	2640	3100	1300	10200	6530	1120	1240	325	220	424
13	465	743	2470	2900	1300	8940	6020	1050	1030	320	220	380
14	1080	701	2310	2800	1300	9280	5840	1040	788	307	210	380
15	3420	650	2090	4340	1300	9820	5950	980	715	302	210	670
16	2430	645	1920	3780	1200	7880	5660	946	665	344	220	621
17	1610	638	1920	3320	1200	7160	5510	920	640	399	230	509
18	1230	902	1770	3270	1200	6440	4590	861	652	393	240	430
19	1130	1230	1640	2840	1200	5780	3860	817	709	367	260	388
20	1170	1080	1840	2790	1100	4880	3360	769	667	341	250	356
21	1200	933	2630	3100	1100	5180	2950	704	561	326	250	342
22	1190	817	3310	5480	1000	5800	2750	713	534	316	250	380
23	1120	772	2570	5150	1000	6690	2590	705	676	301	253	334
24	1070	829	2240	4120	1700	8280	2300	835	652	315	251	320
25	1020	1360	1730	10400	2500	11100	1970	1630	613	292	252	278
26	974	1520	1880	8560	4000	11700	1940	5120	515	264	295	265
27	2800	1330	1940	6270	4200	8690	2420	6800	464	271	305	258
28	3120	1130	1900	5000	2500	6160	5440	5340	426	268	300	265
29	2160	1140	1700	4500	---	5920	4110	4140	455	259	300	413
30	1670	1110	1700	4000	---	7510	3050	3260	481	260	296	430
31	1460	---	1760	3500	---	7490	---	2730	---	259	291	---
TOTAL	36807	29360	73160	179330	51600	308700	136470	61140	27201	10600	8729	15663
MEAN	1187	979	2360	5785	1843	9958	4549	1972	907	342	282	522
MAX	3420	1520	5720	15400	4200	37200	6980	6800	2240	504	513	2100
MIN	397	638	1020	2790	1000	2500	1940	704	426	259	210	258
CAL YR 1978	TOTAL	886202	MEAN	2428	MAX	16500	MIN	234				
WTR YR 1979	TOTAL	938760	MEAN	2572	MAX	37200	MIN	210				

SUSQUEHANNA RIVER BASIN

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01513110 SUSQUEHANNA RIVER AT JOHNSON CITY, NY

LOCATION.--Lat 42°06'37", long 75°58'30", Broome County, Hydrologic Unit 02050103, at intake of the New York State Electric and Gas Corp., Goudey Station, at Johnson City, 100 ft (30 m) upstream from Little Choconut Creek, 0.5 mi (0.8 km) downstream from C.F.J. Memorial Bridge, 3.5 mi (5.6 km) downstream from Chenango River and 4.8 mi (7.7 km) upstream from discontinued discharge station (01513500) at Vestal.

DRAINAGE AREA.--3,891 mi² (10,078 km²), below mouth of Chenango River.

PERIOD OF RECORD.--Water years 1956 to current year. Prior to October 1960, published as 01513500, "at Johnson City", and prior to October 1967, published as 01513500, "at Vestal"; however, all water-temperature records were collected at present site.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1955 to current year.

REMARKS.--Daily water-temperature measurements made at 0800 hours. During winter periods water is at times recirculated from inside the plant through the intake to prevent icing conditions, thus resulting in reported water temperatures that are slightly above actual river temperatures.

COOPERATION.--Water-temperature records furnished by the New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1979; minimum daily, freezing point on many days during winter periods, except 1967, 1976, and 1978-79.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4; minimum daily, 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	9.0	3.0	2.0	1.0	1.0	8.0	13.0	17.0	22.0	27.0	23.0
2	14.0	8.0	3.0	1.0	1.0	1.0	7.0	12.0	18.0	22.0	27.0	24.0
3	13.0	9.0	1.0	1.0	2.0	1.0	6.0	12.0	19.0	22.0	26.0	24.0
4	14.0	9.0	3.0	1.0	2.0	1.0	7.0	12.0	19.0	22.0	29.0	24.0
5	14.0	10.0	4.0	1.0	1.0	1.0	4.0	11.0	20.0	19.0	27.0	24.0
6	15.0	9.0	3.0	1.0	1.0	2.0	4.0	12.0	21.0	17.0	27.0	24.0
7	14.0	11.0	3.0	1.0	1.0	2.0	2.0	13.0	20.0	18.0	23.0	22.0
8	12.0	11.0	4.0	1.0	1.0	2.0	2.0	16.0	22.0	21.0	24.0	21.0
9	11.0	11.0	4.0	1.0	1.0	2.0	7.0	18.0	22.0	22.0	23.0	24.0
10	12.0	4.0	2.0	1.0	1.0	3.0	7.0	20.0	23.0	23.0	24.0	18.0
11	13.0	7.0	1.0	1.0	1.0	2.0	3.0	21.0	22.0	22.0	23.0	20.0
12	14.0	7.0	2.0	1.0	1.0	2.0	6.0	20.0	17.0	24.0	22.0	19.0
13	16.0	7.0	1.0	1.0	2.0	2.0	6.0	21.0	17.0	25.0	19.0	19.0
14	10.0	7.0	2.0	1.0	2.0	3.0	11.0	18.0	17.0	26.0	21.0	20.0
15	12.0	9.0	1.0	1.0	2.0	2.0	10.0	18.0	19.0	27.0	19.0	26.0
16	11.0	8.0	2.0	1.0	2.0	1.0	9.0	18.0	22.0	27.0	17.0	24.0
17	9.0	9.0	3.0	1.0	2.0	2.0	10.0	17.0	23.0	24.0	18.0	18.0
18	9.0	8.0	2.0	1.0	2.0	2.0	9.0	18.0	24.0	26.0	19.0	19.0
19	9.0	8.0	2.0	1.0	2.0	3.0	8.0	18.0	19.0	25.0	19.0	19.0
20	9.0	7.0	2.0	1.0	2.0	4.0	11.0	18.0	21.0	26.0	19.0	16.0
21	9.0	6.0	2.0	2.0	2.0	4.0	12.0	20.0	22.0	26.0	21.0	16.0
22	9.0	5.0	1.0	1.0	2.0	6.0	14.0	17.0	22.0	26.0	22.0	17.0
23	12.0	4.0	1.0	1.0	2.0	7.0	14.0	18.0	20.0	26.0	22.0	16.0
24	13.0	4.0	2.0	1.0	2.0	8.0	15.0	16.0	19.0	25.0	23.0	16.0
25	8.0	4.0	2.0	1.0	1.0	8.0	15.0	15.0	17.0	26.0	23.0	16.0
26	12.0	3.0	2.0	1.0	1.0	7.0	16.0	14.0	19.0	27.0	23.0	16.0
27	10.0	2.0	2.0	4.0	1.0	4.0	15.0	14.0	20.0	25.0	24.0	17.0
28	9.0	2.0	2.0	3.0	1.0	3.0	13.0	14.0	21.0	24.0	23.0	17.0
29	10.0	2.0	2.0	1.0	---	4.0	13.0	13.0	19.0	24.0	24.0	17.0
30	10.0	3.0	2.0	1.0	---	6.0	12.0	14.0	22.0	24.0	24.0	17.0
31	9.0	---	2.0	1.0	---	7.0	---	14.0	---	25.0	24.0	---
MEAN	11.5	7.0	2.0	1.0	1.5	3.5	9.0	16.0	20.0	24.0	23.0	20.0

SUSQUEHANNA RIVER BASIN

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

LOCATION.--Lat 41°59'05", long 76°30'05", Bradford County, Pa., Hydrologic Unit 02050103, on left bank 0.2 mi (0.3 km) upstream from Cayuta Creek, 0.4 mi (0.6 km) upstream from bridge on East Lockhart Street at Sayre, Pa., 1 mi (2 km) downstream from New York-Pennsylvania State line, and 2 mi (3 km) southeast of Waverly.

DRAINAGE AREA.--4,773 mi² (12,362 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft (226.759 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to November 1939, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Minor regulation by upstream lakes and reservoirs. Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--42 years, 7,679 ft³/s (217.5 m³/s), 21.85 in/yr (555 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft³/s (3,430 m³/s) June 23, 1972, gage height, 21.24 ft (6.474 m); minimum daily, 237 ft³/s (6.71 m³/s) Sept. 22, 23, 1964; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 25, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 21.4 ft (6.52 m), from flood profile (discharge, 128,000 ft³/s or 3,620 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 52,000 ft³/s (1,470 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0400	62,700 1,780	14.10 4.298	Mar. 6	1500	*107,000 3,030	*19.66 5.992
Jan. 26	0100	52,900 1,500	12.62 3.847				

Minimum discharge, 610 ft³/s (17.3 m³/s) Aug. 10, 11, gage height, 0.92 ft (0.280 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	4680	3220	7600	9400	12000	17800	11100	10300	1200	963	660
2	1170	4190	3260	43100	8200	13000	16300	9560	8490	1170	925	640
3	1200	3830	3240	58600	7400	15000	15600	8560	7980	1130	987	669
4	1180	3470	3060	43600	6800	20000	14900	8680	7810	1090	1010	915
5	1160	3210	3870	30800	6200	58100	14400	9560	6860	1080	932	1040
6	1310	3030	6280	21800	5800	104000	14100	9050	5680	1060	826	1470
7	1800	2880	7460	17800	5400	95900	13300	7760	5070	1010	764	3550
8	1920	2780	7410	18300	5200	77100	11800	6830	4630	924	714	5010
9	1900	2680	9550	19000	5000	54000	13900	6210	4070	875	660	4520
10	1840	2630	13000	16300	4800	38100	23000	6000	3640	847	629	2860
11	1620	2540	11000	12700	4200	34500	23500	5950	3480	823	626	2030
12	1450	2390	8600	10000	3600	33400	20400	5160	3590	808	657	1620
13	1320	2260	7600	8840	3500	28600	18800	4590	3550	789	697	1400
14	1640	2140	7000	9000	3400	24700	17400	4280	3160	776	712	1200
15	3150	2040	6800	11000	3300	25500	17900	4020	2730	756	708	1300
16	5710	1940	6200	10000	3200	23400	19000	3820	2420	768	712	1490
17	5510	1900	5800	9200	3000	19400	18300	3590	2180	1060	715	1510
18	4090	1940	5400	8000	2600	17300	17000	3260	2010	1480	735	1530
19	3190	2520	4800	7060	2900	15800	14500	2980	1900	2270	748	1420
20	2900	3130	4000	6460	3000	14100	12600	2770	1860	2030	744	1220
21	2810	3180	4700	6840	3000	13300	11000	2610	1760	1980	717	1090
22	3050	2820	7600	10800	3000	13800	9870	2500	1680	1430	688	1080
23	3110	2490	7800	17800	3200	15100	9140	2440	1710	1190	676	1220
24	2770	2420	7200	16900	4400	17200	8460	3100	1750	1120	696	1270
25	2540	2650	5600	33500	8000	21500	7660	9080	1680	1080	699	1180
26	2480	3490	5000	41800	16000	27900	7000	21000	1580	1130	677	1100
27	3760	4060	5400	25000	18000	27800	6910	26200	1420	1050	690	1010
28	7580	3720	5600	18000	13000	21300	13100	22800	1300	958	746	962
29	8860	3180	5200	15000	---	16600	16900	17500	1260	896	719	1080
30	6770	3130	4800	13000	---	17800	14200	14600	1240	908	704	1200
31	5370	---	4600	11000	---	19200	---	12200	---	918	677	---
TOTAL	94390	87320	191050	578800	165500	935400	438740	257760	106790	34606	23153	47246
MEAN	3045	2911	6163	18670	5911	30170	14620	8315	3560	1116	747	1575
MAX	8860	4680	13000	58600	18000	104000	23500	26200	10300	2270	1010	5010
MIN	1160	1900	3060	6460	2600	12000	6910	2440	1240	756	626	640
CFSM	.64	.61	1.29	3.91	1.24	6.32	3.06	1.74	.75	.23	.16	.33
IN.	.74	.68	1.49	4.51	1.29	7.29	3.42	2.01	.83	.27	.18	.37

CAL YR 1978 TOTAL 2785426 MEAN 7631 MAX 55100 MIN 691 CFSM 1.60 IN 21.71
WTR YR 1979 TOTAL 2960755 MEAN 8112 MAX 104000 MIN 626 CFSM 1.70 IN 23.08

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--Lat 42°01'44", long 77°07'57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi (10 km) upstream from Canisteo River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--771 mi² (1,997 km²).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft (293.980 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1937, nonrecording gage on bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Since March 1979, floodflows regulated by detention in upstream reservoirs.

AVERAGE DISCHARGE.--49 years, 806 ft³/s (22.83 m³/s), 14.20 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128,000 ft³/s (3,620 m³/s) June 23, 1972, gage height, 26.27 ft (8.007 m), from floodmark in gage house, from rating curve extended above 31,000 ft³/s (878 m³/s) on basis of velocity-area and slope-area studies at gage height 19.2 ft (5.85 m) and conveyance study and slope-area measurements at gage heights 22.87 ft (6.971 m) and 26.27 ft (8.007 m); minimum, 6.1 ft³/s (0.17 m³/s) Sept. 1, 1939; minimum gage height, 2.80 ft (0.853 m) Sept. 11, 12, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,200 ft³/s (289 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1730	11,300 320	12.11 3.691	Mar. 5	1700	*a16,000 453	*b14.05 4.282
Jan. 25	1030	12,200 346	12.52 3.816				

a About.

b Backwater from ice.

Minimum discharge, 39 ft³/s (1.10 m³/s) Aug. 24, gage height, 2.82 ft (0.860 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	277	292	1300	953	1100	1120	488	488	336	156	64
2	92	258	288	10100	761	1800	1060	442	424	302	169	57
3	88	236	273	7850	700	2400	1090	412	366	222	187	60
4	91	222	288	2300	620	4800	980	456	315	174	153	68
5	142	211	490	1400	560	12500	1320	433	273	141	104	62
6	132	201	406	980	520	7460	1240	379	252	124	85	545
7	113	191	341	840	480	8430	1010	345	236	110	73	1120
8	104	198	328	780	430	9190	907	321	222	99	73	438
9	98	208	1630	700	380	4400	1470	293	302	90	64	254
10	93	191	1590	620	350	5400	3200	284	297	85	60	188
11	89	175	940	560	320	5790	3320	600	346	84	64	148
12	83	166	800	500	300	5400	2400	610	450	87	71	125
13	95	160	680	470	300	5140	2130	494	273	81	80	112
14	492	205	600	440	290	5230	1810	404	209	74	78	107
15	967	201	520	400	300	4990	1860	343	175	81	65	229
16	520	157	500	370	300	4260	1730	332	156	89	58	236
17	341	154	480	360	280	2780	1550	306	139	105	54	160
18	265	341	440	350	260	1610	1340	257	128	85	51	128
19	229	457	350	340	240	1500	1120	237	116	77	50	115
20	225	320	380	340	260	1440	953	242	115	73	50	102
21	239	273	400	380	270	1450	842	236	106	64	48	95
22	215	258	420	430	300	1500	761	213	118	60	44	112
23	194	247	400	400	450	1560	695	201	360	57	41	131
24	185	308	380	560	760	1930	626	269	260	72	40	112
25	181	406	290	11000	1200	3050	577	797	165	102	55	97
26	178	371	320	7980	1200	2820	540	1050	132	136	87	90
27	767	277	270	3600	1300	1870	582	910	114	174	145	83
28	672	288	250	2240	868	1580	761	799	110	131	201	88
29	447	312	230	1750	---	1340	632	786	114	100	123	148
30	353	296	220	1410	---	1310	584	702	133	84	91	288
31	300	---	240	1220	---	1240	---	589	---	78	75	---
TOTAL	8083	7565	15036	61970	14952	115270	38210	14230	6894	3577	2695	5562
MEAN	261	252	485	1999	534	3718	1274	459	230	115	86.9	185
MAX	967	457	1630	11000	1300	12500	3320	1050	488	336	201	1120
MIN	83	154	220	340	240	1100	540	201	106	57	40	57
CFSM	.34	.33	.63	2.59	.69	4.82	1.65	.60	.30	.15	.11	.24
IN.	.39	.37	.73	2.99	.72	5.56	1.84	.69	.33	.17	.13	.27
CAL YR 1978	TOTAL	373924	MEAN	1024	MAX	15000	MIN	75	CFSM	1.33	IN	18.04
WTR YR 1979	TOTAL	294044	MEAN	806	MAX	12500	MIN	40	CFSM	1.05	IN	14.19

SUSQUEHANNA RIVER BASIN

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1971 to current year.

CHEMICAL DATA: 1964 (b), 1965 (c), 1966 (a), 1971-73 (a), 1974-77 (d).

MINOR ELEMENTS DATA: 1973 (a), 1974 (c), 1975-76 (a).

PESTICIDE DATA: 1975-76 (a).

ORGANIC DATA: OC--1975-76 (a).

PCB--1975-76 (a).

NUTRIENT DATA: 1974-75 (d), 1976-77 (b).

SEDIMENT DATA: 1963-64 (b), 1967 (e), 1975 (d), 1976 (a), 1977 (b), 1978 (c), 1979 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1974 to July 1977.

WATER TEMPERATURES: August 1974 to current year.

SUSPENDED-SEDIMENT DISCHARGE: August 1974 to current year.

REMARKS.--Stream affected entire year by upstream construction. River frozen Dec. 6 to Jan. 8 and Feb. 10 to Mar. 1.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily 30.0°C on July 19, 1977; minimum daily, freezing point on many days during winter periods.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,100 mg/L Mar. 13, 1977; minimum daily mean, 1 mg/L on several days during 1975, 1978, and 1979 water years.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 194,000 tons (176,000 Mg) Sept. 26, 1975; minimum daily, 0.26 ton (0.24 Mg) Oct. 9, 13, 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 28.0°C on July 20; minimum daily, freezing point on many days during winter period.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 997 mg/L Mar. 5; minimum daily mean, 1 mg/L Oct. 8, 9, 13, Nov. 11.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 31,800 tons (28,800 Mg) Mar. 5; minimum daily, 0.26 ton (0.24 Mg) Oct. 9, 13.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SEDI- MENT- SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE- SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT							
27...	1200	1040	112	314	41	47	64
DEC							
09...	1200	2110	358	2040	34	48	63
JAN							
01...	1600	971	530	1390	16	24	34
02...	1100	10700	638	18400	33	48	62
25...	1000	11600	500	15700	33	48	63
MAR							
02...	1630	1570	152	644	27	33	44
04...	1900	6000	776	12600	19	27	38
05...	1230	15200	560	23000	34	50	66
05...	1730	15900	561	24100	31	47	62
25...	1115	2330	178	1120	53	63	74
APR							
10...	1300	2790	136	1020	64	74	84
SEP							
06...	1830	1190	438	1410	49	64	77

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT						
27...	79	90	96	99	100	--
DEC						
09...	77	86	94	98	100	--
JAN						
01...	45	57	100	86	100	--
02...	74	81	88	93	99	100
25...	76	81	87	93	97	100
MAR						
02...	57	70	82	95	100	--
04...	51	63	74	81	98	100
05...	82	89	96	99	100	--
05...	74	80	87	92	98	100
25...	85	94	95	98	100	--
APR						
10...	92	96	97	98	99	100
SEP						
06...	88	95	96	99	99	100

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH												
1	3	.75	6	4.5	4	3.2	299	2030	13	33	35	104
2	3	.75	4	2.8	5	3.9	634	16900	18	37	201	999
3	2	.48	3	1.9	6	4.4	188	3980	32	60	135	875
4	3	.74	3	1.8	7	5.4	106	658	18	30	510	8490
5	3	1.2	4	2.3	11	15	82	310	10	15	997	31800
6	2	.71	3	1.6	7	7.7	60	159	20	28	518	10600
7	3	.92	4	2.1	5	4.6	36	82	9	12	355	8080
8	1	.28	4	2.1	6	5.3	22	46	12	14	255	6330
9	1	.26	5	2.8	218	1200	26	49	33	34	150	1780
10	2	.50	2	1.0	130	558	35	59	20	19	130	1900
11	2	.48	1	.47	64	162	36	54	12	10	125	1950
12	3	.67	2	.90	36	78	18	24	10	15	93	1360
13	1	.26	4	1.7	21	39	19	24	14	11	88	1220
14	82	208	6	3.3	12	19	60	71	12	9.4	86	1210
15	86	245	31	17	5	7.0	42	45	12	9.7	80	1080
16	22	31	12	5.1	3	4.1	28	28	4	3.2	62	713
17	11	10	5	2.1	3	3.9	14	14	4	3.0	52	390
18	9	6.4	22	20	3	3.6	17	16	8	5.6	36	156
19	10	6.2	22	27	4	3.8	17	16	3	1.9	25	101
20	7	4.3	8	6.9	3	3.1	6	5.5	3	2.1	21	82
21	5	3.2	5	3.7	16	17	14	14	3	2.2	20	78
22	4	2.3	5	3.5	22	25	42	49	6	4.9	23	93
23	3	1.6	5	3.3	6	6.5	46	50	13	16	30	126
24	3	1.5	8	6.7	2	2.1	119	449	39	80	67	349
25	4	2.0	7	7.7	2	1.6	476	14000	63	204	125	1040
26	9	4.3	5	5.0	3	2.6	128	2760	51	165	55	419
27	72	180	5	3.7	4	2.9	80	778	48	168	30	151
28	33	60	10	7.8	4	2.7	60	363	33	77	15	64
29	13	16	6	5.1	3	1.9	36	170	---	---	14	51
30	9	8.6	4	3.2	6	3.6	28	107	---	---	16	57
31	6	4.9	---	---	6	3.9	19	63	---	---	16	54
TOTAL	---	803.30	---	157.07	---	2200.8	---	43373.5	---	1070.0	---	81702
DAY	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
APRIL MAY JUNE JULY AUGUST SEPTEMBER												
1	16	48	13	17	7	9.2	53	48	16	6.7	8	1.4
2	18	52	9	11	7	8.0	47	38	45	21	7	1.1
3	28	82	9	10	6	5.9	34	20	27	14	6	.97
4	11	29	10	12	7	6.0	22	10	20	8.3	6	1.1
5	35	125	9	11	7	5.2	14	5.3	15	4.2	8	1.3
6	36	121	8	8.2	6	4.1	13	4.4	12	2.8	73	231
7	18	49	7	6.5	5	3.2	12	3.6	11	2.2	112	364
8	8	20	6	5.2	4	2.4	11	2.9	13	2.6	40	47
9	89	611	6	4.7	18	15	8	1.9	10	1.7	22	15
10	176	1730	10	7.7	17	14	12	2.8	10	1.6	16	8.1
11	97	995	59	102	29	27	10	2.3	10	1.7	14	5.6
12	29	188	55	91	28	34	11	2.6	13	2.5	14	4.7
13	21	121	46	61	13	9.6	11	2.4	14	3.0	11	3.3
14	17	83	21	23	9	5.1	9	1.8	14	2.9	10	2.9
15	16	80	15	14	6	2.8	8	1.7	14	2.5	33	20
16	15	70	12	11	6	2.5	13	3.1	15	2.3	18	11
17	12	50	13	11	6	2.3	12	3.4	12	1.7	7	3.0
18	13	47	12	8.3	7	2.4	11	2.5	12	1.7	12	4.1
19	11	33	11	7.0	6	1.9	8	1.7	12	1.6	10	3.1
20	9	23	9	5.9	7	2.2	8	1.6	13	1.8	8	2.2
21	16	36	7	4.5	8	2.3	7	1.2	13	1.7	13	3.3
22	12	25	7	4.0	8	2.5	7	1.1	12	1.4	10	3.0
23	8	15	6	3.3	42	41	7	1.1	10	1.1	7	2.5
24	11	19	9	6.5	38	27	8	1.6	8	.86	4	1.2
25	15	23	42	90	15	6.7	10	2.8	12	1.8	7	1.8
26	16	23	46	130	17	6.1	12	4.4	14	3.3	4	.97
27	19	30	24	59	12	3.7	18	8.5	15	5.9	4	.90
28	19	39	12	26	11	3.3	16	5.7	17	9.2	6	1.4
29	23	39	17	36	17	5.2	12	3.2	12	4.0	16	6.4
30	11	17	15	28	14	5.0	9	2.0	12	2.9	17	13
31	---	---	11	17	---	---	8	1.7	8	1.6	---	---
TOTAL	---	4823	---	831.8	---	265.6	---	193.3	---	120.56	---	765.34

SUSQUEHANNA RIVER BASIN

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

TEMPERATURE (DEG. C OF WATER), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.0	6.0	---	2.5	---	8.0	7.0	21.0	20.0	22.5	22.0
2	15.0	11.0	7.0	---	3.0	---	6.0	11.0	24.0	23.0	28.5	19.0
3	13.0	14.0	5.0	---	---	---	3.0	11.0	19.0	19.0	25.0	19.0
4	14.0	15.0	5.0	---	---	---	5.0	11.0	19.5	18.0	23.0	20.0
5	14.0	13.0	2.5	3.0	---	---	5.0	9.0	17.0	22.0	20.5	21.0
6	14.0	14.0	1.0	4.0	---	---	6.0	11.0	16.5	24.0	22.0	22.0
7	13.5	13.0	1.0	3.0	---	---	9.0	12.0	18.0	27.0	21.0	24.0
8	12.0	12.0	---	3.0	---	---	7.0	11.0	19.0	24.0	22.0	19.0
9	14.0	14.0	---	---	1.5	---	8.0	14.0	18.0	24.0	20.0	18.0
10	13.0	13.0	---	---	2.0	---	10.0	14.0	18.0	26.0	21.5	18.0
11	11.0	9.0	---	2.0	2.0	---	12.0	12.0	23.5	22.0	21.0	18.0
12	12.0	7.0	---	2.0	---	---	12.0	15.0	24.0	22.0	22.0	---
13	10.5	6.5	---	2.0	---	---	11.5	15.0	19.5	25.0	26.5	18.0
14	9.5	5.5	3.0	---	1.5	---	9.0	14.0	15.0	25.0	23.0	18.0
15	9.0	7.0	4.0	2.0	1.5	3.0	7.0	12.0	19.0	23.0	26.0	17.0
16	9.0	8.0	5.0	---	---	.5	---	11.0	17.5	24.0	28.0	17.0
17	7.0	10.0	4.0	2.0	3.5	1.0	7.0	15.0	19.0	21.5	25.0	18.0
18	7.0	9.0	4.0	2.0	1.0	3.0	8.0	15.0	24.0	22.0	24.0	18.0
19	7.0	7.0	4.0	2.0	---	5.0	8.0	13.0	21.0	23.0	23.5	19.0
20	7.0	7.0	5.0	1.0	---	4.0	7.0	17.5	24.0	27.0	22.0	19.0
21	7.0	7.0	3.0	1.0	---	5.0	6.0	15.0	23.0	29.0	19.0	22.0
22	10.0	7.0	4.0	2.0	---	4.5	7.0	14.0	24.0	26.0	21.0	19.0
23	11.0	7.0	3.0	---	---	5.0	11.0	18.0	20.0	28.0	21.0	16.0
24	10.0	6.0	4.0	---	---	4.0	11.0	15.0	---	24.5	23.0	16.0
25	10.5	6.0	3.0	---	---	---	10.0	15.0	24.0	23.0	24.0	16.0
26	14.0	5.0	---	---	---	3.0	12.0	18.0	21.0	23.0	20.0	14.0
27	17.0	4.0	---	1.0	---	2.5	12.0	19.0	24.0	24.0	26.0	15.5
28	14.0	4.0	---	2.0	---	5.0	14.0	24.0	24.0	24.0	24.0	17.0
29	12.0	5.5	---	2.0	---	6.0	13.0	21.0	25.5	20.0	24.5	13.0
30	12.0	6.0	4.0	2.0	---	5.5	12.0	22.0	23.0	21.0	22.0	16.0
31	11.0	---	3.0	1.0	---	6.0	---	23.0	---	19.0	22.0	---
MEAN	11.5	9.0	4.0	2.0	2.0	4.0	9.0	14.5	21.0	23.5	23.0	18.0
WTR YR 1978	MEAN	13.5	MAX	29.0	MIN	.5						

TEMPERATURE (DEG. C OF WATER), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	8.0	4.0	---	1.0	---	12.0	13.5	21.0	21.0	25.0	25.0
2	14.0	6.0	3.0	---	1.0	2.5	9.0	13.0	21.5	21.5	25.5	23.0
3	13.5	12.0	2.0	---	2.0	2.0	8.0	14.0	21.0	20.0	25.0	25.5
4	15.0	6.5	4.0	---	2.0	2.5	8.5	12.0	18.0	20.0	25.0	25.0
5	12.0	7.0	4.0	---	1.5	2.5	6.0	12.0	21.0	18.5	26.0	25.0
6	15.0	7.0	---	---	4.0	2.5	6.0	12.0	22.0	19.0	25.5	24.0
7	13.0	9.0	---	---	3.0	3.5	4.5	12.0	22.5	20.0	23.0	23.0
8	11.0	8.0	---	---	1.0	3.0	5.5	22.0	22.0	19.0	23.0	19.0
9	9.0	10.0	---	2.0	1.5	2.5	4.0	22.5	23.0	19.0	22.0	19.0
10	11.0	9.0	---	2.5	---	2.5	4.0	23.5	24.0	19.0	24.5	19.0
11	12.0	9.0	---	1.5	---	2.0	6.5	21.5	21.0	23.0	24.0	18.0
12	13.5	7.0	---	2.0	---	1.0	8.5	21.5	17.0	24.0	21.0	18.0
13	14.0	7.0	---	2.0	---	1.5	8.5	20.0	15.0	---	19.5	19.5
14	12.0	7.0	---	2.0	---	2.0	7.0	17.0	17.0	26.0	20.0	20.0
15	9.0	7.0	---	1.0	---	1.0	9.0	20.0	24.0	27.0	19.0	18.0
16	9.0	6.0	---	2.0	---	1.5	8.0	16.5	26.0	26.0	20.0	19.5
17	8.5	7.0	---	1.0	---	3.0	7.0	19.0	23.0	24.0	17.0	18.0
18	7.0	9.0	---	2.0	---	4.0	9.0	15.0	21.5	24.0	17.5	18.0
19	7.0	8.0	---	2.0	---	7.0	10.0	19.0	20.0	24.5	---	17.0
20	10.0	5.5	---	1.5	---	7.0	11.0	22.0	21.0	28.0	21.0	15.0
21	7.0	3.0	---	3.0	---	7.5	12.0	19.0	22.0	26.0	21.0	18.0
22	9.0	3.0	---	2.0	---	7.5	15.0	19.0	22.0	25.0	23.0	18.0
23	11.0	4.0	---	3.0	---	8.0	14.0	16.5	22.0	25.0	24.0	17.0
24	9.0	5.0	---	2.0	---	8.0	16.0	17.0	17.0	26.0	23.0	18.5
25	9.0	5.0	---	1.5	---	---	17.0	17.0	20.0	25.0	23.0	15.5
26	12.0	4.0	---	3.0	---	6.0	17.0	15.0	19.0	25.0	24.0	15.0
27	9.0	2.0	---	1.5	---	6.0	15.5	14.5	20.0	24.0	23.0	15.0
28	10.0	3.0	---	2.0	---	6.0	14.5	13.0	21.0	24.0	23.0	16.0
29	10.5	3.0	---	1.5	---	6.0	14.5	14.0	20.0	24.0	23.0	16.0
30	8.0	3.0	4.0	2.0	---	10.0	12.0	16.0	19.0	25.0	24.5	17.0
31	9.0	---	3.0	2.0	---	12.0	---	18.0	---	25.0	25.0	---
MEAN	11.0	6.5	3.5	2.0	2.0	4.5	10.0	17.0	21.0	23.5	22.5	19.0
WTR YR 1979	MEAN	13.5	MAX	28.0	MIN	1.0						

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°43'00", Steuben County, Hydrologic Unit 02050104, on right bank 1,000 ft (305 m) upstream from Arkport Dam on Canisteo River, 1.3 mi (2.1 km) west of Arkport, and 2.3 mi (3.7 km) upstream from small tributary.

DRAINAGE AREA.--30.5 mi² (79.0 km²).

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

REVISED RECORDS.--WSP 1552: 1951-57. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1940 for flood control; first used for flood regulation on Mar. 31, 1940. Usable capacity, 7,936 acre-ft (9.79 hm³) between elevations 1,218.0 ft (371.25 m), sill of conduit, and 1,304.0 ft (397.46 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,304.04 ft (397.471 m) June 23, 1972, contents, 7,944 acre-ft (9.79 hm³); minimum, 1,226.28 ft (373.770 m) many days in August, September, and October 1978, contents, 0.3 acre-ft (370 m³), result of reservoir cleaning operations.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,248.06 ft (380.409 m) Jan. 2, contents, 908.0 acre-ft (1.12 hm³); minimum 1,226.28 ft (373.770 m) many days in October, contents, 0.3 acre-ft (370 m³), result of reservoir cleaning operations.

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

1,226.00	0	1,235.00	264	1,270.00	2,908
1,227.00	1	1,240.00	462	1,280.00	4,142
1,228.00	8	1,245.00	719	1,290.00	5,552
1,229.00	51	1,250.00	1,040	1,300.00	7,192
1,230.00	122	1,260.00	1,861	1,310.00	9,161

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1226.29	1226.68	1226.76	1233.96	1227.66	1227.24	1229.01	1228.70	1228.78	1228.61	1228.49	1226.42
2	1226.28	1226.66	1226.77	1245.63	1227.64	1227.62	1229.13	1228.67	1228.73	1228.48	1228.46	1226.42
3	1226.28	1226.64	1226.80	1231.52	1227.40	1227.59	1229.26	1228.67	1228.68	1228.45	1228.41	1226.42
4	1226.28	1226.64	1227.53	1229.63	1227.31	1231.31	1228.93	1228.73	1228.63	1228.42	1228.37	1226.42
5	1226.28	1226.63	1227.50	1229.59	1227.31	1241.80	1229.18	1228.69	1228.60	1228.39	1228.35	1226.42
6	1226.28	1226.62	1227.31	1229.64	1227.29	1237.70	1228.96	1228.67	1228.59	1228.38	1228.37	1227.16
7	1226.28	1226.62	1227.22	1229.80	1227.28	1229.05	1228.89	1228.65	1228.57	1228.36	1228.05	1227.10
8	1226.29	1226.63	1227.27	1229.90	1227.30	1228.90	1228.87	1228.62	1228.60	1228.35	1227.00	1226.96
9	1226.29	1226.62	1227.61	1229.75	1227.29	1228.85	1231.46	1228.60	1228.66	1228.35	1226.44	1226.87
10	1226.29	1226.61	1227.19	1229.70	1227.28	1229.80	1231.51	1228.83	1228.60	1228.37	1226.42	1226.79
11	1226.29	1226.61	1227.07	1229.60	1227.26	1229.18	1231.66	1229.10	1229.99	1228.38	1226.42	1226.73
12	1226.29	1226.60	1227.02	1229.50	1227.25	1228.95	1231.30	1228.80	1228.67	1228.36	1226.42	1226.70
13	1226.28	1226.60	1226.99	1229.20	1227.25	1228.99	1230.92	1228.75	1228.55	1228.35	1226.42	1226.67
14	1226.67	1226.59	1226.96	1228.80	1227.24	1232.12	1229.82	1228.72	1228.49	1228.34	1226.42	1230.76
15	1226.75	1226.59	1226.94	1228.50	1227.24	1230.71	1229.05	1228.69	1228.46	1228.49	1226.42	1227.86
16	1226.59	1226.59	1226.94	1228.20	1227.24	1230.51	1229.11	1228.69	1228.43	1228.50	1226.42	1227.28
17	1226.52	1226.62	1227.03	1228.62	1227.24	1229.79	1229.10	1228.65	1228.41	1228.49	1226.42	1227.15
18	1226.49	1226.75	1227.03	1227.74	1227.24	1230.40	1228.99	1228.63	1228.41	1228.65	1226.42	1227.08
19	1226.49	1226.74	1226.99	1227.86	1227.22	1230.32	1228.93	1228.61	1228.40	1228.46	1226.42	1227.07
20	1226.52	1226.71	1226.99	1227.59	1227.20	1230.38	1228.88	1228.59	1228.38	1228.40	1226.42	1227.04
21	1226.54	1226.69	1227.78	1227.68	1227.20	1230.90	1228.84	1228.59	1228.38	1228.37	1226.42	1227.01
22	1226.51	1226.67	1227.57	1227.73	1227.21	1231.46	1228.81	1228.58	1228.40	1228.34	1226.42	1227.00
23	1226.50	1226.68	1227.40	1227.63	1227.22	1231.86	1228.79	1228.57	1228.50	1228.41	1226.42	1226.98
24	1226.53	1226.86	1227.28	1228.37	1227.25	1232.74	1228.77	1228.74	1228.44	1228.49	1226.42	1226.97
25	1226.52	1226.99	1227.56	1234.46	1227.25	1231.30	1228.74	1229.09	1228.42	1228.40	1226.42	1226.96
26	1226.57	1226.85	1227.33	1231.42	1228.16	1229.04	1228.72	1229.06	1228.39	1228.38	1226.42	1226.95
27	1227.04	1226.74	1227.34	1230.02	1227.71	1228.85	1228.77	1228.96	1228.37	1228.36	1226.42	1226.94
28	1226.89	1226.81	1227.36	1228.18	1227.24	1228.73	1228.83	1228.97	1228.39	1228.35	1226.42	1226.99
29	1226.79	1226.76	1227.70	1227.44	---	1228.97	1228.76	1228.94	1228.40	1228.34	1226.42	1227.03
30	1226.74	1226.76	1227.31	1227.41	---	1230.28	1228.72	1229.21	1228.43	1228.33	1226.42	1227.00
31	1226.70	---	1227.37	1227.39	---	1229.30	---	1228.87	---	1228.37	1226.42	---
MEAN	1226.49	1226.69	1227.22	1229.76	1227.34	1230.47	1229.36	1228.76	1228.56	1228.41	1226.88	1227.04
MAX	1227.04	1226.99	1227.78	1245.63	1228.16	1241.80	1231.66	1229.21	1229.99	1228.65	1228.49	1230.76
MIN	1226.28	1226.59	1226.76	1227.39	1227.20	1227.24	1228.72	1228.57	1228.37	1228.33	1226.42	1226.42
†	0.7	0.7	5.4	3.3	2.6	58.1	38.5	42.8	28.2	31.6	0.4	1.0
‡	0	0	+0.1	0	0	+0.9	-0.3	+0.1	-0.2	+0.1	-0.5	0
CAL YR 1978	MEAN	1228.69	MAX	1252.05	MIN	1226.28	†	0				
WTR YR 1979	MEAN	1228.09	MAX	1245.63	MIN	1226.28	†	0				

† Contents, in acre-feet, at end of month.

‡ Change in contents, equivalent in cubic feet per second.

SUSQUEHANNA RIVER BASIN

01521500 CANISTEO RIVER AT ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°42'42", Steuben County, Hydrologic Unit 02050104, on left bank 0.2 mi (0.3 km) downstream from Arkport Dam, and 0.9 mi (1.4 km) west of Arkport.

DRAINAGE AREA.--30.6 mi² (79.3 km²).

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft (366.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Since November 1939, flows above 500 ft³/s (14.2 m³/s) controlled by detention in Arkport Reservoir (see station 01521000).

AVERAGE DISCHARGE.--42 years, 35.7 ft³/s (1.01 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft (1.716 m) Feb. 19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft³/s (137 m³/s), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 725 ft³/s (20.5 m³/s) Jan. 2, gage height, 3.19 ft (0.972 m); maximum gage height, 4.02 ft (1.225 m) Jan. 25 (ice jam); minimum discharge, 1.9 ft³/s (0.05 m³/s) Aug. 22, 23, gage height, 0.66 ft (0.201 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES:

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	4.9	8.5	360	26	28	58	14	19	23	11	2.7
2	2.3	4.3	7.8	677	28	76	69	12	14	9.2	9.2	3.2
3	2.3	4.0	8.4	170	24	80	73	11	9.9	6.6	5.2	5.2
4	2.9	3.7	82	70	21	290	51	15	7.2	4.9	4.0	3.7
5	2.7	3.7	45	52	20	645	70	12	6.0	4.0	3.2	2.9
6	2.7	3.7	25	35	19	540	54	11	5.2	3.7	3.7	110
7	2.5	3.7	18	32	17	164	46	9.9	4.9	3.2	4.0	31
8	2.7	3.7	22	28	16	121	45	8.5	5.5	2.9	3.2	18
9	2.7	3.7	72	26	16	107	164	7.8	8.5	2.7	2.9	11
10	2.7	3.4	32	23	15	207	159	18	5.5	3.2	3.7	6.6
11	2.5	3.4	22	20	14	119	161	48	125	3.4	4.6	4.9
12	2.5	3.2	19	17	13	69	133	19	27	3.2	3.2	4.0
13	5.2	3.2	16	16	12	74	119	15	15	2.7	2.7	3.4
14	34	3.2	13	20	11	329	88	12	9.9	2.5	2.9	235
15	18	3.2	12	42	14	98	66	9.9	7.2	16	2.9	94
16	7.8	3.2	12	32	12	66	61	9.2	5.5	12	2.7	25
17	5.2	3.4	18	28	9.0	66	61	7.2	4.9	11	2.5	15
18	4.3	6.6	14	29	8.4	94	44	6.0	4.3	35	2.5	8.5
19	3.7	6.0	21	22	8.0	91	34	5.5	4.3	9.9	2.5	7.8
20	4.9	4.9	15	20	7.8	95	29	4.9	3.7	5.5	2.3	5.5
21	5.2	4.6	15	30	8.0	119	25	4.6	3.4	4.3	2.1	4.9
22	4.3	4.3	17	35	9.0	169	24	4.6	5.5	3.4	2.1	4.3
23	4.0	4.3	12	32	13	248	20	4.3	12	9.2	1.9	3.7
24	4.6	14	8.4	140	33	287	18	14	6.0	13	2.5	3.4
25	4.3	24	5.2	400	41	213	17	46	4.6	5.5	8.5	3.2
26	7.2	14	29	170	30	78	16	51	3.7	4.6	4.6	2.9
27	33	6.6	32	70	28	54	18	40	3.4	4.0	13	2.9
28	18	11	25	52	22	41	24	40	4.0	3.4	9.9	4.3
29	9.9	8.5	21	44	---	70	18	37	4.3	3.2	5.2	5.5
30	6.6	7.8	19	37	---	114	16	58	6.0	2.9	3.7	4.6
31	5.5	---	25	35	---	84	---	29	---	6.6	3.2	---
TOTAL	216.3	178.2	691.3	2764	495.2	4836	1781	584.4	345.4	224.7	135.6	637.1
MEAN	6.98	5.94	22.3	89.2	17.7	156	59.4	18.9	11.5	7.25	4.37	21.2
MAX	34	24	82	677	41	645	164	58	125	35	13	235
MIN	2.1	3.2	5.2	16	7.8	28	16	4.3	3.4	2.5	1.9	2.7

CAL YR 1978 TOTAL 14458.0 MEAN 39.6 MAX 749 MIN 1.7
WTR YR 1979 TOTAL 12889.2 MEAN 35.3 MAX 677 MIN 1.9

01523000 ALMOND LAKE NEAR ALMOND, NY

LOCATION.--Lat 42°20'50", long 77°42'20", Steuben County, Hydrologic Unit 02050104, at Almond Dam on Canacadea Creek, 2 mi (3 km) northeast of Almond, and 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--55.8 mi² (145 km²).

PERIOD OF RECORD.--July 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "Almond Reservoir near Almond."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in June 1949 for flood control; first used for flood regulation on Mar. 28, 1950. Usable capacity, 14,800 acre-ft (18.2 hm³) between elevations 1,229.0 ft or 374.60 m (sill of gates) and 1,300.0 ft or 396.24 m (crest of spillway). No dead storage. Figures given herein represent usable contents. Discharge is controlled by the operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,298.58 ft (395.807 m) June 23, 1972, contents, 14,100 acre-ft (17.4 hm³); no contents for many days each year 1949-65.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,270.11 ft (387.130 m) Mar. 6, contents, 3,776 acre-ft (4.66 hm³); minimum, 1,248.58 ft (380.567 m) Jan. 27, contents, 456 acre-ft (562,248 m³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,240.00	80	1,260.00	1,750
1,245.00	230	1,270.00	3,750
1,250.00	570	1,280.00	6,570
1,255.00	1,080	1,290.00	10,300

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1255.01	1250.01	1250.40	1253.00	1250.27	1250.76	1250.26	1251.17	1254.93	1255.54	1255.43	1254.89
2	1255.00	1249.93	1250.30	1261.51	1250.70	1251.02	1250.08	1251.50	1255.00	1255.37	1255.18	1254.90
3	1254.93	1250.00	1250.20	1256.00	1251.15	1250.95	1250.25	1251.78	1255.04	1255.12	1255.04	1255.23
4	1254.60	1250.09	1251.53	1250.34	1251.48	1252.87	1249.86	1252.15	1255.01	1255.03	1255.02	1255.32
5	1254.17	1250.15	1252.79	1250.66	1251.45	1262.66	1250.94	1252.44	1255.02	1254.99	1254.97	1255.19
6	1253.64	1250.20	1251.26	1250.71	1250.84	1269.70	1251.66	1252.73	1255.16	1254.94	1254.94	1255.19
7	1253.09	1250.26	1250.67	1250.22	1250.19	1266.12	1251.11	1252.99	1255.21	1254.94	1254.94	1255.03
8	1252.60	1250.30	1250.45	1250.06	1250.13	1259.64	1250.62	1253.17	1255.24	1254.96	1254.91	1254.96
9	1252.03	1250.35	1250.43	1250.46	1250.15	1252.27	1251.40	1253.35	1255.72	1254.97	1254.89	1254.91
10	1251.38	1250.37	1250.64	1250.68	1250.19	1251.49	1250.92	1253.62	1255.70	1254.99	1254.94	1254.86
11	1250.72	1250.38	1250.92	1250.74	1250.25	1250.57	1251.08	1253.90	1255.57	1255.05	1254.99	1254.79
12	1250.54	1250.39	1250.99	1250.58	1250.22	1250.67	1251.42	1254.21	1255.49	1255.08	1255.00	1254.75
13	1250.69	1250.39	1250.94	1250.46	1250.26	1251.52	1250.84	1254.28	1255.24	1255.10	1255.00	1254.72
14	1250.90	1250.40	1250.78	1250.60	1250.31	1251.86	1250.13	1254.34	1255.13	1255.11	1255.00	1255.06
15	1250.00	1250.40	1250.41	1251.16	1250.30	1250.79	1250.75	1254.60	1255.08	1255.18	1255.03	1254.97
16	1249.99	1250.39	1250.14	1251.23	1250.31	1250.58	1250.59	1254.93	1255.07	1255.53	1255.03	1254.86
17	1249.92	1250.39	1250.07	1250.84	1250.22	1250.24	1250.63	1255.19	1255.08	1255.93	1255.02	1254.75
18	1249.91	1250.64	1250.18	1250.43	1250.04	1251.82	1250.26	1255.37	1255.09	1255.67	1255.02	1254.74
19	1249.89	1250.59	1249.97	1250.41	1250.09	1251.74	1250.19	1255.51	1255.09	1255.37	1255.02	1254.74
20	1250.07	1250.34	1250.00	1250.31	1250.23	1250.44	1250.03	1255.52	1255.09	1255.27	1255.02	1254.73
21	1250.27	1250.39	1250.65	1250.36	1250.31	1252.01	1250.48	1255.50	1255.07	1255.21	1255.02	1254.67
22	1250.36	1250.46	1250.97	1250.70	1250.37	1252.68	1250.71	1255.47	1255.07	1255.13	1255.01	1254.60
23	1250.41	1250.21	1250.39	1250.63	1249.52	1252.34	1250.63	1255.43	1255.22	1255.06	1254.99	1254.51
24	1250.48	1250.25	1250.08	1251.08	1250.19	1250.83	1250.35	1255.50	1255.28	1255.15	1254.97	1254.40
25	1250.49	1250.74	1249.90	1257.92	1250.50	1250.49	1250.10	1255.60	1255.30	1255.28	1254.97	1254.28
26	1250.41	1250.89	1250.03	1251.86	1250.05	1250.38	1250.37	1255.15	1255.29	1255.35	1254.97	1254.17
27	1250.78	1250.79	1251.04	1250.34	1250.71	1249.99	1250.70	1255.35	1255.26	1255.37	1255.02	1254.04
28	1250.54	1250.71	1251.54	1249.55	1250.22	1249.96	1251.12	1255.47	1255.22	1255.37	1255.08	1253.94
29	1250.18	1250.65	1251.55	1249.86	---	1250.78	1250.76	1255.65	1255.25	1255.38	1254.99	1253.95
30	1250.10	1250.53	1251.40	1250.53	---	1250.55	1250.75	1255.70	1255.31	1255.37	1254.94	1253.65
31	1250.08	---	1250.50	1250.58	---	1249.91	---	1255.10	---	1255.35	1254.89	---
MEAN	1251.39	1250.39	1250.68	1251.41	1250.38	1252.83	1250.63	1254.28	1255.21	1255.23	1255.01	1254.69
MAX	1255.01	1250.89	1252.79	1261.51	1251.48	1269.70	1251.66	1255.70	1255.72	1255.93	1255.43	1255.32
MIN	1249.89	1249.93	1249.90	1249.55	1249.52	1249.91	1249.86	1251.17	1254.93	1254.94	1254.89	1253.65
†	575	613	585	619	615	594	656	1,078	1,126	1,132	1,067	920
‡	-8.3	+0.6	-0.4	+0.6	-0.1	-0.3	+1.0	+6.9	+0.8	+0.1	-1.1	-2.5

CAL YR 1978 MEAN 1252.81 MAX 1263.40 MIN 1249.59 † +0.1
WTR YR 1979 MEAN 1252.70 MAX 1269.70 MIN 1249.52 ‡ -0.2

† Contents, in acre-feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.

SUSQUEHANNA RIVER BASIN

01523500 CANACADEA CREEK NEAR HORNEILL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft (11 m) downstream from bridge on State Highway 21, 1.2 mi (1.9 km) west of Hornell, 1.5 mi (2.4 km) downstream from Almond Dam, and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--57.9 mi² (150 km²).

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft (361.395 m) National Geodetic Vertical Datum of 1929. Oct. 23, 1940 to Dec. 31, 1942, at site 185 ft (56 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--37 years (1940-42, 1944-79), 64.9 ft³/s (1.838 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,430 ft³/s (267 m³/s) May 17, 1945, gage height, 5.14 ft (1.567 m), from rating curve extended above 3,400 ft³/s (96.3 m³/s); maximum gage height, 6.65 ft (2.027 m) June 3, 1947; minimum discharge, 0.5 ft³/s (0.014 m³/s) May 29, 1965, gage height, 0.61 ft (0.186 m); minimum daily, 0.6 ft³/s (0.017 m³/s) May 30 to June 1, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft (5.063 m), discharge, 21,000 ft³/s (595 m³/s), from floodmarks on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 991 ft³/s (28.1 m³/s) Jan. 25, gage height, 2.97 ft (0.905 m); minimum, 8.0 ft³/s (0.23 m³/s) May 9, 10, gage height, 0.87 ft (0.265 m) result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	22	530	38	33	101	18	36	26	38	8.5
2	13	13	22	877	37	162	101	18	28	34	34	9.0
3	20	11	22	611	36	152	100	18	28	25	18	15
4	35	11	33	170	36	489	81	18	25	17	15	19
5	39	11	89	66	36	366	69	17	19	15	13	19
6	39	11	88	64	34	564	87	16	19	12	12	146
7	38	11	37	62	31	893	98	16	19	10	12	43
8	38	11	37	60	25	801	94	16	19	10	12	26
9	38	11	159	46	25	467	366	13	30	10	10	20
10	37	11	37	37	21	434	304	8.5	36	10	9.9	18
11	29	11	37	37	21	275	284	19	37	10	9.6	15
12	15	11	37	37	21	102	330	34	36	10	9.6	13
13	15	11	37	37	21	123	246	38	28	10	9.4	13
14	130	11	37	42	20	509	149	25	19	11	9.4	175
15	48	11	37	52	20	160	118	12	16	11	9.1	103
16	28	11	33	52	19	140	119	11	13	15	9.1	34
17	21	11	29	52	18	100	118	11	13	39	9.1	23
18	19	19	31	36	17	132	87	11	13	39	9.3	18
19	17	25	22	31	14	243	73	16	13	27	9.4	18
20	15	21	24	33	12	145	52	20	13	17	9.1	18
21	15	11	82	40	9.6	163	42	20	13	15	9.1	18
22	15	19	75	51	26	240	47	20	13	15	9.1	18
23	15	23	66	41	50	448	50	20	13	13	9.2	18
24	15	23	36	74	58	452	50	36	13	11	9.6	18
25	18	24	31	711	87	374	37	127	13	11	9.4	18
26	20	24	20	430	45	152	29	117	13	11	9.5	18
27	50	24	19	150	48	115	29	68	13	11	13	18
28	37	24	31	110	36	78	43	71	13	11	19	18
29	28	24	37	68	---	100	50	71	13	11	17	25
30	18	24	58	44	---	221	23	102	13	11	11	29
31	18	---	71	42	---	131	---	78	---	16	10	---
TOTAL	896	481	1396	4693	861.6	8764	3377	1085.5	590	494	392.9	951.5
MEAN	28.9	16.0	45.0	151	30.8	283	113	35.0	19.7	15.9	12.7	31.7
MAX	130	25	159	877	87	893	366	127	37	39	38	175
MIN	13	11	19	31	9.6	33	23	8.5	13	10	9.1	8.5
CAL YR 1978	TOTAL	25076.9	MEAN 68.7	MAX 735	MIN 9.6							
WTR YR 1979	TOTAL	23982.5	MEAN 65.7	MAX 893	MIN 8.5							

SUSQUEHANNA RIVER BASIN

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01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNEILL, NY

LOCATION.--Lat 42°18'50", long 77°39'05", Steuben County, Hydrologic Unit 02050104, on right bank 235 ft (72 m) upstream from Erie Railroad bridge in Hornell, 0.3 mi (0.5 km) upstream from Crosby Creek, and 1.5 mi (2.4 km) downstream from Canacadea Creek.

DRAINAGE AREA.--158 mi² (409 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft (344.826 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Diversion from Carrington Creek, a tributary upstream from station, by city of Hornell for municipal supply (1979 average, 3.6 ft³/s or 0.10 m³/s); sewage enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to materially affect figures of monthly runoff.

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

AVERAGE DISCHARGE.--37 years, 159 ft³/s (4.503 m³/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft³/s (271 m³/s) June 23, 1972, gage height, 13.45 ft (4.100 m), from floodmark, from rating curve extended above 7,600 ft³/s (215 m³/s) on basis of critical-depth measurement of peak flow; minimum, 7.4 ft³/s (0.21 m³/s) Sept. 13, 14, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,890 ft³/s (81.8 m³/s) Mar. 5, gage height, 7.62 ft (2.323 m); minimum, 26 ft³/s (0.74 m³/s) Aug. 21, gage height, 0.50 ft (0.152 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	35	43	900	130	138	259	82	108	72	88	29
2	29	31	43	2190	110	332	268	78	89	70	67	38
3	33	28	46	1050	100	356	274	77	82	58	46	49
4	48	27	155	300	100	1230	217	82	74	46	39	43
5	51	27	191	190	100	2310	243	76	62	80	36	41
6	50	27	162	160	98	1890	232	73	56	39	36	277
7	49	27	100	150	92	1530	217	70	55	35	34	108
8	48	27	104	130	88	1310	214	68	59	34	33	67
9	48	27	276	110	84	901	599	61	74	33	31	54
10	48	27	100	98	70	996	622	57	73	36	36	46
11	43	27	88	88	64	741	764	138	177	36	34	41
12	28	26	82	86	60	341	742	106	101	35	32	37
13	38	26	79	84	70	342	591	101	76	33	30	35
14	166	26	79	120	62	1020	400	81	53	37	30	316
15	90	26	78	150	66	505	302	64	47	43	29	292
16	52	25	72	140	60	357	292	62	43	45	29	81
17	41	34	80	130	54	305	293	53	43	66	28	59
18	52	49	74	100	50	390	227	51	42	85	29	46
19	39	47	66	76	45	494	191	54	40	56	29	45
20	39	42	62	76	40	405	160	58	38	41	28	40
21	37	31	140	88	36	465	138	58	37	37	43	38
22	36	36	150	100	70	631	136	56	43	36	34	37
23	34	41	120	92	98	951	133	54	50	35	32	36
24	31	48	80	160	140	1110	127	96	43	46	33	35
25	33	64	56	1000	190	921	111	209	40	35	41	35
26	37	52	72	600	145	397	100	237	38	34	36	35
27	98	43	74	362	133	280	106	178	36	32	47	33
28	70	49	82	280	135	217	125	171	40	31	53	37
29	52	44	84	225	---	276	122	171	41	31	44	45
30	40	45	100	190	---	473	91	229	43	30	35	47
31	36	---	110	170	---	331	---	170	---	52	32	---
TOTAL	1525	1064	3048	9595	2490	21945	8296	3121	1803	1379	1174	2122
MEAN	49.2	35.5	98.3	310	88.9	708	277	101	60.1	44.5	37.9	70.7
MAX	166	64	276	2190	190	2310	764	237	177	85	88	316
MIN	28	25	43	76	36	138	91	51	36	30	28	29

CAL YR 1978 TOTAL 59569 MEAN 163 MAX 1970 MIN 25
WTR YR 1979 TOTAL 57562 MEAN 158 MAX 2310 MIN 25

SUSQUEHANNA RIVER BASIN

01526500 TIOGA RIVER NEAR ERWINS, NY

LOCATION.--Lat 42°07'15", long 77°07'45", Steuben County, Hydrologic Unit 02050104, on right bank 20 ft (6 m) downstream from bridge on Mulholland Road, 1.1 mi (1.8 km) northeast of Erwins, and 1.1 mi (1.8 km) downstream from Canisteo River.

DRAINAGE AREA.--1,377 mi² (3,566 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 931.24 ft (283.842 m) National Geodetic Vertical Datum of 1929. Prior to June 21, 1931, nonrecording gage on highway bridge at same datum.

REMARKS.--Records fair. High flows regulated by upstream reservoirs.

AVERAGE DISCHARGE.--61 years, 1,382 ft³/s (39.14 m³/s), 13.63 in/yr (346 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft³/s (5,380 m³/s) June 23, 1972, from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi (11.6 km) and 2.0 mi (3.2 km) upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft (8.150 m), from floodmarks; minimum, 18 ft³/s (0.51 m³/s) Sept. 2, 3, 1939; minimum gage height, 0.40 ft (0.122 m) Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s (481 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1100	20,200 572	11.20 3.414	Mar. 5	1900	*30,200 855	*13.77 4.197
Jan. 25	1000	a21,000 595	b12.55 3.825				

a About.

b Backwater from ice.

Minimum daily discharge, 110 ft³/s (3.12 m³/s) Aug. 22, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	375	389	2100	1560	1800	2030	695	853	473	380	150
2	157	353	387	18100	1040	2700	1840	635	694	512	370	150
3	152	330	381	11500	1200	4400	1970	595	602	415	370	170
4	158	310	393	4210	1100	8600	1700	634	523	343	320	180
5	205	297	814	2600	980	25500	2230	635	459	272	310	450
6	227	284	682	1900	920	18000	2130	566	441	240	220	964
7	206	275	565	1600	860	13300	1730	527	404	217	210	2120
8	194	279	484	1500	780	12900	1560	489	381	194	190	896
9	186	290	2000	1300	680	7630	3010	453	611	161	180	569
10	179	272	2320	1200	620	8040	6560	424	587	168	170	437
11	175	256	1210	1100	560	8670	6810	1210	753	165	180	359
12	171	245	1080	960	540	7080	5340	1670	935	172	180	311
13	183	238	940	900	540	6490	4440	983	575	161	180	272
14	573	278	840	860	520	7530	3630	798	446	151	180	257
15	1260	276	680	880	520	7400	3270	633	371	155	170	803
16	648	236	680	860	520	5750	2980	634	329	421	160	662
17	458	234	660	800	490	4370	2730	595	294	413	150	422
18	383	386	620	760	460	2990	2320	480	268	274	150	343
19	346	535	500	720	430	2960	1860	434	248	241	140	289
20	329	420	560	680	460	2790	1550	431	240	200	140	260
21	337	374	600	760	480	2810	1320	420	221	162	130	236
22	321	347	700	840	560	3050	1170	384	225	139	110	233
23	293	335	660	800	860	3640	1070	361	426	126	120	233
24	283	382	600	1000	1300	4740	963	407	415	160	110	229
25	271	483	430	18000	1900	6130	877	1260	294	220	140	214
26	271	486	480	13400	1900	4910	804	2090	244	270	200	199
27	720	389	440	6410	1900	3130	828	1750	217	310	300	186
28	917	385	410	4080	1400	2570	1050	1480	210	270	400	176
29	600	414	380	3030	---	2200	926	1480	225	220	270	180
30	480	396	370	2380	---	2490	802	1240	260	190	200	281
31	410	---	410	2010	---	2420	---	1100	---	210	170	---
TOTAL	11252	10160	21665	107240	25080	196990	69500	25493	12751	7625	6500	12231
MEAN	363	339	699	3459	896	6355	2317	822	425	246	210	408
MAX	1260	535	2320	18100	1900	25500	6810	2090	935	512	400	2120
MIN	152	234	370	680	430	1800	802	361	210	126	110	150
CFSM	.26	.25	.51	2.51	.65	4.62	1.68	.60	.31	.18	.15	.30
IN.	.30	.27	.59	2.90	.68	5.32	1.88	.69	.34	.21	.18	.33

CAL YR 1978	TOTAL	602427	MEAN	1650	MAX	25300	MIN	144	CFSM	1.20	IN	16.27
WTR YR 1979	TOTAL	506487	MEAN	1388	MAX	25500	MIN	110	CFSM	1.01	IN	13.68

SUSQUEHANNA RIVER BASIN

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01527000 COHOCTON RIVER AT COHOCTON, NY

LOCATION.--Lat 42°30'00", long 77°30'02", Steuben County, Hydrologic Unit 02050105, on left bank 450 ft (137 m) downstream from bridge on U.S. Highway 15 at Cohocton, 800 ft (244 m) downstream from small tributary, and 1.4 mi (2.3 km) upstream from Reynolds Creek.

DRAINAGE AREA.--52.2 mi² (135 km²).

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1972: 1970, 1971.

GAGE.--Water-stage recorder. Datum of gage is 1,275.49 ft (388.769 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--29 years, 57.7 ft³/s (1.634 m³/s), 15.01 in/yr (381 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s (64.0 m³/s) June 23, 1972, gage height, 9.82 ft (2.993 m); minimum, 0.1 ft³/s (0.003 m³/s) Oct. 6, 1954, gage height, 1.30 ft (0.396 m), result of regulation from unknown cause.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 5	2300	*561 15.9	*5.67 1.728	Mar. 25	2000	*561 15.9	*5.67 1.728

Minimum discharge, 7.8 ft³/s (0.22 m³/s) Oct. 11, minimum gage height, 1.46 ft (0.445 m) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	13	14	74	88	51	196	53	30	22	29	10
2	9.0	13	14	110	76	60	198	49	29	25	35	10
3	8.8	13	13	150	68	65	196	46	28	24	26	15
4	9.2	12	22	140	64	139	181	47	25	19	17	14
5	10	12	36	130	62	448	168	45	24	16	15	11
6	9.8	12	32	130	62	535	157	41	23	15	13	27
7	9.5	12	26	120	60	518	143	39	23	14	13	40
8	10	12	27	110	58	443	129	38	22	14	13	29
9	11	12	40	100	56	370	138	35	24	13	12	18
10	9.8	12	37	98	54	324	147	34	21	13	12	16
11	9.2	12	30	88	52	296	160	38	23	14	13	15
12	8.5	12	34	84	50	266	170	35	23	16	12	13
13	10	11	30	70	49	231	175	34	20	16	11	12
14	26	12	28	70	47	257	180	32	18	14	11	22
15	34	12	25	72	49	275	181	31	17	13	11	43
16	25	11	24	66	38	266	180	31	18	13	11	46
17	17	11	23	64	36	237	177	29	17	14	10	35
18	14	13	20	60	33	215	167	27	16	12	10	24
19	14	13	19	58	35	207	149	25	16	12	11	22
20	15	12	22	56	37	205	133	25	14	11	11	21
21	15	12	25	58	37	213	120	24	14	11	9.8	19
22	14	11	27	60	40	236	109	24	16	10	9.5	18
23	13	12	27	62	38	287	99	23	21	24	9.2	17
24	15	14	22	72	39	419	89	27	18	17	9.5	15
25	14	16	80	160	40	548	80	39	16	16	13	15
26	14	14	64	170	42	514	72	40	14	14	13	14
27	24	13	52	197	45	388	72	39	13	14	14	14
28	23	13	49	170	48	273	69	37	16	14	17	14
29	17	14	37	129	---	215	64	36	25	13	13	17
30	15	14	32	110	---	198	58	38	23	12	12	16
31	14	---	31	96	---	198	---	34	---	12	11	---
TOTAL	447.0	375	962	3134	1403	8897	4157	1095	607	467	427.0	602
MEAN	14.4	12.5	31.0	101	50.1	287	139	35.3	20.2	15.1	13.8	20.1
MAX	34	16	80	197	88	548	198	53	30	25	35	46
MIN	8.5	11	13	56	33	51	58	23	13	10	9.2	10
CFSM	.28	.24	.59	1.94	.96	5.50	2.66	.68	.39	.29	.26	.39
IN.	.32	.27	.69	2.23	1.00	6.34	2.96	.78	.43	.33	.30	.43

CAL YR 1978 TOTAL 20847.1 MEAN 57.1 MAX 540 MIN 8.5 CFSM 1.09 IN 14.86
WTR YR 1979 TOTAL 22573.0 MEAN 61.8 MAX 548 MIN 8.5 CFSM 1.18 IN 16.09

SUSQUEHANNA RIVER BASIN

01527050 SWITZER CREEK NEAR COHOCTON, NY

LOCATION.--Lat 42°29'28", long 77°29'09", Steuben County, Hydrologic Unit 02050105, on left bank adjacent to unnamed dirt road approximately 0.5 mi (0.8 km) north of intersection with State Highway 415, 0.5 mi (0.8 km) upstream from mouth, and 0.8 mi (1.3 km) southeast of Cohocton. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.45 mi² (8.96 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1978 to September 1979.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,320 ft (402 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	2245	45	1.27	Mar. 24	1700	48	1.36
Mar. 5	0930	*112	3.17	Sept. 14	1530	42	1.19
			3.43				3.47
			1.045				1.058
			*4.08				3.39
			1.244				1.033

Minimum daily discharge, 0.42 ft³/s (0.012 m³/s) many days in August and September; minimum gage height 2.23 ft (0.68 m) Dec. 25 (result of freezeup).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		1.0	.72	15	4.6	2.5	10	2.9	2.1	1.5	1.7	.42
2		.90	.81	35	4.1	3.0	11	2.7	2.0	1.1	1.6	.91
3		.86	.91	20	3.6	4.8	9.4	2.6	1.9	1.0	1.2	.91
4		.82	2.0	13	3.2	16	9.4	2.6	1.7	.91	.81	.56
5		.82	2.3	9.0	2.9	8.4	9.4	2.4	1.7	.81	.81	.49
6		.81	1.9	6.4	2.7	52	8.5	2.3	1.6	.72	.72	6.0
7		.81	1.6	5.4	2.5	34	7.6	2.1	1.5	.64	.64	2.1
8		.81	2.0	6.0	2.3	26	7.3	2.0	1.6	.64	.64	1.6
9		.81	3.1	5.0	2.1	20	10	2.0	1.5	.64	.56	1.2
10		.81	2.7	4.5	2.0	21	10	2.1	1.4	.72	.64	1.1
11		.72	2.7	4.1	1.8	19	12	2.1	1.6	.72	.49	1.0
12		.72	2.6	3.7	1.7	14	14	1.9	1.4	.81	.49	.91
13		.72	2.6	3.5	1.7	12	15	1.9	1.1	.81	.42	.81
14		.72	2.3	3.2	1.8	23	15	1.9	1.0	.72	.42	6.8
15		.64	2.1	3.0	1.8	18	13	1.7	1.0	1.2	.42	4.4
16		.64	2.0	2.8	1.8	13	11	1.7	1.0	1.4	.42	3.3
17		.81	2.0	2.7	1.6	11	9.7	1.5	.91	1.0	.42	2.6
18		.91	1.7	2.5	1.4	11	8.5	1.5	.91	.90	.49	2.2
19		.72	1.5	2.5	1.3	12	7.6	1.5	.91	.72	.49	2.1
20		.72	1.6	2.4	1.3	13	6.8	1.5	.81	.64	.42	1.7
21		.64	2.1	3.0	1.5	16	6.2	1.5	.81	.64	.42	1.6
22		.64	1.9	4.0	1.7	18	5.5	1.4	1.2	.64	.42	1.5
23		.72	1.6	3.0	1.8	27	5.0	1.4	1.1	3.2	.42	1.3
24		1.0	1.2	6.0	1.9	43	4.6	2.0	.91	1.4	.64	1.2
25		.91	.70	21	2.1	34	4.4	2.0	.81	1.0	.81	1.1
26		.72	1.2	11	2.2	18	4.0	2.0	.72	.90	.49	.98
27		.64	1.2	8.8	2.3	12	4.4	2.1	.72	.81	1.2	.89
28		.81	1.1	7.3	2.3	9.7	3.8	2.0	1.4	.81	.72	1.2
29		.81	1.1	6.0	---	9.1	3.2	2.0	1.5	.81	.56	1.2
30		.81	1.0	5.0	---	11	3.1	2.4	1.5	.72	.49	.97
31		---	1.8	4.8	---	13	---	2.1	---	1.9	.42	---
TOTAL		23.47	54.04	229.6	62.0	620.1	249.4	61.8	38.31	30.43	20.39	53.05
MEAN		.78	1.74	7.41	2.21	20.0	8.31	1.99	1.28	.98	.66	1.77
MAX		1.0	3.1	35	4.6	84	15	2.9	2.1	3.2	1.7	6.8
MIN		.64	.70	2.4	1.3	2.5	3.1	1.4	.72	.64	.42	.42
CFSM		.23	.50	2.14	.64	5.78	2.40	.58	.37	.28	.19	.51
IN.		.25	.58	2.47	.67	6.67	2.68	.66	.41	.33	.22	.57

SUSQUEHANNA RIVER BASIN

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01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1978 to September 1979.

ORGANIC DATA: OC--1979 (e).

NUTRIENT DATA: 1979 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE; November 1978 to September 1979.

REMARKS.--Supplemental samples collected by an automatic sampler are designated by the value 26 for sample source code.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,120 mg/L Mar. 5; minimum daily mean, 0 mg/L on many days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 290 tons (263 Mg) Mar. 5; minimum daily, 0 tons (0 Mg) on many days.

WATER QUALITY DATA, NOVEMBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE SOURCE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
NOV									
20...	1030	--	.72	--	--	--	--	--	.55
21...	--	--	1.1	--	--	--	--	--	.88
DEC									
06...	1330	--	1.8	--	--	--	--	--	3.0
13...	1000	--	2.4	--	--	--	--	--	2.9
14...	1030	--	2.0	--	--	--	--	--	2.9
18...	1100	--	1.9	--	--	--	--	--	2.5
21...	1400	--	2.1	--	--	--	--	--	2.3
24...	1430	--	2.1	--	--	--	--	--	1.6
28...	1030	--	1.7	--	--	--	--	--	1.9
JAN									
01...	1130	--	7.9	--	--	--	--	--	2.4
02...	1100	--	35	195	--	3.5	--	--	4.5
02...	1500	--	30	--	--	--	--	--	4.3
03...	1030	--	23	--	--	--	--	--	4.1
04...	1130	--	13	--	--	--	--	--	3.9
08...	1400	--	6.0	--	--	--	--	--	3.3
11...	1430	--	4.0	--	--	--	--	--	2.7
14...	1300	--	3.2	--	--	--	--	--	2.1
18...	1400	--	2.5	--	--	--	--	--	1.9
22...	1200	--	4.0	--	--	--	--	--	1.6
24...	1030	--	2.1	--	--	--	--	--	1.6
25...	1030	--	22	--	--	--	--	--	2.4
29...	1130	--	6.0	--	--	--	--	--	2.7
FEB									
01...	1130	--	4.6	--	--	--	--	--	2.3
05...	1100	--	2.9	--	--	--	--	--	2.5
08...	0900	--	2.3	--	--	--	--	--	2.3
11...	1200	--	1.8	--	--	--	--	--	2.3
14...	1000	--	1.8	--	--	--	--	--	2.2
15...	1130	--	1.9	245	--	.0	--	--	2.1
18...	1100	--	1.4	--	--	--	--	--	2.1
21...	1000	--	1.5	--	--	--	--	--	1.9
27...	1200	--	2.3	290	7.6	.0	--	--	1.9
28...	1615	--	2.3	--	--	--	--	--	2.1
MAR									
03...	1030	--	4.8	--	--	--	--	--	2.3
05...	1115	--	112	120	6.6	.0	--	--	2.3
06...	1230	--	49	144	6.8	.0	--	--	2.7
07...	1030	--	32	--	--	--	--	--	2.6
10...	1100	--	19	--	--	--	--	--	2.5
13...	1030	--	11	185	7.1	.0	--	--	2.5
14...	1100	--	29	--	--	--	--	--	2.1
17...	1430	--	11	--	--	--	--	--	1.4
21...	1400	--	15	--	--	--	--	--	2.2
24...	1030	--	43	--	--	--	--	--	1.2
28...	1600	--	9.4	--	--	--	--	--	1.6
29...	1100	--	8.5	180	7.4	6.5	10.4	88	1.6
31...	0930	--	13	--	--	--	--	--	1.3
APR									
04...	1430	--	8.8	--	--	--	--	--	1.6
07...	0930	--	7.3	--	--	--	--	--	2.0
11...	1630	--	14	--	--	--	--	--	1.8
14...	1000	--	16	--	--	--	--	--	2.1
18...	1530	--	8.2	--	--	--	--	--	2.0
21...	0930	--	6.2	--	--	--	--	--	1.9
24...	1130	--	5.0	--	--	10.0	--	--	1.7
25...	1030	--	4.4	--	--	--	--	--	1.5
28...	1130	--	3.8	--	--	--	--	--	.21

SUSQUEHANNA RIVER BASIN

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, NOVEMBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMPLE SOURCE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY									
02...	1000	--	2.7	--	--	--	--	--	1.4
05...	1000	--	2.4	--	--	--	--	--	1.4
09...	1030	--	2.0	--	--	--	--	--	1.1
12...	1530	--	1.7	--	--	--	--	--	.67
16...	1500	--	1.6	--	--	--	--	--	.88
19...	0930	--	1.5	--	--	--	--	--	.90
24...	1400	--	2.6	--	--	--	--	--	.88
25...	1100	--	2.8	237	7.4	8.5	11.6	104	.81
28...	1500	--	2.3	--	--	--	--	--	.85
31...	0900	--	2.1	--	--	--	--	--	.95
JUN									
04...	1030	--	1.9	--	--	--	--	--	.98
07...	1600	--	1.4	--	--	--	--	--	.87
11...	1400	--	1.6	--	--	--	--	--	.89
14...	0930	--	1.1	--	--	--	--	--	.90
17...	1300	--	1.0	--	--	--	--	--	.86
20...	1130	--	.81	--	--	--	--	--	.85
23...	0930	--	1.1	--	--	--	--	--	.81
27...	1700	--	.64	--	--	--	--	--	.81
30...	1100	--	1.4	--	--	--	--	--	.85
JUL									
04...	1000	--	.90	--	--	--	--	--	.89
07...	0930	--	.72	--	--	--	--	--	.93
11...	1000	--	.72	--	--	--	--	--	.78
12...	1145	--	.77	310	7.7	15.0	9.2	94	.77
14...	1230	--	.72	--	--	--	--	--	.76
18...	1000	--	.90	--	--	--	--	--	.68
21...	0830	--	.64	--	--	--	--	--	.77
25...	1100	--	.64	--	--	--	--	--	.88
28...	1030	--	.90	--	--	--	--	--	.83
31...	0900	--	2.9	--	--	--	--	--	.83
AUG									
03...	1000	--	1.2	--	--	--	--	--	.81
06...	1000	--	1.0	--	--	--	--	--	.79
09...	1100	--	.90	--	--	--	--	--	.78
14...	1100	--	.90	--	--	--	--	--	.75
16...	1045	--	.43	335	8.0	13.0	9.3	90	.53
18...	1000	--	.64	--	--	--	--	--	.81
25...	1130	--	.90	--	--	--	--	--	.79
30...	1000	--	.64	--	--	--	--	--	.86
SEP									
01...	1000	--	.42	--	--	--	--	--	.89
05...	1100	--	.49	--	--	--	--	--	.74
08...	1200	--	1.6	--	--	--	--	--	1.0
12...	1030	--	.90	--	--	--	--	--	.96
14...	1400	--	5.7	160	7.1	17.0	--	--	2.1
14...	1405	26	6.8	--	--	--	--	--	1.5
14...	1505	26	26	--	--	--	--	--	1.2
14...	1600	--	34	160	7.1	17.0	--	--	1.5
14...	1605	26	36	--	--	--	--	--	1.5
14...	1700	--	22	155	7.0	17.0	--	--	1.4
14...	1705	26	20	--	--	--	--	--	1.3
14...	1730	--	17	160	6.9	17.0	--	--	1.2
14...	1800	--	13	170	--	17.0	--	--	1.2
14...	1805	26	13	--	--	--	--	--	1.2
14...	1900	--	10	190	--	16.5	--	--	1.2
15...	1100	--	4.6	--	--	--	--	--	1.9
19...	0930	--	2.1	--	--	--	--	--	2.1
22...	1130	--	1.5	--	--	--	--	--	1.8
24...	0800	--	1.2	--	--	--	--	--	1.5
29...	1100	--	1.1	--	--	--	--	--	1.2

SUSQUEHANNA RIVER BASIN

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01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, NOVEMBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN. AMMONIA TOTAL (MG/L AS N)	NITRO- GEN. ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
NOV								
20...	--	--	.04	.59	.00	.00	5.3	.8
21...	--	--	.14	1.0	.02	.00	--	--
DEC								
06...	--	--	.17	3.2	.01	.01	2.9	.9
13...	--	--	.23	3.1	.01	.01	5.8	1.5
14...	--	--	.02	2.9	.01	.00	2.1	.4
18...	--	--	.19	2.7	.01	.00	13	.3
21...	--	--	.10	2.4	.00	.01	1.6	.4
24...	--	--	.00	1.6	.00	.01	1.4	.6
28...	--	--	.10	2.0	.01	.01	1.1	.4
JAN								
01...	--	--	.90	3.3	.16	.06	3.0	2.4
02...	--	--	.53	5.0	.09	.03	5.6	1.7
02...	--	--	.40	4.7	.09	.03	6.5	1.5
03...	--	--	.20	4.3	.05	.01	60	.9
04...	--	--	.20	4.1	.04	.03	5.2	1.4
08...	--	--	.20	3.5	.10	.05	3.7	.5
11...	--	--	.07	2.8	.04	.01	8.0	.5
14...	--	--	.16	2.3	.09	.03	2.7	1.2
18...	--	--	.00	1.9	.10	.04	--	.4
22...	--	--	.00	1.6	.04	.02	1.4	.8
24...	.00	.00	.00	1.6	.01	.00	45	.5
25...	.04	.46	.50	2.9	.10	.04	3.4	1.1
29...	.01	.09	.10	2.8	.03	.03	1.9	.2
FEB								
01...	.00	.20	.20	2.5	.05	.04	1.6	.3
05...	.00	.20	.20	2.7	.02	.02	1.8	.3
08...	.00	.10	.10	2.4	.05	.03	3.1	.4
11...	.00	.17	.17	2.5	.03	.01	1.1	.4
14...	.01	.59	.60	2.8	.04	.01	1.2	.1
15...	.01	.20	.21	2.3	.01	.00	17	1.4
18...	.01	.29	.30	2.4	.07	.03	1.1	.7
21...	.04	.03	.07	2.0	.01	.00	22	--
27...	.08	.08	.16	2.1	.02	.00	6.4	--
28...	.04	.06	.10	2.2	.06	.03	1.5	.2
MAR								
03...	.05	.05	.10	2.4	.12	.06	5.9	.3
05...	.23	3.1	3.3	5.6	.13	.09	5.6	3.2
06...	.07	.67	.74	3.4	.10	.04	8.3	.9
07...	.01	.11	.12	2.7	.07	.03	3.2	.6
10...	.03	.16	.19	2.7	.05	.03	3.3	.5
13...	.01	.23	.24	2.7	.02	.01	54	.0
14...	.09	.79	.88	3.0	.20	.06	4.3	.8
17...	.01	.01	.02	1.4	.02	.02	2.2	.9
21...	.01	.00	.13	2.2	.03	.02	4.1	.2
24...	.05	.37	.42	1.6	.03	.02	2.1	.8
28...	.01	.18	.19	1.8	.11	.04	5.5	.5
29...	.00	.19	.19	1.8	.04	.01	3.5	1.3
31...	.01	.15	.16	1.5	.02	.01	1.8	.6
APR								
04...	.01	.14	.15	1.8	.02	.01	6.4	.3
07...	.01	.02	.03	2.0	.02	.02	4.4	.3
11...	.00	.56	.56	2.4	.04	.01	11	.8
14...	.00	.43	.43	2.5	.02	.01	3.0	.7
18...	.00	.28	.28	2.3	.02	.01	2.3	.4
21...	.01	.08	.09	2.0	.01	.00	1.3	.3
24...	.07	.10	.17	1.9	.02	.00	14	.6
25...	.01	.01	.02	1.5	.01	.01	2.4	.5
28...	.01	.21	.22	.43	.01	.00	9.1	.3
MAY								
02...	.00	.00	.00	1.4	.02	.01	.3	.3
05...	.01	.05	.06	1.5	.02	.01	.4	.4
09...	.01	.14	.15	1.3	.14	.00	1.7	.5
12...	.00	.10	.10	.77	.13	.00	1.9	.4
16...	.00	.15	.15	1.0	.02	.01	2.4	.5
19...	.00	.05	.05	.95	.01	.01	2.3	.5
24...	.00	.86	.86	1.7	.02	.00	2.5	.6
25...	.00	.52	.52	1.3	.02	.00	3.5	1.3
28...	.00	.41	.41	1.3	.01	.00	3.7	.3
31...	.00	.26	.26	1.2	.02	.00	2.2	.4
JUN								
04...	.00	.28	.28	1.3	.02	.00	1.6	.6
07...	.01	.10	.11	.98	.02	.00	1.5	--
11...	.00	.14	.14	1.0	.03	.00	2.5	.5
14...	.04	.01	.05	.95	.01	.00	1.8	.4
17...	.02	.09	.11	.97	.02	.00	2.0	.5
20...	.02	3.2	3.2	4.1	.02	.00	2.2	.5
23...	.01	.10	.11	.92	.02	.01	1.9	.4
27...	.01	.08	.09	.90	.02	.00	2.6	3.6
30...	.01	.12	.13	.98	.03	.00	4.7	3.8

SUSQUEHANNA RIVER BASIN

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

WATER QUALITY DATA, NOVEMBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN. AMMONIA TOTAL (MG/L AS N)	NITRO- GEN. ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED TOTAL (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
JUL								
04...	.05	.01	.06	.95	.01	.01	2.3	.4
07...	.08	.05	.13	1.1	.02	.01	1.4	.4
11...	.00	.02	.02	.80	.02	.00	1.2	.6
12...	.01	.09	.10	.87	.02	.02	3.0	1.4
14...	.00	.01	.01	.77	.02	.00	1.0	.6
18...	.00	.28	.28	.96	.02	.00	1.4	3.2
21...	.00	.80	.80	1.6	.02	.01	1.2	.4
25...	.00	.00	.00	.88	.03	.00	2.4	.0
28...	.00	.00	.00	.83	.02	.01	1.4	.1
31...	.00	.01	.01	.84	.02	.00	2.7	1.5
AUG								
03...	.00	.15	.15	.96	.03	.00	2.1	.4
06...	.00	.00	.00	.79	.02	.00	1.7	.2
09...	.01	.00	.00	.78	.02	.00	1.2	.5
14...	.00	.06	.06	.81	.01	.01	2.0	.5
16...	.00	.00	.00	.53	.02	.00	26	1.1
18...	.01	.02	.03	.84	.02	.01	1.8	.3
25...	.11	.11	.22	1.0	.03	.01	10	.6
30...	.01	.15	.16	1.0	.02	.01	2.8	.3
SEP								
01...	.00	.10	.10	.99	.01	.01	2.1	.6
05...	.00	.00	.00	.74	.02	.01	2.3	.3
08...	.00	.11	.11	1.1	.03	.01	2.5	.4
12...	.01	.07	.08	1.0	.02	.00	1.6	.5
14...	.54	10	11	13	7.2	2.1	7.5	20
14...	.09	15	15	17	2.7	.39	--	--
14...	.11	16	16	17	2.6	.41	--	--
14...	.11	12	12	14	3.2	.74	11	20
14...	.11	12	12	14	3.3	.56	--	--
14...	.17	7.0	7.2	8.6	2.6	.93	8.6	10
14...	.21	6.9	7.1	8.4	2.7	.70	--	--
14...	.18	4.6	4.8	6.0	2.1	.79	8.8	10
14...	.14	3.6	3.7	4.9	1.4	.76	7.3	10
14...	.19	3.6	3.8	5.0	1.8	.57	--	--
14...	.13	9.0	9.1	10	.71	.60	6.7	4.3
15...	.01	.81	.82	2.7	.06	.00	4.8	.4
19...	.00	.94	.94	3.0	.04	.01	2.4	.1
22...	.00	.27	.27	2.1	.03	.01	2.6	.1
24...	.02	.45	.47	2.0	.00	.01	2.7	.3
29...	.02	.20	.22	1.4	.01	.00	2.5	.2

423132077280800 SWITZER CREEK PRECIPITATION STATION ^{a/}

CHEMICAL QUALITY OF PRECIPITATION, MAY TO SEPTEMBER 1979

DATE	INCHES OF PRECIPITATION	NITRO- GEN. NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN. AMMONIA TOTAL (MG/L AS N)	NITRO- GEN. ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)
MAY								
25-28	.52	.99	.29	1.0	1.3	2.3	.03	.04
SEP								
14...	1.6	.13	.23	.00	.18	.31	.01	--

a The precipitation collector is located 150 ft (45.7 m) east of State Highway 371, 2.1 mi (3.4 km) northeast of intersection of State Highway 371 with U.S. Highway 15 and 2.5 mi (4.0 km) northeast of gaging station.

01527050 SWITZER CREEK NEAR COHOCTON, NY--Continued

SUSPENDED SEDIMENT, NOVEMBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			1.0	---	.72	0	15	356	4.6	1	2.5	10
2			.90	---	.81	1	35	630	4.1	3	3.0	2
3			.86	---	.91	5	20	27	3.6	6	4.8	4
4			.82	---	2.0	17	13	16	3.2	2	16	31
5			.82	---	2.3	6	9.0	18	2.9	1	84	1120
6			.81	---	1.9	1	6.4	10	2.7	5	52	165
7			.81	---	1.6	0	5.4	7	2.5	13	34	91
8			.81	---	2.0	1	6.0	4	2.3	4	26	48
9			.81	---	3.1	2	5.0	6	2.1	3	20	23
10			.81	---	2.7	0	4.5	4	2.0	1	21	19
11			.72	---	2.7	1	4.1	2	1.8	0	19	11
12			.72	---	2.6	4	3.7	4	1.7	0	14	12
13			.72	---	2.6	2	3.5	3	1.7	1	12	18
14			.72	---	2.3	2	3.2	1	1.8	2	23	96
15			.64	---	2.1	0	3.0	0	1.8	1	18	16
16			.64	---	2.0	0	2.8	0	1.8	0	13	13
17			.81	---	2.0	0	2.7	0	1.6	3	11	13
18			.91	---	1.7	0	2.5	0	1.4	1	11	10
19			.72	---	1.5	1	2.5	0	1.3	0	12	8
20			.72	1	1.6	3	2.4	0	1.3	0	13	9
21			.64	0	2.1	4	3.0	0	1.5	1	16	12
22			.64	2	1.9	1	4.0	2	1.7	1	18	23
23			.72	10	1.6	0	3.0	1	1.8	1	27	75
24			1.0	6	1.2	0	6.0	13	1.9	1	43	180
25			.91	1	.70	1	21	66	2.1	1	34	56
26			.72	3	1.2	15	11	9	2.2	2	18	17
27			.64	1	1.2	0	8.8	4	2.3	4	12	6
28			.81	0	1.1	0	7.3	2	2.3	18	9.7	8
29			.81	0	1.1	0	6.0	1	---	---	9.1	8
30			.81	0	1.0	0	5.0	0	---	---	11	31
31			---	---	1.8	2	4.8	1	---	---	13	72
TOTAL			---	24	---	69	---	1187	---	76	---	2207
DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10	32	2.9	3	2.1	4	1.5	6	1.7	9	.42	3
2	11	14	2.7	4	2.0	5	1.1	3	1.6	8	.91	9
3	9.4	7	2.6	3	1.9	6	1.0	3	1.2	6	.91	8
4	9.4	6	2.6	4	1.7	4	.91	3	.81	4	.56	3
5	9.4	7	2.4	3	1.7	4	.81	2	.81	3	.49	2
6	8.5	5	2.3	3	1.6	5	.72	1	.72	2	6.0	160
7	7.6	4	2.1	3	1.5	5	.64	2	.64	4	2.1	20
8	7.3	6	2.0	4	1.6	5	.64	2	.64	5	1.6	6
9	10	16	2.0	5	1.5	5	.64	2	.56	6	1.2	5
10	10	14	2.1	7	1.4	3	.72	2	.64	2	1.1	3
11	12	19	2.1	7	1.6	5	.72	3	.49	3	1.0	2
12	14	8	1.9	7	1.4	1	.81	4	.49	5	.91	1
13	15	8	1.9	8	1.1	2	.81	2	.42	4	.81	2
14	15	8	1.9	5	1.0	0	.72	2	.42	3	6.8	500
15	13	9	1.7	5	1.0	1	1.2	7	.42	3	4.4	21
16	11	6	1.7	5	1.0	3	1.4	7	.42	2	3.3	9
17	9.7	5	1.5	4	.91	1	1.0	4	.42	3	2.6	12
18	8.5	5	1.5	5	.91	2	.90	4	.49	4	2.2	6
19	7.6	5	1.5	5	.91	2	.72	2	.49	2	2.1	7
20	6.8	5	1.5	5	.81	1	.64	3	.42	1	1.7	4
21	6.2	3	1.5	3	.81	2	.64	2	.42	4	1.6	3
22	5.5	5	1.4	4	1.2	6	.64	2	.42	6	1.5	3
23	5.0	7	1.4	4	1.1	4	3.2	9	.42	5	1.3	3
24	4.6	5	2.0	8	.91	1	1.4	11	.64	8	1.2	1
25	4.4	6	2.0	12	.81	1	1.0	10	.81	6	1.1	3
26	4.0	6	2.0	6	.72	2	.90	8	.49	2	.98	5
27	4.4	6	2.1	4	.72	4	.81	6	1.2	12	.89	2
28	3.8	5	2.0	4	1.4	8	.81	6	.72	7	1.2	4
29	3.2	5	2.0	4	1.5	8	.81	5	.56	3	1.2	5
30	3.1	3	2.4	5	1.5	8	.72	4	.49	2	.97	2
31	---	---	2.1	3	---	---	1.9	11	.42	1	---	---
TOTAL	---	240	---	152	---	108	---	138	---	135	---	814

SUSQUEHANNA RIVER BASIN

01528000 FIVEMILE CREEK NEAR KANONA, NY

LOCATION.--Lat 42°23'18", long 77°21'29", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from town of Wheeler highway bridge, 1.3 mi (2.1 km)-upstream from mouth and Kanona.

DRAINAGE AREA.--66.8 mi² (173 km²).

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft (356.707 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 76.2 ft³/s (2.158 m³/s), 15.49 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft³/s (145 m³/s) June 23, 1972, gage height, 6.95 ft (2.118 m) present datum; maximum gage height, 7.10 ft (2.164 m) present datum, Mar. 31, 1940 (ice jam); minimum discharge, 0.04 ft³/s (0.001 m³/s) Sept. 27, 29, 1941; minimum gage height, 0.72 ft (0.219 m) present datum, Sept. 4, 1973 (result of channel improvement).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 880 ft³/s (24.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	2100	ice jam	6.30 1.920	Mar. 5	0330	ice jam	*6.96 2.121
Jan. 2	0900	1,420 40.2	4.87 1.484	Mar. 6	0600	*a2,200 62.3	5.65 1.722
Jan. 25	2130	a1,000 28.3	4.46 1.359				

a About.

Minimum discharge, 3.3 ft³/s (0.93 m³/s) Sept. 1, 2, gage height, 0.76 ft (0.232 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	19	21	120	130	64	146	43	52	26	63	3.7
2	5.0	18	22	1290	100	92	192	37	39	23	55	5.0
3	4.7	17	23	820	74	160	241	35	33	17	35	8.0
4	4.7	15	91	400	58	560	158	41	27	16	22	5.3
5	4.7	15	157	190	52	1600	188	37	23	10	15	4.6
6	4.7	13	76	130	47	1800	170	35	20	7.9	11	353
7	5.0	12	56	98	43	1200	123	32	20	7.5	9.4	150
8	4.7	13	56	98	40	702	123	31	21	6.8	8.7	60
9	4.7	14	179	86	36	457	228	36	55	6.1	8.2	38
10	5.0	13	104	80	33	490	359	29	32	6.2	8.5	25
11	4.4	13	76	70	31	498	401	40	83	16	8.3	19
12	4.1	13	70	62	29	244	432	53	57	12	7.4	16
13	6.2	12	61	56	29	199	372	36	35	6.6	6.6	14
14	36	12	57	52	28	408	287	32	29	4.5	6.6	48
15	63	17	52	49	30	362	197	29	23	12	6.2	129
16	40	12	47	46	29	195	166	29	19	14	5.6	55
17	25	11	47	43	26	173	170	25	17	9.5	4.9	34
18	19	14	48	41	24	218	130	22	15	8.8	5.2	27
19	22	14	47	40	24	228	104	20	13	13	5.5	22
20	20	13	45	40	26	244	88	20	10	7.7	5.0	21
21	18	13	48	46	29	304	78	32	9.1	5.4	4.6	22
22	15	12	50	52	30	349	68	20	11	4.3	4.1	17
23	12	13	47	48	30	418	65	14	15	4.7	4.0	13
24	11	18	43	84	36	513	56	21	15	4.9	4.3	13
25	14	28	39	760	44	479	54	40	11	5.4	4.6	11
26	17	25	36	860	50	270	49	55	9.5	6.1	4.3	10
27	53	20	33	560	50	158	54	60	8.7	5.6	6.6	9.5
28	47	19	30	365	52	121	58	56	13	5.2	5.8	12
29	32	19	27	277	---	146	50	65	19	5.7	5.2	14
30	25	20	25	230	---	181	47	127	14	4.9	4.7	12
31	21	---	25	180	---	181	---	84	---	31	4.5	---
TOTAL	552.9	467	1738	7273	1210	13014	4854	1236	748.3	313.8	349.8	1171.1
MEAN	17.8	15.6	56.1	235	43.2	420	162	39.9	24.9	10.1	11.3	39.0
MAX	63	28	179	1290	130	1800	432	127	83	31	63	353
MIN	4.1	11	21	40	24	64	47	14	8.7	4.3	4.0	3.7
CFSM	.27	.23	.84	3.52	.65	6.29	2.43	.60	.37	.15	.17	.58
IN.	.31	.26	.97	4.05	.67	7.25	2.70	.69	.42	.17	.19	.65
CAL YR 1978	TOTAL	29963.5	MEAN	82.1	MAX	1140	MIN	4.1	CFSM	1.23	IN	16.69
WTR YR 1979	TOTAL	32927.9	MEAN	90.2	MAX	1800	MIN	3.7	CFSM	1.35	IN	18.34

SUSQUEHANNA RIVER BASIN

01528700 DIVERSION FROM WANETA LAKE TO KEUKA LAKE AT KEUKA, NY

LOCATION.--Lat 42°29'06", long 77°06'39", Steuben County, Hydrologic Unit 02050105, at entrance to conduit on Diversion Canal, 0.8 mi (1.3 km) east of Keuka, and 1.0 mi (1.6 km) north of Wayne.

DRAINAGE AREA.--45.5 mi² (118 km²).

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

GAGE.--Daily power generation records.

REMARKS.--Records for January 1951 to September 1966 on file. Sketch indicates diversion from Lamoka-Waneta Lakes (Susquehanna River Basin) to Keuka Lake (Oswego River Basin).

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

AVERAGE DISCHARGE.--13 years, 24.0 ft³/s (0.680 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft³/s (2.07 m³/s) June 23, 1972; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66 ft³/s (1.87 m³/s) Oct. 11, 12; no flow many days.

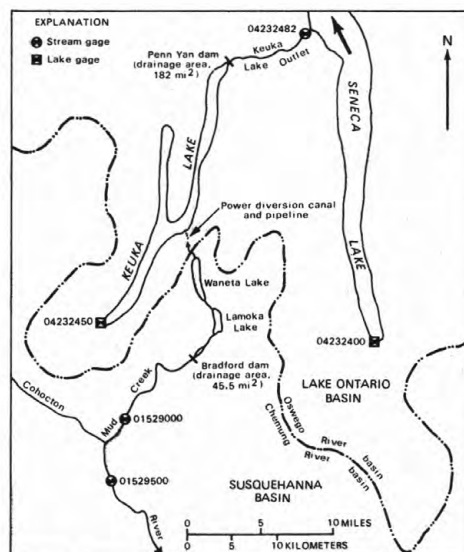


Figure 8.--Gaging stations and transbasin diversion, Cohocton River-Keuka Lake area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	31	.00	.00	.00	.00	.00	26	.00	.00	.00
2	.00	.00	31	23	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	31	48	.00	.00	.00	.00	.00	32	.00	.00
4	.00	.00	31	55	.00	.00	.00	.00	.00	36	.00	.00
5	.00	.00	.00	55	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	32	20	55	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	55	33	55	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	55	33	23	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	55	32	.00	.00	.00	.00	5.2	.00	.00	.00	.00
10	33	55	.00	.00	.00	.00	.00	14	.00	.00	.00	.00
11	66	55	19	.00	.00	.00	.00	8.0	.00	.00	.00	.00
12	66	55	33	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	51	55	33	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	46	48	33	.00	.00	.00	.00	24	.00	.00	.00	.00
15	46	42	34	.00	.00	.00	.00	49	.00	.00	.00	.00
16	27	42	34	.00	.00	.00	.00	55	.00	.00	.00	.00
17	.00	37	34	.00	.00	.00	.00	55	.00	15	.00	.00
18	.00	37	34	.00	.00	.00	.00	35	.00	.00	.00	.00
19	.00	37	34	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	35	33	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	35	33	.00	.00	.00	.00	31	.00	.00	.00	.00
22	.00	16	34	.00	.00	.00	.00	55	.00	.00	.00	.00
23	.00	.00	34	.00	.00	.00	.00	55	.00	.00	.00	.00
24	.00	.00	34	.00	.00	.00	.00	55	.00	.00	.00	.00
25	.00	.00	34	.00	.00	.00	.00	28	.00	.00	.00	.00
26	.00	.00	34	.00	.00	.00	.00	.00	.00	.00	.00	32
27	.00	18	34	.00	.00	.00	.00	.00	.00	.00	.00	49
28	.00	34	34	.00	.00	.00	.00	.00	.00	.00	.00	55
29	.00	34	34	.00	---	.00	.00	24	.00	.00	.00	55
30	.00	34	34	.00	---	.00	.00	42	.00	.00	.00	55
31	.00	---	34	.00	---	.00	---	42	---	.00	.00	---
TOTAL	335.00	866.00	936.00	314.00	.00	.00	.00	577.20	26.00	83.00	.00	246.00
MEAN	10.8	28.9	30.2	10.1	.000	.000	.000	18.6	.87	2.68	.000	8.20
MAX	66	55	34	55	.00	.00	.00	55	26	36	.00	55
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 1978	TOTAL	10772.00	MEAN	29.5	MAX	68	MIN	.00				
WTR YR 1979	TOTAL	3383.20	MEAN	9.27	MAX	66	MIN	.00				

SUSQUEHANNA RIVER BASIN

01529000 MUD CREEK NEAR SAVONA, NY

LOCATION.--Lat 42°18'30", long 77°11'50", Steuben County, Hydrologic Unit 02050105, on left bank just upstream from small tributary entering from east, 2.4 mi (3.9 km) upstream from Savona, and 3.3 mi (5.3 km) upstream from mouth.

DRAINAGE AREA.--76.6 mi² (198 km²).

PERIOD OF RECORD.--July 1918 to December 1919 (published as "at Savona"), March 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,049.63 ft (319.927 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to December 1919, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Lake Lamoka-Waneta System. Diversion table for station 01528700 represents discharge from 45.5 mi² (118 km²) of drainage area from the Susquehanna River basin to the St. Lawrence River basin through the Keuka power diversion canal of New York State Electric and Gas Corp. Monthly records of diversion for January 1951 to September 1966 available in files of the Geological Survey.

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

AVERAGE DISCHARGE.--42 years (1937-79), 42.2 ft³/s (1.20 m³/s) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft³/s (173 m³/s) June 23, 1972, gage height, 8.66 ft (2.640 m), from rating curve extended above 1,350 ft³/s (38.2 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.04 ft³/s (0.001 m³/s) Sept. 21-23, 1941, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft³/s (31.7 m³/s) Mar. 5, gage height, 5.56 ft (1.695 m); minimum, 2.0 ft³/s (0.057 m³/s) Oct. 9, gage height, 0.66 ft (0.201 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.0	5.4	52	210	88	37	71	16	21	26	3.2
2	2.4	3.7	5.4	440	190	150	42	70	13	16	25	3.5
3	2.4	3.5	5.7	273	150	250	105	70	12	9.7	14	5.2
4	2.6	3.5	11	79	130	470	38	136	10	6.8	7.6	3.9
5	2.8	3.5	15	48	110	940	52	65	9.2	5.7	5.7	3.3
6	2.6	3.5	11	36	98	1040	44	22	8.8	5.4	4.8	76
7	2.6	3.5	8.0	30	94	775	37	19	8.8	4.8	76	53
8	2.8	3.7	8.0	29	86	710	31	17	8.4	4.5	122	23
9	2.2	3.7	27	26	66	621	86	16	9.7	4.2	120	13
10	2.4	3.5	26	22	48	567	337	14	11	4.2	31	8.8
11	2.4	3.5	15	20	40	509	440	20	14	3.7	8.5	6.8
12	2.4	3.5	12	31	38	406	423	17	12	3.5	6.6	5.6
13	3.0	3.5	11	78	36	363	383	15	9.2	3.7	5.8	4.8
14	8.0	3.5	11	110	34	143	343	14	8.0	3.2	5.3	8.6
15	11	3.5	12	110	32	79	318	13	7.2	3.5	4.9	127
16	7.6	3.5	8.8	100	32	130	297	14	6.8	4.0	4.8	92
17	5.1	3.7	9.7	92	30	139	112	13	6.4	3.5	4.5	16
18	4.0	4.5	10	86	28	140	50	11	6.4	3.2	4.7	9.9
19	3.7	5.1	8.8	80	28	127	41	10	6.1	3.0	4.8	8.0
20	4.0	4.2	7.6	74	29	122	35	9.7	5.7	3.0	4.5	6.8
21	4.0	4.2	11	80	32	122	31	9.7	5.4	2.8	4.4	5.9
22	3.7	4.0	15	86	33	122	29	9.7	6.1	2.8	4.2	5.8
23	3.5	4.0	13	92	33	125	27	8.8	6.4	2.8	4.2	5.3
24	3.2	5.4	10	100	40	125	24	15	5.7	6.1	4.5	4.7
25	3.5	6.8	9.7	314	70	137	23	29	5.4	4.0	4.3	4.4
26	3.7	5.7	8.8	595	78	130	21	34	5.4	4.8	3.3	4.2
27	7.2	5.1	8.0	465	80	50	26	27	5.4	4.2	5.8	4.0
28	8.0	4.8	7.4	442	82	34	71	26	6.1	3.5	4.8	4.6
29	6.1	5.1	6.8	390	---	40	76	28	7.2	3.2	3.8	7.1
30	5.1	5.1	6.4	335	---	46	74	24	8.4	3.0	3.6	6.5
31	4.2	---	6.2	270	---	42	---	19	---	3.5	3.4	---
TOTAL	128.4	124.8	330.7	4985	1957	8742	3653	866.9	250.2	157.3	532.8	530.9
MEAN	4.14	4.16	10.7	161	69.9	282	122	28.0	8.34	5.07	17.2	17.7
MAX	11	6.8	27	595	210	1040	440	136	16	21	122	127
MIN	2.2	3.5	5.4	20	28	34	21	8.8	5.4	2.8	3.3	3.2

CAL YR 1978 TOTAL 16556.4 MEAN 45.4 MAX 623 MIN 2.2
WTR YR 1979 TOTAL 22259.0 MEAN 61.0 MAX 1040 MIN 2.2

01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'10", long 77°13'00", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi (3.1 km) upstream from Michigan Creek, and 2 mi (3 km) north of Campbell.

DRAINAGE AREA.--470 mi² (1,217 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,016.34 ft (309.780 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.

REMARKS.--Records good except those for winter periods, which are fair. During each year since 1927, a large part of flow from 45.5 mi² (118 km²) of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, is diverted into Keuka Lake (Oswego River basin), for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--61 years, 451 ft³/s (12.77 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,100 ft³/s (1,160 m³/s) July 8, 1935, gage height, 11.6 ft (3.54 m), from floodmark, from rating curve extended above 24,200 ft³/s (685 m³/s) on basis of velocity-area and slope-area measurements of peak flow; minimum, 8 ft³/s (0.23 m³/s) Sept. 6, 7, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft³/s (119 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0800	4,330 123	4.96 1.512	Mar. 6	0430	*a8,200 232	*b7.17 2.185
Jan. 25	0630	ice jam	5.12 1.561				

a About.

b Backwater from ice.

Minimum discharge, 30 ft³/s (0.850 m³/s) Oct. 16; minimum gage height, 0.11 ft (0.034 m) Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	114	108	500	680	660	978	398	338	233	435	60
2	37	108	111	3700	580	800	989	370	289	280	301	60
3	36	104	110	2300	520	1100	1140	355	259	193	244	132
4	39	99	213	1210	460	1900	897	420	231	159	168	94
5	44	95	476	939	420	5800	1020	391	211	134	132	76
6	44	90	303	680	400	7500	935	296	205	119	113	1210
7	40	85	239	560	370	4990	779	281	193	113	147	684
8	41	88	223	500	350	3630	745	264	183	106	212	350
9	42	89	610	460	340	2750	1280	256	482	99	212	252
10	39	85	475	420	320	2650	1860	243	272	94	147	186
11	37	82	349	390	310	2580	2110	260	440	101	108	150
12	35	78	332	380	300	1810	2120	320	341	101	94	132
13	46	76	280	400	290	1530	1880	276	248	95	88	119
14	199	74	250	430	280	1970	1670	266	212	90	76	212
15	302	79	230	470	270	1740	1470	248	193	113	74	698
16	196	74	210	420	270	1370	1320	256	177	268	70	445
17	143	73	200	380	260	1260	1210	236	168	134	64	268
18	114	93	180	350	250	1340	922	218	159	134	66	212
19	106	101	160	330	250	1320	792	208	153	117	70	189
20	116	90	150	310	280	1300	707	210	142	97	68	168
21	122	84	170	360	320	1440	639	204	132	88	62	159
22	106	79	220	400	330	1580	582	200	142	82	60	147
23	95	80	220	390	340	1880	539	181	183	79	58	134
24	95	98	200	470	370	2470	490	211	162	177	62	122
25	98	137	160	2300	460	2670	455	369	145	127	67	110
26	97	126	240	2080	520	1980	429	438	129	134	69	106
27	198	96	180	1570	540	1410	445	429	122	106	86	99
28	214	110	160	1330	560	1070	512	388	124	97	99	106
29	161	110	150	1120	---	1020	464	403	186	95	84	162
30	136	105	140	962	---	1090	426	569	193	86	72	142
31	122	---	140	858	---	1100	---	450	---	82	64	---
TOTAL	3139	2802	7189	26969	10640	65710	29805	9614	6414	3933	3672	6984
MEAN	101	93.4	232	870	380	2120	994	310	214	127	118	233
MAX	302	137	610	3700	680	7500	2120	569	482	280	435	1210
MIN	35	73	108	310	250	660	426	181	122	79	58	60

CAL YR 1978 TOTAL 173059 MEAN 474 MAX 4850 MIN 35
WTR YR 1979 TOTAL 176871 MEAN 485 MAX 7500 MIN 35

SUSQUEHANNA RIVER BASIN

01529950 CHEMUNG RIVER AT CORNING, NY

LOCATION.--Lat 42°08'47", long 77°03'28", Steuben County, Hydrologic Unit 02050105, on right bank adjacent to Corning Glass Works power plant, 0.2 mi (0.3 km) upstream from bridge on State Highway 414 (Centerway) at Corning, and 1.7 mi (2.7 km) downstream from Cohocton River.

DRAINAGE AREA.--2,006 mi² (5,196 km²).

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

REVISED RECORDS.--WRD NY-78-1: 1976, 1977(m).

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft (274.320 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi² (118 km²) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--5 years, 2,496 ft³/s (70.69 m³/s), 16.90 in/yr (429 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127,000 ft³/s (3,600 m³/s) Sept. 26, 1975, gage height, 32.46 ft (9.894 m); minimum 194 ft³/s (5.49 m³/s) Aug. 22, 23, 1979, gage height, 14.45 ft (4.404 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft (12.408 m), from floodmark (discharge, 228,000 ft³/s or 6,460 m³/s), from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 24,000 ft³/s (680 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1200	25,500 722	22.27 6.788	Mar. 5	1600	*46,000 1,300	*24.96 7.608
Jan. 25	0900	a31,000 878	b23.58 7.187				

a About.

b Backwater from ice.

Minimum discharge, 194 ft³/s (5.49 m³/s) Aug. 22, 23, gage height, 14.45 ft (4.404 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	563	540	2600	2400	2700	3880	1390	1400	620	980	250
2	209	530	540	22000	1800	3800	3570	1280	1150	880	1200	230
3	204	506	540	15000	1900	6000	3950	1150	988	740	800	320
4	220	482	580	5730	1700	11000	3380	1210	853	580	620	400
5	261	460	1290	4100	1500	39000	4090	1260	753	500	500	388
6	315	445	1100	2800	1400	29900	3950	1060	719	440	430	4620
7	274	431	894	2400	1300	20200	3220	973	662	400	360	4880
8	255	431	780	2200	1200	17800	2950	894	620	350	400	1830
9	243	445	2420	2000	1100	11200	5210	820	1070	320	410	1140
10	226	438	3010	1800	1000	11200	10500	760	973	290	390	845
11	226	410	1790	1600	940	11900	11100	1450	1260	280	350	714
12	220	395	1650	1500	920	9140	9240	2310	1470	300	330	576
13	243	395	1410	1400	900	8140	7720	1430	924	300	300	485
14	530	300	1290	1400	860	9570	6430	1210	710	250	290	477
15	1770	300	1160	1500	860	9490	5640	983	583	260	270	2000
16	1060	300	1140	1400	860	7170	5100	959	505	700	264	1510
17	710	300	1070	1300	820	6100	4660	927	451	760	250	860
18	580	450	1010	1200	780	4890	3860	756	415	500	248	645
19	530	700	840	1200	740	4840	3180	681	381	450	241	558
20	506	580	900	1100	600	4660	2730	669	361	370	236	527
21	522	500	960	1200	860	4840	2420	654	332	300	225	490
22	506	470	1100	1300	960	5290	2150	608	345	250	205	450
23	467	450	1000	1300	1300	6550	2020	564	570	240	212	430
24	445	450	960	1600	1800	8680	1870	593	607	370	205	400
25	438	620	660	21000	2600	10300	1700	1550	465	420	218	380
26	438	700	800	15800	2600	8180	1590	2930	460	460	278	360
27	862	580	700	8040	2700	5370	1610	2550	420	480	400	350
28	1240	520	640	5500	2100	4470	1940	2140	400	440	520	380
29	862	580	580	4350	---	4110	1760	2210	450	350	420	430
30	700	560	560	3530	---	4540	1560	2060	500	300	360	520
31	615	---	600	3010	---	4490	---	1850	---	290	300	---
TOTAL	15897	14291	32514	140860	38700	295520	122980	39881	20797	13170	12212	27445
MEAN	513	476	1049	4544	1382	9533	4099	1286	693	425	394	915
MAX	1770	700	3010	22000	2700	39000	11100	2930	1470	880	1200	4880
MIN	204	300	540	1100	740	2700	1560	564	332	240	205	230
CAL YR 1978	TOTAL	839099	MEAN	2299	MAX	32400	MIN	204				
WTR YR 1979	TOTAL	774267	MEAN	2121	MAX	39000	MIN	204				

SUSQUEHANNA RIVER BASIN

253

01530500 NEWTOWN CREEK AT ELMIRA, NY

LOCATION.--Lat 42°06'16" (revised), long 76°47'54", Chemung County, Hydrologic Unit 02050105, on left bank 200 ft (61 m) downstream from bridge on Linden Place in Elmira, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--77.5 mi² (201 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft (255.529 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Diurnal fluctuation at low flow caused by operations of sand and gravel plant and waste-water treatment plant upstream.

AVERAGE DISCHARGE.--41 years, 88.4 ft³/s (2.503 m³/s), 15.49 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,000 ft³/s (113 m³/s) June 23, 1972; maximum gage height, 19.28 ft (5.877 m) June 23, 1972, from floodmarks (backwater from Chemung River); minimum daily discharge, 5.0 ft³/s (0.14 m³/s) Aug. 22, Sept. 19, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1215	1,400 39.6	10.66 3.249	Mar. 6	0630	*2,320 65.7	*13.61 4.148
Jan. 25	0700	1,590 45.0	11.30 3.444				

Minimum daily discharge, 7.9 ft³/s (0.22 m³/s) Oct. 1, July 9, 18-20; minimum gage height, 4.85 ft (1.478 m), July 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	16	27	190	88	176	102	68	45	25	148	11
2	8.7	14	27	1070	76	376	101	61	36	21	204	12
3	12	14	24	322	66	437	112	60	30	11	133	34
4	12	14	32	180	58	762	95	75	24	9.5	54	19
5	9.5	13	38	100	52	1930	167	64	22	9.1	38	16
6	8.7	12	29	90	49	1690	118	58	22	10	30	344
7	8.7	12	25	80	47	645	96	56	21	9.1	24	109
8	8.7	13	24	76	45	364	88	52	19	8.7	21	53
9	9.1	13	101	62	42	263	389	48	19	7.9	20	37
10	9.1	13	74	56	39	259	488	63	18	8.7	19	31
11	8.7	13	51	50	36	228	401	76	64	9.5	20	26
12	9.1	13	46	49	34	155	290	58	40	10	20	22
13	12	12	45	47	32	132	218	48	34	10	19	20
14	24	13	44	56	31	167	181	46	32	11	18	22
15	22	13	37	48	30	141	176	43	29	12	17	35
16	14	14	36	43	29	112	176	41	27	12	16	24
17	12	17	37	41	27	109	202	39	22	10	17	20
18	13	20	33	40	25	108	137	37	25	7.9	17	19
19	13	19	26	38	26	99	111	35	24	7.9	16	19
20	14	18	29	37	27	94	95	35	21	7.9	17	17
21	13	17	34	50	28	95	84	33	21	13	17	19
22	12	17	37	94	32	102	78	32	27	27	17	20
23	13	17	32	72	40	109	72	33	29	28	17	19
24	14	20	27	130	90	116	65	39	26	63	19	17
25	14	24	24	1180	132	143	61	76	21	25	19	17
26	16	21	26	371	146	155	58	116	20	23	21	16
27	58	19	30	236	157	109	95	99	19	26	27	16
28	34	24	25	185	116	88	148	96	20	23	24	20
29	23	24	21	153	---	108	88	97	23	23	21	29
30	19	26	24	129	---	140	74	76	30	20	21	24
31	17	---	26	113	---	118	---	58	---	24	19	---
TOTAL	469.2	495	1091	5388	1600	9530	4566	1818	810	513.2	1090	1087
MEAN	15.1	16.5	35.2	174	57.1	307	152	58.6	27.0	16.6	35.2	36.2
MAX	58	26	101	1180	157	1930	488	116	64	63	204	344
MIN	7.9	12	21	37	25	88	58	32	18	7.9	16	11
CFSM	.20	.21	.45	2.25	.74	3.96	1.96	.76	.35	.21	.45	.47
IN.	.23	.24	.52	2.59	.77	4.57	2.19	.87	.39	.25	.52	.52

CAL YR 1978	TOTAL	31831.4	MEAN 87.2	MAX 1240	MIN 6.7	CFSM 1.13	IN 15.28
WTR YR 1979	TOTAL	28457.4	MEAN 78.0	MAX 1930	MIN 7.9	CFSM 1.01	IN 13.66

SUSQUEHANNA RIVER BASIN

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, Hydrologic Unit 02050105, on right bank 100 ft (30 m) upstream from bridge on State Highway 427, 0.7 mi (1.1 km) southwest of Chemung, and 12.2 mi (19.6 km) upstream from mouth.

DRAINAGE AREA.--2,506 mi² (6,491 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft (237.326 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft (18 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi² (118 km²) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--73 years (1905-13, 1914-79), 2,544 ft³/s (72.05 m³/s), 13.79 in/yr (350 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s (5,350 m³/s) June 23, 1972, gage height, 31.62 ft (9.638 m), from floodmark, from rating curve extended above 65,000 ft³/s (1,840 m³/s) on basis of slope-area and velocity-area studies at gage height 19.57 ft (5.965 m) and slope-area and contracted opening measurements at gage heights 23.97 (7.306 m) and 31.62 ft (9.638 m); minimum, 49 ft³/s (1.39 m³/s) Aug. 14, 1911, gage height, 1.47 ft (0.448 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30,000 ft³/s (850 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1800	33,300 943	13.73 4.185	Mar. 6	0400	*61,500 1,740	*18.24 5.560
Jan. 25	1800	30,800 872	13.19 4.020				

Minimum discharge, 218 ft³/s (6.17 m³/s) Aug. 23, 24, gage height, 3.37 ft (1.027 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	772	628	2100	3310	2700	3970	1720	1860	611	833	291
2	268	729	629	26200	2250	3700	3540	1520	1520	897	1850	256
3	264	686	619	22500	2470	5200	3820	1420	1300	854	1430	342
4	260	643	641	9600	2500	11000	3520	1460	1150	713	940	479
5	265	603	933	5780	2200	41500	3880	1570	1030	594	704	404
6	269	564	1450	4750	1900	50900	4150	1380	951	511	543	1670
7	301	527	1140	3870	1700	28200	3430	1250	918	464	464	5640
8	301	501	960	3400	1600	23200	3030	1180	854	434	426	2350
9	296	480	1530	2800	1500	16500	4340	1110	886	397	464	1360
10	291	465	3980	2500	1400	13100	11100	1210	1270	376	456	985
11	289	453	2410	2200	1200	14900	12500	2000	1140	362	419	792
12	285	435	1820	2000	1200	11500	10700	2540	1690	356	362	657
13	279	416	1780	1900	1100	9740	8630	2080	1260	362	342	576
14	325	399	1590	1700	1100	10000	7250	1610	951	342	336	543
15	1300	394	1340	1700	1100	12000	6320	1350	813	323	323	929
16	1540	394	1260	1900	1100	8500	5850	1170	713	479	297	1780
17	942	392	1290	1700	1100	7590	5400	1180	639	833	279	1090
18	702	393	1200	1600	1000	5560	4580	1030	594	629	273	803
19	667	570	1000	1480	960	5200	3750	929	551	519	273	666
20	644	746	874	1400	920	4870	3210	875	519	464	261	585
21	611	641	1070	1400	1000	4940	2830	865	495	456	256	543
22	578	585	1400	1600	1100	5200	2540	833	487	376	244	535
23	556	558	1400	1600	1200	5940	2300	792	585	369	223	503
24	523	536	1200	1700	1700	7250	2100	844	743	487	228	503
25	492	568	1200	19000	2300	9710	1930	1770	666	471	233	471
26	472	755	860	21000	3300	9400	1780	3370	543	543	228	441
27	865	729	1000	11800	3300	6270	1830	3250	479	560	316	412
28	1500	599	880	7400	3300	4700	2350	2760	448	543	383	412
29	1270	659	800	5740	---	4000	2170	2780	464	487	448	479
30	950	661	720	4660	---	4340	1860	2460	511	419	404	594
31	811	---	700	3960	---	4460	---	2330	---	376	342	---
TOTAL	18401	16853	38304	180940	48810	352070	134660	50638	26030	15607	14580	27091
MEAN	594	562	1236	5837	1743	11360	4489	1633	868	503	470	903
MAX	1540	772	3980	26200	3310	50900	12500	3370	1860	897	1850	5640
MIN	260	392	619	1400	920	2700	1780	792	448	323	223	256
CFSM	.24	.22	.49	2.33	.70	4.53	1.79	.65	.35	.20	.19	.36
IN.	.27	.25	.57	2.69	.72	5.23	2.00	.75	.39	.23	.22	.40

CAL YR 1978	TOTAL	1107685	MEAN	3035	MAX	40400	MIN	260	CFSM	1.21	IN	16.44
WTR YR 1979	TOTAL	923984	MEAN	2531	MAX	50900	MIN	223	CFSM	1.01	IN	13.72

SUSQUEHANNA RIVER BASIN

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LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

- 01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 01523000 ALMOND LAKE NEAR ALMOND, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

DIVERSION OF WATER AFFECTING THE SUSQUEHANNA RIVER BASIN

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

OHIO RIVER MAIN STEM

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, Hydrologic Unit 05010001, on left bank 230 ft (70 m) upstream from Main Street bridge in Salamanca, 1.3 mi (2.1 km) downstream from Great Valley Creek, and 1.6 mi (2.6 km) upstream from Little Valley Creek.

DRAINAGE AREA.--1,608 mi² (4,165 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft (413.918 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi (12.1 km) downstream at different datum. Oct. 1, 1964 to Sept. 30, 1967, at present site at datum 0.04 ft (0.012 m) lower.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--76 years, 2,791 ft³/s (79.04 m³/s), 23.57 in/yr (599 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft³/s (2,070 m³/s) June 23, 1972, gage height, 24.01 ft (7.318 m), from floodmarks; minimum daily, 79 ft³/s (2.24 m³/s) Sept. 10, 11, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s (481 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1600	*22,300 632	*11.63 3.545	Mar. 6	0200	19,600 555	10.78 3.286
Jan. 25	1300	ice jam	10.84 3.304				

Minimum discharge, 287 ft³/s (8.13 m³/s) Oct. 3, 4, gage height, 2.98 ft (0.908 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	1300	1420	6000	2940	1700	6570	2000	2250	674	784	378
2	303	1190	1390	20900	2460	2600	6520	1870	2040	694	990	348
3	293	1050	1410	18700	2400	3300	7450	1770	1860	665	877	488
4	309	945	3040	14300	2200	4200	6270	2100	1630	636	644	439
5	355	871	4620	10600	2100	17000	6530	2060	1450	507	532	383
6	369	816	3700	7800	1900	19000	5970	1840	1350	446	460	742
7	350	770	3030	5710	1800	17400	5250	1720	1350	404	444	2620
8	389	739	2810	4670	1700	16200	4810	1620	1310	372	2780	1760
9	504	719	5110	3750	1500	13100	7250	1520	1360	348	2880	1230
10	476	674	5820	3090	1500	12200	10500	2040	1220	454	1470	949
11	406	624	4830	2800	1400	11700	9710	3870	1820	837	1140	780
12	351	590	4110	2500	1300	9390	9050	4340	1930	731	1050	650
13	540	558	3570	2500	1300	7630	8910	3550	1460	501	896	554
14	2350	541	3190	2800	1300	10500	8140	3210	1170	428	745	2420
15	4210	532	2750	3000	1300	10700	7660	2650	995	1290	674	5960
16	2700	530	2550	2800	1300	8230	6890	2400	871	1310	602	3450
17	1910	526	2500	2500	1200	6880	6070	2140	779	1160	525	1940
18	1480	1110	2600	2300	1200	6600	5280	1860	702	903	475	1460
19	1250	1810	2100	2100	1200	7090	4530	1670	656	779	450	1290
20	1120	1410	2000	1900	1300	7030	3930	1530	605	624	432	1100
21	1190	1210	4200	2100	1500	7380	3450	1440	548	532	415	894
22	1060	1120	4820	2400	1600	8140	3080	1370	514	534	379	772
23	886	1090	3790	2300	1700	9650	2790	1230	533	469	354	701
24	803	1440	3000	2100	1800	12700	2500	1240	576	1370	346	625
25	757	1970	2500	8400	1900	16100	2260	1610	509	994	474	540
26	864	1850	2200	10000	1900	13200	2100	1920	452	785	421	487
27	2000	1610	2000	9800	1800	10500	2160	1860	413	889	593	448
28	2570	1570	1800	8750	1800	8230	2680	2170	388	862	736	448
29	1920	1560	1500	6930	---	7180	2390	2950	441	631	701	775
30	1570	1480	1600	5240	---	8250	2130	2720	507	525	539	1250
31	1370	---	1800	4110	---	7760	---	2560	---	477	454	---
TOTAL	34965	32205	91760	182850	47300	301540	162830	66830	31689	21831	24262	35881
MEAN	1128	1074	2960	5898	1689	9727	5428	2156	1056	704	783	1196
MAX	4210	1970	5820	20900	2940	19000	10500	4340	2250	1370	2880	5960
MIN	293	526	1390	1900	1200	1700	2100	1230	388	348	346	348
CFSM	.70	.67	1.84	3.67	1.05	6.05	3.38	1.34	.66	.44	.49	.74
IN.	.81	.75	2.12	4.23	1.09	6.98	3.77	1.55	.73	.51	.56	.83

CAL YR 1978	TOTAL	925099	MEAN	2535	MAX	21500	MIN	247	CFSM	1.58	IN	21.40
WTR YR 1979	TOTAL	1033943	MEAN	2833	MAX	20900	MIN	293	CFSM	1.76	IN	23.92

03013000 CONEWANGO CREEK AT WATERBORO, NY

LOCATION.--Lat 42°10'15", long 79°04'10", Chautauqua County, Hydrologic Unit 05010002, on right bank 300 ft (91 m) downstream from bridge on State Highway 394 at Waterboro, 0.2 mi (0.3 km) downstream from Davis Brook, 0.4 mi (0.6 km) upstream from Harris Brook, and 1.9 mi (3.1 km) northeast of Kennedy.

DRAINAGE AREA.--290 mi² (751 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,255.30 ft (382.615 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Nov. 7, 1939, nonrecording gages at site 1,300 ft (396 m) upstream at various datums. Nov. 7, 1939 to Nov. 4, 1940, nonrecording gage at site 1,100 ft (335 m) upstream at datum 0.79 ft (0.241 m) higher, and Nov. 5, 1940 to May 28, 1948, nonrecording gage at site 700 ft (213 m) downstream at present datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--41 years, 526 ft³/s (14.90 m³/s), 24.63 in/yr (626 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft³/s (244 m³/s) Apr. 7, 1947; maximum gage height, 11.58 ft (3.530 m) Mar. 8, 1956; minimum discharge observed, 22 ft³/s (0.62 m³/s) Aug. 18, 1940, Sept. 27, 29, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s (65.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 4	2200	a3,100 87.8	b8.88 2.707	Apr. 12	1800	2,400 68.0	7.83 2.387
Mar. 8	2000	3,590 102	9.49 2.893	Aug. 9	1100	2,670 75.6	8.24 2.512
Mar. 26	1000	2,300 65.1	7.67 2.338	Sept. 17	0400	*4,490 127	*10.89 3.319

a About.

b Backwater from ice.

Minimum discharge, 46 ft³/s (1.30 m³/s) July 23, gage height, 2.52 ft (0.768 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	177	276	1600	738	809	2060	308	222	79	130	524
2	49	157	264	2480	685	894	2020	284	216	74	150	490
3	49	144	304	2860	695	962	2060	272	194	68	150	834
4	56	132	864	3000	603	1490	1950	313	178	67	130	738
5	69	126	994	2800	545	2480	1830	301	165	60	110	589
6	78	121	849	2200	500	2990	1650	272	147	58	100	466
7	103	115	589	1600	480	3260	1370	251	134	59	98	380
8	188	112	478	1200	450	3530	1200	236	146	57	2330	311
9	241	114	864	1000	420	3510	1570	220	170	60	2640	255
10	195	108	869	920	380	3430	2020	200	152	80	2400	206
11	148	100	700	940	370	3260	2260	266	177	140	1890	170
12	119	102	567	1000	360	2930	2380	365	168	150	1250	157
13	115	107	474	1100	360	2490	2360	1070	138	120	839	144
14	252	100	416	1000	360	2470	2200	1100	114	100	631	1790
15	438	102	380	820	350	2480	1960	869	102	76	503	3420
16	399	102	384	740	340	2360	1650	559	92	82	377	4190
17	311	102	395	660	330	2120	1500	375	84	67	270	4460
18	228	117	390	560	330	1920	1270	290	79	59	196	4110
19	184	132	370	500	320	1840	1010	246	78	56	157	3500
20	165	124	360	450	330	1750	819	220	77	52	138	2840
21	156	115	967	420	340	1710	636	210	72	50	130	2130
22	141	110	1170	410	340	1700	498	208	82	49	117	1500
23	127	114	1200	390	410	1730	435	193	105	56	105	1020
24	122	206	1030	454	820	1880	391	182	102	150	112	748
25	125	348	820	1270	1120	2170	366	190	84	160	203	554
26	175	321	640	1400	839	2290	339	255	77	160	235	380
27	495	249	520	1450	824	2180	358	276	71	170	267	246
28	470	238	450	1460	864	1850	370	277	74	160	301	201
29	345	276	410	1260	---	1680	358	311	93	150	967	219
30	255	282	420	1040	---	1840	332	294	89	120	909	211
31	206	---	490	909	---	2030	---	258	---	110	715	---
TOTAL	6053	4653	18904	37893	14503	68035	39222	10671	3682	2899	18550	36783
MEAN	195	155	610	1222	518	2195	1307	344	123	93.5	598	1226
MAX	495	348	1200	3000	1120	3530	2380	1100	222	170	2640	4460
MIN	49	100	264	390	320	809	332	182	71	49	98	144
CFSM	.67	.53	2.10	4.21	1.79	7.57	4.51	1.19	.42	.32	2.06	4.23
IN.	.78	.60	2.42	4.86	1.86	8.73	5.03	1.37	.47	.37	2.38	4.72

CAL YR 1978	TOTAL	152896	MEAN 419	MAX 3310	MIN 39	CFSM 1.45	IN 19.61
WTR YR 1979	TOTAL	261848	MEAN 717	MAX 4460	MIN 49	CFSM 2.47	IN 33.59

ALLEGHENY RIVER BASIN

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

LOCATION.--Lat 42°09'23", long 79°23'39", Chautauqua County, Hydrologic Unit 05010002, 6 ft (1.8 m) east of lake shore, 30 ft (9.1 m) south of the intersection of Pauline Avenue and Lakeside Avenue, and 950 ft (290 m) south-east of the ferry landing, at Bemus Point.

