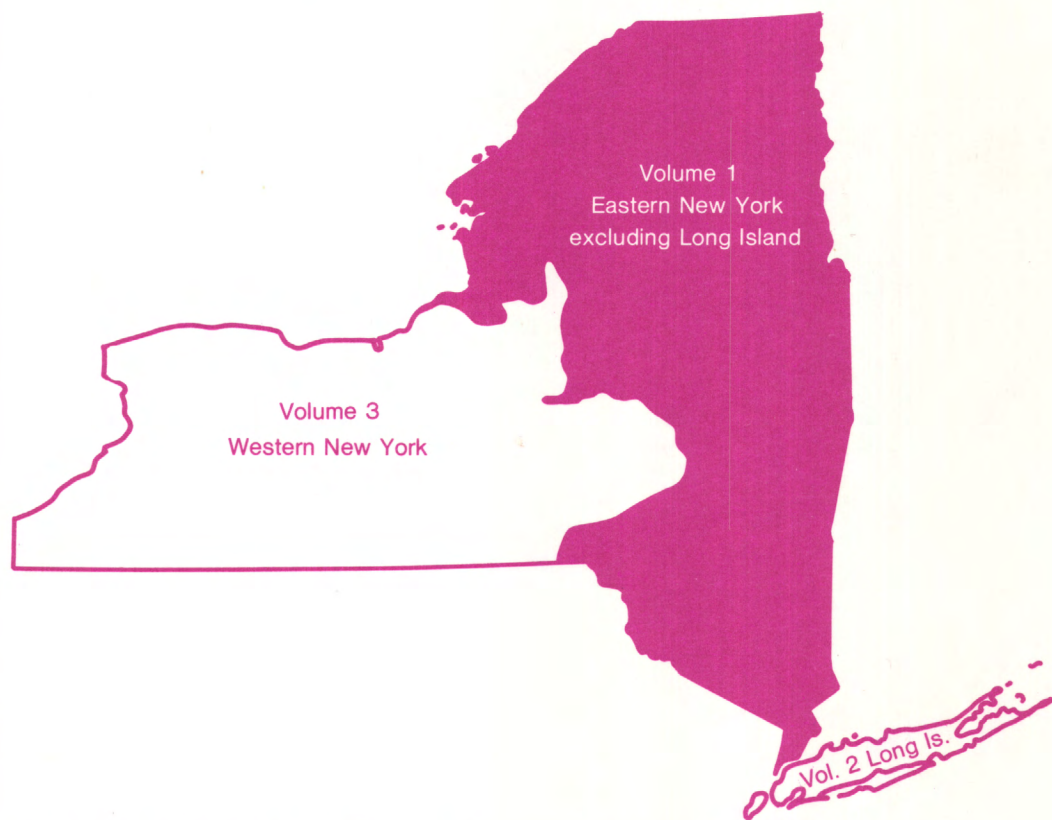
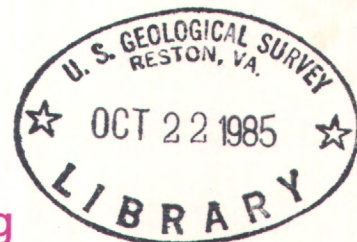


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Water Resources Data New York Water Year 1984

Volume 1. Eastern New York excluding
Long Island



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-84-1
Prepared in cooperation with the State of New York
and with other agencies

CALENDAR FOR WATER YEAR 1984

1983

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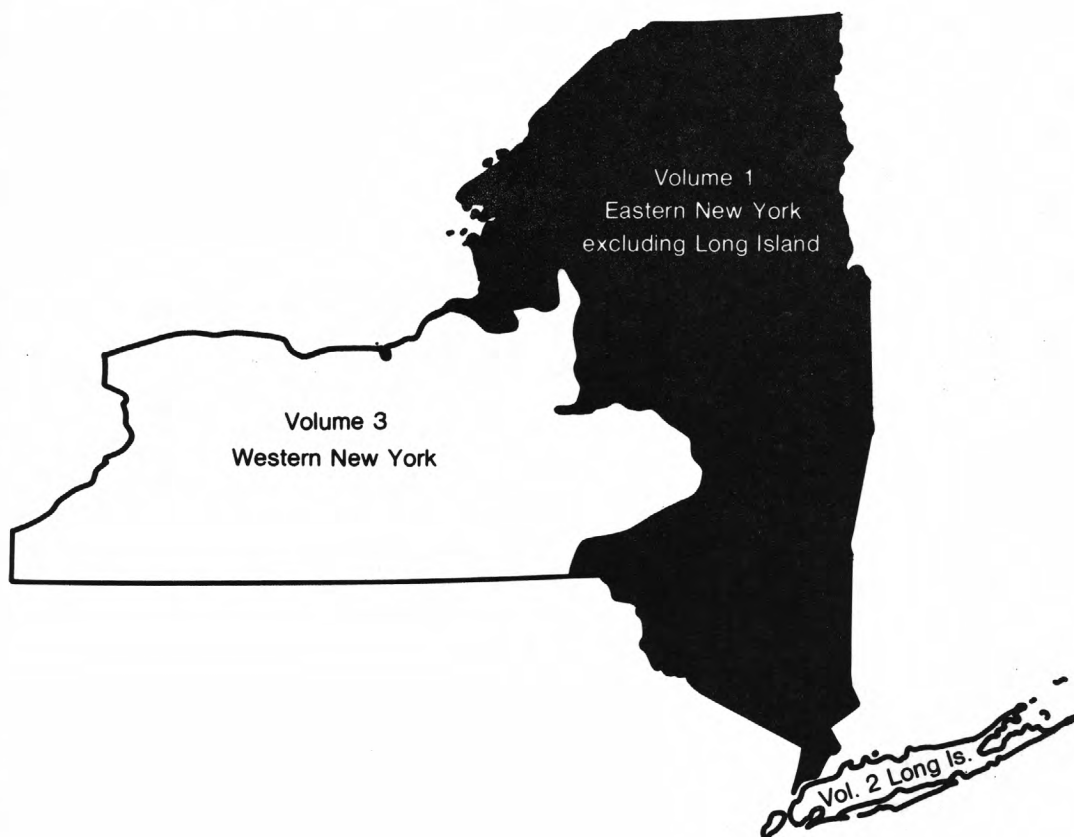
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Water Resources Data New York Water Year 1984

Volume 1. Eastern New York excluding
Long Island

by G.D. Firda, R. Lumia, R.J. Archer, and P.M. Burke



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-84-1
Prepared in cooperation with the State of New York
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, 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 1669
Albany, New York 12201

1985

PREFACE

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

Volume 1. Eastern New York excluding Long Island

Volume 2. Long Island

Volume 3. Western New York

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

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WATER RESOURCES DATA FOR NEW YORK, 1984
Volume 1.--Eastern New York excluding Long Island

INTRODUCTION

Water resources data for the 1984 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; quality of precipitation; and water levels of ground-water wells. This volume contains records for water discharge at 96 gaging stations; stage only at 5 gaging stations; and stage and contents at 4 gaging stations, and 19 other lakes and reservoirs; water quality at 34 gaging stations, 3 precipitation stations, and water levels at 24 observation wells. Locations of these sites are shown on figures 4A and 4B. Also included are data for 66 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey 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 U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Alexandria, VA 22304.

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

Beginning with the 1971 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-84-1." 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.

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 1984, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
County of Ulster, County Legislature
County of Westchester, Department of Public Works
City of New York, Bureau of Water Resources Development
City of New York, Department of Environmental Protection
Village of Nyack
Board of Hudson River-Black River Regulating District
New York Power Authority

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 Environmental Protection Agency, and the St. Lawrence Seaway Development Corp.

The following municipalities and organizations aided in collecting records:

Plattsburgh, Tarrytown, Tupper Lake, and Yonkers; Indian River Co.; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Orange and Rockland Utilities, Inc.; Oswegatchie River-Cranberry Reservoir Commission; Spring Valley Water Co.; and Utica Board of Water Supply.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

The annual mean discharge of streams in eastern New York in water year 1984 was above normal except in the lower Hudson River basin, where it was generally excessive. A below-average snowpack in eastern New York, resulting from a relatively mild winter, did not contribute significantly to spring runoff. The high spring runoff of 1984 was due to exceptionally large amounts of precipitation in April and May. General precipitation and streamflow patterns during the 1984 water year in eastern New York were similar to those of 1983, except for a wet December in most areas.

October flows were deficient except in some drainage basins in the lower Hudson River basin, where mid-month precipitation caused excessive runoff. The New York City reservoir system was at 55 percent of capacity at the end of the month. (Normal for October is 71 percent of capacity.)

Intermittent moderate rainfall during mid- to late November resulted in excessive monthly flows in most drainage basins throughout northern New York. In contrast, streamflows in southeastern New York were generally deficient. The New York City reservoir system was at 50 percent capacity at the end of November. (Normal for November is 73 percent of capacity.)

Two to four inches of rainfall was reported at many locations throughout eastern New York during December 12-15. This storm, plus moderate to heavy rain on December 28, resulted in excessive streamflows throughout the area for the month. A significant snow cover throughout northern New York (as much as 20 inches at Boonville) before the December 12-15 storm, coupled with heavy rainfall and mild temperatures produced annual peak flows at many gaging stations throughout northern New York. New record-high December means were reported at some stations in the upper Hudson River and St. Lawrence River basins, such as West Branch Oswegatchie River near Harrisville. (See figure 2.) The New York City reservoir system was at 71 percent of capacity at the end of December. (Normal for December is 78 percent of capacity.) Reservoirs in northern New York had above-normal levels.

January precipitation in the northern part of the State was below average, which allowed streamflows to return to normal. Average to below-average precipitation over the remainder of eastern New York resulted in a deficiency in cumulative streamflow for the region.

February and March temperatures were above average in eastern New York and caused below-average snowpacks. One to two inches of rain, warm temperatures, and snowmelt during February 14-16 resulted in excessive monthly streamflows in most parts of eastern New York. This storm initiated the breakup and jamming of river ice throughout the area. Streamflows throughout eastern New York receded during early March until moderate rainfall at the end of the month returned flows to near normal. Mean March flows were generally below normal for the area.

April precipitation throughout the Schoharie Creek, Delaware River, and lower Hudson River basins was above average and caused excessive streamflows throughout these basins. Northern New York received average to slightly above-average rainfall during the month. From 1 to 5 inches of rain fell throughout southeastern New York during the April 4-7 storm; many annual peaks were recorded at stations in the area. New record peak discharges occurred on April 5 at stations on the Ramapo River in Rockland County (5 years of record) and in Bergen County, N.J. (66 years of record). A second storm on April 14-16, dropped an additional 1 to 2 inches of rain over the already saturated area. The New York City reservoir system was at 100 percent of capacity by the end of the month.

The Statewide average precipitation for May was 7.08 inches, well above the average 3.37 inches and the wettest May since Statewide weather records began in 1890. Monthly accumulations in excess of 9 inches were widespread in the Catskill region, lower Hudson Valley, and western Long Island. Some local totals for April and May include 19.59 inches at White Plains, 17.58 at West Point, 16.17 at Liberty, and 14.53 inches in the New York City area. The April-May average is 7 to 8.5 inches (National Climatic Data Center, 1984). Above-normal to excessive streamflow was reported throughout eastern New York. A major storm during May 27-31 dropped 4 to 7 inches of rain over southeastern New York, which resulted in annual peak discharges at several gaging stations. New record-high May means were reported at a few stations in the Schoharie Creek, Delaware River, and lower Hudson River basins; for example, Wappinger Creek near Wappingers Falls (fig. 3). The highest flow recorded at the East Branch Delaware River at Downsville gage since regulation by the Pepacton Reservoir began in 1954, occurred on May 30. The Black Dirt farm area along the Wallkill River in Orange County was inundated for the second consecutive month.

June streamflow in eastern New York receded for most of the month as a result of below-average precipitation, but the exceptionally wet spring sustained normal to excessive discharge. Flows in the southeastern part of New York remained in the excessive range for the third consecutive month. These flows were augmented by heavy rainfall at the end of June.

Rainfall in July was near or above average over most of New York, but significantly above average in southeastern New York, where monthly totals were reported to exceed 8 inches in Westchester and Rockland Counties. A period of rainy weather in eastern New York began on July 4 and continued through July 7. Total accumulations of more than 4 inches were measured in the extreme lower Hudson Valley. This rainfall caused streams in Westchester County to overflow their banks and caused the closing of several major highways within the county. A maximum flow of record (39 years) was recorded on the Saw Mill River on July 7, and annual peak discharges were recorded on most gaged streams in Westchester County. Mid- to late July saw widespread precipitation in eastern New York which sustained excessive streamflows. Excessive streamflows were also reported in the Delaware River and lower Hudson River basins for the fourth consecutive month. The New York City reservoir system was at 90 percent of capacity at the end of July, which is normal for this date.

Streamflows during August and September generally declined seasonally after the abnormally wet spring and early summer. One to two inches of rain throughout northern New York in late August caused excessive monthly streamflows in that area. Streamflows in the remainder of eastern New York during August were normal. During September, normal to slightly above-normal streamflows were reported in northern New York, while stations in southeastern New York experienced deficient flows. The New York City reservoir system was at 72 percent of capacity at the end of September. (Normal for September is 78 percent of capacity.)

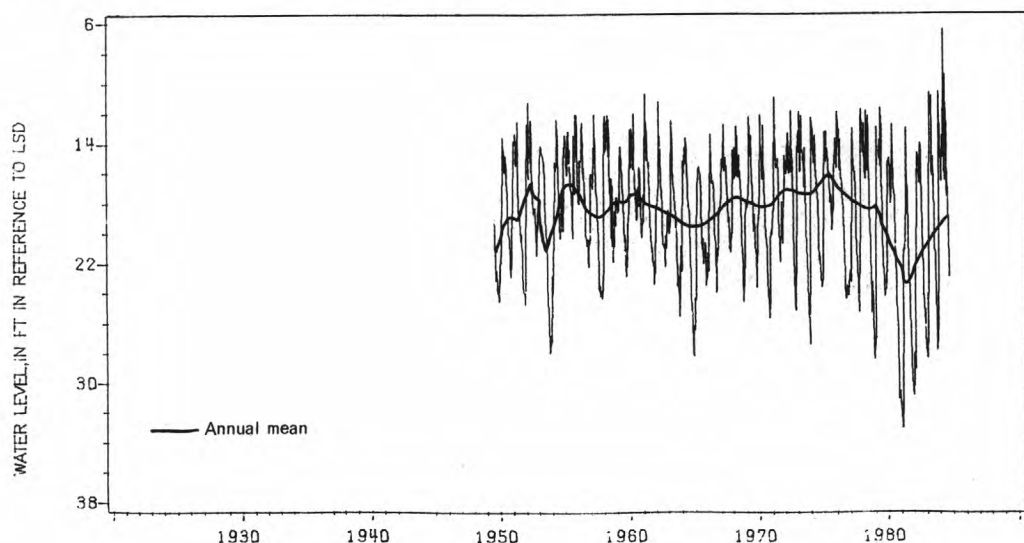
Comparison of the annual mean discharge of the 1984 water year with the average discharge for the period of record for selected streams are given in the following table:

Station	Period of record	1984 Water year mean discharge (ft ³ /s)	Percent of Period-of-record mean discharge
East Branch Ausable River at Au Sable Forks	1925-84	430	137
West Branch Oswegatchie River near Harrisville	1917-84	608	118
Hudson River at Hadley	1922-84	3,696	127
Mohawk River at Cohoes	1926-84	6,307	110
Schoharie Creek at Prattsville	1904-84	622	134
Beaver Kill at Cooks Falls	1915-84	623	111
Wallkill River at Gardiner	1925-84	1,737	163
Wappinger Creek near Wappingers Falls	1929-84	366	144
Mamaroneck River at Mamaroneck	1945-52, 1955-84	70.1	196

Water-quality data from the Hydrologic Benchmark station and the eight NASQAN stations in eastern upstate New York were generally within the extremes of the individual stations' period of record. A few new extremes were measured, but these were only marginally above the previously observed values for the individual constituents. However, pH values for Sandy Creek near Adams exceeded the previous measured maximum of 8.4 in five of the six observations. The new maximum pH of 8.7 was measured on May 22.

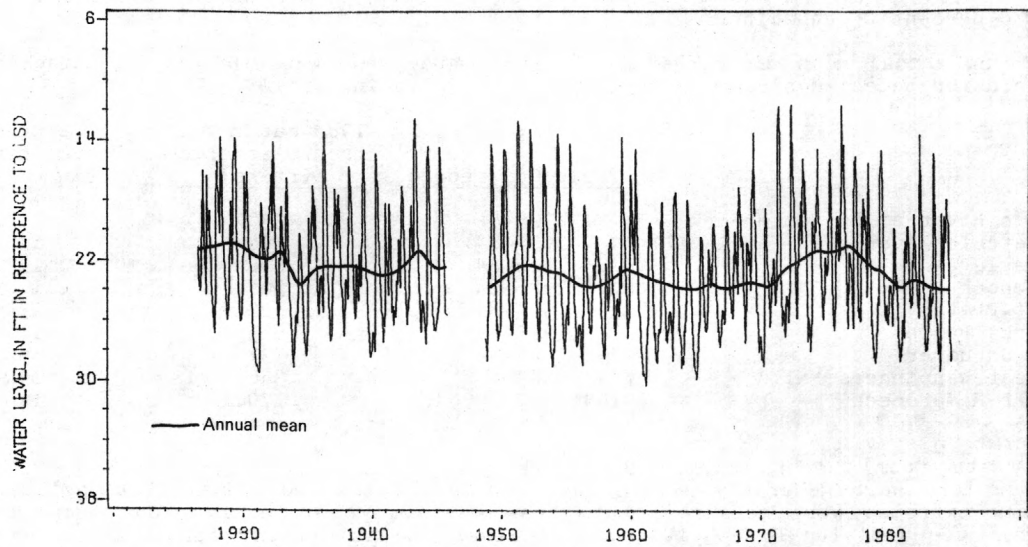
Ground-water levels at the beginning of the 1984 water year were generally below average, but had recovered to slightly above average by the end of the water year. By December 1983, above-normal rain in much of eastern New York had recharged aquifers and set record or near-record levels in one-third of the wells. Well Ro-18 in Rockland County had the highest water level in 34 years of record. Extreme cold weather in January reduced recharge, but in February, unseasonably warm temperatures, snowmelt, and moderate to heavy rain accelerated recharge to the aquifers. The water level in only one well remained below average. Above-average conditions were prevalent through March, April, May, and June as above-normal precipitation continued, especially in the southeast. The growing season started with water levels generally well above average; only well Oe-151, in the western foothills of the Adirondacks, showed declining below-average water levels for the rest of the water year.

The recovery of water levels from the drought of late 1979 to early 1981, especially in the southeastern part of the state, is shown in period-of-record hydrograph A for well Ro-18. This plot shows the recovery and the new record high for this well, which taps a granite aquifer remote from extensive pumping. The effects of this drought were more extensive than those of the drought of the early 1960's.



HYDROGRAPH A.--Well Ro-18, Rockland County, period of record

In contrast to the hydrograph for well Ro-18, period-of-record hydrograph B for well Oe-151 shows a declining trend for the last 3 years. This well, which taps a shallow sand aquifer in the western Adirondacks, had partly recovered from the 1979-81 drought. The effect of this drought was not as great as that of the 1960's on water levels in this well.



HYDROGRAPH B.--Well Oe-151, Oneida County, period of record

DEFINITION OF TERMS

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

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

Algae are mostly aquatic single-celled, colonial, or 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 brainheart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C $\pm$ 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

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

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

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

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

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

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

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

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

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

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

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

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

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

Confined aquifer a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table (it can also be above ground level). Formerly called artesian aquifer.

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

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

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

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

Cubic foot per second (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.

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 (CaCO_3).

High tide is the maximum tidal peak reached each day.

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

Low tide is the minimum tidal trough reached each day.

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

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

Milligrams per liter (MG/L , 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 (PCI, 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 word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed 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.)

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

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

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.

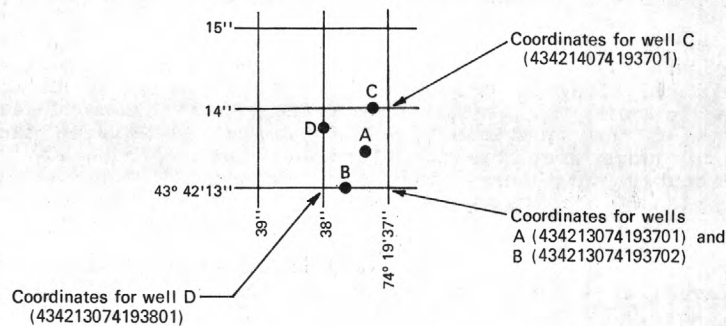


Figure 1. System for numbering wells (latitude and longitude)

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.

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 2175, 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 hydrographers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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 hydrographers, 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.

ACCESS TO WATSTORE DATA

The National Water Data Storage and Retrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer costs incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

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 appear next. The table of ground-water quality data follow the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

Descriptive Headings

For continuing record stations, data are preceded by information pertinent to the history of station operation. These descriptive headings give details regarding locations, 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), 1977-81(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the five 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 often include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

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

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

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

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrate 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 consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 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 as mean daily values, and the extremes are instantaneous values selected from the digital record. Water levels in wells not equipped with recording gages are read periodically or measured periodically with a weighted tape by U.S. Geological Survey personnel and/or an observer.

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

Thirty-seven 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, 604 South Pickett St., Alexandria, VA 22304 (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 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-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.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlike, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-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.

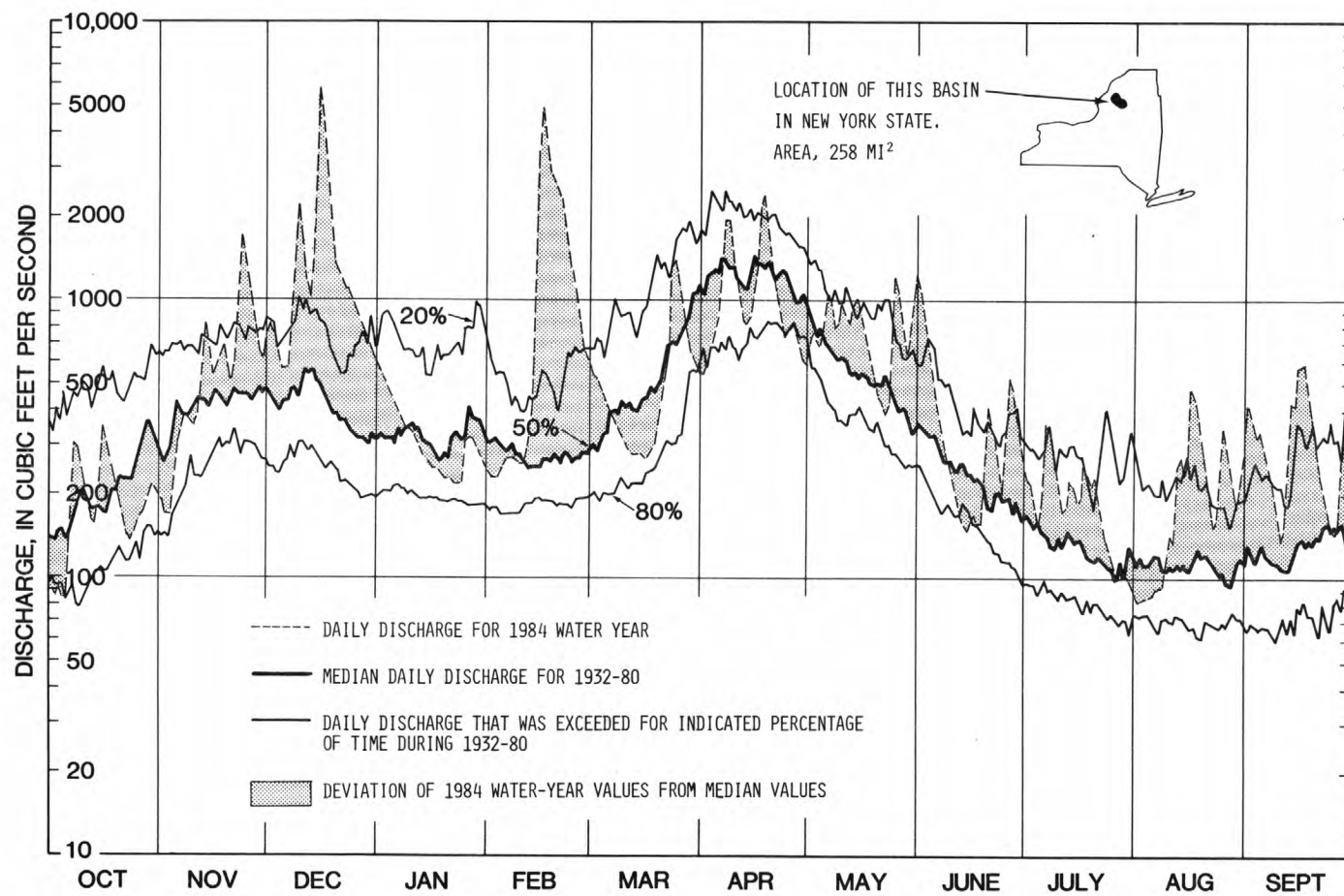


Figure 2.—Hydrographic comparisons, West Branch Oswegatchie River near Harrisville, N.Y.

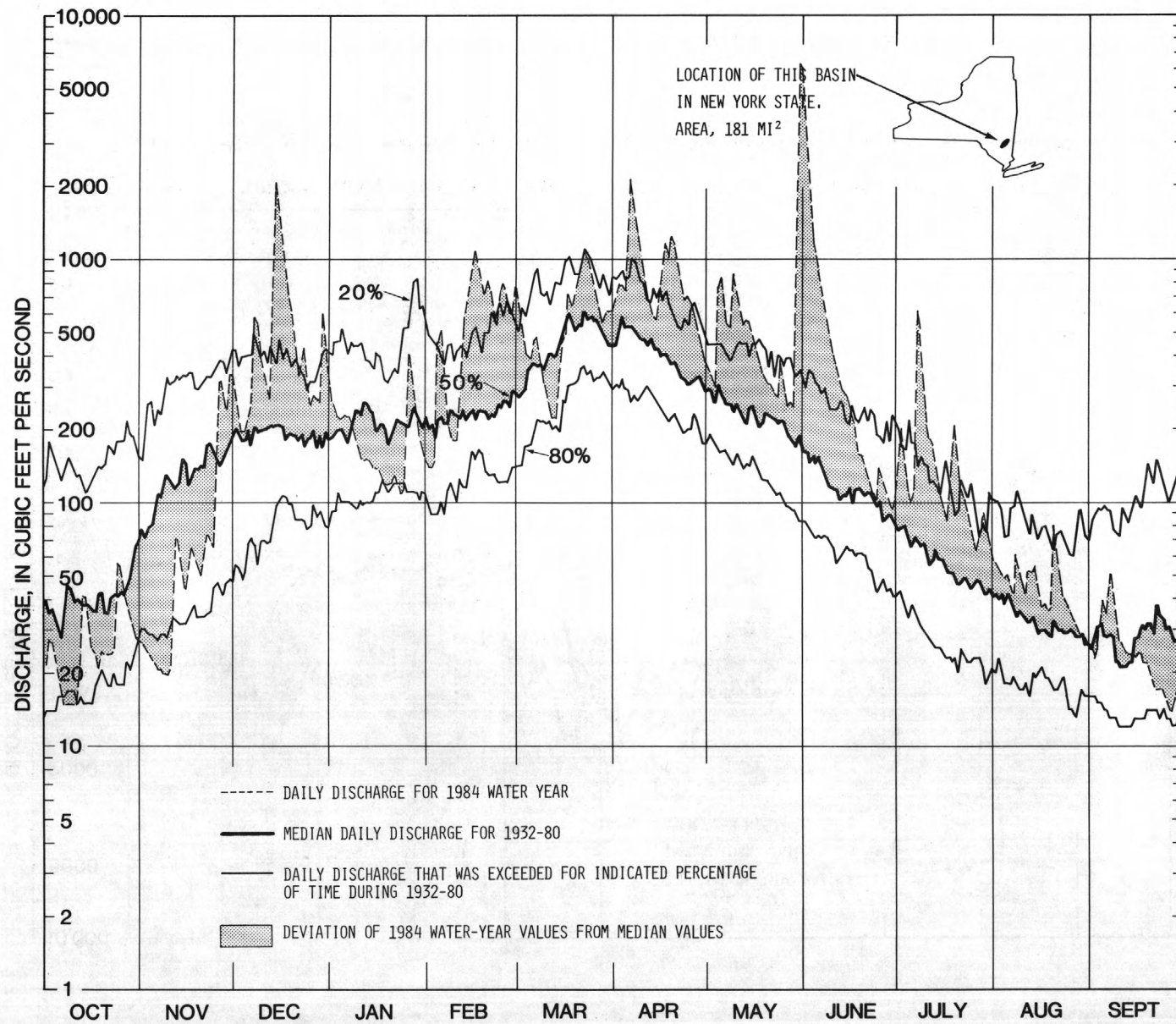
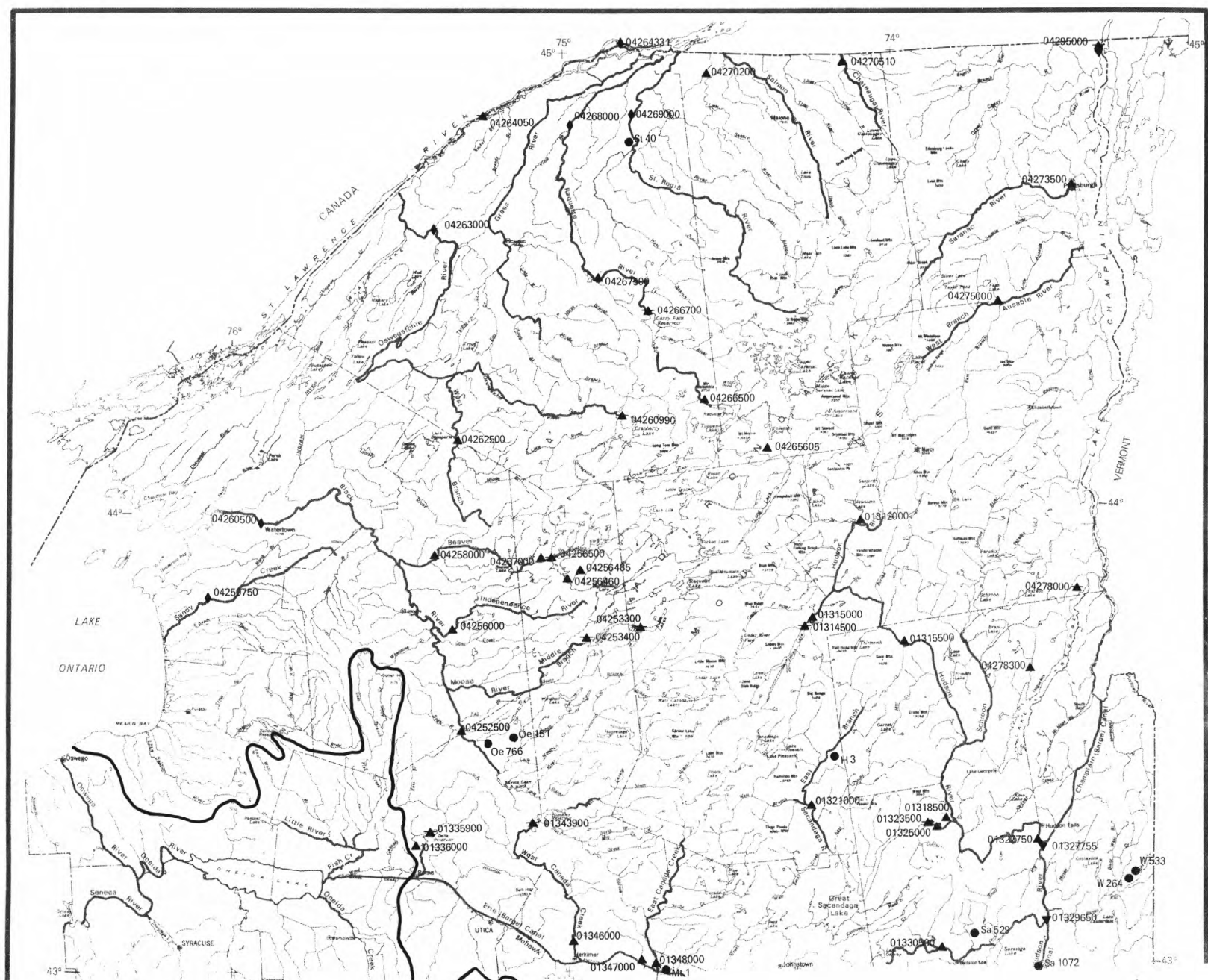


Figure 3.--Hydrographic comparisons, Wappinger Creek near Wappingers Falls, N.Y.



WATER RESOURCES DATA FOR NEW YORK, 1984

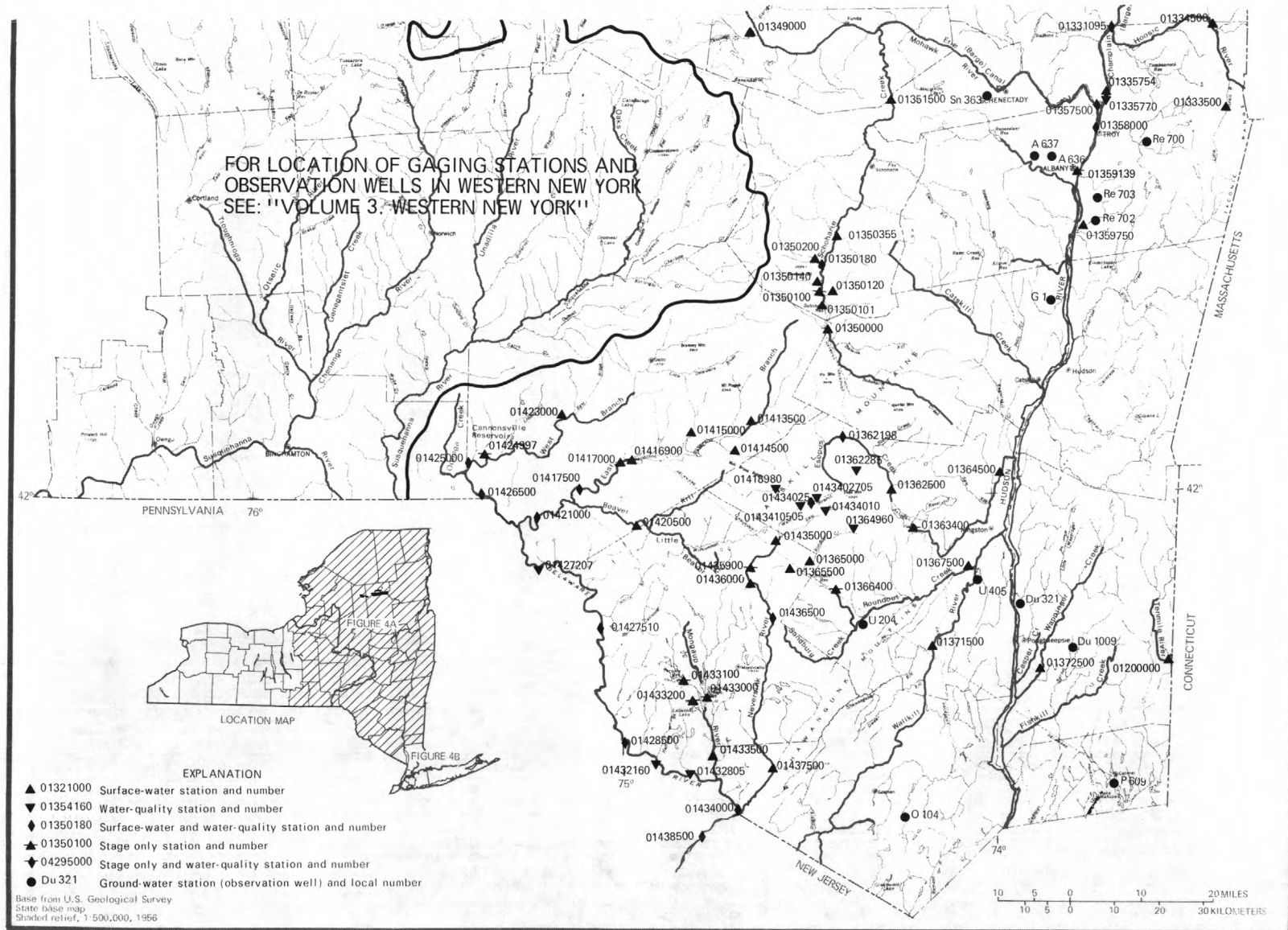


FIGURE 4A.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

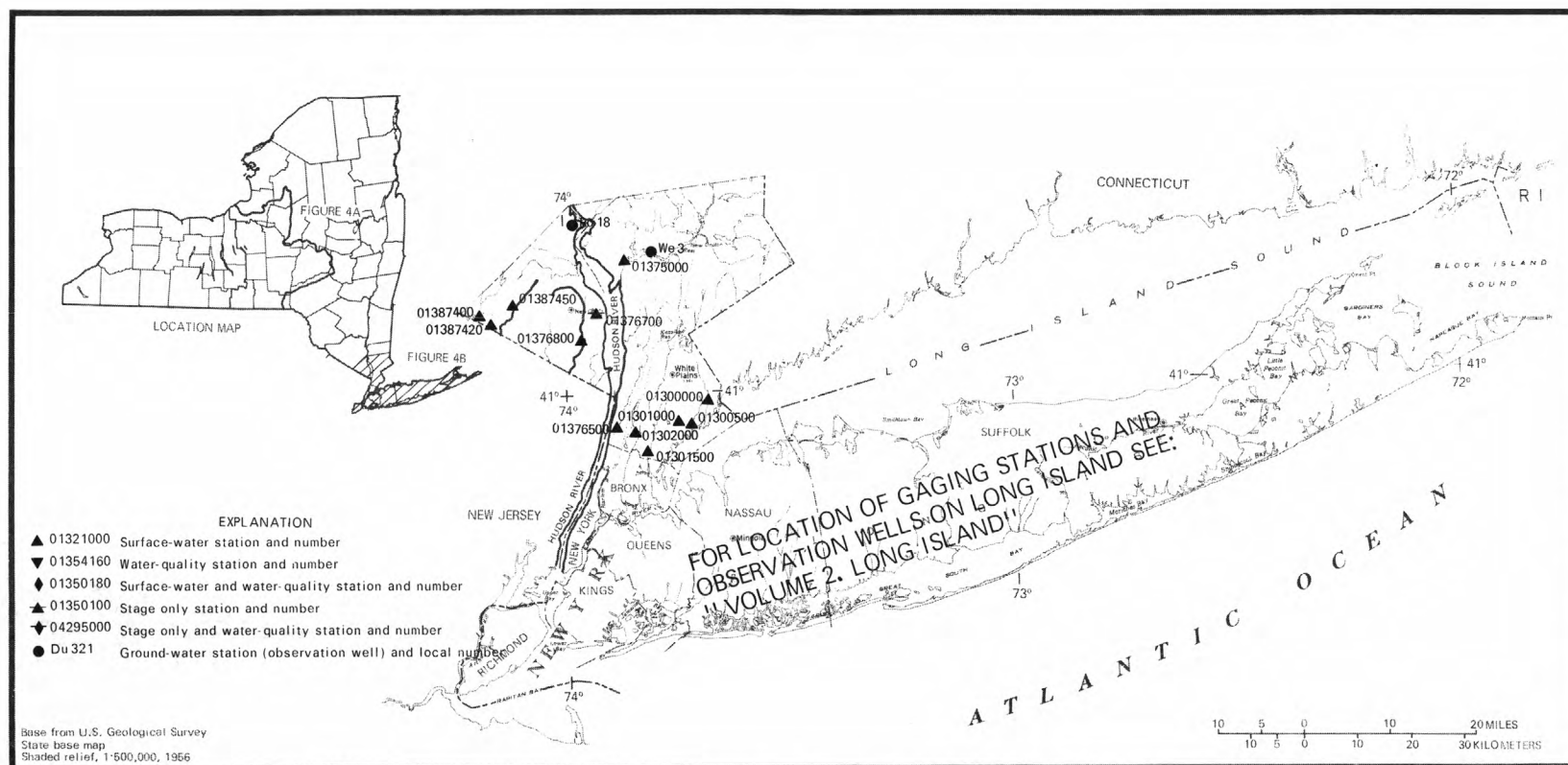


FIGURE 4B.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

HOUSATONIC RIVER BASIN

01200000 TENMILE RIVER NEAR GAYLORDSVILLE, CONN.

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

DRAINAGE AREA.--203 mi².

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 National Geodetic Vertical Datum of 1929, (levels to 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), 1980 (WDR CT-80-1), and water temperatures available for water year 1959 (WSP 1641).

AVERAGE DISCHARGE.--55 years, 306 ft³/s, 20.47 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	1200	2750	5.88
Feb. 26	1400	1550	4.53
Mar. 25	1470	1470	4.42
Apr. 12	1330	3520	6.62
Apr. 25	1660	1660	4.67
May 31	--	*10,390	*11.38

Minimum discharge, 21 ft³/s Oct. 12, gage height, 0.68 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	24	39	312	390	174	1140	586	613	9930	187	86	40	
2	28	37	269	326	170	1010	606	352	7790	292	91	38	
3	28	38	243	295	195	860	637	330	3350	195	94	40	
4	27	42	245	286	722	795	613	334	1880	158	86	52	
5	24	40	280	280	595	695	609	717	1140	135	78	60	
6	24	41	304	280	401	720	672	748	1000	160	71	54	
7	22	40	742	260	336	619	731	604	869	600	95	48	
8	21	38	586	250	263	511	738	518	712	595	132	43	
9	21	38	462	220	260	470	721	573	595	373	94	41	
10	21	39	412	210	249	400	727	551	510	288	85	40	
11	21	76	372	200	289	411	1990	493	437	227	73	39	
12	27	94	339	190	564	397	3350	473	387	230	109	38	
13	52	82	1210	180	668	344	2530	473	339	208	123	36	
14	62	72	2590	175	716	328	1820	543	320	154	104	34	
15	55	63	1870	170	1020	363	1410	530	308	130	82	34	
16	49	69	1290	165	1290	479	1150	560	279	127	69	35	
17	47	77	970	160	1090	510	999	481	250	134	75	36	
18	34	74	769	155	927	543	889	438	251	195	66	35	
19	37	67	652	150	823	745	796	423	260	308	66	34	
20	39	79	501	150	877	647	716	397	246	226	162	33	
21	41	170	416	148	778	715	665	365	178	185	155	30	
22	36	214	423	145	659	696	658	339	169	175	113	28	
23	35	163	510	160	585	873	845	326	157	152	90	28	
24	96	149	446	190	777	1130	1030	326	142	130	77	28	
25	111	370	383	397	907	1370	1530	332	160	114	68	28	
26	94	502	345	458	1470	1150	1340	438	152	100	60	28	
27	80	387	355	355	1090	994	1100	543	148	104	54	28	
28	64	328	386	332	994	865	1090	372	129	131	51	27	
29	54	392	832	266	1210	777	1010	320	119	122	49	27	
30	48	370	581	232	---	703	918	864	120	108	49	27	
31	43	---	450	218	---	632	---	4820	---	97	44	---	
TOTAL	1365	4190	19545	7393	20099	21892	32476	19196	32327	6340	2651	1089	
MEAN	44.0	140	630	238	693	706	1083	619	1078	205	85.5	36.3	
MAX	111	502	2590	458	1470	1370	3350	4820	9930	600	162	60	
MIN	21	37	243	145	170	328	586	320	119	97	44	27	
CFSM	.22	.69	3.10	1.17	3.41	3.48	5.33	3.05	5.31	1.01	.42	.18	
IN.	.25	.77	3.58	1.35	3.68	4.01	5.95	3.52	5.92	1.16	.49	.20	
CAL YR 1983	TOTAL	149792		MEAN	410	MAX	2800	MIN	16	CFSM	2.02	IN.	27.4
WTR YR 1984	TOTAL	168563		MEAN	461	MAX	9930	MIN	21	CFSM	2.27	IN.	30.8

BLIND BROOK BASIN

25

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 southwest of Penn Central Transportation Co. railroad station, and 0.85 mi upstream from mean high tide in Milton Harbor.

DRAINAGE AREA.--9.20 mi².