DRAINAGE AREA.--189 mi² (490 km²).

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Nov. 1974 at site 950 ft (290 m) northwest at same datum.

REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi² (54.34 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft (399.663 m) Mar. 5, 1976; minimum, 1,306.35 ft (398.175 m) Mar. 11, 12, 13, 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,310.14 ft (399.331 m) Sept. 15; minimum, 1,306.71 ft (398.285 m) Feb. 23.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1307.80	1308.07	1307.27	1307.80	1307.57	1307.12	1308.90	1307.85	1308.07	1307.98	1307.86	1308.25
2	1307.80	1308.04	1307.25	1308.35	1307.52	1307.14	1308.93	1307.78	1308.07	1307.98	1307.87	1308.27
3	1307.79	1308.01	1307.25	1308.38	1307.47	1307.17	1309.04	1307.73	1308.07	1307.98	1307.86	1308.36
4	1307.86	1307.95	1307.37	1308.33	1307.42	1307.38	1309.01	1307.72	1308.07	1307.97	1307.85	1308.38
5	1307.88	1307.88	1307.44	1308.27	1307.38	1307.96	1308.99	1307.71	1308.07	1307.95	1307.83	1308.37
6	1307.90	1307.82	1307.46	1308.20	1307.34	1308.22	1308.93	1307.71	1308.08	1307.94	1307.82	1308.34
7	1308.00	1307.79	1307.44	1308.14	1307.30	1308.26	1308.88	1307.72	1308.07	1307.92	1307.79	1308.33
8	1308.06	1307.76	1307.44	1308.08	1307.26	1308.30	1308.81	1307.73	1308.11	1307.91	1307.89	1308.29
9	1308.07	1307.73	1307.54	1308.00	1307.22	1308.31	1309.01	1307.74	1308.13	1307.91	1307.89	1308.25
10	1308.07	1307.73	1307.55	1307.94	1307.18	1308.43	1309.18	1307.74	1308.14	1307.93	1307.89	1308.23
11	1308.08	1307.69	1307.53	1307.88	1307.14	1308.49	1309.22	1307.75	1308.15	1307.94	1307.89	1308.22
12	1308.08	1307.64	1307.48	1307.80	1307.09	1308.45	1309.24	1307.80	1308.13	1307.95	1307.87	1308.20
13	1308.13	1307.58	1307.45	1307.74	1307.06	1308.39	1309.23	1307.91	1308.12	1307.95	1307.84	1308.18
14	1308.19	1307.57	1307.43	1307.72	1307.01	1308.59	1309.21	1307.94	1308.11	1307.94	1307.83	1308.89
15	1308.23	1307.55	1307.38	1307.71	1306.98	1308.68	1309.14	1307.95	1308.10	1307.93	1307.81	1310.10
16	1308.23	1307.53	1307.39	1307.67	1306.94	1308.62	1309.09	1307.95	1308.09	1307.91	1307.78	1310.00
17	1308.20	1307.51	1307.42	1307.64	1306.90	1308.55	1309.05	1307.96	1308.08	1307.90	1307.76	1309.84
18	1308.15	1307.47	1307.36	1307.60	1306.85	1308.53	1308.96	1307.95	1308.07	1307.88	1307.75	1309.65
19	1308.11	1307.42	1307.31	1307.54	1306.82	1308.53	1308.86	1307.96	1308.06	1307.86	1307.75	1309.50
20	1308.08	1307.36	1307.27	1307.49	1306.78	1308.52	1308.76	1307.96	1308.04	1307.84	1307.74	1309.34
21	1308.07	1307.31	1307.45	1307.47	1306.75	1308.52	1308.65	1307.97	1308.03	1307.81	1307.73	1309.17
22	1308.06	1307.29	1307.52	1307.43	1306.74	1308.52	1308.56	1307.96	1308.04	1307.79	1307.72	1309.03
23	1308.06	1307.26	1307.52	1307.39	1306.73	1308.53	1308.46	1307.96	1308.02	1307.78	1307.70	1308.89
24	1308.02	1307.29	1307.48	1307.39	1306.81	1308.58	1308.36	1307.97	1308.00	1307.80	1307.73	1308.74
25	1308.00	1307.31	1307.52	1307.56	1306.92	1308.75	1308.27	1307.97	1307.99	1307.83	1307.79	1308.60
26	1308.06	1307.28	1307.50	1307.65	1307.11	1308.75	1308.20	1307.99	1307.97	1307.88	1307.80	1308.47
27	1308.15	1307.26	1307.49	1307.66	1307.13	1308.69	1308.15	1307.99	1307.96	1307.88	1307.83	1308.35
28	1308.16	1307.27	1307.45	1307.64	1307.13	1308.61	1308.09	1308.02	1307.96	1307.87	1307.85	1308.34
29	1308.13	1307.29	1307.40	1307.63	---	1308.66	1308.02	1308.04	1307.97	1307.86	1308.13	1308.32
30	1308.08	1307.29	1307.36	1307.60	---	1308.83	1307.94	1308.05	1307.99	1307.85	1308.25	1308.26
31	1308.07	---	1307.35	1307.57	---	1308.92	---	1308.06	---	1307.84	1308.25	---
MEAN	1308.05	1307.57	1307.42	1307.78	1307.09	1308.35	1308.77	1307.89	1308.06	1307.90	1307.85	1308.71
MAX	1308.23	1308.07	1307.55	1308.38	1307.57	1308.92	1309.24	1308.06	1308.15	1307.98	1308.25	1310.10
MIN	1307.79	1307.26	1307.25	1307.39	1306.73	1307.12	1307.94	1307.71	1307.96	1307.78	1307.70	1308.18
CAL YR 1978	MEAN	1307.77	MAX	1309.00	MIN	1306.36						
WTR YR 1979	MEAN	1307.96	MAX	1310.10	MIN	1306.73						

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LOCATION.--Lat 42°06'45", long 79°12'15", Chautauqua County, Hydrologic Unit 05010002, on left bank 10 ft (3 m) downstream from South Dow Street Bridge in Falconer, 2.1 mi (3.4 km) upstream from mouth, and 6 mi (10 km) downstream from Chautauqua Lake.

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

REVISÉD RECORDS.--WSP 803: 1936 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,256.41 ft (382.954 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chautauqua Lake. Diurnal fluctuation caused by mills upstream from station. Monthly figures for 1951-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--44 years (1935-79), 347 ft³/s (9.827 m³/s).

EXTREMES FOR PERIOD OF RECORD:--Maximum discharge, 2,250 ft³/s (63.7 m³/s) Sept. 14, 1979, gage height, 4.93 ft (1.503 m); minimum, 2.7 ft³/s (0.076 m³/s) Nov. 20, 21, 1960, gage height, 0.15 ft (0.046 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Nov. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,250 ft³/s (63.7 m³/s) Sept. 14, gage height, 4.93 ft (1.503 m), minimum 16 ft³/s (0.45 m³/s) July 3, gage height, 0.36 ft (0.110 m).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	77	244	649	593	459	1020	688	39	45	55	52
2	43	285	418	809	568	469	1030	639	38	45	63	73
3	43	334	418	819	553	475	1100	489	38	20	67	46
4	52	558	275	814	543	513	1030	323	38	45	65	75
5	40	558	193	799	509	649	1090	88	39	47	62	172
6	42	355	235	783	504	768	1130	71	39	47	60	175
7	48	219	459	763	499	799	1050	69	34	45	93	175
8	37	215	475	752	499	825	975	67	46	45	104	139
9	34	156	518	707	489	835	1080	67	38	45	56	88
10	33	110	533	673	475	884	1140	73	34	47	55	88
11	33	448	509	659	469	904	1120	62	37	46	60	75
12	33	443	518	649	448	884	1130	96	30	45	63	67
13	48	261	518	630	418	854	1110	93	28	43	62	67
14	182	175	513	630	403	939	1100	47	38	43	62	1100
15	404	179	257	614	403	970	1110	37	50	69	60	1550
16	399	182	219	614	398	944	1100	34	50	69	58	1490
17	399	303	509	604	393	919	1070	37	50	69	58	1410
18	399	469	499	593	393	899	1040	38	50	67	55	1340
19	394	459	489	588	369	894	1000	38	49	65	55	1290
20	201	453	494	558	344	904	955	37	49	63	56	1190
21	75	261	523	538	308	894	914	37	47	63	55	1120
22	114	204	523	533	308	889	889	42	49	62	55	1060
23	190	383	523	518	323	889	850	55	41	83	56	1000
24	228	145	518	538	374	899	819	56	38	65	63	944
25	182	428	523	553	388	980	783	56	35	62	55	904
26	241	418	518	593	423	970	737	53	34	77	53	864
27	228	244	518	609	453	929	758	49	41	50	58	494
28	328	165	513	604	459	924	727	49	52	47	55	364
29	428	165	509	604	---	960	712	45	55	46	65	538
30	271	204	499	599	---	996	688	41	49	56	52	329
31	152	---	513	588	---	1030	---	39	---	56	52	---
TOTAL	5348	8856	13973	19984	12306	26147	29257	3615	1255	1677	1888	18279
MEAN	173	295	451	645	440	843	975	117	41.8	54.1	60.9	609
MAX	428	558	533	819	593	1030	1140	688	55	83	104	1550
MIN	33	77	193	518	308	459	688	34	28	20	52	4

CAL YR 1978	TOTAL	111492	MEAN	305	MAX	1110	MIN	22
WTR YR 1979	TOTAL	142585	MEAN	391	MAX	1550	MIN	20

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ALLEGHENY RIVER BASIN

Lakes in Allegheny River basin

03013946 Chautauqua Lake at Bemus Point, NY (see station for daily mean elevation).

STREAMS TRIBUTARY TO LAKE ERIE

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04213440 FRANKS CREEK NEAR WEST VALLEY, NY

LOCATION.--Lat 42°26'59", long 78°38'56", Cattaraugus County, Hydrologic Unit 04120102, on left bank near eastern perimeter of Nuclear Fuels Service, Inc. compound, 0.2 mi (0.3 km) upstream from unnamed tributary, 1.1 mi (1.8 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of West Valley.

DRAINAGE AREA.--0.28 mi² (0.73 km²).

PERIOD OF RECORD.--December 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,340 ft (408 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 101 ft³/s (2.86 m³/s) Sept. 14, 1979, gage height 4.01 ft (1.222 m); maximum gage height, 4.33 ft (1.320 m) Mar. 14, 1978 (backwater from ice), minimum discharge, no flow, many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft³/s (0.42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0330	ice jam	a3.01 0.917	Sept. 14	1145	*101 2.86	*4.01 1.222

a Ice jam.

Minimum discharge, no flow, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.27	.42	5.0	.54	1.0	1.1	.23	.07	.01	.04	.01
2	.01	.20	.54	1.4	.52	1.2	1.7	.15	.11	.02	.03	.80
3	.00	.17	1.2	.80	.49	1.5	1.4	.23	.06	.02	.01	.46
4	.13	.15	1.5	.60	.46	3.5	1.3	.30	.03	.00	.00	.07
5	.05	.15	.85	.48	.44	8.0	1.4	.15	.03	.00	.00	.03
6	.04	.15	.76	.46	.42	3.0	1.2	.11	.03	.00	.00	.15
7	1.8	.17	.76	.44	.40	2.1	1.6	.09	.02	.00	.00	.13
8	.80	.15	1.5	.42	.37	1.9	1.2	.07	.07	.00	.00	.46
9	.30	.13	1.6	.40	.35	2.0	4.5	.05	.04	.00	.00	.08
10	.15	.11	.90	.38	.33	3.0	2.8	.23	.03	.00	.00	.04
11	.11	.10	.76	.35	.32	1.8	2.8	.20	.17	.30	.01	.03
12	.09	.10	.68	.35	.30	1.2	2.7	1.1	.04	.15	.00	.02
13	.59	.09	.60	.39	.28	1.4	1.8	1.2	.02	.01	.00	.01
14	2.1	.10	.56	1.0	.28	4.5	1.3	.38	.01	.00	.02	31
15	.94	.10	.60	.90	.27	1.8	1.0	.20	.00	.08	.01	2.0
16	.59	.11	.62	.70	.26	1.1	1.4	.13	.00	.04	.00	.62
17	.34	.12	.92	.58	.25	1.0	.94	.08	.00	.01	.00	.21
18	.23	.14	.80	.49	.25	1.3	.67	.06	.00	.00	.00	.16
19	.38	.16	.60	.43	.24	1.4	.50	.04	.00	.00	.00	.21
20	.54	.13	.66	.39	.23	1.1	.38	.03	.00	.00	.00	.12
21	.30	.11	2.0	.35	.25	1.0	.34	.11	.00	.00	.00	.03
22	.23	.13	1.2	.32	.30	1.1	.30	.05	.00	.00	.00	.01
23	.38	.23	1.0	.30	.45	1.5	.27	.03	.00	.00	.00	.00
24	.38	.71	.80	.38	1.2	1.8	.20	.05	.00	.00	.07	.00
25	.27	.71	.90	3.5	1.6	3.3	.17	.34	.00	.00	.17	.00
26	1.3	.30	.82	2.2	1.4	1.2	.13	.38	.00	.02	.02	.00
27	1.2	.20	.74	1.5	1.2	1.0	.63	.15	.00	.01	.07	.00
28	.63	.54	.68	.90	1.1	.99	.38	.34	.00	.00	.42	.11
29	.46	.42	.58	.70	---	1.6	.30	.38	.00	.00	1.2	.03
30	.34	.50	.66	.62	---	2.4	.23	.50	.01	.00	.07	.00
31	.30	---	.80	.58	---	1.8	---	.11	---	.01	.03	---
TOTAL	14.98	6.65	27.01	27.31	14.50	61.49	34.64	7.47	.74	.68	2.17	36.79
MEAN	.48	.22	.87	.88	.52	1.98	1.15	.24	.025	.022	.070	1.23
MAX	2.1	.71	2.0	5.0	1.6	8.0	4.5	1.2	.17	.30	1.2	.31
MIN	.00	.09	.42	.30	.23	.99	.13	.03	.00	.00	.00	.00
CFSM	1.71	.79	3.11	3.14	1.86	7.07	4.11	.86	.09	.08	.25	4.39
IN.	1.98	.88	3.56	3.60	1.91	8.11	4.57	.99	.10	.09	.29	4.85

CAL YR 1978 TOTAL 173.96 MEAN .48 MAX 28 MIN .00 CFSM 1.71 IN 22.95
WTR YR 1979 TOTAL 234.43 MEAN .64 MAX 31 MIN .00 CFSM 2.29 IN 30.92

STREAMS TRIBUTARY TO LAKE ERIE

04213500 CATTARAUGUS CREEK AT GOWANDA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°27'50", long 78°56'10", Erie County, Hydrologic Unit 04120102, on right bank 380 ft (116 m) downstream from bridge on State Highways 39 and 62 at Gowanda, and 4.2 mi (6.8 km) downstream from South Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--432 mi² (1,119 km²).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft (225.201 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1969, at datum 0.11 ft (0.034 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by several industrial plants upstream from station. Diurnal fluctuation at low and medium flow caused by industrial plants at Gowanda and by powerplant 20 mi (32 km) upstream from station.

AVERAGE DISCHARGE.--39 years (1940-79), 738 ft³/s (20.90 m³/s), 23.20 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft³/s (980 m³/s) Mar. 7, 1956, gage height, 14.14 ft (4.310 m); minimum, about 6 ft³/s (0.17 m³/s) Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft (0.274 m) Oct. 26, 1951; minimum daily discharge, 52 ft³/s (1.47 m³/s) Sept. 13, 1945, Aug. 1, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft³/s (227 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	2130	11,700 331	8.53 2.600	Mar. 25	0500	8,230 233	7.25 2.210
Mar. 5	0800	11,900 337	8.60 2.621	Sept. 14	a1645	*26,700 756	*13.99 4.264

a About.

Minimum discharge, 81 ft³/s (2.29 m³/s) July 24, gage height, 1.09 ft (0.332 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	290	336	9030	698	660	2200	551	395	306	504	184
2	145	267	344	6460	644	900	2180	516	385	275	327	287
3	140	253	488	1980	680	1100	2560	499	349	267	223	733
4	198	243	2500	1050	620	4800	1620	612	315	220	181	327
5	204	233	1370	920	560	9800	1980	533	298	198	175	223
6	175	223	698	820	520	4640	1520	488	294	189	157	243
7	600	217	522	720	560	2690	1170	466	279	175	152	287
8	638	220	754	700	540	2540	1210	434	319	164	250	290
9	367	214	1740	600	490	2200	3260	404	331	159	170	233
10	260	204	840	580	460	3990	2850	414	287	159	172	195
11	217	198	580	490	430	2680	2660	581	477	198	184	181
12	192	198	560	450	400	1600	2970	950	344	267	159	164
13	298	192	500	500	390	1490	3360	1730	283	187	145	155
14	1300	195	480	880	370	5650	2680	747	253	170	167	12300
15	1090	207	482	940	360	2720	1850	563	230	162	170	5240
16	600	195	477	760	350	1730	1640	482	210	198	145	1570
17	419	195	612	600	330	1510	1510	424	200	167	138	895
18	327	236	560	560	320	2010	1170	395	190	178	136	671
19	315	230	390	450	340	2280	975	367	190	167	136	726
20	385	210	440	440	380	2080	856	349	180	150	131	551
21	340	201	3450	480	440	2330	797	376	180	140	129	471
22	275	198	1550	500	480	2620	740	390	257	133	122	429
23	264	207	1030	440	490	3420	698	340	287	133	116	385
24	311	331	760	1200	820	4810	651	331	226	164	131	358
25	271	477	800	5010	880	6080	600	404	210	181	306	340
26	664	358	660	2760	540	2660	569	587	184	376	189	327
27	1170	279	560	1820	580	1700	664	493	175	287	201	311
28	658	319	480	1370	640	1360	768	527	223	192	217	327
29	461	331	380	1070	---	2100	644	575	260	170	934	376
30	376	340	560	918	---	3630	575	612	371	159	349	340
31	319	---	1000	841	---	3310	---	482	---	147	223	---
TOTAL	13119	7461	25903	45339	14312	91090	46927	16622	8182	6038	6739	29119
MEAN	423	249	836	1463	511	2938	1564	536	273	195	217	971
MAX	1300	477	3450	9030	880	9800	3360	1730	477	376	934	12300
MIN	140	192	336	440	320	660	569	331	175	133	116	155
CFSM	.98	.58	1.94	3.39	1.18	6.80	3.62	1.24	.63	.45	.50	2.25
IN.	1.13	.64	2.23	3.90	1.23	7.84	4.04	1.43	.70	.52	.58	2.51
CAL YR 1978	TOTAL	234368	MEAN 642	MAX 8880	MIN 106	CFSM 1.49	IN 20.18					
WTR YR 1979	TOTAL	310851	MEAN 852	MAX 12300	MIN 116	CFSM 1.97	IN 26.77					

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1963-64, 1972 to current year.

CHEMICAL DATA: 1959 (e), 1963 (b), 1972 (a), 1975 (b), 1976-78 (c), 1979 (d).

MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978-79 (d).

ORGANIC DATA: OC--1975 (b), 1976-77 (c), 1978-79 (d).

NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978-79 (d).

BIOLOGICAL DATA:

Bacteria--1978-79 (d).

Phytoplankton--1978 (b), 1979 (c).

SEDIMENT DATA: 1964 (b), 1978-79 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1958 to September 1959, unpublished; January 1978 to current year.

pH: October 1958 to September 1959, unpublished.

WATER TEMPERATURES: October 1958 to September 1959, January 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 952 micromhos Oct. 7, 1958; minimum daily, 166 micromhos Feb. 1, 1959.

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 19, 1978; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 650 micromhos Feb. 22; minimum daily, 170 micromhos Dec. 21.

WATER TEMPERATURES: Maximum daily, 28.5°C July 13; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	
OCT 03...	1000	135	445	7.4	11.5	2.0	10.6	99	9	41	--	180	
NOV 09...	1100	209	440	8.2	7.0	3.0	9.6	81	5	K4	K28	180	
DEC 04...	1300	3290	250	7.4	5.0	300	11.2	91	95	5000	K27000	96	
JAN 10...	1400	586	350	7.8	.0	11	13.2	92	3	29	25	160	
FEB 07...	1100	538	360	7.7	.0	14	12.8	91	--	K75	32	150	
MAR 07...	1230	2390	213	7.0	.0	100	--	--	29	K200	1600	88	
APR 10...	1500	2400	225	7.5	6.0	60	11.0	89	14	64	810	89	
MAY 08...	1200	460	337	8.3	17.0	1.0	8.0	86	23	K13	K19	150	
JUN 05...	1200	282	378	7.9	19.0	6.0	8.9	98	13	35	K16	160	
27...	1130	164	420	8.0	21.0	5.0	8.9	100	13	48	K5	160	
AUG 08...	1430	255	314	8.1	23.0	150	7.7	90	37	K6800	5200	150	
SEP 19...	1300	731	355	7.6	16.5	70	9.4	96	25	880	800	160	
DATE		HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 03...	45	--	52	--	11	--	19	--	1.6	130	48	27	
NOV 09...	41	50	56	10	10	12	13	1.5	1.8	140	42	16	
DEC 04...	20	--	30	--	5.1	--	5.8	--	2.1	76	31	10	
JAN 10...	52	44	50	8.7	8.9	7.2	9.0	1.3	1.6	110	33	14	
FEB 07...	44	--	48	--	8.2	--	8.9	--	1.4	110	35	15	
MAR 07...	27	--	28	--	4.5	--	5.2	--	1.4	61	21	8.8	
APR 10...	29	36	28	8.4	4.6	7.2	4.9	5.1	1.2	60	21	9.0	
MAY 08...	35	--	45	--	8.0	--	8.5	--	1.4	110	29	15	
JUN 05...	34	--	51	--	9.0	--	11	--	1.6	130	33	18	
27...	21	29	48	6.6	10	17	17	1.6	1.6	140	40	24	
AUG 08...	42	--	47	--	8.5	--	8.3	--	2.3	110	31	12	
SEP 19...	27	--	50	--	7.8	--	7.6	--	2.0	130	33	13	

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

STREAMS TRIBUTARY TO LAKE ERIE

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
OCT 03...	.1	1.1	251	238	0	.47	--	.49	.30	.79	.74	1.3
NOV 09...	.1	1.1	255	224	6	.67	--	.30	.43	.73	.46	1.4
DEC 04...	.1	3.4	138	133	433	.63	--	.10	2.0	2.1	.22	2.7
JAN 10...	.1	5.2	200	188	8	1.5	--	.19	.14	.33	.28	1.8
FEB 07...	.0	5.0	215	188	24	1.4	--	.18	.09	.27	.28	1.7
MAR 07...	.0	4.0	113	110	--	1.0	--	.09	.38	.47	1.9	1.5
APR 10...	.0	3.7	126	109	30	.85	--	.05	.24	.29	1.4	1.1
MAY 08...	.1	1.2	194	174	28	1.1	--	.12	.56	.68	.71	1.8
JUN 05...	.1	1.9	208	204	16	.95	--	.28	.23	.51	.45	1.5
27...	.1	1.2	274	226	15	.82	--	.52	.23	.75	.76	1.6
AUG 08...	.1	3.2	209	179	253	.56	--	.11	.56	.67	.23	1.2
SEP 19...	.1	5.5	220	201	96	.83	.85	.08	.76	.84	.28	1.7

DATE	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
OCT 03...	--	.00	.00	1	--	--	--	3	--	<10	--	--
NOV 09...	--	.00	.00	1	0	100	100	0	0	10	0	1
DEC 04...	--	.30	.00	4	--	--	--	0	--	30	--	--
JAN 10...	--	.02	.01	1	1	100	0	4	1	20	0	1
FEB 07...	--	.02	.01	7	--	--	--	2	--	<10	--	--
MAR 07...	--	.09	.04	2	--	--	--	1	--	10	--	--
APR 10...	--	.07	.02	1	1	0	0	1	2	10	<10	3
MAY 08...	--	.04	.00	1	--	--	--	1	--	20	--	--
JUN 05...	--	.01	.00	0	--	--	--	2	--	30	--	--
27...	--	.01	.00	1	1	100	60	2	0	--	10	0
AUG 08...	--	.14	.00	--	--	--	--	3	--	10	--	--
SEP 19...	1.1	.07	.01	2	--	--	--	3	--	20	--	--

STREAMS TRIBUTARY TO LAKE ERIE

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04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 03...	--	2	--	170	--	1	--	--	--	<.5	--	0
NOV 09...	0	4	2	270	0	6	3	10	10	<.5	<.5	0
DEC 04...	--	35	--	41000	--	23	--	--	--	<.5	--	0
JAN 10...	2	8	3	800	40	19	5	20	20	<.5	<.5	0
FEB 07...	--	2	--	690	--	29	--	--	--	<.5	--	--
MAR 07...	--	13	--	--	--	9	--	--	--	<.5	--	0
APR 10...	2	6	2	6100	30	25	7	110	10	<.5	<.5	0
MAY 08...	--	3	--	220	--	13	--	--	--	<.5	--	--
JUN 05...	--	2	--	360	--	16	--	--	--	<.5	--	--
27...	0	8	8	530	10	13	11	30	10	<.5	<.5	0
AUG 08...	--	15	--	9000	--	21	--	--	--	<.5	--	--
SEP 19...	--	7	--	4600	--	51	--	--	--	<.5	--	--

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO- FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO- FLUOROM (UG/L)
OCT 03...	--	--	--	10	--	2.3	--	--	0	46.0	5.08
NOV 09...	0	0	0	50	0	--	3.8	1.1	2	1.55	.000
DEC 04...	--	--	--	130	--	17	--	--	0	--	--
JAN 10...	0	0	0	30	0	--	8.8	1.2	0	.000	.000
FEB 07...	--	--	--	40	--	2.1	--	--	0	.000	.000
MAR 07...	--	--	--	80	--	--	--	--	1	.000	.000
APR 10...	0	0	0	40	20	--	4.0	1.1	0	.000	.000
MAY 08...	--	--	--	40	--	1.7	--	--	0	.000	.000
JUN 05...	--	--	--	20	--	2.8	--	--	2	1.69	.000
27...	0	0	0	20	20	--	5.9	1.4	1	.000	.000
AUG 08...	--	--	--	90	--	6.8	--	--	0	.000	.000
SEP 19...	--	--	--	10	--	9.0	--	--	0	.000	.000

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS- SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS- SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	1005	1.0	15	445	11.5	JAN 10...	1355	1.0	95	360	.0
03...	1010	1.0	35	440	11.0	10...	1405	1.0	115	355	.0
03...	1015	1.0	55	450	11.0						
03...	1020	1.0	75	450	11.5						
03...	1025	1.0	95	445	11.5	08...	1140	1.0	15	337	17.0
03...	1030	1.0	115	445	11.5	08...	1145	1.0	35	337	17.0
						08...	1150	1.0	55	337	17.0
						08...	1155	1.0	75	337	17.0
JAN 10...	1335	1.0	15	350	.0	08...	1205	1.0	95	347	17.0
10...	1340	1.0	35	355	.0	08...	1210	1.0	115	332	17.0
10...	1345	1.0	55	350	.0						
10...	1350	1.0	75	350	.0						

STREAMS TRIBUTARY TO LAKE ERIE

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						MAY					
03...	1000	135	1	.36	--	08...	1200	460	3	3.7	--
NOV						JUN					
09...	1100	209	2	1.1	--	27...	1130	164	2	.89	--
DEC						AUG					
04...	1300	3290	2390	21200	87	08...	1430	255	273	188	--
MAR						SEP					
07...	1230	2390	237	1530	--	19...	1300	731	98	193	--
APR											
10...	1500	2400	205	1330	--						

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 13,78 1330	JUL 31,78 1200	OCT 3,78 1000	NOV 9,78 1100	MAR 7,79 1230
TOTAL CELLS/ML	620	1900	20000	510	70
DIVERSITY: DIVISION	0.7	1.2	0.1	1.2	0.0
..CLASS	0.7	1.2	0.1	1.2	0.0
..ORDER	0.9	1.5	0.2	1.4	0.0
...FAMILY	2.4	3.0	0.2	2.1	1.5
....GENUS	2.7	3.1	0.2	2.1	1.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....HYDRODICTYACEAE										
...PEDIASTRUM	110#	19	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	14	2	110	6	*	0	--	-	--	-
...OOCYSTIS	--	-	45	2	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	400#	22	*	0	180#	35	--	-
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	180	10	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	*	0	22	4	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....CLOSTERIUM	--	-	--	-	--	-	--	-	--	-
....COSMARIUM	--	-	--	-	*	0	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	14	2	--	-	*	0	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	140#	23	220	12	--	-	--	-	--	-
...COCCONEIS	43	7	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	140#	23	420#	23	--	-	--	-	28#	40
...DIATOMACEAE										
....DIATOMA	--	-	22	1	*	0	22	4	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
...SYNEDRA	--	-	45	2	*	0	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	14	2	22	1	--	-	--	-	--	-
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	14#	20
...NAVICULACEAE										
....NAVICULA	110#	19	67	4	*	0	110#	22	28#	40
...NITZSCHACEAE										
....NITZSCHIA	--	-	250	13	--	-	160#	30	--	-
...SURIARELLACEAE										
....SURIARELLA	14	2	--	-	*	0	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ERIE

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04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 13,78 1330	JUL 31,78 1200	OCT 3,78 1000	NOV 9,78 1100	MAR 7,79 1230
CRYPTOPHYTA (CRYPTOMONADS)					
..CRYPTOPHYCEAE					
...CRYPTOMONADALES					
...CRYPTOCHRYSIDACEAE					
....CHROOMONAS	-- -	45 2	-- -	-- -	-- -
CYANOPHYTA (BLUE-GREEN ALGAE)					
..CYANOPHYCEAE					
...CHROOCOCCEAE					
...CHROOCOCCEACEAE					
....ANACYSTIS	-- -	-- -	120 1	-- -	-- -
...HORMOGONALES					
...OSCILLATORIACEAE					
....OSCILLATORIA	-- -	-- -	20000# 98	-- -	-- -
EUGLENOPHYTA (EUGLENIDS)					
..EUGLENOPHYCEAE					
...EUGLENALES					
...EUGLENACEAE					
....EUGLENA	-- -	22 1	-- -	-- -	-- -
....TRACHELOMONAS	-- -	-- -	-- -	22 4	-- -

DATE TIME	MAY 8,79 1200	JUN 5,79 1200	JUN 27,79 1130	SEP 19,79 1300
TOTAL CELLS/ML	290	320	190	43
DIVERSITY: DIVISION	0.5	0.0	0.7	0.9
..CLASS	0.5	0.0	0.7	0.9
...ORDER	0.6	0.0	0.9	0.9
...FAMILY	2.2	1.5	2.5	0.9
....GENUS	0.0	1.5	2.6	0.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...HYDRODICTYACEAE								
....PEDIASTRUM	-- -	-- -	-- -	-- -	-- -	-- -	-- -	-- -
...OOCYSTACEAE								
....ANKISTRODESMUS	-- -	-- -	-- -	-- -	-- -	-- -	-- -	-- -
...OOCYSTIS	-- -	-- -	-- -	-- -	-- -	-- -	-- -	-- -
...SCENEDESMACEAE								
....SCENEDESMUS	-- -	-- -	-- -	-- -	26 13	-- -	-- -	-- -
...TETRASPORALES								
...PALMELLACEAE								
...SPHAEROCYSTIS	-- -	-- -	-- -	-- -	-- -	-- -	-- -	-- -
...VOLVOCALES								
...CHLAMYDOMONADACEAE	14 5	-- -	-- -	-- -	-- -	-- -	-- -	-- -
...CHLAMYDOMONAS	-- -	-- -	-- -	-- -	-- -	14# 33	-- -	-- -
...ZYGNEATALES								
...DESMIDIACEAE								
...CLOSTERIUM	14 5	-- -	-- -	-- -	-- -	-- -	-- -	-- -
...COSMARIUM	-- -	-- -	-- -	-- -	13 7	-- -	-- -	-- -
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCAEAE								
....CYCLOTELLA	-- -	-- -	-- -	-- -	-- -	-- -	-- -	-- -

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

STREAMS TRIBUTARY TO LAKE ERIE

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 8,79 1200	JUN 5,79 1200	JUN 27,79 1130	SEP 19,79 1300
..PENNALES				
...ACHNANTHACEAE				
....ACHNANTHES	-- -	-- -	13 7	-- -
....COCCONEIS	-- -	-- -	13 7	-- -
...CYMBELLACEAE				
....CYMBELLA	-- -	26 8	13 7	-- -
...DIATOMACEAE				
....DIATOMA	-- -	13 4	-- -	-- -
...FRAGILARIACEAE				
....FRAGILARIA	29 10	-- -	-- -	-- -
....SYNEDRA	-- -	13 4	-- -	-- -
...GOMPHONEMACEAE				
....GOMPHONEMA	43 15	-- -	13 7	-- -
...MERIDIONACEAE				
....MERIDION	-- -	-- -	-- -	-- -
...NAVICULACEAE				
....NAVICULA	58# 20	65# 20	26 13	-- -
...NITZSCHACEAE				
....NITZSCHIA	130# 45	210# 64	78# 40	29# 67
...SURIRELLACEAE				
....SURIRELLA	-- -	-- -	-- -	-- -
CRYPTOPHYTA (CRYPTOMONADS)				
..CRYPTOPHYCEAE				
...CRYPTOMONADALES				
....CRYPTOCHRYSIDACEAE				
.....CHROOMONAS	-- -	-- -	-- -	-- -
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROOCOCCALES				
....CHROOCOCCACEAE				
.....ANACYSTIS	-- -	-- -	-- -	-- -
...HORMOGONALES				
....OSCILLATORIACEAE				
.....OSCILLATORIA	-- -	-- -	-- -	-- -
EUGLENOPHYTA (EUGLENOIDS)				
..EUGLENOPHYCEAE				
...EUGLENALES				
....EUGLENACEAE				
.....EUGLENA	-- -	-- -	-- -	-- -
.....TRACHELOMONAS	-- -	-- -	-- -	-- -

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	370	350	200	340	295	280	337	354	378	372	390
2	442	370	345	198	340	262	231	339	385	382	373	311
3	422	375	360	310	358	265	238	352	388	393	439	317
4	422	360	287	310	300	205	237	330	390	379	390	389
5	425	385	275	287	272	182	245	323	388	372	371	391
6	420	385	290	312	340	182	247	332	380	368	378	387
7	350	390	285	315	350	231	274	325	381	369	373	379
8	315	355	295	319	298	232	278	342	387	376	380	380
9	380	365	235	338	235	252	228	349	382	421	368	379
10	412	360	233	362	348	213	226	357	395	412	373	362
11	410	310	300	360	322	318	225	268	343	422	400	370
12	410	370	290	368	450	210	216	265	370	402	418	363
13	285	385	290	352	285	212	204	262	415	418	418	366
14	283	405	300	315	455	212	207	303	405	429	431	257
15	287	315	295	305	482	213	240	328	398	419	426	255
16	335	405	305	302	460	258	283	348	422	419	436	321
17	397	380	305	335	400	270	284	348	421	416	439	369
18	395	375	295	335	400	243	280	349	421	438	422	370
19	400	380	345	350	435	224	281	367	418	417	434	418
20	380	365	180	346	430	211	295	369	418	432	430	415
21	365	385	170	340	400	215	300	370	410	432	440	398
22	420	385	210	330	650	201	312	380	374	428	434	380
23	420	380	240	330	420	202	321	380	373	436	439	450
24	380	385	265	335	270	172	350	379	420	441	364	449
25	380	330	243	205	258	190	342	380	419	380	388	458
26	385	325	255	225	285	207	341	350	415	386	383	462
27	282	376	290	247	282	267	335	350	405	419	367	460
28	318	375	297	262	295	269	311	342	403	418	364	468
29	350	365	315	270	---	206	322	332	370	420	362	461
30	380	375	280	290	---	205	335	333	365	422	368	434
31	390	---	265	292	---	206	---	330	---	357	401	---
MEAN	376	370	280	305	363	227	276	339	394	406	399	387
WTR YR 1979	MEAN	343	MAX	650	MIN	170						

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.5	10.0	2.5	.5	.0	.0	7.0	10.0	22.0	22.5	28.0	26.0
2	16.0	9.5	2.0	.5	.0	.0	7.0	11.0	24.0	17.0	28.0	25.0
3	15.0	9.5	2.0	.0	.0	1.0	5.0	10.0	26.0	18.0	27.5	24.0
4	14.5	10.0	3.5	.0	.0	3.0	3.0	8.0	24.0	24.0	27.0	24.0
5	14.5	11.0	4.0	.0	.0	2.0	3.5	11.0	17.0	25.0	27.0	23.0
6	14.5	11.5	4.0	.0	.0	1.0	3.0	13.0	25.0	25.5	27.5	22.0
7	12.0	10.0	4.0	.0	.0	2.5	1.0	17.0	25.0	25.0	28.0	20.0
8	9.5	9.0	5.5	.0	.0	3.0	.0	13.0	25.0	26.0	27.0	15.0
9	11.5	7.0	3.0	.0	.0	3.0	1.0	22.0	27.0	25.0	27.0	16.0
10	12.0	7.5	.5	.0	.0	2.0	2.0	24.0	27.0	25.0	26.0	17.0
11	14.0	8.5	1.0	.0	.0	2.0	2.5	25.0	19.5	25.0	21.0	17.5
12	15.5	6.5	1.0	.0	.0	2.0	4.5	20.0	17.0	26.5	20.0	16.0
13	11.5	8.5	1.5	.0	.0	3.0	5.0	14.0	16.0	28.5	19.0	18.0
14	10.0	6.0	.0	.0	.0	3.5	7.0	14.0	25.0	28.0	20.0	17.0
15	10.0	5.0	.5	.0	.0	1.0	5.0	14.0	26.0	27.0	20.0	16.0
16	9.0	5.5	.5	.0	.0	.0	5.5	15.0	26.0	26.0	21.0	17.0
17	8.0	7.0	1.0	.0	.0	3.5	5.5	17.0	17.0	25.0	20.0	18.0
18	7.5	6.0	.0	.0	.0	4.5	7.0	19.5	19.0	27.0	18.0	17.0
19	9.5	5.0	.0	.0	.0	3.5	9.0	20.5	---	26.0	17.0	17.0
20	10.5	6.0	.0	.0	.0	3.5	10.0	18.5	23.0	27.0	19.0	15.0
21	12.0	5.5	.5	.0	.0	3.0	10.0	17.0	25.0	27.0	20.0	17.0
22	13.0	6.0	1.0	.0	.0	5.0	11.0	16.5	23.0	27.5	22.0	12.0
23	11.0	5.0	1.5	.0	.0	7.0	11.5	15.0	15.0	25.0	24.0	13.0
24	11.5	5.0	1.0	.0	.0	8.0	11.0	14.0	17.0	27.0	25.0	14.0
25	12.0	2.5	.0	.0	.0	4.0	13.0	10.0	21.5	28.0	26.0	17.0
26	12.0	1.0	.0	.0	.0	1.0	11.0	10.0	22.0	25.0	25.0	16.0
27	12.5	1.0	.0	.0	.0	1.0	8.0	11.0	22.5	26.0	25.5	15.0
28	9.0	1.0	.0	.0	.0	2.0	7.0	13.0	24.0	27.0	26.0	15.0
29	8.5	1.5	.0	.0	---	5.0	8.0	16.0	23.0	28.0	26.0	15.0
30	9.0	2.0	.5	.0	---	7.0	10.0	17.0	21.0	28.0	26.0	16.0
31	10.0	---	.5	.0	---	8.0	---	19.0	---	27.0	25.0	---
MEAN	11.5	6.5	1.5	.0	.0	3.0	6.5	15.5	22.0	25.5	24.0	17.5
WTR YR 1979	MEAN	11.0	MAX	28.5	MIN	.0						

STREAMS TRIBUTARY TO LAKE ERIE

04214020 CATTARAUGUS CREEK AT IRVING, NY

LOCATION.--Lat 42°34'12", long 79°06'45", at Chautauqua-Erie County line, Hydrologic Unit 04120102, at bridge on Buffalo Road in Irving, 0.4 mi (0.6 km) downstream from bridge on U.S. Highway 20 and State Highway 5, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--554 mi² (1,435 km²) at mouth.

PERIOD OF RECORD.--Water years 1972 to September 1979 (discontinued).

CHEMICAL DATA: 1975 (b), 1976-77 (c), 1978-79 (d).

MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978-79 (d).

NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978-79 (d).

BIOLOGICAL DATA:

Bacteria--1975 (b), 1977 (c), 1978-79 (d).

REMARKS.--Water-discharge data are based on records for Cattaraugus Creek at Gowanda (station 04213500).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 03...	0830	170	400	7.2	12.5	2.0	10.0	96	7	39
NOV 09...	0800	260	440	7.8	11.5	3.0	9.2	88	3	K8
DEC 04...	1130	4110	290	7.6	5.0	200	10.0	81	32	2900
JAN 10...	1100	740	370	7.8	3.0	4.0	12.6	88	5	K110
FEB 07...	0900	680	420	7.3	.0	4.0	11.9	84	89	K170
MAR 07...	0930	2990	232	7.5	.0	200	12.1	85	49	370
APR 10...	1300	3000	232	7.4	3.0	65	--	--	30	290
MAY 08...	1000	580	342	7.9	16.0	1.0	9.2	94	31	45
JUN 05...	1000	360	390	7.3	20.0	3.0	7.2	81	6	K66
JUN 27...	1000	205	420	7.6	19.0	6.0	7.7	84	11	K160
AUG 08...	1200	320	342	7.6	22.0	35	7.5	86	24	3300
SEP 19...	1100	950	380	7.2	16.0	35	8.8	90	21	2000

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 03...	--	--	--	--	--	--	--	234	8	.51
NOV 09...	160	28	28	3.8	140	47	18	282	4	.66
DEC 04...	--	--	--	--	--	--	--	164	274	.64
JAN 10...	47	8.8	6.9	1.4	110	39	13	209	0	1.3
FEB 07...	--	--	--	--	--	--	--	238	15	1.2
MAR 07...	--	--	--	--	--	--	--	120	383	.96
APR 10...	25	5.8	5.7	1.9	62	22	9.4	126	183	.80
MAY 08...	--	--	--	--	--	--	--	213	30	.95
JUN 05...	--	--	--	--	--	--	--	214	15	.73
JUN 27...	45	9.8	13	1.5	140	40	22	229	24	.93
AUG 08...	--	--	--	--	--	--	--	231	66	.39
SEP 19...	--	--	--	--	--	--	--	243	59	.77

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

STREAMS TRIBUTARY TO LAKE ERIE

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04214020 CATTARAUGUS CREEK AT IRVING, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
OCT									
03...	.00	.26	.26	.77	.01	1	3	10	2
NOV									
09...	.07	.25	.32	.98	.00	1	0	10	3
DEC									
04...	.07	1.1	1.2	1.8	.18	2	1	20	13
JAN									
10...	.10	.07	.17	1.5	.01	1	0	10	4
FEB									
07...	.11	.07	.18	1.4	.01	0	1	<10	1
MAR									
07...	.08	.73	.81	1.8	.24	3	0	20	14
APR									
10...	.05	.28	.33	1.1	.06	1	1	10	6
MAY									
08...	.00	.31	.31	1.3	.01	1	1	10	2
JUN									
05...	.04	.35	.39	1.1	.02	0	2	20	3
27...	.04	.26	.30	1.2	.02	1	2	--	5
AUG									
08...	.01	.66	.67	1.1	.05	2	3	10	8
SEP									
19...	.07	.63	.70	1.5	.05	2	1	20	6

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
OCT									
03...	270	9	<.5	0	20	2.8	0	44.5	7.23
NOV									
09...	160	7	<.5	0	20	4.7	0	.000	.000
DEC									
04...	15000	15	<.5	0	50	8.1	1	11.6	.000
JAN									
10...	400	12	<.5	0	20	2.0	0	.000	.000
FEB									
07...	350	14	<.5	--	40	1.9	0	.000	.000
MAR									
07...	15000	20	<.5	--	50	5.1	0	.000	.000
APR									
10...	6200	24	<.5	--	40	11	1	.000	.000
MAY									
08...	290	10	<.5	--	10	1.4	0	1.14	.000
JUN									
05...	340	1	<.5	--	10	1.9	2	.000	.000
27...	780	13	<.5	--	20	9.7	1	.000	.000
AUG									
08...	2200	15	<.5	--	30	4.8	0	4.47	.000
SEP									
19...	2800	26	<.5	--	30	3.5	0	.000	.000

STREAMS TRIBUTARY TO LAKE ERIE

04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'16", long 78°45'22", Erie County, Hydrologic Unit 04120103, on left bank 300 ft (91 m) downstream from bridge on Union Road in Gardenville, and 2 mi (3 km) upstream from Cayuga Creek.

DRAINAGE AREA.--144 mi² (373 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft (183.993 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft (122 m) downstream at same datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--41 years, 198 ft³/s (5.607 m³/s), 18.67 in/yr (474 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s (320 m³/s) Mar. 1, 1955, Mar. 7, 1956, from rating curve extended above 3,200 ft³/s (90.6 m³/s) on basis of slope-area measurement at gage height 7.07 ft (2.155 m); maximum gage height, 14.11 ft (4.301 m) Feb. 16, 1976 (ice jam); minimum discharge, 0.2 ft³/s (0.006 m³/s) Sept. 1, 1964, gage height, 0.81 ft (0.247 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft³/s (119 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1400	5,640 160	6.60 2.012	Mar. 5	0030	a6,150 174	*b14.20 4.328
Jan. 26	1600	ice jam	b10.15 3.094	Sept. 14	2100	*9,230 261	8.49 2.587

a About.

b Backwater from ice.

Minimum discharge, 13 ft³/s (0.37 m³/s) Aug. 23; gage height, 0.57 ft (0.174 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	59	80	4170	270	450	468	111	71	55	464	34
2	20	51	110	1980	240	500	750	101	61	42	106	29
3	20	47	170	450	230	700	771	96	53	39	57	153
4	34	46	1500	230	220	2500	354	114	46	34	36	61
5	65	44	560	210	210	5000	629	120	42	26	26	34
6	53	42	213	200	200	955	417	101	44	22	26	29
7	61	41	153	220	190	860	271	93	42	20	23	36
8	67	41	301	220	180	829	297	88	253	20	20	38
9	44	39	654	210	170	661	369	81	122	19	17	33
10	34	36	228	190	160	1390	531	74	76	18	17	29
11	30	34	157	170	150	688	757	71	128	19	39	29
12	28	33	150	170	140	374	1000	253	98	20	24	23
13	41	33	130	170	130	329	1250	616	61	17	18	21
14	241	34	120	220	130	2030	252	150	47	17	23	4920
15	320	33	120	450	130	597	514	93	39	17	20	2020
16	117	33	130	400	120	354	359	85	36	20	17	302
17	81	34	241	290	120	339	329	69	30	21	15	180
18	57	49	200	230	120	531	284	63	28	20	15	131
19	69	53	120	210	120	525	209	57	28	24	15	111
20	74	42	140	190	110	433	180	53	23	19	15	101
21	71	36	1870	180	110	462	163	55	17	17	16	85
22	53	38	531	180	130	480	153	63	17	16	14	81
23	46	46	292	170	250	560	147	53	22	16	16	74
24	53	134	190	450	500	715	131	47	22	53	14	69
25	53	120	170	800	700	1120	120	55	19	41	16	63
26	344	74	150	1200	680	445	114	106	18	39	17	61
27	585	56	140	580	540	262	117	213	16	65	26	59
28	217	60	120	400	470	213	209	134	18	36	24	59
29	120	60	100	330	---	288	153	173	28	29	109	63
30	85	70	150	310	---	1140	120	125	170	24	743	63
31	67	---	230	290	---	889	---	96	---	25	85	---
TOTAL	3172	1518	9420	15470	6720	26619	11418	3609	1675	850	2073	8991
MEAN	102	50.6	304	499	240	859	381	116	55.8	27.4	66.9	300
MAX	585	134	1870	4170	700	5000	1250	616	253	65	743	4920
MIN	20	33	80	170	110	213	114	47	16	16	14	21
CFSM	.71	.35	2.11	3.47	1.67	5.97	2.65	.81	.39	.19	.47	2.08
IN.	.82	.39	2.43	4.00	1.74	6.88	2.95	.93	.43	.22	.54	2.32

CAL YR 1978 TOTAL 76648.4 MEAN 210 MAX 4300 MIN 9.9 CFSM 1.46 IN 19.80
WTR YR 1979 TOTAL 91535.0 MEAN 251 MAX 5000 MIN 14 CFSM 1.74 IN 23.65

STREAMS TRIBUTARY TO LAKE ERIE

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04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'45", Erie County, Hydrologic Unit 04120103, on right bank 150 ft (46 m) upstream from low dam in Como Lake Park, 700 ft (210 m) downstream from bridge on Bowen Road, 800 ft (240 m) downstream from Little Buffalo Creek, and 2 mi (3.2 km) southeast of Lancaster.

DRAINAGE AREA.--94.9 mi² (246 km²).

PERIOD OF RECORD.--September 1938 to September 1968. October 1971 to April 1974 (peak discharges only). May 1974 to current year.

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft (204.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow.

AVERAGE DISCHARGE.--35 years (1938-68, 1975-79) 129 ft³/s (3.653 m³/s), 18.46 in/yr (469 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft³/s (267 m³/s) Sept. 14, 1979, gage height, 10.48 ft (3.194 m); maximum gage height, 12.58 ft (3.834 m) Mar. 30, 1960 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stoplogs were installed in the dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0845	3,870 110	7.41 2.259	Sept. 14	1815	*9,440 267	*10.48 3.194
Mar. 4	--	a5,200 147	ice jam				

a About.

Minimum discharge, 1.4 ft³/s (0.040 m³/s) July 23, 24, gage height, 2.52 ft (0.768 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	39	85	2800	190	350	289	64	39	20	13	32
2	6.1	34	113	1000	180	560	560	55	29	15	22	22
3	6.6	30	181	170	170	640	515	51	24	12	10	232
4	13	27	1050	140	160	2800	239	86	18	11	5.9	57
5	27	25	300	130	140	3300	432	70	17	7.6	4.4	26
6	20	23	164	130	130	904	239	56	18	6.4	26	18
7	25	23	123	140	120	560	189	50	16	5.4	27	25
8	22	24	250	130	110	507	211	41	71	4.7	10	26
9	22	23	419	120	90	440	228	36	43	4.2	6.7	25
10	14	20	167	100	82	900	246	32	26	4.0	5.1	15
11	12	19	90	100	76	500	383	29	30	12	6.4	13
12	10	18	72	100	72	290	632	88	29	15	5.9	12
13	19	18	62	110	72	260	914	329	19	3.4	4.7	9.6
14	113	19	58	401	72	1200	515	123	14	3.1	8.9	4420
15	183	19	64	522	72	540	282	62	11	4.9	11	1190
16	80	17	76	383	70	270	232	47	9.6	3.1	9.6	228
17	47	19	172	278	66	240	254	38	8.3	2.8	7.9	140
18	34	31	164	210	64	330	178	31	7.3	3.2	7.3	89
19	35	32	78	180	64	360	142	26	7.6	2.6	8.6	58
20	50	24	106	150	66	300	117	22	6.4	2.6	7.6	46
21	48	20	1390	140	74	310	94	24	5.9	2.2	5.1	38
22	31	17	315	130	100	320	92	35	6.2	1.7	2.6	33
23	23	26	192	120	200	350	86	22	7.0	1.5	2.6	29
24	27	106	130	150	400	450	72	21	6.4	1.7	2.6	25
25	26	79	110	1400	500	680	66	25	6.2	4.4	4.0	22
26	296	41	90	1300	400	400	61	79	5.1	10	3.4	20
27	371	28	80	490	300	200	99	162	4.4	9.6	8.3	18
28	164	38	70	280	250	150	157	99	5.9	5.9	8.3	18
29	99	49	70	230	---	200	102	117	8.3	4.4	78	21
30	65	69	68	220	---	700	75	164	35	3.4	576	20
31	48	---	190	210	---	560	---	67	---	3.2	100	---
TOTAL	1945.1	957	6499	11964	4290	19571	7701	2151	533.6	191.0	998.9	6927.6
MEAN	62.7	31.9	210	386	153	631	257	69.4	17.8	6.16	32.2	231
MAX	371	106	1390	2800	500	3300	914	329	71	20	576	4420
MIN	6.1	17	58	100	64	150	61	21	4.4	1.5	2.6	9.6
CFSM	.66	.34	2.21	4.07	1.61	6.65	2.71	.73	.19	.07	.34	2.43
IN.	.76	.38	2.55	4.69	1.68	7.67	3.02	.84	.21	.07	.39	2.72

CAL. YR 1978	TOTAL	50781.2	MEAN 139	MAX 2600	MIN 2.2	CFSM 1.47	IN 19.91
WTR YR 1979	TOTAL	63729.2	MEAN 175	MAX 4420	MIN 1.5	CFSM 1.84	IN 24.98

STREAMS TRIBUTARY TO LAKE ERIE

04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'33", Erie County, Hydrologic Unit 04120103, on right bank 30 ft (9 m) upstream from bridge on Ridge Road in Ebenezer, 4.4 mi (7.1 km) upstream from mouth, and 5 mi (8 km) southeast of Buffalo.

DRAINAGE AREA.--134 mi² (347 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft (184.361 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 4, 1955, at datum 2.00 ft (0.610 m) higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi (2.1 km) downstream at different datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--39 years (1941-79), 229 ft³/s (6.485 m³/s), 23.21 in/yr (590 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft³/s (382 m³/s) Mar. 1, 1955, gage height, 15.82 ft (4.822 m) present datum, from rating curve extended above 7,700 ft³/s (218 m³/s); minimum, 2.6 ft³/s (0.074 m³/s) Nov. 7, 1953; minimum gage height, 1.87 ft (0.570 m) June 28, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 21	0545	4,480 127	7.94 2.420	Feb. 24	1730	ice jam	8.91 2.716
Jan. 1	0945	5,560 157	8.92 2.719	Mar. 4	1900	a4,900 139	b13.21 4.026
Jan. 14	2300	ice jam	8.00 2.438	Sept. 14	1900	*12,000 340	*13.28 4.048
Jan. 25	1615	ice jam	10.76 3.280				

a About.

b Backwater from ice.

Minimum discharge, 13 ft³/s (0.37 m³/s) July 23; minimum gage height, 2.03 ft (0.619 m) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES:

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	109	80	4580	230	450	565	131	89	51	359	37
2	22	92	140	1300	220	500	805	118	82	37	131	59
3	22	82	350	340	210	700	753	118	82	38	70	162
4	103	74	2260	220	200	2700	448	169	61	34	46	67
5	115	67	615	200	190	3750	643	144	55	28	34	37
6	98	63	329	200	180	1320	438	124	51	23	34	30
7	310	61	249	210	170	894	344	112	49	20	27	35
8	254	65	532	220	160	864	334	106	51	19	24	39
9	127	59	731	200	150	782	495	98	72	18	24	34
10	84	55	359	180	140	1440	621	92	63	18	26	28
11	63	49	263	160	130	771	765	87	98	18	35	26
12	49	47	235	160	130	516	852	173	87	18	34	21
13	185	44	218	160	120	485	979	894	55	18	27	20
14	537	47	197	200	120	2060	686	282	42	16	41	6480
15	480	46	209	420	120	664	453	181	35	16	26	1650
16	235	44	193	370	110	443	375	147	30	25	24	324
17	158	53	354	270	110	403	349	124	26	24	20	147
18	115	74	305	210	110	554	277	103	25	27	20	98
19	131	77	190	180	100	610	231	95	24	25	20	84
20	181	59	260	160	100	565	201	84	23	18	21	70
21	151	51	2320	150	110	615	181	87	21	16	20	49
22	100	49	581	140	130	664	173	92	21	14	19	42
23	87	77	375	130	180	834	165	77	25	14	20	35
24	121	254	277	170	500	1020	144	72	29	22	20	31
25	103	205	334	1900	700	1160	137	87	23	25	21	28
26	955	131	305	1100	680	511	131	173	21	34	27	26
27	782	67	282	600	540	344	154	165	20	39	51	24
28	354	72	260	400	500	277	218	151	26	26	34	24
29	218	68	230	300	---	548	169	189	46	20	244	26
30	158	70	250	240	---	1450	144	165	98	17	748	26
31	127	---	500	230	---	992	---	124	---	18	70	---
TOTAL	6450	2311	13783	15300	6340	28886	12230	4764	1430	736	2317	9759
MEAN	208	77.0	445	494	226	932	408	154	47.7	23.7	74.7	325
MAX	955	254	2320	4580	700	3750	979	894	98	51	748	6480
MIN	22	44	80	130	100	277	131	72	20	14	19	20
CFSM	1.55	.58	3.32	3.69	1.69	6.96	3.05	1.15	.36	.18	.56	2.43
IN.	1.79	.64	3.83	4.25	1.76	8.02	3.40	1.32	.40	.20	.64	2.71

CAL YR 1978	TOTAL	89894	MEAN	246	MAX	3800	MIN	12	CFSM	1.84	IN	24.96
WTR YR 1979	TOTAL	104306	MEAN	286	MAX	6480	MIN	14	CFSM	2.13	IN	28.96

LAKE ERIE

275

04215900 LAKE ERIE AT BUFFALO, NY

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

DRAINAGE AREA.--263,700 mi² (683,000 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

REVISED RECORDS.--WDR NY-75-1: 1974.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Feb. 5, 1899, nonrecording gages.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 579.09 ft (176.507 m) Nov. 3, 1955; minimum 564.17 ft (171.959 m) Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 574.66 ft (175.156 m) Apr. 6; minimum elevation, 569.28 ft (173.517 m) Feb. 25.

ELEVATION, IN FEET IGLD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571.22	570.70	571.00	570.82	570.69	570.41	570.81	572.25	572.12	572.38	572.04	571.90
2	570.97	571.13	570.50	571.24	570.46	570.41	571.36	571.75	572.24	572.48	572.57	572.09
3	571.08	570.78	570.37	572.43	570.34	570.34	571.25	572.08	572.13	572.36	572.22	572.10
4	571.62	570.77	572.97	572.52	571.05	570.46	570.96	572.03	572.16	572.15	572.26	571.77
5	571.39	570.78	571.83	570.90	570.58	570.68	572.00	571.91	572.15	572.12	572.30	571.77
6	572.29	570.76	570.71	570.81	570.31	570.72	574.66	571.83	571.97	572.24	572.03	572.16
7	571.57	570.61	570.36	570.45	570.35	570.54	571.65	571.79	572.09	572.07	572.32	571.98
8	571.30	570.84	570.56	570.95	570.47	570.56	570.92	571.89	572.12	572.02	572.08	571.77
9	571.20	571.15	571.14	571.80	570.37	570.69	571.11	571.92	572.08	572.07	572.02	571.82
10	571.21	570.67	571.63	571.04	570.41	571.32	571.57	571.90	572.48	572.13	572.61	572.10
11	570.96	570.74	570.98	570.40	570.21	571.27	571.03	571.88	572.49	572.18	571.76	571.39
12	571.23	570.05	571.13	570.27	570.17	571.09	570.95	572.02	572.28	572.13	571.71	571.66
13	570.80	570.55	572.55	570.14	570.24	570.88	571.40	572.02	572.18	572.06	572.26	571.79
14	570.66	571.32	571.86	571.16	570.14	571.68	572.04	571.98	572.09	572.13	572.62	572.06
15	570.99	570.71	571.80	571.31	569.80	571.05	571.91	572.02	572.18	572.18	572.11	572.16
16	570.51	570.31	570.77	570.51	570.22	571.03	572.07	572.10	572.16	572.12	571.92	572.11
17	570.80	570.81	572.06	570.70	570.18	570.85	572.03	571.89	572.12	572.04	571.93	572.13
18	571.32	573.40	570.60	570.60	569.97	570.79	571.98	571.89	572.11	572.12	572.07	572.38
19	571.41	571.16	570.33	570.12	570.25	570.62	572.00	571.86	571.94	572.10	571.88	571.94
20	570.90	570.05	570.20	570.27	570.19	570.77	571.89	571.95	571.91	572.08	571.71	571.99
21	571.08	570.16	572.84	570.38	570.51	570.83	571.87	572.00	572.14	572.10	571.67	571.94
22	571.04	570.47	571.42	570.78	570.10	570.78	571.99	571.72	572.27	572.03	571.71	571.40
23	570.81	571.06	570.74	570.27	570.13	570.79	571.91	571.79	572.30	572.02	571.88	571.41
24	570.94	571.38	570.33	570.06	570.18	570.90	571.89	571.50	572.10	572.17	572.00	571.70
25	571.31	570.81	571.68	571.00	569.28	571.29	571.89	571.47	571.95	572.14	572.16	571.90
26	570.97	570.13	571.00	570.60	569.90	571.60	571.91	572.22	572.00	572.37	571.83	571.83
27	571.47	570.18	571.32	570.43	570.50	571.14	572.28	572.15	572.14	572.03	571.83	571.71
28	571.03	571.80	570.46	570.58	570.32	570.85	571.98	572.14	572.03	572.30	571.88	571.76
29	570.61	571.07	570.08	570.75	---	571.07	571.99	572.14	572.00	572.09	572.06	571.71
30	570.76	571.48	570.37	570.61	---	571.06	572.07	572.12	572.09	572.03	572.13	571.73
31	570.91	---	570.39	570.50	---	571.24	---	572.00	---	572.17	571.89	---
MEAN	571.11	570.86	571.10	570.79	570.26	570.89	571.78	571.94	572.13	572.15	572.05	571.87
MAX	572.29	573.40	572.97	572.52	571.05	571.68	574.66	572.25	572.49	572.48	572.62	572.38
MIN	570.51	570.05	570.08	570.06	569.28	570.34	570.81	571.47	571.91	572.02	571.67	571.39
CAL YR 1978	MEAN 571.52		MAX 574.10	MIN 570.05								
WTR YR 1979	MEAN 571.42		MAX 574.66	MIN 569.28								

ST. LAWRENCE RIVER MAIN STEM

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°53'25", Erie County, Hydrologic Unit 04120200, at head of Niagara River at Buffalo.

DRAINAGE AREA.--263,700 mi² (683,000 km²).

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936(M). WDR NY-77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

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

AVERAGE DISCHARGE.--119 years, 204,000 ft³/s (5,777 m³/s).EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 299,000 ft³/s (8,470 m³/s) Nov. 17, 1955; minimum daily, 90,000 ft³/s (2,550 m³/s) Jan. 13, 1964. Maximum monthly mean discharge, 264,700 ft³/s (7,500 m³/s) May 1974; minimum monthly mean, 116,200 ft³/s (3,290 m³/s) February 1936.EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 276,000 ft³/s (7,816 m³/s) Jan. 10; minimum daily discharge, 173,000 ft³/s (4,899 m³/s) Jan. 20.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214000	196000	204000	213000	200000	192000	208000	241000	234000	235000	225000	228000
2	207000	211000	197000	219000	201000	198000	211000	229000	238000	238000	237000	233000
3	207000	201000	194000	244000	197000	195000	219000	234000	237000	236000	232000	231000
4	223000	201000	233000	238000	203000	205000	202000	235000	236000	232000	232000	224000
5	215000	201000	231000	190000	195000	212000	236000	233000	236000	228000	235000	223000
6	240000	201000	204000	189000	195000	213000	265000	229000	233000	232000	230000	231000
7	227000	197000	192000	184000	199000	205000	209000	229000	233000	228000	232000	229000
8	214000	200000	200000	195000	199000	204000	192000	233000	235000	229000	234000	221000
9	211000	213000	206000	207000	202000	206000	193000	232000	234000	226000	229000	224000
10	215000	198000	225000	190000	206000	217000	208000	232000	238000	230000	241000	233000
11	205000	200000	206000	175000	204000	215000	202000	230000	248000	229000	225000	214000
12	214000	186000	211000	182000	198000	212000	202000	234000	237000	227000	222000	218000
13	205000	192000	235000	183000	221000	205000	216000	236000	236000	226000	232000	224000
14	198000	215000	229000	204000	199000	221000	224000	234000	234000	227000	245000	239000
15	210000	199000	230000	198000	183000	208000	232000	235000	234000	229000	234000	243000
16	198000	192000	206000	189000	193000	207000	236000	235000	235000	228000	228000	238000
17	202000	198000	229000	196000	204000	204000	232000	232000	233000	223000	228000	236000
18	214000	248000	202000	202000	198000	202000	218000	231000	232000	226000	232000	241000
19	215000	210000	189000	195000	200000	198000	223000	230000	230000	225000	227000	229000
20	209000	187000	186000	187000	192000	200000	222000	232000	226000	224000	224000	230000
21	209000	184000	240000	190000	192000	202000	223000	234000	232000	224000	222000	229000
22	209000	194000	218000	204000	193000	201000	227000	227000	235000	223000	222000	214000
23	204000	208000	206000	192000	187000	200000	227000	227000	234000	221000	226000	216000
24	205000	218000	191000	187000	193000	204000	230000	222000	230000	223000	230000	219000
25	214000	205000	222000	208000	176000	211000	228000	219000	226000	223000	233000	228000
26	211000	188000	208000	202000	181000	220000	226000	236000	228000	231000	226000	226000
27	218000	184000	216000	199000	199000	207000	237000	237000	230000	221000	225000	224000
28	211000	226000	194000	200000	195000	204000	233000	238000	228000	228000	226000	223000
29	203000	211000	186000	204000	---	208000	234000	236000	228000	224000	232000	229000
30	202000	221000	193000	202000	---	210000	234000	236000	228000	223000	234000	222000
31	208000	---	194000	197000	---	213000	---	233000	---	228000	226000	---
TOTAL	6537000	6085000	6477000	6165000	5505000	6399000	6649000	7201000	6998000	7047000	7126000	6813000
MEAN	210900	202800	208900	198900	196600	206400	221600	232300	233300	227300	229900	227100
MAX	240000	248000	240000	244000	221000	221000	265000	241000	248000	238000	245000	243000
MIN	198000	184000	186000	175000	176000	192000	192000	219000	226000	221000	222000	214000
CAL YR 1978	TOTAL	79285000	MEAN	217200	MAX	276000	MIN	173000				
WTR YR 1979	TOTAL	79002000	MEAN	216400	MAX	265000	MIN	175000				

04216200 SCAJAUADA CREEK AT BUFFALO, NY

LOCATION.--Lat 42°54'41", long 78°47'48", Erie County, Hydrologic Unit 04120103, on right bank 58 ft (18 m) upstream from point where stream goes underground in concrete-lined tunnel, 86 ft (26 m) upstream from Pine Ridge Road, and 0.2 mi (0.3 km) east of boundary line of city of Buffalo.

DRAINAGE AREA.--15.9 mi² (41.2 km²).

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

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 626.26 ft (190.884 m) National Geodetic Vertical Datum of 1929 (city of Buffalo bench mark).

REMARKS.--Records good. Discharge includes flow diverted from Lake Erie and Niagara River as sewage-plant effluent entering basin upstream from station.

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

AVERAGE DISCHARGE.--22 years, 35.1 ft³/s (0.994 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft³/s (74.2 m³/s) Aug. 7, 1963, gage height, 14.38 ft (4.383 m); minimum, 3.9 ft³/s (0.11 m³/s) Aug. 24, 1978, gage height, 1.46 ft (0.445 m) result of channel improvement project upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0100	768 21.7	5.99 1.826	Aug. 29	0130	1,470 41.6	9.35 2.850
Jan. 1	1915	644 18.2	5.35 1.631	Aug. 30	0300	831 23.5	6.31 1.923
Mar. 4	1630	612 17.3	5.18 1.579	Sept. 14	0930	*2,300 65.1	*13.01 3.965
Aug. 27	0300	640 18.1	5.33 1.625				

Minimum discharge, 4.2 ft³/s (0.12 m³/s) June 14 gage height, 1.47 ft (0.448 m) result of channel improvement project upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	18	24	433	27	80	32	18	15	16	39	21
2	18	18	39	124	30	173	141	18	14	16	24	26
3	16	17	75	34	27	207	60	24	14	15	17	23
4	63	17	126	25	23	392	70	21	14	13	16	18
5	22	16	45	22	23	203	107	18	18	14	16	18
6	120	17	29	21	21	75	52	19	16	14	16	18
7	55	17	24	18	20	50	29	18	15	14	15	17
8	23	17	100	20	19	45	24	18	20	13	15	17
9	19	18	71	19	18	38	29	18	16	14	15	16
10	23	17	28	18	17	71	66	18	53	16	19	17
11	19	16	21	18	16	41	115	18	39	14	15	17
12	18	15	19	18	16	24	102	52	17	14	13	17
13	63	16	23	23	16	23	61	42	16	15	14	17
14	79	27	24	111	16	82	100	21	14	14	73	1370
15	34	17	21	47	16	42	37	20	16	12	16	130
16	23	16	20	34	16	30	26	17	14	20	15	35
17	19	47	52	27	15	34	23	16	14	15	14	24
18	18	34	27	23	14	43	20	16	14	14	15	20
19	18	19	21	22	16	33	19	16	15	14	14	20
20	19	18	92	21	15	27	17	16	15	14	14	17
21	17	17	151	21	31	24	17	18	15	14	14	16
22	16	16	39	21	52	22	23	16	16	13	14	16
23	27	55	29	22	143	21	18	15	16	14	37	14
24	19	30	22	111	270	21	17	14	13	14	30	15
25	18	19	19	181	107	50	18	37	14	63	34	15
26	158	16	21	102	55	24	24	29	14	115	15	15
27	49	16	18	80	46	20	50	16	14	18	130	15
28	25	21	17	61	45	18	25	16	25	16	58	17
29	20	23	15	49	---	55	21	16	26	14	422	17
30	19	38	16	39	---	156	20	16	15	251	14	14
31	18	---	119	34	---	58	---	15	---	50	31	---
TOTAL	1086	648	1347	1799	1130	2182	1363	632	542	637	1431	2012
MEAN	35.0	21.6	43.5	58.0	40.4	70.4	45.4	20.4	18.1	20.5	46.2	67.1
MAX	158	55	151	433	270	392	141	52	53	115	422	1370
MIN	16	15	15	18	14	18	17	14	13	12	13	14

CAL YR 1978 TOTAL 12997.4 MEAN 35.6 MAX 468 MIN 9.4
WTR YR 1979 TOTAL 14809.0 MEAN 40.6 MAX 1370 MIN 12

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft (46 m) downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi (0.6 km) upstream from Tannery Creek.

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and concrete weir. Altitude of gage is 960 ft (293 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,690 ft³/s (133 m³/s) Sept. 14, 1979, gage height, 9.10 ft (2.774 m); maximum gage height 12.40 ft (3.780 m) Feb. 18, 1979 (backwater from ice); minimum discharge, 9.2 ft³/s (0.26 m³/s) Sept. 2, 3, 7, 8, 1978, gage height, 3.38 ft (1.030 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft³/s (170 m³/s) June 23, 1972, gage height about 12.0 ft (3.66 m) present site and datum, from information supplied by Village of Attica.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 21	0345	1,400	39.6	5.93	1.807	Mar. 14	0845	1,660	47.0	6.24	1.902
Jan. 1	0915	a2,330	66.0	b7.58	2.310	Apr. 13	1715	1,280	36.2	5.79	1.765
Feb. 18	1200	ice jam		*b12.40	3.780	Sept. 14	1800	*4,690	133	9.10	2.774
Mar. 4	1500	a1,720	48.7	ab6.30	1.920						

a About.

b Backwater from ice.

Minimum discharge, 15 ft³/s (0.42 m³/s) Sept. 12, 13, 14, gage height, 3.44 ft (1.049 m).

REVISIONS.--The maximum discharge for the water year 1978 has been revised to 4,500 ft³/s (127 m³/s) Apr. 5, 1978, gage height, 8.82 ft (2.688 m), superseding figure published in the report for 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	36	42	1600	150	180	317	85	58	61	124	23
2	18	32	42	900	120	210	453	74	48	56	68	34
3	18	30	79	210	120	300	357	71	44	56	46	63
4	23	28	613	170	120	800	233	110	38	46	40	30
5	34	28	182	120	110	1600	347	88	34	40	36	21
6	26	26	108	110	94	1300	219	77	36	40	85	24
7	28	26	94	120	86	700	202	71	53	38	58	36
8	32	26	202	120	82	500	198	66	166	36	38	30
9	30	26	264	100	76	350	219	56	80	36	32	23
10	25	25	128	90	72	658	228	53	58	36	36	18
11	21	23	98	82	64	341	265	58	104	34	48	18
12	21	23	82	80	62	215	383	66	82	32	36	18
13	36	23	80	100	60	288	921	117	63	32	30	17
14	207	23	71	130	58	1050	596	71	53	32	30	1980
15	142	23	77	230	54	288	362	53	51	38	30	447
16	68	23	71	200	54	198	292	48	46	38	28	135
17	46	23	98	160	54	265	302	42	44	32	28	74
18	38	30	98	130	50	260	207	40	42	28	26	53
19	36	32	63	110	50	270	162	38	42	28	26	44
20	44	28	110	94	45	240	139	32	38	28	24	36
21	44	26	802	92	45	250	128	40	38	26	21	32
22	34	25	255	96	54	270	117	46	40	26	21	30
23	28	28	162	90	68	300	110	40	51	25	18	26
24	34	74	114	90	190	380	101	38	46	61	17	24
25	36	63	100	250	350	580	94	44	42	36	18	23
26	139	34	90	600	330	600	91	94	42	48	20	21
27	182	21	88	660	250	250	121	98	38	58	23	18
28	91	34	76	500	210	170	139	85	44	40	24	18
29	58	36	70	330	---	240	107	110	58	38	51	18
30	46	44	80	250	---	658	91	158	71	34	91	18
31	40	---	260	190	---	525	---	80	---	36	30	---
TOTAL	1643	919	4699	8004	3078	14236	7501	2149	1650	1195	1203	3352
MEAN	53.0	30.6	152	258	110	459	250	69.3	55.0	38.5	38.8	112
MAX	207	74	802	1600	350	1600	921	158	166	61	124	1980
MIN	18	21	42	80	45	170	91	32	34	25	17	17
CFSM	.69	.40	1.97	3.35	1.43	5.95	3.24	.90	.71	.50	.50	1.45
IN.	.79	.44	2.27	3.86	1.48	6.87	3.62	1.04	.80	.58	.58	1.62
CAL YR 1978	TOTAL	41560.6	MEAN 114	MAX 1660	MIN 9.2	CFSM 1.48	IN 20.04					
WTR YR 1979	TOTAL	49629.0	MEAN 136	MAX 1980	MIN 17	CFSM 1.76	IN 23.93					

NIAGARA RIVER BASIN

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04216500 LITTLE TONAWANDA CREEK AT LINDEN, NY

LOCATION.--Lat 42°52'37", long 78°09'48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on County Highway 13A (Depot Road) in Linden and 7 mi (11 km) upstream from mouth.

 DRAINAGE AREA.--22.1 mi² (57.2 km²).

PERIOD OF RECORD.--July 1912 to September 1968, October 1977 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 15, 1930. Datum of gage is 1,081.62 ft (329.678 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1943, nonrecording gage at same site and datum.

REMARKS.--Records good, except those for winter periods, which are poor.

 AVERAGE DISCHARGE.--57 years (1912-19, 1920-68, 1978-79), 27.3 ft³/s (0.773 m³/s), 16.78 in/yr (426 mm/yr).

 EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Mar. 7, 1956, gage height, 16.04 ft (4.889 m), from high-water mark; minimum, 0.08 ft³/s (0.002 m³/s) Aug. 3, 4, 1955; minimum gage height, -0.14 ft (-0.043 m) Jan. 17, 1966 (siphonic action).

 EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 530 ft³/s (15.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1200	856 24.2	7.12 2.170	Apr. 13	1900	535 15.2	5.44 1.658
Mar. 5	0700	*913 25.9	*7.40 2.256	Sept. 14	2000	896 25.4	7.32 2.231
Mar. 25	0715	581 16.5	5.70 1.737				

 Minimum discharge, 0.51 ft³/s (0.014 m³/s) Aug. 23, 26, gage height, 0.27 ft (0.082 m).

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	6.9	7.6	567	35	38	79	19	12	5.7	2.2	1.5
2	1.9	6.7	8.3	318	33	96	116	17	9.4	3.5	1.6	2.4
3	1.9	6.1	9.6	66	31	103	90	17	8.3	3.1	1.5	4.9
4	2.1	5.4	95	47	30	391	56	22	7.1	2.4	1.5	2.7
5	2.3	5.0	46	39	29	707	85	18	6.2	2.3	1.3	1.9
6	2.0	4.5	24	36	28	234	59	15	5.6	2.1	1.2	2.1
7	2.0	4.6	18	32	28	156	52	14	5.3	2.0	1.4	2.6
8	2.4	4.6	30	29	27	130	54	13	9.0	1.9	1.3	2.0
9	2.2	4.5	53	28	26	100	55	11	7.4	2.0	1.2	2.0
10	2.2	4.1	23	26	25	200	56	9.7	29	2.2	1.2	2.0
11	2.1	3.9	15	23	24	110	67	12	26	2.2	1.1	1.9
12	2.0	4.1	14	23	23	62	96	11	13	2.0	1.0	1.8
13	2.8	4.1	14	34	22	58	282	16	8.8	2.0	1.0	1.5
14	24	3.9	14	110	21	321	241	12	6.7	1.8	1.1	338
15	21	4.1	14	100	20	112	121	10	5.2	2.1	1.1	200
16	10	3.6	13	74	20	80	98	9.6	4.0	1.8	1.0	36
17	7.2	3.6	21	46	19	74	104	8.0	3.4	1.8	.77	17
18	5.9	5.0	21	37	19	97	61	7.2	2.9	1.7	.84	11
19	5.9	5.0	16	29	18	95	45	6.3	2.8	1.6	.95	7.8
20	7.2	4.3	16	29	18	91	38	5.5	2.7	1.4	.89	6.5
21	6.7	3.8	150	32	19	105	32	6.7	2.5	1.4	.79	5.1
22	5.2	3.3	66	29	25	119	29	6.9	3.2	1.3	.75	4.3
23	5.0	4.1	40	26	38	153	27	6.3	3.7	1.3	.64	3.7
24	5.2	11	29	41	100	185	24	6.8	3.4	1.3	.77	3.5
25	4.8	9.1	26	220	100	309	23	10	2.6	1.4	.79	3.1
26	16	7.4	23	163	52	95	20	18	2.4	1.8	.65	2.8
27	29	6.0	21	93	47	55	32	19	2.2	1.6	1.1	2.8
28	15	6.7	18	69	38	45	32	17	2.8	1.4	1.0	2.8
29	11	7.2	18	55	---	70	25	22	3.5	1.4	1.4	3.1
30	8.3	8.1	20	46	---	142	22	39	6.5	1.2	4.4	3.0
31	7.8	---	39	40	---	133	---	17	---	1.5	1.9	---
TOTAL	223.0	160.7	922.5	2507	915	4666	2121	422.0	207.6	61.2	38.34	679.8
MEAN	7.19	5.36	29.8	80.9	32.7	151	70.7	13.6	6.92	1.97	1.24	22.7
MAX	29	11	150	567	100	707	282	39	29	5.7	4.4	338
MIN	1.9	3.3	7.6	23	18	38	20	5.5	2.2	1.2	.64	1.5
CFSM	.33	.24	1.35	3.66	1.48	6.83	3.20	.62	.31	.09	.06	1.03
IN.	.38	.27	1.55	4.22	1.54	7.85	3.57	.71	.35	.10	.06	1.14

 CAL YR 1978 TOTAL 11129.99 MEAN 30.5 MAX 569 MIN .40 CFSM 1.38 IN 18.73
 WTR YR 1979 TOTAL 12924.14 MEAN 35.4 MAX 707 MIN .64 CFSM 1.60 IN 21.75

NIAGARA RIVER BASIN

04217000 TONAWANDA CREEK AT BATAVIA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft (46 m) downstream from municipal dam, 500 ft (152 m) upstream from bridge on Walnut Street in Batavia, and 5.0 mi (8.0 km) downstream from Little Tonawanda Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--171 mi² (443 km²).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 876.33 ft (267.105 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage.

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

AVERAGE DISCHARGE.--35 years, 209 ft³/s (5.919 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft³/s (204 m³/s) Mar. 31, 1960, gage height, 12.70 ft (3.871 m); maximum gage height, 13.85 ft (4.221 m) Apr. 6, 1947; minimum discharge, 0.4 ft³/s (0.011 m³/s) Aug. 5-7, 1955; minimum gage height, 0.59 ft (0.180 m) July 26, 27, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--From records of city of Batavia, maximum stage, 14.5 ft (4.42 m) in March 1942.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0430	4,430 125	9.95 3.033	Mar. 25	2300	1,870 53.0	5.72 1.743
Jan. 26	2000	1,840 52.1	5.66 1.725	Apr. 14	0830	2,070 58.6	6.12 1.865
Mar. 5	2000	*5,570 158	*11.23 3.423	Sept. 15	1600	3,880 110	9.22 2.810

Minimum discharge, 10 ft³/s (0.28 m³/s) Aug. 23, 24, gage height, 1.32 ft (0.402 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	69	83	1300	310	388	812	165	132	64	65	33
2	26	62	92	3950	250	469	648	146	105	55	67	29
3	25	58	92	1180	250	663	802	138	90	49	43	89
4	27	55	454	379	250	1400	529	175	75	46	32	58
5	36	52	622	240	220	4610	597	171	66	37	26	34
6	39	49	294	210	200	3850	544	142	64	33	23	30
7	33	48	193	230	190	1490	375	129	62	32	69	42
8	41	48	200	230	190	1050	435	118	145	31	36	40
9	41	46	489	210	170	758	430	107	132	27	24	36
10	33	44	260	190	150	879	440	97	97	27	23	30
11	29	44	160	170	140	1110	510	90	132	27	31	28
12	25	42	171	160	140	563	648	148	129	26	28	26
13	30	42	151	160	130	440	989	277	86	23	23	22
14	90	41	132	220	130	944	1800	196	67	24	24	331
15	370	39	123	450	120	1380	1110	135	58	32	23	2770
16	158	40	135	420	120	637	642	118	50	30	21	1530
17	100	40	168	300	120	489	637	102	45	29	19	381
18	73	46	180	240	110	577	479	90	41	24	17	198
19	62	55	110	200	110	592	356	81	40	21	18	136
20	64	48	132	190	100	525	302	73	39	19	18	107
21	79	42	484	180	110	548	265	79	36	19	17	86
22	62	41	792	190	121	577	236	102	34	17	14	73
23	52	41	577	180	208	642	223	81	44	16	11	66
24	51	83	289	180	454	817	196	73	45	24	13	58
25	58	110	227	500	748	1260	178	83	39	36	13	52
26	65	83	180	1270	719	1280	168	161	37	34	16	47
27	393	51	190	1420	525	539	178	216	33	49	22	43
28	227	62	150	940	444	370	294	185	33	38	27	42
29	132	69	140	617	---	402	215	204	52	30	30	45
30	97	77	150	454	---	753	182	281	68	25	104	49
31	79	---	200	379	---	994	---	200	---	22	68	---
TOTAL	2623	1627	7620	16939	6729	30996	15220	4365	2076	966	965	6511
MEAN	84.6	54.2	246	546	240	1000	507	141	69.2	31.2	31.1	217
MAX	393	110	792	3950	748	4610	1800	281	145	64	104	2770
MIN	25	39	83	160	100	370	168	73	33	16	11	22

CAL YR 1978 TOTAL 79699 MEAN 218 MAX 2970 MIN 11
WTR YR 1979 TOTAL 96637 MEAN 265 MAX 4610 MIN 11

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1978 to current year.

CHEMICAL DATA: 1971 (a), 1978 (c), 1979 (d).

MINOR ELEMENTS DATA: 1978-79 (b).

ORGANIC DATA: OC--1978-79 (c).

NUTRIENT DATA: 1971 (a), 1978 (c), 1979 (d).

BIOLOGICAL DATA:

Bacteria--1978 (c), 1979 (d).

Phytoplankton--1978 (b), 1979 (c).

SEDIMENT DATA: 1978 (c), 1979 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1978 to current year.

WATER TEMPERATURES: January 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 850 micromhos Mar. 14, 1978; minimum daily, 203 micromhos Apr. 2, 1978.

WATER TEMPERATURES: Maximum daily, 27.0°C July 15, 19, 1979; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 750 micromhos Nov. 23; minimum daily, 210 micromhos Mar. 6.

WATER TEMPERATURES: Maximum daily, 27.0°C July 15, 19; minimum daily, freezing point Nov. 29 to Dec. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	
DATE	TIME												
OCT 02...	1200	25	560	7.6	14.0	1.0	9.7	96	39	--	260	67	
NOV 08...	1200	49	540	7.8	10.0	2.0	9.8	88	42	27	240	64	
DEC 05...	1000	700	342	7.4	2.0	25	11.2	83	K8000	7300	120	48	
JAN 11...	1100	176	445	7.6	.0	2.0	13.2	92	270	70	200	62	
FEB 08...	1100	195	505	7.4	.0	4.0	12.6	89	270	94	190	43	
MAR 08...	1130	1060	310	7.4	.0	100	--	--	K820	900	110	29	
APR 12...	1030	690	372	7.7	5.0	40	11.0	88	520	2300	140	30	
MAY 09...	1000	105	400	8.2	17.5	1.0	8.8	97	48	K13	180	25	
JUN 06...	1000	61	495	7.6	19.0	3.0	8.8	98	210	K18	210	41	
28...	1000	32	490	7.6	17.0	3.0	8.6	91	K130	K170	220	27	
AUG 09...	1100	23	440	8.0	23.0	4.0	7.7	90	K63	K4	220	55	
SEP 20...	0800	106	475	7.5	14.0	7.0	--	--	360	270	210	34	
		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 (MG/L AS CAC03)	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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 02...	75	17	16	2.6	190	54	29	.1	3.0	323	311	.54	
NOV 08...	73	15	16	2.6	180	50	28	.1	2.1	309	295	.31	
DEC 05...	35	7.3	9.6	3.4	69	38	20	.1	3.7	192	159	1.2	
JAN 11...	61	12	12	1.7	140	38	22	.1	5.7	250	237	1.3	
FEB 08...	59	11	13	1.8	150	40	25	.0	5.7	261	246	1.3	
MAR 08...	35	6.2	7.5	1.8	84	23	15	.1	4.1	154	143	1.1	
APR 12...	43	7.9	14	1.8	110	26	26	.1	3.2	202	188	.79	
MAY 09...	52	11	11	1.8	150	31	20	.1	1.4	255	218	.47	
JUN 06...	63	13	8.8	1.1	170	33	28	.1	1.0	274	250	.40	
28...	64	14	14	2.1	190	38	23	.1	3.5	307	273	.85	
AUG 09...	63	14	13	2.8	160	36	18	.1	3.4	267	247	.35	
SEP 20...	66	12	12	3.0	180	40	22	.1	7.2	322	274	.74	

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

NIAGARA RIVER BASIN

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 02...	.06	.27	.33	.25	.87	.06	.02	--	--	--	--	--
NOV 08...	.02	.38	.40	.25	.71	.04	.02	1	1	100	100	0
DEC 05...	.07	1.0	1.1	.45	2.3	.20	.03	--	--	--	--	--
JAN 11...	.08	.07	.15	.01	1.5	.02	.01	1	1	100	100	0
FEB 08...	.09	.19	.28	.26	1.6	.03	.01	--	--	--	--	--
MAR 08...	.05	.60	.65	.29	1.8	.08	.02	1	0	0	0	2
APR 12...	.05	.47	.52	.30	1.3	.06	.02	--	--	--	--	--
MAY 09...	.00	.54	.54	.30	1.0	.01	.01	--	--	--	--	--
JUN 06...	.08	.34	.42	.40	.82	.04	.02	--	--	--	--	--
28...	.06	.30	.36	.52	1.2	.05	.02	--	--	--	--	--
AUG 09...	.04	.52	.56	.27	.91	.09	.06	--	--	--	--	--
SEP 20...	.11	.57	.68	.47	1.4	.05	.03	2	2	100	70	2

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 08...	0	20	0	0	0	5	5	470	50	7	4	80
DEC 05...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 11...	1	10	0	1	3	4	2	390	10	12	4	80
FEB 08...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 08...	1	10	0	2	0	9	3	3900	30	31	10	100
APR 12...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 20...	0	10	<10	0	0	4	3	380	40	25	7	60

NIAGARA RIVER BASIN

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04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 02...	--	--	--	--	--	--	--	--	--	2.8	--	--
NOV 08...	80	<.5	<.5	0	0	0	0	30	0	--	17	4.3
DEC 05...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 11...	80	<.5	<.5	0	0	0	0	20	0	3.3	--	--
FEB 08...	--	--	--	--	--	--	--	--	--	7.4	--	--
MAR 08...	30	<.5	<.5	0	0	0	0	50	10	--	4.8	.8
APR 12...	--	--	--	--	--	--	--	--	--	4.6	--	--
MAY 09...	--	--	--	--	--	--	--	--	--	6.8	--	--
JUN 06...	--	--	--	--	--	--	--	--	--	2.8	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 20...	110	<.5	<.5	0	0	0	0	20	0	--	18	.6

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	1130	1.0	3.0	560	14.0	JAN 11...	1125	1.0	35	450	.0
02...	1135	1.0	11	555	14.5	11...	1130	1.0	43	455	.0
02...	1140	1.0	19	560	14.5	MAY 09...	0945	1.0	10	400	18.0
02...	1145	1.0	27	560	14.0	09...	0950	1.0	20	420	17.5
02...	1150	1.0	35	560	14.0	09...	0955	1.0	30	395	17.5
02...	1155	1.0	43	560	14.0	09...	1000	1.0	40	400	17.5
JAN 11...	1105	1.0	3.0	445	.0	09...	1005	1.0	50	405	17.5
11...	1110	1.0	11	445	.0	09...	1010	1.0	60	400	17.5
11...	1115	1.0	19	445	.0						
11...	1120	1.0	27	445	.0						

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 02...	1200	25	3	.20	MAY 09...	1000	105	6	1.7
NOV 08...	1200	49	4	.53	JUN 06...	1000	61	3	.49
DEC 05...	1000	700	282	533	28...	1000	32	5	.43
MAR 08...	1130	1060	221	633	AUG 09...	1100	23	5	.31
APR 12...	1030	690	119	222	SEP 20...	0800	106	9	2.6

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 14,78 1000	AUG 1,78 1200	OCT 2,78 1200	NOV 8,78 1200	MAR 8,79 1130
TOTAL CELLS/ML	10000	3200	620	1100	530
DIVERSITY: DIVISION	1.1	1.3	1.6	1.3	0.0
..CLASS	1.1	1.4	1.6	1.3	0.0
..ORDER	1.7	1.9	2.2	1.6	0.0
...FAMILY	2.5	2.3	2.5	1.9	0.0
....GENUS	2.8	2.7	2.6	2.0	0.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
.....CHARACIUM	--	-	24	1	--	-	--	-	--	-
....COELASTRACEAE										
.....COELASTRUM	2100#	20	--	-	--	-	--	-	--	-
....MICRACTINIACEAE										
.....GOLENKINIA	64	1	--	-	--	-	--	-	--	-
....OOCYSTACEAE										
.....ANKISTRODESMUS	640	6	200	6	6	1	--	-	--	-
.....KIRCHNERIELLA	64	1	200	6	--	-	--	-	--	-
.....OOCYSTIS	--	-	24	1	--	-	56	5	--	-
.....QUADRIGULA	--	-	240	8	--	-	--	-	--	-
.....TETRAEDRON	--	-	--	-	6	1	--	-	--	-
....SCENEDESMACEAE										
.....CRUCIGENIA	--	-	--	-	11	2	--	-	--	-
.....SCENEDESMUS	770	7	98	3	22	4	110	11	--	-
....ULOTRICHIALES										
....MICROSPORACEAE										
.....MICROSPORA	--	-	--	-	20	3	--	-	--	-
....VOLVOCALES										
....CHLAMYDOMONADACEAE										
.....CARTERIA	510	5	--	-	--	-	--	-	--	-
.....CHLAMYDOMONAS	1000	10	73	2	20	3	14	1	--	-
.....CHLOROGONIUM	--	-	49	2	--	-	--	-	--	-
....VOLVOCAEAE										
.....GONIUM	--	-	98	3	--	-	--	-	--	-
....PANDORINA	1000	10	--	-	--	-	--	-	--	-
....ZYGNEMALES										
....DESMIDIACEAE										
....COSMARIUM	--	-	--	-	6	1	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCAEAE										
.....CYCLOTELLA	3700#	36	1800#	56	220#	35	56	5	--	-
....MELOSIRA	190	2	--	-	--	-	56	5	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-
..PENNALES										
....ACHNANTHACEAE										
.....COCCONEIS	--	-	--	-	*	0	--	-	--	-
....CYMBELLACEAE										
.....CYMBELLA	--	-	24	1	--	-	14	1	--	-
....FRAGILARIACEAE										
.....SYNEDRA	--	-	--	-	20	3	--	-	--	-
....GOMPHONEMACEAE										
.....GOMPHONEMA	--	-	24	1	*	0	--	-	--	-
....NAVICULACEAE										
.....NAVICULA	--	-	24	1	48	8	28	3	--	-
....NITZSCHIACEAE										
.....NITZSCHIA	--	-	73	2	6	1	70	7	--	-
..CHRYSOPHYCEAE										
...CHRYSOMONADALES										
....OCHROMONADACEAE										
.....OCHROMONAS	--	-	24	1	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOCHRYSIDACEAE										
.....CHROOMONAS	--	-	24	1	6	1	--	-	--	-
....CRYPTOMONADACEAE										
.....CRYPTOMONAS	130	1	120	4	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

NIAGARA RIVER BASIN

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04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

DATE TIME	PHYTOPLANKTON									
	JUL 14, 78 1000		AUG 1, 78 1200		OCT 2, 78 1200		NOV 8, 78 1200		MAR 8, 79 1130	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-
...HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	220# 36		660# 62		530#100	
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
....EUGLENA	64	1	24	1	8	1	--	-	--	-
....TRACHELDMONAS	64	1	24	1	* 0		--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...GYMNODINIALES										
....GYMNODINIACEAE										
....GYMNODINIUM	--	-	24	1	--	-	--	-	--	-
...PERIDINIALES										
....GLENODINIACEAE										
....GLENODINIUM	--	-	24	1	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

NIAGARA RIVER BASIN

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 9,79 1000	JUN 6,79 1000	JUN 28,79 1000	AUG 9,79 1100	SEP 20,79 0800					
TOTAL CELLS/ML	1500	1000	1400	1400	87					
DIVERSITY: DIVISION	0.6	1.3	1.7	1.5	1.3					
..CLASS	0.6	1.3	1.7	1.5	1.3					
..ORDER	0.8	1.4	2.4	2.4	1.8					
...FAMILY	1.8	1.4	2.6	2.7	1.8					
....GENUS	1.8	1.4	2.8	2.7	1.8					
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...CHARACIACEAE										
....CHARACIUM	--	-	--	-	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	39	3	52	4	14#	17
....KIRCHNERIELLA	--	-	--	-	52	4	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....QUADRIGULA	--	-	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	160	11	230#	17	--	-
..ULOTRICHIALES										
...MICROSPORACEAE										
....MICROSPORA	--	-	--	-	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	28	2	13	1	450#	31	26	2	--	-
....CHLOROGONIUM	--	-	--	-	--	-	--	-	--	-
...VOLVOCAEAE										
....GONIUM	--	-	--	-	--	-	210#	15	--	-
....PANDORINA	--	-	--	-	--	-	--	-	--	-
..ZYGNEATALES										
...DESMIDIACEAE										
....COSMARITUM	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	56	4	39	4	52	4	360#	27	14#	17
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
...STEPHANODISCUS	--	-	--	-	100	7	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	13	1	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....SYNEDRA	--	-	--	-	--	-	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	28	2	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	690#	47	--	-	26	2	--	-	--	-
...NITZSCHIAEAE										
....NITZSCHIA	520#	36	220#	22	78	5	300#	22	43#	50
..CHRYSOPHYCEAE										
...CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	13	1	13	1	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	78	8	52	4	100	8	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

NIAGARA RIVER BASIN

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04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 9,79 1000		JUN 6,79 1000		JUN 28,79 1000		AUG 9,79 1100		SEP 20,79 0800	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	410# 29		--	-	--	-
....ANACYSTIS	140	10	--	-	--	-	52	4	--	-
...HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	650# 65		--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	13 1		--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-	14# 17	
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...GYMNODINIALES										
...GYMNODINIACEAE										
....GYMNODINIUM	--	-	--	-	--	-	--	-	--	-
...PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

NIAGARA RIVER BASIN

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	495	525	410	419	418	285	420	438	520	540	482
2	558	510	530	215	440	482	320	435	430	460	485	470
3	555	522	483	245	445	331	290	438	462	458	420	481
4	539	535	570	375	438	316	322	442	478	470	365	450
5	530	540	315	375	350	221	360	422	480	470	380	458
6	520	530	355	395	445	210	320	418	518	477	420	462
7	545	542	390	390	445	270	340	435	540	465	460	425
8	522	---	415	410	455	285	370	440	500	480	462	459
9	520	520	370	395	420	322	370	440	392	480	440	510
10	522	535	345	405	465	300	360	448	357	498	416	512
11	530	545	385	420	455	280	410	470	430	485	419	518
12	522	545	425	445	462	342	350	480	440	495	442	503
13	522	535	450	460	463	350	319	385	520	495	439	520
14	530	550	465	680	470	338	270	440	425	448	458	444
15	495	550	465	420	470	268	272	475	470	500	540	298
16	395	550	485	349	470	320	310	485	465	519	467	332
17	445	525	495	385	475	315	328	480	475	518	470	418
18	485	595	505	405	455	335	328	472	480	510	472	462
19	502	545	465	418	500	310	358	482	510	490	479	484
20	525	550	485	430	501	300	420	510	500	520	470	520
21	520	665	455	455	475	310	392	520	515	520	474	536
22	555	535	285	455	500	290	402	520	538	518	482	560
23	530	750	350	430	520	280	410	518	538	520	482	561
24	525	565	410	475	462	245	420	485	540	510	480	566
25	540	575	425	460	380	235	419	490	542	540	498	571
26	555	470	425	295	330	258	418	485	522	519	490	584
27	520	485	425	318	360	302	470	480	520	575	502	---
28	400	485	425	358	380	330	438	460	518	520	510	580
29	422	505	445	372	---	385	389	440	510	470	505	594
30	455	565	450	402	---	320	440	430	500	478	440	590
31	480	---	500	415	---	280	---	388	---	442	416	---
MEAN	510	545	436	402	445	308	363	459	485	496	462	495

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	7.5	.0	1.0	1.0	1.0	9.0	11.0	17.0	20.0	23.0	21.5
2	14.0	7.5	.0	1.0	1.0	1.0	7.0	9.0	19.0	20.5	23.5	21.0
3	12.5	8.0	.0	1.0	1.0	1.0	7.0	10.5	19.0	20.0	22.0	21.0
4	15.0	8.0	2.0	1.0	1.0	1.0	6.0	11.0	20.0	20.0	23.0	22.0
5	14.0	9.0	1.5	1.0	1.0	1.0	5.0	11.0	21.0	19.0	23.0	22.0
6	14.0	10.0	1.5	1.0	1.0	1.0	3.0	11.0	21.0	18.0	23.0	21.0
7	13.0	10.0	2.5	1.0	1.0	1.0	1.0	12.0	21.0	18.0	22.0	19.5
8	11.5	9.0	4.0	1.0	1.0	2.0	1.0	14.0	21.0	21.0	22.0	19.0
9	11.0	8.0	4.5	1.0	1.0	3.0	1.0	17.5	22.0	23.0	23.0	18.0
10	10.0	8.0	1.0	1.0	1.0	4.0	1.0	20.0	23.0	23.0	21.0	18.0
11	11.0	8.0	1.0	1.0	1.0	2.0	5.0	22.0	22.0	21.5	19.0	17.0
12	11.0	7.0	1.0	1.0	1.0	1.0	5.0	22.5	17.0	22.0	20.0	16.0
13	14.0	7.0	1.5	1.0	1.0	2.0	5.0	19.0	17.0	22.0	18.0	16.0
14	12.0	7.0	1.0	1.0	1.0	3.0	5.5	17.0	16.0	25.0	21.0	17.0
15	10.0	6.0	1.0	1.0	1.0	1.0	7.0	17.0	19.0	27.0	18.5	13.0
16	8.0	7.0	1.0	1.0	1.0	1.0	6.0	17.0	20.0	25.0	16.5	13.5
17	8.0	7.0	1.0	1.0	1.0	3.0	5.0	17.0	23.0	24.0	19.0	15.0
18	7.0	6.0	1.0	1.0	1.0	4.0	7.0	19.0	22.0	24.0	16.5	15.0
19	7.0	6.0	1.0	1.0	1.0	5.0	9.0	20.0	20.0	27.0	17.5	15.0
20	7.0	5.0	1.0	1.0	1.0	5.0	10.0	20.0	21.0	24.0	17.0	13.0
21	8.0	7.0	1.0	1.0	1.0	5.0	10.0	19.0	22.0	24.0	18.5	13.0
22	10.0	3.0	1.0	1.0	1.0	6.0	12.0	19.0	22.0	24.0	19.5	14.0
23	11.0	4.0	1.0	1.0	1.0	8.0	12.5	18.0	20.0	24.0	20.0	12.0
24	11.0	2.0	1.0	1.0	1.0	10.0	13.5	17.0	18.0	26.0	20.5	11.0
25	10.0	3.0	1.0	1.0	1.0	8.0	16.0	15.0	16.5	25.0	14.0	11.0
26	10.0	2.0	1.0	1.0	1.0	3.0	17.0	12.0	16.0	25.0	20.0	12.0
27	10.5	1.0	1.0	1.0	1.0	2.0	15.0	11.5	18.0	22.0	18.0	14.0
28	9.0	.5	1.0	1.0	1.0	2.5	12.5	13.0	---	22.0	19.0	14.0
29	8.0	.0	1.0	1.0	---	7.0	10.0	13.0	21.0	20.0	20.0	14.0
30	6.5	.0	1.0	1.0	---	8.0	11.0	13.5	20.0	24.0	19.0	14.0
31	7.0	---	1.0	1.0	---	10.0	---	15.0	---	25.0	20.0	---
MEAN	10.5	6.0	1.0	1.0	1.0	3.5	8.0	15.5	20.0	22.5	20.0	16.0

NIAGARA RIVER BASIN

289

04217500 TONAWANDA CREEK NEAR ALABAMA, NY

LOCATION.--Lat 43°05'28", long 78°27'15", Genesee County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) downstream from bridge on Meadville Road, 0.4 mi (0.6 km) downstream from inoperable canal feeder connecting Tonawanda and Oak Orchard Creeks, 1.1 mi (1.8 km) upstream from small tributary, and 3.2 mi (5.1 km) west of Alabama.

DRAINAGE AREA.--231 mi² (598 km²).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973. WDR NY-75-1: 1959 (P).

GAGE.--Water-stage recorder. Datum of gage is 605.93 ft (184.687 m) National Geodetic Vertical Datum of 1929. Prior to October 1965, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--24 years, 283 ft³/s (8.015 m³/s), 16.64 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft³/s (226 m³/s) Mar. 31, 1960, gage height, 14.28 ft (4.353 m); maximum gage height, 15.95 ft (4.862 m) Jan. 23, 1959 (ice jam); minimum daily, 7.7 ft³/s (0.22 m³/s) Sept. 14, 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft³/s (59.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1800	3,790 107	12.80 3.901	Mar. 6	0700	*a4,200 119	*b14.17 4.319
Jan. 27	unknown	a2,100 59.5 b unknown		Sept. 16	0700	3,340 94.6	12.44 3.792

a About.
b Ice jam.

Minimum discharge, 15 ft³/s (0.42 m³/s) July 22, gage height, 5.07 ft (1.545 m).

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	90	91	935	460	540	1030	192	164	83	33	62
2	36	81	101	3320	390	560	798	177	123	71	65	43
3	35	74	113	2100	340	780	1010	164	102	63	59	42
4	38	70	245	720	350	1500	784	172	88	57	43	91
5	42	66	804	400	320	3000	712	202	79	51	34	58
6	47	63	482	300	290	3900	779	172	73	44	30	44
7	52	61	258	290	260	2500	494	153	69	39	29	45
8	49	58	211	310	250	1470	528	141	69	38	59	49
9	53	58	430	290	240	1130	497	128	164	37	37	45
10	52	57	462	260	220	1060	528	117	121	35	29	42
11	44	55	243	240	210	1320	632	105	143	37	30	38
12	41	53	215	230	200	912	818	110	147	35	30	37
13	40	52	175	220	190	583	1090	288	114	33	31	35
14	51	54	160	280	180	864	1740	280	88	31	33	700
15	258	54	163	480	180	1400	1500	183	73	39	33	1880
16	235	50	152	600	170	920	912	145	65	39	27	2650
17	136	53	153	500	160	646	743	126	59	37	26	771
18	97	60	229	400	150	672	650	110	52	33	24	330
19	79	61	235	320	150	711	455	97	49	30	23	225
20	72	68	200	270	140	650	361	86	46	27	23	161
21	73	61	375	260	140	625	305	86	45	24	23	128
22	79	56	895	260	150	646	274	94	44	22	23	106
23	64	56	899	260	230	689	250	99	44	22	24	92
24	58	62	459	250	360	813	230	83	51	22	20	81
25	57	107	268	400	840	1100	209	85	52	27	21	73
26	69	110	250	960	940	1520	195	130	46	47	21	66
27	235	86	249	1800	840	788	202	213	45	50	28	61
28	313	68	226	1600	640	458	277	228	45	46	35	57
29	182	78	200	1100	---	393	277	199	46	38	51	57
30	126	80	200	720	---	697	223	235	79	31	96	57
31	103	---	234	540	---	1100	---	271	---	31	119	---
TOTAL	2856	2002	9377	20615	8990	33947	18503	4871	2385	1219	1159	8126
MEAN	92.1	66.7	302	665	321	1095	617	157	79.5	39.3	37.4	271
MAX	313	110	899	3320	940	3900	1740	288	164	83	119	2650
MIN	35	50	91	220	140	393	195	83	44	22	20	35
CFSM	.40	.29	1.31	2.88	1.39	4.74	2.67	.68	.34	.17	.16	1.17
IN.	.46	.32	1.51	3.32	1.45	5.47	2.98	.78	.38	.20	.19	1.31
CAL YR 1978	TOTAL	100258	MEAN 275	MAX 3450	MIN 15	CFSM 1.19	IN 16.15					
WTR YR 1979	TOTAL	114050	MEAN 312	MAX 3900	MIN 20	CFSM 1.35	IN 18.37					

NIAGARA RIVER BASIN

04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi (7.4 km) east of Pendleton, 4.9 mi (7.9 km) downstream from Beeman Creek, and 5.9 mi (9.5 km) upstream from Mud Creek.

DRAINAGE AREA.--351 mi² (909 km²), includes 0.76 mi² (1.97 km²) in Mud Creek from which flow is diverted into Black Creek.

PERIOD OF RECORD.--August 1955 to September 1965, March 1978 to current year (seasonal gage-height records only).

GAGE.--Water-stage recorder. Datum of gage is 571.19 ft (174.099 m) National Geodetic Vertical Datum of 1929.

AVERAGE DISCHARGE.--10 years (1956-65), 355 ft³/s (10.05 m³/s), 13.73 in/yr (349 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft³/s (178 m³/s) Apr. 1, 1960, gage height, 16.96 ft (5.169 m); minimum daily, 6.8 ft³/s (0.19 m³/s) Sept. 29, 30, 1965; minimum gage height, 1.13 ft (0.344 m) Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.91 ft (4.849 m) Mar. 7; minimum, 1.19 ft (0.363 m) July 23, 24.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.30	1.77	1.64	4.02		---	5.82	2.40	2.25	1.52	1.33	1.99
2	1.29	1.68	1.73	7.11		---	5.98	2.28	2.00	1.55	1.40	1.71
3	1.26	1.62	1.79	8.74		---	6.01	2.21	1.83	1.52	1.53	1.69
4	1.26	1.58	2.10	9.99		---	5.98	2.17	1.72	1.47	1.54	1.62
5	1.29	1.55	2.74	---		---	5.98	2.19	1.65	1.42	1.44	1.71
6	1.32	1.53	3.88	---		14.01	5.66	2.25	1.61	1.39	1.36	1.57
7	1.37	1.51	3.51	---		15.69	5.09	2.17	1.57	1.34	1.32	1.47
8	1.42	1.49	2.76	---		14.23	4.01	2.10	1.54	1.30	1.31	1.45
9	1.40	1.46	2.69	---		11.69	3.80	2.05	1.60	1.29	1.47	1.44
10	1.41	1.46	3.15	---		8.93	3.67	2.00	1.88	1.29	1.38	1.43
11	1.41	1.45	2.98	---		7.68	4.11	1.94	1.82	1.28	1.31	1.40
12	1.36	1.44	2.48	---		8.59	5.28	1.90	1.88	1.29	1.29	1.37
13	1.34	1.43	2.35	---		7.61	6.30	2.11	1.88	1.28	1.30	1.35
14	1.37	1.43	2.20	---		5.50	7.14	2.52	1.75	1.27	1.34	3.15
15	1.46	1.44	2.22	---		6.07	8.50	2.47	1.63	1.29	1.36	8.04
16	2.08	1.43	2.05	---		6.69	8.11	2.24	1.54	1.34	1.34	8.85
17	2.14	1.42	2.10	---		6.36	6.11	2.07	1.48	1.35	1.29	10.11
18	1.87	1.46	2.14	---		4.97	5.03	1.97	1.43	1.33	1.28	8.60
19	1.70	1.51	2.32	---		4.72	4.33	1.91	1.40	1.29	1.26	5.06
20	1.60	1.51	2.08	---		4.68	3.52	1.86	1.37	1.27	1.25	3.09
21	1.56	1.54	2.37	---		4.38	3.04	1.81	1.35	1.24	1.24	2.46
22	1.56	1.51	2.88	---		4.16	2.79	1.78	1.35	1.22	1.23	2.21
23	1.59	1.49	4.11	---		4.07	2.66	1.79	1.34	1.20	1.24	2.05
24	1.54	1.53	4.75	---		4.10	2.57	1.78	1.33	1.19	1.30	1.92
25	1.50	1.56	3.92	---		4.56	2.46	1.71	1.36	1.21	1.28	1.83
26	1.52	1.72	2.86	---		5.54	2.37	1.77	1.38	1.30	1.25	1.75
27	1.67	1.75	2.46	---		6.41	2.34	1.96	1.35	1.46	1.31	1.68
28	2.15	1.64	2.34	---		4.75	2.41	2.18	1.34	1.46	1.45	1.63
29	2.40	1.55	2.44	---		3.33	2.61	2.20	1.35	1.42	1.75	1.60
30	2.15	1.62	2.07	---		3.38	2.56	2.15	1.37	1.39	2.23	1.59
31	1.91	---	2.16	---		4.75	---	2.25	---	1.33	2.20	---
MEAN	1.59	1.54	2.62	---	---	---	4.54	2.07	1.58	1.34	1.41	2.86
MAX	2.40	1.77	4.75	---	---	---	8.50	2.52	2.25	1.55	2.23	10.11
MIN	1.26	1.42	1.64	---	---	---	2.34	1.71	1.33	1.19	1.23	1.35

NIAGARA RIVER BASIN

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04218190 BLACK CREEK NEAR SWORMVILLE, NY

LOCATION.--Lat 43°03'33", long 78°41'50", Erie County, Hydrologic Unit 04120104, at bridge on State Highway 78, 350 ft (110 m) north of Wolcott Road, 1.4 mi (2.3 km) upstream from mouth, 1.4 mi (2.3 km) north of Swormville, and 1.6 mi (2.6 km) south of junction of State Highways 78 and 263 at Millersport.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

PERIOD OF RECORD.--Seasonal gage-height records only March 1978 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 573.74 ft (174.876 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Flood flows from Tonawanda Creek can enter Black Creek at the extreme upstream end of the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 9.29 ft (2.832 m) Mar. 8, 1979; minimum observed, 1.52 ft (0.463 m) July 16, 1979, during period of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum gage height 9.29 ft (2.832 m) Mar. 8; minimum observed, 1.52 ft (0.463 m) July 16, during period of no gage-height record.

 GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.16	3.64	4.08	5.87			3.08	2.22	1.94			2.40
2	3.15	3.60	4.36	6.08			4.00	2.15	1.92			2.10
3	3.13	3.57	4.43				4.21	2.12	1.89			3.11
4	3.27	3.55	5.80				3.58	2.27	1.86			2.89
5	3.53	3.53	5.34				4.60	2.24	1.85			2.19
6	3.87	3.50	4.72			5.50	4.06	2.18	1.83			1.89
7	4.65	3.48	4.40			7.14	3.54	2.15	1.81			1.81
8	4.09	3.46	4.75			9.16	3.08	2.11	1.80			1.77
9	3.87	3.44	5.34			7.72	3.31	2.06	1.78			1.73
10	3.70	3.43	4.58			5.14	4.24	2.03	1.77			1.72
11	3.60	3.42	4.19			3.86	4.46	2.00	1.85			1.71
12	3.52	3.41	4.04			3.30	3.70	2.20	1.81			1.68
13	3.66	3.40	3.91			3.02	3.27	2.59	1.78			1.64
14	4.19	3.44	4.00			3.70	3.02	2.47	1.76			5.26
15	4.50	3.48	3.96			3.22	2.72	2.27	1.74			7.57
16	4.11	3.48	3.95			3.01	2.51	2.15	1.73			7.02
17	3.78	3.51	4.31			2.88	2.36	2.04	1.73			5.84
18	3.69	3.79	4.23			2.96	2.25	1.97	1.72			4.45
19	3.62	3.80	3.32			2.77	2.22	1.93	1.72			3.71
20	3.57	3.71	2.48			2.61	2.17	1.91	1.73			3.16
21	3.53	3.64	4.15			2.49	2.13	1.90				2.72
22	3.48	3.59	3.57			2.39	2.11	1.89				2.37
23	3.46	3.66	3.21			2.31	2.11	1.88				2.12
24	3.47	4.16	2.93			2.23	2.10	1.85				1.98
25	3.46	3.98	2.73			2.52	2.07	1.89				1.91
26	3.95	3.80	2.66			2.46	2.08	2.06				1.88
27	4.71	3.70	2.66			2.29	2.33	2.23				1.84
28	4.10	3.65	2.66			2.19	2.53	2.16				1.82
29	3.85	3.65	2.66			2.21	2.41	2.07			2.84	1.80
30	3.74	3.85	2.65			3.37	2.30	2.01			3.75	1.79
31	3.68	---	2.86			3.50	---	1.97			3.34	---
MEAN	3.74	3.61	3.84	---	---	---	2.95	2.10	---	---	---	2.80
MAX	4.71	4.16	5.80	---	---	---	4.60	2.59	---	---	---	7.57
MIN	3.13	3.40	2.48	---	---	---	2.07	1.85	---	---	---	1.64

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi (1.3 km) upstream from sewage treatment plant, and 1.4 mi (2.3 km) northwest of Williamsville.

PERIOD OF RECORD.--October 1972 to current year.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, Nov. 30 to Jan. 4, which are poor. Regulation by intermittent pumping from stone quarry into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 04218500 between October 1955 and September 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft³/s (72.2 m³/s) Mar. 5, 1979, gage height 9.16 ft (2.792 m); maximum gage height, 9.23 ft (2.813 m) Sept. 26, 1977; no flow for part of July 27, 1976, gage height, 0.73 ft (0.222 m), result of pipeline construction.

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 2	--	1,570	44.5	6.69	2.039	Sept. 15	2015	2,120	60.0	8.11	2.472
Mar. 5	2200	*2,550	72.2	*9.16	2.792						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	25	54	1000	182	284	351	70	47	23	40	83
2	12	20	56	1350	160	328	328	61	34	23	32	65
3	11	31	80	600	140	453	580	60	27	22	27	49
4	42	30	270	190	120	960	403	60	23	19	22	50
5	37	28	310	150	110	1950	393	72	22	17	14	36
6	93	27	180	150	110	1900	411	68	19	10	12	42
7	68	25	120	130	110	781	218	59	19	8.1	11	38
8	35	13	120	110	100	506	186	53	19	7.2	19	35
9	29	11	230	110	90	367	184	50	18	6.8	20	32
10	29	11	120	98	78	346	194	47	30	8.6	20	36
11	24	23	96	94	68	421	308	45	63	7.6	11	34
12	17	21	100	94	62	218	503	53	36	7.2	10	30
13	41	21	84	92	58	160	623	45	40	6.8	9.5	29
14	57	27	76	98	58	250	598	94	35	6.4	45	1220
15	56	15	70	130	56	420	419	84	30	6.0	26	1770
16	71	14	80	160	54	200	248	72	26	13	22	1170
17	42	24	96	170	54	188	200	62	24	8.6	14	290
18	41	35	100	140	52	212	175	54	23	7.6	13	151
19	37	31	66	120	52	208	130	52	22	12	13	109
20	34	31	76	110	52	165	88	48	22	15	12	87
21	31	29	200	100	60	141	87	47	22	9.1	12	57
22	32	26	360	98	78	125	77	46	20	6.8	12	65
23	34	29	280	98	120	112	74	45	19	8.6	17	60
24	18	27	150	141	270	108	70	46	19	6.8	24	56
25	16	38	100	277	480	146	64	65	19	26	29	53
26	77	35	110	346	568	218	65	65	18	91	14	51
27	123	26	100	489	383	125	82	76	16	36	82	49
28	143	35	86	419	298	94	102	90	28	29	76	48
29	80	53	80	328	---	112	109	78	26	23	293	47
30	54	52	96	259	---	306	84	70	24	21	248	46
31	43	---	150	208	---	464	---	76	---	29	149	---
TOTAL	1443	813	4096	7859	4023	12268	7354	1913	790	521.2	1348.5	5888
MEAN	46.5	27.1	132	254	144	396	245	61.7	26.3	16.8	43.5	196
MAX	143	53	360	1350	568	1950	623	94	63	91	293	1770
MIN	11	11	54	92	52	94	64	45	16	6.0	9.5	29
CFSM	.60	.35	1.70	3.27	1.86	5.10	3.16	.80	.34	.22	.56	2.53
IN.	.69	.39	1.96	3.77	1.93	5.88	3.53	.92	.38	.25	.65	2.82
CAL YR 1978	TOTAL	36398.4	MEAN	99.7	MAX	1650	MIN	2.7	CFSM	1.29	IN	17.45
WTR YR 1979	TOTAL	48316.7	MEAN	132	MAX	1950	MIN	6.0	CFSM	1.70	IN	23.16

NIAGARA RIVER BASIN

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04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft (152 m) downstream from headgate in old Erie Canal, 700 ft (213 m) downstream from bridge on State Highway 350, 0.2 mi (0.3 km) downstream from Lock 30, and 2.6 mi (4.2 km) upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1977 to current year (navigation seasons only), October 1950 to September 1977. Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951.

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft (136.422 m) National Geodetic Vertical Datum of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--Records good except those for non-navigation season, which are poor. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the period when the navigation pool upstream from Lock 30 is lowered, from Dec. 1 to May 6, discharge consists of leakage through guard gates, runoff from small areas tributary to canal upstream from station, or diversion for use downstream in the Canal system.

COOPERATION.--Records of gate openings, lockages, lock-value openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--27 years (1950-77), 200 ft³/s (5.664 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft³/s (24.8 m³/s) Dec. 3, 1969; minimum daily, 0.8 ft³/s (0.023 m³/s) Feb. 25, 26, 1962.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	250	221				260	3.0	253	345	347	324
2	254	247	201				260	3.2	262	346	338	341
3	255	248	181				260	3.4	271	348	332	339
4	262	254	53				260	3.0	287	343	334	325
5	256	254	51				260	12	313	336	324	332
6	259	257	47				260	13	325	343	330	330
7	263	251	47				260	137	346	357	318	318
8	259	254	47				260	11	347	351	327	318
9	258	263	48				260	11	334	336	336	307
10	262	251	47				260	20	347	341	327	318
11	263	263	47				260	14	348	327	330	323
12	257	253	47				260	17	348	328	327	325
13	263	249	47				270	11	317	336	332	322
14	260	252	47				260	14	158	347	341	384
15	266	251	47				260	109	231	346	334	325
16	259	247	47				260	258	362	334	325	342
17	261	253	47				726	257	359	332	336	343
18	260	252	47				229	256	352	326	330	326
19	253	251	46				102	263	355	342	324	312
20	254	249	47				71	266	348	339	328	310
21	262	244	32				57	252	336	343	327	269
22	262	245	15				41	250	339	363	327	235
23	255	233	14				29	256	336	362	322	245
24	255	210	12				11	256	336	361	316	226
25	255	171	12				2.0	256	350	353	316	222
26	257	131	10				2.0	255	362	354	320	227
27	251	98	9.5				2.0	269	355	348	322	221
28	254	77	8.5				3.0	255	345	355	312	223
29	251	55	7.5				3.0	259	337	350	330	230
30	252	128	7.5				3.0	258	316	339	323	224
31	253	---	7.5				---	263	---	327	321	---
TOTAL	7988	6641	1547.5				5451.0	4510.6	9675	10658	10156	8886
MEAN	258	221	49.9				182	146	323	344	328	296
MAX	266	263	221				726	269	362	363	347	384
MIN	251	55	7.5				2.0	3.0	158	326	312	221

ST. LAWRENCE RIVER MAIN STEM

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY
(National stream-quality accounting network station)

LOCATION (REVISED).--Lat 43°15'40", long 79°03'47", Niagara County, Hydrologic Unit 04120104, specific-conductance and water-temperature recorder on U.S. Coast Guard wharf at Old Fort Niagara, at mouth of Niagara River, and 1.0 mi (1.6 km) northwest of Youngstown. Water samples collected about 2 mi (3 km) upstream from U.S. Coast Guard wharf.

DRAINAGE AREA.--265,000 mi² (686,350 km²).

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

CHEMICAL DATA: 1971 (a), 1973-74 (b), 1975-79 (c).

MINOR ELEMENTS DATA: 1971 (a), 1972-79 (b).

ORGANIC DATA: OC--1973 (a), 1974-75 (b), 1978-79 (c).

NUTRIENT DATA: 1971 (a), 1973-74 (b), 1975-79 (c).

BIOLOGICAL DATA:

Bacteria--1973 (b), 1974 (d), 1975-79 (c).

Phytoplankton--1973 (b), 1974 (d), 1975-77 (c), 1978-79 (b).

Periphyton--1974 (a), 1975-79 (b).

SEDIMENT DATA: 1975-77 (c), 1978 (b), 1979 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1973 to current year.

WATER TEMPERATURES: September 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1973.

REMARKS.--Published in 1971 as "at Youngstown." Discharge is estimated on the basis of records for Niagara River at Buffalo (station 04216000). Interruptions in the record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water year 1978): Maximum recorded, 333 micromhos March 15, 16, 1978; minimum recorded, 205 micromhos Jan. 9, 1978.

WATER TEMPERATURES: Maximum recorded (water years 1977-78), 25.5°C July 20-22, 1977; minimum (water years 1976-79), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT												
10...	1400	E223000	290	7.9	15.0	3.0	8.4	86	K85	K19	130	24
30...	1400	E219000	300	7.6	12.0	2.0	10.0	93	K91	39	140	47
APR												
11...	1345	E209000	335	7.6	1.0	7.0	11.6	81	K150	72	120	35
MAY												
07...	1600	E238000	290	7.8	7.0	1.0	9.0	76	K98	22	120	33
JUN												
04...	1400	E249000	315	7.4	12.0	1.0	7.6	73	K18	K8	130	37
26...	1400	E233000	318	7.4	17.0	3.0	8.9	93	K150	K2	120	23
JUL												
31...	1400	E234000	295	7.7	23.5	2.0	8.4	100	370	K12	130	16
SEP												
10...	1400	E230000	300	6.9	20.5	1.0	93.0	103	K100	K16	120	36

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 (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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
10...	39	8.8	10	.3	110	27	22	.1	.4	169	174	.14
30...	41	9.0	11	1.4	93	27	24	.1	.2	179	170	.15
APR												
11...	35	7.5	11	1.6	83	26	22	.1	.3	170	153	.21
MAY												
07...	35	7.8	11	1.4	87	26	22	.1	.1	192	156	.31
JUN												
04...	37	7.9	11	1.4	88	27	20	.1	.1	156	157	.25
26...	35	8.0	11	1.9	97	26	22	.1	.2	190	163	.28
JUL												
31...	37	8.1	10	1.2	85	26	19	.1	.3	176	168	.21
SEP												
10...	36	7.8	10	1.3	86	24	20	.1	.2	167	152	.14

B Estimated.

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

ST. LAWRENCE RIVER MAIN STEM

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04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT												
10...	.04	.48	.52	.59	.66	.02	.01	--	--	--	--	--
30...	.10	.12	.22	.24	.37	.00	.00	2	1	100	100	2
APR												
11...	.06	.17	.23	.83	.44	.02	.01	--	--	--	--	--
MAY												
07...	.05	.52	.57	.27	.88	.14	.01	1	1	0	0	3
JUN												
04...	.07	.28	.35	.35	.60	.01	.01	--	--	--	--	--
26...	.09	.24	.33	.31	.61	.02	.02	1	1	0	30	4
JUL												
31...	.05	.29	.34	.31	.55	.02	.01	--	--	--	--	--
SEP												
10...	.06	.39	.45	.37	.59	.02	.01	2	1	0	20	30

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT												
10...	--	--	--	--	--	--	--	--	--	--	--	--
30...	0	20	0	0	0	6	3	190	10	4	5	0
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
07...	2	10	<10	1	0	8	5	130	0	26	8	10
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
26...	0	--	10	0	0	20	27	270	0	26	9	20
JUL												
31...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
10...	5	10	<10	0	2	11	6	190	0	16	0	0

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT												
10...	--	--	--	--	--	--	--	--	--	6.4	--	--
30...	0	<.5	<.5	0	0	0	0	30	10	--	3.1	1.2
APR												
11...	--	--	--	--	--	--	--	--	--	2.3	--	--
MAY												
07...	3	<.5	<.5	0	0	0	0	30	20	--	40	1.9
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
26...	5	<.5	<.5	0	0	0	0	40	10	--	5.3	2.0
JUL												
31...	--	--	--	--	--	--	--	--	--	4.5	--	--
SEP												
10...	1	<.5	<.5	0	0	0	0	20	20	--	3.1	.7

ST. LAWRENCE RIVER MAIN STEM

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT						JUN					
10...	1330	3.0	200	290	15.0	04...	1315	30	200	315	12.0
10...	1335	10	200	290	15.0	04...	1405	3.0	800	315	12.0
10...	1340	25	200	290	14.5	04...	1410	10	800	315	12.0
10...	1345	40	200	290	14.5	04...	1415	22	800	315	12.0
10...	1401	3.0	800	295	15.0	04...	1420	45	800	315	12.0
10...	1405	10	800	295	15.0	04...	1505	3.0	1400	310	12.5
10...	1410	30	800	295	15.0	04...	1510	10	1400	315	12.5
10...	1415	50	800	295	14.5	04...	1515	15	1400	310	12.0
10...	1430	3.0	1400	325	15.5	04...	1520	20	1400	305	12.0
10...	1435	10	1400	320	15.0	26...	1245	3.0	200	290	17.0
10...	1440	20	1400	320	15.0	26...	1250	10	200	290	17.0
10...	1445	30	1400	315	15.0	26...	1255	20	200	295	17.0
30...	1340	3.0	200	290	11.5	26...	1300	30	200	295	17.0
30...	1345	10	200	290	11.5	26...	1315	3.0	800	295	17.0
30...	1350	20	200	292	11.5	26...	1320	10	800	300	17.0
30...	1355	30	200	295	11.5	26...	1325	25	800	300	17.0
30...	1410	3.0	800	300	11.5	26...	1330	40	800	300	17.0
30...	1415	10	800	300	11.5	26...	1345	3.0	1400	290	17.5
30...	1420	25	800	300	11.5	26...	1350	10	1400	290	17.0
30...	1425	45	800	300	11.5	26...	1355	15	1400	295	17.0
30...	1440	3.0	1400	290	11.5	26...	1405	20	1400	295	17.0
30...	1445	10	1400	300	11.5	JUL					
30...	1450	20	1400	300	11.5	31...	1340	3.0	200	295	24.0
30...	1455	30	1400	300	11.5	31...	1345	10	200	295	23.5
MAY						31...	1350	20	200	295	23.5
07...	1405	3.0	200	305	7.5	31...	1355	30	200	295	23.5
07...	1410	10	200	305	7.0	31...	1410	3.0	800	295	24.0
07...	1415	25	200	310	7.0	31...	1415	10	800	295	24.0
07...	1420	40	200	315	7.0	31...	1420	30	800	295	23.5
07...	1440	3.0	800	315	7.0	31...	1425	50	800	300	23.5
07...	1445	10	800	315	7.0	31...	1440	3.0	1400	300	24.0
07...	1450	25	800	315	7.0	31...	1445	10	1400	300	24.0
07...	1455	40	800	315	7.0	31...	1450	20	1400	300	23.5
07...	1515	3.0	1400	315	7.0	31...	1455	30	1400	300	23.5
07...	1520	10	1400	315	7.0	SEP					
07...	1525	20	1400	315	7.0	10...	1235	3.0	200	290	20.5
07...	1530	30	1400	315	7.0	10...	1240	10	200	295	20.5
JUN						10...	1245	20	200	300	20.5
04...	1300	3.0	200	310	12.0	10...	1250	30	200	295	20.5
04...	1305	10	200	310	12.0	10...	1310	3.0	800	300	20.5
04...	1310	20	200	315	12.0	10...	1315	10	800	300	20.5
						10...	1320	25	800	300	20.5
						10...	1325	40	800	295	20.5
						10...	1405	3.0	1400	290	20.5
						10...	1410	10	1400	290	20.5
						10...	1415	20	1400	295	21.0

ST. LAWRENCE RIVER MAIN STEM

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04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued
 SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					JUL				
10...	1400	E223000	8	E4800	31...	1400	E234000	6	E3800
30...	1400	E219000	6	E3500	SEP				
MAY					10...	1400	E230000	4	E2500
07...	1600	E238000	7	E3800					
JUN									
04...	1400	E249000	2	E1300					

E Estimated.

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll	Chlorophyll	Sampling method
		Dry weight	Ash weight	a (mg/m ²)	b (mg/m ²)	
Sept. 20 to Oct. 30	40	41.6	36.8	32.3	4.84	Polyethylene strip
Apr. 11 to June 4	54	7.32	6.54	3.28	.740	Polyethylene strip
June 4 to July 31	57	21.5	16.5	49.4	17.7	Polyethylene strip
July 31 to Sept. 10	41	31.4	28.4	46.6	6.52	Polyethylene strip

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 17.78 1400	SEP 20.78 1400	OCT 30.78 1400	MAY 7.79 1600
TOTAL CELLS/ML.	2700	1100	2300	2700
DIVERSITY: DIVISION	1.4	0.2	1.3	1.5
..CLASS	1.5	0.2	1.6	1.5
..ORDER	2.1	0.3	1.7	2.0
...FAMILY	2.8	1.6	1.8	2.5
....GENUS	2.9	1.7	1.8	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....CHARACIACEAE								
....SCHROEDERIA	110	4	15	1	--	--	--	--
....HYDRODICTYACEAE								
....PEDIASTRUM	360	13	230#	20	--	--	14	1
....DOCYSTACEAE								
....ANKISTRODESMUS	--	--	--	--	45	2	200	7
....CHODATELLA	22	1	15	1	22	1	28	1
....DICTYOSPHAERIUM	--	--	--	--	--	--	900#	34
....DOCYSTIS	110	4	710#	62	--	--	--	--
....SCENEDESMACEAE								
....SCENEDESMUS	--	--	120	10	--	--	110	4
....TETRASTRUM	--	--	--	--	--	--	110	4
..TETRASPORALES								
...COCCOMYXACEAE								
....ELAKATOTHRIX	--	--	--	--	45	2	--	--
...PALMELLACEAE								
....SPHAEROCYSTIS	--	--	--	--	--	--	--	--
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	22	1	--	--	--	--	--	--
....CHLAMYDOMONAS	44	2	--	--	--	--	42	2
..ZYGNEMATALES								
...DESMIDIACEAE								
....COSMARIUM	--	--	15	1	--	--	--	--
....STAURASTRUM	--	--	15	1	22	1	--	--
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	22	1	--	--	22	1	140	5
....MELOSIRA	--	--	29	3	--	--	14	1
....STEPHANODISCUS	--	--	--	--	--	--	14	1
..PENNALES								
...FRAGILARIACEAE								
....ASTERIONELLA	--	--	--	--	--	--	--	--
....FRAGILARIA	--	--	--	--	400#	18	98	4
....SYNEDRA	--	--	--	--	--	--	14	1
...NAVICULACEAE								
....NAVICULA	--	--	--	--	--	--	14	1
...NITZSCHIACEAE								
....NITZSCHIA	22	1	--	--	22	1	--	--
...TABELLARIACEAE								
....TABELLARIA	--	--	--	--	--	--	84	3
..CHRYSTOPHYCEAE								
...CHRYSONOMADALES								
...OCHROMONADACEAE								
....DINOBYRON	--	--	--	--	--	--	--	--
....OCHROMONAS	330	12	--	--	160	7	--	--
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROMONAS	--	--	--	--	--	--	--	--
...CRYPTOMONADACEAE								
....CRYPTOMONAS	22	1	--	--	89	4	--	--

NOTE: # - DOMINANT ORGANISM# EQUAL TO OR GREATER THAN 15%

ST. LAWRENCE RIVER MAIN STEM

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04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE: TIME	JUL 17,78 1400	SEP 20,78 1400	OCT 30,78 1400	MAY 7,79 1600
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROOCOCCALES				
...CHROOCOCCACEAE				
....ANACYSTIS	490# 18	-- --	1500# 64	240 9
...HORMOGONALES				
...NOSTOCACEAE				
....ANABAENA	420# 16	-- --	-- --	-- --
...OSCILLATORIA				
...OSCILLATORIA	710# 26	-- --	-- --	630# 24
PYRRHOPHYTA (FIRE ALGAE)				
..DINOPHYCEAE				
...PERIDINIALES				
...GLENODINIACEAE				
...GLENODINIUM	-- --	-- --	-- --	28 1

DATE TIME	JUN 4,79 1400	JUN 26,79 1400	JUL 31,79 1400
TOTAL CELLS/ML	690	230	5000
DIVERSITY: DIVISION	1.6	1.1	1.5
..CLASS	1.6	1.1	1.6
...ORDER	1.7	1.1	2.4
...FAMILY	1.8	1.4	2.5
....GENUS	1.9	1.9	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...CHARACIACEAE						
...SCHROEDERIA	-- --	-- --	-- --	-- --	580 11	
...HYDRODICTYACEAE						
...PEDIASTRUM	-- --	-- --	-- --	-- --	-- --	
...OOCYSTACEAE						
....ANKISTRODESMUS	26 4		-- --	-- --	* 0	
....CHODATELLA	52 8		-- --	-- --	-- --	
...DICTYOSPHAERIUM	-- --	-- --	-- --	-- --	-- --	
...OOCYSTIS	-- --	-- --	-- --	-- --	140 3	
...SCENEDESMACEAE						
...SCENEDESMUS	-- --	-- --	-- --	-- --	-- --	
...TETRASTRUM	-- --	-- --	-- --	-- --	-- --	
..TETRASPORALES						
...COCCOMYXACEAE						
...ELAKATOTHRIX	-- --	-- --	-- --	-- --	-- --	
...PALMELLACEAE						
...SPHAEROCYSTIS	-- --	-- --	-- --	-- --	1500# 30	
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CARTERIA	-- --	-- --	-- --	-- --	-- --	
....CHLAMYDOMONAS	-- --	-- --	-- --	-- --	-- --	
...ZYGNEMATALES						
...DESMIDIACEAE						
...COSMARIVUM	-- --	-- --	-- --	-- --	-- --	
...STAUSTRUM	-- --	-- --	-- --	-- --	-- --	

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ST. LAWRENCE RIVER MAIN STEM

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

DATE TIME	JUN 4,79 1400	JUN 26,79 1400	JUL 31,79 1400
CHRYSTOPHYTA			
..BACILLARIOPHYCEAE			
..CENTRALES			
...COSCINODISCACEAE			
....CYCLOTELLA	13 2	39# 17	-- -
....MELOSIRA	-- -	120# 50	470 9
....STEPHANODISCUS	-- -	-- -	-- -
..PENNALES			
...FRAGILARIACEAE			
....ASTERIONELLA	13 2	-- -	-- -
....FRAGILARIA	-- -	-- -	-- -
....SYNEDRA	-- -	-- -	-- -
...NAVICULACEAE			
....NAVICULA	-- -	-- -	-- -
...NITZSCHACEAE			
....NITZSCHIA	-- -	-- -	-- -
...TABELLARIACEAE			
....TABELLARIA	-- -	-- -	-- -
..CHRYSTOPHYCEAE			
..CHRYSONOMADALES			
...OCHROMONADACEAE			
....DINOBRYON	13 2	-- -	-- -
....OCHROMONAS	-- -	-- -	120 2
CRYPTOPHYTA (CRYPTOMONADS)			
..CRYPTOPHYCEAE			
...CRYPTOMONADALES			
....CRYPTOCHRYSIDACEAE			
....CHROMONAS	170# 25	39# 17	-- -
...CRYPTOMONADACEAE			
....CRYPTOMONAS	13 2	26 11	58 1
CYANOPHYTA (BLUE-GREEN ALGAE)			
..CYANOPHYCEAE			
...CHROOCOCCALES			
....CHROOCOCCACEAE			
....ANACYSTIS	-- -	13 6	720 14
...HORMOGONALES			
...NOSTOCAEAE			
....ANABAENA	-- -	-- -	1400# 28
...OSCILLATORIAEAE			
....OSCILLATORIA	390# 57	-- -	-- -
PYRRHOPHYTA (FIRE ALGAE)			
..DINOPHYCEAE			
...PERIDINIALES			
...GLENODINIACEAE			
....GLENODINIUM	-- -	-- -	-- -

NOTE: # - DOMINANT ORGANISM# EQUAL TO OR GREATER THAN 15%

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04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	292	289	291	301	299	300	297	293	295	306	297	301
2	293	290	292	300	298	299	296	293	294	306	293	296
3	291	290	290	301	298	300	297	296	296	294	292	293
4	291	289	290	300	297	299	301	296	298	298	280	289
5	293	290	292	299	296	298	304	297	300	295	288	289
6	292	290	292	298	297	298	301	298	299	291	289	290
7	292	290	291	299	296	297	298	296	297	289	287	288
8	291	289	290	297	295	296	296	294	295	293	288	290
9	291	288	289	298	295	297	296	294	295	298	270	287
10	290	288	289	298	295	297	295	293	294	291	287	289
11	292	288	290	298	295	296	297	294	295	297	289	294
12	292	290	291	296	294	295	300	297	298	312	292	302
13	291	290	290	297	294	296	300	295	297	297	292	294
14	292	288	290	298	296	297	298	294	296	305	295	300
15	297	290	295	297	294	296	301	292	296	305	292	298
16	297	294	296	295	293	295	303	301	302	299	292	297
17	297	295	296	295	292	295	301	296	298	296	291	294
18	297	296	295	296	292	294	299	296	297	298	290	294
19	296	293	295	297	293	294	297	296	296	301	292	297
20	296	293	294	296	293	295	297	295	296	301	286	292
21	297	292	295	296	293	295	301	293	295	298	295	297
22	297	294	296	294	291	292	301	296	298	299	297	298
23	297	293	295	296	292	294	296	293	295	301	298	299
24	296	293	295	296	295	295	296	295	295	304	298	301
25	296	293	294	296	293	294	296	293	294	314	304	308
26	299	296	299	296	293	294	295	294	295	314	310	312
27	302	298	300	295	292	294	294	292	294	311	304	307
28	301	299	300	295	291	293	294	293	294	306	304	305
29	302	299	301	297	293	295	295	294	294	304	302	303
30	302	299	301	296	294	295	295	293	294	305	301	303
31	302	300	301	---	---	---	297	294	295	304	301	303
MONTH	302	288	294	301	291	296	304	292	296	314	270	297
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	302	288	299							---	---	---
2	---	---	---							---	---	---
3	---	---	---							---	---	---
4	---	---	---							---	---	---
5	---	---	---							---	---	---
6	---	---	---							---	---	---
7	---	---	---							---	---	---
8	---	---	---							288	286	287
9	---	---	---							288	286	287
10	---	---	---							292	286	291
11	---	---	---							289	286	288
12	---	---	---							286	285	286
13	---	---	---							288	285	286
14	---	---	---							293	288	292
15	---	---	---							292	291	292
16	---	---	---							293	292	292
17	---	---	---							297	290	291
18	---	---	---							300	296	298
19	---	---	---							301	297	299
20	---	---	---							300	297	299
21	---	---	---							300	298	299
22	---	---	---							303	300	303
23	---	---	---							303	302	302
24	---	---	---							302	300	301
25	---	---	---							304	299	301
26	---	---	---							306	304	305
27	---	---	---							306	305	306
28	---	---	---							307	304	306
29	---	---	---							310	304	305
30	---	---	---							312	310	311
31	---	---	---							314	311	312
MONTH	302	288	299							314	285	297

ST. LAWRENCE RIVER MAIN STEM

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	315	313	314	312	311	312				---	---	---
2	315	314	315	314	312	312				---	---	---
3	315	314	315	313	312	312				---	---	---
4	323	314	317	312	311	312				---	---	---
5	323	322	323	313	311	312				---	---	---
6	324	321	323	312	310	311				---	---	---
7	325	323	324	311	310	311				---	---	---
8	334	324	327	312	310	311				---	---	---
9	336	334	334	312	310	311				---	---	---
10	336	330	334	312	311	311				---	---	---
11	330	326	327	313	311	312				316	312	315
12	326	323	324	314	312	313				315	311	314
13	325	322	323	315	313	314				316	313	314
14	324	322	323	315	313	314				315	311	313
15	325	322	324	315	313	314				313	302	307
16	326	324	325	316	315	315				312	306	310
17	326	325	326	316	314	315				314	312	313
18	326	323	324	316	314	314				314	312	313
19	324	322	323	316	314	315				313	311	312
20	323	321	322	316	313	314				311	309	310
21	324	321	323	316	315	315				312	310	311
22	322	316	317	316	314	315				313	311	312
23	318	316	317	315	306	309				312	310	311
24	318	316	317	311	306	308				312	310	311
25	318	316	317	312	309	311				312	309	311
26	319	308	314	310	308	309				313	310	311
27	310	308	309	309	307	308				313	311	312
28	310	308	309	307	305	306				314	312	313
29	311	309	310	---	---	---				314	313	314
30	312	310	311	---	---	---				314	313	314
31	---	---	---	---	---	---				---	---	---
MONTH	336	308	320	316	305	312				316	302	312

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.0	17.0	17.0	12.0	11.5	11.5	5.0	5.0	5.0	2.0	1.5	2.0
2	17.0	17.0	17.0	11.5	11.0	11.5	5.0	5.0	5.0	1.5	1.0	1.0
3	17.0	16.5	17.0	11.5	11.0	11.5	6.0	5.0	5.0	1.0	.0	.5
4	17.0	16.5	17.0	11.5	11.5	11.5	6.0	5.0	6.0	.0	.0	.0
5	16.5	16.5	16.5	12.0	11.5	12.0	5.0	4.5	5.0	.0	.0	.0
6	16.5	15.5	16.0	12.0	11.5	12.0	5.0	4.5	5.0	.0	.0	.0
7	15.5	15.0	15.0	11.5	11.0	11.5	5.0	5.0	5.0	.0	.0	.0
8	15.0	14.0	14.5	11.0	11.0	11.0	5.0	5.0	5.0	.0	.0	.0
9	15.0	14.0	14.0	11.0	11.0	11.0	5.0	4.5	5.0	.0	.0	.0
10	15.0	15.0	15.0	11.0	11.0	11.0	4.5	4.0	4.0	.0	.0	.0
11	15.0	15.0	15.0	11.0	11.0	11.0	4.0	3.0	3.0	1.0	.0	1.0
12	15.0	15.0	15.0	11.0	10.0	11.0	3.0	3.0	3.0	1.0	.0	1.0
13	15.0	14.5	15.0	10.0	10.0	10.0	3.0	3.0	3.0	1.0	1.0	1.0
14	14.5	13.0	14.0	10.5	10.0	10.5	3.0	2.5	3.0	1.0	1.0	1.0
15	14.0	13.0	13.5	10.0	9.5	10.0	2.5	2.0	2.5	1.0	1.0	1.0
16	13.0	13.0	13.0	9.5	9.0	9.0	3.0	2.0	2.5	1.0	1.0	1.0
17	13.0	13.0	13.0	9.5	9.0	9.0	3.0	2.5	3.0	1.0	1.0	1.0
18	13.0	13.0	13.0	9.5	9.0	9.0	3.0	2.5	2.5	1.0	.5	1.0
19	13.0	12.5	12.5	9.0	8.5	8.5	2.5	2.0	2.0	1.0	.5	1.0
20	13.0	12.5	12.5	8.5	8.0	8.5	2.5	2.0	2.0	1.0	.5	1.0
21	12.5	12.5	12.5	8.0	8.0	8.0	3.0	2.5	2.5	1.0	.5	1.0
22	13.0	12.5	12.5	8.0	8.0	8.0	2.5	1.5	2.0	1.0	1.0	1.0
23	13.0	12.0	12.5	8.0	8.0	8.0	2.0	2.0	2.0	1.0	.5	.5
24	12.0	11.5	12.0	8.0	8.0	8.0	2.0	1.5	2.0	1.0	.5	1.0
25	12.0	11.5	12.0	8.0	7.0	7.5	2.5	2.0	2.0	1.0	1.0	1.0
26	12.0	12.0	12.0	7.0	6.5	6.5	2.0	1.0	1.5	1.0	.5	1.0
27	12.0	11.0	11.5	6.5	6.0	6.0	1.0	1.0	1.0	1.0	1.0	1.0
28	11.0	11.0	11.0	6.0	6.0	6.0	1.0	.5	1.0	1.0	.5	1.0
29	11.5	11.0	11.0	6.0	5.5	6.0	.5	.0	.5	.5	.5	.5
30	11.5	11.5	11.5	5.5	5.0	5.0	1.0	.5	1.0	.5	.5	.5
31	12.0	11.5	11.5	---	---	---	1.5	1.0	1.0	.5	.5	.5
MONTH	17.0	11.0	13.5	12.0	5.0	9.5	6.0	.0	3.0	2.0	.0	.5

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.0							---	---	---
2	.0	.0	.0							---	---	---
3	.5	.0	.0							---	---	---
4	.5	.0	.0							---	---	---
5	.0	.0	.0							---	---	---
6	.0	.0	.0							---	---	---
7	.0	.0	.0							---	---	---
8	---	---	---							7.5	6.5	7.0
9	---	---	---							8.0	7.0	7.5
10	---	---	---							8.0	7.5	8.0
11	---	---	---							8.5	8.0	8.0
12	---	---	---							9.5	8.0	8.5
13	---	---	---							9.0	8.5	9.0
14	---	---	---							11.0	8.0	9.5
15	---	---	---							11.5	11.0	11.0
16	---	---	---							11.0	11.0	11.0
17	---	---	---							11.5	11.0	11.0
18	---	---	---							12.0	11.0	11.5
19	---	---	---							12.0	11.0	11.5
20	---	---	---							12.5	11.5	12.0
21	---	---	---							12.5	12.0	12.5
22	---	---	---							12.0	12.0	12.0
23	---	---	---							12.0	11.5	11.5
24	---	---	---							11.5	10.5	11.0
25	---	---	---							10.5	9.0	10.0
26	---	---	---							9.0	8.0	8.5
27	---	---	---							8.0	8.0	8.0
28	---	---	---							8.0	7.5	8.0
29	---	---	---							9.0	8.0	8.5
30	---	---	---							9.5	8.5	9.0
31	---	---	---							10.0	9.0	9.5
MONTH	.5	.0	.0							12.5	6.5	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.5	10.0	10.0	17.5	17.0	17.5				---	---	---
2	10.5	10.0	10.0	17.5	17.5	17.5				---	---	---
3	11.0	10.0	10.5	17.5	17.0	17.5				---	---	---
4	12.0	11.0	11.5	18.0	17.5	17.5				---	---	---
5	12.0	11.5	12.0	17.5	17.0	17.5				---	---	---
6	13.0	12.0	12.0	18.0	17.5	17.5				---	---	---
7	13.5	13.0	13.0	18.5	18.0	18.0				---	---	---
8	15.5	13.0	14.0	19.0	18.0	18.5				---	---	---
9	16.0	15.5	15.5	19.0	18.5	19.0				---	---	---
10	16.0	15.5	15.5	19.5	19.0	19.0				---	---	---
11	16.5	16.0	16.0	20.0	19.0	19.5				20.0	20.0	20.0
12	17.0	16.0	16.5	20.5	20.0	20.0				20.0	19.5	20.0
13	16.0	15.5	15.5	21.0	20.5	20.5				20.0	20.0	20.0
14	16.5	15.5	15.5	21.0	21.0	21.0				20.0	19.5	20.0
15	17.5	16.5	17.0	22.0	21.0	21.5				19.5	18.5	19.0
16	17.5	17.0	17.0	23.0	22.0	22.5				19.0	18.5	19.0
17	18.0	17.5	17.5	23.0	22.5	23.0				19.5	19.0	19.0
18	18.0	17.5	18.0	23.0	22.5	22.5				19.5	19.0	19.0
19	17.5	17.0	17.5	23.0	22.5	22.5				19.0	18.0	18.5
20	18.0	17.0	17.5	22.5	21.5	22.0				18.0	18.0	18.0
21	17.5	17.5	17.5	23.5	22.5	22.5				18.0	18.0	18.0
22	17.5	17.5	17.5	23.5	23.0	23.0				18.0	17.5	18.0
23	17.5	17.0	17.0	24.0	22.5	23.0				17.5	17.5	17.5
24	17.0	16.5	17.0	23.0	22.5	22.5				17.5	17.5	17.5
25	17.0	17.0	17.0	22.5	22.5	22.5				17.5	17.5	17.5
26	17.0	17.0	17.0	23.0	22.5	22.5				17.5	17.5	17.5
27	17.0	17.0	17.0	22.5	22.0	22.0				17.5	17.5	17.5
28	17.0	17.0	17.0	22.5	22.0	22.0				17.5	17.5	17.5
29	17.0	17.0	17.0	---	---	---				17.5	17.5	17.5
30	17.5	17.0	17.0	---	---	---				17.5	17.5	17.5
31	---	---	---	---	---	---				---	---	---
MONTH	18.0	10.0	15.5	24.0	17.0	20.5				20.0	17.5	18.5

LAKE ONTARIO

431607077385301 (042202528) LAKE ONTARIO NEAR ROCHESTER, NY

LOCATION.--Lat 43°16'07", long 77°38'53", Monroe County, Hydrologic Unit 04150200, at Shoremont filtration plant on Dewey Avenue, Rochester.

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

CHEMICAL DATA: 1975 (a), 1976-79 (b).

MINOR ELEMENTS DATA: 1975 (a), 1976-79 (b).

RADIOCHEMICAL DATA: 1975 (a), 1976-78 (b).

PESTICIDE DATA: 1975 (a), 1976-79 (b).

ORGANIC DATA: OC--1975 (a), 1976 (b), 1977 (a), 1978-79 (b).

PCB--1975 (a), 1976 (b), 1977 (a), 1978-79 (b).

PCN--1975 (a), 1976 (b), 1977 (a), 1978-79 (b).

REMARKS.--Samples are collected from raw-water tap in filtration plant laboratory. Analyses of treated-water samples collected at the Shoremont filtration plant are available in the files of the Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS AS (CAC03)	HARDNESS NONCARBONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM DIS-SOLVED (MG/L AS MG)	SODIUM DIS-SOLVED (MG/L AS NA)	POTASSIUM DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HC03)	ALKALINITY (MG/L AS CAC03)
DEC 05...	1430	340	--	10.0	130	39	38	8.3	12	1.6	110	90
MAR 09...	1130	380	7.4	4.0	130	42	39	7.9	15	1.7	--	88
JUN 08...	0900	335	7.4	21.0	130	45	40	8.1	13	1.5	--	88
SEP 13...	1100	350	--	18.0	130	43	40	8.0	13	1.4	--	90

DATE	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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
DEC 05...	28	26	.1	.2	185	168	.28	.00	.01	.12	.41	.00
MAR 09...	31	32	.1	.9	192	181	.41	.01	.02	.07	.51	.02
JUN 08...	29	28	.1	.2	177	173	.32	.00	.01	.21	.54	.01
SEP 13...	27	28	.1	.2	212	173	.24	.00	.01	.22	.47	.01

DATE	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
DEC 05...	.00	60	1	100	1	<10	2	6	90	5	0	50
MAR 09...	.01	250	1	0	1	10	1	3	150	4	0	50
JUN 08...	.00	40	2	100	2	20	1	32	90	10	0	70
SEP 13...	--	40	1	0	1	2	0	52	130	9	0	10

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)
DEC 05...	<.5	1	21	0	0	170	10	6.3	.00	.00	.0	.00
MAR 09...	<.5	1	9	0	0	160	20	3.0	.00	.00	.0	.00
JUN 08...	<.5	2	12	0	0	130	20	2.1	.00	.00	.0	.00
SEP 13...	<.5	2	4	0	0	160	10	1.5	--	.00	.0	.00

431607077385301 (042202528) LAKE ONTARIO NEAR ROCHESTER, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
DEC 05...	.00	.0	.00	.00	.00	.00	.00	.00
MAR 09...	.00	.0	.00	.00	.00	.00	.00	.00
JUN 08...	.00	.0	.00	.00	.00	.00	.00	.00
SEP 13...	.00	.0	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)
DEC 05...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR 09...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUN 08...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 13...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC 05...	.00	.00	.00	0	.00	.00	.00	.00
MAR 09...	.00	.00	.00	0	.00	.01	.00	.00
JUN 08...	.00	.00	.00	0	.00	.00	.00	.00
SEP 13...	.00	.00	.00	0	.00	.00	.00	.00

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RA-226, DIS- SOLVED, PLAN- CHET COUNT (PCI/L)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	STRON- TIUM 90 DIS- SOLVED (PCI/L)
DEC 05...	<1.9	<.4	--	--	3.4	<.4	3.2	<.4	--	.29	.6
MAR 09...	<2.7	<.4	--	--	3.2	.4	3.0	.5	--	.04	.7
JUN 08...	<2.5	<.4	<1.7	<.3	3.2	<.4	3.0	<.4	--	.13	.8
SEP 13...	<2.6	<.4	<1.8	<.3	3.0	<.4	2.9	<.4	.3	--	1.1

STREAMS TRIBUTARY TO LAKE ONTARIO

04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft (11 m) upstream from concrete weir at Wellsville, 0.5 mi (0.8 km) upstream from bridge on State Highway 17, 0.6 mi (1.0 km) upstream from Crowner Brook and sewage treatment plant, and 0.6 mi (1.0 km) downstream from Dyke Creek.

DRAINAGE AREA.--289 mi² (749 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft (448.056 m) National Geodetic Vertical Datum of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi (0.6 km) upstream at datum 3.00 ft (0.91 m) higher. August 1955 to September 1957, at same site at datum 8.00 ft (2.438 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Record for station 04221500 Genesee River at Scio, 5.2 mi (8.4 km) downstream, published for June 1916 to September 1972.

AVERAGE DISCHARGE.--10 years (1955-58, 1972-79), 434 ft³/s (12.29 m³/s), 20.39 in/yr (518 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s (447 m³/s) Mar. 8, 1956, gage height, 12.65 ft (3.856 m) site and datum then in use, from graph based on gage readings; minimum daily, 18 ft³/s (0.51 m³/s) Sept. 9, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since before June 1916, 38,500 ft³/s (1,090 m³/s) June 23, 1972, gage height, 20.7 ft (6.31 m) present datum, from floodmark, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0230	*7,320 207	*10.16 3.097	Jan. 25	0300	5,280 150	9.07 2.765
Jan. 24	2200	ice jam	9.22 2.810	Mar. 5	1330	6,870 195	9.93 3.027

Minimum discharge, 35 ft³/s (0.99 m³/s) many days in August and September, gage height 4.31 ft (1.314 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	132	96	2300	410	210	649	212	187	175	444	38
2	47	122	94	5760	350	400	696	196	173	119	206	37
3	46	114	96	2090	310	560	637	194	155	107	163	41
4	54	107	425	1100	270	1600	561	224	138	78	116	41
5	56	102	348	840	250	6170	696	190	125	68	95	37
6	48	96	254	660	230	5000	574	182	121	63	86	747
7	47	92	224	560	200	2690	528	167	116	58	79	314
8	48	99	276	520	170	1980	515	156	114	52	78	175
9	49	92	842	400	160	1580	1280	143	146	49	67	136
10	46	86	450	360	150	1890	1370	140	110	53	67	109
11	44	82	330	320	130	1560	1320	243	248	60	73	93
12	42	78	280	310	120	1050	1160	246	150	57	68	82
13	78	76	250	290	120	921	1050	243	113	51	59	72
14	496	76	230	320	120	1790	924	202	98	49	61	239
15	299	75	220	350	110	1160	874	180	87	79	57	289
16	180	71	220	310	110	903	761	247	80	127	53	133
17	140	74	230	290	100	848	763	181	75	75	49	103
18	119	167	240	270	90	947	604	159	71	114	47	88
19	112	132	210	250	100	944	518	147	72	69	47	86
20	117	106	200	240	120	880	464	140	65	57	44	77
21	110	99	380	260	180	940	422	128	60	53	41	73
22	97	94	300	290	200	1040	387	123	68	48	38	77
23	92	98	250	260	220	1230	350	112	82	387	37	69
24	98	140	210	520	230	1660	319	202	67	392	44	62
25	89	167	190	3760	240	2060	297	257	61	163	53	58
26	103	136	170	1870	230	1220	274	292	56	143	45	57
27	445	104	150	1210	220	903	302	239	51	126	85	55
28	227	110	130	912	210	727	313	273	54	92	73	65
29	178	100	120	729	---	816	254	282	62	92	54	185
30	156	98	130	607	---	884	229	247	94	74	47	121
31	142	---	170	520	---	743	---	210	---	165	42	---
TOTAL	3852	3125	7715	28478	5350	45306	19091	6157	3099	3295	2518	3759
MEAN	124	104	249	919	191	1461	636	199	103	106	81.2	125
MAX	496	167	842	5760	410	6170	1370	292	248	392	444	747
MIN	42	71	94	240	90	210	229	112	51	48	37	37
CFSM	.43	.36	.86	3.18	.66	5.06	2.20	.69	.36	.37	.28	.43
IN.	.50	.40	.99	3.67	.69	5.83	2.46	.79	.40	.42	.32	.48

CAL YR 1978	TOTAL	144015	MEAN 395	MAX 4290	MIN 39	CFSM 1.37	IN 18.54
WTR YR 1979	TOTAL	131745	MEAN 361	MAX 6170	MIN 37	CFSM 1.25	IN 16.96

STREAMS TRIBUTARY TO LAKE ONTARIO

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04221990 RUSHFORD LAKE AT CANEADEA DAM, NY

04221991 CANEADEA CREEK AT CANEADEA DAM, NY

LOCATION.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, in control structure of Caneadea Dam at outlet of Rushford Lake, and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--60.7 mi² (157 km²).

PERIOD OF RECORD.--October 1968 to current year. July 1928 to current year in files of Rochester Gas and Electric Corp.

GAGE.--Water-stage recorder. Elevation of gage is 1,440 ft (439 m) National Geodetic Vertical Datum of 1929 (furnished by Rochester Gas and Electric Corp.).

REMARKS.--Outflow from Rushford Lake (capacity, 1,106 mil ft³ or 31.3 hm³) used for power generation. Discharge computed by orifice and (or) weir formula. Flow regulated by gates at dam completed in 1928. Area of water surface, 0.89 mi² (2.31 km²). Daily discharge record at a site 2 miles (3.2 km) downstream is published for July 1949 to September 1968 as station 04222000 Caneadea Creek at Caneadea, NY.

AVERAGE DISCHARGE.--11 years, 94.3 ft³/s (2.67 m³/s), 21.10 in/yr (536 mm/yr), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1978 TO SEPT. 1979

04221990 RUSHFORD LAKE				04221991 CANEADEA CREEK AT CANEADEA DAM			
	* Elevation FT	Contents FT ³	Change in contents FT ³ /S	Observed discharge MEAN	† Adjusted for change in contents in Rushford Lake MEAN	CFSM	IN.
October	1,423.6	752.46	+ 32.5	0	32.5	0.54	0.62
November	1,407.1	486.86	-102	116	13.3	.22	.24
December	1,409.5	520.91	+ 12.7	71.2	83.9	1.38	1.59
CAL YR 1978			- 5.32	72.0	66.7	1.09	14.91
January	1,419.9	685.32	+ 61.4	76.2	138	2.27	2.61
February	1,402.5	424.57	-108	135	27.1	.45	.46
March	1,421.2	708.83	+106	224	331	5.45	6.28
April	1,425.0	777.94	+ 26.7	140	167	2.75	3.07
May	1,430.8	894.93	+ 43.7	0	43.7	.72	.83
June	1,432.7	936.23	+ 15.9	0	15.9	.26	.29
July	1,433.2	947.03	+ 4.03	0	4.03	.06	.08
August	1,434.2	968.80	+ 8.13	0	8.13	.13	.15
September	1,420.3	692.41	-107	149	42.7	.70	.78
WTR YR 1979			+ .85	75.2	76.1	1.25	17.00

* Elevation at 2400 hours on last day of month.

† Adjustments by Geological Survey.

NOTE.--All figures of contents expressed in millions.

STREAMS TRIBUTARY TO LAKE ONTARIO

04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft (152 m) downstream from bridge on State Highway 436, 800 ft (244 m) upstream from abandoned railroad bridge piers, and 0.9 mi (1.4 km) upstream from Upper Falls.

DRAINAGE AREA.--981 mi² (2,541 km²).

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112: Drainage area. WRD NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft (329.184 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi (13 km) downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft (366 m) downstream at datum 2.60 ft (0.792 m) higher (destroyed by flood of June 1972). July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft (152 m) upstream at datum 11.48 ft (3.499 m) higher.

REMARKS.--Records fair except those for winter period, which are poor. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake.

AVERAGE DISCHARGE.--71 years, 1,257 ft³/s (35.60 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft³/s (2,550 m³/s) June 23, 1972, gage height, 35.25 ft (10.744 m) site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of contracted-opening measurement of 71,000 ft³/s (2,010 m³/s) at highway bridge 0.4 mi (0.6 km) upstream and contracted-opening measurement of 98,200 ft³/s (2,780 m³/s) 0.7 mi (1.1 km) downstream from gage; minimum, 18 ft³/s (0.51 m³/s) Oct. 5, 17, 1913, gage height, 1.70 ft (0.518 m) site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (425 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0830	*23,700 671	*18.45 5.624	Mar. 5	1800	a19,000 538	b17.65 5.380

a About.

b Backwater from ice.

Minimum discharge, 77 ft³/s (2.18 m³/s) Aug. 24, minimum gage height 8.27 ft (2.521 m) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	308	540	8400	1100	520	2920	665	517	313	404	110
2	152	286	540	19700	700	1300	3210	605	444	378	580	107
3	147	268	561	7900	620	2000	3920	572	397	302	347	195
4	160	254	1890	3800	540	4800	2410	613	330	270	296	171
5	165	238	2740	2500	480	18000	2940	622	280	217	231	128
6	166	226	1260	2000	450	17000	2370	564	270	191	204	444
7	163	218	697	1800	410	10100	1850	525	265	167	199	1500
8	181	218	679	1700	380	8030	1910	480	275	152	175	564
9	172	218	2840	1300	350	6230	4350	437	417	138	160	372
10	162	207	2110	1000	320	8310	6380	458	417	138	163	275
11	156	202	1000	800	270	7820	6470	932	954	156	171	221
12	152	194	900	700	260	4200	6260	976	767	167	156	187
13	175	194	800	760	250	3190	6110	767	444	145	145	167
14	767	192	660	960	250	9090	5140	674	324	128	135	2690
15	1690	189	580	1100	240	6650	3620	556	270	245	128	5260
16	676	189	580	1000	240	3580	2810	525	240	417	125	1350
17	457	389	600	900	230	3010	2770	540	221	430	116	858
18	366	477	640	820	220	3820	2110	444	208	336	107	648
19	318	598	520	700	240	4550	1590	404	265	313	104	572
20	313	518	520	660	300	3940	1350	366	195	217	101	532
21	320	484	2000	720	380	4440	1200	347	183	171	95	480
22	292	457	2200	800	480	5200	1090	347	175	156	89	451
23	264	457	1400	760	540	6680	1010	336	221	138	83	437
24	261	554	840	820	580	9210	921	347	235	597	81	417
25	259	753	680	10200	600	10200	827	572	199	868	122	397
26	271	679	600	7050	580	5570	767	889	179	347	128	378
27	616	561	540	3820	560	3140	787	797	160	318	160	366
28	811	554	470	2730	540	2310	1060	739	167	255	204	384
29	505	561	400	2160	---	2690	868	879	187	199	212	548
30	400	547	450	1700	---	4470	739	797	231	183	175	417
31	340	---	1200	1500	---	4120	---	665	---	171	128	---
TOTAL	11037	11190	31437	90760	12110	184170	79759	18440	9437	8223	5524	20626
MEAN	356	373	1014	2928	433	5941	2659	595	315	265	178	688
MAX	1690	753	2840	19700	1100	18000	6470	976	954	868	580	5260
MIN	147	189	400	660	220	520	739	336	160	128	81	107

CAL YR 1978 TOTAL 519617 MEAN 1424 MAX 18300 MIN 127
WTR YR 1979 TOTAL 482713 MEAN 1323 MAX 19700 MIN 81

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi (3.2 km) northwest of Mount Morris, 5 mi (8 km) upstream from Canaseraga Creek, and 40 mi (64 km) upstream from mouth.

DRAINAGE AREA.--1,075 mi² (2,784 km²).

PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."

REVISED RECORDS.--WSP 1437: 1955. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.

REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft (415 hm³) between elevation 585.0 ft (178.31 m), sill of conduits, and 760.0 ft (231.65 m), crest of spillway. Dead storage, 609 acre-ft (751,000 m³). Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.

COOPERATION.--Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft (230.264 m) June 25, 1972, contents, 322,600 acre-ft (398 hm³); minimum, 584.23 ft (178.073 m) Sept. 2, 1976, contents, 475.8 acre-ft (587,000 m³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 691.51 ft (210.772 m) Mar. 11, contents, 146,000 acre-ft (180 hm³); minimum, 585.35 ft (178.415 m) Aug. 24, 25, contents, 669.6 acre-ft (825,600 m³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Furnished by Corps of Engineers in 1953)

584.00	436	600.00	5,610	640.00	43,700
586.00	782	605.00	8,250	660.00	78,200
588.00	1,210	610.00	11,600	680.00	119,800
590.00	1,730	620.00	19,800	700.00	166,300
595.00	3,410	630.00	30,500	730.00	245,200
				750.00	305,100

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597.13	599.73	587.46	618.41	639.46	609.07	651.55	593.15	591.08	588.96	589.09	585.43
2	596.78	597.90	587.49	644.41	634.48	607.34	649.75	592.73	590.21	588.98	588.98	585.37
3	596.80	596.78	587.48	659.01	628.71	609.86	650.23	592.33	589.85	589.02	588.76	585.68
4	596.80	597.75	588.59	660.42	622.42	617.76	650.39	592.40	589.58	588.94	588.40	585.78
5	597.10	598.50	591.09	658.48	615.38	642.49	649.05	592.76	589.33	588.81	588.06	585.58
6	597.38	598.77	589.39	655.07	609.40	665.95	647.05	592.36	589.18	588.66	587.80	585.86
7	597.58	598.80	588.75	650.55	605.52	677.21	643.10	591.99	589.03	588.49	587.59	589.68
8	597.82	598.72	588.27	645.63	605.06	683.15	638.61	591.61	588.96	588.33	587.38	587.56
9	598.34	596.53	589.94	640.44	604.33	686.10	635.22	591.28	589.08	588.19	586.64	586.75
10	598.65	588.98	590.44	635.64	602.69	688.26	636.51	590.01	590.16	588.10	585.85	586.39
11	598.82	586.98	589.28	631.34	600.15	691.03	637.91	593.16	591.90	588.07	585.91	586.10
12	598.92	586.70	588.99	626.56	596.40	690.84	640.98	593.53	592.94	587.92	585.82	585.91
13	599.10	586.62	588.78	621.29	594.25	688.41	644.72	593.90	590.27	587.74	587.23	586.06
14	599.72	586.49	590.13	617.55	594.39	687.26	648.05	591.59	589.63	587.58	588.08	594.77
15	605.14	586.36	595.77	614.67	591.12	688.04	649.55	590.62	589.35	587.45	588.97	619.06
16	606.85	586.26	601.09	612.56	591.30	684.91	648.83	590.14	589.17	587.33	589.20	624.77
17	605.10	586.33	604.45	611.64	590.97	680.69	645.90	590.48	589.01	587.24	585.48	624.76
18	602.05	586.77	607.17	611.53	590.63	676.61	640.76	589.92	588.86	587.23	585.47	623.81
19	600.16	587.12	608.45	610.73	590.59	673.32	636.35	589.66	588.72	587.22	585.45	622.48
20	599.20	587.30	608.18	609.62	591.81	669.79	630.23	589.45	588.61	587.15	585.43	621.01
21	599.03	587.28	608.46	608.88	593.89	665.63	623.82	589.38	588.51	587.08	585.41	619.36
22	600.95	587.23	613.74	609.00	593.86	661.99	616.32	589.35	588.45	586.98	585.39	617.56
23	600.64	587.19	616.21	609.42	593.99	660.13	608.47	589.27	588.43	586.87	585.38	615.53
24	598.70	587.20	616.47	609.41	599.26	661.07	600.53	589.31	588.39	586.78	585.36	613.25
25	598.75	587.37	615.83	617.33	606.57	664.83	594.33	590.13	588.36	591.94	585.44	610.70
26	599.15	587.70	614.09	637.47	610.67	666.11	594.16	592.76	588.30	598.53	585.49	607.91
27	600.15	587.66	612.78	644.36	611.56	663.15	593.95	594.10	588.23	599.97	585.57	604.90
28	603.44	587.57	611.94	646.98	611.38	659.05	594.85	592.34	588.20	603.02	585.74	601.26
29	602.60	587.51	610.22	647.35	---	655.28	594.33	593.79	588.27	604.88	585.94	597.60
30	600.01	587.47	609.01	646.11	---	653.42	593.57	593.93	588.48	601.29	585.85	594.60
31	599.81	---	611.15	643.42	---	652.87	---	592.95	---	589.44	585.60	---
MEAN	599.76	590.45	600.36	630.82	604.29	663.92	629.64	591.63	589.28	590.26	586.70	601.18
MAX	606.85	599.73	616.47	639.46	639.46	691.03	651.55	594.10	592.94	604.88	589.20	624.77
MIN	596.78	586.26	587.46	608.88	590.59	607.34	593.57	589.27	588.20	586.78	585.36	585.37
†	5,525	1,093	13,450	46,070	11,790	64,010	2,810	2,256	1,460	1,522	697.2	3,178
‡	+9.0	-74.5	+201	+530	-617	+849	-1,030	-9.0	-13.4	+1.0	-13.4	+41.7

CAL YR 1978 MEAN 610.02 MAX 722.41 MIN 585.29 † +40.7
WTR YR 1979 MEAN 606.59 MAX 691.03 MIN 585.36 ‡ -2.5

† Contents, in acre-feet, at end of month.

‡ Change in contents, equivalent in cubic feet per second.

STREAMS TRIBUTARY TO LAKE ONTARIO

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 04130002, on right bank on Poags Hole Road, 0.7 mi (1.1 km) upstream from Stony Brook, and 1.7 mi (2.7 km) south of Dansville.

DRAINAGE AREA.--90.0 mi² (233 km²).

PERIOD OF RECORD.--August 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft (218.115 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--5 years, 118 ft³/s (3.342 m³/s), 17.80 in/yr (452 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft³/s (81.3 m³/s) Sept. 20, 1977, gage height, 5.51 ft (1.679 m); minimum, 7.4 ft³/s (0.21 m³/s) Sept. 11, 1975; minimum gage height, 0.76 ft (0.232 m) Aug. 23, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0115	a1,500 42.5	*b4.13 1.259	Mar. 14	1100	1,040 29.5	3.26 0.994
Mar. 5	0715	*1,620 45.9	4.02 1.225				

a About.

b Backwater from ice.

Minimum discharge, 9.2 ft³/s (0.26 m³/s) Aug. 23, gage height, 0.76 ft (0.232 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	21	27	720	72	194	170	62	70	48	32	11
2	11	20	28	1000	70	316	221	57	62	31	24	13
3	11	19	30	380	70	209	230	55	56	27	20	19
4	13	18	132	186	70	599	170	59	52	22	17	15
5	13	17	86	120	56	1400	208	54	47	19	15	12
6	13	16	54	100	50	1140	170	53	43	18	14	88
7	12	17	43	92	46	673	146	51	41	17	13	53
8	13	17	43	84	58	501	146	48	39	16	13	30
9	12	16	132	68	52	386	368	45	44	15	12	24
10	12	16	68	60	54	573	386	128	36	17	14	19
11	12	16	60	56	54	449	419	230	100	19	13	18
12	11	15	52	50	52	273	402	131	66	17	13	16
13	16	15	47	56	49	244	396	107	52	16	12	15
14	80	15	41	72	49	688	341	88	40	15	12	244
15	56	15	34	100	46	354	268	77	35	17	11	137
16	35	15	32	72	46	234	230	70	33	20	11	49
17	26	16	49	58	46	213	221	63	30	16	10	34
18	22	23	50	52	46	253	166	57	28	14	12	28
19	21	24	26	50	68	248	140	53	25	12	11	30
20	24	21	31	48	84	248	122	50	22	11	11	27
21	26	19	140	48	100	294	109	49	21	10	10	23
22	21	18	100	52	170	391	99	47	22	9.8	9.9	22
23	21	20	68	50	200	520	92	43	28	9.6	9.5	21
24	22	28	35	70	390	673	86	65	24	88	13	19
25	21	43	29	490	437	592	77	156	21	20	28	18
26	22	33	40	250	197	304	72	190	19	17	15	17
27	61	26	43	190	256	200	77	200	17	17	27	16
28	42	28	36	150	225	156	84	130	21	15	23	19
29	31	27	29	120	---	188	72	110	24	12	16	21
30	25	26	40	110	---	248	65	230	29	10	13	20
31	23	---	58	100	---	217	---	86	---	18	12	---
TOTAL	739	620	1683	5054	3113	12978	5753	2844	1147	613.4	466.4	1078
MEAN	23.8	20.7	54.3	163	111	419	192	91.7	38.2	19.8	15.0	35.9
MAX	80	43	140	1000	437	1400	419	230	100	88	32	244
MIN	11	15	26	48	46	156	65	43	17	9.6	9.5	11
CFSM	.26	.23	.60	1.81	1.23	4.66	2.13	1.02	.42	.22	.17	.40
IN.	.31	.26	.70	2.09	1.29	5.36	2.38	1.18	.47	.25	.19	.45

CAL YR 1978 TOTAL 33926.0 MEAN 92.9 MAX 1380 MIN 11 CFSM 1.03 IN 14.02
WTR YR 1979 TOTAL 36088.8 MEAN 98.9 MAX 1400 MIN 9.5 CFSM 1.10 IN 14.92

STREAMS TRIBUTARY TO LAKE ONTARIO

311

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'26", Livingston County, Hydrologic Unit 04130002, on left bank 30 ft (9 m) upstream from bridge on State Highway 408 at Shakers Crossing, 1.3 mi (2.1 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Mount Morris.

DRAINAGE AREA.--333 mi² (862 km²).

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 545.52 ft (166.274 m) National Geodetic Vertical Datum of 1929. Prior to October 1974, at site 30 ft (9 m) downstream at same datum. Prior to November 1958, at site 40 ft (12 m) downstream at datum 5.52 ft (1.682 m) lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi (1.0 km) downstream from base gage.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--16 years (1959-70, 1975-79), 298 ft³/s (8.439 m³/s), 12.15 in/yr (309 mm/yr).

EXTREMES FOR PERIODS OF RECORD.--Maximum discharge, 5,270 ft³/s (149 m³/s) Mar. 4, 1976, gage height, 13.33 ft (4.063 m); maximum gage height, 23.62 ft (7.199 m) present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft³/s (0.12 m³/s) Aug. 19, 1970, gage height, 2.26 ft (0.689 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0030	3,640 103	11.41 3.478	Mar. 14	2130	-- --	a10.94 3.335
Mar. 5	1215	*5,220 148	*13.22 4.029				

a Backwater from Genesee River.

Minimum discharge, 22 ft³/s (0.62 m³/s) Aug. 17, gage height, 2.35 ft (0.716 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	65	86	2430	300	762	695	205	252	131	134	31
2	35	61	84	3220	290	1120	764	189	203	110	89	32
3	35	58	90	1930	280	1560	730	182	173	88	72	81
4	39	58	274	1290	260	3060	517	196	152	73	55	52
5	47	57	312	786	220	4790	708	179	136	65	49	37
6	41	56	171	700	180	4740	577	170	129	62	48	153
7	38	54	128	600	200	3740	475	163	120	58	47	297
8	42	56	120	540	220	2770	503	156	116	54	43	99
9	42	54	318	480	190	2000	1110	144	125	53	40	74
10	39	53	242	450	200	1950	1700	204	113	59	43	59
11	38	51	187	440	200	1770	1830	568	243	66	46	53
12	36	51	167	430	190	1020	1530	312	176	65	41	48
13	52	50	148	450	180	806	1270	262	126	52	39	43
14	174	50	143	800	170	1700	1000	231	106	48	37	552
15	223	50	119	1000	170	1550	759	202	94	70	35	969
16	111	49	124	740	160	964	665	198	88	64	35	286
17	83	51	172	560	160	860	753	176	88	55	31	160
18	69	66	169	520	150	965	589	156	84	52	33	114
19	64	71	138	420	180	963	477	146	81	48	36	106
20	71	62	121	410	200	794	424	139	75	42	34	95
21	78	60	469	430	220	997	373	135	70	35	32	84
22	69	57	389	470	400	1170	329	135	71	34	28	74
23	68	58	271	400	661	1310	315	123	82	40	27	68
24	77	78	206	440	1730	1620	292	153	78	154	29	63
25	69	97	173	2000	1650	1590	266	298	79	64	73	59
26	65	90	295	1500	791	1000	245	398	69	56	46	57
27	140	58	296	1200	806	739	261	394	62	57	58	53
28	127	89	241	980	775	619	301	317	73	49	74	54
29	93	86	188	760	---	574	247	325	88	47	49	71
30	79	84	223	600	---	650	220	440	91	41	39	64
31	70	---	306	500	---	665	---	314	---	43	34	---
TOTAL	2249	1880	6370	27476	11133	48818	19925	7210	3443	1935	1476	3988
MEAN	72.5	62.7	205	886	398	1575	664	233	115	62.4	47.6	133
MAX	223	97	469	3220	1730	4790	1830	568	252	154	134	969
MIN	35	49	84	400	150	574	220	123	62	34	27	31
CFSM	.22	.19	.62	2.66	1.20	4.73	1.99	.70	.35	.19	.14	.40
IN.	.25	.21	.71	3.07	1.24	5.45	2.23	.81	.38	.22	.16	.45

CAL YR 1978	TOTAL	112950	MEAN 309	MAX 3110	MIN 33	CFSM .93	IN 12.62
WTR YR 1979	TOTAL	135903	MEAN 372	MAX 4790	MIN 27	CFSM 1.12	IN 15.18

STREAMS TRIBUTARY TO LAKE ONTARIO

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft (30 m) north of Jones Bridge Road, 0.8 mi (1.3 km) downstream from Canaseraga Creek, and 2.8 mi (4.5 km) northeast of Mount Morris.

DRAINAGE AREA.--1,417 mi² (3,670 km²).

PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."

REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112: Drainage area.
WDR NY-78-1: 1974-77 (M,m).

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft (164.629 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft (0.869 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221991) since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--69 years (1908-13, 1915-79), 1,663 ft³/s (47.10 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft³/s (1,560 m³/s) May 17, 1916, gage height, 25.44 ft (7.754 m); minimum, 12 ft³/s (0.34 m³/s) July 23, 1955, gage height, 0.22 ft (0.067 m), partially obstructed intake; minimum daily, 30 ft³/s (0.85 m³/s) Aug. 8, 1909.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 9,500 ft³/s (269 m³/s) Mar. 5, gage height, 14.66 ft (4.468 m), backwater from ice; minimum, 42 ft³/s (1.19 m³/s) July 30, gage height, 1.31 ft (0.399 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338	477	732	4300	5200	3200	5870	1180	1090	455	417	231
2	178	456	727	5640	4800	4000	5220	1090	892	573	803	189
3	182	394	748	4670	4400	4800	4380	1010	788	480	569	245
4	184	310	1510	5700	3800	6000	4430	1020	686	432	439	311
5	191	314	3130	5790	3200	8600	5310	1060	595	366	394	249
6	184	314	1920	6260	2700	7370	6120	988	550	334	358	382
7	184	314	1160	6430	2300	5340	6320	923	520	315	323	1540
8	191	313	923	6160	1900	4800	6180	855	518	227	304	1070
9	192	484	2240	5780	1600	5440	6440	787	539	259	281	619
10	186	354	2790	4490	1300	5870	7150	781	764	249	263	470
11	174	290	1710	4100	1100	6750	7310	1780	1060	263	285	386
12	173	283	1330	3800	940	7060	5670	1510	1670	277	270	342
13	194	274	1220	3200	780	7190	4950	1560	881	267	241	281
14	454	272	1010	2500	980	8140	4680	1210	619	245	256	602
15	998	267	751	2200	1400	9070	4680	1020	517	263	263	2190
16	1140	260	569	1900	1300	9120	5680	900	455	427	285	1430
17	1060	362	546	1700	1200	8970	7010	923	427	579	241	1550
18	935	561	658	1500	1000	8900	7120	791	366	455	192	1480
19	483	741	796	1300	860	8760	6750	717	370	455	192	1450
20	472	704	1040	1400	900	8900	6050	665	334	354	182	1430
21	352	639	1630	1400	1000	9340	5280	631	323	292	175	1400
22	285	604	1710	1500	1400	9130	4480	616	311	274	175	1340
23	484	595	1580	1600	2500	8280	3430	582	326	182	165	1300
24	432	666	1500	1600	5200	7670	2590	629	382	490	124	1250
25	327	917	1300	3800	4200	7460	1670	914	362	723	234	1190
26	325	961	1600	3900	3500	7920	1450	1460	319	407	227	1120
27	396	771	1500	3310	2700	8100	1400	1650	292	323	270	1050
28	787	735	1400	3760	2800	7540	1720	1360	296	71	304	973
29	1030	765	1500	4000	---	6860	1620	1500	334	50	330	893
30	726	738	1600	4400	---	6090	1350	1690	370	1140	292	683
31	490	---	1800	5400	---	6030	---	1430	---	373	252	---
TOTAL	13727	15135	42630	113490	64960	222700	142310	33232	16956	11600	9106	27646
MEAN	443	505	1375	3661	2320	7184	4744	1072	565	374	294	922
MAX	1140	961	3130	6430	5200	9340	7310	1780	1670	1140	803	2190
MIN	173	260	546	1300	780	3200	1350	582	292	50	124	189

CAL YR 1978 TOTAL 651775 MEAN 1786 MAX 10200 MIN 144
WTR YR 1979 TOTAL 713492 MEAN 1955 MAX 9340 MIN 50

STREAMS TRIBUTARY TO LAKE ONTARIO

313

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft (91 m) east of State Highway 256, and 3.0 mi (4.8 km) south of Lakeville.

DRAINAGE AREA.--69.7 mi² (181 km²).

PERIOD OF RECORD.--July 1963 to current year. Since 1930 in files of village of Geneseo.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft (61 m) downstream at datum 796.59 ft (242.801 m) higher.

REMARKS.--Lake level maintained by plank and pile dam at outlet. Area of water surface, 5.08 mi² (13.2 km²). Daily average of about 2 ft³/s (0.057 m³/s) diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft (250.698 m) June 24, 1972; minimum observed, 816.33 ft (248.817 m) present datum, Nov. 3-8, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 820.20 ft (249.997 m) Mar. 8, 9; minimum, 816.56 ft (248.887 m) Dec. 1, 2, 3.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	816.88	816.80	816.58	817.25	818.48	818.01	818.85	818.53	818.37	817.88	817.74	817.31
2	816.84	816.80	816.57	817.72	818.45	818.05	818.84	818.48	818.37	817.87	817.74	817.31
3	816.84	816.80	816.59	817.93	818.41	818.14	818.87	818.41	818.35	817.86	817.72	817.33
4	816.86	816.80	816.60	817.99	818.38	818.55	818.84	818.37	818.35	817.84	817.70	817.31
5	816.86	816.81	816.61	818.01	818.33	819.36	818.82	818.32	818.32	817.81	817.69	817.30
6	816.82	816.81	816.62	818.01	818.28	819.95	818.79	818.27	818.29	817.80	817.71	817.36
7	816.79	816.82	816.63	818.00	818.24	820.14	818.78	818.23	818.27	817.78	817.69	817.38
8	816.79	816.79	816.65	818.01	818.20	820.20	818.77	818.20	818.26	817.77	817.67	817.36
9	816.77	816.71	816.69	817.98	818.16	820.18	818.82	818.20	818.25	817.76	817.64	817.34
10	816.77	816.70	816.69	817.95	818.11	820.16	818.87	818.20	818.23	817.78	817.63	817.32
11	816.75	816.69	816.69	817.93	818.06	820.13	818.92	818.19	818.26	817.78	817.61	817.30
12	816.73	816.69	816.69	817.90	818.01	820.06	818.99	818.18	818.23	817.77	817.58	817.28
13	816.78	816.69	816.69	817.88	817.97	819.96	819.12	818.20	818.18	817.76	817.56	817.26
14	816.84	816.69	816.69	817.91	817.92	819.90	819.22	818.21	818.16	817.75	817.54	817.45
15	816.86	816.67	816.68	817.94	817.88	819.86	819.26	818.19	818.13	817.75	817.50	817.67
16	816.86	816.64	816.67	817.92	817.84	819.77	819.26	818.20	818.11	817.74	817.47	817.69
17	816.85	816.66	816.68	817.91	817.80	819.68	819.26	818.21	818.09	817.72	817.44	817.69
18	816.84	816.65	816.69	817.90	817.75	819.61	819.23	818.18	818.06	817.70	817.43	817.68
19	816.83	816.63	816.69	817.87	817.71	819.54	819.18	818.17	818.04	817.68	817.41	817.65
20	816.84	816.62	816.69	817.85	817.68	819.47	819.11	818.18	818.01	817.66	817.40	817.62
21	816.82	816.61	816.75	817.85	817.64	819.40	819.06	818.18	818.00	817.64	817.38	817.59
22	816.82	816.61	816.78	817.83	817.60	819.33	819.00	818.19	818.00	817.62	817.37	817.57
23	816.83	816.62	816.79	817.80	817.60	819.27	818.94	818.18	817.99	817.62	817.36	817.54
24	816.83	816.61	816.80	817.80	817.73	819.22	818.88	818.18	817.97	817.61	817.35	817.51
25	816.82	816.60	816.92	818.14	817.86	819.18	818.83	818.19	817.95	817.64	817.36	817.49
26	816.84	816.59	816.94	818.35	818.00	819.12	818.74	818.23	817.89	817.66	817.35	817.47
27	816.86	816.60	816.94	818.45	818.02	819.05	818.71	818.27	817.77	817.66	817.37	817.45
28	816.83	816.61	816.94	818.50	818.02	818.97	818.69	818.34	817.79	817.64	817.36	817.44
29	816.84	816.61	816.93	818.52	---	818.95	818.64	818.36	817.84	817.63	817.36	817.43
30	816.82	816.59	816.93	818.51	---	818.92	818.59	818.37	817.86	817.61	817.34	817.42
31	816.79	---	816.96	818.49	---	818.89	---	818.39	---	817.65	817.32	---
MEAN	816.82	816.68	816.73	818.00	818.00	819.39	818.93	818.26	818.11	817.72	817.51	817.45
MAX	816.88	816.82	816.96	818.52	818.48	820.20	819.26	818.53	818.37	817.88	817.74	817.69
MIN	816.73	816.59	816.57	817.25	817.60	818.01	818.59	818.17	817.77	817.61	817.32	817.26

CAL YR 1978 MEAN 817.85 MAX 820.17 MIN 816.57
WTR YR 1979 MEAN 817.80 MAX 820.20 MIN 816.57

STREAMS TRIBUTARY TO LAKE ONTARIO

04228500 GENESEE RIVER AT AVON, NY

LOCATION.--Lat 42°55'04", long 77°45'27", Livingston County, Hydrologic Unit 04130003, on right bank 250 ft (76 m) downstream from bridge on U.S. Highway 20 (State Highway 5), 0.3 mi (0.5 km) west of Avon, and 0.8 mi (1.3 km) downstream from Conesus Creek.

DRAINAGE AREA.--1,667 mi² (4,318 km²).

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.11 ft (152.433 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221990), at high flows by Mount Morris Lake (see station 04224000), and by Conesus Lake (see station 04227980). Monthly figures of discharge and runoff August 1955 to September 1965 adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--24 years, 1,959 ft³/s (55.48 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) June 25, 1972, gage height, 40.67 ft (12.396 m); minimum, 56 ft³/s (1.59 m³/s) Oct. 5, 1955, gage height, 13.73 ft (4.185 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,100 ft³/s (314 m³/s) Mar. 6, gage height 33.42 ft (10.186 m); maximum gage height, 33.74 ft (10.284 m) Mar. 5 (ice jam); minimum discharge, 100 ft³/s (2.83 m³/s) July 30, gage height, 13.91 ft (4.240 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	532	761	3500	6400	3550	6110	1460	1330	444	439	253
2	315	515	758	7500	6000	3830	6040	1320	1040	527	566	243
3	219	493	764	6150	5600	4870	5200	1220	895	597	726	220
4	222	398	892	5600	5200	7500	4690	1180	806	494	521	286
5	222	344	2530	5800	4600	9800	5500	1210	719	452	444	302
6	227	344	2520	6400	3800	10400	6100	1180	647	380	397	269
7	219	344	1550	7300	3100	8800	6490	1080	612	354	356	1010
8	219	341	1050	7400	2300	6740	6510	959	587	333	316	1510
9	222	339	1250	6900	1800	6310	6470	893	594	258	301	753
10	222	512	2940	6000	1500	6430	7230	828	679	292	281	552
11	214	366	2100	4800	1300	7120	7880	1180	774	284	272	453
12	206	315	1400	4200	1100	7270	7670	1680	1530	289	284	380
13	216	304	1300	3900	980	7400	6770	1560	1200	301	266	341
14	283	299	1100	4300	980	7870	6310	1350	798	284	262	550
15	697	293	880	4000	1200	9060	5500	1130	639	275	238	2250
16	1070	288	680	3700	1300	9200	5660	965	555	309	233	1550
17	1050	285	600	3400	1300	9130	6770	900	502	509	220	1490
18	972	461	600	2800	1100	9080	7350	887	473	558	220	1480
19	767	628	760	2300	1000	8910	7060	784	388	463	213	1410
20	532	747	960	2100	1000	8740	6580	723	396	451	211	1380
21	512	683	1700	2200	1100	9160	5720	684	360	349	201	1340
22	336	642	2200	2300	1500	9230	5140	667	363	304	194	1290
23	355	622	2000	2400	2200	8640	4200	641	354	286	199	1250
24	551	653	1800	2500	4860	7950	3320	637	369	275	185	1200
25	431	750	1600	4510	5620	7520	2390	775	411	665	172	1150
26	368	929	1700	6440	4040	7790	1790	1240	376	535	244	1090
27	390	859	1900	6020	3080	8030	1660	1610	341	448	249	1030
28	496	758	2000	5800	3080	7790	1770	1550	331	296	289	960
29	937	767	1900	5800	---	7060	1950	1510	355	139	315	904
30	934	780	1900	6000	---	6510	1690	1740	378	127	329	828
31	614	---	2100	6200	---	6260	---	1690	---	1060	295	---
TOTAL	14498	15591	46195	148220	77040	237950	157520	35233	18802	12338	9438	27724
MEAN	468	520	1490	4781	2751	7676	5251	1137	627	398	304	924
MAX	1070	929	2940	7500	6400	10400	7880	1740	1530	1060	726	2250
MIN	206	285	600	2100	980	3550	1660	637	331	127	172	220

CAL YR 1978 TOTAL 715691 MEAN 1961 MAX 10300 MIN 177
WTR YR 1979 TOTAL 800549 MEAN 2193 MAX 10400 MIN 127

STREAMS TRIBUTARY TO LAKE ONTARIO

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04228845 HONEOYE LAKE NEAR HONEOYE, NY

LOCATION.--Lat 42°45'44", long 77°30'21", Ontario County, Hydrologic Unit 04130003, on east shore of Honeoye Lake, at Trident Marina on East Lake Road, 1.9 mi (3.1 km) south of U.S. Highway 20A, and 2.0 mi (3.2 km) southeast of Honeoye.

DRAINAGE AREA.--41.1 mi² (106 km²).

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. July 10, 1963 to Sept. 28, 1967, nonrecording gage and Sept. 29, 1967 to Sept. 30, 1969, recording gage at datum 800.35 ft (243.947 m) higher. Oct. 1, 1969 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher.

REMARKS.--Area of water surface, 2.71 mi² (7.02 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 806.91 ft (245.946 m) June 23, 1972; minimum observed, 802.15 ft (244.495 m) present datum, Oct. 5, 1965, Oct. 1, 2, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 804.70 ft (245.273 m) Mar. 7; minimum, 802.45 ft (244.587 m) Oct. 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802.51	802.73	802.85	803.63	803.71	803.53	803.78	803.37	803.34	803.16	803.10	803.00
2	802.50	802.73	802.87	804.01	803.67	803.57	803.81	803.34	803.33	803.17	803.14	803.01
3	802.49	802.73	802.89	804.14	803.63	803.62	803.75	803.34	803.31	803.16	803.14	803.03
4	802.51	802.74	802.93	804.07	803.60	803.82	803.72	803.33	803.30	803.15	803.14	803.02
5	802.51	802.74	802.96	803.98	803.56	804.36	803.72	803.31	803.28	803.13	803.13	803.02
6	802.49	802.75	802.97	803.91	803.54	804.62	803.71	803.30	803.25	803.11	803.14	803.10
7	802.48	802.75	802.98	803.85	803.51	804.68	803.66	803.29	803.24	803.10	803.14	803.15
8	802.49	802.75	803.00	803.81	803.50	804.68	803.64	803.28	803.23	803.10	803.12	803.15
9	802.48	802.75	803.07	803.74	803.48	804.57	803.68	803.27	803.22	803.10	803.11	803.14
10	802.47	802.75	803.10	803.69	803.46	804.48	803.73	803.29	803.22	803.10	803.12	803.14
11	802.47	802.74	803.11	803.64	803.45	804.40	803.74	803.35	803.24	803.10	803.11	803.13
12	802.47	802.75	803.12	803.60	803.47	804.29	803.78	803.34	803.20	803.09	803.10	803.12
13	802.50	802.76	803.14	803.58	803.47	804.18	803.83	803.33	803.17	803.08	803.08	803.12
14	802.57	802.76	803.14	803.61	803.47	804.14	803.84	803.31	803.15	803.07	803.08	803.24
15	802.61	802.75	803.15	803.62	803.47	804.11	803.80	803.31	803.14	803.07	803.05	803.45
16	802.62	802.75	803.16	803.59	803.48	804.04	803.79	803.29	803.12	803.06	803.03	803.47
17	802.61	802.76	803.18	803.57	803.48	803.96	803.79	803.26	803.12	803.04	803.02	803.47
18	802.62	802.76	803.19	803.55	803.48	803.91	803.75	803.25	803.10	803.03	803.01	803.47
19	802.62	802.77	803.20	803.53	803.48	803.86	803.71	803.25	803.09	803.01	803.01	803.46
20	802.64	802.77	803.20	803.51	803.48	803.82	803.67	803.23	803.08	802.99	803.00	803.45
21	802.64	802.78	803.27	803.52	803.49	803.79	803.63	803.21	803.07	802.98	803.00	803.44
22	802.65	802.78	803.31	803.51	803.51	803.79	803.59	803.20	803.06	802.96	802.99	803.42
23	802.66	802.78	803.32	803.49	803.48	803.83	803.55	803.18	803.06	802.95	802.99	803.41
24	802.67	802.79	803.33	803.51	803.39	803.95	803.53	803.20	803.05	802.95	802.99	803.40
25	802.67	802.79	803.42	803.79	803.44	804.06	803.50	803.24	803.03	802.96	802.98	803.39
26	802.69	802.79	803.47	803.88	803.56	804.07	803.51	803.28	803.02	802.98	802.98	803.37
27	802.73	802.80	803.47	803.89	803.57	804.01	803.45	803.32	803.01	802.99	803.02	803.37
28	802.73	802.81	803.46	803.87	803.55	803.93	803.43	803.33	803.06	802.98	803.02	803.37
29	802.73	802.82	803.45	803.84	---	803.85	803.41	803.34	803.11	802.96	803.02	803.38
30	802.73	802.83	803.44	803.79	---	803.82	803.39	803.36	803.14	802.95	803.02	803.38
31	802.73	---	803.45	803.75	---	803.81	---	803.35	---	802.99	803.00	---
MEAN	802.59	802.77	803.18	803.72	803.51	804.05	803.66	803.29	803.16	803.05	803.06	803.27
MAX	802.73	802.83	803.47	804.14	803.71	804.68	803.84	803.37	803.34	803.17	803.14	803.47
MIN	802.47	802.73	802.85	803.49	803.39	803.53	803.39	803.18	803.01	802.95	802.98	803.00
CAL YR 1978	MEAN 803.08		MAX 804.31	MIN 802.34								
WTR YR 1979	MEAN 803.27		MAX 804.68	MIN 802.47								

STREAMS TRIBUTARY TO LAKE ONTARIO

04228919 HEMLOCK LAKE NEAR HEMLOCK, NY

LOCATION.--Lat 42°46'30", long 77°36'36", Livingston County, Hydrologic Unit 04130003, at Rochester Water Bureau filtration plant at north end of Hemlock Lake, 1.5 mi (2.4 km) south of Hemlock.

PERIOD OF RECORD.--Water years 1976 to current year.

CHEMICAL DATA: 1976-79 (b).
 MINOR ELEMENTS DATA: 1976-79 (b).
 RADIOCHEMICAL DATA: 1976-79 (b).
 PESTICIDE DATA: 1976-79 (b).
 ORGANIC DATA: OC--1976-79 (b).
 PCB--1976-79 (b).
 PCN--1976-79 (b).
 NUTRIENT DATA: 1976-79 (b).

REMARKS.--Samples are collected from raw-water tap in filtration plant laboratory.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HC03)	ALKALINITY (MG/L AS CAC03)
DEC 06...	1200	230	7.4	9.0	93	33	26	6.7	9.2	1.3	72	59
MAR 09...	1500	255	7.2	4.0	87	31	25	5.9	7.6	1.3	--	56
JUN 08...	1230	218	7.7	22.0	87	34	25	5.9	8.8	1.3	--	53
SEP 13...	1400	225	7.1	22.0	83	28	24	5.6	8.0	1.2	--	55

DATE	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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
DEC 06...	23	13	.1	1.6	125	116	.15	.00	.01	.27	.43	.00
MAR 09...	23	14	.1	1.7	106	112	.19	.01	.02	.22	.44	.01
JUN 08...	25	15	.1	1.4	120	114	.20	.00	.01	.19	.40	.01
SEP 13...	22	14	.1	.3	135	108	.02	.00	.01	.17	.20	.01

DATE	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
DEC 06...	.00	100	1	0	1	<10	1	16	160	12	0	30
MAR 09...	.00	20	1	0	1	<10	1	30	180	6	0	0
JUN 08...	.00	70	0	0	1	20	0	23	110	5	0	0
SEP 13...	--	40	1	--	1	1	0	21	90	6	0	20

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)
DEC 06...	<.5	0	17	0	0	60	20	4.9	.00	.00	.0	.00
MAR 09...	<.5	2	10	0	0	80	20	3.7	.00	.00	.0	.00
JUN 08...	<.5	1	7	0	0	50	20	2.2	.00	.00	.0	.00
SEP 13...	<.5	0	4	0	0	110	10	1.5	--	.00	.0	.00

STREAMS TRIBUTARY TO LAKE ONTARIO

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04228919 HEMLOCK LAKE NEAR HEMLOCK, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
DEC 06...	.00	.0	.00	.00	.00	.00	.00	.00
MAR 09...	.00	.0	.00	.00	.00	.00	.00	.00
JUN 08...	.00	.0	.00	.00	.00	.00	.00	.00
SEP 13...	.00	.0	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)
DEC 06...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR 09...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUN 08...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 13...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC 06...	.00	.00	.00	0	.00	.00	.00	.00
MAR 09...	.00	.00	.00	0	.00	.00	.00	.00
JUN 08...	.00	.00	.00	0	.00	.00	.00	.00
SEP 13...	.00	.00	.00	0	.00	.00	.00	.00

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. (UG/L U-NAT)	GROSS ALPHA, DIS- SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. (PCI/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. (PCI/L AS YT-90)	RA-226, DIS- SOLVED, PLAN- CHET COUNT (PCI/L)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	STRON- TIUM 90 DIS- SOLVED (PCI/L)
DEC 06...	<3.0	<.4	--	--	4.5	<.4	4.7	<.4	--	.04	<.4
MAR 09...	<1.2	<.4	--	--	1.6	<.4	1.5	<.4	--	.05	<.4
JUN 08...	<1.4	<.4	<1.0	<.3	2.3	<.4	2.2	<.4	--	.06	<.4
SEP 13...	3.7	<.4	2.5	<.3	2.6	<.4	2.7	<.4	.2	--	.5

STREAMS TRIBUTARY TO LAKE ONTARIO

04228950 CANADICE LAKE NEAR HEMLOCK, NY

04229000 CANADICE OUTLET NEAR HEMLOCK, NY

LOCATION.--Lake: Lat 42°44'27", long 77°34'20", Ontario County, Hydrologic Unit 04130003, at dam at outlet of Canadice Lake, 3.6 mi (5.8 km) upstream from point of diversion to Hemlock Lake, and 4 mi (6 km) southeast of Hemlock. Outlet: Lat 42°44'27", long 77°34'20", Ontario County, upstream from weir, 60 ft (18.3 m) downstream from dam.

DRAINAGE AREA.--12.4 mi² (32.1 km²).

PERIOD OF RECORD.--Lake: October 1970 to current year.

Outlet: April 1903 to current year. Prior to October 1966, published as "Canadice Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area; 1967.

GAGE.--Nonrecording gage read once daily and whenever control gate is changed. Datum of gage is 1,093.00 ft (333.146 m) National Geodetic Vertical Datum of 1929 (furnished by city of Rochester).

REMARKS.--Outflow from Canadice Lake diverted into Hemlock Lake for Rochester water supply. Flow regulated by gates at dam and augmented by pumping. Discharge computed by weir formula and from pumping records. Intermittent flow over spillway is not monitored. Accuracy of adjusted record, as indicative of natural runoff, is therefore reduced.

COOPERATION.--Records furnished by Department of Public Works, City of Rochester.

AVERAGE DISCHARGE.--76 years, 11.5 ft³/s (0.326 m³/s), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1978 TO SEPT. 1979

04228950 CANADICE LAKE

04229000 CANADICE OUTLET

	* Elevation FT	Contents FT ³	Change in contents FT ³ /S	Observed discharge MEAN	† Adjusted for change in contents in Canadice Lake MEAN	CFSM	IN.
October	1,091.27	262.56	- 11.2	0	- 4.18	-0.34	-0.39
November	1,091.07	256.96	- 5.60	0	- 2.16	- .17	- .19
December	1,092.78	304.84	+ 47.9	0	+17.9	+1.44	+1.66
CAL YR 1978			-124	12.4	+ 8.45	+ .68	+9.25
January	1,095.72	391.32	+ 86.5	0	+32.3	+2.60	+3.00
February	1,096.69	422.08	+ 30.8	0	+12.7	+1.02	+1.07
March	1,098.86	494.24	+ 72.2	14.4	+41.3	+3.33	+3.84
April	1,098.75	490.50	- 3.74	0	- 1.44	- .12	- .13
May	1,098.80	492.20	+ 1.70	0	+ .63	+ .05	+ .06
June	1,097.61	452.13	- 40.1	11.5	- 3.93	- .32	- .35
July	1,095.75	392.25	- 59.9	20.2	- 2.12	- .17	- .20
August	1,092.58	299.24	- 93.0	30.6	- 4.17	- .34	- .39
September	1,092.07	284.96	- 14.3	4.68	- .83	- .07	- .07
WTR YR 1979			+ 11.2	6.87	+ 7.22	+ .58	+7.91

* Elevation at 2400 hours on last day of month.

† Adjustments by Geological Survey. Negative figures indicate that natural losses from Canadice Lake exceeded inflow or that unmonitored spillage occurred.

NOTE.--All figures of contents expressed in millions.

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LOCATION.--Lat 42°57'24", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft (8 m) downstream from bridge on State Highway 65 at Honeoye Falls, and 13 mi (21 km) upstream from mouth.

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft (185.928 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft (185.855 m) NGVD.

REMARKS.--Records poor. Outlet of Honeoye Lake not controlled (see station 04228845). Some diversion from and regulation by Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gal/min (1.33 ft³/s or 0.038 m³/s). This pumped water enters creek upstream from gage.

AVERAGE DISCHARGE.--32 years (1946-70, 1973-79), 123 ft³/s (3.483 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft³/s (131 m³/s) Mar. 28, 1950, gage height, 6.42 ft (1.957 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s); minimum, 0.06 ft³/s (0.002 m³/s) Aug. 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,170 ft³/s (89.8 m³/s) Mar. 5, gage height, 4.79 ft (1.460 m); maximum gage height, 6.06 ft (1.847 m) Feb. 24 (ice jam); minimum discharge, 2.2 ft³/s (0.062 m³/s) Oct. 6, 12, 13, gage height, 0.22 ft (0.067 m).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	18	24	1200	210	209	291	116	118	47	30	5.1
2	2.9	16	28	2400	180	271	332	105	90	40	36	6.3
3	2.9	14	46	1400	150	438	475	94	78	30	27	5.4
4	3.1	13	118	880	130	1050	354	100	67	25	21	5.4
5	2.5	12	213	500	130	2450	423	96	58	19	16	5.1
6	2.3	11	222	300	120	2030	423	86	53	17	11	10
7	2.9	11	219	220	100	1070	362	78	48	15	8.3	17
8	3.1	10	203	190	100	806	358	73	43	13	7.2	23
9	3.4	10	300	160	100	647	385	70	43	11	6.9	18
10	3.3	10	280	140	86	608	502	67	48	11	6.6	12
11	2.9	9.5	360	130	80	602	621	327	53	12	5.4	9.1
12	2.3	9.5	310	110	76	480	777	246	81	13	5.4	7.2
13	3.3	9.1	236	110	74	428	929	118	57	12	5.4	6.3
14	10	8.7	236	120	66	450	905	86	42	11	5.7	60
15	67	8.7	243	150	70	400	714	71	35	10	5.4	350
16	61	8.3	222	200	64	340	571	75	30	8.0	5.4	200
17	36	9.1	220	200	58	349	596	71	25	8.3	5.4	130
18	22	9.1	220	180	56	362	590	60	20	25	5.4	100
19	16	9.5	220	140	56	327	536	53	15	37	5.1	84
20	14	11	240	130	54	287	475	54	13	31	5.1	76
21	13	12	410	120	52	268	428	55	10	12	5.1	68
22	14	11	584	120	52	257	390	52	11	6.6	5.1	64
23	12	11	454	120	64	264	362	48	19	5.4	5.1	62
24	13	11	380	130	100	294	332	48	26	12	4.8	60
25	17	16	250	160	200	332	307	86	21	10	5.1	58
26	19	18	240	250	332	340	298	148	17	12	4.8	56
27	30	18	240	350	177	307	226	225	14	17	4.8	56
28	50	17	230	400	200	271	166	213	15	13	4.8	56
29	40	15	220	354	---	268	140	177	30	12	5.4	54
30	28	18	220	298	---	298	124	182	52	9.1	5.4	54
31	20	---	330	283	---	315	---	168	---	8.7	5.1	---
TOTAL	520.0	364.5	7718	11445	3137	16818	13392	3448	1232	513.1	279.2	1717.9
MEAN	16.8	12.2	249	369	112	543	446	111	41.1	16.6	9.01	57.3
MAX	67	18	584	2400	332	2450	929	327	118	47	36	350
MIN	2.3	8.3	24	110	52	209	124	48	10	5.4	4.8	5.1
CAL YR 1978 TOTAL	54607.8											
WTR YR 1979 TOTAL	60584.7											
MEAN 150					1390	MIN 2.2						
MAX 166					2450	MIN 2.3						

STREAMS TRIBUTARY TO LAKE ONTARIO

04230380 OATKA CREEK AT WARSAW, NY

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft (122 m) downstream from bridge on Court Street, Warsaw.

DRAINAGE AREA.--41.9 mi² (109 km²).

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 987.15 ft (300.883 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record, June 19 to July 25, which are poor.

AVERAGE DISCHARGE.--15 years (1964-79), 54.9 ft³/s (1.555 m³/s), 17.79 in/yr (452 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,010 ft³/s (114 m³/s) June 23, 1972, gage height, 9.75 ft (2.972 m), from rating curve extended above 1,770 ft³/s (50.1 m³/s) on basis of slope-area measurement of peak discharge; minimum, 0.90 ft³/s (0.025 m³/s) Aug. 1, 1965; minimum gage height, 1.09 ft (0.332 m) July 22, 23, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 690 ft³/s (19.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1000	882 25.0	4.68 1.426	Mar. 14	0815	752 21.3	3.83 1.167
Jan. 5	0015	ice jam	5.00 1.524	Mar. 25	0315	866 24.5	4.10 1.250
Jan. 25	1115	*a2,000 56.6	*b7.18 2.188	Apr. 13	1730	807 22.9	3.96 1.207
Mar. 5	0530	1,140 32.3	4.72 1.439	Sept. 14	1500	1,470 41.6	5.39 1.643

a About.

b Backwater from ice.

Minimum discharge, 1.1 ft³/s (0.031 m³/s) Aug. 22, 23, gage height, 1.49 ft (0.454 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	12	694	76	52	123	39	17	30	20	3.1
2	14	11	13	340	72	140	203	35	14	7.0	13	6.9
3	14	10	32	110	70	130	147	37	13	6.0	6.0	16
4	18	10	189	70	76	480	102	45	10	5.2	3.7	6.0
5	17	12	71	92	58	908	147	37	11	4.8	3.1	5.2
6	16	12	37	92	54	367	89	32	11	4.4	14	19
7	17	10	30	76	44	244	97	28	10	4.0	6.9	14
8	17	10	68	68	43	203	100	25	14	3.8	4.4	9.0
9	16	10	84	68	41	173	116	23	11	16	3.7	6.9
10	15	8.3	39	66	38	284	131	22	13	4.0	7.9	5.2
11	16	9.2	28	62	39	153	153	23	17	3.8	6.0	4.4
12	15	8.3	26	50	33	102	197	20	10	3.5	4.4	4.4
13	19	8.3	30	66	37	134	413	25	9.0	3.6	3.1	6.0
14	67	9.2	22	120	31	492	330	20	7.9	18	5.2	534
15	38	8.3	26	98	29	158	188	19	6.9	3.7	3.7	153
16	26	8.3	21	80	28	126	156	19	6.0	3.3	3.1	41
17	21	10	32	72	30	131	147	16	5.2	2.9	2.6	22
18	20	16	31	66	26	176	102	14	5.2	2.7	2.6	14
19	20	12	30	56	26	164	81	13	6.0	2.5	3.1	16
20	23	10	76	54	27	167	71	13	4.8	2.3	2.6	13
21	21	10	170	54	24	185	63	17	4.4	2.1	2.1	10
22	19	10	92	52	28	209	59	16	30	2.0	1.3	10
23	19	16	52	70	80	270	52	13	10	1.9	1.3	9.0
24	21	28	42	120	200	345	47	22	6.0	2.5	2.1	7.9
25	21	21	32	1400	160	393	45	33	4.5	5.0	4.4	7.9
26	31	12	28	1600	78	139	43	39	4.0	17	2.6	9.0
27	41	42	28	1000	84	100	63	33	5.0	7.9	6.9	7.9
28	24	13	26	310	70	84	56	32	7.0	4.4	6.9	10
29	16	11	25	84	---	131	47	33	10	3.7	25	11
30	12	13	26	78	---	237	43	39	35	2.6	6.9	10
31	11	---	62	76	---	194	---	23	---	9.0	3.7	---
TOTAL	659	381.9	1480	7244	1602	7071	3611	805	317.9	189.6	182.3	991.8
MEAN	21.3	12.7	47.7	234	57.2	228	120	26.0	10.6	6.12	5.88	33.1
MAX	67	42	189	1600	200	908	413	45	35	30	25	534
MIN	11	8.3	12	50	24	52	43	13	4.0	1.9	1.3	3.1
CFSM	.51	.30	1.14	5.59	1.37	5.44	2.86	.62	.25	.15	.14	.79
IN.	.59	.34	1.31	6.43	1.42	6.28	3.21	.71	.28	.17	.16	.88

CAL YR 1978 TOTAL 19329.4 MEAN 53.0 MAX 665 MIN 3.1 CFSM 1.27 IN 17.16
WTR YR 1979 TOTAL 24535.5 MEAN 67.2 MAX 1600 MIN 1.3 CFSM 1.60 IN 21.78

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

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LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from bridge on Union Street in Garbutt, 1.5 mi (2.4 km) west of Scottsville, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--204 mi² (528 km²).

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

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft (170.950 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--34 years, 214 ft³/s (6.060 m³/s), 14.25 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s (200 m³/s) Mar. 31, 1960, gage height, 8.64 ft (2.633 m); minimum, 3.3 ft³/s (0.093 m³/s) Sept. 11, 12, 1958; minimum gage height, 1.88 ft (0.573 m) June 19, 1959, result of regulation; minimum daily discharge, 13 ft³/s (0.37 m³/s) Oct. 30 to Nov. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	0515	2,260 64.0	5.91 1.801	Apr. 15	0200	1,640 46.4	5.28 1.609
Mar. 6	0345	*3,940 112	*7.19 2.192				

Minimum discharge, 32 ft³/s (0.91 m³/s) Oct. 1, 2, 3, 4; minimum gage height, 2.31 ft (0.704 m) Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	61	59	563	390	452	672	229	154	69	44	34
2	33	57	78	1630	330	459	646	213	131	73	44	38
3	33	56	78	2100	300	549	671	203	117	68	43	43
4	36	54	115	1200	290	1380	659	200	107	63	42	37
5	34	53	249	600	260	3050	620	208	102	59	42	35
6	34	51	273	340	230	3620	646	192	97	59	41	39
7	34	51	176	280	230	2260	508	179	93	56	40	37
8	36	51	140	270	220	1440	502	171	108	54	40	36
9	36	49	174	220	200	1230	539	162	97	52	39	35
10	34	48	231	210	190	1160	535	152	106	53	41	35
11	33	48	140	170	170	1120	623	144	125	52	40	35
12	33	46	130	150	170	943	763	153	110	50	40	35
13	38	46	125	170	150	692	1060	170	100	50	39	34
14	49	46	111	190	160	858	1540	158	90	50	41	168
15	119	44	103	240	140	1090	1480	148	80	51	40	729
16	138	44	112	300	130	1030	1020	138	76	50	39	649
17	86	46	123	290	130	752	790	131	72	48	38	601
18	68	49	130	250	130	704	691	126	69	48	39	227
19	61	48	110	190	120	707	575	121	67	47	38	133
20	57	51	100	180	120	695	453	114	64	46	38	103
21	56	53	201	180	120	651	390	118	63	46	37	89
22	57	49	331	180	120	637	351	117	63	45	36	79
23	56	49	382	180	150	648	323	117	62	44	35	73
24	54	54	322	191	414	694	298	122	60	45	35	68
25	51	66	206	406	787	874	278	133	63	45	35	64
26	56	76	138	705	674	1040	260	172	61	49	35	61
27	72	66	140	787	557	755	255	202	58	46	39	58
28	105	100	130	958	490	472	280	189	60	45	36	58
29	95	84	120	797	---	394	285	199	64	44	35	59
30	76	69	120	590	---	506	249	190	63	44	38	55
31	66	---	140	470	---	614	---	181	---	43	35	---
TOTAL	1769	1665	4987	14987	7372	31616	17962	5052	2582	1594	1204	3747
MEAN	57.1	55.5	161	483	263	1020	599	163	86.1	51.4	38.8	125
MAX	138	100	382	2100	787	3620	1540	229	154	73	44	729
MIN	33	44	59	150	120	394	249	114	58	43	35	34
CFSM	.28	.27	.79	2.37	1.29	5.00	2.94	.80	.42	.25	.19	.61
IN.	.32	.30	.91	2.73	1.34	5.77	3.28	.92	.47	.29	.22	.68

CAL YR 1978	TOTAL	92289	MEAN 253	MAX 3020	MIN 31	CFSM 1.24	IN 16.83
WTR YR 1979	TOTAL	94537	MEAN 259	MAX 3620	MIN 33	CFSM 1.27	IN 17.24

LOCATION.--Lat 43°05'26", long 77°40'52", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft (120 m) upstream from Ballantyne Bridge on State Highway 252, 1.6 mi (2.6 km) west of Mortimer, and 2.8 mi (4.5 km) upstream from Erie (Barge) Canal.

PERIOD OF RECORD.--October 1973 to current year.

REMARKS.--River regulated at high stages by Mount Morris Lake (see station 04224000). River regulated for operation of Erie (Barge) Canal and downstream powerplants.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.33 ft (5.892 m) Mar. 5, 1976; minimum, 8.21 ft (2.502 m) Dec. 20, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 18.67 ft (5.691 m) Mar. 6; minimum, 10.88 ft (3.316 m) Aug. 17.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.66	12.07	11.70	12.56	13.77	12.29	14.07	12.04	12.05	11.95	11.74	12.15
2	11.73	11.95	12.01	15.28	13.50	11.92	14.01	11.84	12.05	12.16	11.90	12.25
3	11.65	11.99	12.02	14.78	13.28	12.24	13.73	12.24	12.30	12.07	12.21	12.35
4	11.60	11.95	12.07	13.42	13.12	14.03	13.34	12.10	12.25	12.06	11.99	12.35
5	11.67	11.87	12.38	13.84	12.84	16.96	13.62	12.30	12.10	12.14	11.88	12.35
6	11.70	12.03	12.00	13.51	12.38	18.58	14.01	12.25	12.15	12.00	12.00	12.15
7	11.79	12.10	12.28	13.69	12.22	17.89	14.17	12.25	12.04	11.80	11.94	12.10
8	11.80	12.01	12.25	13.86	12.23	16.05	14.19	12.15	11.87	11.89	11.92	12.35
9	11.77	11.91	12.34	13.74	12.20	14.76	14.17	12.25	12.10	11.96	11.76	12.10
10	11.76	12.04	12.50	13.55	12.07	14.37	14.41	12.00	12.14	11.92	11.64	12.30
11	11.70	11.81	12.26	12.93	12.02	14.54	14.93	11.95	12.06	11.93	11.54	12.20
12	11.74	11.82	12.12	14.75	11.92	14.34	15.01	12.30	12.21	11.99	11.45	12.25
13	11.85	11.98	12.09	15.45	11.60	14.20	14.52	12.00	12.11	11.93	11.44	12.11
14	11.93	12.05	11.96	15.39	11.35	14.43	14.49	12.30	11.96	11.88	11.67	11.64
15	11.95	12.02	12.21	14.61	11.69	15.19	13.90	12.25	11.91	11.93	11.85	12.02
16	12.18	11.92	12.15	13.97	11.51	15.26	13.63	12.20	12.00	11.99	11.86	11.94
17	12.20	11.81	12.06	13.51	11.34	15.17	14.35	12.15	12.07	12.14	11.08	11.76
18	12.08	12.01	12.09	12.80	11.23	15.06	14.72	12.30	12.00	12.15	10.99	11.72
19	12.11	12.15	12.03	12.38	11.07	14.95	14.46	12.20	11.96	12.04	11.05	11.87
20	11.96	12.14	12.12	12.51	11.49	14.78	14.19	12.20	11.99	11.97	11.03	12.01
21	11.92	12.03	11.98	12.57	11.56	14.89	13.62	12.05	11.80	11.85	11.14	12.15
22	11.80	12.00	12.35	12.65	11.35	14.95	13.30	12.00	11.67	11.73	11.26	12.02
23	11.87	12.04	12.25	12.58	11.05	14.70	13.15	12.10	11.65	11.68	11.50	12.05
24	12.13	12.05	12.04	12.59	12.15	14.23	12.91	12.00	11.63	11.60	11.65	12.04
25	12.07	12.11	11.66	13.04	13.65	13.94	12.62	12.00	11.74	11.84	11.70	12.18
26	12.08	12.15	12.00	14.65	12.68	14.26	12.28	12.30	11.88	12.10	11.60	12.08
27	12.09	12.10	12.19	14.52	12.00	14.43	12.27	12.10	11.87	11.96	11.65	11.62
28	12.12	12.08	12.20	14.13	12.09	14.20	12.10	11.90	11.89	12.01	11.70	11.75
29	12.12	12.06	12.04	13.97	---	13.75	12.30	12.20	12.04	11.80	11.90	12.05
30	11.91	11.98	12.09	13.79	---	13.60	12.10	12.10	11.98	11.55	12.05	11.99
31	12.06	---	12.04	13.73	---	14						

STREAMS TRIBUTARY TO LAKE ONTARIO

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04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft (30 m) downstream from main-line tracks of Penn Central Transportation Co., and 0.3 mi (0.5 km) downstream from Black Creek Dam.

DRAINAGE AREA.--123 mi² (319 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 552.45 ft (168.387 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station.

AVERAGE DISCHARGE.--34 years, 115 ft³/s (3.257 m³/s), 12.70 in/yr (323 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s (138 m³/s) Mar. 31, 1960, gage height, 9.44 ft (2.877 m); minimum, 0.22 ft³/s (0.006 m³/s) Aug. 19, 1970; minimum gage height, 0.93 ft (0.283 m) Aug. 5-7, Sept. 15, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	1000	933 26.4	4.81 1.466	Mar. 6	0100	*2,840 80.4	*7.72 2.353
Feb. 25	2300	933 26.4	4.81 1.466				

Minimum discharge, 4.0 ft³/s (0.113 m³/s) Aug. 10, gage height, 1.21 ft (0.369 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	22	35	226	250	585	321	122	111	38	11	20
2	9.7	21	48	525	210	528	356	112	92	34	13	14
3	10	17	53	879	190	561	458	109	76	30	15	12
4	13	17	75	700	160	1130	461	111	62	25	13	12
5	15	17	106	400	140	2420	406	116	60	20	11	13
6	16	17	112	250	130	2590	431	108	61	18	8.8	13
7	12	16	84	170	120	1590	366	104	58	16	7.0	11
8	11	17	75	140	110	945	300	101	48	14	5.8	12
9	12	17	96	130	100	731	288	100	45	14	4.7	13
10	12	17	103	120	100	651	281	100	44	16	6.5	12
11	11	18	81	110	98	574	374	100	73	20	6.5	11
12	11	17	72	120	96	430	504	126	77	18	9.3	11
13	14	16	56	130	94	359	644	217	54	14	9.8	9.3
14	26	17	50	120	92	386	710	269	42	14	12	77
15	41	17	43	100	92	371	704	199	35	12	11	160
16	53	20	51	94	90	362	477	131	30	14	9.3	388
17	35	21	61	86	90	310	352	103	27	14	7.4	394
18	24	26	58	94	88	276	292	88	26	12	7.8	168
19	21	26	47	100	90	278	235	69	26	11	7.8	66
20	18	24	58	110	90	260	188	61	23	10	7.4	73
21	17	23	91	115	110	233	162	65	22	7.0	6.1	49
22	16	22	122	108	130	215	149	80	24	6.1	5.8	31
23	17	26	138	99	160	203	140	74	28	7.4	6.1	25
24	17	40	125	110	316	194	133	71	23	7.8	6.5	22
25	17	44	80	201	742	219	126	84	22	9.3	7.0	19
26	22	40	64	238	843	265	119	131	20	15	5.8	16
27	34	29	58	490	716	250	126	184	18	17	14	14
28	48	33	54	701	658	186	145	178	24	20	16	15
29	41	35	50	520	---	163	153	153	29	17	16	16
30	30	36	50	400	---	212	138	143	36	12	18	18
31	25	---	67	310	---	305	---	140	---	11	19	---
TOTAL	659.7	708	2263	7896	6105	17782	9539	3749	1316	493.6	304.4	1714.3
MEAN	21.3	23.6	73.0	255	218	574	318	121	43.9	15.9	9.82	57.1
MAX	53	44	138	879	843	2590	710	269	111	38	19	394
MIN	9.7	16	35	86	88	163	119	61	18	6.1	4.7	9.3
CFSM	.17	.19	.59	2.07	1.77	4.67	2.59	.98	.36	.13	.08	.46
IN.	.20	.21	.68	2.39	1.85	5.38	2.88	1.13	.40	.15	.09	.52

CAL YR 1978 TOTAL 51027.3 MEAN 140 MAX 2560 MIN 5.7 CFSM 1.14 IN 15.43
WTR YR 1979 TOTAL 52530.0 MEAN 144 MAX 2590 MIN 4.7 CFSM 1.17 IN 15.89

STREAMS TRIBUTARY TO LAKE ONTARIO

04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from Rochester Gas and Electric Corp. plant 5, 100 ft (30 m) upstream from bridge on Driving Park Avenue in Rochester, and 6.1 mi (9.8 km) upstream from mouth.

DRAINAGE AREA.--2,457 mi² (6,364 km²).

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.24 ft (75.054 m) National Geodetic Vertical Datum of 1929 (247.00 ft or 75.286 m, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi (8 km) upstream at datum 506.85 ft (154.488 m), Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 250.00 ft (76.200 m), Barge Canal datum.

REMARKS.--Records fair. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi (8.7 km) upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--72 years, (1905-18, 1920-79), 2,780 ft³/s (78.73 m³/s), 15.37 in/yr (390 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft³/s (1,370 m³/s) Mar. 30, 1916, gage height, 15.3 ft (4.66 m) site and datum then in use; maximum at present site, 34,400 ft³/s (974 m³/s) Mar. 19, 1942; maximum gage height, 17.08 ft (5.206 m) Apr. 2, 1940, present datum; minimum discharge, less than 10 ft³/s (0.28 m³/s), occurred during low-water periods when powerplant was shut down; minimum daily, 91 ft³/s (2.58 m³/s) Jan. 9, 29, Feb. 1, 8, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge on Mar. 18, 1865, was about 54,000 ft³/s (1,530 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,700 ft³/s (615 m³/s) Mar. 6, gage height, 13.74 ft (4.188 m), result of regulation; minimum discharge, 98 ft³/s (2.78 m³/s) July 30, result of regulation during period of backwater from Lake Ontario; minimum gage height, 0.92 ft (0.280 m) Oct. 1, result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863	975	582	4560	6810	4350	8220	2450	3050	952	1150	617
2	577	1080	1090	12600	6430	4740	8490	1780	2020	1070	671	667
3	540	802	1150	11200	5880	5470	7790	1140	1820	1340	1010	676
4	506	967	1470	7770	5690	10600	6900	1320	1790	878	1090	625
5	444	819	2510	7670	4990	17200	7580	1400	1690	969	821	723
6	480	741	3620	8140	4190	20900	8410	1620	1110	1060	649	1170
7	480	881	1780	7880	3540	18900	8670	1720	1450	936	780	927
8	466	806	1750	8090	2740	14400	8630	1720	1550	653	632	2580
9	458	693	1780	7310	2320	11600	8560	1750	1100	662	640	1280
10	487	858	3510	6820	2240	10900	9650	1730	1320	716	810	904
11	467	1120	3080	5290	2140	11100	10900	1140	1650	707	632	1050
12	481	593	1980	4230	2040	10700	12000	2170	2120	711	619	699
13	564	577	2000	4150	1950	10300	11100	2170	2530	720	628	720
14	875	802	1590	4550	1740	10800	10800	1880	1710	757	628	3230
15	1120	729	1430	4210	1780	12400	9700	2710	1250	805	671	3990
16	1330	734	1360	4030	2000	12500	8400	1950	1090	743	587	3610
17	1580	637	1230	3670	1880	12300	9190	1960	936	720	1230	3350
18	1570	746	1200	3000	1860	12100	10100	1480	1050	1040	579	2960
19	1270	1010	943	2590	1610	12000	9350	1790	689	969	555	2390
20	1040	1090	1180	2310	1510	11800	8560	1120	836	963	628	2150
21	868	1170	1920	2470	1540	12100	7370	1700	1010	915	619	2150
22	954	899	2540	2450	2010	12300	6420	936	986	748	614	1910
23	592	936	2550	2520	2490	11700	5350	1550	915	743	618	2080
24	669	896	2430	2620	4620	10600	4660	1690	894	689	757	1850
25	956	949	1910	3510	6660	9990	3870	1750	684	716	762	1670
26	698	1400	1790	5730	5180	10300	3190	2400	762	1310	874	1950
27	824	1150	2170	6290	4120	10500	2840	3460	790	680	1070	2130
28	860	1100	2090	6280	4120	10000	2920	2980	730	523	673	1460
29	1510	1110	1810	6360	---	8870	3020	3200	725	547	947	1580
30	1550	1050	1910	6380	---	8430	2910	3570	1090	502	939	1490
31	1080	---	2440	6580	---	8190	---	3210	---	1110	848	---
TOTAL	26159	27320	58795	171260	94080	348040	225550	61446	39347	25854	23731	52588
MEAN	844	911	1897	5525	3360	11230	7518	1982	1312	834	766	1753
MAX	1580	1400	3620	12600	6810	20900	12000	3570	3050	1340	1230	3990
MIN	444	577	582	2310	1510	4350	2840	936	684	502	555	617

CAL YR 1978 TOTAL 1104283 MEAN 3025 MAX 16500 MIN 414
WTR YR 1979 TOTAL 1154170 MEAN 3162 MAX 20900 MIN 444

STREAMS TRIBUTARY TO LAKE ONTARIO

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04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°13'26", long 77°36'59", Monroe County, Hydrologic Unit 04130003, at Charlotte Docks, at the Rochester Cement Corp., in Rochester, 0.4 mi (0.6 km) upstream from Rattlesnake Point, 1.6 mi (2.6 km) upstream from Stutson Street Bridge, and 3.9 mi (6.3 km) downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,457 mi² (6,364 km²) at station 04232000.

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

CHEMICAL DATA: 1971-72 (a), 1974 (b), 1975-79 (c).

MINOR ELEMENTS DATA: 1971-73 (a), 1974-79 (b).

ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-79 (c).

NUTRIENT DATA: 1971 (a), 1974 (b), 1975-79 (c).

BIOLOGICAL DATA:

Bacteria--1974 (b), 1975-79 (c).

Phytoplankton--1974 (b), 1975-77 (c), 1978-79 (b).

Periphyton--1975-79 (b).

SEDIMENT DATA: 1974 (b), 1975-79 (c).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT												
11...	1100	E470	750	7.3	17.0	6.0	8.6	88	430	43	230	120
31...	1100	E1100	840	7.4	11.0	9.0	8.3	77	K1100	190	320	170
APR												
13...	1145	E10000	450	7.6	4.0	70	12.1	98	K890	670	150	60
MAY												
10...	1100	E1800	720	7.9	17.0	4.0	7.6	80	290	28	250	110
JUN												
07...	1400	E1500	750	7.8	--	5.0	7.3	87	K180	K14	240	110
29...	1100	E750	1100	7.5	21.5	7.0	5.2	60	K26000	260	260	120
AUG												
01...	1100	E1200	700	7.3	27.5	7.0	4.0	49	E60000	4000	200	92
SEP												
11...	1100	E1100	600	6.1	21.5	15	7.4	82	K35000	2800	210	110

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- LINEITY AS CAC03)	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
11...	72	13	62	4.6	110	120	97	.2	1.7	465	437	.77
31...	97	19	58	3.5	150	140	100	.2	2.8	553	511	.67
APR												
13...	45	10	23	2.2	94	48	38	.1	3.5	250	226	.92
MAY												
10...	73	16	44	2.9	140	100	71	.1	1.7	450	393	.74
JUN												
07...	73	14	49	3.8	130	120	77	.2	.8	438	416	.31
29...	78	16	93	4.1	140	130	160	.2	1.0	612	567	.52
AUG												
01...	61	12	61	2.4	110	79	97	.2	2.5	425	381	.50
SEP												
11...	66	12	38	3.7	100	90	94	.2	3.7	358	372	.72

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT												
11...	.97	.63	1.6	1.4	2.4	.11	.07	--	--	--	--	--
31...	.01	.99	1.0	.55	1.7	.13	.05	1	1	100	100	1
APR												
13...	.06	.48	.54	.34	1.5	.10	.02	--	--	--	--	--
MAY												
10...	.36	.74	1.1	.81	1.8	.04	.02	1	1	0	0	3
JUN												
07...	1.9	1.6	3.5	2.1	3.8	.10	.04	--	--	--	--	--
29...	1.5	1.0	2.5	2.3	3.0	.10	.04	2	2	100	70	8
AUG												
01...	.26	.84	1.1	.60	1.6	.20	.11	--	--	--	--	--
SEP												
11...	1.1	.90	2.0	1.9	2.7	.12	.05	3	2	100	60	4

E Estimated.

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

STREAMS TRIBUTARY TO LAKE ONTARIO

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--
31...	1	10	0	0	0	7	4	770	50	7	0	90
APR 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	2	40	<10	1	0	6	5	540	10	28	18	70
JUN 07...	--	--	--	--	--	--	--	--	--	--	--	--
29...	4	--	10	0	0	18	14	810	100	16	6	140
AUG 01...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 11...	2	20	<10	0	1	21	13	1200	30	17	2	110

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 11...	--	--	--	--	--	--	--	--	--	6.8	--	--
31...	90	<.5	<.5	0	0	2	0	70	20	--	4.9	1.1
APR 13...	--	--	--	--	--	--	--	--	--	7.7	--	--
MAY 10...	40	<.5	<.5	0	0	1	0	60	10	--	6.7	1.6
JUN 07...	--	--	--	--	--	--	--	--	--	5.9	--	--
29...	90	<.5	<.5	0	0	2	0	80	60	--	3.0	1.8
AUG 01...	--	--	--	--	--	--	--	--	--	13	--	--
SEP 11...	60	<.5	<.5	0	0	3	0	100	60	--	12	.8

STREAMS TRIBUTARY TO LAKE ONTARIO

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT						JUN					
11...	1000	3.0	40	740	17.0	07...	1340	9.0	260	760	22.0
11...	1005	8.0	40	740	16.5	07...	1345	12	260	760	22.0
11...	1010	12	40	735	16.5	29...	0930	3.0	40	930	21.5
11...	1015	16	40	720	16.5	29...	0935	8.0	40	930	21.5
11...	1030	3.0	150	750	17.0	29...	0940	12	40	930	21.5
11...	1035	8.0	150	745	16.5	29...	0945	16	40	915	21.0
11...	1040	12	150	745	16.5	29...	1000	3.0	150	950	21.5
11...	1055	3.0	260	760	17.0	29...	1005	7.0	150	950	21.5
11...	1101	7.0	260	750	17.0	29...	1010	10	150	950	21.5
11...	1105	10	260	750	16.5	29...	1015	14	150	950	21.0
31...	1035	3.0	40	800	12.0	29...	1030	3.0	260	965	21.5
31...	1040	10	40	805	11.0	29...	1035	7.0	260	965	21.5
31...	1045	15	40	815	10.5	29...	1040	10	260	965	21.0
31...	1100	3.0	150	840	11.0	29...	1045	14	260	960	21.5
31...	1105	7.0	150	840	10.5	AUG					
31...	1110	10	150	840	10.5	01...	1015	3.0	40	710	28.0
31...	1125	3.0	260	835	10.5	01...	1020	10	40	695	27.5
31...	1130	6.0	260	835	10.5	01...	1025	15	40	680	27.5
31...	1135	9.0	260	835	10.5	01...	1040	3.0	150	720	28.0
						01...	1045	8.0	150	690	27.5
MAY						01...	1050	15	150	680	27.0
10...	1110	10	40	720	17.0	01...	1105	3.0	260	715	27.5
10...	1115	15	40	720	16.5	01...	1110	7.0	260	710	27.5
10...	1120	20	40	720	16.5	01...	1115	11	260	685	27.5
10...	1140	3.0	150	725	17.0	SEP					
10...	1145	8.0	150	695	17.0	11...	1010	3.0	40	590	22.0
10...	1150	15	150	710	16.5	11...	1015	10	40	600	21.5
10...	1210	3.0	260	740	17.5	11...	1020	15	40	600	21.5
10...	1215	8.0	260	740	17.0	11...	1025	20	40	600	21.5
10...	1220	13	260	750	17.0	11...	1040	3.0	150	595	21.5
JUN						11...	1045	10	150	595	21.5
07...	1205	3.0	40	725	23.0	11...	1050	13	150	595	21.5
07...	1210	10	40	730	22.5	11...	1055	16	150	585	21.5
07...	1215	15	40	735	22.0	11...	1110	3.0	260	600	21.5
07...	1220	20	40	740	22.0	11...	1115	6.0	260	600	21.5
07...	1245	3.0	150	730	23.0	11...	1120	10	260	600	21.5
07...	1250	7.0	150	745	22.5						
07...	1255	12	150	755	22.0						
07...	1300	16	150	760	22.0						
07...	1330	3.0	260	650	22.5						
07...	1335	6.0	260	685	22.0						

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
11...	1100	E470	12	E15	--
31...	1100	E1100	20	E59	--
APR					
13...	1145	E10000	320	E8600	78
MAY					
10...	1100	E1800	10	E49	--
JUN					
07...	1400	E1500	16	E65	--
29...	1100	E750	21	E42	--
AUG					
01...	1100	E1200	13	E42	--
SEP					
11...	1100	E1100	27	E82	--

E Estimated.

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE/ TIME	JUL 18,78 1100	SEP 21,78 1100	OCT 31,78 1100	MAY 10,79 1100				
TOTAL CELLS/ML	12000	15000	3300	4300				
DIVERSITY: DIVISION	1.5	0.9	1.2	0.6				
..CLASS	1.5	0.9	1.3	0.6				
..ORDER	2.3	1.2	1.7	1.4				
...FAMILY	2.9	1.5	2.2	1.9				
....GENUS	3.6	1.9	3.0	1.9				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
....GLUEOACTINIUM	--	--	--	--	--	--	--	--
....CHARACIACEAE								
....SCHROEDERIA	*	0	--	--	--	--	--	--
....COELASTRACEAE								
....COELASTRUM	250	2	--	--	--	--	--	--
....MICRACTINIACEAE								
....GOLENKINIA	--	--	--	--	22	1	--	--
....MICRACTINIUM	120	1	--	--	--	--	--	--
....OOCYSTACEAE								
....ANKISTRODESMUS	250	2	720	5	110	3	--	--
....CHLORELLA	210	2	--	--	--	--	--	--
....CHODATELLA	61	1	1600	10	180	5	--	--
....DICTYOSPHAERIUM	280	2	--	--	--	--	--	--
....KIRCHNERIELLA	--	--	--	--	--	--	--	--
....OOCYSTIS	--	--	--	--	160	5	110	3
....SELENASTRUM	250	2	430	3	--	--	--	--
....WESTELLA	--	--	--	--	--	--	--	--
....SCENEDESMACEAE								
....ACTINASTRUM	2500#	21	--	--	--	--	--	--
....CRUCIGENIA	120	1	--	--	--	--	--	--
....SCENEDESMUS	1200	10	870	6	380	11	--	--
....TETRASTRUM	--	--	580	4	540#	16	110	3
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	210	2	--	--	--	--	--	--
....CHLAMYDOMONAS	61	1	430	3	110	3	200	5
....VOLVOCAECIAE								
....GONIUM	490	4	--	--	--	--	--	--
....PANDORINA	490	4	--	--	--	--	--	--
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCEAE								
....CYCLOTELLA	400	3	10000#	66	1000#	30	2700#	63
....MELOSIRA	--	--	--	--	--	--	--	--
....SKELETONEMA	--	--	--	--	490	15	--	--
....STEPHANODISCUS	--	--	--	--	--	--	--	--
..PENNALES								
...ACHNANTHACEAE								
....RHOICOSPHEA	--	--	140	1	--	--	--	--
....CYMBELLACEAE								
....CYMBELLA	*	0	--	--	--	--	28	1
....DIATOMACEAE								
....DIATOMA	--	--	--	--	22	1	--	--
....FRAGILARIACEAE								
....SYNEDRA	180	2	140	1	--	--	170	4
....NAVICULACEAE								
....NAVICULA	--	--	--	--	45	1	200	5
....NITZSCHIAEAE								
....NITZSCHIA	61	1	290	2	67	2	730#	17
..CHRYSTOPHYCEAE								
...CHRYDOMONADALES								
....OCHROMONADACEAE								
....OCHROMONAS	--	--	--	--	22	1	--	--
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
....CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	--	--	--	--	--	--	--
....CRYPTOMONADACEAE								
....CRYPTOMONAS	180	2	--	--	--	--	56	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON									
DATE/ TIME	JUL 18,78 1100		SEP 21,78 1100		OCT 31,78 1100		MAY 10,79 1100		
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	
CYANOPHYTA (BLUE-GREEN ALGAE)									
..CYANOPHYCEAE									
...CHROOCOCCALES									
...CHROOCOCCACEAE									
....AGMENELLUM	980	8	--	-	--	-	--	-	
....ANACYSTIS	210	2	--	-	180	5	--	-	
...HORMOGONALES									
...OSCILLATORIACEAE									
....LYNGBYA	3200#	26	--	-	--	-	--	-	
....OSCILLATORIA	--	-	--	-	--	-	--	-	
EUGLENOPHYTA (EUGLENOIDS)									
..EUGLENOPHYCEAE									
..EUGLENALES									
...EUGLENACEAE									
....EUGLENA	61	1	--	-	--	-	--	-	
....TRACHELOMONAS	120	1	--	-	--	-	--	-	
PYRRHOPHYTA (FIRE ALGAE)									
..DINOPHYCEAE									
...GYMNODINIALES									
...GYMNODINIACEAE									
....GYMNODINIUM	180	2	--	-	--	-	--	-	
DATE TIME	JUN 7,79 1400		JUN 29,79 1100		AUG 1,79 1100				
TOTAL CELLS/ML	10000		20000		31000				
DIVERSITY: DIVISION	0.9		1.4		1.4				
..CLASS	0.9		1.4		1.4				
...ORDER	1.3		1.5		1.7				
...FAMILY	1.4		2.0		2.0				
....GENUS	2.4		2.4		2.3				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT			
CHLOROPHYTA (GREEN ALGAE)									
..CHLOROPHYCEAE									
...CHLOROCOCCALES									
...OOCYSTACEAE									
....GLOEOACTINIUM	--	-	--	-	820	3			
...CHARACIACEAE									
....SCHROEDERIA	--	-	--	-	--	-			
...COELASTRACEAE									
....COELASTRUM	--	-	--	-	--	-			
...MICRACTINIACEAE									
....GOLENKINIA	--	-	--	-	--	-			
....MICRACTINIUM	--	-	510	2	1800	6			
...OOCYSTACEAE									
....ANKISTRODESMUS	350	3	380	2	--	-			
....CHLORELLA	--	-	--	-	--	-			
....CHODATELLA	87	1	--	-	--	-			
...DICTYOSPHAERIUM	--	-	760	4	--	-			
....KIRCHNERIELLA	--	-	250	1	820	3			
...OOCYSTIS	--	-	--	-	820	3			
...SELENASTRUM	430	4	--	-	--	-			
....WESTELLA	--	-	510	2	--	-			
...SCENEDESMACEAE									
....ACTINASTRUM	--	-	--	-	410	1			
...CRUCIGENIA	--	-	--	-	--	-			
...SCENEDESMUS	870	8	3800#	19	1200	4			
...TETRASTRUM	--	-	--	-	820	3			
...VOLVOCALES									
...CHLAMYDOMONADACEAE									
....CARTERIA	--	-	--	-	200	1			
...CHLAMYDOMONAS	350	3	380	2	610	2			
...VOLVOCAEAE									
....GONIUM	--	-	--	-	--	-			
...PANDORINA	--	-	--	-	--	-			

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 7,79 1400		JUN 29,79 1100		AUG 1,79 1100	
	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
ORGANISM						
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCAEAE						
....CYCLOTELLA	3800#	37	11000#	52	19000#	60
....MELOSIRA	170	2	--	--	--	--
....SKELETONEMA	--	--	--	--	--	--
...STEPHANODISCUS	3500#	34	890	4	--	--
..PENNIALES						
...ACHNANTHACEAE						
...RHOICOSPHEA	--	--	--	--	--	--
...CYMBELLACEAE	--	--	--	--	--	--
....CYMBELLA	--	--	--	--	--	--
...DIATOMACEAE	--	--	--	--	--	--
....DIATOMA	--	--	--	--	--	--
...FRAGILARIACEAE	--	--	--	--	--	--
...SYNEDRA	--	--	130	1	--	--
...NAVICULACEAE	--	--	--	--	--	--
....NAVICULA	--	--	--	--	--	--
...NITZSCHIAEAE						
....NITZSCHIA	430	4	130	1	820	3
..CHRYSOPHYCEAE						
...CHRYSOMONADALES						
...OCHROMONADACEAE						
....OCHROMONAS	--	--	--	--	200	1
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	--	130	1	--	--
...CRYPTOMONADACEAE						
....CRYPTOMONAS	260	3	130	1	610	2
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	--	--	--	--	--	--
....ANACYSTIS	--	--	1700	8	--	--
...HORMOGONALES						
...OSCILLATORIAEAE						
....LYNGBYA	--	--	--	--	--	--
....OSCILLATORIA	--	--	--	--	3100	10
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	--	--	--	--	--
....TRACHELONAS	--	--	--	--	--	--
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	--	--	--	--	--	--

NOTE: # - DOMINANT ORGANISM# EQUAL TO OR GREATER THAN 15%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Sampling method
		Dry weight	Ash weight			
Sept. 21 to Oct. 31	40	25.6	22.0	23.9	9.32	Polyethylene strip
Apr. 13 to June 7	55	15.8	13.3	37.0	9.92	Polyethylene strip
June 7 to Aug. 1	55	10.2	7.80	2.23	2.23	Polyethylene strip
Sept. 11 to Nov. 2	52	19.8	18.5	4.04	2.81	Polyethylene strip

STREAMS TRIBUTARY TO LAKE ONTARIO

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04232047 IRONDEQUOIT CREEK AT EAST ROCHESTER, NY

LOCATION.--Lat 43°07'15", long 77°28'38", Monroe County, Hydrologic Unit 04140101, on left bank 200 ft (61 m) upstream from bridge on Linden Avenue, 2.2 mi (3.5 km) upstream from Allen Creek, and 6.9 mi (11.1 km) upstream from mouth.

DRAINAGE AREA.--92.8 mi² (240 km²), flow from 5.04 mi² (13.1 km²) noncontributing.

PERIOD OF RECORD.--August 1973 to current year.

REVISED RECORDS.--WDR NY-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 341.46 ft (104.077 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--6 years, 109 ft³/s (3.087 m³/s), 15.95 in/yr (405 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s (41.9 m³/s) Oct. 29, 1974, gage height, 15.64 ft (4.767 m), result of dewatering of Erie (Barge) Canal through accidental break in canal wall at Bushnell Basin. Minimum, 25 ft³/s (0.71 m³/s) Sept. 9-11, 1975, gage height, 11.27 ft (3.435 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 570 ft³/s (16 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	2015	571 16.2	13.67 4.167	Sept. 14	1530	575 16.3	13.68 4.170
Mar. 5	2130	*1,350 38.2	*15.35 4.679				

Minimum discharge, 36 ft³/s (1.02 m³/s) Oct. 7, gage height 11.33 ft (3.453 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	50	88	361	120	139	140	81	87	79	89	50
2	37	49	86	522	120	223	242	81	77	85	62	62
3	37	48	85	333	110	320	273	97	72	62	55	85
4	44	48	102	240	100	571	185	114	67	55	52	61
5	39	49	86	200	100	1130	281	119	67	52	50	55
6	37	48	74	170	96	1050	239	112	66	52	50	122
7	37	49	69	150	95	673	183	111	64	52	47	88
8	37	49	86	120	84	475	191	102	66	50	46	60
9	37	48	105	100	77	373	195	82	63	50	46	55
10	37	48	82	90	77	376	230	78	63	52	52	60
11	37	47	67	80	72	314	322	77	89	59	49	60
12	37	47	64	74	68	203	397	76	68	58	49	54
13	49	47	63	73	65	178	358	76	62	55	48	51
14	113	47	59	104	63	288	322	73	58	53	56	330
15	113	47	56	93	60	230	251	76	56	57	55	341
16	67	47	55	85	58	165	210	80	54	57	56	127
17	55	61	63	77	56	159	206	74	53	54	54	85
18	52	63	62	74	56	163	155	71	52	53	59	70
19	49	55	67	72	54	155	127	70	52	50	61	66
20	50	52	65	70	54	144	110	68	48	49	58	62
21	48	50	115	69	54	137	101	73	48	48	56	59
22	47	54	96	72	75	128	98	71	54	47	55	58
23	54	65	79	68	99	125	92	66	64	65	54	56
24	56	69	70	89	261	120	86	89	56	89	54	54
25	52	62	62	228	320	125	84	113	53	62	57	54
26	70	57	70	239	176	113	81	128	50	86	54	52
27	78	53	69	246	139	99	105	146	48	67	78	50
28	64	57	68	232	142	91	110	126	70	58	63	54
29	56	58	77	203	---	98	95	131	65	54	70	52
30	53	69	68	168	---	180	87	138	65	50	64	52
31	52	---	88	146	---	176	---	107	---	53	54	---
TOTAL	1631	1593	2346	4848	2851	8721	5556	2906	1857	1813	1753	2485
MEAN	52.6	53.1	75.7	156	102	281	185	93.7	61.9	58.5	56.5	82.8
MAX	113	69	115	522	320	1130	397	146	89	89	89	341
MIN	37	47	55	68	54	91	81	66	48	47	46	50
CFSM	.57	.57	.82	1.68	1.10	3.03	1.99	1.01	.67	.63	.61	.89
IN.	.65	.64	.94	1.94	1.14	3.50	2.23	1.16	.74	.73	.70	1.00
CAL YR 1978	TOTAL	34750	MEAN	95.2	MAX	808	MIN	26	CFSM	1.03	IN	13.93
WTR YR 1979	TOTAL	38360	MEAN	105	MAX	1130	MIN	37	CFSM	1.13	IN	15.38

STREAMS TRIBUTARY TO LAKE ONTARIO

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft (160 m) downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1 mi (2 km) upstream from Irondequoit Creek.

DRAINAGE AREA.--30.1 mi² (78.0 km²), flow from 3.5 mi² (9.06 km²) not contributing.

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WRD NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M,P), 1960-63, 1972-74.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft (98.615 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station.

AVERAGE DISCHARGE.--19 years (1960-79), 34.0 ft³/s (0.963 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft³/s (92.9 m³/s) May 17, 1974, gage height, 7.42 ft (2.262 m); minimum daily discharge, 1.7 ft³/s (0.048 m³/s) Jan. 24, 1963; minimum gage height, 1.16 ft (0.354 m) Feb. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1945	533 15.1	4.19 1.277	Sept. 14	1545	*935 26.5	*4.80 1.463
Mar. 4	2200	919 26.0	4.78 1.457				

Minimum discharge, 6.6 ft³/s (0.19 m³/s) Dec. 25, gage height, 1.95 ft (0.594 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	25	25	391	44	47	38	14	38	37	38	28
2	26	24	31	176	42	100	142	13	35	33	32	53
3	26	24	35	52	40	195	77	14	33	29	32	44
4	35	24	41	32	38	486	55	17	31	28	31	31
5	29	24	29	20	36	605	125	13	32	28	31	30
6	31	24	27	16	34	279	72	12	31	27	30	58
7	26	25	26	14	33	140	61	11	35	26	29	34
8	26	24	46	14	30	92	53	11	33	27	28	31
9	26	24	43	13	29	71	56	9.8	31	27	27	29
10	26	24	30	11	28	89	104	9.0	31	29	37	37
11	26	24	26	11	27	53	166	10	46	31	29	37
12	26	24	10	12	26	32	158	14	31	29	29	31
13	38	24	7.9	11	26	31	117	13	29	28	27	30
14	73	24	8.3	31	25	82	125	11	10	30	31	475
15	40	24	7.9	23	25	48	71	11	24	34	28	99
16	29	24	7.9	19	25	52	58	11	27	30	27	43
17	27	35	18	16	26	47	52	9.8	27	28	27	35
18	26	29	10	14	25	40	38	16	27	27	29	33
19	27	25	12	14	24	36	31	29	27	26	28	33
20	26	24	16	14	19	35	31	29	26	26	27	30
21	24	24	45	13	13	35	31	35	27	26	26	29
22	24	24	17	13	21	35	30	29	32	26	26	28
23	30	35	13	13	40	33	31	29	30	32	26	28
24	26	29	11	12	200	33	35	70	28	35	27	28
25	24	26	8.6	50	116	35	24	78	27	31	29	27
26	46	24	9.4	70	51	29	14	87	27	41	26	27
27	36	24	9.8	72	45	26	31	78	27	31	50	26
28	27	28	9.4	70	41	24	25	82	37	30	31	28
29	26	26	11	60	---	27	17	79	31	29	29	28
30	25	26	9.8	50	---	74	15	75	31	27	34	27
31	25	---	29	46	---	52	---	45	---	44	29	---
TOTAL	927	765	630.0	1373	1129	2963	1883	964.6	901	932	930	1497
MEAN	29.9	25.5	20.3	44.3	40.3	95.6	62.8	31.1	30.0	30.1	30.0	49.9
MAX	73	35	46	391	200	605	166	87	46	44	50	475
MIN	24	24	7.9	11	13	24	14	9.0	10	26	26	26
CAL YR 1978	TOTAL	13929.0	MEAN 38.2	MAX 427	MIN 7.9							
WTR YR 1979	TOTAL	14894.6	MEAN 40.8	MAX 605	MIN 7.9							

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY

LOCATION.--Lat 43°09'27", long 77°31'37", Monroe County, Hydrologic Unit 04140101, on right bank 200 ft (61 m) downstream from bridge on Browncroft Boulevard, and 1.5 mi (2.4 km) downstream from bridge on Blossom Road, Rochester.

DRAINAGE AREA.--133 mi² (344 km²) revised.

PERIOD OF RECORD.--Water years 1977 to current year.

CHEMICAL DATA: 1977-79 (b).

NUTRIENT DATA: 1977-79 (b).

BIOLOGICAL DATA:

Bacteria--1977-79 (b).

SEDIMENT DATA: 1977 (a), 1978-79 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1977 to current year.

WATER TEMPERATURE: January 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1977.

REMARKS.--Water-discharge measurements are made at bridge on Blossom Road. Water-quality samples are collected at bridge on Blossom Road when stream discharge exceeds 300 ft³/s (8.50 m³/s). Interruptions in the specific-conductance and water-temperature records are due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1977-78): Maximum recorded, 2,300 micromhos Feb. 13, 1977; minimum recorded, 357 micromhos Sept. 25, 1977.

WATER TEMPERATURES (water years 1977-78): Maximum recorded, 28.0°C July 20, 22, 23, 1978; minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ PER 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)
DEC 06...	0900	100	1200	7.7	6.0	11.2	91	6200	6000	1950	400	190
MAR 08...	1530	702	650	7.6	.0	--	--	330	340	1100	200	65
JUN 06...	1200	102	1070	7.9	17.5	9.4	90	K12000	K8600	190	410	200
SEP 20...	1200	95	960	7.6	13.0	10.1	95	62000	K1600	1000	350	170

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)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)
DEC 06...	110	30	56	2.9	260	0	210	160	110	.2	7.6	605
MAR 08...	54	15	35	2.8	160	0	130	54	67	.1	5.6	312
JUN 06...	120	27	60	2.6	260	0	210	150	110	.2	6.0	604
SEP 20...	100	24	47	3.4	220	0	180	140	96	.2	8.7	528

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOVERABLE (UG/L AS MN)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
DEC 06...	.98	.02	1.0	.32	.43	.75	1.8	.14	.05	590	80	.10
MAR 08...	1.2	.02	1.2	.11	.99	1.1	2.3	.16	.03	2000	100	.00
JUN 06...	.62	.02	.64	.04	.75	.79	1.4	.13	.01	510	60	.00
SEP 20...	1.1	.01	1.1	.05	.64	.69	1.8	.14	.03	1400	500	.10

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

STREAMS TRIBUTARY TO LAKE ONTARIO

430927077313700 (04320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY--Continued

CHEMICAL QUALITY OF BOTTOM MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, VOLATILE IN BOTTOM MATERIAL (MG/KG)	NITRO- GEN, NO ₂ +NO ₃ TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, NH ₄ TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, NH ₄ + ORG. TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, TOT IN BOT- TOM MA- TERIAL (MG/KG AS N)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)
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AUG 31...	28700	2.0	32	5100	5100	520	0	<10	<10	<10
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DATE	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/G)
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AUG 31...	20	7500	20	290	.00	0	80	.0	13
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DATE	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
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AUG 31...	3.5	2.9	4.2	.0	.0	.0	.0	.0	.0
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DATE	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
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AUG 31...	.0	.0	.0	.0	.0	.0	16	0	.0
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SUSPENDED-SEDIMENT MEASUREMENTS, NOVEMBER 1976 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV , 1976						DEC , 1978					
05...	1200	153	21	8.7	--	06...	0900	100	11	3.0	--
SEP , 1977						MAR , 1979					
21...	1130	386	289	301	--	08...	1530	702	227	430	--
MAR , 1978						JUN					
15...	1300	901	341	830	85	06...	1200	102	10	2.8	--
JUN						SEP					
07...	1100	90	27	6.6	--	20...	1200	95	27	6.9	--
SEP											
13...	1000	85	63	14	--						

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	995	968	980	1180	1150	1160	1080	952	986	1400	523	941
2	1050	974	1010	1150	1120	1130	975	938	951	784	484	734
3	1030	927	982	1130	1110	1120	1260	940	1050	876	477	660
4	1020	761	885	1130	1100	1110	1090	956	989	853	718	762
5	1000	879	958	1130	1100	1100	990	954	968	910	839	886
6	985	945	959	1120	1100	1110	1080	964	1010	1030	912	963
7	987	933	956	1130	1100	1110	1090	1040	1060	1060	743	928
8	990	945	956	1110	1050	1080	1090	837	1000	1170	691	1000
9	1020	986	995	1090	1040	1060	930	772	837	----	----	----
10	1020	990	1010	1120	1050	1080	968	922	934	----	----	----
11	1020	986	995	1100	1040	1060	1040	933	979	----	----	----
12	1040	997	1010	1110	1030	1060	1060	1020	1030	----	----	----
13	1040	889	959	1060	996	1030	1110	1050	1070	----	----	----
14	1070	842	953	1060	1000	1030	1150	1070	1100	----	----	----
15	980	861	909	1050	978	1020	1160	1080	1110	----	----	----
16	1060	973	1020	1040	925	978	1190	1120	1140	----	----	----
17	1130	1060	1100	1020	785	944	1250	1090	1150	----	----	----
18	1180	1130	1160	892	735	832	1160	1090	1130	----	----	----
19	1190	1130	1150	950	890	923	1160	1090	1130	----	----	----
20	1140	1130	1140	1020	929	952	1210	965	1110	----	----	----
21	1140	1120	1130	994	897	960	1540	892	1120	----	----	----
22	1140	1110	1120	1050	921	968	1070	887	954	----	----	----
23	1140	1070	1120	1020	822	937	1120	986	1070	----	----	----
24	1090	1060	1070	966	852	920	1170	1080	1110	----	----	----
25	1130	1070	1100	1010	958	972	1100	1010	1080	----	----	----
26	1150	960	1080	1010	955	975	1170	1090	1130	----	----	----
27	1010	948	972	1000	937	967	1240	1150	1200	----	----	----
28	1090	1010	1050	1230	955	1110	1260	1190	1230	----	----	----
29	1120	1090	1110	1250	1050	1160	1310	1210	1250	----	----	----
30	1120	1100	1110	1100	992	1030	1350	1240	1280	----	----	----
31	1160	1110	1140	----	----	----	1410	1270	1340	----	----	----
MONTH	1190	761	1040	1250	735	1030	1540	772	1080	1400	477	859

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1				----	----	----	770	765	767	1030	1020	1030
2				----	----	----	775	733	758	1050	1020	1040
3				----	----	----	786	762	778	1050	1000	1040
4				----	----	----	798	763	778	1000	959	984
5				----	----	----	805	756	777	977	927	953
6				----	----	----	794	755	775	970	937	950
7				----	----	----	804	784	797	985	950	965
8				----	----	----	796	752	774	996	962	977
9				727	685	702	794	758	768	1040	966	1010
10				737	581	704	823	766	789	1020	962	1000
11				740	638	677	815	709	751	1020	991	1000
12				762	736	749	757	728	737	997	878	976
13				785	758	776	733	728	731	1000	924	975
14				785	725	760	743	733	736	997	981	990
15				750	729	735	753	743	748	1010	948	991
16				782	746	765	764	753	758	948	929	936
17				801	782	792	777	764	769	1010	941	970
18				797	787	792	789	776	780	1070	962	985
19				814	792	801	972	771	870	997	926	948
20				821	806	813	980	831	930	1000	933	959
21				823	805	813	988	942	954	1000	933	973
22				948	823	833	949	933	941	991	946	971
23				847	806	820	933	882	902	1000	972	987
24				818	802	810	958	882	924	1010	746	902
25				840	813	827	1030	957	997	882	756	828
26				820	797	809	1060	920	1010	878	771	838
27				802	790	796	1060	987	1020	889	753	830
28				803	793	797	1010	978	993	887	713	824
29				813	796	802	1010	987	996	761	682	719
30				806	759	770	1030	994	1010	761	714	739
31				773	761	766	----	----	----	810	761	776
MONTH				848	581	779	1060	709	844	1070	682	938

STREAMS TRIBUTARY TO LAKE ONTARIO

430927077313700 (042320502) IRONDEQUOIT CREEK AT BROWNCROFT BOULEVARD, ROCHESTER, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	870	810	848									
2	861	844	851									
3	891	843	859									
4	925	874	892									
5	981	908	938									
6	1010	939	967									
7	1050	804	989									
8	978	813	913									
9	1010	929	963									
10	1080	953	1020									
11	1040	760	854									
12	1020	875	961									
13	1060	1000	1030									
14	1100	1020	1060									
15	1120	931	1050									
16	1000	908	949									
17	1010	887	948									
18	1040	940	984									
19	1030	937	969									
20	979	925	949									
21	984	921	946									
22	1010	852	951									
23	973	843	911									
24	960	899	930									
25	976	897	923									
26	1010	925	958									
27	1010	958	981									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	1120	760	948									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.0	14.0	15.0	10.0	8.5	9.5	.5	.0	.0	6.0	5.0	6.5
2	15.5	13.5	14.5	10.0	6.5	8.5	1.5	.0	.5	6.0	4.0	4.5
3	14.0	11.5	13.0	10.5	8.5	9.5	.5	.0	.0	4.5	2.5	3.0
4	14.5	13.0	14.0	11.0	8.5	10.0	3.0	.5	2.0	3.0	2.5	2.5
5	14.5	13.0	14.0	12.5	10.5	11.0	2.0	1.5	2.0	3.0	2.5	2.5
6	14.5	13.5	14.0	13.5	11.0	12.0	2.5	2.0	2.0	3.5	3.0	3.0
7	13.5	12.0	13.0	12.0	10.5	11.0	2.5	2.0	2.5	3.5	3.0	3.0
8	12.0	9.5	11.0	10.5	8.5	10.0	4.5	2.5	4.0	3.5	2.5	3.0
9	11.0	9.0	10.0	10.0	7.5	8.5	3.5	.5	2.0	---	---	---
10	13.5	10.0	12.0	10.5	8.5	9.5	6.0	3.0	4.5	---	---	---
11	14.5	12.0	13.0	10.0	7.5	9.0	3.5	3.0	3.0	---	---	---
12	15.0	13.0	14.0	10.0	7.0	8.5	5.0	3.5	4.5	---	---	---
13	15.0	13.5	14.0	8.5	6.5	7.5	6.0	5.0	6.0	---	---	---
14	13.5	11.0	12.5	10.5	8.5	10.0	6.0	4.5	4.5	---	---	---
15	11.0	10.0	10.5	9.5	7.5	8.5	5.5	4.0	5.0	---	---	---
16	10.5	9.5	10.0	7.5	6.0	7.0	7.0	5.0	6.0	---	---	---
17	9.5	7.5	8.5	8.5	4.0	5.0	7.0	5.5	6.5	---	---	---
18	9.0	7.0	8.0	9.0	8.0	8.5	5.5	3.0	4.0	---	---	---
19	10.0	9.0	9.5	8.5	6.0	8.0	5.0	2.5	2.5	---	---	---
20	10.5	9.5	10.0	6.5	3.0	5.5	4.5	2.5	3.5	---	---	---
21	12.0	9.0	10.5	3.0	2.0	2.5	5.0	4.0	4.5	---	---	---
22	14.0	10.5	12.5	2.0	.5	1.5	5.5	4.5	5.0	---	---	---
23	13.5	10.5	12.5	4.5	1.0	2.0	6.0	4.5	5.0	---	---	---
24	10.5	9.5	10.0	5.5	4.5	5.0	5.0	4.0	4.5	---	---	---
25	10.5	8.0	9.0	5.0	2.0	3.0	4.5	3.0	3.0	---	---	---
26	13.0	10.5	11.5	2.0	.0	.5	3.0	3.0	3.0	---	---	---
27	12.5	11.0	12.0	.0	.0	.0	3.0	3.0	3.0	---	---	---
28	11.0	10.0	10.5	.5	.0	.0	3.0	3.0	3.0	---	---	---
29	10.0	8.5	9.5	.5	.0	.0	3.0	2.5	3.0	---	---	---
30	9.5	8.5	8.0	2.0	.0	1.0	3.0	2.5	3.0	---	---	---
31	11.0	8.0	9.5	---	---	---	5.0	3.0	4.0	---	---	---
MONTH	16.0	6.5	11.5	13.5	.0	6.5	7.0	.0	3.5	6.0	2.5	3.5

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TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

STREAMS TRIBUTARY TO LAKE ONTARIO

04232100 STERLING CREEK AT STERLING, NY

LOCATION.--Lat 43°19'31", long 76°38'51", Cayuga County, Hydrologic Unit 04140101, on right bank at Sterling, 25 ft (8 m) downstream from bridge on State Highway 104A, 1.8 mi (2.9 km) southwest of Sterling Valley, and 1.9 mi (3.1 km) upstream from Sterling Valley Creek.