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

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

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

AVERAGE DISCHARGE.--40 years (1945-84), 15.9 ft³/s, 23.47 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	2300	438	4.20	May 31	0800	417	4.29
Dec. 22	1615	492	4.68	Jun. 30	1900	615	5.29
Apr. 5	2015	507	4.76	Jul. 6	0430	412	4.25
May 30	1400	610	5.26	Jul. 7	1315	*1,380	*8.54

Minimum discharge, 1.2 ft³/s Sept. 26, 27, 28, gage height, 0.97 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	4.9	23	15	9.0	25	57	11	67	170	4.9	2.1
2	15	4.7	14	14	9.0	19	44	8.9	57	45	4.4	1.7
3	7.9	5.1	15	14	9.3	17	30	9.8	36	67	4.8	9.1
4	4.9	5.9	125	13	47	15	22	67	26	63	4.2	33
5	5.8	4.7	57	13	44	21	393	28	20	32	5.0	8.4
6	6.9	4.2	46	13	37	44	145	15	18	187	5.4	4.4
7	5.8	3.9	56	12	22	20	46	12	15	579	4.1	3.2
8	4.0	3.7	29	11	14	16	34	20	13	93	4.2	2.7
9	3.1	3.7	20	10	13	15	26	30	11	37	3.5	2.4
10	2.7	12	18	9.7	12	13	20	14	9.0	25	3.1	2.2
11	2.7	28	16	14	14	12	23	12	8.0	21	4.0	2.2
12	90	11	70	9.6	26	11	16	12	7.1	18	16	2.1
13	103	7.1	226	9.2	18	15	14	12	19	13	7.0	1.9
14	10	5.9	209	9.3	17	196	42	17	24	11	4.6	1.9
15	5.6	6.2	60	9.3	44	69	87	11	12	9.1	4.0	3.9
16	4.0	61	38	8.6	42	53	156	9.7	7.4	17	3.6	3.3
17	3.4	17	26	8.6	22	39	57	9.0	6.6	16	2.7	2.3
18	3.1	11	21	8.3	18	27	33	8.4	7.0	18	2.2	2.0
19	32	8.5	18	8.3	17	28	26	7.9	17	13	2.1	1.8
20	8.9	7.8	15	9.0	17	22	23	9.1	7.2	8.7	3.1	1.6
21	5.2	30	13	8.0	15	30	20	14	5.6	10	2.8	1.4
22	4.2	13	205	7.4	12	36	17	8.2	4.8	12	2.2	1.3
23	12	9.4	84	7.1	12	22	17	21	4.4	8.3	2.4	1.3
24	173	11	37	10	80	18	21	29	10	7.0	2.2	1.4
25	22	97	19	33	43	16	17	10	109	5.9	2.0	1.4
26	12	30	16	26	27	15	14	8.5	13	5.0	1.8	1.3
27	8.9	17	14	18	19	13	13	8.1	8.8	39	1.8	1.2
28	6.9	22	63	17	79	14	12	22	7.0	13	1.8	3.1
29	5.8	61	98	13	63	43	11	213	6.3	7.6	1.7	2.8
30	5.0	26	25	11	---	52	11	450	181	6.2	1.7	2.0
31	4.7	---	16	10	---	61	---	200	---	5.6	2.0	---
TOTAL	591.5	532.7	1692	379.4	801.3	997	1447	1307.6	737.2	1562.4	115.3	109.4
MEAN	19.1	17.8	54.6	12.2	27.6	32.2	48.2	42.2	24.6	50.4	3.72	3.65
MAX	173	97	226	33	80	196	393	450	181	579	16	33
MIN	2.7	3.7	13	7.1	9.0	11	11	7.9	4.4	5.0	1.7	1.2
CFSM	2.08	1.93	5.93	1.33	3.00	3.50	5.24	4.59	2.67	5.48	.40	.40
IN.	2.39	2.15	6.84	1.53	3.24	4.03	5.85	5.29	2.98	6.32	0.47	0.44

CAL YR 1983 TOTAL 9400.8 MEAN 25.8 MAX 353 MIN 1.1 CFSM 2.80 IN. 38.01
WTR YR 1984 TOTAL 10272.8 MEAN 28.1 MAX 579 MIN 1.2 CFSM 3.05 IN. 41.54

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 downstream from Brentwood Brook, and 0.2 mi upstream from tidal barrier in Guion Creek, Mamaroneck Harbor.

DRAINAGE AREA.--4.71 mi².

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 National Geodetic Vertical Datum of 1929. Prior to June 8, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow affected by natural storage in swampy areas above station.

AVERAGE DISCHARGE.--40 years (1945-84), 6.57 ft³/s, 18.94 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	2030	96	1.89	May 30	1645	155	2.61
Dec. 14	0315	99	1.93	Jun. 30	2000	99	1.93
Apr. 5	2015	123	2.22	Jul. 7	2015	*166	*2.75
May 29	0345	87	1.79				

Minimum discharge, 0.17 ft³/s Sept. 23, 24, gage height 0.17 ft; minimum daily, 0.21 ft³/s Sept. 23-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.7	8.6	7.3	4.0	12	20	4.5	63	70	2.8	.56
2	4.9	2.4	7.1	6.8	3.7	9.4	15	4.1	30	31	2.4	.60
3	1.3	2.7	7.9	6.5	4.3	8.0	11	4.4	20	19	2.3	10
4	.75	3.3	34	6.0	14	6.9	12	24	14	21	2.4	27
5	2.1	2.3	33	5.7	18	11	92	12	9.8	16	2.3	6.0
6	1.7	2.0	20	5.4	15	15	84	7.1	7.9	35	2.2	2.6
7	.78	1.9	20	4.9	8.8	9.8	32	5.8	6.6	118	2.3	1.7
8	.56	1.8	12	4.4	6.5	7.6	19	9.4	5.5	100	1.9	1.3
9	.49	1.8	9.4	4.1	5.4	6.7	14	11	4.7	31	1.5	1.1
10	.54	7.2	8.2	4.5	4.9	5.4	12	6.7	3.8	17	1.4	.89
11	.64	15	7.1	4.9	6.5	5.2	9.8	5.3	3.2	12	1.1	.81
12	23	7.1	21	4.4	7.7	4.6	8.7	5.8	2.6	9.7	1.9	.78
13	43	4.2	60	4.0	6.3	8.8	8.1	5.6	6.8	7.4	1.6	.74
14	9.1	3.6	83	3.8	6.2	66	19	7.0	11	5.8	1.4	.66
15	3.6	4.3	40	3.6	15	34	32	4.9	5.8	5.0	1.3	3.2
16	2.5	22	21	3.5	12	22	51	4.4	4.1	11	1.1	1.1
17	2.1	12	15	3.2	8.6	17	33	4.0	3.1	7.9	.93	.78
18	1.8	7.9	12	3.1	7.2	14	18	3.5	3.7	13	.73	.51
19	13	6.9	10	3.1	6.6	15	14	3.2	8.0	8.4	.60	.35
20	5.2	5.0	8.4	3.0	6.2	12	12	4.0	4.0	5.5	1.1	.31
21	3.1	10	7.0	3.0	5.5	13	9.5	6.7	2.9	6.8	.82	.28
22	2.5	6.3	45	3.0	4.9	13	8.4	3.3	2.1	6.6	.63	.23
23	8.4	4.8	47	4.7	5.5	9.7	8.3	8.2	1.8	5.1	1.0	.21
24	55	5.9	19	8.4	30	8.0	8.8	9.8	4.5	4.0	.85	.21
25	21	30	13	11	14	7.3	7.4	5.3	44	3.2	.53	.25
26	8.0	20	9.1	8.1	9.3	6.7	6.3	4.3	11	3.0	.49	.28
27	5.4	10	7.7	6.7	7.4	6.0	5.6	3.9	5.1	18	.44	.37
28	4.3	11	22	5.7	27	6.6	5.4	11	3.7	9.9	.38	1.7
29	3.8	24	31	4.7	25	23	5.2	69	3.2	5.0	.40	.64
30	2.8	13	13	4.3	---	27	5.1	132	41	3.9	.50	.49
31	2.9	---	8.9	4.8	---	22	---	138	---	3.2	.75	---
TOTAL	237.56	251.1	660.4	156.6	295.5	432.7	586.6	528.2	336.9	612.4	40.05	65.65
MEAN	7.66	8.37	21.3	5.05	10.2	14.0	19.6	17.0	11.2	19.8	1.29	2.19
MAX	55	30	83	11	30	66	92	138	63	118	2.8	27
MIN	.49	1.8	7.0	3.0	3.7	4.6	5.1	3.2	1.8	3.0	.38	.21
CFSM	1.63	1.78	4.52	1.07	2.17	2.97	4.16	3.61	2.38	4.20	.27	.46
IN.	1.88	1.98	5.22	1.24	2.33	3.42	4.63	4.17	2.66	4.84	0.32	0.52
CAL YR 1983	TOTAL	3678.08	MEAN	10.1	MAX	113	MIN	.09	CFSM	2.14	IN.	29.05
WTR YR 1984	TOTAL	4203.66	MEAN	11.5	MAX	138	MIN	.21	CFSM	2.44	IN.	33.20

27

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

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

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

AVERAGE DISCHARGE.--38 years (1945-52, 1955-84), 35.8 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s Sept. 26, 1975, gage height, 10.15 ft, from rating curve extended above 2,000 ft³/s on basis of indirect measurement of peak flow at 10.15 ft; minimum, 0.06 ft³/s Sept. 30, 1965; minimum daily, 0.10 ft³/s Sept. 29, 30, 1965; minimum gage height since Sept. 9, 1954, 0.10 ft 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 present datum, Sept. 21, 1938, from information by officials of village of Mamaroneck.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,720 ft³/s Jul. 7, gage height, 7.71 ft; minimum, 2.2 ft³/s Oct. 11, gage height, 0.27 ft; minimum daily, 2.4 ft³/s Oct. 11.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	16	65	46	26	85	95	30	208	241	16	5.4
2	44	16	51	43	28	66	71	27	163	92	15	4.0
3	9.4	14	46	40	28	43	58	36	117	104	14	47
4	5.7	19	255	37	90	38	82	156	92	121	14	120
5	7.6	12	125	36	95	56	965	67	68	67	31	21
6	15	11	113	35	82	79	480	36	48	289	20	12
7	4.6	11	154	33	52	49	179	32	42	1210	20	8.3
8	3.3	11	85	30	39	40	134	48	36	337	15	6.6
9	2.9	10	60	27	35	40	108	58	31	129	12	5.6
10	2.7	28	-54	27	37	35	67	34	28	87	12	20
11	2.4	60	46	32	60	34	58	32	24	78	11	28
12	202	23	173	29	71	31	51	33	22	93	32	5.4
13	297	16	523	27	58	47	46	34	38	66	17	4.9
14	76	14	544	25	51	410	99	41	60	37	13	4.2
15	37	31	188	24	92	144	145	29	34	32	9.9	12
16	11	148	132	23	68	122	270	34	21	53	8.2	10
17	9.2	58	83	22	49	112	134	47	19	45	7.2	7.6
18	8.7	37	68	21	43	84	92	38	20	50	6.2	7.1
19	81	25	61	20	40	70	77	26	37	37	5.8	4.4
20	21	22	51	20	38	54	67	30	20	27	9.4	3.8
21	13	80	45	20	34	74	59	41	16	34	6.2	3.7
22	11	35	413	19	31	86	53	22	14	34	5.4	3.2
23	39	27	193	21	31	69	53	49	14	24	6.7	3.2
24	396	42	100	34	158	62	57	53	18	22	6.2	3.0
25	113	209	76	61	75	58	49	26	278	18	4.9	3.2
26	68	95	60	43	58	49	45	22	49	16	4.2	3.2
27	32	69	56	37	57	35	41	22	45	95	4.0	2.7
28	26	81	211	33	181	38	34	51	38	35	4.3	11
29	21	150	210	28	127	109	31	368	22	23	4.2	5.7
30	18	80	89	26	---	114	30	979	201	20	5.2	3.7
31	17	---	53	30	---	115	---	637	---	17	11	---
TOTAL	1654.5	1450	4383	949	1834	2448	3730	3138	1823	3533	351.0	379.9
MEAN	53.4	48.3	141	30.6	63.2	79.0	124	101	60.8	114	11.3	12.7
MAX	396	209	544	61	181	410	965	979	278	1210	32	120
MIN	2.4	10	45	19	26	31	30	22	14	16	4.0	2.7
CAL YR 1983	TOTAL	22916.0	MEAN	62.8	MAX	736	MIN	1.2				
WTR YR 1984	TOTAL	25673.4	MEAN	70.1	MAX	1210	MIN	2.4				

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 downstream from Pelham Lake, and 1.5 mi west of New Rochelle.

DRAINAGE AREA.--5.76 mi².

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

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

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

AVERAGE DISCHARGE.--40 years, 7.15 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 367 ft³/s Jul. 7, gage height, 4.99 ft; minimum, 0.24 ft³/s Sept. 25, 27, 28, gage height, 2.03 ft; minimum daily, 0.27 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	2.7	8.8	7.4	4.9	11	18	3.2	38	32	3.7	.86
2	15	2.3	6.0	6.7	4.2	7.6	13	2.9	23	19	3.4	.80
3	6.4	2.3	6.6	6.5	5.5	6.2	9.4	3.2	16	11	3.3	8.5
4	3.9	3.0	29	6.3	13	5.6	15	22	11	14	3.3	23
5	4.8	3.7	39	6.1	17	10	181	13	9.3	11	3.5	10
6	3.9	3.7	28	6.0	17	15	109	6.2	8.4	36	3.1	4.6
7	2.7	2.9	19	5.7	10	8.9	30	4.4	7.3	193	4.0	3.4
8	2.2	2.9	12	5.2	6.6	6.5	17	6.6	6.7	64	5.3	2.3
9	2.0	4.0	7.6	4.7	5.4	6.6	13	9.4	5.9	17	4.1	1.5
10	1.6	9.3	6.5	5.3	4.9	5.9	10	5.6	5.4	10	3.4	1.4
11	1.7	10	6.1	7.5	6.4	5.5	8.4	4.1	5.2	12	3.1	1.4
12	26	8.9	24	5.9	7.8	5.0	6.5	4.8	4.8	9.5	3.0	1.3
13	67	6.1	71	4.8	6.6	13	5.7	4.7	6.6	6.7	2.9	1.1
14	27	4.1	108	4.7	6.8	76	19	6.2	12	5.8	2.9	1.3
15	5.4	4.5	47	4.6	22	44	34	4.6	8.6	4.9	2.6	3.8
16	3.2	24	31	4.2	17	18	49	4.1	5.6	9.0	2.4	1.6
17	2.5	17	16	4.1	9.6	13	27	3.6	4.6	9.5	2.3	1.2
18	1.6	7.3	10	4.0	7.1	11	13	3.3	4.4	11	2.1	1.1
19	14	5.0	8.8	3.8	6.6	9.2	9.2	3.2	8.0	8.4	1.9	3.2
20	8.3	4.3	7.4	3.7	7.3	8.3	7.4	4.6	6.3	5.5	2.1	2.0
21	4.3	13	6.1	3.6	6.1	8.0	6.4	8.6	4.7	6.2	1.3	.80
22	3.1	9.8	52	3.4	5.1	7.9	5.5	6.1	3.9	6.3	1.2	.36
23	11	5.9	65	3.5	5.7	7.0	5.5	9.0	3.4	5.0	2.6	.29
24	61	6.6	29	6.8	33	6.4	6.5	8.6	7.3	4.3	1.4	.38
25	42	21	15	13	16	5.8	5.5	5.5	71	3.8	1.1	.34
26	12	20	9.3	10	9.9	5.5	4.7	4.2	18	3.5	1.1	.33
27	5.3	15	7.1	8.1	6.9	5.2	3.9	4.0	7.3	23	1.0	.27
28	3.7	11	26	6.5	25	6.3	3.5	11	5.0	14	1.0	2.2
29	3.1	15	50	5.4	25	24	3.4	67	4.4	6.6	.93	.52
30	2.9	13	21	5.0	---	30	3.3	137	22	4.7	.99	.45
31	2.9	---	9.6	5.7	---	22	---	108	---	4.1	2.2	---
TOTAL	361.5	258.3	781.9	178.2	318.4	414.4	642.8	488.7	344.1	570.8	77.22	80.30
MEAN	11.7	8.61	25.2	5.75	11.0	13.4	21.4	15.8	11.5	18.4	2.49	2.68
MAX	67	24	108	13	33	76	181	137	71	193	5.3	23
MIN	1.6	2.3	6.0	3.4	4.2	5.0	3.3	2.9	3.4	3.5	.93	.27
CAL YR 1983	TOTAL	4250.75	MEAN	11.6	MAX	147	MIN	.15				
WTR YR 1984	TOTAL	4516.62	MEAN	12.3	MAX	193	MIN	.27				

BRONX RIVER BASIN

29

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 downstream from Grassy Sprain Brook.

DRAINAGE AREA.--26.5 mi², not including 18.1 mi², 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-71-1: 1961-67(P), 1968(M), 1970(M). WRD NY-72-1: 1969(M).

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

REMARKS.--Records fair. Diversions from 18.1 mi² for municipal water supply and flood control use. Included in these diversions is drainage from 12.8 mi² from Kensico Reservoir for City of New York, 4.58 mi² from Grassy Sprain Reservoir for Yonkers, 0.67 mi² for White Plains, and 0.1 mi² for flood control from outflow from Grassy Sprain Reservoir.

AVERAGE DISCHARGE.--40 years (1945-84), 42.5 ft³/s, 21.78 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	2100	938	5.13	Apr. 5	1915	1,620	7.46
Oct. 24	0630	717	4.26	May 29	0345	626	3.88
Dec. 13	2400	899	4.98	May 30	1330	935	5.12
Dec. 22	1500	1,040	5.50	Jun. 25	0100	975	5.27
Dec. 28	2115	732	4.32	Jul. 6	0315	824	4.69
Mar. 14	0130	764	4.45	Jul. 7	1200	*2,170	*9.12

Minimum discharge, 7.5 ft³/s Oct. 11, gage height, 0.44 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	20	43	77	39	83	120	56	245	195	30	16
2	46	19	39	74	36	72	101	50	221	80	30	13
3	15	23	46	72	44	66	85	67	163	110	29	87
4	11	25	214	71	107	60	108	161	134	128	25	158
5	18	18	107	72	102	90	1140	72	113	99	38	28
6	27	16	99	67	88	109	586	55	100	423	27	18
7	9.9	15	119	60	64	70	297	52	90	1300	41	16
8	9.2	16	67	56	53	59	191	103	80	352	30	15
9	8.7	15	58	51	48	63	160	79	74	211	25	14
10	8.2	46	54	54	46	54	156	55	71	162	24	13
11	7.9	68	50	63	60	54	121	44	59	142	22	13
12	225	26	180	51	73	49	110	61	52	120	43	12
13	163	19	602	47	58	106	100	57	97	99	24	12
14	53	18	545	47	60	365	102	63	89	83	21	12
15	24	24	230	45	154	147	151	49	55	75	21	25
16	17	135	172	43	94	121	172	45	41	129	19	14
17	15	38	142	41	70	113	162	44	38	95	19	11
18	14	27	113	40	64	92	135	42	39	110	17	11
19	113	23	97	38	62	91	118	41	57	77	16	11
20	27	22	83	36	60	77	110	47	35	56	22	10
21	18	104	74	34	55	83	98	64	31	64	16	10
22	16	36	420	32	51	81	98	39	31	59	16	11
23	69	28	193	34	54	69	93	84	28	47	21	10
24	359	42	126	65	202	61	93	81	65	44	16	10
25	65	167	98	90	97	59	82	43	317	40	14	10
26	41	65	87	63	80	58	73	40	50	37	13	10
27	31	44	79	52	62	53	68	39	39	147	13	9.4
28	28	64	240	48	188	60	64	91	33	50	13	22
29	24	108	219	43	130	143	62	355	30	36	15	13
30	22	50	105	42	---	144	60	698	178	34	22	10
31	21	---	85	45	---	126	---	512	---	32	37	---
TOTAL	1572.9	1321	4786	1653	2301	2878	5016	3289	2655	4636	719	624.4
MEAN	50.7	44.0	154	53.3	79.3	92.8	167	106	88.5	150	23.2	20.8
MAX	359	167	602	90	202	365	1140	698	317	1300	43	158
MIN	7.9	15	39	32	36	49	60	39	28	32	13	9.4
CFSM	1.91	1.66	5.81	2.01	2.99	3.50	6.30	4.00	3.34	5.66	.88	.78
IN.	2.21	1.85	6.72	2.32	3.23	4.04	7.04	4.62	3.73	6.51	1.01	0.88
CAL YR 1983	TOTAL	25193.0	MEAN	69.0	MAX	602	MIN	6.7	CFSM	2.60	IN.	35.37
WTR YR 1984	TOTAL	31451.3	MEAN	85.9	MAX	1300	MIN	7.9	CFSM	3.24	IN.	44.15

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 downstream from bridge on State Highway 28N, 0.5 mi downstream from outlet of Harris Lake, 2 mi east of Newcomb, and 4 mi upstream from Wolf Creek.

DRAINAGE AREA.--192 mi².

PERIOD OF RECORD.--September 1925 to October 1982, January 1983 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 National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1931, nonrecording gage at site 125 ft downstream at same datum. Aug. 6, 1931 to Nov. 4, 1960, water-stage recorder on left bank at same site and datum.

REMARKS.--Records good except those under 250 ft³/s, which are fair. Flow slightly regulated by small reservoirs above station.

AVERAGE DISCHARGE.--58 years (1926-82, 1984), 397 ft³/s, 28.08 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	0730	*4,040	*7.69	Apr. 18	2015	2,620	5.95

Minimum discharge, 62 ft³/s Aug. 6, 7; minimum gage height, 0.99 ft Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	166	548	238	130	398	261	1330	1350	138	74	139
2	74	149	463	222	130	343	269	1430	1010	133	74	129
3	70	139	390	211	120	304	295	998	770	122	72	118
4	67	166	307	199	130	272	347	760	601	113	69	116
5	74	224	300	189	130	247	427	881	479	163	66	113
6	155	281	304	181	130	237	1140	891	391	460	64	105
7	265	293	502	174	130	225	1950	745	368	1170	65	96
8	254	283	712	167	120	211	1760	697	354	1540	67	88
9	208	257	662	159	120	196	1340	1000	321	1010	66	84
10	170	243	582	158	110	184	1040	1170	286	614	65	80
11	142	447	473	150	110	174	831	878	252	413	64	83
12	127	1160	401	150	110	171	778	978	223	412	100	109
13	136	1290	691	140	100	162	892	1640	202	425	138	116
14	234	895	2420	140	100	168	1040	1540	190	341	135	134
15	444	630	3880	140	150	162	1240	1130	190	259	132	219
16	385	496	3110	140	500	160	1580	856	173	228	126	234
17	285	439	2140	140	1100	172	2130	702	154	221	120	223
18	226	391	1470	130	1330	183	2560	575	151	201	110	196
19	187	322	1060	130	1600	193	2440	490	261	190	101	168
20	158	287	747	130	1660	219	1940	557	320	169	94	146
21	137	450	572	130	1540	283	1540	663	283	147	85	130
22	124	1170	500	130	1270	514	1260	617	239	132	79	116
23	117	1190	452	130	972	766	1000	628	203	121	96	106
24	134	954	409	140	787	687	886	1220	174	116	112	100
25	153	953	368	150	679	539	1090	1480	199	105	117	97
26	158	1100	329	150	632	437	1090	1170	238	94	126	99
27	182	917	291	150	550	372	952	925	210	90	118	108
28	173	722	269	150	523	333	917	762	180	94	106	114
29	166	637	274	140	466	311	962	831	156	89	97	112
30	180	615	272	140	---	288	1070	1430	142	84	91	107
31	180	---	256	140	---	272	---	1640	---	78	108	---
TOTAL	5444	17266	25154	4838	15429	9183	35027	30614	10070	9472	2937	3785
MEAN	176	576	811	156	532	296	1168	988	336	306	94.7	126
MAX	444	1290	3880	238	1660	766	2560	1640	1350	1540	138	234
MIN	67	139	256	130	100	160	261	490	142	78	64	80
CFSM	.92	3.00	4.22	.81	2.77	1.54	6.08	5.15	1.75	1.59	.49	.66
IN.	1.05	3.35	4.87	0.94	2.99	1.78	6.79	5.93	1.95	1.84	0.57	0.73

WTR YR 1984 TOTAL 169219 MEAN 462 MAX 3880 MIN 64 CFSM 2.41 IN. 32.79

HUDSON RIVER BASIN

01314500 INDIAN LAKE NEAR INDIAN LAKE, NY

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

DRAINAGE AREA.--131 mi².

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 bil ft³ at elevation, 1,651.29 ft (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft. Dead storage unknown. Water is used for power development, for improvement of navigation in lower Hudson River, and to compensate for flow diverted from Hudson River at Glens Falls into Champlain (Barge) Canal.

COOPERATION.--Gage-height record furnished by Indian River Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft Mar. 28, 1913, contents, 5.781 bil ft³; minimum observed, 1,616.81 ft, estimated, Feb. 13, 1948, contents, 0.20 bil ft³.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,650.79 ft July 13, contents, 4.571 bil ft³; minimum observed, 1,636.50 ft Apr. 4, 5, contents 2.186 bil ft³.

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 (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1646.16	1643.35	1644.56	1646.17	1639.59	1640.81	1636.75	1648.01	1650.78	1649.82	1648.41	1646.74
2	1646.06	1643.29	1644.64	1645.91	1639.32	1640.70	1636.66	1648.23	1650.65	1649.86	1648.35	1646.71
3	1645.93	1643.25	1644.61	1645.74	1639.19	1640.54	1636.54	1648.29	1650.62	1649.88	1648.29	1646.75
4	1645.78	1643.19	1644.55	1645.51	1639.01	1640.35	1636.50	1648.31	1650.54	1649.83	1648.21	1646.74
5	1645.69	1643.20	1644.57	1645.31	1638.79	1640.23	1636.50	1648.51	1650.34	1649.96	1648.15	1646.73
6	1645.65	1643.18	1644.49	1645.09	1638.67	1640.11	1637.28	1648.66	1650.25	1650.15	1648.09	1646.66
7	1645.59	1643.15	1644.76	1644.87	1638.60	1639.91	1638.31	1648.74	1650.18	1650.61	1648.06	1646.57
8	1645.43	1643.11	1645.00	1644.64	1638.44	1639.74	1638.80	1648.72	1650.06	1650.78	1648.03	1646.50
9	1645.23	1643.08	1645.09	1644.41	1638.34	1639.56	1638.97	1648.93	1649.94	1650.70	1647.96	1646.39
10	1645.08	1643.07	1645.11	1644.27	1638.17	1639.37	1639.18	1649.08	1649.83	1650.66	1647.91	1646.34
11	1644.94	1643.05	1645.05	1644.04	1637.99	1639.19	1639.36	1649.21	1649.75	1650.65	1647.83	1646.23
12	1644.80	1643.20	1644.96	1643.83	1637.86	1639.01	1639.70	1649.45	1649.50	1650.76	1647.81	1646.29
13	1644.72	1643.29	1645.08	1643.64	1637.74	1638.78	1639.98	1649.71	1649.48	1650.79	1647.78	1646.23
14	1644.62	1643.32	1646.26	1643.43	1637.59	1638.66	1640.50	1649.92	1649.43	1650.71	1647.71	1646.28
15	1644.60	1643.29	1647.46	1643.21	1637.74	1638.50	1640.91	1650.01	1649.36	1650.61	1647.75	1646.33
16	1644.57	1643.28	1647.91	1643.00	1638.51	1638.31	1641.49	1650.06	1649.33	1650.68	1647.69	1646.29
17	1644.48	1643.23	1648.19	1642.78	1639.13	1638.16	1642.70	1650.02	1649.33	1650.60	1647.63	1646.26
18	1644.38	1643.21	1648.24	1642.54	1639.61	1638.01	1643.87	1649.98	1649.36	1650.43	1647.48	1646.22
19	1644.26	1643.12	1648.18	1642.35	1640.21	1637.85	1644.59	1649.98	1649.36	1650.31	1647.46	1646.12
20	1644.08	1643.03	1648.03	1642.15	1640.41	1637.69	1645.06	1649.99	1649.34	1650.14	1647.42	1645.96
21	1644.03	1643.10	1647.89	1641.89	1640.96	1637.58	1645.41	1649.97	1649.35	1650.00	1647.37	1645.76
22	1643.91	1643.51	1647.81	1641.74	1641.00	1637.50	1645.56	1649.96	1649.35	1649.84	1647.36	1645.56
23	1643.83	1643.76	1647.72	1641.48	1641.11	1637.58	1645.71	1649.96	1649.37	1649.72	1647.37	1645.42
24	1643.80	1643.87	1647.56	1641.21	1641.09	1637.58	1645.95	1650.07	1649.38	1649.52	1647.34	1645.12
25	1643.76	1644.02	1647.37	1641.06	1641.08	1637.48	1646.47	1650.06	1649.50	1649.33	1647.29	1645.03
26	1643.72	1644.26	1647.17	1640.86	1641.07	1637.42	1646.86	1649.98	1649.58	1649.22	1647.21	1644.91
27	1643.65	1644.29	1647.00	1640.69	1641.05	1637.30	1647.24	1650.01	1649.65	1649.06	1647.15	1644.69
28	1643.62	1644.33	1646.82	1640.46	1641.02	1637.18	1647.42	1650.06	1649.61	1648.91	1647.10	1644.45
29	1643.54	1644.43	1646.62	1640.24	1640.89	1637.16	1647.63	1650.24	1649.66	1648.79	1646.97	1644.24
30	1643.46	1644.61	1646.55	1640.08	---	1637.00	1647.76	1650.48	1649.71	1648.63	1646.87	1644.05
31	1643.38	---	1646.36	1639.80	---	1636.86	---	1650.69	---	1648.49	1646.83	---
MEAN	1644.60	1643.47	1646.31	1642.98	1639.45	1638.58	1641.99	1649.53	1649.75	1649.98	1647.64	1645.92
MAX	1646.16	1644.61	1648.24	1646.17	1648.11	1640.81	1647.76	1650.69	1650.78	1650.79	1648.41	1646.75
MIN	1643.38	1643.03	1644.49	1639.80	1637.59	1636.86	1636.50	1648.01	1649.33	1648.49	1646.83	1644.05
#	3.273	3.474	3.761	2.687	2.864	2.234	4.053	4.575	4.385	4.140	3.847	3.373
**	-182.2	+77.5	+107.2	-401.0	+70.7	-235.2	+701.8	+194.9	-73.3	-91.5	-109.4	-182.9
CAL YR 1983	MEAN	1645.15	MAX	1651.84	MIN	1637.58	**	+23.8				
WTR YR 1984	MEAN	1645.04	MAX	1650.79	MIN	1636.50	**	-12.3				

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 downstream from Indian Lake Dam, 1.0 mi upstream from Big Brook, and 2.0 mi south of village of Indian Lake.

DRAINAGE AREA.--132 mi².

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 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.--70 years (1913, 1916-84), 296 ft³/s, unadjusted.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 677 ft³/s July 9, gage height, 3.29 ft; minimum, 15 ft³/s Aug. 21, gage height, 0.59 ft; minimum daily, 29 ft³/s June 22, 23, 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	188	330	596	506	524	456	331	584	62	183	222
2	285	138	329	593	503	522	456	453	576	62	183	222
3	296	174	328	590	500	521	456	454	569	62	182	222
4	333	174	328	587	497	517	456	460	565	62	181	224
5	331	174	348	585	495	516	456	460	568	102	181	224
6	328	174	424	584	445	514	495	459	568	176	181	224
7	328	174	439	582	386	511	520	456	563	430	182	224
8	337	173	439	581	384	510	525	456	560	659	181	223
9	337	172	453	580	384	508	530	455	496	565	183	224
10	335	200	508	573	384	506	450	455	424	245	183	245
11	334	289	509	569	380	502	341	411	399	246	183	312
12	334	286	510	568	375	497	266	285	325	267	183	309
13	334	285	541	566	375	495	266	280	242	299	183	308
14	335	285	598	564	375	492	271	315	185	298	183	309
15	331	295	598	561	386	488	277	452	142	296	183	308
16	330	322	602	559	389	485	282	452	110	335	183	307
17	329	322	606	556	391	481	346	451	110	452	182	306
18	328	322	609	552	403	477	472	402	110	452	182	305
19	328	322	609	549	403	474	479	270	110	449	184	413
20	309	319	610	547	408	474	486	268	63	436	183	468
21	219	328	609	543	410	474	486	267	30	395	111	465
22	218	325	609	541	527	474	486	267	29	392	167	464
23	218	325	607	538	528	474	441	268	29	390	183	462
24	218	325	606	535	529	470	295	266	30	388	225	459
25	217	331	606	530	529	470	296	280	30	388	224	458
26	217	328	579	525	528	467	296	329	29	388	224	452
27	217	328	503	522	527	467	354	327	29	388	224	449
28	217	328	601	519	527	463	490	330	36	388	224	448
29	214	331	601	516	526	459	486	501	62	387	221	445
30	214	331	600	513	---	456	431	583	62	389	222	444
31	214	---	598	508	---	456	---	586	---	287	222	---
TOTAL	8871	8068	16237	17232	13000	15144	12347	12029	7635	10135	5896	10145
MEAN	286	269	524	556	448	489	412	388	255	327	190	338
MAX	337	331	610	596	529	524	530	586	584	659	225	468
MIN	214	138	328	508	375	456	266	266	29	62	111	222

ADJUSTED FOR CHANGE IN CONTENTS OF INDIAN LAKE

MEAN	104	346	631	155	519	254	1110	583	182	236	81	155
CFSM	.79	2.62	4.78	1.17	3.93	1.92	8.41	4.42	1.38	1.79	.61	1.17
IN	.91	2.92	5.51	1.35	4.24	2.22	9.38	5.09	1.54	2.06	.71	1.31

OBSERVED

ADJUSTED

CAL YR 1983	TOTAL	106969	MEAN	293	MAX	726	MIN	24	MEAN	269	CFSM	2.04	IN	27.66
WTR YR 1984	TOTAL	136739	MEAN	374	MAX	659	MIN	29	MEAN	362	CFSM	2.74	IN	37.33

HUDSON RIVER BASIN

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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 upstream from bridge on State Highway 28N in village of North Creek, 500 ft upstream from North Creek, and 26 mi downstream from Indian Lake.

DRAINAGE AREA.--792 mi².

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 National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1930, nonrecording gages at sites 80 ft and 125 ft 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.--77 years, 1,562 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft³/s Dec. 31, 1948, gage height, 12.14 ft; minimum, 112 ft³/s July 26, 1934, gage height, 1.96 ft; minimum daily, 114 ft³/s July 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,700 ft³/s Dec. 14, gage height, 9.35 ft; minimum, 308 ft³/s Sept. 23, gage height, 2.59 ft; minimum daily, 327 ft³/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	651	2400	1500	860	1900	1560	3810	4520	539	450	537
2	459	579	2120	1500	820	1800	1660	3890	3290	492	430	537
3	365	543	1910	1400	780	1700	1860	3180	2780	436	380	528
4	427	564	1790	1400	800	1600	2120	3110	2470	391	350	567
5	547	688	1720	1300	840	1500	2940	3660	2040	660	337	580
6	810	1100	1810	1300	840	1400	8070	3330	1810	1830	327	533
7	909	1190	3320	1200	800	1300	8120	2910	2480	4870	353	485
8	1020	1160	3590	1200	780	1300	6350	2760	2200	4750	378	453
9	962	1060	3090	1100	740	1200	4770	3330	1700	3210	378	421
10	830	980	2680	1100	710	1200	3910	3550	1430	2020	371	399
11	752	1940	2240	1000	700	1100	3230	2960	1370	1550	358	501
12	824	3530	2000	980	700	1100	3430	3090	1100	1600	485	866
13	853	3370	4320	940	680	1100	4070	3910	824	1620	757	955
14	1230	2550	13100	900	800	1100	4470	3950	695	1370	705	1080
15	1590	2050	12200	900	1500	1100	5430	3370	683	1150	670	1420
16	1490	1930	8690	880	4000	1100	6540	3000	599	1080	707	1400
17	1280	1790	6220	860	4640	1200	9190	2640	485	1260	610	1290
18	1080	1680	4000	840	5650	1200	9810	2260	490	1310	519	1110
19	910	1520	3000	820	5920	1300	7950	2000	751	1270	473	1010
20	804	1440	2100	800	5710	1400	6460	1870	995	1160	464	1050
21	693	3130	2000	800	5100	1710	5310	1840	788	931	424	924
22	598	4920	2100	820	4200	2470	4240	1820	641	734	341	842
23	563	4230	2000	840	3480	2900	3690	1790	526	800	516	510
24	616	3400	1900	900	2900	2620	3600	2450	456	780	811	761
25	700	3830	1700	960	2600	2280	4520	2910	643	700	738	719
26	708	3890	1600	1000	2400	2050	3970	2790	759	640	652	718
27	728	3210	1500	1000	2300	1890	3550	2530	652	580	583	765
28	752	2670	1500	980	2200	1810	3440	2310	541	600	521	786
29	731	2590	1700	960	2100	1790	3430	3480	474	560	480	716
30	691	2670	1700	940	---	1720	3450	5400	494	500	460	762
31	653	---	1600	900	---	1630	---	5370	---	460	490	---
TOTAL	25102	64855	101600	32020	65550	49470	141140	95270	38686	39853	15518	23225
MEAN	810	2162	3277	1033	2260	1596	4705	3073	1290	1286	501	774
MAX	1590	4920	13100	1500	5920	2900	9810	5400	4520	4870	811	1420
MIN	365	543	1500	800	680	1100	1560	1790	456	391	327	399
CAL YR 1983	TOTAL	644472		MEAN	1766	MAX	13100	MIN	135			
WTR YR 1984	TOTAL	692289		MEAN	1892	MAX	13100	MIN	327			

HUDSON RIVER BASIN

01318500 HUDSON RIVER AT HADLEY, NY

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

DRAINAGE AREA.--1,664 mi².

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 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.--63 years, 2,915 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft³/s Jan. 1, 1949, gage height, 21.21 ft; minimum, 281 ft³/s Sept. 3, 1934, gage height, 0.94 ft; minimum daily, 292 ft³/s July 24, 1934.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	2030	*22,900	*13.17	Apr. 18	1000	17,100	10.72
Apr. 6	1900	16,200	10.37				

Minimum discharge, 613 ft³/s Oct. 4, gage height, 1.83 ft; minimum daily, 637 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	744	1080	5520	3600	1400	4500	3280	7000	9070	1190	973	1040
2	776	1050	4940	3400	1400	4200	3560	6900	7710	1210	818	1020
3	713	973	4500	3200	1400	3800	3860	6350	6280	1120	799	1020
4	637	973	4040	3100	1500	3500	4360	6650	5900	1050	763	1060
5	712	1060	3800	3000	1700	3300	5740	7840	5130	1280	730	1050
6	996	1370	3870	2800	1600	3100	15300	7220	4460	2970	718	995
7	1190	1640	6430	2600	1500	2900	15100	6360	5010	5360	696	911
8	1210	1650	7070	2400	1400	2700	12700	6210	4920	6730	720	838
9	1270	1610	6200	2200	1300	2500	10500	7260	4110	5300	718	789
10	1210	1550	5570	2200	1400	2300	8960	7280	3400	3700	739	743
11	1100	1890	4970	2100	1400	2100	7930	6740	3080	2990	715	743
12	1090	4270	4290	2000	1500	1900	7690	6320	2660	2890	783	1060
13	1230	4850	6360	2000	1500	2000	8380	7240	2190	2850	958	1260
14	1530	4150	20200	1900	1600	1900	8810	7730	2010	2510	1130	1190
15	2000	3450	20800	1900	2630	2000	9860	7190	1800	2170	1060	1410
16	2060	3380	16900	1900	7280	1900	11700	6380	1690	1930	1060	1610
17	1850	3460	13500	1800	7870	2000	15300	5710	1520	1850	1040	1520
18	1650	3280	11000	1800	9970	2200	16800	5120	1420	2040	928	1350
19	1510	3070	9200	1700	11100	2570	15100	4660	1470	2070	842	1200
20	1370	2890	7400	1600	10900	2720	12900	4250	1700	1900	849	1230
21	1260	4390	6000	1600	10200	3110	11300	4050	1640	1710	794	1190
22	1140	7630	5400	1600	8870	4170	9740	3930	1440	1530	772	1110
23	1060	7140	5000	1600	7900	5200	8440	3790	1290	1440	923	957
24	1140	6160	4500	1600	7070	4870	8200	4410	1160	1360	1180	849
25	1220	6660	4000	1800	6400	4400	8890	4990	1800	1280	1270	964
26	1260	7290	3400	1900	6400	4100	8630	4750	1800	1210	1160	980
27	1240	6500	3500	1800	5800	3850	7510	4550	1560	1170	1060	949
28	1230	5730	3900	1800	5400	3710	7130	4140	1410	1200	983	995
29	1200	5810	4400	1700	5000	3720	6790	6860	1280	1210	953	933
30	1160	6080	4200	1600	---	3600	6520	10600	1190	1160	1040	918
31	1110	---	3800	1500	---	3380	---	10500	---	1090	1140	---
TOTAL	37868	111036	214660	65700	133390	98200	280980	192980	90100	67470	28314	31884
MEAN	1222	3701	6925	2119	4600	3168	9366	6225	3003	2176	913	1063
MAX	2060	7630	20800	3600	11100	5200	16800	10600	9070	6730	1270	1610
MIN	637	973	3400	1500	1300	1900	3280	3790	1160	1050	696	743
CAL YR 1983	TOTAL	1295652	MEAN	3550	MAX	21100	MIN	342				
WTR YR 1984	TOTAL	1352582	MEAN	3696	MAX	20800	MIN	637				

HUDSON RIVER BASIN

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01321000 SACANDAGA RIVER NEAR HOPE, NY

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

DRAINAGE AREA.--491 mi².

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

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

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

AVERAGE DISCHARGE.--73 years, 1,103 ft³/s.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0730	*14,100	*7.75	Apr. 16	2100	11,300	7.10
Apr. 6	0430	13,500	7.62				

Minimum discharge, 134 ft³/s July 31, gage height, 1.57 ft; minimum daily discharge, 149 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	278	1710	1100	430	1200	857	2580	2630	518	182	922
2	159	267	1450	1100	410	1100	1110	2340	2180	469	177	729
3	149	270	1260	1000	400	1000	1460	2050	1830	388	171	765
4	151	294	1060	940	430	960	1840	2700	1430	342	166	820
5	170	305	889	900	500	1020	5240	3380	1150	2410	160	666
6	403	391	1080	860	560	984	10300	2770	1030	4610	151	554
7	361	408	3700	820	540	904	6290	2330	1520	3750	175	473
8	279	382	2620	780	490	811	4810	2260	1210	2710	186	409
9	240	360	2070	780	450	752	3480	3260	973	2220	172	360
10	213	342	1870	840	430	677	3200	2720	799	1820	239	319
11	194	534	1530	800	410	633	2900	2240	674	1560	320	307
12	200	1260	1370	740	400	574	3370	2720	571	1700	297	444
13	342	1070	4060	660	410	567	4030	2950	502	1340	289	431
14	780	838	11400	580	500	583	3930	2720	482	1080	264	426
15	775	718	6490	500	2000	596	4710	2410	449	889	580	497
16	588	752	4830	450	4500	593	7010	2100	399	762	508	477
17	507	872	3500	420	4130	637	8850	1870	365	657	680	437
18	450	800	2500	410	4500	660	8090	1640	375	601	594	386
19	399	698	1700	400	4940	656	6240	1470	474	612	550	342
20	351	666	1500	400	4460	720	5160	1310	372	521	603	310
21	312	2820	1300	390	3930	987	4140	1060	296	363	490	279
22	284	3010	1200	390	3050	1420	3510	1060	268	308	406	252
23	276	1820	1100	390	2400	1740	3140	1160	249	281	612	234
24	442	1740	1000	430	2100	1470	3730	1610	249	256	616	223
25	470	2710	960	600	1900	1300	4250	1390	1290	228	487	211
26	425	2460	920	800	1700	1210	3320	1140	824	208	413	223
27	394	1810	940	700	1500	1160	3110	1070	570	232	360	224
28	362	1470	1000	600	1400	1150	2700	1110	512	277	319	212
29	347	1890	1100	540	1300	1170	2470	3670	433	254	335	206
30	318	2070	1100	500	---	1130	2220	4670	383	225	746	196
31	296	---	1000	460	---	1070	---	3840	---	180	1140	---
TOTAL	10800	33305	68209	20280	50170	29434	125467	69600	24489	31771	12388	12334
MEAN	348	1110	2200	654	1730	949	4182	2245	816	1025	400	411
MAX	780	3010	11400	1100	4940	1740	10300	4670	2630	4610	1140	922
MIN	149	267	889	390	400	567	857	1060	249	180	151	196
CAL YR 1983	TOTAL	445338	MEAN	1220	MAX	11400	MIN	53				
WTR YR 1984	TOTAL	488247	MEAN	1334	MAX	11400	MIN	149				

HUDSON RIVER BASIN

01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

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

DRAINAGE AREA.--1,044 mi².

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 downstream.

REMARKS.--Reservoir is formed by earth and concrete dam; storage began in March 1930; dam completed in 1930. Usable capacity for stream regulation, 29.670 bil ft³ between elevations 735.0 ft and 768.0 ft. Between elevations 768.0 ft and 771.0 ft (spillway crest) an additional 3.450 bil ft³ is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft. Capacity of 4.600 bil ft³ below elevation 735.0 ft is considered dead storage, except for extraordinary emergencies or for necessary inspection of structures. Purpose of reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and safety. Area of water surface of reservoir filled to capacity, elevation, 771.0 ft, is 41.7 mi². Discharge over spillway May 1-10, 1983 (only spillage since dam completion in 1930).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 773.29 ft May 4, 1983, contents, 40.418 bil ft³; minimum since first filling, 729.55 ft Mar. 30, 1940, contents, 2.100 bil ft³.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 769.30 ft June 1, contents, 35.760 bil ft³; minimum, 745.76 ft Feb. 15, contents, 12.268 bil ft³.

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	20.11	774	41.26

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	755.24	751.01	752.14	757.83	749.70	750.80	748.91	765.60	769.23	766.08	764.79	760.70
2	755.17	750.82	752.18	757.62	749.39	750.77	749.17	765.80	768.87	766.11	764.54	760.62
3	755.10	750.66	752.17	757.42	749.06	750.73	749.45	765.92	768.79	765.98	764.41	760.62
4	754.92	750.48	752.08	757.28	748.82	750.68	749.80	765.98	768.47	765.90	764.22	760.65
5	754.75	750.23	752.08	757.15	748.61	750.60	750.25	766.23	768.27	765.87	764.08	760.61
6	754.63	750.18	752.04	757.02	748.37	750.38	752.40	766.77	768.08	766.42	764.06	760.44
7	754.40	750.20	752.70	756.78	748.06	750.12	754.12	767.16	768.03	766.86	763.88	760.28
8	754.20	749.98	753.00	756.47	747.73	749.80	755.07	767.45	767.85	767.03	763.68	760.12
9	754.06	749.84	753.12	756.32	747.39	749.47	755.78	767.60	767.67	767.07	763.47	760.03
10	753.98	749.67	753.28	756.09	747.06	749.15	756.35	767.98	767.58	767.06	763.32	759.98
11	753.77	749.63	753.29	755.82	746.78	748.84	756.81	768.17	767.65	767.07	763.14	759.77
12	753.57	749.71	753.25	755.54	746.55	748.48	757.28	768.24	767.47	767.15	763.05	759.63
13	753.46	749.76	753.45	755.25	746.25	748.12	757.83	768.40	767.38	767.17	763.00	759.49
14	753.49	749.83	755.18	755.00	745.98	747.88	758.42	768.63	767.33	767.10	762.82	759.38
15	753.35	749.70	756.76	754.72	745.85	747.75	759.12	768.77	767.15	767.08	762.68	759.22
16	753.23	749.72	757.62	754.42	746.52	747.62	759.92	768.83	767.07	767.05	762.52	759.15
17	753.23	749.88	758.04	754.22	747.28	747.50	761.50	768.78	766.98	766.98	762.36	759.18
18	753.05	749.87	758.30	753.80	747.95	747.40	762.71	768.68	766.98	766.86	762.21	758.90
19	752.85	749.72	758.37	753.55	748.72	747.35	763.57	768.58	766.88	766.77	762.10	758.75
20	752.65	749.70	758.33	753.27	749.37	747.26	764.08	768.43	766.73	766.63	762.10	758.70
21	752.50	749.98	758.30	752.96	749.83	747.24	764.27	768.35	766.65	766.44	761.98	758.48
22	752.33	750.37	758.28	752.64	750.09	747.37	764.42	768.32	766.54	766.33	761.80	758.02
23	752.25	750.52	758.26	752.28	750.19	747.63	764.48	768.09	766.43	766.35	761.74	757.88
24	752.17	750.66	758.23	752.00	750.23	747.72	764.84	768.02	766.37	766.10	761.52	757.82
25	752.06	750.92	758.14	751.76	750.29	747.77	764.83	768.00	766.50	765.83	761.37	757.61
26	751.95	751.28	758.12	751.49	750.40	747.80	765.22	768.02	766.47	765.61	761.26	757.38
27	751.78	751.40	758.22	751.22	750.45	747.81	765.38	767.99	766.42	765.38	761.24	757.16
28	751.67	751.47	758.26	750.93	750.57	747.87	765.51	767.95	766.37	765.23	761.03	756.98
29	751.45	751.73	758.30	750.63	750.78	748.15	765.58	767.87	766.24	765.13	760.88	756.80
30	751.32	752.02	758.25	750.32	---	748.46	765.50	768.21	766.13	765.10	760.83	756.68
31	751.27	---	758.09	750.02	---	748.69	---	768.95	---	764.97	760.80	---
MEAN	753.22	750.36	755.74	754.25	748.56	748.62	759.09	767.80	767.29	766.35	762.61	759.03
MAX	755.24	752.02	758.37	757.83	750.78	750.80	765.58	768.95	769.23	767.17	764.79	760.70
MIN	751.27	749.63	752.04	750.02	745.85	747.24	748.91	765.60	766.13	764.97	760.80	756.68
*	16.94	17.86	23.52	15.82	16.65	14.88	31.66	35.75	32.11	30.76	26.36	22.23
**	-1482	+355	+2113	-2875	+331	-661	+6474	+1527	-1404	-504	-1643	-1593
CAL YR 1983	MEAN	758.54	MAX	773.23	MIN	749.63	**	+220				
WTR YR 1984	MEAN	757.78	MAX	769.23	MIN	745.85	**	+41.7				

* Contents, in billions of cubic feet, at 2400 hours on last day on 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 downstream from Stewarts Bridge, 1.1 mi west of Hadley, 1.4 mi upstream from mouth, and 1.5 mi downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.--1,055 mi².

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

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

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

REMARKS.--Records good above 10 ft³/s and fair below. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); discharge over spillway only May 1-10, 1983. 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.--From Oct. 1, 1932, to Dec. 4, 1979 discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey. Since Dec. 4, 1979, discharge computed by U.S. Geological Survey.

AVERAGE DISCHARGE.--77 years, 2,149 ft³/s, adjusted for storage since 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,500 ft³/s Mar. 28, 1913, gage height, 12.36 ft site and datum then in use; minimum, 5.3 ft³/s Mar. 17, 18, 1964, Apr. 29 to May 4, May 5, 6, 1965; minimum daily, 5.3 ft³/s Apr. 30 to May 3, 1965. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft³/s May 4, 1983, gage height, 9.68 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,140 ft³/s May 29, gage height, 8.00 ft; minimum recorded, 8.6 ft³/s Apr. 4, but may have been less during period of questionable gage height record Mar. 29 to Apr. 3; minimum daily, 8.6 ft³/s Apr. 4, but may have been less during period of questionable gage height record Mar. 29 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2540	2480	2320	4130	4090	2390	9.4	1710	7410	61	2950	2620
2	59	2500	2260	4150	4130	2420	9.0-	1460	7360	2000	2640	65
3	2570	2590	2360	3550	4050	2410	8.8	2010	7290	2040	2450	1420
4	2120	2530	2910	3130	3370	2460	8.6	2020	5760	344	2560	2470
5	2650	2560	2380	3190	3350	3100	22	1600	4550	2390	71	2720
6	2520	42	2290	3450	4100	4340	34	50	3920	2060	2530	2550
7	2540	2460	2510	4090	4130	4320	18	2290	3840	2700	2580	2510
8	2480	1980	2330	4080	4100	4500	13	2370	4690	2890	2540	2540
9	57	1950	2300	3690	4120	4530	13	2320	4330	3030	2510	103
10	2490	2020	2360	3760	4170	4530	12	2970	172	2110	2540	2630
11	2490	1980	2990	4100	3410	4510	10	3050	2920	2190	2560	2570
12	2550	2010	2490	4100	3350	4530	9.9	3060	2310	2210	63	2570
13	2520	39	2620	4090	3430	4560	9.9	4070	1990	2230	2550	2570
14	2570	2080	596	4080	4100	3950	12	4380	2040	2210	2550	1680
15	2510	2020	942	4070	4110	1560	13	4710	2020	49	2620	3360
16	48	2010	2500	4070	4100	2420	17	4640	2050	2510	2560	189
17	2600	2020	2310	4090	4090	2400	17	4690	58	2530	2540	2520
18	2470	2010	2830	4090	4100	2380	15	4580	2590	2520	2630	2460
19	2480	2030	2590	4070	4090	2390	83	4610	2440	2700	84	2450
20	2530	42	2520	4080	4110	2300	4150	3080	2050	2700	2500	2350
21	2510	2000	2420	4100	4110	2380	4180	3040	1720	2710	2420	2590
22	2540	2090	2600	4070	4090	2380	4090	4150	1760	62	2710	2920
23	35	2100	3390	4100	4110	2480	4060	3070	1700	2790	2490	1220
24	2450	1930	3110	4080	4100	2330	4060	2640	99	3070	2520	3020
25	2520	2080	1010	4050	4090	2460	4090	2410	2020	3090	2520	2890
26	2540	1890	98	4070	4130	2360	3050	2550	1690	3060	59	3120
27	2530	2070	837	4060	4070	3380	3010	2210	1750	3060	2570	2270
28	2520	2220	2570	4040	2730	1840	3000	2770	2010	3040	2550	2170
29	2550	2140	2800	4160	2890	20	3200	5790	2050	165	2540	2610
30	34	2210	3560	4090	---	11	3170	7820	2050	2010	2460	54
31	2490	---	4200	4090	---	10	---	7590	---	2070	2660	---
TOTAL	65513	58083	73003	122970	112820	85651	40394.6	103710	86639	66601	69527	65211
MEAN	2113	1936	2355	3967	3890	2763	1346	3345	2888	2148	2243	2174
MAX	2650	2590	4200	4160	4170	4560	4180	7820	7410	3090	2950	3360
MIN	34	39	98	3130	2730	10	8.6	50	58	49	59	54

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

	MEAN	CFM	IN	Observed	Adjusted
MEAN	620	2267	4483	1042	4211
CFM	0.59	2.15	4.25	0.99	3.99
IN	0.68	2.40	4.90	1.14	4.30

	Observed	Adjusted
CAL YR 1983 TOTAL	846014.5	MEAN 2318 MAX 12800 MIN 9.9
WTR YR 1984 TOTAL	950122.6	MEAN 2596 MAX 7820 MIN 8.6
		MEAN 2535 CFM 2.40 IN 32.61
		MEAN 2637 CFM 2.50 IN 34.26

HUDSON RIVER BASIN

01327750 HUDSON RIVER AT FORT EDWARD, NY

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

DRAINAGE AREA.--2,817 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft 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, Bond Creek, and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--7 years, 5,343 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft³/s May 3, 1983, gage height 28.34 ft; maximum gage height, 28.71 ft Jan. 11, 1978, ice jam; minimum discharge, 234 ft³/s July 25, 1983, minimum gage height, 19.33 ft Sept. 4, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,600 ft³/s Dec. 14, gage height, 26.67 ft; minimum, 322 ft³/s July 4, gage height, 19.61 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3250	3600	8110	8400	5700	7440	3470	9150	18100	1310	3490	3690
2	1190	3500	7610	8200	5700	6870	3780	8700	16500	2640	3580	1810
3	2870	3490	6560	7600	5650	6510	3890	8600	14700	3060	3150	2670
4	2940	3330	6560	6800	5400	5880	4650	8850	13400	1200	3080	2830
5	2970	3340	6880	6400	5070	6190	5020	9550	10600	3290	1250	3180
6	3370	1830	6140	6200	5450	7220	13700	7950	9120	4660	2490	4230
7	3360	3540	7930	6400	5730	6950	16900	8600	8880	6380	3460	3320
8	3550	3680	10000	6800	5660	7270	14400	8850	10100	9640	3100	3320
9	1380	3640	8810	6600	5340	7030	11100	9550	9370	8340	3240	1760
10	3350	3630	7750	5800	5640	6850	9420	10400	6040	7100	3090	2910
11	3450	3730	7590	6350	5290	6620	8470	10200	5210	5450	3380	2910
12	3670	4450	7610	6300	4830	6880	7700	9830	5760	5050	1600	3360
13	3360	5530	7780	6300	4720	6910	8400	10800	4730	4960	2780	3950
14	3830	5500	21900	6200	5080	7950	9050	12000	4450	4750	3300	3920
15	4320	5430	23500	6150	6280	4720	9870	12400	4520	2970	3810	3280
16	2880	5480	21500	6150	9670	4430	11100	11100	3680	3930	3730	3100
17	3550	5360	17600	6100	12400	5070	16200	10600	2750	4220	3380	2930
18	4320	5260	14500	6100	14100	4820	18000	9820	3530	4260	3370	3730
19	3820	5080	12200	6000	16200	5040	17200	9560	3760	4560	1470	3900
20	3970	3730	10400	5900	15700	4980	17500	7940	3580	4460	3160	3850
21	3580	4200	8810	5900	15000	5180	16600	7090	3150	4480	3110	3600
22	3320	8280	7570	5850	13200	6140	14600	7440	3320	2550	2890	3630
23	1410	9470	8200	5900	12100	7390	12900	6920	2670	3460	3530	2890
24	3210	8800	7200	5900	11200	7190	12500	6220	1240	4090	3620	3770
25	3750	8140	5400	6000	10900	7060	12900	6750	3480	4290	3580	3450
26	3780	9010	4000	6150	10900	6730	12100	6940	3720	4240	1600	3780
27	3680	9110	4500	6100	10100	6270	10900	6680	3730	3930	3410	3670
28	3430	7820	6600	5830	9130	6860	10500	6480	2970	4130	3290	3250
29	3710	8240	7400	6050	7710	4880	10300	10400	2850	2010	3600	3200
30	1310	8060	8000	6000	---	3770	10000	19900	3070	3010	4000	1370
31	3210	---	8400	5650	---	3490	---	20000	---	2920	3620	---
TOTAL	99790	164260	297010	196080	249850	190590	333120	299270	188980	131340	96160	97260
MEAN	3219	5475	9581	6325	8616	6148	11100	9654	6299	4237	3102	3242
MAX	4320	9470	23500	8400	16200	7950	18000	20000	18100	9640	4000	4230
MIN	1190	1830	4000	5650	4720	3490	3470	6220	1240	1200	1250	1370
CAL YR 1983	TOTAL	2186564	MEAN	5991	MAX	34100	MIN	690				
WTR YR 1984	TOTAL	2343710	MEAN	6404	MAX	23500	MIN	1190				

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY

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

DRAINAGE AREA.--2,817 mi², at gage.

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

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

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

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

ORGANIC DATA: OC--1975 (a).

PCB--1975, 1977 (a); 1978-84 (e).

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

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

SEDIMENT DATA: 1975 (b), 1980-84 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1978 to September 1979.

REMARKS.--Water-discharge data is that for Hudson River at Fort Edward (station 01327750). Samples are collected from both the navigation canal (east channel) and main (west) channel. Composite samples are from both the main channel and the navigation canal.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	PCB, TOTAL (UG/L)	IDENTIFIED AROCOR(S)	LOCATION
NOV 04	1435	3540	3	0.01	--	COMPOSITE
DEC 02	1420	7020	2	0.08	1221	COMPOSITE
DEC 14	1030	21600	26	0.20	1242	COMPOSITE
DEC 15	1145	23800	18	0.01	--	MAIN
DEC 15	1200	23800	21	77.00	1248	CANAL
DEC 16	1200	18700	10	0.08	1242	MAIN
FEB 19	1320	16700	12	0.13	1221	COMPOSITE
FEB 21	1300	15700	2	0.33	1221	MAIN
FEB 21	1315	15700	4	0.07	1221	CANAL
FEB 23	1350	10800	2	0.05	1221	COMPOSITE
APR 06	1315	17400	17	0.10	1221, 1016	MAIN
APR 06	1330	17400	14	0.02	1232	CANAL
APR 07	1350	17200	10	0.02	1221, 1016	COMPOSITE
APR 16	1500	11700	2	0.02	1221, 1016	MAIN
APR 16	1515	11700	3	0.03	1221, 1016	CANAL
APR 17	1400	16800	2	0.01	--	MAIN
APR 17	1415	16800	5	0.02	1232	CANAL
APR 19	1330	16400	4	0.02	1232	COMPOSITE
APR 25	1100	12400	3	0.02	1232	MAIN
APR 25	1115	12400	9	0.02	1232	CANAL
MAY 10	0950	8670	5	0.01	--	CANAL
MAY 10	0930	8670	3	0.01	--	MAIN
MAY 24	1230	5820	18	0.30	1232	COMPOSITE
MAY 29	1650	11500	4	0.01	--	COMPOSITE
MAY 30	1220	20000	9	0.04	1232	COMPOSITE
MAY 30	1630	20200	8	0.12	1221	MAIN
MAY 30	1645	20200	8	0.09	1232	CANAL
MAY 31	1200	19600	7	0.01	--	MAIN
MAY 31	1215	19600	6	0.01	--	CANAL
JUN 01	1135	17800	10	0.01	--	COMPOSITE
JUN 20	1215	3720	23	0.43	1232	COMPOSITE
JUL 12	1350	4760	12	0.01	--	COMPOSITE
JUL 24	1615	4860	11	0.05	1016, 1221	COMPOSITE
AUG 20	1215	3750	4	0.06	1016, 1221	MAIN
AUG 20	1230	3750	7	0.06	1016, 1221	CANAL
AUG 24	1535	3870	6	0.02	1221, 1016	COMPOSITE
AUG 31	1750	4060	8	9.00	1221, 1016	COMPOSITE
SEP 15	1835	3220	9	0.06	1016	COMPOSITE
SEP 26	1650	4350	6	0.01	1016	COMPOSITE

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 upstream from bridge on Highway 313 at Arlington and 0.9 mi downstream from Warm Brook.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--October 1928 to July 1984 (discontinued).

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 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 poor. 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.--55 years, 339 ft³/s, 30.29 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 14	1600	2680	8.17	May 30	1200	3910	8.96

Minimum discharge, 62 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	94	363	203	150	401	303	734	2270			
2	93	92	307	175	140	367	363	535	1400			
3	86	92	275	175	164	348	420	443	966			
4	75	119	244	177	301	328	447	1020	701			
5	82	160	239	183	296	306	582	1080	555			
6	240	255	242	195	239	314	1520	722	469			
7	150	208	1220	207	205	288	1720	551	442			
8	115	173	912	197	176	251	1320	614	376			
9	93	150	507	180	160	242	840	979	319			
10	83	139	410	160	150	221	645	690	271			
11	77	210	352	180	200	190	555	533	241			
12	76	378	303	150	348	210	604	1070	215			
13	166	255	1170	140	309	185	753	1330	189			
14	161	190	2510	136	420	180	927	1330	201			
15	128	165	2030	128	1090	190	1090	1080	190			
16	104	279	1340	110	1800	223	1130	817	158			
17	94	415	899	105	1470	266	1370	710	143			
18	90	292	610	99	1510	240	1500	587	147			
19	85	220	491	97	1390	227	1330	514	165			
20	82	192	357	115	1270	236	1320	488	159			
21	80	612	315	120	1040	354	1470	467	135			
22	79	674	290	130	748	449	1040	403	121			
23	82	431	270	145	608	407	791	428	111			
24	215	333	250	170	672	332	959	625	104			
25	183	1200	240	425	792	315	1040	457	178			
26	135	1040	230	322	1000	320	848	401	154			
27	124	593	220	238	673	303	831	478	118			
28	119	414	209	213	543	310	811	445	102			
29	110	482	371	188	485	317	811	2080	93			
30	101	465	306	170	---	290	783	3690	94			
31	96	---	254	160	---	271	---	3230	---			
TOTAL	3469	10322	17736	5393	18349	8881	28123	28531	10787			
MEAN	112	344	572	174	633	286	937	920	360			
MAX	240	1200	2510	425	1800	449	1720	3690	2270			
MIN	65	92	209	97	140	180	303	401	93			
CFSM	.74	2.26	3.76	1.15	4.16	1.88	6.16	6.05	2.37			
IN.	.85	2.53	4.34	1.32	4.49	2.17	6.88	6.98	2.64			

CAL YR 1983 TOTAL 130878 MEAN 359 MAX 2530 MIN 55 CFSM 2.36 IN 32.03

HUDSON RIVER BASIN

41

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY

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 east of Schuylerville, 0.8 mi downstream from Batten Kill, and 1.0 mi downstream from Champlain (Barge) Canal lock 5.

DRAINAGE AREA.--3,440 mi² approximately.

PERIOD OF RECORD.--Water years 1977 to current year.

CHEMICAL DATA: 1980 (b), 1981 (c), 1982-84 (e).

MINOR ELEMENTS DATA: 1977 (e), 1978-79 (d), 1980 (b).

PESTICIDE DATA: 1977 (e), 1978-79 (d).

ORGANIC DATA: PCB--1977 (e), 1978-80 (d), 1981-84 (e).

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

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

SEDIMENT DATA: 1980 (d), 1981-84 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1977 to September 1979.

REMARKS.--Water discharge estimated from wire-weight gage located at bridge. Streamflow affected by regulation for power generation and diversion for canal operations.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	PCB, TOTAL (UG/L)	IDENTIFIED AROCLO(S)
OCT 14	1700	4370	5	0.06	1016
NOV 04	1515	3370	3	0.25	1221
DEC 02	1515	9420	2	0.06	1232
DEC 14	1130	25200	93	0.09	1248
DEC 15	1330	29200	35	0.09	1248
DEC 16	1315	25000	15	0.03	1248
FEB 16	1100	17500	60	<0.01	--
FEB 19	1345	20300	17	0.14	1221
FEB 21	1415	18500	5	0.12	1221
FEB 23	1430	14900	4	0.20	1221, 1016
MAR 21	0545	6940	1	0.01	1221, 1016
APR 06	1415	15600	42	0.08	1221, 1016
APR 07	1430	19800	19	0.06	1221, 1016
APR 16	1615	14900	53	0.02	1221, 1016
APR 17	1500	18500	13	0.14	1232
APR 18	1515	20800	22	0.03	1232
APR 19	1430	19600	12	0.01	1232
APR 25	1200	15500	7	0.02	1232
MAY 10	1245	12700	7	0.04	1232
MAY 24	1345	8650	4	0.25	1232
MAY 29	1730	18500	102	0.05	1016
MAY 30	1115	29100	135	0.76	1016
MAY 30	1530	30600	156	0.40	1232
MAY 31	1330	31100	92	0.26	1232
JUN 01	1215	26000	42	0.14	1232
JUN 20	1115	4390	5	0.20	1232
JUL 12	1445	7280	--	0.87	1016, 1221
JUL 24	1515	4200	13	0.07	1016, 1221
AUG 20	1330	2660	4	0.10	1221, 1016
AUG 24	1545	3980	3	0.09	1221, 1016
AUG 31	1655	5600	19	0.07	1221, 1016
SEP 15	1900	3660	4	0.06	1016
SEP 26	1530	4370	3	0.01	1016

HUDSON RIVER BASIN

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY

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

DRAINAGE AREA.--90.0 mi².

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 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.--57 years, 137 ft³/s, 20.67 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0700	1,580	5.92	May 29	1645	*2,050	*6.79
Apr. 6	0415	1,810	6.34				

Minimum discharge, 29 ft³/s Oct. 1, gage height, 1.30 ft; minimum daily discharge, 30 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	48	220	160	94	170	267	183	485	84	53	154
2	54	46	172	140	94	160	311	161	329	84	50	94
3	44	49	140	140	110	150	325	150	253	78	51	112
4	41	59	120	150	170	140	314	581	217	78	47	109
5	57	58	141	170	140	130	526	559	183	160	44	85
6	103	64	169	160	120	130	1420	342	163	281	42	68
7	67	60	913	140	110	120	665	251	254	619	48	59
8	55	53	475	130	110	120	430	308	176	337	62	53
9	48	50	285	120	110	110	324	491	141	172	49	50
10	42	49	222	120	120	100	275	330	123	127	48	48
11	50	85	186	110	120	98	238	246	112	166	58	50
12	50	174	163	100	140	96	226	474	101	270	53	78
13	67	113	649	100	150	94	214	461	95	136	48	60
14	107	88	1370	98	170	96	320	507	149	101	43	60
15	85	81	691	96	350	110	394	374	128	85	42	64
16	63	153	420	94	950	120	456	280	102	117	38	75
17	52	194	303	92	677	159	593	240	93	117	44	63
18	51	135	220	92	722	147	568	209	103	135	40	56
19	53	106	170	90	594	145	381	191	185	150	37	50
20	46	91	150	90	505	174	305	177	127	99	45	46
21	44	154	150	90	393	228	262	176	98	82	40	42
22	43	168	170	94	300	386	232	158	86	80	35	39
23	52	124	160	100	256	396	205	162	79	71	60	40
24	110	121	140	110	273	290	332	205	79	63	55	39
25	90	441	130	140	289	280	375	157	359	56	44	38
26	82	338	130	190	374	280	280	139	210	52	39	39
27	70	214	140	130	269	270	222	134	131	80	35	38
28	59	172	180	110	200	267	192	205	118	121	33	38
29	56	375	300	100	180	271	180	1360	104	83	34	39
30	50	335	250	98	---	225	172	1630	91	69	437	37
31	51	---	200	96	---	211	---	876	---	59	391	---
TOTAL	1872	4198	9129	3650	8090	5673	11004	11717	4874	4212	2145	1823
MEAN	60.4	140	294	118	279	183	367	378	162	136	69.2	60.8
MAX	110	441	1370	190	950	396	1420	1630	485	619	437	154
MIN	30	46	120	90	94	94	172	134	79	52	33	37
CFSM	.67	1.56	3.27	1.31	3.10	2.03	4.08	4.20	1.80	1.51	.77	.68
IN.	0.77	1.74	3.77	1.51	3.34	2.34	4.55	4.84	2.01	1.74	0.89	0.75

CAL YR 1983	TOTAL	64771	MEAN	177	MAX	1370	MIN	26	CFSM	1.97	IN.	26.77
WTR YR 1984	TOTAL	68387	MEAN	187	MAX	1630	MIN	30	CFSM	2.08	IN.	28.27

HUDSON RIVER BASIN

43

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 Stillwater Bridge Road in Stillwater, 0.4 mi upstream from Champlain (Barge) Canal lock 4, and 0.9 mi upstream from Hoosic River.

DRAINAGE AREA.--3,773 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 78.99 ft National Geodetic Vertical Datum of 1929. Prior to January 1978, nonrecording gages in upper pool of Champlain (Barge) Canal lock 4, at Barge Canal datum.

REMARKS.--Water stage records are good above 3,000 ft³/s and fair below 3,000 ft³/s. Streamflow affected by regulation for power generation and diversion for canal operations.

AVERAGE DISCHARGE.--7 years, 6,610 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,600 ft³/s May 4, 1983, gage height, 8.69 ft; minimum daily, 900 ft³/s July 25, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,900 ft³/s May 31, gage height, 8.14 ft; minimum daily, 2,090 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3590	4000	10600	8250	5940	9670	5930	11300	29500	2990	3710	5500
2	2530	3780	9740	8120	5730	8610	6120	10100	23500	2610	3970	3950
3	2090	3850	8700	8010	5760	8080	6240	9680	19700	3820	3910	3240
4	3410	3710	7880	7520	6300	7480	6710	11600	17300	2680	3600	3740
5	3290	3910	8380	6940	6420	7460	7260	12700	14000	2990	2440	4120
6	3850	2820	7800	6870	6300	8310	14600	11700	12200	5250	2100	4740
7	3620	3190	14000	7030	6450	8160	21100	9960	11000	8760	3650	4460
8	3940	4110	14500	7180	6220	8170	19200	10700	11800	12500	3990	4340
9	2870	4100	12600	6830	6100	7840	15500	11900	11400	10400	3600	3110
10	2530	4020	10400	6410	5960	7560	12800	12600	8910	9030	3810	2870
11	3920	4200	9890	6450	6230	7460	11100	12200	5900	7200	3800	3600
12	3770	4880	9530	6410	6240	6840	9980	12600	7290	7150	3130	3960
13	3900	6000	13600	6320	6440	6850	10200	14100	5710	6690	2940	4230
14	4100	5790	27100	6290	7210	6820	11500	16200	5670	6240	3690	4550
15	4670	5950	32900	6310	11000	6060	13200	16500	5520	4900	4410	4170
16	4110	6040	27800	6330	17200	5140	14600	14900	5150	4480	4340	3920
17	3290	6210	23000	5980	18800	5990	19000	13600	3990	5250	4130	3130
18	4360	6230	18600	6060	19500	5910	22400	12500	3550	5360	4010	4190
19	4290	5760	15700	5990	21800	5900	21400	11900	5240	5790	2740	4420
20	4250	4880	12900	6140	20500	5930	20300	10300	4930	5630	2720	4380
21	3810	5000	11000	5710	19400	6770	20800	9100	4190	5450	3950	4040
22	3780	8890	9430	5620	17200	10200	18500	9260	3930	4120	3270	4220
23	2430	10400	10500	5720	15500	11300	16200	9000	3660	3630	3910	3430
24	2810	9960	10100	5750	14300	10200	15300	9000	2750	4630	4100	4010
25	4100	11600	10300	6120	13700	9970	15900	8520	3290	4820	4340	3790
26	4240	12900	6420	6560	14400	9700	15100	8490	4740	4840	2740	4110
27	4210	12100	5280	6510	13200	8720	13800	8350	4700	4480	2980	4110
28	4010	9990	5940	6270	11800	9100	12900	7970	4330	4740	3810	3740
29	4340	11700	7870	6240	10200	7720	12300	13700	3810	3450	3810	3630
30	2450	11200	8600	6120	---	6160	11900	29000	3890	3100	6180	2590
31	2730	---	8710	6040	---	5900	---	35800	---	3510	6110	---
TOTAL	111290	197170	389770	202100	325800	239980	421840	395230	251550	166490	115890	118290
MEAN	3590	6572	12570	6519	11230	7741	14060	12750	8385	5371	3738	3943
MAX	4670	12900	32900	8250	21800	11300	22400	35800	29500	12500	6180	5500
MIN	2090	2820	5280	5620	5730	5140	5930	7970	2750	2610	2100	2590
CAL YR 1983	TOTAL	2732330	MEAN	7486	MAX	44100	MIN	900				
WTR YR 1984	TOTAL	2935400	MEAN	8020	MAX	35800	MIN	2090				

HUDSON RIVER BASIN

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

WATER-QUALITY RECORDS

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

CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c), 1980 (b), 1981 (c), 1982-84 (e).

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

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

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

PCB--1977-84 (e).

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

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

SEDIMENT DATA: 1977 (d), 1978 (a), 1981-84 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

REMARKS.--No sediment data Dec. 20 to Feb. 15 due to river ice conditions. Other missing periods due to observer not collecting samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 202 mg/L Dec. 14, 1983; minimum daily mean, 1 mg/L on many days each year.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 14,800 tons Dec. 14, 1983; minimum daily 4.0 Sept. 7, 1980.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 202 mg/L Dec. 14; minimum daily mean, 1 mg/L on Nov. 6.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 14,800 tons Dec. 14; minimum daily, 7.6 tons Nov. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	PCB, TOTAL (UG/L)	IDENTIFIED AROCLO(S)
OCT 14	1600	3950	61	0.03	1016
NOV 04	1615	3380	4	0.25	1221
DEC 02	1645	9230	4	0.04	1232
DEC 14	1215	28000	182	0.08	1248
DEC 15	1415	33000	70	0.19	1242
DEC 16	1415	28000	28	0.09	1248
FEB 16	1530	17600	62	<0.01	--
FEB 19	1430	21800	27	0.30	1221, 1016
FEB 21	1530	19300	9	0.20	1221, 1016
FEB 23	1515	15300	1	0.01	--
APR 05	1615	6950	2	0.04	1232
APR 06	1500	16100	28	0.07	1232
APR 07	1515	21300	36	0.25	1232
APR 16	1210	14200	7	0.03	1232
APR 16	1215	14200	7	0.05	1232
APR 16	1715	16200	16	0.05	1232
APR 17	1545	19700	33	0.15	1232
APR 18	1430	22300	31	0.03	1232
APR 19	1515	21200	15	0.22	1232
APR 19	1520	21200	--	0.04	1232
APR 25	1300	16000	5	0.01	1232
MAY 10	1345	12900	11	0.11	1232
MAY 24	1530	8850	5	0.09	1232
MAY 29	1815	17600	111	0.17	1016
MAY 30	1030	28700	154	0.79	1232
MAY 30	1035	28700	--	0.50	1232
MAY 30	1445	31600	135	0.49	1232
MAY 30	1445	31600	--	0.62	1232
MAY 31	1245	36700	--	0.27	1232
JUN 01	1245	29300	45	0.46	1232
JUN 20	1030	4930	10	0.25	1221, 1242
JUL 12	1530	6840	--	0.11	1232
JUL 24	1430	4330	7	0.06	1016, 1221
AUG 20	1415	2940	4	0.11	1221, 1016
AUG 24	1630	4040	3	0.01	1221, 1016
AUG 24	1635	4040	--	0.01	1221, 1016
AUG 31	1630	5890	29	0.06	1221, 1016
SEP 15	1745	3990	5	0.06	1016

HUDSON RIVER BASIN

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01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11	107	7	76	7	200			---	---	---	---
2	9	61	8	82	4	105			---	---	---	---
3	2	11	2	21	3	70			---	---	---	---
4	3	28	3	30	7	149			---	---	---	---
5	4	36	5	53	4	91			---	---	---	---
6	11	114	1	7.6	7	147			---	---	---	---
7	5	49	4	34	37	1400			---	---	---	---
8	4	43	5	55	35	1370			---	---	---	---
9	23	178	3	33	11	374			---	---	---	---
10	6	41	2	22	7	197			---	---	---	---
11	3	32	3	34	5	134			---	---	---	---
12	2	20	5	66	76	1960			---	---	---	---
13	4	42	5	81	136	4990			---	---	---	---
14	5	55	3	47	202	14800			---	---	---	---
15	5	63	5	80	121	10700			---	---	---	---
16	17	189	5	82	33	2480			52	2410	---	---
17	6	53	5	84	18	1120			60	3050	8	129
18	10	118	5	84	8	402			40	2110	7	112
19	12	139	3	47	7	297			34	2000	9	143
20	3	34	6	79	---	---			33	1830	30	480
21	5	51	3	40	---	---			10	524	9	165
22	3	31	25	600	---	---			7	325	14	386
23	6	39	15	421	---	---			4	167	8	244
24	3	23	12	323	---	---			3	116	5	138
25	4	44	18	564	---	---			5	185	5	135
26	3	34	42	1460	---	---			13	505	10	262
27	3	34	16	523	---	---			---	---	14	330
28	3	32	7	189	---	---			---	---	13	319
29	8	94	13	411	---	---			---	---	11	229
30	3	20	13	393	---	---			---	---	5	83
31	6	44	---	---	---	---			---	---	7	112
TOTAL	---	1859	---	6021.6	---	40986			---	13222	---	3267

DAY	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)			
APRIL			MAY			JUNE			JULY			AUGUST		SEPTEMBER	
1	9	144	5	153	47	3740	---	---	---	---	---	---			
2	6	99	4	109	---	---	---	---	---	---	---	---			
3	6	101	10	261	---	---	---	---	3	32	---	---			
4	5	91	12	376	---	---	---	---	3	29	---	---			
5	5	98	16	549	---	---	---	---	3	20	---	---			
6	30	1320	13	411	---	---	---	---	3	17	---	---			
7	64	3650	21	565	---	---	---	---	9	89	---	---			
8	26	1350	8	231	2	64	---	---	3	32	---	---			
9	11	460	9	289	2	62	---	---	3	29	---	---			
10	8	276	11	374	3	72	---	---	5	51	---	---			
11	6	180	10	329	4	64	---	---	5	51	---	---			
12	6	162	14	476	4	79	---	---	2	17	---	---			
13	8	220	21	799	22	339	---	---	3	24	---	---			
14	10	310	18	787	13	199	---	---	3	30	---	---			
15	13	463	11	490	7	104	---	---	2	24	5	56			
16	17	670	8	322	5	70	---	---	11	129	---	---			
17	42	2150	---	---	41	442	---	---	3	33	---	---			
18	38	2300	---	---	3	29	---	---	5	54	---	---			
19	27	1560	---	---	6	85	---	---	4	30	---	---			
20	6	329	---	---	7	93	6	91	3	22	---	---			
21	9	505	---	---	4	45	3	44	4	43	---	---			
22	12	599	---	---	4	42	3	33	5	44	---	---			
23	3	131	---	---	4	40	3	29	---	---	---	---			
24	6	248	---	---	2	15	6	75	---	---	---	---			
25	5	215	---	---	4	36	---	---	---	---	---	---			
26	4	163	---	---	6	77	---	---	---	---	4	44			
27	4	149	---	---	4	51	---	---	---	---	---	---			
28	5	174	---	---	7	82	---	---	---	---	---	---			
29	4	133	86	3540	6	62	---	---	---	---	---	---			
30	3	96	145	11400	---	---	---	---	---	---	---	---			
31	---	---	115	11100	---	---	---	---	29	478	---	---			
TOTAL	---	18346	---	32561	---	5892	---	272	---	1278	---	100			

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 downstream from Sherman Brook and 2.7 mi east of junction of U.S. Highway 7 and State Highway 2 in Williamstown.

DRAINAGE AREA.--126 mi².

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, Corps of Engineers datum. Prior to June 6, 1979, at site 1.2 mi downstream at different datum.

REMARKS.--Records good except those for winter period and period of doubtful gage-height record, Apr. 10 to June 12, which are fair. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 16 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--44 years, 275 ft³/s, 29.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s Dec. 31, 1948, gage height, 14.85 ft, former site and datum, from rating curve extended above 4,300 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 5.8 ft³/s Aug. 30, 31, Oct. 26, 1940; minimum daily, 24 ft³/s Sept. 9, 1980.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0215	3140	8.76	Apr. 5	2100	3170	8.78
Feb. 16	0900	2500	8.26	aMay 30	a0015	*4670	9.82

a About.

Minimum discharge, 35 ft³/s Oct. 12; minimum daily, 42 ft³/s Oct. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	56	300	220	110	371	330	350	2300	100	92	69
2	64	55	246	200	105	331	413	311	1260	111	90	64
3	54	58	220	175	110	305	504	284	910	110	69	80
4	52	67	189	170	310	277	467	850	671	100	66	82
5	53	71	194	162	279	255	1610	627	548	103	62	72
6	69	76	237	164	219	277	2160	467	467	217	66	67
7	51	70	1180	157	186	250	1320	397	461	836	62	63
8	49	68	492	146	150	223	840	470	404	440	60	63
9	48	66	322	135	140	213	654	627	344	242	65	55
10	45	60	287	136	145	194	592	448	305	185	61	47
11	42	91	238	133	170	180	547	391	273	308	90	60
12	42	147	214	125	275	175	736	958	168	665	79	79
13	67	100	1710	120	288	160	841	752	149	265	78	74
14	69	79	2370	120	422	155	1000	1090	176	185	64	84
15	60	75	1220	115	1270	160	1200	701	168	150	68	92
16	50	256	832	110	2240	185	1310	576	146	152	71	79
17	43	271	571	110	1360	293	1420	487	136	150	64	75
18	47	168	434	105	1490	257	1250	441	141	375	60	66
19	45	133	347	105	1110	240	1180	397	190	316	65	61
20	45	115	220	100	1290	273	962	350	165	202	109	61
21	44	413	198	90	893	420	853	333	144	156	76	61
22	44	303	215	84	663	529	645	294	126	143	70	58
23	45	198	225	90	552	413	566	488	119	136	75	57
24	163	187	200	110	893	329	727	441	113	126	80	57
25	107	898	185	240	924	335	790	316	141	114	74	57
26	84	553	180	195	1080	334	625	359	131	108	66	57
27	79	359	175	170	643	333	544	379	114	114	57	54
28	76	290	200	150	510	328	478	442	104	142	57	54
29	68	457	390	135	447	300	428	3210	99	117	57	54
30	56	419	314	132	---	288	385	3910	100	110	62	51
31	55	---	248	131	---	281	---	3200	---	102	82	---
TOTAL	1869	6159	14353	4335	18274	8664	25377	24346	10573	6580	2197	1953
MEAN	60.3	205	463	140	630	279	846	785	352	212	70.9	65.1
MAX	163	898	2370	240	2240	529	2160	3910	2300	836	109	92
MIN	42	55	175	84	105	155	330	284	99	100	57	47
CFSM	.48	1.63	3.68	1.11	5.00	2.21	6.71	6.23	2.79	1.68	.56	.52
IN.	.55	1.82	4.24	1.28	5.40	2.56	7.49	7.19	3.12	1.94	.65	.58

CAL YR 1983 TOTAL 109880 MEAN 301 MAX 2420 MIN 29 CFSM 2.39 IN 32.44
WTR YR 1984 TOTAL 124680 MEAN 341 MAX 3910 MIN 42 CFSM 2.71 IN 36.81

01333000 GREEN RIVER AT WILLIAMSTOWN, MA

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

DRAINAGE AREA.--42.6 mi².

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, from topographic map.

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

AVERAGE DISCHARGE.--35 years, 83.6 ft³/s, 26.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft³/s Dec. 21, 1973, gage height, 5.68 ft in gage well, from rating curve extended above 750 ft³/s on basis of slope-area measurement at gage height 4.94 ft; maximum gage height, 6.35 ft Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft³/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, from floodmarks.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 7	0115	859	3.63	Feb. 15	2330	1140	3.97
Dec. 13	1715	1170	4.02	May 30	0930	*1970	*4.89

Minimum discharge, 6.1 ft³/s Oct. 1.

REVISIONS.--Revised peak discharges for water years 1977-83 and revised daily discharges, in cubic feet per second, for high-water periods in water year 1979 are given below. These figures supersede those published in the reports for 1977-83.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 30, 1977	1915	859	3.63	May 25, 1979	1500	974	3.78
Oct. 1, 1977	2215	859	3.63	Nov. 26, 1979	2015	1230	4.09
Oct. 17, 1977	0745	1300	4.17	Mar. 18, 1980	0815	919	3.71
Nov. 26, 1977	0800	912	3.70	Mar. 22, 1980	0115	*1630	4.55
Dec. 14, 1977	2330	982	3.79	Apr. 10, 1980	0545	1600	4.52
Dec. 25, 1977	1245	823	3.58	Feb. 20, 1981	1930	*1560	4.47
Jan. 9, 1978	1345	1070	3.90	Feb. 4, 1982	0200	966	3.77
Jan. 26, 1978	1445	*1410	4.30	Apr. 4, 1982	2130	990	3.80
Mar. 14, 1978	1845	852	3.62	Apr. 18, 1982	0345	*1610	4.53
Mar. 27, 1978	1345	896	3.68	June 29, 1982	1715	1070	3.90
Jan. 2, 1979	1730	1690	4.61	Apr. 19, 1983	2100	*1980	4.90
Mar. 6, 1979	1730	*2040	4.95				

* Annual maximum.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Jan. 2, 1979.....	1330	Mar. 5, 1979.....	1050	Mar. 6, 1979.....	1730	Mar. 7, 1979.....	1200
Month	Total	Mean	Max	Min	Cfsm	In	
January 1979	6788	219	1330	68	5.14	5.93	
March 1979	11643	376	1730	78	8.83	10.17	
Wtr Yr 1979	36997.9	101	1730	4.4	2.37	32.31	
Cal Yr 1979	42884.3	117	1730	4.4	2.75	37.45	

HUDSON RIVER BASIN

01333000 GREEN RIVER AT WILLIAMSTOWN, MA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	11	101	80	37	137	113	99	530	25	16	12
2	11	10	82	74	36	121	135	86	361	23	15	10
3	8.8	10	72	68	38	108	151	77	266	24	14	18
4	7.4	12	66	62	130	94	141	208	206	22	14	17
5	7.7	12	61	58	68	87	307	148	162	23	16	13
6	11	13	127	54	59	98	483	125	138	36	17	12
7	8.6	13	427	51	52	77	367	114	138	183	16	11
8	6.9	12	188	49	47	67	261	125	113	75	19	10
9	6.7	12	137	45	47	63	202	144	96	52	14	9.4
10	6.7	12	119	42	50	56	173	120	83	43	13	8.8
11	6.7	24	98	43	89	56	154	109	74	58	22	11
12	8.1	34	88	36	183	49	153	230	65	51	15	17
13	17	23	732	37	149	45	159	214	59	37	13	11
14	12	19	654	37	265	45	216	411	61	32	13	16
15	11	17	417	35	649	53	278	289	52	28	21	14
16	9.5	41	284	33	853	54	370	234	47	29	14	13
17	9.4	43	206	33	504	88	364	186	43	27	15	12
18	9.1	33	161	34	509	62	345	157	44	49	13	11
19	8.6	28	132	32	393	59	272	136	46	38	13	10
20	8.2	25	91	30	460	68	246	123	38	29	22	9.6
21	7.7	73	74	29	320	152	208	116	34	26	14	9.3
22	8.3	54	80	27	239	201	169	97	31	25	13	8.4
23	9.0	42	84	28	196	139	151	106	29	23	19	8.1
24	32	48	75	32	321	114	193	109	28	21	15	8.2
25	20	284	58	80	308	123	190	84	35	19	13	7.8
26	15	144	56	61	328	121	157	86	28	18	12	7.9
27	14	112	53	50	230	118	140	91	25	24	11	7.7
28	13	101	60	46	203	119	129	120	24	26	11	7.0
29	12	176	170	44	175	112	121	1040	23	20	10	7.2
30	11	126	110	43	---	94	112	1500	29	18	11	7.3
31	11	---	90	43	---	92	---	1100	---	17	20	---
TOTAL	334.5	1564	5153	1416	6938	2872	6460	7784	2908	1121	464	324.7
MEAN	10.8	52.1	166	45.7	239	92.6	215	251	96.9	36.2	15.0	10.8
MAX	32	284	732	80	853	201	483	1500	530	183	22	18
MIN	6.7	10	53	27	36	45	112	77	23	17	10	7.0
CFSM	.25	1.22	3.90	1.07	5.61	2.17	5.05	5.89	2.28	.85	.35	.25
IN.	.29	1.37	4.50	1.24	6.06	2.51	5.64	6.80	2.54	.98	.41	.28
CAL YR 1983	TOTAL	35185.9	MEAN	96.4	MAX	958	MIN	5.2	CFSM	2.26	IN	30.72
WTR YR 1984	TOTAL	37339.2	MEAN	102	MAX	1500	MIN	6.7	CFSM	2.39	IN	32.61

HUDSON RIVER BASIN

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01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY

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

DRAINAGE AREA.--56.1 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 National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--33 years, 95.3 ft³/s, 23.07 in/yr.