DRAINAGE AREA.--44.4 mi² (115 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 264.69 ft (80.677 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--22 years, 67.4 ft³/s (1.909 m³/s), 20.61 in/yr (523 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) Mar. 6, 1979; maximum gage height, 5.69 ft (1.734 m) Mar. 6, 1979 (ice jam); minimum discharge, 0.32 ft³/s (0.009 m³/s) Sept. 14, 1966, gage height, 1.50 ft (0.457 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 630 ft³/s (17.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 4	1400	ice jam	4.13 1.259	Mar. 6	1200	ice jam	*5.69 1.734
Mar. 6	0300	*1,900 53.8	5.56 1.695				

Minimum discharge, 3.6 ft³/s (0.10 m³/s) Oct. 4, July 28, gage height, 1.66 ft (0.506 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	13	21	240	74	190	167	70	47	11	15	8.8
2	4.7	12	23	380	70	250	270	62	38	12	11	27
3	4.3	12	23	300	66	260	392	61	32	11	7.9	119
4	4.0	11	42	280	64	560	262	74	27	9.7	6.8	55
5	4.7	11	51	260	58	1300	281	68	23	8.1	5.9	34
6	4.7	11	43	240	56	1800	215	62	21	7.3	6.1	50
7	4.7	11	38	200	54	1220	175	60	18	6.8	5.1	67
8	5.1	11	42	140	52	801	157	57	18	6.4	4.7	50
9	4.7	9.9	64	110	50	631	153	53	18	5.8	4.7	36
10	4.3	9.9	46	100	48	499	165	51	16	5.9	19	27
11	4.0	9.9	40	98	47	417	201	50	52	5.9	34	21
12	4.0	9.9	40	96	45	258	212	46	39	5.7	24	17
13	6.3	9.9	38	94	44	258	204	46	26	5.8	17	15
14	18	11	40	100	42	349	198	41	22	5.7	14	72
15	26	11	44	120	41	289	182	35	18	5.8	14	172
16	21	9.3	42	100	41	240	172	34	15	8.3	13	103
17	16	9.9	40	86	40	175	162	28	13	11	12	71
18	14	15	40	80	40	157	132	26	12	9.1	9.9	48
19	12	15	42	74	39	160	106	23	11	7.5	8.8	37
20	12	14	37	72	39	180	88	20	9.9	6.1	8.2	27
21	11	13	70	70	40	196	62	19	8.8	5.5	7.7	22
22	9.9	12	68	68	56	198	68	20	13	5.4	6.7	19
23	9.9	12	50	66	110	210	62	18	31	5.0	6.7	17
24	9.3	21	38	70	280	237	58	22	21	4.7	8.8	15
25	9.3	37	34	80	410	210	57	35	15	4.4	12	12
26	12	30	34	100	450	167	57	58	12	4.3	8.8	11
27	20	22	33	120	410	139	81	98	11	4.3	18	9.9
28	22	20	32	110	290	124	124	75	13	3.9	20	9.3
29	20	19	30	100	---	126	100	60	15	5.4	21	11
30	18	20	32	90	---	196	79	59	13	7.1	15	9.9
31	15	---	36	80	---	201	---	56	---	7.6	10	---
TOTAL	335.6	432.7	1253	4124	3056	11998	4642	1487	628.7	212.5	375.8	1192.9
MEAN	10.8	14.4	40.4	133	109	387	155	48.0	21.0	6.85	12.1	39.8
MAX	26	37	70	380	450	1800	392	98	52	12	34	172
MIN	4.0	9.3	21	66	39	124	57	18	8.8	3.9	4.7	8.8
CFSM	.24	.32	.91	3.00	2.46	8.72	3.49	1.08	.47	.15	.27	.90
IN.	.28	.36	1.05	3.46	2.56	10.05	3.89	1.25	.53	.18	.31	1.00
CAL YR 1978	TOTAL	23110.0	MEAN	63.3	MAX	801	MIN	2.7	CFSM	1.43	IN	19.36
WTR YR 1979	TOTAL	29738.2	MEAN	81.5	MAX	1800	MIN	3.9	CFSM	1.84	IN	24.92

STREAMS TRIBUTARY TO LAKE ONTARIO

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04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft (91 m) from lake on shorter of two boat slips at Watkins Glen.

DRAINAGE AREA.--704 mi² (1,823 km²).

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.59 ft or 0.485 m, Barge Canal datum). Prior to Oct. 1, 1975, at datum 438.41 ft (133.627 m) higher.

REMARKS.--Area of water surface, 67.6 mi² (175 km²). Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. For table of diversion, see station 01528700. Lake regulated by taintor gates on Seneca River at lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.88 ft (136.819 m) June 25, 1972; minimum, 442.64 ft (134.917 m) Mar. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 445.39 ft (135.755 m) Apr. 12; minimum, 443.05 ft (135.042 m) Feb. 23.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444.49	444.49	444.17	444.24	444.38	443.35	445.05	444.97	445.02	444.91	445.12	444.90
2	444.58	444.45	444.20	444.58	444.32	443.40	445.03	444.92	445.02	444.94	445.16	444.90
3	444.50	444.40	444.18	444.64	444.24	443.47	445.06	444.85	445.00	444.95	445.14	444.90
4	444.44	444.37	444.20	444.58	444.17	443.76	445.02	444.83	444.98	444.93	445.16	444.90
5	444.51	444.39	444.19	444.58	444.12	444.39	445.02	444.85	444.95	444.92	445.09	444.90
6	444.48	444.39	444.18	444.55	444.10	444.93	444.98	444.87	444.94	444.95	445.13	444.90
7	444.47	444.41	444.18	444.56	444.04	445.13	444.99	444.87	444.90	444.87	445.04	445.20
8	444.51	444.41	444.19	444.56	444.01	445.23	444.95	444.84	444.87	444.85	445.01	445.20
9	444.46	444.36	444.26	444.49	443.98	445.25	445.02	444.83	444.90	444.87	445.06	445.15
10	444.42	444.35	444.26	444.46	443.92	445.28	445.10	444.86	444.89	444.85	444.98	445.15
11	444.44	444.38	444.24	444.42	443.89	445.31	445.17	444.89	444.95	444.84	445.08	445.10
12	444.41	444.40	444.21	444.36	443.82	445.26	445.24	444.89	444.93	444.88	445.04	445.05
13	444.48	444.34	444.17	444.35	443.78	445.20	445.26	444.93	444.91	444.89	445.01	445.05
14	444.63	444.29	444.16	444.34	443.71	445.22	445.25	444.94	444.85	444.87	444.98	445.00
15	444.60	444.33	444.13	444.34	443.65	445.22	445.26	444.94	444.82	444.88	444.99	445.00
16	444.56	444.36	444.14	444.33	443.60	445.16	445.26	444.96	444.83	444.90	444.90	445.00
17	444.57	444.31	444.18	444.29	443.54	445.13	445.25	444.96	444.86	444.94	444.90	444.95
18	444.50	444.31	444.18	444.32	443.44	445.11	445.22	444.97	444.87	444.93	444.85	444.87
19	444.49	444.33	444.13	444.26	443.42	445.07	445.18	444.96	444.89	444.88	444.85	444.91
20	444.55	444.35	444.09	444.18	443.35	445.03	445.12	444.96	444.85	444.91	444.85	444.78
21	444.49	444.32	444.13	444.23	443.28	445.00	445.07	444.97	444.81	444.87	444.85	444.66
22	444.45	444.29	444.09	444.20	443.24	444.96	445.03	444.99	444.84	444.84	444.85	444.80
23	444.55	444.24	444.11	444.16	443.15	444.91	444.98	444.98	444.93	444.86	444.85	444.76
24	444.54	444.27	444.11	444.15	443.22	444.95	444.93	445.04	444.96	444.91	444.85	444.68
25	444.44	444.32	444.26	444.32	443.31	445.04	444.91	445.10	444.94	444.93	444.85	444.64
26	444.45	444.30	444.25	444.45	443.43	445.09	444.91	445.13	444.88	444.95	444.85	444.63
27	444.55	444.26	444.22	444.46	443.43	445.05	444.93	445.13	444.83	445.04	444.85	444.57
28	444.53	444.26	444.22	444.47	443.38	444.97	444.98	445.16	444.88	444.99	444.85	444.53
29	444.52	444.20	444.17	444.46	---	444.94	445.01	445.17	444.93	444.99	444.90	444.62
30	444.51	444.20	444.13	444.46	---	444.95	445.02	445.14	444.92	445.00	444.90	444.61
31	444.48	---	444.14	444.42	---	445.00	---	445.08	---	444.92	444.90	---
MEAN	444.50	444.34	444.18	444.39	443.71	444.86	445.07	444.97	444.91	444.91	444.96	444.88
MAX	444.63	444.49	444.26	444.64	444.38	445.31	445.26	445.17	445.02	445.04	445.16	445.20
MIN	444.41	444.20	444.09	444.15	443.15	443.35	444.91	444.83	444.81	444.84	444.85	444.53
CAL YR 1978	MEAN 444.53		MAX 445.56	MIN 442.77								
WTR YR 1979	MEAN 444.65		MAX 445.31	MIN 443.15								

STREAMS TRIBUTARY TO LAKE ONTARIO

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY
(Formerly published as Keuka Lake at Hammondsport)

LOCATION.--Lat 42°24'22", long 77°13'08", Steuben County, Hydrologic Unit 04140201, on left bank of Keuka Inlet at end of Liberty Street extension at Hammondsport; and 300 ft (91 m) upstream from mouth.

DRAINAGE AREA.--Keuka Inlet 25.0 mi² (64.8 km²); Keuka Lake at mouth 182 mi² (471 km²).

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1, 1975, at datum 710.00 ft (216.408 m) higher.

REMARKS.--Lake regulated by village of Penn Yan; prior to July 1962, by New York State Electric and Gas Corp. Area of water surface, 18.3 mi² (47.4 km²). During each year, a large part of flow from 45.5 mi² (118 km²) of drainage area of Mud Creek (Susquehanna River basin) is diverted into Keuka Lake for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 719.35 ft (219.258 m) June 24, 1972; minimum daily, 711.40 ft (216.835 m) Feb. 2, 3, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 715.15 ft (217.978 m) March 11; minimum, 712.65 ft (217.216 m) Feb. 18.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	713.08	713.18	713.21	712.86	713.51	712.87	714.50	714.24	714.42	714.40	714.55	713.77
2	713.11	713.15	713.19	713.26	713.40	712.90	714.48	714.20	714.42	714.40	714.61	713.76
3	713.07	713.15	713.16	713.33	713.25	712.98	714.50	714.14	714.42	714.41	714.65	713.82
4	713.06	713.15	713.16	713.34	713.20	713.16	714.48	714.10	714.41	714.40	714.58	713.82
5	713.07	713.14	713.16	713.35	713.15	713.53	714.47	714.06	714.41	714.39	714.49	713.81
6	713.03	713.15	713.13	713.36	713.10	714.69	714.41	714.02	714.42	714.36	714.45	714.13
7	713.03	713.17	713.10	713.35	713.10	714.92	714.42	713.98	714.41	714.35	714.32	714.23
8	713.03	713.17	713.09	713.38	713.10	715.02	714.40	713.97	714.42	714.34	714.25	714.18
9	713.01	713.16	713.15	713.35	713.10	715.04	714.48	713.97	714.49	714.32	714.19	714.09
10	712.98	713.18	713.13	713.37	713.05	715.08	714.57	713.98	714.49	714.31	714.10	714.00
11	712.99	713.19	713.10	713.30	713.00	715.10	714.67	714.00	714.51	714.30	714.07	713.95
12	712.99	713.22	713.07	713.20	712.90	715.07	714.75	714.00	714.53	714.32	713.99	713.88
13	713.07	713.19	713.03	713.10	712.85	715.03	714.78	714.01	714.50	714.32	713.91	713.79
14	713.19	713.18	713.00	713.05	712.85	715.02	714.79	714.02	714.48	714.32	713.86	713.79
15	713.20	713.20	712.97	713.00	712.80	715.01	714.80	714.03	714.46	714.33	713.85	713.84
16	713.21	713.21	712.95	713.00	712.75	714.97	714.80	714.05	714.45	714.39	713.85	713.78
17	713.19	713.20	712.93	713.00	712.70	714.92	714.79	714.07	714.45	714.41	713.80	713.72
18	713.16	713.23	712.93	713.00	712.65	714.89	714.78	714.08	714.45	714.40	713.80	713.65
19	713.17	713.24	712.90	713.05	712.70	714.85	714.75	714.07	714.43	714.38	713.80	713.62
20	713.18	713.26	712.87	713.05	712.75	714.80	714.71	714.07	714.40	714.37	713.79	713.52
21	713.16	713.26	712.88	713.10	712.80	714.77	714.68	714.08	714.35	714.36	713.79	713.47
22	713.16	713.25	712.85	713.20	712.90	714.74	714.65	714.11	714.36	714.34	713.77	713.46
23	713.17	713.23	712.84	713.30	713.00	714.71	714.61	714.10	714.40	714.34	713.74	713.38
24	713.17	713.25	712.81	713.37	712.92	714.69	714.56	714.16	714.38	714.39	713.74	713.31
25	713.13	713.26	712.90	713.39	712.86	714.70	714.50	714.23	714.37	714.40	713.75	713.29
26	713.15	713.26	712.88	713.47	712.85	714.68	714.45	714.24	714.33	714.40	713.75	713.28
27	713.20	713.25	712.85	713.51	712.86	714.64	714.42	714.26	714.29	714.42	713.81	713.28
28	713.19	713.27	712.83	713.53	712.86	714.58	714.39	714.29	714.33	714.40	713.81	713.31
29	713.20	713.26	712.80	713.52	---	714.55	714.35	714.32	714.34	714.41	713.79	713.35
30	713.18	713.24	712.76	713.52	---	714.55	714.29	714.37	714.35	714.39	713.80	713.36
31	713.16	---	712.74	713.51	---	714.53	---	714.40	---	714.39	713.80	---
MEAN	713.12	713.21	712.98	713.26	712.96	714.55	714.57	714.12	714.42	714.37	714.01	713.69
MAX	713.21	713.27	713.21	713.53	713.51	715.10	714.80	714.40	714.53	714.42	714.65	714.23
MIN	712.98	713.14	712.74	712.86	712.65	712.87	714.29	713.97	714.29	714.30	713.74	713.28
CAL YR 1978	MEAN 714.04		MAX 716.26	MIN 712.74								
WTR YR 1979	MEAN 713.78		MAX 715.10	MIN 712.65								

STREAMS TRIBUTARY TO LAKE ONTARIO

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04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--207 mi² (536 km²).

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 446.67 ft (136.145 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi² (118 km²) of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--14 years, 212 ft³/s (6.004 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s (113 m³/s) June 22, 1972, gage height, 8.37 ft (2.551 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of contracted-opening measurement at Mays Mills, adjusted for intervening area; minimum daily, 12 ft³/s (0.34 m³/s) July 16, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,550 ft³/s (43.9 m³/s) Sept. 6, gage height, 4.00 ft (1.219 m); minimum, 18 ft³/s (0.51 m³/s) Nov. 22, June 10, 11, 12, gage height, 0.11 ft (.034 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	25	193	274	293	241	425	370	30	60	81	27
2	29	24	189	397	289	328	455	365	29	74	165	27
3	28	24	193	285	282	543	445	365	28	53	288	30
4	29	23	230	196	278	710	435	360	27	52	505	26
5	28	22	248	259	282	705	470	355	27	52	490	26
6	28	21	237	270	278	796	445	345	27	52	470	572
7	29	19	223	278	263	601	395	212	26	52	460	495
8	29	19	189	259	263	563	390	97	27	51	450	410
9	28	19	203	255	259	558	450	60	26	51	430	390
10	29	19	196	259	289	563	515	64	23	42	425	375
11	29	19	189	259	280	549	515	64	23	26	410	355
12	30	19	189	259	270	530	470	60	43	25	395	350
13	38	19	189	255	260	520	435	62	87	25	219	365
14	55	20	189	252	250	535	410	48	85	25	48	400
15	42	19	186	259	240	520	390	31	85	25	28	390
16	35	19	183	255	230	515	380	30	87	25	27	360
17	33	19	180	255	223	510	380	30	94	25	26	345
18	33	20	170	255	223	500	375	29	83	24	27	330
19	33	19	170	255	223	495	370	28	83	23	26	321
20	33	19	199	252	223	490	360	27	83	22	26	240
21	32	19	237	244	216	490	355	28	83	22	26	316
22	33	18	230	241	186	475	350	27	85	22	26	297
23	36	20	223	230	230	460	365	26	85	23	26	293
24	36	21	223	244	360	460	430	30	83	26	26	136
25	36	20	230	432	270	460	420	36	109	24	26	24
26	35	19	220	360	244	455	415	36	76	33	26	23
27	33	20	220	336	244	435	405	32	53	26	31	23
28	29	21	213	332	237	430	395	31	54	24	29	26
29	27	102	223	320	---	435	380	31	53	23	28	26
30	26	196	203	304	---	445	375	38	53	23	27	25
31	26	---	203	300	---	445	---	32	---	31	26	---
TOTAL	996	863	6370	8631	7185	15762	12400	3349	1757	1061	5293	7023
MEAN	32.1	28.8	205	278	257	508	413	108	58.6	34.2	171	234
MAX	55	196	248	432	360	796	515	370	109	74	505	572
MIN	26	18	170	196	186	241	350	26	23	22	26	23
CAL YR 1978	TOTAL	95465	MEAN 262	MAX 922	MIN 18							
WTR YR 1979	TOTAL	70690	MEAN 194	MAX 796	MIN 18							

STREAMS TRIBUTARY TO LAKE ONTARIO

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi (1.3 km) upstream from Enfield (formerly Butternut) Creek, and 5 mi (8 km) south of Ithaca.

DRAINAGE AREA.--35.2 mi² (91.2 km²).

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

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft (133.246 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years, 38.9 ft³/s (1.102 m³/s), 15.01 in/yr (381 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 23, 1972, gage height, 8.10 ft (2.469 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurements at gage heights 5.5 ft (1.68 m) and 7.58 ft (2.310 m); minimum, 1.7 ft³/s (0.048 m³/s) July 22, 1955; minimum gage height, 0.42 ft (0.128 m) Aug. 30, 31, Sept. 1, 2, 1939, July 22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 25	0245	978 27.7	3.51 1.070	Mar. 6	0200	*1,370 38.8	*4.21 1.283

Minimum daily discharge, 3.4 ft³/s (0.10 m³/s) Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	8.4	10	107	47	56	51	42	21	8.0	26	4.0
2	4.0	8.0	10	315	44	115	55	39	19	7.6	13	4.5
3	4.0	8.0	9.7	107	42	173	53	40	18	7.2	11	11
4	6.4	8.0	15	61	38	399	53	46	16	6.8	8.0	8.0
5	7.6	7.6	16	49	33	1010	72	35	18	6.4	6.8	6.0
6	6.8	7.6	13	45	29	812	57	32	15	6.4	5.7	20
7	6.0	8.0	12	42	28	347	49	30	14	6.0	4.9	30
8	5.7	8.8	13	41	25	220	46	28	13	5.7	4.6	17
9	5.3	8.0	33	34	23	165	149	27	13	5.3	4.6	12
10	4.9	7.6	23	32	21	154	168	25	12	5.3	9.2	9.0
11	4.9	7.2	20	28	19	127	159	25	25	5.7	6.8	7.6
12	4.9	7.2	15	23	17	92	139	23	16	5.3	5.7	6.6
13	7.6	7.2	14	25	15	83	117	23	12	4.9	4.9	6.0
14	28	7.2	13	40	14	104	107	22	11	4.6	4.9	10
15	18	7.2	11	32	13	81	96	21	10	11	5.4	20
16	11	7.2	12	28	12	67	92	20	9.7	18	6.4	15
17	8.8	7.6	13	25	11	67	87	19	9.2	13	5.6	9.0
18	8.0	12	10	23	10	64	69	18	9.2	12	5.0	7.2
19	8.0	10	8.0	21	20	58	61	17	9.2	7.2	6.0	7.5
20	9.7	8.8	11	20	24	55	55	17	8.4	5.7	5.4	7.0
21	8.8	8.4	19	40	28	57	50	16	8.4	4.9	4.8	6.6
22	8.0	7.6	15	60	33	60	47	16	13	4.6	4.2	7.4
23	8.0	8.0	13	40	37	66	45	16	14	5.3	3.5	7.0
24	8.4	13	13	111	43	74	41	25	9.7	8.4	3.5	6.2
25	8.0	13	14	368	50	85	39	55	8.8	5.7	3.4	5.6
26	9.7	9.0	20	141	60	81	36	53	8.4	6.4	3.4	5.2
27	25	8.0	12	107	74	58	74	35	8.0	7.2	7.0	4.5
28	15	10	11	94	60	50	72	41	8.4	6.4	10	5.8
29	11	9.0	10	77	---	58	50	32	9.2	6.0	7.0	10
30	9.2	10	11	66	---	63	45	27	12	4.9	5.6	8.0
31	8.4	---	12	58	---	57	---	23	---	7.6	5.2	---
TOTAL	283.1	257.6	431.7	2260	870	4958	2234	888	378.6	219.5	207.5	283.7
MEAN	9.13	8.59	13.9	72.9	31.1	160	74.5	28.6	12.6	7.08	6.69	9.46
MAX	28	13	33	368	74	1010	168	55	25	18	26	30
MIN	4.0	7.2	8.0	20	10	50	36	16	8.0	4.6	3.4	4.0
CFSM	.26	.24	.40	2.07	.88	4.55	2.12	.81	.36	.20	.19	.27
IN.	.30	.27	.46	2.39	.92	5.24	2.36	.94	.40	.23	.22	.30

CAL YR 1978 TOTAL 14885.6 MEAN 40.8 MAX 544 MIN 4.0 CFSM 1.16 IN 15.73
WTR YR 1979 TOTAL 13271.7 MEAN 36.4 MAX 1010 MIN 3.4 CFSM 1.03 IN 14.03

STREAMS TRIBUTARY TO LAKE ONTARIO

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04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY
(Formerly published as Cayuga Lake at Ithaca)

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank of natural channel 40 ft (12 m) upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1 mi (2 km) upstream from mouth of Inlet, at Ithaca.

DRAINAGE AREA.--Cayuga Inlet 143 mi² (370 km²); Cayuga Lake at mouth 1,564 mi² (4,051 km²); Cayuga Lake portion 785 mi² (2,033 km²).

PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.43 ft or 0.436 m, Barge Canal datum). Prior to September 1925, nonrecording gage at several sites within 1 mi (2 km) of present site. Prior to October 1968, at datum 378.57 ft (115.388 m) higher. October 1968 to September 1975, at datum 376.57 ft (114.779 m) higher.

REMARKS.--Lake regulated at Mud Lock by New York State Department of Transportation. Area of water surface, 66.9 mi² (173 km²). Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi (0.8 km) upstream from Mud Lock and is included in first drainage area given above.

EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.33 ft (117.753 m) June 26, 1972; minimum daily, 377.64 ft (115.105 m) present datum, Mar. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 382.97 ft (116.729 m) Mar. 14; minimum 378.65 ft (115.413 m) Feb. 22, 24, 25, 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381.10	381.15	380.89	379.52	380.03	378.77	381.54	382.46	382.67	382.32	382.28	381.52
2	381.17	381.16	380.88	380.13	379.96	378.89	381.46	382.47	382.65	382.36	382.29	381.48
3	381.04	381.16	380.73	380.31	379.85	379.02	381.62	382.47	382.61	382.39	382.33	381.58
4	380.98	381.16	380.75	380.30	379.76	379.37	381.60	382.55	382.57	382.33	382.32	381.58
5	381.05	381.17	380.73	380.32	379.69	380.44	381.65	382.48	382.58	382.32	382.23	381.58
6	381.02	381.18	380.72	380.30	379.57	381.47	381.68	382.38	382.59	382.26	382.25	381.89
7	381.06	381.21	380.68	380.30	379.47	381.97	381.74	382.31	382.54	382.19	382.07	382.08
8	381.08	381.18	380.68	380.31	379.43	382.32	381.66	382.26	382.52	382.17	381.96	382.06
9	381.01	381.13	380.72	380.22	379.37	382.56	381.75	382.27	382.56	382.15	381.97	381.94
10	380.98	381.13	380.65	380.16	379.27	382.71	381.91	382.26	382.52	382.11	381.86	381.86
11	380.96	381.13	380.57	380.09	379.18	382.84	381.97	382.25	382.63	382.12	381.96	381.98
12	380.92	381.17	380.54	379.99	379.08	382.82	382.05	382.23	382.67	382.15	381.90	381.93
13	381.04	381.05	380.48	379.94	379.02	382.68	382.01	382.30	382.66	382.13	381.86	381.92
14	381.17	381.01	380.47	379.93	378.95	382.69	382.02	382.29	382.60	382.11	381.84	382.03
15	381.13	381.10	380.36	379.89	378.88	382.69	382.07	382.29	382.58	382.09	381.92	382.31
16	381.12	381.09	380.30	379.84	378.83	382.52	382.07	382.32	382.60	382.11	381.88	382.28
17	381.13	380.97	380.32	379.75	378.77	382.42	382.11	382.30	382.59	382.15	381.76	382.30
18	381.06	381.06	380.23	379.79	378.70	382.34	382.10	382.28	382.62	382.11	381.72	382.25
19	381.06	381.08	380.11	379.65	378.68	382.20	382.07	382.26	382.60	382.05	381.74	382.29
20	381.11	381.11	379.97	379.50	378.67	382.08	382.04	382.26	382.52	382.05	381.76	382.11
21	381.04	381.10	380.00	379.55	378.67	381.95	382.03	382.28	382.43	382.02	381.72	381.99
22	381.02	381.06	379.93	379.50	378.67	381.86	382.05	382.30	382.47	382.00	381.71	382.12
23	381.12	380.96	379.91	379.42	378.66	381.71	382.06	382.26	382.57	381.98	381.61	382.04
24	381.10	381.06	379.80	379.36	378.65	381.49	382.07	382.34	382.58	382.01	381.58	381.94
25	380.97	381.13	379.91	379.75	378.65	381.47	382.05	382.42	382.55	382.02	381.63	381.92
26	381.03	381.10	379.83	379.94	378.71	381.39	382.05	382.49	382.46	382.01	381.60	381.94
27	381.13	381.00	379.80	379.99	378.76	381.42	382.22	382.48	382.39	382.15	381.64	381.93
28	381.12	381.05	379.77	380.05	378.77	381.39	382.35	382.54	382.43	382.09	381.65	381.92
29	381.14	380.97	379.69	380.09	---	381.43	382.37	382.58	382.41	382.10	381.59	381.99
30	381.10	380.98	379.57	380.08	---	381.53	382.39	382.63	382.35	382.10	381.61	381.94
31	381.09	---	379.47	380.05	---	381.56	---	382.65	---	382.05	381.61	---
MEAN	381.07	381.09	380.27	379.94	379.10	381.61	381.96	382.38	382.55	382.14	381.87	381.96
MAX	381.17	381.21	380.89	380.32	380.03	382.84	382.39	382.65	382.67	382.39	382.33	382.31
MIN	380.92	380.96	379.47	379.36	378.65	378.77	381.46	382.23	382.35	381.98	381.58	381.48
CAL YR 1978	MEAN 381.24		MAX 383.01	MIN 378.19								
WTR YR 1979	MEAN 381.34		MAX 382.84	MIN 378.65								

STREAMS TRIBUTARY TO LAKE ONTARIO
04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi (0.3 km) east of Ithaca, 0.5 mi (0.8 km) upstream from Cornell University dam, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.

REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft (242.356 m) National Geodetic Vertical Datum of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods, which are poor. Diversion from point about 1 mi (2 km) upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University.

AVERAGE DISCHARGE.--54 years (1925-79), 186 ft³/s (5.268 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft³/s (439 m³/s) July 8, 1935 gage height, 9.52 ft (2.902 m), from average of computed flow over each of four dams; maximum gage height 11.16 ft (3.402 m) Feb. 21, 1971 (ice jam); minimum discharge, about 3 ft³/s (0.085 m³/s) Aug. 25, 1927, result of regulation; minimum daily, 3.6 ft³/s (0.10 m³/s) Aug. 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1130	2,360 66.8	4.02 1.225	Mar. 6	0730	*4,470 127	5.29 1.612
Mar. 2	0300	a2,300 65.1	*b6.34 1.932				

a About.

b Backwater from ice.

Minimum discharge, 13 ft³/s (0.37 m³/s) July 23, Aug. 23, gage height, 0.33 ft (0.101 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	52	58	500	200	340	411	150	79	39	112	17
2	19	47	52	2000	190	1200	361	137	69	33	107	18
3	20	43	44	820	190	640	365	128	62	31	63	40
4	21	41	96	350	180	1100	293	188	57	27	41	34
5	31	41	201	280	170	3500	356	159	48	27	31	23
6	31	41	121	240	160	3740	297	133	45	25	27	109
7	26	39	97	220	150	1630	235	121	44	24	24	182
8	24	41	97	230	140	1020	235	109	43	24	21	79
9	31	41	273	190	130	716	416	99	47	23	19	45
10	30	38	180	170	120	646	667	94	44	22	20	34
11	25	36	110	150	110	571	604	88	78	23	30	30
12	23	34	100	130	100	385	532	81	97	24	28	27
13	25	33	96	160	94	346	416	78	57	23	24	24
14	116	33	80	220	88	443	361	83	44	20	22	36
15	161	34	70	270	84	380	346	75	38	20	23	116
16	86	32	88	230	78	281	432	72	34	21	24	72
17	57	32	100	170	74	289	460	69	31	21	23	40
18	45	53	60	140	70	277	319	62	32	21	21	31
19	44	57	50	120	110	273	261	59	31	22	24	27
20	55	43	68	110	130	273	231	58	29	19	24	27
21	56	39	160	190	150	289	210	55	27	20	20	26
22	45	32	190	350	170	314	197	55	52	17	17	27
23	40	35	130	310	200	337	188	53	133	17	17	26
24	42	62	100	280	240	406	173	61	72	21	16	22
25	41	97	74	1000	400	483	164	140	49	27	15	20
26	40	66	78	980	500	477	156	253	37	24	15	19
27	179	31	114	600	620	319	201	217	31	34	27	17
28	128	64	100	440	400	261	390	176	31	30	37	21
29	85	56	80	350	---	427	204	148	42	27	27	51
30	66	60	100	280	---	591	167	118	45	24	21	43
31	56	---	120	250	---	545	---	95	---	24	20	---
TOTAL	1669	1353	3287	11730	5248	22499	9648	3414	1528	754	940	1283
MEAN	53.8	45.1	106	378	187	726	322	110	50.9	24.3	30.3	42.8
MAX	179	97	273	2000	620	3740	667	253	133	39	112	182
MIN	19	31	44	110	70	261	156	53	27	17	15	17
CFSM	.43	.36	.84	3.00	1.48	5.76	2.56	.87	.40	.19	.24	.34
IN.	.49	.40	.97	3.46	1.55	6.64	2.85	1.01	.45	.22	.28	.38

CAL YR 1978 TOTAL 64525 MEAN 177 MAX 2300 MIN 15 CFSM 1.41 IN 19.05
WTR YR 1979 TOTAL 63353 MEAN 174 MAX 3740 MIN 15 CFSM 1.38 IN 18.70

STREAMS TRIBUTARY TO LAKE ONTARIO

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04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY

LOCATION.--Lat 42°52'19", long 77°16'22", Ontario County, Hydrologic Unit 04140201, at south end of city pier at northern end of Canandaigua Lake, 1 mi (2 km) southeast of Canandaigua.

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft (207.621 m) higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.

REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi-(2.4 km-) long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft (208.596 m) and 684.94 ft (208.770 m), respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi² (43.0 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft (210.955 m) June 24, 1972; minimum daily, 685.62 ft (208.977 m) Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 689.49 ft (210.157 m) Mar. 11; minimum, 686.90 ft (209.367 m) Dec. 2, 3, 17, 18.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687.46	687.17	686.92	687.21	688.01	687.52	688.90	688.50	688.64	688.41	688.28	688.06
2	687.40	687.16	686.91	687.42	687.99	687.53	688.94	688.50	688.59	688.43	688.37	688.07
3	687.39	687.16	686.92	687.59	687.97	687.59	688.89	688.49	688.54	688.40	688.36	688.07
4	687.39	687.15	686.95	687.64	687.94	687.80	688.85	688.50	688.49	688.38	688.35	688.05
5	687.37	687.15	686.94	687.62	687.91	688.40	688.87	688.49	688.46	688.34	688.34	688.04
6	687.36	687.15	686.94	687.62	687.86	689.03	688.90	688.48	688.45	688.34	688.31	688.04
7	687.32	687.14	686.93	687.61	687.81	689.30	688.81	688.47	688.47	688.33	688.33	688.06
8	687.29	687.13	686.93	687.63	687.78	689.40	688.77	688.47	688.47	688.33	688.29	688.00
9	687.27	687.12	686.96	687.62	687.75	689.43	688.78	688.46	688.46	688.33	688.26	687.96
10	687.26	687.10	686.99	687.59	687.74	689.43	688.84	688.45	688.48	688.32	688.29	687.90
11	687.23	687.09	686.99	687.56	687.73	689.47	688.88	688.46	688.49	688.32	688.25	687.81
12	687.23	687.06	686.98	687.55	687.73	689.45	688.94	688.48	688.43	688.32	688.23	687.75
13	687.21	687.07	687.00	687.55	687.73	689.39	689.02	688.46	688.42	688.31	688.22	687.74
14	687.24	687.10	686.97	687.58	687.73	689.37	689.11	688.46	688.42	688.30	688.22	687.74
15	687.29	687.04	686.96	687.59	687.73	689.38	689.08	688.46	688.42	688.30	688.18	687.80
16	687.29	687.02	686.95	687.57	687.64	689.34	689.05	688.45	688.41	688.30	688.13	687.76
17	687.27	687.06	686.93	687.56	687.56	689.28	689.04	688.45	688.40	688.26	688.13	687.71
18	687.27	687.04	686.91	687.55	687.56	689.23	689.01	688.45	688.37	688.24	688.13	687.67
19	687.25	687.01	686.92	687.52	687.56	689.19	688.97	688.46	688.34	688.23	688.11	687.58
20	687.23	686.98	686.93	687.50	687.56	689.14	688.93	688.46	688.35	688.22	688.11	687.54
21	687.23	686.97	686.97	687.50	687.55	689.11	688.89	688.45	688.37	688.20	688.09	687.51
22	687.22	686.96	686.97	687.51	687.43	689.09	688.82	688.43	688.35	688.19	688.09	687.44
23	687.20	687.00	686.97	687.49	687.33	689.08	688.77	688.42	688.34	688.19	688.10	687.42
24	687.19	686.97	686.96	687.48	687.33	689.12	688.71	688.43	688.31	688.20	688.09	687.41
25	687.20	686.95	687.06	687.65	687.37	689.12	688.65	688.47	688.29	688.21	688.08	687.40
26	687.19	686.93	687.10	687.84	687.48	689.12	688.62	688.53	688.30	688.23	688.07	687.35
27	687.21	686.92	687.10	687.94	687.53	689.08	688.56	688.60	688.31	688.23	688.08	687.34
28	687.22	686.95	687.09	688.00	687.53	689.03	688.52	688.62	688.31	688.23	688.09	687.34
29	687.20	686.94	687.09	688.03	---	689.03	688.50	688.63	688.34	688.21	688.10	687.33
30	687.19	686.93	687.09	688.04	---	688.96	688.50	688.66	688.39	688.20	688.08	687.33
31	687.21	---	687.11	688.03	---	688.94	---	688.67	---	688.22	688.06	---
MEAN	687.27	687.05	686.98	687.63	687.67	688.98	688.84	688.49	688.41	688.28	688.19	687.71
MAX	687.46	687.17	687.11	688.04	688.01	689.47	689.11	688.67	688.64	688.43	688.37	688.07
MIN	687.19	686.92	686.91	687.21	687.33	687.52	688.50	688.42	688.29	688.19	688.06	687.33

CAL YR 1978 MEAN 687.88 MAX 689.59 MIN 686.91
WTR YR 1979 MEAN 687.96 MAX 689.47 MIN 686.91

STREAMS TRIBUTARY TO LAKE ONTARIO

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft (8 m) upstream from bridge on State Highway 488, and 4.1 mi (6.6 km) downstream from Canandaigua Lake.

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 671.44 ft (204.655 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1974, at site 0.1 mi (0.2 km) upstream at datum 676.90 ft (206.319 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966.

AVERAGE DISCHARGE.--39 years (1941-79), 156 ft³/s (4.418 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft³/s (48.4 m³/s) June 24, 1972, gage height, 5.62 ft (1.713 m) site and datum then in use; minimum, 4.6 ft³/s (0.13 m³/s) Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 940 ft³/s (26.6 m³/s) Mar. 4 (ice jam), gage height, 5.96 ft (1.817 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 31; minimum gage height, 2.98 ft (0.908 m) Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	14	43	138	370	270	554	108	386	38	71	21
2	50	13	42	298	360	300	594	108	390	39	77	21
3	112	12	44	231	340	350	569	106	379	36	38	22
4	110	12	50	220	330	600	539	108	292	36	36	29
5	104	12	43	218	310	700	574	106	104	34	42	136
6	101	23	39	231	280	739	574	106	33	31	31	292
7	97	68	38	252	270	769	539	106	32	33	31	328
8	95	61	42	241	260	774	515	106	32	34	31	317
9	90	57	45	233	250	769	525	108	31	36	30	317
10	85	54	43	236	240	774	559	108	32	36	32	317
11	85	52	52	203	240	765	600	102	37	37	32	331
12	86	51	40	86	210	750	634	63	28	38	32	328
13	88	51	37	118	140	734	629	61	26	36	33	298
14	95	52	37	239	180	745	634	60	26	34	33	371
15	86	47	33	250	250	734	615	60	27	33	32	375
16	77	45	32	240	270	714	605	60	28	31	31	321
17	72	48	32	230	250	693	600	58	29	29	32	304
18	68	47	30	220	240	678	579	58	31	27	33	295
19	57	44	43	210	230	663	554	60	32	25	32	279
20	57	43	48	210	220	649	539	61	34	25	30	247
21	55	43	44	210	210	634	520	61	36	25	27	104
22	54	43	36	210	200	624	501	60	37	26	27	79
23	48	45	33	200	210	620	482	61	34	27	27	77
24	26	45	30	210	240	629	465	63	33	27	27	76
25	19	42	51	280	250	644	449	63	33	27	26	63
26	18	40	90	320	270	644	441	61	33	24	26	60
27	22	40	79	330	270	624	413	63	33	20	28	58
28	18	43	74	340	270	605	279	61	33	20	24	55
29	16	42	71	350	---	600	116	63	33	20	21	37
30	15	43	42	370	---	584	108	81	40	21	21	33
31	11	---	36	370	---	574	---	187	---	31	21	---
TOTAL	1951	1232	1399	7494	7160	19952	15305	2537	2354	936	1014	5591
MEAN	62.9	41.1	45.1	242	256	644	510	81.8	78.5	30.2	32.7	186
MAX	112	68	90	370	370	774	634	187	390	39	77	375
MIN	11	12	30	86	140	270	108	58	26	20	21	21
CAL YR 1978	TOTAL	65932	MEAN 181	MAX 784	MIN 11							
WTR YR 1979	TOTAL	66925	MEAN 183	MAX 774	MIN 11							

STREAMS TRIBUTARY TO LAKE ONTARIO

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04235250 FLINT CREEK AT PHELPS, NY

LOCATION.--Lat 42°57'28", long 77°04'06", Ontario County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) downstream from bridge on Eagle Street at Phelps, and 1.1 mi (1.8 km) upstream from Canandaigua Outlet.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft (159.453 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Small diversion (during periods of low ground-water level) by Phelps Cement Products, Inc., located about 0.2 mile (0.3 km) upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft³/s (0.008 m³/s).

AVERAGE DISCHARGE.--20 years, 93.0 ft³/s (2.634 m³/s), 12.38 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft³/s (83.3 m³/s) Mar. 30, 1960, gage height, 5.83 ft (1.777 m); maximum gage height, 6.20 ft (1.890 m) Mar. 17, 1963 (ice jam); no flow for many days 1962-65, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 5	1430	*a2,000 56.6	*b5.68 1.731

a About.

b Backwater from ice.

Minimum discharge, 2.8 ft³/s (0.079 m³/s) Sept. 2, gage height, 1.06 ft (0.323 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	16	17	133	150	140	178	63	123	31	20	3.5
2	4.8	14	19	395	120	150	226	57	80	31	74	3.2
3	4.8	14	15	395	110	270	251	55	61	20	81	4.4
4	5.4	13	31	349	100	620	208	58	49	16	36	4.0
5	5.4	12	40	244	90	1800	285	55	39	13	35	3.5
6	5.2	12	56	166	80	1500	257	50	34	11	20	50
7	4.8	12	41	100	68	1300	194	47	30	10	14	130
8	5.6	12	36	90	62	1100	171	43	28	8.7	11	20
9	5.0	12	46	74	56	960	200	39	26	8.1	8.4	13
10	5.0	12	56	70	50	780	341	36	25	7.8	7.3	9.6
11	5.2	11	43	66	45	590	423	41	28	9.1	7.0	8.4
12	5.0	11	42	64	40	391	497	44	34	10	7.0	7.6
13	7.6	10	40	76	35	278	486	38	26	7.5	6.5	7.0
14	17	11	33	100	30	357	414	35	21	6.5	6.0	11
15	38	10	32	170	27	337	374	34	19	9.1	5.2	70
16	45	10	36	140	24	257	292	32	16	8.7	4.8	45
17	32	11	32	110	22	229	257	31	14	6.5	4.2	23
18	21	11	24	80	20	229	211	28	13	5.7	4.8	17
19	18	12	21	66	21	235	164	26	13	5.3	5.0	13
20	16	12	35	54	22	235	137	25	12	4.6	4.4	12
21	15	13	50	64	23	248	122	23	11	4.4	3.8	11
22	14	11	45	80	27	257	109	23	13	3.8	3.5	13
23	14	11	43	74	36	274	98	23	16	3.8	3.3	12
24	13	13	36	70	150	303	88	24	19	4.4	3.5	11
25	13	15	22	250	430	345	81	49	14	4.6	4.2	9.4
26	16	12	21	370	370	325	77	76	11	8.1	3.6	8.1
27	19	7.0	37	350	230	223	78	76	9.7	11	5.5	6.7
28	26	22	40	300	170	147	85	80	12	8.7	5.7	6.5
29	26	18	41	260	---	135	77	82	16	7.6	6.0	9.4
30	20	16	37	230	---	171	69	120	22	7.0	5.5	9.4
31	17	---	37	190	---	197	---	166	---	6.6	4.2	---
TOTAL	449.2	376.0	1104	5180	2608	14383	6450	1579	834.7	299.6	410.4	551.7
MEAN	14.5	12.5	35.6	167	93.1	464	215	50.9	27.8	9.66	13.2	18.4
MAX	45	22	56	395	430	1800	497	166	123	31	81	130
MIN	4.8	7.0	15	54	20	135	69	23	9.7	3.8	3.3	3.2
CFSM	.14	.12	.35	1.64	.91	4.55	2.11	.50	.27	.10	.13	.18
IN.	.16	.14	.40	1.89	.95	5.25	2.35	.58	.30	.11	.15	.20
CAL YR 1978	TOTAL	36898.9	MEAN	101	MAX	1620	MIN	1.7	CFSM	.99	IN	13.46
WTR YR 1979	TOTAL	34225.6	MEAN	93.8	MAX	1800	MIN	3.2	CFSM	.92	IN	12.48

STREAMS TRIBUTARY TO LAKE ONTARIO

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°53'56", long 76°32'17", Cayuga County, Hydrologic Unit 04140201, on west side of breakwater at city of Auburn water intake and pumping station, 1 mi (2 km) south of city limits of Auburn, and 1.8 mi (2.9 km) upstream from State dam.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.

GAGE.--Nonrecording gage read once daily by employees of city of Auburn Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. Reference mark at elevation 715.48 ft (218.078 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi² (27.5 km²).

COOPERATION.--Records furnished by city of Auburn.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.88 ft (218.505 m) June 25, 1972; minimum observed, 708.58 ft (215.975 m) Feb. 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since 1912, 716.91 ft (218.514 m) Mar. 23, 1936, Apr. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 714.58 ft (217.804 m) Mar. 8; minimum observed, 710.01 ft (216.411 m) Dec. 30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	712.22	711.80	710.85	710.05	711.41	710.76	711.43	712.38	712.63	712.65	712.54	712.20
2	712.15	711.80	710.84	710.58	711.36	710.91	711.46	712.35	712.55	712.63	712.67	712.20
3	712.11	711.76	710.85	711.28	711.28	711.13	711.42	712.38	712.51	712.64	712.75	712.15
4	712.12	711.73	710.96	711.38	711.23	711.48	711.40	712.41	712.46	712.63	712.76	712.10
5	712.06	711.69	710.95	711.36	711.16	712.43	711.58	712.43	712.45	712.58	712.75	712.03
6	712.00	711.64	710.96	711.33	711.06	713.88	711.56	712.41	712.43	712.59	712.71	712.05
7	711.96	711.56	710.92	711.28	711.00	714.48	711.56	712.46	712.45	712.58	712.67	712.30
8	711.92	711.52	710.92	711.28	710.96	714.58	711.56	712.48	712.48	712.49	712.61	712.25
9	711.88	711.50	710.93	711.23	710.88	714.38	711.58	712.48	712.50	712.55	712.56	712.04
10	711.84	711.44	710.95	711.16	710.80	714.13	711.78	712.48	712.50	712.55	712.58	712.05
11	711.82	711.23	710.91	711.08	710.73	713.81	711.96	712.52	712.60	712.54	712.52	712.05
12	711.83	711.18	710.89	711.00	710.65	713.78	712.18	712.54	712.59	712.53	712.49	712.08
13	711.85	711.16	710.88	710.90	710.60	713.50	712.30	712.54	712.57	712.53	712.46	712.03
14	711.93	711.12	710.75	710.96	710.53	713.26	712.45	712.56	712.59	712.52	712.45	712.01
15	711.98	711.00	710.71	710.98	710.48	713.10	712.46	712.58	712.60	712.50	712.38	712.00
16	711.92	711.00	710.60	710.96	710.49	712.86	712.56	712.60	712.58	712.51	712.37	712.03
17	711.90	711.02	710.53	710.92	710.47	712.65	712.68	712.56	712.57	712.48	712.36	712.02
18	711.90	710.96	710.46	710.90	710.46	712.48	712.73	712.58	712.55	712.47	712.36	711.99
19	711.85	710.90	710.39	710.85	710.43	712.25	712.83	712.58	712.55	712.46	712.33	711.92
20	711.82	710.83	710.32	710.78	710.42	712.08	712.75	712.58	712.55	712.45	712.32	711.88
21	711.83	710.83	710.32	710.76	710.42	712.03	712.60	712.60	712.58	712.40	712.32	711.84
22	711.80	710.81	710.31	710.80	710.40	711.91	712.57	712.56	712.58	712.39	712.30	711.73
23	711.76	710.85	710.28	710.80	710.36	711.83	712.55	712.56	712.61	712.38	712.31	711.69
24	711.74	710.81	710.24	710.75	710.33	711.76	712.58	712.56	712.62	712.38	712.30	711.62
25	711.73	710.81	710.20	710.93	710.35	711.71	712.58	712.58	712.62	712.36	712.27	711.57
26	711.70	710.83	710.22	711.25	710.36	711.70	712.59	712.65	712.62	712.40	712.27	711.49
27	711.78	710.83	710.17	711.28	710.65	711.58	712.66	712.69	712.63	712.51	712.30	711.46
28	711.85	710.85	710.11	711.43	710.73	711.48	712.79	712.68	712.61	712.51	712.35	711.39
29	711.84	710.86	710.06	711.46	---	711.45	712.62	712.68	712.63	712.53	712.34	711.38
30	711.85	710.85	710.01	711.45	---	711.41	712.48	712.68	712.65	712.51	712.30	711.36
31	711.86	---	710.03	711.42	---	711.43	---	712.66	---	712.51	712.19	---
MEAN	711.90	711.17	710.57	711.05	710.71	712.46	712.21	712.54	712.56	712.51	712.45	711.90
MAX	712.22	711.80	710.96	711.46	711.41	714.58	712.83	712.69	712.65	712.65	712.76	712.30
MIN	711.70	710.81	710.01	710.05	710.33	710.76	711.40	712.35	712.43	712.36	712.19	711.36
CAL YR 1978	MEAN 711.91		MAX 713.20		MIN 710.01							
WTR YR 1979	MEAN 711.84		MAX 714.58		MIN 710.01							

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LOCATION.--Lat 42°56'48", long 76°35'56", Cayuga County, Hydrologic Unit 04140201, on left bank 2.5 mi (4.0 km) downstream from center of Auburn, and 4 mi (6 km) downstream from State dam at outlet of Owasco Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,960 ft³/s (55.5 m³/s) Mar. 8, gage height, 4.34 ft (1.323 m); minimum, 18 ft³/s (0.51 m³/s) Sept. 29; minimum gage height, 1.25 ft (0.381 m) July 19.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	155	56	475	582	419	722	590	287	44	81	137
2	128	101	54	482	566	468	741	282	287	44	79	137
3	125	158	67	519	558	512	676	181	282	42	91	140
4	128	242	86	550	527	641	287	189	177	40	107	180
5	125	237	185	558	504	1090	399	189	99	44	107	220
6	125	256	206	558	497	1590	504	189	65	47	110	326
7	118	197	256	542	482	1820	440	197	54	99	107	237
8	118	193	303	542	475	1930	433	151	45	47	107	228
9	115	201	368	535	461	1880	355	118	47	45	93	223
10	112	368	355	497	461	1780	309	104	49	47	88	223
11	112	251	349	512	461	1690	309	104	54	47	88	214
12	96	380	349	497	447	1590	349	96	49	47	86	210
13	81	380	374	497	399	1510	386	83	44	49	86	210
14	134	228	393	482	419	1420	386	81	45	49	91	256
15	110	151	393	482	200	1350	386	72	51	45	88	242
16	81	45	406	475	90	1290	440	158	72	54	69	206
17	112	125	399	419	214	1230	461	107	65	47	53	219
18	107	282	399	461	237	1170	298	81	56	44	49	214
19	125	210	393	482	237	1120	185	79	42	53	44	242
20	125	112	393	475	228	799	1050	79	42	47	47	210
21	121	83	399	475	201	820	650	148	51	45	40	223
22	121	110	393	475	256	871	454	128	56	45	42	206
23	125	65	419	475	355	850	242	81	47	76	42	232
24	125	56	419	489	386	770	266	86	45	65	40	189
25	121	56	413	527	393	790	266	219	45	65	42	206
26	144	54	413	574	413	790	266	298	40	83	39	206
27	134	56	413	599	406	760	276	292	47	67	53	201
28	125	61	406	624	413	741	722	292	54	69	56	206
29	121	61	406	624	---	732	969	292	44	63	93	197
30	121	56	406	615	---	732	667	298	44	67	128	193
31	118	---	406	512	---	732	---	292	---	112	141	---
TOTAL	3678	4930	10277	16029	10868	33887	13894	5556	2385	1738	2387	6333
MEAN	119	164	332	517	388	1093	463	179	79.5	56.1	77.0	211
MAX	144	380	419	624	582	1930	1050	590	287	112	141	326
MIN	81	45	54	419	90	419	185	72	40	40	39	137
CAL YR 1978	TOTAL	104007	MEAN 285	MAX 1460	MIN 21							
WTR YR 1979	TOTAL	111962	MEAN 307	MAX 1930	MIN 39							

LOCATION.--Lat 42°56'42", long 76°25'46", Onondaga County, Hydrologic Unit 04140201, on east side of breakwater, enclosed in city of Syracuse boathouse, at Skaneateles.

PERIOD OF RECORD.--October 1967 to current year. Records since September 1890 collected by, and in files of, city of Syracuse.

GAGE.--Nonrecording gages read once daily by employees of Syracuse Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. October 1967 to September 1975, at same site at datum 801.75 ft (244.373 m) higher.

REMARKS.--Lake elevation regulated by gates at outlet by Syracuse Water Division. Area of water surface, 13.6 mi² (35.2 km²).

COOPERATION.--Records furnished by city of Syracuse.

EXTREMES FOR PERIOD OF RECORD.--(since 1890): Maximum observed elevation, 866.95 ft (264.246 m) June 25, 26, 1972; minimum observed, 858.90 ft (261.793 m) Nov. 15, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 864.57 ft (263.521 m) May 29, 30; minimum observed, 860.82 ft (262.378 m) Dec. 1, 2, 3.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861.94	861.38	860.82	860.95	862.22	862.33	864.35	864.54	864.55	864.20	863.72	863.03
2	861.89	861.39	860.82	861.43	862.22	862.37	864.37	864.53	864.53	864.18	863.70	863.02
3	861.86	861.37	860.82	861.45	862.22	862.42	864.47	864.50	864.53	864.17	863.73	863.03
4	861.90	861.33	860.90	861.49	862.20	862.49	864.45	864.53	864.52	864.14	863.73	863.02
5	861.83	861.33	860.86	861.50	862.22	862.98	864.45	864.53	864.50	864.07	863.72	862.99
6	861.84	861.32	860.84	861.59	862.22	863.53	864.43	864.53	864.49	864.05	863.66	863.02
7	861.77	861.26	860.83	861.63	862.22	863.70	864.42	864.54	864.47	864.03	863.63	863.19
8	861.75	861.29	860.83	861.73	862.20	863.80	864.40	864.54	864.45	864.02	863.60	863.18
9	861.65	861.25	860.85	861.74	862.20	863.83	864.41	864.52	864.46	864.01	863.55	863.14
10	861.64	861.22	860.84	861.71	862.19	863.92	864.43	864.51	864.45	864.00	863.54	863.13
11	861.65	861.20	860.84	861.70	862.19	863.98	864.44	864.50	864.52	864.00	863.49	863.08
12	861.63	861.15	860.83	861.65	862.19	864.00	864.42	864.50	864.45	863.95	863.47	863.05
13	861.60	861.12	860.83	861.68	862.18	864.00	864.45	864.53	864.45	863.90	863.44	863.03
14	861.65	861.15	860.83	861.70	862.17	864.01	864.50	864.50	864.42	863.88	863.44	863.01
15	861.69	861.09	860.84	861.77	862.17	864.06	864.50	864.49	864.42	863.87	863.39	863.05
16	861.65	861.07	860.84	861.77	862.16	864.09	864.50	864.49	864.37	863.87	863.34	863.05
17	861.61	861.05	860.85	861.77	862.16	864.09	864.48	864.49	864.37	863.85	863.34	863.05
18	861.57	861.03	860.85	861.75	862.16	864.09	864.50	864.47	864.35	863.82	863.32	863.03
19	861.55	860.99	860.86	861.70	862.18	864.05	864.43	864.46	864.33	863.77	863.31	863.02
20	861.55	860.95	860.85	861.68	862.18	864.05	864.42	864.46	864.31	863.75	863.25	862.99
21	861.53	860.93	860.86	861.65	862.15	864.06	864.42	864.44	864.29	863.73	863.23	862.98
22	861.51	860.90	860.86	861.79	862.14	864.07	864.42	864.43	864.28	863.70	863.22	862.90
23	861.50	860.90	860.86	861.79	862.10	864.11	864.42	864.42	864.30	863.68	863.17	862.84
24	861.54	860.93	860.87	861.78	862.05	864.12	864.42	864.42	864.30	863.66	863.15	862.84
25	861.51	860.95	860.89	861.91	862.04	864.15	864.42	864.39	864.28	863.64	863.15	862.82
26	861.41	860.91	860.90	861.91	862.19	864.24	864.40	864.49	864.26	863.60	863.11	862.79
27	861.46	860.93	860.90	862.06	862.25	864.24	864.40	864.51	864.25	863.67	863.13	862.75
28	861.50	860.89	860.90	862.13	862.31	864.25	864.53	864.55	864.22	863.66	863.15	862.74
29	861.											

CAL YR 1978	MEAN 862.85	MAX 864.38	MIN 860.82
WTR YR 1979	MEAN 862.91	MAX 864.57	MIN 860.82

04237500 SENECA RIVER AT BALDWINVILLE, NY

LOCATION.--Lat 43°09'26", long 76°19'56", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft (61 m) downstream from bridge on State Highway 31 in Baldwinsville, and 400 ft (122 m) downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi² (8,127 km²).

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WDR NY-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 362.60 ft (110.520 m) Barge Canal datum. Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft (457 m) downstream from base gage at same datum.

REMARKS.--Records fair. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge since November 1949, computed by using fall as determined by auxiliary water-stage recorder, represents total discharge at Baldwinsville and includes flow in Erie (Barge) Canal.

A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in river basin. Large diurnal fluctuations at low and medium flows caused by power-plants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of year, entire flow from 45.5 mi² (118 km²) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin (see station 01529000).

COOPERATION.--Records of lockages at lock 24 furnished by New York State Department of Transportation (since November 1949).

AVERAGE DISCHARGE.--29 years (1950-79), 3,504 ft³/s (99.23 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,200 ft³/s (487 m³/s) Apr. 4, 1960, June 28, 1972; maximum gage height, 9.21 ft (2.807 m) Apr. 4, 1960, June 30, 1972; minimum daily discharge, 237 ft³/s (6.71 m³/s) Nov. 10, 1957; minimum gage height, 0.81 ft (0.247 m) Aug. 10, 1952, Oct. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 14,200 ft³/s (402 m³/s) Mar. 9, 10; maximum recorded gage height, 8.29 ft (2.527 m) Mar. 9; minimum daily discharge, 390 ft³/s (11.0 m³/s) Oct. 8; minimum gage height, 1.16 ft (0.354 m) Nov. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	1180	2460	3200	8310	7510	6300	3330	4330	1980	1790	1450
2	856	1080	2400	5400	7930	7770	6370	3450	3390	1770	4370	1450
3	1390	648	2250	7420	8000	8160	6960	3820	3200	1550	4750	1540
4	1090	508	2610	6410	7670	9280	7270	4040	2750	1620	5040	1550
5	1040	645	2850	7240	9750	11600	7570	4160	2800	2270	4800	1540
6	989	1350	2960	7410	11700	13300	7950	4200	2310	1690	4650	2970
7	952	1230	3220	7220	9840	13600	7590	4230	2040	1420	4770	5240
8	390	1120	3490	6920	8910	14100	7160	3890	2070	1410	4770	5430
9	1040	1080	3570	6620	8200	14200	6960	3060	1920	1380	2610	5130
10	976	493	3620	6360	7750	14200	7070	1600	1690	1350	964	4210
11	392	1170	3440	6360	7620	14000	7180	1380	985	950	3410	2220
12	1070	1100	3380	6180	7420	13500	7790	1350	1380	960	746	1550
13	1010	1170	3470	5840	7250	13000	8450	1430	1980	981	606	1730
14	1070	1210	2840	5820	6990	12800	9140	1390	1860	995	1640	2070
15	1260	1010	3440	5960	6880	12300	9280	1290	1700	991	1440	3420
16	1220	924	3520	6060	6390	11800	9240	2010	945	1010	1400	4220
17	1120	590	3780	6080	5640	11700	9120	1200	421	986	1370	3910
18	1040	497	3630	6210	5290	11400	8910	1290	585	1020	788	4550
19	1080	1210	3390	6280	5080	11100	8410	1310	1380	1020	1460	4890
20	746	1120	3410	6040	5050	10800	7690	1280	1370	1020	1460	4730
21	1100	1020	3550	6660	5000	10600	6880	1220	1330	487	1080	4770
22	1080	445	3600	6420	5260	10300	6310	1220	1350	1410	912	3460
23	1050	503	3620	6270	5560	10000	5730	1180	1510	1340	1060	2400
24	699	664	3620	6220	5700	9760	4850	653	2190	1390	1450	1550
25	507	1320	3770	6640	6100	9650	4400	1290	1400	1390	1630	2790
26	616	1120	3360	6850	6810	9420	3170	1600	1440	1380	1520	1430
27	1560	565	3560	7670	7550	8480	2650	2630	1590	1420	1500	1650
28	1250	537	3280	8050	7640	7130	3480	2810	2120	1450	1490	1700
29	1110	1520	3250	8640	---	6310	3610	1890	2080	1470	1510	1720
30	492	2620	3050	8780	---	6070	3560	3260	1990	1480	1470	1710
31	612	---	2920	8580	---	6210	---	4170	---	1490	1440	---
TOTAL	29545	29649	101310	205810	201290	330050	201050	71633	56106	41080	67896	86980
MEAN	953	988	3268	6639	7189	10650	6702	2311	1870	1325	2190	2899
MAX	1560	2620	3780	8780	11700	14200	9280	4230	4330	2270	5040	5430
MIN	390	445	2250	3200	5000	6070	2650	653	421	487	606	1430

CAL YR 1978 TOTAL 1403247 MEAN 3845 MAX 14200 MIN 390
WTR YR 1979 TOTAL 1422399 MEAN 3897 MAX 14200 MIN 390

STREAMS TRIBUTARY TO LAKE ONTARIO

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY

LOCATION.--Lat 42°55'51", long 76°10'24", Onondaga County, Hydrologic Unit 04140201, at Onondaga Dam on Onondaga Creek, 3.5 mi (5.6 km) southwest of Nedrow, 4 mi (6 km) south of Syracuse, and 12.6 mi (20.3 km) upstream from Onondaga Lake.

DRAINAGE AREA.--67.7 mi² (175 km²).

PERIOD OF RECORD.--June 1949 to September 1952 (monthly elevations and contents), October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by a rolled earthfill dam, completed by Corps of Engineers in August 1949 for flood control; first used for flood regulation about a year prior to completion. Usable capacity, 18,200 acre-ft (22.5 hm³) between elevations 457.0 ft (139.29 m), conduit invert at intake, and 504.5 ft (153.77 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually. Storage includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 485.9 ft (148.10 m) Apr. 1, 1960, contents, 5,960 acre-ft (7.35 hm³); no contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 483.80 ft (147.462 m) Mar. 6, contents, 4,988 acre-ft (6.15 hm³); minimum elevation, 459.67 ft (140.107 m) many days in October; no contents many days.

Capacity table (elevation, in feet, and contents, in acre-feet)

460.00	0	470.00	700
461.00	5	473.00	1,420
462.00	15	478.00	2,880
464.00	50	482.00	4,230
467.00	225	486.00	6,010

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	459.70	460.09	460.15	464.87	461.38	462.29	462.74	461.50	461.00	460.41	461.08	459.97
2	459.69	460.04	460.15	473.19	461.41	464.67	462.96	461.40	460.87	460.39	460.71	459.95
3	459.68	460.00	460.12	473.58	461.79	464.99	463.02	461.38	460.80	460.41	460.56	460.24
4	459.67	459.97	461.15	469.49	461.70	467.85	462.54	461.65	460.71	460.33	460.34	460.16
5	459.68	459.95	461.31	463.51	461.06	475.72	463.13	461.39	460.64	460.28	460.19	460.06
6	459.69	459.93	460.70	462.41	460.93	482.83	462.75	461.24	460.63	460.28	460.11	461.70
7	459.68	459.91	460.48	462.02	460.87	482.96	462.44	461.18	460.58	460.25	460.05	461.68
8	459.67	459.93	460.63	461.28	460.83	480.41	462.50	461.08	460.56	460.23	460.02	460.79
9	459.70	459.91	461.63	461.08	460.70	477.22	463.24	460.98	460.57	460.22	460.00	460.40
10	459.70	459.89	461.00	460.87	460.60	473.89	464.12	460.92	460.53	460.21	460.00	460.20
11	459.69	459.87	460.95	460.72	460.50	470.61	464.20	460.88	461.17	460.21	460.04	460.17
12	459.68	459.86	460.49	460.62	460.51	466.17	464.31	460.83	461.03	460.23	460.05	460.12
13	459.68	459.84	460.50	460.81	460.51	463.30	464.57	460.97	460.72	460.20	460.04	460.09
14	460.80	459.84	460.50	462.00	460.45	464.28	464.28	460.97	460.57	460.16	460.04	460.66
15	460.84	459.85	460.42	462.21	460.47	464.23	463.62	460.89	460.48	460.14	460.06	461.32
16	460.43	459.85	460.37	461.51	460.43	463.13	463.91	460.88	460.42	460.37	460.10	460.70
17	460.20	459.84	460.61	461.00	460.35	462.93	464.00	460.81	460.39	460.26	460.05	460.44
18	460.04	459.97	460.56	460.90	460.28	462.83	463.05	460.77	460.41	460.17	460.02	460.29
19	459.97	459.99	460.66	460.64	460.34	462.67	462.53	460.74	460.42	460.12	460.07	460.27
20	460.00	459.90	460.36	460.74	460.33	462.56	462.25	460.69	460.37	460.10	460.04	460.24
21	460.00	459.87	461.87	461.13	460.34	462.50	462.04	460.70	460.34	460.08	460.00	460.19
22	459.94	459.84	461.42	461.61	460.50	462.57	461.91	460.74	460.49	460.07	459.97	460.18
23	459.90	459.84	460.92	461.04	460.61	462.71	461.80	460.70	460.76	460.06	459.95	460.14
24	459.93	460.10	460.65	461.07	462.71	462.99	461.66	460.98	460.58	460.06	459.95	460.12
25	459.92	460.48	460.36	465.14	462.69	463.22	461.57	461.88	460.49	460.05	459.96	460.11
26	459.96	460.30	460.60	464.83	463.98	462.99	461.51	463.08	460.41	460.18	459.95	460.10
27	461.44	460.05	460.62	463.48	463.87	462.26	461.93	462.10	460.35	460.54	460.20	460.08
28	460.77	460.06	460.55	462.96	462.50	462.01	462.84	461.68	460.43	460.35	460.33	460.10
29	460.44	460.11	460.66	462.62	---	462.46	462.02	461.77	460.58	460.33	460.14	460.32
30	460.26	460.12	460.52	462.09	---	463.12	461.68	461.72	460.45	460.23	460.06	460.25
31	460.15	---	460.59	461.74	---	463.20	---	461.24	---	460.17	459.99	---
MEAN	460.03	459.97	460.69	462.94	461.17	466.63	462.84	461.22	460.59	460.23	460.13	460.37
MAX	461.44	460.48	461.87	473.58	463.98	482.96	464.57	463.08	461.17	460.54	461.08	461.70
MIN	459.67	459.84	460.12	460.62	460.28	462.01	461.51	460.69	460.34	460.05	459.95	459.95
†	0.6	0.8	5.4	8.0	15.8	31.1	7.8	5.4	2.2	2.3	0	1.0
‡	+0.01	0	+0.07	+0.04	+0.14	+0.25	-0.39	-0.04	-0.05	0	-0.04	+0.02
CAL YR 1978	MEAN 461.12	MAX 472.65	MIN 459.53	‡ 0								
WTR YR 1979	MEAN 461.41	MAX 482.96	MIN 459.67	‡ 0								

† Contents, in acre-feet, at end of period.

‡ Change in contents, equivalent in cubic feet per second.

STREAMS TRIBUTARY TO LAKE ONTARIO

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04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft (168 m) upstream from bridge on Dorwin Avenue, at Syracuse, and 4 mi (6 km) downstream from Onondaga Reservoir.

DRAINAGE AREA.--88.5 mi² (229 km²).

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

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 413.59 ft (126.062 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. The adjusted and unadjusted yearly means are the same for each year of record.

AVERAGE DISCHARGE.--28 years, 128 ft³/s (3.625 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft³/s (92.3 m³/s) July 3, 1974, gage height, 6.48 ft (1.975 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Aug. 17, 1965; minimum gage height, 1.15 ft (0.351 m) Sept. 16, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,140 ft³/s (60.6 m³/s) Mar. 6, gage height, 5.49 ft (1.673 m); minimum, 19 ft³/s (0.54 m³/s) Aug. 23, Sept. 2, gage height, 1.39 ft (0.424 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	57	58	567	160	235	241	127	88	44	83	21
2	30	54	58	1330	150	442	250	118	80	43	55	21
3	30	52	57	1020	140	514	266	114	75	44	48	36
4	30	50	125	900	130	881	220	138	67	41	37	26
5	34	49	161	400	130	1670	272	116	63	38	32	23
6	32	47	105	192	120	1660	238	106	61	38	29	159
7	30	47	85	164	110	1360	211	103	58	36	27	144
8	33	49	95	161	110	1240	220	95	57	35	26	70
9	33	46	179	161	110	1120	282	90	58	33	25	42
10	31	44	133	168	100	1010	340	86	56	33	26	33
11	30	42	108	142	100	868	388	81	99	33	28	32
12	29	43	88	161	98	597	380	78	92	34	27	29
13	34	42	86	127	94	317	384	83	68	32	25	27
14	131	40	88	206	92	404	353	85	58	31	26	62
15	129	44	81	240	90	388	292	80	53	30	27	128
16	80	42	76	203	88	282	313	80	51	42	28	64
17	58	40	95	147	86	262	327	75	48	33	25	44
18	49	53	90	140	86	250	250	72	47	31	25	37
19	49	49	97	140	84	232	205	69	48	28	27	37
20	54	43	78	135	88	223	179	66	45	27	24	35
21	50	41	205	149	90	223	166	66	43	28	23	32
22	46	39	168	197	97	226	154	67	54	29	22	31
23	44	41	125	144	95	235	144	61	66	25	21	30
24	49	63	101	142	253	253	133	81	55	25	21	29
25	44	88	86	459	272	275	127	161	49	25	21	28
26	57	69	95	482	392	266	120	309	44	34	21	28
27	176	52	101	357	396	200	161	186	42	45	38	27
28	120	54	92	296	256	179	253	147	48	34	34	29
29	86	56	110	262	---	217	168	151	54	35	26	41
30	67	57	90	214	---	269	140	147	47	29	24	35
31	61	---	93	186	---	275	---	106	---	31	22	---
TOTAL	1757	1493	3209	9592	4017	16573	7217	3344	1774	1046	923	1380
MEAN	56.7	49.8	104	309	143	535	241	108	59.1	33.7	29.8	46.0
MAX	176	88	205	1330	396	1670	388	309	99	45	83	159
MIN	29	39	57	127	84	179	120	61	42	25	21	21
CAL YR 1978	TOTAL	50736	MEAN 139	MAX 1090	MIN 22							
WTR YR 1979	TOTAL	52325	MEAN 143	MAX 1670	MIN 21							

STREAMS TRIBUTARY TO LAKE ONTARIO

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft (76 m) upstream from bridge on Spencer Street in Syracuse, 1,000 ft (305 m) upstream from Erie (Barge) Canal terminal, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WRD NY 1972: 1971(M). WRD NY 1975: 1972(M), 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 362.29 ft (110.426 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.75 ft (111.176 m).

AVERAGE DISCHARGE.--9 years, 222 ft³/s (6.287 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s (77.6 m³/s) July 3, 1974, gage height, 8.73 ft (2.661 m); minimum, 31 ft³/s (0.88 m³/s) Sept. 11, 1978, gage height, 2.31 ft (0.704 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,380 ft³/s (67.4 m³/s) Mar. 6, gage height, 8.16 ft (2.487 m); minimum 34 ft³/s (0.96 m³/s) Aug. 26, 27, gage height, 2.33 ft (0.710 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	100	88	796	256	365	344	206	152	80	111	45
2	53	96	86	1400	240	558	445	196	136	74	113	79
3	53	92	102	940	232	632	419	196	124	74	66	59
4	68	90	169	780	224	1020	432	206	131	70	52	47
5	55	88	211	440	217	2040	484	186	124	68	44	43
6	57	84	151	250	214	1930	410	172	125	64	46	396
7	49	84	131	220	206	1490	360	177	119	60	44	213
8	47	88	174	240	209	1380	350	174	110	56	44	131
9	49	84	232	210	194	1270	450	165	114	54	40	97
10	47	78	186	200	182	1200	620	158	97	52	70	84
11	47	74	140	210	162	1010	620	153	207	50	38	80
12	45	76	140	200	172	655	620	142	138	58	37	76
13	94	74	140	220	165	438	600	146	124	53	36	71
14	247	72	142	400	160	504	560	146	102	45	51	217
15	174	74	129	380	153	445	500	144	92	53	41	176
16	118	74	124	280	151	377	460	137	84	64	41	104
17	92	94	158	227	138	319	406	131	76	57	39	79
18	79	88	129	209	129	328	359	122	78	52	44	69
19	83	79	153	189	138	319	312	110	81	51	40	60
20	88	77	199	194	140	316	280	108	82	45	40	52
21	80	75	309	235	145	319	247	118	110	42	38	47
22	78	68	232	276	158	304	237	118	160	42	37	63
23	72	75	182	232	199	310	237	114	130	43	37	44
24	78	104	146	246	353	337	232	160	110	45	37	42
25	72	127	127	547	365	374	224	300	90	45	47	85
26	110	102	127	462	530	337	211	384	70	81	34	45
27	230	83	146	455	492	287	291	242	66	65	90	41
28	190	92	137	409	378	287	329	201	80	81	60	65
29	140	90	124	371	---	326	245	211	100	48	51	54
30	120	90	146	312	---	381	219	212	84	47	47	49
31	110	---	167	275	---	378	---	172	---	106	43	---
TOTAL	2877	2572	4827	11805	6302	20236	11503	5407	3296	1825	1558	2713
MEAN	92.8	85.7	156	381	225	653	383	174	110	58.9	50.3	90.4
MAX	247	127	309	1400	530	2040	620	384	207	106	113	396
MIN	45	68	86	189	129	287	211	108	66	42	34	41
CAL YR 1978	TOTAL	72348	MEAN	198	MAX	1200	MIN	37				
WTR YR 1979	TOTAL	74921	MEAN	205	MAX	2040	MIN	34				

STREAMS TRIBUTARY TO LAKE ONTARIO

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04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'08", long 76°11'17", Onondaga County, Hydrologic Unit 04140201, on left bank 10 ft (3.05 m) downstream from bridge on Velasco Road at Syracuse, and 2.9 mi (4.7 km) upstream from mouth.

DRAINAGE AREA.--9.63 mi² (24.9 km²).

PERIOD OF RECORD.--June 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.79 ft (120.332 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1978, at site 135 ft (41 m) downstream at same datum.

REMARKS.--Records fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--20 years, 9.39 ft³/s (0.266 m³/s) 13.24 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft³/s (20.6 m³/s) July 3, 1974, gage height, 8.34 ft (2.542 m), from rating curve extended above 180 ft³/s (5.10 m³/s) on basis of slope-area measurements of peak flow; minimum daily, 1.8 ft³/s (0.051 m³/s) Sept. 22, 24, 1964, Aug. 29 to Sept. 3, Sept. 10-13, Oct. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	2345	310 8.78	6.70 2.042	Mar. 5	0315	*330 9.35	*6.80 2.073

Minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.8	3.2	101	8.8	12	10	5.2	3.2	4.8	4.6	4.2
2	4.2	3.8	3.4	126	8.5	32	19	5.2	2.6	4.4	5.3	6.4
3	4.2	3.6	3.8	17	8.2	43	15	6.2	2.6	4.2	4.2	3.2
4	4.5	3.3	5.2	12	7.9	117	14	5.9	3.4	4.0	4.0	3.1
5	3.4	3.3	3.8	9.7	7.6	234	16	5.7	3.4	4.0	3.8	2.9
6	3.4	3.6	3.6	8.8	7.6	149	14	5.4	4.2	4.2	4.0	20
7	3.4	3.8	3.6	7.9	7.3	83	14	6.5	4.4	4.4	3.6	4.0
8	3.6	3.8	4.9	7.9	7.3	71	14	7.6	4.6	4.6	3.2	3.2
9	3.6	3.6	5.4	7.3	6.7	60	16	8.2	4.8	4.8	3.2	3.1
10	3.2	3.6	3.8	7.3	6.7	55	18	9.7	4.6	4.8	4.4	2.9
11	2.9	3.6	3.6	7.0	6.7	42	21	12	6.4	6.1	3.4	2.9
12	3.1	3.6	3.4	6.7	6.7	31	30	11	2.6	4.2	3.4	2.8
13	4.2	3.4	3.4	6.7	6.5	30	31	9.4	2.6	3.8	3.2	2.8
14	9.1	3.4	3.4	14	6.2	40	28	8.2	2.8	3.6	4.0	9.4
15	4.5	3.2	3.4	8.8	6.2	21	25	8.2	3.2	3.7	3.8	3.6
16	4.0	3.2	3.4	7.6	5.7	18	25	8.2	3.4	3.6	3.4	3.1
17	4.0	4.0	4.2	7.3	5.7	17	22	8.2	3.8	3.6	3.2	3.1
18	4.0	3.6	3.4	6.7	5.4	17	18	8.2	4.0	3.6	3.4	3.1
19	4.0	3.2	3.4	6.5	5.4	15	16	8.5	4.2	4.0	3.2	3.6
20	4.0	3.2	4.2	6.5	5.4	14	14	8.8	4.2	4.0	3.1	3.4
21	3.8	3.2	9.4	7.6	5.7	14	13	8.5	4.4	4.0	3.2	3.4
22	3.6	3.2	4.2	7.0	5.7	13	12	7.6	5.8	4.2	3.2	3.6
23	4.1	4.2	3.8	7.0	8.5	12	11	7.6	4.4	4.2	3.2	3.2
24	3.8	4.2	3.6	7.9	11	12	11	7.3	4.0	4.2	3.6	2.5
25	3.6	3.8	3.6	13	12	12	11	6.2	4.0	4.2	4.0	2.6
26	6.2	3.2	3.1	11	17	11	9.4	8.3	4.0	5.5	3.6	3.1
27	5.4	3.1	3.1	11	13	9.7	13	9.7	4.0	4.4	6.1	3.1
28	4.2	3.2	3.1	12	10	9.1	8.5	7.9	4.6	5.3	3.4	4.4
29	4.0	3.2	2.9	11	---	10	6.5	7.2	4.0	4.2	3.6	3.1
30	3.8	3.4	2.9	10	---	12	6.2	4.8	4.2	3.8	4.2	3.1
31	3.8	---	3.6	9.4	---	11	---	4.0	---	7.2	4.2	---
TOTAL	127.4	105.3	119.8	489.6	219.4	1226.8	481.6	235.4	118.4	135.6	116.7	122.9
MEAN	4.11	3.51	3.86	15.8	7.84	39.6	16.1	7.59	3.95	4.37	3.76	4.10
MAX	9.1	4.2	9.4	126	17	234	31	12	6.4	7.2	6.1	20
MIN	2.9	3.1	2.9	6.5	5.4	9.1	6.2	4.0	2.6	3.6	3.1	2.5
CFSM	.43	.36	.40	1.64	.81	4.11	1.67	.79	.41	.45	.39	.43
IN.	.49	.41	.46	1.89	.85	4.74	1.86	.91	.46	.52	.45	.47

CAL YR 1978 TOTAL 4009.7 MEAN 11.0 MAX 172 MIN 2.6 CFSM 1.14 IN 15.49
WTR YR 1979 TOTAL 3498.9 MEAN 9.59 MAX 234 MIN 2.5 CFSM 1.00 IN 13.51

STREAMS TRIBUTARY TO LAKE ONTARIO

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft (76 m) downstream from culvert on Hiawatha Boulevard, in Syracuse, and 3,000 ft (914 m) upstream from mouth.

DRAINAGE AREA.--11.3 mi² (29.3 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 365.86 ft (111.514 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--9 years, 17.4 ft³/s (0.493 m³/s), 20.91 in/yr (531 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft³/s (23.3 m³/s) July 3, 1974, gage height, 7.91 ft (2.411 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on basis of step-backwater computations; maximum gage height, 8.15 ft (2.484 m) Sept. 26, 1975 (backwater from Onondaga Lake); minimum discharge, 1.0 ft³/s (0.028 m³/s) June 25, 1971; minimum gage height, 0.34 ft (0.104 m) Sept. 20, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 290 ft³/s (8.21 m³/s) and maximum (*).

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0345	395 11.2	5.69 1.734	Sept. 6	1015	415 11.8	5.81 1.771
Mar. 5	1215	*806 22.8	*7.83 2.387	Sept. 14	1545	350 9.91	5.41 1.649

Minimum discharge, 2.3 ft³/s (0.065 m³/s) Sept. 1; gage height, 1.73 ft (0.527 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	3.6	3.6	111	11	20	22	12	6.8	6.2	4.2	3.0
2	4.7	3.6	3.9	172	10	43	41	12	6.8	4.2	9.8	12
3	4.5	3.6	5.8	27	9.8	51	25	13	6.6	4.0	3.6	3.2
4	6.2	3.5	6.4	17	9.3	137	27	12	6.6	3.7	3.5	2.5
5	4.6	3.5	4.3	13	9.0	567	27	11	6.3	3.7	3.7	2.6
6	4.3	3.5	4.0	13	8.7	330	24	11	6.1	3.7	4.2	8.7
7	4.4	3.6	4.0	12	8.5	134	24	14	6.1	3.6	3.1	8.7
8	4.4	3.4	9.8	12	8.4	98	22	10	6.0	3.6	2.9	7.3
9	4.0	3.5	8.7	12	8.0	60	28	10	6.8	3.7	3.0	6.4
10	3.5	3.5	5.2	12	7.8	50	35	9.7	5.6	3.7	9.0	6.4
11	3.1	3.6	4.2	9.4	7.6	45	33	9.9	31	8.1	2.9	6.4
12	3.0	3.6	4.2	7.5	7.6	38	39	9.9	13	3.7	3.0	6.2
13	6.6	3.6	5.0	7.7	7.3	40	36	10	16	3.6	3.0	6.0
14	16	3.5	4.3	22	7.2	60	32	8.3	11	3.5	7.2	28
15	4.2	3.5	4.2	11	7.0	40	29	8.2	6.2	4.6	4.3	6.2
16	3.6	3.5	4.3	8.9	7.0	34	34	8.1	5.8	3.6	3.1	3.4
17	4.0	5.8	6.2	8.5	7.0	30	29	8.2	5.7	3.5	3.1	3.6
18	5.0	3.6	5.8	8.1	6.8	31	25	8.1	5.7	3.4	3.7	3.5
19	4.9	3.2	7.5	7.7	6.8	29	23	7.8	5.7	3.5	3.0	3.7
20	3.7	3.1	13	7.8	6.8	28	20	7.5	5.7	3.4	3.0	3.4
21	3.6	3.2	16	10	7.5	27	17	8.4	6.6	3.2	3.0	3.4
22	3.6	3.1	5.5	8.5	7.7	26	16	7.7	13	3.2	2.9	3.5
23	4.0	6.4	5.0	8.3	14	26	15	7.7	4.9	3.5	2.9	3.1
24	3.5	5.3	4.8	11	17	25	14	12	4.3	3.1	2.9	3.2
25	3.5	4.2	4.7	18	16	24	14	26	4.3	3.1	5.0	3.7
26	8.5	3.5	4.7	15	29	22	14	19	4.2	7.5	2.6	3.2
27	5.8	3.6	4.7	14	19	21	31	9.6	4.2	3.2	11	3.1
28	3.9	3.9	5.5	16	16	20	17	8.7	7.1	9.2	2.9	7.3
29	3.7	3.9	6.1	14	---	24	14	7.9	4.2	3.2	2.9	3.4
30	3.6	4.0	4.8	12	---	28	13	6.9	4.0	3.2	2.8	3.2
31	3.6	---	6.7	11	---	25	---	6.8	---	15	2.6	---
TOTAL	146.8	113.4	182.9	637.4	287.8	2133	740	321.4	226.3	138.4	124.8	168.3
MEAN	4.74	3.78	5.90	20.6	10.3	68.8	24.7	10.4	7.54	4.46	4.03	5.61
MAX	16	6.4	16	172	29	567	41	26	31	15	11	28
MIN	3.0	3.1	3.6	7.5	6.8	20	13	6.8	4.0	3.1	2.6	2.5
CFSM	.42	.34	.52	1.82	.91	6.09	2.19	.92	.67	.40	.36	.50
IN.	.48	.37	.60	2.10	.95	7.02	2.44	1.06	.74	.46	.41	.55
CAL YR 1978	TOTAL	5256.7	MEAN 14.4	MAX 169	MIN 3.0	CFSM 1.27	IN 17.30					
WTR YR 1979	TOTAL	5220.5	MEAN 14.3	MAX 567	MIN 2.5	CFSM 1.27	IN 17.18					

STREAMS TRIBUTARY TO LAKE ONTARIO

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04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi (0.3 km) upstream from bridge on Park Street, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--Occasional measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 362.76 ft (110.569 m) National Geodetic Vertical Datum of 1929 (revised).

REMARKS.--Records poor. Temporary channel storage intermittently results from backwater caused by Onondaga Lake.

AVERAGE DISCHARGE.--6 years (1974-79), 52.3 ft³/s (1.481 m³/s), 23.75 in/yr (603 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s or 37.1 m³/s Sept. 26, 1975, gage height, 6.17 ft (1.881 m), from rating curve extended above 530 ft³/s (15.0 m³/s); minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 6, 7, 1977; minimum gage height, 0.28 ft (0.085 m) Feb. 6-8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0630	450 12.7	3.03 0.924	Sept. 6	1330	500 14.2	3.24 0.988
Mar. 5	unknown	*a860 24.4	*b5.41 1.649				

a About.

b Backwater from Onondaga Lake.

Minimum daily discharge, 9.9 ft³/s (0.280 m³/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	22	204	39	44	63	25	22	19	35	14
2	13	14	20	104	36	50	131	22	19	17	32	25
3	14	14	20	69	35	70	80	26	23	21	24	53
4	15	13	66	49	33	130	50	34	14	16	14	19
5	23	13	47	38	32	200	50	23	21	15	13	16
6	13	13	37	34	30	270	48	20	19	15	17	221
7	12	14	28	30	29	240	52	19	17	16	15	55
8	13	14	43	23	28	210	70	19	17	16	15	23
9	13	15	64	26	25	180	80	18	19	16	15	16
10	12	15	32	26	23	150	90	17	17	16	71	14
11	13	15	30	23	21	130	98	16	66	19	26	14
12	12	14	28	21	19	110	100	26	27	19	14	13
13	33	15	25	19	19	90	100	26	18	16	13	12
14	103	22	28	65	19	76	90	18	14	15	25	92
15	39	17	24	47	18	60	80	16	14	17	21	68
16	22	14	21	43	17	45	70	16	14	30	19	26
17	26	27	47	41	17	42	56	16	14	14	16	18
18	22	29	30	37	17	40	50	16	14	14	20	16
19	22	17	37	32	17	39	40	15	21	13	17	16
20	23	15	41	32	17	38	35	14	14	13	16	13
21	20	14	122	37	18	38	32	16	16	12	16	12
22	19	22	50	47	20	37	29	16	39	12	16	11
23	19	15	42	40	25	37	26	14	27	14	17	10
24	21	24	29	40	35	39	25	30	17	17	17	9.9
25	19	35	14	101	50	60	19	83	16	11	24	10
26	35	20	21	91	90	60	18	123	16	20	17	10
27	77	14	22	80	66	60	78	80	16	17	48	10
28	40	14	22	66	50	50	87	54	25	16	23	23
29	30	16	22	58	---	50	54	36	19	21	19	21
30	23	20	22	50	---	40	36	29	17	13	16	11
31	18	---	25	43	---	37	---	27	---	18	15	---
TOTAL	777	519	1081	1616	845	2722	1837	910	612	508	666	871.9
MEAN	25.1	17.3	34.9	52.1	30.2	87.8	61.2	29.4	20.4	16.4	21.5	29.1
MAX	103	35	122	204	90	270	131	123	66	30	71	221
MIN	12	13	14	19	17	37	18	14	14	11	13	9.9
CFSM	.84	.58	1.17	1.74	1.01	2.94	2.05	.98	.68	.55	.72	.97
IN.	.97	.65	1.34	2.01	1.05	3.39	2.29	1.13	.76	.63	.83	1.08

CAL YR 1978 TOTAL 16314.5 MEAN 44.7 MAX 541 MIN 8.5 CFSM 1.50 IN 20.30
WTR YR 1979 TOTAL 12964.9 MEAN 35.5 MAX 270 MIN 9.9 CFSM 1.19 IN 16.13

STREAMS TRIBUTARY TO LAKE ONTARIO

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) upstream from bridge on Schuyler Road, 0.9 mi (1.4 km) north of Marietta, and 1.8 mi (2.9 km) downstream from Otisco Lake.

DRAINAGE AREA.--45.5 mi² (118 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WRD NY 1971: 1966(M), 1968, 1969.

GAGE.--Water-stage recorder. Datum of gage is 748.25 ft (228.066 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--15 years, 43.8 ft³/s (1.240 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) June 23, 1972, gage height, 8.65 ft (2.637 m); minimum, 0.80 ft³/s (0.023 m³/s) Sept. 13, 18, 19, 1966, gage height, 0.61 ft (0.186 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 336 ft³/s (9.52 m³/s) Mar. 5, gage height, 5.30 ft (1.615 m); minimum discharge 3.7 ft³/s (0.10 m³/s) July 24, Aug. 30, Sept. 1, 2, 4-6, gage height, 0.72 ft (0.219 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	17	74	78	90	101	53	21	5.0	7.0	3.8
2	22	23	17	83	76	102	109	42	18	4.8	7.0	4.2
3	21	23	17	32	80	108	98	43	17	4.7	5.3	4.7
4	21	23	30	31	90	149	94	42	14	4.5	4.1	3.7
5	21	24	23	29	82	262	95	39	12	4.5	3.9	3.7
6	21	23	20	28	99	226	92	37	9.9	4.5	3.9	29
7	21	24	20	27	105	233	88	34	9.9	4.5	3.9	15
8	22	24	25	26	96	234	86	32	9.4	4.4	3.9	13
9	22	24	31	26	99	226	98	29	7.0	4.4	3.8	13
10	21	24	24	25	100	220	112	26	7.2	4.4	3.9	12
11	21	24	21	24	110	210	118	26	13	4.4	3.9	12
12	20	24	19	30	100	193	125	26	8.0	4.5	4.1	11
13	21	23	18	40	100	186	134	22	6.2	4.4	3.9	11
14	29	23	16	50	100	197	134	19	5.7	4.2	4.1	16
15	23	17	16	50	103	190	127	18	5.2	4.2	4.2	12
16	21	9.4	17	41	100	176	134	15	5.0	4.2	4.1	9.7
17	21	11	18	45	100	165	137	14	5.0	4.1	3.9	9.2
18	22	13	13	41	100	155	129	13	4.8	4.1	4.2	8.9
19	22	13	10	40	99	137	120	13	4.8	4.1	4.1	9.2
20	22	13	13	42	99	100	111	11	4.8	4.1	3.9	8.5
21	22	14	32	46	106	98	104	8.7	5.2	3.9	3.9	8.0
22	22	14	19	41	103	97	96	5.5	5.7	4.1	3.9	7.9
23	22	15	16	39	103	99	79	5.3	5.3	4.1	3.9	7.5
24	22	17	13	51	112	106	65	6.2	5.0	3.7	4.1	7.2
25	23	20	13	79	107	110	62	12	4.8	3.9	4.1	7.0
26	28	16	11	66	119	113	62	19	4.8	7.2	4.0	6.8
27	31	15	10	66	92	104	65	22	4.8	4.2	6.7	6.9
28	24	16	10	64	88	92	70	22	5.5	4.1	4.2	8.1
29	23	16	10	67	---	92	65	25	5.2	3.9	4.0	7.7
30	23	17	11	80	---	94	61	24	5.2	3.9	3.9	7.1
31	23	---	15	78	---	103	---	23	---	7.2	3.8	---
TOTAL	699	565.4	545	1461	2746	4667	2971	726.7	239.4	138.2	133.6	283.8
MEAN	22.5	18.8	17.6	47.1	98.1	151	99.0	23.4	7.98	4.46	4.31	9.46
MAX	31	24	32	83	119	262	137	53	21	7.2	7.0	29
MIN	20	9.4	10	24	76	90	61	5.3	4.8	3.7	3.8	3.7
CAL YR 1978	TOTAL	16075.8	MEAN	44.0	MAX	203	MIN	1.6				
WTR YR 1979	TOTAL	15176.1	MEAN	41.6	MAX	262	MIN	3.7				

STREAMS TRIBUTARY TO LAKE ONTARIO

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04240200 NINEMILE CREEK AT CAMILLUS, NY

LOCATION.--Lat 43°02'21", long 76°18'30", Onondaga County, Hydrologic Unit 04140201, on right bank 150 ft (46 m) downstream from highway bridge on State Highway 5 (Main Street) in Camillus, and 7.2 mi (11.6 km) upstream from Onondaga Lake.

DRAINAGE AREA.--84.3 mi² (218 km²).

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 398.56 ft (121.481 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--21 years, 117 ft³/s (3.313 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft³/s (78.2 m³/s) Mar. 30, 1960, gage height, 8.25 ft (2.515 m); maximum gage height, 10.83 ft (3.301 m) Sept. 26, 1975; minimum discharge, 16 ft³/s (0.45 m³/s) Sept. 30, Oct. 1, 2, 1961; minimum gage height, 1.02 ft (0.311 m) Aug. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft³/s (51.8 m³/s) Mar. 5, gage height, 8.07 ft (2.460 m); minimum daily, 28 ft³/s (0.79 m³/s) Aug. 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	61	57	338	169	207	209	153	78	44	74	28
2	54	60	57	975	169	355	240	137	75	43	46	32
3	52	59	58	204	162	387	230	134	71	43	50	37
4	51	58	103	128	156	729	204	143	67	41	38	31
5	51	59	92	124	152	1570	232	134	64	41	35	30
6	50	58	65	122	156	1090	209	129	61	40	34	205
7	50	58	58	117	167	688	193	126	60	40	34	81
8	53	58	65	120	174	592	198	120	59	39	36	52
9	52	58	100	113	165	522	222	117	58	39	37	46
10	52	57	78	110	159	495	263	112	56	38	41	44
11	53	57	61	107	165	448	286	106	71	38	40	43
12	52	56	59	102	172	371	308	107	59	39	39	42
13	55	57	58	113	156	345	317	110	51	38	37	41
14	98	58	58	166	169	438	290	94	51	37	38	59
15	88	56	57	162	159	388	260	80	51	37	38	76
16	69	50	55	141	159	330	277	75	51	38	39	51
17	63	48	62	124	156	306	286	72	51	37	36	45
18	61	51	59	126	167	292	250	70	51	37	36	43
19	61	49	51	113	156	278	226	70	51	37	36	43
20	63	48	56	119	153	225	209	69	51	37	35	42
21	61	48	123	130	161	215	198	69	51	37	34	40
22	60	47	94	138	167	211	189	69	53	37	33	39
23	60	49	75	126	169	207	177	66	51	37	32	38
24	61	55	66	127	242	211	157	72	47	37	32	38
25	59	65	57	241	252	215	154	97	45	36	33	38
26	67	58	60	214	293	215	153	122	43	41	32	37
27	117	52	65	195	277	202	177	129	45	42	43	37
28	80	54	62	193	215	186	224	105	47	37	35	39
29	67	56	57	181	---	195	172	110	46	37	31	43
30	64	56	59	179	---	211	161	89	44	35	30	40
31	62	---	61	177	---	226	---	88	---	44	28	---
TOTAL	1941	1656	2088	5525	5017	12350	6671	3174	1659	1203	1162	1460
MEAN	62.6	55.2	67.4	178	179	398	222	102	55.3	38.8	37.5	48.7
MAX	117	65	123	975	293	1570	317	153	78	44	74	205
MIN	50	47	51	102	152	186	153	66	43	35	28	28
CAL YR 1978	TOTAL	45820	MEAN	126	MAX	742	MIN	32				
WTR YR 1979	TOTAL	43906	MEAN	120	MAX	1570	MIN	28				

STREAMS TRIBUTARY TO LAKE ONTARIO

04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft (9 m) downstream from bridge on State Highway 48, 0.6 mi (1.0 km) downstream from Geddes Brook, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 360.67 ft (109.93 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--6 years (1972, 1973, 1976-79), 269 ft³/s (7.618 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,960 ft³/s (83.8 m³/s) Mar. 5, 1979; maximum gage height, 8.75 ft (2.667 m) Sept. 26, 1975; minimum daily discharge, 68 ft³/s (1.93 m³/s) Oct. 23, Nov. 1, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,960 ft³/s (83.8 m³/s) Mar. 5; maximum gage height, about 8.62 ft (2.627 m) Mar. 5; minimum daily discharge, 90 ft³/s (2.55 m³/s) Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	165	141	552	262	445	357	260	163	134	178	90
2	133	158	148	1800	255	658	406	244	172	130	137	103
3	139	156	153	680	246	693	360	235	162	128	143	130
4	139	151	210	287	262	1050	315	248	158	123	116	113
5	142	149	200	228	260	2960	274	230	146	126	108	103
6	136	156	165	209	305	2780	310	219	138	128	110	438
7	134	156	163	191	294	1260	346	224	141	126	104	299
8	137	155	184	207	302	918	323	205	137	125	106	169
9	131	151	228	209	284	835	337	199	134	122	117	135
10	134	144	194	189	272	806	422	185	128	115	123	134
11	131	155	156	181	253	871	486	181	170	126	123	132
12	129	155	149	174	253	612	511	185	170	125	125	125
13	158	142	148	226	253	504	479	185	148	122	107	116
14	256	144	155	329	248	588	458	172	141	122	122	155
15	204	141	158	321	267	412	422	174	141	119	115	162
16	162	142	162	277	279	455	431	174	137	122	117	126
17	162	141	196	253	257	387	431	165	122	122	112	122
18	153	133	171	241	244	409	418	160	130	119	112	116
19	151	128	142	222	248	425	366	156	134	119	113	116
20	158	137	165	241	232	315	332	155	123	122	106	110
21	155	141	315	269	255	340	307	155	130	117	108	112
22	153	139	265	282	282	326	279	153	148	117	116	125
23	153	151	210	244	284	302	265	146	151	119	109	118
24	149	171	190	248	409	366	237	155	141	122	105	110
25	146	188	194	422	441	393	264	224	137	117	112	109
26	160	156	180	402	545	246	257	323	132	122	108	115
27	241	139	184	384	530	232	292	289	125	132	155	117
28	206	142	184	375	435	250	372	228	135	123	137	130
29	165	144	182	323	---	269	269	207	137	128	123	138
30	158	149	188	302	---	284	248	183	134	123	105	128
31	162	---	188	277	---	360	---	163	---	120	94	---
TOTAL	4868	4479	5668	10545	8457	20751	10574	6182	4265	3815	3666	4196
MEAN	157	149	183	340	302	669	352	199	142	123	118	140
MAX	256	188	315	1800	545	2960	511	323	172	134	178	438
MIN	129	128	141	174	232	232	237	146	122	115	94	90
CAL YR 1978	TOTAL	84060	MEAN	230	MAX	1730	MIN	100				
WTR YR 1979	TOTAL	87466	MEAN	240	MAX	2960	MIN	90				

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LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft (61 m) southwest of Onondaga Lake Parkway, and 1.9 mi (3.1 km) upstream from outlet of lake.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 368.47 ft (112.310 m) Mar. 9; minimum, 362.18 ft (110.392 m) Oct. 16.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362.65	362.98	363.13	363.23	364.20	363.34	364.59	363.12	363.16	362.84	362.83	362.70
2	362.67	362.87	363.07	364.44	364.07	363.61	364.89	362.97	362.88	362.83	363.01	362.69
3	362.76	362.85	363.01	364.49	363.89	364.02	365.34	363.01	362.85	362.74	362.94	362.80
4	362.77	362.76	363.13	364.05	363.65	364.68	365.35	363.07	362.76	362.70	363.02	362.77
5	362.78	362.75	363.26	363.83	363.45	366.21	365.39	363.03	362.63	362.74	363.06	362.76
6	362.75	362.85	363.29	363.69	363.04	367.75	365.37	362.99	362.57	362.70	363.03	363.17
7	362.73	362.93	363.18	363.58	362.63	368.24	365.25	362.94	362.62	362.77	362.97	363.19
8	362.65	362.93	362.93	363.41	362.72	368.41	365.14	362.72	362.59	362.81	362.97	363.24
9	362.64	362.82	362.91	363.20	362.80	368.47	365.10	362.74	362.54	362.81	362.85	363.19
10	362.71	362.71	362.85	363.30	362.76	368.46	365.16	362.64	362.51	362.80	362.58	362.99
11	362.64	362.88	362.74	363.29	362.72	368.36	365.20	362.68	362.66	362.77	362.76	362.63
12	362.63	362.98	362.63	363.17	362.66	368.29	365.31	363.01	362.73	362.78	362.59	362.65
13	362.85	362.68	362.62	363.03	362.57	367.98	365.42	362.71	362.83	362.76	362.32	362.54
14	362.99	362.61	362.78	363.03	362.53	367.87	365.55	362.50	362.88	362.76	362.59	362.93
15	362.63	362.75	362.84	363.10	362.74	367.85	365.63	362.49	362.85	362.76	362.72	363.22
16	362.35	362.75	362.97	363.07	362.88	367.51	365.65	362.83	362.70	362.77	362.65	363.13
17	362.81	362.71	363.00	363.09	362.78	367.27	365.63	362.79	362.49	362.76	362.82	362.98
18	363.02	362.63	362.94	363.09	362.59	367.00	365.53	362.73	362.61	362.76	362.83	362.92
19	362.99	362.70	362.81	363.02	362.39	366.78	365.34	362.71	362.85	362.73	362.88	363.07
20	362.93	362.80	363.05	362.91	362.27	366.60	365.07	362.69	362.95	362.73	362.97	363.18
21	362.85	362.81	363.25	363.01	362.49	366.42	364.74	362.68	362.74	362.66	362.94	363.15
22	362.88	362.74	363.26	363.12	362.67	366.24	364.40	362.67	362.70	362.64	362.84	362.89
23	362.90	362.80	363.22	363.13	362.53	366.03	364.08	362.64	362.74	362.70	362.83	362.55
24	362.81	362.92	363.17	363.12	362.63	365.75	363.61	362.60	362.81	362.73	362.88	363.00
25	362.67	363.03	363.24	363.33	362.93	365.61	363.16	362.68	362.79	362.73	363.00	362.99
26	362.67	362.79	363.06	363.63	363.33	365.73	362.95	363.05	362.69	362.73	363.00	363.01
27	362.85	362.56	363.09	363.72	363.36	365.61	363.62	362.99	362.99	362.76	362.96	362.99
28	362.97	362.44	363.11	363.95	363.33	365.23	363.82	363.03	362.73	362.76	362.72	362.80
29	362.65	362.74	363.01	364.21	---	364.90	363.75	363.17	362.85	362.78	362.93	362.73
30	362.65	363.07	362.94	364.34	---	364.78	363.53	363.29	362.84	362.76	362.79	362.67
31	362.80	---	362.90	364.32	---	364.64	---	363.33	---	362.75	362.73	---
MEAN	362.76	362.79	363.01	363.48	362.95	366.44	364.79	362.85	362.74	362.75	362.84	362.92
MAX	363.02	363.07	363.29	364.49	364.20	368.47	365.65	363.33	363.16	362.84	363.06	363.24
MIN	362.35	362.44	362.62	362.91	362.27	363.34	362.95	362.49	362.49	362.64	362.32	362.54
CAL YR 1978	MEAN 363.44		MAX 368.16		MIN 361.59							
WTR YR 1979	MEAN 363.36		MAX 368.47		MIN 362.27							

STREAMS TRIBUTARY TO LAKE ONTARIO

04242500 EAST BRANCH FISH CREEK AT TABERG, NY

LOCATION.--Lat 43°18'06", long 75°37'09", Oneida County, Hydrologic Unit 04140202, on left bank at downstream side of bridge on Main Street at Taberg, just downstream from Furnace Creek, 300 ft (91 m) upstream from bridge on State Highway 69, and 2.8 mi (4.5 km) upstream from confluence of East and West Branches near Blossvale.

DRAINAGE AREA.--188 mi² (487 km²).

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1034: 1944. WSP 1054: 1923-45.

GAGE.--Water-stage recorder. Datum of gage is 490.12 ft (149.389 m) National Geodetic Vertical Datum of 1929. Prior to May 20, 1969, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good, except those for winter periods, which are poor. Diversion above station for municipal supply by cities of Rome and Oneida. Diurnal fluctuation at low flow caused by diversion and small power operations upstream.

AVERAGE DISCHARGE.--56 years, 543 ft³/s (15.38 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft³/s (411 m³/s) June 22, 1972, gage height, 11.71 ft (3.569 m); minimum, 4.9 ft³/s (0.14 m³/s) Aug. 15, 16, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,900 ft³/s (140 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 25	0930	*6,270 178	*7.13 2.173	Apr. 2	2400	5,060 143	6.54 1.993

Minimum discharge, 8.6 ft³/s (0.24 m³/s) July 26, gage height, 0.24 ft (0.073 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	291	290	761	280	330	3720	947	277	83	38	168
2	138	241	287	2470	260	370	2510	772	228	115	35	120
3	136	222	228	2060	250	380	4210	689	194	138	34	569
4	127	211	379	1420	240	480	2290	1640	168	103	35	453
5	173	199	644	1170	220	1270	1890	1200	149	76	48	239
6	204	175	554	961	210	2050	1310	766	141	62	36	1730
7	209	168	444	700	200	1890	784	622	130	56	23	2920
8	270	157	559	600	200	1560	933	544	123	46	20	920
9	227	151	1030	440	190	1280	873	457	125	41	37	413
10	184	145	689	390	190	1200	772	391	128	36	194	257
11	155	141	524	350	180	1030	772	343	178	46	421	214
12	145	138	453	330	180	772	797	426	250	69	219	184
13	175	141	408	350	180	655	809	549	204	63	132	149
14	660	141	351	840	180	951	1290	495	151	46	109	257
15	873	284	351	1100	180	1090	1290	363	120	36	118	1140
16	524	280	375	900	180	940	1140	320	102	36	113	649
17	351	260	362	700	180	809	1240	277	84	35	103	355
18	270	1440	270	500	180	689	1520	239	75	23	91	236
19	260	1100	266	430	190	633	1480	219	67	18	130	204
20	270	644	273	410	200	706	1540	211	58	22	130	217
21	244	434	448	780	210	899	1730	206	50	44	97	177
22	217	291	534	760	230	1250	2000	247	66	42	74	155
23	206	241	524	660	250	1760	2000	228	138	43	59	132
24	211	387	412	600	280	3050	2220	225	130	46	80	136
25	230	666	316	540	320	5630	2180	280	109	58	129	122
26	371	417	450	600	340	3520	2210	722	28	45	189	99
27	1100	300	440	500	350	1860	3110	1210	20	29	343	90
28	748	290	430	420	330	1300	3110	900	29	21	595	91
29	529	310	430	370	---	1440	1800	584	55	23	291	118
30	404	300	430	330	---	2090	1170	448	82	25	305	127
31	351	---	440	300	---	3490	---	362	---	23	287	---
TOTAL	10077	10165	13591	22742	6380	45374	52700	16882	3659	1549	4515	12641
MEAN	325	339	438	734	228	1464	1757	545	122	50.0	146	421
MAX	1100	1440	1030	2470	350	5630	4210	1640	277	138	595	2920
MIN	115	138	228	300	180	330	772	206	20	18	20	90
†	25.4	26.1	25.2	26.1	27.6	27.7	25.4	26.4	27.4	31.7	28.8	25.9

CAL YR 1978 TOTAL 199958 MEAN 548 MAX 4830 MIN 24 † 26.5
WTR YR 1979 TOTAL 200275 MEAN 549 MAX 5630 MIN 18 † 27.0

† Diversion, in cubic feet per second, by cities of Rome and Oneida for water supply.
(Data supplied by respective cities)

STREAMS TRIBUTARY TO LAKE ONTARIO

363

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft (21 m) upstream from bridge on Sconondoa Street at Oneida, and 500 ft (152 m) downstream from Sconondoa Creek.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-78-1: 1951, 1956, 1958, 1961, 1963, 1964, 1972, 1976 (P).

GAGE.--Water-stage recorder. Datum of gage is 409.33 ft (124.764 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those above 300 ft³/s (8.50 m³/s), which are fair. Occasional regulation by small mills upstream from station.

AVERAGE DISCHARGE.--30 years, 168 ft³/s (4.758 m³/s), 20.19 in/yr (513 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s (314 m³/s) Oct. 9, 1976, gage height, 15.01 ft (4.575 m); minimum 12 ft³/s (0.34 m³/s) Aug. 5, 6, 1962, Oct. 28, 1964; minimum gage height, 1.30 ft (0.396 m) Aug. 3, 6, 1955, Aug. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0645	3,670 104	11.51 3.508	Mar. 5	1630	*7,480 212	*14.42 4.395

Minimum discharge, 22 ft³/s (0.62 m³/s) July 25; minimum gage height, 1.58 ft (0.482) Aug. 23, Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	71	69	600	220	400	410	173	108	44	33	28
2	40	66	72	2000	200	500	506	163	92	42	30	30
3	40	64	66	922	180	600	489	155	83	44	27	62
4	40	62	278	620	170	1000	328	189	78	39	26	37
5	46	59	249	500	160	5210	456	159	73	37	24	33
6	54	58	155	450	150	3410	314	139	75	36	33	364
7	46	56	126	400	140	1350	251	130	68	34	27	180
8	45	58	188	380	130	956	292	118	65	33	25	77
9	44	56	334	350	120	755	377	111	66	33	24	52
10	42	55	190	330	110	741	515	103	63	32	39	43
11	41	53	160	310	100	621	627	99	77	34	43	44
12	40	52	140	280	100	425	616	93	78	34	30	41
13	44	50	130	310	100	388	573	93	64	32	28	38
14	308	51	120	400	94	658	701	93	58	30	31	111
15	199	53	110	380	90	492	564	87	56	28	37	167
16	106	52	110	300	88	379	550	97	54	32	44	75
17	77	52	110	270	86	334	472	86	51	29	31	55
18	70	66	100	260	84	326	339	81	51	28	32	45
19	71	58	120	260	80	312	271	78	50	26	37	43
20	92	54	180	250	78	327	237	78	46	26	33	38
21	75	52	290	300	76	369	207	77	44	26	31	37
22	65	50	247	330	76	404	192	79	49	26	30	35
23	63	51	164	290	76	464	178	73	66	25	28	33
24	67	85	130	300	200	589	163	108	53	25	29	31
25	61	116	120	580	350	677	154	149	50	25	29	30
26	69	75	110	560	700	489	151	371	45	29	28	28
27	217	95	110	500	600	305	328	233	43	32	48	27
28	136	95	100	400	450	248	531	187	48	28	45	29
29	101	74	100	350	---	385	252	141	54	26	33	40
30	84	69	100	300	---	532	196	171	46	25	32	32
31	76	---	150	250	---	532	---	145	---	26	30	---
TOTAL	2497	1908	4628	13732	5008	24178	11240	4059	1854	966	997	1885
MEAN	80.5	63.6	149	443	179	780	375	131	61.8	31.2	32.2	62.8
MAX	308	116	334	2000	700	5210	701	371	108	44	48	364
MIN	38	50	66	250	76	248	151	73	43	25	24	27
CFSM	.71	.56	1.32	3.92	1.58	6.90	3.32	1.16	.55	.28	.29	.56
IN.	.82	.63	1.52	4.52	1.65	7.96	3.70	1.34	.61	.32	.33	.62

CAL YR 1978	TOTAL	61958	MEAN 170	MAX 1730	MIN 28	CFSM 1.50	IN 20.40
WTR YR 1979	TOTAL	72952	MEAN 200	MAX 5210	MIN 24	CFSM 1.77	IN 24.02

STREAMS TRIBUTARY TO LAKE ONTARIO

04245000 LIMESTONE CREEK AT FAYETTEVILLE, NY

LOCATION.--Lat 43°01'48", long 76°00'49", Onondaga County, Hydrologic Unit 04140202, on left bank 100 ft (30 m) downstream from bridge on Genesee Street at Fayetteville, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--85.5 mi² (221 km²), not including 14.0 mi² (36.3 km²) of Middle Branch Tioughnioga Creek basin, flow from which may be completely diverted into Limestone Creek basin through DeRuyter Reservoir, and 0.8 mi² (2.07 km²) in closed basin.

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

REVISED RECORDS.--WSP 954: 1941. WSP 1912: 1958(M).

GAGE.--Water-stage recorder. Datum of gage is 427.73 ft (130.372 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Canal diverts water from Limestone Creek about 3 mi (5 km) above station and returns water to creek about 400 ft (122 m) above station. Flow regulated by DeRuyter Reservoir.

AVERAGE DISCHARGE.--39 years (1941-79), 144 ft³/s (4.078 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,010 ft³/s (199 m³/s) Mar. 28, 1950, gage height, 7.78 ft (2.371 m), from rating curve extended above 3,500 ft³/s (99.1 m³/s); maximum gage height, 8.66 ft (2.640 m) July 3, 1974; minimum discharge, 1.4 ft³/s (0.040 m³/s) Aug. 19, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1130	2,260 64.0	5.93 1.807	Mar. 6	0300	*3,660 104	*7.40 2.256

Minimum discharge, 21 ft³/s (0.59 m³/s) July 22, 23, 24, 25, 26, Sept. 2, gage height, 1.51 ft (0.460 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	95	66	766	150	219	273	131	79	37	48	24
2	55	89	66	1810	140	395	295	123	72	36	38	26
3	54	76	63	745	130	473	312	118	68	37	32	34
4	54	71	160	300	130	1010	238	150	63	35	28	32
5	61	69	194	206	120	2980	300	124	58	33	26	28
6	58	68	109	174	120	2570	242	109	72	33	27	139
7	56	66	95	162	120	941	214	102	57	31	25	108
8	56	66	124	163	110	595	242	93	54	29	25	46
9	57	64	230	146	110	437	309	89	54	28	24	36
10	54	61	137	135	110	424	378	85	51	28	27	32
11	52	59	104	137	100	377	391	81	72	32	28	32
12	65	58	102	178	98	267	428	76	72	34	27	31
13	75	57	102	124	96	271	418	77	55	31	26	28
14	232	57	101	236	94	464	412	79	49	28	26	47
15	194	64	91	255	92	334	354	72	46	27	27	125
16	117	53	87	176	88	260	414	73	44	27	31	51
17	100	51	101	141	86	254	379	68	42	27	28	40
18	94	72	78	135	84	251	281	64	42	26	28	35
19	99	62	74	173	80	234	240	62	43	25	28	36
20	102	53	87	136	76	236	218	61	40	24	27	35
21	86	51	204	145	74	252	202	60	37	24	26	33
22	79	47	153	213	73	272	191	62	43	22	25	32
23	80	53	119	156	78	310	183	57	52	22	24	31
24	92	85	99	144	170	387	167	70	46	22	24	29
25	82	114	535	408	212	441	141	116	42	21	24	28
26	107	69	182	423	355	334	136	317	38	29	24	27
27	313	52	95	314	343	238	187	218	36	32	35	27
28	163	65	88	265	228	223	301	158	40	28	37	29
29	124	65	88	226	---	275	167	129	46	31	28	36
30	106	66	90	192	---	341	146	114	40	26	26	34
31	100	---	91	174	---	322	---	92	---	31	25	---
TOTAL	3020	1978	3915	8958	3667	16387	8159	3230	1553	896	874	1271
MEAN	97.4	65.9	126	289	131	529	272	104	51.8	28.9	28.2	42.4
MAX	313	114	535	1810	355	2980	428	317	79	37	48	139
MIN	52	47	63	124	73	219	136	57	36	21	24	24

CAL YR 1978 TOTAL 53413 MEAN 146 MAX 1260 MIN 25
WTR YR 1979 TOTAL 53908 MEAN 148 MAX 2980 MIN 21

STREAMS TRIBUTARY TO LAKE ONTARIO

365

04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY

LOCATION.--Lat 42°56'02", long 76°03'44", Onondaga County, Hydrologic Unit 04140202, on left bank 15 ft (5 m) downstream from bridge on Walberger Road, 125 ft (38 m) downstream from tributary from Stebbins Gulf, 2.2 mi (3.5 km) upstream from Jamesville Reservoir, and 4 mi (6 km) south of Jamesville.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-58. July 1958 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.93 ft (218.825 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--21 years, 51.4 ft³/s (1.456 m³/s), 21.68 in/yr (551 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,820 ft³/s (79.9 m³/s) July 3, 1974, gage height, 7.84 ft (2.390 m); maximum gage height, 8.38 ft (2.554 m) Oct. 17, 1977; minimum discharge, 2.0 ft³/s (0.057 m³/s) Sept. 27, 1959, gage height, 2.26 ft (0.689 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0730	1,020 28.8	b7.69 2.344	Mar. 5	1200	*a1,400 39.6	*b8.08 2.463

a About.

b Backwater from ice and/or sluggish intakes.

Minimum discharge, 4.4 ft³/s (0.12 m³/s) Sept. 2, gage height, 5.00 ft (1.524 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	23	26	277	60	74	90	49	25	11	30	4.7
2	13	22	26	772	56	108	99	46	22	11	13	6.1
3	12	21	24	234	52	130	97	44	21	13	9.8	11
4	12	20	77	157	52	373	80	55	19	9.8	7.9	7.0
5	15	19	70	110	50	1030	92	46	18	9.3	7.0	6.1
6	13	19	47	86	48	772	75	40	18	9.3	6.1	9.0
7	11	19	41	78	47	351	66	37	16	8.8	5.7	34
8	13	19	56	78	44	217	74	35	15	7.9	5.7	14
9	12	18	90	70	44	168	97	32	15	7.4	5.7	10
10	10	17	56	64	42	162	114	30	14	7.9	6.5	8.8
11	9.8	16	58	66	40	140	112	29	22	9.3	7.0	9.3
12	9.8	15	44	70	39	102	117	26	25	9.3	6.5	7.9
13	14	14	44	60	38	99	117	27	18	8.4	6.1	7.4
14	72	16	44	120	37	130	116	27	14	7.4	7.0	39
15	43	18	40	130	36	99	108	25	13	7.0	7.4	40
16	26	18	39	96	35	83	130	25	11	19	8.4	18
17	19	16	44	80	34	80	121	23	10	12	6.1	12
18	18	25	46	68	33	78	95	21	10	8.8	7.0	10
19	19	20	56	68	32	74	83	20	10	7.4	7.4	11
20	22	18	49	70	30	78	77	19	9.8	7.0	6.1	9.8
21	19	16	85	110	30	86	70	19	8.8	6.5	5.7	8.8
22	17	18	59	100	29	92	67	20	9.3	6.5	5.0	8.8
23	18	20	50	78	34	102	64	18	13	5.7	5.0	7.9
24	22	36	47	72	60	121	58	28	13	5.7	5.0	7.9
25	18	41	64	234	80	130	55	53	11	5.4	5.0	7.4
26	32	26	85	140	151	106	52	93	10	11	4.7	7.4
27	80	21	68	121	104	77	67	62	10	11	14	7.0
28	43	27	45	97	75	70	90	50	14	8.4	9.3	9.3
29	31	25	42	85	---	85	59	47	14	9.3	7.0	12
30	26	26	43	74	---	100	53	41	13	7.0	6.1	9.3
31	25	---	45	69	---	97	---	31	---	10	5.4	---
TOTAL	707.6	629	1610	3934	1412	5414	2595	1118	441.9	277.5	238.6	441.9
MEAN	22.8	21.0	51.9	127	50.4	175	86.5	36.1	14.7	8.95	7.70	14.7
MAX	80	41	90	772	151	1030	130	93	25	19	30	90
MIN	9.8	14	24	60	29	70	52	18	8.8	5.4	4.7	4.7
CFSM	.71	.65	1.61	3.94	1.57	5.44	2.69	1.12	.46	.28	.24	.46
IN.	.82	.73	1.86	4.54	1.63	6.25	3.00	1.29	.51	.32	.28	.51

CAL YR 1978	TOTAL	17808.2	MEAN	48.8	MAX	635	MIN	7.0	CFSM	1.52	IN	20.57
WTR YR 1979	TOTAL	18819.5	MEAN	51.6	MAX	1030	MIN	4.7	CFSM	1.60	IN	21.74

STREAMS TRIBUTARY TO LAKE ONTARIO

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY

LOCATION.--Lat 43°02'30", long 76°06'02", Onondaga County, Hydrologic Unit 04140202, on right bank 170 ft (52 m) downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--2.90 mi² (7.51 km²).

PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (peak discharges only), October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records fair except those after Apr. 2, which are poor. Flow includes storm sewer inflow, some originating outside the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft³/s (13.5 m³/s) July 3, 1974, gage height 4.82 ft (1.469 m), on basis of culvert measurement of peak flow; minimum, 0.02 ft³/s (0.001 m³/s) Sept. 11, 1972; minimum gage height, 0.27 ft (0.082 m) Oct. 8, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 6	0745	104 2.95	2.76 0.841	Sept. 14	1515	*160 4.53	*3.21 0.978

Minimum discharge, 0.08 ft³/s (0.002 m³/s) Aug. 8, gage height, 0.95 ft (0.290 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	.34	.96	30	2.2	6.2	2.4	2.1	1.4	.96	2.1	.42
2	.64	.34	1.2	21	2.1	11	8.3	2.0	1.4	.79	.96	2.9
3	.64	.34	1.7	3.3	2.2	13	2.7	2.4	1.4	.64	.64	2.0
4	1.2	.34	3.7	2.2	2.2	16	3.7	2.2	1.2	.64	.34	.34
5	1.2	.34	1.4	2.1	2.4	34	3.5	2.0	1.2	.52	.34	.34
6	.64	.34	.96	2.0	2.1	20	2.5	2.0	.79	.52	.79	24
7	.79	.34	.96	2.0	2.0	5.4	3.3	2.0	.96	.64	.34	1.4
8	.79	.42	4.1	2.0	1.8	3.9	2.7	2.2	.96	.64	.22	.52
9	.42	.42	3.5	1.8	1.7	3.3	5.1	1.8	.96	.79	.27	.34
10	.52	.42	1.7	1.7	1.7	3.3	8.3	1.8	.79	.79	3.1	.42
11	.42	.42	1.2	2.0	1.4	2.9	5.4	1.8	5.9	2.5	.52	.52
12	.42	.42	1.2	2.5	1.4	2.7	3.5	1.8	1.4	.79	.27	.22
13	2.1	.42	1.2	1.7	1.4	3.9	2.7	2.6	1.2	.34	.34	.22
14	9.1	.52	1.4	9.1	1.4	6.5	3.3	1.8	1.4	.34	1.2	16
15	.96	.64	1.4	2.7	1.4	3.1	2.9	1.8	1.4	2.2	.52	3.3
16	.42	.52	1.2	2.0	1.4	2.9	3.7	1.8	1.2	1.4	.42	.42
17	.42	1.2	2.5	1.8	1.4	2.9	2.7	2.0	.79	.27	.34	.42
18	.42	1.4	1.7	1.7	1.3	2.7	2.4	2.0	.96	.22	.79	.34
19	.64	.52	1.2	2.9	1.3	2.5	2.4	1.8	.96	.27	.42	.52
20	.79	.52	2.5	2.1	1.3	2.5	2.4	1.8	.96	.27	.27	.34
21	.42	.52	7.2	2.4	1.4	2.4	2.4	2.1	1.2	.27	.27	.22
22	.42	.52	1.8	2.1	1.8	2.4	2.4	1.7	4.1	.34	.27	.22
23	.64	1.7	1.4	1.7	5.4	2.4	2.1	1.7	2.0	.27	.27	.27
24	.52	2.1	1.4	3.1	9.5	2.4	2.2	3.5	.96	.27	.27	.27
25	.42	1.7	1.8	7.2	3.9	2.7	2.2	13	.96	.34	1.4	.27
26	3.9	.79	1.7	3.7	13	2.4	2.1	6.8	.96	3.5	.34	.34
27	3.7	.64	1.2	3.9	4.3	2.2	7.9	2.1	.96	.96	3.9	.34
28	.64	.96	1.2	3.9	3.9	2.4	3.1	1.7	1.8	2.4	.42	2.0
29	.42	.96	1.7	2.9	---	3.7	2.1	2.0	.96	1.2	.34	1.2
30	.42	1.2	1.2	2.4	---	4.6	2.1	1.4	.79	.42	.34	.52
31	.34	---	2.1	2.2	---	2.9	---	1.4	---	3.3	.42	---
TOTAL	35.16	21.31	58.38	132.1	77.3	179.2	102.5	77.1	41.92	28.80	22.43	60.63
MEAN	1.13	.71	1.88	4.26	2.76	5.78	3.42	2.49	1.40	.93	.72	2.02
MAX	9.1	2.1	7.2	30	13	34	8.3	13	5.9	3.5	3.9	24
MIN	.34	.34	.96	1.7	1.3	2.2	2.1	1.4	.79	.22	.22	.22
CFSM	.39	.25	.65	1.47	.95	1.99	1.18	.86	.48	.32	.25	.70
IN.	.45	.27	.75	1.69	.99	2.30	1.31	.99	.54	.37	.29	.78

WTR YR 1979 TOTAL 836.83 MEAN 2.29 MAX 34 MIN .22 CFSM .79 IN 10.73

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LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft (30 m) west of bridge on U.S. Highway 11. at Brewerton.

PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.01 ft or 0.308 m, Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft (110.030 m) higher.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 372.83 ft (113.639 m) June 26, 1972; minimum daily, 366.41 ft (111.682 m) Feb. 18, 19, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1936, reached a stage of 373.5 ft (113.84 m) above mean sea level, from Corps of Engineers report "Flood Plain Information, Oneida Creek, New York."