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

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1515	2,030	5.66	May 29	2000	2,950	6.40
Feb. 15	2315	1,500	5.11	May 30	0900	*4,660	*7.51

Minimum discharge, 4.3 ft³/s Oct. 11, 22, 23; minimum gage height, 1.12 ft Oct. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	4.8	124	70	45	183	174	108	622	26	27	32
2	6.3	4.7	100	60	50	157	200	98	434	24	25	26
3	5.7	5.3	88	50	58	133	221	90	321	23	23	41
4	5.5	6.1	80	46	200	119	211	248	251	24	22	37
5	5.7	6.4	72	47	90	110	406	205	200	28	20	31
6	8.8	6.9	145	45	70	100	589	171	170	53	19	26
7	5.8	6.4	629	41	60	90	503	152	159	397	19	24
8	5.1	6.4	267	40	56	80	374	152	128	160	22	21
9	5.0	6.0	191	39	54	74	288	174	109	109	18	20
10	4.7	6.0	156	38	60	66	240	143	93	87	17	18
11	4.9	12	126	37	131	60	205	129	82	153	179	19
12	5.3	25	112	36	166	54	189	224	71	147	81	27
13	6.8	18	1280	35	184	54	183	231	65	94	54	19
14	6.4	14	1050	35	389	54	216	445	71	77	43	26
15	6.0	13	582	34	873	60	259	335	58	66	109	23
16	5.9	25	389	34	969	66	341	288	50	79	70	22
17	5.8	32	275	33	575	108	344	236	44	69	70	19
18	5.7	24	208	32	640	81	342	196	43	250	54	18
19	5.5	21	164	32	468	75	297	171	44	155	49	17
20	5.4	19	120	31	490	83	302	150	37	110	63	15
21	5.1	55	100	31	371	216	261	143	33	89	46	15
22	4.7	44	80	30	295	346	214	120	30	78	38	14
23	5.3	33	70	35	246	246	189	131	27	68	53	13
24	15	34	60	60	393	192	209	140	26	59	45	13
25	9.1	253	56	120	354	198	217	109	36	48	40	12
26	7.3	143	66	100	364	193	187	111	27	41	34	13
27	6.8	106	80	74	281	184	163	112	24	50	30	12
28	6.3	94	100	62	255	184	146	152	23	54	27	11
29	5.3	204	140	52	236	173	131	1500	24	40	25	11
30	5.1	165	96	49	---	146	119	2240	40	35	24	11
31	5.1	---	80	47	---	144	---	1190	---	31	55	---
TOTAL	191.0	1393.0	7086	1475	8423	4029	7720	9894	3342	2724	1401	606
MEAN	6.16	46.4	229	47.6	290	130	257	319	111	87.9	45.2	20.2
MAX	15	253	1280	120	969	346	589	2240	622	397	179	41
MIN	4.7	4.7	56	30	45	54	119	90	23	23	17	11
CFSM	.11	.83	4.08	.85	5.17	2.32	4.58	5.69	1.98	1.57	.81	.36
IN.	0.13	0.92	4.70	0.98	5.59	2.67	5.12	6.56	2.22	1.81	0.93	0.40

CAL YR 1983	TOTAL	42488.1	MEAN	116	MAX	1280	MIN	4.0	CFSM	2.07	IN.	28.17
WTR YR 1984	TOTAL	48284.0	MEAN	132	MAX	2240	MIN	4.7	CFSM	2.35	IN.	32.02

HUDSON RIVER BASIN

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 downstream from Paran Creek and 1.4 mi south of North Bennington.

DRAINAGE AREA.--111 mi².

PERIOD OF RECORD.--Discharge: June 1931 to current year.
Water-quality records: Water years 1953-54.

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

GAGE.--Water-stage recorder. Elevation of gage is 525 ft, 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.--52 years, 223 ft³/s.

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

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

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 14	0330	2340	6.05	July 7	0415	2060	5.66
May 30	1230	*3390	7.36				

Minimum daily discharge, 42 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	55	271	140	88	310	259	394	1210	119	98	189
2	53	55	223	120	84	275	302	330	810	109	92	117
3	50	57	199	120	98	254	341	290	626	146	90	111
4	46	81	176	120	218	236	346	738	519	142	85	113
5	55	83	172	125	192	218	581	709	436	130	81	103
6	112	97	191	134	148	244	1290	486	382	439	78	89
7	72	89	1030	127	122	214	944	384	382	1440	79	81
8	58	81	496	117	110	177	632	369	317	597	89	75
9	51	72	327	109	105	166	491	519	268	334	78	71
10	48	67	271	109	96	149	442	399	235	235	74	67
11	45	93	232	110	144	143	407	335	214	296	125	73
12	45	190	205	120	259	179	495	750	185	940	112	104
13	69	122	1350	100	220	121	573	800	168	425	87	81
14	81	95	1780	90	390	130	659	976	237	278	79	101
15	73	85	965	84	1010	153	713	672	196	212	83	109
16	59	194	674	75	1320	158	863	544	162	202	81	94
17	54	261	488	70	833	270	993	473	147	207	97	81
18	50	160	390	68	1080	236	1050	409	149	659	79	73
19	47	121	323	65	848	207	1010	366	165	522	76	69
20	46	109	222	68	862	218	945	334	140	319	142	66
21	45	568	195	80	649	409	838	330	123	236	94	62
22	45	395	190	90	503	516	614	285	113	204	77	59
23	47	249	180	95	432	412	543	313	105	174	147	58
24	150	236	170	140	598	300	654	399	102	156	134	57
25	108	1030	155	282	640	273	671	288	170	134	111	56
26	80	582	150	194	736	257	570	255	135	122	85	63
27	70	384	145	123	502	218	523	318	111	141	74	65
28	66	298	140	111	432	214	478	312	105	172	70	58
29	63	391	240	100	389	252	443	1820	96	133	65	57
30	59	362	200	97	---	228	409	2890	148	116	115	56
31	57	---	170	93	---	222	---	2430	---	111	392	---
TOTAL	1946	6662	11920	3476	13108	7359	19079	19917	8156	9450	3169	2458
MEAN	62.8	222	385	112	452	237	636	642	272	305	102	81.9
MAX	150	1030	1780	282	1320	516	1290	2890	1210	1440	392	189
MIN	42	55	140	65	84	121	259	255	96	109	65	56

CAL YR 1983 TOTAL 90926 MEAN 249 MAX 1780 MIN 32
WTR YR 1984 TOTAL 106700 MEAN 292 MAX 2890 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 upstream from Case Brook, 1.2 mi downstream from Walloomsac River, and 1.2 mi southeast of Eagle Bridge.

DRAINAGE AREA.--510 mi².

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 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 upstream at different datums.

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

AVERAGE DISCHARGE.--72 years (1911-21, 1924-84), 949 ft³/s, 25.26 in./yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0415	12,700	10.64	Apr. 6	0945	7,900	8.70
Feb. 16	0400	9,860	9.55	May 30	1615	*21,500	*13.49

Minimum discharge, 107 ft³/s Oct. 1; minimum daily, 113 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	172	1310	820	370	1530	1220	1290	8570	376	347	543
2	153	161	1070	760	350	1200	1450	1130	5140	361	328	371
3	177	167	938	700	400	1000	1650	1010	3790	358	311	336
4	152	186	835	740	1300	900	1840	2550	3000	406	276	423
5	150	185	787	820	1200	800	2100	2710	2430	349	254	365
6	245	224	808	740	820	900	6760	1970	2060	774	257	323
7	221	243	4940	660	640	760	4950	1580	1980	3680	250	291
8	158	204	2520	580	580	660	3330	1460	1620	2070	286	237
9	154	208	1650	520	560	600	2460	2160	1350	1090	259	244
10	143	187	1390	500	560	540	2140	1670	1160	750	240	257
11	155	215	1180	490	700	500	1830	1390	1020	749	801	209
12	147	393	1030	480	1800	480	1970	2300	835	3200	600	333
13	170	369	6530	480	1600	450	2300	3350	709	1380	400	288
14	208	307	10900	500	2000	440	2530	4350	805	878	328	290
15	195	250	5520	460	5420	460	3240	3320	740	671	439	346
16	163	345	3720	420	8930	600	3470	2700	624	616	380	308
17	174	779	2680	430	5650	1010	4320	2240	568	655	367	274
18	154	555	2100	470	6110	905	4220	1870	553	1630	334	250
19	153	420	1700	450	4800	805	3930	1640	618	1770	298	256
20	143	351	1000	440	4770	767	3480	1470	562	1030	464	230
21	138	906	900	450	3630	1790	3190	1400	492	758	389	215
22	128	1140	1000	470	2740	2910	2410	1210	447	653	313	181
23	130	720	920	500	2240	2180	2080	1150	410	587	381	195
24	271	584	800	580	2910	1520	2360	1710	388	523	418	221
25	383	2850	700	1000	3140	1390	2710	1200	483	464	363	193
26	261	2370	720	920	3880	1440	2260	1010	458	414	306	199
27	223	1490	800	640	2570	1290	1930	1260	394	422	294	202
28	207	1190	1000	520	2180	1300	1700	1170	366	550	266	202
29	175	1780	2000	500	1980	1310	1520	7150	342	459	228	166
30	177	1790	1500	490	---	1160	1380	19800	400	402	296	179
31	184	---	1000	430	---	1080	---	16700	---	377	821	---
TOTAL	5605	20741	63948	17960	73830	32677	80730	95920	42314	28402	11294	8127
MEAN	181	691	2063	579	2546	1054	2691	3094	1410	916	364	271
MAX	383	2850	10900	1000	8930	2910	6760	19800	8570	3680	821	543
MIN	113	161	700	420	350	440	1220	1010	342	349	228	166
CFSM	.35	1.35	4.05	1.14	4.99	2.07	5.28	6.07	2.76	1.80	.71	.53
IN.	0.41	1.51	4.66	1.31	5.39	2.38	5.89	7.00	3.09	2.07	0.82	0.59

CAL YR 1983 TOTAL 431758 MEAN 1183 MAX 10900 MIN 95 CFSM 2.32 IN. 31.49
WTR YR 1984 TOTAL 481548 MEAN 1316 MAX 19800 MIN 113 CFSM 2.58 IN. 35.12

HUDSON RIVER BASIN

01335754 HUDSON RIVER ABOVE LOCK 1 NEAR WATERFORD, NY

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

DRAINAGE AREA.--4,611 mi².

PERIOD OF RECORD.--October 1976 to current year. Prior to October 1981 published as 01335770 Hudson River at Waterford, NY.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to February 1978, nonrecording gage 200 ft downstream of this site.

REMARKS.--Records good, except those below 4,500 ft³/s and those during winter periods, which are fair. Streamflow affected by regulation for power generation and diversion for canal operations.

AVERAGE DISCHARGE.--8 years, 8,370 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 71,800 ft³/s Mar. 15, 1977; minimum daily, 1,170 ft³/s July 25, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62,400 ft³/s May 30, 31, elevation 36.38 ft; minimum daily, 2,120 ft³/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3900	4600	13700	9660	6550	12400	8140	13000	42000	3660	3970	6400
2	3160	4460	12300	9320	6280	10700	8340	11600	30700	2890	4310	4670
3	2240	4520	11100	9120	6310	9780	8730	11100	24800	4110	4100	3730
4	3670	4470	10100	8590	7350	8930	9420	14300	21300	3430	3650	4240
5	3580	4460	10800	8090	8320	8760	10100	16600	17400	3240	2770	4610
6	4150	3590	9900	7800	7910	9560	23400	15000	15000	5760	2120	5170
7	3750	3290	19600	7860	7590	9440	29700	12500	13600	10900	3720	4720
8	4130	4560	19400	8470	7150	9260	26500	12800	14100	15500	4260	4480
9	3450	4500	15700	7670	6960	8800	21700	14700	13200	12200	3800	3450
10	2450	4590	12500	7180	6800	8430	17800	15200	11000	10100	4060	2910
11	4170	5360	11800	7200	7140	8250	15000	14500	7080	8120	4080	3970
12	3810	5330	11100	7140	7840	7580	13300	14900	8320	10000	4230	4150
13	4380	6560	19100	7040	9070	7560	13700	18600	6650	8610	3350	4520
14	4410	6680	42700	7020	10100	7490	15400	21400	6500	7350	4080	4840
15	5020	6930	43800	7040	22100	6730	19200	21400	6480	5880	4570	4550
16	4650	7510	36100	7000	32100	6660	21000	18800	5890	5110	4850	4230
17	3610	7390	29400	6620	30100	7500	27800	17000	4860	5940	4350	3570
18	4920	7430	24100	6720	29400	8040	27400	15300	4040	6100	4370	4510
19	4490	7120	20600	6690	31300	7440	25300	14300	6020	7470	3240	4420
20	4110	6040	16700	6810	28900	7420	23600	12600	5530	6750	2960	4520
21	4200	5590	13900	6370	27200	9050	24200	11100	4770	6290	4410	4310
22	3930	10200	11200	6310	23800	16700	21400	11000	4560	5050	3460	4260
23	3010	12500	11500	6440	20800	17500	18700	10600	4080	4160	4150	3500
24	3120	12100	12100	6540	19300	14300	17900	11200	3480	5220	4590	4130
25	4580	14100	11500	7200	19600	13300	19200	10300	3500	5240	4810	3980
26	4790	17400	7480	8020	20600	13000	18200	9890	5220	5260	3140	4410
27	4730	15400	6400	7740	18700	11600	16600	9510	5110	4950	2910	4200
28	4380	12800	7240	7170	15900	11800	15300	9610	4870	5140	4060	3930
29	4630	14800	9870	7010	14300	10600	14500	21900	4300	4180	3990	3820
30	3390	14900	11400	6870	---	8450	13800	52900	4240	3490	6190	2980
31	2940	---	10700	6750	---	7880	---	57300	---	3840	6540	---
TOTAL	121750	239180	503790	229460	459470	304910	545330	520910	308600	195940	125090	127180
MEAN	3927	7973	16250	7402	15840	9836	18180	16800	10290	6321	4035	4239
MAX	5020	17400	43800	9660	32100	17500	29700	57300	42000	15500	6540	6400
MIN	2240	3290	6400	6310	6280	6660	8140	9510	3480	2890	2120	2910
CAL YR 1983	TOTAL	3415550	MEAN	9358	MAX	50500	MIN	1170				
WTR YR 1984	TOTAL	3681610	MEAN	10060	MAX	57300	MIN	2120				

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

DRAINAGE AREA.--4,620 mi².

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

CHEMICAL DATA: 1975-76 (b), 1977 (c), 1978-79 (d), 1980-84 (e).

MINOR ELEMENTS DATA: 1975-76 (c), 1977-79 (e), 1980-81 (d), 1982-82 (a), 1983 (b).

PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e), 1980, 1982 (a).

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

PCB--1975 (b), 1976 (d), 1977-84 (e).

PCN--1977-79 (e), 1980, 1982 (a).

NUTRIENT DATA: 1975-76 (c), 1977-78 (e), 1979-81 (d).

BIOLOGICAL DATA:

Bacteria--1977 (c), 1978 (d), 1979 (e), 1980-81 (d).

SEDIMENT DATA: 1975 (b), 1976-77 (e), 1978 (a), 1979 (b), 1980 (c), 1981-84 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--Water discharge data based on records obtained above Lock 1 near Waterford (station 01335754) 3.2 mi upstream. No sediment data Dec. 7-9, Dec. 26 to Feb. 14, May 15-23, 25-28, July 25 to Aug. 5, Aug. 7-19.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L March 14, 1977; minimum daily mean, 1 mg/L on many days.

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

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 329 mg/L May 30; minimum daily mean, 1 mg/L on Aug. 6.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 47,000 tons May 30; minimum daily, 5.7 tons Aug. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	PCB, TOTAL (UG/L)	IDENTIFIED AROCLO(S)
OCT 14	1430	4090	7	0.05	1016
NOV 04	1715	4120	5	0.34	1221
DEC 02	1730	12300	5	0.04	1232
DEC 14	1345	45000	204	0.06	1242
DEC 15	0945	45400	93	0.12	1248
DEC 15	1515	42400	66	0.10	1242
DEC 16	1500	35600	32	0.08	1248
FEB 16	1345	33300	199	0.03	1248
FEB 19	1515	30500	51	<0.01	--
FEB 21	1630	26600	18	<0.01	--
FEB 23	1630	20400	8	<0.01	--
FEB 29	1630	12900	5	0.01	--
MAR 21	0915	8500	10	0.02	1221, 1016
MAR 22	0915	16400	37	0.01	1221, 1016
APR 05	1515	9220	8	0.02	1232
APR 06	1315	25400	49	0.03	1232
APR 06	1600	27500	71	0.04	1232
APR 06	2300	31100	93	0.10	1232
APR 07	1600	29300	45	0.14	1221, 1016
APR 16	1800	22300	68	0.01	--
APR 17	0915	27600	47	0.05	1232
APR 17	1630	29200	40	0.02	1221, 1016
APR 18	1545	26800	62	0.11	1221, 1016
APR 19	1600	25200	22	0.06	1221, 1016
APR 25	1415	20900	8	0.04	1221, 1016
MAY 10	1430	15500	12	0.06	1232
MAY 24	1630	11200	11	0.07	1232
MAY 29	1315	22700	150	0.07	1016
MAY 29	1845	29700	156	0.30	1232
MAY 30	0915	52000	360	0.11	1016
MAY 30	1300	57000	370	0.10	1016
MAY 30	2100	61800	350	0.24	1016
MAY 31	1600	54700	224	0.20	1016
JUN 01	1400	40400	96	0.08	1016
JUN 04	1245	21400	22	0.05	1045
JUN 20	0930	6970	10	0.08	1221, 1242
JUL 12	1645	10800	20	0.10	1232
JUL 24	1330	4790	23	0.09	1016, 1221
AUG 20	1500	2930	5	0.07	1016, 1221
AUG 24	1800	4460	5	0.01	1016, 1221
AUG 31	1530	6290	11	0.08	1221, 1016
SEP 15	2100	4350	5	0.04	1016

HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)					
OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
1	7	74	7	87	4	148									9	301	
2	6	51	6	72	5	166									5	144	
3	7	42	6	73	4	120									3	79	
4	7	69	6	72	5	136									3	72	
5	5	48	5	60	4	117									2	47	
6	7	78	6	58	4	107									3	77	
7	7	71	9	80											3	76	
8	7	78	7	86											4	100	
9	6	56	7	85											4	95	
10	6	40	6	74	11	371									4	91	
11	6	68	6	87	8	255									5	111	
12	6	62	6	86	7	210									4	82	
13	7	83	7	124	155	9980									3	61	
14	7	83	6	108	216	24900									2	40	
15	7	95	6	112	75	8870					53	3840			5	91	
16	7	88	5	101	30	2920					178	15400			5	90	
17	6	58	5	100	22	1750					53	4310			4	81	
18	8	106	4	80	20	1300					33	2620			3	65	
19	7	85	7	135	12	667					49	4140			3	60	
20	6	67	5	82	8	361					26	2030			5	100	
21	7	79	6	91	7	263					19	1400			13	318	
22	6	64	7	193	4	121					19	1220			75	3380	
23	5	41	6	202	4	124					12	674			95	4490	
24	5	42	5	163	4	131					8	417			25	965	
25	5	62	4	152	4	124					8	423			12	431	
26	6	78	9	423							11	612			9	316	
27	6	77	8	333							9	454			12	376	
28	6	71	4	138							7	301			4	127	
29	5	63	6	240							5	193			5	143	
30	5	46	4	161											7	160	
31	6	48													7	149	
TOTAL	---	2073	---	3858	---	53141					---	38034			---	12718	

DAY	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDI- MENT DIS- CHARGE (T/DAY)					
APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER		
1	7	154	5	175	105	11900	8	79							13	225	
2	8	180	6	188	48	3980	12	94							12	151	
3	6	141	7	210	32	2140	38	422							8	81	
4	8	203	12	463	22	1270	22	204							7	80	
5	21	573	25	1120	14	658	13	114							7	87	
6	68	4300	8	324	12	486	25	389			1	5.7			6	84	
7	65	5210	9	304	9	330	58	1710							5	64	
8	25	1790	9	311	11	419	32	1340							6	73	
9	17	996	11	437	7	249	5	165							7	65	
10	8	384	12	492	5	148	4	109							7	55	
11	5	202	7	274	5	96	3	66							8	86	
12	5	180	12	483	6	135	12	324							7	78	
13	6	222	20	1000	6	108	3	70							7	85	
14	7	291	29	1680	7	123	3	60							6	78	
15	7	363			6	105	3	48							8	98	
16	29	1640			6	95	4	55							7	80	
17	50	3750			8	105	4	64							5	48	
18	55	4070			8	87	5	82							6	73	
19	31	2120			10	163	9	182							4	48	
20	17	1080			8	119	5	91			5	40			6	73	
21	11	719			7	90	2	34			7	83			6	70	
22	10	578			8	98	2	27			5	47			6	69	
23	9	454			7	77	10	112			5	56			5	47	
24	9	435	11	333	10	94	23	324			4	50			8	89	
25	8	415			12	113					5	65			7	75	
26	8	393			7	99					4	34			8	95	
27	9	403			10	138					5	39			8	91	
28	6	248			4	53					3	33			6	64	
29	7	274	132	7810	4	46					6	65			7	72	
30	6	224	329	47000	4	46					24	401			7	56	
31			271	41900							18	318					
TOTAL	---	31992	---	104504	---	23570	---	6165	---	1236.7	---		---		---	2440	

HUDSON RIVER BASIN

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY

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

DRAINAGE AREA.--150 mi².

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 Barge Canal datum. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft downstream at same datum.

REMARKS.--Records excellent. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir. Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft³). 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.--63 years, 377 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft³/s Oct. 2, 1945, gage height, 11.18 ft; minimum, 18 ft³/s July 21, 27, Oct. 24, 25, 1983, minimum gage height, 0.63 ft Oct. 24, 25, 1983; minimum daily, 45 ft³/s Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,360 ft³/s Dec. 14, gage height, 6.12 ft; minimum, 18 ft³/s Oct. 24, 25, gage height, 0.63 ft; minimum daily, 103 ft³/s Jan. 20, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	203	410	472	156	1240	451	401	478	213	259	213
2	211	203	303	469	155	1220	456	390	416	213	259	213
3	211	204	303	467	154	1210	424	385	400	212	259	224
4	208	205	302	343	155	1190	398	586	306	211	257	216
5	210	235	303	253	156	1170	307	755	224	351	256	213
6	211	259	352	254	293	605	255	667	187	709	256	213
7	211	258	380	253	227	295	221	346	250	662	252	259
8	211	254	354	251	149	534	214	338	251	569	198	297
9	210	252	362	250	147	445	210	347	302	338	201	294
10	209	235	355	248	147	368	208	341	288	265	203	279
11	210	313	357	248	378	367	208	397	288	227	221	262
12	209	334	423	248	403	226	208	403	286	211	236	259
13	210	321	1190	393	437	164	209	357	285	208	208	256
14	219	313	2270	484	553	164	212	357	289	208	206	265
15	212	323	2180	483	520	164	229	399	285	208	208	256
16	208	333	2150	441	426	165	264	376	286	208	208	256
17	208	333	2130	349	413	166	450	365	285	211	206	253
18	206	327	2100	139	338	167	746	363	295	219	206	171
19	206	325	2120	116	334	167	609	360	213	219	208	184
20	205	327	2230	103	377	168	555	361	220	217	208	213
21	191	381	1740	104	355	218	553	360	219	298	208	213
22	206	365	869	104	529	213	552	259	216	268	206	211
23	206	359	494	104	660	324	532	318	216	268	219	211
24	152	360	490	103	989	445	492	331	218	267	213	263
25	121	382	486	145	1290	446	537	325	225	267	211	279
26	206	368	485	158	1280	444	533	326	217	265	211	282
27	206	366	480	155	1270	441	530	327	216	265	208	282
28	204	417	479	210	1260	442	528	335	216	265	211	279
29	204	527	481	156	1250	440	529	1410	216	262	213	279
30	203	493	478	155	---	440	451	1610	213	262	221	279
31	205	---	476	155	---	442	---	728	---	262	229	---
TOTAL	6300	9575	27532	7813	14801	14490	12071	14563	8006	8828	6865	7374
MEAN	203	319	888	252	510	467	402	470	267	285	221	246
MAX	219	527	2270	484	1290	1240	746	1610	478	709	259	297
MIN	121	203	302	103	147	164	208	259	187	208	198	171
CAL YR 1983	TOTAL	134671	MEAN	369	MAX	3340	MIN	121				
WTR YR 1984	TOTAL	138218	MEAN	378	MAX	2270	MIN	103				

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 downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi downstream from North Creek, 2.2 mi north of Herkimer, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--556 mi².

PERIOD OF RECORD.--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 height and discharge measurements only, May 1905 to December 1906.

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

REMARKS.--Records poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi above station (usable capacity, 3,320 mil ft³). Diurnal fluctuation at low and medium flow caused by powerplants above station. Diversion at Trenton Falls, 26 mi 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.--64 years (1921-84), 1,319 ft³/s, unadjusted.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 10,000 ft³/s Dec. 15, gage height, about 6.0 ft; minimum discharge, 259 ft³/s Sept. 28, 29; minimum daily discharge, 400 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	578	1310	1220	1230	1670	1510	2800	2120	516	558	701
2	510	547	1150	1380	1180	1580	1470	2540	2030	571	571	500
3	480	634	1030	1220	1120	1500	1540	2440	2040	612	508	841
4	510	735	1230	1380	1110	1500	1590	2880	1980	537	517	739
5	510	674	1130	1260	1020	1500	1800	2970	1960	2100	484	501
6	510	651	1440	1290	1040	1500	2190	2570	1950	2840	468	861
7	550	614	3170	1290	1070	1520	1880	2390	1830	3090	467	1020
8	480	632	1620	1390	1040	1600	1710	2500	1380	2190	467	1380
9	480	612	1570	1310	938	1660	1580	2790	1190	2140	476	1410
10	520	627	1390	1190	1000	1640	1580	2150	1170	2650	870	1410
11	520	907	1480	1330	794	1460	1620	1730	1240	2760	607	1400
12	520	950	1540	1170	875	1450	1530	3140	850	2710	844	1470
13	520	703	5360	1190	1070	1370	1530	2330	765	2550	638	1430
14	730	653	8820	1260	2700	1430	1660	2670	719	2500	643	1470
15	560	685	8720	1310	4100	1690	1880	2410	736	2460	660	1520
16	460	910	5140	1570	6600	1120	3030	2270	655	2210	553	1610
17	500	959	3310	1330	6000	1380	6670	2190	477	1760	596	1640
18	500	707	2180	1360	4300	1380	6630	2110	569	1170	512	1540
19	570	700	1860	1380	3600	1320	5090	2090	1210	1060	484	1430
20	540	680	1590	1330	3100	1480	4130	2070	653	1020	485	1430
21	480	680	1330	1470	2200	2390	3120	2050	654	880	583	1330
22	520	900	1400	1350	1970	2540	2710	2000	668	768	579	1090
23	580	760	1600	1560	1830	1840	2570	2320	596	838	850	885
24	520	760	1230	1500	1800	1610	3550	2400	496	559	682	1020
25	520	1540	1520	1500	1900	1610	3450	2090	1400	504	516	856
26	560	1170	1380	1350	1800	1610	2950	2070	764	431	491	606
27	576	979	2090	1170	1600	1550	2900	2110	810	474	673	586
28	580	997	2680	1170	1700	1560	2560	2360	737	509	484	400
29	564	1340	1800	1170	1700	1570	2430	3860	637	401	609	424
30	506	1260	1360	1230	---	1480	2540	2890	614	416	725	686
31	550	---	1280	1180	---	1580	---	2370	---	405	830	---
TOTAL	16406	24544	72710	40810	60387	49090	79400	75560	32900	43631	18430	32186
MEAN	529	818	2345	1316	2082	1584	2647	2437	1097	1407	595	1073
MAX	730	1540	8820	1570	6600	2540	6670	3860	2120	3090	870	1640
MIN	460	547	1030	1170	794	1120	1470	1730	477	401	467	400

CAL YR 1983 TOTAL 470831 MEAN 1290 MAX 10300 MIN 289
WTR YR 1984 TOTAL 546054 MEAN 1492 MAX 8820 MIN 400

NOTE.--No gage height record Oct. 1-26, Dec. 24 to Jan. 7, Jan. 27 to Feb. 1, and Feb. 14-22.

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 downstream from Rocky Rift Dam, 2.1 mi upstream from East Canada Creek, and 4.5 mi southeast of city of Little Falls.

DRAINAGE AREA.--1,348 mi².

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 National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter periods, which are 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, 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) (see Reservoirs in Hudson River Basin).

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

AVERAGE DISCHARGE.--57 years, 2,801 ft³/s.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	unknown	*21,800	*a15.6	Feb. 15	2230	19,700	14.85

a From floodmarks.

Minimum discharge recorded (river channel only), 672 ft³/s Oct. 10, gage height, 4.79 ft; minimum daily (river channel only), 782 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	782	988	4180	2550	1930	3920	3880	4860	6030	1580	1060	1370
2	860	977	3040	2650	1300	3840	4400	4570	4480	1300	1010	1120
3	917	1130	2610	2570	1670	3790	4660	4070	3770	1300	1060	1580
4	873	1350	2450	2620	2220	3560	4360	4550	3560	1190	1050	2240
5	946	1350	2410	2460	2340	3520	4520	6460	3070	3410	947	1490
6	1060	1230	2570	2390	2040	3640	5950	5700	2970	7310	936	1380
7	1040	1250	8480	2410	2080	3160	5930	4550	2910	9000	906	1530
8	1010	1220	6560	2250	2080	2640	4880	4120	2310	6840	931	1800
9	896	1190	4820	2220	1810	2720	3850	5060	1960	4220	888	1940
10	856	1180	3570	2100	1780	2580	3400	4300	2000	3890	1150	1940
11	893	1840	3350	2150	1650	2290	3210	3230	1950	3900	1210	1990
12	944	2550	3140	1940	2080	2310	3010	6070	1640	4600	1750	2180
13	1110	2030	8000	1870	3240	2030	2880	6290	1460	3770	2040	2050
14	1750	1630	21000	2000	6660	2030	2950	6390	1950	3460	1720	2140
15	1550	1520	19000	2330	16000	2280	3490	5570	1930	3270	1900	2250
16	1170	1930	15000	2080	16200	2100	5300	4400	1630	3020	1620	2320
17	985	2590	10000	2060	12200	2250	11300	4060	1300	2460	1240	2230
18	1010	2220	8000	2080	10400	2380	11500	3440	1270	1870	1150	2170
19	979	1900	7060	2140	8270	2290	8720	3440	4230	1670	951	1960
20	1000	1770	5400	1820	8470	2590	6600	3440	3580	1630	1000	1870
21	944	2500	5000	1570	7210	4670	5390	3330	1720	1460	973	1820
22	916	3500	4500	1560	5480	7560	4960	3180	1550	1380	1040	1550
23	963	2400	4050	1620	4760	6830	4800	3410	1400	1470	1310	1390
24	1180	2070	3220	1780	4560	5340	6100	5240	1160	1110	1420	1360
25	1170	3700	3250	2360	4620	4280	6570	3720	2420	1030	1110	1290
26	1040	4500	3140	2410	4770	3990	5530	3320	1990	953	973	1110
27	1010	3400	3640	2280	4250	3630	5010	3510	1600	1040	952	1160
28	1070	3040	4260	2130	4250	3440	4380	3970	1460	1280	944	989
29	1060	4270	3530	1910	4210	3430	4130	10100	1370	1090	894	919
30	1010	4840	3340	1860	---	3310	4110	9140	1580	895	1160	1110
31	978	---	2950	1870	---	3400	---	8030	---	917	1430	---
TOTAL	31972	66065	181520	66040	148530	105800	155770	151520	70250	82315	36725	50248
MEAN	1031	2202	5855	2130	5122	3413	5192	4888	2342	2655	1185	1675
MAX	1750	4840	21000	2650	16200	7560	11500	10100	6030	9000	2040	2320
MIN	782	977	2410	1560	1300	2030	2880	3180	1160	895	888	919
#	13.5	4.6	0.2	0	0	0	0.2	14.6	17.9	21.8	20.3	18.9
CAL YR 1983	TOTAL	1076577	MEAN	2950	MAX	21000	MIN	704	#	9.3		
WTR YR 1984	TOTAL	1146755	MEAN	3133	MAX	21000	MIN	782	#	9.4		

* 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 downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi upstream from mouth, and 3.5 mi northwest of St. Johnsville.

DRAINAGE AREA.--291 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft 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 for municipal supply.

AVERAGE DISCHARGE.--38 years (1947-84), 682 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s Mar. 14, 1977, gage height, 7.42 ft; minimum, 0.05 ft³/s July 9, 1978, gage height 0.47 ft; minimum gage height, 0.44 ft July 29, 1977; minimum daily, 0.22 ft³/s July 9, 1978.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,850 ft³/s Dec. 14, gage height, 6.31 ft; minimum, 1.0 ft³/s Aug. 13, gage height, 0.65 ft; minimum daily, 11 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	91	777	412	281	694	714	1210	1900	258	47	345
2	12	304	752	376	246	469	701	1420	700	326	41	206
3	134	200	856	383	369	484	760	1410	717	321	43	328
4	450	168	845	387	302	485	834	1080	744	81	44	584
5	280	103	723	365	119	574	1080	1940	680	634	44	346
6	623	421	771	518	345	488	3600	1670	280	3400	40	374
7	227	235	1240	295	340	433	3470	1340	153	2790	110	227
8	348	273	2040	122	237	411	2380	1370	396	2030	241	228
9	73	259	1080	304	210	313	1760	1410	15	1230	202	16
10	163	492	1420	386	279	211	1580	1160	15	546	59	209
11	187	720	494	193	263	118	1430	1100	423	368	142	296
12	162	521	794	335	209	362	1350	1910	176	521	77	187
13	291	463	2130	161	376	411	1590	2340	106	548	15	45
14	647	466	6750	164	583	413	1880	2340	264	270	231	109
15	648	824	3990	97	1520	386	2020	1860	395	13	560	14
16	413	770	2440	288	4660	312	3170	1180	171	260	519	41
17	339	652	1750	427	3350	325	5610	1100	15	13	444	164
18	336	569	1460	369	3350	153	3880	826	109	241	430	139
19	338	221	1050	358	2960	568	2630	453	295	35	102	136
20	207	170	623	212	3360	526	2050	380	275	138	297	203
21	240	907	611	179	2760	835	1700	599	156	216	265	226
22	204	2000	503	145	1910	1070	1040	543	73	20	200	149
23	105	1180	500	146	1260	806	889	701	102	165	359	76
24	504	646	487	131	1280	821	1500	568	104	194	478	182
25	482	1620	307	163	1210	808	2390	567	1560	100	295	173
26	328	1480	448	520	1350	847	1760	581	1290	39	202	172
27	422	840	377	305	1140	625	1140	500	502	213	203	226
28	202	1010	323	242	1040	713	957	992	398	101	176	158
29	286	1020	469	266	890	956	660	2570	335	34	170	48
30	15	1160	688	287	---	518	904	3820	377	164	479	48
31	157	---	429	203	---	539	---	2450	---	105	583	---
TOTAL	8834	19785	37127	8739	36199	16674	55429	41390	12726	15374	7098	5655
MEAN	285	660	1198	282	1248	538	1848	1335	424	496	229	189
MAX	648	2000	6750	520	4660	1070	5610	3820	1900	3400	583	584
MIN	11	91	307	97	119	118	660	380	15	13	15	14

CAL YR 1983 TOTAL 256445 MEAN 703 MAX 6750 MIN 11
WTR YR 1984 TOTAL 265030 MEAN 724 MAX 6750 MIN 11

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 downstream from bridge on State Highway 163 in Fort Plain, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--59.2 mi².

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

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

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

AVERAGE DISCHARGE.--35 years, 85.9 ft³/s, 19.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s Oct. 28, 1981, gage height, 11.44 ft in gage well, 12.0 ft from floodmarks, from rating curve extended above 3,200 ft³/s on basis of contracted-opening measurement of peak flow at gage height 11.44 ft in gage well, 12.0 ft from floodmarks; minimum, 0.6 ft³/s Nov. 30, 1964.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	2330	*4,110	*7.33	Apr. 16	1630	2,860	6.13
Feb. 15	1600	4,040	7.10				

Minimum recorded discharge, 4.1 ft³/s Aug. 22, but may have been less during period of no gage height record, Aug. 31 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	6.3	82	30	21	52	295	77	103	11	6.4	5.4
2	5.8	6.4	60	23	19	47	285	61	72	12	6.1	5.2
3	5.0	7.1	50	23	30	43	211	51	56	9.4	6.1	6.0
4	5.2	7.7	34	27	200	40	151	726	50	8.4	6.4	5.5
5	6.9	7.7	45	31	450	40	364	300	40	98	6.1	5.3
6	9.0	8.1	68	35	350	50	330	123	37	88	5.8	4.9
7	6.9	8.0	570	36	100	42	210	87	36	130	6.1	4.6
8	5.2	7.4	120	30	60	34	128	79	29	38	5.8	4.5
9	5.0	6.8	70	24	40	30	94	132	24	23	5.6	4.5
10	4.8	6.7	60	19	30	27	78	85	21	17	5.3	4.6
11	4.5	39	50	18	35	25	69	68	18	16	5.3	5.0
12	5.8	34	45	17	100	24	63	266	16	16	8.4	6.0
13	9.6	19	1500	16	250	23	58	155	15	12	6.4	5.5
14	24	16	1340	16	600	25	63	309	24	9.9	5.3	6.6
15	13	13	361	15	1980	35	168	121	17	9.0	5.3	6.0
16	9.1	106	190	15	823	44	939	87	14	9.5	4.8	5.5
17	7.5	97	112	14	469	45	446	70	12	9.8	5.3	5.0
18	6.6	48	70	14	608	45	232	58	14	12	4.5	4.9
19	6.0	35	45	14	342	48	158	53	17	12	4.3	4.7
20	5.5	30	30	13	390	190	200	47	13	8.8	5.0	4.7
21	5.2	99	32	13	201	481	129	47	11	8.4	4.5	4.4
22	5.0	61	80	13	140	528	86	39	9.8	8.0	4.2	4.3
23	5.5	37	90	13	129	218	95	63	8.8	7.3	7.3	4.2
24	21	37	60	15	150	121	398	71	9.2	6.7	5.8	4.4
25	15	358	45	60	144	137	331	40	15	6.4	5.0	4.3
26	11	146	35	300	100	120	139	33	11	6.1	4.8	4.3
27	9.8	143	35	250	70	90	95	34	9.1	12	4.5	4.5
28	8.8	108	40	140	64	82	76	124	9.4	17	4.5	4.4
29	7.7	322	150	80	60	78	67	1000	9.8	9.0	4.3	4.3
30	7.0	149	90	47	---	74	60	399	17	7.7	6.4	4.3
31	6.6	---	50	30	---	130	---	184	---	6.7	6.3	---
TOTAL	252.8	1969.2	5609	1391	7955	2968	6018	4989	738.1	645.1	171.9	147.8
MEAN	8.15	65.6	181	44.9	274	95.7	201	161	24.6	20.8	5.55	4.93
MAX	24	358	1500	300	1980	528	939	1000	103	130	8.4	6.6
MIN	4.5	6.3	30	13	19	23	58	33	8.8	6.1	4.2	4.2
CFSM	.14	1.11	3.06	.76	4.63	1.62	3.40	2.72	.42	.35	.09	.08
IN.	0.16	1.24	3.52	0.87	5.00	1.87	3.78	3.13	0.46	0.41	0.11	0.09

CAL YR 1983	TOTAL	36237.8	MEAN	99.3	MAX	1730	MIN	3.9	CFSM	1.68	IN.	22.77
WTR YR 1984	TOTAL	32854.9	MEAN	89.8	MAX	1980	MIN	4.2	CFSM	1.52	IN.	20.65

NOTE.--No gage height record Aug. 31 to Sept. 30.

HUDSON RIVER BASIN

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 upstream from bridge on State Highway 23 in Prattsville, 0.2 mi upstream from Schoharie Reservoir, 0.2 mi downstream from Huntersfield, and 1.6 mi downstream from Batavia Kill.

DRAINAGE AREA.--236 mi².

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 1,134.98 ft 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 upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi downstream, all at datum 1.56 ft lower than present datum.

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

AVERAGE DISCHARGE.--81 years, 464 ft³/s, 26.70 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0015	12,800	10.01	Apr. 16	1730	8,990	8.69
Feb. 15	2330	10,100	9.12	May 30	0930	9,270	8.80
Apr. 5	1815	*31,900	*14.46				

Minimum discharge, 16 ft³/s Oct. 10, 11, 12, gage height, 1.65 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	32	656	320	250	520	457	660	2030	86	47	38
2	20	31	524	310	210	470	519	571	1400	116	43	32
3	20	31	448	340	230	380	662	515	1050	98	40	41
4	19	31	389	240	680	370	771	2140	859	91	38	58
5	20	27	361	290	760	370	14800	1460	681	83	35	58
6	27	25	428	290	520	450	9340	1070	566	83	36	52
7	22	27	2160	260	390	380	3820	888	485	381	32	49
8	19	46	969	230	310	230	2360	820	406	270	34	49
9	17	69	710	240	300	270	1570	950	337	160	30	44
10	16	67	605	250	310	200	1310	769	292	119	28	36
11	16	95	501	210	350	250	1140	661	244	106	34	35
12	17	330	461	180	660	190	1260	707	205	137	75	41
13	26	191	7400	160	660	250	1360	859	181	99	129	37
14	70	139	7880	180	760	180	1460	1360	173	79	98	39
15	69	115	3400	210	3200	190	2130	1020	154	66	77	45
16	51	311	2010	220	6080	240	4760	900	132	62	68	43
17	42	429	1370	190	2850	400	3900	774	119	59	71	37
18	37	265	1010	180	2020	310	2700	679	122	73	57	32
19	38	207	815	180	1540	290	2040	584	136	112	49	29
20	41	182	500	200	1660	426	1690	527	109	78	81	27
21	37	935	460	200	1260	945	1380	684	96	67	81	26
22	34	688	500	180	1000	1140	1120	530	83	64	61	24
23	33	452	600	160	856	735	973	494	72	56	73	22
24	37	367	520	220	900	556	1100	629	68	51	76	22
25	65	1180	490	640	820	521	1210	477	129	44	64	21
26	54	891	280	620	958	555	1050	415	106	38	54	20
27	48	706	260	440	733	519	929	389	81	64	48	18
28	43	602	320	370	744	529	841	683	71	105	44	17
29	40	1080	680	320	1010	482	805	6240	62	82	41	30
30	36	924	680	300	---	1340	734	7160	69	65	41	25
31	34	---	420	280	---	475	---	3580	---	55	38	---
TOTAL	1068	10475	37807	8410	32021	14163	68191	39195	10518	3049	1723	1047
MEAN	34.5	349	1220	271	1104	457	2273	1264	351	98.4	55.6	34.9
MAX	70	1180	7880	640	6080	1340	14800	7160	2030	381	129	58
MIN	16	25	260	160	210	180	457	389	62	38	28	17
CFSM	.15	1.48	5.17	1.15	4.68	1.94	9.63	5.36	1.49	.42	.24	.15
IN.	0.17	1.65	5.96	1.33	5.05	2.23	10.75	6.18	1.66	0.48	0.27	0.17

CAL YR 1983	TOTAL	222365.6	MEAN	609	MAX	8010	MIN	9.3	CFSM	2.58	IN.	35.05
WTR YR 1984	TOTAL	227667	MEAN	622	MAX	14800	MIN	16	CFSM	2.64	IN.	35.89

HUDSON RIVER BASIN

01350100 SCHOHARIE RESERVOIR NEAR GRAND GORGE, NY

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

DRAINAGE AREA.--314 mi².

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 between minimum operating level, elevation, 1,050.00 ft, and crest of spillway, elevation, 1,130.00 ft. Dead storage below elevation 1,050.00, 1,968 mil gal. Figures given herein represent usable contents. Reservoir impounds water except for periods of spilling, for diversion through Shandaken Tunnel into Esopus Creek to Ashokan Reservoir, for New York City water supply.

COOPERATION.--Capacity table furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,135.17 ft Oct. 16, 1955, contents, 21,597 mil gal; minimum observed (after initial filling), 1,062.00 ft Aug. 20, 1970, contents, 1,520 mil gal.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,134.06 ft Apr. 5, contents, 21,160 mil gal; minimum observed, 1,074.44 ft Nov. 10, contents, 3,744 mil gal.

REVISIONS.--The maximum contents for the period of record has been revised to 21,597 mil gal superseding figure published in previous reports.

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

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

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1084.32	1075.78	1097.40	1125.78	1102.96	1130.41	1130.22	1131.29	1131.15	1126.11	1118.80	1104.05
2	1083.84	1075.60	1098.43	1125.13	1102.13	1130.39	1130.26	1131.24	1130.90	1125.90	1118.47	1103.66
3	1083.37	1075.42	1099.15	1124.43	1101.39	1130.29	1130.33	1131.16	1130.72	1125.68	1118.12	1103.33
4	1082.90	1075.25	1099.73	1123.67	1101.88	1130.30	1130.41	1131.91	1130.66	1125.45	1117.76	1103.06
5	1082.45	1075.07	1100.21	1122.93	1102.66	1130.31	1132.17	1131.75	1130.63	1125.20	1117.39	1102.73
6	1082.02	1074.90	1100.60	1122.20	1102.67	1130.34	1132.11	1131.38	1130.59	1124.92	1117.03	1102.40
7	1081.52	1074.73	1104.39	1121.42	1102.37	1130.35	1131.21	1131.23	1130.55	1124.97	1116.66	1102.03
8	1081.13	1074.56	1107.60	1120.56	1101.85	1130.27	1130.88	1131.23	1130.48	1125.29	1116.25	1101.68
9	1080.77	1074.49	1109.07	1119.70	1101.23	1130.24	1130.72	1131.41	1130.39	1125.26	1115.78	1101.31
10	1080.42	1074.47	1109.43	1118.86	1100.70	1130.18	1130.66	1131.33	1130.35	1125.06	1115.32	1100.94
11	1080.06	1074.49	1109.42	1117.93	1100.35	1130.19	1130.59	1131.19	1130.30	1124.83	1114.85	1100.56
12	1079.72	1074.91	1109.18	1116.94	1100.87	1130.17	1130.61	1131.19	1130.23	1124.69	1114.45	1100.21
13	1079.42	1075.60	1115.03	1115.91	1101.34	1130.23	1130.64	1131.37	1130.17	1124.48	1114.13	1099.75
14	1079.21	1075.89	1131.10	1114.94	1102.50	1130.21	1130.70	1131.77	1130.06	1124.20	1113.86	1098.93
15	1079.05	1076.04	1131.12	1114.03	1110.72	1130.20	1131.08	1131.62	1129.92	1123.89	1113.56	1097.91
16	1078.86	1076.16	1130.78	1113.14	1127.45	1130.23	1131.67	1131.47	1129.74	1123.58	1113.19	1096.81
17	1078.63	1077.09	1130.51	1112.18	1127.45	1130.94	1131.73	1131.33	1129.54	1123.25	1112.86	1095.72
18	1078.40	1078.07	1130.39	1111.22	1130.72	1130.28	1131.85	1131.12	1129.34	1122.97	1112.49	1094.79
19	1078.17	1078.51	1130.34	1110.27	1130.60	1130.27	1131.80	1130.81	1129.21	1122.73	1112.10	1093.87
20	1077.94	1078.79	1130.06	1109.34	1130.60	1130.31	1131.67	1130.70	1129.01	1122.48	1111.72	1092.95
21	1077.71	1079.46	1129.72	1108.41	1130.48	1130.48	1131.50	1130.88	1128.76	1122.19	1111.37	1091.99
22	1077.49	1081.88	1129.46	1107.42	1130.42	1130.59	1131.31	1130.94	1128.47	1121.90	1110.99	1091.06
23	1077.27	1083.20	1129.46	1106.40	1130.35	1130.43	1131.21	1131.06	1128.16	1121.58	1110.64	1090.14
24	1077.09	1084.00	1129.27	1105.56	1130.33	1130.27	1131.31	1131.23	1127.84	1121.23	1110.24	1089.25
25	1076.93	1085.47	1128.77	1105.88	1130.34	1130.20	1131.44	1131.11	1127.72	1120.86	1108.98	1088.58
26	1076.81	1088.30	1128.03	1106.14	1130.35	1130.27	1131.37	1131.01	1127.54	1120.47	1107.46	1087.99
27	1076.66	1090.11	1127.23	1105.89	1130.30	1130.25	1131.24	1130.97	1127.28	1120.15	1106.00	1087.39
28	1076.50	1091.51	1126.55	1105.48	1130.36	1130.28	1131.17	1131.34	1126.99	1119.97	1105.49	1086.79
29	1076.33	1093.32	1126.71	1104.93	1130.50	1130.27	1131.17	1132.83	1126.68	1119.74	1105.12	1086.19
30	1076.15	1095.87	1126.86	1104.33	---	1130.18	1131.17	1132.52	1126.38	1119.44	1104.77	1085.62
31	1075.97	---	1126.43	1103.68	---	1130.24	---	1131.59	---	1119.11	1104.43	---
MEAN	1079.26	1079.63	1118.79	1113.70	1115.84	1130.29	1131.14	1131.35	1129.32	1123.15	1112.59	1096.06
MAX	1084.32	1095.87	1131.12	1125.78	1130.94	1130.59	1132.17	1132.83	1131.15	1126.11	1118.80	1104.05
MIN	1075.97	1074.47	1097.40	1103.68	1100.35	1130.17	1130.22	1130.70	1126.38	1119.11	1104.43	1085.62
#	4050	9190	18196	11031	19761	19680	20065	20084	18228	15764	11283	6237
**	-100	+265	+450	-358	+466	-4.04	+19.9	+0.95	-95.7	-123	-224	-260

CAL YR 1983 MEAN 1108.16 MAX 1132.01 MIN 1074.47 ** +47.5
WTR YR 1984 MEAN 1113.46 MAX 1132.83 MIN 1074.47 ** +0.77

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

HUDSON RIVER BASIN

01350101 SCHOHARIE CREEK AT GILBOA, NY

LOCATION.--Lat 42°23'50", long 74°27'03", Schoharie County, Hydrologic Unit 02020005, on left bank, 200 ft upstream from bridge on County Highway 322, 0.2 mi west of village of Gilboa, 0.4 mi downstream from dam on Schoharie Reservoir, and 0.8 mi upstream from the Platter Kill.

DRAINAGE AREA.--314 mi².

PERIOD OF RECORD.--October 1975 to current year (since October 1983, discharges only for days of Schoharie Reservoir spill).

GAGE.--Water-stage recorder. Datum of gage is 939.56 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Entire flow, runoff from 314 mi², except for periods of spill, Dec. 14-20 and Feb. 16 to June 14, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of city of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,500 ft³/s Mar. 21, 1980 determined by flow over dam computations at Schoharie Reservoir dam, gage height, 28.6 ft from floodmarks; minimum daily, 0.04 ft³/s on many days, June to October 1976, and Sept. 11-13, 1980 (see PERIOD OF RECORD).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 32,000 ft³/s Mar. 18, 1936, from information furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,100 ft³/s Apr. 5, gage height, 23.64 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						576	133	733	2790			
2						445	193	701	1880			
3						385	367	630	1180			
4						309	570	2260	961			
5						305	12800	2210	841			
6						392	11300	1470	693			
7						313	5000	1140	588			
8						175	3070	946	456			
9						192	2080	1110	260			
10						124	1700	1030	203			
11						147	1430	868	131			
12						94	1510	816	86			
13						119	1740	1020	39			
14			6770			87	1840	1660	3.5			
15			4510			87	2510	1490				
16			2530		959	125	5690	1240				
17			1380		3200	307	5410	1060				
18			909		2060	246	3390	873				
19			535		1450	210	2870	534				
20			42		1480	310	2290	397				
21					1040	934	1890	503				
22					700	1270	1500	567				
23					517	549	1230	591				
24					522	265	1260	759				
25					588	201	1470	681				
26					615	247	1360	564				
27					358	198	1170	509				
28					399	215	1030	618				
29					836	211	963	7310				
30						94	820	8960				
31						156	---	4940				
TOTAL						9288	78586	48190				
MEAN						300	2620	1555				
MAX						1270	12800	8960				
MIN						87	133	397				

NOTE.--Discharges only for days when Schoharie Reservoir spilled for the entire day.

HUDSON RIVER BASIN

63

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 upstream from culvert on County Highway 17, 0.5 mi upstream from mouth, and 0.6 mi northeast of Gilboa.

DRAINAGE AREA.--11.1 mi².

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

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

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

AVERAGE DISCHARGE.--9 years, 16.2 ft³/s, 19.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 ft³/s Oct. 17, 1977, gage height, 4.54 ft; maximum gage height, 4.84 ft Feb. 12, 1982 (ice jam); minimum discharge, 0.32 ft³/s Nov. 18, 1980 (result of freezeup); minimum gage height (subsequent to concrete control installation), 0.76 ft Nov. 18, 1980.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0800	201	3.04	Apr. 16	1845	289	3.55
Apr. 5	1845	*404	*3.76	May 29	1130	315	3.64

Minimum discharge, 1.2 ft³/s Sept. 26, 27, gage height 0.89 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.4	6.8	10	5.4	22	21	19	65	4.7	2.3	1.5
2	1.6	1.3	5.8	8.8	5.0	20	24	17	45	4.4	2.3	1.5
3	1.4	1.4	5.1	8.0	6.6	19	29	16	33	4.4	2.3	3.5
4	1.4	1.4	4.9	7.9	12	18	31	62	26	4.1	2.2	2.3
5	1.6	1.4	4.9	7.7	10	16	176	53	20	4.3	2.1	1.7
6	1.5	1.5	9.8	7.7	8.2	16	206	41	16	4.8	2.0	1.6
7	1.4	1.5	30	7.5	7.4	14	120	34	13	8.0	2.0	1.5
8	1.4	1.4	16	7.4	6.6	14	67	30	11	5.2	2.0	1.5
9	1.3	1.4	13	7.0	6.6	13	57	32	9.5	4.1	1.8	1.5
10	1.3	1.4	11	6.6	8.5	12	51	27	8.3	3.7	1.9	1.4
11	1.4	4.1	9.5	6.6	12	11	46	23	7.8	4.2	1.9	1.5
12	1.5	3.2	9.2	6.4	20	10	44	23	7.1	4.4	2.3	1.7
13	1.5	1.9	98	6.2	21	9.3	43	24	6.8	3.4	2.0	1.5
14	2.1	1.6	169	6.0	33	9.7	59	47	7.1	3.1	1.9	3.0
15	1.5	1.6	95	5.8	66	11	62	42	6.4	3.0	2.4	2.2
16	1.5	3.4	62	5.4	67	12	152	31	6.4	3.0	1.9	2.0
17	1.4	2.6	45	5.2	48	12	140	26	6.4	2.8	1.8	1.6
18	1.4	2.0	35	5.0	47	11	78	21	6.9	4.8	1.7	1.5
19	1.5	1.8	29	4.9	40	9.9	61	19	7.9	3.2	2.3	1.5
20	1.4	1.8	26	4.8	39	16	58	19	6.8	2.9	2.6	1.5
21	1.4	2.8	23	4.8	32	32	52	21	6.3	3.0	1.8	1.4
22	1.4	2.1	20	4.8	28	35	44	17	5.7	2.9	1.7	1.4
23	1.4	1.8	17	5.0	25	25	39	19	5.4	2.6	2.1	1.6
24	1.7	2.1	14	17	26	20	37	21	5.4	2.4	1.8	1.4
25	1.5	7.7	13	28	28	20	39	16	7.2	2.2	1.7	1.3
26	1.5	3.9	12	11	29	21	34	15	5.5	2.1	1.6	1.3
27	1.4	3.5	11	8.6	23	20	29	14	5.2	5.1	1.5	1.3
28	1.5	3.8	33	7.8	23	20	26	23	4.4	3.6	1.5	1.3
29	1.4	8.5	20	7.0	23	17	24	208	4.1	2.8	1.5	1.3
30	1.4	8.4	14	6.3	---	17	22	181	4.2	2.6	1.6	1.3
31	1.4	---	11	6.0	---	19	---	117	---	2.4	1.9	---
TOTAL	45.6	82.7	873.0	241.2	706.3	521.9	1871	1258	369.8	114.2	60.4	49.6
MEAN	1.47	2.76	28.2	7.78	24.4	16.8	62.4	40.6	12.3	3.68	1.95	1.65
MAX	2.1	8.5	169	28	67	35	206	208	65	8.0	2.6	3.5
MIN	1.3	1.3	4.9	4.8	5.0	9.3	21	14	4.1	2.1	1.5	1.3
CFSM	.13	.25	2.54	.70	2.20	1.51	5.62	3.66	1.11	.33	.18	.15
IN.	0.15	0.28	2.93	0.81	2.37	1.75	6.27	4.22	1.24	0.38	0.20	0.17
CAL YR 1983	TOTAL	6127.7	MEAN	16.8	MAX	278	MIN	1.3	CFSM	1.51	IN.	20.54
WTR YR 1984	TOTAL	6193.7	MEAN	16.9	MAX	208	MIN	1.3	CFSM	1.52	IN.	20.76

HUDSON RIVER BASIN

01350140 MINE KILL NEAR NORTH BLENHEIM, NY

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

DRAINAGE AREA.--16.3 mi².

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

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

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

AVERAGE DISCHARGE.--9 years (1976-84), 26.2 ft³/s, 21.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft³/s May 29, 1984, gage height, 3.81 ft; minimum, 0.10 ft³/s Aug. 27, 28, 29, 30, 1980, gage height, 0.49 ft.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1730	655	3.07	Apr. 16	1515	697	3.13
Apr. 5	1500	564	2.93	May 29	0815	*1,320	*3.81

Minimum discharge, 0.40 ft³/s Oct. 1, gage height, 0.59 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.92	17	22	7.0	27	28	25	84	2.6	1.1	1.2
2	.70	.95	14	18	7.0	24	41	23	58	3.2	.99	.97
3	.69	.91	12	15	15	22	59	22	43	2.3	.96	4.2
4	.61	.89	10	15	45	20	56	157	36	2.2	.88	3.8
5	.62	.89	11	17	25	23	243	77	29	2.5	.73	2.3
6	1.3	1.0	38	15	17	25	142	54	25	4.6	.67	1.7
7	1.0	1.1	113	13	13	23	95	43	22	8.2	.61	1.4
8	.82	1.1	36	11	11	21	64	39	19	4.7	.61	1.1
9	.67	1.0	26	10	10	19	51	52	17	2.7	.61	.93
10	.61	1.0	20	9.2	14	17	44	40	15	2.0	.53	.89
11	.61	3.4	18	8.6	50	19	40	33	13	2.0	.57	.89
12	.64	4.9	16	8.0	62	22	40	52	12	4.0	1.2	1.5
13	1.1	2.4	392	7.4	52	20	38	58	9.1	2.1	1.5	1.0
14	3.3	1.7	314	7.0	88	19	62	147	11	1.5	1.1	7.4
15	1.9	1.7	149	6.6	165	22	71	76	9.9	1.2	3.0	5.1
16	1.3	6.6	92	6.2	131	25	240	65	4.2	1.0	2.1	4.5
17	.99	7.0	64	6.0	87	30	206	51	3.3	.86	5.7	2.6
18	.83	4.6	47	5.8	84	30	115	43	4.4	6.8	2.0	1.9
19	.80	3.3	35	5.6	65	25	92	38	10	4.1	2.0	1.5
20	.76	4.1	33	5.4	62	39	84	35	5.3	2.2	5.9	1.3
21	.62	11	31	5.4	49	66	63	44	3.4	2.1	2.4	1.4
22	.61	8.0	29	5.4	41	68	50	31	2.8	2.1	1.6	1.1
23	.65	5.1	26	6.0	37	42	45	46	2.4	1.5	1.9	1.0
24	1.2	4.4	23	15	37	34	50	46	2.3	1.2	1.8	.99
25	1.4	34	17	45	42	35	55	30	7.9	.93	1.4	.99
26	1.1	18	21	25	43	34	45	24	3.5	.72	1.1	.90
27	1.1	16	26	17	34	32	36	22	2.7	3.5	.84	.89
28	1.2	15	32	14	30	30	32	82	3.2	5.6	.79	.87
29	1.3	46	50	11	30	25	34	473	5.2	2.7	.68	.80
30	1.3	27	30	9.0	---	24	27	310	3.4	1.9	.61	.77
31	1.0	---	25	8.0	---	24	---	146	---	1.5	1.3	---
TOTAL	31.15	233.96	1767	372.6	1353.0	886	2248	2384	467.0	84.51	47.18	55.89
MEAN	1.00	7.80	57.0	12.0	46.7	28.6	74.9	76.9	15.6	2.73	1.52	1.86
MAX	3.3	46	392	45	165	68	243	473	84	8.2	5.9	7.4
MIN	.42	.89	10	5.4	7.0	17	27	22	2.3	.72	.53	.77
CFSM	.06	.48	3.50	.74	2.87	1.75	4.60	4.72	.96	.17	.09	.11
IN.	0.07	0.53	4.03	0.85	3.09	2.02	5.13	5.44	1.07	0.19	0.11	0.13
CAL YR 1983	TOTAL	10378.29	MEAN	28.4	MAX	392	MIN	.20	CFSM	1.74	IN.	23.69
WTR YR 1984	TOTAL	9930.29	MEAN	27.1	MAX	473	MIN	.42	CFSM	1.66	IN.	22.66

HUDSON RIVER BASIN

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2,300 ft upstream from West Kill, and 1.2 mi upstream from bridge on State Highway 30 in North Blenheim. Water-quality sampling site at discharge station.

DRAINAGE AREA.--359 mi³.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records fair except those for winter periods, and those for period of doubtful gage-height record, Jan. 25 to June 29, and those below 20 ft³/s, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 314 mi², 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.--14 years, 488 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,900 ft³/s Mar. 21, 1980, gage height, 14.72 ft from floodmark, from rating curve extended above 14,000 ft³/s; minimum, no flow Oct. 21-28, 1972, Sept. 12-14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,200 ft³/s Apr. 5, gage height, 12.79 ft at manometer orifice, 13.34 ft from floodmark, from rating curve extended above 12,000 ft³/s on basis of computation of peak flows through radial gates at gage heights 12.79 ft and 14.10 ft; minimum discharge, 4.0 ft³/s Oct. 11, 16, 25, 26, Nov. 7, 13, 14; minimum gage height, 0.96 ft Oct. 11, 16; minimum daily discharge, 4.1 ft³/s Oct. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.8	7.8	9.0	30	610	181	709	2630	7.8	8.0	7.8
2	4.9	4.6	7.3	18	12	446	297	713	1800	13	8.1	7.3
3	4.4	4.5	7.4	21	11	462	477	710	1180	13	8.2	8.1
4	4.7	4.5	7.1	25	125	268	777	2000	959	12	8.1	7.7
5	4.7	4.7	6.4	27	43	362	11000	1680	823	15	7.5	7.1
6	4.7	4.6	10	27	50	467	13200	1180	699	13	8.0	7.0
7	4.7	4.8	147	28	28	365	6920	1090	617	21	7.4	7.0
8	4.8	4.7	83	29	15	199	3060	992	513	25	7.7	7.6
9	4.7	4.8	91	24	15	237	2180	1130	239	51	7.8	7.2
10	4.9	4.7	57	26	16	109	1700	1040	223	8.7	8.2	6.8
11	4.3	5.8	31	23	33	150	1450	964	219	8.2	8.2	7.0
12	4.5	4.8	16	15	132	143	1580	873	65	8.1	7.8	7.0
13	4.5	4.6	866	12	127	102	1670	1090	48	7.9	7.4	7.0
14	4.8	4.7	7720	10	109	129	1950	1650	59	7.6	7.4	8.8
15	4.6	4.7	4620	9.0	348	107	2430	1620	17	7.9	7.7	7.6
16	4.7	5.2	2610	8.6	886	154	5240	1260	8.2	11	7.5	7.3
17	4.8	4.5	1410	8.6	3130	380	5520	1080	7.9	8.1	7.4	7.1
18	4.3	4.6	945	8.4	2050	309	3390	940	10	10	7.3	6.7
19	4.5	4.9	666	8.2	1340	229	2850	638	59	9.6	7.8	7.1
20	4.7	5.2	70	8.0	1450	355	2270	469	19	9.4	7.7	7.5
21	4.9	5.4	15	8.0	1020	1020	1840	678	7.9	8.2	7.4	7.1
22	4.9	5.2	24	8.0	800	1440	1510	666	7.9	7.9	7.2	7.5
23	4.5	4.8	20	11	619	701	1380	700	8.1	17	7.1	7.1
24	4.9	5.0	16	20	539	310	1290	853	7.6	7.9	7.1	7.1
25	4.1	8.3	13	149	653	266	1500	750	9.0	7.8	7.3	8.2
26	4.5	5.5	13	61	787	334	1370	637	8.6	8.1	7.3	6.4
27	4.6	5.6	15	34	336	240	1150	591	7.8	9.1	6.9	6.4
28	4.5	6.2	27	22	530	315	1040	818	7.7	8.2	7.1	6.8
29	4.7	7.8	187	29	857	357	920	7280	8.8	7.9	7.2	7.0
30	5.1	6.7	36	33	---	194	927	9700	7.3	8.9	7.6	6.9
31	4.8	---	13	41	---	232	---	5070	---	9.2	8.1	---
TOTAL	144.4	156.2	19757.0	760.8	16091	10992	81069	49571	10275.8	367.5	235.5	217.2
MEAN	4.66	5.21	637	24.5	555	355	2702	1599	343	11.9	7.60	7.24
MAX	5.1	8.3	7720	149	3130	1440	13200	9700	2630	51	8.2	8.8
MIN	4.1	4.5	6.4	8.0	11	102	181	469	7.3	7.6	6.9	6.4

CAL YR 1983 TOTAL 180565.5 MEAN 495 MAX 10600 MIN 4.1
WTR YR 1984 TOTAL 189637.4 MEAN 518 MAX 13200 MIN 4.1

NOTE.--Doubtful gage-height record Jan. 25 to June 29.

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.--No record Sept. 27-30, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1973-76, 1980-81, 1983-84), 33.5°C Aug. 7, 1973; minimum, freezing point on many days during winter periods, except water years 1978-80, 1983-84.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 29.0°C Aug. 8, 14; minimum, 0.5°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

HUDSON RIVER BASIN

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01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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

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 upstream from highway bridge on State Highway 30, in North Blenheim, 100 ft downstream from Mill Creek and 0.2 mi upstream from mouth.

DRAINAGE AREA.--44.6 mi².

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

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

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

AVERAGE DISCHARGE.--9 years, 86.6 ft³/s, 26.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft³/s Oct. 18, 1975, gage height, 5.91 ft from rating curve extended above 2,700 ft³/s; maximum gage height, 7.82 ft Oct. 17, 1977; minimum discharge, 0.37 ft³/s several days during Sept. 1983; minimum gage height, 0.68 ft July 25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,190 ft³/s May 29, gage height, 6.58 ft, only peak above base of 2,000 ft³/s; minimum discharge, 1.00 ft³/s Oct. 1, gage height, 1.92 ft; minimum gage height, 1.70 ft Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.8	48	46	26	81	99	117	251	15	3.9	3.5
2	1.3	2.8	38	44	26	78	118	113	161	16	3.6	2.8
3	1.3	2.8	34	43	40	76	146	104	120	12	3.7	14
4	1.2	2.8	28	50	110	70	155	291	99	10	3.6	13
5	1.4	2.8	32	45	80	73	551	194	77	11	3.2	6.7
6	2.7	3.2	58	40	50	99	585	151	64	11	3.0	4.6
7	2.0	3.0	256	35	40	70	414	130	53	51	2.7	3.6
8	1.6	2.8	110	33	35	56	276	122	42	25	3.3	3.0
9	1.5	2.6	82	31	30	52	216	140	34	15	3.4	2.6
10	1.3	2.6	72	30	35	50	184	116	29	11	2.9	2.4
11	1.3	6.4	61	29	45	45	170	105	24	9.7	3.3	2.5
12	1.5	9.8	57	27	60	45	165	127	20	9.0	4.7	5.9
13	2.4	6.6	1110	26	100	45	153	130	18	6.9	7.3	4.5
14	10	5.3	1140	25	210	56	223	264	21	6.1	4.6	12
15	6.9	4.7	593	24	383	70	266	171	19	5.4	6.3	10
16	4.0	12	330	23	329	80	687	152	16	4.7	5.1	11
17	3.0	16	215	22	216	80	528	132	15	4.1	11	7.2
18	2.4	12	161	21	211	80	322	118	17	15	6.4	5.2
19	2.0	9.8	128	21	168	69	261	108	39	12	6.1	4.2
20	1.9	10	77	21	163	109	219	100	19	8.0	18	4.2
21	1.8	22	71	21	136	178	174	112	15	6.1	8.6	3.3
22	1.6	19	80	21	117	157	150	89	12	5.3	5.8	2.9
23	1.8	15	70	23	108	124	135	102	10	4.5	6.8	2.5
24	3.9	14	60	40	107	109	144	108	9.8	3.9	6.9	2.5
25	5.0	75	58	130	116	108	159	82	15	3.8	5.2	2.6
26	4.1	43	58	90	122	107	136	73	11	3.1	4.0	2.5
27	3.6	35	70	60	98	100	127	75	9.3	8.9	3.6	2.4
28	3.4	34	90	50	94	98	123	188	9.1	16	3.2	2.2
29	3.2	92	120	45	91	91	121	2090	14	8.5	2.9	2.3
30	3.0	69	52	35	---	96	116	1200	25	6.4	3.0	2.2
31	3.0	---	50	26	---	93	---	494	---	4.9	4.2	---
TOTAL	85.2	538.8	5409	1177	3346	2645	7123	7498	1268.2	329.3	160.3	148.3
MEAN	2.75	18.0	174	38.0	115	85.3	237	242	42.3	10.6	5.17	4.94
MAX	10	92	1140	130	383	178	687	2090	251	51	18	14
MIN	1.1	2.6	28	21	26	45	99	73	9.1	3.1	2.7	2.2
CFSM	.06	.40	3.90	.85	2.58	1.91	5.31	5.43	.95	.24	.12	.11
IN.	0.07	0.45	4.51	0.98	2.79	2.21	5.94	6.25	1.06	0.27	0.13	0.12
CAL YR 1983	TOTAL	35503.10	MEAN	97.3	MAX	1580	MIN	.40	CFSM	2.18	IN.	29.61
WTR YR 1984	TOTAL	29728.1	MEAN	81.2	MAX	2090	MIN	1.1	CFSM	1.82	IN.	24.80

HUDSON RIVER BASIN

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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 downstream from bridge on State Highway 30, 0.9 mi north of Breakabeen, and 1.1 mi downstream from Keyser Kill.

DRAINAGE AREA.--443 mi².

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

REVISED RECORDS.--WDR NY-79-1: Drainage area. WDR NY-81-1: 1980(M).

GAGE.--Water-stage recorder. Datum of gage is 686.79 ft National Geodetic Vertical Datum of 1929. (Soil Conservation Service Benchmark.)

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, 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, 614 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,000 ft³/s Mar. 21, 1980, gage height, 18.34 ft, from floodmarks, from rating curve extended above 11,000 ft³/s; minimum discharge, 1.7 ft³/s Oct. 14, 1980; minimum gage height, 0.63 ft Sept. 18, 19, 1975 (corrected); minimum daily discharge, 5.8 ft³/s Sept. 13, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,400 ft³/s April 5, gage height, 15.12 ft; minimum, 9.0 ft³/s Oct. 1; minimum gage height, 1.70 ft part of each day Oct. 18-21; minimum daily discharge, 9.3 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	12	82	72	70	833	356	1010	3240	43	17	12
2	10	12	68	76	50	659	495	1010	2360	47	16	12
3	10	12	61	80	59	652	761	1010	1720	45	15	19
4	10	12	54	82	246	393	1130	2620	1410	39	16	30
5	11	12	55	85	146	509	10600	2580	1260	42	14	21
6	13	13	82	84	111	633	15100	1870	1060	49	14	17
7	13	13	617	84	94	541	7070	1610	937	105	13	14
8	12	12	326	80	69	338	3490	1370	823	87	13	13
9	12	12	264	74	63	316	2580	1530	448	107	13	12
10	11	12	212	70	66	218	2140	1390	392	39	12	11
11	11	17	168	68	99	195	1890	1280	372	33	12	11
12	11	27	129	66	308	221	2000	1200	180	32	14	14
13	12	20	2450	60	328	154	2040	1430	102	25	18	16
14	14	17	10200	54	484	179	2380	2160	127	22	17	26
15	18	16	6650	51	1190	173	2810	2000	85	19	17	28
16	13	21	3790	48	1550	179	6490	1680	51	20	17	26
17	11	29	2080	45	4640	502	6320	1450	43	19	19	22
18	9.9	25	1390	42	3040	406	3770	1300	47	30	21	17
19	9.8	21	1030	40	2030	316	3270	931	119	37	18	14
20	9.8	20	275	40	2120	461	2670	741	94	27	29	13
21	9.8	27	165	40	1540	1300	2220	959	42	23	25	12
22	11	33	176	40	1190	1930	1890	908	37	22	19	11
23	11	26	140	50	934	972	1760	945	33	25	17	11
24	13	24	120	70	839	532	1670	1160	30	19	18	12
25	14	96	100	321	972	453	1900	988	44	15	16	12
26	14	74	100	165	1150	513	1740	848	36	15	13	12
27	13	60	110	101	636	425	1510	794	33	23	12	9.8
28	13	58	112	80	767	477	1390	1140	29	41	11	10
29	14	124	452	72	1130	516	1280	8850	34	28	10	11
30	13	114	250	68	---	386	1280	11700	61	22	11	11
31	13	---	120	77	---	365	---	5650	---	21	13	---
TOTAL	369.6	971	31828	2385	25921	15747	94002	64114	15249	1121	490	459.8
MEAN	11.9	32.4	1027	76.9	894	508	3133	2068	508	36.2	15.8	15.3
MAX	18	124	10200	321	4640	1930	15100	11700	3240	107	29	30
MIN	9.3	12	54	40	50	154	356	741	29	15	10	9.8
CAL YR 1983	TOTAL	245539.1	MEAN	673	MAX	12500	MIN	8.1				
WTR YR 1984	TOTAL	252657.4	MEAN	690	MAX	15100	MIN	9.3				

HUDSON RIVER BASIN

01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY

LOCATION.--Lat 42°48'00", long 74°15'48", Schenectady County, Hydrologic Unit 02020005, on right bank 0.4 mi south of Burtonsville, 2.7 mi north of Esperance, and 13.5 mi upstream from mouth.

DRAINAGE AREA.--883 mi².

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

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

REMARKS.--Records good except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi², 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.--45 years, 1,017 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft³/s Oct. 16, 1955, gage height, 12.39 ft; minimum, 2.4 ft³/s Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 and 10.2 ft, 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, 39,400 ft³/s Apr. 6, gage height, 8.38 ft; minimum, 19 ft³/s Oct. 1, gage height, 0.59 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	29	713	380	350	1740	1340	1830	7170	174	73	59
2	21	29	509	270	300	1380	1990	1650	4770	154	63	49
3	20	29	415	230	250	1150	3090	1580	3340	142	55	53
4	20	29	353	240	270	964	3750	5240	2560	132	50	69
5	22	29	325	240	1500	795	8450	6110	2240	127	47	74
6	29	30	475	230	1100	1010	31000	3700	1790	129	45	69
7	37	30	3780	210	800	1100	14100	3000	1580	280	42	55
8	36	30	1900	200	680	800	7910	2420	1390	346	47	46
9	34	29	1080	190	640	480	5090	2720	1050	238	42	41
10	33	29	877	180	560	350	4000	2460	697	203	40	38
11	29	38	708	170	500	330	3470	2110	579	153	38	36
12	29	85	549	170	700	250	3380	2090	513	133	39	39
13	31	98	6070	170	1200	240	3420	2420	346	120	44	49
14	33	85	17400	160	2500	230	3970	4310	307	102	46	45
15	52	71	12300	170	5380	300	5340	3900	307	85	46	48
16	43	85	6710	160	7020	340	9750	3110	248	75	45	84
17	37	155	4190	160	6630	578	15700	2600	206	66	162	106
18	37	156	2830	170	6260	760	8040	2300	190	76	107	90
19	32	132	1700	180	4720	625	6330	1910	238	146	71	78
20	30	110	760	170	4310	871	5030	1560	296	123	78	68
21	28	112	350	160	3530	2660	4120	1560	230	96	89	58
22	25	168	410	140	2600	4190	3430	1650	173	80	76	44
23	24	168	400	130	2040	2980	2990	1480	150	71	69	39
24	26	147	320	250	1930	1760	3140	2030	140	63	61	37
25	31	473	280	800	2030	1430	3900	1710	141	57	55	34
26	37	723	230	2400	2980	1530	3460	1430	156	49	50	33
27	37	535	240	1500	2030	1410	2820	1340	139	57	45	29
28	37	480	300	960	1660	1260	2440	1690	124	155	41	28
29	35	981	560	640	1950	1340	2210	17000	122	155	39	28
30	30	1100	1000	400	---	1190	2030	24100	147	116	42	28
31	30	---	600	350	---	991	---	14400	---	88	54	---
TOTAL	965	6195	68334	11780	66420	35034	175690	125410	31339	3991	1801	1554
MEAN	31.1	207	2204	380	2290	1130	5856	4045	1045	129	58.1	51.8
MAX	52	1100	17400	2400	7020	4190	31000	24100	7170	346	162	106
MIN	20	29	230	130	250	230	1340	1340	122	49	38	28

CAL YR 1983 TOTAL 516888 MEAN 1416 MAX 28500 MIN 15
WTR YR 1984 TOTAL 528513 MEAN 1444 MAX 31000 MIN 20

HUDSON RIVER BASIN

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 upstream from mouth.

DRAINAGE AREA.--3,456 mi².

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 National Geodetic Vertical Datum of 1929. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi upstream at Crescent Dam at datum 130.87 ft higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records good. 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, includes diversion at Lock 6; 59 years (1926-84), 5,713 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft, from rating curve extended above 100,000 ft³/s; minimum, 6 ft³/s Sept. 18, 1941, gage height, 3.40 ft; minimum daily, 23 ft³/s Aug. 24, 1941.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	1330	*63,400	*18.85	Apr. 17	1330	45,000	17.41
Feb. 16	1115	52,400	18.04	May 29	2315	59,000	18.54
Apr. 6	1915	51,000	17.92				

Minimum discharge, 147 ft³/s Sept. 10, 11, gage height, 4.74 ft; minimum daily, 738 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905	1160	10500	4210	2890	8070	7190	3480	19800	1900	1220	1670
2	770	1200	9130	3800	2730	6890	9550	7080	12900	1960	907	1980
3	819	1310	6870	3520	2470	6280	11100	6750	9180	1850	1100	1830
4	1040	1280	4930	3750	2080	5830	11900	15400	7780	1760	1100	1430
5	1050	1540	4660	3700	3170	5450	12400	19400	6530	1960	785	2630
6	1600	1550	4130	3750	3870	5560	39800	14200	5900	9420	1080	2370
7	1390	1580	14000	3570	3550	5840	34100	10100	4700	14400	1260	2170
8	1560	1900	16400	3440	3330	5000	22400	8790	4410	10800	902	1900
9	1290	1320	10800	3070	3060	4150	14900	10600	4210	7370	999	2500
10	1070	2090	8120	2910	2860	3900	11200	10100	3880	3970	1110	1080
11	1000	2080	6660	2870	2350	3790	9650	7340	3200	4670	1280	1680
12	1050	2840	5760	2820	2710	2830	8890	11100	2010	5020	1440	2440
13	1340	3110	11800	2790	3520	2670	8620	15000	2680	5080	1730	2100
14	1920	2890	56500	2710	6460	2530	9260	15900	1860	4400	2040	2400
15	2370	2180	52400	2590	16400	3250	11900	15800	2180	3630	2190	1910
16	2290	2480	37900	2600	37200	3840	16700	10300	2730	2830	2130	2510
17	1150	4820	24900	2730	30700	3970	39500	9050	2190	3260	2060	2280
18	1590	4100	17600	2810	26700	4080	32800	8260	2000	3240	1520	2090
19	1570	3250	13100	2990	22500	3990	23900	6200	2270	2910	1810	1870
20	1560	2310	9630	3120	18200	4230	18300	5790	4420	1440	1520	1900
21	1300	2860	6440	2900	16900	7800	14800	5350	3690	1500	1520	1850
22	1010	5370	5760	2110	13500	16000	12100	5490	2010	1720	1190	1940
23	1000	4810	5740	2350	11000	17100	10200	5130	1800	1750	1350	1920
24	1340	3520	5000	1850	9650	12000	8830	7440	1380	1710	1540	1820
25	2140	7410	4460	2050	9560	9560	14900	6600	2640	1740	1560	1810
26	1800	10400	3720	3070	10400	8830	13300	5580	3780	1750	1420	1720
27	1620	5890	3750	4220	9960	8150	10100	5080	3660	776	1240	923
28	1300	5450	4250	3940	8590	7120	9390	5520	1390	790	1300	1640
29	1410	10100	5180	3620	8650	6970	8650	34700	2510	1260	1150	738
30	1140	13000	5610	2980	---	6730	6390	53500	2050	1390	1280	903
31	1170	---	5030	3000	---	6090	---	37600	---	1440	1340	---
TOTAL	42564	113800	380730	95840	294960	198500	462720	382630	129740	107696	43073	56004
MEAN	1373	3793	12280	3092	10170	6403	15420	12340	4325	3474	1389	1867
MAX	2370	13000	56500	4220	37200	17100	39800	53500	19800	14400	2190	2630
MIN	770	1160	3720	1850	2080	2530	6390	3480	1380	776	785	738
CAL YR 1983	TOTAL	2293435	MEAN	6283	MAX	59300	MIN	511				
WTR YR 1984	TOTAL	2308257	MEAN	6307	MAX	56500	MIN	738				

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 1983 to September 1984

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	126	108	3.0	3.0	3.0	3.0	98	98	146	140	146
2	144	114	102	3.0	3.0	3.0	3.0	78	78	122	140	128
3	162	108	102	3.0	3.0	3.0	3.0	78	98	134	134	134
4	150	108	108	3.0	3.0	3.0	3.0	78	152	152	122	122
5	156	120	114	3.0	3.0	3.0	3.0	78	152	122	122	128
6	162	108	108	3.0	3.0	3.0	3.0	78	152	152	134	146
7	132	114	102	3.0	3.0	3.0	3.0	152	140	134	134	140
8	138	120	102	3.0	3.0	3.0	3.0	116	146	146	152	116
9	156	120	102	3.0	3.0	3.0	3.0	128	128	122	122	128
10	150	108	3.0	3.0	3.0	3.0	3.0	128	140	158	128	128
11	126	108	3.0	3.0	3.0	3.0	3.0	128	122	128	152	116
12	126	102	3.0	3.0	3.0	3.0	78	116	122	128	140	122
13	120	102	3.0	3.0	3.0	3.0	78	134	122	134	110	104
14	120	114	3.0	3.0	3.0	3.0	78	122	116	140	120	134
15	132	108	3.0	3.0	3.0	3.0	78	134	152	152	140	128
16	132	114	3.0	3.0	3.0	3.0	78	110	140	140	128	140
17	108	114	3.0	3.0	3.0	3.0	78	110	122	146	140	128
18	138	132	3.0	3.0	3.0	3.0	78	170	146	128	146	116
19	126	108	3.0	3.0	3.0	3.0	78	134	110	128	134	128
20	114	108	3.0	3.0	3.0	3.0	78	128	122	140	152	164
21	120	114	3.0	3.0	3.0	3.0	78	146	122	140	122	140
22	120	108	3.0	3.0	3.0	3.0	78	134	122	140	140	122
23	126	102	3.0	3.0	3.0	3.0	78	140	140	134	128	140
24	120	114	3.0	3.0	3.0	3.0	78	110	122	140	140	214
25	120	108	3.0	3.0	3.0	3.0	78	152	140	134	146	140
26	108	114	3.0	3.0	3.0	3.0	78	146	166	128	158	116
27	144	108	3.0	3.0	3.0	3.0	78	140	134	104	134	128
28	138	108	3.0	3.0	3.0	3.0	78	134	128	158	122	140
29	102	102	3.0	3.0	3.0	3.0	78	98	134	134	152	122
30	114	114	3.0	3.0	---	3.0	98	78	140	104	134	128
31	144	---	3.0	3.0	---	3.0	---	78	---	152	128	---
TOTAL	4080	3348	1014.0	93.0	87.0	93.0	1535.0	3654	3906	4220	4194	3986
MEAN	132	112	32.7	3.00	3.00	3.00	51.2	118	130	136	135	133
MAX	162	132	114	3.0	3.0	3.0	98	170	166	158	158	214
MIN	102	102	3.0	3.0	3.0	3.0	3.0	78	78	104	110	104

CAL YR 1983 TOTAL 32307.0 MEAN 88.5 MAX 192 MIN 3.0
WTR YR 1984 TOTAL 30210.0 MEAN 82.5 MAX 214 MIN 3.0

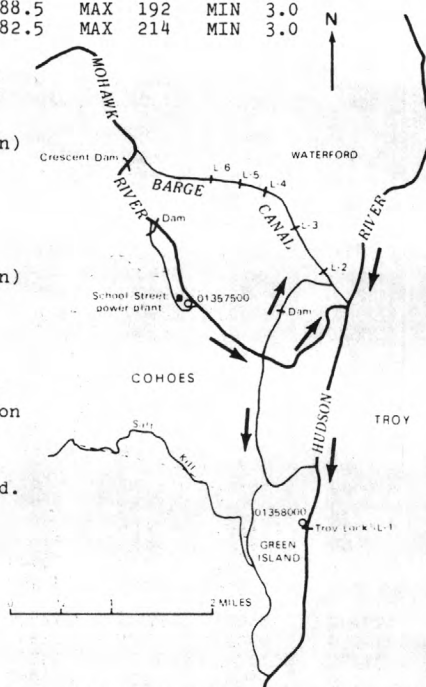
01357500 MOHAWK RIVER AT COHOES, NY

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 5.--Gaging stations and diversions near mouth of Mohawk River.

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND, NY

(National stream-quality accounting 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 downstream from 5th branch Mohawk River. Water-quality sampling site at bridge on State Highway 7, 1.7 mi downstream from discharge station.

DRAINAGE AREA.--8,090 mi², 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 below National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft higher.

REMARKS.--Records fair above 15,000 ft³/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.--38 years, 13,790 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft³/s Dec. 31, 1948, gage height, 27.05 ft, from high-water mark in gage well; maximum daily, 152,000 ft³/s Mar. 14, 1977; minimum daily, 882 ft³/s Sept. 2, 1968; minimum gage height 13.68 ft July 6, 1981, when pool was lowered for inspection of flashboards.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 109,000 ft³/s May 30, gage height, 22.98 ft; minimum daily, 3,220 ft³/s Oct. 3; minimum gage height, 14.61 ft July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4940	5890	25800	17200	10600	21000	16000	17600	63800	6070	7400	8620
2	4070	5770	22600	16400	9820	17200	18400	19100	43900	6240	4160	7380
3	3220	5940	17800	15900	9050	15900	19800	19100	33800	6410	3780	7340
4	4860	5860	14700	14600	9330	14700	21300	29700	28900	5920	4980	6370
5	4790	6120	14700	11300	11500	14100	22500	37300	22400	6860	4590	7900
6	5910	5250	13300	11400	11800	15900	59600	30200	21000	13900	5020	8380
7	5270	4980	31700	11300	11600	15400	64700	23400	16800	24900	5510	8510
8	5830	6580	36300	11300	11200	14300	48400	23000	18500	26900	5900	7510
9	4900	5940	28500	10700	9720	15600	35500	26400	18800	20600	5420	7160
10	3670	6790	22300	9640	9380	14000	28100	25300	16200	14400	6030	5890
11	5300	7550	20000	9580	9770	13200	24200	22300	11200	13600	6210	6600
12	4990	8270	16900	9600	10600	11300	22200	26000	9760	16000	6960	7160
13	5840	9770	28600	10200	12200	10400	21500	34400	10600	14700	5780	9870
14	6450	9680	94800	9900	16500	10200	23900	37800	8290	12100	6320	6480
15	7520	9220	93600	9690	34400	10400	29500	38800	7590	10700	7580	5720
16	7070	10100	73100	9560	71400	9970	36300	30400	7330	7900	8120	5870
17	4870	12300	54400	9650	63700	11600	63500	26800	6330	9020	7500	5520
18	6650	11700	40800	9230	58400	12200	60900	24700	6070	9020	6500	6650
19	6190	10500	32700	9860	57200	11600	52000	21700	9320	10200	5740	7420
20	5780	8460	26100	9530	48800	11900	43700	19600	9670	8120	5770	7320
21	5620	8560	20900	9100	45200	12500	35000	18000	8190	8360	6200	6050
22	5060	15700	16100	9080	37300	31200	29000	17300	7330	7680	6990	5970
23	4140	17400	15900	9660	31200	34400	24400	17000	6770	6570	5050	5670
24	4580	15700	17000	9450	28100	26800	28300	18800	6440	6730	7070	6480
25	6840	21600	14000	9540	28100	22600	34700	18500	4560	7230	7370	5950
26	6700	27900	10800	9980	29500	21800	33400	16400	8910	8050	6010	6680
27	6490	21400	10300	12100	27600	20400	28300	15800	8960	5940	5390	5660
28	5820	19000	11400	11200	23400	19800	25200	16000	6770	5700	5530	5840
29	6140	25800	15300	10800	22100	19000	23800	53900	7540	5560	6750	4730
30	4640	29500	16500	10500	---	15100	21400	104000	6640	5450	8470	4150
31	4250	---	18000	9300	---	15000	---	94900	---	5380	8900	---
TOTAL	168400	359230	874900	337250	759470	509470	995500	924200	442370	316210	193000	200850
MEAN	5432	11970	28220	10880	26190	16430	33180	29810	14750	10200	6226	6695
MAX	7520	29500	94800	17200	71400	34400	64700	104000	63800	26900	8900	9870
MIN	3220	4980	10300	9080	9050	9970	16000	15800	4560	5380	3780	4150
CAL YR 1983	TOTAL	5760020	MEAN	15780	MAX	99900	MIN	2330				
WTR YR 1984	TOTAL	6080850	MEAN	16610	MAX	104000	MIN	3220				

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), 1979-82 (d), 1983-84 (b).

MINOR ELEMENTS DATA: 1970-71 (a); 1972-73, 1975-79 (b), 1980-84 (b).

RADIOCHEMICAL DATA: 1968-71 (c), 1973-75 (a), 1976 (d), 1977 (a), 1978 (b), 1979-80 (a), 1981 (b), 1982-84 (a).

PESTICIDE DATA: 1976-77 (b), 1978 (a), 1979 (c), 1980, 82 (a).

ORGANIC DATA: OC--1974 (a), 1975 (c), 1976-77 (b), 1978 (a), 1979 (c), 1980-81 (d).

PCB--1978 (a), 1979 (b), 1980 (a).

NUTRIENT DATA: 1968 (b), 1969-76 (d), 1977-79 (c), 1980-82 (d), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1971 (a), 1973-74 (d), 1975 (a), 1976-78 (c), 1979-81 (d), 1983-84 (b).

Phytoplankton--1975 (a), 1976-77 (c), 1978 (b), 1979-81 (c).

Periphyton--1976-77 (b), 1978 (a), 1979-80 (b).

SEDIMENT DATA: 1975 (b), 1976 (d), 1977 (b), 1978 (c), 1979-82 (d), 1983-84 (b).

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 September 1981.