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 372.10 ft (113.416 m) Apr. 4; minimum, 367.63 ft (112.054 m) Feb. 24.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.48	369.67	369.54	368.33	368.86	368.92	371.27	370.08	370.01	369.65	369.66	369.60
2	369.48	369.64	369.40	368.60	368.82	368.10	371.54	370.02	369.85	369.54	369.69	369.57
3	369.58	369.61	369.57	368.97	368.78	368.21	371.62	369.99	369.72	369.51	369.67	369.54
4	369.61	369.56	369.27	369.17	368.71	368.36	371.87	369.75	369.67	369.54	369.63	369.58
5	369.61	369.49	369.27	369.26	368.65	368.72	371.78	369.72	369.64	369.49	369.59	369.59
6	369.55	369.40	369.27	369.30	368.61	369.48	371.33	369.73	369.70	369.49	369.56	369.71
7	369.48	369.33	369.29	369.30	368.56	370.18	371.43	369.69	369.73	369.51	369.53	369.87
8	369.53	369.29	369.21	369.28	368.48	370.63	371.52	369.65	369.71	369.54	369.42	369.90
9	369.58	369.29	369.19	369.24	368.43	370.88	371.54	369.58	369.69	369.56	369.44	369.86
10	369.59	369.30	369.15	369.17	368.37	371.00	371.28	369.59	369.72	369.57	369.48	369.74
11	369.66	369.28	369.23	369.10	368.30	371.03	371.27	369.64	369.63	369.57	369.54	369.59
12	369.65	369.25	369.25	369.03	368.24	371.03	371.24	369.72	369.61	369.58	369.59	369.53
13	369.66	369.39	369.13	368.97	368.17	371.00	371.31	369.69	369.66	369.59	369.57	369.51
14	369.71	369.21	368.96	368.94	368.11	370.94	371.19	369.74	369.72	369.60	369.49	369.44
15	369.79	369.22	369.01	368.93	368.05	370.95	371.04	369.76	369.71	369.61	369.52	369.39
16	369.87	369.29	368.95	368.94	367.99	370.95	370.99	369.72	369.70	369.62	369.58	369.44
17	369.84	369.65	368.52	368.97	367.93	370.87	370.91	369.78	369.72	369.59	369.61	369.44
18	369.79	369.28	368.68	368.94	367.90	370.78	370.84	369.86	369.66	369.60	369.63	369.38
19	369.64	369.38	368.73	368.91	367.85	370.70	370.76	369.90	369.67	369.61	369.58	369.32
20	369.55	369.51	368.70	368.87	367.78	370.61	370.70	369.86	369.70	369.60	369.59	369.39
21	369.48	369.60	368.60	368.84	367.74	370.56	370.62	369.80	369.69	369.60	369.59	369.37
22	369.37	369.65	368.66	368.80	367.69	370.53	370.51	369.80	369.67	369.59	369.58	369.31
23	369.26	369.87	368.60	368.80	367.69	370.54	370.41	369.89	369.60	369.60	369.61	369.30
24	369.30	369.59	368.63	368.83	367.67	370.61	370.35	369.86	369.58	369.59	369.57	369.34
25	369.30	369.61	368.61	368.78	367.67	370.72	370.30	369.92	369.61	369.58	369.52	369.31
26	369.31	369.67	368.58	368.79	367.78	370.91	370.24	370.11	369.63	369.57	369.57	369.24
27	369.40	370.07	368.51	368.82	367.88	371.00	370.19	370.32	369.67	369.59	369.59	369.26
28	369.51	369.70	368.47	368.85	367.96	371.03	370.27	370.39	369.60	369.6		

04246500 ONEIDA RIVER AT CAUGHDENY, NY

LOCATION.--Lat 43°14'49", long 76°10'12", Oswego County, Hydrologic Unit 04140202, on left bank at point of diversion to New York State Erie (Barge) Canal, 1.6 mi (2.6 km) downstream from Oneida Lake, and 2.6 mi (4.2 km) upstream from navigation dam at Caughdenoy.

DRAINAGE AREA.--1,382 mi² (3,579 km²); 1902-9, 1,439 mi² (3,727 km²).

PERIOD OF RECORD.--September 1902 to December 1909 (published as "near Euclid"), January 1910 to December 1912, and October 1947 to current year in reports of Geological Survey. September 1902 to December 1909 and January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Base gage: Water-stage recorder. Datum of gage is 362.00 ft (110.338 m) Barge Canal datum. Prior to June 5, 1907, headwater readings, and June 5, 1907 to Dec. 31, 1909, nonrecording gage readings at former Oak Orchard State Dam 5.5 mi (8.8 km) downstream at different datum. Jan. 1, 1910 to Dec. 31, 1912, nonrecording gage at site 2.5 mi (4.0 km) downstream from present site at different datum. From Oct. 9, 1947 to Nov. 7, 1951, water-stage recorder at site 2.5 mi (4.0 km) downstream at present datum.

Auxiliary gage: Water-stage recorder at site 2.5 mi (4.0 km) downstream, 350 ft (107 m) upstream from navigation dam at present datum (base gage site 1947-51).

Supplementary gage: Water-stage recorder at site 2.6 mi (4.2 km) downstream, 180 ft (55 m) downstream from navigation dam at present datum.

REMARKS.--Records fair. Jan. 1, 1910 to Dec. 31, 1912: Flow over dam computed on basis of coefficient determined for model of dam of same general type; flow through gate and diversion through lock culverts estimated by theoretical calculations.

1947 to current year: Record represents total discharge at Caughdenoy, including flow in Oneida and Erie (Barge) Canals. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Occasional large diurnal fluctuations caused by seiche in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi² (36 km²) of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below lock 23, furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--42 years (1902-12, 1947-79), 2,581 ft³/s (73.09 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,800 ft³/s (391 m³/s) Mar. 25-27, 1903; minimum daily, 52 ft³/s (1.47 m³/s) Oct. 24, 1910.

1947 to current year: Maximum daily discharge, 10,100 ft³/s (286 m³/s) June 25, 1972; minimum daily, 62 ft³/s (1.76 m³/s) July 29, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,870 ft³/s (251 m³/s) Apr. 4; minimum daily, 106 ft³/s (3.00 m³/s) Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	1410	3270	3160	3910	2730	7830	5710	5630	718	226	977
2	216	2110	3210	3540	3860	2830	8300	5640	5370	703	260	975
3	226	2520	3260	4040	3790	2980	8420	5600	5180	702	484	977
4	229	2510	3170	4370	3700	3180	8870	5180	2870	700	906	965
5	226	2500	3160	4500	3590	3670	8700	5140	1200	493	897	967
6	209	2510	3140	4560	3550	4790	7940	5160	1220	192	893	1750
7	200	2510	3200	4560	3510	5900	8060	4050	971	226	886	3380
8	187	1850	3210	4560	3510	6640	8250	3250	779	229	785	4520
9	171	717	3210	4500	3440	7050	8290	2590	783	221	611	4500
10	189	720	3190	4390	3370	7260	7840	1430	776	214	442	4410
11	166	727	3230	4270	3260	7320	7830	818	763	208	240	4320
12	308	732	3230	4180	3240	7360	7760	847	745	206	212	3270
13	572	729	3830	4090	3240	7340	7910	825	749	212	184	2640
14	573	497	4090	4020	3240	7230	7680	826	750	215	201	2570
15	539	136	4170	4010	3230	7240	7420	851	755	207	371	2620
16	1530	132	4080	4040	3220	7260	7340	845	727	210	617	2620
17	2250	122	3420	4100	3210	7130	7180	856	679	203	635	2600
18	3260	106	3650	4040	3200	6980	7040	878	677	204	638	2040
19	3780	110	3720	3990	3180	6840	6860	897	719	205	641	860
20	3730	134	3660	3980	3070	6700	6750	911	730	207	653	876
21	3690	127	3520	3890	2340	6600	6620	912	711	198	655	878
22	3630	669	3610	3820	2270	6560	6440	912	699	199	643	863
23	2480	1110	3540	3840	2300	6580	6280	903	705	198	635	857
24	1290	1090	3590	3920	2280	6700	6170	911	709	206	649	801
25	838	1100	3550	3790	2280	6870	6090	958	706	200	669	675
26	154	1080	3510	3800	2420	7190	5990	1070	707	193	671	676
27	203	1170	3420	3860	2540	7340	5900	1140	706	205	786	680
28	233	1600	3360	3890	2640	7420	6030	3720	702	212	969	646
29	147	2060	3250	3930	---	7400	6050	5330	722	213	978	656
30	374	2710	3190	3950	---	7440	5990	5900	723	204	956	647
31	795	---	3140	3950	---	7560	---	5780	---	200	975	---
TOTAL	32624	35498	106780	125540	87390	196090	217830	79840	39163	8703	19368	55216
MEAN	1052	1183	3445	4050	3121	6325	7261	2575	1305	281	625	1841
MAX	3780	2710	4170	4560	3910	7560	8870	5900	5630	718	978	4520
MIN	147	106	3140	3160	2270	2730	5900	818	677	192	184	646

CAL YR 1978 TOTAL 955987 MEAN 2619 MAX 7750 MIN 106
WTR YR 1979 TOTAL 1004042 MEAN 2751 MAX 8870 MIN 106

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DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	2380	5900	7640	13800	11600	17100	11000	11600	3160	1720	2380
2	1520	4160	6760	13600	13400	12000	18000	9970	10500	3080	2910	2930
3	1420	3790	5880	15700	13200	13000	19600	10000	9320	3220	4910	3020
4	1640	3210	6380	14400	12800	14700	19500	10100	7490	2600	4820	2930
5	1730	3300	6510	12900	11700	20300	19800	9910	4570	2720	4920	2850
6	1590	3680	6090	13100	11600	26000	19400	9880	3630	2360	5070	5390
7	1490	3950	7610	12700	10800	28800	18600	9530	3260	1730	5080	9820
8	1110	3700	7260	12400	9620	29600	18400	7830	3650	1760	5030	9820
9	1170	2540	7750	11500	9680	29600	18400	6000	3750	1800	3870	9850
10	1450	1860	7490	11000	9680	29700	18200	4100	2850	1700	2160	9560
11	1380	1590	7350	10700	9800	29100	18500	1980	2390	1830	2300	7520
12	1280	2070	7240	10600	9680	27800	18900	1870	2450	2160	1650	5430
13	1700	3170	7180	10400	9500	26700	19100	3800	3070	1860	1750	3860
14	2620	1980	7320	10200	8700	26500	19200	2770	2610	1890	1020	4760
15	3360	1450	7440	10100	8000	26100	19100	1820	3440	1760	1980	7320
16	3210	1450	8050	10300	8330	24900	19100	2120	2820	2000	2120	7550
17	2620	1570	7800	10500	8530	23600	19000	2740	1800	1500	1670	7040
18	4180	1180	7380	10200	8390	22600	18600	2660	1260	2010	2140	6650
19	5280	1150	6870	10500	7830	21900	17900	2550	2160	1440	1760	4860
20	4980	1380	6710	10800	7290	21400	17200	2730	2710	1900	2030	5330
21	5030	1630	8000	10300	6210	20900	16300	2610	3200	1460	2230	5380
22	5150	1340	8160	10400	7150	20600	15200	2290	2690	1300	2160	5350
23	4320	1430	8050	10500	8050	20000	14300	2520	2820	1790	1830	2420
24	2790	1830	7910	10600	8140	19700	13200	2520	2810	1640	1710	2240
25	2120	2770	7380	10800	8480	19200	12300	2250	3080	1710	2130	2150
26	1270	3190	7580	11800	10100	19000	9680	5050	2670	1590	2170	2550
27	1800	2970	7470	13000	11400	18800	9140	6250	2600	1530	3140	4240
28	1910	2500	7380	13100	11400	17900	12400	7240	2680	1590	2750	3170
29	2560	2640	7320	13600	---	17200	12000	9850	3070	1790	2290	2590
30	1130	4320	7070	13800	---	17000	11900	10400	3210	1590	3210	2660
31	1350	---	6980	14100	---	17000	---	11900	---	1730	2950	---
TOTAL	74520	74180	224270	361240	273260	673200	500020	176240	114160	60200	85480	151620
MEAN	2404	2473	7235	11650	9759	21720	16670	5685	3805	1942	2757	5054
MAX	5280	4320	8160	15700	13800	29700	19800	11900	11600	3220	5080	9850
MIN	1110	1150	5880	7640	6210	11600	9140	1820	1260	1300	1020	2150
CAL YR 1978	TOTAL	2714280	MEAN	7436	MAX	27000	MIN	1060				
WTR YR 1979	TOTAL	2768390	MEAN	7585	MAX	29700	MIN	1020				

STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1964-66, 1971 to current year.

CHEMICAL DATA: 1957 (a), 1958-60 (a) unpublished, 1964 (b), 1965 (c), 1966 (a), 1971-72 (a), 1974 (a), 1975 (c), 1976-79 (d).

MINOR ELEMENTS DATA: 1971-73 (a), 1975 (b), 1976 (a), 1977-79 (b).

ORGANIC DATA: OC-1975 (b), 1978-79 (d).

NUTRIENT DATA: 1971 (a), 1974 (a), 1975 (c), 1976-79 (d).

BIOLOGICAL DATA:

Bacteria--1974 (a), 1975 (c), 1976-79 (d).

Phytoplankton--1974 (a), 1975 (c), 1976 (d), 1977-78 (c), 1979 (b).

Periphyton--1975-79 (a).

SEDIMENT DATA: 1974 (a), 1975 (c), 1976 (d), 1977 (b), 1978-79 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1975 to current year.

WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1975-78): Maximum recorded, 2,090 micromhos Sept. 24, 1978; minimum recorded, 430 micromhos Apr. 19, 1976.

WATER TEMPERATURES (water years 1975-78): Minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT 12...	1100	1700	1850	7.5	14.5	4.0	9.0	89	K900	K110	470	370
NOV 01...	1100	2940	1680	7.5	11.5	4.0	9.6	89	74	K6	440	340
DEC 13...	1000	7100	1170	7.8	2.5	2.0	12.2	90	K830	310	280	170
JAN 16...	1000	7250	950	7.3	1.0	4.0	14.0	97	390	280	260	150
FEB 14...	1000	10400	890	7.7	.0	2.0	12.6	88	K190	63	240	130
MAR 19...	1000	22000	645	7.2	5.5	15	--	--	K180	140	190	96
APR 17...	1000	19100	700	7.8	5.5	6.0	12.0	95	K85	K45	220	110
MAY 17...	1100	4370	1280	8.2	17.0	4.0	10.0	102	26	K7	330	220
JUN 13...	1100	4600	1000	7.4	19.5	4.0	10.5	113	K150	80	280	160
JUL 10...	1100	2000	1360	7.8	22.5	1.0	12.2	140	K64	21	330	230
AUG 14...	1000	640	950	7.6	22.0	3.0	7.6	86	K34	K30	220	130
SEP 18...	1100	7200	990	7.4	20.0	7.0	8.6	94	220	27	290	200

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

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04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 (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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 12...	160	16	160	4.0	100	110	460	.2	.1	1130	970	.53
NOV 01...	150	15	130	3.8	100	88	380	.2	.1	1010	827	.56
DEC 13...	94	12	75	2.8	110	70	190	.1	1.5	595	512	.48
JAN 16...	80	15	65	2.5	110	63	170	.1	2.7	492	464	.68
FEB 14...	76	12	56	2.4	110	63	130	.1	2.6	493	408	.61
MAR 19...	61	9.7	39	2.1	96	47	97	.1	3.2	383	317	.92
APR 17...	70	11	44	2.1	110	53	120	.1	1.7	432	368	.65
MAY 17...	110	13	95	3.3	110	75	280	.1	.3	915	643	.47
JUN 13...	92	13	76	3.3	120	73	200	.1	.7	696	530	.54
JUL 10...	110	13	110	3.1	100	84	310	.1	.3	910	691	.27
AUG 14...	68	11	72	2.7	87	61	170	.1	1.3	562	438	.32
SEP 18...	99	10	64	2.7	84	54	190	.1	1.2	651	473	.24

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 12...	.30	.90	1.2	.70	1.7	.08	.03	--	--	--	--	--
NOV 01...	.36	.39	.75	.84	1.3	.10	.05	--	--	--	--	--
DEC 13...	.30	.39	.69	.51	1.2	.09	.06	--	--	--	--	--
JAN 16...	.18	.55	.73	.71	1.4	.07	.05	6	1	0	0	0
FEB 14...	.29	.91	1.2	1.2	1.8	.07	.04	--	--	--	--	--
MAR 19...	.15	.45	.60	.50	1.5	.06	.03	--	--	--	--	--
APR 17...	.14	.41	.55	.56	1.2	.06	.02	--	--	--	--	--
MAY 17...	.24	1.1	1.3	.98	1.8	.12	.02	1	0	100	100	0
JUN 13...	.12	.77	.89	.64	1.4	.08	.03	--	--	--	--	--
JUL 10...	.08	.79	.87	.69	1.1	.07	.04	1	0	0	50	7
AUG 14...	.19	.59	.78	.81	1.1	.11	.09	--	--	--	--	--
SEP 18...	.16	.83	.99	.65	1.2	.09	.03	2	2	100	50	1

STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 12...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 16...	0	10	0	0	0	2	1	140	30	6	1	20
FEB 14...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 19...	--	--	--	--	--	--	--	--	--	--	--	--
APR 17...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	0	30	<10	0	0	4	2	230	10	10	4	40
JUN 13...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 10...	4	10	10	0	0	4	3	130	10	9	8	60
AUG 14...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	0	10	<10	0	0	3	3	340	30	8	4	50

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 12...	--	--	--	--	--	--	--	--	--	3.7	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	4.6	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	4.1	--	--
JAN 16...	10	<.5	<.5	0	0	0	0	20	10	--	28	1.0
FEB 14...	--	--	--	--	--	--	--	--	--	3.8	--	--
MAR 19...	--	--	--	--	--	--	--	--	--	6.2	--	--
APR 17...	--	--	--	--	--	--	--	--	--	5.2	--	--
MAY 17...	4	<.5	<.5	0	0	0	0	20	10	--	8.1	3.0
JUN 13...	--	--	--	--	--	--	--	--	--	6.5	--	--
JUL 10...	50	<.5	<.5	0	0	1	0	20	8	--	5.4	1.7
AUG 14...	--	--	--	--	--	--	--	--	--	8.3	--	--
SEP 18...	7	<.5	<.5	0	0	0	0	10	0	--	8.4	1.0

DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	TIME	SAMP- LING DEPTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 12...	0935	1.0	40	1850	14.5	NOV 01...	1045	1.0	240	1700	11.5
12...	0950	1.0	140	1800	15.0	JUN 13...	0955	2.0	40	1000	19.5
12...	1010	1.0	240	1800	14.5	13...	1025	2.0	140	1010	19.0
NOV 01...	0955	1.0	40	1680	11.5	13...	1050	2.0	240	1010	19.0
01...	1020	1.0	140	1640	11.5						

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04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 12...	1100	1700	6	28	JUN 13...	1100	4600	6	75
NOV 01...	1100	2940	10	79	JUL 10...	1100	2000	2	11
DEC 13...	1000	7100	24	460	AUG 14...	1000	640	3	5.2
MAR 19...	1000	22000	23	1370	SEP 18...	1100	7200	15	292
MAY 17...	1100	4370	7	83					

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Sampling method
		Dry weight	Ash weight			
May 17 to June 13	27	0.870	0.710	0.390	0.170	Polyethylene strip

STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE/ TIME	JUL 19.78 1000	SEP 19.78 1000	NOV 1.78 1100	MAR 19.79 1000
TOTAL CELLS/ML	13000	73000	29000	1800
DIVERSITY: DIVISION	1.2	0.5	1.6	1.8
..CLASS	1.2	0.5	1.6	1.8
..ORDER	1.9	0.7	1.9	2.2
...FAMILY	3.0	0.8	2.3	2.5
....GENUS	3.6	0.8	3.0	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...OOCYSTACEAE								
....GLOEOACTINIUM	--	--	--	--	--	--	--	--
....CHARACIACEAE	--	--	* 0	--	--	--	--	--
....SCHROEDERIA	--	--						
...COELASTRACEAE								
...COELASTRUM	650	5	--	--	1800	6	--	--
...HYDRODICTYACEAE								
...PEDIASTRUM	1100	9	930	1	--	--	--	--
...MICRACTINIACEAE								
....GOLENKINIA	--	--	--	--	--	--	--	--
....MICRACTINIUM	--	--	--	--	--	--	--	--
...OOCYSTACEAE								
....ANKISTRODESMUS	--	--	* 0		220	1	35	2
....CHODATELLA	--	--	* 0		220	1	--	--
...DICTYOSPHAERIUM	410	3	* 0		--	--	--	--
...KIRCHNERIELLA	240	2	--	--	--	--	12	1
...OOCYSTIS	1400	11	--	--	670	2	--	--
...SELENASTRUM	--	--	* 0		* 0		--	--
...TETRAEDRON	--	--	--	--	--	--	--	--
...WESTELLA	--	--	--	--	--	--	--	--
...SCENEDESMACEAE								
...CRUCIGENIA	1600	12	--	--	670	2	--	--
...SCENEDESMUS	2000#	15	1200	2	3000	11	210	11
...TETRASTRUM	200	2	--	--	890	3	46	3
...TETRASPORALES								
...PALMELLACEAE								
...SPHAEROCYSTIS	200	2	* 0		--	--	--	--
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
...CARTERIA	--	--	--	--	--	--	--	--
...CHLAMYDOMONAS	810	6	* 0		450	2	12	1
...VOLVOCAEEAE								
...PANDORINA	320	2	--	--	--	--	--	--
...CHLOROCOCCALES								
...OOCYSTACEAE								
...POLYEDRIOPSIS	--	--	--	--	--	--	--	--
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
...COSCINODISCUS	--	--	--	--	--	--	--	--
....CYCLOTETRA	--	--	900	1	5900#	21	850#	46
....MELOSIRA	--	--	900	1	--	--	23	1
....SKELETONEMA	--	--	--	--	5700#	20	--	--
....STEPHANODISCUS	--	--	--	--	* 0		--	--
...PENNALES								
...DIATOMACEAE								
....DIATOMA	--	--	--	--	--	--	12	1
...FRAGILARIACEAE								
....ASTERIONELLA	--	--	--	--	--	--	46	3
...FRAGILARIA	--	--	--	--	1000	4	12	1
...SYNEDRA	--	--	--	--	--	--	23	1
...GOMPHONEMACEAE								
....GOMPHONEMA	--	--	--	--	--	--	12	1
...NAVICULACEAE								
....NAVICULA	--	--	--	--	--	--	23	1
...NITZSCHIACEAE								
....NITZSCHIA	* 0		--	--	--	--	12	1
..CHRYSOPHYCEAE								
...CHRYSONOMADACEAE								
....DINOBRYON	--	--	--	--	--	--	--	--
...OCHROMONAS	240	2	* 0		* 0		--	--

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ONTARIO

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04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

DATE/ TIME	PHYTOPLANKTON							
	JUL 19.78 1000		SEP 19.78 1000		NOV 1.78 1100		MAR 19.79 1000	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
....CRYPTOCHRYSIDACEAE								
....CHROOMONAS	81	1	--	-	*	0	46	3
....CRYPTOMONADACEAE								
....CRYPTOMONAS	320	2	--	-	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
....ANACYSTIS	2200#	17	66000#	90	7500#	26	46	3
...HORMOGONALES								
....NOSTOCACEAE								
....ANABAENA	--	-	870	1	--	-	--	-
....APHANIZOMENON	--	-	1200	2	--	-	--	-
....OSCILLATORIA								
....OSCILLATORIA	1100	8	--	-	--	-	120	6
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	120	1	*	0	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	300#	16
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
....GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-
....PERIDINIACEAE								
....PERIDINIUM	--	-	*	0	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON									
DATE TIME	MAY 17,79 1100		JUN 13,79 1100		AUG 14,79 1000		SEP 18,79 1100		
TOTAL CELLS/ML	19000		22000		3800		23000		
DIVERSITY: DIVISION	1.4		1.7		1.3		1.6		
..CLASS	1.4		1.7		1.3		1.6		
..ORDER	1.9		1.8		1.7		1.8		
...FAMILY	2.3		2.5		1.9		2.3		
....GENUS	2.9		3.1		2.2		3.0		
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	
CHLOROPHYTA (GREEN ALGAE)									
..CHLOROPHYCEAE									
...CHLOROCOCCALES									
...OOCYSTACEAE									
....GLOEOACTINIUM	410	2	170	1	--	--	--	--	
....CHARACIACEAE	--	--	*	0	--	--	--	--	
....SCHROEDERIA	--	--	--	--	--	--	--	--	
....COELASTRACEAE	--	--	--	--	--	--	--	--	
....COELASTRUM	--	--	--	--	--	--	850	4	
....HYDRODICTYACEAE	--	--	--	--	--	--	--	--	
....PEDIASTRUM	--	--	--	--	--	--	--	--	
....MICRACTINIACEAE	--	--	--	--	--	--	--	--	
....GOLENKINIA	--	--	*	0	--	--	--	--	
....MICRACTINIUM	1100	6	--	--	--	--	--	--	
...OOCYSTACEAE									
....ANKISTRODESMUS	410	2	*	0	65	2	270	1	
....CHODATELLA	100	1	--	--	--	--	420	2	
....DICTYOSPHAERIUM	--	--	--	--	--	--	--	--	
....KIRCHNERIELLA	--	--	--	--	100	3	480	2	
....OOCYSTIS	--	--	1100	5	*	0	1600	7	
....SELENASTRUM	--	--	--	--	65	2	--	--	
....TETRAEDRON	100	1	*	0	--	--	*	0	
....WESTELLA	--	--	--	--	--	--	850	4	
...SCENEDESMACEAE									
....CRUCIGENIA	--	--	--	--	--	--	850	4	
....SCENEDESMUS	2800	15	4900#	22	550	15	3100	13	
....TETRASTRUM	--	--	1000	5	--	--	--	--	
..TETRASPORALES									
...PALMELLACEAE									
....SPHAEROCYSTIS	--	--	350	2	--	--	--	--	
..VOLVOCALES									
...CHLAMYDOMONADACEAE									
....CARTERIA	--	--	--	--	--	--	*	0	
....CHLAMYDOMONAS	410	2	260	1	26	1	210	1	
...VOLVOCACEAE									
....PANDORINA	--	--	--	--	--	--	--	--	
...CHLOROCOCCALES									
...OOCYSTACEAE									
....POLYEDRIOPSIS	--	--	--	--	--	--	*	0	
CHRYSOPHYTA									
..BACILLARIOPHYCEAE									
...CENTRALES									
...COSCINODISCACEAE									
....COSCINODISCUS	--	--	--	--	--	--	*	0	
....CYCLOTELLA	410	2	3900#	18	290	8	320	1	
....MELOSIRA	8600#	45	1500	7	140	4	4000#	18	
....SKELETONEMA	--	--	--	--	--	--	--	--	
....STEPHANODISCUS	1500	8	1500	7	91	2	420	2	
..PENNALES									
...DIATOMACEAE									
....DIATOMA	--	--	--	--	--	--	--	--	
....FRAGILARIACEAE									
....ASTERIONELLA	410	2	--	--	--	--	--	--	
....FRAGILARIA	--	--	--	--	--	--	160	1	
....SYNEDRA	100	1	--	--	--	--	--	--	
...GOMPHONEMACEAE									
....GOMPHONEMA	--	--	--	--	--	--	--	--	
...NAVICULACEAE									
....NAVICULA	100	1	--	--	--	--	--	--	
...NITZSCHIAEAE									
....NITZSCHIA	910	5	--	--	26	1	270	1	
..CHRYSOPHYCEAE									
...CHRYSOMONADALES									
....OCHROMONADACEAE									
....DINOBYRON	100	1	--	--	--	--	--	--	
....OCHROMONAS	--	--	--	--	--	--	--	--	

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ONTARIO

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04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 17.79 1100		JUN 13.79 1100		AUG 14.79 1000		SEP 18.79 1100	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
....CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	* 0		--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	710	4	260	1	--	-	* 0	
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	310	8	8800#	38
...HORMOGONALES								
...VOSTOCACEAE								
....ANABAENA	--	-	3800#	17	--	-	--	-
....APHANIZOMENON	--	-	--	-	--	-	--	-
...OSCILLATORIA								
....OSCILLATORIA	--	-	3100	14	2100#	55	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	610	3	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	* 0	
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
....GLENODINIACEAE								
....GLENODINIUM	410	2	--	-	--	-	--	-
...PERIDINIACEAE								
....PERIDINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---				---	---	---	1020	890	949
2	---	---	---				---	---	---	1250	870	1040
3	---	---	---				---	---	---	---	---	---
4	---	---	---				1220	1000	1120	---	---	---
5	---	---	---				1320	1100	1220	---	---	---
6	---	---	---				---	---	---	---	---	---
7	---	---	---				---	---	---	1040	695	870
8	---	---	---				---	---	---	1110	1030	1070
9	---	---	---				---	---	---	1040	910	960
10	---	---	---				---	---	---	1140	935	1080
11	---	---	---				---	---	---	1340	1140	1260
12	---	---	---				---	---	---	1330	1150	1200
13	---	---	---				1310	1150	1180	1150	1050	1080
14	---	---	---				1590	1220	1310	1150	1000	1090
15	---	---	---				1340	1060	1210	1050	990	1020
16	---	---	---				1490	1180	1340	1050	850	940
17	---	---	---				1220	1090	1140	1100	850	940
18	---	---	---				1220	990	1130	1120	1030	1100
19	---	---	---				1060	950	985	1210	1080	1140
20	965	745	841				990	665	891	1200	1120	1140
21	750	660	705				1100	640	856	1190	920	1080
22	825	640	751				1250	1040	1160	1310	1070	1250
23	---	---	---				1040	830	949	1270	1190	1230
24	---	---	---				830	715	755	1250	1150	1190
25	---	---	---				940	755	860	1270	1160	1230
26	---	---	---				965	810	915	1250	1160	1220
27	---	---	---				895	735	803	1180	920	1100
28	---	---	---				950	720	830	1060	970	1030
29	---	---	---				---	---	---	---	---	---
30	---	---	---				1060	605	911	1110	1040	1080
31	---	---	---				1020	845	967	1180	1070	1130
	---	---	---				890	790	826	1150	1030	1100
MONTH	965	640	766				1590	605	1020	1340	695	1090

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1030	960	990	1110	790	980	690	550	620			
2	1020	930	980	810	690	760	720	590	660			
3	1030	960	1000	780	710	740	590	330	440			
4	990	890	940	880	700	760	640	390	560			
5	1100	975	1000	1090	620	820	600	470	520			
6	1030	930	1010	960	690	790	690	470	560			
7	930	560	803	850	700	770	760	600	670			
8	900	610	741	770	660	690	760	700	720			
9	1210	900	1160	690	570	610	770	670	700			
10	1240	1050	1140	610	520	570	730	640	670			
11	1280	1060	1180	550	480	510	750	680	720			
12	1060	910	1010	740	570	670	850	720	800			
13	1090	880	990	820	670	740	820	770	790			
14	930	870	900	670	550	620	770	630	720			
15	980	880	910	900	510	670	660	560	610			
16	1430	960	1210	1180	880	1030	790	640	700			
17	1210	1090	1160	880	820	840	---	---	---			
18	1090	1000	1020	820	780	800	---	---	---			
19	1030	945	1000	820	760	790	---	---	---			
20	970	900	937	820	740	770	---	---	---			
21	955	855	881	770	700	730	---	---	---			
22	1220	955	1190	730	680	710	---	---	---			
23	1290	1030	1180	700	610	650	---	---	---			
24	1060	835	900	680	560	620	---	---	---			
25	1130	840	1000	640	560	600	---	---	---			
26	1080	1020	1050	660	540	580	---	---	---			
27	1180	660	910	740	600	640	---	---	---			
28	1050	630	817	850	740	770	---	---	---			
29	---	---	---	860	780	820	---	---	---			
30	---	---	---	780	670	720	---	---	---			
31	---	---	---	760	690	740	---	---	---			
MONTH	1430	560	1000	1180	480	726	850	330	654			

STREAMS TRIBUTARY TO LAKE ONTARIO

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04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	18.0	14.0	17.0
20	---	---	---	---	---	---	---	---	---	18.5	14.5	17.5
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	17.5	15.0	17.0
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	16.5	15.5	16.0
27	---	---	---	---	---	---	---	---	---	16.0	15.5	15.5
28	---	---	---	---	---	---	---	---	---	15.5	15.5	15.5
29	---	---	---	---	---	---	---	---	---	15.5	15.5	15.5
30	---	---	---	---	---	---	---	---	---	16.0	14.5	15.5
31	---	---	---	---	---	---	---	---	---	16.5	15.5	16.0
MONTH										18.5	14.0	16.0

STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

TEMPERATURE(DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

LAKE ONTARIO

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04249010 LAKE ONTARIO AT OSWEGO, NY

LOCATION.--Lat 43°27'51", long 76°30'42", Oswego County, Hydrologic Unit 04150200, in southwest corner of Port of Oswego Authority building at mouth of Oswego River at Oswego.

DRAINAGE AREA.--295,800 mi² (766,100 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Jan. 1, 1933, nonrecording gages.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 248.96 ft (75.883 m) June 6, 1952; minimum observed, 240.94 ft (73.438 m) Dec. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 246.60 ft (75.164 m) Apr. 6; minimum, 243.43 ft (74.197 m) Dec. 3.

ELEVATION, IN FEET IGLD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244.41	243.90	243.55	243.87	244.69	244.26	245.16	246.00	246.07	245.77	245.47	245.08
2	244.37	243.89	243.52	244.03	244.67	244.34	245.08	246.00	246.08	245.80	245.46	245.11
3	244.27	243.85	243.43	244.17	244.54	244.23	245.32	245.98	246.05	245.83	245.49	245.15
4	244.31	243.83	243.66	244.09	244.62	244.25	245.25	246.12	246.04	245.79	245.48	245.11
5	244.29	243.81	243.65	244.04	244.79	244.43	245.45	246.08	246.05	245.80	245.50	245.06
6	244.30	243.84	243.60	243.99	244.48	244.53	245.92	246.03	246.03	245.77	245.47	245.14
7	244.46	243.84	243.54	244.03	244.40	244.56	245.72	246.03	245.98	245.72	245.41	245.13
8	244.39	243.78	243.68	244.11	244.61	244.63	245.52	246.05	245.98	245.69	245.53	245.05
9	244.29	243.76	243.69	244.12	244.54	244.62	245.59	246.06	245.99	245.65	245.36	244.99
10	244.26	243.75	243.80	244.15	244.46	244.70	245.70	246.07	245.95	245.64	245.44	245.02
11	244.19	243.74	243.66	244.06	244.43	244.91	245.63	246.07	246.06	245.65	245.40	244.96
12	244.18	243.70	243.63	244.02	244.40	244.95	245.59	246.06	246.05	245.63	245.29	244.93
13	244.22	243.57	243.71	244.00	244.42	244.65	245.55	246.12	246.01	245.62	245.23	244.87
14	244.26	243.69	243.81	244.33	244.37	244.90	245.64	246.08	245.98	245.60	245.42	245.17
15	244.19	243.72	243.65	244.34	244.31	245.03	245.80	246.12	245.95	245.56	245.46	245.27
16	244.15	243.66	243.61	244.22	244.34	244.87	245.83	246.12	245.96	245.60	245.37	245.22
17	244.07	243.45	243.99	244.14	244.32	244.85	245.87	246.10	245.94	245.55	245.25	245.19
18	244.06	243.83	243.81	244.31	244.22	244.87	245.87	246.06	245.98	245.51	245.20	245.21
19	244.07	243.76	243.75	244.19	244.26	244.89	245.86	246.02	245.95	245.49	245.23	245.30
20	244.05	243.67	243.52	244.11	244.24	244.88	245.85	246.02	245.87	245.48	245.18	245.17
21	244.02	243.60	243.89	244.28	244.24	244.90	245.84	246.07	245.82	245.46	245.16	245.14
22	244.00	243.55	243.66	244.47	244.30	244.88	245.87	246.07	245.86	245.45	245.11	245.13
23	244.10	243.44	243.76	244.24	244.13	244.82	245.86	246.04	245.92	245.44	245.04	245.01
24	244.00	243.71	243.59	244.15	244.31	244.80	245.87	246.04	245.88	245.43	245.08	244.95
25	243.94	243.74	243.93	244.41	244.28	244.96	245.83	246.06	245.84	245.40	245.13	244.93
26	244.05	243.61	243.88	244.49	244.26	245.15	245.81	246.06	245.80	245.53	245.09	244.96
27	244.02	243.45	243.95	244.45	244.35	245.14	245.95	246.05	245.77	245.53	245.13	244.91
28	244.02	243.66	243.86	244.55	244.32	244.99	245.95	246.08	245.80	245.49	245.11	244.86
29	243.96	243.53	243.75	244.67	---	245.01	245.96	246.07	245.78	245.49	245.13	244.86
30	243.89	243.71	243.69	244.64	---	245.06	245.96	246.08	245.73	245.44	245.17	244.81
31	243.92	---	243.70	244.61	---	245.18	---	246.07	---	245.42	245.14	---
MEAN	244.15	243.70	243.71	244.23	244.40	244.78	245.70	246.06	245.94	245.59	245.29	245.06
MAX	244.46	243.90	243.99	244.67	244.79	245.18	245.96	246.12	246.08	245.83	245.53	245.30
MIN	243.89	243.44	243.43	243.87	244.13	244.23	245.08	245.98	245.73	245.40	245.04	244.81
CAL YR 1978	MEAN 245.30		MAX 246.72	MIN 243.43								
WTR YR 1979	MEAN 244.89		MAX 246.12	MIN 243.43								

STREAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'48", long 76°04'30", Jefferson County, Hydrologic Unit 04140102, on left bank 250 ft (76 m) upstream from highway bridge on Liberty Street, 0.2 mi (0.3 km) downstream from tributary, 2.5 mi (4.0 km) downstream from Adams, and 10.0 mi (16.1 km) upstream from mouth. Water-quality sampling site at discharge station; except for specific conductance and water temperatures which are measured about 2 mi (3.2 km) downstream, in the village of Belleville.

DRAINAGE AREA.--128 mi² (332 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft (159.627 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Moderate diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--22 years, 269 ft³/s (7.618 m³/s), 28.54 in/yr (725 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Apr. 4, 1963, gage height, 11.01 ft (3.356 m), from rating curve extended above 5,500 ft³/s (156 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0800	ice jam	8.07 2.460	Sept. 14	1930	3,140 89	6.62 2.018
Mar. 5	1800	*5,540 157	*8.94 2.725				

Minimum discharge, 5.2 ft³/s (0.147 m³/s) July 30, 31, gage height, 0.91 ft (0.277 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	74	107	300	250	237	855	192	106	21	53	56
2	14	66	109	1200	230	302	867	170	86	21	40	40
3	13	61	74	680	220	382	1070	195	72	31	25	210
4	13	58	500	600	210	832	523	359	63	27	21	97
5	25	54	550	540	190	4370	716	243	55	20	13	52
6	29	51	363	480	180	3480	480	195	51	18	11	117
7	29	50	307	400	180	2080	346	184	46	16	9.7	580
8	40	48	574	320	170	1370	352	157	42	15	9.3	162
9	33	44	934	270	160	1070	349	135	69	14	8.3	84
10	26	43	436	250	150	1230	337	119	57	13	7.5	56
11	24	41	244	250	150	1020	356	130	162	13	7.5	59
12	21	38	230	250	140	665	385	146	201	13	7.1	55
13	32	37	210	270	140	568	501	189	125	12	7.1	42
14	294	62	200	483	130	1470	1020	162	82	12	7.1	855
15	368	178	180	819	120	1160	812	128	60	11	7.9	1020
16	172	109	170	682	120	776	849	123	47	10	11	349
17	109	85	160	586	110	626	747	111	37	10	12	217
18	85	315	150	505	110	516	523	95	31	9.3	10	149
19	76	222	140	431	110	473	373	82	28	9.3	12	195
20	72	141	130	391	110	527	327	74	25	8.3	11	167
21	64	85	150	370	110	665	303	71	21	7.5	10	113
22	56	62	200	500	120	658	303	86	21	7.1	9.3	95
23	51	72	180	430	130	1180	285	74	22	6.7	8.3	80
24	51	431	160	400	170	2140	243	69	25	6.3	9.3	65
25	50	350	150	450	300	2150	220	115	26	5.9	15	55
26	85	133	140	500	270	975	207	359	22	5.9	19	48
27	341	93	130	440	250	508	315	434	19	5.9	93	44
28	194	99	130	370	240	352	415	253	20	5.9	97	41
29	128	107	120	320	---	415	256	186	29	5.9	49	43
30	101	114	130	290	---	826	204	154	25	5.6	285	44
31	85	---	130	270	---	1270	---	137	---	5.2	130	---
TOTAL	2694	3323	7388	14047	4770	34493	14539	5127	1675	371.8	1015.4	5190
MEAN	86.9	111	238	453	170	1113	485	165	55.8	12.0	32.8	173
MAX	368	431	934	1200	300	4370	1070	434	201	31	285	1020
MIN	13	37	74	250	110	237	204	69	19	5.2	7.1	40
CFSM	.68	.87	1.86	3.54	1.33	8.70	3.79	1.29	.44	.09	.26	1.35
IN.	.78	.97	2.15	4.08	1.39	10.02	4.23	1.49	.49	.11	.30	1.51

CAL YR 1978 TOTAL 97853.0 MEAN 268 MAX 2720 MIN 3.5 CFSM 2.09 IN 28.44
WTR YR 1979 TOTAL 94633.2 MEAN 259 MAX 4370 MIN 5.2 CFSM 2.02 IN 27.50

STREAMS TRIBUTARY TO LAKE ONTARIO

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04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1978 to current year.

CHEMICAL DATA: 1965, 1978 (c); 1979 (d).

MINOR ELEMENTS DATA: 1978-79 (b).

ORGANIC DATA: OC-1978 (c), 1979 (d).

NUTRIENT DATA: 1978 (c), 1979 (d).

BIOLOGICAL DATA:

Bacteria--1978 (c), 1979 (d).

Phytoplankton--1978-79 (c).

Periphyton--1978-79 (b).

SEDIMENT DATA: 1978 (c), 1979 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1978 to current year.

WATER TEMPERATURES: January 1978 to current year.

REMARKS.--No sample collected for specific conductance May 13.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 900 micromhos Dec. 26, 27, 30, 1978 and Jan. 1, 6, 1979; minimum daily, 115 micromhos Mar. 24, 1979.

WATER TEMPERATURES: Maximum daily, 33.0°C July 24, 1979; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 900 micromhos Dec. 26, 27, 30, Jan. 1, 6; minimum daily, 115 micromhos Mar. 24.

WATER TEMPERATURES: Maximum daily, 33.0°C July 24; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT 23...	1400	49	360	7.9	11.0	2.0	10.4	95	2600	200	160	28
NOV 20...	1230	138	260	7.9	3.0	2.0	10.2	73	310	100	130	39
DEC 12...	1330	229	290	7.7	1.0	2.0	11.0	78	5500	230	140	35
JAN 22...	1200	513	235	7.8	1.0	3.0	14.6	104	430	280	120	34
FEB 20...	1230	103	370	7.7	.5	2.0	11.4	79	2500	240	150	17
MAR 13...	1230	518	260	7.5	2.0	5.0	10.4	75	86	93	110	17
APR 03...	0915	1210	140	7.2	6.0	40	12.8	102	350	K1100	59	2
MAY 14...	1300	172	250	8.1	14.0	1.0	11.2	108	520	690	120	18
JUN 12...	1230	215	285	8.3	11.5	3.0	10.0	93	K16000	3600	110	13
JUL 09...	1330	13	400	7.6	21.5	2.0	8.2	93	K1700	650	170	9
AUG 20...	1130	12	350	7.5	23.0	3.0	10.4	113	480	K120	160	28
SEP 10...	1400	54	260	8.0	15.0	15	10.4	102	4800	630	130	21

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

STREAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 (MG/L AS CAC03)	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 23...	56	4.5	5.0	2.0	130	35	7.9	.1	2.2	193	191	.03
NOV 20...	44	3.9	3.8	1.3	87	28	5.8	.1	3.6	159	143	.06
DEC 12...	52	3.6	3.5	1.4	110	24	5.9	.1	4.5	164	161	1.1
JAN 22...	42	3.4	2.8	1.1	85	16	6.2	.1	4.3	129	127	.73
FEB 20...	53	3.6	4.7	1.1	130	19	7.9	.1	4.3	174	172	1.1
MAR 13...	39	2.6	3.4	1.0	91	14	6.1	.1	3.9	140	125	.94
APR 03...	20	2.1	2.1	.8	57	8.9	2.9	.0	3.0	78	74	.44
MAY 14...	42	3.2	4.2	1.2	100	14	5.7	.1	2.2	156	133	.22
JUN 12...	39	3.1	5.2	1.2	97	15	5.3	.1	4.4	149	132	.34
JUL 09...	60	4.6	23	2.2	160	14	25	.1	3.7	234	229	.02
AUG 20...	56	4.5	7.6	1.6	130	26	13	.1	2.8	216	190	.26
SEP 10...	46	3.8	5.2	1.4	110	21	6.3	.1	3.4	166	154	.13

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 23...	.01	.18	.19	.21	.22	.20	.20	0	0	0	0	1
NOV 20...	.00	.12	.12	.24	.18	.12	.17	--	--	--	--	--
DEC 12...	.00	.15	.15	.08	1.3	.04	.03	--	--	--	--	--
JAN 22...	.00	.13	.13	.07	.86	.04	.03	--	--	--	--	--
FEB 20...	.04	.69	.73	.14	1.8	.21	.18	1	0	100	0	0
MAR 13...	.00	.17	.17	.17	1.1	.03	.02	--	--	--	--	--
APR 03...	.01	.30	.31	.24	.75	.08	.02	2	0	0	0	0
MAY 14...	.02	.52	.54	.38	.76	.07	.08	--	--	--	--	--
JUN 12...	.01	.45	.46	.36	.80	.27	.28	3	0	0	30	0
JUL 09...	.06	.87	.93	.37	.95	1.1	.94	--	--	--	--	--
AUG 20...	.16	.82	.98	.42	1.2	.23	.14	--	--	--	--	--
SEP 10...	.03	.56	.59	.25	.72	.37	.35	--	--	--	--	--

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 23...	1	<10	0	1	1	4	2	150	140	5	4	30
NOV 20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 22...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 20...	0	10	0	0	0	4	0	120	20	2	0	20
MAR 13...	--	--	--	--	--	--	--	--	--	--	--	--
APR 03...	0	30	30	2	1	6	2	3900	50	5	2	80
MAY 14...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 12...	0	10	20	0	0	3	2	310	50	4	3	20
JUL 09...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 20...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 23...	30	<.5	<.5	0	0	0	0	20	10	--	4.7	.8
NOV 20...	--	--	--	--	--	--	--	--	--	10	--	--
DEC 12...	--	--	--	--	--	--	--	--	--	2.9	--	--
JAN 22...	--	--	--	--	--	--	--	--	--	4.2	--	--
FEB 20...	9	<.5	<.5	0	0	0	0	20	0	--	2.8	--
MAR 13...	--	--	--	--	--	--	--	--	--	3.2	--	--
APR 03...	4	<.5	<.5	0	0	1	0	80	10	--	24	.3
MAY 14...	--	--	--	--	--	--	--	--	--	4.1	--	--
JUN 12...	10	<.5	<.5	0	0	0	0	20	20	--	5.3	1.2
JUL 09...	--	--	--	--	--	--	--	--	--	15	--	--
AUG 20...	--	--	--	--	--	--	--	--	--	2.8	--	--
SEP 10...	--	--	--	--	--	--	--	--	--	4.5	--	--

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 23...	1400	49	1	.13	APR 03...	0915	1210	107	350
NOV 20...	1230	138	0	.00	MAY 14...	1300	172	2	.93
DEC 12...	1330	229	3	1.9	JUN 12...	1230	215	7	4.1
JAN 22...	1200	513	6	8.3	JUL 09...	1330	13	3	.11
FEB 20...	1230	103	3	.83	AUG 20...	1130	12	8	.28
MAR 13...	1230	518	15	21	SEP 10...	1400	54	9	1.3

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 26,78 1245	JUL 24,78 1300	AUG 15,78 1230	SEP 11,78 1530	NOV 20,78 1230	MAR 13,79 1230				
TOTAL CELLS/ML	5300	100000	42000	11000	6800	470				
DIVERSITY: DIVISION	0.5	1.4	0.3	0.6	0.2	0.8				
..CLASS	0.5	1.4	0.3	0.6	0.2	0.8				
...ORDER	0.6	1.8	0.5	0.6	0.2	0.8				
...FAMILY	1.4	2.0	1.5	1.1	0.2	1.1				
....GENUS	1.5	2.2	1.8	1.1	0.5	1.1				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....COELASTRACEAE										
.....COELASTRUM	700	13	3700	4	3700	9	--	-	--	-
....HYDRODICTYACEAE										
.....PEDIASTRUM	180	3	--	-	--	-	780	7	--	-
....SORASTRUM	--	-	--	-	--	-	--	-	--	-
....OOCYSTACEAE										
.....ANKISTRODESMUS	59	1	930	1	1800	4	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	2300	5	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	460	1	*	0	--	-
....TETRAEDRON	--	-	--	-	1100	3	*	0	--	-
....SCENEDESMACEAE										
.....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	3900#	73	9300	9	30000#	70	8700#	81	--	-
....VOLVOCALES										
....CHLAMYDOMONADACEAE										
.....CARTERIA	--	-	3300	3	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	27000#	27	1400	3	--	-	--	-
....ZYGNEMATALES										
....DESMIDIACEAE										
....CLOSTERIUM	--	-	--	-	--	-	--	-	14	3
....COSMARIUM	29	1	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCACEAE										
.....CYCLOTELLA	*	0	930	1	920	2	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	89	1
....COCCONEIS	*	0	--	-	--	-	--	-	--	-
....CYMBELLACEAE										
.....CYMBELLA	--	-	--	-	--	-	--	-	*	0
....FRAGILARIACEAE										
.....SYNEDRA	--	-	--	-	--	-	--	-	*	0
....GOMPHONEMATACEAE										
.....GOMPHONEMA	--	-	--	-	--	-	150	1	--	-
....MERIDIONACEAE										
.....MERIDION	--	-	--	-	--	-	--	-	--	-
....NAVICULACEAE										
.....NAVICULA	88	2	1900	2	460	1	*	0	44	1
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
....NITZSCHIA	29	1	7000	7	690	2	*	0	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOMONADACEAE										
.....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
.....AGMENELLUM	120	2	--	-	--	-	--	-	--	-
....ANACYSTIS	180	3	--	-	--	-	190	2	--	-
....HORMOGONALES										
....OSCILLATORIACEAE										
.....ARTHROSPIRA	--	-	--	-	--	-	680	6	--	-
....LYNGBYA	--	-	--	-	--	-	--	-	6300#	92
....OSCILLATORIA	--	-	46000#	46	--	-	--	-	360	5
....SPIRULINA	--	-	--	-	--	-	--	-	390#	82
....RIVULARIACEAE										
....RAPHIIDIOPSIS	--	-	--	-	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 14,79 1300	JUN 12,79 1230	JUL 9,79 1330	AUG 20,79 1130	SEP 10,79 1400
TOTAL CELLS/ML	3600	1500	44000	170000	1700
DIVERSITY: DIVISION	0.5	1.4	0.8	0.4	0.9
..CLASS	0.5	1.4	0.8	0.4	0.9
..ORDER	0.5	1.8	0.9	0.4	0.9
...FAMILY	0.6	2.4	1.4	0.7	1.3
....GENUS	0.6	2.7	1.6	0.8	1.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....COELASTRACEAE										
.....COELASTRUM	--	-	51	4	--	-	2100	1	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	100	7	--	-	--	-	160	9
....SORASTRUM	--	-	--	-	--	-	1700	1	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	1000	2	1500	1	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-
...OOCYSTIS	--	-	--	-	810	2	850	1	--	-
....SELENASTRUM	--	-	--	-	4600	11	* 0		--	-
....TETRAEDRON	--	-	--	-	* 0		* 0		14	1
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	100	7	--	-	--	-	--	-
....SCENEDESMUS	--	-	490#	33	27000#	63	150000#	90	260#	16
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	--	-	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	* 0		--	-	--	-
..ZYGNEATALES										
...DESMIDIACEAE										
....CLOSTERIUM	--	-	--	-	--	-	--	-	--	-
....COSMARIUM	--	-	13	1	--	-	--	-	--	-
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCACEAE										
.....CYCLOTELLA	--	-	--	-	--	-	* 0		--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
...COCCONEIS										
....CYMBELLACEAE										
.....CYMBELLA	120	3	64	4	--	-	--	-	14	1
...FRAGILARIACEAE										
....SYNEDRA	26	1	--	-	--	-	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	* 0		26	2	--	-	1100	1	--	-
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	65	2	--	-	400	1	1100	1	--	-
...PINNULARIA	--	-	--	-	--	-	--	-	--	-
...NITZSCHACEAE							* 0			
....NITZSCHIA	120	3	64	4	--	-	--	-	14	1
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOMONADACEAE										
.....CRYPTOMONAS	--	-	13	1	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
.....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
...ANACYSTIS	--	-	150	11	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....ARTHROSPIRA	--	-	--	-	--	-	--	-	--	-
....LYNGBYA	--	-	--	-	--	-	7600	5	1200#	72
...OSCILLATORIA	3200#	91	390#	26	9100#	21	--	-	--	-
...SPIRULINA	--	-	--	-	--	-	--	-	--	-
...RIVULARIACEAE										
....RAPIDIOPSIS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll ^a	Chlorophyll ^b	Sampling method
		Dry weight	Ash weight	(mg/m ²)	(mg/m ²)	
May 14 to June 12	29	0.390	0.160	7.20	5.04	Polyethylene strip
June 12 to July 9	27	4.09	2.13	48.1	19.6	Polyethylene strip
Aug. 20 to Sept. 10	21	2.52	1.65	.610	.110	Polyethylene strip
July 9 to Aug. 20	42	2.28	1.34	37.9	11.1	Polyethylene strip

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	370	280	330	900	320	290	150	245	290	360	300	250
2	330	300	330	200	320	290	145	245	300	380	310	280
3	330	280	850	280	330	260	148	250	320	330	300	210
4	350	320	230	280	330	240	205	195	300	350	280	235
5	350	300	220	280	330	160	185	210	320	320	270	270
6	310	330	260	900	330	170	225	235	330	340	270	270
7	310	850	260	850	340	200	265	230	310	350	340	160
8	290	850	280	320	340	210	260	215	330	400	330	235
9	290	350	210	325	340	230	250	235	600	400	340	255
10	320	340	270	325	350	210	260	235	580	380	330	280
11	320	370	280	330	360	230	260	225	320	380	300	260
12	330	370	310	325	350	250	245	240	200	370	330	270
13	260	350	310	750	350	270	235	---	280	390	320	250
14	250	350	315	310	360	170	165	250	300	400	320	225
15	270	250	320	260	350	200	215	260	320	420	360	155
16	270	700	300	260	360	225	220	270	320	440	330	280
17	280	280	330	300	380	265	205	270	330	400	330	290
18	300	250	340	300	650	245	190	280	350	400	710	310
19	300	260	320	285	340	270	205	290	350	380	320	260
20	300	260	320	290	370	250	205	320	340	380	320	250
21	300	300	320	290	320	175	210	310	390	340	330	280
22	300	310	290	235	310	180	210	300	370	400	310	245
23	340	350	290	700	290	160	200	300	340	350	320	260
24	340	260	320	240	280	115	215	320	340	600	300	225
25	340	220	315	240	270	122	220	280	340	420	300	280
26	330	310	900	250	270	210	225	240	340	430	290	255
27	260	310	900	650	280	215	230	220	330	360	330	310
28	300	300	325	290	290	240	175	250	330	390	270	330
29	310	290	350	310	---	220	225	260	330	280	850	330
30	310	290	900	300	---	155	240	270	330	400	205	300
31	310	---	850	310	---	132	---	270	---	400	230	---
MEAN	309	353	392	383	340	212	213	257	341	385	337	260
WTR YR 1979	MEAN	315	MAX	900	MIN	115						

STREAMS TRIBUTARY TO LAKE ONTARIO

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04250750 SANDY CREEK NEAR ADAMS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	11.0	.0	.0	.0	1.5	6.5	9.0	23.0	23.0	24.0	29.0
2	15.0	10.0	.0	1.0	.0	2.0	6.0	10.5	22.0	22.0	25.0	27.5
3	16.0	11.0	.0	.5	.5	2.0	5.5	11.0	21.0	25.0	27.0	24.0
4	16.0	11.5	2.0	.0	.0	2.0	5.5	10.0	24.0	21.0	30.0	25.0
5	14.0	12.0	1.5	.0	.0	1.0	5.0	11.0	20.5	20.0	29.0	27.0
6	12.0	12.0	3.5	.0	.0	2.0	1.5	12.0	23.0	23.5	29.0	21.0
7	11.0	13.0	3.0	.0	.0	2.0	2.5	13.5	26.0	25.0	23.0	20.0
8	12.0	13.0	4.0	.0	.0	3.0	4.0	18.0	24.0	28.0	26.0	16.0
9	11.0	12.0	2.0	.0	.0	4.5	2.5	23.5	26.0	28.0	26.0	17.0
10	13.0	11.0	.0	.0	.0	4.0	5.0	23.0	25.0	25.0	24.5	19.0
11	15.0	10.0	1.0	.0	.0	1.5	8.0	27.0	18.5	24.5	24.0	18.0
12	16.0	9.0	1.0	.0	.0	2.0	6.5	19.0	15.0	29.0	22.0	19.0
13	13.0	5.0	1.0	1.0	.0	2.0	7.0	17.0	18.0	30.5	22.0	22.0
14	12.0	8.5	.5	1.0	.0	3.0	6.5	18.0	21.0	32.0	21.0	18.5
15	11.0	7.0	2.0	.5	.0	.0	5.0	19.0	23.0	31.0	17.0	16.0
16	9.5	6.0	1.0	.0	.0	2.0	6.0	15.5	24.0	27.0	25.0	16.0
17	8.0	6.0	.0	.0	.0	3.0	8.0	16.0	25.0	31.0	25.5	17.0
18	6.5	5.0	.0	.0	.0	4.0	9.0	21.0	19.0	29.0	21.0	18.5
19	8.0	5.0	.0	.0	.0	5.0	10.0	22.0	26.0	27.0	20.0	15.5
20	10.5	5.0	.0	.5	1.0	5.5	10.0	20.0	25.0	27.5	22.0	13.0
21	13.0	2.0	.0	1.0	2.0	6.0	12.0	18.0	24.0	30.0	26.5	16.0
22	15.0	1.0	.5	.5	1.0	6.0	11.0	19.5	20.0	31.0	29.5	19.0
23	11.0	1.0	.5	.5	1.0	6.5	12.0	17.0	19.0	29.0	22.0	18.0
24	9.0	1.0	.0	1.0	1.5	6.0	14.0	14.0	20.0	33.0	27.0	18.5
25	8.5	1.0	.0	.5	1.0	7.0	13.5	12.0	21.5	28.0	27.0	20.0
26	11.5	1.0	.0	1.5	1.0	3.0	15.0	15.0	22.0	26.5	25.5	21.0
27	10.0	1.0	.0	1.0	1.0	1.0	13.0	14.0	22.0	27.0	24.0	18.0
28	8.5	1.0	.0	1.0	2.0	4.0	11.0	15.5	20.5	27.5	25.0	15.0
29	8.0	1.0	.0	.5	---	5.0	11.5	17.0	25.0	30.5	22.5	17.5
30	7.0	1.0	.0	.5	---	6.0	11.0	15.0	23.5	29.0	22.0	19.0
31	11.0	---	.0	.5	---	7.0	---	19.0	---	27.0	25.0	---
MEAN	11.5	6.5	1.0	.5	.5	3.5	8.0	16.5	22.0	27.5	24.5	19.5
WTR YR 1979	MEAN	12.0		MAX	33.0	MIN	.0					

STREAMS TRIBUTARY TO LAKE ONTARIO

04252000 BLACK RIVER CANAL (FLOWING SOUTH) NEAR BOONVILLE, NY

LOCATION.--Lat 43°27'21", long 75°19'27", Oneida County, Hydrologic Unit 04150101, on left bank at former lock 69, 200 ft (61 m) downstream from bridge on State Highway 46, and 2.0 mi (3.2 km) south of Boonville.

PERIOD OF RECORD.--September 1915 to current year (canal seasons only prior to October 1942 and since October 1957).

REVISED RECORDS.--WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,105.56 ft (336.975 m) National Geodetic Vertical Datum of 1929. Prior to June 7, 1929, station was operated as a slope station on summit level of canal. Auxiliary water-stage recorder with concrete control on right bank of Lansing Kill spillway, 100 ft (30 m) downstream from spillway and headgate, 600 ft (183 m) upstream from lock 70, and 0.3 mi (0.5 km) upstream from lock 69.

REMARKS.--Records poor. This record shows combined flow in Black River Canal and Lansing Kill spillway, and represents total diversion from Black River at Forestport, through Forestport feeder, into Mohawk River basin. Discharge during periods when no water was diverted, made up of leakage through headgates and runoff from area draining into canal above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge recorded, 323 ft³/s (9.15 m³/s) Nov. 1915; practically no flow at times when no water is being diverted.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	9.3					---	1.6	1.7	2.2	3.7	42
2	4.7	8.6					---	1.5	1.7	3.6	13	42
3	4.7	8.3					---	1.5	1.7	7.4	8.0	44
4	4.7	7.1					---	1.8	1.7	4.6	23	43
5	5.4	3.5					1.2	1.7	1.7	2.8	45	42
6	8.8	3.1					1.6	1.7	1.7	2.4	44	76
7	12	2.9					3.6	1.5	1.7	2.2	42	68
8	10	2.7					1.4	1.4	1.5	2.3	41	51
9	7.8	2.7					1.1	1.5	1.5	2.3	23	47
10	6.1	2.7					1.7	1.5	1.5	2.3	37	45
11	4.7	2.6					1.2	1.4	1.6	2.4	48	45
12	4.5	2.6					1.1	1.5	1.6	2.5	49	44
13	4.5	2.3					1.1	1.5	1.6	2.7	47	43
14	18	2.5					1.6	1.5	1.6	2.7	46	47
15	25	2.8					1.9	1.5	1.5	3.0	46	58
16	19	2.9					2.2	1.6	1.4	3.1	46	49
17	14	2.6					2.5	1.5	1.5	3.2	45	46
18	11	20					2.1	1.6	1.5	3.1	48	45
19	9.3	14					2.0	1.7	1.4	3.1	54	43
20	9.3	8.4					1.8	1.7	1.4	2.9	49	42
21	9.0	5.6					1.8	1.8	1.3	2.9	46	41
22	8.4	4.1					1.7	1.8	1.4	3.1	45	41
23	8.0	3.1					1.7	1.6	2.4	3.1	44	41
24	8.6	4.4					1.7	1.6	2.5	3.1	46	42
25	8.6	7.5					1.6	1.8	2.1	3.1	47	42
26	9.3	6.6					1.6	1.9	2.0	3.1	46	42
27	15	6.6					2.5	2.1	2.1	3.7	50	42
28	17	6.6					3.9	2.1	2.3	3.9	51	42
29	15	---					2.1	1.9	2.3	3.9	45	43
30	13	---					1.7	1.8	2.2	3.8	45	41
31	10	---					---	1.7	---	3.6	43	---
TOTAL	310.1	---	---	---	---	---	---	51.3	52.1	98.1	1265.7	1379
MEAN	10.0	---	---	---	---	---	---	1.65	1.74	3.16	40.8	46.0
MAX	25	---	---	---	---	---	---	2.1	2.5	7.4	54	76
MIN	4.5	---	---	---	---	---	---	1.4	1.3	2.2	3.7	41

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 (1.3 km) upstream from Sugar River, and 2 mi (3 km) northeast of Boonville.

DRAINAGE AREA.--295 mi² (764 km²).

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

REVISED RECORDS.--WSP 759: Drainage area. 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).

GAGE.--Water-stage recorder. Datum of gage is 935.50 ft (285.140 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi (14 km) upstream. That portion of diverted water which does not pass Black River Canal (flowing south), see station 04252000, returns to Black River below station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill above station.

AVERAGE DISCHARGE.--68 years, 700 ft³/s (19.82 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s (351 m³/s) Mar. 28, 1913, gage height, about 12.5 ft (3.81 m), from floodmarks; minimum observed, about 5 ft³/s (0.14 m³/s) Aug. 26, 1918, gage height, 2.40 ft (0.732 m); minimum daily, 7 ft³/s (0.20 m³/s) Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 3	1030	4,350 123	8.56 2.609	Mar. 25	1800	5,530 157	9.23 2.813
Mar. 6	0145	ice jam	*10.31 3.142	Apr. 3	1245	4,150 118	8.65 2.636
Mar. 7	0700	*6,420 182	9.55 2.911	Apr. 28	1930	4,740 134	8.91 2.716

Minimum discharge, 136 ft³/s (3.85 m³/s) Aug. 7, gage height, 3.78 ft (1.152 m); minimum daily, 141 ft³/s (3.99 m³/s) Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	515	388	700	470	420	3730	1430	941	308	214	258
2	224	475	377	2500	440	410	3480	1170	713	543	290	211
3	221	449	339	4160	440	420	4170	1040	609	466	283	440
4	218	436	462	3000	430	440	3270	1460	538	350	227	484
5	234	419	686	1860	430	1200	2560	1670	484	279	182	308
6	436	406	660	1200	420	4500	2090	1150	466	258	153	1120
7	666	394	543	900	420	5230	1570	909	449	251	141	2600
8	492	382	549	840	410	3820	1420	792	423	227	164	1640
9	386	370	911	700	410	2630	1280	707	449	214	170	834
10	335	362	840	620	410	1910	1140	672	449	204	324	497
11	354	323	702	500	410	1520	1050	689	440	224	701	402
12	346	286	641	460	410	1120	1020	654	462	227	446	350
13	350	276	563	460	410	928	1100	643	436	214	380	304
14	701	272	509	480	410	1150	1620	677	394	198	217	415
15	1430	283	465	800	430	1280	2060	588	358	195	198	1520
16	1180	286	449	1100	410	1120	1800	547	331	261	221	1240
17	804	304	464	940	390	1000	1820	520	312	316	204	749
18	552	779	374	780	380	800	1760	475	286	251	185	501
19	453	980	369	640	380	780	1680	449	283	208	279	394
20	436	743	400	600	380	760	1620	427	258	185	286	350
21	427	577	560	640	380	900	1630	432	234	170	234	316
22	390	471	600	800	380	1300	1730	588	195	173	179	286
23	366	440	580	1000	380	1830	1790	520	201	164	155	265
24	415	484	520	1100	390	2810	1860	475	234	158	185	244
25	449	524	500	960	400	5150	1950	689	238	158	265	227
26	432	409	480	800	450	5120	1960	1200	221	217	283	211
27	773	352	480	720	460	3280	2470	2380	204	338	366	201
28	1020	362	480	660	460	2170	4410	2600	214	301	557	198
29	841	422	480	640	---	1850	3890	1700	255	231	423	258
30	689	416	490	600	---	1990	2360	1240	244	195	350	283
31	571	---	520	540	---	2780	---	1260	---	179	338	---
TOTAL	16429	13197	16381	31700	11590	60618	64290	29753	11321	7663	8600	17106
MEAN	530	440	528	1023	414	1955	2143	960	377	247	277	570
MAX	1430	980	911	4160	470	5230	4410	2600	941	543	701	2600
MIN	218	272	339	460	380	410	1020	427	195	158	141	198
CAL YR 1978	TOTAL	257789	MEAN	706	MAX	3820	MIN	133				
WTR YR 1979	TOTAL	288648	MEAN	791	MAX	5230	MIN	141				

STREAMS TRIBUTARY TO LAKE ONTARIO

04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY

LOCATION.--Lat 43°41'05", long 74°55'08", Herkimer County, Hydrologic Unit 04150101, on left bank, 0.1 mi (0.2 km) upstream from Little Moose Lake, 0.2 mi (0.3 km) downstream from outlet of Panther Lake, and about 3.2 mi (5.2 km) southeast of Old Forge. Water-quality sampling site at discharge station.

DRAINAGE AREA.--0.48 mi² (1.24 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (555 m), from topographic map.

REMARKS.--Records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.7 ft³/s (0.16 m³/s) Apr. 1, 1979, gage height, 2.02 ft (0.616 m); maximum gage height, 6.14 ft (1.871 m) Mar. 12, 1979, ice jam; minimum discharge, 0.13 ft³/s (0.004 m³/s) July 12-14, 15, 18, 26, 27, 1978, gage height, 1.01 ft (0.308 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.7 ft³/s (0.16 m³/s) Apr. 1, gage height, 2.02 ft (0.616 m); maximum gage height, 6.14 ft (1.871 m) Mar. 12, ice jam; minimum discharge, 0.24 ft³/s (0.007 m³/s) Oct. 2-4; minimum gage height, 1.02 ft (0.311 m) July 24-26, 30, Aug. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.72	.64	1.4	.74	.61	5.6	3.5	1.3	.50	.39	1.1
2	.24	.64	.57	3.9	.74	.50	5.4	2.8	1.1	.52	.55	1.1
3	.24	.60	.57	3.9	.72	.47	5.4	2.4	.97	.52	.55	2.0
4	.27	.60	.57	3.0	.70	.52	4.9	2.5	.85	.47	.52	1.7
5	.28	.57	.57	2.5	.70	1.0	4.4	2.2	.71	.47	.44	1.4
6	.53	.53	.57	2.0	.70	2.8	4.3	2.0	.68	.47	.42	2.8
7	.47	.50	.57	1.6	.68	2.5	4.6	1.8	.68	.47	.35	3.9
8	.44	.50	.76	1.3	.68	2.3	3.8	1.6	.68	.42	.32	3.1
9	.41	.47	.95	1.1	.64	2.0	3.5	1.4	.64	.39	.30	2.4
10	.38	.47	.95	.90	.60	1.7	3.1	1.3	.64	.39	.97	2.0
11	.38	.44	.90	.80	.56	1.4	2.7	1.3	.58	.39	.58	1.7
12	.38	.41	.86	.80	.54	1.3	2.5	1.2	.58	.39	.52	1.3
13	.41	.38	.74	1.0	.52	1.2	2.4	1.2	.55	.39	.47	1.1
14	.90	.38	.82	1.2	.50	1.4	2.4	1.1	.52	.39	.44	1.7
15	1.1	.38	.82	1.5	.48	1.5	2.5	1.0	.47	.39	.42	3.1
16	1.1	.38	.80	1.4	.47	1.5	2.5	.97	.44	.50	.42	2.4
17	.90	.38	.84	1.3	.46	1.1	2.6	.97	.42	.47	.37	2.1
18	.81	.81	.80	1.2	.46	.97	2.7	.93	.42	.44	.39	1.6
19	.81	.72	.76	1.1	.47	.85	2.7	.85	.47	.42	.42	1.4
20	.81	.68	.74	1.1	.46	.78	2.8	.78	.44	.39	.39	1.2
21	.72	.64	.78	1.2	.45	.71	3.2	.74	.44	.35	.37	1.1
22	.68	.57	.88	1.2	.45	.85	3.3	.78	.42	.35	.35	1.0
23	.60	.60	.86	1.3	.47	1.2	3.7	.74	.42	.30	.35	.89
24	.57	.81	.86	1.3	.46	2.1	4.1	.74	.42	.30	.52	.81
25	.53	.76	.86	1.3	.45	4.6	4.3	.81	.44	.28	.68	.74
26	.64	.64	.84	1.2	.62	5.3	4.3	1.1	.42	.32	.61	.74
27	1.1	.64	.84	1.1	.72	4.6	4.4	1.4	.39	.37	.85	.64
28	1.1	.72	.84	1.0	.71	3.9	4.9	1.5	.39	.32	.89	.61
29	.95	.64	.82	.92	---	3.5	4.9	1.4	.42	.32	.97	.64
30	.85	.64	.82	.84	---	3.5	4.1	1.3	.42	.30	1.3	.64
31	.76	---	.80	.78	---	4.6	---	1.4	---	.30	1.3	---
TOTAL	19.64	17.22	24.00	45.14	16.15	61.26	112.0	43.71	17.32	12.30	17.42	46.91
MEAN	.63	.57	.77	1.46	.58	1.98	3.73	1.41	.58	.40	.56	1.56
MAX	1.1	.81	.95	3.9	.74	5.3	5.6	3.5	1.3	.52	1.3	3.9
MIN	.24	.38	.57	.78	.45	.47	2.4	.74	.39	.28	.30	.61
CFSM	1.31	1.19	1.60	3.04	1.21	4.13	7.77	2.94	1.21	.83	1.17	3.25
IN.	1.52	1.33	1.86	3.49	1.25	4.74	8.66	3.38	1.34	.95	1.35	3.63

CAL YR 1978 TOTAL 396.69 MEAN 1.09 MAX 4.8 MIN .13 CFSM 2.27 IN 30.68
WTR YR 1979 TOTAL 433.07 MEAN 1.19 MAX 5.6 MIN .24 CFSM 2.48 IN 33.49

04254375 PANTHER LAKE OUTLET NEAR OLD FORGE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to June 1979 (discontinued.)

MINOR ELEMENTS DATA: 1978-79 (e).

REMARKS.--Supplemental sample collected by automatic sampler is designated by the value 26 for sample source code.

WATER QUALITY DATA, OCTOBER 1978 TO MAY 1979

DATE	TIME	SAMPLE SOURCE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDED (MG/L)	SOLIDS, VOLATILE, TILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
NOV											
06...	1100	--	.53	38	6.7	--	--	100	1	20	10
14...	1215	--	.38	37	6.6	--	--	150	7	10	10
21...	1030	--	.64	39	6.7	--	--	110	1	10	0
29...	1300	--	.64	42	6.6	--	--	140	5	10	20
DEC											
06...	1515	--	.57	40	6.5	--	--	150	3	0	10
JAN											
06...	1430	--	E2.0	34	6.4	--	--	120	6	10	30
19...	1200	--	E1.1	--	--	--	--	160	6	20	20
26...	1230	--	E1.2	35	6.1	--	--	130	0	20	20
FEB											
15...	1230	--	.51	38	6.1	--	--	280	0	10	20
MAR											
01...	1615	--	.50	38	6.5	6	0	830	--	--	20
04...	1330	--	.50	37	6.5	9	0	100	1	20	10
06...	1115	--	2.8	29	6.0	6	0	100	2	30	20
07...	1030	--	2.6	30	6.1	8	2	130	1	40	20
08...	1225	--	2.3	31	5.7	1	0	50	2	40	20
10...	0300	26	1.7	--	--	--	--	540	7	60	40
15...	1300	--	1.5	--	--	3	1	100	2	80	30
22...	1100	--	.89	31	5.8	0	0	40	3	50	30
22...	1445	--	.97	29	5.7	--	--	80	6	30	60
27...	1050	--	4.6	31	4.8	--	--	90	6	50	30
28...	1150	--	3.8	33	4.7	--	--	80	7	60	20
31...	1030	--	4.3	28	4.7	--	--	90	5	30	20
APR											
03...	1600	--	5.3	25	5.7	--	--	90	4	30	30
09...	1300	--	3.2	34	4.9	0	0	100	5	50	40
14...	1050	--	2.4	29	5.2	2	2	100	2	40	20
21...	1315	--	3.5	41	6.6	0	0	110	5	30	40
30...	1030	--	3.6	39	6.5	2	0	100	4	30	20
MAY											
09...	1351	--	1.4	36	6.8	1	0	130	6	20	40
24...	1415	--	.71	39	6.3	5	1	200	3	20	40
30...	1600	--	1.1	26	6.0	6	0	130	3	40	10

E Estimated.

DATE	TIME	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB					
15...	1230	50	0	10	10

434105074550801 PANTHER LAKE OUTLET PRECIPITATION STATION a/

CHEMICAL QUALITY OF PRECIPITATION, OCTOBER 1978 TO JUNE 1979

PERIOD OF COLLECTION	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
Oct. 19 to Nov. 28	10	12	20	20
Nov. 28 to Mar. 7	120	65	10	60
b/ Feb. 15	70	6	10	10
May 9 to June 5	80	9	30	10

a The precipitation collector is located 20 ft (6 m) from the gage.

b Composite sample of snowcover collected from snow survey course at this station.

STREAMS TRIBUTARY TO LAKE ONTARIO

04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY

LOCATION.--Lat 43°44'50", long 75°20'05", Lewis County, Hydrologic Unit 04150101, on right bank at downstream side of highway bridge on Donnattsburg Road at Donnattsburg, 1.2 mi (1.9 km) downstream from Chase Lake Outlet, 4.2 mi (6.8 km) northeast of Glenfield, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--91.7 mi² (238 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 972.84 ft (296.522 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--37 years, 192 ft³/s (5.437 m³/s), 28.42 in/yr (722 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft³/s (97.7 m³/s) May 20, 1969, gage height, 8.72 ft (2.658 m) from rating curve extended above 2,000 ft³/s (56.6 m³/s); minimum observed, 18 ft³/s (0.51 m³/s) Sept. 17, 1948, Aug. 4, 5, 1949, gage height, 2.85 ft (0.869 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 17	1100	ice jam	6.11 1.862	Mar. 25	1730	*2,300 65.1	*7.49 2.283
Jan. 23	0530	ice jam	6.87 2.094				

Minimum discharge, 29.1 ft³/s (0.82 m³/s) July 23-24, gage height, 3.07 ft (0.936 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES:

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	130	92	170	100	84	1270	337	248	45	61	103
2	62	115	90	500	100	88	888	281	181	58	53	84
3	62	105	94	820	94	90	1100	242	143	65	124	161
4	63	97	110	640	90	100	841	300	120	66	113	193
5	63	93	153	450	86	250	576	337	103	61	71	126
6	69	88	169	320	84	580	400	268	95	58	55	253
7	110	86	141	260	82	1020	300	231	93	54	45	1000
8	117	83	156	210	80	954	300	202	84	48	40	529
9	101	88	371	180	78	704	310	178	79	45	37	250
10	90	78	250	160	78	500	268	161	79	41	40	156
11	83	77	190	150	76	340	220	146	82	41	45	117
12	78	74	160	140	76	250	220	141	95	40	50	99
13	81	71	140	130	76	220	271	193	105	39	45	84
14	204	71	120	130	76	250	415	212	95	37	43	113
15	624	77	120	120	74	300	678	172	79	36	45	714
16	422	80	110	120	74	270	580	156	69	35	51	543
17	242	80	100	120	74	240	600	148	62	35	54	278
18	177	139	98	120	74	210	595	129	58	36	53	181
19	146	242	96	120	74	190	529	115	55	34	51	190
20	134	190	110	130	74	190	476	107	53	34	51	236
21	121	144	140	140	78	220	472	103	54	32	48	181
22	108	110	160	170	80	340	524	115	47	31	43	143
23	101	110	140	220	84	520	552	111	48	30	39	117
24	97	113	130	190	88	1000	571	105	48	30	40	101
25	97	130	130	170	90	2120	552	122	50	30	50	88
26	99	110	120	160	90	1560	515	196	48	32	77	79
27	254	100	120	150	88	560	571	403	44	37	111	71
28	406	96	120	140	84	420	1120	354	45	36	190	68
29	264	92	130	130	---	370	812	268	44	35	143	72
30	187	92	130	120	---	403	455	231	44	32	156	76
31	148	---	140	110	---	741	---	284	---	37	151	---
TOTAL	4872	3161	4330	6690	2302	15084	16981	6348	2450	1270	2175	6406
MEAN	157	105	140	216	82.2	487	566	205	81.7	41.0	70.2	214
MAX	624	242	371	820	100	2120	1270	403	248	66	190	1000
MIN	62	71	90	110	74	84	220	103	44	30	37	68

CAL YR 1978 TOTAL 72584 MEAN 199 MAX 1380 MIN 40
WTR YR 1979 TOTAL 72069 MEAN 197 MAX 2120 MIN 30

STREAMS TRIBUTARY TO LAKE ONTARIO

395

04256484 WOODS LAKE NEAR BIG MOOSE, NY

LOCATION.--Lat 43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on left bank, just upstream from dam at lake outlet and 3.6 mi (5.8 km) northwest of Big Moose.

DRAINAGE AREA.--0.80 mi² (2.07 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 1,990 ft (607 m), from topographic map.

REMARKS.--Gage-heights during March are from once daily readings. Lake level maintained by log and cobble dam at outlet. Area of water surface, 0.10 mi² (0.259 km²).

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.12 ft (0.646 m) Oct. 27, 28; minimum, 0.31 ft (.094 m) July 25, 26. May have been higher or lower during periods of missing record.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.86	.84	.79	.63	---	---	.71	.67	.42	.44	.62
2	---	.71	.83	1.10	.62	---	.93	.65	.64	.44	.49	.60
3	---	.64	.83	.92	.62	---	---	.64	.61	.47	.58	.69
4	1.66	.59	.84	.81	.62	---	---	.69	.59	.47	.57	.70
5	---	.58	.85	.76	.63	---	.80	.69	.58	.46	.57	.65
6	---	.58	.85	.70	.62	1.12	.79	.67	.57	.46	.54	.83
7	---	.57	.84	.67	.62	1.00	.76	.65	.57	.46	.52	1.02
8	---	.57	.86	.67	.61	.82	.70	.63	---	.46	.53	.82
9	---	.57	.99	.65	.61	.73	.67	.62	---	.45	.51	.70
10	---	.57	.97	.63	.60	---	.66	.61	---	.45	.53	.63
11	---	.58	.91	.62	.58	---	.63	.60	---	.44	.56	.60
12	---	.59	.86	.60	.57	---	.62	.60	.58	.44	.55	.60
13	---	.59	.82	.60	.56	---	.62	.63	---	.44	.52	.58
14	---	.61	.82	.66	.55	---	.72	.63	---	.44	.51	.63
15	---	.64	.79	.72	---	---	.79	.61	---	.43	.51	.82
16	---	.66	.76	.72	---	---	.79	.60	---	.44	.53	.80
17	---	.68	.77	.69	---	---	.77	.59	---	.44	.52	.74
18	1.95	.79	.77	.68	---	---	.77	.57	.50	.42	.51	.70
19	1.95	.84	.74	.65	---	1.68	.76	.57	.49	.41	.51	.69
20	1.95	.87	.73	.63	---	---	.75	.55	.47	.39	.52	.67
21	1.95	.88	.76	.68	---	---	.77	.55	.46	.38	.52	.64
22	1.95	.88	.76	.72	---	.70	.83	.55	.44	.36	.51	.62
23	1.95	.88	.74	.71	---	---	.88	.55	.43	.36	.49	.59
24	1.95	.92	.73	.67	---	---	.90	.55	.43	.34	.49	.57
25	1.96	.90	.78	.70	---	1.25	.89	.57	.43	.32	.55	.55
26	1.97	.88	.80	.68	---	---	.87	.59	.42	.33	.57	.54
27	2.11	.88	.77	.66	---	---	.89	.63	.40	.37	.67	.53
28	2.09	.88	.74	.65	---	---	1.03	.64	.40	.38	.68	.52
29	2.05	.87	.72	.64	---	.70	.88	.63	.40	.37	.64	.53
30	1.91	.85	.71	.63	---	---	.77	.64	.40	.37	.69	.53
31	1.15	---	.70	.63	---	1.05	---	.68	---	.36	.66	---
MEAN	---	.73	.80	.70	---	---	---	.62	---	.41	.55	.66
MAX	---	.92	.99	1.10	---	---	---	.71	---	.47	.69	1.02
MIN	---	.57	.70	.60	---	---	---	.55	---	.32	.44	.52

STREAMS TRIBUTARY TO LAKE ONTARIO

04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY

LOCATION.--43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on right bank 45 ft (14 m) downstream from dam on Woods Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--0.80 mi² (2.07 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,980 ft (604 m), from topographic map.

REMARKS.--Records good except those below 0.3 ft³/s (0.008 m³/s), which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft³/s (1.95 m³/s) Oct. 30, 1978, gage height, 2.18 ft (0.664 m), from rating curve extended above 15 ft³/s (0.42 m³/s); minimum, 0.01 ft³/s (<0.001 m³/s) many days in 1978 and 1979; minimum gage-height recorded, 0.95 ft (0.290 m) June 25, 1979, but may have been less during period of doubtful gage-height record July 11-30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69 ft³/s (1.95 m³/s) Oct. 30, gage height, 2.18 ft (0.664 m), from rating curve extended above 15 ft³/s (0.42 m³/s); minimum, 0.01 ft³/s (<0.001 m³/s) June 25, 26, 28-30, July 1, 9-25; minimum gage height recorded, 0.95 ft (0.290 m) June 25, but may have been less during period of doubtful gage-height record July 11-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	4.8	.70	2.7	1.0	.70	4.6	2.9	2.4	.01	.06	1.3
2	.07	3.1	.70	7.3	.95	.75	4.6	2.2	1.6	.02	.52	.49
3	.05	2.9	.75	8.2	.88	.70	9.2	2.0	1.1	.10	1.2	1.1
4	.05	.81	1.1	5.1	.81	.70	6.5	2.9	.81	.04	.75	2.4
5	.04	.49	1.5	3.3	1.2	4.3	4.8	2.7	.70	.05	.29	2.4
6	.20	.23	1.4	2.4	1.0	13	3.8	2.2	.66	.04	.17	7.3
7	.22	.27	1.2	2.0	.88	11	3.8	2.0	.38	.03	.14	11
8	.27	.40	2.0	1.8	.72	5.8	2.7	1.6	.22	.02	.29	5.8
9	.25	.20	4.6	1.5	.60	3.6	2.2	1.5	.31	.01	.23	3.6
10	.22	.13	3.6	1.3	.54	2.7	2.1	1.4	.27	.01	.40	2.4
11	.20	.08	2.4	1.0	.50	2.2	1.7	1.2	.20	.01	.40	1.6
12	.17	.06	2.0	.88	.47	2.0	1.5	1.2	.25	.01	.27	.81
13	.25	.04	1.7	1.3	.45	1.7	1.6	1.6	.33	.01	.27	.52
14	2.7	.08	2.1	2.6	.43	3.1	3.3	1.7	.27	.01	.23	1.6
15	4.8	.09	1.7	2.7	.43	4.3	4.8	1.4	.17	.01	.16	4.8
16	3.4	.05	1.4	2.2	.44	3.3	4.3	1.3	.14	.01	.31	4.0
17	2.0	.07	1.7	2.0	.44	2.6	4.3	1.1	.12	.01	.17	2.6
18	1.2	.55	1.7	1.8	.44	2.0	4.6	.88	.19	.01	.23	2.7
19	.89	.46	1.3	1.4	.44	1.7	4.6	.70	.15	.01	.22	3.3
20	.60	.33	1.1	1.2	.45	1.5	4.3	.62	.07	.01	.27	2.4
21	.46	.75	1.5	1.8	.47	1.8	4.8	.62	.04	.01	.27	1.7
22	.62	1.0	1.4	2.4	.62	2.9	5.8	.75	.02	.01	.16	1.6
23	.46	.58	1.3	2.1	.66	3.8	6.5	.55	.02	.01	.17	1.2
24	.31	1.3	1.0	1.7	.88	3.6	6.9	.62	.02	.01	.20	.88
25	.38	1.2	1.8	2.0	.75	4.0	6.5	.95	.01	.01	.58	.52
26	.81	.95	1.8	1.7	1.2	4.8	5.8	1.4	.01	.02	.33	.46
27	3.6	.88	1.5	1.5	1.0	5.1	7.3	1.8	.02	.07	1.7	.52
28	3.1	.95	1.2	1.4	.88	3.6	11	2.0	.01	.05	3.1	.25
29	2.0	.95	.95	1.3	---	3.1	6.5	1.7	.01	.05	2.0	.31
30	5.5	.88	.88	1.1	---	3.6	4.0	2.1	.01	.04	3.1	.27
31	10	---	.81	1.0	---	4.8	---	2.9	---	.04	2.9	---
TOTAL	44.88	24.58	48.79	70.68	19.53	108.75	144.4	48.49	10.51	.75	21.09	69.83
MEAN	1.45	.82	1.57	2.28	.70	3.51	4.81	1.56	.35	.024	.68	2.33
MAX	10	4.8	4.6	8.2	1.2	13	11	2.9	2.4	.10	3.1	11
MIN	.04	.04	.70	.88	.43	.70	1.5	.55	.01	.01	.06	.25
CFSM	1.81	1.03	1.96	2.85	.88	4.39	6.01	1.95	.44	.03	.85	2.91
IN.	2.08	1.14	2.27	3.28	.91	5.05	6.71	2.25	.49	.03	.98	3.24

CAL YR 1978 TOTAL 530.84 MEAN 1.45 MAX 11 MIN .01 CFSM 1.81 IN 24.65
WTR YR 1979 TOTAL 612.28 MEAN 1.68 MAX 13 MIN .01 CFSM 2.10 IN 28.44

04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to June 1979 (discontinued).

MINOR ELEMENTS DATA: 1978-79 (e).

REMARKS.--Supplemental samples collected by automatic sampler are designated by the value 26 for sample source code.

WATER QUALITY DATA, OCTOBER 1978 TO MAY 1979											
DATE	TIME	SAMPLE SOURCE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT											
19...	1145	--	.88	21	4.6	--	--	50	2	80	20
NOV											
03...	0900	--	5.8	21	4.5	--	--	60	0	60	40
07...	1200	--	.22	22	5.1	--	--	60	4	70	20
12...	1145	--	.06	23	5.0	--	--	200	5	80	20
19...	1300	--	.49	23	5.1	--	--	40	5	70	20
27...	1300	--	.75	24	4.9	--	--	20	6	50	20
DEC											
11...	1300	--	2.4	25	4.6	--	--	60	4	60	30
JAN											
07...	1300	--	1.8	30	4.4	--	--	490	5	70	20
18...	1300	--	1.8	--	--	--	--	80	3	60	30
30...	1100	--	1.1	27	4.5	--	--	110	0	60	30
FEB											
14...	1400	--	.46	26	4.5	--	--	180	0	40	10
MAR											
01...	1335	--	.70	25	4.7	9	0	100	1	70	30
06...	0830	--	13	25	4.7	6	0	100	2	70	20
07...	1100	--	13	28	4.6	7	0	50	2	70	30
08...	1510	--	7.3	33	4.4	0	0	100	3	80	70
09...	0500	26	4.0	--	--	--	--	220	13	70	90
11...	0500	26	2.2	--	--	--	--	230	10	70	40
17...	1015	--	2.6	--	--	0	0	70	3	80	30
22...	1100	--	2.7	34	4.4	--	--	80	3	60	40
28...	1350	--	3.8	35	4.3	--	--	100	3	50	50
31...	1530	--	4.8	34	4.4	--	--	190	0	90	30
APR											
05...	1200	--	4.6	33	4.4	--	--	70	2	70	50
14...	1415	--	3.7	34	4.4	4	3	100	5	60	50
23...	1415	--	6.2	26	4.6	2	2	140	5	50	50
MAY											
02...	0900	--	2.2	27	4.6	2	0	140	11	70	60
10...	1300	--	1.5	25	4.7	0	0	150	3	70	40
24...	0930	--	.38	27	4.6	3	1	100	5	60	40
30...	1105	--	1.8	28	4.3	7	0	110	3	50	40

DATE	TIME	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB					
14...	1400	70	0	70	20

435157074572001 WOODS LAKE OUTLET PRECIPITATION STATION ^{a/}

CHEMICAL QUALITY OF PRECIPITATION, OCTOBER 1978 TO JUNE 1979

PERIOD OF COLLECTION	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
Oct. 19 to Nov. 29	10	11	10	30
Nov. 29 to Mar. 6	440	16	10	10
b/ Feb. 14	20	5	10	20
Mar. 6 to Apr. 5	70	15	0	20
Apr. 5 to May 10	10	6	10	10
May 10 to June 1	130	11	20	20

a The precipitation collector is located 200 ft (61 m) west of the gage.

b Composite sample of snowcover collected from snow survey course at this station.

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 (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, monthend contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

GAGE.--Nonrecording gage read once daily and prior to reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, 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 ft³ (131 hm³) between elevations 1,650.3 ft (503.01 m) and 1,679.3 ft (511.85 m) (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft (500.57 m). Capacity below elevation 1,650.3 ft (503.01 m), 90 mil ft³ (2.55 hm³), 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft (512.088 m) May 20, 1969, contents, 4,939 mil ft³ (140 hm³); minimum observed since first filling, 1,644.80 ft (501.335 m) Mar. 25-27, 1949, contents, 8 mil ft³ (0.227 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,679.33 ft (511.866 m) May 2, contents, 4,722 mil ft³ (134 hm³); minimum observed, 1,659.69 ft (505.880 m) Mar. 5, contents, 786 mil ft³ (22.3 hm³).

Capacity table, current year (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, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1666.22	1665.52	1664.16	1664.81	1666.93	1660.90	1671.44	1679.23	1677.63	1674.68	1670.49	1667.36
2	1666.16	1665.43	1664.05	1665.34	1666.84	1660.55	1672.08	1679.33	1677.54	1674.62	1670.34	1667.42
3	1665.95	1665.37	1664.10	1665.97	1666.72	1660.18	1672.83	1679.31	1677.45	1674.54	1670.34	1667.61
4	1665.74	1665.38	1664.19	1666.38	1666.59	1659.83	1673.52	1679.30	1677.35	1674.44	1670.22	1667.67
5	1665.52	1665.44	1664.15	1666.61	1666.50	1659.69	1674.03	1679.30	1677.24	1674.36	1670.05	1667.62
6	1665.38	1665.50	1664.10	1666.66	1666.39	1660.54	1674.43	1679.25	1677.13	1674.26	1669.87	1667.60
7	1665.17	1665.41	1664.04	1667.05	1666.26	1661.61	1674.80	1679.03	1677.02	1674.17	1669.69	1668.26
8	1665.25	1665.31	1663.99	1667.28	1666.14	1662.45	1675.09	1678.78	1676.88	1674.06	1669.49	1668.65
9	1665.33	1665.18	1664.11	1667.31	1666.03	1663.02	1675.23	1678.82	1676.78	1673.96	1669.32	1668.90
10	1665.23	1665.07	1664.40	1667.33	1665.84	1663.44	1675.57	1678.86	1676.66	1673.85	1669.14	1668.98
11	1665.07	1664.95	1664.56	1667.31	1665.64	1663.78	1675.59	1678.84	1676.53	1673.75	1669.01	1668.97
12	1664.87	1665.00	1664.55	1667.29	1665.44	1664.08	1675.59	1678.82	1676.42	1673.65	1668.85	1668.95
13	1664.66	1665.03	1664.52	1667.25	1665.24	1664.32	1675.58	1678.80	1676.36	1673.55	1668.66	1668.90
14	1664.61	1664.90	1664.55	1667.42	1665.01	1664.62	1675.63	1678.80	1676.28	1673.45	1668.46	1668.86
15	1665.08	1664.78	1664.53	1667.67	1664.79	1664.77	1675.80	1678.76	1676.19	1673.33	1668.27	1669.31
16	1665.41	1664.69	1664.46	1667.73	1664.59	1664.88	1675.92	1678.68	1676.11	1673.23	1668.13	1669.65
17	1665.37	1664.57	1664.57	1667.73	1664.34	1664.95	1676.03	1678.63	1676.03	1673.14	1668.00	1669.80
18	1665.29	1664.46	1664.73	1667.70	1664.13	1664.95	1676.18	1678.56	1675.93	1672.96	1667.87	1669.81
19	1665.16	1664.67	1664.67	1667.65	1663.90	1664.91	1676.39	1678.48	1675.85	1672.77	1667.77	1669.89
20	1665.06	1664.83	1664.59	1667.57	1663.67	1664.87	1676.58	1678.39	1675.77	1672.59	1667.67	1669.88
21	1665.02	1664.75	1664.57	1667.55	1663.44	1664.83	1676.79	1678.29	1675.67	1672.40	1667.57	1669.93
22	1665.13	1664.67	1664.55	1667.55	1663.24	1664.87	1677.04	1678.20	1675.57	1672.20	1667.44	1669.99
23	1665.19	1664.55	1664.50	1667.55	1662.89	1665.01	1677.33	1678.11	1675.43	1672.03	1667.31	1670.10
24	1665.09	1664.49	1664.59	1667.51	1662.57	1665.52	1677.65	1678.01	1675.36	1671.83	1667.18	1670.11
25	1665.00	1664.44	1664.76	1667.48	1662.22	1666.87	1677.95	1677.95	1675.26	1671.65	1667.14	1670.05
26	1664.90	1664.50	1664.90	1667.43	1661.94	1668.06	1678.21	1677.87	1675.17	1671.45	1667.24	1669.98
27	1665.01	1664.57	1664.85	1667.36	1661.61	1668.76	1678.42	1677.82	1675.04	1671.33	1667.36	1669.91
28	1665.22	1664.47	1664.78	1667.28	1661.25	1669.23	1678.93	1677.78	1674.95	1671.16	1667.36	1669.83
29	1665.44	1664.38	1664.69	1667.22	---	1669.63	1679.10	1677.73	1674.86	1670.95	1667.34	1669.82
30	1665.59	1664.27	1664.60	1667.14	---	1670.00	1679.11	1677.64	1674.77	1670.78	1667.39	1669.92
31	1665.56	---	1664.67	1667.04	---	1670.52	---	1677.66	---	1670.58	1667.40	---
MEAN	1665.28	1664.89	1664.47	1667.13	1664.65	1664.57	1675.96	1678.55	1676.17	1672.96	1668.46	1669.12
MAX	1666.22	1665.52	1664.90	1667.73	1666.93	1670.52	1679.11	1679.33	1677.63	1674.68	1670.49	1670.11
MIN	1664.61	1664.27	1663.99	1664.81	1661.25	1659.69	1671.44	1677.64	1674.77	1670.58	1667.14	1667.36
†	1605	1392	1480	2035	946	2662	4681	4244	3484	2538	1925	2413
‡	-43.3	-82.2	+32.9	+207	-450	+641	+779	-163	-293	-353	-229	+188
CAL YR 1978	MEAN	1669.38	MAX	1678.91	MIN	1658.87	‡	-79.1				
WTR YR 1979	MEAN	1669.37	MAX	1679.33	MIN	1659.69	‡	+21.9				

† 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

399

04257000 BEAVER RIVER BELOW STILLWATER DAM, NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--May 1908 to current year. Published as "at State dam, near Beaver River" prior to June 1924.

REVISED RECORDS.--WSP 714: Drainage area. WRD NY 1973: 1971.

GAGE.--Nonrecording gage read once daily and after reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to June 1, 1924, nonrecording gage at present site and datum. June 1, 1924 to Nov. 14, 1929, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

REMARKS.--Records poor. Flow regulated by Stillwater Reservoir (see station 04256500). Discharge determined from ratings for gates and spillway of Stillwater Dam applied to log of reservoir elevation and gate operation.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

AVERAGE DISCHARGE.--71 years, 378 ft³/s (10.70 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,700 ft³/s (105 m³/s) May 3, 1926; practically no flow at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,570 ft³/s (44.5 m³/s) Apr. 29, May 7, minimum daily, 28 ft³/s (0.793 m³/s) Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	438	423	117	515	761	68	629	621	411	590	152
2	511	437	180	332	513	752	69	918	620	410	588	28
3	616	327	60	443	512	742	70	1060	616	410	588	138
4	613	62	302	448	511	733	71	1060	615	409	587	403
5	611	62	422	350	510	292	72	1060	614	409	586	402
6	609	315	422	102	509	54	72	1400	612	408	583	402
7	244	440	422	129	507	55	72	1570	612	408	581	158
8	62	438	421	332	506	57	72	806	611	408	579	31
9	175	436	165	459	580	58	72	418	609	406	577	127
10	605	435	60	459	615	58	425	541	609	405	576	413
11	603	186	305	459	612	59	688	626	608	405	575	413
12	600	62	428	459	609	60	688	625	542	404	572	413
13	597	311	428	206	605	60	688	647	422	404	570	413
14	239	433	428	79	603	417	689	647	421	403	568	323
15	62	431	428	424	600	595	690	646	421	402	566	36
16	353	430	183	597	595	599	692	645	421	401	476	74
17	607	429	62	597	592	600	641	644	421	533	406	220
18	606	183	308	597	588	600	421	642	419	616	405	220
19	605	61	430	597	584	600	422	639	375	614	404	221
20	468	308	429	546	595	599	423	637	418	613	403	221
21	62	431	428	521	576	599	424	634	417	612	402	183
22	62	430	428	521	729	599	426	631	417	610	401	36
23	306	429	207	521	809	444	428	631	416	609	400	117
24	435	427	97	521	801	62	544	629	415	606	399	422
25	435	167	97	520	793	63	618	627	415	604	153	422
26	433	61	320	519	785	64	880	624	414	601	152	421
27	310	306	432	518	778	65	1050	624	414	599	400	421
28	62	427	431	518	769	66	1390	623	412	598	400	316
29	62	426	430	517	---	66	1570	622	411	595	400	36
30	313	425	208	517	---	66	952	621	411	593	401	116
31	438	---	110	516	---	67	---	621	---	592	401	---
TOTAL	11915	9753	9494	13441	17301	9912	15387	22747	14749	15498	14689	7298
MEAN	384	325	306	434	618	320	513	734	492	500	474	243
MAX	616	440	432	597	809	761	1570	1570	621	616	590	422
MIN	62	61	60	79	506	54	68	418	375	401	152	28
CAL YR 1978	TOTAL	192987	MEAN	529	MAX	1240	MIN	54				
WTR YR 1979	TOTAL	162184	MEAN	444	MAX	1570	MIN	28				

STREAMS TRIBUTARY TO LAKE ONTARIO

04258000 BEAVER RIVER AT CROGHAN, NY

LOCATION.--Lat 43°53'50", long 75°24'16", Lewis County, Hydrologic Unit 04150101, on left bank 1,200 ft (366 m) upstream from Black Creek, and 0.5 mi (0.8 km) west of Croghan.

DRAINAGE AREA.--294 mi² (761 km²).

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

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 806.20 ft (245.730 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir (see station 04256500). Between Stillwater Dam and this station, flow is further regulated by several powerplant ponds. Diurnal fluctuation at low and medium flow.

AVERAGE DISCHARGE.--49 years, 593 ft³/s (16.79 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft³/s (144 m³/s) May 21, 1969, gage height, 6.98 ft (2.128 m); minimum, 11 ft³/s (0.31 m³/s) Jan. 22, 29, Feb. 4, 1967, gage height, 0.63 ft (0.192 m); minimum daily, 22 ft³/s (0.62 m³/s) July 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,110 ft³/s (59.8 m³/s) Apr. 28, gage height, 4.73 ft (1.442 m); minimum, 61 ft³/s (1.73 m³/s) Jan. 1, gage height, 1.19 ft (0.363 m); minimum daily, 108 ft³/s (3.06 m³/s) Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	714	480	250	899	772	1010	1380	899	238	500	318
2	286	596	520	906	720	865	955	1320	886	272	684	300
3	341	432	333	1030	552	872	1010	1070	838	303	515	266
4	422	289	369	1200	418	927	992	1130	636	373	475	470
5	480	253	465	1130	558	1310	1210	1100	665	515	391	413
6	510	253	436	1250	1130	1370	1170	1090	690	500	382	579
7	436	607	432	1300	942	1190	1110	1470	765	293	515	596
8	422	613	460	1110	772	999	1040	1540	727	247	624	427
9	446	515	485	636	678	970	955	1160	684	364	552	307
10	505	526	505	845	907	999	906	999	475	352	568	373
11	490	322	531	752	953	984	920	879	785	318	568	423
12	579	293	558	927	1010	920	941	811	702	341	325	329
13	541	293	490	541	721	607	825	408	838	391	360	413
14	505	352	547	391	720	648	778	665	563	344	470	325
15	427	505	531	927	700	955	752	671	422	318	624	504
16	714	404	480	1310	680	913	852	702	451	436	671	746
17	602	289	422	1260	720	852	948	765	356	413	432	575
18	791	373	418	1140	620	785	865	852	505	520	303	476
19	660	341	665	1070	740	831	778	838	422	526	250	485
20	739	377	552	621	740	906	765	811	436	515	460	515
21	772	386	500	708	859	934	708	798	422	465	455	536
22	382	369	510	929	906	948	714	798	404	480	373	340
23	470	360	427	1030	825	906	798	714	247	455	369	256
24	441	455	344	977	759	408	886	798	241	547	413	462
25	337	382	108	941	739	1150	886	733	364	648	303	386
26	275	352	404	899	727	1680	886	714	386	607	250	314
27	526	413	515	927	746	1500	1380	865	373	585	495	408
28	232	422	495	850	798	1090	1990	684	386	432	500	465
29	480	510	495	816	---	1020	1880	879	382	272	460	460
30	590	404	446	906	---	970	1710	920	250	505	541	322
31	739	---	253	899	---	999	---	920	---	590	485	---
TOTAL	15440	12400	14176	28478	21539	30280	30620	28484	16200	13165	14313	12789
MEAN	498	413	457	919	769	977	1021	919	540	425	462	426
MAX	791	714	665	1310	1130	1680	1990	1540	899	648	684	746
MIN	232	253	108	250	418	408	708	408	241	238	250	256

CAL YR 1978 TOTAL 259277 MEAN 710 MAX 2350 MIN 33
WTR YR 1979 TOTAL 237884 MEAN 652 MAX 1990 MIN 108

04260500 BLACK RIVER AT WATERTOWN, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 43°59'08", long 75°55'30", Jefferson County, Hydrologic Unit 04150101, on downstream side of right abutment of Vanduzee Street Bridge at Watertown, and 3.5 mi (5.6 km) upstream from Philomel Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,876 mi² (4,859 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WDR NY-77-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft (113.959 m) National Geodetic Vertical Datum of 1929. 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 (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. 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), see station 04252000.

AVERAGE DISCHARGE.--59 years, 4,008 ft³/s (113.5 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s (1,120 m³/s) Mar. 16, 1977, gage height, 12.98 ft (3.956 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 2, 1934, gage height, 0.81 ft (0.247 m) present datum; minimum daily, 137 ft³/s (3.88 m³/s) Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 39,700 ft³/s (1,120 m³/s) Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s (480 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 26	2300	*24,100 683	*10.39 3.167	Apr. 3	1400	17,600 498	9.00 2.743

Minimum discharge, 87 ft³/s (2.46 m³/s) May 18, gage height, 1.17 ft (0.357 m); minimum daily, 1,000 ft³/s (28.3 m³/s), July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	3460	2630	2830	4330	3120	12900	14400	6190	1240	1390	3050
2	1480	2930	2510	6100	3860	3200	15200	11600	5410	1160	1430	2440
3	1500	2760	2460	7780	3670	3320	17100	9660	4540	1160	1580	1990
4	1630	2510	2060	8750	3170	3840	17300	8460	3690	1700	1960	2670
5	1560	2050	3460	10900	2760	6650	16500	7900	3030	1710	1740	2960
6	1880	1900	3980	11000	3120	9640	14500	7530	2690	1830	1470	2600
7	1750	2060	4010	10000	3560	10800	12100	7320	2580	1570	1380	6350
8	2460	2360	3690	8730	3190	13400	10700	7000	2480	1400	1290	7300
9	2730	2300	4940	7520	3030	16000	9570	6260	2180	1270	1290	7840
10	2620	2190	5370	6430	2940	15500	8560	5450	2170	1190	1230	7510
11	2200	2110	4410	5650	2650	13600	7990	4750	2390	1160	1230	6150
12	2060	1820	4170	4870	3060	11600	7550	4380	2490	1190	1900	4450
13	2040	1800	3820	4050	3170	10000	7300	4040	2590	1040	1490	2980
14	2270	1740	3580	3780	2650	9380	7690	3860	2480	1130	1690	2910
15	4040	1950	2950	4600	2690	9710	8330	4040	2150	1230	1470	4980
16	5420	2130	3190	5980	2570	9690	8850	3750	1800	1130	1490	6420
17	5610	2030	3260	6210	2540	9040	9560	3750	1580	1090	1450	6530
18	5030	2370	2380	6350	2280	8370	9760	3070	1620	1150	1310	5820
19	4170	4420	2900	6400	2540	7830	9460	3160	1550	1330	1100	4820
20	3120	4690	3700	5930	2480	7840	9290	2850	1440	1180	1120	4070
21	3060	4140	2730	4800	2340	7860	8940	2910	1410	1230	1410	3340
22	2840	3200	3100	4660	2310	8050	8670	2730	1400	1150	1350	2930
23	2410	2850	3250	5150	2370	8980	8550	2950	1210	1090	1190	2340
24	2460	2360	3130	5470	2470	11100	8630	2870	1080	1050	1240	1930
25	2220	3140	2900	5830	2690	14900	8820	2970	1180	1040	1040	2230
26	2350	2790	2400	6000	3030	21000	9090	3430	1270	1180	1250	1690
27	2390	2640	2740	5850	3240	22600	9520	5860	1220	1160	1670	1530
28	3730	1980	2850	5560	3180	19000	10800	6640	1210	1220	2590	1530
29	4320	2300	3280	5230	---	14800	13500	6920	1250	1230	2930	1560
30	4490	2800	2860	4910	---	12200	16300	7090	1350	1000	3040	1690
31	4160	---	2500	4600	---	12000	---	6780	---	1190	2910	---
TOTAL	89610	77780	101210	191920	81890	335020	323030	174380	67630	38400	49630	114610
MEAN	2891	2593	3265	6191	2925	10810	10770	5625	2254	1239	1601	3820
MAX	5610	4690	5370	11000	4330	22600	17300	14400	6190	1830	3040	7840
MIN	1480	1740	2060	2830	2280	3120	7300	2730	1080	1000	1040	1530
CAL YR 1978 TOTAL	1604854			MEAN 4397	MAX 18700	MIN 842						
WTR YR 1979 TOTAL	1645110			MEAN 4507	MAX 22600	MIN 1000						

STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-60, 1962 to current year.

CHEMICAL DATA: 1956 (e), 1959 (a), 1960 (b), 1965 (a), 1966-79 (d).

MINOR ELEMENTS DATA: 1970-71 (a), 1974-79 (b).

PESTICIDE DATA: 1975-79 (b).

ORGANIC DATA: OC--1973 (c), 1974 (a), 1975 (c), 1976-77 (b), 1978-79 (d).

PCB--1978-79 (b).

NUTRIENT DATA: 1968 (b), 1969-79 (d).

BIOLOGICAL DATA:

Bacteria--1973-79 (d).

Phytoplankton--1975-77 (d), 1978-79 (c).

Periphyton--1975-78 (b), 1979 (a).

SEDIMENT DATA: 1975-76 (d), 1977 (c), 1978-79 (d).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1955 to September 1959, July 1962 to March 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPE- RATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT												
24...	1000	2130	102	7.3	7.0	2.0	13.8	113	570	40	32	11
NOV												
21...	0900	4270	100	7.5	3.0	9.0	14.0	104	K1200	K1000	42	13
DEC												
13...	0830	3980	97	7.4	1.0	3.0	12.8	91	170	72	38	9
JAN												
23...	1000	5200	112	7.5	.5	4.0	12.6	87	370	84	47	17
FEB												
21...	0815	2420	100	7.1	2.0	3.0	9.4	68	360	26	38	11
MAR												
14...	0815	9060	104	7.3	2.0	5.0	10.6	77	K1800	70	37	10
28...	1030	19300	65	7.1	2.0	8.0	16.0	113	K1700	22	23	6
MAY												
15...	0830	4080	86	7.5	17.0	3.0	10.0	102	290	450	32	9
JUN												
13...	0845	2560	108	7.8	16.0	3.0	9.4	95	K1200	180	35	12
JUL												
10...	0930	511	89	7.3	21.5	2.0	8.2	93	>6000	1200	34	9
AUG												
21...	1045	1730	86	7.4	27.0	2.0	9.4	102	270	270	32	10
SEP												
11...	0915	6260	76	7.1	14.5	5.0	10.8	105	500	940	29	9

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 (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, NO2+NO3 TOTAL (MG/L AS N)
OCT												
24...	11	1.1	3.0	1.0	21	13	2.0	.1	5.5	56	50	.14
NOV												
21...	14	1.6	2.6	1.2	29	12	3.0	.1	5.5	72	57	.20
DEC												
13...	13	1.4	2.5	.9	29	13	1.9	.1	6.3	65	57	.47
JAN												
23...	16	1.7	3.0	.9	30	13	2.8	.1	6.6	78	62	.14
FEB												
21...	13	1.3	3.5	.7	27	13	2.5	.1	7.5	68	58	.33
MAR												
14...	13	1.2	2.3	.8	27	9.4	2.4	.1	5.5	63	51	.67
28...	8.0	.7	1.1	.7	17	6.2	1.1	.0	4.1	42	32	.60
MAY												
15...	11	1.1	2.7	.7	23	9.1	1.7	.1	4.6	58	45	.33
JUN												
13...	12	1.1	3.8	.6	23	10	1.9	.1	5.4	--	49	.38
JUL												
10...	12	1.1	3.9	.6	26	10	2.0	.1	5.9	60	51	.34
AUG												
21...	11	1.1	4.2	.7	22	13	1.8	.1	5.5	60	51	.21
SEP												
11...	10	1.0	2.3	.9	20	8.8	1.4	.1	5.3	64	42	.16

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

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WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 24...	.01	.16	.17	.09	.31	.03	.01	1	1	0	0	1
NOV 21...	.01	.36	.37	.34	.57	.04	.01	--	--	--	--	--
DEC 13...	.03	.14	.17	.06	.64	.04	.01	--	--	--	--	--
JAN 23...	.02	.05	.29	.21	.21	.02	.01	--	--	--	--	--
FEB 21...	.09	.44	.58	.35	.91	.03	.01	1	1	100	0	0
MAR 14...	.03	.16	.19	.24	.86	.02	.01	2	1	0	0	1
28...	.02	.24	.26	.29	.86	.03	.01	1	1	0	0	1
MAY 15...	.05	.39	.44	.32	.77	.03	.01	--	--	--	--	--
JUN 13...	.08	.16	.24	.22	.62	.03	.02	2	1	0	30	0
JUL 10...	.08	.24	.32	.16	.66	.03	.02	--	--	--	--	--
AUG 21...	.02	.17	.19	.54	.40	.02	.02	--	--	--	--	--
SEP 11...	.05	.47	.52	.64	.68	.04	.02	--	--	--	--	--

[illegible]

STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 24...	20	<.5	<.5	0	0	0	0	10	10	--	8.4	1.1
NOV 21...	--	--	--	--	--	--	--	--	--	4.6	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	4.9	--	--
JAN 23...	--	--	--	--	--	--	--	--	--	5.3	--	--
FEB 21...	40	<.5	<.5	0	0	0	0	50	50	--	9.0	--
MAR 14...	30	<.5	<.5	0	0	0	0	20	20	--	48	.4
MAR 28...	20	<.5	<.5	0	0	0	0	60	10	--	21	.6
MAY 15...	--	--	--	--	--	--	--	--	--	5.1	--	--
JUN 13...	20	<.5	<.5	0	0	0	0	20	20	--	31	.8
JUL 10...	--	--	--	--	--	--	--	--	--	4.2	--	--
AUG 21...	--	--	--	--	--	--	--	--	--	4.1	--	--
SEP 11...	--	--	--	--	--	--	--	--	--	8.6	--	--

PESTICIDE ANALYSES, MARCH 1978 TO SEPTEMBER 1979

DATE	TIME	PCB, TOTAL (UG/L)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)
MAR , 1978												
22...	0915	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 24...	1230	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP 12...	0900	ND	--	ND	--	ND	--	ND	--	ND	--	ND
NOV 21...	0900	ND	62	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB , 1979												
21...	0815	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 15...	0830	ND	--	ND	--	ND	--	ND	--	ND	--	ND
SEP 11...	0915	ND	--	ND	--	ND	--	ND	--	ND	--	ND

ND Material specifically analyzed for, but not detected.

STREAMS TRIBUTARY TO LAKE ONTARIO

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04260500 BLACK RIVER AT WATERTOWN, NY--Continued

PESTICIDE ANALYSES, MARCH 1978 TO SEPTEMBER 1979

DATE	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)
MAR , 1978												
22...	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY												
24...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP												
12...	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
NOV												
21...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB , 1979												
21...	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY												
15...	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
SEP												
11...	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)
MAR , 1978											
22...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
24...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP											
12...	--	ND	--	ND	--	ND	--	ND	--	ND	--
NOV											
21...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB , 1979											
21...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
15...	--	ND	--	ND	--	ND	--	ND	--	ND	--
SEP											
11...	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOX- APHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL TRI- THION (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)
MAR , 1978											
22...	ND	--	ND	--	ND	--	ND	ND	ND	ND	ND
MAY											
24...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEP											
12...	ND	--	ND	--	ND	--	ND	ND	ND	ND	ND
NOV											
21...	ND	ND	ND	ND	ND	ND	--	--	--	--	--
FEB , 1979											
21...	ND	--	ND	--	ND	--	--	--	--	--	--
MAY											
15...	ND	--	ND	--	ND	--	--	--	--	--	--
SEP											
11...	ND	--	ND	--	ND	--	--	--	--	--	--

ND Material specifically analyzed for, but not detected.

STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					MAY				
24...	1000	2130	5	29	15...	0830	4080	5	55
NOV					JUN				
21...	0900	4270	12	138	13...	0845	2560	5	35
DEC					JUL				
13...	0830	3980	4	43	10...	0930	511	2	2.8
JAN					AUG				
23...	1000	5200	3	42	21...	1045	1730	2	9.3
FEB					SEP				
21...	0815	2420	2	13	11...	0915	6260	10	169
MAR									
14...	0815	9060	7	171					
28...	1030	19300	26	1360					

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 27,78 0830	JUL 25,78 0945	AUG 16,78 0800	SEP 12,78 0900	NOV 21,78 0900	MAR 14,79 0815
TOTAL CELLS/ML	840	15000	14000	980	1500	50
DIVERSITY: DIVISION	1.1	1.5	1.3	1.2	1.2	0.7
..CLASS	1.1	1.5	1.3	1.2	1.2	0.7
..ORDER	1.1	1.9	1.8	1.2	1.6	1.4
...FAMILY	2.4	2.3	2.3	1.7	3.0	1.8
...GENUS	2.4	3.1	3.5	2.4	3.0	1.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
..CHLOROPHYCEAE												
...CHLOROCOCCALES												
...CHARACIACEAE												
...SCHROEDERIA												
...COELASTRACEAE												
...COELASTRUM	180#	21			300	2						
...HYDRODICTYACEAE												
...PEDIASTRUM	180#	21										
...OOCYSTACEAE												
...ANKISTRODESMUS			290	2	380	3	58	6				
...CHLORELLA												
...DICTYOSPHAERIUM			1900	12	950	7						
...KIRCHNERIELLA			4100#	27	350	3	230#	24				
...OOCYSTIS					*	0						
...SELENASTRUM			480	3	700	5						
...TETRAEDRON			96	1	*	0						
...WESTELLA												
...SCENEDESMACEAE												
...CRUCIGENIA					400	3	58	6	89	6		
...SCENEDESMUS	230#	28	1300	9	2200#	16	72	7				
...TETRASPORALES												
...PALMELLACEAE												
...SPHAEROCYSTIS												
...VOLVOCALES												
...CHLAMYDOMONADACEAE												
...CHLAMYDOMONAS			480	3	75	1						
...ZYGNEMATALES												
...DESMIDIACEAE												
...ARTHRODESMUS												
...COSMARUM					*	0						

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ONTARIO

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04260500 BLACK RIVER AT WATERTOWN, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 27,78 0830		JUL 25,78 0945		AUG 16,78 0800		SEP 12,78 0900		NOV 21,78 0900		MAR 14,79 0815	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSTOPHYTA												
..BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
...CYCLOTELLA	--	-	580	4	230	2	--	-	--	-	10#	20
....MELOSIRA	--	-	--	-	430	3	--	-	44	3	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	--	-	160	11	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	15	2	--	-	*	0	14	1	200	14	5	10
...FRAGILARIACEAE												
....FRAGILARIA	29	4	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	--	-	110	8	--	-
...GOMPHONEMACEAE												
....GOMPHONEMA	--	-	--	-	*	0	14	1	110	8	--	-
...NAVICULACEAE												
....NAVICULA	29	4	290	2	--	-	--	-	110	8	25#	50
...NITZSCHACEAE												
....NITZSCHIA	--	-	2400#	16	75	1	14	1	110	8	--	-
...TABELLARIACEAE												
....TABELLARIA	--	-	--	-	--	-	--	-	--	-	--	-
...XANTHOPHYCEAE												
..HETEROCOCCALES												
...CENTRITRACTACEAE												
....CENTRITRACTUS	--	-	--	-	*	0	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
..CYANOPHYCEAE												
...CHROOCOCCALES												
....CHROOCOCCACEAE												
....AGMENELLUM	--	-	2300	15	1900	14	120	12	89	6	--	-
....ANACYSTIS	180#	21	770	5	2600#	19	400#	41	--	-	--	-
....COCCOCHLORIS	--	-	--	-	1300	10	--	-	--	-	--	-
...HORMOGONALES												
...OSCILLATORIA												
....LYNGBYA	--	-	--	-	1100	8	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	280	2	--	-	440#	30	--	-
EUGLENOPHYTA (EUGLENOIDS)												
..EUGLENOPHYCEAE												
...EUGLENALES												
....EUGLENACEAE												
....EUGLENA	--	-	380	2	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	*	0	--	-	--	-	10#	20
PYRRHOPHYTA (FIRE ALGAE)												
..DINOPHYCEAE												
...PERIDINIALES												
....GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 15,79 0830	JUN 13,79 0845	JUL 10,79 0930	AUG 21,79 1045	SEP 11,79 0915
TOTAL CELLS/ML	270	780	3900		800
DIVERSITY: DIVISION	1.2	1.6	1.2	1.4	0.3
..CLASS	1.2	1.6	1.2	1.4	0.3
..ORDER	2.0	2.0	1.3	2.0	0.3
...FAMILY	2.3	2.5	1.8	2.3	1.8
....GENUS	2.3	2.8	2.1	2.8	2.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	5	1
....COELASTRACEAE										
....COELASTRUM	--	-	100	13	310	8	--	-	--	-
....HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	160#	20
....OOCYSTACEAE										
....ANKISTRODESMUS	--	-	13	2	77	2	100	10	30	4
....CHLORELLA	--	-	--	-	--	-	--	-	210#	26
....DICTYOSPHAERIUM	--	-	--	-	--	-	51	5	20	3
....KIRCHNERIELLA	--	-	--	-	--	-	26	2	--	-
....OOCYSTIS	--	-	--	-	52	1	--	-	--	-
....SELENASTRUM	--	-	--	-	130	3	64	6	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-	5	1
....WESTELLA	--	-	--	-	52	1	--	-	--	-
....SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	300	8	51	5	40	5
....SCENEDESMUS	52#	19	130#	16	260	7	51	5	290#	37
....TETRASPORALES										
....PALMELLACEAE										
....SPHAEROCYSTIS	100#	38	--	-	--	-	210#	20	--	-
....VOLVOCALES										
....CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	51	7	26	1	--	-	--	-
....ZYGNEATALES										
....DESMIDIACEAE										
....ARTHRODESMUS	--	-	--	-	--	-	--	-	--	-
....COSMARIUM	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCACEAE										
....CYCLOTELLA	--	-	120	15	120	3	90	9	10	1
....MELOSIRA	--	-	120	15	--	-	--	-	--	-
....STEPHANODISCUS	26	10	--	-	77	2	--	-	--	-
...PENNALES										
....ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
....COCconeIS	--	-	--	-	*	0	--	-	--	-
....CYMBELLACEAE										
....CYMBELLA	52#	19	--	-	--	-	--	-	--	-
....FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	26	1	--	-	20	3
....GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	13	1	--	-
....NAVICULACEAE										
....NAVICULA	--	-	26	3	*	0	--	-	5	1
....NITZSCHIA										
....NITZSCHIA	26	10	13	2	26	1	13	1	--	-
....TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	--	-
....XANTHOPHYCEAE										
...HETEROCOCCALES										
....CENTRITRACTACEAE										
....CENTRITRACTUS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO LAKE ONTARIO

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04260500 BLACK RIVER AT WATERTOWN, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

DATE TIME	PHYTOPLANKTON									
	MAY 15,79 0830		JUN 13,79 0845		JUL 10,79 0930		AUG 21,79 1045		SEP 11,79 0915	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	220#	28	2500#	63	390#	37	--	-
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
...HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	13	5	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll ^a	Chlorophyll ^b	Sampling method
		Dry weight	Ash weight	(mg/m ²)	(mg/m ²)	
Sept. 27 to Oct. 24	27	0.000	0.000	0.000	0.000	Polyethylene strip
June 13 to July 10	27	1.34	1.10	2.01	.460	Polyethylene strip
July 10 to Aug. 21	42	11.3	9.76	7.33	.360	Polyethylene strip

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

- 04221990 RUSHFORD LAKE AT CANEADA DAM, NY.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, at Caneadea Dam, 2.4 mi (3.9 km) upstream from Caneadea Creek mouth.
Lake is formed by Caneadea Dam completed in 1928 with capacity of 1,104,000 ft³ (31,265 m³) and is used for power generation (see station 04221991 for monthly mean discharges).
- 04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).
- 04228845 HONEOYE LAKE NEAR HONEOYE, NY (see station for daily mean elevation).
- 04228950 CANADICE LAKE NEAR HEMLOCK, NY (see station 04229000 for observed and adjusted monthly mean discharges).
- 04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).
- 04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY (see station for daily mean elevation).
- 04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY (see station for daily mean elevation).
- 04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).
- 04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).
- 04236000 SKANEATELES LAKE AT SKANEATELES, NY (see station for daily elevation).
- 04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 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 (18.0 km) upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi² (48.2 km²). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (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 feet (1.5 m) 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 ft³ (8.400 hm³) between minimum operating level, elevation 1,755.1 ft (541.05 m) and crest of spillway, elevation 1,786.0 ft (544.37 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.
EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 332 mil ft³ (9.4 hm³) Oct. 3, 1945, elevation, 1,787.1 ft (544.71 m); minimum observed, less than 900,000 ft³ (25,500 m³) Nov. 18, 1943, water level below elevation 1,775.6 ft (541.20 m).
EXTREMES FOR CURRENT YEAR: Maximum contents observed, 299.8 mil ft³ (8.5 hm³) Apr. 28, 29, 30, elevation, 1,786.10 ft (544.40 m); minimum observed, 124.7 mil ft³ (3.53 hm³) Nov. 27, 28, elevation, 1,780.45 ft (542.68 m).
- 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, and 100 ft (30 m) downstream from bridge on State Highway 28 at Old Forge, 11.2 mi (18.0 km) downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 52.1 mi² (135 km²). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily about 0800. Datum of gage is 1,700.15 ft (518.206 m) National Geodetic Vertical Datum of 1929 (levels by Board of 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 ft³ (25.36 hm³), gage height, 6.89 ft (2.100 m). Usable capacity without flashboards, 764.3 mil ft³ (21.64 hm³), gage height, 5.91 ft (1.801 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.
EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,019 mil ft³ (28.85 hm³) June 17, 1972, gage height, 7.78 ft (2.371 m); minimum observed, 6,500,000 ft³ (184,000 m³) Nov. 3, 1939, gage height, -0.35 ft (-0.107 m).
EXTREMES FOR CURRENT YEAR: Maximum contents observed, 921.2 mil ft³ (26.09 hm³) Aug. 2, 3, gage height, 7.08 ft (2.158 m); minimum observed, 270.0 mil ft³ (7.65 hm³) Mar. 4, gage height, 2.00 ft (0.610 m).
- 04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

MONTHEND ELEVATION, GAGE HEIGHT, AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	*Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	*Gage height (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)
	04253300 Sixth Lake				04253400 First Lake	
Sept. 30.....	1,785.05	266.4		6.31	817.3	
Oct. 31.....	1,784.10	236.4	-11.2	5.75	743.5	- 27.6
Nov. 30.....	1,780.53	127.1	-42.2	4.93	636.9	- 41.1
Dec. 31.....	1,781.40	153.2	+ 9.74	4.87	629.1	- 2.91
CAL YR 1978			- 2.61			+ 4.08
Jan. 31.....	1,781.47	155.3	+ 0.78	4.24	547.2	- 30.6
Feb. 28.....	1,780.82	135.8	- 8.06	2.27	302.4	-101.2
Mar. 31.....	1,785.77	289.2	+57.3	4.19	540.7	+ 89.0
Apr. 30.....	1,786.07	298.8	+ 3.70	6.17	798.1	+ 99.3
May 31.....	1,785.92	294.0	- 1.79	6.96	904.8	+ 39.8
June 30.....	1,785.42	278.0	- 6.17	7.03	914.2	+ 3.63
July 31.....	1,785.28	273.6	- 1.64	7.05	917.0	+ 1.05
Aug. 31.....	1,785.80	290.2	+ 6.20	6.97	906.1	- 4.07
Sept. 30.....	1,785.33	275.2	- 5.79	6.49	841.6	- 24.9
WTR YR 1979			+ 0.28			+ 0.77

* Elevations or gage heights at 2400 hours, by interpolation.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04261000 OSWEGATCHIE RIVER AT CRANBERRY LAKE, NY

LOCATION.--Lat 44°13'15", long 74°51'00", St. Lawrence County, Hydrologic Unit 04150302, on right bank 900 ft (274 m) downstream from dam at outlet of Cranberry Lake, at village of Cranberry Lake.

DRAINAGE AREA.--144 mi² (373 km²).

PERIOD OF RECORD.--May 1923 to current year. Prior to October 1958, published as "East Branch Oswegatchie River at Cranberry Lake."

GAGE.--Water-stage recorder. Datum of gage is 1,458.23 ft (444.468 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at site 80 ft (24 m) upstream at same datum.

REMARKS.--Records good. Since 1867, flow regulated by Cranberry Lake.

AVERAGE DISCHARGE.--56 years, 293 ft³/s (8.298 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft³/s (54.9 m³/s) May 13, 1943, gage height, 7.70 ft (2.347 m); minimum daily, 3 ft³/s (0.085 m³/s) Apr. 9-16, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 973 ft³/s (27.6 m³/s) May 2; minimum daily, 109 ft³/s (3.09 m³/s) July 21, 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	277	255	182	330	484	488	514	939	190	177	130	132
2	248	255	182	415	480	480	534	973	190	177	131	132
3	188	255	182	526	480	470	563	939	190	261	131	132
4	188	255	182	530	475	461	583	944	190	165	131	134
5	188	255	182	575	475	466	600	961	190	165	131	134
6	188	255	182	588	470	484	609	950	183	165	131	134
7	188	252	182	534	466	499	613	939	183	165	131	134
8	188	252	183	534	461	503	613	888	183	165	131	135
9	188	252	183	534	461	510	613	709	182	165	131	135
10	187	248	183	534	456	514	613	495	182	165	131	135
11	187	248	183	526	456	518	609	495	182	165	131	137
12	187	248	203	526	451	518	605	495	182	165	131	151
13	187	245	248	522	447	522	605	491	182	165	131	200
14	188	245	248	518	442	522	588	491	180	164	131	231
15	188	248	248	518	442	522	554	484	180	164	131	234
16	188	228	248	518	438	522	558	411	180	164	130	234
17	188	185	248	514	438	522	563	248	180	164	130	234
18	190	185	277	514	438	522	563	211	178	164	130	236
19	190	185	337	514	428	518	461	211	178	144	130	236
20	190	185	337	510	424	518	206	211	178	111	130	261
21	190	183	337	507	456	518	203	216	178	109	130	319
22	190	183	337	507	526	518	203	203	178	109	130	315
23	228	183	334	507	522	522	206	183	178	109	130	315
24	258	183	334	503	514	534	203	183	177	111	130	311
25	255	183	334	499	510	563	193	255	177	114	130	304
26	255	182	334	495	507	579	195	394	177	114	130	304
27	258	182	334	491	499	588	290	400	177	119	130	301
28	258	182	334	491	491	592	672	400	177	131	130	290
29	258	183	334	488	---	592	850	300	177	131	130	271
30	258	182	330	488	---	550	905	250	177	131	131	267
31	255	---	330	484	---	499	---	220	---	130	131	---
TOTAL	6574	6562	8072	15740	13137	16134	15087	15489	5436	4648	4046	6488
MEAN	212	219	260	508	469	520	503	500	181	150	131	216
MAX	277	255	337	588	526	592	905	973	190	261	131	319
MIN	187	182	182	330	424	461	193	183	177	109	130	132
CAL YR 1978	TOTAL	114033	MEAN 312	MAX 588	MIN 154							
WTR YR 1979	TOTAL	117413	MEAN 322	MAX 973	MIN 109							

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", Lewis County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi (0.8 km) northeast of Geers Corners, 1.5 mi (2.4 km) downstream from Big Creek, and 4.0 mi (6.4 km) downstream from Harrisville.