REMARKS.--Prior to October 1968 sampling site at old bridge on State Highway 7 about 100 ft upstream, and between April 1971 and September 1973 sampling site at former bridge on road between Green Island and Troy at Starbuck Island.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
DEC 08...	1100	36300	173	7.8	2.0	40	770	14.7	105	--
MAR 07...	1100	15400	181	7.7	.5	5.5	765	14.8	102	150
JUN 05...	1100	22400	148	7.8	14.0	9.5	765	10.4	101	2100
AUG 13...	1200	5780	189	7.6	27.0	.50	766	7.7	96	640

		STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 08...	2000	72	17	22	4.1	8.8	1.5	55	20	13	
MAR 07...	190	71	24	22	3.8	7.8	.80	47	18	14	
JUN 05...	350	58	14	18	3.2	4.9	.80	44	16	7.9	
AUG 13...	--	69	20	21	3.9	8.2	.90	49	18	13	

		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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC 08...	<.10	4.5	123	110	.71	.120	.90	.130	.030	.020	
MAR 07...	<.10	5.4	99	100	.61	.130	1.4	.030	.010	<.010	
JUN 05...	.20	4.6	98	82	.50	.200	1.0	.030	<.010	.010	
AUG 13...	<.10	2.9	114	98	.48	.110	.30	.100	.050	.040	

HUDSON RIVER BASIN

01358000 HUDSON RIVER AT GREEN ISLAND NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
DEC 08...	50	1	26	<.5	<1	<1	<3	3	59	3
MAR 07...	30	1	26	<.5	12	<1	<3	7	60	7
JUN 05...	30	<1	22	<.5	<1	<1	<3	11	46	1
AUG 13...	30	1	28	<.5	<1	<1	<3	9	87	4

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 08...	<4	10	.3	<10	1	<1	<1	120	<6	12
MAR 07...	8	27	.3	<10	3	<1	<1	110	<6	19
JUN 05...	<4	17	1.3	<10	4	<1	<1	82	<6	8
AUG 13...	<4	24	.1	<10	3	<1	<1	100	<6	7

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)
AUG 13...	1130	367	22	188	7.7
13...	1145	637	3	193	7.9
13...	1205	574	10	186	7.6
13...	1215	480	19	171	7.6
13...	1230	429	20	186	7.6
13...	1245	304	22.5	190	7.6
13...	1300	241	20.5	189	7.6
13...	1315	159	19.5	191	7.6
13...	1330	97	17.5	189	7.6
13...	1345	35	17.5	181	7.7

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/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 (PCI/L METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
MAR 07...	1100	<2.0	<.4	<1.3	<.4	<1.1	<.4	.05	.09
AUG 13...	1200	<2.9	<.4	2.3	.5	2.0	.5	.05	.17

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 08...	1100	36300	96	9410	94	JUN 05...	1100	22400	27	1630	--
MAR 07...	1100	15400	10	416	90	AUG 13...	1200	5780	12	187	--

HUDSON RIVER BASIN

01359139 HUDSON RIVER AT ALBANY, NY

LOCATION.--Lat 42°38'57", long 73°44'46", Albany County, Hydrologic Unit 02020006, on right bank 0.5 mi upstream from bridge on U.S. Highways 9 and 20 in Albany, and 0.5 mi downstream from the Penn Central Transportation Company bridge.

DRAINAGE AREA.--8,290 mi².

PERIOD OF RECORD.--October 1972 to September 1976, April 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Gage-height record converted to elevation above or below (-) mean sea level for publication.

REMARKS.--Records good, except those for period of sluggish intake (Oct. 26 to Nov. 8), which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 10.05 ft May 31, 1984; minimum recorded, -4.13 ft Dec. 7, 1981.

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
<u>Maximum high tide</u>												
Elevation	5.72	6.06	8.56	5.02	7.67	6.51	8.09	10.05	7.84	5.62	5.13	4.69
Date	25	11	14	6	18	29	17	31	1	12	30	5
<u>Minimum low tide</u>												
Elevation	a-3.31	-2.93	-1.66	-1.52	-1.27	-2.84	-0.27	-1.44	-2.02	-2.13	-2.19	-2.84
Date	29	13	25	11	26	12	3	27	15	24	2	27
Mean high tide	b4.32	b4.57	4.98	3.39	4.59	4.48	5.76	5.44	5.03	4.74	4.54	4.22
Mean water level	1.56	1.81	2.63	1.65	2.60	1.81	3.43	2.96	2.03	1.70	1.57	1.27
Mean low tide	a-1.51	a-1.12	0.14	-0.13	0.66	-0.97	1.03	0.42	-0.91	-1.43	-1.62	-1.64

a May have been lower.
b May have been higher.

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 downstream from bridge on State Highway 150, 0.2 mi east of village of Castleton-on-Hudson, 0.5 mi downstream from unnamed tributary, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--32.6 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 98.72 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diurnal fluctuation of low flow by mills upstream and occasional regulation at dam 800 ft upstream.

AVERAGE DISCHARGE.--27 years, 38.9 ft³/s, 16.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s Jan. 22, 1959, gage height, 3.63 ft; maximum gage height, 4.02 ft Jan. 27, 1976 (ice jam); minimum discharge, 0.30 ft³/s Aug. 9, 10, 1964, gage height, 0.25 ft; minimum daily, 1.0 ft³/s Sept. 6, 1964.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	2230	864	3.07	Mar. 22	1200	490	2.42
Feb. 16	0300	437	2.31	May 30	1330	*1,300	*3.66

Minimum discharge, 4.1 ft³/s Oct. 19, 20, 21-22, 23; minimum gage height, 0.66 ft Oct. 1; minimum daily, 4.1 ft³/s Oct. 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	4.8	75	47	20	62	90	53	320	16	14	10
2	6.7	4.8	59	35	22	54	84	47	189	17	13	9.1
3	6.5	4.9	51	27	40	47	80	44	136	16	12	12
4	6.4	4.9	45	24	150	43	77	176	109	16	12	12
5	6.6	4.9	41	22	70	41	123	123	84	15	12	11
6	9.7	5.2	55	22	36	46	198	83	67	30	11	9.6
7	8.9	5.4	212	21	31	40	154	67	63	304	17	9.0
8	7.3	5.1	127	21	29	35	113	64	53	133	16	8.3
9	6.6	5.1	81	20	28	31	88	82	44	61	12	7.7
10	6.4	5.2	67	20	29	29	75	64	38	39	12	7.6
11	6.0	11	57	19	30	27	66	55	33	30	35	8.3
12	5.4	14	52	19	40	26	59	62	29	29	31	10
13	6.7	9.5	451	18	64	27	54	85	27	23	18	8.9
14	6.1	7.6	593	18	148	48	60	168	37	20	15	11
15	5.2	6.8	269	17	324	94	85	121	34	17	16	10
16	4.7	14	175	17	346	92	169	92	26	17	19	9.2
17	4.4	16	123	17	195	106	212	76	24	16	26	8.3
18	4.4	12	94	17	207	51	144	66	25	56	15	7.8
19	4.3	9.4	70	17	161	44	121	60	42	89	14	7.6
20	4.1	8.1	60	17	176	62	126	58	27	44	19	7.4
21	4.1	23	70	18	129	184	110	67	22	28	15	6.9
22	4.1	20	105	19	101	434	86	55	19	24	13	6.6
23	4.3	14	82	20	85	261	78	54	18	20	17	6.5
24	6.2	14	64	25	89	139	109	77	18	17	17	6.8
25	6.8	87	54	60	85	116	126	53	25	16	14	6.7
26	6.0	89	54	130	76	106	110	47	20	15	12	6.7
27	5.6	73	63	78	61	90	84	50	17	20	11	6.9
28	5.4	66	96	45	66	84	71	75	16	27	10	6.8
29	5.1	113	246	30	90	82	63	423	16	19	9.9	6.8
30	4.8	104	151	22	---	73	57	994	16	16	9.8	6.8
31	4.8	---	70	20	---	77	---	596	---	15	10	---
TOTAL	179.6	761.7	3812	902	2928	2651	3072	4137	1594	1205	477.7	252.3
MEAN	5.79	25.4	123	29.1	101	85.5	102	133	53.1	38.9	15.4	8.41
MAX	9.7	113	593	130	346	434	212	994	320	304	35	12
MIN	4.1	4.8	41	17	20	26	54	44	16	15	9.8	6.5
CFSM	.18	.78	3.77	.89	3.10	2.62	3.13	4.08	1.63	1.19	.47	.26
IN.	0.20	0.87	4.35	1.03	3.34	3.03	3.51	4.72	1.82	1.38	0.55	0.29

CAL YR 1983	TOTAL	21442.6	MEAN	58.7	MAX	593	MIN	4.1	CFSM	1.80	IN.	24.47
WTR YR 1984	TOTAL	21972.3	MEAN	60.0	MAX	994	MIN	4.1	CFSM	1.84	IN.	25.07

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 right bank 2,400 ft downstream from bridge on State Highway 28, at Shandaken, 0.5 mi downstream from Bushnellville Creek, 0.5 mi upstream from Fox Hollow Creek, and 5.2 mi northwest of Phoenicia. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,017.27 ft 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.--21 years, 140 ft³/s, 31.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s Mar. 21, 1980, gage height, 13.00 ft from floodmarks, from rating curve extended above 2,200 ft³/s on basis of slope-area measurement at gage height 10.88 ft; minimum, 2.1 ft³/s Sept. 16, 1983 (result of slight regulation above station).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0230	2,390	7.75	Apr. 16	1500	2,350	7.87
Feb. 15	1945	3,170	8.32	May 30	0830	2,150	7.55
Apr. 5	1430	*8,470	*10.95				

Minimum discharge, 4.7 ft³/s Oct. 5, minimum gage height, 3.50 July 17, 18; minimum daily, 5.0 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	6.8	149	120	74	196	135	174	697	46	15	13
2	8.4	6.4	133	110	74	179	142	159	484	41	15	12
3	6.3	6.1	122	97	93	155	161	150	352	33	12	19
4	5.0	6.0	115	94	169	155	182	347	277	30	12	31
5	6.0	6.0	104	89	122	149	3740	311	220	30	7.2	24
6	9.1	5.6	127	87	110	130	2280	294	186	31	6.8	21
7	6.9	5.3	321	82	100	115	1110	267	163	46	7.6	19
8	6.7	5.3	231	80	96	105	676	258	143	37	6.8	17
9	7.1	5.3	194	78	90	98	488	254	125	30	6.8	15
10	6.6	9.2	172	74	90	95	390	225	111	26	6.8	13
11	5.3	24	146	70	98	94	323	207	99	24	12	13
12	6.7	41	138	70	110	88	302	212	89	24	26	18
13	8.4	29	736	68	123	88	303	207	81	21	48	13
14	10	25	1970	66	317	87	312	241	76	18	29	17
15	7.4	23	1170	66	2020	78	383	226	69	16	23	16
16	6.2	42	736	64	1700	77	1160	226	64	14	18	15
17	5.6	47	505	64	915	83	1200	216	59	14	19	13
18	6.3	39	360	62	628	79	821	203	58	26	14	13
19	8.6	36	290	60	494	81	631	189	56	24	16	12
20	7.4	35	220	60	482	95	530	177	49	21	35	12
21	7.1	105	200	60	410	136	436	177	45	21	24	12
22	8.3	101	183	64	344	177	358	156	41	23	22	9.7
23	7.9	84	179	80	295	170	311	155	37	19	30	8.1
24	9.0	78	170	155	274	163	288	157	40	17	27	8.1
25	8.6	167	160	222	250	157	264	143	50	15	24	9.3
26	8.4	151	150	163	226	155	241	138	39	13	21	12
27	8.2	143	160	132	201	150	230	132	34	28	18	13
28	8.2	131	203	99	209	149	214	166	30	30	18	14
29	8.1	175	183	93	215	157	201	1200	29	25	18	13
30	7.8	170	140	79	---	147	189	1870	40	21	24	13
31	7.4	---	130	75	---	135	---	1150	---	17	16	---
TOTAL	232.1	1708.0	9797	2783	10329	3923	18001	9987	3843	781	578.0	438.2
MEAN	7.49	56.9	316	89.8	356	127	600	322	128	25.2	18.6	14.6
MAX	10	175	1970	222	2020	196	3740	1870	697	46	48	31
MIN	5.0	5.3	104	60	74	77	135	132	29	13	6.8	8.1
CFSM	.13	.96	5.31	1.51	5.98	2.13	10.1	5.41	2.15	.42	.31	.25
IN.	0.15	1.07	6.13	1.74	6.46	2.45	11.25	6.24	2.40	0.49	0.36	0.27

CAL YR 1983	TOTAL	60946.8	MEAN	167	MAX	2000	MIN	3.6	CFSM	2.81	IN.	38.10
WTR YR 1984	TOTAL	62400.3	MEAN	170	MAX	3740	MIN	5.0	CFSM	2.86	IN.	39.01

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), 1968-82 (d), 1983-84 (b).

MINOR ELEMENT DATA: 1964-65, 1967-73, 1975-76 (a), 1977 (b), 1978-84 (a).

RADIOCHEMICAL DATA: 1967-77, 1979-84 (a).

PESTICIDE DATA: 1967-72, 1974-77, 1979-82 (a).

ORGANIC DATA: OC--1979 (a), 1981 (c).

PCB--1974-77, 1979-82 (a).

PCN--1977, 1979-82 (a).

NUTRIENT DATA: 1968 (a), 1969-71 (d), 1972 (c), 1974 (a), 1975-82 (d), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1968-69 (d), 1970-72 (c), 1973-82 (d), 1983-84 (b).

SEDIMENT DATA: 1969-71 (c), 1972-75, 1977-82 (d), 1983-84 (b).

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 Dec. 30-Feb. 7, due to instrument malfunction, and June 22-24, 26-30, July 14-21, 26, 27, Aug. 4-6, temperature probe was out of water due to breached control.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (except water years 1969, 1977, 1981, 1983-84), 28.5°C Aug. 16, 1965, Aug. 9, 1980; minimum, freezing point on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 30...	1030	168	57	7.1	3.5	1.0	733	12.8	100	K7
MAR 06...	0915	132	54	6.8	2.0	1.0	665	12.3	102	4
APR 10...	1100	398	45	6.8	4.0	17	738	12.8	101	K4
AUG 14...	1500	32	75	7.3	23.0	1.4	737	8.5	103	85

DATE	TIME	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 30...	21	18	7	5.1	1.2	2.7	.30	11	9.2	4.9	
MAR 06...	69	16	8	4.7	1.1	3.2	.30	8.0	6.6	6.2	
APR 10...	K3	13	7	4.0	.85	2.2	.30	7.0	7.4	4.3	
AUG 14...	--	24	4	7.4	1.4	4.3	.50	20	7.3	6.0	

DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHORUS, DIS- SOLVED (MG/L AS P)
NOV 30...	<.10	2.6	40	33	.48	<.010	.40	.010	.010	<.010	
MAR 06...	<.10	2.6	28	30	.29	<.010	.70	<.010	<.010	<.010	
APR 10...	<.10	2.6	--	26	.18	.030	3.6	<.010	<.010	<.010	
AUG 14...	<.10	3.0	43	42	<.10	<.010	.10	.050	<.010	<.010	

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 1983 TO SEPTEMBER 1984

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
MAR 06...	<10	1	18	<.5	<1	<1	<3	2	4	5
AUG 14...	20	1	22	<.5	2	<1	<3	3	29	1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR 06...	5	2	.1	<10	2	<1	<1	16	<6	9
AUG 14...	<4	6	.1	<10	3	<1	<1	23	<6	22

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DISP. TOTAL (UG/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)
AUG 14...	1500	1.9	<.4	2.0	<.4	1.7	<.4	.04	.03

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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 30...	1030	168	3	1.4	--	APR 10...	1100	398	27	29	91
MAR 06...	0915	132	2	.71	--	AUG 14...	1500	32	1	.09	--

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	7.0	8.5	16.5	15.0	15.5	22.5	17.0	19.5	19.0	15.0	16.5
2	12.5	8.5	9.5	20.5	14.0	17.0	23.0	18.0	20.5	16.5	14.0	15.0
3	9.5	8.5	9.0	20.0	15.0	17.0	21.0	18.5	20.0	16.5	14.5	15.5
4	14.0	8.0	10.5	21.0	14.5	18.0	---	---	---	17.5	14.5	15.5
5	15.0	9.0	11.5	19.0	17.0	18.0	---	---	---	15.5	12.0	14.0
6	14.5	9.5	11.5	18.0	16.0	17.5	---	---	---	15.0	10.5	12.5
7	16.0	10.5	13.0	19.0	16.0	17.0	23.5	19.0	21.0	16.0	10.0	12.5
8	17.5	11.0	14.0	20.0	14.0	16.5	24.5	18.5	21.5	17.0	10.5	13.5
9	18.5	12.0	15.0	19.0	13.5	16.0	24.0	19.0	21.5	17.5	12.0	14.5
10	18.5	12.5	15.5	20.5	13.5	17.0	21.5	20.0	20.5	18.0	13.5	15.5
11	20.0	13.0	16.0	21.0	16.0	18.5	21.5	19.0	20.0	19.0	14.5	17.0
12	20.0	12.0	15.5	23.5	17.0	20.0	21.0	18.0	19.5	18.5	15.0	17.0
13	19.5	12.5	15.0	23.0	16.0	19.5	23.0	18.0	20.0	18.5	13.5	16.0
14	18.0	12.5	15.0	---	---	---	24.0	18.0	20.5	19.0	16.0	17.0
15	17.0	12.5	14.0	---	---	---	23.5	19.0	21.0	16.0	12.5	14.5
16	17.5	10.0	13.5	---	---	---	22.0	18.0	19.5	14.5	9.5	12.0
17	15.5	11.5	13.5	---	---	---	22.5	17.5	19.5	15.0	10.0	12.0
18	14.5	13.0	13.5	---	---	---	22.0	15.5	18.5	15.0	9.5	12.0
19	20.5	13.0	16.0	---	---	---	17.5	16.0	16.5	16.0	10.0	13.0
20	20.0	13.0	16.0	---	---	---	20.5	15.5	17.5	17.0	12.0	15.0
21	19.5	12.0	15.5	---	---	---	20.0	13.5	17.0	16.5	13.0	14.5
22	---	---	---	23.5	15.5	19.0	21.0	14.0	17.5	16.0	11.0	13.5
23	---	---	---	25.0	17.0	20.5	20.0	17.0	18.0	17.5	12.5	15.0
24	---	---	---	24.0	19.5	21.0	17.5	16.0	16.5	17.5	15.5	16.5
25	19.0	14.0	16.0	23.0	16.5	19.5	20.5	14.0	17.0	19.0	15.0	17.0
26	---	---	---	---	---	---	20.5	14.0	17.0	17.0	12.0	15.5
27	---	---	---	---	---	---	19.0	14.0	16.5	13.0	10.0	12.0
28	---	---	---	18.5	15.0	16.5	20.5	14.5	17.5	11.0	10.0	10.5
29	---	---	---	20.0	14.5	17.0	20.5	16.5	18.0	13.0	10.5	11.5
30	---	---	---	20.5	15.5	18.0	21.5	17.5	19.0	13.5	8.5	11.0
31	---	---	---	23.0	15.5	19.0	21.5	17.0	19.0	---	---	---
MONTH	20.5	7.0	13.5	25.0	13.5	18.0	24.5	13.5	19.0	19.0	8.5	14.0

HUDSON RIVER BASIN

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01362285 WOODLAND CREEK NEAR WOODLAND, NY

LOCATION.--Lat 42°02'06", long 74°21'59", Ulster County, Hydrologic Unit 02020006, at bridge on private road, 0.9 mi upstream from Dougherty Branch, and 2.3 mi southwest of Woodland.

DRAINAGE AREA.--5.18 mi².

PERIOD OF RECORD.--August 1983 to current year.

CHEMICAL DATA: 1983 (a), 1984 (c).

MINOR ELEMENT DATA: 1983 (a), 1984 (c).

ORGANIC DATA: OC--1983 (a), 1984 (c).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 01...	1440	2.5	27	6.3	7.5	9	8	<.1	2.2
DEC 15...	1615	93	21	6.5	5.5	9	6	<.1	2.3
FEB 02...	1000	6.0	23	6.2	.0	9	2	.1	2.3
APR 02...	1355	19	25	6.4	5.0	9	6	<.1	2.2
16...	1305	468	20	6.1	4.5	7	6	<.1	1.8
JUN 12...	0845	7.8	23	6.4	11.5	8	5	<.1	2.1
JUL 19...	1600	3.0	23	6.4	15.5	8	5	.1	2.0
SEP 11...	1640	1.2	--	5.7	15.0	9	5	.3	2.1

DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)
NOV 01...	.89	.70	.30	1.3	6.9	.77	<.01	<.10	2.1
DEC 15...	.76	.50	.28	.60	6.0	.78	.05	<.10	1.9
FEB 02...	.85	.60	.23	1.0	6.8	.74	.01	<.10	1.8
APR 02...	.81	.50	.25	1.2	6.4	.77	.05	<.10	1.6
16...	.61	.30	.27	.70	5.3	.43	.04	<.10	1.3
JUN 12...	.77	.40	.29	1.4	6.3	.57	.02	<.10	2.1
JUL 19...	.79	.50	.29	1.4	6.4	.48	<.01	<.10	2.1
SEP 11...	.81	.60	.38	1.7	6.1	.89	.04	<.10	2.2

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV 01...	15	.18	.016	.012	10	4	2	1.8
DEC 15...	14	.31	<.001	.010	10	<3	3	2.5
FEB 02...	18	.41	.018	<.001	30	<3	<1	2.2
APR 02...	14	.27	.084	<.001	50	<3	<1	.90
16...	11	.31	.006	.003	20	9	15	2.8
JUN 12...	15	.20	.186	.005	<10	3	2	1.3
JUL 19...	14	.21	<.001	<.001	40	<3	1	.90
SEP 11...	16	.26	<.001	<.001	10	19	4	1.2

HUDSON RIVER BASIN

01362500 ESOPUS CREEK AT COLDBROOK, NY

LOCATION.--Lat 42°00'51", long 74°16'16", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Coldbrook Road, in Coldbrook, 0.3 mi downstream from Little Beaver Kill, 1.5 mi upstream from Ashokan Reservoir, and 2.5 mi south of Mount Tremper.

DRAINAGE AREA.--192 mi².

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 National Geodetic Vertical Datum of 1929. Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good 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 above station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,300 ft³/s Mar. 21, 1980, gage height, 21.94 ft, from rating curve extended above 13,000 ft³/s on basis of slope-area measurements at gage heights 12.39 ft, 15.15 ft, and 20.70 ft; minimum daily, 8 ft³/s Oct. 14, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,400 ft³/s Apr. 5, gage height, 17.75 ft; minimum, 125 ft³/s Nov. 9, 10, gage height, 3.90 ft; minimum daily, 126 ft³/s Nov. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	139	923	1180	740	923	1050	581	2100	406	279	251
2	233	137	806	1140	720	829	1120	520	1450	396	278	249
3	224	136	719	1110	821	720	1210	485	1280	362	275	263
4	218	135	676	1080	1140	660	1290	1660	1050	350	271	291
5	214	133	617	1070	1040	672	17900	1240	728	341	268	261
6	222	131	844	1050	999	683	8390	1060	610	354	267	254
7	232	129	1850	1020	949	624	3350	918	520	656	273	248
8	172	128	1290	986	860	540	2070	919	460	478	307	245
9	168	126	1170	970	820	500	1510	922	565	407	304	241
10	164	128	1390	966	840	480	1240	781	518	377	301	241
11	160	201	1290	924	883	430	1060	700	472	364	309	238
12	172	277	1370	860	954	430	966	697	436	359	435	247
13	190	220	5790	860	1030	430	941	679	442	343	607	304
14	182	200	6810	904	1470	440	948	810	490	329	400	499
15	168	196	3140	869	6840	460	1350	720	465	321	367	576
16	160	424	2060	800	5890	496	3520	687	447	318	347	567
17	157	367	1780	820	3440	558	3270	639	434	310	337	529
18	155	326	1470	829	2560	535	2200	666	437	348	324	467
19	160	309	1380	814	2120	549	1750	907	433	330	322	462
20	153	296	1410	760	2140	633	1520	870	406	312	350	457
21	149	1020	1290	740	1830	941	1260	837	392	310	321	448
22	148	771	1340	720	1600	1200	1070	562	380	305	311	442
23	149	597	1320	740	1460	1260	965	455	370	298	322	436
24	157	533	1220	832	1520	1190	1050	485	382	290	418	412
25	152	1180	1120	984	1440	1150	977	402	421	284	854	292
26	150	1000	1100	907	1380	1120	873	382	375	281	850	284
27	149	872	1090	885	1280	1070	809	363	360	322	697	280
28	146	801	1210	874	1360	1080	740	550	350	319	261	280
29	144	1230	1570	852	1290	1090	691	5560	344	299	266	276
30	143	1080	1250	841	---	1050	637	6610	371	290	266	273
31	141	---	1170	823	---	1020	---	3570	---	285	257	---
TOTAL	5370	13222	50465	28210	49416	23763	65727	36237	17488	10744	11444	10313
MEAN	173	441	1628	910	1704	767	2191	1169	583	347	369	344
MAX	238	1230	6810	1180	6840	1260	17900	6610	2100	656	854	576
MIN	141	126	617	720	720	430	637	363	344	281	257	238
CAL YR 1983	TOTAL	313394	MEAN	859	MAX	7320	MIN	126				
WTR YR 1984	TOTAL	322399	MEAN	881	MAX	17900	MIN	126				

HUDSON RIVER BASIN

85

01364500 ESOPUS CREEK AT MOUNT MARION, NY

LOCATION.--Lat 42°02'16", long 73°58'21", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Glasco Turnpike, 0.8 mi east of Mount Marion, 1.6 mi downstream from Plattekill Creek, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--419 mi².

PERIOD OF RECORD.--March 1970 to current year. Monthly discharge only May 1907 to March 1918, published in WSP 1302. Occasional miscellaneous measurements, 1951, 1956, 1966, 1967, 1969.

GAGE.--Water-stage recorder. Datum of gage is 40.16 ft 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 good except those for periods of no gage height record, Jan. 11 to Feb. 11 and June 17 to July 12, which are fair. Flow from 256 mi² 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 above Ashokan Reservoir. Diversion from Plattekill Creek for water supply of village 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, together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--14 years (1971-84), 553 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 ft³/s Apr. 26, 1910, gage height, 25.10 ft, datum then in use; minimum, 9.7 ft³/s Sept. 16, 17, 1980, gage height, 11.79 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,800 ft³/s Apr. 5, gage height, 22.29 ft; minimum, 19 ft³/s Sept. 30, gage height, 12.03 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	47	637	340	80	728	659	710	7330	600	61	41
2	44	46	470	290	80	530	956	598	4330	1000	57	38
3	37	45	387	250	96	469	1140	481	2710	580	55	37
4	30	43	338	210	130	376	1200	1690	2040	370	54	62
5	28	41	318	180	250	349	5530	2530	1800	300	53	64
6	31	40	361	160	180	351	9130	2190	1570	280	50	53
7	29	38	1690	150	140	360	10000	1730	1200	3500	48	44
8	28	37	1150	150	130	304	6440	1460	559	1700	48	39
9	25	35	699	150	120	240	3910	1550	346	780	46	36
10	23	36	510	170	160	230	2710	1340	255	520	44	34
11	22	81	416	150	210	240	2050	1120	215	380	44	32
12	26	152	382	130	242	210	1640	972	182	300	54	30
13	79	144	3480	120	269	206	1390	1020	162	243	92	30
14	65	125	5100	110	390	290	1230	1030	149	191	119	30
15	53	111	2340	100	2280	390	1470	987	134	157	84	30
16	52	228	1370	94	4300	403	2270	839	121	137	65	30
17	50	361	936	88	2530	519	4320	670	110	127	58	29
18	49	277	616	84	1600	568	5160	538	100	121	49	27
19	48	220	491	82	1210	549	3850	478	110	126	45	25
20	46	190	384	80	1480	592	3090	480	100	112	55	24
21	44	445	290	80	1180	886	2520	555	90	99	54	23
22	41	452	260	80	871	1180	1980	584	80	94	48	22
23	40	345	240	90	618	1110	1600	519	70	87	46	22
24	70	297	200	100	981	874	1570	468	80	78	45	22
25	81	1020	190	150	1040	640	1590	321	110	71	40	22
26	78	1190	180	250	837	533	1460	223	100	63	39	22
27	71	707	190	160	577	465	1240	212	80	68	37	20
28	64	494	240	120	587	422	1100	256	72	89	35	20
29	57	1010	671	100	1030	488	982	3610	68	84	34	20
30	52	1020	525	90	---	490	832	10900	150	75	43	19
31	49	---	408	80	---	504	---	11500	---	67	46	---
TOTAL	1449	9277	25469	4388	23598	15496	83019	51561	24423	12399	1648	947
MEAN	46.7	309	822	142	814	500	2767	1663	814	400	53.2	31.6
MAX	81	1190	5100	340	4300	1180	10000	11500	7330	3500	119	64
MIN	22	35	180	80	80	206	659	212	68	63	34	19

CAL YR 1983 TOTAL 248314 MEAN 680 MAX 9030 MIN 14
WTR YR 1984 TOTAL 253674 MEAN 693 MAX 11500 MIN 19

NOTE.--No gage height record Jan. 11 to Feb. 11 and June 17 to July 12.

HUDSON RIVER BASIN

01364959 RONDOUT CREEK ABOVE RED BROOK, AT PEEKAMOOSE, NY

LOCATION.--Lat 41°56'13", long 74°22'30", Ulster County, Hydrologic Unit 02020007, at State Forest Preserve boundary, 500 ft upstream from Red Brook, 0.8 mi upstream from outlet of Peekamoose Lake, and 0.8 mi north of Peekamoose.

DRAINAGE AREA.--5.36 mi².

PERIOD OF RECORD.--June to September 1984.

CHEMICAL DATA: 1984 (b).

MINOR ELEMENT DATA: 1984 (b).

ORGANIC DATA: OC--1984 (b).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUN 11...	1730	14	23	--	--	7	5	<.1	1.7
JUL 19...	1215	8.1	24	5.5	13.5	7	5	<.1	1.7
SEP 13...	1400	2.4	23	6.1	11.5	8	5	.3	2.0

DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
JUN 11...	.56	.40	.24	.20	6.6	.65	.04	<.10	2.1
JUL 19...	.59	.40	.15	.10	6.7	.49	.05	<.10	2.2
SEP 13...	.65	.60	.26	.50	6.4	.62	.04	<.10	2.7

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
JUN 11...	14	.20	.028	<.001	150	3	57	1.2
JUL 19...	14	.16	.023	.002	100	<3	49	2.3
SEP 13...	15	.21	<.001	<.001	10	<3	18	.90

01364960 RONDOUT CREEK BELOW RED BROOK, AT PEEKAMOOSE, NY

LOCATION (REVISED).--Lat 41°56'06", long 74°22'34", Ulster County, Hydrologic Unit 02020007, 300 ft upstream from private bridge at Peekamoose, 600 ft downstream from Red Brook, and 0.6 mi upstream from outlet of Peekamoose Lake.

DRAINAGE AREA.--6.21 mi², revised.

PERIOD OF RECORD.--August 1983 to May 1984 (discontinued). Prior to October 1983, published as Rondout Creek at Peekamoose.

CHEMICAL DATA: 1983 (a), 1984 (c).

MINOR ELEMENT DATA: 1983 (a), 1984 (c).

ORGANIC DATA: OC--1983 (a), 1984 (c).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 01...	1230	--	28	6.0	4.5	8	2	<.1	2.0
DEC 14...	1022	--	26	4.7	5.0	5	0	.1	1.4
FEB 02...	0950	11	23	5.6	.0	8	2	.1	2.0
APR 03...	1715	27	28	5.4	4.0	7	5	<.1	1.8
17...	1640	87	24	4.8	5.5	5	6	<.1	1.4
MAY 30...	0935	--	25	4.7	9.0	5	6	<.1	1.2
DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
NOV 01...	.72	.50	.35	.60	7.0	.78	<.01	<.10	2.6
DEC 14...	.45	.50	.35	-1.2	5.4	.56	.05	<.10	1.4
FEB 02...	.74	.60	.25	-.10	7.0	.64	.02	<.10	2.2
APR 03...	.67	.40	.26	.30	6.5	.55	.05	<.10	1.8
17...	.47	.30	.28	-.50	6.4	.45	.04	<.10	1.5
MAY 30...	.39	.30	.32	-.90	5.9	.30	.01	<.10	1.3
DATE	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
NOV 01...	19	.18	.030	.007	50	3	40	1.7	
DEC 14...	15	.30	.039	.024	390	13	120	3.7	
FEB 02...	19	.42	.020	<.001	130	5	30	17	
APR 03...	13	.33	.022	<.001	30	5	45	1.0	
17...	11	.32	.012	<.001	290	6	82	2.1	
MAY 30...	10	.18	.055	.006	330	20	79	3.0	

HUDSON RIVER BASIN

01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY

LOCATION.--Lat 41°52'00", long 74°29'12", Sullivan County, Hydrologic Unit 02020007, on left bank 100 ft downstream from small tributary, 350 ft upstream from bridge on county road, 1.1 mi upstream from Sugarloaf Brook, 1.1 mi east of Lowes Corners, and 1.9 mi southwest of Sundown.

DRAINAGE AREA.--38.5 mi².

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

REVISED RECORDS.--WSP 1702: 1952.

GAGE.--Water-stage recorder. Datum of gage is 874.44 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft downstream at datum 847.00 ft 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 downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft NGVD and July 4, 1949 to July 5, 1951, datum 846.00 ft NGVD (levels by Board of Water Supply, City of New York).

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

AVERAGE DISCHARGE.--47 years, 98.7 ft³/s, 34.81 in./yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,600 ft³/s July 22, 1938, from rating curve extended above 2,600 ft³/s; maximum gage height, 10.5 ft Mar. 21, 1980, from floodmarks; minimum discharge, 3.3 ft³/s Sept. 16, 17, Oct. 17, 18, 1980.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0645	1,370	5.23	Apr. 16	1500	1,220	5.14
Feb. 15	1715	2,090	6.01	May 29	1030	2,410	6.26
Apr. 5	1500	*6,410	a*8.87				

a Recorded in well; outside gage height was 9.7 ft, from floodmarks.

Minimum discharge, 6.3 ft³/s Oct. 8, 9, 10-11, 12, gage height, 2.30 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	12	141	83	40	150	134	114	374	81	27	13
2	12	12	124	76	43	130	147	104	283	59	26	13
3	9.6	13	116	70	52	120	161	101	226	42	25	20
4	7.8	14	113	68	108	110	166	256	186	38	26	34
5	7.8	13	104	65	89	100	2830	178	152	35	25	19
6	8.9	13	228	64	80	105	1180	161	131	39	24	15
7	7.3	13	470	59	68	94	495	149	112	209	22	13
8	6.8	13	236	52	64	86	332	165	96	87	21	13
9	6.4	13	176	51	64	78	261	166	85	73	20	12
10	6.3	14	150	52	66	74	229	144	77	66	20	12
11	6.3	53	133	44	84	70	204	132	71	62	22	13
12	6.7	59	145	34	105	68	192	146	64	70	34	13
13	9.9	35	765	43	123	68	179	142	60	56	39	12
14	11	28	1060	49	290	68	167	148	60	49	26	13
15	10	27	567	40	1280	70	215	130	54	46	22	14
16	8.4	66	357	35	1120	74	530	123	49	44	20	13
17	7.7	61	258	36	660	80	441	117	47	43	19	11
18	7.7	48	194	33	466	90	310	110	53	53	17	10
19	11	45	155	30	397	110	270	106	49	45	17	10
20	9.9	46	125	28	468	125	264	105	42	39	20	9.8
21	8.3	233	108	27	323	175	226	109	39	38	16	9.8
22	7.6	128	122	28	264	199	196	93	36	37	16	9.5
23	9.5	101	115	32	224	161	179	114	34	34	19	9.2
24	48	104	99	62	278	145	181	118	45	32	17	9.3
25	24	281	80	89	244	140	165	99	66	29	15	9.8
26	16	178	72	58	215	138	148	96	39	28	14	9.8
27	14	148	72	53	183	134	136	91	34	44	13	9.4
28	12	133	100	51	198	135	127	142	31	40	13	9.4
29	12	245	142	49	199	130	123	1430	30	32	16	9.2
30	12	177	90	50	---	128	119	1380	43	29	18	9.5
31	12	---	78	50	---	126	---	607	---	28	15	---
TOTAL	344.2	2326	6695	1561	7795	3481	10307	7076	2668	1607	644	377.7
MEAN	11.1	77.5	216	50.4	269	112	344	228	88.9	51.8	20.8	12.6
MAX	48	281	1060	89	1280	199	2830	1430	374	209	39	34
MIN	6.3	12	72	27	40	68	119	91	30	28	13	9.2
CFSM	.29	2.01	5.61	1.31	6.99	2.91	8.94	5.92	2.31	1.35	.54	.33
IN.	0.33	2.25	6.47	1.51	7.53	3.36	9.96	6.84	2.58	1.55	0.62	0.36

CAL YR 1983	TOTAL	45979.1	MEAN	126	MAX	1380	MIN	6.3	CFSM	3.27	IN.	44.43
WTR YR 1984	TOTAL	44881.9	MEAN	123	MAX	2830	MIN	6.3	CFSM	3.19	IN.	43.37

HUDSON RIVER BASIN

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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 Gramhamsville, 600 ft downstream from Red Brook, and 0.6 mi upstream from bridge on State Highway 55.

DRAINAGE AREA.--20.9 mi².

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair, except those for winter periods, which are poor. Slight seasonal regulation caused by Beaverdam Pond on Red Brook.

AVERAGE DISCHARGE.--46 years, 39.3 ft³/s, 25.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft³/s Oct. 15, 1955, gage height, 5.02 ft, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement at gage height 4.68 ft; minimum discharge, 1.4 ft³/s Nov. 1, 1964.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 15	1315	522	2.08	Apr. 16	1415	1,030	2.36
Apr. 5	0845	*1,330	*2.57	May 29	0815	1,240	2.51

Minimum discharge, 3.4 ft³/s Sept. 28, gage height, 0.45 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	7.3	39	31	19	50	67	41	151	82	9.3	5.6
2	7.3	6.8	32	28	21	43	74	39	104	43	9.3	5.7
3	6.2	7.1	29	26	25	39	75	39	79	29	9.2	11
4	5.6	7.0	27	26	46	37	75	191	64	26	8.8	16
5	5.7	6.6	27	25	37	38	690	96	51	22	8.1	6.6
6	6.3	6.3	93	26	31	51	352	73	52	31	8.1	5.6
7	5.7	6.1	130	25	30	41	196	59	46	141	7.8	5.2
8	5.4	6.0	76	25	28	38	131	71	42	69	7.7	4.9
9	5.2	6.0	56	23	28	34	97	75	45	47	7.3	4.9
10	5.5	6.8	47	22	24	33	80	60	42	31	7.4	4.9
11	8.1	26	40	23	29	33	68	55	33	25	8.6	4.9
12	8.2	19	49	23	43	36	61	63	28	29	14	5.5
13	8.5	13	200	23	58	30	54	58	26	21	12	4.7
14	9.4	11	211	22	106	40	52	65	28	18	9.5	5.4
15	9.6	14	125	21	286	37	67	53	24	16	8.3	5.4
16	8.3	28	93	20	264	45	283	49	25	16	7.8	5.1
17	6.5	20	72	19	158	65	194	46	24	16	7.3	4.5
18	6.6	15	58	18	120	56	135	42	26	21	13	4.5
19	10	13	48	17	128	56	124	41	24	16	16	4.5
20	8.0	12	38	17	148	67	144	43	19	13	13	4.3
21	7.0	56	36	16	102	111	98	49	17	13	8.5	4.0
22	6.5	27	39	16	82	117	77	38	16	12	6.8	3.9
23	9.8	21	40	20	71	90	70	48	15	12	9.1	4.0
24	26	26	37	70	89	72	71	48	25	11	7.3	3.9
25	14	111	35	52	80	65	64	38	28	9.6	6.7	4.0
26	11	65	31	29	68	60	56	44	18	9.3	6.2	3.7
27	11	47	30	26	57	56	51	45	15	20	6.0	3.7
28	11	38	41	24	65	56	47	86	14	15	6.0	4.0
29	9.5	86	42	22	70	57	46	759	15	12	6.0	4.3
30	8.4	54	36	21	---	53	44	460	31	11	6.6	4.1
31	7.7	---	48	20	---	55	---	255	---	10	6.0	---
TOTAL	264.5	768.0	1905	776	2313	1661	3643	3129	1127	846.9	267.7	158.8
MEAN	8.53	25.6	61.5	25.0	79.8	53.6	121	101	37.6	27.3	8.64	5.29
MAX	26	111	211	70	286	117	690	759	151	141	16	16
MIN	5.2	6.0	27	16	19	30	44	38	14	9.3	6.0	3.7
CFSM	.41	1.22	2.94	1.20	3.82	2.56	5.79	4.83	1.80	1.31	.41	.25
IN.	0.47	1.37	3.39	1.38	4.12	2.96	6.48	5.57	2.01	1.51	0.48	0.28

CAL YR 1983	TOTAL	16983.3	MEAN	46.5	MAX	647	MIN	4.8	CFSM	2.22	IN.	30.23
WTR YR 1984	TOTAL	16859.9	MEAN	46.1	MAX	759	MIN	3.7	CFSM	2.21	IN.	30.01

HUDSON RIVER BASIN

01367500 RONDOUT CREEK AT ROSENDALE, NY

LOCATION.--Lat 41°50'35", long 74°05'11", Ulster County, Hydrologic Unit 02020007, on left bank 30 ft upstream from bridge on James Street in Rosendale, and 3 mi upstream from Wallkill River.

DRAINAGE AREA.--386 mi² (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 WDR NY-70-1.

REVISED RECORDS.--WSP 641: Drainage Area. WSP 756: 1933.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft National Geodetic Vertical Datum of 1929. Prior to January 1919, nonrecording gage at site 150 ft downstream at datum 38.83 ft NGVD. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 42.83 ft 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 upstream at datum 44.03 ft NGVD.

REMARKS.--Records fair 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, together with spillage during high flow from Rondout Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 ft³/s Oct. 16, 1955, gage height, 26.8 ft, datum then in use, from floodmarks, from rating curve extended above 15,000 ft³/s on basis of contracted-opening measurement at gage height 33.93 ft; minimum, 2.2 ft³/s July 16, 1965; minimum daily, 3.0 ft³/s July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,000 ft³/s Apr. 5, gage height, 22.62 ft; minimum, 59 ft³/s Oct. 10, 11, 12, gage height, 8.91 ft; minimum daily discharge, 60 ft³/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	107	902	460	280	1060	1310	543	3730	743	141	82
2	90	93	707	450	280	809	1610	485	2170	1320	133	76
3	80	90	542	430	400	680	1890	441	1390	561	128	88
4	77	89	476	410	700	580	2030	3270	1060	479	129	133
5	72	86	466	400	900	565	12700	2170	826	359	126	136
6	72	85	698	380	840	756	14100	1400	692	345	134	107
7	70	84	2900	350	800	798	4450	1090	623	6310	124	92
8	66	82	1580	320	720	616	2700	1070	524	2650	117	85
9	63	81	1040	300	660	586	1950	1310	446	1390	110	82
10	61	81	842	280	640	488	1550	999	389	817	111	80
11	60	175	719	260	700	468	1300	843	340	580	144	82
12	74	378	664	250	1350	420	1150	728	302	501	191	84
13	130	282	5840	250	1850	352	1030	764	277	417	284	82
14	117	226	6660	240	2910	711	944	811	286	345	194	79
15	120	202	3280	240	5520	985	1390	718	277	293	148	86
16	126	506	2040	240	6890	853	3040	632	240	260	127	96
17	114	601	1420	240	3490	1250	3690	580	215	251	115	90
18	100	387	1090	240	2450	1170	2250	536	213	246	104	76
19	116	284	780	240	2080	1070	1840	504	236	322	99	71
20	138	224	640	240	2950	1230	1860	431	211	247	140	74
21	120	600	590	240	2080	1750	1540	478	184	213	129	72
22	106	636	540	240	1500	2560	1220	436	170	222	103	70
23	106	446	540	240	1200	2010	1080	387	155	198	102	69
24	238	406	540	280	1870	1530	1230	708	150	179	102	71
25	269	1990	540	500	1760	1290	1120	558	250	161	97	81
26	194	1580	560	900	1540	1140	934	464	228	144	92	91
27	163	967	640	700	1140	1010	755	538	178	159	87	83
28	172	763	700	450	1150	925	670	607	153	244	85	70
29	186	1510	800	330	1760	995	626	7230	142	202	85	70
30	172	1270	640	300	---	970	589	13200	359	167	82	72
31	153	---	520	280	---	1010	---	8000	---	152	83	---
TOTAL	3710	14311	39896	10680	50410	30637	72548	51931	16416	20477	3846	2530
MEAN	120	477	1287	345	1738	988	2418	1675	547	661	124	84.3
MAX	269	1990	6660	900	6890	2560	14100	13200	3730	6310	284	136
MIN	60	81	466	240	280	352	589	387	142	144	82	69
CAL YR 1983	TOTAL	302060	MEAN	828	MAX	8410	MIN	51				
WTR YR 1984	TOTAL	317392	MEAN	867	MAX	14100	MIN	60				

HUDSON RIVER BASIN

91

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 upstream from bridge on U.S. Highway 44, 500 ft downstream from Shawangunk Kill, and 0.7 mi northwest of Gardiner.

DRAINAGE AREA.--711 mi².

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 National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--60 years, 1,067 ft³/s, 20.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft³/s Oct. 16, 1955, gage height, 19.81 ft; minimum, 9.5 ft³/s Sept. 28, 1964; minimum gage height, 1.59 ft Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0030	9,140	9.40	May 4	1530	7,430	8.18
Feb. 15	2100	10,600	a*13.63	May 30	1430	15,100	12.19
Apr. 6	0200	*16,000	12.62	July 7	1230	6,900	7.86

a Ice jam.