DRAINAGE AREA.--258 mi² (668 km²).

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934.

GAGE.--Water-stage recorder. Datum of gage is 738.51 ft (225.098 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for winter periods, which are fair.

AVERAGE DISCHARGE.--63 years, 512 ft³/s (14.50 m³/s), 26.95 in/yr (685 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,080 ft³/s (200 m³/s) Mar. 15, 1977, gage height, 9.31 ft (2.838 m); maximum gage height, 9.6 ft (2.93 m) Jan. 9, 1930; minimum discharge, 25 ft³/s (0.71 m³/s) Sept. 1, 1934, gage height, 0.86 ft (0.262 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,300 ft³/s (93 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 7	0700	3,680 104	6.49 1.978	Mar. 26	0300	*4,580 130	*7.33 2.234

Minimum discharge, 53 ft³/s (1.50 m³/s) July 26, gage height, 1.27 ft (0.387 m); minimum daily, 54 ft³/s (1.53 m³/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	381	239	403	380	335	2160	1280	559	93	74	527
2	116	321	226	1050	360	349	2480	1020	474	102	182	397
3	112	281	201	1750	340	397	2630	855	381	120	166	397
4	108	253	257	2040	330	486	2880	829	307	129	130	460
5	106	229	448	1670	320	1020	2330	890	268	122	116	401
6	111	224	540	1370	310	2650	1900	885	244	116	102	389
7	112	224	508	1190	290	3620	1500	792	218	108	88	863
8	135	205	491	1000	290	3040	1220	683	197	102	80	1340
9	146	192	716	850	280	2380	1120	598	185	93	72	1190
10	139	187	870	695	270	1930	998	530	175	95	70	869
11	132	182	952	582	260	1590	904	467	182	95	76	590
12	127	172	859	505	250	1300	851	460	227	85	86	447
13	139	166	720	466	240	1100	868	486	268	82	88	343
14	247	180	509	518	230	1050	1130	487	262	64	85	304
15	657	247	463	766	220	1220	1860	451	229	75	85	735
16	935	290	435	925	210	1400	1950	409	213	74	86	1270
17	875	268	406	960	213	1230	1800	388	170	70	96	1180
18	682	294	390	891	213	1060	1690	356	148	67	100	901
19	532	417	370	778	207	898	1480	319	135	65	114	656
20	438	430	340	663	200	842	1300	289	129	63	119	561
21	361	369	320	618	192	869	1150	271	112	61	114	476
22	307	271	340	623	200	1030	1060	295	109	59	100	390
23	274	258	360	626	216	1340	1050	302	111	58	88	325
24	244	280	340	593	261	1990	1060	292	114	56	82	273
25	221	336	320	564	318	3730	1060	353	116	55	82	233
26	221	293	320	540	354	4440	1060	439	116	54	88	200
27	372	250	310	500	350	3500	1090	610	106	56	112	175
28	682	250	300	480	336	2320	1410	733	100	58	332	159
29	694	250	290	450	---	1630	1880	707	99	60	311	151
30	554	246	290	430	---	1330	1670	621	95	59	300	148
31	447	---	288	400	---	1450	---	587	---	57	501	---
TOTAL	10346	7946	13418	24906	7640	51526	45541	17684	6049	2453	4125	16350
MEAN	334	265	433	803	273	1662	1518	570	202	79.1	133	545
MAX	935	430	952	2040	380	4440	2880	1280	559	129	501	1340
MIN	106	166	201	400	192	335	851	271	95	54	70	148
CFSM	1.30	1.03	1.68	3.11	1.06	6.44	5.88	2.21	.78	.31	.52	2.11
IN.	1.49	1.15	1.93	3.59	1.10	7.43	6.57	2.55	.87	.35	.59	2.36

CAL YR 1978 TOTAL 180747 MEAN 495 MAX 3790 MIN 73 CFSM 1.92 IN 26.06
WTR YR 1979 TOTAL 207984 MEAN 570 MAX 4440 MIN 54 CFSM 2.21 IN 29.99

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°35'58", long 75°22'45", St. Lawrence County, Hydrologic Unit 04150302, on right bank 1.5 mi (2.4 km) downstream from Beaver Creek, and 2.5 mi (4.0 km) upstream from Heuvelton. Water-quality sampling site at discharge station.

DRAINAGE AREA.--973 mi² (2,520 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft (88.041 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, 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 (7.2 km) above station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows.

AVERAGE DISCHARGE.--63 years, 1,714 ft³/s (48.54 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s (555 m³/s) Apr. 6, 1960, gage height, 10.36 ft (3.158 m); minimum recorded, 130 ft³/s (3.68 m³/s) Aug. 17, 1949, gage height, 0.47 ft (0.143 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,510 ft³/s (269 m³/s) Mar. 8, gage height, 6.85 ft (2.088 m); minimum, 189 ft³/s (5.35 m³/s) July 31, gage height, 0.68 ft (0.207 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	669	1380	986	1530	1600	2210	4400	3840	1840	499	228	966
2	601	1180	927	3840	1600	1830	4960	3550	1600	456	265	1040
3	428	985	878	5090	1500	1720	5650	3210	1490	574	254	884
4	527	892	873	5020	1500	1990	6100	3100	1180	551	249	788
5	618	851	1430	4810	1400	5040	6460	3010	965	506	310	794
6	569	841	1770	4350	1400	8060	6530	2900	977	477	327	837
7	495	772	1870	3690	1300	9140	6050	2830	841	450	302	933
8	426	819	1710	3100	1300	9440	5350	2730	735	470	271	1690
9	430	781	1840	2700	1200	9180	4600	2480	813	470	242	1970
10	448	783	1900	2400	1200	8420	4210	2230	823	409	218	1670
11	461	756	1800	2100	1200	7590	4080	1980	808	429	209	1330
12	511	668	1600	1900	1100	6600	3870	1700	836	468	245	1060
13	504	647	1500	1760	1100	5390	3520	1520	867	479	232	875
14	555	631	1400	1810	1000	4750	3720	1560	928	434	227	1630
15	730	732	1400	2260	1000	5060	4980	1580	954	409	226	4280
16	1540	946	1300	2540	960	4870	5630	1600	880	435	318	4180
17	1970	1000	1300	2830	920	4500	5680	1510	848	440	445	3820
18	1860	1060	1300	2840	880	4010	5360	1470	702	508	375	3320
19	1790	1430	1200	2810	960	3520	4920	1450	653	445	400	2900
20	1450	1430	1200	2410	1100	3270	4410	1130	492	363	412	2480
21	1080	1340	1200	2100	1160	3240	3930	849	409	388	418	2100
22	981	1280	1200	2050	1250	3350	3340	773	463	339	344	1770
23	808	1160	1100	2000	1410	3800	2960	1040	463	355	285	1570
24	785	1120	1100	2000	1510	4680	2700	1080	456	367	309	1190
25	806	1110	1100	1900	1700	5400	2450	948	521	370	289	1010
26	778	1240	1100	1900	2000	6340	2310	1090	506	337	299	962
27	884	980	1100	1800	1970	7140	2330	1700	429	290	345	941
28	1490	723	1100	1800	2070	7250	2730	2330	497	281	427	742
29	1760	898	1100	1700	---	6500	3250	2410	514	236	719	681
30	1820	914	1090	1700	---	5290	3780	2340	536	200	1070	809
31	1610	---	1160	1600	---	4510	---	2090	---	194	993	---
TOTAL	29384	29349	40534	80340	37290	164090	130260	62030	24026	12629	11253	49222
MEAN	948	978	1308	2592	1332	5293	4342	2001	801	407	363	1641
MAX	1970	1430	1900	5090	2070	9440	6530	3840	1840	574	1070	4280
MIN	426	631	873	1530	880	1720	2310	773	409	194	209	681

CAL YR 1978 TOTAL 643283 MEAN 1762 MAX 8490 MIN 315
WTR YR 1979 TOTAL 670407 MEAN 1837 MAX 9440 MIN 194

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1966-69, 1971-72, 1978 to current year.

CHEMICAL DATA: 1960 (a), 1966 (b), 1968-69 (d), 1971-72 (a), 1978 (c), 1979 (d).

MINOR ELEMENTS DATA: 1978-79 (b).

ORGANIC DATA: OC--1978 (c), 1979 (d).

NUTRIENT DATA: 1978 (c), 1979 (d).

BIOLOGICAL DATA:

Bacteria--1978 (c), 1979 (d).

Phytoplankton--1978-79 (c).

Periphyton--1978-79 (b).

SEDIMENT DATA: 1978 (c), 1979 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1978 to current year.

WATER TEMPERATURES: January 1978 to current year.

REMARKS.--No sample collected for specific conductance May 15. No water-temperature record Apr. 5, 6 and May 15.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 152 micromhos Mar. 5, 1978; minimum daily, 37 micromhos Jan. 31, 1979.

WATER TEMPERATURES: Maximum daily, 28.0°C July 28, 1978 and July 23-28, 1979; minimum daily, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 149 micromhos May 26; minimum daily, 37 micromhos Jan. 31.

WATER TEMPERATURES: Maximum daily, 28.0°C July 23-28; minimum daily, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (CULS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT												
10...	1200	470	93	7.4	12.0	1.0	10.0	9	110	K2	38	11
NOV												
06...	1100	865	98	7.4	8.0	2.0	8.4	73	130	K8	35	16
DEC												
04...	1200	830	108	7.4	1.0	1.0	10.6	75	560	55	47	17
JAN												
15...	1230	2290	71	7.1	3.0	4.0	9.8	72	300	79	53	23
MAR												
12...	1200	6610	106	7.4	.0	6.0	12.8	90	250	540	41	11
APR												
18...	1100	5490	89	7.1	7.0	5.0	12.2	98	1200	K13	33	9
MAY												
07...	1145	2880	76	7.3	12.0	2.0	--	--	K27	K2	30	5
JUN												
04...	1130	1210	88	7.1	17.0	1.0	8.6	88	K47	K2	39	10
JUL												
12...	1200	460	106	7.3	22.0	1.0	9.1	105	K60	K4	45	11
AUG												
07...	1200	310	110	6.4	23.0	1.0	9.3	109	K50	K2	44	12
SEP												
04...	1200	778	116	7.2	20.0	1.0	8.1	88	33	23	42	12

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

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 10...	11	2.5	2.9	1.0	27	17	2.5	.1	4.4	64	58	--
NOV 06...	10	2.5	3.7	1.8	19	16	2.5	.1	5.6	64	54	.15
DEC 04...	13	3.5	3.0	1.1	30	19	2.7	.1	6.6	77	67	.24
JAN 15...	15	3.8	2.4	1.1	30	16	3.6	.1	6.8	81	67	.29
MAR 12...	11	3.3	2.0	1.2	30	11	2.3	.1	6.0	70	55	.32
APR 18...	9.1	2.4	1.7	.6	24	9.7	1.9	.1	4.0	54	44	.20
MAY 07...	8.6	2.0	1.8	.6	25	9.9	2.0	.1	3.9	57	44	.23
JUN 04...	11	2.7	2.4	.5	29	11	2.0	.1	4.3	66	51	.17
JUL 12...	13	3.1	4.0	.6	34	14	2.9	.2	3.4	68	62	.07
AUG 07...	12	3.5	4.2	.9	32	15	3.5	.2	2.5	74	61	.06
SEP 04...	12	3.0	5.5	.9	30	16	4.2	.1	4.6	73	65	.18

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 06...	.05	.40	.45	--	.60	.00	.17	0	0	0	0	0
DEC 04...	.10	.20	.30	.71	.54	.02	.01	--	--	--	--	--
JAN 15...	.10	.20	.30	.36	.59	.03	.02	--	--	--	--	--
MAR 12...	.08	.37	.45	.49	.77	.05	.04	1	1	0	0	1
APR 18...	.01	1.1	1.1	.34	1.3	.03	.01	--	--	--	--	--
MAY 07...	.06	.38	.44	.38	.67	.01	.00	--	--	--	--	--
JUN 04...	.01	.28	.29	.52	.46	.08	.05	--	--	--	--	--
JUL 12...	.04	.28	.32	.22	.39	.02	.01	2	0	100	30	0
AUG 07...	.03	.33	.36	.18	.42	.01	.01	--	--	--	--	--
SEP 04...	.02	.54	.56	.49	.74	.01	.01	3	0	0	30	0

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 06...	1	10	0	0	0	5	2	370	200	17	13	20
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	0	<10	0	0	0	10	4	410	300	8	5	40
APR 18...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	1	20	10	0	0	1	0	310	190	2	3	30
AUG 07...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	0	<10	10	1	1	4	1	3200	200	3	0	30

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 10...	--	--	--	--	--	--	--	--	--	5.1	--	--
NOV 06...	20	<.5	<.5	0	0	0	0	30	0	--	36	--
DEC 04...	--	--	--	--	--	--	--	--	--	5.6	--	--
JAN 15...	--	--	--	--	--	--	--	--	--	6.4	--	--
MAR 12...	40	<.5	<.5	0	0	0	0	30	40	--	17	.3
APR 18...	--	--	--	--	--	--	--	--	--	5.2	--	--
MAY 07...	--	--	--	--	--	--	--	--	--	5.1	--	--
JUN 04...	--	--	--	--	--	--	--	--	--	7.6	--	--
JUL 12...	20	<.5	<.5	0	0	0	0	20	20	--	4.7	.5
AUG 07...	--	--	--	--	--	--	--	--	--	4.2	--	--
SEP 04...	20	<.5	<.5	0	0	1	0	20	30	--	7.7	.3

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 10...	1200	470	1	1.3	MAY 07...	1145	2880	2	16
NOV 06...	1100	865	1	2.3	JUN 04...	1130	1210	2	6.5
DEC 04...	1200	830	1	2.2	JUL 12...	1200	460	1	1.2
JAN 15...	1230	2290	6	37	AUG 07...	1200	310	1	.84
MAR 12...	1200	6610	8	143	SEP 04...	1200	778	3	6.3
APR 18...	1100	5490	6	89					

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 10,78 1030	AUG 7,78 1230	SEP 13,78 1200	NOV 6,78 1100	MAR 12,79 1200
TOTAL CELLS/ML	3500	150	67	180	160
DIVERSITY: DIVISION	1.6	0.8	0.0	0.5	1.7
..CLASS	1.7	0.8	0.0	0.5	1.7
..ORDER	2.3	0.8	0.0	1.1	2.1
...FAMILY	2.5	1.1	0.9	2.5	3.1
....GENUS	3.1	1.3	0.9	2.5	3.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....COELASTRACEAE										
.....COELASTRUM	89	3	--	--	--	--	--	--	--	--
.....OOCYSTACEAE										
.....ANKISTRODESMUS	--	--	--	--	--	--	--	--	10	6
.....DICTYOSPHAERIUM	750#	22	--	--	--	--	--	--	--	--
.....KIRCHNERIELLA	--	--	--	--	--	--	--	--	--	--
.....OOCYSTIS	--	--	--	--	--	--	--	--	--	--
.....TETRAEDRON	--	--	--	--	--	--	22	13	--	--
...SCENEDESMACEAE										
....SCENEDESMUS	--	--	--	--	--	--	--	--	--	--
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	180	5	--	--	--	--	--	--	--	--
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	67	2	--	--	--	--	--	--	--	--
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCAEAE										
.....CYCLOTELLA	730#	21	--	--	--	--	22	13	10	6
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	22	1	14	9	--	--	44#	25	--	--
...COCCONEIS	--	--	14	9	44#	67	--	--	5	3
...CYMBELLACEAE										
....CYMBELLA	--	--	14	9	--	--	44#	25	5	3
...DIATOMACEAE										
....DIATOMA	44	1	--	--	--	--	--	--	15	10
...FRAGILARIACEAE										
....SYNEDRA	--	--	--	--	--	--	22	13	--	--
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	--	--	--	--	--	--	--	5	3
...NAVICULACEAE										
....NAVICULA	67	2	--	--	22#	33	--	--	30#	19
...PINNULARIA	--	--	--	--	--	--	--	--	--	--
...NITZSCHIAEAE										
....NITZSCHIA	44	1	--	--	--	--	22	13	10	6
...SURIRELLACEAE										
....SURIRELLA	22	1	--	--	--	--	--	--	--	--
..CHRYSOPHYCEAE										
...CHRYDOMONADALES										
....OCHROMONADACEAE										
.....OCHROMONAS	22	1	--	--	--	--	--	--	--	--
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
.....AGMENELLUM	200	6	--	--	--	--	--	--	--	--
....ANACYSTIS	490	14	110#	73	--	--	--	--	20	13
...COCCOCHLORIS	--	--	--	--	--	--	--	--	15	10
..HORMOGONIALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	67	2	--	--	--	--	--	--	--	--
...SPIRULINA	--	--	--	--	--	--	--	--	5	3
..CHROOCOCCALES										
....CHROOCOCCACEAE										
.....GOMPHOSPHAERIA	620#	18	--	--	--	--	--	--	--	--

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 10.78 1030	AUG 7.78 1230	SEP 13.78 1200	NOV 6.78 1100	MAR 12.79 1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	--	-	--	-
					25#	16
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
..GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	44	1	--	-	--	-
DATE TIME	MAY 7.79 1145	JUN 4.79 1130	JUL 12.79 1800	AUG 7.79 1200	SEP 4.79 1200	
TOTAL CELLS/ML	330	140	52	130	2200	
DIVERSITY: DIVISION	1.0	1.2	0.0	0.0	0.8	
..CLASS	1.0	1.2	0.0	0.0	0.8	
..ORDER	1.3	1.8	1.0	0.0	1.0	
...FAMILY	2.4	2.1	1.0	0.0	1.7	
....GENUS	2.6	2.1	1.0	0.9	1.9	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....CHLOROCOCCACEAE	--	-	--	-	--	-
....CHLOROCOCCUM					14	1
...COELASTRACEAE						
....COELASTRUM	--	-	--	-	--	-
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	--	-	--	-
...OOCYSTACEAE					27	1
....ANKISTRODESMUS	98#	29	13	9	*	0
....CHLORELLA	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	20	1
....KIRCHNERIELLA	--	-	--	-	160	7
....OOCYSTIS	--	-	--	-	43#	33
....TETRAEDRON	--	-	--	-	86#	67
....SCENEDESMACEAE					27	1
....CRUCIGENIA	--	-	--	-	--	-
....SCENEDESMUS	--	-	52#	36	--	-
...TETRASPORALES					41	2
...PALMELLACEAE					1500#	68
...SPHAEROCYSTIS	--	-	--	-	--	-
...VOLVOCALES					54	3
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	42	13	26#	18	--	-
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	26#	50
					--	-
...PENNALES					140	7
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	26#	50
....COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE					*	0
....CYMBELLA	28	8	--	-	14	1
...DIATOMACEAE					20	1
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE					--	-
....SYNEDRA	42	13	13	9	--	-
...GOMPHONEMACEAE					--	-
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE					--	-
....NAVICULA	70#	21	--	-	--	-
...PINNULARIA	14	4	--	-	48	2
...NITZSCHACEAE					--	-
....NITZSCHIA	42	13	--	-	--	-
...SURIPELLACEAE					--	-
....SURIPELLA	--	-	--	-	--	-
CHRYSOPHYCEAE						
...CHRYSONOMADALES						
....OCHROMONADACEAE						
....OCHROMONAS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 7,79 1145		JUN 4,79 1130		JUL 12,79 1800		AUG 7,79 1200		SEP 4,79 1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	39#	27	--	-	--	-	--	-
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
....GOMPHOSPHERIA	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIAEAE										
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	110	5
....SPIRULINA	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAL										
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...GYMNODINIALES										
...GYMNODINIAEAE										
....GYMNODINIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll	Chlorophyll	Sampling method
		Dry weight	Ash weight	^a (mg/m ²)	^b (mg/m ²)	
May 7 to June 4	28	5.67	4.96	1.40	0.460	Polyethylene strip
June 4 to July 12	38	1.73	1.42	2.64	.490	Polyethylene strip
July 12 to Aug. 7	26	6.85	4.65	3.58	.930	Polyethylene strip
Aug. 7 to Sept. 4	28	.710	.550	3.60	.840	Polyethylene strip

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	102	98	102	114	136	77	87	104	112	108	120
2	92	38	80	104	115	136	72	87	93	108	104	120
3	92	76	96	106	120	136	68	86	94	110	104	116
4	92	60	84	85	116	122	68	87	95	112	104	90
5	92	88	97	83	117	124	66	87	92	112	106	89
6	92	89	91	82	124	116	65	87	90	112	108	89
7	97	62	98	82	125	91	79	87	92	112	128	89
8	97	48	91	88	124	92	79	87	91	112	128	88
9	97	40	99	90	122	91	78	85	95	112	130	89
10	93	98	100	86	120	102	80	84	94	114	128	83
11	86	49	97	93	120	102	89	83	97	114	126	83
12	86	64	95	91	122	106	87	90	124	112	126	76
13	94	40	87	97	120	95	95	89	124	110	124	71
14	93	92	85	95	122	95	91	89	126	110	138	64
15	93	104	86	100	122	102	91	---	122	110	138	73
16	92	104	83	93	122	98	92	96	122	110	138	86
17	92	82	87	92	122	95	79	104	120	110	138	113
18	90	56	86	91	124	90	77	107	122	108	138	114
19	92	93	93	92	122	92	76	106	122	108	138	102
20	70	108	87	90	122	92	78	106	120	106	138	97
21	69	118	86	54	120	91	79	107	118	106	136	94
22	70	99	69	86	122	94	80	112	114	104	134	95
23	68	98	75	94	136	93	80	112	114	106	130	93
24	73	80	76	91	130	83	82	111	110	102	131	99
25	73	100	98	97	134	83	81	111	112	102	130	100
26	74	104	89	97	132	69	84	149	110	104	132	100
27	73	110	93	69	138	55	83	148	116	102	128	100
28	100	65	90	82	142	57	89	148	116	104	130	100
29	100	61	91	68	---	60	98	148	114	104	130	100
30	100	122	92	60	---	62	93	140	114	104	133	100
31	100	---	92	37	---	75	---	126	---	---	133	---
MEAN	88	82	89	86	124	95	81	105	109	108	127	94

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	10.0	.5	2.0	.0	2.0	6.0	13.0	17.0	23.0	27.0	22.0
2	14.0	10.0	.5	1.0	.0	3.0	6.0	13.0	17.5	23.0	26.5	22.5
3	14.0	9.0	.5	.5	.0	3.0	7.0	13.0	18.0	22.0	26.0	23.0
4	14.0	10.0	.5	.5	.0	2.0	6.0	13.0	18.0	22.0	27.0	23.0
5	14.0	11.0	1.0	.5	.0	2.0	---	13.0	18.0	22.0	26.5	23.0
6	14.0	11.0	1.0	.0	1.0	3.0	---	13.0	20.0	21.0	26.0	22.5
7	13.0	9.0	1.0	.5	1.0	3.0	5.0	13.5	21.0	21.0	26.0	22.0
8	13.0	9.0	1.0	1.0	1.0	3.0	5.0	13.5	21.0	22.0	26.0	21.0
9	12.0	9.0	.5	.0	1.0	3.0	5.0	14.0	22.0	23.0	26.0	20.0
10	12.0	9.0	.5	.0	1.0	3.0	4.0	14.0	23.0	23.0	24.5	19.0
11	13.0	9.0	.5	.0	1.0	2.0	5.0	16.0	23.0	23.0	25.0	18.5
12	13.0	8.0	1.0	.0	1.0	2.0	4.0	17.0	22.5	23.0	23.5	18.0
13	12.0	8.0	1.5	.0	1.0	1.0	8.0	17.5	22.0	24.0	23.0	18.0
14	12.0	8.0	2.0	.0	1.0	2.0	8.0	18.0	21.0	25.0	22.0	18.0
15	11.0	8.0	2.0	.0	.5	2.0	8.0	---	20.0	27.0	22.0	17.0
16	11.0	8.0	2.0	.0	.0	2.0	8.0	18.0	20.0	27.0	21.5	17.0
17	10.0	7.0	.5	.0	.0	2.0	9.0	18.5	21.0	27.0	21.0	17.0
18	10.0	7.0	.5	.0	.0	2.5	8.0	19.0	21.5	27.0	20.5	17.0
19	10.0	7.0	.5	.0	.0	3.0	9.0	19.5	22.0	27.0	20.0	16.5
20	10.0	6.0	.0	.5	.0	3.0	10.0	19.5	23.0	27.0	20.0	16.0
21	10.0	4.0	.0	1.0	.0	3.0	11.0	20.0	24.0	27.0	20.0	16.0
22	10.0	3.0	.5	1.0	1.0	3.0	12.0	20.0	23.0	27.0	21.0	15.5
23	10.0	4.0	.5	.5	2.0	3.5	12.0	19.0	22.5	28.0	21.0	15.0
24	10.0	5.0	.5	1.0	2.0	4.0	12.0	18.0	22.0	28.0	21.0	15.5
25	10.0	3.0	.5	1.0	1.0	5.0	12.0	17.5	22.0	28.0	22.0	16.0
26	10.0	1.0	.5	1.0	1.0	5.0	13.0	17.5	21.0	28.0	22.0	16.0
27	10.0	.5	.5	1.0	2.0	6.0	13.0	17.0	21.0	28.0	22.0	17.0
28	9.0	.5	.5	.5	2.0	6.0	13.0	17.0	21.0	28.0	22.0	17.0
29	9.0	.5	.5	.0	---	6.0	13.0	17.0	23.0	27.0	22.0	16.5
30	8.0	.5	.5	.0	---	6.0	13.0	16.0	23.0	27.0	22.0	16.0
31	8.0	---	1.0	.0	---	6.0	---	17.0	---	---	22.0	---
MEAN	11.5	6.5	.5	.5	.5	3.5	9.0	16.5	21.0	25.0	23.0	18.5

ST. LAWRENCE RIVER MAIN STEM

421

04264050 ST. LAWRENCE RIVER NEAR WADDINGTON, NY

LOCATION.--Lat 44°51'27", long 75°14'46", St. Lawrence County, Hydrologic Unit 04150301, on right bank at Leishman Point, 2.1 mi (3.4 km) west of Waddington, 2.5 mi (4.0 km) upstream from Sucker Brook, and 3.3 mi (5.3 km) downstream from Iroquois Dam.

DRAINAGE AREA.--298,500 mi² (773,100 km²).

PERIOD OF RECORD.--January 1976 to November 1976, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum.

REMARKS.--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 Chicago Sanitary and Ship Canal, operation of which began in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, operation of which began in July 1939, and by the Ogoki Project, operation of which began in July 1943.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 244.80 ft (74.615 m) Apr. 6, 1976; minimum daily, 236.30 ft (72.024 m) Feb. 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 243.36 ft (74.176 m) Apr. 6; minimum daily, 236.30 ft (72.024 m) Feb. 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240.44	240.04	240.85	241.44	238.98	236.57	240.84	241.98	241.53	241.31	241.45	240.66
2	240.34	240.26	240.61	241.22	238.92	236.74	240.75	242.05	241.51	241.45	241.41	240.69
3	240.06	240.12	240.13	241.53	238.47	236.85	241.55	242.02	241.62	241.55	241.64	240.78
4	240.11	239.98	240.61	241.95	238.06	237.17	241.51	242.30	241.57	241.46	241.47	240.53
5	240.24	239.95	241.05	241.49	238.09	237.53	241.49	242.46	241.56	241.38	241.46	240.48
6	240.27	240.11	240.89	240.91	237.79	237.85	242.51	242.36	241.41	241.40	241.26	240.42
7	240.58	240.00	240.47	240.85	237.45	238.11	242.26	242.04	241.30	241.44	241.21	240.43
8	240.42	239.90	240.24	240.72	237.35	238.40	241.66	242.00	241.34	241.51	241.37	240.28
9	240.41	240.19	240.36	240.65	237.20	238.70	241.04	242.27	241.40	241.44	241.18	240.27
10	240.60	239.90	240.63	240.87	237.10	238.83	241.02	242.30	241.37	241.32	241.03	240.50
11	240.38	239.75	240.62	240.79	237.00	239.13	241.37	242.08	241.68	241.33	240.98	240.44
12	240.36	239.52	240.78	240.36	236.80	239.50	241.37	241.96	241.55	241.36	240.81	240.26
13	240.35	239.53	241.05	239.92	236.60	239.40	241.12	242.02	241.50	241.37	240.74	240.20
14	239.97	240.24	241.23	239.94	236.55	239.88	241.21	241.94	241.46	241.33	241.23	240.56
15	240.10	240.38	241.18	239.63	236.70	239.61	241.36	241.76	241.51	241.33	241.33	240.90
16	240.02	239.99	241.13	239.06	236.80	239.52	241.45	241.67	241.63	241.39	241.04	240.94
17	240.03	239.82	241.09	238.56	236.90	239.48	241.49	241.57	241.54	241.17	241.00	241.06
18	240.21	240.65	241.07	237.95	237.00	239.51	241.47	241.51	241.27	241.14	241.03	241.16
19	240.28	240.60	241.07	237.95	237.00	239.77	241.44	241.44	241.16	241.25	241.01	240.96
20	240.18	240.10	240.79	238.12	237.10	240.06	241.46	241.45	241.15	241.27	240.93	240.84
21	240.35	240.07	241.39	238.05	237.20	240.19	241.44	241.53	241.18	241.34	240.85	241.02
22	240.43	240.02	241.56	238.18	237.30	240.38	241.42	241.54	241.29	241.37	240.77	240.52
23	240.28	239.98	241.86	238.16	237.13	240.50	241.47	241.35	241.65	241.30	240.73	240.01
24	240.04	240.53	241.48	237.96	237.12	240.60	241.40	241.09	241.62	241.24	240.88	239.92
25	240.15	240.40	240.96	237.84	236.96	240.71	241.25	240.54	241.35	241.29	241.05	240.05
26	240.40	240.31	241.38	238.24	236.30	241.02	241.35	240.17	241.34	241.44	240.98	240.13
27	240.28	239.94	241.07	238.63	236.40	241.31	241.44	241.13	241.47	241.38	240.82	240.00
28	240.35	240.08	240.92	238.88	236.70	240.97	241.65	241.47	241.52	241.37	240.81	239.99
29	240.08	240.57	240.64	239.23	---	240.91	241.84	241.52	241.36	241.46	240.82	239.99
30	240.02	241.10	240.92	239.20	---	240.70	241.86	241.53	241.29	241.36	241.01	239.94
31	240.32	---	241.36	239.04	---	240.92	---	241.60	---	241.40	240.86	---
MEAN	240.26	240.13	240.95	239.59	237.25	239.38	241.45	241.70	241.44	241.36	241.07	240.46
MAX	240.60	241.10	241.86	241.95	238.98	241.31	242.51	242.46	241.68	241.55	241.64	241.16
MIN	239.97	239.52	240.13	237.84	236.30	236.57	240.75	240.17	241.15	241.14	240.73	239.92
CAL YR 1978	MEAN 240.68		MAX 243.47	MIN 237.66								
WTR YR 1979	MEAN 240.44		MAX 242.51	MIN 236.30								

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, N.Y., 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 (4.7 km) upstream from Grass River, 6.2 mi (10.0 km) upstream from Raquette River, and 5.9 mi (9.5 km) northeast of Massena, N.Y.. Water-quality samples collected at power dam from taps at generators 17 and 30.

DRAINAGE AREA.--298,800 mi² 773,890 km².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1860 to current year. Monthly discharges only for some periods published in WSP 1307. Prior to October 1971 published as 04264000 "St. Lawrence River at Ogdensburg."

REVISED RECORDS.--WSP 1437: 1870, 1874, 1881, 1883, 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, N.Y. is considered to be the same as discharge at Ogdensburg, N.Y. 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 furnished by Buffalo District, Corps of Engineers through International St. Lawrence River Board of Control.

AVERAGE DISCHARGE.--119 years (1860-1979), 242,300 ft³/s (6,862 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 352,000 ft³/s (9,969 m³/s) June 22, 1976; minimum daily, 139,000 ft³/s (3,940 m³/s) Feb. 7, 1936. Maximum monthly discharge, 350,000 ft³/s (9,910 m³/s) July 1973; minimum monthly, 154,000 ft³/s (4,360 m³/s) Feb. 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 301,000 ft³/s (8,524 m³/s) June 2, minimum daily, 200,000 ft³/s (5,664 m³/s) Dec. 21-24, 30, 31, Jan. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269000	258000	235000	228000	235000	250000	274000	284000	299000	285000	272000	280000
2	269000	258000	235000	228000	235000	250000	274000	284000	301000	285000	272000	280000
3	269000	258000	235000	228000	252000	250000	268000	274000	300000	285000	273000	280000
4	269000	256000	235000	228000	252000	253000	264000	274000	300000	285000	275000	280000
5	269000	256000	235000	228000	252000	257000	274000	274000	300000	285000	275000	280000
6	269000	256000	235000	220000	252000	262000	274000	274000	300000	285000	275000	280000
7	266000	256000	235000	220000	252000	264000	276000	274000	300000	283000	275000	280000
8	265000	256000	235000	223000	252000	264000	282000	274000	300000	283000	275000	280000
9	266000	256000	231000	230000	252000	264000	282000	274000	300000	283000	275000	280000
10	266000	256000	231000	210000	252000	275000	282000	274000	300000	283000	275000	280000
11	266000	253000	231000	210000	252000	275000	282000	278000	300000	283000	276000	280000
12	266000	253000	231000	210000	252000	275000	282000	283000	300000	283000	276000	280000
13	267000	253000	231000	200000	252000	275000	282000	288000	300000	283000	276000	280000
14	262000	253000	231000	200000	252000	275000	289000	293000	300000	279000	276000	280000
15	262000	253000	231000	228000	252000	275000	289000	298000	300000	279000	276000	278000
16	262000	253000	227000	228000	248000	275000	289000	300000	295000	279000	276000	278000
17	262000	253000	225000	228000	243000	275000	289000	300000	295000	279000	276000	278000
18	262000	253000	226000	226000	243000	275000	289000	300000	295000	279000	274000	278000
19	262000	254000	226000	215000	243000	275000	289000	300000	295000	279000	274000	278000
20	262000	246000	212000	215000	243000	275000	289000	300000	295000	279000	274000	278000
21	260000	240000	200000	215000	243000	275000	292000	300000	295000	275000	274000	278000
22	250000	240000	200000	220000	243000	275000	292000	300000	295000	275000	274000	291000
23	260000	240000	200000	220000	250000	275000	292000	300000	290000	275000	274000	291000
24	260000	240000	200000	220000	250000	275000	292000	300000	290000	275000	274000	291000
25	260000	235000	215000	220000	250000	275000	292000	300000	290000	275000	274000	291000
26	260000	235000	236000	220000	250000	275000	292000	300000	290000	275000	274000	291000
27	261000	235000	236000	225000	250000	275000	292000	300000	290000	275000	274000	291000
28	258000	235000	236000	225000	250000	275000	291000	300000	290000	272000	274000	291000
29	258000	235000	236000	225000	---	276000	284000	300000	290000	272000	274000	288000
30	258000	235000	200000	235000	---	276000	284000	300000	285000	272000	274000	288000
31	258000	---	200000	235000	---	274000	---	300000	---	272000	275000	---
TOTAL	8163000	7460000	6972000	6863000	6952000	8365000	8522000	8994000	8880000	8657000	8511000	8479000
MEAN	263300	248700	224900	221400	248300	269800	284100	290100	296000	279300	274500	282600
MAX	269000	258000	236000	235000	252000	276000	292000	300000	301000	285000	276000	291000
MIN	258000	235000	200000	200000	235000	250000	264000	274000	285000	272000	272000	278000
CAL YR 1978 TOTAL	101210000			MEAN 277300		MAX 321000		MIN 200000				
WTR YR 1979 TOTAL	96818000			MEAN 265300		MAX 301000		MIN 200000				

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), 1975-79 (d).

MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a), 1979 (b).

RADIOCHEMICAL DATA: 1974-79 (a).

ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-79 (d).

NUTRIENT DATA: 1974-75 (c), 1976-79 (d).

BIOLOGICAL DATA:

Bacteria--1974 (c), 1975-79 (d).

Phytoplankton--1974 (a), 1975-77 (d), 1978 (c), 1979 (b).

Periphyton--1974 (a), 1975 (c), 1976-79 (b).

SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-79 (d).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.

WATER TEMPERATURES: October 1955 to October 1958, unpublished; January 1966 to current year.

REMARKS.--Temperature measurements made approximately 68 ft (21 m) below normal forebay level. Temperature measurements from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station. No sample collected for specific conductance Oct. 14, 15, Dec. 18, 22, Jan. 4, 8, May 28, July 15, 17, Sept. 21. No water-temperature record Oct. 14, 15, Dec. 18, 19, Jan. 8, July 15, 17.

COOPERATION.--Water-temperature record furnished by the Power Authority of the State of New York.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Aug. 7, 1978, Mar. 29, 1979; minimum daily, 250 micromhos Dec. 21, 1978.

WATER TEMPERATURES: Maximum daily, 24.5°C on several days in August and September 1973 and August 1975; minimum daily, freezing point on many days during winter periods except 1972-74, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Mar. 29; minimum daily, 250 micromhos Dec. 21.

WATER TEMPERATURES: Maximum daily, 23.5°C Aug. 5, 6; minimum daily, 0.5°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)
OCT 25...	1030	260000	320	8.2	11.5	.00	9.6	88	K5	K19	130	38
NOV 27...	1000	235000	340	8.1	5.5	2.0	12.0	96	K5	K2	140	50
DEC 21...	1000	200000	250	8.2	1.5	5.0	11.8	87	K3	K7	130	38
JAN 25...	1000	220000	370	7.8	.5	2.0	--	--	K5	K5	130	45
FEB 26...	1100	250000	350	7.8	.5	1.0	13.0	77	K3	20	130	39
MAR 29...	1030	276000	400	7.9	2.0	3.0	11.2	79	K2	K11	130	41
APR 25...	0945	292000	320	8.3	7.0	2.0	11.0	89	<1	K2	130	45
MAY 29...	1030	300000	310	7.7	12.0	2.0	10.6	99	K8	K1	130	38
JUN 26...	1000	290000	320	8.2	16.0	1.0	8.8	86	K3	K1	130	35
JUL 26...	1000	275000	310	6.5	21.5	1.0	8.8	97	K7	K8	130	38
AUG 27...	1000	274000	300	8.0	21.0	2.0	9.0	97	K12	K4	120	41
SEP 25...	1000	291000	300	8.1	17.0	2.0	9.6	94	K3	<1	130	33

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

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 (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, NO2+NO3 TOTAL (MG/L AS N)
OCT 25...	38	8.2	12	1.6	91	28	27	.1	.3	180	170	.15
NOV 27...	41	8.5	13	1.5	87	29	27	.1	.6	208	173	.13
DEC 21...	38	7.8	13	1.5	89	27	27	.1	.5	180	168	.22
JAN 25...	41	7.8	13	1.6	90	27	27	.1	.6	183	172	.28
FEB 26...	39	7.9	13	1.5	91	28	27	.1	.4	189	172	.32
MAR 29...	39	7.8	13	1.4	89	27	26	.1	.2	183	168	.23
APR 25...	39	7.8	13	1.4	85	27	28	.1	.1	185	168	.22
MAY 29...	39	7.3	11	1.6	89	26	25	.1	.0	179	163	.20
JUN 26...	41	7.7	13	1.4	99	28	27	.1	.2	208	178	.04
JUL 26...	39	8.1	14	1.4	93	27	27	.1	.4	205	173	.12
AUG 27...	36	8.0	14	1.4	41	27	29	.1	.3	200	165	.10
SEP 25...	38	7.9	12	1.6	88	29	27	.1	.6	189	60	.08

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 25...	.02	.23	.25	.14	.40	.01	.00	1	1	0	0	1
NOV 27...	.02	.20	.22	.31	.35	.02	.00	--	--	--	--	--
DEC 21...	.04	.27	.31	.26	.53	.03	.00	--	--	--	--	--
JAN 25...	.02	.08	.10	.09	.38	.01	.01	--	--	--	--	--
FEB 26...	.05	.32	.37	.35	.69	.01	.01	1	1	0	0	0
MAR 29...	.01	.24	.25	.24	.48	.02	.01	--	--	--	--	--
APR 25...	.00	.45	.45	.21	.67	.01	.00	--	--	--	--	--
MAY 29...	.05	.44	.49	.37	.69	.03	.00	--	--	--	--	--
JUN 26...	.02	.18	.20	.24	.24	.02	.01	1	1	0	40	0
JUL 26...	.02	.29	.31	1.3	.43	.02	.07	--	--	--	--	--
AUG 27...	.03	.29	.32	.34	.42	.03	.01	--	--	--	--	--
SEP 25...	.02	.35	.37	.28	.45	.02	.01	4	1	0	30	1

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 25...	0	10	0	1	0	4	2	30	20	6	3	10
NOV 27...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 25...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	0	10	0	0	0	5	4	150	10	0	0	10
MAR 29...	--	--	--	--	--	--	--	--	--	--	--	--
APR 25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 29...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 26...	0	30	<10	0	1	6	2	120	0	5	3	10
JUL 26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 25...	0	20	10	1	2	16	4	330	10	3	1	10

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 25...	0	<.5	<.5	0	0	2	2	20	10	--	6.2	.7
NOV 27...	--	--	--	--	--	--	--	--	--	3.7	--	--
DEC 21...	--	--	--	--	--	--	--	--	--	2.5	--	--
JAN 25...	--	--	--	--	--	--	--	--	--	3.1	--	--
FEB 26...	2	<.5	<.5	0	0	0	0	10	0	--	24	--
MAR 29...	--	--	--	--	--	--	--	--	--	3.9	--	--
APR 25...	--	--	--	--	--	--	--	--	--	2.2	--	--
MAY 29...	--	--	--	--	--	--	--	--	--	2.4	--	--
JUN 26...	0	<.5	<.5	0	0	0	0	20	20	--	15	.6
JUL 26...	--	--	--	--	--	--	--	--	--	4.0	--	--
AUG 27...	--	--	--	--	--	--	--	--	--	2.2	--	--
SEP 25...	3	<.5	<.5	0	0	0	0	70	20	--	3.4	.2

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRACTION (UG/L)
OCT 25...	1030	<1.9	--	<.4	--	<6.5	<.4	3.6	<.4	.07	.33
MAY 29...	1030	<1.7	<1.2	<.4	<.3	2.6	<.4	2.4	<.4	.03	.28

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 25...	1030	260000	1	702	APR 25...	0945	292000	2	1580
NOV 27...	1000	235000	1	634	MAY 29...	1030	300000	3	2430
DEC 21...	1000	200000	14	7560	JUN 26...	1000	290000	2	1570
JAN 25...	1000	220000	2	1190	JUL 26...	1000	275000	2	1490
FEB 26...	1100	250000	1	675	AUG 27...	1000	274000	3	2220
MAR 29...	1030	276000	6	4470	SEP 25...	1000	291000	2	1570

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 28,78 1000	JUL 26,78 1015	AUG 28,78 1030	SEP 25,78 1000	NOV 27,78 1000
TOTAL CELLS/ML	790	870	680	760	200
DIVERSITY: DIVISION	0.9	1.6	0.2	1.8	1.1
..CLASS	0.9	1.8	0.2	1.8	1.1
..ORDER	0.9	2.0	1.6	2.5	1.1
...FAMILY	0.9	2.5	2.6	3.4	1.8
....GENUS	1.7	2.5	2.6	3.6	1.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	4	1	11	1	--	-
....COELASTRACEAE										
....COELASTRUM	--	-	330#	38	170#	25	62	8	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	77	11	86	11	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	86#	43
....OOCYSTIS	--	-	69	8	--	-	11	1	--	-
....TREUBARIA	--	-	--	-	*	0	*	0	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	58#	29
....SCENEDESMUS	29	4	27	3	70	10	86	11	--	-
....TETRASTRUM	--	-	--	-	5	1	--	-	--	-
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	54	8	75	10	--	-
...VOLVOCALES										
....CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	55	6	49	7	27	4	--	-
...VOLVOCAEAE										
....PANDORINA	--	-	--	-	230#	33	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIVUM	--	-	--	-	*	0	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ST. LAWRENCE RIVER MAIN STEM

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04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 28,78 1000		JUL 26,78 1015		AUG 28,78 1030		SEP 25,78 1000		NOV 27,78 1000	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
..CENTRALES										
..COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	4	1	22	3	--	-
....MELOSIRA	--	-	--	-	--	-	11	1	--	-
....STEPHANODISCUS	--	-	--	-	--	-	19	2	--	-
..PENNALES										
..FRAGILARIACEAE										
....ASTERIONELLA	280#	35	--	-	--	-	22	3	29	14
....FRAGILARIA	320#	41	--	-	5	1	59	8	--	-
....SYNEDRA	--	-	--	-	--	-	*	0	--	-
..NAVICULACEAE										
....NAVICULA	--	-	--	-	*	0	--	-	--	-
..NITZSCHACEAE										
....NITZSCHIA	--	-	--	-	*	0	--	-	--	-
..TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	--	-
..CHRYSTOPHYCEAE										
..CHRYDOMONADALES										
....OCHROMONADACEAE										
....OCHROMONAS	--	-	82	10	--	-	--	-	--	-
..XANTHOPHYCEAE										
..HETEROCOCCALES										
..CHLOROTHECIACEAE										
....OPHIOCYTIUM	--	-	41	5	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
..CRYPTOMONADALES										
....CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	100	14	--	-
....CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	27	3	9	1	75	10	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
..CHROOCOCCALES										
....CHROOCOCCACEAE										
....AGMENELLUM	--	-	220#	25	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
..NOSTOCACEAE										
....ANABAENA	160#	20	--	-	--	-	--	-	--	-
....OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	81	11	--	-
..RIVULARIACEAE										
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	29	14
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
..PERIDINIALES										
..GLENODINIACEAE										
....GLENODINIUM	--	-	14	2	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAR 29.79 1030	MAY 29.79 1030	JUN 26.79 1000	JUL 26.79 1000	AUG 27.79 1000
TOTAL CELLS/ML	2900	2100	100	360	890
DIVERSITY: DIVISION	0.8	1.3	1.3	1.2	0.4
..CLASS	0.8	1.3	1.3	1.2	0.4
...ORDER	1.4	1.5	1.5	1.6	0.6
...FAMILY	1.6	1.7	1.5	2.2	2.3
....GENUS	2.1	1.8	1.5	2.2	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	13	4	5	1
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	42	5
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	180#	21
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	410#	47
...OOCYSTACEAE										
....ANKISTRODESMUS	190	7	39	2	13	13	--	-	*	0
....OOCYSTIS	94	3	--	-	--	-	--	-	14	2
...TETRAEDRON	--	-	--	-	--	-	--	-	7	1
...TREUBARIA	--	-	--	-	--	-	--	-	*	0
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	20	2
...SCENEDESMUS	280	10	51	2	--	-	52	14	110	12
...TETRASTRUM	--	-	--	-	--	-	--	-	--	-
...TETRASPORALES										
...PALMELLACEAE										
...SPHAEROCYSTIS	--	-	--	-	--	-	100#	29	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	13	13	--	-	12	1
...VOLVOCAEAE										
...PANDORINA	--	-	210	10	--	-	--	-	--	-
...ZYGNEATALES										
...DESMIDIACEAE										
...COSMARIUM	--	-	--	-	--	-	--	-	*	0
...STAUSTRUM	--	-	--	-	--	-	--	-	*	0
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCACEAE										
...CYCLOTELLA	1700#	58	--	-	64#	63	--	-	25	3
...MELOSIRA	140	5	--	-	--	-	--	-	--	-
...STEPHANODISCUS	--	-	39	2	--	-	--	-	--	-
...PENNALES										
...FRAGILARIACEAE										
...ASTERIONELLA	380	13	370#	18	--	-	--	-	--	-
...FRAGILARIA	47	2	26	1	--	-	--	-	34	4
...SYNEDRA	47	2	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	--	-	--	-	--	-	*	0
...NITZSCHIAEAE										
....NITZSCHIA	--	-	13	1	--	-	13	4	5	1
...TABELLARIACEAE										
....TABELLARIA	--	-	39	2	--	-	--	-	--	-
CHRYSTOPHYCEAE										
...CHRYDOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
...XANTHOPHYCEAE										
...HETEROCOCCALES										
...CHLOROTHECIACEAE										
...OPHIOCYTIUM	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	64#	18	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	23	1	--	-	--	-	120#	32	5	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ST. LAWRENCE RIVER MAIN STEM

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04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JUNE 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAR 29,79 1030		MAY 29,79 1030		JUN 26,79 1000		JUL 26,79 1000		AUG 27,79 1000	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
..CHROOCYCEALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	13	13	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	1300#	62	--	-	--	-	--	-
...RIVULARIACEAE										
....RAPHIIDOPSIS	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Sampling method
		Dry weight	Ash weight			
May 29 to June 26	28	2.60	2.28	1.13	0.510	Polyethylene strip
June 26 to July 26	30	40.9	36.2	21.1	15.9	Polyethylene strip
July 26 to Aug. 27	32	22.6	19.4	19.4	4.13	Polyethylene strip
Aug. 28 to Sept. 25	28	14.8	13.4	27.8	8.64	Polyethylene strip

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO-NEAR MASSENA, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	330	260	350	350	370	330	310	360	310	320	300
2	310	340	260	350	340	370	330	310	330	320	320	330
3	330	340	270	340	350	360	320	310	330	340	320	300
4	310	340	270	---	350	360	325	320	330	320	315	300
5	310	340	270	340	350	370	330	310	340	320	315	300
6	320	340	260	340	350	360	330	310	360	330	310	300
7	310	340	270	340	350	360	330	310	340	320	315	300
8	330	330	260	---	350	350	330	310	360	320	310	300
9	320	340	270	340	350	350	330	310	330	320	315	300
10	320	340	270	340	350	360	320	310	360	340	315	300
11	320	340	260	340	350	340	335	310	340	320	320	300
12	320	340	260	350	340	340	330	320	340	360	315	300
13	310	330	260	350	340	350	330	300	340	320	315	300
14	---	330	260	350	340	350	330	310	350	320	310	290
15	---	340	270	350	350	340	330	310	330	---	315	295
16	310	340	290	350	350	350	340	310	330	320	310	300
17	310	340	270	350	350	350	330	310	330	---	315	290
18	320	350	---	350	350	350	340	310	340	320	310	290
19	350	340	270	350	360	350	340	300	340	320	310	290
20	320	340	300	360	350	350	345	310	340	320	305	340
21	320	340	250	350	340	350	340	330	340	320	340	---
22	320	350	---	360	340	350	340	350	340	310	340	295
23	320	340	320	360	350	350	330	290	330	340	310	290
24	320	340	320	350	350	350	340	290	340	340	305	290
25	320	350	350	370	350	350	320	300	330	320	340	300
26	330	340	350	330	350	360	320	300	340	310	305	300
27	330	340	340	330	340	360	310	300	310	320	310	300
28	330	300	350	340	370	370	310	---	310	355	290	300
29	340	300	350	340	---	400	310	310	310	325	300	300
30	330	270	350	340	---	325	310	340	310	320	290	330
31	330	---	340	350	---	330	---	360	---	340	300	---
MEAN	322	335	290	347	349	354	329	312	336	326	313	301

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	11.0	4.5	.5	.5	.5	2.0	7.0	12.0	17.0	23.0	21.0
2	15.0	10.5	4.5	1.0	.5	.5	2.0	7.0	12.5	17.0	23.0	21.5
3	14.0	10.5	4.0	1.0	.5	.5	2.0	7.0	12.5	17.0	23.0	21.0
4	14.0	10.5	4.0	.5	.5	.5	2.0	7.0	12.5	17.0	23.0	21.0
5	14.0	10.5	4.0	.5	.5	.5	2.0	7.0	12.5	17.0	23.5	21.0
6	14.0	10.5	4.0	.5	.5	.5	2.0	7.0	12.5	17.0	23.5	22.0
7	14.0	10.5	4.0	.5	.5	.5	2.0	8.0	13.0	17.0	23.0	21.0
8	14.0	10.5	4.0	---	.5	.5	2.0	8.0	13.5	17.0	23.0	21.0
9	13.0	10.5	4.0	.5	.5	.5	2.0	8.5	14.0	17.5	23.0	21.0
10	13.0	10.0	4.0	.5	.5	.5	3.0	9.0	14.0	17.5	23.0	20.5
11	13.0	10.0	3.0	.5	.5	.5	2.5	9.0	15.0	18.0	23.0	20.0
12	13.0	10.0	3.0	.5	.5	.5	3.0	9.0	15.0	18.0	22.5	19.0
13	13.0	9.5	3.0	.5	.5	.5	3.0	9.0	14.5	18.0	22.0	19.0
14	---	9.5	3.0	.5	.5	.5	3.0	10.0	14.5	18.5	22.0	19.0
15	---	9.0	3.0	.5	.5	.5	3.5	10.0	15.0	---	22.0	19.0
16	12.0	9.0	3.0	.5	.5	.5	3.5	10.0	16.0	19.0	21.0	18.0
17	12.0	9.0	3.0	.5	.5	.5	3.5	10.0	16.0	---	21.0	18.0
18	12.0	9.0	---	.5	.5	.5	4.0	10.5	17.0	20.0	20.5	18.0
19	12.0	8.5	---	.5	.5	.5	4.0	11.0	16.5	20.5	20.0	18.0
20	12.0	8.5	1.0	.5	.5	.5	4.5	12.0	17.0	21.0	20.5	18.0
21	12.0	8.0	1.5	.5	.5	.5	4.5	12.0	17.0	21.0	20.5	17.5
22	12.0	7.0	1.0	.5	.5	.5	5.0	12.0	17.0	21.0	20.0	18.0
23	12.0	7.0	1.0	.5	.5	.5	5.0	12.0	17.0	21.0	20.0	17.5
24	12.0	7.0	1.0	.5	.5	1.5	6.0	12.0	16.0	21.0	20.0	17.5
25	11.5	6.5	1.0	.5	.5	1.5	6.0	12.0	16.0	21.0	20.5	17.5
26	12.0	6.0	1.0	1.0	.5	2.0	6.0	12.0	16.0	21.5	20.5	17.0
27	11.5	5.5	1.0	.5	.5	2.0	6.0	12.0	16.0	21.0	21.0	17.0
28	11.0	4.5	1.0	.5	.5	1.5	6.5	12.0	16.0	21.5	21.0	17.0
29	11.0	4.5	.5	.5	---	2.0	6.5	12.0	16.0	21.5	21.0	17.0
30	11.0	4.5	.5	.5	---	2.0	7.0	12.0	17.0	22.0	21.0	17.0
31	11.0	---	.5	.5	---	2.0	---	12.0	---	22.5	21.0	---
MEAN	12.5	8.5	2.5	.5	.5	1.0	4.0	10.0	15.0	19.5	21.5	19.0

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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434604074361400, revised (042654529) LOST BROOK NEAR RAQUETTE LAKE, NY

LOCATION.--Lat 43°46'04", long 74°36'14" (revised), Hamilton County, Hydrologic Unit 04150305, on right bank 0.6 mi (1.0 km) upstream from mouth and Sagamore Lake, 1.3 mi (2.1 km) upstream from Sagamore Lake Outlet, 0.1 mi (0.2 km) downstream from confluence of East Inlet, and 4.0 mi (6.4 km) southeast of Raquette Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--17.0 mi² (44.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,910 ft (582 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 855 ft³/s (24.21 m³/s) Apr. 28, 1979, gage height, 8.49 ft (2.588 m); minimum, 2.1 ft³/s (0.059 m³/s) July 25, 1979, gage height, 3.11 ft (0.948 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 855 ft³/s (24.21 m³/s) Apr. 28, gage height, 8.49 ft (2.588 m); minimum, 2.1 ft³/s (0.059 m³/s) July 25, gage height, 3.11 ft (0.948 m).

REVISIONS.--The maximum discharge for the period December 1977 to September 1978 has been revised to 489 ft³/s (13.85 m³/s) May 10, 1978, gage height 7.51 ft (2.289 m), superseding figure published in the report for 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	18	9.6	14	10	6.0	376	106	45	6.0	7.0	41
2	7.7	16	9.6	50	9.2	6.0	191	79	30	9.0	7.4	23
3	7.5	14	9.6	190	8.6	6.2	171	63	22	12	7.4	20
4	7.0	13	10	120	8.4	6.6	131	88	18	10	7.2	17
5	7.0	12	18	60	8.0	16	88	95	15	8.0	7.0	15
6	13	12	18	44	7.6	34	68	67	14	6.8	6.0	36
7	19	11	17	35	7.2	140	63	50	12	5.8	5.2	165
8	17	11	21	28	6.8	180	43	46	11	5.2	4.9	81
9	15	10	39	22	6.6	140	35	60	11	4.8	4.3	41
10	13	10	35	18	6.2	100	32	71	11	4.5	4.8	25
11	12	9.9	28	16	6.0	70	27	59	9.9	4.3	5.8	19
12	12	9.7	23	14	6.0	50	27	46	9.7	4.0	5.8	15
13	11	9.2	20	14	5.8	40	26	39	9.9	3.8	5.6	12
14	42	9.4	17	15	5.6	37	43	35	9.2	3.6	5.2	14
15	141	9.4	15	18	5.6	40	69	31	8.8	3.5	5.0	62
16	75	9.2	14	25	5.6	41	61	27	8.2	3.4	4.9	48
17	39	8.8	13	23	5.4	35	67	24	7.3	3.2	4.9	30
18	26	21	13	21	5.4	27	67	21	6.8	3.1	5.0	21
19	22	30	12	18	5.4	22	63	20	6.5	3.0	5.4	16
20	19	23	12	17	5.6	20	59	18	6.0	2.8	5.4	14
21	17	18	12	16	5.6	19	67	18	5.4	2.7	5.2	12
22	15	15	12	16	5.6	26	91	22	5.2	2.6	5.0	11
23	14	13	11	16	5.6	40	117	20	5.2	2.4	4.8	10
24	14	14	11	15	5.6	80	178	20	5.0	2.3	4.8	9.2
25	14	12	11	15	5.8	580	208	29	4.9	2.2	19	8.4
26	15	11	11	15	6.0	400	337	38	4.8	2.8	36	8.0
27	44	10	10	14	6.0	184	480	37	4.5	4.5	39	7.5
28	54	9.8	10	13	6.0	103	562	38	4.4	5.0	55	7.3
29	36	9.6	10	12	---	70	247	39	4.4	4.6	34	8.0
30	26	9.6	10	12	---	77	136	44	4.3	4.3	146	8.2
31	21	---	10	11	---	185	---	67	---	4.3	97	---
TOTAL	783.1	388.6	471.8	917	181.2	2780.8	4130	1417	319.4	144.5	560.0	804.6
MEAN	25.3	13.0	15.2	29.6	6.47	89.7	138	45.7	10.6	4.66	18.1	26.8
MAX	141	30	39	190	10	580	562	106	45	12	146	165
MIN	7.0	8.8	9.6	11	5.4	6.0	26	18	4.3	2.2	4.3	7.3
CFSM	1.49	.76	.89	1.74	.38	5.26	8.10	2.68	.62	.27	1.06	1.57
IN.	1.71	.85	1.03	2.00	.40	6.07	9.02	3.09	.70	.32	1.22	1.76
CAL YR 1978 TOTAL	10932.1			MEAN 30.0	MAX 258	MIN 2.6	CFSM 1.76	IN 23.86				
WTR YR 1979 TOTAL	12898.0			MEAN 35.3	MAX 580	MIN 2.2	CFSM 2.07	IN 28.16				

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

434604074361400, revised (042654529) LOST BROOK NEAR RAQUETTE LAKE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to May 1979 (discontinued).

MINOR ELEMENTS DATA: 1978-79 (d).

WATER QUALITY DATA, OCTOBER 1978 TO MAY 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
NOV										
08...	0900	11	34	6.3	--	--	280	3	30	40
17...	1030	9.0	36	6.4	--	--	290	3	20	30
25...	1415	13	36	6.1	--	--	150	3	30	20
DEC										
08...	1015	20	35	5.9	--	--	240	6	30	20
16...	1500	15	36	5.8	--	--	200	3	20	20
JAN										
02...	1200	50	40	4.9	--	--	390	2	90	30
17...	1200	23	--	--	--	--	230	5	40	20
FEB										
13...	1000	5.8	36	6.5	--	--	110	0	60	30
MAR										
04...	0930	6.6	36	6.3	6	0	320	1	30	20
05...	0800	16	36	6.1	7	0	300	2	30	10
06...	1525	E34	38	4.9	13	6	280	1	80	20
07...	1430	E130	43	4.6	9	1	180	1	110	20
08...	1740	E180	43	4.5	1	1	260	1	100	40
09...	0805	E140	43	4.5	2	1	240	1	110	30
12...	1830	E50	38	4.7	2	0	220	2	90	160
19...	0915	E22	36	5.1	0	0	160	1	60	30
22...	1840	E26	34	5.3	6	0	170	3	50	80
26...	1230	E400	38	4.7	6	0	230	3	80	40
28...	0940	E103	37	4.7	11	0	110	5	60	30
APR										
04...	1300	142	37	4.7	13	3	210	3	80	20
09...	1630	34	37	4.9	2	1	200	0	70	50
14...	1630	53	35	5.1	7	1	200	2	60	40
21...	1415	67	36	4.9	2	0	170	0	60	30
MAY										
01...	1210	97	35	4.6	0	0	250	4	60	60
29...	1030	37	--	--	7	0	300	2	40	20

E Estimated.

DATE	TIME	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB					
13...	1000	160	0	0	0

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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434556074374401, revised (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY

LOCATION.--Lat 43°45'56", long 74°37'44", Hamilton County, Hydrologic Unit 04150305, on left bank 75 ft (23 m) downstream from bridge on private road at Sagamore Conference Center, 90 ft (27 m) downstream from outlet dam on Sagamore Lake, 0.8 mi (1.3 km) upstream from mouth, and 3.5 mi (5.6 km) southeast of Raquette Lake.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,900 ft (579 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 731 ft³/s (20.7 m³/s) Apr. 28, 1979, gage height 6.25 ft (1.905 m); minimum, 3.75 ft³/s (0.11 m³/s) July 25, 26, 1979, gage height, 3.13 ft (0.954 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 731 ft³/s (20.7 m³/s) Apr. 28, gage height, 6.25 ft (1.905 m); minimum discharge, 3.75 ft³/s (0.11 m³/s) July 25, 26, gage height, 3.13 ft (0.954 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	26	12	16	14	9.6	297	119	59	6.8	7.1	60
2	8.9	23	12	79	13	9.8	217	93	46	11	8.7	37
3	8.4	21	12	204	12	10	180	74	34	14	9.8	32
4	8.4	19	13	133	11	10	149	80	26	15	9.8	28
5	8.2	17	16	82	11	18	109	101	22	13	8.9	23
6	10	17	19	58	10	36	79	81	20	13	8.4	29
7	17	16	20	46	10	156	62	65	18	11	7.6	130
8	20	16	22	38	9.8	175	54	57	16	10	7.1	107
9	19	14	35	30	9.8	140	48	62	16	9.2	6.4	59
10	17	14	46	26	9.8	107	44	73	14	8.4	6.6	38
11	15	13	40	24	9.6	81	38	69	13	7.6	7.9	28
12	14	13	32	22	9.6	63	35	60	13	7.1	8.2	22
13	13	12	25	20	9.6	48	36	52	12	6.8	7.9	19
14	26	12	23	21	9.4	43	44	48	12	6.3	7.9	19
15	125	12	20	23	9.2	44	68	43	12	6.1	6.8	44
16	101	12	18	28	9.0	48	70	37	11	5.9	6.8	59
17	59	12	16	29	9.0	48	71	33	10	5.5	6.8	45
18	41	17	15	25	8.8	41	73	30	9.5	5.3	6.8	33
19	33	32	14	21	9.0	34	70	26	8.7	4.9	7.4	25
20	28	34	14	18	9.2	32	68	25	8.4	4.5	7.6	20
21	25	28	14	18	9.4	30	69	21	7.9	4.2	7.4	17
22	22	22	14	19	9.4	32	85	23	7.4	4.1	7.1	15
23	21	19	15	19	9.0	44	113	23	7.1	3.9	6.8	13
24	20	18	15	19	9.4	87	168	23	6.8	3.9	6.6	12
25	19	17	14	19	10	354	205	29	6.8	3.8	11	11
26	19	15	15	18	10	357	315	42	6.6	3.9	32	10
27	34	13	14	17	10	197	450	44	6.4	5.3	40	10
28	56	13	13	17	9.8	113	635	45	6.4	5.9	55	9.8
29	51	13	12	16	---	79	315	46	6.1	5.7	48	10
30	39	13	12	15	---	70	175	49	6.1	5.5	106	11
31	32	---	12	15	---	145	---	63	---	5.5	126	---
TOTAL	918.8	523	574	1135	279.8	2661.4	4342	1636	448.2	223.1	600.4	975.8
MEAN	29.6	17.4	18.5	36.6	9.99	85.9	145	52.8	14.9	7.20	19.4	32.5
MAX	125	34	46	204	14	357	635	119	59	15	126	130
MIN	8.2	12	12	15	8.8	9.6	35	21	6.1	3.8	6.4	9.8
CFSM	1.54	.91	.97	1.91	.52	4.48	7.56	2.75	.78	.38	1.01	1.70
IN.	1.78	1.01	1.11	2.20	.54	5.16	8.43	3.17	.87	.43	1.17	1.89
CAL YR 1978	TOTAL	13885.6	MEAN	38.0	MAX	544	MIN	5.1	CFSM	1.98	IN	26.94
WTR YR 1979	TOTAL	14317.5	MEAN	39.2	MAX	635	MIN	3.8	CFSM	2.05	IN	27.78

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

434556074374401, revised (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to June 1979 (discontinued).

MINOR ELEMENTS DATA: 1978-79 (e).

REVISIONS.--The figure of total recoverable lead for Aug. 30, 1978 (1200 hours) has been determined to be invalid and has been deleted.

WATER QUALITY DATA, OCTOBER 1978 TO MAY 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, VOLA- TILE, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT										
08...	1500	20	--	--	1	0	270	17	60	0
10...	0900	17	--	--	1	0	320	--	10	0
13...	1200	13	--	--	--	--	240	27	60	20
14...	1200	23	--	--	1	0	290	6	50	30
26...	1020	19	--	--	--	--	500	2	50	60
NOV										
02...	1150	22	31	5.4	--	--	500	1	50	50
08...	0930	15	31	5.8	--	--	480	4	60	10
17...	0945	12	32	6.1	--	--	470	7	70	20
25...	1315	16	32	6.1	--	--	420	5	60	20
DEC										
08...	1000	23	32	5.7	--	--	420	1	40	20
16...	1500	19	33	5.7	--	--	40	4	40	20
JAN										
02...	1000	46	--	--	--	--	350	6	40	30
17...	1600	29	--	--	--	--	280	0	60	20
FEB										
13...	1530	9.7	36	5.5	--	--	280	0	30	40
MAR										
04...	1000	E10	37	6.1	4	0	330	2	50	10
06...	1510	48	36	5.9	0	0	310	2	40	20
07...	1500	183	34	5.8	5	0	380	2	50	20
08...	1215	175	35	5.6	0	0	290	1	60	30
09...	0915	149	35	5.6	3	1	240	3	60	20
12...	1800	60	36	5.1	0	0	240	2	90	20
19...	1050	36	36	5.1	4	4	190	2	80	70
22...	1915	33	36	5.3	4	0	260	5	70	20
26...	1215	357	33	5.3	18	0	250	5	70	20
28...	1315	115	34	5.1	8	0	230	7	80	20
APR										
04...	1100	138	34	4.8	6	2	230	4	80	30
09...	1645	47	29	4.8	2	0	200	0	70	30
14...	1700	49	37	4.9	1	0	270	2	80	40
21...	1330	71	34	5.7	1	0	330	10	60	80
27...	1530	E450	31	5.7	6	0	400	17	60	220
29...	1330	E315	30	5.3	10	9	370	2	70	20
MAY										
01...	1310	116	30	5.1	3	0	320	4	70	30
08...	1145	57	29	5.2	10	7	320	5	70	30
21...	0930	21	28	5.3	4	0	250	0	70	40
29...	0900	48	--	--	6	0	180	1	50	30

DATE	TIME	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB 13...	1530	170	0	10

E Estimated.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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434556074374401, revised (0426545295) SAGAMORE LAKE OUTLET NEAR RAQUETTE LAKE, NY--Continued

WATER QUALITY DATA, OCTOBER 1978 TO MAY 1979

434556074374402 SAGAMORE LAKE OUTLET PRECIPITATION STATION a/

CHEMICAL QUALITY OF PRECIPITATION, OCTOBER 1978 TO JUNE 1979

PERIOD OF COLLECTION	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
Oct. 19 to Nov. 30	70	22	10	30
Nov. 30 to Mar. 6	300	7	20	10
<u>b/</u> Feb. 13	130	6	20	10
Mar. 6 to Apr. 4	90	19	10	30
Apr. 4 to May 8	10	6	10	10
May 8 to June 4	140	11	40	20

a The precipitation collector is located 300 ft (91 m) south of the gage.

b Composite sample of snowcover collected from snow survey course at this station.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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 (0.8 km) downstream from powerplant at Piercefield, and 1.5 mi (2.4 km) upstream from Dead Creek.

DRAINAGE AREA.--722 mi² (1,870 km²).

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1387: 1910, 1913, 1914(M), 1916, 1921.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft (457.846 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1912, nonrecording gage at same site (datum of gage lowered 2 ft or 0.6 m Jan. 1, 1911, to present datum).

REMARKS.--Records good except those for winter periods, which are fair. 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.

AVERAGE DISCHARGE.--71 years, 1,292 ft³/s (36.59 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,360 ft³/s (237 m³/s) May 8, 1972, gage height, 12.25 ft (3.734 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Oct. 12, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,740 ft³/s (162 m³/s) Apr. 6, gage height, 10.45 ft (3.185 m); minimum, 36.9 ft³/s (1.04 m³/s) July 25, gage height, 1.47 ft (0.448 m); minimum daily, 95 ft³/s (2.69 m³/s) July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	508	1130	645	917	1100	945	4670	5560	1650	360	202	1380
2	502	1260	665	1210	1090	1000	4950	5530	1700	359	256	1360
3	488	954	647	1480	1040	1090	5310	5620	1660	456	456	1320
4	546	1000	669	1680	1060	1070	5560	5550	1620	556	406	1270
5	459	998	687	1640	1020	1090	5700	5320	1540	583	425	1230
6	491	796	711	1620	908	1330	5650	5120	1470	539	372	1250
7	506	709	675	1620	843	1580	5580	4840	1370	543	348	1450
8	469	695	805	1630	757	1740	5470	4540	1340	493	357	1670
9	530	628	931	1600	703	1820	5280	4220	1260	516	287	1690
10	500	836	907	1600	702	1910	4920	3920	1150	471	308	1660
11	559	698	887	1500	718	1980	4750	3730	1130	458	494	1560
12	545	626	874	1520	666	2010	4470	3560	889	449	270	1510
13	535	634	876	1550	698	2020	4240	3310	697	456	267	1410
14	677	694	902	1550	704	2060	4110	3140	731	340	244	1360
15	681	654	889	1540	703	2090	3980	2970	708	233	255	1430
16	940	536	891	1510	685	2080	3870	2810	682	324	252	1470
17	1200	633	871	1480	679	2020	3750	2670	669	301	260	1500
18	1330	709	888	1460	642	2030	3700	2530	556	275	281	1480
19	1300	750	854	1410	644	2060	3660	2370	381	278	237	1440
20	1260	906	825	1390	625	1990	3630	2240	223	291	349	1420
21	995	837	841	1350	623	1960	3610	2100	211	282	297	1400
22	983	854	885	1390	683	1970	3600	1970	308	221	296	1330
23	965	762	857	1340	607	2020	3570	1800	241	270	333	1280
24	931	796	847	1300	662	2250	3670	1570	247	183	349	1100
25	700	726	881	1320	713	2780	3770	1440	382	134	659	788
26	714	509	859	1260	841	3310	3900	1390	351	98	691	666
27	696	670	905	1130	1030	3670	4090	1420	343	95	719	553
28	777	631	873	1100	953	3900	4540	1430	339	98	1060	487
29	918	606	860	1130	---	4110	4920	1460	404	125	1130	713
30	1180	699	838	1160	---	4220	5320	1500	347	193	1200	809
31	1290	---	838	1150	---	4390	---	1540	---	142	1280	---
TOTAL	24175	22936	25583	43537	22099	68495	134240	97170	24599	10122	14340	37986
MEAN	780	765	825	1404	789	2210	4475	3135	820	327	463	1266
MAX	1330	1260	931	1680	1100	4390	5700	5620	1700	583	1280	1690
MIN	459	509	645	917	607	945	3570	1390	211	95	202	487

CAL YR 1978 TOTAL 483594 MEAN 1325 MAX 5210 MIN 122
WTR YR 1979 TOTAL 525282 MEAN 1439 MAX 5700 MIN 95

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04267500 RAQUETTE RIVER AT SOUTH COLTON, NY

LOCATION.--Lat 44°30'42", long 74°53'00", St. Lawrence County, Hydrologic Unit 04150305, on left bank 300 ft (91 m) upstream from bridge on State Highway 56 at South Colton, 500 ft (152 m) downstream from Niagara Mohawk Power Corp. powerplant, and 0.8 mi (1.3 km) upstream from Cold Brook.

DRAINAGE AREA.--939 mi² (2,432 km²).

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft (268.849 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated 16 mi (26 km) upstream by Carry Falls Reservoir since 1953; considerable natural storage in large lakes above Piercefild. Large diurnal fluctuation caused by five powerplants.

AVERAGE DISCHARGE.--26 years, 1,756 ft³/s (49.73 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft³/s (275 m³/s) May 11, 1971, gage height, 9.80 ft (2.987 m); minimum, 1.3 ft³/s (0.037 m³/s) Feb. 1, 1962, Aug. 8, 1964, gage height, 1.53 ft (0.466 m); minimum daily, 4.6 ft³/s (0.13 m³/s) June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,750 ft³/s (219 m³/s) May 4, gage height, 8.76 ft (2.670 m); minimum, 14 ft³/s (0.40 m³/s) Jan. 24, gage height, 1.77 ft (0.539 m); minimum daily, 36 ft³/s (1.02 m³/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	556	1260	1410	404	1100	1610	4100	3900	2020	451	870	332
2	1200	1440	589	1490	1500	1730	4180	4010	1600	1460	946	487
3	2300	1520	279	1020	860	1630	4520	4920	2770	1320	884	352
4	1690	504	1270	1160	1500	2560	4860	7270	2450	66	244	1240
5	1930	583	1190	830	1800	2230	5060	6430	1820	571	715	1540
6	1540	1460	982	542	1400	3340	4520	6380	1880	646	556	1600
7	907	1490	1460	370	1200	3760	4780	6170	2510	576	737	1050
8	655	1370	1180	1030	1500	3730	5900	5970	1950	180	807	36
9	1320	953	676	1660	1400	3770	6220	5550	2160	671	659	938
10	1550	1310	439	1370	1500	3920	6320	4990	2330	1450	1350	1300
11	1570	1090	990	1170	2000	3820	6110	4670	2060	1050	79	779
12	1610	510	1440	726	1900	3670	6160	4090	1770	850	580	1860
13	1610	1760	1250	980	1360	3700	5560	3800	2220	913	911	967
14	393	1210	1560	1080	1560	3900	6200	3760	1960	608	899	1620
15	437	1530	1010	1060	1560	3880	6010	3750	1480	302	977	218
16	2660	1190	461	987	1900	3810	5630	3760	1440	906	1070	1130
17	1850	1590	769	1200	1800	3770	5180	3730	880	722	1200	1520
18	1430	1020	1460	1040	1200	3730	4670	3650	1210	913	521	1370
19	1860	266	1290	1230	1800	3700	4430	2980	2090	1320	365	1330
20	1740	1580	1310	615	1460	3690	4170	2910	1220	942	931	1320
21	504	1650	1330	870	1700	3700	3960	3200	1420	542	1120	1100
22	529	1340	978	1030	1550	3760	3910	2870	1140	530	879	715
23	1600	328	938	1190	1580	3850	3900	2940	1090	993	679	1530
24	1310	478	615	1200	1250	4050	3900	2190	856	1030	1090	1670
25	1240	543	327	1230	1840	4390	3880	2090	1180	1100	298	1610
26	1430	357	1180	1000	1550	4300	3860	1570	1390	745	123	1680
27	1100	1280	1240	740	1560	4020	3870	1340	1220	888	977	1100
28	640	907	1020	520	1550	3890	4210	1670	1210	189	1130	2060
29	100	1240	984	2000	---	3830	4070	1750	1450	475	988	1530
30	1500	1310	302	1500	---	3850	3970	1440	487	1210	928	1190
31	818	---	305	1600	---	3990	---	1900	---	763	1340	---
TOTAL	39579	33069	30234	32844	42880	109580	144110	115650	49263	24382	24853	35174
MEAN	1277	1102	975	1059	1531	3535	4804	3731	1642	787	802	1172
MAX	2660	1760	1560	2000	2000	4390	6320	7270	2770	1460	1350	2060
MIN	100	266	279	370	860	1610	3860	1340	487	66	79	36

CAL YR 1978 TOTAL 685914 MEAN 1879 MAX 5820 MIN 100
WTR YR 1979 TOTAL 681618 MEAN 1867 MAX 7270 MIN 36

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°50'20", long 74°58'45", St. Lawrence County, Hydrologic Unit 04150305, on right bank 250 ft (76 m) upstream from bridge on Grant Road at Raymondville, 0.3 mi (0.5 km) downstream from Trout Brook, 0.4 mi (0.6 km) downstream from Niagara Mohawk Power Corp. powerplant, and 18.0 mi (29.0 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,131 mi² (2,929 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft (55.879 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Extensive diurnal fluctuation caused by power and industrial operations. Flow regulated since 1953 by Carry Falls Reservoir, about 46 mi (74 km) upstream and by Niagara Mohawk Power Corp. powerplant, 0.4 mi (0.6 km) upstream; considerable natural storage in large lakes above Piercefield.

AVERAGE DISCHARGE.--35 years (1944-79), 2,040 ft³/s (57.77 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Apr. 5, 1974, gage height, 8.40 ft (2.560 m); maximum gage height, 9.24 ft (2.816 m) Feb. 22, 1954 (backwater from ice); minimum discharge, 2.2 ft³/s (0.062 m³/s) Sept. 18, 19, 1966; minimum daily, 7.0 ft³/s (0.20 m³/s) Oct. 15, 1951; minimum gage height, 0.42 ft (0.128 m) July 13, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,120 ft³/s (230 m³/s) Apr. 15, gage height, 6.30 ft (1.920 m); maximum gage height, 7.51 ft (2.289 m) Mar. 6 (backwater from ice); minimum discharge, 18 ft³/s (0.51 m³/s) Oct. 9, gage height, 0.61 ft (0.186 m); minimum daily, 424 ft³/s (12.0 m³/s) July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	1210	1200	940	1900	2100	4900	4700	2640	487	1110	790
2	717	1370	840	1100	1600	2100	5280	4450	3720	983	838	591
3	1420	1460	760	1400	1800	2300	5730	4470	2030	1670	1180	607
4	1370	988	820	1800	1600	2400	6430	6730	1540	919	583	878
5	1720	762	1000	1200	1800	3000	6500	7330	1370	494	553	1470
6	2210	1030	820	920	2000	6000	6480	6970	1780	460	838	1510
7	1190	1460	1200	860	1400	5800	4610	6810	1940	538	735	1740
8	1260	1640	1200	1000	1600	5400	5820	6690	2710	480	735	930
9	926	1750	1000	1300	2000	5000	6480	5930	2490	699	530	516
10	1160	1400	940	1800	2100	5000	6870	5710	2510	1120	1070	1230
11	1820	906	920	1700	2100	5000	7230	5140	2430	1120	640	1490
12	1720	926	1200	1500	1700	5000	6970	4660	2300	858	538	1480
13	1750	1320	1200	1600	1900	4800	6870	4320	1970	919	708	1550
14	1570	1460	1100	1600	2100	4700	6850	4060	1830	615	940	2130
15	3140	1450	940	1600	2200	5000	7720	3710	1790	429	994	3000
16	1520	1500	780	1600	2100	4800	7390	3880	1640	951	1070	2360
17	1620	1530	540	1700	1900	4500	6680	4040	1490	1070	940	1820
18	1500	1410	700	1900	1800	4400	5820	4100	1380	1000	717	1740
19	1460	1240	1700	2000	2000	4100	4790	3670	1670	962	453	1700
20	1520	1370	1700	1500	2200	4220	4900	3370	1470	951	599	1190
21	838	1480	1900	1800	2200	4100	4880	3040	1470	648	1450	1130
22	664	1420	1500	1700	2000	4720	4300	3340	1380	424	951	1440
23	1140	998	800	2000	2100	5100	4340	2950	1230	909	1110	1820
24	1370	552	640	1700	2100	5680	4280	2830	1130	972	972	1450
25	1370	708	600	1900	2200	6260	4420	2150	1240	972	523	1750
26	1490	559	740	1600	1800	6580	4340	2000	1360	1170	607	1890
27	1560	800	860	1800	2000	5660	4340	2130	1180	962	771	1860
28	1060	740	1100	2000	2200	4850	4900	2070	1370	568	1080	1650
29	559	760	1200	1800	---	4510	5010	2090	1450	516	1080	1550
30	1390	960	900	1600	---	4490	4880	2410	909	726	994	1520
31	1110	---	840	1800	---	4640	---	2570	---	962	1480	---
TOTAL	43264	35159	31640	48720	54400	142210	170010	128320	53419	25554	26789	44782
MEAN	1396	1172	1021	1572	1943	4587	5667	4139	1781	824	864	1493
MAX	3140	1750	1900	2000	2200	6580	7720	7330	3720	1670	1480	3000
MIN	559	552	540	860	1400	2100	4280	2000	909	424	453	516

CAL YR 1978 TOTAL 802588 MEAN 2199 MAX 6520 MIN 540
WTR YR 1979 TOTAL 804267 MEAN 2203 MAX 7720 MIN 424

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957, 1960-61, 1969-72 and April to September 1979.

CHEMICAL DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979 (d).

MINOR ELEMENTS DATA: 1969 (a), 1970 (b), 1979 (b).

PESTICIDE DATA: 1970 (a).

ORGANIC DATA: OC--1979 (d).

NUTRIENT DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979 (d).

BIOLOGICAL DATA:

Bacteria--1969-71 (a), 1979 (d).

Phytoplankton--1979 (b).

Periphyton--1979 (b).

SEDIMENT DATA: 1979 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1959 to September 1961 (unpublished), April to September 1979.

WATER TEMPERATURES: October 1959 to September 1961, April to September 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 377 micromhos Mar. 24, 1961; minimum 38 micromhos May 11, 12, 1979.

WATER TEMPERATURES: Maximum, 28.5°C July 25, 1979; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 150 micromhos Sept. 18; minimum, 38 micromhos May 11, 12.

WATER TEMPERATURES: Maximum, 28.5°C July 25.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
APR												
11...	1115	7450	60	7.0	3.5	2.0	14.2	104	150	49	16	8
MAY												
08...	1115	6760	38	6.7	11.0	1.0	--	--	K6	K12	13	6
30...	1000	2020	66	6.8	15.5	1.0	9.2	93	210	23	27	6
JUN												
14...	1030	2030	45	8.3	17.0	2.0	8.9	90	330	K17	16	2
27...	1300	591	55	6.8	17.0	2.0	9.1	95	280	69	23	5
JUL												
11...	1300	480	49	7.2	23.5	1.0	8.6	10	540	57	20	6
30...	1100	460	49	6.0	23.5	1.0	8.0	93	930	K16	19	4
AUG												
14...	0915	1650	54	7.3	20.0	2.0	8.8	96	220	52	20	4
29...	0945	440	50	6.6	21.0	3.0	9.0	100	240	53	21	6
SEP												
12...	0930	1640	52	6.8	15.0	1.0	9.7	95	360	K14	20	6
27...	0945	1880	49	6.7	15.0	2.0	10.2	100	100	K15	19	7

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- LITY (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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
APR												
11...	4.6	1.2	1.1	.5	8	6.7	1.4	.1	5.0	41	26	.16
MAY												
08...	3.8	.8	1.0	.4	7	6.2	1.3	.0	4.5	35	22	.34
30...	7.2	2.2	1.8	.3	21	6.8	1.6	.1	4.4	66	37	.26
JUN												
14...	4.5	1.1	1.1	.4	14	6.5	1.1	.1	4.2	18	28	.30
27...	6.3	1.8	1.7	.4	18	7.4	1.7	.1	4.0	36	34	.04
JUL												
11...	5.5	1.5	1.7	.4	14	7.0	1.7	.1	3.6	44	30	.22
30...	5.3	1.5	1.5	.4	15	6.4	1.5	.1	3.5	44	29	.21
AUG												
14...	5.6	1.5	1.6	.4	16	7.1	1.6	.1	3.5	19	31	.19
29...	5.6	1.6	1.7	.5	15	7.3	1.5	.1	3.8	44	31	.23
SEP												
12...	5.5	1.4	1.8	.5	14	7.0	2.1	.1	3.6	44	32	.18
27...	5.4	1.4	1.5	.4	12	8.8	1.9	.1	3.9	44	31	.24

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

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER
04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued
WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
APR 11...	.01	.34	.35	.21	.51	.01	.00	2	0	0	0	1
MAY 08...	.04	.28	.32	.32	.66	.01	.00	--	--	--	--	--
30...	.01	.30	.31	.22	.57	.02	.00	--	--	--	--	--
JUN 14...	.01	.10	.11	.08	.41	.01	.00	3	0	0	20	3
27...	.03	.07	.10	--	.14	.02	.01	--	--	--	--	--
JUL 11...	.05	.33	.38	.27	.60	.02	.01	--	--	--	--	--
30...	.00	.25	.25	.22	.46	.02	.01	3	0	0	20	0
AUG 14...	.00	.07	.07	.10	.26	.01	.01	--	--	--	--	--
29...	.02	.18	.20	.21	.43	.01	.00	--	--	--	--	--
SEP 12...	.01	.11	.12	.11	.30	.01	.01	--	--	--	--	--
27...	.00	.25	.25	.37	.49	.01	.01	0	0	0	20	0

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
APR 11...	1	10	10	2	2	8	3	430	80	24	3	50
MAY 08...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 14...	0	10	20	0	0	2	0	300	120	2	1	40
27...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--
30...	0	10	20	1	0	2	2	300	150	0	0	30
AUG 14...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 12...	--	--	--	--	--	--	--	--	--	--	--	--
27...	1	10	<10	0	2	2	2	380	260	4	1	20

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
APR 11...	20	<.5	<.5	0	0	0	0	20	10	--	22	.7
MAY 08...	--	--	--	--	--	--	--	--	--	5.8	--	--
30...	--	--	--	--	--	--	--	--	--	5.0	--	--
JUN 14...	20	<.5	<.5	0	0	0	0	20	8	--	38	.5
27...	--	--	--	--	--	--	--	--	--	6.5	--	--
JUL 11...	--	--	--	--	--	--	--	--	--	5.3	--	--
30...	20	<.5	<.5	0	0	0	0	20	4	--	4.2	.1
AUG 14...	--	--	--	--	--	--	--	--	--	5.8	--	--
29...	--	--	--	--	--	--	--	--	--	5.0	--	--
SEP 12...	--	--	--	--	--	--	--	--	--	--	--	--
27...	20	<.5	<.5	0	0	0	0	10	1	--	15	.1

04268000 RACQUETTE RIVER AT RAYMONDVILLE, NY--Continued

SUSPENDED-SEDIMENT MEASUREMENTS, MAY TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
MAY					JUL				
08...	1115	6760	2	37	30...	1100	460	1	1.2
30...	1000	2020	2	11	AUG				
JUN					14...	0915	1650	2	8.9
14...	1030	2030	2	11	SEP				
27...	1300	591	2	3.2	12...	0930	1640	1	4.4
JUL					27...	0945	1880	2	10
11...	1300	480	0	.00					

QUALITATIVE AND ASSOCIATED ANALYSES OF BIOLOGICAL DATA, MAY TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAY 8,79 1115	JUN 14,79 1030	JUL 11,79 1300	JUL 30,79 1100	AUG 14,79 0915
TOTAL CELLS/ML	290	26	640	77	460
DIVERSITY: DIVISION	1.0	1.0	0.7	1.3	0.6
..CLASS	1.0	1.0	0.7	1.3	0.6
..ORDER	1.0	1.0	1.0	1.3	1.2
...FAMILY	2.9	1.0	1.0	1.3	1.2
....GENUS	3.0	1.0	1.0	1.3	1.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	77	12	52#	67	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	14	5	13#	50	--	-	--	-	13	3
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	13#	50	--	-	13#	17	13	3
..PENNALES										
...ACHNANTHACEAE										
...ACHNANTHES	14	5	--	-	--	-	--	-	13	3
...COCCONEIS	14	5	--	-	--	-	--	-	--	-
...EUNOTIACEAE										
...EUNOTIA	28	10	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
...SYNEDRA	84#	29	--	-	--	-	--	-	--	-
...GOMPHONEMACEAE										
...GOMPHONEMA	56#	19	--	-	--	-	--	-	--	-
...NAVICULACEAE										
...NAVICULA	14	5	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	28	10	--	-	13	2	--	-	13	3
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	28	10	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	39	6	13#	17	52	11
...HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	520#	80	--	-	360#	78
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....TRACHELONAS	14	5	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

QUALITATIVE AND ASSOCIATED ANALYSES OF BIOLOGICAL DATA, MAY TO SEPTEMBER 1979

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll ^a	Chlorophyll ^b	Sampling method
		Dry weight	Ash weight	(mg/m ²)	(mg/m ²)	
May 30 to June 27	28	4.96	0.550	0.750	0.600	Polyethylene strip
June 27 to July 30	33	2.60	1.18	2.09	.720	Polyethylene strip
July 30 to Aug. 29	30	.160	.080	1.61	.830	Polyethylene strip
Aug. 29 to Sept. 12	14	.630	.470	.420	.000	Polyethylene strip

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) APRIL TO SEPTEMBER 1979
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	57	60	55	51	55
2							---	57	55	63	66	55
3							---	48	54	48	52	53
4							---	46	68	63	49	52
5							---	44	53	70	51	50
6							46	44	51	70	50	50
7							46	41	50	58	50	53
8							55	41	44	50	52	55
9							43	42	47	54	52	53
10							52	40	43	52	49	52
11							112	38	42	53	49	51
12							54	38	45	59	50	51
13							52	39	47	51	55	48
14							63	43	46	50	54	49
15							96	42	49	57	52	148
16							63	43	46	54	47	134
17							57	43	47	54	49	134
18							60	47	46	52	47	150
19							47	44	46	51	48	116
20							70	42	49	52	48	116
21							52	40	44	50	47	104
22							48	39	45	55	49	104
23							44	42	52	53	47	104
24							45	42	56	49	48	104
25							44	43	54	51	49	84
26							45	49	54	50	50	84
27							46	75	72	50	49	53
28							75	98	70	49	52	---
29							71	112	46	53	54	---
30							66	98	49	49	52	---
31							---	84	---	50	51	---
MEAN							58	52	51	54	51	80
WTR YR 1979	MEAN	57		MAX	150	MIN	38					

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, APRIL TO SEPTEMBER 1979
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	11.0	17.5	22.5	26.5	20.0
2							---	10.5	19.5	21.5	25.0	20.5
3							---	11.0	19.5	22.0	25.5	19.0
4							---	11.5	19.5	21.5	26.5	23.5
5							---	11.0	21.0	20.0	23.5	20.5
6							2.5	11.0	19.5	21.0	26.0	21.0
7							2.0	11.5	20.0	21.5	24.5	21.0
8							3.0	11.5	21.5	21.5	24.0	20.5
9							3.5	14.5	22.0	22.5	26.5	19.5
10							3.5	16.5	22.5	23.5	27.5	19.5
11							4.0	16.0	22.0	23.5	28.0	17.5
12							4.5	16.5	19.5	25.0	22.0	17.5
13							5.0	17.0	18.5	25.0	23.5	18.5
14							6.0	15.5	18.0	26.0	22.0	18.0
15							7.0	15.5	19.5	26.5	19.5	18.0
16							6.0	15.5	21.5	27.0	20.0	17.0
17							6.5	15.0	22.5	26.5	20.5	17.0
18							6.5	15.5	22.5	27.5	19.5	18.5
19							7.0	17.0	21.5	26.0	20.0	17.5
20							7.5	18.0	21.0	27.0	20.5	16.0
21							8.0	18.5	22.5	26.0	21.0	16.5
22							8.5	17.0	22.5	26.5	22.0	16.5
23							9.0	16.5	21.0	26.5	22.0	15.5
24							9.0	16.5	23.0	27.5	23.5	14.5
25							10.0	15.0	23.5	28.5	26.0	16.5
26							10.5	14.5	23.0	28.0	26.0	16.5
27							11.5	15.0	20.0	27.0	25.0	16.5
28							11.0	16.0	21.5	27.5	25.5	16.0
29							11.0	16.0	22.0	26.5	24.0	18.5
30							10.5	16.5	21.0	26.0	24.5	19.0
31							---	16.5	---	27.0	26.0	---
MEAN							7.0	15.0	21.0	25.0	24.0	18.0
WTR YR 1979	MEAN	18.5		MAX	28.5	MIN	2.0					

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°51'49", long 74°46'45", St. Lawrence County, Hydrologic Unit 04150306, on left bank 600 ft (183 m) upstream from highway bridge at Brasher Center, and 6.5 mi (10.5 km) downstream from West Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--616 mi² (1,595 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 584: Drainage area. WSP 1387: 1910-16, 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 217.23 ft (66.212 m) National Geodetic Vertical Datum of 1929. Prior to June 24, 1916, nonrecording gage at site 600 ft (183 m) 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 winter periods, which are poor. Slight diurnal fluctuation caused by powerplant operations above station.

AVERAGE DISCHARGE.--69 years, 1,045 ft³/s (29.59 m³/s), 23.04 in/yr (585 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) Apr. 6, 1937, gage height, 12.82 ft (3.908 m); maximum gage height recorded, about 15.3 ft (4.66 m) Apr. 6, 1937 (ice jam); minimum discharge observed, about 34 ft³/s (0.96 m³/s) Aug. 8, 1917, gage height, 5.25 ft (1.600 m); minimum daily, 37 ft³/s (1.05 m³/s) Aug. 8, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,600 ft³/s (159 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 7	0045	6,000 170	9.38 2.859	Mar. 25	1500	*6,820 193	*9.70 2.956

Minimum discharge, 134 ft³/s (3.79 m³/s) July 26, gage height, 5.69 ft (1.734 m); minimum daily, 184 ft³/s (5.21 m³/s) July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	701	410	560	680	620	3770	2320	1450	303	230	765
2	419	620	380	1000	660	700	3900	1950	1220	427	400	650
3	411	610	355	2230	640	860	4700	1690	1000	561	461	552
4	371	650	453	2000	600	1100	4720	1720	830	600	411	496
5	371	552	681	1800	580	1500	4000	1750	691	505	350	461
6	340	514	1600	1600	560	2600	3370	1620	571	479	320	496
7	355	552	1400	1400	540	5450	2700	1440	479	461	282	1970
8	419	479	1200	1200	520	4610	2200	1270	533	403	261	2150
9	411	487	660	1100	500	3920	2090	1120	542	355	242	1610
10	395	461	640	920	480	3630	1950	1010	514	325	236	1270
11	386	436	600	840	470	3160	1870	919	487	303	248	1070
12	310	427	560	780	460	2300	1750	885	453	296	242	874
13	347	419	520	740	450	1810	1720	885	581	275	248	775
14	542	453	500	840	440	2120	2650	931	600	268	242	1490
15	1620	470	480	1000	430	2450	3980	874	403	261	236	3980
16	1650	630	460	1100	420	1950	3630	852	427	340	242	2560
17	1390	524	440	1100	410	1720	3490	863	378	487	268	1690
18	1120	660	430	1000	400	1470	3090	819	355	479	282	1220
19	1000	852	420	980	390	1370	2760	775	275	427	282	1040
20	874	808	400	920	380	1370	2450	660	296	355	289	931
21	786	650	400	900	380	1480	2220	650	289	296	289	808
22	701	436	400	880	390	1810	2110	701	296	275	275	701
23	600	395	430	840	400	2400	2060	640	318	255	248	650
24	561	410	410	820	450	3850	2010	640	310	242	242	600
25	524	460	400	800	490	6350	1920	691	325	219	355	610
26	542	520	380	780	500	6270	1810	919	303	195	419	590
27	954	296	360	760	470	4750	1860	1210	296	184	600	430
28	1240	318	360	740	470	3850	3180	1240	268	236	1050	289
29	1130	395	350	720	---	2860	3330	1330	303	242	1110	378
30	954	450	370	700	---	2440	2810	1430	268	236	931	378
31	808	---	400	700	---	2860	---	1610	---	225	874	---
TOTAL	21871	15635	16849	31750	13560	83630	84100	35414	15061	10515	12165	31484
MEAN	706	521	544	1024	484	2698	2803	1142	502	339	392	1049
MAX	1650	852	1600	2230	680	6350	4720	2320	1450	600	1110	3980
MIN	310	296	350	560	380	620	1720	640	268	184	230	289
CFSM	1.15	.85	.88	1.66	.79	4.38	4.55	1.85	.82	.55	.64	1.70
IN.	1.32	.94	1.02	1.92	.82	5.05	5.08	2.14	.91	.63	.73	1.90

CAL YR 1978 TOTAL 401934 MEAN 1101 MAX 7380 MIN 255 CFSM 1.79 IN 24.27
WTR YR 1979 TOTAL 372034 MEAN 1019 MAX 6350 MIN 184 CFSM 1.65 IN 22.47

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1960, 1970-72, 1974 to current year.

CHEMICAL DATA: 1955 (a), 1960 (b), 1970-72 (a), 1975-79 (d).

MINOR ELEMENTS DATA: 1975, 1977-79 (b).

ORGANIC DATA: OC-1974 (b), 1978-79 (d).

NUTRIENT DATA: 1970-71 (a), 1975-79 (d).

BIOLOGICAL DATA:

Bacteria--1975-79 (d).

Phytoplankton--1975-77 (d), 1978 (c), 1979 (b).

Periphyton--1975-79 (b).

SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-79 (d).

REMARKS.--No temperature record Oct. 9.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: September 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1975; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 26.5°C July 27, 31, Aug. 1; minimum, freezing point Nov. 19 to Mar. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	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 (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT												
11...	1000	436	72	7.4	10.0	1.0	10.4	92	200	K16	32	6
NOV												
07...	1030	542	70	7.2	9.0	1.0	10.4	90	K210	K7	29	9
DEC												
05...	1000	691	92	7.8	1.0	2.0	13.2	93	170	500	35	12
JAN												
16...	1130	1050	88	7.4	.0	3.0	14.0	96	560	59	29	11
MAR												
15...	1030	2360	90	6.7	.5	2.0	--	--	44	200	32	8
APR												
05...	1115	3940	54	6.8	1.5	2.0	14.0	100	44	90	17	5
MAY												
03...	1000	1660	40	7.2	11.0	1.0	11.2	99	51	K15	22	2
31...	1215	1670	77	7.2	14.0	2.0	9.8	96	83	30	30	8
JUN												
25...	1015	298	78	7.3	14.0	1.0	9.8	94	190	23	37	7
JUL												
19...	0930	427	81	7.3	22.5	1.0	8.2	93	100	43	37	6
AUG												
13...	1300	242	90	7.4	17.0	1.0	9.7	100	93	K4	39	6
SEP												
12...	1130	901	56	7.1	13.0	2.0	10.2	96	130	43	24	11

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 (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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
11...	8.1	2.8	1.9	.7	26	7.1	1.8	.2	7.3	57	46	.11
NOV												
07...	7.6	2.5	1.8	.7	20	8.8	1.9	.1	6.8	53	42	.15
DEC												
05...	8.7	3.1	2.0	.7	23	9.4	1.7	.1	8.7	59	48	.35
JAN												
16...	6.9	2.8	1.8	.6	18	10	2.2	.1	8.3	60	44	.26
MAR												
15...	8.1	2.8	1.4	.6	24	9.5	1.5	.1	6.5	58	45	.34
APR												
05...	4.6	1.4	.9	.4	12	6.7	1.0	.0	4.7	41	27	.29
MAY												
03...	5.7	1.8	1.3	.5	20	6.4	1.2	.1	4.0	46	33	.11
31...	8.0	2.5	1.7	.3	22	6.1	1.3	.1	5.7	68	39	.11
JUN												
25...	9.6	3.1	2.0	.5	30	7.6	2.1	.1	5.1	54	49	.24
JUL												
19...	9.7	3.2	2.0	.5	31	7.1	2.0	.1	4.8	64	48	.10
AUG												
13...	10	3.4	2.2	.5	33	7.1	2.1	.1	5.2	44	51	.09
SEP												
12...	6.8	1.8	1.4	.4	13	8.1	2.0	.1	6.1	70	35	.07

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 11...	--	--	--	--	--	--	--	--	--	7.8	--	--
NOV 07...	0	<.5	<.5	0	0	0	0	10	0	--	40	.8
DEC 05...	--	--	--	--	--	--	--	--	--	5.3	--	--
JAN 16...	--	--	--	--	--	--	--	--	--	7.1	--	--
MAR 15...	6	<.5	<.5	0	0	0	0	30	20	--	26	.1
APR 05...	20	<.5	<.5	0	0	1	0	50	20	--	25	.4
MAY 03...	--	--	--	--	--	--	--	--	--	8.9	--	--
MAY 31...	--	--	--	--	--	--	--	--	--	8.4	--	--
JUN 25...	--	--	--	--	--	--	--	--	--	3.0	--	--
JUL 19...	--	--	--	--	--	--	--	--	--	6.1	--	--
AUG 13...	20	<.5	<.5	0	0	0	0	10	20	--	5.1	.5
SEP 12...	--	--	--	--	--	--	--	--	--	--	--	--

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 11...	1000	436	1	1.2	MAY 03...	1000	1660	5	22
NOV 07...	1030	542	1	1.5	MAY 31...	1215	1670	5	23
DEC 05...	1000	691	0	.00	JUN 25...	1015	298	1	.80
JAN 16...	1130	1050	4	11	JUL 19...	0930	427	2	2.3
MAR 15...	1030	2360	4	25	AUG 13...	1300	242	1	.65
APR 05...	1115	3940	3	32	SEP 12...	1130	901	3	7.3

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Sampling method
		Dry weight	Ash weight			
May 31 to June 25	25	1.26	0.870	0.510	0.080	Polyethylene strip
June 25 to July 19	24	13.7	8.19	6.09	1.21	Polyethylene strip
July 19 to Aug. 13	25	13.0	8.90	8.30	1.46	Polyethylene strip
Aug. 13 to Sept. 12	30	.390	.310	4.13	.980	Polyethylene strip

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE: TIME:	JUL 13,78 1000	AUG 10,78 1030	SEP 14,78 1000	NOV 7,78 1030
TOTAL CELLS/ML	2200	450	350	530
DIVERSITY: DIVISION	1.1	1.5	0.5	1.3
..CLASS	1.1	1.5	0.5	1.3
..ORDER	1.2	1.6	1.1	1.3
...FAMILY	1.3	2.7	2.5	2.2
....GENUS	1.5	2.7	2.8	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....COELASTRACEAE								
.....COELASTRUM	--	-	110# 24		--	-	--	-
....HYDRODICTYACEAE								
.....PEDIASTRUM	--	-	--	-	--	-	--	-
....OOCYSTACEAE								
.....ANKISTRODESMUS	44	2	--	-	--	-	28	5
....KIRCHNERIELLA	44	2	--	-	--	-	--	-
....OOCYSTIS	89	4	--	-	--	-	--	-
....SCENEDESMACEAE								
.....CRUCIGENIA	--	-	--	-	--	-	55	11
....SCENEDESMUS	--	-	28	6	44	13	42	8
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	67	3	--	-	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCEAE								
.....CYCLOTELLA	--	-	14	3	44	13	--	-
....MELOSIRA	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	200	9	55	12	110# 31		110# 21	
....COCconeis	--	-	--	-	22	6	--	-
....CYMBELLACEAE								
.....CYMBELLA	--	-	14	3	44	13	--	-
....DIATOMACEAE								
.....DIATOMA	--	-	--	-	--	-	--	-
....EUNOTIACEAE								
.....EUNOTIA	--	-	--	-	22	6	--	-
....FRAGILARIACEAE								
.....FRAGILARIA	--	-	--	-	--	-	83# 16	
....SYNEDRA	--	-	--	-	--	-	120# 24	
....GOMPHONEMATACEAE								
.....GOMPHONEMA	44	2	55	12	22	6	--	-
....NAVICULACEAE								
.....NAVICULA	67	3	96# 21		44	13	14	3
....NITZSCHACEAE								
.....NITZSCHIA	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
.....ANACYSTIS	1600#	75	83# 18		--	-	--	-
....HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	69	13
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
.....TRACHELOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	MAR 15.79 1030	MAY 3.79 1000	JUN 25.79 1015	AUG 13.79 1300
TOTAL CELLS/ML	76	190	440	480
DIVERSITY: DIVISION	0.4	1.0	1.3	0.6
..CLASS	0.4	1.0	1.3	0.6
..ORDER	0.4	1.5	1.9	0.6
...FAMILY	1.6	2.5	2.2	0.6
....GENUS	1.6	2.5	2.5	0.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
...PEDIASTRUM	--	-	--	-	64	15	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	13	3
....KIRCHNERIELLA	--	-	--	-	--	-	--	-
...OOCYSTIS	--	-	--	-	--	-	52	11
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
...SCENEDESMUS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
...CHLAMYDOMONAS	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCEAE								
...CYCLOTELLA	--	-	--	-	64	15	--	-
....MELOSIRA	--	-	29#	15	--	-	--	-
....STEPHANODISCUS	--	-	--	-	100#	24	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	43#	23	--	-	--	-
...COCCONEIS	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	15#	20	--	-	--	-	--	-
...EUNOTIACEAE	--	-	--	-	--	-	--	-
....EUNOTIA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	10	13	--	-	13	3	--	-
...SYNEDRA	--	-	43#	23	--	-	--	-
...GOMPHONEMACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	45#	60	29#	15	13	3	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	77#	18	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	29#	15	100#	24	--	-
...HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	410#	86
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	5	7	14	8	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%.

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	5.0	.0	.0	.0	.0	4.0	11.5	16.5	21.5	26.5	22.5
2	11.5	6.0	.0	.0	.0	.0	4.0	10.5	17.5	22.0	26.0	23.0
3	11.0	7.0	.0	.0	.0	.0	4.0	9.5	18.0	23.5	25.5	23.0
4	11.0	8.0	.0	.0	.0	.0	3.0	9.5	19.5	24.5	25.0	23.0
5	11.0	8.0	.0	.0	.0	.0	3.0	10.0	20.0	23.5	24.5	23.0
6	10.5	8.0	.0	.0	.0	.0	3.0	11.0	22.5	22.5	24.0	22.5
7	10.0	7.0	.0	.0	.0	.0	4.0	12.5	23.5	23.0	24.0	20.0
8	9.5	6.5	.0	.0	.0	.0	4.0	15.0	25.0	24.5	24.5	21.0
9	---	5.0	.0	.0	.0	.0	4.0	18.0	25.5	25.0	24.0	19.0
10	9.0	5.0	.0	.0	.0	.0	4.0	18.5	26.0	25.5	23.0	17.0
11	9.0	4.0	.0	.0	.0	.0	5.0	19.0	26.0	26.0	20.0	16.0
12	8.5	4.0	.0	.0	.0	.0	5.0	20.0	20.0	26.0	18.0	14.0
13	8.0	4.0	.0	.0	.0	.0	6.0	20.0	17.0	26.0	17.5	13.5
14	7.5	4.0	.0	.0	.0	.0	6.0	20.5	19.5	26.0	19.0	14.5
15	7.0	3.5	.0	.0	.0	.0	6.0	20.5	21.0	26.0	18.0	15.0
16	6.0	3.5	.0	.0	.0	.0	6.0	20.5	21.0	26.0	18.0	14.0
17	6.0	2.0	.0	.0	.0	.0	6.0	20.0	23.0	25.5	17.5	14.5
18	5.5	1.0	.0	.0	.0	.0	6.0	20.0	24.5	25.0	17.0	14.0
19	5.0	.0	.0	.0	.0	.0	6.0	19.5	24.0	24.0	17.5	13.0
20	4.0	.0	.0	.0	.0	.0	7.0	19.0	24.0	23.5	17.5	12.5
21	7.5	.0	.0	.0	.0	.0	8.0	19.0	22.0	25.0	18.5	13.5
22	9.0	.0	.0	.0	.0	.0	9.0	17.0	19.5	26.0	20.0	13.5
23	8.5	.0	.0	.0	.0	1.0	9.0	15.0	18.0	26.0	22.5	13.0
24	8.0	.0	.0	.0	.0	1.0	10.0	14.0	18.0	26.0	23.0	14.0
25	7.5	.0	.0	.0	.0	1.0	10.0	14.0	19.5	26.0	24.0	15.0
26	7.5	.0	.0	.0	.0	2.0	10.5	12.0	16.0	26.0	23.5	17.0
27	7.0	.0	.0	.0	.0	2.0	11.0	12.0	19.0	26.5	23.0	17.0
28	6.0	.0	.0	.0	.0	3.0	11.5	14.0	20.0	26.0	22.5	17.0
29	6.0	.0	.0	.0	---	3.0	11.5	14.5	21.0	26.0	22.5	17.0
30	5.0	.0	.0	.0	---	3.0	11.5	15.0	21.5	26.0	22.5	17.5
31	5.0	---	.0	.0	---	4.0	---	16.0	---	26.5	22.0	---
MEAN	8.0	3.0	.0	.0	.0	.5	6.5	15.5	21.0	25.0	21.5	17.0

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

451

04269043 DEER RIVER AT NORTH LAWRENCE, NY

LOCATION.--Lat 44°47'57", long 74°40'24", St. Lawrence County, Hydrologic Unit 04150306, on right bank 0.4 mi (0.6 km) upstream from abandoned railroad bridge, 0.5 mi (0.8 km) upstream from dam at Kraft Co. plant at North Lawrence, and 1.7 mi (2.7 km) downstream from Kingston Brook.

DRAINAGE AREA.--88.2 mi² (228 km²).

PERIOD OF RECORD.--December 1972 to April 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 330 ft (101 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

COOPERATION.--Observer services furnished by personnel of the Kraft Co. plant, North Lawrence N.Y.

AVERAGE DISCHARGE.--5 years (1973-78), 178 ft³/s (5.041 m³/s), 27.41 in/yr (696 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,740 ft³/s (106 m³/s) Mar. 23, 1977, gage height, 6.18 ft (1.884 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); maximum gage height, 12.03 ft (3.667 m) Jan. 8, 1973 (backwater from ice); minimum discharge, 18 ft³/s (0.51 m³/s) Aug. 20, 21, 1975, gage height, 1.35 ft (0.411 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 5	1500	ice jam	7.86 2.396	Mar. 25	2300	1,010 28.6	3.67 1.119

Minimum discharge, 43 ft³/s (1.22 m³/s) Oct. 1, gage height, 1.63 ft (0.497 m); minimum daily, 45 ft³/s (1.27 m³/s) Oct. 1, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	88	66	90	80	82						
2	50	80	78	500	84	72						
3	53	74	94	300	72	84						
4	53	68	110	230	74	88						
5	49	66	130	230	78	1100						
6	48	65	120	220	76	900						
7	50	61	110	170	78	660						
8	52	58	130	170	74	500						
9	49	56	130	130	72	420						
10	46	56	130	110	68	440						
11	45	53	86	86	64	440						
12	53	53	92	86	68	290						
13	72	52	100	94	66	190						
14	155	61	74	90	66	440						
15	282	74	84	160	64	330						
16	229	74	94	160	58	330						
17	177	66	90	120	56	200						
18	149	95	74	110	54	220						
19	128	99	60	98	58	170						
20	114	88	74	80	58	180						
21	102	110	90	84	58	300						
22	90	120	100	100	60	266						
23	86	130	120	88	58	351						
24	84	150	120	86	80	551						
25	77	72	110	86	84	953						
26	95	62	98	82	92	907						
27	194	52	90	90	80	565						
28	190	64	80	98	74	421						
29	152	76	76	94	---	347						
30	117	86	78	96	---	311						
31	99	---	84	86	---	380						
TOTAL	3185	2309	2972	4224	1954	12488	---	---	---	---	---	---
MEAN	103	77.0	95.9	136	69.8	403	---	---	---	---	---	---
MAX	282	150	130	500	92	1100	---	---	---	---	---	---
MIN	45	52	60	80	54	72	---	---	---	---	---	---
CFSM	1.17	.87	1.09	1.54	.79	4.57	---	---	---	---	---	---
IN.	1.34	.97	1.25	1.78	.82	5.27	---	---	---	---	---	---

CAL YR 1978 TOTAL 59846 MEAN 164 MAX 1140 MIN 32 CFSM 1.86 IN 25.24

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 (0.2 km) downstream from Niagara Mohawk Power Corp. powerplant at Chasm Falls, and 3.0 mi (4.8 km) downstream from Duane Stream.

DRAINAGE AREA.--132 mi² (342 km²).

PERIOD OF RECORD.--July 1925 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 (308.311 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Seasonal regulation of flow by upstream reservoirs. Diurnal fluctuation at low and medium flow caused by powerplant. A small diversion from tributary stream above station is used as water supply for village of Malone.

AVERAGE DISCHARGE.--54 years, 227 ft³/s (6.429 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft³/s (81.8 m³/s) Apr. 25, 1926, gage height, 5.0 ft (1.52 m); minimum, 9.8 ft³/s (0.28 m³/s) Sept. 26, 27, 1963, minimum daily, 28 ft³/s (0.79 m³/s) Sept. 4, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft³/s (44.5 m³/s) Mar. 25, gage height, 3.67 ft (1.119 m); minimum, 16 ft³/s (0.45 m³/s) June 29, gage height, 0.40 ft (0.122 m); minimum daily, 79 ft³/s (2.24 m³/s) June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES:

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	180	131	174	139	147	955	445	335	134	121	211
2	139	183	150	398	136	144	955	389	268	323	150	207
3	126	131	160	440	139	141	1160	323	226	234	164	250
4	116	170	170	389	126	153	1030	403	211	164	139	211
5	121	161	180	347	131	222	746	389	177	144	121	174
6	126	155	170	291	128	426	580	343	174	153	139	305
7	136	155	160	242	126	534	460	211	147	121	114	766
8	128	155	180	215	126	470	407	190	147	116	134	580
9	153	158	180	190	124	398	372	190	141	114	116	351
10	114	158	190	180	121	343	347	167	139	110	103	259
11	197	153	120	161	121	300	319	174	128	101	121	242
12	177	153	140	153	119	230	305	177	139	108	105	207
13	200	91	120	150	119	207	323	183	177	97	101	180
14	331	155	105	153	119	277	407	190	144	101	101	226
15	470	170	101	215	116	268	491	180	126	112	105	598
16	331	155	112	215	119	268	518	174	114	363	167	426
17	246	144	101	204	110	238	545	180	114	238	134	291
18	230	177	82	174	108	211	518	167	114	170	128	234
19	222	193	112	139	108	211	475	155	112	139	128	230
20	215	167	108	150	105	200	436	144	103	116	126	230
21	211	119	124	153	105	230	426	150	95	112	99	193
22	255	116	131	139	110	300	445	155	97	101	108	167
23	200	126	131	144	112	436	455	147	147	101	99	158
24	204	144	126	153	116	688	460	150	116	91	95	147
25	177	141	126	150	124	1240	440	197	121	91	161	134
26	200	124	139	155	193	1390	436	234	112	93	180	128
27	335	116	141	141	170	893	460	219	105	124	355	121
28	286	144	131	147	161	633	688	226	116	119	394	116
29	238	131	139	144	---	496	700	263	79	99	331	121
30	207	147	128	150	---	470	551	319	103	97	295	119
31	207	---	134	136	---	651	---	421	---	93	259	---
TOTAL	6414	4472	4222	6192	3531	12815	16410	7255	4327	4279	4893	7582
MEAN	207	149	136	200	126	413	547	234	144	138	158	253
MAX	470	193	190	440	193	1390	1160	445	335	363	394	766
MIN	114	91	82	136	105	141	305	144	79	91	95	116
CAL YR 1978	TOTAL	95850	MEAN 263	MAX 1240	MIN 82							
WTR YR 1979	TOTAL	82392	MEAN 226	MAX 1390	MIN 79							

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

453

04270200 LITTLE SALMON RIVER AT BOMBAY, NY

LOCATION.--Lat 44°56'24", long 74°33'24", Franklin County, Hydrologic Unit 04150307, on right bank 50 ft (15 m) downstream from bridge on road to Fort Covington Center, 0.5 mi (0.8 km) east of village of Bombay, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--93.6 mi² (242 km²).

PERIOD OF RECORD.--August to November 1957, July 1958 to current year. Occasional low-flow measurements, water years 1954-55, 1957.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft (53.008 m) National Geodetic Vertical Datum of 1929. August to November 1957, at site 100 ft (30 m) upstream at datum 0.72 ft (0.219 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--21 years (1958-79), 118 ft³/s (3.342 m³/s), 17.12 in/yr (435 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s (92.0 m³/s) Apr. 4, 1974, gage height, 12.90 ft (3.932 m); minimum, 8.0 ft³/s (0.23 m³/s) Aug. 6, 7, 1965, gage height, 1.52 ft (0.463 m); minimum gage height, 0.85 ft (0.259 m) Sept. 2, 1957, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1600	ice jam	6.81 2.076	Sept. 15	0600	*1,460 41.3	9.01 2.746
Mar. 6	0030	ice jam	*12.84 3.914				

Minimum discharge, 19.5 ft³/s (0.55 m³/s) July 31, gage height, 1.53 ft (0.466 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	43	43	160	74	80	446	128	117	29	25	41
2	29	39	41	410	70	76	416	116	80	48	36	31
3	32	37	40	300	66	74	639	102	59	53	32	28
4	29	35	43	240	68	94	338	171	49	42	34	28
5	26	34	52	220	70	150	292	181	42	34	31	27
6	27	34	80	200	68	800	279	134	39	36	60	28
7	28	35	78	170	70	600	236	107	36	32	43	287
8	29	35	80	160	68	470	171	95	36	28	32	131
9	27	34	90	110	64	480	160	86	38	26	26	72
10	26	34	64	74	62	480	184	74	51	25	26	49
11	25	32	54	72	60	370	242	67	42	25	29	49
12	43	31	60	70	62	210	234	63	42	32	29	50
13	70	30	64	72	60	170	194	69	65	31	25	42
14	110	35	64	80	62	150	313	87	55	27	24	197
15	190	51	60	100	56	190	466	70	40	29	24	957
16	170	46	64	130	52	270	402	66	33	86	24	247
17	150	41	68	100	52	500	375	69	30	107	25	123
18	130	49	60	92	52	400	238	60	28	72	23	89
19	110	62	56	80	54	310	183	53	29	43	24	77
20	96	51	70	76	54	270	147	49	27	33	26	72
21	86	37	84	80	54	260	129	46	26	29	26	59
22	80	33	94	86	54	240	118	50	26	25	24	51
23	76	29	100	82	54	270	114	46	31	24	21	46
24	72	38	98	80	62	330	104	44	35	24	24	42
25	70	43	100	78	74	280	98	56	34	23	28	40
26	110	32	96	76	84	260	95	110	31	23	30	37
27	126	28	92	82	86	240	100	142	27	25	31	34
28	114	34	86	92	82	197	355	118	26	24	86	33
29	73	38	82	100	---	180	253	147	25	23	53	34
30	56	45	80	90	---	178	169	189	26	22	38	35
31	47	---	86	80	---	271	---	247	---	20	46	---
TOTAL	2283	1145	2229	3842	1794	8850	7490	3042	1225	1100	1005	3036
MEAN	73.6	38.2	71.9	124	64.1	285	250	98.1	40.8	35.5	32.4	101
MAX	190	62	100	410	86	800	639	247	117	107	86	957
MIN	25	28	40	70	52	74	95	44	25	20	21	27
CFSM	.79	.41	.77	1.33	.69	3.05	2.67	1.05	.44	.38	.35	1.08
IN.	.91	.46	.89	1.53	.71	3.52	2.98	1.21	.49	.44	.40	1.21
CAL YR 1978	TOTAL	48758	MEAN 134	MAX 2130	MIN 23	CFSM 1.43	IN 19.38					
WTR YR 1979	TOTAL	37041	MEAN 101	MAX 957	MIN 20	CFSM 1.08	IN 14.72					

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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 (3 m) downstream from bridge on Sam Cook Road, 0.2 mi (0.3 km) downstream from Marble River, 2.4 mi (3.9 km) upstream from international boundary, and 4.1 mi (6.6 km) northeast of Chateaugay.

DRAINAGE AREA.--151 mi² (391 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft (125.373 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at Forge Dam on Upper and Lower Chateaugay Lakes.

AVERAGE DISCHARGE.--13 years (1967-79), 254 ft³/s (7.193 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft³/s (147 m³/s) Apr. 4, 1974, gage height, 7.33 ft (2.234 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s); maximum gage height, 10.99 ft (3,350 m) Feb. 11, 1966 (ice jam); minimum discharge, 37 ft³/s (1.05 m³/s) Aug. 22, 23, 24, 26, 27, 1979, gage height, 2.56 ft (0.780 m); minimum daily, 37 ft³/s (1.05 m³/s) Aug. 23, 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) Mar. 31, gage height, 5.35 ft (1.631 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s); minimum, 37 ft³/s (1.05 m³/s) Aug. 22, 23, 24, 26, 27, gage height, 2.56 ft (0.780 m); minimum daily, 37 ft³/s (1.05 m³/s) Aug. 23, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	140	110	187	180	100	1180	554	248	115	47	132
2	154	138	102	292	170	96	1030	492	245	140	44	132
3	147	135	110	198	150	94	1090	465	230	123	45	132
4	149	133	120	200	150	92	806	497	222	81	40	188
5	142	129	116	200	150	400	724	465	214	66	50	248
6	140	129	114	200	150	800	695	433	198	53	58	393
7	135	124	112	200	140	554	639	398	195	50	42	403
8	124	124	127	200	140	418	605	374	195	48	56	379
9	122	122	120	160	140	403	599	338	188	47	42	554
10	122	120	114	140	130	428	566	312	188	45	48	632
11	120	118	120	130	130	398	548	299	185	53	45	702
12	122	114	100	140	120	347	548	287	178	50	41	573
13	131	114	110	150	120	333	554	279	173	45	40	492
14	189	133	94	180	120	444	605	256	168	44	40	702
15	173	116	96	230	110	365	566	241	163	48	47	639
16	168	112	100	250	100	329	592	230	156	138	50	470
17	168	116	94	230	110	291	560	222	152	72	40	433
18	168	127	80	200	110	263	514	219	145	53	38	384
19	164	114	76	180	110	256	519	211	138	47	42	347
20	159	110	90	180	110	263	508	203	140	44	40	316
21	156	124	110	200	110	295	481	195	130	42	40	291
22	152	152	130	190	110	365	465	183	132	41	38	263
23	145	168	130	180	120	465	444	180	136	41	37	241
24	138	138	130	170	130	619	438	178	127	41	40	225
25	138	104	120	160	130	902	438	188	119	40	45	216
26	159	92	110	160	120	902	438	195	115	42	37	201
27	161	90	100	150	110	791	454	198	115	44	84	190
28	154	110	94	160	110	738	579	198	107	41	68	188
29	147	145	84	180	---	716	653	206	97	41	58	180
30	149	127	90	190	---	674	605	256	93	40	129	173
31	147	---	124	180	---	861	---	291	---	40	149	---
TOTAL	4609	3718	3327	5767	3580	14002	18443	9043	4892	1815	1620	10419
MEAN	149	124	107	186	128	452	615	292	163	58.5	52.3	347
MAX	189	168	130	292	180	902	1180	554	248	140	149	702
MIN	120	90	76	130	100	92	438	178	93	40	37	132
CAL YR 1978 TOTAL	98275		MEAN 269	MAX 2170	MIN 76							
WTR YR 1979 TOTAL	81235		MEAN 223	MAX 1180	MIN 37							

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04273500 SARANAC RIVER AT PLATTSBURGH, NY

LOCATION.--Lat 44°40'54", long 73°28'18", Clinton County, Hydrologic Unit 02010006, on right bank at Plattsburgh, 600 ft (183 m) downstream from Imperial Paper and Color Corp. dam, 3.0 mi (4.8 km) upstream from mouth, and 5.5 mi (8.8 km) downstream from Mead Brook.

DRAINAGE AREA.--608 mi² (1,575 km²). Prior to Nov. 12, 1919, 607 mi² (1,572 km²).

PERIOD OF RECORD.--March 1903 to September 1930, October 1943 to current year. Published as "near Plattsburgh," 1903-30.

REVISED RECORDS.--WSP 345: Drainage area. WSP 384: 1909-10 (monthly discharge only). WSP 1387: 1907-8. WSP 1437: 1908 (minimum daily only).

GAGE.--Water-stage recorder. Datum of gage is 155.74 ft (47.470 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1919, nonrecording gage and Nov. 12, 1919 to Sept. 30, 1930, water-stage recorder, at site 1.5 mi (2.4 km) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Considerable diurnal fluctuation caused by power and industrial operations. Slight regulation by storage in Upper and Lower Saranac Lakes and elsewhere. During year, city of Plattsburgh diverted an average of 3.43 ft³/s (0.097 m³/s) from Saranac River and Mead and West Brooks, tributaries above station, for municipal supply. About 1 ft³/s (0.028 m³/s) diverted from Great Chazy River basin into Saranac River for water supply of State Institutions at Dannemora.

AVERAGE DISCHARGE.--63 years, 835 ft³/s (23.65 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Apr. 8, 1928, from computation of flow over dam and through waste gates and powerplant; minimum daily, 3.6 ft³/s (0.102 m³/s) June 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,930 ft³/s (168 m³/s) Apr. 3, gage height, 7.92 ft (2.414 m); minimum gage height, 0.64 ft (0.195 m) June 24; minimum daily discharge, 3.6 ft³/s (0.102 m³/s) June 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	582	375	582	593	545	3470	2540	1230	89	291	599
2	393	529	346	657	681	616	3140	2210	1100	89	245	534
3	397	523	291	1240	588	599	4960	1990	999	124	397	472
4	443	513	149	1080	561	593	3700	2040	808	112	463	477
5	425	513	221	945	487	724	3160	1990	762	142	371	458
6	388	508	261	849	540	1050	2730	1800	755	96	367	498
7	440	513	363	849	540	1940	2410	1600	717	104	448	1480
8	480	518	503	864	560	1650	2100	1500	711	69	338	1430
9	470	523	463	893	580	1560	1940	1440	693	89	268	1240
10	450	518	468	856	620	1550	1850	1380	681	67	313	976
11	360	443	503	856	680	1540	1730	1300	693	80	298	968
12	331	415	472	781	600	1340	1720	1250	657	58	295	856
13	415	477	492	768	580	1130	1730	1260	633	91	534	755
14	566	622	508	730	700	1120	1940	1240	582	64	397	768
15	821	711	518	864	540	1140	2190	1170	545	57	264	1020
16	991	582	518	893	500	1170	2350	1130	453	42	295	1040
17	871	705	503	828	480	1110	2630	1030	313	221	384	953
18	922	835	468	762	470	991	2460	885	402	487	331	907
19	1010	749	453	878	450	1020	2330	768	429	411	291	835
20	808	539	305	856	411	1050	2210	717	137	363	305	795
21	717	523	331	762	518	1150	2130	724	41	305	393	755
22	828	518	545	775	448	1400	2140	705	45	295	327	749
23	984	487	534	808	477	1860	2150	616	72	233	298	711
24	622	663	487	762	503	2500	2190	669	54	195	305	693
25	472	539	508	687	458	4180	2060	762	5.1	206	305	693
26	448	482	539	762	534	4390	2050	1020	3.6	255	508	693
27	327	472	518	775	539	3480	2160	1010	47	245	593	633
28	327	255	518	724	545	2620	3160	1110	82	375	828	577
29	492	230	513	755	---	2000	3350	1140	62	367	657	545
30	599	367	550	724	---	2060	2930	1260	60	258	534	550
31	610	---	518	663	---	2440	---	1340	---	309	593	---
TOTAL	17655	15854	13741	25228	15183	50518	75070	39596	13771.7	5898	12236	23660
MEAN	570	528	443	814	542	1630	2502	1277	459	190	395	789
MAX	1010	835	550	1240	700	4390	4960	2540	1230	487	828	1480
MIN	248	230	149	582	411	545	1720	616	3.6	42	245	458

CAL YR 1978 TOTAL 348636.0 MEAN 955 MAX 4710 MIN 70
WTR YR 1979 TOTAL 308410.7 MEAN 845 MAX 4960 MIN 3.6

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04273900 LAKE PLACID AT LAKE PLACID, NY

LOCATION.--Lat 44°17'42", long 73°59'26", Essex County, Hydrologic Unit 02010004, on south shore of East Lake on Victor Herbert Drive, and 400 ft (122 m) north of State Highway 86 in village of Lake Placid.

DRAINAGE AREA.--20.1 mi² (52.1 km²) at outlet 0.7 mi (1.1 km) northwest of gage.