Minimum discharge, 51 ft³/s Sept.29, gage height, 1.90 ft..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	230	1990	2200	1050	2640	3320	1050	8420	1480	444	149
2	222	227	1640	1900	1000	1700	4280	947	7190	2760	415	195
3	193	224	1360	1800	1100	1400	4640	862	5910	1900	400	224
4	171	214	1300	1600	1700	1200	4130	5210	4440	1580	412	268
5	163	197	1930	1500	3900	1200	9810	5030	3040	1320	452	286
6	145	212	2180	1450	3500	1640	13100	3370	2270	1150	539	251
7	127	207	3200	1430	2200	1800	9130	2720	1710	5480	468	256
8	118	199	2290	1400	1600	1300	8590	2480	1400	4480	411	217
9	110	195	1900	1330	1450	1000	7740	3210	1170	3300	369	148
10	101	197	1610	1250	1400	960	6340	2660	995	2860	340	147
11	96	322	1440	1200	1500	880	4590	2180	854	2450	335	161
12	108	754	1340	1180	1850	800	3200	1860	737	1950	371	161
13	167	799	6660	1100	2200	780	2460	1710	646	1440	433	158
14	180	586	8730	1050	3200	1500	2060	1630	610	1110	344	157
15	154	467	7000	1000	8200	3410	2330	1460	582	890	309	149
16	141	533	6100	950	8490	3360	3850	1290	526	738	267	138
17	129	863	5360	940	5930	3970	5390	1150	476	703	241	127
18	120	780	4290	920	4970	3620	4130	1030	461	1010	209	126
19	143	613	3060	920	4230	3260	3440	945	501	1920	207	124
20	229	508	2140	920	4630	3110	3160	898	514	1540	251	122
21	311	666	1500	910	3400	3000	2740	911	450	1170	311	121
22	242	854	1200	910	2660	3390	2240	893	385	927	271	118
23	200	793	1150	910	2200	2950	1890	807	347	811	261	103
24	444	695	1200	1050	3050	2560	1920	992	337	656	223	101
25	956	2620	1400	1300	3210	2240	1880	1040	468	563	219	103
26	771	2870	2500	1900	2910	1950	1630	843	687	493	220	106
27	561	2140	3500	2500	2310	1690	1440	830	663	481	207	102
28	410	1840	2600	2200	2260	1570	1280	816	515	729	188	99
29	330	2510	5000	1850	3340	1940	1180	6410	427	793	157	63
30	276	2370	3700	1450	---	2010	1110	14500	928	632	154	104
31	247	---	2600	1150	---	2450	---	11200	---	517	152	---
TOTAL	7719	25685	91870	42170	89440	65280	123000	80934	47659	47813	9580	4584
MEAN	249	856	2964	1360	3084	2106	4100	2611	1589	1542	309	153
MAX	956	2870	8730	2500	8490	3970	13100	14500	8420	5480	539	286
MIN	96	195	1150	910	1000	780	1110	807	337	481	152	63
CFSM	.35	1.20	4.17	1.91	4.34	2.96	5.77	3.67	2.23	2.17	.43	.22
IN.	0.40	1.34	4.81	2.21	4.68	3.42	6.44	4.23	2.49	2.50	0.50	0.24

CAL YR 1983	TOTAL	606415	MEAN	1661	MAX	11600	MIN	66	CFSM	2.34	IN.	31.73
WTR YR 1984	TOTAL	635734	MEAN	1737	MAX	14500	MIN	63	CFSM	2.44	IN.	33.26

HUDSON RIVER BASIN

01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY

LOCATION.--Lat 41°39'11", long 73°52'23", Dutchess County, Hydrologic Unit 02020008, on left bank 700 ft downstream from Red Oak Mill dam, and 4.5 mi northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi².

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 National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi downstream at different datum.

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

AVERAGE DISCHARGE.--56 years (1929-84), 255 ft³/s, 19.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft³/s Aug. 19, 1955, gage height, 19.60 ft, from floodmarks in gage shelter, from rating curve extended above 5,000 ft³/s on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft and contracted-opening and flow-over-road measurement at gage height 19.60 ft; minimum, 0.90 ft³/s Sept. 20, 21, 1964, gage height, 2.05 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	1100	2,200	6.85	May 30	2115	*7,830	*12.18
Apr. 6	0930	2,420	7.12				

Minimum discharge, 11 ft³/s Sept. 27, gage height, 2.24 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	278	270	140	623	715	361	3470	157	56	25
2	28	25	228	244	140	514	782	324	2230	202	54	23
3	27	24	199	229	150	457	787	302	1650	147	52	25
4	23	23	200	226	450	400	743	757	1190	118	49	34
5	19	22	229	229	509	388	1090	860	917	101	50	40
6	16	21	256	227	330	465	2160	650	749	109	46	35
7	15	21	592	223	220	482	1680	539	647	625	42	41
8	15	20	551	196	190	380	1310	529	552	494	61	50
9	15	20	424	182	180	341	1040	880	478	299	54	33
10	15	21	346	160	180	290	888	728	413	221	46	27
11	15	44	305	150	230	250	765	604	366	180	42	26
12	22	73	267	150	460	230	669	546	321	170	52	25
13	42	66	1010	150	570	230	592	561	289	143	52	24
14	41	54	2100	140	650	300	561	556	276	117	55	24
15	30	45	1600	140	906	450	674	488	257	101	44	23
16	25	57	1150	140	1070	484	901	433	227	90	37	24
17	24	66	898	130	935	708	1150	387	208	86	38	24
18	21	63	718	120	823	642	984	348	158	141	36	22
19	25	56	605	120	723	682	1240	330	158	212	37	22
20	24	52	420	120	819	782	1040	310	144	144	80	20
21	24	64	330	130	749	983	903	308	128	113	60	18
22	24	76	382	120	632	1110	762	282	118	105	45	17
23	25	68	441	108	547	1030	685	273	107	93	40	17
24	58	66	320	113	730	901	698	389	102	82	38	17
25	56	194	250	254	797	776	663	291	139	70	37	16
26	44	322	280	404	745	684	593	248	126	64	34	15
27	39	281	270	299	606	597	516	257	110	70	32	14
28	34	245	261	240	594	545	462	251	101	92	30	16
29	31	337	606	190	773	607	423	1340	94	81	28	17
30	29	340	430	170	---	608	387	6360	104	69	28	18
31	28	---	290	150	---	606	---	6000	---	62	27	---
TOTAL	856	2793	16236	5724	15848	17545	25863	26492	15829	4758	1382	732
MEAN	27.6	93.1	524	185	546	566	862	855	528	153	44.6	24.4
MAX	58	340	2100	404	1070	1110	2160	6360	3470	625	80	50
MIN	15	20	199	108	140	230	387	248	94	62	27	14
CFM	.15	.51	2.90	1.02	3.02	3.13	4.76	4.72	2.92	.85	.25	.13
IN.	0.18	0.57	3.34	1.18	3.26	3.61	5.32	5.44	3.25	0.98	0.28	0.15

CAL YR 1983	TOTAL	132319	MEAN	363	MAX	2100	MIN	11	CFM	2.01	IN.	27.19
WTR YR 1984	TOTAL	134058	MEAN	366	MAX	6360	MIN	14	CFM	2.02	IN.	27.55

HUDSON RIVER BASIN

93

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 downstream from New Croton Dam, and 1.8 mi northeast of Croton-On-Hudson.

DRAINAGE AREA.--378 mi².

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, from topographic map. Prior to Oct. 1, 1941, supplementary water-stage recorder and concrete control at site 1.1 mi downstream at Quaker Bridge.

REMARKS.--Records good above 50 ft³/s and poor below, except winter period which is fair. 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 Oct. 16, 1955, gage height, 18.44 ft, from floodmarks, from rating curve extended above 9,700 ft³/s on basis of slope-area measurements of peak flow; minimum daily, 0.1 ft³/s Mar. 14, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft³/s Apr. 5, gage height, 10.68 ft; minimum, 1.0 ft³/s Oct. 3, 4, gage height, 0.91 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	9.4	2.6	830	300	1350	1040	510	9360	1200	61	8.8
2	1.3	6.7	2.5	710	300	1130	1110	462	6090	1360	103	8.9
3	1.2	3.9	2.5	600	260	965	1050	408	4220	783	185	9.3
4	1.1	5.7	3.4	540	540	827	990	962	3050	536	125	9.3
5	1.3	4.5	3.0	540	650	779	6150	1180	2320	386	103	9.4
6	1.7	4.5	5.5	490	570	939	9320	951	1900	1060	108	9.3
7	1.9	4.6	7.1	460	300	939	5180	794	1630	5810	72	9.5
8	1.9	4.5	6.2	460	260	808	3730	788	1360	4430	52	9.6
9	2.1	3.8	5.8	390	357	838	2610	1040	1110	2370	34	10
10	2.3	3.5	6.0	368	311	740	1930	895	899	1730	21	11
11	2.5	3.6	8.6	394	311	490	1540	778	742	1380	16	11
12	3.3	3.6	29	300	453	440	1320	747	566	1120	88	11
13	2.0	3.4	2880	340	537	390	1140	757	404	833	105	11
14	2.4	3.2	4180	370	580	1050	1120	751	329	610	75	11
15	1.7	3.0	2710	370	853	1160	1740	642	257	463	35	11
16	1.8	3.4	2210	300	1040	1070	2270	545	155	390	12	11
17	3.2	3.2	1800	300	810	1250	2350	481	109	362	8.9	11
18	3.4	3.1	1490	240	674	1180	1930	413	116	415	7.9	10
19	2.6	3.0	1320	300	615	1180	1750	374	215	536	7.9	11
20	2.0	3.0	1120	300	603	1110	1490	356	223	400	10	11
21	1.9	3.9	860	240	623	1140	1330	344	140	335	7.6	11
22	1.9	2.7	1040	300	706	1260	1160	305	66	327	7.2	11
23	2.5	2.1	1470	260	676	1160	1120	336	26	258	7.6	11
24	4.4	2.2	1180	240	1050	1060	1190	785	39	188	7.8	11
25	2.5	4.0	868	340	1110	939	1100	600	476	144	7.9	11
26	2.2	3.0	740	490	1200	861	953	412	416	88	7.8	11
27	2.0	2.6	600	490	1040	729	799	383	210	233	8.1	11
28	2.1	2.9	510	490	1210	729	689	374	109	343	8.1	11
29	2.9	3.8	1620	410	1650	995	612	2320	61	220	8.3	10
30	3.1	2.9	1360	340	---	948	548	8740	434	142	8.4	11
31	6.0	---	950	360	---	903	---	12600	---	102	8.6	---
TOTAL	72.9	113.7	28990.2	12562	19589	29359	59261	41033	37032	28554	1317.1	313.1
MEAN	2.35	3.79	935	405	675	947	1975	1324	1234	921	42.5	10.4
MAX	6.0	9.4	4180	830	1650	1350	9320	12600	9360	5810	185	11
MIN	1.1	2.1	2.5	240	260	390	548	305	26	88	7.2	8.8
CAL YR 1983	TOTAL	188446.8	MEAN	516	MAX	5410	MIN	1.1				
WTR YR 1984	TOTAL	258197.0	MEAN	705	MAX	12600	MIN	1.1				

HUDSON RIVER BASIN

01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION.--Lat 40°56'11", long 73°53'12", Westchester County, Hydrologic Unit 02030101, on right bank in Yonkers, just upstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Center Street, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--25.6 mi².

PERIOD OF RECORD.--November 1943 to September 1973, April 1974 to current year.

REVISED RECORDS.--WDR NY-71-1: 1965, 1966.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 90 ft, from topographic map. Prior to Aug. 17, 1978, water-stage recorder and concrete control at same site but at different datum. Aug. 17, 1978 to Sept. 9, 1980, nonrecording and crest-stage gage, and Sept. 10, 1980 to Sept. 30, 1982, water-stage recorder and crest-stage gage at site 1,300 ft downstream at different datum.

REMARKS.--Records good. 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.--39 years (1945-73, 1975-84), 33.8 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s Jul. 7, 1984, gage height, 7.84 ft; minimum, no flow during part of several days in Oct., Nov., and June-Sept. of 1981 water year because of construction in channel upstream from gage; minimum daily, 0.11 ft³/s Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft³/s Jul. 7, gage height, 7.84 ft; minimum, 5.5 ft³/s Oct. 5, 11, 12, gage height, 1.44 ft; minimum daily, 6.0 ft³/s Oct. 8, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	14	41	58	36	76	106	45	366	249	24	17
2	21	13	35	55	31	64	91	38	228	118	23	12
3	8.9	15	39	52	39	59	78	41	166	81	24	47
4	6.8	15	149	50	107	53	94	129	125	190	21	107
5	11	14	124	48	79	65	709	99	100	99	24	26
6	14	13	84	47	78	97	1050	52	87	476	24	15
7	6.4	13	115	43	57	66	412	45	78	747	29	13
8	6.0	13	62	39	42	53	204	72	68	614	31	12
9	6.4	13	51	36	39	55	155	96	59	192	21	12
10	6.2	28	47	37	38	51	129	51	52	133	20	11
11	6.0	55	42	42	50	50	112	43	49	111	20	11
12	107	24	123	33	66	45	99	46	41	94	37	10
13	140	15	516	32	57	68	89	48	63	78	26	9.5
14	44	13	622	31	60	260	114	55	52	67	23	9.4
15	17	20	265	30	154	120	206	39	39	56	17	14
16	11	83	155	28	114	104	263	36	32	85	16	12
17	9.6	35	119	29	78	104	177	33	31	69	14	8.9
18	9.0	23	99	28	70	88	126	31	31	79	13	8.4
19	82	20	89	27	66	90	121	31	38	66	12	8.7
20	24	19	75	26	63	80	102	36	28	45	20	7.8
21	13	90	63	26	55	79	91	42	26	49	14	8.2
22	9.8	36	248	26	49	84	78	29	24	49	12	7.7
23	37	26	219	27	50	70	78	46	24	39	15	7.0
24	334	31	98	40	165	61	79	118	50	35	14	7.3
25	71	146	72	90	90	57	70	38	239	31	11	9.7
26	34	74	64	64	79	54	61	32	46	29	10	13
27	25	43	60	48	57	50	55	30	31	104	10	13
28	21	52	140	47	137	53	50	63	27	54	11	18
29	18	100	226	41	121	102	48	334	25	34	12	13
30	14	50	84	42	---	109	47	594	100	30	11	11
31	14	---	66	43	---	102	---	653	---	27	45	---
TOTAL	1168.1	1106	4192	1265	2127	2469	5094	3045	2325	4130	604	479.6
MEAN	37.7	36.9	135	40.8	73.3	79.6	170	98.2	77.5	133	19.5	16.0
MAX	334	146	622	90	165	260	1050	653	366	747	45	107
MIN	6.0	13	35	26	31	45	47	29	24	27	10	7.0
#	.99	.93	.89	1.1	1.0	1.2	1.2	1.2	1.3	1.1	1.4	.91

CAL YR 1983 TOTAL 22491.4 MEAN 61.6 MAX 622 MIN 4.3 # 1.1
WTR YR 1984 TOTAL 28004.7 MEAN 76.5 MAX 1050 MIN 6.0 # 1.1

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 upstream from Rome. DRAINAGE AREA, 145 mi². 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 at crest of spillway, elevation 550.0 ft. Reservoir is used for navigation in Barge Canal. Records furnished by New York State Department of Transportation.
- EXTREMES FOR PERIOD OF RECORD (1951-84): Maximum contents observed, 3,136 mil ft³ June 22, 1972, elevation, 552.8 ft; minimum observed, 2.0 mil ft³ Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft.
- EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,339 mil ft³ May 21, elevation, 545.9 ft; minimum observed, 725 mil ft³ Jan. 24, elevation, 525.5 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 east of Prospect. DRAINAGE AREA, 374 mi². 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 between elevation 1,173.5 and 1,225.0 ft. Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft, and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft. Crest of Ogee spillway is at elevation 1,225.0 ft. Length of spillway is 400 ft. Area of water surface at crest elevation is 4.46 mi². Records furnished by New York State Department of Transportation.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 4,041 mil ft³ Oct. 2, 1945, elevation, 1,230.2 ft; minimum observed (after initial filling), not determined.
- EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,720 mil ft³ Dec. 15, elevation, 1,228.0 ft; minimum observed, 620 mil ft³ Sept. 26, elevation, 1,191.9 ft, may have been lower Sept. 29 and 30 (no reading taken).
- 01350100 SCHOHARIE RESERVOIR (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).
- 01363400 ASHOKAN RESERVOIR.--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi south of Shokan. DRAINAGE AREA, 256 mi². PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WDR NY-72-1: 1968. WDR NY-83-1: (M)(m). GAGE, nonrecording gage read daily at 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 between minimum operating level elevation 495.50 ft and crest of spillway to East basin, elevation 590.00 ft; dead storage below minimum operating level 2,237 mil gal. Usable capacity of East basin 80,678 mil gal between elevation 500.00 ft and crest of spillway, elevation 587.10 ft; no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records 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 Mar. 31, 1951, elevation, 594.33 ft, in East basin, 89,411 mil gal Mar. 31, 1951, elevation, 592.23 ft; minimum observed, in West basin, 9,098 mil gal Oct. 24, 1926, elevation, 530.56 ft, in East basin, 8,394 mil gal Oct. 24, 1926, elevation, 525.91 ft.
- EXTREMES FOR CURRENT YEAR: Maximum contents observed, in West basin, 51,525 mil gal May 30, elevation, 591.99 ft, in East basin, 83,899 mil gal May 30, elevation, 589.02 ft; minimum observed, in West basin, 26,458 mil gal Nov. 16, elevation, 563.55 ft, in East basin, 40,104 mil gal Dec. 5, elevation, 559.20 ft.
- 01366400 RONDOUT RESERVOIR.--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi upstream from Brandy Brook, and 1.3 mi northwest of Lackawack. DRAINAGE AREA, 94.4 mi². 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 between minimum operating level, elevation, 720.00 ft and crest of spillway, elevation, 840.00 ft. Dead storage below elevation 720.00 ft, 2,387 mil gal. Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records furnished by Bureau of Water Resources Development, City of New York.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 53,355 mil gal June 23, 1972, elevation, 841.34 ft; minimum observed (after initial filling), 8,335 mil gal Oct. 15, 1957, elevation, 748.75 ft.
- EXTREMES FOR CURRENT YEAR: Maximum contents, 53,037 mil gal May 31, elevation, 840.88 ft; minimum, 32,601 mil gal Nov. 23, elevation, 807.55 ft.

HUDSON RIVER BASIN

RESERVOIRS IN HUDSON RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	537.2	1,506		1,209.7	1,806	
Oct. 31	533.9	1,243	- 98.2	1,207.7	1,646	- 59.7
Nov. 30	535.1	1,338	+ 36.7	1,220.0	2,750	+426
Dec. 31	530.8	1,028	-116	1,221.4	2,904	+ 57.5
CAL YR 1983	-	-	- 31.5	-	-	- 3.55
Jan. 31	526.4	770	- 96.3	1,203.2	1,312	-594
Feb. 29	536.5	1,450	+271	1,223.1	3,096	+712
Mar. 31	531.3	1,061	-145	1,210.3	1,854	-464
Apr. 30	543.7	2,110	+405	1,224.5	3,260	+542
May 31	544.8	2,220	+ 41.1	1,221.0	2,860	-149
June 30	542.9	2,030	- 73.3	1,212.5	2,040	-316
July 31	538.3	1,597	-162	1,209.4	1,782	- 96.3
Aug. 31	536.6	1,458	- 51.9	1,210.1	1,838	+ 20.9
Sept. 30	533.2	1,194	-102	*1,191.2	585	-483
WTR YR 1984	-	-	- 9.87	-	-	- 38.6

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	574.43	34,971		571.54	56,393		817.10	37,929	
Oct. 31	566.22	28,433	-326	566.08	48,901	-374	811.35	34,665	-163
Nov. 30	569.61	31,038	+134	560.28	41,421	-386	811.67	34,841	+ 9.08
Dec. 31	575.90	36,224	+259	573.22	58,813	+868	835.07	49,124	+713
CAL YR 1983	-	-	+ 25.9	-	-	+ 49.0	-	-	+ 25.9
Jan. 31	574.94	35,389	- 41.7	575.05	61,453	+132	828.56	44,915	-210
Feb. 29	588.73	48,153	+681	580.49	69,876	+449	833.53	48,113	+171
Mar. 31	590.47	49,916	+ 88.0	579.88	68,900	- 48.7	833.52	48,106	- 0.35
Apr. 30	590.39	49,831	- 4.38	587.50	81,349	+642	839.29	51,951	+198
May 31	591.39	50,889	+ 52.8	588.99	83,849	+125	840.46	52,750	+ 39.9
June 30	590.21	49,640	- 64.4	583.37	74,524	-481	837.30	50,608	-110
July 31	584.10	43,603	-301	581.65	71,748	-139	837.14	50,501	- 5.34
Aug. 31	579.80	39,625	-199	577.15	64,691	-352	837.56	50,783	+ 14.1
Sept. 30	575.38	35,770	-199	573.82	59,677	-259	828.86	45,105	-293
WTR YR 1984	-	-	+ 3.38	-	-	+ 13.9	-	-	+ 30.3

* Elevation at 2400 hours by interpolation.

Elevation at 0900 hours on first day of following month.

* No readings Sept. 29 and 30, record estimated by interpolation.

DIVERSIONS IN HUDSON RIVER BASIN

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

Undetermined diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin.

Undetermined diversion from Hudson River basin to summit level of Champlain (Barge) Canal.

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records 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.

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 1983 TO SEPTEMBER 1984

Month	01343899 <u>Hinckley Reservoir</u>	01362230 <u>Schoharie Reservoir</u>	01363401 <u>Ashokan Reservoir</u>	01366399 <u>Rondout Reservoir</u>
October.....	31.6	154	823	1,342
November.....	31.1	118	845	1,219
December.....	30.0	540	875	757
CAL YR 1983	31.9	304	831	1,076
January.....	30.7	697	871	988
February.....	34.3	566	898	1,012
March.....	34.6	278	888	832
April.....	34.1	72.2	582	1,146
May.....	32.1	39.6	588	1,327
June.....	31.6	206	779	1,343
July.....	33.8	262	905	1,237
August.....	34.4	315	925	1,315
September.....	30.9	345	765	1,363
WTR YR 1984	32.4	299	812	1,156

HACKENSACK RIVER BASIN

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft upstream from State Highway 59, and 1.0 mi downstream from DeForest Lake.

DRAINAGE AREA.--29.4 mi².

PERIOD OF RECORD.--December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

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 Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s Feb. 3, 1973, gage height, 9.38 ft, from floodmarks, from rating curve extended above 840 ft³/s; maximum gage height, 10.52 ft May 30, 1984; minimum daily, 2.6 ft³/s June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft³/s May 30, gage height, 10.52 ft; minimum discharge, 11 ft³/s Sept. 26, gage height, 2.65 ft; minimum daily, 14 ft³/s Sept. 22, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	35	21	67	28	104	125	46	334	194	18	17
2	38	31	19	59	25	83	118	40	167	218	18	17
3	39	25	20	54	23	71	100	38	129	93	18	19
4	40	20	39	50	65	62	90	202	101	106	17	29
5	41	18	28	48	75	62	990	187	88	86	18	18
6	41	18	29	45	80	89	829	98	77	385	18	16
7	40	18	34	43	69	84	296	81	69	1090	25	17
8	41	18	21	38	55	70	171	91	61	504	18	18
9	43	18	18	35	44	78	130	137	54	164	16	16
10	42	21	17	32	37	54	112	95	45	102	16	16
11	42	28	17	41	37	49	100	78	36	88	18	16
12	59	21	40	34	50	42	89	70	29	78	19	15
13	51	19	202	30	56	45	83	70	23	63	18	15
14	48	19	96	28	62	122	85	71	23	53	18	16
15	40	18	43	27	313	137	176	60	22	46	17	17
16	40	38	80	25	257	118	361	53	15	56	17	18
17	41	23	92	24	117	178	270	47	16	60	17	18
18	42	20	87	23	95	103	140	33	18	64	17	17
19	60	19	91	25	84	90	133	30	34	63	17	16
20	45	19	79	23	79	79	107	29	35	50	19	16
21	43	47	62	23	70	71	102	31	29	44	18	15
22	42	23	151	23	62	67	84	29	20	42	17	14
23	51	21	299	23	57	61	72	30	15	31	17	15
24	122	23	125	24	107	57	80	38	18	30	17	16
25	51	51	84	40	102	53	75	29	74	26	17	15
26	45	26	72	43	95	56	70	25	54	22	17	14
27	43	21	62	42	77	41	61	27	37	42	16	15
28	42	24	91	41	144	46	55	34	27	44	17	15
29	41	43	259	35	237	108	52	491	21	33	17	16
30	41	23	109	32	---	105	49	1300	57	26	17	16
31	40	---	81	33	---	110	---	783	---	23	18	---
TOTAL	1438	748	2468	1110	2602	2495	5205	4373	1728	3926	547	498
MEAN	46.4	24.9	79.6	35.8	89.7	80.5	174	141	57.6	127	17.6	16.6
MAX	122	51	299	67	313	178	990	1300	334	1090	25	29
MIN	38	18	17	23	23	41	49	25	15	22	16	14
CAL YR 1983	TOTAL	21202	MEAN	58.1	MAX	554	MIN	12				
WTR YR 1984	TOTAL	27138	MEAN	74.1	MAX	1300	MIN	14				

HACKENSACK RIVER BASIN

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01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi upstream from Pascack Brook, 4.6 mi upstream from Oradell Dam, and 27.2 mi upstream from mouth.

DRAINAGE AREA.--58.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD-NJ-80-1: 1968-79(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. 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.--43 years, 90.1 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft³/s May 30, 1984, gage height, 7.85 ft; no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,440 ft³/s May 30, gage height, 7.85 ft; minimum, 13 ft³/s Nov. 14, 15, gage height 1.50 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	16	16	112	65	220	243	84	1260	325	46	145
2	29	18	15	99	56	142	201	77	566	474	43	144
3	27	18	16	90	53	124	171	74	281	221	41	164
4	26	18	47	84	114	107	154	200	191	149	38	143
5	28	18	24	81	134	107	1170	336	140	141	36	42
6	28	18	24	78	151	148	1960	222	134	488	35	39
7	26	17	37	76	135	141	1140	157	122	1540	36	38
8	24	17	18	70	110	122	453	156	112	1630	43	53
9	24	16	17	63	92	128	246	222	100	729	37	72
10	40	18	17	60	80	105	187	190	89	252	34	71
11	62	27	17	77	75	94	165	149	76	152	33	71
12	72	18	38	67	86	83	145	128	63	139	34	70
13	35	16	235	59	95	85	133	130	55	118	32	69
14	31	15	205	56	100	223	136	127	54	101	30	68
15	21	14	226	53	384	255	210	110	48	87	29	70
16	20	36	132	50	682	223	557	96	41	114	27	95
17	20	16	127	47	298	267	600	73	36	117	30	133
18	20	14	123	46	160	208	327	43	38	123	41	127
19	44	14	121	51	141	157	227	47	46	121	81	121
20	20	14	114	48	135	139	195	53	52	98	109	123
21	17	41	99	44	122	132	171	69	49	92	99	132
22	16	17	258	43	108	118	144	56	43	91	98	143
23	27	15	511	39	98	109	130	60	37	76	100	150
24	124	17	321	44	198	99	125	84	35	64	98	149
25	22	54	170	82	182	91	122	66	187	54	97	147
26	18	21	177	94	161	91	114	56	129	46	96	144
27	18	16	136	92	131	81	103	52	92	88	107	138
28	18	20	137	89	201	86	95	64	69	93	148	119
29	17	44	397	80	380	186	92	630	56	76	148	100
30	16	18	265	72	---	224	85	2020	107	61	147	99
31	16	---	135	74	---	232	---	2190	---	51	148	---
TOTAL	939	621	4175	2120	4727	4527	9801	8021	4308	7911	2121	3179
MEAN	30.3	20.7	135	68.4	163	146	327	259	144	255	68.4	106
MAX	124	54	511	112	682	267	1960	2190	1260	1630	148	164
MIN	16	14	15	39	53	81	85	43	35	46	27	38
CAL YR 1983 TOTAL	38771	MEAN	106	MAX	1340	MIN	14					
WTR YR 1984 TOTAL	52450	MEAN	143	MAX	2190	MIN	14					

HACKENSACK RIVER BASIN

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06'23", long 73°58'01", Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi north of West Nyack, NY. DRAINAGE AREA, 27.5 mi² revised. 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, elevation, 80.00 ft. Crest of dam topped by two 50-foot Bascule gates 5 ft high. Flow regulated by 12-inch Howell-Bunger valve at elevation, 59.25 ft and 24-inch Howell-Bunger valve at elevation, 61.25 ft. Reservoir used for storage and water released by 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 north of Old Tappan. DRAINAGE AREA, about 49.0 mi². 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, elevation, 55.00 ft. 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 north of Hillsdale. DRAINAGE AREA, 19.4 mi². 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, elevation, 94.33 ft. Flow is regulated by flashboards and one 36-inch 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. 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, elevation, 22.66 ft. Flow regulated by seven sluice gates (7 by 9 ft). Water is released for diversion by Hackensack Water Co., 1 mi downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	78.60	3,704	-	38.44	65	-	67.60	0	-
Oct. 31	78.03	3,538	-8.3	46.85	1,359	+64.6	67.60	0	0
Nov. 30	79.89	4,084	+28.2	50.78	2,440	+55.7	67.60	0	0
Dec. 31	85.27	5,759	+83.6	55.33	3,971	+76.4	67.60	0	0
CAL YR 1983	-	-	+7.9	-	-	+16.2	-	-	-0.4
Jan. 31	85.10	5,703	-2.8	55.23	3,935	-1.8	67.60	0	0
Feb. 29	85.39	5,799	+5.1	55.41	4,000	+3.5	67.60	0	0
Mar. 31	85.37	5,792	-4	55.40	3,997	-2	67.60	0	0
Apr. 30	85.16	5,722	-3.6	55.11	3,892	-5.4	67.60	0	0
May 31	85.48	5,829	+5.3	55.58	4,063	+8.5	67.60	0	0
June 30	85.31	5,772	-2.9	55.40	3,997	-3.4	67.60	0	0
July 31	85.03	5,680	-4.6	55.15	3,906	-4.5	67.60	0	0
Aug. 31	83.64	5,231	-22.4	52.92	3,128	-38.8	67.60	0	0
Sept. 30	81.93	4,699	-27.4	48.09	1,672	-75.1	67.60	0	0
WTR YR 1984	-	-	+4.2	-	-	+6.8	-	-	0
01378480 ORADELL RESERVOIR +									
Sept. 30	17.07	2,031	-						
Oct. 31	21.23	3,001	+48.4						
Nov. 30	20.92	2,924	-4.0						
Dec. 31	23.24	3,528	+30.1						
CAL YR 1983	-	-	+6.8						
Jan. 31	22.63	3,363	-8.2						
Feb. 29	23.50	3,600	+12.6						
Mar. 31	23.52	3,606	+3						
Apr. 30	23.24	3,528	-4.0						
May 31	23.73	3,665	+6.8						
June 30	23.44	3,583	-4.2						
July 31	23.10	3,490	-4.6						
Aug. 31	18.55	2,362	-56.3						
Sept. 30	18.68	2,391	+1.5						
WTR YR 1984	-	-	+1.5						

+ Elevation at 0800 on first day of following month.

HACKENSACK RIVER BASIN

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DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

- 01376272 Hackensack Water Co., diverts water from Sparkill Creek at foot of Danny Lane in Northvale, 300 ft south of New York-New Jersey state line and 0.6 mi upstream of Sparkill Brook. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records furnished by Hackensack Water Co.
- 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 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 upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft 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.
- 01391210 Hackensack Water Co., diverts water from Saddle River just north of bridge on State Route 4 at Arcola. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Month	01376699 SPRING VALLEY WATER CO.	01376810 WEST NYACK, NY	01378490 HACKENSACK WATER CO.
October.....	8.22	2.23	116
November.....	7.20	2.15	141
December.....	7.16	2.25	142
CAL YR 1983.....	9.71	2.34	140
January.....	6.77	2.54	148
February.....	6.64	2.71	134
March.....	6.71	2.72	139
April.....	6.70	2.78	141
May.....	6.84	2.95	150
June.....	12.0	3.18	174
July.....	11.2	3.16	157
August.....	13.2	3.14	177
September.....	14.7	2.68	165
WTR YR 1984.....	8.96	2.71	149

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 1983 TO SEPTEMBER 1984

Month	01376272 SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	01391210 SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October.....	0.62	3.10	14.9	3.08
November.....	.33	3.13	13.2	2.95
December.....	0	.67	3.01	0
CAL YR 1983.....	0.27	1.58	7.94	1.38
January.....	0	0	0	0
February.....	0	0	0	0
March.....	0	0	0	0
April.....	0	0	0	0
May.....	0	0	0	0
June.....	0	0	0	.20
July.....	0	0	0	.17
August.....	0	0	0	.14
September.....	0	0	0	.14
WTR YR 1984.....	.08	.58	2.60	.56

PASSAIC RIVER BASIN

01387400 RAMAPO RIVER AT RAMAPO, N.Y.

LOCATION.--Lat 41°08'25", long 74°10'14", Rockland County, Hydrologic Unit 02030103, on right bank, 105 ft downstream from highway bridge on New York State Thruway at Ramapo, 500 ft upstream from local bridge, and 0.4 mi upstream from Torne Brook.

DRAINAGE AREA.--85.7 mi².

PERIOD OF RECORD.--June 1979 to current year.

REVISED RECORDS.--WDR NY-81-1: 1980(m).

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 297.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Occasional regulation by Lake Sebago.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s Apr. 5, 1984, gage height, 13.82 ft, from rating curve extended above 3,600 ft³/s on basis of runoff comparison with station 1.5 mi downstream; minimum, 5.3 ft³/s Aug. 7, 1983, gage height, 1.27 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,050 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	2230	4,140	8.83	May 30	1330	4,000	8.22
Feb. 16	0145	1,110	4.73	July 7	1245	1,580	5.21
Apr. 5	1830	*10,700	*13.82				

Minimum discharge, 12 ft³/s Sept. 26, 27, 28, 29; minimum gage height, 1.60 ft Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	88	401	241	78	431	377	90	1500	153	50	22
2	44	128	334	207	74	343	445	82	860	254	46	20
3	32	128	300	191	73	295	548	83	640	129	52	18
4	40	95	354	178	177	256	659	345	520	106	51	28
5	68	76	482	165	192	236	6300	361	420	111	44	32
6	70	67	414	158	168	289	5240	252	360	297	42	24
7	70	61	746	148	136	281	1880	203	310	1290	39	22
8	69	58	621	131	109	220	974	207	270	950	36	19
9	68	53	446	116	103	208	728	295	250	499	33	19
10	61	53	374	106	95	188	542	245	230	335	31	19
11	32	96	323	114	104	171	469	231	173	266	29	22
12	30	126	388	102	190	147	382	264	92	213	28	21
13	60	105	3060	98	219	141	328	263	82	154	30	19
14	65	85	3340	91	254	391	304	258	74	114	30	19
15	53	76	1640	87	634	447	373	249	66	95	28	20
16	37	169	919	84	979	410	568	224	59	116	26	19
17	30	174	659	76	630	422	600	209	49	140	24	18
18	28	137	516	72	483	470	500	194	50	145	23	17
19	79	115	428	70	424	400	450	189	52	177	22	15
20	88	104	346	68	411	440	380	176	47	118	37	15
21	63	318	280	66	359	500	329	136	42	103	40	14
22	50	335	362	64	309	561	282	80	38	125	29	14
23	54	233	525	62	276	474	255	75	33	94	27	14
24	578	195	390	68	460	398	255	86	39	73	26	14
25	569	499	310	101	490	343	228	75	182	59	24	14
26	314	692	250	112	410	306	179	67	95	54	22	13
27	230	505	209	100	331	272	151	69	62	81	21	12
28	177	411	253	97	371	261	120	72	52	117	19	12
29	137	631	553	87	554	376	110	1010	47	80	19	13
30	113	559	400	81	---	364	100	3640	67	65	18	13
31	101	---	294	81	---	336	---	2600	---	56	20	---
TOTAL	3483	6372	19917	3422	9093	10377	24057	12330	6761	6569	966	541
MEAN	112	212	642	110	314	335	802	398	225	212	31.2	18.0
MAX	578	692	3340	241	979	561	6300	3640	1500	1290	52	32
MIN	28	53	209	62	73	141	100	67	33	54	18	12

CAL YR 1983	TOTAL	103742.9	MEAN	284	MAX	3340	MIN	7.9
WTR YR 1984	TOTAL	103888	MEAN	284	MAX	6300	MIN	12

PASSAIC RIVER BASIN

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01387420 RAMAPO RIVER AT SUFFERN, NEW YORK

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi².

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 264.44 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow affected by diversion from Spring Valley Water Company well field upstream from station and by occasional regulation by Lake Sebago.

COOPERATION.--Figures of pumpage from well field furnished by Spring Valley Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s Apr. 5, 1984, gage height, 15.38 ft, from rating curve extended above 5,400 ft³/s; minimum discharge, 2.6 ft³/s Sept. 30, 1981, gage height, 1.23 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	2315	4,350	10.78	May 30	1100	4,260	10.39
Feb. 16	0345	1,240	5.45	July 7	0700	1,940	7.50
Apr. 5	1930	*12,300	*15.38				

Minimum discharge, 7.7 ft³/s Sept. 26, 27, gage height, 1.44 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	71	389	270	79	426	363	90	1530	169	43	17
2	49	112	307	220	76	323	455	76	941	279	40	15
3	36	114	277	200	73	279	586	78	661	154	46	13
4	41	83	344	180	187	243	718	372	540	134	43	21
5	61	64	465	170	200	235	7110	360	431	133	38	26
6	61	57	403	160	180	283	5880	250	361	380	35	18
7	60	53	800	150	150	267	1930	197	321	1560	30	16
8	57	49	628	140	130	222	1020	219	287	1060	28	14
9	55	46	426	130	110	219	693	321	258	549	24	14
10	53	47	349	110	100	194	509	252	234	339	23	13
11	32	94	296	120	108	172	436	227	171	248	23	15
12	30	124	422	110	202	144	382	275	84	213	22	15
13	54	99	3380	100	223	143	345	269	74	164	24	13
14	57	78	3560	96	247	397	310	264	68	123	22	13
15	48	68	1860	88	700	448	405	240	60	99	19	14
16	36	177	1090	82	1070	420	580	215	48	132	18	14
17	31	177	759	78	680	440	631	220	44	157	16	12
18	28	137	580	74	470	500	510	224	45	145	15	11
19	77	112	459	72	410	430	478	217	48	186	14	10
20	88	99	360	68	393	470	426	210	40	117	30	9.9
21	60	307	294	64	331	540	365	172	33	99	31	9.8
22	49	316	419	62	284	580	304	97	26	133	22	9.5
23	58	235	596	60	256	458	270	84	23	100	18	9.5
24	643	212	423	64	481	366	273	99	31	78	18	9.7
25	578	516	330	106	499	308	222	78	169	60	16	9.9
26	288	711	280	120	392	276	183	67	84	49	16	9.0
27	218	481	250	105	310	250	152	72	51	79	14	8.7
28	163	384	313	100	380	242	123	78	39	121	13	9.8
29	116	662	629	94	597	349	113	1030	32	74	12	10
30	92	547	450	86	---	331	102	3730	61	59	12	9.8
31	81	---	340	82	---	311	---	2770	---	51	14	---
TOTAL	3374	6232	21478	3561	9318	10266	25874	12853	6795	7244	739	389.6
MEAN	109	208	693	115	321	331	862	415	227	234	23.8	13.0
MAX	643	711	3560	270	1070	580	7110	3730	1530	1560	46	26
MIN	28	46	250	60	73	143	102	67	23	49	12	8.7
*	6.0	8.2	9.6	11	11	12	12	11	12	8.1	11	6.8

CAL YR 1983 TOTAL 105626.6 MEAN 289 MAX 3560 MIN 7.3 * 7.6
WTR YR 1984 TOTAL 108123.6 MEAN 295 MAX 7110 MIN 8.7 * 9.8

* Diversion, in cubic feet per second, by pumpage from well field upstream of station.

PASSAIC RIVER BASIN

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft upstream from bridge on U.S. Highway 202, 2.5 mi northeast of Suffern, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--12.3 mi².

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WDR NY-79-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft downstream, at present datum.

REMARKS.--Records poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--26 years, 25.3 ft³/s, 27.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s Nov. 8, 1977, gage height, 9.91 ft, from rating curve extended above 850 ft³/s on basis of contracted-opening measurements at gage heights 8.52 ft and 9.91 ft; minimum, 0.05 ft³/s Oct. 20, 21, 1970, result of temporary pumping from gage pool.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 24	0730	241	3.94	Apr. 5	1530	*1,310	*7.49
Dec. 13	1315	821	5.92	May 29	2030	640	5.39
Dec. 28	2230	201	3.73	May 30	0915	756	5.73
Feb. 15	1400	285	4.15	Jul. 7	0900	619	5.33

Minimum discharge, 1.3 ft³/s Sept. 22, 26, gage height, 1.33 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	53	34	13	56	56	25	174	50	8.8	3.4
2	7.3	12	43	31	12	48	64	23	104	32	8.2	2.7
3	5.6	12	39	30	13	42	67	24	76	31	7.8	2.5
4	4.6	12	60	28	38	38	71	78	60	29	7.4	6.1
5	3.6	11	56	28	30	39	862	49	49	30	7.2	3.9
6	3.0	11	57	27	28	49	474	39	42	100	7.2	2.8
7	2.6	10	102	25	23	40	191	34	37	401	7.6	2.4
8	2.1	10	66	22	18	34	113	47	31	182	7.6	2.3
9	2.0	9.9	52	19	17	32	84	52	27	82	6.1	2.2
10	2.1	9.3	46	19	17	28	70	42	24	53	6.1	2.3
11	2.1	22	40	20	20	28	60	37	21	42	6.0	2.3
12	10	19	74	17	32	24	53	35	19	35	6.7	2.2
13	14	16	554	16	32	24	47	34	18	28	6.3	1.9
14	12	14	411	15	35	62	47	34	17	24	5.6	1.9
15	7.3	14	175	15	138	53	66	30	15	21	5.0	2.0
16	5.8	50	103	14	110	55	117	28	14	27	4.6	2.3
17	4.8	37	76	14	71	63	91	26	13	23	4.3	1.9
18	4.4	29	61	13	56	55	70	25	15	26	4.1	1.7
19	17	24	53	13	50	51	60	24	18	22	4.0	1.7
20	10	21	44	12	47	48	53	23	13	17	6.7	1.8
21	8.6	80	38	12	41	48	46	23	11	17	4.2	1.6
22	7.4	56	81	11	37	48	41	20	11	17	3.9	1.4
23	12	42	74	11	34	42	41	21	9.9	14	4.1	1.4
24	144	38	55	15	78	38	44	26	12	13	4.1	1.4
25	64	97	44	25	59	35	38	21	38	11	3.6	1.6
26	39	82	38	20	49	32	33	19	17	10	3.2	1.5
27	27	62	34	18	42	29	31	19	13	22	3.0	1.6
28	21	56	62	18	72	30	29	23	10	16	3.0	1.7
29	17	98	77	15	76	39	28	206	9.4	13	3.0	2.1
30	15	69	47	14	---	39	27	587	20	11	3.0	2.0
31	14	---	38	15	---	45	---	372	---	9.7	4.7	---
TOTAL	502.3	1036.2	2753	586	1288	1294	3074	2046	938.3	1408.7	167.1	66.6
MEAN	16.2	34.5	88.8	18.9	44.4	41.7	102	66.0	31.3	45.4	5.39	2.22
MAX	144	98	554	34	138	63	862	587	174	401	8.8	6.1
MIN	2.0	9.3	34	11	12	24	27	19	9.4	9.7	3.0	1.4
CFSM	1.32	2.80	7.22	1.54	3.61	3.39	8.29	5.37	2.54	3.69	.44	.18
IN.	1.52	3.13	8.33	1.77	3.90	3.91	9.30	6.19	2.84	4.26	0.51	0.20
CAL YR 1983	TOTAL	15609.4	MEAN	42.8	MAX	578	MIN	1.7	CFSM	3.48	IN.	47.21
WTR YR 1984	TOTAL	15160.2	MEAN	41.4	MAX	862	MIN	1.4	CFSM	3.37	IN.	45.85

PASSAIC RIVER BASIN

105

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft downstream from State Highway 17, 0.6 mi downstream from Mahwah River, and 1.0 mi west of Mahwah. Water-quality samples collected at bridge 350 ft upstream from gage at high flows.

DRAINAGE AREA.--120 mi².

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). WDR NJ-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Flow affected by diversion from Spring Valley (NY) Water Company well field upstream from station (see sta. 01387420). Occasional regulation from lakes and ponds upstream from the station.

AVERAGE DISCHARGE.--66 years (water years 1903-06, 1923-84), 232 ft³/s, 26.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft³/s April 5, 1984, gage height, 13.35 ft from rating curve extended above 1,400 ft³/s; minimum discharge, 4.6 ft³/s Sept. 30, 1981 (possible regulation); minimum daily discharge, 6.1 ft³/s Sept. 30, 1981 (possible regulation).