PERIOD OF RECORD.--November 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,859.42 ft (566.751 m) May 3, 1972; minimum, 1,857.60 ft (566.196 m) Oct. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,859.16 ft (566.672 m) Apr. 28, minimum, 1,857.67 ft (566.218 m) Oct. 4.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1857.74	1858.06	1857.97	1858.11	1858.22	1858.05	1858.77	1858.81	1858.39	1858.11	1858.09	1858.32
2	1857.74	1858.05	1857.97	1858.21	1858.21	1858.04	1858.77	1858.71	1858.36	1858.17	1858.09	1858.30
3	1857.74	1858.05	1857.97	1858.30	1858.19	1858.03	1858.81	1858.64	1858.33	1858.23	1858.10	1858.31
4	1857.72	1858.04	1857.97	1858.31	1858.18	1858.03	1858.75	1858.61	1858.31	1858.22	1858.09	1858.29
5	1857.72	1858.04	1857.97	1858.31	1858.18	1858.04	1858.70	1858.58	1858.29	1858.22	1858.08	1858.27
6	1857.75	1858.03	1857.97	1858.30	1858.16	1858.14	1858.64	1858.53	1858.28	1858.22	1858.07	1858.35
7	1857.76	1858.03	1857.97	1858.29	1858.16	1858.24	1858.60	1858.49	1858.25	1858.20	1858.05	1858.55
8	1857.75	1858.03	1857.98	1858.31	1858.15	1858.28	1858.53	1858.45	1858.24	1858.19	1858.03	1858.54
9	1857.74	1858.01	1858.01	1858.30	1858.15	1858.28	1858.49	1858.45	1858.22	1858.19	1858.02	1858.47
10	1857.73	1858.01	1858.01	1858.28	1858.14	1858.28	1858.47	1858.46	1858.21	1858.18	1858.04	1858.42
11	1857.73	1858.00	1858.00	1858.26	1858.13	1858.27	1858.43	1858.46	1858.20	1858.17	1858.07	1858.39
12	1857.73	1858.00	1858.00	1858.25	1858.12	1858.26	1858.39	1858.43	1858.20	1858.16	1858.06	1858.36
13	1857.74	1857.98	1858.00	1858.23	1858.11	1858.25	1858.37	1858.42	1858.19	1858.16	1858.04	1858.33
14	1857.85	1858.00	1858.02	1858.24	1858.09	1858.25	1858.37	1858.41	1858.17	1858.16	1858.03	1858.33
15	1857.97	1857.99	1858.02	1858.24	1858.09	1858.25	1858.38	1858.38	1858.14	1858.14	1858.04	1858.39
16	1857.98	1857.98	1858.02	1858.22	1858.08	1858.24	1858.39	1858.36	1858.14	1858.19	1858.06	1858.38
17	1857.98	1857.98	1858.03	1858.22	1858.07	1858.23	1858.41	1858.34	1858.13	1858.20	1858.05	1858.35
18	1857.97	1858.02	1858.06	1858.22	1858.07	1858.21	1858.41	1858.31	1858.12	1858.17	1858.04	1858.32
19	1857.98	1858.03	1858.04	1858.21	1858.06	1858.20	1858.41	1858.29	1858.10	1858.16	1858.05	1858.33
20	1857.97	1858.03	1858.03	1858.20	1858.05	1858.19	1858.41	1858.27	1858.08	1858.14	1858.07	1858.30
21	1857.97	1858.02	1858.06	1858.22	1858.04	1858.18	1858.42	1858.26	1858.06	1858.12	1858.06	1858.28
22	1857.97	1858.01	1858.07	1858.23	1858.04	1858.19	1858.45	1858.26	1858.05	1858.11	1858.06	1858.27
23	1857.97	1858.00	1858.06	1858.22	1858.04	1858.23	1858.51	1858.24	1858.02	1858.10	1858.05	1858.24
24	1857.96	1858.01	1858.06	1858.21	1858.04	1858.34	1858.58	1858.24	1858.01	1858.09	1858.05	1858.22
25	1857.95	1858.01	1858.10	1858.25	1858.03	1858.65	1858.63	1858.27	1858.01	1858.07	1858.10	1858.21
26	1857.97	1858.00	1858.12	1858.26	1858.05	1858.80	1858.70	1858.29	1857.98	1858.08	1858.12	1858.19
27	1858.04	1857.98	1858.13	1858.25	1858.06	1858.74	1858.80	1858.31	1857.97	1858.13	1858.18	1858.18
28	1858.07	1857.99	1858.11	1858.24	1858.06	1858.66	1859.10	1858.32	1858.00	1858.12	1858.20	1858.16
29	1858.08	1857.99	1858.11	1858.23	---	1858.59	1859.05	1858.35	1858.07	1858.11	1858.21	1858.16
30	1858.07	1857.97	1858.10	1858.22	---	1858.55	1858.93	1858.38	1858.09	1858.10	1858.30	1858.15
31	1858.07	---	1858.10	1858.23	---	1858.62	---	1858.39	---	1858.08	1858.34	---
MEAN	1857.88	1858.01	1858.03	1858.24	1858.11	1858.30	1858.59	1858.41	1858.15	1858.15	1858.09	1858.31
MAX	1858.08	1858.06	1858.13	1858.31	1858.22	1858.80	1859.10	1858.81	1858.39	1858.23	1858.34	1858.55
MIN	1857.72	1857.97	1857.97	1858.11	1858.03	1858.03	1858.37	1858.24	1857.97	1858.07	1858.02	1858.15
CAL YR 1978	MEAN	1858.12	MAX	1858.79	MIN	1857.71						
WTR YR 1979	MEAN	1858.19	MAX	1859.10	MIN	1857.72						

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 (213 m) upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi (0.8 km) upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi² (513 km²).

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 (166.229 m) National Geodetic Vertical Datum of 1929.

Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft (122 m) upstream from confluence with West Branch at datum 3.54 ft (1.079 m) lower.

REMARKS.--Records good except those for periods of no gage-height record, May 16 to June 19 which are fair, and those for winter periods, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown.

AVERAGE DISCHARGE.--55 years, 310 ft³/s (8.779 m³/s), 21.26 in/yr (540 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft³/s (569 m³/s) Sept. 22, 1938, gage height, 12.91 ft (3.935 m), from rating curve extended above 5,800 ft³/s (164 m³/s) on basis of velocity-area studies; minimum observed, 20 ft³/s (0.57 m³/s) Aug. 11, 14, 28, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft³/s (105 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 6	1000	ice jam	7.65 2.332	Apr. 28	0500	*10,500 297	*9.35 2.850
Mar. 25	1000	5,960 169	7.31 2.228	Sept. 6	2400	6,840 194	7.76 2.365

Minimum discharge, 35 ft³/s (0.991 m³/s) July 26, gage height, 0.98 ft (0.299 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	122	98	300	110	130	2030	1160	700	88	46	248
2	55	112	92	1300	100	130	1370	846	480	460	51	168
3	66	102	110	600	94	140	1850	683	410	210	117	197
4	61	93	120	400	90	220	1180	1060	300	180	93	195
5	68	89	140	280	88	600	904	954	250	140	69	148
6	177	87	120	200	86	3000	705	685	240	130	63	1570
7	324	85	110	180	84	2230	546	538	200	110	54	2770
8	203	83	150	160	84	1170	435	502	170	90	48	887
9	154	81	170	140	86	768	407	930	160	76	44	474
10	125	77	150	120	86	626	377	1050	160	68	47	299
11	105	73	120	110	86	556	337	870	150	64	76	230
12	98	75	120	110	88	393	353	756	170	62	75	185
13	96	70	100	120	94	329	413	656	180	58	63	154
14	517	79	90	130	100	427	520	591	160	52	57	140
15	871	77	82	140	96	445	522	429	140	52	59	1110
16	395	75	80	140	88	329	664	360	110	52	76	510
17	250	71	76	130	82	299	661	320	98	56	95	318
18	186	344	74	120	80	256	560	270	90	50	72	228
19	156	231	82	110	84	246	521	240	82	47	70	183
20	142	154	84	100	94	249	492	220	76	45	71	162
21	125	142	84	120	130	279	538	210	69	42	72	143
22	112	107	84	160	160	446	742	200	65	40	62	129
23	105	139	84	220	140	880	1110	180	66	38	53	114
24	100	120	82	160	140	2030	1320	180	70	37	50	104
25	96	94	86	150	130	4650	1530	1000	65	36	289	96
26	96	86	88	160	130	2490	2250	1200	59	38	413	89
27	261	94	84	160	130	1200	3560	720	56	69	492	80
28	282	100	82	150	130	769	6090	580	55	66	578	73
29	212	110	80	130	---	633	2650	720	93	56	307	80
30	167	100	80	120	---	691	1560	960	100	51	404	76
31	146	---	100	110	---	1880	---	980	---	45	411	---
TOTAL	5804	3272	3102	6530	2890	28491	36197	20050	5024	2608	4477	11160
MEAN	187	109	100	211	103	919	1207	647	167	84.1	144	372
MAX	871	344	170	1300	160	4650	6090	1200	700	460	578	2770
MIN	53	70	74	100	80	130	337	180	55	36	44	73
CFSM	.94	.55	.51	1.07	.52	4.64	6.10	3.27	.84	.43	.73	1.88
IN.	1.09	.61	.58	1.23	.54	5.35	6.80	3.77	.94	.49	.84	2.10

CAL YR 1978	TOTAL	128920	MEAN 353	MAX 3250	MIN 41	CFSM 1.78	IN 24.22
WTR YR 1979	TOTAL	129605	MEAN 355	MAX 6090	MIN 36	CFSM 1.79	IN 24.35

LOCATION.--Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft (152 m) north of Hooper's dock at Rogers Rock, and 0.4 mi (0.6 km) west of Baldwin.

PERIOD OF RECORD.--July 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 315.93 ft (96.295 m) National Geodetic Vertical Datum, 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 mi² (114 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.09 ft (1.551 m) Apr. 9, 1936; minimum, 0.64 ft (0.195 m) Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.17 ft (1.271 m) Apr. 6; minimum, 2.70 ft (0.823 m) Feb. 26.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.02	3.00	2.97	3.20	3.39	2.77	3.82	3.93	4.05	3.56	3.75	3.63
2	2.96	3.05	2.93	3.34	3.36	2.77	3.85	3.87	4.04	3.63	3.79	3.65
3	2.97	3.02	2.90	3.57	3.33	2.79	3.95	3.83	4.01	3.64	3.82	3.66
4	2.98	3.02	2.96	3.60	3.33	2.80	3.94	3.83	3.95	3.63	3.81	3.62
5	2.99	3.01	2.95	3.55	3.33	2.99	4.00	3.77	3.92	3.62	3.81	3.64
6	3.05	3.02	2.94	3.50	3.30	3.34	4.02	3.73	3.87	3.63	3.74	3.75
7	3.11	2.97	2.92	3.47	3.23	3.59	3.98	3.66	3.84	3.62	3.75	3.86
8	3.08	3.00	2.95	3.50	3.22	3.65	3.90	3.63	3.81	3.63	3.70	3.80
9	3.07	3.01	2.95	3.51	3.17	3.69	3.85	3.61	3.75	3.62	3.62	3.79
10	3.06	2.97	3.02	3.48	3.13	3.73	3.89	3.54	3.73	3.62	3.65	3.78
11	3.04	3.00	3.01	3.42	3.09	3.77	3.87	3.54	3.72	3.61	3.67	3.68
12	3.06	2.91	3.03	3.39	3.06	3.78	3.81	3.58	3.69	3.60	3.65	3.65
13	3.00	2.98	3.05	3.37	3.01	3.75	3.80	3.56	3.65	3.61	3.64	3.67
14	3.04	3.00	3.04	3.39	2.97	3.77	3.81	3.55	3.63	3.59	3.70	3.67
15	3.11	2.96	3.02	3.39	2.95	3.74	3.81	3.55	3.62	3.61	3.65	3.68
16	3.08	2.93	3.01	3.35	2.93	3.73	3.81	3.55	3.62	3.73	3.60	3.65
17	3.08	2.94	3.06	3.35	2.91	3.69	3.83	3.53	3.64	3.67	3.59	3.63
18	3.10	3.01	3.07	3.34	2.88	3.64	3.83	3.55	3.57	3.72	3.61	3.61
19	3.09	2.99	3.04	3.33	2.88	3.62	3.83	3.55	3.59	3.75	3.60	3.53
20	3.07	2.94	2.98	3.31	2.86	3.58	3.84	3.57	3.60	3.75	3.58	3.52
21	3.09	2.92	3.06	3.38	2.83	3.57	3.86	3.60	3.60	3.74	3.59	3.48
22	3.08	2.92	3.04	3.44	2.82	3.57	3.85	3.57	3.61	3.75	3.58	3.36
23	3.06	2.94	3.05	3.43	2.78	3.60	3.85	3.59	3.62	3.71	3.60	3.35
24	3.07	2.98	3.02	3.39	2.79	3.64	3.82	3.56	3.57	3.70	3.61	3.35
25	3.11	2.97	3.10	3.41	2.76	3.76	3.81	3.66	3.52	3.71	3.61	3.36
26	3.11	2.95	3.19	3.44	2.79	3.89	3.78	3.79	3.56	3.75	3.59	3.34
27	3.06	2.92	3.18	3.44	2.80	3.90	3.79	3.89	3.59	3.75	3.61	3.33
28	3.10	3.00	3.16	3.43	2.80	3.87	3.89	3.91	3.55	3.77	3.63	3.34
29	3.04	2.99	3.13	3.44	---	3.88	3.93	4.01	3.55	3.75	3.64	3.34
30	3.06	2.98	3.13	3.41	---	3.84	3.93	4.06	3.53	3.73	3.66	3.35
31	3.06	---	3.15	3.40	---	3.86	---	4.10	---	3.77	3.60	---
MEAN	3.06	2.98	3.03	3.42	3.03	3.57	3.87	3.70	3.70	3.68	3.66	3.57
MAX	3.11	3.05	3.19	3.60	3.39	3.90	4.02	4.10	4.05	3.77	3.82	3.86
MIN	2.96	2.91	2.90	3.20	2.76	2.77	3.78					

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DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	8.9	7.2	19	18	10	104	70	53	6.5	12	3.9
2	2.9	8.0	6.8	380	17	10	123	59	45	14	20	3.5
3	2.8	7.7	8.0	250	16	11	179	52	56	12	24	4.3
4	3.4	7.4	9.0	200	15	18	111	52	39	7.2	12	3.6
5	4.5	7.2	16	150	14	600	98	45	41	7.7	8.1	3.2
6	18	6.9	14	100	14	1300	84	39	52	6.7	6.1	147
7	12	6.4	13	70	13	578	68	35	36	5.9	5.0	110
8	7.2	6.9	17	50	13	228	59	31	30	5.3	5.1	42
9	5.9	6.7	45	40	12	136	58	29	28	4.9	4.8	26
10	5.5	6.2	38	32	12	124	58	26	25	4.5	11	18
11	4.9	6.2	70	28	11	110	59	24	30	4.4	12	14
12	4.4	5.9	36	25	11	94	67	21	40	3.8	8.0	11
13	4.9	5.7	20	25	11	84	68	21	28	3.6	6.6	9.1
14	12	5.9	18	28	10	74	75	19	22	3.3	6.3	22
15	22	5.9	16	33	10	68	79	16	18	3.3	5.2	49
16	13	5.7	15	29	9.0	60	102	16	15	44	4.6	26
17	10	5.5	13	27	9.0	56	97	13	12	16	4.1	18
18	8.6	16	14	26	9.0	52	75	12	11	9.2	4.1	14
19	8.0	15	15	25	9.0	50	62	11	11	7.2	5.6	12
20	8.3	11	14	25	9.0	60	55	10	9.2	5.8	5.0	9.6
21	7.4	8.4	13	28	9.0	93	49	9.8	8.6	4.9	4.4	9.2
22	6.9	7.4	12	36	9.0	159	45	10	7.7	4.3	3.9	10
23	6.9	6.6	12	33	9.2	234	42	9.1	7.5	3.9	3.5	11
24	9.5	7.0	12	31	9.4	326	37	15	7.0	3.4	3.3	9.0
25	8.6	6.8	18	29	13	464	34	51	6.5	3.3	4.3	8.0
26	8.0	7.6	20	26	12	288	32	56	5.9	3.9	5.0	7.3
27	12	6.8	17	26	11	144	85	34	5.6	5.7	7.7	6.8
28	12	8.0	15	23	10	98	207	34	5.4	4.7	7.3	6.7
29	12	8.2	14	21	---	80	146	125	5.8	4.0	5.6	9.6
30	11	7.8	14	20	---	80	92	118	5.2	3.8	5.9	8.3
31	9.5	---	14	19	---	117	---	84	---	3.2	4.5	---
TOTAL	265.0	229.7	566.0	1854	324.6	5806	2450	1146.9	666.4	220.4	225.0	632.1
MEAN	8.55	7.66	18.3	59.8	11.6	187	81.7	37.0	22.2	7.11	7.26	21.1
MAX	22	16	70	380	18	1300	207	125	56	44	24	147
MIN	2.8	5.5	6.8	19	9.0	10	32	9.1	5.2	3.2	3.3	3.2
CFSM	.37	.33	.78	2.56	.50	7.99	3.49	1.58	.95	.30	.31	.90
IN.	.42	.37	.90	2.95	.52	9.23	3.89	1.82	1.06	.35	.36	1.00
CAL YR 1978	TOTAL	12084.4	MEAN	33.1	MAX	615	MIN	1.6	CFSM	1.42	IN	19.21
WTR YR 1979	TOTAL	14386.1	MEAN	39.4	MAX	1300	MIN	2.8	CFSM	1.68	IN	22.87

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04279000 LA CHUTE AT TICONDEROGA, NY

LOCATION.--Lat 43°50'38", long 73°25'57", Essex County, Hydrologic Unit 02010001, on right bank 250 ft (76 m) downstream from International Paper Co. "C" Mill dam, at Ticonderoga, 250 ft (76 m) upstream from Trout Brook, and 0.5 mi (0.8 km) downstream from upper ("A" Mill) dam.

DRAINAGE AREA.--234 mi² (606 km²).

PERIOD OF RECORD.--August 1904 to December 1905, October 1942 to September 1979 (discontinued). Prior to October 1973, published as "Lake George Outlet at Ticonderoga."

REVISED RECORDS.--WRD NY 1971: 1970.

GAGE.--Water-stage recorder and concrete control on river channel. Datum of gage is 190.41 ft (58.037 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1971, turbine gate-opening recorder in powerplant at "C" Mill dam. Prior to Dec. 31, 1905, nonrecording gage at site 2,000 ft (610 m) upstream at different datum.

REMARKS.--Records fair. Prior to June 25, 1971, discharge in tailrace determined from rating for turbine gage developed from discharge measurements. Since June 25, 1971, leakage through inoperative turbine gate determined from periodic discharge measurements. Records represent total discharge from Lake George and include flow in river channel and in tailrace. Flow regulated by Lake George (see station 04278000).

AVERAGE DISCHARGE.--37 years (1942-79), 313 ft³/s (8.864 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,370 ft³/s (38.8 m³/s) Mar. 17, 1977; minimum daily, 0.50 ft³/s (0.014 m³/s) Sept. 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,100 ft³/s (31.2 m³/s) May 31; minimum daily, 0.80 ft³/s (0.023 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	32	90	39	444	240	1010	973	1080	36	45	26
2	36	33	90	54	436	90	1040	1040	1090	45	53	28
3	25	33	89	367	436	88	1070	1030	1080	45	57	29
4	25	33	65	803	436	81	1050	1030	1070	42	53	23
5	25	32	40	789	436	339	1080	1000	1050	40	55	26
6	27	37	39	774	572	747	1090	983	1030	40	180	477
7	26	40	39	772	715	841	1070	960	1030	40	334	815
8	26	40	40	784	715	947	1030	962	1030	40	328	790
9	25	40	40	792	715	970	1010	638	1000	42	155	788
10	26	35	38	781	715	1000	1030	418	994	45	33	561
11	23	24	37	765	705	1020	1030	425	994	40	33	403
12	20	23	37	645	705	1020	1010	436	645	35	31	399
13	20	23	37	438	705	1010	1010	428	420	37	30	405
14	21	24	37	441	510	1020	993	211	207	36	42	417
15	21	23	37	441	375	1010	993	57	46	37	32	406
16	20	23	37	438	375	989	765	57	46	55	27	406
17	20	23	38	434	375	967	473	53	48	39	26	405
18	25	25	37	433	375	945	467	55	40	46	26	402
19	26	25	37	435	375	937	465	55	39	51	27	389
20	25	24	37	435	375	922	475	57	42	48	25	389
21	25	24	37	444	375	919	471	59	42	46	24	388
22	25	24	36	452	375	922	464	55	42	48	24	369
23	29	24	36	452	375	936	464	57	45	42	27	368
24	31	24	36	452	375	961	640	53	39	42	27	207
25	32	21	36	444	375	994	867	62	36	43	28	18
26	33	13	36	444	375	1040	867	75	39	51	25	18
27	33	27	36	452	375	1040	861	96	45	46	27	15
28	32	88	36	452	375	1020	874	93	39	51	26	10
29	32	101	38	460	---	1030	865	537	36	49	29	2.2
30	32	90	46	452	---	1030	881	1090	33	45	31	.80
31	32	---	36	452	---	1040	---	1100	---	53	24	---
TOTAL	844	1028	1350	15816	13495	26115	25415	14145	13377	1355	1884	8980.00
MEAN	27.2	34.3	43.5	510	482	842	847	456	446	43.7	60.8	299
MAX	46	101	90	803	715	1040	1090	1100	1090	55	334	815
MIN	20	13	36	39	375	81	464	53	33	35	24	.80

CAL. YR 1978 TOTAL 112190.00 MEAN 307 MAX 1080 MIN 12
WTR YR 1979 TOTAL 123804.00 MEAN 339 MAX 1100 MIN .80

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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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 (0.5 km) downstream from Carver Falls, 1.9 mi (3.1 km) upstream from Hubbardton River, and 3.2 mi (5.1 km) northwest of Fair Haven.

DRAINAGE AREA.--187 mi² (484 km²).

PERIOD OF RECORD.--Discharge: October 1928 to current year.
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records fair except those for winter period and period of no gage-height record, Nov. 8 to Dec. 18, which are poor. Flow regulated by powerplant upstream and by Lake Bomoseen. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--51 years, 251 ft³/s (7.108 m³/s), 18.23 in/yr (463 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s (419 m³/s) July 20, 1945, gage height, 24.36 ft (7.425 m), from high-water mark in well, from rating curve extended above 2,600 ft³/s (74 m³/s) on basis of computations of flow over dam at gage heights 16.10 ft (4.907 m), 21.40 ft (6.523 m), and 24.36 ft (7.425 m); minimum daily, 2.1 ft³/s (0.059 m³/s) Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft³/s (74 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	2345	*4220 120	14.27 4.349	Mar. 7	unknown	3200 91	ice jam

Minimum daily discharge, 6.6 ft³/s (0.19 m³/s) Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	87	88	100	320	330	727	324	548	93	30	13
2	12	101	82	1800	310	330	667	263	426	411	35	21
3	14	314	95	2860	300	350	850	184	355	199	43	23
4	35	298	120	1250	310	500	756	153	306	144	15	44
5	11	268	190	1050	330	1000	636	146	232	90	29	49
6	33	258	160	890	320	2300	652	132	282	114	33	199
7	70	279	120	830	290	3000	572	149	172	85	30	521
8	44	268	130	840	280	2400	481	89	159	66	32	324
9	38	240	260	850	270	2000	417	108	149	52	33	258
10	37	210	220	840	260	1700	398	93	140	72	23	206
11	35	170	180	790	260	1900	411	86	258	47	51	90
12	36	110	140	710	260	1580	464	85	693	50	49	132
13	37	86	135	610	260	1280	451	83	539	45	40	66
14	73	88	130	520	260	1380	434	72	308	48	43	133
15	157	84	120	500	260	1750	518	76	160	40	40	395
16	104	82	115	450	260	1250	542	40	137	26	33	203
17	82	130	110	400	260	1120	675	69	94	178	38	166
18	70	160	105	390	260	1020	659	49	85	197	6.6	67
19	66	200	84	370	255	957	590	49	75	57	54	43
20	73	160	70	360	250	984	507	49	72	53	44	73
21	72	130	72	400	240	1000	445	55	78	13	42	64
22	66	110	76	430	230	1100	387	45	56	32	37	59
23	64	100	72	450	300	1190	276	45	61	56	36	59
24	80	105	62	390	450	1240	206	52	34	33	26	51
25	78	95	58	370	580	1370	192	777	76	28	15	49
26	72	85	62	390	500	1230	182	1280	36	25	19	48
27	149	77	64	380	400	984	192	852	40	40	44	39
28	184	85	80	370	340	834	230	735	39	36	48	180
29	132	89	90	360	---	737	282	714	54	9.5	64	70
30	111	90	94	340	---	682	369	657	28	43	45	71
31	108	---	86	330	---	706	---	796	---	25	35	---
TOTAL	2154	4559	3470	20620	8615	38204	14168	8307	5692	2407.5	1112.6	3716
MEAN	69.5	152	112	665	308	1232	472	268	190	77.7	35.9	124
MAX	184	314	260	2860	580	3000	850	1280	693	411	64	521
MIN	11	77	58	100	230	330	182	40	28	9.5	6.6	13
CFSM	.37	.81	.60	3.56	1.65	6.59	2.52	1.43	1.02	.42	.19	.66
IN.	.43	.91	.69	4.10	1.71	7.60	2.82	1.65	1.13	.48	.22	.74
CAL YR 1978	TOTAL	90012.0	MEAN	247	MAX	1970	MIN	11	CFSM	1.32	IN	17.91
WTR YR 1979	TOTAL	113025.1	MEAN	310	MAX	3000	MIN	6.6	CFSM	1.66	IN	22.48

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) National Geodetic Vertical Datum of 1929.
Prior to July 20, 1937, nonrecording gage at site 0.7 mi (1.1 km) south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi (0.2 km) south, both at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.04 ft (2.146 m) Apr. 6, affected by seiche; minimum, 0.92 ft (0.280 m) Dec. 4.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.18	1.42	1.05	1.17	2.78	2.57	6.54	6.48	4.91	3.29	2.40	2.22
2	1.22	1.39	1.05	1.37	2.78	2.56	6.95	6.44	4.90	3.27	2.39	2.18
3	1.23	1.40	1.02	1.72	2.78	2.54	6.88	6.38	4.88	3.26	2.40	2.19
4	1.14	1.37	.99	1.95	2.77	2.54	6.96	6.34	4.84	3.22	2.40	2.21
5	1.16	1.38	1.02	2.09	2.78	2.77	6.98	6.31	4.79	3.20	2.39	2.21
6	1.21	1.34	1.03	2.16	2.75	3.43	6.99	6.27	4.76	3.18	2.38	2.31
7	1.23	1.36	1.04	2.23	2.74	4.16	7.00	6.21	4.69	3.13	2.36	2.56
8	1.23	1.35	1.05	2.32	2.74	4.70	6.95	6.12	4.61	3.07	2.32	2.70
9	1.21	1.31	1.10	2.34	2.73	5.01	6.91	6.01	4.56	3.03	2.29	2.75
10	1.19	1.33	1.13	2.37	2.72	5.20	6.92	5.95	4.47	3.00	2.30	2.72
11	1.19	1.28	1.12	2.38	2.72	5.37	6.86	5.86	4.37	2.97	2.27	2.69
12	1.14	1.30	1.11	2.38	2.71	5.47	6.83	5.71	4.38	2.93	2.26	2.72
13	1.19	1.23	1.10	2.40	2.71	5.48	6.74	5.63	4.36	2.90	2.24	2.69
14	1.30	1.10	1.13	2.41	2.70	5.49	6.65	5.56	4.32	2.87	2.18	2.65
15	1.35	1.17	1.10	2.44	2.70	5.56	6.64	5.46	4.25	2.82	2.15	2.79
16	1.40	1.20	1.10	2.44	2.69	5.59	6.64	5.38	4.19	2.80	2.16	2.88
17	1.42	1.12	1.12	2.46	2.68	5.60	6.65	5.27	4.15	2.79	2.15	2.89
18	1.40	1.15	1.11	2.49	2.67	5.59	6.64	5.16	4.09	2.79	2.09	2.88
19	1.42	1.18	1.11	2.49	2.66	5.53	6.60	5.04	4.03	2.76	2.07	2.90
20	1.43	1.20	1.11	2.49	2.63	5.49	6.54	4.94	3.97	2.71	2.09	2.88
21	1.38	1.20	1.12	2.55	2.60	5.49	6.47	4.83	3.88	2.66	2.10	2.77
22	1.36	1.19	1.13	2.59	2.58	5.52	6.39	4.75	3.80	2.63	2.08	2.80
23	1.39	1.14	1.12	2.59	2.56	5.59	6.36	4.65	3.74	2.61	2.05	2.79
24	1.39	1.10	1.13	2.60	2.55	5.74	6.33	4.59	3.67	2.57	2.01	2.77
25	1.32	1.14	1.20	2.64	2.56	5.91	6.28	4.62	3.62	2.53	2.05	2.69
26	1.30	1.13	1.21	2.65	2.57	6.25	6.19	4.66	3.56	2.49	2.09	2.67
27	1.39	1.10	1.21	2.65	2.58	6.41	6.24	4.67	3.45	2.51	2.14	2.65
28	1.40	1.09	1.20	2.67	2.57	6.53	6.38	4.68	3.41	2.51	2.15	2.59
29	1.46	1.07	1.20	2.70	---	6.64	6.47	4.73	3.36	2.48	2.15	2.59
30	1.42	1.06	1.19	2.72	---	6.47	6.49	4.79	3.31	2.44	2.19	2.57
31	1.37	---	1.15	2.76	---	6.50	---	4.86	---	2.40	2.23	---
MEAN	1.30	1.23	1.11	2.36	2.68	5.09	6.65	5.43	4.18	2.83	2.21	2.63
MAX	1.46	1.42	1.21	2.76	2.78	6.64	7.00	6.48	4.91	3.29	2.40	2.90
MIN	1.14	1.06	.99	1.17	2.55	2.54	6.19	4.59	3.31	2.40	2.01	2.18
CAL YR 1978	MEAN 3.51		MAX 7.76	MIN .99								
WTR YR 1979	MEAN 3.14		MAX 7.00	MIN .99								

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide 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 (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi² (21,437 km²).

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 Oct. 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 National Geodetic Vertical Datum of 1929. 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 (28.346 m) higher.

REMARKS.--Area of lake surface about 490 mi² (1,269 km²). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft³ (25,600 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) 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, 100.24 ft (30.55 m) Apr. 2, minimum, 93.73 ft (28.57 m) Nov. 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.27	94.26	93.99	94.12	95.64	95.39	99.36	99.34	97.74	96.17	95.29	95.16
2	94.04	94.32	93.85	94.19	95.63	95.40	99.77	99.25	97.76	96.15	95.36	95.23
3	94.07	94.25	93.93	94.57	95.63	95.42	99.70	99.24	97.75	96.07	95.30	95.09
4	94.35	94.31	94.03	94.90	95.64	95.45	99.76	99.16	97.72	96.03	95.27	95.03
5	94.11	94.23	93.92	94.99	95.62	95.66	99.92	99.09	97.69	95.99	95.27	95.06
6	94.14	94.26	93.90	95.06	95.60	96.26	99.92	99.09	97.60	95.97	95.20	95.07
7	94.12	94.18	93.87	95.10	95.60	97.00	99.67	99.03	97.60	95.97	95.28	95.36
8	94.05	94.22	93.90	95.16	95.61	97.53	99.75	98.98	97.60	95.97	95.19	95.45
9	94.09	94.26	93.90	95.24	95.60	97.84	99.68	98.90	97.46	95.92	95.12	95.55
10	94.06	94.14	93.91	95.22	95.60	98.05	99.64	98.76	97.49	95.90	95.13	95.74
11	94.08	94.23	93.99	95.24	95.61	98.19	99.63	98.69	97.44	95.85	95.10	95.57
12	94.24	94.00	94.05	95.26	95.61	98.29	99.57	98.74	97.25	95.80	95.05	95.55
13	94.03	94.31	94.08	95.26	95.59	98.40	99.58	98.53	97.20	95.76	95.02	95.67
14	94.04	94.42	93.97	95.30	95.58	98.38	99.61	98.41	97.22	95.72	95.16	95.74
15	94.17	94.00	94.08	95.28	95.56	98.37	99.49	98.32	97.20	95.78	95.01	95.65
16	94.21	94.03	94.01	95.29	95.55	98.44	99.46	98.17	97.10	95.74	94.95	95.73
17	94.26	94.45	93.95	95.29	95.54	98.42	99.46	98.10	97.04	95.61	94.97	95.86
18	94.36	94.05	93.91	95.30	95.54	98.38	99.41	98.05	96.86	95.61	95.10	95.87
19	94.26	94.05	93.93	95.34	95.52	98.35	99.37	97.94	96.83	95.63	95.00	95.67
20	94.28	93.97	93.96	95.35	95.52	98.31	99.36	97.87	96.80	95.61	94.95	95.82
21	94.36	94.01	94.03	95.38	95.50	98.31	99.31	97.75	96.80	95.58	94.93	95.94
22	94.34	94.03	94.02	95.45	95.45	98.34	99.26	97.55	96.76	95.55	94.91	95.60
23	94.16	94.27	94.01	95.46	95.44	98.41	99.16	97.51	96.64	95.46	94.99	95.62
24	94.22	94.12	93.99	95.44	95.41	98.56	99.14	97.34	96.52	95.47	95.06	95.63
25	94.48	93.86	93.99	95.40	95.38	98.73	99.16	97.31	96.41	95.46	95.01	95.74
26	94.30	93.84	94.08	95.45	95.37	99.07	99.19	97.46	96.46	95.51	94.95	95.55
27	94.23	93.96	94.04	95.49	95.42	99.23	99.10	97.61	96.52	95.37	94.97	95.55
28	94.32	94.01	94.02	95.51	95.41	99.35	99.19	97.53	96.30	95.35	95.05	95.60
29	94.25	94.06	94.04	95.55	---	99.46	99.31	97.55	96.27	95.30	95.14	95.46
30	94.52	93.99	94.05	95.56	---	99.29	99.36	97.63	96.23	95.30	95.10	95.50
31	94.37	---	94.10	95.62	---	99.32	---	97.69	---	95.37	95.04	---
MEAN	94.22	94.14	93.98	95.22	95.54	97.92	99.48	98.28	97.08	95.71	95.09	95.54
MAX	94.52	94.45	94.10	95.62	95.64	99.46	99.92	99.34	97.76	96.17	95.36	95.94
MIN	94.03	93.84	93.85	94.12	95.37	95.39	99.10	97.31	96.23	95.30	94.91	95.03
CAL YR 1978	MEAN 96.38		MAX 100.53	MIN 93.84								
WTR YR 1979	MEAN 96.01		MAX 99.92	MIN 93.84								

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to current year.

CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-79 (c).

MINOR ELEMENTS DATA: 1974-79 (b).

PESTICIDE DATA: 1976-79 (b).

ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979 (c).

PCB--1978-79 (b).

NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-79 (c).

BIOLOGICAL DATA:

Bacteria--1974 (a), 1975-79 (c).

Phytoplankton--1974 (a), 1975-78 (c), 1979 (b).

Periphyton--1975 (c), 1976-79 (b).

SEDIMENT DATA: 1975-79 (c).

COOPERATION.--Pesticide samples were collected by the U.S. Geological Survey and were analyzed by the U.S. Environmental Protection Agency.

WATER QUALITY DATA, WATER YEAR, OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)
OCT 02...	1400	142	7.3	13.0	1.0	9.8	92	K4	<1	58	14	16
NOV 01...	1300	160	7.4	8.0	3.0	10.2	84	K3	<1	56	12	16
APR 23...	1230	148	7.8	9.0	2.0	12.8	108	K2	<1	53	18	15
MAY 16...	1200	135	7.4	12.5	1.0	11.2	102	K2	K1	52	17	15
JUN 19...	1000	140	7.8	17.0	1.0	9.3	96	K2	<1	54	15	16
JUL 17...	1200	135	7.8	22.0	.00	8.6	98	K1	<1	55	9	16
AUG 16...	1030	140	7.5	19.0	2.0	8.4	90	K12	K1	61	16	19
SEP 05...	1100	136	7.8	19.0	1.0	9.3	100	K2	<1	55	11	16

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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 (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT 02...	4.5	5.0	1.2	44	15	7.3	.1	.8	83	76	.03	.04
NOV 01...	3.9	5.1	1.2	44	12	7.2	.1	.6	80	73	.09	.01
APR 23...	3.7	4.8	1.1	35	12	7.1	.1	1.3	77	66	1.0	.32
MAY 16...	3.5	5.0	1.1	35	12	7.0	.0	.6	82	65	.16	.01
JUN 19...	3.5	4.9	1.0	39	12	7.1	.1	.2	91	68	.05	.05
JUL 17...	3.7	4.9	.9	46	12	6.8	.1	.7	71	73	.05	.01
AUG 16...	3.2	3.7	1.0	45	17	7.4	.1	.9	73	79	.02	.02
SEP 05...	3.7	4.9	1.0	44	11	7.7	.0	.8	83	72	.02	.04

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

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC DIS- TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)
OCT 02...	.21	.25	.24	.28	.01	.00	--	--	--	--	--	--
NOV 01...	.26	.27	.17	.36	.01	.00	--	--	--	--	--	--
APR 23...	.00	.30	.06	1.3	.00	.01	3	1	0	0	0	0
MAY 16...	.24	.25	.20	.41	.01	.00	--	--	--	--	--	--
JUN 19...	.20	.25	.23	.30	.01	.00	3	0	0	10	3	0
JUL 17...	.29	.30	.23	.35	.01	.01	--	--	--	--	--	--
AUG 16...	.31	.33	.20	.35	.02	.00	4	1	0	10	1	0
SEP 05...	.34	.38	.32	.40	.01	.00	2	1	100	30	0	1

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 02...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	20	10	2	1	3	1	140	20	7	5	0	1
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	40	20	1	0	7	2	70	10	5	3	10	10
JUL 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	20	30	0	0	4	1	90	10	2	4	20	3
SEP 05...	20	<10	0	0	3	3	80	40	3	2	10	3

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 02...	--	--	--	--	--	--	--	--	1.2	--	--
NOV 01...	--	--	--	--	--	--	--	--	3.3	--	--
APR 23...	<.5	<.5	0	0	0	0	120	0	--	5.4	.4
MAY 16...	--	--	--	--	--	--	--	--	4.2	--	--
JUN 19...	<.5	<.5	0	0	0	0	20	10	--	11	.6
JUL 17...	--	--	--	--	--	--	--	--	3.9	--	--
AUG 16...	<.5	<.5	0	0	0	0	50	30	--	5.6	.5
SEP 05...	<.5	<.5	0	0	0	0	100	30	--	6.3	.4

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

PESTICIDE ANALYSES, AUGUST 1978 TO SEPTEMBER 1979

DATE	TIME	PCB, TOTAL (UG/L)	AROCLOR TOTAL 1254 PCB SERIES (UG/L)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	P,P' DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	P,P' DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG , 1978												
08...	1100	ND	--	--	ND	--	ND	--	ND	--	--	ND
NOV												
01...	1300	ND	.0	16	ND	ND	ND	ND	ND	2.7	6.0	ND
APR , 1979												
23...	1230	ND	--	--	ND	--	ND	--	ND	--	--	ND
MAY												
16...	1200	ND	--	--	ND	--	ND	--	ND	--	--	ND
AUG												
16...	1030	ND	--	--	ND	--	ND	--	ND	--	--	ND

DATE	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG , 1978												
08...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--
NOV												
01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR , 1979												
23...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY												
16...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--
AUG												
16...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)
AUG , 1978													
08...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
NOV													
01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR , 1979													
23...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY													
16...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND
AUG													
16...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)
AUG , 1978											
08...	ND	--	ND	--	ND	--	ND	ND	ND	ND	ND
NOV											
01...	ND	ND	ND	ND	ND	ND	--	--	--	--	--
APR , 1979											
23...	ND	--	ND	--	ND	--	--	--	--	--	--
MAY											
16...	ND	--	ND	--	ND	--	--	--	--	--	--
AUG											
16...	ND	--	ND	--	ND	--	--	--	--	--	--

ND Material specifically analyzed for, but not detected.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued
SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR, OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SEDI- MENT, SUS- PENDE (MG/L)	DATE	TIME	SEDI- MENT, SUS- PENDE (MG/L)
OCT 02...	1400	17	JUN 19...	1000	1
NOV 01...	1300	17	JUL 17...	1200	0
APR 23...	1230	0	AUG 16...	1030	2
MAY 16...	1200	0	SEP 05...	1100	1

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a	Chlorophyll b	Sampling method
		Dry weight	Ash weight	(mg/m ²)	(mg/m ²)	
June 19 to July 17	28	1.34	0.870	0.730	0.250	Polyethylene strip
July 17 to Sept. 5	50	6.54	3.94	3.53	.670	Polyethylene strip
Sept. 5 to Oct. 1	26	8.82	6.54	20.1	4.84	Polyethylene strip

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 11.78 1230	AUG 8.78 1100	SEP 5.78 1145	OCT 2.78 1400	MAY 16.79 1200
TOTAL CELLS/ML	380	780	2200	1900	220
DIVERSITY: DIVISION	1.3	1.4	0.6	1.9	0.5
..CLASS	1.3	1.7	0.6	1.9	0.5
..ORDER	1.6	2.2	1.4	2.3	0.8
...FAMILY	1.6	2.2	1.5	2.9	0.8
....GENUS	1.6	2.2	1.6	2.9	0.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	* 0		--	-	--	-
....CHLOROCOCCACEAE										
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	--	-
....OOCYSTACEAE										
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	28	1	--	-	--	-
....GLOEOACTINIUM	--	-	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	* 0		--	-	--	-
....SCENEDESMACEAE										
....SCENEDESMUS	44	12	--	-	21	1	290#	15	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	87	11	* 0		--	-	--	-
...VOLVOCAEAE										
....EUDORINA	--	-	--	-	57	3	--	-	--	-
....ZYGNEATALES										
....DESMIDIACEAE										
....STAUSTRUM	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCAEAE										
....CYCLOTILLA	22	6	43	6	* 0		110	6	--	-
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	13	6
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	22	3	--	-	--	-	--	-
....FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	14	1	--	-	180#	82
....FRAGILARIA	200#	53	--	-	71	3	--	-	--	-
....NAVICULACEAE										
....NAVICULA	--	-	--	-	--	-	--	-	--	-
....NITZSCHIAEAE										
....NITZSCHIA	--	-	--	-	--	-	100	5	--	-
..CHRYSOPHYCEAE										
...CHRYSONOMADALES										
....OCHROMONADACEAE										
....OCHROMONAS	--	-	220#	28	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	330#	17	--	-
....CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	260	14	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	130#	17	1500#	67	210	11	26	12
...HORMOGONALES										
....NOSTOCAEAE										
....ANABAENA	--	-	280#	36	460#	21	410#	22	--	-
....OSCILLATORIAEAE										
....OSCILLATORIA	110#	29	--	-	57	3	160	9	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUL 11,78 1230		AUG 8,78 1100		SEP 5,78 1145		OCT 2,78 1400		MAY 16,79 1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
.....EUGLENA	--	-	--	-	--	-	10	1	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...PERIDINIALES										
....GLENODINIACEAE										
.....GLENODINIUM	--	-	--	-	--	-	--	-	--	-

DATE TIME	JUN 19,79 1000	JUL 17,79 1200	AUG 16,79 1030	SEP 5,79 1100
TOTAL CELLS/ML	52	240	1000	8600
DIVERSITY: DIVISION	0.8	0.7	0.9	1.1
..CLASS	0.8	0.7	0.9	1.1
...ORDER	0.8	1.0	1.7	1.6
....FAMILY	0.8	1.3	1.9	1.8
.....GENUS	0.8	2.1	2.0	2.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....CHAKACIACEAE								
.....SCHROEDERIA	--	-	13	5	--	-	--	-
....CHLOROCOCCACEAE								
.....CHLOROCOCCUM	--	-	--	-	26	3	130	1
....OOCYSTACEAE								
.....ANKISTRODESMUS	--	-	--	-	13	1	--	-
....CHLORELLA	--	-	--	-	--	-	3000#	35
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....GLOEOACTINIUM	--	-	100#	42	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	380	4
....OOCYSTIS	--	-	52#	21	--	-	--	-
....TETRAEDRON	--	-	13	5	13	1	--	-
....SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	26	3	84	1
....VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-
....VOLVOCAEAE								
....EUDORINA	--	-	--	-	--	-	--	-
....ZYGNEMATALES								
....DESMIDIACEAE								
....STAUSTRUM	--	-	13	5	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCACEAE								
.....CYCLOTELLA	--	-	--	-	13	1	63	1
....MELOSIRA	--	-	--	-	26	3	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-
...PENNALES								
....ACHNANTHACEAE								
.....ACHNANTHES	13#	25	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-
....FRAGILARIACEAE								
.....ASTERIONELLA	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	77	8	--	-
....NAVICULACEAE								
.....NAVICULA	--	-	--	-	13	1	--	-
....NITZSCHIAEAE								
.....NITZSCHIA	--	-	--	-	--	-	*	0
..CHRYSTOPHYCEAE								
...CHRYSONOMADALES								
....OCHROMONADACEAE								
.....OCHROMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, JULY 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 19,79 1000		JUL 17,79 1200		AUG 16,79 1030		SEP 5,79 1100	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
...CHROOMONAS	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	52# 21		--	-	--	-
....ANACYSTIS	39# 75		--	-	230# 23		3300# 38	
...HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	570# 56		--	-
....SCHIZOTHRIX	--	-	--	-	--	-	1600# 19	
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	* 0	

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Sampling method
		Dry weight	Ash weight			
June 19 to July 17	28	1.34	0.870	0.730	0.250	Polyethylene strip
July 17 to Sept. 5	50	6.54	3.94	3.53	.670	Polyethylene strip
Sept. 5 to Oct. 1	26	8.82	6.54	20.1	4.84	Polyethylene strip

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, 144 mi² (373 km²). PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft (447.980 m) National Geodetic Vertical Datum of 1929.
 Dam completed in 1867 and controlled storage for which records are available began in 1923. Usable capacity above elevation 1,475.25 ft (449.656 m) is 2,530 mil ft³ (71.6 hm³). Crest at spillway is at elevation, 1,486.43 ft (453.064 m). Length of spillway is 110 ft (34 m). Area of water surface at crest elevation is 10.9 mi² (28.2 km²). Records furnished by Oswegatchie River-Cranberry Reservoir Commission.
 EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 2,985 mil ft³ (84.5 hm³) May 13-15, 1971, gage height, 18.5 ft (5.64 m); minimum observed, 70 mil ft³ (1.98 hm³) Apr. 1-4, 1956, gage height, 6.0 ft (1.83 m).
 EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,680 mil ft³ (75.9 hm³) April 30, May 1, gage height, 17.5 ft (5.33 m); minimum observed, 595 mil ft³ (16.8 hm³) Mar. 3-5, gage height, 9.0 ft (2.74 m).

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 (3.2 km) southeast of Stark, and 8.8 mi (14.2 km) southeast of South Colton. DRAINAGE AREA, 873 mi² (2,261 km²). PERIOD OF RECORD, October 1954 to current year. GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.
 Dam completed January 1953 and controlled storage for which records are available began in October 1954. Usable capacity above elevation 1,332.0 ft (405.99 m) is 5,114.9 mil ft³ (145 hm³). Crest at spillway is at elevation 1,386.0 ft (422.45 m). Length of spillway is 830 ft (253 m). Area of water surface at crest elevation is 5.16 mi² or 13.4 km² (3,300 acres or 1,300 hm²). The pond has a length of 6 mi (10 km) and a perimeter of 25 mi (40 km). Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft (8m x 5m), and 2 sluice gates, 10 ft x 10 ft (3m x 3m). Records furnished by Niagara Mohawk Power Corp.
 EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 5,146 mil ft³ (146 hm³) June 1, 5, 6, 1955, elevation, 1,386.1 ft (422.48 m); minimum observed, 8.64 mil ft³ (0.245 hm³) Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft (405.69 m).
 EXTREMES FOR CURRENT YEAR: Maximum contents observed, 5,132 mil ft³ (145 hm³) May 3, elevation, 1,386.0 ft (422.45 m); minimum observed, 1,305 mil ft³ (37.0 hm³) Oct. 14, elevation, 1,352.6 ft (412.27 m).

04273900 LAKE PLACID AT LAKE PLACID, NY (see station for daily mean elevations).

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).

MONTHEND GAGE HEIGHT, ELEVATION, AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Gage height (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (million ft ³)	Change in contents (equivalent in ft ³ /s)
04260990 Cranberry Lake				04266700 Carry Falls Reservoir		
Sept. 30.....	13.2	1,508		1,360.6	2,049.4	
Oct. 31.....	13.4	1,556	+ 17.9	1,356.5	1,654.6	- 152
Nov. 30.....	12.9	1,436	- 46.3	1,354.8	1,494.7	- 61.7
Dec. 31.....	12.8	1,412	- 8.97	1,358.6	1,854.1	+ 134
CAL YR 1978			+ 5.77			- 72.7
Jan. 31.....	12.0	1,230	- 67.9	1,377.6	3,991.7	+ 798
Feb. 28.....	9.2	635	-246	1,368.7	2,903.9	- 450
Mar. 31.....	12.7	1,388	+281	1,362.3	2,571.3	- 124
Apr. 30.....	17.5	2,680	+498	1,382.2	4,606.8	+ 785
May 31.....	16.3	2,324	-133	1,385.2	5,021.6	+ 155
June 30.....	15.4	2,074	- 96.5	1,375.2	3,680.6	- 517
July 31.....	14.6	1,866	- 77.6	1,368.6	2,892.7	- 294
Aug. 31.....	14.6	1,866	0	1,365.5	2,557.4	- 125
Sept. 30....	15.0	1,970	+ 40.1	1,377.3	3,952.8	+ 538
WTR YR 1979			+ 14.6			+ 60.0

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 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. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1979

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
HUDSON RIVER BASIN							
01356160 ^{c/}	LISHA KILL AT MAYWOOD, NY	LAT 42 45 09, LONG 73 52 25, ALBANY COUNTY, HYDROLOGIC UNIT 02020005, ON DOWNSTREAM SIDE OF CULVERT ON CENTRAL AVENUE, 1.6 MI (2.6 KM) UPSTREAM FROM ALBANY- SCHENECTADY COUNTY LINE AND 0.8 MI (1.3 KM) NORTHWEST OF MAYWOOD.	9.64	--	1979	10-25-78 11-14-78 11-29-78 12-15-78 02-05-79 03-14-79 04-12-79 05-11-79 06-14-79 07-16-79 08-28-79	*1.40 *1.73 *1.86 *2.33 *5.86 23.0 20.4 *3.71 *4.78 * .33 * .42
01356280 ^{c/}	SHAKERS CREEK NEAR COLONIE, NY	LAT 42 44 08, LONG 73 48 50, ALBANY COUNTY, HYDROLOGIC UNIT 02020004, JUST UPSTREAM OF POND AT ANN LEE HOME, 1.8 MI (2.9 KM) NORTH OF COLONIE CENTRAL HIGH SCHOOL AND 1.6 MI (2.6 KM) NORTHEAST OF COLONIE.	2.76	--	1979	10-31-78 11-14-78 11-29-78 12-15-78 02-05-79 03-14-79 04-12-79 05-11-79 06-14-79 07-16-79 08-30-79	*1.10 * .85 * .90 * .82 *1.85 *4.15 4.41 *2.50 *1.48 * .13 * .26
01356285 ^{c/}	SHAKERS CREEK TRIB. AT COLONIE, NY	LAT 42 44 13, LONG 73 48 35, ALBANY COUNTY, HYDROLOGIC UNIT 02020004, JUST UPSTREAM OF POND AT ANN LEE HOME, 2.0 MI (3.2 KM) NORTH OF COLONIE CENTRAL HIGH SCHOOL AND 1.6 MI (2.6 KM) NORTHEAST OF COLONIE.	.61	--	1979	10-31-78 11-14-78 12-15-78 03-14-79 04-12-79 05-11-79 06-14-79 07-16-79 08-30-79	* .29 * .24 * .34 *1.33 1.40 * .47 * .75 0 0
01359131 ^{c/}	PATROON CREEK AT CENTRAL AVE. IN ALBANY, NY	LAT 42 41 15, LONG 73 47 56, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT DOWNSTREAM SIDE OF CULVERT ON CENTRAL AVENUE, JUST SOUTH OF NEW YORK CENTRAL OVER- CROSSING AT ROESSLEVILLE AT ALBANY.	7.37	--	1979	10-25-78 11-13-78 11-29-78 12-14-78 02-05-79 03-14-79 04-12-79 06-14-79 07-16-79 08-28-79	*5.40 *5.55 *6.02 *6.79 *8.93 *13.8 14.2 *12.0 *5.90 *5.97
01359132 ^{c/}	SAND CREEK AT SAND CREEK ROAD AT ALBANY, NY	LAT 42 41 13, LONG 73 46 47, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT UPSTREAM SIDE OF CULVERT ON SAND CREEK ROAD, 0.4 MI (0.6 KM) UPSTREAM FROM NEW YORK CENTRAL RAILROAD AT ALBANY.	2.79	--	1979	10-31-78 11-13-78 11-29-78 12-15-78 02-05-79 03-14-79 04-12-79 05-11-79 06-14-79 07-16-79 08-28-79	*2.33 *1.89 *2.18 *2.19 *2.88 *3.91 3.32 *2.65 *3.19 *1.90 *2.07

* Base flow.

c Water-quality data included in this report.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1979--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
HUDSON RIVER BASIN--CONTINUED							
01359515 ^{c/}	BLOCKHOUSE CREEK AT WESTMERE, NY	LAT 42 41 08, LONG 73 53 53, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, JUST UPSTREAM FROM MOUTH OF SOUTH BRANCH BLOCKHOUSE CREEK, 0.2 MI (0.3 KM) EAST OF STATE HIGHWAY 155, AND 1.0 MI (1.6 KM) SOUTHWEST OF WESTMERE.	--	--	1967 1979	11-13-78 11-29-78 12-15-78 02-05-79 04-12-79 06-14-79 07-16-79 08-30-79	*1.94 *1.20 *1.10 * .74 1.93 *1.16 * .70 * .72
01359516 ^{c/}	SOUTH BRANCH BLOCKHOUSE CREEK AT WESTMERE, NY	LAT 42 41 07, LONG 73 53 52, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, JUST UPSTREAM FROM MOUTH, 0.2 MI EAST OF STATE HIGHWAY 155, AND 1.0 MI (1.6 KM) SOUTHWEST OF WESTMERE.	--	--	1967 1979	11-13-78 11-29-78 12-15-78 02-05-79 04-12-79 06-14-79 07-16-79 08-30-79	* .51 * .38 * .34 * .62 1.65 * .45 * .08 * .17
01359517 ^{c/}	BLOCKHOUSE CREEK NEAR GUILDERLAND NY	LAT 42 41 08, LONG 73 54 05, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT BRIDGE ON STATE HIGHWAY 155, 0.2 MI (0.3 KM) UPSTREAM FROM KAIKOUT KILL, AND 1.4 MI (2.2 KM) SOUTH OF GUILDERLAND.	1.96	0.4	1962-67 1970 1973-75 1979	10-24-78 11-13-78 11-29-78 12-15-78 02-05-79 04-12-79 05-11-79 06-14-79 07-16-79 08-30-79	* .97 *1.92 *1.59 *1.53 *2.32 3.00 *2.07 *1.52 *1.19 *1.33
01359523 ^{c/}	KRUM KILL TRIB AT ALBANY, NY	LAT 42 40 36, LONG 73 50 10, ALBANY COUNTY, HYDROLOGIC UNIT 02020006, AT BRIDGE ON MCKOWAN RD, 0.4 MI (0.6 KM) DOWNSTREAM FROM US HIGHWAY 20 (WESTERN AVE.), AT ALBANY.	1.43	.5	1962 1979	10-25-78 11-13-78 11-29-78 12-15-78 02-05-79 03-14-79 04-12-79 05-11-79 06-14-79 07-16-79 08-28-79	* .92 * .93 *1.21 *1.22 *1.72 *2.06 2.81 *1.92 *2.14 *1.16 * .88
ALLEGHENY RIVER BASIN							
03013777	PENDERGAST CREEK NEAR CHAUTAUQUA, NY	LAT 42 11 19, LONG 79 27 10, CHAUTAUQUA COUNTY, HYDROLOGIC UNIT 05010002, AT BRIDGE ON STATE ROUTE 17J, AT STATE FISH HATCHERY, 1.1 MI (1.8 KM) SOUTHEAST OF VILLAGE LINE OF CHAUTAUQUA.	21.2	.7	1952 1967-68 1978-79	07-16-79	0
03013820	BEMUS CREEK AT BEMUS POINT, NY	LAT 42 09 14, LONG 79 22 57, CHAUTAUQUA COUNTY, HYDROLOGIC UNIT 05010002, AT BRIDGE ON COUNTY HIGHWAY 126, AT BEMUS POINT.	12.2	.2	1952 1967-68 1978-79	07-16-79	0

* Base flow.

c Water-quality data included in this report.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1979--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	MILES ABOVE MOUTH	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
STREAMS TRIBUTARY TO LAKE ONTARIO							
04235724	COLD SPRING BROOK AT WEEDSPORT, NY	LAT 43 02 37, LONG 76 34 42, CAYUGA COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON STATE HIGHWAY 31, 0.8 MI (1.3 KM) WEST OF WEEDSPORT.	--	2.6	1977-79	07-09-79	*5.25
04235727	PUTNAM BROOK AT WEEDSPORT, NY	LAT 43 03 21, LONG 76 33 12, CAYUGA COUNTY, HYDROLOGIC UNIT 04140201, AT BRIDGE ON STATE HIGHWAY 31, 0.8 MI (1.3 KM) NORTHEAST OF WEEDSPORT.	--	1.1	1977-79	07-09-79	*1.85
04240253	GEDDES BROOK AT FAIRMOUNT, NY	LAT 43 03 26, LONG 76 14 03, ONONDAGA COUNTY, HYDROLOGIC UNIT 04140201, AT DOWNSTREAM SIDE OF BRIDGE ON HORAN ROAD AT FAIRMOUNT AND 0.2 MI (0.3 KM) DOWNSTREAM FROM TRACKS OF PENN CENTRAL TRANSPORTATION COMPANY.	--	1.4	1978-79	07-09-79	*4.80
04245885	LITTLE BAY CREEK NEAR CENTRAL SQUARE, NY	LAT 43 17 07, LONG 76 08 12, OSWEGO COUNTY, HYDROLOGIC UNIT 04140202, AT BRIDGE ON STATE HIGHWAY 49, 0.5 MI (0.8 KM) EAST OF CENTRAL SQUARE.	--	2.8	1977-79	07-19-79	*.66

* Base flow.

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.

Annual maximum discharge at crest-stage partial-record stations during water year 1979

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Housatonic River basin							
01199477	Stony Brook near Dover Plains, NY	Lat 41°42'38", long 73°37'18", Dutchess County, at culvert on town road, 100 ft (30 m) upstream from Mill River, and 2.9 mi (4.7 km) southwest of Dover Plains.	1.93	1976-79	1-25-79	2.50	171
Hudson River basin							
01319800	West Branch Sacandaga River at Arietta, NY	Lat 43°15'03", long 74°31'06", Hamilton County, at bridge on State Highway 10, 0.4 mi (0.6 km) north of Arietta.	28.9	1963-79	3-25-79 3- 6-79	12.76 b13.65	- -
01328758	Pecks Creek at Fort Miller, NY	Lat 43°09'10", long 73°35'24", Saratoga County, at culvert on River Road, 0.5 mi (0.8 km) up- stream from mouth, and 0.9 mi (1.4 km) southwest of Fort Miller.	2.43	1976-79	3- 5-79	16.98	230
01329154	Steele Brook at Shushan, NY	Lat 43°05'35", long 73°19'38", Washington County, at bridge on county road, 1.1 mi (1.8 km) upstream from mouth, and 0.8 mi (1.3 km) east of Shushan.	2.85	1979	3- 5-79	5.51	115
01329780	Sessions Brook at Porters Corners, NY	Lat 43°09'21", long 73°52'45", Saratoga County, at culvert on County Highway 17, 0.7 mi (1.1 km) northeast of Porters Corners, and 0.9 mi (1.4 km) upstream from mouth.	1.12	1976, 1978-79	3-27-78 4-28-79	10.10 10.58	21 29
01329900	Glowegee Creek tributary at Mosherville, NY	Lat 43°03'24", long 74°00'58", Saratoga County, at culvert on Parkis Mill Road, and 0.4 mi (0.6 km) south of Mosherville.	1.42	1968-78	R4-25-68 3-17-72 R9-26-75 4- 1-76 3-14-77	12.16 R11.67 12.57 R- R-	71 R38 100 R- R-
01330880	Saratoga Lake tributary near Bemis Heights, NY	Lat 42°59'43", long 73°43'06", Saratoga County, at culvert on State Highway 423, 1.4 mi (2.3 km) upstream from mouth, and 4.6 mi (7.4 km) northwest of Bemis Heights.	1.67	1976, 1979	3- 6-79	14.88	197
01346820	Mohawk River tributary at Indian Castle, NY	Lat 43°00'34", long 74°47'47", Herkimer County, at culvert on State Highway 5S, 0.35 mi (0.6 km) west of Indian Castle, and 0.4 mi (0.7 km) upstream from mouth.	1.37	1974-79	3- 5-79	2.16	77
01347460	Spruce Lake tributary near Salisbury Center, NY	Lat 43°10'51", long 74°48'44", Herkimer County, at culvert on town road (Jerseyfield Road), 1.3 mi (2.1 km) upstream from mouth, and 2.9 mi (4.7 km) north of Salisbury Center.	.53	1978-79	3- 5-79	4.09	55
01348420	North Creek near Ephratah, NY	Lat 43°00'28", long 74°33'54", Fulton County, at culvert on town road, 0.4 mi (0.7 km) up- stream from mouth, and 1.2 mi (1.9 km) northwest of Ephratah.	6.68	1975-79	3-25-79	5.21	175

b Ice jam.
R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Hudson River basin--Continued							
01349360	Van Wie Creek tributary near Randall, NY	Lat 42°54'11", long 74°25'55", Montgomery County, at culvert on Brumley Road, 0.3 mi (0.5 km) south of intersection with Argisinger Road, and 0.9 mi (1.4 km) southwest of Randall.	1.03	1974-79	10-17-77 3- 6-79	3.77 3.56	67 61
01349850	Batavia Kill at Hensonville, NY	Lat 42°17'17", long 74°12'55", Greene County, on County Highway 40, at Hensonville, 0.7 mi (1.1 km) upstream from Silver Lake Outlet, and 1.8 mi (2.9 km) upstream from Nauvo Stream.	13.5	1955,1960 1961-66, 1972, 1974, 1976, 1979	3-24-79	3.35	-
01350900	Beaverdam Creek near Knox, NY	Lat 42°38'57", long 74°07'56", Albany County, 250 ft (76 m) downstream from bridge, 1.2 mi (1.9 km) south of Knox, and 1.7 mi (2.7 km) upstream from mouth.	6.91	1963-64, 1966, 1967-74, 1976-77, 1979	1- 2-79	5.45	608
01354200	Sandsea Kill at Pattersonville, NY	Lat 42°53'20", long 74°04'42", Schenectady County, at bridge on State Highway 5S, in village of Pattersonville.	9.56	1961, 1963-67, 1971-74, 1976-79	3- 5-79	4.44	-
01354300	Plotter Kill at Rynex Corners, NY	Lat 42°49'16", long 74°04'20", Schenectady County, at bridge on State Highway 159, in hamlet of Rynex Corners.	3.70	1958, 1960-68, 1970-74, 1976-79	3- 6-79	5.05	-
01355405	Indian Kill near Glenville Center, NY	Lat 42°53'40", long 73°57'27", Schenectady County, 1.1 mi (1.7 km) east of Glenville Center, and 1.3 mi (2.1 km) west of East Glenville.	2.39	1974-79	3- 6-79	16.32	59
01361200	Claverack Creek near Claverack, NY	Lat 42°12'54", long 73°43'46", Columbia County, on right bank, 70 ft (21 m) upstream from bridge on State Highway 9H, 0.5 mi (0.9 km) south of Claverack.	60.6	1960-68†, 1969-73 1975-79	1- 2-79	8.63	2,710
01361453	Catskill Creek tributary at Franklinton, NY	Lat 42°31'35", long 74°18'33", Schoharie County, at culvert on town road, 0.15 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Franklinton.	3.64	1968-72, 1974-79	3-24-79	6.96	263
01361900	Shingle Kill at Cairo, NY	Lat 42°18'22", long 74°00'15", Greene County, at bridge on town road at Cairo, southeast of State Highway 32, about 400 ft (122 m) south of State Highway 23, and 0.8 mi (1.3 km) upstream from mouth.	13.9	1953, 1966, 1967-74, 1976-79	9- 6-79	5.30	-
01362100	Roeliff Jansen Kill near Hillsdale, NY	Lat 42°09'13", long 73°31'14", Columbia County, at bridge on county highway off State Highway 22, 1.8 mi (2.9 km) south of Hillsdale.	27.5	1958-60†, 1963-64, 1968-79	3- 5-79	6.16	1,380
01362197	Bushnellsville Creek at Shandaken, NY	Lat 42°07'25", long 74°24'04", Ulster County, along State Highway 42, 0.4 mi (0.6 km) upstream from Esopus Creek, and 0.6 mi (0.97 km) northwest of Shandaken.	11.4	1951, 1956, 1972, 1976-79	3- 5-79	8.40	-
01363388	Dry Brook at West Shokan, NY	Lat 41°58'22", long 74°17'50", Ulster County, at bridge on town road, 0.6 mi (1.0 km) northwest of West Shokan, and 1.2 mi (1.9 km) upstream from mouth.	1.67	1978-79	9- 6-79	4.28	225

† Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
		Hudson River basin--Continued					
01368713	Wawayanda Creek at Durland, NY	Lat 41°16'44", long 74°18'20", Orange County, 75 ft (22.9 m) upstream from bridge on State School Road, at Durland, 0.1 mi (0.2 km) downstream from Wickham Lake, and 2.5 mi (4.0 km) north- east of Warwick.	5.15	1971-79	1-25-79	16.64	-
01368724	Long House Creek at Bellvale, NY	Lat 41°15'10", long 74°18'30", Orange County, at bridge on Iron Forge Road, at Bellvale, and 1.9 mi (3.1 km) upstream from mouth.	11.8	1971-79	9- 6-79	18.49	-
01368810	Wawayanda Creek at New Milford, NY	Lat 41°14'18", long 74°25'03", Orange County, at bridge on Ryerson Road, at New Milford, 0.2 mi (0.3 km) upstream from Double Kill.	45.0	1971-79	3-27-78 1-25-79	15.09 16.81	931 1,250
01372200	Wappinger Creek near Clinton Corners, NY	Lat 41°48'55", long 73°45'50", Dutchess County, on right downstream wingwall of highway bridge 850 ft (259 m) downstream from abandoned bridge abutment of Philadelphia, Reading, and New England Railroad, 1,900 ft (579 m) downstream from East Branch Wappinger Creek, and 1 mi (1.6 km) south of Clinton Corners.	92.4	1956-76†, 1977-79	1-25-79	11.31	2,530
01372948	Clove Creek near North Highland, NY	Lat 41°28'50", long 73°54'35", Putnam County, at bridge on Mill Road, 1.6 mi (2.6 km) northeast of North Highland.	12.1	1975-79	1-25-79	3.65	-
01373690	Woodbury Creek near Highland Mills, NY	Lat 41°22'00", long 74°06'17", Orange County, on left bank, 40 ft (12 m) downstream from culvert type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft (365 m) downstream from bridge on N.Y. Highway 32, and 1.9 mi (3.1 km) north of Highland Mills.	11.2	1966-68†, 1971-72, 1977-79	1-25-79	5.07	-
01374130	Canopus Creek at Oscawana Corners, NY	Lat 41°22'43", long 73°52'23", Putnam County, at bridge on Hortun Hollow Road, 0.4 mi (0.6 km) downstream from West Branch, and 0.8 mi (1.3 km) west of Oscawana Corners.	8.30	1975-79	R9-27-75 1-28-76 3-14-77 11- 8-77 1-25-79	R3.85 3.56 R4.86 4.07 4.22	R230 R198 - R255 273
01374250	Peekskill Hollow Creek at Tompkins Corners, NY	Lat 41°23'18", long 73°48'47", Putnam County, at bridge on Bryant Pond Road, 0.9 mi (1.4 km) southwest of Tompkins Corners, and 1.1 mi (1.8 km) downstream from Wiccopee Brook.	14.96	1975-79	R9-25-75 8-10-76 R3-31-77 11- 8-77 1-25-79	R3.65 3.03 3.16 3.49 3.54	R366 R266 285 339 347
01374440	Cedar Pond Brook at Stony Point, NY	Lat 41°13'36", long 73°59'04", Rockland County, at bridge on Lowland Hill Road, 1,200 ft downstream from U.S. Highway 9-W, at Stony Point, 0.9 mi (1.4 km) downstream from water- supply reservoir, 1.5 mi (2.4 km) upstream from mouth.	17.4	1976, 1979	1-25-79	4.72	1,140
01374456	South Branch Minisceongo Creek tributary near Mount Ivy, NY	Lat 41°10'48", long 74°03'22", Rockland County, 50 ft (15 m) downstream from twin culvert on Camp Hill Road, 0.2 mi (0.3 km) south of U.S. Highway 202, and 1.2 mi (1.9 km) south- west of Mount Ivy.	.90	1977-79	1-24-79	4.31	50

† Operated as a continuous-record gaging station.
R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Hudson River basin--Continued							
01374458	South Branch Minisceongo Creek at Mount Ivy, NY	Lat 41°11'32", long 74°02'32", Rockland County, 25 ft (8 m) downstream from bridge on Quaker Road, 0.5 mi (0.8 km) north of U.S. Highway 202, and 0.5 mi (0.8 km) northwest of Mount Ivy.	5.23	1977-79	1-25-79	2.49	106
01374480	Minisceongo Creek at Thiells, NY	Lat 41°12'34", long 74°01'16", Rockland County, on left bank at old bridge, at Thiells, 0.8 mi (1.3 km) upstream from Garnerville Reservoir, and 1.2 mi (1.9 km) downstream from South Branch Minisceongo Creek.	15.0	1977-79	1-25-79	3.22	740
01374494	Haviland Hollow Brook near Putnam Lake, NY	Lat 41°29'03", long 73°34'16", Putnam County, at bridge on Haviland Hollow-Putnam Lake Road, 0.6 mi (1.0 km) upstream from mouth, and 2 mi (3.2 km) northwest of Putnam Lake.	12.19	1977-79	1-25-79	6.26	-
013744949	East Branch Croton River near Deforest, NY	Lat 41°25'16", long 73°33'00", Putnam County, at culvert on County Road 84, 1.7 mi (2.7 km) south of Deforest Corners, and 0.6 mi (1.0 km) west of New York and Connecticut line.	.61	1977-79	1-25-79	8.99	-
01374645	Lake Carmel Inlet at Kent Corners, NY	Lat 41°28'19", long 73°39'15", Putnam County, at culvert on State Highway 311, 0.3 mi (0.5 km) upstream from mouth, and 0.4 mi (0.6 km) northeast of Kent Corners.	10.3	1975-79	1-25-79	2.50	-
01376410	Saw Mill River at Elmsford, NY	Lat 41°03'19", long 73°49'16", Westchester County, at bridge on State Highway 119, 0.6 m (1.0 km) upstream from Rum Brook, and 0.8 mi (1.3 km) downstream from Mine Brook at Elmsford.	15.4	1979	1-21-79	10.22	700
Hackensack River basin							
01376570	New City Brook near New City, NY	Lat 41°10'09", long 73°58'46", Rockland County, at bridge on road north of Christie Airport, 0.5 mi (0.8 km) east of Zukor Road, 0.8 mi (1.3 km) upstream from mouth, and 1.1 mi (1.8 km) north of New City.	5.51	1972-79	1-25-79	6.43	-
01376600	Hackensack River at Brookside Park, NY	Lat 41°10'18", long 73°58'24", Rockland County, at Brookside Park, 900 ft (270 m) upstream from State Highway 304, 1,300 ft (400 m) upstream from DeForest Lake, 0.8 mi (1.3 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) from Lake Lucille.	13.2	1959-63†, 1967-79	1-25-79	6.93	-
01376690	East Branch Hackensack River near Congers, NY	Lat 41°07'32", long 73°57'24", Rockland County, about 0.1 mi (0.2 km) downstream from small pond, half a mile (0.8 km) upstream from DeForest Lake, and 2 mi (3 km) south of Congers.	6.86	1960, 1968-69, 1971-79	5-25-79	10.29	594
01376842	Naurauschaun Brook at Nanuet, NY	Lat 41°05'49", long 74°00'40", Rockland County, on downstream left wingwall of culvert on old State Highway 59A, 50 ft (15 m) upstream from culvert on State Highway 59 in Nanuet.	2.33	1976-77, 1979	1-21-79	5.79	-

† Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Hackensack River basin--Continued							
01376855	Nauraushaun Brook at Pearl River, NY	Lat 41°03'32", long 73°59'35", Rockland County, on left bank, south of Blaauvelt Road, 100 ft (30 m) upstream from bridge of Sickeltown Road, 0.6 mi (1.0 km) upstream from mouth, and 0.8 mi (1.3 km) east of Pearl River.	6.04	1976-79	5-24-79	4.80	1,230
01377180	Pascack Brook at Spring Valley, NY	Lat 41°06'45", long 74°02'00", Rockland County, on road to Orange and Rockland Utilities substation, and 0.7 mi (1.1 km) east of Spring Valley.	2.13	1972-79	5-24-79	3.07	-
01377196	Pascack Brook tributary at Erie Railroad at Spring Valley, NY	Lat 41°06'41", long 74°02'35", Rockland County, at Spring Valley, 20 ft (6 m) downstream from Erie Railroad Bridge, 300 ft (91 m) downstream from reservoir, and 0.9 mi (1.4 km) upstream from Pascack Brook.	3.88	1977-79	1-25-79	3.96	450
01377200	Pascack Brook tributary at Spring Valley, NY	Lat 41°06'15", long 74°01'57", Rockland County, 250 ft (76 m) upstream from mouth, on right downstream wingwall of bridge on Pascack Road at Spring Valley.	4.58	1960-62‡, 1963-74, 1976-79	4- 2-76 2-25-77 1-25-79	5.77 4.79 5.96	R- R- -
01377260	Pascack Brook near Pearl River, NY	Lat 41°04'30", long 74°02'47", Rockland County, on right bank, in Town of Ramapo Park, 250 ft (76 m) east of Pascack Road, 0.7 mi (1.1 km) upstream from Crooked Hill Road, and 1.1 mi (1.8 km) northeast of Pearl River.	8.42	1977-79	1-25-79	6.66	953
01387250	Ramapo River at Sloatsburg, NY	Lat 41°10'08", long 74°11'27", Rockland County, on left bank, 300 ft (91 m) upstream from Washington Avenue bridge, 600 ft (183 m) downstream from unnamed tributary at Sloatsburg, 0.6 mi (1.0 km) upstream from Stony Brook.		1956, 1960-63, 1976-79	11- 8-77 1-25-79	11.03 10.53	R3,660 3,070
01387410	Torne Brook at Ramapo, NY	Lat 41°08'34", long 74°09'44", Rockland County, 0.2 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) east of Ramapo.	2.62	1960, 1962-79	9- 6-79	7.09	-
Delaware River basin							
01417185	Campbell Brook tributary near Downsville, NY	Lat 42°02'41", long 74°58'37", Delaware County, at culvert on Campbell Brook Road, 200 ft (61 m) upstream from mouth, 2.0 mi (3.2 km) southwest of Downsville Dam, and 2.7 mi (4.3 km) southeast of Downsville.	.41	1975-79	R9-25-77 3- 5-79	R3.60 2.06	R47 15
01437345	Basher Kill tributary near Westbrookville, NY	Lat 41°30'34", long 74°32'36", Sullivan County, at culvert on town road, 0.2 mi (0.3 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Westbrookville.	1.51	1975-79	1- 2-79	3.59	82
Susquehanna River basin							
01496370	Mink Creek at Richfield Springs, NY	Lat 42°50'55", long 75°00'10", Otsego County, at bridge on State Highway 28, 0.4 mi (0.6 m) southwest of Richfield Springs, and 1 mi (1.6 km) upstream from mouth.	10.4	1969-79	3- 5-79	b5.67	-
01497805	Little Elk Creek near Westford, NY	Lat 42°38'01", long 74°47'45", Otsego County, at culvert on Greenbush Road, 1.2 mi (1.9 km) south of Westford, and 2.2 mi (3.5 km) from mouth.		1978-79	R10-17-77 3- 5-79	18.54 18.20	202 184

‡ Operated as a continuous-record gaging station.

b Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Susquehanna River basin--Continued							
01501140	Wharton Creek tributary near Edmeston, NY	Lat 42°42'35", long 75°13'19", Otsego County, at culvert on town road, 1.1 mi (1.8 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Edmeston.	2.02	1976-79	12-15-78 3- 5-79	b4.08 4.00	- 132
01502701	Susquehanna River at Afton, NY	Lat 42°13'38", long 75°31'27", Chenango County, on right bank at downstream side of bridge on State Highway 41, 0.1 mi (0.16 km) southeast of Afton and intersection of State Highways 7 and 41, and 0.2 mi (0.32 km) down- stream from Kelsey Brook.	1,716	1972-77, 1979	6-23-72 3-14-77 3- 7-79	a16.21 17.86 17.90	a34,700 41,900 42,000
01502714	Oquaga Creek near Belden, NY	Lat 42°10'12", long 75°40'45", Broome County, at culvert on Kane Road, 2.3 mi (3.7 km) south of Belden, 2.8 mi (4.5 km) west of Harpursville, and 4.5 mi (7.2 km) upstream from mouth.	3.37	1977-79	3- 5-79	3.24	210
01503960	Electric Light Stream near Morrisville, NY	Lat 42°52'51", long 75°38'37", Madison County, at bridge on Eaton-Morrisville Road, in Eagleville, 0.4 mi (0.6 km) upstream from mouth, and 1.3 mi (2.1 km) south of Morrisville.	7.21	1976-79	3- 5-79	10.03	260
01503980	Chenango River at Eaton, NY	Lat 42°51'02", long 75°36'21", Madison County, at bridge on London Road at Eaton, 0.1 mi (0.2 km) upstream from Eaton Brook, and 0.1 mi (0.2 km) downstream from State Highway 26.	24.3	1964-65, 1967-79	3-29-67 3-23-68 4- 5-69 4- 2-70 3- 5-79	6.28 6.87 6.81 7.28 7.53	R384 R598 R574 R854 1,130
01505018	Cold Brook at North Norwich, NY	Lat 42°36'26", long 75°31'58", Chenango County, at culvert on town road, 0.8 mi (1.3 km) southwest of North Norwich, and 1.5 mi (2.4 km) upstream from mouth.	4.77	1975-79	2-22-76 3- 5-79	R4.00 5.86	R180 a300
01507000	Chenango River at Greene, NY	Lat 42°19'28", long 75°46'18", Chenango County, on left bank 1,700 ft (520 m) down- stream from bridge on State Highway 206 at Greene, and 0.6 mi (1.0 km) downstream from Birdsall Creek.	593	1937-70†, 1971-79	3- 6-79	17.41	17,900
01508946	Otter Creek tributary at State Highway 222 near Cortland, NY	Lat 42°35'22", long 76°14'01", Cortland County, at culvert on State Highway 222, 1.0 mi (1.6 km) upstream from mouth, and 1.8 mi (2.9 km) west of Cortland.	2.85	1976-79	3- 5-79	12.11	95
01510610	Merrill Creek tributary near Texas Valley, NY	Lat 42°28'03", long 75°59'19", Cortland County, at bridge on town road, 0.3 mi (0.5 km) up- stream from mouth, and 1.4 mi (2.3 km) southwest of Texas Valley.	5.32	1976-79	3- 5-79	1.56	325
01511500	Tioughnioga River at Itaska, NY	Lat 42°17'55", long 75°54'30", Broome County, on right bank at Itaska, 3.8 mi (6.1 km) downstream from Otselic River and village of Whitney Point, and 6 mi (10 km) upstream from mouth.	730	1929-67†, 1968-79	3- 6-79	10.03	17,000

† Operated as a continuous-record gaging station.

a Approximately.

b Ice jam.

R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Susquehanna River basin--Continued							
01513500	Susquehanna River at Vestal, NY	Lat 42°05'27", long 76°03'23", Broome County, on left bank 400 ft (120 m) downstream from highway bridge at Vestal, and 800 ft (240 m) upstream from Choconut Creek.	3,941	1938-67†, 1968-72, 1974-79	3- 6-79	26.62	81,700
01513712	Nanticoke Creek tributary at Nanticoke, NY	Lat 42°16'40", long 76°02'51", Broome County, at culvert on Rabbit Road, 0.4 mi (0.6 km) northeast of Nanticoke, and 0.6 mi (1.0 km) upstream from mouth.	1.70	1976-79	9-25-75 3- 5-79	5.73 2.76	310 145
01514000	Owego Creek near Owego, NY	Lat 42°07'40", long 76°16'17", Tioga County, on right bank of right channel 300 ft (91 m) upstream from bridge on State Highway 96, 0.5 mi (0.8 km) upstream from Catatonk Creek, and 1.5 mi (2.4 km) north of Owego.	1.85	1930-78†, 1979	3- 6-79	10.34	11,500
01521596	Big Creek near Howard, NY	Lat 42°22'01", long 77°34'33", Steuben County, at culvert on town road, 0.1 mi (0.2 km) south of State Highway 70, 1.3 mi (2.1 km) north of Butch Corner, 3.4 mi (5.5 km) west of Howard, and 6.2 mi (10.0 km) upstream from mouth.	6.36	1977-79	9-25-77 1- 1-79 3- 5-79	15.63 b14.81 14.28	450 - 105
01525500	Canisteo River at West Cameron, NY	Lat 42°13'20", long 77°25'05", Steuben County, on right bank 250 ft (76 m) downstream from bridge on County Highway 119, 0.3 mi (0.5 km) southeast of West Cameron, and 1.7 mi (2.7 km) north of Cameron.	340	1930-31†, 1937-70†, 1971-72, 1974-79	3- 5-79	12.36	7,270
01530301	Cuthrie Run near Big Flats, NY	Lat 42°10'43", long 76°55'32", Chemung County, at culvert on Breed Hollow Road, 0.9 mi (1.4 km) north of intersection of Eaches Hollow Road and Breed Hollow Road, 2.3 mi (3.7 km) north of State Highway 17, and 3.0 mi (4.8 km) north of Big Flats.	5.39	1976, 1979	6-19-76 3- 5-79	18.52 16.89	800 490
Allegheny River basin							
03010734	Ischua Creek near Machias, NY	Lat 42°24'28", long 78°33'33", Cattaraugus County, at culvert on Very Road, 0.2 mi (.32 km) upstream from mouth, 0.7 mi (1.1 km) north of State High- way 242, and 1.5 mi (2.4 km) west of Machias.	5.12	1978-79	R3-21-78 9-14-79	R9.35 10.59	R500 570
03010800	Olean Creek near Olean, NY	Lat 42°07'12", long 78°25'12", Cattaraugus County, on right bank at upstream side of high- way bridge, 1,000 ft (300 m) west of State Highway 16, 1.4 mi (2.3 km) northeast of Olean, and 4.6 mi (7.4 km) upstream from mouth.	198	1959-68†, 1970-79	1- 2-79	11.25	4,520
03011000	Great Valley Creek near Salamanca, NY	Lat 42°10'42", long 78°41'40", Cattaraugus County, on left bank 0.3 mi (0.5 km) upstream from highway bridge, 1 mi (1.6 km) downstream from Hungry Hollow, 1.5 mi (2.4 km) northeast of Salamanca, and 2 mi (3.2 km) up- stream from mouth.	137	1950-68†, 1977-79	1- 2-79 1-25-79	13.85 b14.88	3,700 -

† Operated as a continuous-record gaging station.

b Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Allegheny River basin--Continued							
03012837	West Branch Conewango Creek tributary near Hamlet, NY	Lat 42°21'55", long 79°10'17", Chautauqua County, at culvert on Hamlet Road, 0.1 mi (0.2 km) west of the intersection of State Highway 83 and Hamlet Road, 1.0 mi (1.6 km) upstream from mouth, and 1.9 mi (3.1 km) west of Hamlet.	6.84	1977-79	8- 8-79 9-14-79	18.72 18.42	820 860
03013800	Ball Creek at Stow, NY	Lat 42°09'13", long 79°24'27", Chautauqua County, at bridge on State Highway 17J at Stow.	9.06	1935-66, 1974-79	6- 6-75 3- 4-76 9-24-77 9-14-79	17.94 18.30 17.71 21.88	R1,170 1,280 R1,100 2,000
Streams tributary to Lake Erie							
04213399	Walnut Creek tributary near Forestville, NY	Lat 42°28'12", long 79°08'07", Chautauqua County, at culvert on Quarry Road, 0.1 mi (0.2 km) north of the inter- section of Quarry Road and Hopper Road, 1.6 mi (2.6 km) east of Forestville and 2.3 mi (3.7 km) upstream from mouth.	1.12	1979	9-14-79	14.83	244
04213490	South Branch Cattaraugus Creek near Otto, NY	Lat 42°21'54", long 78°48'06", Cattaraugus County, at highway bridge, 0.2 mi (0.3 km) upstream from Mansfield Creek, and 1.7 mi (2.7 km) northeast of Otto.	25.6	1963-79	9-14-79	11.18	4,350
04214040	Delaware Creek near Angola, NY	Lat 42°37'46", long 79°03'15", Erie County, at bridge on State Highway 5, 1.5 mi (2.4 km) southwest of Angola, and 1.6 mi (2.6 km) upstream from mouth.	8.15	1963-79	9-14-79	15.91	-
04214410	Hunter Creek at Colegrave, NY	Lat 42°44'11", long 78°32'55", Erie County, at bridge on Center Line Road, 0.3 mi (0.5 km) east of Colegrave, and 3.5 mi (5.6 km) upstream from mouth.	14.0	1964-79	4- 5-78 9-14-79	5.78 6.33	1,140 1,310
04214980	Little Buffalo Creek near East Lancaster, NY	Lat 42°52'46", long 78°36'27", Erie County, at bridge on Schwartz Road, 1.9 mi (3.1 km) southeast of East Lancaster, and 2.9 mi (4.7 km) upstream from mouth.	23.9	1963-73, 1976-79	9-14-79	8.86	2,140
Streams tributary to Niagara River							
04216400	Tonawanda Creek near Johnsonburg, NY	Lat 42°43'05", long 78°19'18", Wyoming County, on State Highway 98 near Johnsonburg, and 0.6 mi (1.0 km) downstream from East Fork.	23.6	1962-79	3-13-62 3-26-63 3- 5-64 3-15-71 1-29-75 9-14-79	6.68 6.98 7.31 6.62 8.14 9.44	R625 R700 R782 R610 998 1,380
04216875	Little Tonawanda Creek Tributary near Batavia, NY	Lat 43°56'33", long 78°09'46", Genesee County, at culvert on Francis Road, 1.6 mi (2.6 km) upstream of mouth, and 2.9 mi (4.7 km) south of the city limits of Batavia.	1.01	1976-79	3-22-78 3- 5-79	14.23 12.94	130 100
04217700	Murder Creek at Pembroke, NY	Lat 42°59'37", long 78°26'08", Genesee County, at Lake Road bridge, 0.3 mi (0.5 km) south of Pembroke, and 12.5 mi (20.1 km) west of Batavia.	43.9	1962-72, 1974-79	3- 4-79	9.35	1,740
04219645	Fourmile Creek near Youngstown, NY	Lat 43°13'49", long 79°01'01", Niagara County, at culvert on Balmer Road, 200 ft (61 m) east of State Highway 18, 1.5 mi (3.2 km) southeast of Youngstown, and 3.4 mi (5.5 km) above the mouth.	4.88	1969-70, 1971-73, 1976-79	3- 5-79	7.80	140

d Debris jam.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Streams tributary to Lake Ontario							
04219738	Eighteenmile Creek tributary near Lockport, NY	Lat 43°12'20", long 78°46'47", Niagara County, at culvert on Budd Road, 3.3 mi (5.3 km) northwest of Lockport and 4.1 mi (6.6 km) upstream from mouth.	2.53	1979	3- 5-79	13.50	260
04219900	Johnson Creek near Lyndonville, NY	Lat 43°20'21", long 78°20'55", Orleans County, at bridge on Woodworth Road, 3.3 mi (5.3 km) downstream from dam at Lyndonville, and 4.4 mi (7.1 km) upstream from mouth.	87.7	1962-70, 1972-73, 1976-79	3-27-63 3-14-64 2- 8-65 3-11-67 3- 5-79	7.05 5.90 5.49 6.58 b9.79	1,840 1,310 1,140 1,620 a3,000
04219905	Johnson Creek tributary near Lyndonville, NY	Lat 43°20'09", long 78°19'30", Orleans County, at culvert on Alps Road at intersection of Goodwin Road, 0.5 mi (0.8 km) upstream from mouth, and 2.8 mi (4.5 km) east of Lyndonville.	1.95	1970, 1972-73, 1977-79	4- 2-70 6-24-72 3-17-73 R4-23-77 3-22-78 3- 5-79	23.59 22.83 23.66 R22.06 24.79 23.31	- - - - - -
04219922	Oak Orchard Creek at Barrville Road near Elba, NY	Lat 43°05'42", long 78°08'43", Genesee County, at culvert on Barrville Road, 2.3 mi (3.7 km) northeast of Elba, and 6.0 mi (9.6 km) north of Batavia.	6.34	1976-79	3- 6-76 9-25-77 3-22-78 3- 5-79	8.61 9.33 9.83 9.31	127 173 205 170
04220245	West Creek near Hamlin, NY	Lat 43°17'42", long 71°53'32", Monroe County, at culvert on Hamlin Center Road, 1.5 mi (2.4 km) east of State Highway 18, and 1.6 mi (2.6 km) south- east of Hamlin.	4.56	1978-79	3- 5-79	b6.58	-
04221769	Black Creek at Hyder Flats Road at Black Creek, NY	Lat 42°16'03", long 78°13'38", Allegany County, at culvert on Ryder Flats Road, 0.6 mi (1.0 km) south of Black Creek, and 8.5 mi (13.7 km) upstream from mouth.	10.6	1978-79	1-25-79 3- 5-79	b6.09 5.26	- 1,800
04222600	Wiscoy Creek at Bliss, NY	Lat 42°34'59", long 78°14'16", Wyoming County, at bridge on county road, 0.1 mi (0.2 km) north of State Highway 39, and 0.6 mi (1.0 km) east of Bliss.	21.8	1962-65, 1967-79	12- 6-72 9-14-79	R3.27 2.84	1,100 -
04224700	Sugar Creek near Ossian, NY	Lat 42°30'52", long 77°48'12", Livingston County, on right bank 300 ft (91 m) downstream from bridge on Linzy Road, 1.3 mi (2.1 km) southwest of Ossian, and 5.1 mi (8.2 km) upstream from mouth.	9.83	1964-73, 1975, 1977-79	9-14-79	4.51	444
04224807	Stony Brook tributary at South Dansville, NY	Lat 42°28'16", long 77°40'21", Steuben County, at culvert on Willey Road, 0.6 mi (1.0 km) from mouth, and 0.9 mi (1.4 km) west of South Dansville.	3.29	1977-79	1- 2-79	10.05	a170
04224900	Mill Creek at Patchinville, NY	Lat 42°31'13", long 77°35'06", Steuben County, at bridge on Ellinger Road, 0.1 mi (0.2 km) east of State Highway 21, 0.8 mi (1.3 km) south of Patchinville, 3.3 mi (5.3 km) south of Wayland, and 9.1 mi (14.6 km) upstream from mouth.	5.00	1964-79	7-24-79	2.05	184
04231040	Hotel Creek at Griffin Road near Churchville, NY	Lat 43°03'57", long 77°52'29", Monroe County, at bridge on Griffin Road, 3.0 mi (4.8 km) upstream from mouth, and 3.1 mi (5.0 km) southeast of Churchville.	4.57	1976-79	3- 6-76 9-25-77 3-22-78 3- 5-79	12.41 12.19 12.41 12.78	72 56 73 88

a Approximately.

b Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Streams tributary to Lake Ontario--Continued							
042320527	Mill Creek tributary near Webster, NY	Lat 43°14'45", long 77°26'43", Monroe County, at culvert on Woodboro Farms Road, 400 ft (120 m) east of Holt Road, and 1.0 mi (1.6 km) north of Webster.	1.80	1971-72, 1976-79	3-15-71 3-22-72 9- 6-79	12.48 12.28 12.14	125 110 124
042320578	Bear Creek at Ontario, NY	Lat 43°13'30", long 77°17'00", Wayne County, at culvert on New Street in Ontario, 100 ft (30 m) west of Furnace Road.	6.74	1975-79	3- 5-79	13.17	189
04232087	Red Creek tributary No. 16 near Red Creek, NY	Lat 43°13'36", long 76°42'23", Cayuga County, at culvert on town road (Red Creek Road), 1.3 mi (2.1 km) southeast of Red Creek.	2.90	1976-79	2-17-76 3- 6-79	7.82 7.92	92 96
04232460	Sugar Creek at Guyanoga, NY	Lat 42°37'23", long 77°09'30", Yates County, at bridge on Sid White Road, 0.4 mi (0.6 km) east of Guyanoga, and 2.3 mi (3.7 km) upstream from mouth.	28.9	1966-79	3- 5-79	4.20	-
04232630	Kendig Creek near MacDougall, NY	Lat 42°50'57", long 76°53'33", Seneca County, at downstream side of bridge on County Highway of MacDougall, 3.5 mi (5.6 km) southwest of Waterloo, and 4.6 mi (7.4 km) upstream from mouth.	13.8	1965-68†, 1969-79	1-31-69 3-16-71 R9-25-77 12-15-77 3-15-78 3- 5-79	3.08 b6.23 R5.14 5.72 b6.72 5.89	84 a700 R435 575 - 622
04233255	Cayuga Inlet at Ithaca, NY	Lat 42°25'38", long 76°31'19", Tompkins County, on upstream abutment face of flood-control weir, at east end of Burtt Place, south of Ithaca city line, 0.3 mi (0.5 km) east of State Highway 13a, 0.9 mi (1.4 km) downstream from Buttermilk Creek, and 2.4 mi (3.9 km) upstream from mouth.	86.7	1971-72, 1975-79	3-15-71 3- 6-79	10.74 9.42	5,150 3,420
04233310	Sixmile Creek near Ithaca, NY	Lat 42°24'33", long 76°27'14", Tompkins County, at bridge on Burns Road, 1.8 mi (2.9 km) southeast of Ithaca, and 4.4 mi (7.1 km) upstream from mouth.	42.0	1967-69, 1971-73, 1976-79	3- 6-79	7.49	3,140
04233676	Virgil Creek at Mill Street, Dryden, NY	Lat 42°29'18", long 76°18'08", Tompkins County, at bridge on Mill Street at Dryden, and 0.1 mi (0.2 km) upstream from Dryden Lake Outlet.	20.7	1966-70, 1972, 1975-79	3-28-67 11- 3-67 6-24-69 6-23-72 3- 6-79	2.58 3.25 5.09 3.90 4.38	R433 680 1,580 R910 1,160
04233700	Virgil Creek at Freeville, NY	Lat 42°30'18", long 76°21'01", Tompkins County, on left bank, 10 ft (3 m) upstream from bridge on Johnson Street in Freeville, and 0.8 mi (1.3 km) upstream from Fall Creek.	40.3	1974-75†, 1976-79	9-26-75 2-22-76 9-25-77 3- 6-79	20.20 16.82 17.08 17.37	R2,740 R1,140 R1,210 1,300
042340202	Cayuga Lake tributary No. 8 near Jacksonville, NY	Lat 42°32'24", long 76°35'35", Tompkins County, at culvert on State Highway 89 (Taughannock Boulevard), 0.1 mi (0.2 km) upstream from mouth, and 2.4 mi (3.9 km) northeast of Jacksonville.	1.36	1977-79	1-25-79 3- 5-79	b6.50 6.31	87
042340588	Yawger Creek tributary near Auburn, NY	Lat 42°54'41", long 76°39'46", Cayuga County, at culvert on Chamberlain Road, 3.5 mi (5.6 km) west of Auburn, and 4.3 mi (6.9 km) upstream from mouth.	1.76	1976-79	7-11-76 3- 4-77 9- 7-79	11.57 10.60 12.83	54 36 74

† Operated as a continuous-record gaging station.

a Approximately.

b Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

485

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Streams tributary to Lake Ontario--Continued							
04234200	Mud Creek at East Victor, NY	Lat 42°58'28", long 77°22'57", Ontario County, 25 ft (8 m) downstream from bridge on State Highway 96, 0.3 mi (0.5 km) upstream from Fish Creek, at East Victor.	64.2	1958-68†, 1972, 1976-79	3- 5-79	b6.05	a1,100
04234363	Marbletown Creek tributary near Newark, NY	Lat 43°02'47", long 77°02'57", Wayne County, at culvert at intersection of Brumm and Sutton Roads, and 1.2 mi (1.9 km) east of Newark.	0.58	1976-79	2-17-76 5-26-79	5.33 4.78	31 23
04235255	Canandaigua Outlet tributary near Alloway, NY	Lat 43°00'21", long 77°00'54", Ontario County, at bridge on Pre-Emption Road, 0.5 mi (0.8 km) south of Wayne-Ontario County line, and 1.8 mi (2.9 km) south- west of Alloway.	2.94	1978-79	3- 5-79	7.05	154
04235276	Black Brook at Tyre, NY	Lat 42°59'30", long 76°48'13", Seneca County, at bridge on County Highway 101, in village of Tyre, and 0.8 mi (1.3 km) upstream from mouth.	19.0	1966-73, 1975-79	2-14-66 3-29-67 1-30-68 1-31-69 12-11-69 6-23-72 4- 5-73 9-26-75 2-18-76 4-23-77 12-14-77 3- 6-79	2.70 2.22 2.56 3.68 2.34 3.61 3.41 3.77 3.63 2.63 5.02 4.57	204 R134 183 410 R154 R392 R352 R432 R398 R209 786 651
04242795	Canada Creek tributary near Lee Center, NY	Lat 43°19'40", long 75°31'52", Oneida County, at culvert on Streu Road at Negro Road, 1.6 mi (2.6 km) upstream from mouth, 1.7 mi (2.7 km) northwest of Lee Center, and 7.6 mi (12.2 km) northwest of Rome.	1.34	1977-79	R10- 9-76 R9-12-78 4-26-79	R6.95 R2.65 2.55	R165 R63 60
04245405	Negro Brook near Bridgeport, NY	Lat 43°07'46", long 75°56'50", Madison County, at culvert on Marsh Mill Road, 0.2 mi (0.3 km) upstream from mouth, and 2.1 mi (3.4 km) southwest of Bridgeport.	1.53	1976-79	3- 6-79	6.80	114
04245840	Scriba Creek near Constantia, NY	Lat 43°15'35", long 76°00'11", Oswego County, on right bank, 8 ft (2 m) upstream from road to Ingersol Road, and about 0.8 mi (1.3 km) north of vil- lage of Constantia.	38.4	1966-68†, 1969, 1971-79	7- 3-74 10-17-76 4- 1-78 3- 6-79	R5.78 5.08 5.08 6.08	639 463 463 724
04249011	Wine Creek at Oswego, NY	Lat 43°27'43", long 76°28'43", Oswego County, at culvert on U.S. Highway 104, 0.3 mi (0.5 km) west of east city limits of City of Oswego, and 1.4 mi (2.3 km) upstream from mouth.	3.11	1976-78	2-19-76 3-29-77 3-23-78	11.07 12.77 11.37	83 165 96
04249050	Catfish Creek at New Haven, NY	Lat 43°29'00", long 76°19'34", Oswego County, at bridge on State Highway 104B, at New Haven, 1.4 mi (2.3 km) up- stream from mouth.	31.7	1962-66, 1968-79	4- 8-62 3-27-63 3- 5-64 4-12-65 3-23-68 1-31-69 9-26-75 4-16-76 3- 6-79	4.47 5.58 5.12 4.92 b5.21 4.77 5.53 7.02 5.94	264 476 384 344 a400 328 480 789 562

† Operated as a continuous-record gaging station.

a Approximately.

b Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Streams tributary to Lake Ontario--Continued							
042490673	North Branch Grindstone Creek near Altmar, NY	Lat 43°29'31", long 76°05'41", Oswego County, at culvert on Hong Kong Road, 4.1 mi (6.6 km) upstream from con- fluence with South Branch Grindstone Creek, and 4.1 mi (6.6 km) southwest of Altmar.	11.2	1976-79	4-16-76 14.63 R3-13-77 R15.03 3- 6-79 8.80	470 R482 242	
04256040	Mill Creek tributary near Lowville, NY	Lat 43°45'43", long 75°31'13", Lewis County, at culvert on West Road, 2.0 mi (3.2 km) southwest of Lowville, and 2.2 mi (3.5 km) upstream from mouth.	1.68	1976-79	R3-23-76 - 3-30-77 10.91 3- 5-79 13.41	- R130 312	
04258700	Deer River at Deer River, NY	Lat 43°55'49", long 75°35'31", Lewis County, on left bank 350 ft (107 m) upstream from bridge on State Highway 26 at Deer River, and 2 mi (3.2 km) upstream from mouth.	98.1	1957-69†, 1977-79	3-25-79 7.07 3- 6-79 b11.10	8,400 -	
04260575	Horse Creek tributary near Dexter, NY	Lat 44°04'47", long 76°03'28", Jefferson County, at bridge on Weaver Road, 0.3 mi (0.5 km) upstream from mouth, 1.0 mi (1.6 km) southwest of Reynolds Corners, and 5.1 mi (8.2 km) north of Dexter.	4.59	1976-79	3-23-76 R11.20 4- 1-78 13.58 3- 5-79 13.35	225 560 525	
Streams tributary to St. Lawrence River							
04264200	Little Sucker Brook at Waddington, NY	Lat 44°50'28", long 75°11'28", St. Lawrence County, on left bank, on downstream side of bridge on State Highway 345, 0.6 mi (1.0 km) south of Waddington, and 3.9 mi (6.3 km) upstream from mouth.	19.9	1959-60†, 1961-69, 1971-79	9-15-79 3.44 3- 5-79 b4.83	- -	
04264300	Brandy Brook near Waddington, NY	Lat 44°49'42", long 75°04'32", St. Lawrence County, at bridge on Halfway House Road, 3.2 mi (5.1 km) southeast of Waddington, and 4.4 mi (8.2 km) upstream from mouth.	27.0	1959-63†, 1964-69, 1976-79	4-16-79 6.87 3- 5-79 b7.56	- -	
04265100	Elm Creek near Hermon, NY	Lat 44°26'14", long 75°12'52", St. Lawrence County, on left bank, 100 ft (30 m) downstream from highway bridge, 2.3 mi (3.7 km) south of Hermon, and 6.8 mi (10.9 km) upstream from confluence with Tanner Creek.	33.0	1958-68†, 1969-79	4-26-79 6.10 3- 5-79 b8.15	417 -	
04267800	Trout Brook at Allen Corners, NY	Lat 44°47'33", long 75°01'59", St. Lawrence County, at aban- doned bridge off State Highway 56A, at Allen Corners, and 2 mi (3 km) southwest of Norfolk.	56.2	1958-63†, 1964-76, 1967-74, 1976-79	5-20-76 9.63 9-15-79 7.86 3- 5-79 b10.74	R1,420 830 -	
04268200	Plum Brook at Grantville, NY	Lat 44°52'45", long 74°54'52", St. Lawrence County, at bridge on Grant Road, 0.7 mi (1.1 km) downstream from unnamed tribu- tary, 1.1 mi (1.8 km) upstream from mouth, 1.4 mi (2.3 km) north of Grantville, and 2.3 mi (3.7 km) southwest of Massena city limits.	37.6	1958-63†, 1964, 1966-68, 1971-79	4- 3-67 4.74 4- 1-68 5.36 5- 4-71 5.84 5- 4-72 5.87 1-23-73 5.98 3-25-79 5.06	R446 R669 R895 R910 R969 552	
04268720	Hopkinton Brook at Hopkinton, NY	Lat 44°40'59", long 74°41'58", St. Lawrence County, at bridge on town road, 0.4 mi (0.6 km) upstream from unnamed tributary, 0.6 mi (1.0 km) south of Hopkinton, and 2.0 mi (3.2 km) upstream from mouth.	18.5	1967, 1969, 1973-74, 1976-79	3-25-79 3.55 3- 5-79 b3.71	- -	

† Operated as a continuous-record gaging station.

b Ice jam.

R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Streams tributary to St. Lawrence River--Continued							
04268800	West Branch St. Regis River near Parishville, NY	Lat 44°35'52", long 74°44'19", St. Lawrence County, at high- way bridge, 4.1 mi (6.6 km) downstream from Mud Pond Outlet, 4.2 mi (6.8 km) southeast of Parishville, and 4.8 mi (7.7 km) upstream from Niagara Mohawk Power Corp. dam.	172	1959-68† 1969, 1971, 1974, 1976-79	3-25-79 3- 7-79	4.77 b5.02	2,650 -
04269050	Allen Brook near Brasher Falls, NY	Lat 44°48'07", long 74°43'40", St. Lawrence County, at bridge on U.S. Highway 11, 0.8 mi (1.3 km) upstream from mouth, and 2.2 mi (3.5 km) east of Brasher Falls.	16.0	1961-66†, 1967-74, 1976-79	5-20-76 3-14-77 9-15-79 3- 5-79	4.79 4.88 3.94 b5.94	853 924 376 -
04269100	Lawrence Brook near Moira, NY	Lat 44°50'22", long 74°35'46", Franklin County, at highway bridge, 2.4 mi (3.9 km) north- west of Moira, and 5.4 mi (8.7 km) upstream from mouth.	28.0	1959-60†, 1961-79	9-15-79 3- 5-79	5.60 b6.68	586 -
04269500	Deer River at Brasher Iron Works, NY	Lat 44°53'32", long 74°41'28", St. Lawrence County, 400 ft (122 m) upstream from high- way bridge, at Brasher Iron Works, 2.6 mi (4.2 km) south- east of Helena, 3.6 mi (5.8 km) upstream from mouth, and 3.8 mi (6.1 km) downstream from Lawrence Brook.	189	1913-16†, 1959-68†, 1969, 1971-74, 1976-79	9-15-79	5.99	2,830
04270100	West Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'49", long 74°28'49", Franklin County, at highway bridge, 0.8 mi (1.3 km) west of Fort Covington Center, 2.1 mi (3.4 km) upstream from East Branch, and 3.1 mi (5.0 km) south Fort Covington.	31.4	1962-74, 1976-79	4-13-78 9-15-79	6.74 5.65	1,200 752
04270150	East Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'52", long 74°27'51", Franklin County, at highway bridge, at Fort Covington Center, 1.9 mi (3.1 km) up- stream from West Branch, and 3.2 mi (5.1 km) south of Fort Covington.	23.1	1961-62†, 1963-74, 1976-79	7- 7-62 3- 4-66 1-26-67 3-23-68 4- 5-69 4- 9-70 4-14-71 5- 4-72 4- 2-73 4- 5-74 5-20-76 4-14-78 3-25-79 3- 5-79	5.51 6.64 4.52 4.23 4.30 4.76 4.94 4.95 5.43 6.34 6.33 5.16 6.45 b8.16	R703 R1,230 R393 R325 R340 R457 R509 R512 R673 R1,070 R1,060 R579 1,130 -
04270700	Trout River at Trout River, NY	Lat 44°59'23", long 74°17'56", Franklin County, at bridge on county highway, 0.2 mi (0.3 km) east of State Highway 30, at Trout River, 0.5 mi (0.8 km) upstream from international boundary, 1.5 mi (2.4 km) down- stream from unnamed tributary, and 3.3 mi (5.3 km) downstream from Little Trout River.	107	1960-66†, 1967-74, 1976-79	3-25-79	6.60	4,060
04270800	English River near Mooers Forks, NY	Lat 44°58'32", long 73°39'49", Clinton County, at highway bridge, 1.6 mi (2.6 km) up- stream from unnamed tributary, 1.7 mi (2.7 km) northwest of Mooers Forks, and 2.5 mi (4.0 km) upstream from international boundary.	40.8	1960-68†, 1969, 1971-74, 1976-79	3-25-79	4.48	-
04273700	Salmon River at South Plattsburgh, NY	Lat 44°38'24", long 73°29'43", Clinton County, on left bank, at bridge on Salmon River Road, at South Plattsburgh, 0.4 mi (0.6 km) west of State Highway 22, and 3.9 mi (6.3 km) upstream from mouth.	61.9	1960-68†, 1969, 1971-79	R9-26-77 3-13-77 4- 2-79 3-22-79	R4.08 b5.88 3.46 b4.58	R797 - 537 -

† Operated as a continuous-record gaging station.

b Ice jam.

R Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1979

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Hudson River basin						
01356150 Lisha Kill	Mohawk River	Lat 42°45'04", long 73°53'19", Albany County, 50 ft (15 m) up- stream of unnamed tributary 0.8 mi (1.3 km) southwest of Roosevelt School, 0.9 mi (1.4 km) upstream of State Street, and 1.4 mi (2.2 km) northwest of Maywood.	4.55		10-31-78 11-14-78	*0.79 *.78
01356155 Lisha Kill Tributary	Lisha Kill	Lat 42°45'06", long 73°53'17", Albany County, 50 ft (15 m) up- stream from mouth, 0.8 mi (1.3 km) south of Roosevelt School, 2.3 mi (3.7 km) southeast of Woodlawn School and 1.4 mi (2.2 km) northwest of Maywood.	2.20		10-31-78 11-14-78	*.34 *.43
01359507 Hunger Kill	Normans Kill	Lat 42°43'25", long 73°55'06", Albany County, at culvert on Old State Road, 0.8 mi (1.3 km) up- stream from Glass Pond, 1.3 mi (2.1 km) northwest of Guilderland.	3.91	1960-61 1970 1973-75 1977	10-25-78 11-14-78	*5.83 *5.77
01359510 East Branch Hunger Kill	Hunger Kill	Lat 42°42'40", long 73°54'39", Albany County, at culvert on Silver Road, 0.2 mi (0.3 km) upstream from Glass Pond, 0.4 mi (0.6 km) north of Guilderland.	1.58	1954 1960-65	10-25-78 11-14-78	*2.76 *3.22
01359511 Hunger Kill	Normans Kill	Lat 42°42'16", long 73°54'53", Albany County, 200 ft (61 m) downstream from Glass Pond and U.S. Highway 20, at Guilderland.	7.17	1960 1962	10-25-78 11-14-78	*9.84 *11.5
c/ 01359513 Hunger Kill	Normans Kill	Lat 42°41'23, long 73°54'26", Albany County, at bridge on Nott Road, 0.25 mi (0.4 km) upstream from Blockhouse Creek, 0.7 mi (1.1 km) upstream from mouth, and 1 mi (1.6 km) south of Guilderland.	8.16	1962-65 1967-77†	10-24-78 11-13-78 11-29-78 12-15-78 2- 5-79 4-12-79 6-14-79 7-16-79 8-28-79	*9.17 *9.37 *9.79 *10.5 *9.53 16.5 *12.4 *7.98 *8.78
013595165 Blockhouse Creek Tributary	Blockhouse Creek	Lat 42°41'09", long 73°54'01", Albany County, at mouth 0.1 mi (0.2 km) upstream of State Farm Road at Westmere.			11-13-78	*.07
01359518 Kaikout Kill	Blockhouse Creek	Lat 42°41'20", long 73°54'08", Albany County, at bridge on Nott Road, 0.2 mi (0.3 km) upstream from mouth, and 1.2 mi (1.9 km) southeast of Guilderland.	1.55	1962-65 1970 1973-75	10-24-78 11-13-78	*2.44 *2.33
013595235 Krum Kill	Normans Kill	Lat 42°39'33", long 73°49'42", Albany County, at upstream side of culvert on Krumkill Road, 0.1 mi (0.2 km) west of New York Thruway and 1.2 mi (1.9 km) southeast of North Bethlehem.	4.55		10-31-78 11-13-78	*2.11 *1.92
01359524 Krum Kill	Normans Kill	Lat 42°38'56", long 73°50'51", Albany County, at bridge on Blessing-Road, just upstream from mouth, at Karlsfeld.	5.58	1962-63 1970 1973-75	11-13-78	*2.43

* Base flow.

† Operated as a continuous-record gaging station.

c Water-quality data included in this report.

Discharge measurements made at miscellaneous sites during water year 1979--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Delaware River basin						
01417300 Baxter Brook	East Branch Delaware River	Lat 42°01'29", long 75°06'52", Delaware County, at bridge on State Highway 30, 0.25 mi (0.4 km) upstream from mouth, at Harvard.	14.2	1959-64 1966-68 1977-78	3- 7-79 4-20-79 5-31-79	229 37.1 83.9
01421200 Cadosia Creek	East Branch Delaware River	Lat 41°58'03", long 75°15'51", Delaware County, at bridge on State Highway 236, 0.3 mi (0.5 km) upstream from mouth, at Cadosia.	17.7	1974-78	11-15-78 5- 2-79 5-16-79 5-31-79 6- 6-79 6-20-79 7-12-79 8-29-79	8.89 47.5 14.8 101 26.4 5.84 2.20 2.96
01426000 Oquaga Creek	West Branch Delaware River	Lat 42°03'35", long 75°25'40", Broome County, on left bank, 200 ft (60 m) upstream from washed-out dam at rear of Delaware Mills, 400 ft (120 m) upstream from Mill Street Bridge in Deposit, and 0.3 mi (0.5 km) upstream from mouth.	66.4	1941-73‡ 1975-76	5- 2-79 5-16-79 5-31-79 6- 6-79 6-20-79 7-12-79 8-29-79	117 41.1 178 61.1 16.6 5.95 8.89
01428000 Tenmile River	Delaware River	Lat 41°33'51", long 75°00'56", Sullivan County, on left bank 0.5 mi (0.8 km) downstream from East Branch Tenmile River, 0.8 mi (1.3 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Tusten.	45.0	1946-73‡ 1978	5- 7-79 6-21-79 8-22-79	66.8 16.1 3.88
01436800 Bush Kill	Neversink River	Lat 41°30'34", long 74°39'20", Sullivan County, at timber bridge on dirt road, 0.4 mi (0.6 km) northwest of Oakland Valley.	19.5	1957-78	4-19-79 8-28-79	50.7 6.88
01438000 Neversink River	Delaware River	Lat 41°21'40", long 74°41'07", Orange County, at Tristates Bridge on East Main Street (U.S. Highway 6), in Port Jervis, 450 ft (137 m) upstream from Clove Brook, and 0.6 mi (1.0 km) upstream from mouth.	346	1902-03 1943 1945 1960-62 1965-78	3-23-79 6-26-79 8-22-79	632 244 118
Susquehanna River basin						
01501004 ^{c/} Mill Brook	Unadilla River	Lat 42°38'13", long 75°21'07", Chenango County, at culvert on Sherburne Turnpike, 0.5 mi (0.8 km) northwest of New Berlin, and 1.6 mi (2.6 km) upstream from mouth.	1.78	1975-78	5-15-79 7- 3-79 8-10-79 9- 5-79	1.02 .22 .05 e.05
01501008 ^{c/} Mill Brook Tributary	Mill Brook	Lat 42°37'34", long 75°21'06", Chenango County, at culvert on town highway, 0.4 mi (0.6 km) west of New Berlin, and 0.7 mi (1.1 km) upstream from mouth.	1.70	1975-78	5-15-79 7- 3-79 8-10-79 9- 5-79	1.59 .54 .19 e.2
01508800 ^{c/} Factory Brook	West Branch Tioughnioga River	Lat 42°38'39", long 76°11'19", Cortland County, at bridge on State Highway 41, about 1 mi (1.6 km) upstream from mouth at bridge on State Highway 281, 0.9 mi (1.4 km) upstream from mouth, in Homer.	15.8	1962-66 1970 1972-78	12-12-78 3-20-79 6-12-79	18.0 44.8 12.4
01513847 East Branch Owego Creek Tributary	East Branch Owego Creek Tributary	Lat 42°26'27", long 76°14'19", Cortland County, at culvert on Daisy Hollow Road 50 ft (15 m) southeast of Cotterill Crossroad and 1.2 mi (1.9 km) northwest of Harford.			3- 5-79 3-13-79	18.3 .84

‡ Operated as a continuous-record gaging station.

c Water-quality data included in this report.

e Estimated.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1979--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Susquehanna River basin--Continued						
01513848	East Branch	Lat 42°26'19", long 76°14'47",			3- 6-79	13.0
East Branch	Owego Creek	Cortland County, at culvert			3- 7-79	3.76
Owego Creek	Tributary	on Cotterill Lane 100 ft			3-26-79	.66
Tributary		(30 m) north of Lehigh Valley Railroad tracks and 1.3 mi (2.1 km) upstream from Harford.				
01513849	East Branch	Lat 42°26'17", long 76°14'49",			3- 6-79	3.80
East Branch	Owego Creek	Cortland County, at upstream			3- 7-79	.49
Owego Creek	Tributary	end of culvert under Cotterill				
Tributary		Lane on southwest side of Lehigh				
No. 2		Valley Railroad tracks, 1400 ft (430 m) northeast of State High- way 38 and 1.3 mi (2.1 km) upstream from Harford.				
01513850	East Branch	Lat 42°26'06", long 76°14'30",			3- 6-79	12.2
East Branch	Owego Creek	Cortland County, on northeast			3- 7-79	1.93
Owego Creek	Tributary	side of Lehigh Valley Railroad				
Tributary		tracks, 0.3 mi (0.5 km) northwest				
		of Daisy Hollow Road and 1.0 mi (1.6 km) northwest of Harford.				
01513851	East Branch	Lat 42°25'56", long 76°14'11",			3- 5-79	84.8
East Branch	Owego Creek	Cortland County, at culvert on			3- 6-79	48.1
Owego Creek		Daisy Hollow Road, 800 ft (240 m)			3- 7-79	19.6
Tributary		north of State Highway 38, 0.6 mi (1.0 km) upstream from Harford			3-13-79	3.20
		and 2.2 mi (3.5 km) upstream from mouth.				
01513852	East Branch	Lat 42°25'22", long 76°13'58",			5- 9-79	.65
Cheese	Owego Creek	Cortland County, at a culvert				
Factory	Tributary	on a town road 0.05 mi (0.1 km)				
Brook		southwest from Cheese Factory				
		Road, 0.3 mi (0.5 km) southwest				
		of Harford and 0.5 mi from mouth.				
01513853	East Branch	Lat 42°25'41", long 76°13'32",			5- 8-79	6.01
East Branch	Owego Creek	Cortland County, at State Highway				
Owego Creek		221 at Harford (North Harford				
Tributary		station).				
01513854	East Branch	Lat 42°25'12", long 76°13'00",			5- 8-79	8.00
East Branch	Owego Creek	Cortland County, 200 ft (61 m)				
Owego Creek		northeast of State Highway 38,				
Tributary		0.9 mi (1.4 km) upstream from				
		mouth and 0.7 mi (1.1 km)				
		southeast of Harford.				
01513856	East Branch	Lat 42°25'40", long 76°12'30",			5- 8-79	11.5
East Branch	Owego Creek	Cortland County, 0.1 mi (0.2 km)				
Owego Creek	Tributary	upstream from State Highway 221,				
Tributary		0.8 mi (1.3 km) upstream from				
		mouth, and 1.0 mi (1.6 km) east				
		of Harford.				
01513857	East Branch	Lat 42°25'24", long 76°12'47",			5- 8-79	.23
East Branch	Owego Creek	Cortland County, at downstream				
Owego Creek	Tributary	side of culvert under Lehigh				
Tributary		Valley Railroad tracks, 0.8 mi				
		(1.3 km) southeast of Harford				
		and 1.0 mi (1.6 km) northwest				
		of Harford Mills.				
01513858	East Branch	Lat 42°24'58", long 76°12'37",			5- 8-79	1.18
East Branch	Owego Creek	Cortland County, 200 ft (61 m)				
Owego Creek		northeast of State Highway 38,				
Tributary		0.4 mi (0.6 km) upstream of				
		mouth, 1.1 mi (1.8 km) southeast				
		of Harford, and 0.5 mi (0.8 km)				
		northwest of Harford Mills.				
01516000	Susquehanna	Lat 42°00'32", long 76°31'33",	140	1962-76	3- 7-79	1.05
Cayuta Creek	River	Tioga County, at bridge on		1978		
		Ithaca Street, Waverly, 2.4 mi				
		(3.9 km) upstream from mouth.				

Discharge measurements made at miscellaneous sites during water year 1979--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Allegheny River basin						
03013068 Mill Creek	Cassadaga Creek	Lat 42°18'11", long 79°14'17", Chautauqua County, at bridge on County Road 326 at Charlotte Center.	7.01		8- 7-79	p6,060
03013110 Hatch Creek	Cassadaga Creek	Lat 42°11'42", long 79°15'03", Chautauqua County, at bridge on State Highway 60 at Gerry, 1.2 mi (1.9 km) upstream from mouth.	6.11		8- 7-79	p2,900
Streams tributary to Lake Erie						
04213371 Canadaway Creek	Lake Erie	Lat 42°21'33", long 79°12'38", Chautauqua County, at culvert on County Road 326, 0.2 mi (0.3 km) south of Country Road 312, and 1.2 mi (1.9 km) east of Griswold.	2.19		8- 7-79	p1,880
Streams tributary to Lake Ontario						
042320502 ^{c/} Irondequoit Creek	Lake Ontario	Lat 43°09'27", long 77°31'37", Monroe County, at bridge on Browncroft Boulevard (State Highway 286A), 0.6 mi (1.0 km) east of State Highway 47, and 2.2 mi (3.5 km) upstream from mouth.	133	1976-78	10- 2-78 11- 8-78 12- 6-78 3- 3-79 4-19-79 5- 9-79 6- 6-79 6-28-79 8- 9-79 9-20-79	69.0 73.3 100 702 192 96.9 102 144 72.5 95.3
†04232460 Sugar Creek	Keuka Lake	Lat 42°37'23", long 77°09'30", Yates County, at bridge on Sid White Road, 0.4 mi (0.6 km) east of Guyanoga, and 2.3 mi (3.7 km) upstream from mouth.	28.9	1955 1964-66 1970-71 1977-78	1-31-79	59.5
04234504 Canandaigua Outlet	Clyde River	Lat 42°52'28", long 77°15'15", Ontario County, at bridge over control gate structure, 0.1 mi (0.2 km) north of Lake Shore Drive and 1.0 mi (1.6 km) northeast of USGS gaging station (Canandaigua Lake at Canandaigua 04234500).	184		7-13-79	10.5
04234506 Canandaigua Outlet	Clyde River	Lat 42°52'36", long 77°15'04", Ontario County at bridge on U.S. Highway 20 and State Highway 5, 1.0 mi (1.6 km) east of Feeder Canal and 0.1 mi (0.2 km) east of Canandaigua City Line.			7-13-79	13.3
04236001 Skaneateles Creek	Seneca River	Lat 42°56'56", long 76°26'08", Onondaga County, at bridge on West Elizabeth Street in Skaneateles, and 0.4 mi (0.6 km) downstream from Skaneateles Lake.		1971-73	6-13-79	22.4
04242739 Old Erie Canal Feeder	Oneida River	Lat 43°01'56", long 76°00'51", Onondaga County, on left bank, at downstream side of bridge on village road, 50 ft (15 m) downstream from diversion spillway, 700 ft (213 m) down- stream from USGS gaging station (Limestone Creek at Fayetteville 04245000), and 800 ft (244 m) north of Genesee Street, at Fayetteville.		1978	7-17-79 8-22-79 9-26-79	7.64 8.10 8.62
04242793 Wood Creek	Fish Creek	Lat 43°13'33", long 75°30'10", Oneida County, at abandoned Erie Canal outlet structure at Fort Bull Monument Road 350 ft (107 m) south of State Highway 46 and 49 and 0.9 mi (1.4 km) west of Rome village boundary.		1976	9- 9-76	*5.6

* Base flow.

† Also a crest-stage partial-record station.

c Water-quality data included in this report.

p Peak flow.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1979--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Streams tributary to Lake Ontario--Continued						
04242794 Wood Creek	Fish Creek	Lat 43°13'31", long 75°32'34", Oneida County, at bridge on State Highway 46 and 49, 0.1 mi (0.2 km) upstream from Canada Creek, 0.1 mi (0.2 km) south of Oswego Road, at Seifert Corners.		1976	9- 9-76	*10
04242796 Canada Creek	Wood Creek	Lat 43°13'47", long 75°32'25", Oneida County, at bridge on road between Seifert Corners and Coonrod, 0.4 mi (0.6 km) northwest of Seifert Corners and 0.4 mi (0.6 km) upstream from Wood Creek.		1976	9- 9-76	*19
04242798 Stony Creek	Wood Creek	Lat 43°13'07", long 75°33'32", Oneida County, at bridge on State Highway 46 and 49, 0.3 mi (0.5 km) upstream from Wood Creek, 1.2 mi (1.9 km) south- west of Seifert Corners.		1976	9- 9-76	27.2
04242803 Beaver Brook	Wood Creek	Lat 43°13'53", long 75°36'38", Oneida County, 200 ft (61 m) downstream from bridge on State Highway 49, 0.9 mi (1.4 km) upstream from Wood Creek, and 2.1 mi (3.4 km) northwest of New London.		1976	9- 9-76	*3.47
04245003 Limestone Creek	Oneida River	Lat 43°01'56", long 76°00'51", Onondaga County, 25 ft (8 m) downstream from dropstructure, 800 ft (244 m) downstream from bridge on Genesee Street, at Fayetteville, 700 ft (213 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000), and 7.75 mi (12.5 km) upstream from mouth.	85.6	1978	7-17-79 8-22-79 9-26-79	21.2 17.2 20.6
04245016 Old Erie Canal Feeder	Limestone Creek	Lat 43°02'10", long 76°00'43", Onondaga County, at foot- bridge over overflow channel, 20 ft (6 m) upstream from Limestone Creek, 2,000 ft (610 m) downstream from Lime- stone Creek Diversion, and 2,700 ft (823 m) downstream from USGS gaging station (Limestone Creek, at Fayette- ville 04245000).		1978	7-17-79 8-22-79 9-26-79	.95 .87 1.07
04245040 Bishop Brook	Limestone Creek	Lat 43°02'16", long 76°00'38", Onondaga County, at downstream side of footbridge, 100 ft (30 m) upstream from Limestone Creek, 2,200 ft (671 m) down- stream from Limestone Creek Diversion, and 2,900 ft (884 m) downstream from USGS gaging station (Limestone Creek at Fayetteville 04245000).	3.93	1978	7-17-79 8-22-79 9-26-79	1.26 .69 .37
04247080 Oswego River	Lake Ontario	Lat 43°14'54", long 76°21'06", Oswego County, at bridge on road between State Highway 48 and Oswego River Road in Hinmansville and 5.6 mi (9.0 km) downstream from confluence of Oneida and Seneca Rivers.		1977	8-23-77 8-24-77 8-12-79	2,000 2,970 1,600
04247500 Oswego River	Lake Ontario	Lat 43°19'00", long 76°25'01, Oswego County, at bridge on State Highway 176, 700 ft (213 m) downstream from dam at the East Fulton powerplant.			8-12-79	852

* Base flow.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

493

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	VITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
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HUDSON RIVER BASIN

01356160 - LISHA KILL AT MAYWOOD NY (LAT 42 45 09 LONG 073 52 25.01)

APR , 1979												
12...	1515	20	425	7.8	12.0	42	.27	.01	.19	.20	.47	--
AUG												
28...	1330	.42	--	--	--	50	.39	.13	.34	.47	.86	.02

01356280 - SHAKERS CREEK NEAR COLONIE NY (LAT 42 44 08 LONG 073 48 50.01)

APR , 1979												
12...	1420	4.4	440	7.7	12.0	47	.30	.03	.47	.50	.80	--
AUG												
30...	0900	.26	470	7.7	--	26	1.0	.01	.00	.01	1.0	.01

01356285 - SHAKERS CREEK TRIB AT COLONIE NY (LAT 42 44 13 LONG 073 48 35.01)

APR , 1979												
12...	1430	1.4	--	--	--	69	.01	.02	1.1	1.1	1.1	.01
AUG												
30...	0930	.00	760	7.4	--	80	6.6	.05	.60	.65	7.3	.03

01359131 - PATROON CREEK AT CENTRAL AVE IN ALBANY NY (LAT 42 41 15 LONG 073 47 56.01)

APR , 1979												
12...	0950	14	730	7.9	8.0	120	.43	.08	.15	.23	.66	--
AUG												
28...	1000	6.0	--	--	--	110	.43	.03	.28	.31	.74	.01

424142073495901 - RENSSELAER LAKE AT SIXMILE WATERWRKS ALBANY NY (LAT 42 41 42 LONG 073 49 59.01)

SEP , 1979												
19...	1535	--	--	8.3	--	57	.04	.09	.18	.27	.31	.01

DATE	HARD- NESS (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)
------	--	--	--	--	---

424142073495901 - RENSSELAER LAKE AT SIXMILE WATERWRKS ALBANY NY (LAT 42 41 42 LONG 073 49 59.01)

SEP , 1979					
19...	130	39	7.9	44	1.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
HUDSON RIVER BASIN--Continued												
01359132 - SAND CREEK AT SAND CREEK ROAD AT ALBANY NY (LAT 42 41 13 LONG 073 46 47.01)												
APR , 1979												
12...	0900	3.3	590	7.2	6.0	55	.96	.02	.30	.32	1.3	.01
AUG												
28...	0900	2.1	--	--	--	--	.99	.10	.11	.21	1.2	.02
01359513 - HUNGER KILL AT GUILDERLAND NY (LAT 42 41 22 LONG 073 54 26)												
APR , 1979												
12...	1225	16	--	--	--	63	.96	.01	.18	.19	1.2	.00
AUG												
28...	1400	8.8	--	--	--	69	1.2	.00	.18	.18	1.4	.01
01359515 - BLOCKHOUSE CREEK AT WESTMERE NY (LAT 42 41 08 LONG 073 53 53.01)												
APR , 1979												
12...	1115	1.9	580	7.9	8.0	60	1.5	.00	.16	.16	1.7	.01
AUG												
30...	1210	.72	750	8.2	--	81	1.7	.01	.19	.20	1.9	.03
01359516 - SOUTH BRANCH BLOCKHOUSE CREEK AT WESTMERE NY (LAT 42 41 07 LONG 073 53 52.01)												
APR , 1979												
12...	1100	1.6	470	7.6	7.0	36	.50	.02	.28	.30	.80	--
AUG												
30...	1210	.17	540	7.7	--	43	1.9	.02	.52	.54	2.4	--
01359517 - BLOCKHOUSE CREEK NEAR GUILDERLAND NY (LAT 42 41 08 LONG 073 54 05)												
APR , 1979												
12...	1125	3.0	490	7.5	8.0	53	.87	.01	.24	.25	1.1	--
AUG												
30...	1240	1.3	710	8.2	--	74	1.6	.01	.21	.22	1.8	.03
01359523 - KRUM KILL TRIBUTARY AT ALBANY NY (LAT 42 40 36 LONG 073 50 10.01)												
APR , 1979												
12...	1025	2.8	870	7.2	7.0	150	.59	.11	.82	.93	1.5	--
AUG												
28...	1130	.88	--	--	--	120	.27	.23	.32	.55	.82	.09

GROUND-WATER LEVELS

495

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.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 21 ft (6.4 m), cased to 22 ft (6.7 m), 2-in. (0.05-m) jet point (60-gauze screen 22 ft or 6.7 m to 24 ft or 7.3 m). Well gravel packed from original depth of 26 ft (7.9 m).

DATUM.--Altitude of land-surface datum is 260 ft (79 m), from topographic map. Measuring point: Top of casing, 2.40 ft (0.732 m) above land-surface datum.

REMARKS.--This well drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft (10.7 m) north, which has a period of record from November 1965 to May 1974 (unpublished). Digital recorder installed Nov. 15, 1978.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft (1.87 m) below land-surface datum, April 12, 13, 1978; lowest, 10.52 ft (3.21 m) below land-surface datum, Sept. 30, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
HIGHEST FOR THE DAY (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	9.72	JAN 05, 1979	9.64	APR 05, 1979	7.85	JUL 05, 1979	8.41
10	9.79	10	9.40	10	7.84	10	8.59
15	9.87	15	9.32	15	7.72	15	8.79
20	9.91	20	9.32	20	7.57	20	8.97
25	9.96	25	9.22	25	7.49	25	9.13
31	10.01	31	8.86	30	7.44	31	9.30
NOV 05	10.04	FEB 05	8.80	MAY 05	7.41	AUG 05	9.45
10	10.08	10	8.80	10	7.43	10	9.62
15	10.12	15	8.85	15	7.51	15	9.74
20	10.17	20	8.95	20	7.63	20	9.84
25	10.21	25	8.97	25	7.75	25	9.95
30	10.25	28	8.88	31	7.71	31	10.06
DEC 05	10.28	MAR 05	8.39	JUN 05	7.73	SEP 05	10.19
10	10.32	10	8.00	10	7.81	10	10.24
15	10.35	15	7.89	15	7.87	15	10.31
20	10.37	20	7.87	20	7.98	20	10.38
25	10.39	25	7.87	25	8.12	25	10.45
31	10.41	31	7.86	30	8.26	30	10.51

WTR YEAR 1979 HIGHEST 7.41 May 4, 5, 6, 1979 LOWEST 10.52 Sept. 30, 1979

424044073535101. Local number, A 637.

LOCATION.--Lat 42°40'44", long 73°53'51", Hydrologic Unit 02020006, Dr. Shaw Road, Guilderland.

Owner: Mill Hill Missionaries.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in. (0.15 m), depth 198 ft (60.4 m), cased to 193 ft (58.8 m), 30-slot plastic openings section 193 ft (58.8 m) to 198 ft (60.4 m).

DATUM.--Altitude of land-surface datum is 220 ft (67 m), from topographic map. Measuring point: Top of casing, 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Digital recorder installed April 3, 1979.

PERIOD OF RECORD.--September 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 115.79 ft (35.29 m) below land-surface datum, April 6, 1977; lowest measured, 126.55 ft (38.57 m) below land-surface datum, September 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
HIGHEST FOR THE DAY (FROM DIGITAL RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26, 1978	126.35	JUN 05, 1979	119.58	JUL 20, 1979	120.78	SEP 05, 1979	118.99
NOV 15	125.68	10	119.23	25	119.86	10	118.12
DEC 15	124.87	15	118.43	31	119.59	15	117.74
JAN 31, 1979	121.25	20	118.68	AUG 05	119.21	20	118.06
MAR 02	119.90	25	119.86	10	119.85	25	118.46
APR 03	119.55	30	119.67	15	120.14	30	118.66
MAY 01	118.69	JUL 05	120.15	20	118.92		
21	121.75	10	120.31	25	118.75		
31	119.22	15	121.09	31	119.31		

WTR YEAR 1979 HIGHEST MEASURED 117.51 Sept. 14, 1979 LOWEST MEASURED 126.35 Oct. 26, 1978

GROUND-WATER LEVELS

BROOME COUNTY

420646075531201. Local number, Bm 100.

LOCATION.--Lat 42°06'46", long 75°53'12", Hydrologic Unit 02050103, at Moeller and Frederick Streets, Binghamton.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in. (0.15 m), depth 52 ft (15.8 m), cased to 52 ft (15.8 m), slotted 40 ft (12.2 m) to 45 ft (13.7 m).

DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map. Measuring point: Top of coupling, at land-surface datum.

PERIOD OF RECORD.--October 1977 to current year. Unpublished record for October 1946 to July 1955 (intermittent), April 1966 to April 1968 (intermittent) and May 1968 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.87 ft (2.70 m) below land-surface datum, July 3, 1972; lowest measured 12.83 ft (3.91 m) below land-surface datum, October 13, 1946.

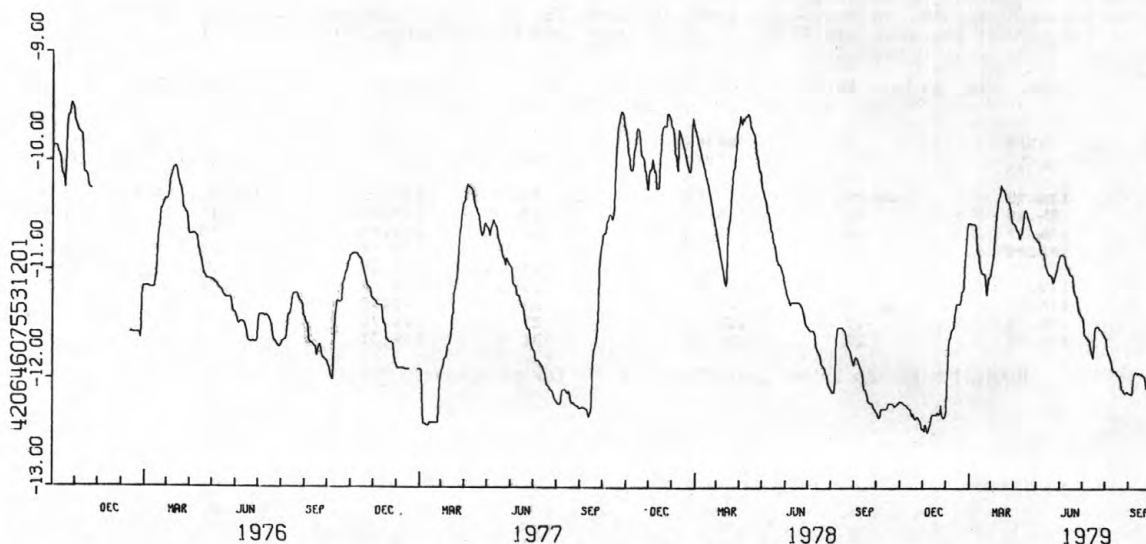
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.30	12.20	12.45	12.29	10.55	11.02	10.56	10.70	10.85	11.42	11.61	12.12
2	12.32	12.20	12.45	12.05	10.55	10.95	10.56	10.72	10.84	11.46	11.62	12.12
3	12.35	12.21	12.49	11.85	10.56	10.91	10.59	10.72	10.84	11.56	11.71	12.12
4	12.35	12.21	12.41	11.70	10.56	10.86	10.62	10.72	10.84	11.58	11.73	12.13
5	12.35	12.21	12.41	11.63	10.56	10.80	10.61	10.77	10.84	11.59	11.76	12.13
6	12.31	12.22	12.46	11.62	10.56	10.69	10.62	10.80	10.84	11.60	11.77	12.08
7	12.27	12.23	12.49	11.59	10.56	10.58	10.65	10.82	10.85	11.61	11.80	12.02
8	12.27	12.23	12.48	11.54	10.56	10.48	10.70	10.83	10.91	11.62	11.80	11.94
9	12.27	12.23	12.45	11.54	10.59	10.43	10.66	10.83	10.94	11.63	11.85	11.94
10	12.27	12.25	12.42	11.53	10.78	10.37	10.65	10.83	10.95	11.63	11.90	11.92
11	12.27	12.25	12.42	11.52	10.83	10.33	10.65	10.87	10.95	11.67	11.90	11.92
12	12.27	12.26	12.36	11.42	10.83	10.31	10.59	10.94	10.98	11.73	11.92	11.93
13	12.27	12.27	12.33	11.37	10.89	10.30	10.55	10.95	11.01	11.74	11.92	11.94
14	12.27	12.27	12.32	11.32	10.96	10.20	10.47	10.97	11.02	11.76	11.91	11.92
15	12.26	12.29	12.32	11.30	10.97	10.21	10.44	10.99	11.03	11.80	11.92	11.93
16	12.23	12.32	12.32	11.30	11.00	10.24	10.43	11.01	11.03	11.78	11.94	11.94
17	12.22	12.34	12.32	11.30	11.02	10.24	10.44	11.02	11.03	11.58	11.95	11.94
18	12.22	12.31	12.32	11.30	11.02	10.24	10.47	11.03	11.07	11.53	11.95	11.94
19	12.22	12.35	12.32	11.30	11.02	10.27	10.51	11.03	11.14	11.51	11.96	11.94
20	12.22	12.36	12.32	11.30	11.02	10.31	10.51	11.03	11.20	11.51	11.98	11.96
21	12.22	12.36	12.30	11.21	11.04	10.32	10.54	11.04	11.21	11.50	12.02	11.96
22	12.22	12.36	12.32	11.18	11.16	10.35	10.56	11.09	11.22	11.50	12.03	11.96
23	12.22	12.35	12.32	11.18	11.22	10.35	10.61	11.10	11.23	11.51	12.08	12.01
24	12.25	12.34	12.31	11.15	11.20	10.35	10.62	11.09	11.26	11.52	12.09	12.07
25	12.25	12.35	12.23	10.98	11.08	10.36	10.63	11.06	11.34	11.53	12.10	12.07
26	12.24	12.36	12.32	10.85	11.05	10.40	10.65	11.04	11.36	11.53	12.12	12.07
27	12.24	12.38	12.34	10.78	11.05	10.43	10.67	11.01	11.38	11.54	12.12	12.09
28	12.23	12.39	12.35	10.64	11.05	10.50	10.68	10.98	11.38	11.56	12.12	12.09
29	12.22	12.46	12.35	10.58	---	10.55	10.69	10.94	11.40	11.57	12.11	12.09
30	12.22	12.45	12.35	10.55	---	10.55	10.69	10.91	11.41	11.58	12.10	12.09
31	12.21	---	12.34	10.56	---	10.55	---	10.89	---	11.60	12.11	---

WTR YEAR 1979

HIGHEST 10.17 Mar. 14, 1979

LOWEST 12.49 Dec. 7, 1978



GROUND-WATER LEVELS

497

BROOME COUNTY

420657075583501. Local number, Bm 121.

LOCATION.--Lat 42°06'57", long 75°58'35", Hydrologic Unit 02050103, at Camden and Main Streets, Johnson City.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.

DATUM.--Altitude of land-surface datum is 835 ft (255 m), from topographic map. Measuring point: Top of casing, 3.17 ft (0.966 m) above land-surface datum.

REMARKS.--Well cleaned from 46 ft (14.0 m), to original depth on Oct. 19, 1970. Water level affected by floods of Susquehanna River, and by pumping from municipal well field 1,100 ft (335 m) south. Digital recorder installed Dec. 6, 1978.

PERIOD OF RECORD.--March 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.73 ft (2.97 m) below land-surface datum, Apr. 8, 1956; lowest, 33.47 ft (10.20 m) below land-surface datum, Sept. 23, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
HIGHEST FOR THE DAY (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
UCT 05, 1978	27.76	JAN 05, 1979	21.70	APR 05, 1979	21.52	JUL 05, 1979	26.70
10	27.84	10	21.81	10	22.04	10	27.11
15	27.73	15	21.41	15	21.94	15	27.56
20	27.43	20	22.19	20	22.22	20	27.42
25	27.45	25	20.82	25	23.09	25	27.57
31	26.91	31	21.25	30	23.09	31	27.72
NOV 05	27.07	FEB 05	22.57	MAY 05	23.51	AUG 05	27.89
10	27.20	10	21.61	10	24.05	10	28.16
15	27.22	15	22.51	15	24.65	15	28.41
20	27.24	20	23.35	20	25.00	20	28.54
25	27.19	25	23.48	25	25.00	25	28.73
30	27.11	28	22.42	31	23.13	31	28.95
DEC 05	27.13	MAR 05	20.76	JUN 05	23.62	SEP 05	29.06
10	26.45	10	14.09	10	24.34	10	28.54
15	26.23	15	17.43	15	24.92	15	28.74
20	26.46	20	19.55	20	25.48	20	28.74
25	26.29	25	20.54	25	25.95	25	28.83
31	26.52	31	20.83	30	26.38	30	28.96

WTR YEAR 1979 HIGHEST 12.92 Mar. 8, 1979 LOWEST 29.09 Sept. 5, 1979

CATTARAUGUS COUNTY

420530078445201. Local number, Ct 121.

LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House.

Owner: State Department of Environmental Conservation.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.

DATUM.--Altitude of land-surface datum is 1,470 ft (448 m), from topographic map. Measuring point: Top of casing, 0.30 ft (0.091 m) above land-surface datum.

REMARKS.--Unusually low water levels experienced since July 4, 1969. (Lowest previous measurement was 13.23 ft or 4.03 m, Feb. 1, 1961). Extreme low levels occur during late summer and fall months, with lower than normal levels prevalent throughout the year. A source of nearby pumping has not been determined.

PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.29 ft (1.00 m) below land-surface datum, Dec. 15, 1967; lowest measured 34.87 ft (10.62 m) below land-surface datum, Nov. 21, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1978	29.15	MAR 09, 1979	29.46	MAY 16, 1979	23.86	JUL 27, 1979	21.86
29	29.52	16	22.86	18	23.40	AUG 04	19.60
JAN 05, 1979	29.06	23	17.89	25	24.20	14	17.58
13	28.74	30	14.48	JUN 01	25.11	18	20.15
19	28.96	APR 06	11.27	24	26.90	25	20.10
26	29.02	13	18.04	29	27.33	31	19.86
FEB 09	28.81	20	20.32	JUL 06	24.34	SEP 17	24.09
23	29.61	27	20.13	14	22.04	28	26.52
MAR 02	29.92	MAY 07	22.26	24	20.65		

GROUND-WATER LEVELS

CAYUGA COUNTY

424158076251901. Local number, Cy 7.

LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia.

Owner: Earl Van Pelt.

AQUIFER.--Clayey gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m), cased to 26 ft (7.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 26 ft or 7.9 m to 28 ft or 8.5 m).

DATUM.--Altitude of land-surface datum is 765 ft (233 m), from topographic map. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for December 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft (3.63 m) below land-surface datum, June 26, 1972; lowest measured, 24.53 ft (7.48 m) below land-surface datum, Oct. 20, 1973.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	21.26	JAN 02, 1979	16.16	APR 02, 1979	16.37	JUL 02, 1979	19.11
09	21.64	08	15.38	10	16.23	09	20.45
16	20.74	15	16.26	16	15.61	16	21.64
24	19.11	22	16.47	23	16.19	23	22.51
30	18.36	29	15.51	30	16.19	30	22.14
NOV 06	17.24	FEB 05	16.17	MAY 07	16.39	AUG 07	19.79
13	17.63	13	16.80	14	16.56	14	21.31
20	18.20	20	17.26	21	17.40	20	21.70
27	18.11	26	16.83	28	17.29	27	22.74
DEC 05	17.77	MAR 04	15.41	JUN 04	16.85	SEP 03	22.66
11	17.49	12	14.43	12	18.26	10	20.33
18	17.30	19	15.94	19	19.24	17	19.84
26	17.05	27	16.36	25	19.08	24	19.29

CHAUTAUQUA COUNTY

420326079295801. Local number, Cu 5.

LOCATION.--Lat 42°03'26", long 79°29'58", Hydrologic Unit 05010002, near Panama.

Owner: State Department of Environmental Conservation.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 33 ft (10.1 m), stone-lined.

DATUM.--Altitude of land-surface datum is 1,750 ft (533 m), from topographic map. Measuring point: Top of

0.25-in. (0.006-m) steel-plate well cover, inside shelter door, 0.44 ft (0.134 m) below land-surface datum.

PERIOD OF RECORD.--May 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.95 ft (0.29 m) below land-surface datum, Dec. 26, 1968; lowest measured 9.41 ft (2.87 m) below land-surface datum, May 24, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	3.75	JAN 04, 1979	3.50	APR 05, 1979	1.50	JUL 05, 1979	2.60
12	3.60	11	3.10	12	1.65	12	2.65
19	3.55	18	2.90	19	1.60	19	2.80
26	3.40	25	2.70	26	1.70	26	2.95
NOV 02	3.50	31	2.60	MAY 03	1.80	AUG 02	3.00
09	3.40	FEB 08	2.55	10	1.90	09	3.10
16	3.35	15	2.60	17	1.95	16	3.15
23	3.25	22	2.40	24	2.10	23	3.25
30	3.15	MAR 01	2.00	31	2.15	30	3.35
DEC 07	3.10	08	1.75	JUN 07	2.20	SEP 06	3.45
14	3.25	15	1.60	14	2.25	13	3.20
21	3.35	22	1.50	21	2.35	20	3.25
28	3.40	29	1.35	28	2.50	27	3.10

GROUND-WATER LEVELS

499

CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.

LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer.

Owner: City of Jamestown.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 12 in. (0.30 m) to 10 in. (0.25 m), depth 232 ft (70.7 m), filled in from original depth of 240 ft (73.2 m), cased 12-in. (0.30-m) 0 ft (0.0 m) to 130 ft (39.6 m), 10-in. (0.25-m) 130 ft (39.6 m) to 240 ft (73.2 m), slotted 130 ft (39.6 m) to 144 ft (43.9 m), open end.

DATUM.--Altitude of land-surface datum is 1,250 ft (381 m), from topographic map. Measuring point: Top of flange, 5.00 ft (1.524 m) above land-surface datum.

REMARKS.--Water level affected by pumping (average 5 Mgal/d or 18,900 m³/d in 1977) from municipal well field.

Digital recorder installed Dec. 18, 1978.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1939 to September 1943, August

1946 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.2 ft (1.6 m) above land-surface datum, Mar. 14, 1942; lowest, 66.6 ft (20.3 m) below land-surface datum, Nov. 3, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
WEEKLY HIGHEST (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1978	50.98	MAR 17, 1979	25.70	MAY 25, 1979	13.30	AUG 08, 1979	28.50
NOV 11	48.50	22	12.57	JUN 01	27.10	14	31.68
16	49.38	28	24.46	11	29.14	16	22.14
21	49.65	APR 06	12.27	16	26.93	26	38.95
30	47.48	15	22.88	24	28.85	SEP 04	36.83
DEC 12	43.38	22	23.26	27	29.49	08	36.59
15	42.47	25	23.62	JUL 08	10.12	16	13.27
24	39.37	30	23.78	12	31.03	22	31.12
31	36.00	MAY 10	14.11	19	27.48	28	30.33
JAN 03, 1979	35.12	15	15.04	27	35.61		
11	32.67	19	8.57	31	35.75		
MAR 03	29.43						
07	27.64						

WTR YEAR 1979 HIGHEST 8.57 May 19, 1979 LOWEST 51.90 Oct. 6, 1978

CHEMUNG COUNTY

420829076484801. Local number, Cm 46.

LOCATION.--Lat 42°08'29", long 76°48'48", Hydrologic Unit 02050105, near Horseheads.

Owner: Milton A. Roy.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in. (0.15 m), depth 34 ft (10.4 m), cased to 34 ft (10.4 m), open end.

DATUM.--Altitude of land-surface datum is 880 ft (268 m), from topographic map. Measuring point: Top of extended casing, 3.35 ft (1.021 m) above land-surface datum.

REMARKS.--Water level affected by floods of Newtown Creek.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1955 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.93 ft (5.77 m) below land-surface datum, Apr. 25, 1961; lowest measured, 25.73 ft (7.84 m) below land-surface datum, Aug. 24, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1978	25.30	JAN 13, 1979	24.02	APR 14, 1979	23.10	JUL 14, 1979	25.30
13	25.31	20	24.52	21	23.58	21	25.38
28	24.88	27	23.13	29	23.64	27	25.34
NOV 04	25.10	FEB 03	24.15	MAY 05	24.02	AUG 04	24.84
11	25.15	10	24.56	12	24.05	13	25.33
18	25.12	17	24.55	19	24.45	18	25.44
25	25.10	24	24.33	26	24.21	25	25.53
DEC 02	25.04	MAR 03	23.37	JUN 02	24.43	SEP 01	25.55
11	24.80	10	22.50	09	24.73	08	24.79
16	24.98	17	23.33	16	24.88	15	25.14
23	24.92	24	23.57	23	24.88	22	25.35
30	24.98	31	23.60	30	25.02	29	25.32
JAN 06, 1979	23.83	APR 07	23.73	JUL 07	25.20		

GROUND-WATER LEVELS

CHENANGO COUNTY

421556075281602. Local number, Cn 12.

LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, near Bainbridge.

Owner: Ilse Maehlman.

AQUIFER.--Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 13 ft (4.0 m), cased to 13 ft (4.0 m), gravel-packed, open end.

DATUM.--Altitude of land-surface datum is 980 ft (299 m), from topographic map. Measuring point: Filemark at top of flange, 1.33 ft (0.405 m) above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft (27.4 m) north, which has a period of record from October 1965 to September 1972 (unpublished).

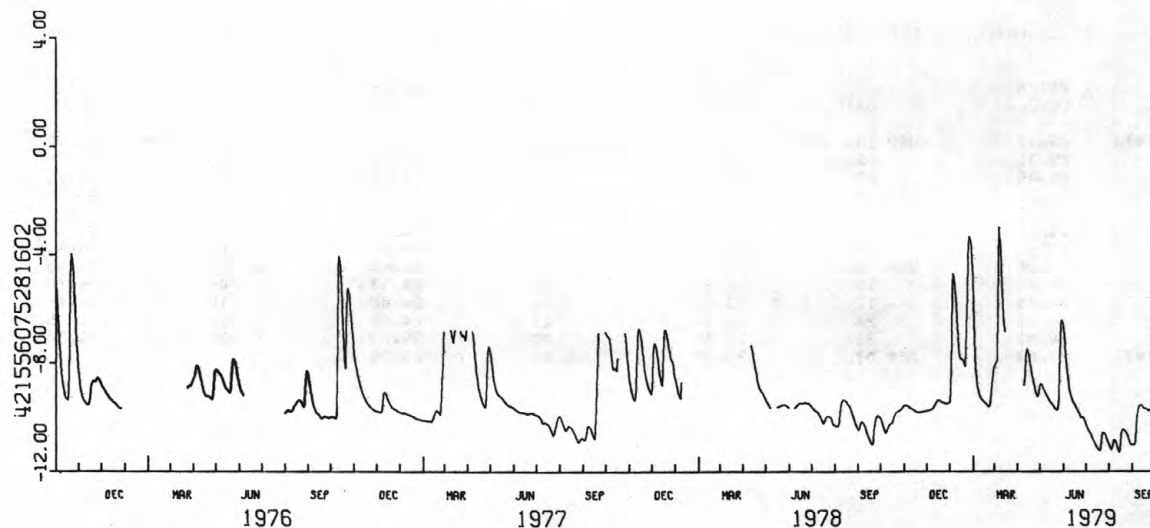
PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.79 ft (0.85 m) below land-surface datum, Mar. 7, 1979; lowest, 11.32 ft (3.45 m) below land-surface datum, Aug. 14, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.07	9.59	9.77	9.47	5.82	8.16	---	8.83	6.63	10.29	11.05	11.02
2	10.15	9.57	9.76	9.01	7.08	8.09	---	8.76	6.94	10.35	11.12	11.02
3	10.24	9.57	9.76	7.10	7.76	8.01	---	8.76	7.33	10.41	11.17	11.02
4	10.34	9.56	9.75	5.15	8.18	7.97	---	8.83	7.71	10.46	11.21	11.02
5	10.44	9.57	9.75	4.67	8.54	7.91	---	8.91	8.04	10.51	11.17	10.85
6	10.52	9.59	9.74	4.81	8.84	5.85	8.46	8.98	8.34	10.56	11.00	10.34
7	10.59	9.61	9.73	5.18	9.00	2.94	8.60	9.03	8.59	10.61	10.86	10.05
8	10.59	9.64	9.71	5.57	9.09	3.25	8.72	9.08	8.81	10.67	10.83	9.80
9	10.51	9.66	9.69	6.02	9.17	3.81	8.83	9.14	8.98	10.74	10.86	9.67
10	10.43	9.68	9.66	6.35	9.24	4.46	8.84	9.20	9.12	10.81	10.93	9.60
11	10.36	9.69	9.61	7.00	9.30	5.09	8.41	9.25	9.23	10.87	11.04	9.57
12	10.30	9.71	9.55	7.43	9.35	5.72	7.83	9.31	9.32	10.93	11.15	9.55
13	10.26	9.73	9.49	7.73	9.38	6.31	7.55	9.37	9.40	10.98	11.23	9.55
14	10.25	9.75	9.44	7.85	9.41	6.76	7.47	9.42	9.45	11.03	11.30	9.59
15	10.25	9.77	9.40	7.87	9.43	6.85	7.53	9.45	9.51	11.09	11.30	9.64
16	10.23	9.79	9.37	7.87	9.46	---	7.70	9.48	9.55	11.15	10.95	9.68
17	10.14	9.80	9.37	7.86	9.48	---	7.91	9.52	9.60	11.19	10.65	9.69
18	10.04	9.81	9.38	7.90	9.51	---	8.10	9.56	9.66	11.21	10.52	9.69
19	9.96	9.82	9.40	8.00	9.54	---	8.26	9.60	9.71	11.24	10.46	9.69
20	9.91	9.82	9.42	8.09	9.59	---	8.40	9.64	9.77	11.24	10.45	9.71
21	9.86	9.82	9.44	8.14	9.62	---	8.54	9.68	9.82	11.09	10.48	9.73
22	9.83	9.82	9.46	7.53	9.62	---	8.68	9.71	9.87	10.74	10.51	9.75
23	9.80	9.82	9.46	6.05	9.60	---	8.82	9.74	9.95	10.60	10.54	9.77
24	9.78	9.82	9.47	5.61	9.45	---	8.95	9.75	10.01	10.57	10.58	9.76
25	9.77	9.81	9.48	4.02	9.09	---	9.06	9.71	10.03	10.60	10.65	9.73
26	9.76	9.81	9.49	3.31	8.79	---	9.15	9.30	10.01	10.59	10.74	9.72
27	9.75	9.80	9.50	3.30	8.44	---	9.22	8.31	10.01	10.64	10.85	9.72
28	9.72	9.79	9.50	3.45	8.25	---	9.25	7.14	10.05	10.72	10.93	9.74
29	9.68	9.78	9.49	3.75	---	---	9.20	6.59	10.12	10.82	10.99	9.77
30	9.64	9.78	9.48	4.20	---	---	9.02	6.41	10.20	10.91	11.02	9.80
31	9.61	---	9.47	4.76	---	---	---	6.43	---	10.99	11.03	---

WTR YEAR 1979 HIGHEST 2.79 Mar. 7, 1979 LOWEST 11.32 Aug. 14, 1979



CORTLAND COUNTY

423541076114701. Local number, C 102.

LOCATION.--Lat 42°35'41", long 76°11'47", Hydrologic Unit 02050102, at Municipal Water Works, Cortland.

Owner: City of Cortland.

AQUIFER.--Glacial gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven unused water-table well, diameter 1.25 in. (0.03 m), depth 45 ft (13.7 m), 1.25 in. (0.03 m) well point.

DATUM.--Altitude of land-surface datum is 1,140 ft (347 m), from topographic map. Measuring point: Top of coupling, 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Water level may be affected by pumping from nearby municipal supply wells. This well is a replacement for 423539076114801 (local number C 19), located 80 ft (24.4 m) southwest, which has a period of record from February 1947 to May 1976.

PERIOD OF RECORD.--October 1977 to current year. Unpublished record for October 1975 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft (0.94 m) below land-surface datum, September 25, 1977; lowest measured, 14.50 ft (4.42 m) below land-surface datum, Dec. 14, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
UCT 13, 1978	12.71	JAN 12, 1979	7.18	APR 13, 1979	4.21	JUL 12, 1979	6.99
20	12.60	19	6.58	20	4.86	20	8.25
27	12.92	26	4.55	27	5.04	27	8.36
NOV 03	13.26	FEB 02	4.70	MAY 04	5.72	AUG 03	8.54
10	13.39	09	4.88	11	6.12	10	8.90
17	13.77	16	4.23	18	6.54	17	9.23
22	13.18	23	5.17	25	5.59	24	10.30
29	13.56	MAR 02	6.75	JUN 01	5.32	31	10.56
DEC 07	14.01	09	5.47	08	5.51	SEP 07	11.16
14	14.50	15	4.32	15	6.16	21	11.00
21	14.31	23	4.81	22	6.41	23	11.12
29	13.41	30	5.03	29	6.32		
JAN 05, 1979	7.32	APR 06	4.97	JUL 06	6.40		

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.--Shale of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 128 ft (39.0 m), open hole.

DATUM.--Altitude of land-surface datum is 170 ft (52 m), from topographic map. Measuring point: Top of extended casing, 3.10 ft (0.944 m) above land-surface datum.

REMARKS.--Water level affected by earth tides (approximately 0.05 ft or 0.015 m).

PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft (20.00 m) below land-surface datum, June 22, 1953; lowest, 73.85 ft (22.51 m) below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.11	68.59	68.79	69.00	68.07	68.05	67.69	67.52	67.50	67.61	68.50	69.06
2	68.10	68.57	68.82	68.80	68.11	68.07	67.71	67.56	67.50	67.58	68.51	69.09
3	68.11	68.57	68.88	68.64	68.17	68.10	67.69	67.59	67.49	67.61	68.53	69.06
4	68.13	68.57	68.80	68.69	68.19	68.09	67.71	67.54	67.47	67.65	68.58	69.08
5	68.15	68.56	68.73	68.78	68.17	68.03	67.64	67.52	67.42	67.70	68.61	69.12
6	68.11	68.56	68.77	68.80	68.18	67.90	67.58	67.55	67.37	67.79	68.65	69.02
7	68.07	68.56	68.86	68.76	68.20	67.73	67.60	67.59	67.42	67.87	68.57	68.92
8	68.10	68.58	68.89	68.55	68.16	67.69	67.65	67.63	67.48	67.92	68.70	68.97
9	68.18	68.59	68.79	68.47	68.17	67.72	67.59	67.63	67.51	67.93	68.75	69.07
10	68.24	68.62	68.72	68.52	68.19	67.73	67.50	67.61	67.50	67.90	68.76	69.13
11	68.28	68.67	68.81	68.59	68.24	67.60	67.58	67.62	67.43	67.91	68.73	69.15
12	68.27	68.70	68.87	68.65	68.27	67.57	67.66	67.66	67.33	67.92	68.72	69.19
13	68.26	68.75	68.86	68.64	68.24	67.65	67.69	67.65	67.39	67.92	68.68	69.22
14	68.25	68.75	68.82	68.48	68.23	67.60	67.65	67.64	67.47	67.94	68.70	69.19
15	68.25	68.74	68.82	68.45	68.21	67.60	67.53	67.65	67.51	67.98	68.73	69.13
16	68.30	68.78	68.83	68.52	68.21	67.69	67.50	67.69	67.50	68.03	68.79	69.20
17	68.38	68.81	68.80	68.57	68.27	67.74	67.51	67.75	67.47	68.08	68.87	69.26
18	68.43	68.72	68.79	68.52	68.35	67.73	67.54	67.78	67.45	68.12	68.89	69.25
19	68.40	68.72	68.81	68.57	68.35	67.71	67.59	67.76	67.50	68.16	68.85	69.21
20	68.35	68.78	68.84	68.57	68.32	67.66	67.62	67.72	67.57	68.20	68.86	69.25
21	68.37	68.83	68.74	68.35	68.28	67.64	67.65	67.70	67.60	68.22	68.89	69.27
22	68.39	68.85	68.75	68.15	68.24	67.65	67.66	67.70	67.57	68.24	68.91	69.16
23	68.39	68.83	68.82	68.23	68.26	67.64	67.67	67.71	67.54	68.27	68.93	69.15
24	68.41	68.72	68.89	68.29	68.20	67.59	67.67	67.57	67.55	68.30	68.94	69.21
25	68.43	68.68	68.75	68.15	68.10	67.49	67.66	67.35	67.60	68.30	68.92	69.25
26	68.42	68.71	68.75	68.06	67.99	67.48	67.62	67.28	67.68	68.29	68.93	69.24
27	68.39	68.77	68.81	68.07	67.91	67.57	67.50	67.34	67.72	68.30	68.94	69.25
28	68.45	68.76	68.91	68.04	67.94	67.71	67.46	67.40	67.70	68.33	68.95	69.26
29	68.51	68.80	69.02	68.02	---	67.74	67.44	67.44	67.67	68.37	68.96	69.20
30	68.60	68.78	69.08	68.05	---	67.74	67.48	67.46	67.65	68.42	68.97	69.19
31	68.62	---	69.09	68.08	---	67.71	---	67.49	---	68.47	69.01	---

WTR YEAR 1979

HIGHEST 67.22 May 26, 1979

LOWEST 69.30 Sept. 28, 1979

GROUND-WATER LEVELS

DUTCHESS COUNTY

414128073475201. Local number, Du 1009.

LOCATION.--Lat 41°41'28", long 73°47'52", Hydrologic Unit 02020008, James Baird State Park, near Pleasant Valley.
Owner: State Department of Environmental Conservation.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m) in July 1979 (previously reported as 27 ft or 8.2 m), cased to 25 ft (7.6 m), 1.25-in. (0.03-m) well point (60-gauze screen 25 ft or 7.6 m to 27 ft or 8.2 m).

DATUM.--Altitude of land-surface datum is 330 ft (101 m), from topographic map. Measuring point: Top of casing, 2.10 ft (0.640 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1965 to April 1969, June 1971 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.92 ft (3.63 m) below land-surface datum, Sept. 14, 1971; lowest measured, 20.60 ft (6.28 m) below land-surface datum, Nov. 24, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	19.17	JAN 08, 1979	13.98	APR 09, 1979	12.97	JUL 17, 1979	16.04
09	19.37	15	13.12	16	12.64	26	16.53
16	19.54	22	12.56	23	12.73	30	16.74
23	19.67	30	12.34	30	12.81	AUG 14	16.24
30	19.76	FEB 05	12.80	MAY 07	12.99	27	15.27
NOV 06	19.89	13	13.15	14	13.45	SEP 03	15.76
DEC 04	20.27	20	13.63	29	12.46	10	15.86
11	19.58	27	12.54	JUN 13	13.35	18	16.59
18	18.69	MAR 12	12.22	26	14.26	24	16.00
26	17.98	19	12.51	JUL 02	14.72		
JAN 02, 1979	16.80	APR 02	12.87	09	15.52		

414857073460501. Local number, Du 1010.

LOCATION.--Lat 41°48'57", long 73°46'05", Hydrologic Unit 02020008, near Hibernia.

Owner: Manuel Matri.

AQUIFER.--Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 21 ft (6.4 m), cased to 19 ft (5.8 m), 1.25-in. (0.03-m) well point (60-gauze screen 19 ft or 5.8 m to 20 ft or 6.1 m).

DATUM.--Altitude of land-surface datum is 250 ft (76 m), from topographic map. Measuring point: Top of extended casing, 2.90 ft (0.883 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.88 ft (2.09 m) below land-surface datum, Mar. 30, 1977; lowest, 12.52 ft (3.82 m) below land-surface datum, Aug. 27, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1978	12.34 S	FEB 20, 1979	10.81	APR 05, 1979	10.29	JUN 25, 1979	11.45
NOV 13	12.42 S	MAR 07	7.23 S	10	10.26	30	11.64
JAN 18, 1979	10.29 S	10	7.62	25	10.29	JUL 05	11.68
20	10.33	15	8.22	MAY 05	10.14	10	11.94 S
FEB 06	9.75 S	20	9.33	10	10.56	AUG 07	12.40 S
10	10.05	27	9.92 S	15	10.75 S	SEP 14	12.33 S
15	10.44	31	10.08	20	11.01 E		
16	10.64 S	APR 03	10.29 S	JUN 20	11.17		

WTR YEAR 1979 HIGHEST MEASURED 7.23 Mar. 7, 1979 LOWEST MEASURED 12.42 Nov. 13, 1978

E Estimated.

S Steel tape measurement.

GENESEE COUNTY

425516078032001. Local number, Gs 2.

LOCATION.--Lat 42°55'16", long 78°03'20", Hydrologic Unit 04130003, near Pavilion.

Owner: Angelina C. Rigoni.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined.

DATUM.--Altitude of land-surface datum is 1,030 ft (314 m), from topographic map. Measuring point: Painted arrow on top edge of concrete well cover, inside shelter door, 1.12 ft (0.341 m) above land-surface datum.

PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.10 ft (0.03 m) below land-surface datum, May 14, 1960, Feb. 28, 1971, and Feb. 13, 1976; lowest measured 6.55 ft (2.00 m) below land-surface datum, Feb. 11, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1978	1.15	JAN 01, 1979	0.56	MAR 31, 1979	0.34	JUL 07, 1979	1.60
14	0.47	02	0.59	APR 12	0.35	14	1.96
21	0.93	06	1.05	21	0.74	21	2.30
28	0.61	15	0.62	28	0.47	28	2.59
NOV 04	1.14	20	1.00	MAY 05	1.02	AUG 04	2.53
11	1.42	FEB 07	1.13	12	1.16	11	2.22
13	1.49	10	1.32	19	1.28	18	2.62
18	1.42	17	1.67	26	0.52	25	2.97
25	0.78	26	0.41	JUN 02	0.86	SEP 01	1.12
DEC 02	0.67	MAR 03	0.19	09	1.40	08	0.53
09	0.61	10	0.33	16	1.37	15	0.55
16	0.97	17	0.56	23	1.78	22	1.46
23	0.68	24	0.55	30	1.22	29	1.84

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. Formerly Fred Kropp.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 36 in. (0.91 m), depth 18 ft (5.5 m) in August

1979 (previously reported as 19 ft or 5.8 m), tile-lined to 2 ft (0.6 m), stone-lined to 19 ft (5.8 m).

DATUM.--Altitude of land-surface datum is 130 ft (40 m), from topographic map. Measuring point: Chiseled square on top of inner step on curb, 0.18 ft (0.055 m) below land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 1.07 ft (0.33 m) below land-surface datum, Mar. 15, 1962; lowest measured 15.56 ft (4.74 m) below land-surface datum, Feb. 27, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1978	3.96	JAN 20, 1979	3.86	APR 20, 1979	2.97	JUL 21, 1979	5.95
13	4.60	27	2.51	28	2.46	27	4.47
20	3.81	FEB 02	3.09	MAY 04	3.21	AUG 01	5.33
27	4.08	09	4.03	11	3.91	04	5.65
NOV 03	4.55	16	4.61	18	3.96	11	6.37
10	4.79	24	2.61	26	2.20	19	4.89
18	4.62	MAR 02	2.59	JUN 01	2.74	26	5.81
24	4.42	10	2.81	08	3.62	SEP 02	7.74
DEC 15	3.83	16	3.25	15	3.22	09	6.44
22	3.50	23	3.60	22	4.08	16	6.73
29	4.05	31	2.92	29	4.49	23	5.56
JAN 05, 1979	2.83	APR 06	2.70	JUL 08	4.72		
12	3.44	13	2.78	15	5.81		

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.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), filled in from original depth of 19 ft (5.8 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 19 ft or 5.8 m, damaged during well installation).

DATUM.--Altitude of land-surface datum is 1,290 ft (393 m), from topographic map. Measuring point: Top of casing, 2.30 ft (0.701 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.78 ft (2.68 m) below land-surface datum, Apr. 9, 1979; lowest measured, 15.44 ft (4.71 m) below land-surface datum, Oct. 21, 1969 (corrected).

CORRECTIONS.--Data published last year was incorrectly referenced to feet below measuring point in lieu of depth to water below land-surface datum. Therefore, 2.3 ft (0.701 m) must be subtracted from each water level published last year.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1978	13.57	FEB 21, 1979	12.30	JUN 22, 1979	11.23
NOV 20	12.60	APR 09	8.78	JUL 24	12.13
JAN 09, 1979	11.69	MAY 23	10.95	AUG 27	12.57

GROUND-WATER LEVELS

MADISON COUNTY

430056075354102. Local number, M 178.

LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills.

Owner: Donald L. Greene.

AQUIFER.--Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 16 ft (4.9 m), cased to 16 ft (4.9 m), open end.

DATUM.--Altitude of land-surface datum is 575 ft (175 m), from topographic map. Measuring point: Top of flange, 3.06 ft (0.933 m) above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft (3.0 m) west, which has a period of record from October 1965 to September 1973 (unpublished).

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.60 ft (0.79 m) below land-surface datum, Mar. 5, 1979; lowest, 10.41 ft (3.17 m) below land-surface datum, Sept. 5, 1979.

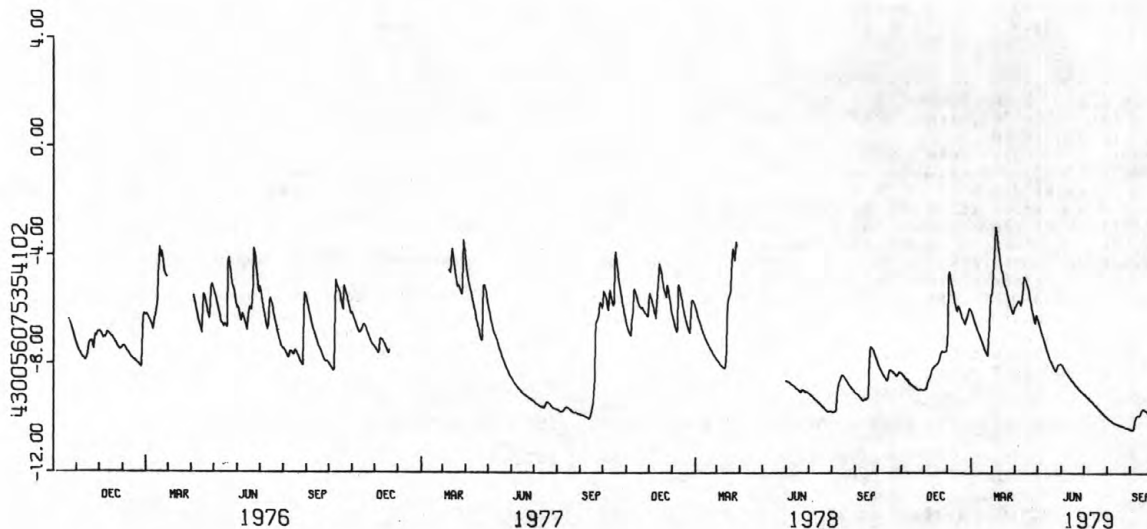
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.97	8.31	8.95	6.74	6.02	5.34	5.83	6.39	7.97	9.08	9.96	10.38
2	8.05	8.34	8.93	4.70	6.15	4.69	5.82	6.50	8.01	9.10	9.98	10.39
3	8.11	8.39	8.92	4.54	6.24	4.25	5.70	6.59	8.06	9.13	10.00	10.39
4	8.17	8.42	8.86	4.72	6.31	3.58	5.70	6.68	8.11	9.16	10.02	10.40
5	8.23	8.46	8.76	4.92	6.41	2.90	5.63	6.77	8.17	9.18	10.05	10.40
6	8.28	8.50	8.65	5.08	6.51	2.87	5.63	6.87	8.22	9.22	10.07	10.33
7	8.33	8.53	8.57	5.23	6.58	3.26	5.75	6.96	8.27	9.25	10.09	10.10
8	8.39	8.57	8.51	5.38	6.65	3.56	5.80	7.05	8.31	9.28	10.11	9.99
9	8.44	8.59	8.44	5.54	6.73	3.81	5.69	7.14	8.35	9.30	10.13	9.93
10	8.48	8.63	8.33	5.68	6.79	3.97	5.52	7.24	8.39	9.33	10.15	9.89
11	8.53	8.66	8.23	5.83	6.87	4.14	5.16	7.33	8.43	9.36	10.16	9.87
12	8.57	8.69	8.16	5.95	6.93	4.38	4.73	7.43	8.47	9.39	10.16	9.87
13	8.61	8.72	8.10	6.05	7.01	4.53	4.76	7.52	8.50	9.41	10.17	9.88
14	8.56	8.74	8.08	5.91	7.08	4.54	4.82	7.60	8.54	9.44	10.18	9.88
15	8.33	8.77	8.05	5.81	7.16	4.72	4.91	7.68	8.58	9.48	10.20	9.80
16	8.23	8.79	8.04	5.90	7.24	4.94	5.03	7.76	8.62	9.51	10.21	9.72
17	8.21	8.81	8.01	5.98	7.34	5.04	5.13	7.83	8.66	9.53	10.22	9.66
18	8.21	8.83	7.98	6.10	7.41	5.11	5.26	7.89	8.70	9.56	10.23	9.64
19	8.22	8.86	7.95	6.22	7.47	5.21	5.42	7.95	8.74	9.59	10.24	9.63
20	8.25	8.88	7.92	6.28	7.53	5.32	5.58	8.01	8.77	9.62	10.25	9.64
21	8.27	8.90	7.85	6.33	7.58	5.44	5.74	8.06	8.80	9.65	10.26	9.66
22	8.30	8.92	7.71	6.41	7.65	5.56	5.90	8.13	8.83	9.68	10.27	9.68
23	8.33	8.94	7.59	6.49	7.67	5.66	6.04	8.18	8.87	9.71	10.28	9.71
24	8.37	8.95	7.53	6.53	7.10	5.77	6.15	8.22	8.90	9.74	10.29	9.74
25	8.40	8.94	7.49	6.39	6.65	5.86	6.27	8.24	8.92	9.77	10.30	9.77
26	8.43	8.93	7.52	6.28	5.81	5.91	6.42	8.16	8.95	9.80	10.32	9.79
27	8.41	8.92	7.53	6.20	5.39	6.00	6.48	8.05	8.98	9.83	10.33	9.82
28	8.32	8.92	7.53	6.04	5.41	6.10	6.19	8.00	9.01	9.86	10.33	9.85
29	8.29	8.94	7.52	5.92	---	6.11	6.17	7.99	9.03	9.88	10.34	9.87
30	8.28	8.95	7.51	5.91	---	6.01	6.26	7.99	9.06	9.91	10.35	9.89
31	8.28	---	7.51	5.95	---	5.87	---	7.96	---	9.93	10.36	---

WTR YEAR 1979

HIGHEST 2.60 Mar. 5, 1979

LOWEST 10.41 Sept. 5, 1979



GROUND-WATER LEVELS

505

MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.

LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.

Owner: Marion G. Groff.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 24 in. (0.61 m), depth 12 ft (3.7 m), stone-lined.

DATUM.--Altitude of land-surface datum is 710 ft (216 m), 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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.74 ft (1.14 m) below land-surface datum, Apr. 10, 1971; lowest measured 9.99 ft (3.04 m) below land-surface datum, Aug. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10, 1978	7.92	JAN 15, 1979	7.19	APR 16, 1979	4.78	JUL 30, 1979	8.61
17	7.34	26	7.00	24	5.88	AUG 06	8.84
27	7.37	FEB 04	6.42	MAY 07	6.16	14	8.82
NOV 08	7.38	23	7.62	14	6.60	22	8.54
17	7.62	28	6.28	24	7.16	28	8.71
DEC 01	7.57	MAR 07	4.55	JUN 07	6.91	SEP 03	8.81
13	6.61	16	5.06	18	7.44	18	8.22
21	6.96	24	5.18	30	8.00	25	8.41
30	7.08	31	4.74	JUL 09	8.35		
JAN 06, 1979	6.08	APR 06	4.53	16	8.57		

NIAGARA COUNTY

430655079022001. Local number, Ni 69.

LOCATION.--Lat 43°06'55", long 79°02'20", Hydrologic Unit 04120104, 20th Street and Beech Avenue, Niagara Falls.

Owner: City of Niagara Falls.

AQUIFER.--Lockport Dolomite of Middle Silurian age.

WELL CHARACTERISTICS.--Drilled observation artesian and water-table well, diameter 8 in. (0.20 m) to 6 in. (0.15 m), depth 36 ft (11.0 m), cased 8-in. (0.20-m) 0 ft (0.0 m) to 17 ft (5.2 m), open hole 6-in. (0.15-m) 17 ft (5.2 m) to 36 ft (11.0 m).

DATUM.--Land-surface datum is 596.21 ft (181.725 m) U.S. Lake Survey datum (levels by Uhl, Hall, and Rich).

Measuring point: Top of 2-in. (0.05 m) opening in 6 in. (0.15 m) plug of 8 in. (0.20 m) extended casing,

3.60 ft (1.097 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1958 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.39 ft (5.00 m) below land-surface datum, Mar. 5, 1979; lowest measured, 22.21 ft (6.77 m) below land-surface datum, Aug. 3, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
UCT 02, 1978	19.90	DEC 18, 1978	19.40	APR 17, 1979	17.53	JUL 16, 1979	21.05
10	19.20	26	19.38	23	18.10	23	21.20
16	19.07	JAN 02, 1979	18.35	30	18.47	30	21.37
23	19.25	08	18.50	MAY 07	18.98	AUG 06	20.94
30	19.76	15	18.35	14	19.26	13	21.07
NOV 06	19.78	MAR 05	16.39	21	19.48	21	21.09
13	19.79	19	18.66	29	19.46	27	21.35
20	20.4	26	18.87	JUN 04	19.80	SEP 04	20.90
27	20.39	APR 02	19.06	25	20.66	10	21.00
DEC 04	19.90	09	18.64	JUL 02	20.75	29	20.16
13	19.20	16	17.53	09	21.10		

GROUND-WATER LEVELS

NIAGARA COUNTY

431308078544501. Local number, Ni 70.

LOCATION.--Lat 43°13'08", long 78°54'45", Hydrologic Unit 04130001, near Ransomville.

Owner: Calvin C. Schultz.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 4 ft (1.2 m) to 5 ft (1.5 m) (reported), depth 24 ft (7.3 m).

DATUM.--Altitude of land-surface datum is 335 ft (102 m), from topographic map. Measuring point: Top of 1-in. (0.02-m) hole in steel cover, at land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for August 1972 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.14 ft (0.35 m) below land-surface datum, Feb. 24, 1979; lowest measured, 9.91 ft (3.02 m) below land-surface datum, Nov. 9, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1978	8.65	JAN 06, 1979	3.08	APR 07, 1979	1.82	JUL 08, 1979	6.73
14	8.24	13	3.20	15	1.50	14	7.04
21	7.37	20	3.51	21	2.41	21	7.26
28	6.67	27	1.80	28	2.44	28	7.46
NOV 04	6.31	FEB 03	2.27	MAY 05	2.60	AUG 04	7.40
11	6.35	11	2.91	12	3.27	11	7.55
18	6.30	17	3.32	19	3.90	18	7.74
25	6.19	24	1.14	26	3.61	25	8.05
DEC 02	5.84	MAR 03	1.25	JUN 02	4.23	SEP 01	8.18
09	5.23	11	1.67	09	5.08	08	8.28
16	4.87	17	2.44	16	5.76	15	8.26
24	4.73	24	2.33	24	6.32	22	7.38
30	4.76	31	1.63	JUL 01	6.48	28	7.12

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.--Glacial sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 36 in. (0.91 m), depth 31 ft (9.4 m), stone-lined.

DATUM.--Land-surface datum is 1,484.94 ft (452.609 m) National Geodetic Vertical Datum of 1929. Measuring point:

Top of 2-ft (0.6-m) square concrete well cover at midpoint of south side of rectangular opening, 1.00 ft (0.305 m) 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 (3.48 m) below land-surface datum, Apr. 3, 1976; lowest measured 30.31 ft (9.24 m) below land-surface datum, Feb. 25, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1978	27.62	JAN 06, 1979	27.12	APR 07, 1979	15.26	JUL 07, 1979	21.66
14	27.70	13	26.03	14	15.21	14	22.23
21	28.28	20	25.40	21	14.45	21	23.52
28	28.10	27	24.91	28	14.76	28	23.50
NOV 04	28.50	FEB 03	24.45	MAY 05	14.96	AUG 04	24.50
11	28.69	10	24.23	12	15.85	11	24.68
18	28.10	17	24.45	19	16.87	18	24.88
25	27.97	24	24.60	26	18.12	25	25.21
DEC 02	28.30	MAR 03	24.82	JUN 02	18.37	SEP 01	25.50
09	28.21	10	23.09	09	18.80	08	25.83
16	28.18	17	21.38	16	19.30	15	25.15
23	27.95	24	20.41	23	20.03	22	24.96
30	27.92	31	16.30	30	21.10	29	24.83

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.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven-washed observation water-table well, diameter 6 in. (0.15 m), depth 33 ft (10.1 m), cased to 33 ft (10.1 m), open end.

DATUM.--Land-surface datum is 1,190.22 ft (362.779 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of extended casing, 2.63 ft (0.802 m) above land-surface datum.

REMARKS.--This well driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft (4.6 m) east, which has a period of record from November 1965 to November 1968 (unpublished).

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1968 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.87 ft (4.53 m) below land-surface datum, May 21, 1972; lowest, 23.49 ft (7.16 m) below land-surface datum, Apr. 10, 11, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	22.91	23.31		---	21.83	18.16	18.22	19.13	20.15	21.08
2		---	22.92	23.32		22.72	21.62	18.11	18.24	19.15	20.18	21.10
3		---	22.94	23.34		22.70	21.41	18.05	18.27	19.19	20.21	21.12
4		---	22.94	23.35		22.69	21.17	17.99	18.30	19.22	20.25	21.15
5		---	22.96	23.36		22.68	20.95	17.96	18.32	19.26	20.28	21.18
6		---	22.98	23.36		22.67	20.75	17.93	18.37	19.31	20.32	21.19
7		---	22.99	23.37		22.66	20.58	17.90	18.41	19.34	20.35	21.22
8		---	23.00	23.38		22.65	20.37	17.87	18.44	19.37	20.38	21.25
9		---	23.01	23.39		22.64	20.15	17.84	18.47	19.40	20.42	21.28
10		---	23.02	23.40		22.63	19.98	17.82	18.48	19.43	20.44	21.30
11		---	23.05	---		22.61	19.82	17.81	18.50	19.46	20.47	21.32
12		---	23.06	---		22.61	19.65	17.79	18.55	19.49	20.51	21.35
13		---	23.07	---		22.60	19.50	17.78	18.60	19.52	20.54	21.36
14		---	23.08	---		22.58	19.35	17.78	18.64	19.55	20.56	21.37
15		---	23.09	---		22.58	19.22	17.77	18.66	19.59	20.60	21.40
16		---	23.11	---		22.57	19.12	17.78	18.68	19.62	20.64	21.43
17		---	23.11	---		22.55	19.03	17.80	18.70	19.66	20.67	21.45
18		---	23.13	---		22.52	18.96	17.80	18.74	19.69	20.69	21.46
19		---	23.14	---		22.51	18.90	17.79	18.79	19.73	20.71	21.48
20		---	23.15	---		22.49	18.84	17.79	18.82	19.76	20.74	21.51
21		22.77	23.17	---		22.47	18.79	17.80	18.84	19.79	20.77	21.52
22		22.78	23.19	---		22.45	18.74	17.85	18.86	19.83	20.80	21.54
23		22.79	23.20	---		22.42	18.69	17.88	18.89	19.86	20.83	21.56
24		22.80	23.21	---		22.39	18.63	17.88	18.93	19.89	20.86	21.58
25		22.82	23.21	---		22.37	18.57	17.90	18.97	19.92	20.88	21.60
26		22.84	23.23	---		22.34	18.49	17.93	19.01	19.95	20.92	21.61
27		22.85	23.24	---		22.30	18.41	18.00	19.03	19.98	20.94	21.63
28		22.86	23.26	---		22.26	18.35	18.05	19.05	20.02	20.96	21.64
29		22.89	23.27	---		22.19	18.29	18.09	19.08	20.05	20.99	21.66
30		22.90	23.28	---		22.10	18.22	18.14	19.10	20.09	21.01	21.67
31		---	23.29	---		21.99	---	18.18	---	20.12	21.05	---

WTR YEAR 1979 HIGHEST 17.77 May 13, 14, 15, 16, 1979 LOWEST 23.40 Jan. 9, 10, 1979

ONTARIO COUNTY

425840077133901. Local number, Ot 900.

LOCATION.--Lat 42°58'40", long 77°13'39", Hydrologic Unit 04140201, at New York State Thruway Interchange 43, near Manchester.

Owner: State Thruway Authority.

AQUIFER.--Camillus Shale of the Salina Group of Late Silurian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 139 ft (42.4 m), cased to 11 ft (3.4 m), open hole.

DATUM.--Altitude of land-surface datum is 555 ft (169 m), from topographic map. Measuring point: Top of casing, 11.43 ft (3.484 m) above land-surface datum.

PERIOD OF RECORD.--May 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.14 ft (3.40 m) above land-surface datum, Mar. 15, 1976; lowest measured 4.59 ft (1.40 m) above land-surface datum, Nov. 11, 1957.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	7.57	JAN 01, 1979	8.58	APR 02, 1979	10.51	JUL 02, 1979	9.17
10	7.62	08	8.88	09	10.75	09	8.85
16	7.45	15	9.05	16	10.69	16	8.71
23	7.68	22	9.52	23	10.64	23	8.58
30	7.61	29	9.69	30	10.64	31	8.50
NOV 06	7.74	FEB 05	9.56	MAY 07	10.63	AUG 06	8.38
13	7.59	12	9.56	14	10.63	13	8.16
20	7.62	19	9.56	21	10.63	20	8.00
27	7.69	26	9.54	28	10.64	27	7.90
DEC 04	8.02	MAR 05	9.91	JUN 04	10.63	SEP 03	7.79
11	7.82	12	10.29	11	10.63	10	7.72
18	8.11	19	10.32	18	9.35	17	7.91
25	8.38	26	10.67	25	9.36	24	7.80

GROUND-WATER LEVELS

ORANGE COUNTY

411933074150801. Local number, O 104.

LOCATION.--Lat 41°19'33", long 74°15'08", Hydrologic Unit 02020008, near Chester.

Owner: Palisades Interstate Park Commission.

AQUIFER.--Limestone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in. (0.15 m), depth 70 ft (21.3 m) in October 1979 (previously reported as 98 ft or 29.9 m), cased to 73 ft (22.3 m), open end.

DATUM.--Altitude of land-surface datum is 445 ft (136 m), from topographic map. Measuring point: Top of extended casing, 4.49 ft (1.369 m) above land-surface datum.

REMARKS.--Water-level fluctuations show hydraulic contact with Seeley Brook, 500 ft (152 m) west.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for September 1964 to June 1974,

February 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.59 ft (2.92 m) below land-surface datum, Apr. 5, 1970; lowest, 17.50 ft (5.33 m) below land-surface datum, Oct. 26, 1976.

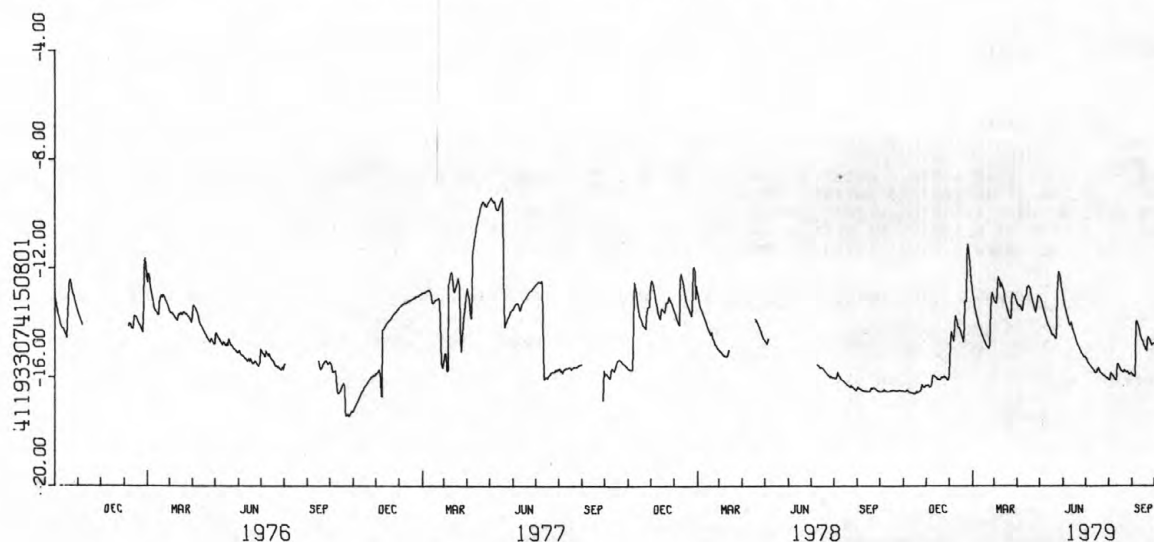
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.52	16.50	16.30	15.93	12.93	13.13	13.26	13.02	13.01	15.24	16.08	15.87
2	16.53	16.51	16.30	15.30	13.10	13.20	13.33	13.08	13.18	15.31	16.10	15.91
3	16.53	16.52	16.30	14.50	13.30	13.24	13.37	13.16	13.32	15.37	16.10	15.92
4	16.53	16.52	16.29	14.32	13.45	13.28	13.38	13.22	13.42	15.44	15.83	15.94
5	16.52	16.53	16.32	14.45	13.60	13.23	13.36	13.35	13.54	15.49	15.86	15.96
6	16.48	16.49	16.34	14.58	13.75	12.90	13.41	13.48	13.68	15.52	15.92	15.13
7	16.46	16.47	16.35	14.66	13.86	12.29	13.50	13.59	13.80	15.56	15.93	13.97
8	16.49	16.52	16.35	14.16	13.96	12.34	13.55	13.69	13.91	15.60	15.98	13.95
9	16.51	16.54	16.16	13.77	14.07	12.50	13.47	13.79	14.01	15.63	16.04	14.05
10	16.53	16.55	15.92	13.74	14.17	12.68	13.25	13.88	14.10	15.67	16.09	14.17
11	16.53	16.56	15.92	13.94	14.26	12.53	13.15	13.99	14.11	15.70	16.10	14.30
12	16.53	16.57	15.93	14.11	14.34	12.59	13.06	14.08	13.99	15.74	15.92	14.43
13	16.53	16.57	15.96	14.21	14.41	12.73	13.03	14.13	14.14	15.78	15.92	14.54
14	16.52	16.58	15.98	14.19	14.49	12.81	12.91	14.18	14.25	15.82	15.51	14.61
15	16.50	16.58	16.00	14.23	14.56	12.98	12.71	14.23	14.33	15.85	15.58	14.65
16	16.50	16.60	16.04	14.33	14.63	13.17	12.66	14.32	14.42	15.85	15.65	14.73
17	16.50	16.61	16.06	14.45	14.71	13.30	12.65	14.41	14.51	15.70	15.72	14.81
18	16.49	16.55	16.07	14.53	14.79	13.40	12.71	14.47	14.59	15.72	15.77	14.67
19	16.49	16.53	16.08	14.55	14.83	13.51	12.82	14.43	14.68	15.67	15.76	14.94
20	16.49	16.56	16.08	14.70	14.87	13.60	13.00	14.44	14.76	15.74	15.78	15.01
21	16.49	16.55	16.06	14.18	14.90	13.70	13.14	14.50	14.82	15.80	15.81	15.04
22	16.50	16.54	15.99	13.22	14.93	13.78	13.24	14.58	14.88	15.84	15.72	14.67
23	16.50	16.53	15.99	13.16	14.95	13.84	13.34	14.58	14.94	15.88	15.75	14.52
24	16.51	16.48	16.00	13.22	14.83	13.85	13.44	13.94	15.00	15.89	15.79	14.57
25	16.51	16.45	15.98	11.57	13.62	13.26	13.55	12.95	15.06	15.92	15.80	14.64
26	16.51	16.27	15.97	11.10	13.08	12.98	13.63	12.34	15.12	15.93	15.79	14.70
27	16.48	16.33	15.98	11.42	12.89	12.90	13.42	12.11	15.17	15.96	15.83	14.77
28	16.48	16.35	16.03	11.74	13.01	12.96	13.23	12.22	15.22	15.99	15.86	14.82
29	16.48	16.37	16.07	12.12	---	12.99	13.04	12.44	15.26	16.01	15.89	14.78
30	16.50	16.34	16.10	12.45	---	13.07	13.01	12.64	15.27	16.03	15.85	14.77
31	16.51	---	16.11	12.70	---	13.16	---	12.83	---	16.05	15.83	---

WTR YEAR 1979

HIGHEST 11.04 Jan. 26, 1979

LOWEST 16.61 Nov. 16, 17, 1978



GROUND-WATER LEVELS

509

OTSEGO COUNTY

424136075025101. Local number, Og 23.

LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, near Hartwick.

Owner: Michael Kallan.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 15 ft (4.6 m), stone-lined.

DATUM.--Altitude of land-surface datum is 1,430 ft (435 m), from topographic map. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Records for May 1953 to September 1976 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft (0.91 m) below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft (3.86 m) below land-surface datum, Nov. 14, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1978	7.58	JAN 07, 1979	6.10	APR 15, 1979	5.00	JUL 22, 1979	9.50
08	6.92	14	5.99	22	5.12	29	9.36
15	7.10	21	5.90	29	5.60	AUG 05	9.27
22	6.97	28	5.60	MAY 06	5.94	12	8.94
29	7.20	FEB 04	5.82	13	6.65	19	9.11
NOV 05	7.04	11	5.98	20	7.20	26	8.97
12	7.10	18	6.40	27	6.20	SEP 02	8.93
19	7.28	25	5.86	JUN 03	6.50	09	9.03
26	7.40	MAR 04	5.24	10	6.70	16	8.90
DEC 03	7.02	11	4.70	17	7.08	23	8.88
10	6.60	18	4.78	24	7.60	30	8.80
17	6.70	25	4.98	JUL 01	7.99		
23	6.80	APR 01	5.02	08	8.65		
31	5.60	08	4.80	15	8.99		

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.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 17 ft (5.2 m), stone-lined.

DATUM.--Altitude of land-surface datum is 540 ft (165 m), from topographic map. Measuring point: Top (north side) of 3-in. (0.08-m) coupling set in concrete well cover, at land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for January 1935 to September 1945,

September 1950 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.0 ft (0.30 m) below land-surface datum, Oct. 19, 1955; lowest measured, dry (several times).

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1978	14.90	DEC 30, 1978	13.40	APR 07, 1979	5.40	JUL 14, 1979	12.00
14	14.90	JAN 10, 1979	7.90	18	4.90	21	12.60
28	15.70	20	8.00	MAY 02	4.90	28	13.60
NOV 04	15.90	27	1.80	10	6.80	AUG 09	14.65
11	15.90	FEB 03	3.50	17	7.40	17	14.00
18	DRY	17	7.20	26	4.80	24	13.85
25	DRY	MAR 03	6.20	JUN 02	4.40	SEP 03	14.60
DEC 02	DRY	10	2.90	09	7.65	09	14.40
08	DRY	17	3.50	22	8.90	15	14.20
16	14.40	24	4.15	30	9.60	23	14.40
21	14.00	APR 01	4.90	JUL 07	10.90	30	14.60

GROUND-WATER LEVELS

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.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 4 ft (1.2 m), depth 16 ft (4.9 m), stone-lined.

DATUM.--Altitude of land-surface datum is 405 ft (123 m), from topographic map. Measuring point: Top edge

of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft (0.609 m) above land-surface datum.

PERIOD OF RECORD.--September 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 8.92 ft (2.72 m) below land-surface datum, Apr. 4, 1970; lowest measured 15.49 ft (4.72 m) below land-surface datum, Oct. 3, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1978	14.31	JAN 08, 1979	12.70	APR 07, 1979	10.54	JUL 07, 1979	12.32
14	14.33	13	12.58	14	10.43	14	12.54
22	14.37	21	12.80	21	10.15	21	12.82
28	14.00	28	11.69	28	10.08	29	13.22
NOV 05	14.09	FEB 04	11.34	MAY 06	10.07	AUG 04	13.35
11	14.20	11	11.60	12	10.30	11	13.49
18	14.06	18	11.99	20	10.82	18	13.42
26	14.14	24	11.79	26	10.28	25	13.64
DEC 02	14.12	MAR 04	10.70	JUN 02	10.26	SEP 01	13.77
09	14.01	11	10.23	09	10.68	08	13.74
16	14.13	18	10.50	16	10.92	15	13.84
23	13.75	24	10.59	23	11.45	22	13.70
30	13.95	31	10.47	30	11.88	29	13.74

423532073423701. Local number, Re 701.

LOCATION.--Lat 42°35'32", long 73°42'37", Hydrologic Unit 02020006, near East Greenbush.

Owner: Town of East Greenbush.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in. (0.20 m) to 12 in. (0.30 m), depth 96 ft (29.3 m), slotted 82 ft (25.0 m) to 96 ft (29.3 m).

DATUM.--Altitude of land-surface datum is 255 ft (78 m), from topographic map. Measuring point: Top of flange, 3.35 ft (1.021 m) above land-surface datum.

REMARKS.--No record May-August. Recorder temporarily removed to enable water withdrawal for lawn sprinkling.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for March 1961 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.72 ft (6.01 m) below land-surface datum, May 25, 1976; lowest, 31.59 ft (9.63 m) below land-surface datum, Mar. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
HIGHEST FOR THE DAY (FROM RECORDER GRAPH)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	23.15	NOV 30, 1978	24.04	FEB 05, 1979	24.44	MAR 31, 1979	23.79
10	23.24	DEC 05	24.14	10	24.55	APR 05	23.73
15	23.32	10	24.22	15	24.65	10	23.68
20	23.38	15	24.29	20	24.72	15	23.63
25	23.47	20	24.32	25	24.73	20	23.56
31	23.58	25	24.34	28	24.72	25	23.50
NOV 05	23.66	31	24.53	MAR 05	24.51	26	23.48
10	23.74	JAN 05, 1979	24.52	10	24.05	SEP 27	24.03
15	23.83	10	24.55	15	23.93	30	24.05
20	23.93	15	24.61	20	23.84		
25	23.98	31	24.39	25	23.79		

WTR YEAR 1979 HIGHEST MEASURED 23.06 Oct. 1, 1978 LOWEST MEASURED 24.76 Feb. 22, 1979

E Estimated.

S Steel tape measurement.

GROUND-WATER LEVELS

511

RENSSELAER COUNTY

423225073430501. Local number, Re 702.

LOCATION.--Lat 42°32'25", long 73°43'05", Hydrologic Unit 02020006, near Brookview.

Owner: Nicholas J. Bult.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), cased to 13 ft (4.0 m), 1.5-in. (0.04-m) well point (60-gauze screen 13 ft or 4.0 m to 16 ft or 4.9 m).

DATUM.--Altitude of land-surface datum is 175 ft (53 m), from topographic map. Measuring point: Top of casing, 3.30 ft (1.006 m) above land-surface datum (previously reported as 2.40 or 0.732 m).

PERIOD OF RECORD.--October 1977 to current year. Unpublished record for November 1965 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft (0.01 m) above land-surface datum, November 29, 1972; lowest measured, 6.42 ft (1.96 m) below land-surface datum, September 22, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26, 1978	4.74	JAN 31, 1979	0.65	MAY 01, 1979	1.42	JUL 23, 1979	5.00
NOV 22	4.57	MAR 02	0.99	JUN 08	2.98	AUG 27	5.30
DEC 15	3.22	APR 03	1.78	27	3.87	SEP 27	4.42

ROCKLAND COUNTY

411802073593001. Local number, Ro 18.

LOCATION.--Lat 41°18'02", long 73°59'30", Hydrologic Unit 02030101, in Bear Mountain section near Lemon Road and Seven Lakes Drive.

Owner: Palisades Interstate Park Commission.

AQUIFER.--Storm King Granite of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 60 ft (18.3 m), cased to 53 ft (16.2 m), open hole.

DATUM.--Altitude of land-surface datum is 390 ft (119 m), from topographic map. Measuring point: Top of extended casing, 3.65 ft (1.112 m) above land-surface datum.

PERIOD OF RECORD.--July 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 10.55 ft (3.22 m) below land-surface datum, Mar. 3, 1961; lowest measured 28.32 ft (8.63 m) below land-surface datum, Dec. 7, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1978	25.20	JAN 10, 1979	24.72	APR 25, 1979	14.27	JUL 26, 1979	19.04
22	24.40	30	12.82	MAY 06	13.64	AUG 09	20.23
30	23.20	FEB 06	14.04	13	14.75	20	21.30
NOV 05	27.05	13	14.83	20	15.38	26	21.98
12	27.46	21	15.42	27	11.44	SEP 07	23.05
19	27.82	27	14.05	JUN 10	14.74	18	23.64
DEC 07	28.32	MAR 31	14.31	19	15.84		
15	27.77	APR 09	14.88	28	16.53		
27	27.67	17	14.52	JUL 05	17.17		

ST. LAWRENCE COUNTY

444904074455201. Local number, St 40.

LOCATION.--Lat 44°49'04", long 74°45'52", Hydrologic Unit 04150306, near Brasher Falls.

Owner: State Department of Environmental Conservation.

AQUIFER.--Glacial sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in (0.91 m), depth 12 ft (3.7 m), concrete cased to 12 ft (3.7 m), open end.

DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Chisled mark on top edge of 6-in. (0.15-m) by 8-in. (0.20-m) opening of concrete well cover, 0.70 ft (0.213 m) above land-surface datum.

PERIOD OF RECORD.--May 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.24 ft (0.99 m) below land-surface datum, Apr. 21, 1971; lowest measured 9.38 ft (2.86 m) below land-surface datum, Oct. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1978	8.27	JAN 13, 1979	7.34	APR 21, 1979	5.03	JUL 27, 1979	7.70
14	8.28	20	7.29	28	5.14	AUG 04	7.97
21	7.89	27	7.28	MAY 05	5.14	11	8.12
27	7.84	FEB 03	7.24	12	5.35	18	8.28
NOV 03	7.47	10	7.40	20	5.63	25	8.37
10	7.83	17	7.61	26	5.72	SEP 01	8.23
17	7.75	24	7.52	JUN 01	5.65	07	8.23
24	7.74	MAR 03	6.89	09	6.11	15	6.60
DEC 02	7.80	10	6.49	16	6.26	21	6.58
09	7.71	17	6.16	23	6.64	27	6.81
16	7.72	24	5.31	30	6.96	29	6.93
23	7.74	31	5.35	JUL 07	7.07		
30	7.86	APR 07	5.08	14	7.33		
JAN 06, 1979	7.33	14	4.87	21	7.50		

GROUND-WATER LEVELS

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.--Dolomite of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 304 ft (92.6 m), cased to 189 ft (57.6 m), open hole.

DATUM.--Altitude of land-surface datum is 305 ft (93 m), from topographic map. Measuring point: Top of casing, 3.38 ft (1.028 m) above land-surface datum.

REMARKS.--Water level affected by earthquakes and distant pumping.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1949 to November 1961, August 1964 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 41.06 ft (12.52 m) below land-surface datum, Apr. 9, 1979; lowest, 56.20 ft (17.13 m) below land-surface datum, July 29, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.65	44.00	43.90	42.74	42.88	43.63	41.86	---	42.53	42.42	44.60	45.05
2	44.57	43.97	43.71	42.54	43.22	43.24	41.67	---	42.42	42.48	44.56	44.70
3	44.71	43.88	43.54	42.77	43.28	43.09	41.71	---	42.17	42.75	44.63	44.35
4	44.86	43.69	42.89	43.09	43.00	42.79	41.75	---	42.16	42.62	44.35	44.39
5	44.98	43.61	42.86	43.30	43.20	42.72	41.80	---	42.21	42.73	44.05	44.62
6	44.85	43.54	43.30	43.07	43.68	42.76	41.53	---	42.45	43.13	44.09	44.38
7	44.65	43.51	43.89	42.82	43.62	42.73	41.52	---	42.69	43.12	44.30	44.58
8	44.58	43.57	43.82	42.76	43.40	42.83	41.42	---	42.81	42.93	44.41	44.66
9	44.80	43.53	43.48	43.16	43.48	42.91	---	---	42.69	43.09	44.72	44.50
10	44.85	43.66	43.32	43.20	43.44	42.48	---	---	42.38	43.38	44.65	44.43
11	44.72	43.58	43.53	43.44	43.39	41.99	---	---	42.33	43.54	44.71	44.45
12	44.57	43.59	43.60	43.30	43.41	42.31	---	---	42.55	43.58	44.74	44.49
13	44.83	43.74	43.55	42.87	43.32	42.62	---	---	42.98	43.61	44.48	44.48
14	44.63	43.73	43.63	42.33	43.19	42.25	---	---	44.11	43.51	44.42	44.14
15	44.40	43.86	43.52	42.94	43.25	42.84	---	---	44.30	43.42	44.67	44.16
16	44.68	43.86	43.50	43.20	43.55	43.59	---	---	43.65	43.63	44.95	44.20
17	45.00	43.69	43.02	42.98	43.80	43.80	---	43.22	42.86	43.95	45.13	44.26
18	44.84	43.28	43.07	43.06	43.64	45.26	---	43.36	42.82	44.31	45.01	44.18
19	44.56	43.42	43.21	43.47	43.25	45.41	---	43.35	44.63	44.48	44.64	44.20
20	44.64	43.69	43.46	43.04	43.42	44.17	---	42.91	45.96	44.60	44.75	44.43
21	44.48	43.93	43.07	42.26	43.25	43.85	---	42.76	44.94	44.43	44.94	44.31
22	44.21	44.07	43.34	42.27	43.37	43.39	---	43.04	44.03	44.17	45.13	44.07
23	44.01	43.72	43.28	42.60	43.48	42.93	---	43.09	43.42	44.28	45.28	44.11
24	44.17	43.18	43.12	42.40	43.23	42.42	---	42.87	42.99	44.48	45.37	44.25
25	44.02	43.29	42.52	42.23	43.14	41.84	---	42.67	42.99	44.65	45.25	44.14
26	43.91	43.38	42.98	42.46	43.08	41.78	---	42.47	42.98	44.70	45.12	43.96
27	44.21	43.37	43.19	42.45	43.27	41.91	---	42.39	42.92	44.83	45.13	44.06
28	44.20	43.25	43.34	42.19	43.67	42.18	---	42.23	43.00	44.62	45.24	44.24
29	44.18	43.69	43.39	42.47	---	42.32	---	42.27	42.93	44.27	45.13	44.19
30	44.22	43.72	43.31	42.85	---	42.39	---	42.27	42.71	44.44	45.13	44.03
31	43.91	---	43.12	42.92	---	42.02	---	42.31	---	44.65	45.26	---

WTR YEAR 1979

HIGHEST RECORDED 41.06 Apr. 9, 1979

LOWEST 47.14 Jun. 20, 1979

GROUND-WATER LEVELS

513

SARATOGA COUNTY

430013073370401. Local number, Sa 1072.

LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, near Stillwater.

Owner: U.S. National Park Service.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 24 ft (7.3 m), cased to 21 ft (6.4 m), 2-in. (0.05-m) well point (30-gauze screen 21 ft or 6.4 m to 24 ft or 7.3 m).

DATUM.--Altitude of land-surface datum is 224 ft (68 m), from topographic map. Measuring point: Top of casing, 3.31 ft (1.007 m) above land-surface datum.

REMARKS.--Water level affected by nearby pumping.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for July 1969 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft (1.20 m) below land-surface datum, May 25, 1976; lowest, 11.91 ft (3.63 m) below land-surface datum, Oct. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.96	9.19	9.41	9.43	8.17	8.08	7.11	6.61	6.57	7.26	7.80	8.45
2	9.02	9.26	9.42	9.09	8.16	8.07	7.11	6.69	6.56	7.29	7.84	8.50
3	9.01	9.20	9.41	8.95	8.20	8.00	7.03	6.73	6.57	7.32	7.86	8.47
4	9.05	9.27	9.47	8.84	8.16	7.92	7.05	---	6.58	7.33	7.87	8.51
5	9.03	9.22	9.44	8.80	8.25	7.63	7.01	---	6.57	7.41	7.91	8.51
6	9.07	9.26	9.43	8.77	8.22	7.10	6.94	---	6.59	7.37	7.90	8.52
7	9.08	9.26	9.44	8.71	8.23	6.95	6.92	---	6.62	7.45	7.94	8.47
8	9.04	9.28	9.48	8.66	8.22	6.99	6.90	---	6.68	7.50	7.94	8.43
9	9.10	9.24	9.48	8.63	8.21	7.01	6.93	---	6.69	7.53	7.97	8.44
10	9.14	9.28	9.45	8.61	8.27	7.04	6.91	---	6.72	7.54	8.01	8.51
11	9.09	9.25	9.45	8.56	8.25	7.02	6.88	---	6.70	7.58	8.02	8.49
12	9.14	9.31	9.45	8.57	8.33	6.99	6.85	---	6.64	7.57	8.04	8.46
13	9.15	9.27	9.45	8.59	8.32	7.00	6.83	---	6.67	7.66	8.07	8.57
14	9.13	9.33	9.55	8.57	8.31	7.04	6.76	---	6.69	7.63	8.07	8.48
15	9.16	9.30	9.50	8.52	8.37	7.02	6.70	---	6.72	7.70	8.11	8.54
16	9.12	9.31	9.47	8.50	8.39	7.02	6.66	---	6.76	7.70	8.15	8.52
17	9.14	9.30	9.52	8.52	8.39	7.05	6.64	6.81	6.81	7.69	8.16	8.60
18	9.16	9.35	9.49	8.51	8.42	7.07	6.62	6.85	6.81	7.71	8.17	8.56
19	9.18	9.33	9.48	8.49	8.48	7.06	6.58	6.88	6.89	7.73	8.20	8.57
20	9.16	9.34	9.48	8.55	8.47	7.06	6.57	6.91	6.94	7.75	8.21	8.58
21	9.19	9.33	9.56	8.53	8.50	7.07	6.56	6.91	6.96	7.79	8.26	8.61
22	9.23	9.35	9.48	8.46	8.49	7.11	6.57	6.94	6.98	7.84	8.24	8.61
23	9.22	9.36	9.48	8.40	8.55	7.09	6.57	6.98	7.02	7.83	8.28	8.60
24	9.17	9.38	9.48	8.39	8.52	7.11	6.53	6.96	7.07	7.86	8.29	8.67
25	9.21	9.37	9.51	8.39	8.33	7.09	6.51	6.84	7.07	7.86	8.31	8.65
26	9.20	9.38	9.46	8.34	8.23	7.10	6.47	6.74	7.13	7.83	8.36	8.67
27	9.20	9.38	9.48	8.28	8.16	7.09	6.45	6.72	7.16	7.70	8.35	8.67
28	9.18	9.41	9.45	8.30	8.10	7.10	6.47	6.73	7.19	7.62	8.38	8.68
29	9.23	9.39	9.48	8.23	---	7.11	6.48	6.67	7.21	7.73	8.38	8.72
30	9.19	9.43	9.50	8.20	---	7.14	6.54	6.63	7.24	7.73	8.42	8.73
31	9.25	---	9.50	8.21	---	7.11	---	6.62	---	7.78	8.42	---

WTR YEAR 1979 HIGHEST 6.43 Apr. 27, 28, 1979 LOWEST 9.72 Dec. 21, 1978

GROUND-WATER LEVELS

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.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 54 ft (16.4 m), filled in from original depth of 57 ft (17.4 m), cased to 57 ft (17.4 m), open end.

DATUM.--Land-surface datum is 228.50 ft (69.647 m) National Geodetic Vertical Datum of 1929. Measuring point:

Top of casing, 2.47 ft (0.753 m) above land-surface datum.

REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 16.8 Mgal/d or 63,600 m³/d in 1978) from municipal well field.

PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft (1.10 m) below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft (9.53 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
HIGHEST FOR THE DAY (FROM RECORDER)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 10, 1978	19.55	JAN 10, 1979	16.12	APR 25, 1979	21.00	E	JUL 15, 1979	22.58
15	19.04	15	17.92	S	29	16.72	20	19.63
20	19.40	25	17.45	MAY 05	19.56		25	20.89
25	19.80	FEB 05	18.95	10	21.43		31	20.82
31	19.73	10	20.25	15	21.61	AUG 05	21.01	
NOV 05	19.87	15	21.45	20	21.19	10	21.01	
10	20.10	20	21.66	24	21.44	15	19.95	
15	19.93	25	21.56	31	19.47	20	18.90	
20	19.84	S	28	19.93	JUN 05	21.09	25	20.00
25	19.20	MAR 05	18.40	10	20.80	31	19.70	
30	21.00	15	17.45	15	21.54	SEP 05	20.30	
DEC 05	21.43	20	19.01	20	22.13	10	18.30	
15	22.69	25	13.60	25	20.71	15	19.20	
20	22.74	31	18.12	30	21.38	20	20.00	
25	21.08	APR 05	16.91	JUL 05	20.00	25	20.60	
31	21.80	E	09	18.85	10	21.79		

WTR YEAR 1979 HIGHEST 9.16 Mar. 7, 1979 LOWEST 23.21 June 27, 28, 1979

E Estimated.

S Steel tape measurement.

STEBEN COUNTY

423121077281201. Local number, Sb 471.

LOCATION.--Lat 42°31'21", long 77°28'12", Hydrologic Unit 02050105, near Cohocton.

Owner: Myron Crouch.

AQUIFER.--Glacial sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 24 ft (7.3 m), filled in from original depth of 25 ft (7.6 m), cased to 24 ft (7.3 m), 1.25-in. (0.03-m) well point (60-gauze screen 24 ft or 7.3 m to 25 ft or 7.6 m, damaged during well installation).

DATUM.--Altitude of land-surface datum is 1,315 ft (401 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.46 ft (0.14 m) below land-surface datum, June 26, 1972; lowest measured, 17.50 ft (5.33 m) below land-surface datum, Oct. 28, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1978	14.80	JAN 28, 1979	10.04	MAY 06, 1979	9.23	JUL 22, 1979	13.73
15	14.98	FEB 04	10.28	13	9.96	29	13.88
29	14.96	11	10.66	20	10.62	AUG 05	14.03
NOV 07	15.00	18	11.40	27	11.11	12	14.24
13	15.05	25	11.48	JUN 03	11.36	19	14.45
19	15.14	MAR 24	5.10	10	11.74	SEP 02	14.79
DEC 10	14.85	APR 01	6.20	17	12.19	09	14.76
17	14.56	09	6.83	24	12.58	16	14.74
JAN 01, 1979	14.30	15	6.24	JUL 01	12.87	23	14.78
14	11.45	22	7.28	08	13.16	30	14.88
21	11.78	29	8.32	15	13.44		

GROUND-WATER LEVELS

515

STEUBEN COUNTY

422445077203301. Local number, Sb 472.

LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona.

Owner: David Owens.

AQUIFER.--Glacial gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 17 ft (5.2 m), filled in from original depth of 18 ft (5.5 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 18 ft or 5.5 m, damaged during well installation).

DATUM.--Altitude of land-surface datum is 1,220 ft (372 m), from topographic map. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft (1.11 m) below land-surface datum, June 25, 1972; lowest measured, 10.84 ft (3.30 m) below land-surface datum, Sept. 22, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1978	10.25	DEC 31, 1978	9.47	APR 08, 1979	6.44	JUL 08, 1979	9.73
08	10.36	JAN 07, 1979	9.51	15	6.21	15	9.96
15	10.45	14	7.49	22	6.11	22	9.99
22	10.10	21	7.85	29	6.99	30	10.01
30	10.16	28	7.09	MAY 06	7.87	AUG 05	8.57
NOV 05	10.07	FEB 04	7.25	13	8.54	12	8.53
12	10.18	11	7.37	20	9.04	19	8.90
19	10.24	18	7.41	27	9.24	26	9.40
26	10.18	25	8.46	JUN 03	9.07	SEP 02	9.71
DEC 03	10.19	MAR 04	7.63	10	9.19	09	8.74
10	9.41	11	4.54	17	9.14	16	8.60
17	9.38	18	5.20	24	9.11	23	8.89
24	9.49	25	5.09	JUL 01	9.59	30	9.23

ULSTER COUNTY

414425074213601. Local number, U 204.

LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.

Owner: State Department of Correction.

AQUIFER.--Till.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in. (0.20 m), depth 46 ft (14.0 m), filled in from original depth of 67 ft (20.4 m).

DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Top of casing, 1.00 ft (0.305 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1954 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft (5.13 m) below land-surface datum, Mar. 24, 1955; lowest measured, 26.90 ft (8.20 m) below land-surface datum, Dec. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1978	22.02	JAN 02, 1979	23.35	APR 03, 1979	20.54	JUL 24, 1979	20.93
10	23.35	09	22.65	11	20.52	26	20.98
17	23.04	16	22.59	17	20.49	31	21.10
24	23.71	23	22.33	MAY 08	20.42	AUG 07	21.27
31	23.93	30	21.83	15	20.45	14	21.48
NOV 08	24.17	FEB 07	21.54	22	20.50	21	21.66
14	24.31	13	21.42	29	20.47	28	21.85
22	24.53	20	21.35	JUN 07	20.48	SEP 04	22.04
28	24.65	27	21.25	12	20.51	18	22.40
DEC 05	24.66	MAR 06	21.08	21	20.56	25	21.94
12	24.51	13	20.82	26	20.59		
19	24.18	20	20.74	JUL 03	20.60		
26	23.83	27	20.60	17	20.78		

GROUND-WATER LEVELS

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.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2.5 in. (0.06 m), depth 36 ft (11.0 m), cased to 34 ft (10.4 m), 2-in. (0.05-m) well point (60-gauze screen 34 ft or 10.4 m to 36 ft or 11.0 m).

DATUM.--Altitude of land-surface datum is 240 ft (73 m), from topographic map. Measuring point: Top of casing, 0.47 ft (0.143 m) above land-surface datum.

REMARKS.--Originally a dug well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined. Well deepened by power auger, October 1965.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for October 1964 to July 1965, March 1966 to December 1974, April 1976 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.43 ft (4.40 m) below land-surface datum, June 3, 1978; lowest measured, 20.71 ft (6.31 m) below land-surface datum, Jan. 24, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1978	16.93	JAN 20, 1979	16.79	APR 14, 1979	15.65	JUL 14, 1979	16.16
14	17.05	27	16.39	21	15.61	21	16.33
21	17.17	FEB 03	16.20	28	15.55	28	16.50
28	17.28	10	16.18	MAY 05	15.51	30	16.57
NOV 04	17.29	15	16.25	12	15.63	AUG 04	16.67
11	17.49	17	16.30	15	15.69	11	16.83
18	17.57	24	16.39	19	15.76	18	16.93
25	17.65	MAR 03	16.09	26	15.66	25	17.03
DEC 02	17.72	07	15.90	JUN 02	15.58	SEP 01	17.18
09	17.78	10	15.80	09	15.61	08	17.18
16	17.98	17	15.65	16	15.59	14	17.16
23	17.79	24	15.59	21	15.73	15	17.28
30	17.82	27	15.60	23	15.76	22	17.38
JAN 06, 1979	17.25	31	15.60	30	15.91	29	17.44
13	16.89	APR 07	15.68	JUL 07	16.02		

WASHINGTON COUNTY

431026073194101. Local number, W 264.

LOCATION.--Lat 43°10'26", long 73°19'41", Hydrologic Unit 02020003, in Salem.

Owner: Village of Salem.

AQUIFER.--Glacial gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug fire-protection water-table well, approximate size 8 ft (2.4 m) by 12 ft (3.7 m), depth 15 ft (4.6 m), stone-lined.

DATUM.--Land-surface datum is 485.5 ft (147.98 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of concrete cover at north side of square opening, at land-surface datum.

REMARKS.--Water level affected by floods of nearby stream.

PERIOD OF RECORD.--July 1946 to December 1973, October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 6.62 ft (2.02 m) below land-surface datum, Apr. 4, 1960; lowest measured 11.70 ft (3.57 m) below land-surface datum, Oct. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25, 1978	9.70	FEB 23, 1979	9.55	MAY 21, 1979	9.74	AUG 22, 1979	10.33
NOV 21	9.97	MAR 26	8.58	JUN 23	9.56	SEP 24	10.36
JAN 22, 1979	8.59	APR 23	9.86	JUL 23	10.16		

517

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.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 15 ft (4.6 m), cased to 16 ft (4.9 m), open end. Well backfilled 1.6 ft (0.48 m) with coarse gravel.

DATUM.--Altitude of land-surface datum is 490 ft (149 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

REMARKS.--This well drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft (107 m) northwest, which has a period of record from October 1965 to June 1973 (unpublished).

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for March 1974 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.99 ft (1.22 m) below land-surface datum, Jan. 29, 1976; lowest recorded, 7.60 ft (2.32 m) below land-surface datum, Sept. 4, 5, 6, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.07	6.56	7.03	6.65	---	6.31	5.81	6.21	---	7.04	7.44	7.59
2	7.09	6.57	7.04	6.07	---	6.25	5.83	6.23	---	7.03	7.45	7.59
3	7.11	6.59	7.05	5.54	---	6.17	5.73	6.27	---	7.06	7.46	7.59
4	7.12	6.61	7.04	5.41	---	5.89	5.70	6.30	---	7.08	7.47	7.60
5	7.12	6.63	7.00	5.42	---	4.78	5.70	6.34	---	7.10	7.47	7.60
6	7.08	6.65	6.98	5.47	---	4.18	5.69	6.38	---	7.12	7.48	7.56
7	7.01	6.69	6.98	5.52	---	4.17	5.72	6.53	---	7.14	7.49	7.43
8	6.98	6.70	6.97	5.47	---	4.17	5.76	6.60	---	7.17	7.50	7.39
9	6.97	6.73	6.93	5.46	---	4.17	5.80	6.64	---	7.22	7.51	7.40
10	6.97	6.75	6.88	---	---	4.17	5.85	---	---	7.27	7.51	7.41
11	6.98	6.78	6.84	---	---	4.17	5.87	---	---	7.30	7.49	7.42
12	6.98	6.81	6.80	---	---	4.21	5.89	---	6.34	7.35	7.50	7.44
13	6.99	6.83	6.77	---	---	4.41	5.90	---	6.38	7.37	7.50	7.45
14	6.99	6.85	6.75	---	---	4.52	5.91	---	6.43	7.35	7.50	7.47
15	6.94	6.88	6.74	---	---	4.59	5.87	---	6.48	7.36	7.51	7.47
16	6.88	6.91	6.74	---	---	4.74	5.86	---	6.53	7.37	7.51	7.48
17	6.85	6.93	6.73	---	---	4.89	5.81	---	6.58	7.38	7.52	7.49
18	6.83	6.92	6.72	---	---	5.02	5.78	---	6.63	7.40	7.53	7.50
19	6.82	6.91	6.75	---	---	5.15	5.79	---	6.69	7.41	7.53	7.50
20	6.83	6.92	6.77	---	---	5.27	5.82	---	6.75	7.43	7.53	7.51
21	6.83	6.94	6.74	---	6.72	5.39	5.86	---	6.81	7.39	7.54	7.53
22	6.83	6.95	6.71	---	6.75	5.48	5.90	---	6.86	7.37	7.54	7.53
23	6.84	6.96	6.72	---	6.74	5.55	5.94	---	6.90	7.39	7.55	7.53
24	6.83	6.97	6.73	---	6.57	5.60	5.98	---	6.94	7.41	7.56	7.54
25	6.82	6.97	6.73	---	6.30	5.60	6.02	---	6.98	---	7.56	7.55
26	6.81	6.98	6.75	---	6.26	5.59	6.06	---	7.01	---	7.57	7.56
27	6.76	7.00	6.76	---	6.26	5.62	6.09	---	7.04	---	7.57	7.56
28	6.66	7.01	6.78	---	6.30	5.68	6.12	---	7.05	---	7.57	7.56
29	6.61	7.02	6.80	---	---	5.73	6.14	---	6.99	---	7.58	7.55
30	6.59	7.03	6.82	---	---	5.79	6.16	---	7.01	---	7.58	7.55
31	6.57	---	6.84	---	---	5.80	---	---	---	7.43	7.58	---

WTR YEAR 1979 HIGHEST 4.17 Mar. 7-11, 1979 LOWEST 7.60 Sept. 4, 5, 6, 1979

GROUND-WATER LEVELS

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.--Glacial sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in. (0.91 m), depth 15.3 ft (4.66 m) in November 1978, original depth reported to be 18.2 ft (5.55 m), filled in to 17.1 ft (5.21 m) as of November 1956, to 16.3 ft (4.97 m) as of June 1971, to 15.5 ft (4.72 m) as of October 1977, stone lined.

DATUM.--Altitude of land-surface datum is 252.5 ft (76.96 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in wooden well cover, 1.13 ft (0.34 m) above land-surface datum.

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for April 1934 to September 1937, April 1938 to September 1945, March 1951 to September 1976 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.9 ft (1.19 m) below land-surface datum, Apr. 12, 13, 1958; lowest measured, dry Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6 to Feb. 4, 1965, Nov. 12, 1970, Sept. 10 to Nov. 9, 1977, Oct. 30 to Nov. 7, 1978, Nov. 28, 1978 to Jan. 8, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.79	DRY	DRY	DRY	6.14	8.39	---	8.04	6.82	10.85	13.17	13.61
2	14.80	DRY	DRY	DRY	6.25	8.28	---	7.98	6.92	10.93	13.23	13.58
3	14.82	DRY	DRY	DRY	6.35	8.18	---	7.92	7.03	11.02	13.27	13.55
4	14.83	DRY	DRY	DRY	6.44	8.05	---	7.89	7.17	11.10	13.32	13.50
5	14.84	DRY	DRY	DRY	6.59	7.94	---	7.92	7.30	11.18	13.36	13.45
6	14.84	DRY	DRY	DRY	6.77	7.68	---	8.00	7.48	11.27	13.41	13.38
7	14.85	DRY	DRY	DRY	6.88	6.61	---	8.08	7.64	11.36	13.45	13.28
8	14.87	---	DRY	DRY	7.07	5.98	---	8.16	7.81	11.43	13.48	13.19
9	14.88	---	DRY	15.11	7.25	5.71	---	8.25	7.96	11.51	13.52	13.09
10	14.88	---	DRY	14.40	7.43	5.52	---	8.34	8.11	11.58	13.56	13.04
11	14.89	---	DRY	14.09	7.60	5.33	---	8.44	---	11.65	13.61	12.95
12	14.95	---	DRY	---	7.70	5.19	---	8.54	---	11.73	13.65	12.88
13	15.01	---	DRY	---	7.82	5.16	---	8.64	---	11.80	13.59	12.81
14	15.01	---	DRY	---	7.96	5.11	---	8.71	---	11.88	13.60	12.74
15	15.04	---	DRY	---	8.05	5.30	---	8.73	---	11.97	13.66	12.71
16	15.06	---	DRY	---	---	5.39	---	8.74	---	12.05	13.70	12.73
17	15.07	---	DRY	---	---	5.46	---	8.74	---	12.15	13.73	12.77
18	15.10	---	DRY	---	---	5.53	---	8.74	---	12.24	13.75	12.79
19	15.11	---	DRY	---	---	5.63	---	8.74	---	12.32	13.77	12.82
20	15.13	---	DRY	---	---	5.73	---	---	---	12.39	13.76	12.89
21	15.15	---	DRY	---	---	5.87	---	---	---	12.46	13.76	12.95
22	15.17	---	DRY	---	9.04	5.98	---	---	---	12.54	13.76	12.90
23	15.19	---	DRY	---	9.11	6.09	---	---	---	12.61	13.76	12.88
24	15.21	---	DRY	---	9.09	6.18	---	9.59	---	12.68	13.76	12.91
25	15.22	---	DRY	---	8.96	6.28	---	9.02	---	12.74	13.75	12.89
26	15.24	---	DRY	---	8.83	6.41	---	8.04	10.39	12.80	13.74	12.83
27	15.26	---	DRY	---	8.63	6.52	8.22	---	10.50	12.86	13.71	12.74
28	15.26	DRY	DRY	---	8.50	---	8.26	---	10.59	12.93	13.71	12.66
29	15.30	DRY	DRY	---	---	---	8.22	---	10.68	13.00	13.72	12.58
30	DRY	DRY	DRY	---	---	---	8.12	---	10.77	13.06	13.67	12.51
31	DRY	---	DRY	6.10	---	---	---	6.79	---	13.12	13.62	---

WTR YEAR 1979 HIGHEST 5.07 Mar. 14, 1979 LOWEST DRY Oct. 30-Nov. 7, 1978, Nov. 28, 1978-Jan. 8, 1979

WYOMING COUNTY

423739077595501. Local number, Wo 1.

LOCATION.--Lat 42°37'39", long 77°59'55", Hydrologic Unit 04130002, Letchworth State Park, near Castile.

Owner: State Department of Environmental Conservation.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 2 in. (0.05 m), depth 14 ft (4.3 m), well point (60-gauze screen 12 ft or 3.7 m to 14 ft or 4.3 m).

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Top of 2-in. (0.05-m) by 1-in. (0.02-m) reducing coupling, 3.33 ft (1.015 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft (0.15 m) below land-surface datum, Apr. 5, 1947; lowest measured, dry, Dec. 6-27, 1964, Jan. 2, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 1978	12.51	JAN 13, 1979	4.92	APR 22, 1979	3.57	JUL 20, 1979	7.81
NOV 14	12.58	FEB 18	4.98	MAY 25	4.66	AUG 23	10.33
DEC 13	8.26	MAR 21	3.01	JUN 22	7.75	SEP 20	5.42

GROUND-WATER LEVELS

519

WYOMING COUNTY

423743078070802. Local number, Wo 4.

LOCATION.--Lat 42°37'43", long 78°07'08", Hydrologic Unit 04130002, near Gainesville.

Owner: Letchworth Central School.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in. (0.15 m), depth 20 ft (6.1 m), cased to 20 ft (6.1 m), open end.

DATUM.--Altitude of land-surface datum is 1,610 ft (491 m), from topographic map. Measuring point: Top of casing, 2.60 ft (0.792 m) above land-surface datum.

REMARKS.--This well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft (7.6 m) southeast, which has a period of record from November 1965 to May 1974 (unpublished).

PERIOD OF RECORD.--October 1976 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.89 ft (2.40 m) below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft (4.27 m) below land-surface datum, Nov. 3, 1974.

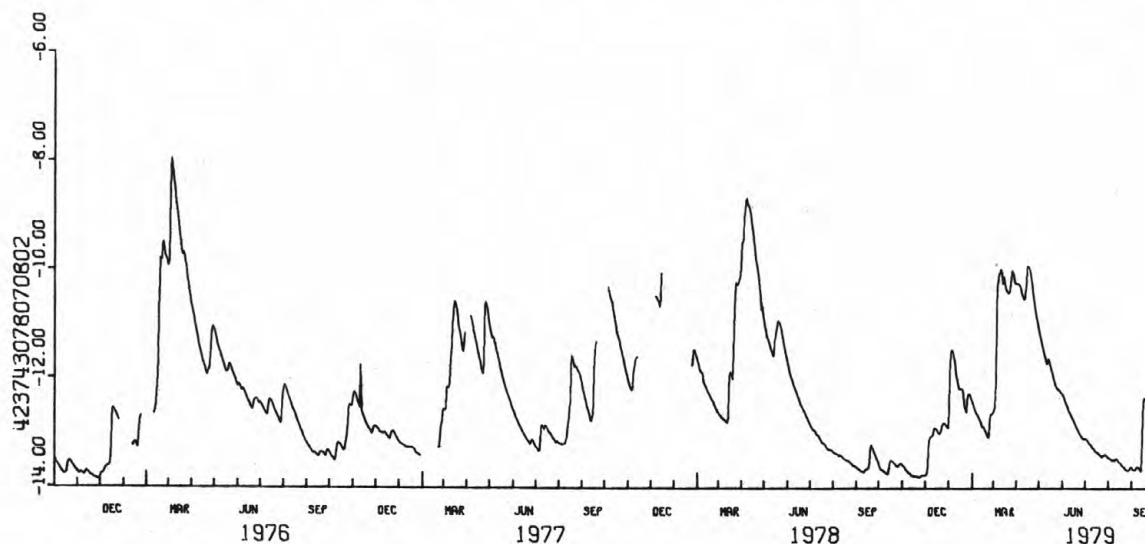
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.58	13.57	13.76	12.62	12.43	12.61	10.23	11.14	12.28	13.08	13.44	13.62
2	13.61	13.59	13.75	11.89	12.48	12.56	10.23	11.21	12.31	13.09	13.44	13.65
3	13.65	13.60	13.75	11.54	12.51	12.50	10.24	11.25	12.35	13.11	13.45	13.66
4	13.66	13.62	13.60	11.45	12.55	12.05	10.25	11.33	12.39	13.12	13.46	13.66
5	13.66	13.65	13.29	11.45	12.59	10.74	10.27	11.38	12.43	13.14	13.48	13.66
6	13.67	13.66	13.13	11.49	12.62	10.28	10.33	11.44	12.46	13.17	13.49	13.66
7	13.68	13.68	13.08	11.57	12.64	10.16	10.42	11.51	12.50	13.19	13.48	13.62
8	13.69	13.70	13.06	11.68	12.66	10.04	10.45	11.57	12.54	13.19	13.47	13.61
9	13.70	13.71	13.04	11.78	12.69	10.03	10.49	11.61	12.56	13.21	13.49	13.60
10	13.72	13.72	13.04	11.89	12.72	9.98	10.53	11.67	12.60	13.24	13.48	13.61
11	13.72	13.73	13.02	11.99	12.76	9.96	10.52	11.72	12.63	13.26	13.45	13.64
12	13.73	13.75	12.91	12.04	12.79	10.12	10.42	11.64	12.66	13.27	13.45	13.66
13	13.74	13.76	12.89	12.14	12.82	10.24	10.25	11.62	12.69	13.29	13.47	13.68
14	13.66	13.77	12.89	12.18	12.86	10.10	9.97	11.66	12.72	13.31	13.50	13.44
15	13.55	13.77	12.90	12.18	12.87	10.12	9.90	11.72	12.74	13.33	13.51	12.71
16	13.50	13.78	12.92	12.18	12.89	10.23	9.92	11.78	12.78	13.33	13.52	12.40
17	13.49	13.78	12.96	12.18	12.92	10.33	9.94	11.83	12.81	13.34	13.54	12.33
18	13.49	13.78	12.99	12.18	12.95	10.37	9.99	11.88	12.84	13.35	13.56	12.33
19	13.50	13.78	12.99	12.18	12.98	10.37	10.07	11.94	12.87	13.36	13.58	12.40
20	13.52	13.78	13.00	12.27	13.01	10.40	10.15	12.00	12.90	13.38	13.59	12.47
21	13.53	13.79	12.99	12.47	13.05	10.41	10.25	12.04	12.93	13.39	13.61	12.55
22	13.55	13.79	12.90	12.52	13.07	10.40	10.38	12.10	12.96	13.41	13.62	12.63
23	13.57	13.80	12.85	12.60	13.06	10.32	10.49	12.13	12.99	13.43	13.64	12.70
24	13.59	13.80	12.82	12.61	12.81	10.14	10.58	12.16	13.01	13.40	13.66	12.76
25	13.59	13.78	12.80	12.39	12.64	10.05	10.66	12.18	13.03	13.39	13.66	12.81
26	13.61	13.77	12.80	12.29	12.64	9.99	10.76	12.18	13.05	13.39	13.67	12.86
27	13.59	13.76	12.81	12.26	12.64	10.04	10.85	12.20	13.08	13.38	13.67	12.92
28	13.56	13.76	12.85	12.26	12.63	10.14	10.93	12.21	13.10	13.37	13.67	12.97
29	13.55	13.76	12.85	12.29	---	10.21	11.00	12.23	13.10	13.39	13.65	13.00
30	13.54	13.76	12.87	12.34	---	10.24	11.06	12.24	13.10	13.41	13.61	13.04
31	13.55	---	12.90	12.39	---	10.23	---	12.26	---	13.43	13.60	---

WTR YEAR 1979

HIGHEST 9.90 Apr. 15, 1979

LOWEST 13.80 Nov. 22, 23, 24, 1978



QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ALBANY COUNTY

NUMBER	NAME	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	SAMP- LING DEPTH (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)
424249073522401	PB-2A OBSERVATION WELL	112SAND	79-04-18	1215	34	10
			79-09-19	1350	30	10
424250073522501	PB-2B OBSERVATION WELL	112SAND	79-04-18	1052	52	10
			79-09-19	1325	49	10
424251073522401	PB-2C OBSERVATION WELL	112SAND	79-04-18	1132	25	10
			79-09-19	1340	25	10
424250073515702	PB-4 TEST WELL	112SAND	79-08-15	1205	60	215
			79-08-15	1615	60	465
			79-08-15	2400	60	930
			79-08-16	0600	60	1650
424250073515701	PB-4A OBSERVATION WELL	112SAND	79-04-17	0955	63	10
			79-09-19	1445	60	10
424250073515901	PB-4B OBSERVATION WELL	112SAND	79-04-17	1515	69	10
424250073515902	PB-4C OBSERVATION WELL	112SAND	79-04-17	1435	42	10
424249073515901	PB-4D OBSERVATION WELL	112SAND	79-04-17	1215	68	10
424249073515902	PB-4E OBSERVATION WELL	112SAND	79-04-17	1135	35	10
			79-09-19	1510	32	10
424230073514802	PB-6 TEST WELL	112SAND	79-05-29	1320	49	60
			79-05-29	1630	49	157
			79-06-07	1200	49	240
			79-06-07	1800	49	600
			79-06-07	2400	49	960
			79-06-08	0600	49	1320
424230073514801	PB-6A OBSERVATION WELL	112SAND	79-04-18	1440	49	10
			79-09-19	1155	49	10
424229073514801	PB-6B OBSERVATION WELL	112SAND	79-04-18	1350	46	10
			79-09-19	1130	48	10
424229073514802	PB-6C OBSERVATION WELL	112SAND	79-04-18	1410	22	10
			79-09-19	1140	22	10
424230073514901	PB-6D OBSERVATION WELL	112SAND	79-04-18	1600	47	--
			79-09-19	1210	49	10
424230073514902	PB-6E OBSERVATION WELL	112SAND	79-04-18	1515	22	--
			79-09-19	1205	22	10
424125073495701	STATE UNIV GROUNDS DEPT WELL	112SAND	79-04-19	0950	25	--
			79-09-19	1555	25	--
424132073513401	GIPP GEORGE DOMESTIC WELL	112SAND	79-04-11	1715	38	--
424139073514501	MCDANIEL ALBERT DOMESTIC WELL	112SAND	79-04-13	0850	35	--
			79-09-18	1410	35	--
424155073545001	OFSTEIN DOMESTIC WELL	112SAND	79-04-13	1010	20	--
			79-09-18	1555	20	--
424215073505601	CORRINE DOMESTIC WELL	112SAND	79-04-11	1330	39	--
			79-09-18	1425	39	--
424222073541301	TOWN OF GUILDERLAND WELL AT WILLOW ST	112SAND	79-04-13	1200	70	--
424241073535201	MCHUGH PETER DOMESTIC WELL	112SAND	79-04-13	1120	45	--
424244073535301	MENIA ROBERT DOMESTIC WELL	112SAND	79-04-13	1125	40	--
424324073525501	WILEY WM DOMESTIC WELL	112SAND	79-04-19	1600	30	--
424325073493001	J R BJLOERS SUPPLY CORP WELL	112SAND	79-04-11	1430	18	--
424325073513001	GREEN TRUCK SUPPLY CO WELL	112SAND	79-04-11	1300	25	--
424327073531101	SMITH C B DOMESTIC WELL	112SAND	79-04-19	1620	30	--
424347073525701	SCHULTZ BILL DOMESTIC WELL	112SAND	79-04-19	1635	30	--
424348073495701	SCALLOWAY KENNELS SUPPLY WELL	112SAND	79-04-19	1130	30	--
			79-09-18	1440	30	--
424357073531201	POLLE DOMESTIC WELL	112SAND	79-04-19	1400	30	--
424359073493901	LARSEN WAYNE DOMESTIC WELL	112SAND	79-04-11	1245	350	--
			79-09-18	1520	350	--
424410073515301	SUSSMAN DOMESTIC WELL	112SAND	79-04-19	1330	30	--
424418073494601	LEMPERLE JACK SPRING	112SAND	79-04-11	1330	--	--
			79-09-18	1500	--	--
424422073493001	COLEMAN PAUL DOMESTIC WELL	112SAND	79-04-11	1400	20	--
			79-09-18	1505	20	--
424448073535201	BENTLEY RAPLH DOMESTIC WELL	112SAND	79-04-19	1500	35	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979--Continued

ALBANY COUNTY--Continued

DATE OF SAMPLE	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, NO2+NO3 TOTAL (MG/L AS N)	VITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (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- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
79-04-18	--	--	--	--	.01	--	.01	--	.15	--	.16	--
79-09-19	--	--	--	--	.61	--	.05	--	.17	--	.78	--
79-04-18	--	--	--	.00	.00	.02	.01	.22	.37	.22	.37	.00
79-09-19	--	--	--	--	.57	--	1.4	--	3.7	--	4.3	--
79-04-18	--	--	--	--	.00	--	.00	--	.04	--	.04	--
79-09-19	--	--	--	--	.35	--	.47	--	.13	--	.48	--
79-08-15	--	--	--	--	--	.00	--	.00	--	--	--	--
79-08-15	--	--	--	--	--	.00	--	.00	--	--	--	--
79-08-15	--	--	--	--	--	.00	--	.03	--	--	--	--
79-08-16	--	--	--	--	--	.00	--	.00	--	--	--	--
79-04-17	--	--	--	.05	.04	.01	.01	.16	.17	.21	.21	.01
79-09-19	--	--	--	--	1.1	--	.54	--	.09	--	1.2	--
79-04-17	--	--	--	--	.00	--	.00	--	.14	--	.14	--
79-04-17	--	--	--	--	.01	--	.00	--	.00	--	.01	--
79-04-17	--	--	--	--	.00	--	.00	--	.00	--	.00	--
79-04-17	--	--	--	--	.06	--	.06	--	.59	--	.65	--
79-09-19	--	--	--	--	.01	--	.03	--	.09	--	.10	--
79-05-29	--	--	--	--	.10	--	.03	--	.15	--	--	--
79-05-29	--	--	--	--	.02	--	.01	--	.11	--	--	--
79-06-07	8.9	456	464	.05	--	.00	--	.00	--	.05	--	.01
79-06-07	8.9	494	499	.06	--	.01	--	.01	--	.07	--	.02
79-06-07	8.9	467	484	.08	--	.00	--	.01	--	.09	--	.01
79-06-08	9.0	484	484	.07	--	.00	--	.06	--	.13	--	.01
79-04-18	--	--	--	--	.00	--	.01	--	.08	--	.08	--
79-09-19	--	--	--	--	.20	--	.03	--	.13	--	.33	--
79-04-18	--	--	--	--	.02	--	.00	--	.04	--	.06	--
79-09-19	--	--	--	--	.04	--	.02	--	.09	--	.13	--
79-04-18	--	--	--	--	.00	--	--	--	--	--	--	--
79-09-19	--	--	--	--	.10	--	.01	--	.20	--	.30	--
79-04-18	--	--	--	--	.01	--	.00	--	.18	--	.19	--
79-09-19	--	--	--	--	.20	--	.13	--	.51	--	.71	--
79-04-18	--	--	--	--	.00	--	.00	--	.05	--	.05	--
79-09-19	--	--	--	--	.20	--	.05	--	.31	--	.51	--
79-04-19	--	--	--	.00	.07	.20	.19	.59	.59	.59	.66	.03
79-09-19	--	--	--	--	.10	--	.15	--	.35	--	.45	--
79-04-11	--	--	--	--	.01	--	.01	--	.03	--	.04	--
79-04-13	--	--	--	--	.02	--	.03	--	.07	--	.09	--
79-09-18	--	--	--	--	.40	--	.07	--	.30	--	.70	--
79-04-13	--	--	--	--	4.2	--	2.2	--	2.9	--	7.1	--
79-09-18	--	--	--	--	.10	--	.14	--	.32	--	.42	--
79-04-11	--	--	--	--	.00	--	.01	--	.22	--	.22	--
79-09-18	--	--	--	--	.16	--	.05	--	.38	--	.54	--
79-04-13	--	--	--	--	.00	--	--	--	--	--	--	--
79-04-13	--	--	--	--	.73	--	.00	--	.00	--	.73	--
79-04-13	--	--	--	--	2.3	--	.00	--	.00	--	2.3	--
79-04-19	--	--	--	--	.01	--	.00	--	.12	--	.13	--
79-04-11	--	--	--	--	.00	--	3.4	--	3.8	--	3.8	--
79-04-11	--	--	--	--	.03	--	.00	--	.00	--	.03	--
79-04-19	--	--	--	--	1.9	--	.00	--	.00	--	1.9	--
79-04-19	--	--	--	--	1.8	--	.04	--	.50	--	2.3	--
79-04-19	--	--	--	--	5.3	--	.00	--	.37	--	5.7	--
79-09-18	--	--	--	--	5.7	--	.28	--	.28	--	6.0	--
79-04-19	--	--	--	--	3.3	--	.01	--	.11	--	3.4	--
79-04-11	--	--	--	--	.05	--	.70	--	.82	--	.87	--
79-09-18	--	--	--	--	.47	--	.95	--	1.1	--	1.6	--
79-04-19	--	--	--	--	6.9	--	.01	--	.13	--	7.0	--
79-04-11	--	--	--	--	.78	--	.00	--	.11	--	.89	--
79-09-18	--	--	--	--	1.8	--	.04	--	.19	--	2.0	--
79-04-11	--	--	--	--	4.0	--	.00	--	.10	--	4.1	--
79-09-18	--	--	--	--	7.7	--	.02	--	.28	--	8.0	--
79-04-19	--	--	--	--	.05	--	.03	--	.04	--	.09	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979--Continued

ALBANY COUNTY--Continued

DATE OF SAMPLE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
79-04-18	--	--	--	--	--	--	--	--	--	--	--
79-09-19	.02	--	--	--	--	--	--	--	--	--	--
79-04-18	.01	--	--	--	--	--	--	--	--	--	--
79-09-19	.00	--	--	--	--	--	--	--	--	--	--
79-04-18	--	--	--	--	--	--	--	--	--	--	--
79-09-19	.01	--	--	--	--	--	--	--	--	--	--
79-08-15	--	0	0	10	1	50	0	0	10	1	40
79-08-15	--	0	0	10	1	50	0	0	10	1	30
79-08-15	--	0	0	10	1	40	1	1	10	4	10
79-08-16	--	0	0	10	2	50	1	0	10	3	10
79-04-17	.00	--	--	--	--	--	--	--	--	--	--
79-09-19	.01	--	--	--	--	--	--	--	--	--	--
79-04-17	--	--	--	--	--	--	--	--	--	--	--
79-04-17	--	--	--	--	--	--	--	--	--	--	--
79-04-17	--	--	--	--	--	--	--	--	--	--	--
79-04-17	--	--	--	--	--	--	--	--	--	--	--
79-04-17	.04	--	--	--	--	--	--	--	--	--	--
79-09-19	.02	--	--	--	--	--	--	--	--	--	--
79-05-29	--	--	--	--	--	--	--	--	--	--	--
79-05-29	--	--	--	--	--	--	--	--	--	--	--
79-06-07	--	0	1	20	4	280	7	--	170	18	20
79-06-07	--	0	2	20	4	620	6	--	190	17	10
79-06-07	--	0	4	20	4	280	4	--	200	19	20
79-06-08	--	0	1	10	6	320	9	--	190	18	10
79-04-18	--	--	--	--	--	--	--	--	--	--	--
79-09-19	.01	--	--	--	--	--	--	--	--	--	--
79-04-18	.00	--	--	--	--	--	--	--	--	--	--
79-09-19	.01	--	--	--	--	--	--	--	--	--	--
79-04-18	--	--	--	--	--	--	--	--	--	--	--
79-09-19	.01	--	--	--	--	--	--	--	--	--	--
79-04-18	--	--	--	--	--	--	--	--	--	--	--
79-09-19	.00	--	--	--	--	--	--	--	--	--	--
79-04-18	--	--	--	--	--	--	--	--	--	--	--
79-09-19	.02	--	--	--	--	--	--	--	--	--	--
79-04-19	.00	--	--	--	--	--	--	--	--	--	--
79-09-19	.01	--	--	--	--	--	--	--	--	--	--
79-04-11	--	--	--	--	--	--	--	--	--	--	--
79-04-13	--	--	--	--	--	--	--	--	--	--	--
79-09-18	.01	--	--	--	--	--	--	--	--	--	--
79-04-13	.40	--	--	--	--	--	--	--	--	--	--
79-09-18	.02	--	--	--	--	--	--	--	--	--	--
79-04-11	.00	--	--	--	--	--	--	--	--	--	--
79-09-18	.00	--	--	--	--	--	--	--	--	--	--
79-04-13	.02	--	--	--	--	--	--	--	--	--	--
79-04-13	--	--	--	--	--	--	--	--	--	--	--
79-04-13	.00	--	--	--	--	--	--	--	--	--	--
79-04-19	--	--	--	--	--	--	--	--	--	--	--
79-04-11	.00	--	--	--	--	--	--	--	--	--	--
79-04-11	--	--	--	--	--	--	--	--	--	--	--
79-04-19	--	--	--	--	--	--	--	--	--	--	--
79-04-19	.02	--	--	--	--	--	--	--	--	--	--
79-04-19	.02	--	--	--	--	--	--	--	--	--	--
79-09-18	.01	--	--	--	--	--	--	--	--	--	--
79-04-19	--	--	--	--	--	--	--	--	--	--	--
79-04-11	.04	--	--	--	--	--	--	--	--	--	--
79-09-18	.42	--	--	--	--	--	--	--	--	--	--
79-04-19	--	--	--	--	--	--	--	--	--	--	--
79-04-11	--	--	--	--	--	--	--	--	--	--	--
79-09-18	.01	--	--	--	--	--	--	--	--	--	--
79-04-11	--	--	--	--	--	--	--	--	--	--	--
79-09-18	.02	--	--	--	--	--	--	--	--	--	--
79-04-19	.00	--	--	--	--	--	--	--	--	--	--

QUALITY OF GROUND WATER
 WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979--Continued
 GREENE COUNTY

NUMBER	NAME	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	HARD- NESS (MG/L AS CACO3)
421612073572901	JOSEPH PERRONE	--	79-08-31	1630	360	39
421622073573401	N Y TELEPHONE	--	79-08-31	1545	440	7

DATE OF SAMPLE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	ALKA- LILITY (MG/L AS CACO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
79-08-31	0	13	1.5	52	130	3.2	130	80
79-08-31	0	2.2	.4	81	190	9.7	250	70

SCHENECTADY COUNTY

[illegible]

REVISIONS IN TERMINOLOGY OF WATER-QUALITY PARAMETERS
(see NOTICE on page 5)

ALPHABETIC LISTING

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
39332	ALDRIN, SUSPENDED TOTAL (UG/L)
39332	ALDRIN, SUSPENDED (UG/L)
01505	ALPHA, SUSPENDED TOTAL (PCI/L)
01505	ALPHA, SUSPENDED (PCI/L)
01506	ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506	ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105	ALUMINUM, TOTAL (UG/L AS AL)
01107	ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107	ALUMINUM, SUSPENDED (UG/L AS AL)
01108	ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108	ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)
01096	ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096	ANTIMONY, SUSPENDED (UG/L AS SB)
39502	AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502	AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001	ARSENIC, SUSPENDED (UG/L AS AS)
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006	BARIUM, SUSPENDED (UG/L AS BA)
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007	BARIUM, TOTAL (UG/L AS BA)
01008	BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008	BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)
01011	BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)
01012	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012	BERYLLIUM, TOTAL (UG/L AS BE)
01013	BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013	BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)
03505	BETA, SUSPENDED TOTAL (PCI/L)
03505	BETA, SUSPENDED (PCI/L)
03506	BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506	BETA, SUSPENDED, COUNTING ERROR (PCI/L)
01016	BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016	BISMUTH, SUSPENDED (UG/L AS BI)
01021	BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021	BORON, SUSPENDED (UG/L AS B)
01022	BORON, TOTAL RECOVERABLE (UG/L AS B)
01022	BORON, TOTAL (UG/L AS B)
01023	BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023	BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026	CADMIUM, SUSPENDED (UG/L AS CD)
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027	CADMIUM, TOTAL (UG/L AS CD)
01028	CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028	CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

REVISIONS IN TERMINOLOGY OF WATER-QUALITY PARAMETERS--Continued
(see NOTICE on page 5)

PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
00916	CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916	CALCIUM, TOTAL (MG/L AS CA)
07052	CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052	CALCIUM 45, SUSPENDED (PCI/L)
07053	CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053	CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)
00683	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688	CARBON, INORGANIC, SUSPENDED (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689	CARBON, ORGANIC, SUSPENDED (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694	CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)
01116	CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116	CESIUM, SUSPENDED (UG/L AS CS)
28404	CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404	CESIUM 137, SUSPENDED (PCI/L)
28405	CESIUM 137, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405	CESIUM 137, SUSPENDED, COUNTING ERROR (PCI/L)
28412	CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412	CESIUM 134, SUSPENDED (PCI/L)
28413	CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413	CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)
39353	CHLORDANE, SUSPENDED TOTAL (UG/L)
39353	CHLORDANE, SUSPENDED (UG/L)
01029	CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029	CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)
01031	CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031	CHROMIUM, SUSPENDED (UG/L AS CR)
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034	CHROMIUM, TOTAL (UG/L AS CR)
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036	COBALT, SUSPENDED (UG/L AS CO)
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037	COBALT, TOTAL (UG/L AS CO)
01038	COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038	COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041	COPPER, SUSPENDED (UG/L AS CU)
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042	COPPER, TOTAL (UG/L AS CU)
01043	COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043	COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)
39362	DDD, SUSPENDED TOTAL (UG/L)
39362	DDD, SUSPENDED (UG/L)
39367	DDE, SUSPENDED TOTAL (UG/L)
39367	DDE, SUSPENDED (UG/L)
39372	DDT, SUSPENDED TOTAL (UG/L)
39372	DDT, SUSPENDED (UG/L)
39573	DIAZINON, SUSPENDED TOTAL (UG/L)
39573	DIAZINON, SUSPENDED (UG/L)
39382	DIELDIN, SUSPENDED TOTAL (UG/L)
39382	DIELDIN, SUSPENDED (UG/L)

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39392	ENDKIN, SUSPENDED TOTAL (UG/L)
39392	ENDRIN, SUSPENDED (UG/L)
01121	GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121	GALLIUM, SUSPENDED (UG/L AS GA)
01126	GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126	GERMANIUM, SUSPENDED (UG/L AS GE)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS U NATURAL)
01516	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/L AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS U NATURAL)
01517	GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/G AS U NATURAL)
01518	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/G AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/L AS U NATURAL)
80040	GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/L AS U NATURAL)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS SR/YT-90)
80060	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS SR/YT-90)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS CS-137)
03516	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS CS-137)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS SR/YT-90)
03517	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS SR/YT-90)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS CS-137)
03518	GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS CS-137)
39412	HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412	HEPTACHLOR, SUSPENDED (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422	HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044	IRON, SUSPENDED (UG/L AS FE)
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045	IRON, TOTAL (UG/L AS FE)
01170	IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170	IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)
07062	IRON 59, SUSPENDED TOTAL (PCI/L)
07062	IRON 59, SUSPENDED (PCI/L)
07063	IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063	IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)
39432	ISODRIN, SUSPENDED TOTAL (UG/L)
39432	ISODRIN, SUSPENDED (UG/L)
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050	LEAD, SUSPENDED (UG/L AS PB)
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051	LEAD, TOTAL (UG/L AS PB)
01052	LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052	LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

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PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
39342	LINDANE, SUSPENDED TOTAL (UG/L)
39342	LINDANE, SUSPENDED (UG/L)
01131	LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131	LITHIUM, SUSPENDED (UG/L AS LI)
01132	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132	LITHIUM, TOTAL (UG/L AS LI)
00926	MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926	MAGNESIUM, SUSPENDED (MG/L AS MG)
00927	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927	MAGNESIUM, TOTAL (MG/L AS MG)
39533	MALATHION, SUSPENDED TOTAL (UG/L)
39533	MALATHION, SUSPENDED (UG/L)
01053	MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053	MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)
01054	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054	MANGANESE, SUSPENDED (UG/L AS MN)
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055	MANGANESE, TOTAL (UG/L AS MN)
71895	MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895	MERCURY, SUSPENDED (UG/L AS HG)
71900	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900	MERCURY, TOTAL (UG/L AS HG)
71921	MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921	MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)
39603	METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603	METHYL PARATHION, SUSPENDED (UG/L)
39757	MIREX, SUSPENDED TOTAL (UG/L)
39757	MIREX, SUSPENDED (UG/L)
01061	MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061	MOLYBDENUM, SUSPENDED (UG/L AS MO)
01062	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062	MOLYBDENUM, TOTAL (UG/L AS MO)
01063	MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063	MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)
01066	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066	NICKEL, SUSPENDED (UG/L AS NI)
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067	NICKEL, TOTAL (UG/L AS NI)
01068	NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068	NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)
00623	NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)
00624	NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624	NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)
00625	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)
00626	NITROGEN, AMMONIA PLUS ORGANIC, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626	NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
39543	PARATHION, SUSPENDED TOTAL (UG/L)
39543	PARATHION, SUSPENDED (UG/L)
39518	PCB, SUSPENDED TOTAL (UG/L)
39518	PCB, SUSPENDED (UG/L)

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PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
09505	RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505	RADIUM 226, SUSPENDED (PCI/L)
07082	RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082	RHODAMINE WT, SUSPENDED (UG/L)
01136	RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136	RUBIDIUM, SUSPENDED (UG/L AS RB)
29633	SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633	SCANDIUM 46, SUSPENDED (PCI/L)
29634	SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634	SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)
01146	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146	SELENIUM, SUSPENDED (UG/L AS SE)
07102	SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102	SELENIUM 75, SUSPENDED (PCI/L)
07103	SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103	SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)
01076	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076	SILVER, SUSPENDED (UG/L AS AG)
01077	SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077	SILVER, TOTAL (UG/L AS AG)
01078	SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078	SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)
07122	SILVER 110, SUSPENDED TOTAL (PCI/L)
07122	SILVER 110, SUSPENDED (PCI/L)
07123	SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123	SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)
39763	SILVEX, SUSPENDED TOTAL (UG/L)
39763	SILVEX, SUSPENDED (UG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299	SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)
01081	STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081	STRONTIUM, SUSPENDED (UG/L AS SR)
01082	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082	STRONTIUM, TOTAL (UG/L AS SR)
01083	STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083	STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)
13505	STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505	STRONTIUM 90, SUSPENDED (PCI/L)
13506	STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506	STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)
07142	SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142	SULFUR 35, SUSPENDED (PCI/L)
07143	SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143	SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)
01101	TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101	TIN, SUSPENDED (UG/L AS SN)
01102	TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102	TIN, TOTAL (UG/L AS SN)
01151	TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151	TITANIUM, SUSPENDED (UG/L AS TI)
39402	TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402	TOXAPHENE, SUSPENDED (UG/L)

APPENDIX

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REVISIONS IN TERMINOLOGY OF WATER-QUALITY PARAMETERS--Continued
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PARM. CODE	NEW TERMINOLOGY -- FIRST LINE OLD TERMINOLOGY -- SECOND LINE
07010	TRITIUM, SUSPENDED TOTAL (PCI/L)
07010	TRITIUM, SUSPENDED (PCI/L)
07011	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011	TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)
07014	TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014	TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016	TRITIUM, SUSPENDED (TRITIUM UNITS)
22705	URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705	URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)
01086	VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086	VANADIUM, SUSPENDED (UG/L AS V)
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091	ZINC, SUSPENDED (UG/L AS ZN)
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092	ZINC, TOTAL (UG/L AS ZN)
01093	ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093	ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)
01161	ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161	ZIRCONIUM, SUSPENDED (UG/L AS ZR)
39733	2,4-D, SUSPENDED TOTAL (UG/L)
39733	2,4-D, SUSPENDED (UG/L)
39743	2,4,5-T, SUSPENDED TOTAL (UG/L)
39743	2,4,5-T, SUSPENDED (UG/L)

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons



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