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	2315	5540	10.28	May 30	1330	3780	9.37
Apr. 5	1945	*15500	13.35	July 7	0800	2020	7.90

Minimum discharge, 13.0 ft³/s Sept. 25, gage height, 2.41 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	119	537	343	116	587	560	189	1560	332	78	38
2	69	169	439	311	103	470	644	173	1180	424	73	34
3	47	168	395	291	112	406	743	169	962	242	77	41
4	48	128	518	277	313	359	908	546	703	223	74	65
5	76	102	652	264	292	358	8600	473	584	261	72	47
6	81	88	574	252	261	434	5860	326	497	650	68	36
7	74	81	1060	237	214	398	2010	273	440	1720	62	33
8	69	76	808	212	176	330	1300	325	384	1300	60	31
9	67	72	577	190	159	321	1020	417	341	788	54	30
10	61	88	488	178	150	295	735	324	310	512	52	33
11	37	169	418	191	176	275	661	295	252	388	51	32
12	64	188	623	158	288	255	592	332	165	303	51	30
13	94	146	4010	141	314	250	526	327	152	234	54	27
14	101	118	4150	153	351	601	510	326	147	190	50	37
15	68	120	1880	144	890	617	620	296	136	166	45	40
16	47	301	1210	123	1220	576	863	272	122	227	41	24
17	39	266	962	124	842	666	828	255	115	226	39	24
18	36	209	720	119	632	625	632	240	119	225	38	26
19	142	173	608	125	557	569	569	232	149	254	37	26
20	121	154	502	109	540	569	500	227	112	174	60	22
21	73	544	415	98	472	631	437	203	99	164	54	20
22	57	479	636	93	408	702	373	143	90	189	44	17
23	98	335	806	93	365	600	343	145	85	157	42	15
24	980	301	580	119	671	507	354	158	120	131	41	15
25	764	782	484	205	653	442	312	130	320	102	38	14
26	413	957	402	201	543	404	269	119	157	87	37	15
27	300	657	346	172	452	359	241	121	113	168	35	15
28	240	568	467	164	557	349	223	141	94	181	34	17
29	194	940	818	138	773	498	212	1060	86	126	33	18
30	156	747	555	127	---	498	200	3370	146	101	33	17
31	137	---	410	132	---	494	---	2610	---	87	38	---
TOTAL	4881	9245	27050	5484	12600	14445	31645	14217	9740	10332	1565	839
MEAN	157	308	873	177	434	466	1055	459	325	333	50.5	28.0
MAX	980	957	4150	343	1220	702	8600	3370	1560	1720	78	65
MIN	36	72	346	93	103	250	200	119	85	87	33	14
CFSM	1.31	2.57	7.27	1.47	3.62	3.88	8.79	3.82	2.71	2.77	.42	.23
IN	1.51	2.87	8.39	1.70	3.91	4.48	9.81	4.41	3.02	3.20	.49	.26

CAL YR 1983 TOTAL 142184 MEAN 390 MAX 4150 MIN 13 CFSM 3.25 IN 44.08
WTR YR 1984 TOTAL 142043 MEAN 388 MAX 8600 MIN 14 CFSM 3.23 IN 44.03

DELAWARE RIVER BASIN

01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY

LOCATION.--Lat 42°08'41", long 74°39'14", Delaware County, Hydrologic Unit 02040102, on right bank at downstream side of bridge on Fair Street at intersection with Main Street at Margaretville, 0.2 mi upstream from unnamed tributary, and 1.6 mi downstream from Dry Brook.

DRAINAGE AREA.--163 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft 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 higher.

REMARKS.--Records good except those for winter period, which are fair.

AVERAGE DISCHARGE.--47 years, 307 ft³/s, 25.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s Nov. 25, 1950, gage height, 13.84 ft, from rating curve extended above 8,700 ft³/s; minimum, 5.0 ft³/s Aug. 5, 1964; minimum gage height, 0.89 ft Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1845	3,670	7.86	Apr. 16	1700	5,140	9.15
Feb. 16	0130	3,980	8.15	May 29	1215	4,990	9.03
Apr. 5	1715	*6,600	*10.28				

Minimum discharge, 14 ft³/s Oct. 1, 3, gage height, 2.56 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	21	341	230	100	350	336	386	1640	115	74	58
2	16	20	295	210	110	310	384	348	1170	122	69	52
3	14	21	270	200	130	270	485	323	882	104	64	77
4	15	21	251	190	400	250	546	979	703	96	60	109
5	17	21	232	180	300	240	3700	778	549	84	55	76
6	31	20	349	170	240	260	3570	686	455	98	59	62
7	26	22	1310	160	206	230	2120	608	387	295	50	56
8	22	18	712	135	185	200	1400	590	325	169	46	51
9	20	18	559	135	180	170	1060	667	278	122	42	47
10	18	18	480	130	170	170	870	537	243	101	41	45
11	17	38	408	115	200	160	738	475	212	92	56	45
12	17	81	381	95	300	145	662	544	182	122	85	64
13	18	49	2460	105	400	150	631	565	159	88	108	50
14	34	41	3230	110	700	150	720	852	160	71	86	68
15	31	35	2040	100	2910	150	882	717	136	69	177	68
16	27	58	1390	90	3110	192	2450	682	117	58	99	61
17	25	73	1030	96	1850	254	2610	600	107	57	113	52
18	24	59	783	94	1380	211	1960	530	112	103	84	46
19	29	51	628	90	1110	222	1660	484	126	90	82	43
20	27	50	450	88	1050	319	1380	454	94	68	166	41
21	24	147	390	90	849	530	1100	550	80	198	94	39
22	22	134	360	90	700	626	893	409	75	198	79	37
23	22	109	320	90	601	510	778	466	75	127	156	36
24	26	105	270	120	571	448	722	536	74	105	119	36
25	31	366	230	320	524	415	691	424	172	86	99	35
26	29	293	230	220	483	393	597	402	97	75	85	34
27	26	269	240	180	417	360	527	380	78	144	74	32
28	26	258	260	160	431	351	478	662	77	164	69	32
29	25	475	450	140	485	350	459	3660	71	109	65	32
30	24	413	280	130	---	351	418	4290	94	93	73	31
31	21	---	250	120	---	330	---	2620	---	81	68	---
TOTAL	718	3304	20879	4383	20092	9067	34827	26204	8930	3504	2597	1515
MEAN	23.2	110	674	141	693	292	1161	845	298	113	83.8	50.5
MAX	34	475	3230	320	3110	626	3700	4290	1640	295	177	109
MIN	14	18	230	88	100	145	336	323	71	57	41	31
CFSM	.14	.67	4.12	.86	4.24	1.79	7.11	5.17	1.82	.69	.51	.31
IN.	0.16	0.75	4.75	1.00	4.57	2.06	7.93	5.97	2.03	0.80	0.59	0.34
CAL YR 1983	TOTAL	123158	MEAN	337	MAX	3620	MIN	10	CFSM	2.06	IN.	28.04
WTR YR 1984	TOTAL	136020	MEAN	372	MAX	4290	MIN	14	CFSM	2.28	IN.	30.97

01414500 MILL BROOK NEAR DUNRAVEN, NY

LOCATION.--Lat 42°06'22", long 74°43'51", Delaware County, Hydrologic Unit 02040102, on left bank 0.4 mi upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi southwest of Dunraven.

DRAINAGE AREA.--25.2 mi².

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,298.54 ft Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for winter periods, and periods of flow below 50 ft³/s, which are poor.

AVERAGE DISCHARGE.--47 years, 55.5 ft³/s, 30.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s Sept. 21, 1938, from rating curve extended above 960 ft³/s on basis of velocity-area study; maximum gage height, 9.92 ft Nov. 25, 1950; minimum discharge observed, 1.2 ft³/s Sept. 25, 26, 1939, gage height, 0.71 ft, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 740 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1515	997	6.31	Apr. 16	1430	799	5.92
Feb. 15	0330	926	6.17	May 29	1115	*1,770	*7.50
Apr. 5	1430	1,720	7.43				

Minimum discharge, 3.0 ft³/s Oct. 3, gage height, 2.81 ft.

REVISIONS.--Peak, daily, monthly, and yearly discharges have been revised as shown in the following tables. They supersede figures published in WDR NY Vol. 1, 1979-83.

Revised peak discharges at or above base of 740 ft³/s for 1979-83 water years are given herewith:

Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1979	Jan. 2, 1979	1530	740	a6.10	1981	Feb. 11, 1981	1800	1,230	6.70
1979	Mar. 6, 1979	0815	*780	a6.02	1981	Feb. 20, 1981	1630	937	6.19
1979	Sept. 6, 1979	1515	b672	5.65	1981	May 12, 1981	1430	1,060	6.42
1980	Nov. 26, 1979	1930	1,860	7.61	1982	Apr. 18, 1982	0115	*958	6.23
1980	Mar. 21, 1980	unknown	*3,080	9.00	1983	Feb. 3, 1983	1045	*789	5.90
1980	Apr. 9, 1980	1330	b624	5.54	1983	Apr. 16, 1983	0945	b722	5.76
1981	Feb. 2, 1981	1400	*1,400	c7.0					

* Denotes maximum for the water year.

a Backwater from ice.

b Revised discharge not above base.

c From floodmarks.

Revised daily discharges, in cubic feet per second, for 1979-83 water years, are given herewith:

Water year	Date	Discharge	Water year	Date	Discharge	Water year	Date	Discharge	Water year	Date	Discharge
1979	Jan. 1	481	1980	Mar. 20	250	1981	Feb. 20	554	1983	Apr. 16	470
1979	Jan. 2	578	1980	Mar. 21	1,700	1981	Feb. 21	318	1983	Apr. 17	314
1979	Mar. 5	330	1980	Mar. 22	650	1981	Feb. 22	196	1983	Apr. 24	283
1979	Mar. 6	560	1981	Feb. 2	858	1981	May 12	765	1983	Apr. 25	470
1979	Mar. 7	205	1981	Feb. 3	369	1981	May 13	310	1983	Apr. 26	310
1980	Nov. 26	695	1981	Feb. 4	208	1981	May 14	169	1983	Apr. 27	272
1980	Nov. 27	476	1981	Feb. 11	765	1982	Apr. 18	486	1983	Apr. 28	391
1980	Nov. 28	205	1981	Feb. 12	342	1983	Feb. 3	455	1983	Apr. 29	330
1980	Mar. 18	803	1981	Feb. 13	169	1983	Feb. 4	182	1983	Apr. 30	257
1980	Mar. 19	405									

Revised monthly and yearly discharges, in cubic feet per second, for 1979-83 water years, are given herewith:

Water year	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1979 TOTAL				4320		4458						
1979 MEAN				139		144						
1979 MAX				578		560						
1979 MIN				40		52						
1979 CFSM				5.52		5.71						
1979 IN.				6.38		6.58						
CAL YR 1978	TOTAL	17905.2	MEAN	49.1	MAX	572	MIN	5.1	CFSM	1.95	IN.	26.43
WTR YR 1979	TOTAL	20876.9	MEAN	57.2	MAX	578	MIN	4.5	CFSM	2.27	IN.	30.82
Water year	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1980 TOTAL		3173				5883.2						
1980 MEAN		106				190						
1980 MAX		695				1700						
1980 MIN		28				8.0						
1980 CFSM		4.21				7.54						
1980 IN.		4.68				8.68						
CAL YR 1979	TOTAL	24620.3	MEAN	67.5	MAX	695	MIN	4.5	CFSM	2.68	IN.	36.34
WTR YR 1980	TOTAL	20802.3	MEAN	56.8	MAX	1700	MIN	3.0	CFSM	2.25	IN.	30.71

DELAWARE RIVER BASIN

01414500 MILL BROOK NEAR DUNRAVEN, NY--Continued

Revised monthly and yearly discharges, in cubic feet per second, for 1979-83 water years (continued):

Water year	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1981 TOTAL					5780.4			3247				
1981 MEAN					206			105				
1981 MAX					858			765				
1981 MIN					5.4			28				
1981 CFSM					8.17			4.17				
1981 IN.					8.53			4.79				
CAL YR 1980	TOTAL	15867.6	MEAN	43.4	MAX	1700	MIN	2.9	CFSM	1.72	IN.	23.42
WTR YR 1981	TOTAL	15311.2	MEAN	41.9	MAX	858	MIN	2.9	CFSM	1.66	IN.	22.60

Water year	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1982 TOTAL							4412					
1982 MEAN							147					
1982 MAX							486					
1982 MIN							67					
1982 CFSM							5.83					
1982 IN.							6.51					
CAL YR 1981	TOTAL	17969.9	MEAN	49.2	MAX	858	MIN	4.5	CFSM	1.95	IN.	26.53
WTR YR 1982	TOTAL	16680.0	MEAN	45.7	MAX	486	MIN	3.3	CFSM	1.81	IN.	24.62

Water year	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1983 TOTAL					1598		5658					
1983 MEAN					57.1		189					
1983 MAX					455		470					
1983 MIN					22		62					
1983 CFSM					2.27		7.50					
1983 IN.					2.36		8.35					
CAL YR 1982	TOTAL	14623.3	MEAN	40.1	MAX	486	MIN	2.7	CFSM	1.59	IN.	21.59
WTR YR 1983	TOTAL	18705.2	MEAN	51.2	MAX	470	MIN	2.7	CFSM	2.03	IN.	27.61

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	4.8	61	62	27	58	54	53	209	26	10	8.1
2	3.1	4.8	55	47	38	50	59	52	144	23	9.7	7.4
3	3.0	4.9	49	35	70	44	70	50	107	16	8.9	11
4	3.8	4.8	45	32	100	42	76	130	86	13	9.3	14
5	5.0	4.7	42	30	47	41	889	108	70	13	8.2	11
6	5.7	4.6	78	27	43	43	573	100	60	18	7.8	10
7	5.2	4.5	157	25	41	39	269	91	53	86	7.8	9.0
8	4.4	4.3	92	26	45	36	184	92	47	47	7.4	8.2
9	3.7	4.0	76	29	46	34	132	91	41	36	6.8	7.7
10	3.5	4.2	74	25	42	32	110	87	37	31	6.4	7.5
11	3.4	9.9	64	30	44	31	94	78	33	31	11	8.2
12	3.4	18	66	27	50	28	84	90	29	31	11	12
13	3.6	14	542	25	60	27	81	89	26	25	9.7	8.5
14	6.1	12	527	23	200	32	89	115	27	22	8.6	9.1
15	4.3	12	256	21	600	35	122	105	24	19	9.9	7.4
16	3.5	18	167	20	484	40	377	97	21	19	8.4	7.3
17	3.3	18	125	19	249	46	206	87	20	17	8.7	6.7
18	3.5	16	102	19	177	40	142	77	22	23	7.2	6.6
19	4.9	15	88	18	148	43	108	70	20	19	9.2	6.5
20	4.9	15	60	18	148	53	97	71	16	16	15	6.8
21	5.0	70	53	18	123	88	88	81	15	15	9.9	6.4
22	4.8	50	45	18	105	121	74	69	14	14	8.7	6.4
23	4.8	39	52	20	91	102	68	72	13	12	18	6.4
24	5.3	36	60	45	87	86	62	74	14	11	14	6.1
25	6.0	82	33	90	81	77	58	68	22	9.9	12	6.1
26	6.4	64	34	50	73	69	53	64	14	9.6	10	6.1
27	6.1	55	37	38	64	63	49	58	11	22	9.4	5.8
28	6.5	52	75	31	70	60	47	93	9.4	20	8.7	5.8
29	5.4	82	96	29	74	59	48	706	7.7	15	10	5.8
30	5.1	71	80	25	---	58	49	649	17	13	12	5.5
31	4.8	---	72	23	---	54	---	356	---	11	9.6	---
TOTAL	141.6	794.5	3363	945	3427	1631	4412	4023	1229.1	683.5	303.3	233.4
MEAN	4.57	26.5	108	30.5	118	52.6	147	130	41.0	22.0	9.78	7.78
MAX	6.5	82	542	90	600	121	889	706	209	86	18	14
MIN	3.0	4.0	33	18	27	27	47	50	7.7	9.6	6.4	5.5
CFSM	1.18	1.05	4.29	1.21	4.68	2.09	5.83	5.16	1.63	.87	.39	.31
IN.	0.21	1.17	4.96	1.39	5.06	2.41	6.51	5.94	1.81	1.01	0.45	0.34
CAL YR 1983	TOTAL	20803.0	MEAN	57.0	MAX	542	MIN	2.8	CFSM	2.26	IN.	30.71
WTR YR 1984	TOTAL	21186.4	MEAN	57.9	MAX	889	MIN	3.0	CFSM	2.30	IN.	31.28

DELAWARE RIVER BASIN

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01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 ft upstream from bridge on County Highway 1, about 1,700 ft upstream from Pepacton Reservoir, and 5 mi south of Andes.

DRAINAGE AREA.--33.2 mi².

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 1937. Datum of gage is 1,285.87 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi downstream at different datum.

REMARKS.--Records good except those above 200 ft³/s and those for winter periods, which are poor.

AVERAGE DISCHARGE.--47 years, 59.6 ft³/s, 24.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft³/s Sept. 21, 1938, gage height, 7.12 ft, from rating curve extended above 1,500 ft³/s; maximum gage height, 7.92 ft Jan. 26, 1976 (ice jam); minimum discharge, 0.5 ft³/s Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	Unknown	Unknown	Unknown	Apr. 16	Unknown	Unknown	Unknown
Feb. 15	Unknown	Unknown	Unknown	May 29	Unknown	#2,300	b*6.06
Apr. 5	Unknown	1,040	a5.0				

a From floodmark.

b From crest-stage gage.

Minimum discharge, 2.4 ft³/s Oct. 3, 4, gage height, 2.31 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.9	85	44	18	64	61	54	214	24	9.4	15
2	3.1	4.3	70	39	24	56	76	48	180	21	8.9	12
3	2.7	3.6	60	38	38	50	94	47	140	14	8.5	21
4	2.5	4.5	54	37	70	47	103	149	110	12	8.4	30
5	3.2	3.7	51	35	55	45	490	124	93	14	7.9	19
6	6.3	3.8	105	33	45	46	440	112	76	17	7.6	15
7	4.7	3.5	228	30	35	42	230	99	62	29	7.1	13
8	4.1	3.4	137	27	35	35	189	103	52	17	6.7	12
9	3.3	3.2	114	15	35	32	146	118	44	13	6.2	12
10	3.0	3.6	99	15	34	30	121	96	37	11	6.0	11
11	3.4	7.7	82	16	64	29	105	85	32	11	9.9	11
12	3.0	9.2	80	18	100	28	89	109	25	11	12	18
13	3.7	6.9	800	20	128	28	79	106	23	9.1	10	12
14	12	6.2	600	19	330	28	112	174	24	8.1	18	22
15	8.0	5.9	281	18	770	30	159	152	20	7.7	83	19
16	6.0	12	196	18	450	32	450	139	16	7.5	31	16
17	5.0	13	152	18	290	35	350	118	15	7.1	23	13
18	5.2	10	127	18	220	39	222	100	19	15	18	11
19	7.1	9.8	97	16	190	43	182	90	20	13	26	11
20	5.2	9.9	84	14	170	56	172	89	14	9.3	55	9.8
21	4.6	50	74	15	150	78	138	105	12	15	28	9.3
22	3.8	38	68	16	125	115	117	76	11	13	22	9.2
23	4.2	29	58	17	110	99	108	106	10	9.0	48	8.9
24	5.8	33	50	19	100	91	103	113	12	7.9	35	8.3
25	5.6	109	44	40	95	82	99	97	35	7.9	27	8.0
26	5.2	74	41	47	85	73	81	88	15	6.8	23	7.9
27	5.2	68	41	36	80	65	68	78	11	28	21	7.3
28	5.3	70	50	31	75	61	63	163	11	27	18	7.1
29	4.8	135	80	26	78	62	63	1300	9.7	15	17	7.0
30	4.3	104	60	23	---	60	57	940	12	12	19	6.7
31	4.1	---	48	20	---	55	---	339	---	10	18	---
TOTAL	147.8	838.1	4116	778	3999	1636	4767	5517	1354.7	422.4	638.6	382.5
MEAN	4.77	27.9	133	25.1	138	52.8	159	178	45.2	13.6	20.6	12.7
MAX	12	135	800	47	770	115	490	1300	214	29	83	30
MIN	2.5	3.2	41	14	18	28	57	47	9.7	6.8	6.0	6.7
CFSM	.14	.84	4.01	.76	4.16	1.59	4.79	5.36	1.36	.41	.62	.38
IN.	0.17	0.94	4.61	0.87	4.48	1.83	5.34	6.18	1.52	0.47	0.72	0.43

CAL YR 1983	TOTAL	21761.9	MEAN	59.6	MAX	800	MIN	2.1	CFSM	1.80	IN.	24.38
WTR YR 1984	TOTAL	24597.1	MEAN	67.2	MAX	1300	MIN	2.5	CFSM	2.02	IN.	27.56

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 downstream from Downs ville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi east of Downs ville.

DRAINAGE AREA.--372 mi².

PERIOD OF RECORD.--July 1941 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft 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 downstream at datum 7.03 ft lower.

REMARKS.--Records good. 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 Nov. 26, 1950, gage height, 14.52 ft, site and datum then in use, from rating curve extended above 12,000 ft³/s; minimum, 0.3 ft³/s Oct. 11, 1954; minimum daily, 0.6 ft³/s Oct. 10, 1954; minimum gage height, 1.39 ft Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft (at former datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,820 ft³/s May 30, gage height, 8.91 ft; minimum, 5.1 ft³/s Dec. 28, gage height, 1.95 ft; minimum daily, 5.3 ft³/s Nov. 26-27, Dec. 1, 26-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	408	5.3	6.9	59	54	74	220	4380	75	88	80
2	70	195	5.4	6.9	56	57	76	167	3000	74	106	74
3	70	197	5.4	31	53	54	78	124	2200	75	111	77
4	70	354	5.5	54	53	54	79	459	1650	76	110	75
5	71	602	5.5	54	53	55	79	855	1010	77	110	70
6	71	604	6.0	58	53	54	81	877	604	84	110	70
7	70	602	6.1	59	54	54	82	784	376	77	109	70
8	70	600	5.6	56	54	54	83	798	230	72	109	71
9	70	599	5.8	56	54	54	76	1220	136	72	109	73
10	70	302	5.8	56	54	54	77	1240	97	74	122	72
11	70	360	5.8	55	54	54	79	1170	100	73	138	72
12	69	605	6.0	55	54	55	81	1200	105	72	139	74
13	69	605	7.9	54	54	55	81	1310	105	77	123	75
14	69	487	8.3	52	55	57	81	1610	105	96	110	74
15	68	166	7.5	59	54	56	81	1590	104	110	108	74
16	68	258	7.1	57	54	54	83	1280	103	111	108	74
17	68	544	6.8	51	54	53	83	961	103	111	96	74
18	169	476	6.7	55	56	53	83	700	86	93	83	74
19	287	473	6.3	59	58	54	83	529	72	72	77	75
20	419	279	6.0	57	59	57	214	432	72	74	72	77
21	612	69	5.8	53	60	57	888	523	73	72	72	74
22	606	6.5	5.8	51	59	56	1080	415	76	93	72	72
23	572	6.4	5.6	51	59	55	1010	366	76	110	73	75
24	575	6.6	5.5	57	59	54	914	536	73	110	74	72
25	608	6.7	5.4	58	58	58	812	453	72	96	72	75
26	602	5.3	5.3	53	56	54	691	374	72	77	73	79
27	604	5.3	5.3	55	58	57	528	320	79	76	75	78
28	601	5.5	5.7	61	63	56	406	520	81	73	77	80
29	597	5.6	6.3	59	57	56	346	5390	77	72	74	76
30	597	5.4	7.2	59	---	56	279	9340	74	70	90	79
31	603	---	7.2	61	---	67	---	7000	---	72	93	---
TOTAL	8631	8838.3	189.9	1609.8	1624	1719	8688	42763	15391	2566	2983	2235
MEAN	278	295	6.13	51.9	56.0	55.5	290	1379	513	82.8	96.2	74.5
MAX	612	605	8.3	61	63	67	1080	9340	4380	111	139	80
MIN	66	5.3	5.3	6.9	53	53	74	124	72	70	72	70

CAL YR 1983 TOTAL 75659.0 MEAN 207 MAX 4090 MIN 5.3
WTR YR 1984 TOTAL 97238.0 MEAN 266 MAX 9340 MIN 5.3

DELAWARE RIVER

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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 downstream from Baxter Brook, and 1,100 ft downstream from highway bridge at Harvard. Water-quality sampling site at discharge station.

DRAINAGE AREA.--458 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to June 1967, November 1977 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,007.41 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1958, water-stage recorder 1,100 ft upstream at datum 0.65 ft higher, and from Aug. 12, 1958, to June 30, 1967, water-stage recorder at site 200 ft downstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² 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, 31,400 ft³/s Sept. 22, 1938, gage height, 16.93 ft site and datum then in use, from rating curve extended above 10,000 ft³/s on basis of slope-area measurement at gage height 15.58 ft; minimum discharge, 7.2 ft³/s Oct. 13, 1954, gage height, 1.63 ft site and datum then in use; minimum daily discharge, 7.6 ft³/s Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,100 ft³/s May 30, gage height, 11.78 ft; minimum, 60 ft³/s Dec. 26, gage height, 1.61 ft, result of freezeup; minimum daily, 66 ft³/s Oct. 1.

REVISIONS.--The maximum discharges for some water years have been revised as shown in the following table. They supersede figures published in the reports for 1978-81.

Water year	Date	Discharge (ft ³ /s)	Gage height (ft)
1978	Jan. 9, 1978	a7,400	unknown
1979	May 26, 1979	4,640	7.72
1980	Nov. 26, 1979	5,400	8.30
1981	Feb. 11, 1981	6,820	9.28

a About.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	555	292	120	100	200	205	366	5570	144	117	123
2	73	217	237	115	105	190	235	305	3680	149	146	116
3	70	212	202	110	110	180	277	247	2650	121	147	125
4	77	224	176	130	140	180	307	533	2000	114	148	131
5	87	590	164	135	140	170	776	949	1290	113	144	110
6	77	604	160	135	130	150	1290	1010	829	120	139	102
7	75	604	565	125	130	130	911	932	589	152	134	97
8	73	603	435	115	140	125	635	881	429	126	130	93
9	72	602	343	110	168	120	483	1240	313	113	128	91
10	72	524	285	105	141	120	393	1290	230	108	128	90
11	71	190	231	110	152	115	342	1210	196	116	174	88
12	74	622	278	120	215	110	300	1260	190	120	202	108
13	73	621	1840	110	297	110	267	1430	182	101	175	94
14	110	581	2340	100	743	110	335	1870	185	105	159	98
15	88	346	1190	98	2550	115	497	1980	171	124	515	100
16	80	118	700	120	2020	120	1000	1600	158	126	314	94
17	77	566	482	100	1060	154	1380	1220	148	124	272	90
18	89	534	376	86	722	136	907	958	156	179	206	87
19	287	514	300	90	552	138	637	787	126	134	184	82
20	336	442	205	95	488	157	568	659	112	109	359	87
21	603	312	188	100	425	216	980	754	105	106	243	85
22	606	166	170	110	373	300	1170	651	100	114	201	78
23	602	127	140	100	332	307	1130	569	101	137	252	78
24	574	118	125	105	305	287	1070	743	103	124	212	84
25	620	271	110	135	285	273	955	685	133	127	183	77
26	620	266	105	120	266	245	844	593	103	94	163	83
27	619	231	100	105	231	222	702	527	97	173	149	82
28	619	216	105	100	247	212	573	743	101	205	143	83
29	614	340	170	105	292	220	500	6260	98	150	136	81
30	612	353	150	100	---	201	434	10800	97	134	133	80
31	610	---	120	105	---	189	---	8720	---	122	159	---
TOTAL	8726	11669	12284	3414	12859	5502	20103	51772	20242	3984	5895	2817
MEAN	281	389	396	110	443	177	670	1670	675	129	190	93.9
MAX	620	622	2340	135	2550	307	1380	10800	5570	205	515	131
MIN	66	118	100	86	100	110	205	247	97	94	117	77
CAL YR 1983	TOTAL	132521	MEAN	363	MAX	4780	MIN	57				
WTR YR 1984	TOTAL	159267	MEAN	435	MAX	10800	MIN	66				

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1978, 1981-82, 1984), 28.0°C June 30, 1981; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 25.5°C July 14; minimum, freezing point on several days during January and March.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	13.0	13.5	6.5	4.5	5.5	4.5	4.0	4.0	.5	.5	.5
2	16.5	14.0	15.0	7.0	5.5	6.5	4.0	3.0	3.5	.5	.5	.5
3	17.5	14.0	15.5	7.0	6.0	6.5	4.0	2.5	3.0	.5	.5	.5
4	15.5	14.5	15.0	6.0	4.5	5.0	2.5	1.5	2.0	1.0	.5	.5
5	16.0	14.5	15.0	6.5	4.5	5.5	4.5	2.5	3.5	1.0	.5	1.0
6	15.5	13.0	14.5	6.0	5.5	6.0	5.0	4.0	4.5	1.0	.5	.5
7	14.0	11.0	12.5	6.5	6.0	6.0	5.0	2.5	3.5	1.0	.5	.5
8	14.0	10.0	12.0	7.0	5.5	6.0	3.0	2.0	2.5	.5	.5	.5
9	12.0	10.5	11.5	7.5	5.5	6.5	3.0	2.0	2.5	.5	.5	.5
10	12.5	9.0	11.0	7.0	5.5	6.5	4.0	3.0	3.5	.5	.5	.5
11	11.0	9.0	10.0	8.5	7.0	7.5	4.0	3.0	3.5	.5	.5	.5
12	12.5	10.5	11.5	6.5	4.5	5.5	4.0	2.0	3.0	.5	.5	.5
13	15.0	12.5	13.5	6.0	4.0	5.0	5.5	4.0	5.0	.5	.5	.5
14	15.0	12.0	14.0	6.5	4.5	5.5	6.0	5.5	6.0	.5	.5	.5
15	12.0	10.5	11.5	6.0	5.5	5.5	6.5	6.0	6.5	.5	.5	.5
16	12.0	8.5	10.0	6.5	5.5	6.0	6.0	4.5	5.5	.5	.5	.5
17	11.5	9.5	10.5	6.0	5.0	5.5	4.5	3.0	3.5	.5	.5	.5
18	12.0	10.0	11.0	6.0	4.5	5.0	3.0	2.0	2.5	.5	.5	.5
19	11.0	7.5	9.0	7.5	5.5	6.5	2.5	.5	1.5	.5	.5	.5
20	8.5	6.5	7.5	8.5	7.0	7.5	1.0	.5	.5	.5	.5	.5
21	7.0	4.5	6.0	9.0	7.0	8.5	1.0	.5	.5	.5	.5	.5
22	7.0	4.5	6.0	7.5	5.5	6.5	1.0	.5	.5	.5	.0	.5
23	7.0	5.5	6.0	7.0	5.0	6.5	1.0	.5	.5	.5	.5	.5
24	8.0	6.5	7.0	7.5	6.5	7.0	.5	.5	.5	.5	.5	.5
25	7.0	6.0	6.5	7.5	4.0	5.5	.5	.5	.5	.5	.5	.5
26	7.0	6.0	6.5	5.5	4.0	4.5	1.0	.5	.5	.5	.5	.5
27	6.5	5.5	6.0	6.0	5.0	5.0	.5	.5	.5	.5	.5	.5
28	8.0	5.0	6.5	5.0	4.5	4.5	.5	.5	.5	.5	.5	.5
29	8.0	5.5	6.5	5.5	4.5	5.0	.5	.5	.5	.5	.5	.5
30	6.5	4.5	5.5	5.5	4.5	5.0	.5	.5	.5	.5	.5	.5
31	6.5	4.0	5.5	---	---	---	.5	.5	.5	.5	.5	.5
MONTH	17.5	4.0	10.0	9.0	4.0	6.0	6.5	.5	2.5	1.0	.0	.5

DELAWARE RIVER BASIN

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01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	13.0	10.5	12.0	18.5	16.0	17.5	22.5	18.0	20.5	19.0	15.5	17.5
2	13.5	11.5	12.5	20.5	15.0	17.5	22.0	19.0	20.5	17.5	15.0	16.5
3	12.0	10.5	11.5	21.5	17.0	19.0	20.5	18.0	19.0	16.5	15.5	16.0
4	14.5	11.0	12.5	22.0	18.0	20.0	20.5	16.0	18.5	17.0	15.0	15.5
5	16.0	10.0	13.0	20.0	18.5	19.0	19.0	17.0	18.0	16.5	13.5	15.0
6	16.0	12.0	14.0	19.0	17.5	18.5	21.0	16.0	18.5	15.5	12.5	14.0
7	19.0	14.0	16.0	21.0	17.0	18.5	20.5	17.5	19.0	17.0	12.0	14.0
8	19.0	15.5	17.5	20.5	15.5	18.0	22.0	17.0	19.5	18.0	13.0	15.5
9	21.0	16.0	18.5	19.5	15.5	17.5	21.5	18.0	20.0	18.0	14.0	16.0
10	22.0	17.0	19.5	19.0	15.5	17.5	20.5	18.0	18.5	18.0	15.0	16.5
11	23.0	17.5	20.5	21.0	17.0	19.0	17.5	14.5	16.0	20.0	16.0	17.5
12	22.5	16.0	19.0	24.0	18.0	20.5	18.5	14.0	16.0	19.5	16.5	18.0
13	21.0	16.0	18.5	25.0	19.0	22.0	19.0	15.5	17.0	19.5	15.5	17.5
14	20.0	16.0	18.0	25.5	19.5	22.5	20.0	16.0	18.0	20.0	17.5	18.5
15	18.5	14.5	16.5	23.5	20.0	22.0	20.5	16.5	18.5	17.5	13.5	16.0
16	20.0	13.0	16.5	23.0	19.0	21.0	19.5	17.0	18.0	15.0	11.5	13.0
17	17.5	15.0	16.0	23.5	18.5	21.0	20.0	16.0	18.0	16.0	11.5	13.5
18	15.0	13.5	14.0	21.5	17.5	19.0	20.5	15.5	18.0	16.5	12.0	14.0
19	21.0	13.5	17.0	20.5	15.5	17.5	18.0	15.5	16.5	17.0	12.5	14.5
20	23.0	16.0	19.0	21.5	17.0	18.5	19.0	13.5	16.0	19.0	14.5	16.5
21	23.0	16.5	19.5	20.5	18.0	19.0	19.5	14.5	17.0	18.5	15.0	16.5
22	23.0	16.5	19.5	22.5	17.0	19.5	20.0	15.0	17.5	18.0	14.0	15.5
23	21.0	17.0	19.0	24.0	19.0	21.5	19.5	16.5	18.0	19.0	14.5	16.5
24	19.0	16.0	17.5	24.0	19.0	21.5	18.0	16.0	17.0	18.0	16.5	17.5
25	21.0	15.5	18.0	22.5	17.5	20.5	19.5	15.0	17.0	20.0	16.0	17.5
26	19.5	16.0	18.0	22.5	16.5	19.5	20.5	15.0	17.5	17.5	14.0	16.5
27	22.0	15.5	18.5	20.5	15.5	17.5	19.5	15.5	17.5	14.0	11.5	13.0
28	23.0	18.0	20.5	17.0	14.0	15.5	20.0	16.0	18.0	12.5	11.0	11.5
29	22.0	18.5	20.5	19.5	15.0	17.0	20.0	17.0	18.5	14.0	11.0	12.0
30	20.0	18.0	19.0	20.5	16.5	18.5	20.5	18.0	19.5	14.5	10.5	12.5
31	---	---	---	22.0	17.0	19.5	21.5	17.5	19.5	---	---	---
MONTH	23.0	10.0	17.0	25.5	14.0	19.0	22.5	13.5	18.0	20.0	10.5	15.5

DELAWARE RIVER BASIN

01417820 BEAVER KILL ABOVE BLACK BROOK, NEAR TURNWOOD, NY

LOCATION.--Lat 42°00'40", long 74°36'15", Ulster County, Hydrologic Unit 02040102, 900 ft upstream from Black Brook, 2.4 mi southwest of Balsam Lake Mountain, and 5.5 mi southeast of Turnwood.

DRAINAGE AREA.--8.08 mi².

PERIOD OF RECORD.--November 1983 to September 1984.

CHEMICAL DATA: 1984 (c).

MINOR ELEMENT DATA: 1984 (c).

ORGANIC DATA: OC--1984 (c).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 03...	1315	3.5	36	7.0	6.5	15	4	<.1	5.2
DEC 15...	1225	94	23	6.1	4.0	11	4	<.1	3.6
JAN 31...	1730	6.8	30	6.6	.0	15	4	.1	4.8
APR 02...	1830	20	34	6.8	4.0	13	7	<.1	4.4
16...	1630	--	20	5.8	4.5	8	5	.1	2.6
JUN 13...	1000	13	31	7.0	14.5	13	0	--	4.2
JUL 19...	1945	8.4	34	7.2	15.0	14	6	--	4.8
SEP 13...	0915	3.9	33	7.0	11.5	15	6	.3	5.1

DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)
NOV 03...	.57	.50	.27	7.0	7.3	.72	<.01	<.10	1.5
DEC 15...	.42	.30	.21	1.3	6.7	.53	.06	<.10	1.6
JAN 31...	.62	.40	.19	4.1	7.5	.59	.02	<.10	1.9
APR 02...	.52	.30	.20	3.9	7.0	.56	.07	<.10	1.6
16...	.30	.20	.28	.80	5.4	.32	.06	<.10	1.0
JUN 13...	.51	.30	.21	5.5	7.0	.41	.03	<.10	1.7
JUL 19...	.55	.30	.19	6.7	6.6	.40	.03	<.10	1.8
SEP 13...	.59	.30	.25	7.2	6.3	.58	.04	<.10	1.7

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV 03...	24	.29	.009	.007	<10	<3	<1	1.7
DEC 15...	19	.32	.049	.012	60	11	14	3.3
JAN 31...	25	.48	.022	<.001	20	8	<1	2.9
APR 02...	18	.31	.011	<.001	60	3	2	1.8
16...	12	.36	.006	<.001	130	29	33	4.5
JUN 13...	28	.19	.122	<.001	<10	5	1	7.6
JUL 19...	19	.19	<.001	<.001	60	8	<1	2.0
SEP 13...	20	.30	<.001	<.001	10	6	1	1.2

DELAWARE RIVER BASIN

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01418980 HODGE POND NEAR DEBRUCE, NY

LOCATION.--Lat 41°58'30", long 74°42'45", Sullivan County, Hydrologic Unit 02040102, 10 ft from pond outlet at end of private dirt road, 2.0 mi north of Mongaup Pond Road, and 4.4 mi north of Debruce.

DRAINAGE AREA.--0.24 mi².

PERIOD OF RECORD.--August to December 1983 (discontinued).

CHEMICAL DATA: 1983-84 (a).

MINOR ELEMENT DATA: 1983-84 (a).

ORGANIC DATA: OC--1983-84 (a).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 16...	1600	23	6.7	5.5	8	0	.1	2.7
DEC 15...	0931	19	6.3	2.0	8	0	<.1	2.7

DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
NOV 16...	.34	.30	.42	3.0	4.4	.68	<.01	<.10	.0
DEC 15...	.32	.50	.41	2.0	4.8	.57	.05	<.10	.1

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV 16...	15	<.05	.615	.058	10	13	62	3.7
DEC 15...	15	<.09	.010	.006	<10	18	46	4.1

DELAWARE RIVER BASIN

01420500 BEAVER KILL AT COOKS FALLS, NY

LOCATION.--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 66 ft downstream from road bridge in Cooks Falls, and 5.5 mi downstream from Willowemoc Creek.

DRAINAGE AREA.--241 mi².

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 National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft 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.--70 years (1915-84), 559 ft³/s, 31.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft³/s Mar. 31, 1951, gage height, 16.02 ft, from rating curve extended above 13,000 ft³/s on basis of slope-area measurement at gage height 15.52 ft; minimum, 16 ft³/s Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0445	9,370	9.85	Apr. 5	1745	*15,300	*11.95
Feb. 15	1515	10,400	10.25	May 29	1200	14,900	11.81

Minimum discharge, 44 ft³/s Oct. 10, 11; minimum gage height, 0.89 ft Sept. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	61	803	350	190	560	520	476	2240	400	155	85
2	67	59	667	310	190	480	578	433	1560	458	154	81
3	64	60	594	280	210	440	644	412	1200	282	149	99
4	59	62	542	270	500	400	721	1440	980	235	146	131
5	58	61	508	260	380	380	7150	1200	786	214	152	111
6	69	58	727	240	330	350	5720	893	659	219	150	92
7	60	57	2730	230	290	320	2840	754	580	826	136	84
8	53	56	1430	230	260	300	1860	792	501	525	130	78
9	50	54	1040	240	240	300	1390	1150	446	346	122	76
10	46	54	861	230	240	270	1130	900	411	291	117	74
11	44	80	717	200	300	250	960	781	367	292	119	75
12	47	227	656	180	400	240	844	858	322	477	135	88
13	51	164	5140	200	580	240	758	946	296	345	139	83
14	105	127	7290	230	1830	270	714	1100	309	276	132	82
15	96	115	3300	160	8190	375	855	964	278	244	173	86
16	69	173	2050	150	5580	397	2090	884	245	230	143	81
17	59	270	1450	140	3170	457	2690	781	226	236	128	75
18	56	213	1120	140	2290	427	1910	698	240	259	119	75
19	69	181	800	130	1930	443	1510	649	254	275	115	70
20	71	184	480	130	2160	525	1640	620	210	223	122	65
21	61	752	420	130	1620	911	1360	825	189	206	112	63
22	55	629	500	130	1280	1450	1080	636	176	206	101	60
23	55	460	470	140	1060	1040	952	690	160	182	126	59
24	131	434	380	200	1010	827	902	968	166	167	128	61
25	135	1230	350	440	943	733	829	738	265	151	109	61
26	100	991	330	400	838	682	728	642	206	141	98	59
27	87	788	330	340	701	619	629	611	164	259	92	56
28	79	697	350	300	682	603	566	1050	148	322	89	56
29	73	1080	600	260	768	612	551	9690	140	226	88	56
30	67	1030	470	230	---	572	505	6960	237	189	95	57
31	63	---	390	200	---	525	---	3660	---	169	93	---
TOTAL	2165	10407	37495	7070	38162	15998	44626	43201	13961	8871	3867	2279
MEAN	69.8	347	1210	228	1316	516	1488	1394	465	286	125	76.0
MAX	135	1230	7290	440	8190	1450	7150	9690	2240	826	173	131
MIN	44	54	330	130	190	240	505	412	140	141	88	56
CFSM	.29	1.44	5.02	.95	5.46	2.14	6.17	5.78	1.93	1.19	.52	.32
IN.	0.33	1.61	5.79	1.09	5.89	2.47	6.89	6.67	2.15	1.37	0.60	0.35
CAL YR 1983	TOTAL	227522	MEAN	623	MAX	9250	MIN	41	CFSM	2.59	IN.	35.12
WTR YR 1984	TOTAL	228102	MEAN	623	MAX	9690	MIN	44	CFSM	2.59	IN.	35.21

DELAWARE RIVER BASIN

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01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY

LOCATION.--Lat 41°58'23", long 75°10'28", Delaware County, Hydrologic Unit 02040102, on left bank 3,000 ft upstream from bridge on County highway 28 at Fishs Eddy, 0.6 mi upstream from Fish Creek, 4.2 mi downstream from Beaver Kill, and 11 mi upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--784 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft 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 downstream at datum 5.0 ft lower.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² 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 Aug. 24, 1933, gage height, 20.60 ft at former site and datum, from rating curve extended above 22,000 ft³/s; minimum discharge, 52 ft³/s July 23, 1964, gage height, 1.16 ft at former site and datum; minimum daily discharge, 68 ft³/s Aug. 29, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft³/s, from rating curve extended above 22,000 ft³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,700 ft³/s May 29, gage height, 12.07 ft; minimum, 132 ft³/s Oct. 1, 12, gage height, 2.78 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	705	1330	620	540	1000	877	1060	8450	624	348	245
2	146	367	1110	580	560	880	970	935	5830	830	360	221
3	147	332	1000	560	620	820	1090	844	4350	556	361	246
4	143	332	927	640	760	760	1220	2000	3450	464	372	296
5	148	640	873	700	740	740	7100	2600	2460	432	378	264
6	170	700	995	720	700	720	8930	2330	1780	429	356	227
7	154	700	3790	680	700	700	4840	2080	1420	940	335	215
8	145	700	2350	640	740	640	3190	1990	1110	829	315	204
9	137	700	1720	600	800	600	2430	2820	910	597	303	196
10	137	686	1410	560	760	500	1960	2670	789	508	293	192
11	134	275	1190	580	800	480	1670	2460	692	506	379	188
12	140	858	1080	620	1300	420	1440	2530	621	711	426	212
13	145	869	7020	620	2300	380	1290	2870	575	589	381	203
14	241	823	11700	580	6000	500	1310	3430	584	484	352	202
15	224	615	5890	540	12000	600	1700	3470	558	455	716	207
16	184	346	3560	620	9340	640	3530	3040	495	437	542	199
17	170	860	2530	580	5360	725	5140	2490	460	544	461	188
18	167	847	1930	520	3700	676	3560	2070	477	501	387	182
19	351	789	1400	470	3020	676	2800	1770	477	513	355	177
20	433	755	1000	490	3140	767	2750	1550	409	409	512	170
21	668	1110	900	520	2490	1160	2910	1860	364	386	415	167
22	692	993	880	560	2040	1960	2870	1560	344	391	350	158
23	700	781	800	540	1710	1590	2650	1430	320	375	427	155
24	705	713	600	540	1560	1320	2460	2010	324	348	412	158
25	789	1580	500	780	1480	1200	2260	1710	492	328	349	157
26	765	1500	480	700	1340	1090	1980	1500	405	285	310	157
27	750	1210	470	620	1140	1010	1680	1370	328	507	284	155
28	750	1120	520	580	1120	978	1440	1980	306	703	269	155
29	734	1590	740	580	1200	996	1310	16500	285	501	258	155
30	725	1690	820	560	---	944	1180	19400	371	422	259	152
31	717	---	680	560	---	877	---	13100	---	376	276	---
TOTAL	11652	25186	60195	18460	67960	26349	78537	107429	39436	15980	11541	5803
MEAN	376	840	1942	595	2343	850	2618	3465	1315	515	372	193
MAX	789	1690	11700	780	12000	1960	8930	19400	8450	940	716	296
MIN	134	275	470	470	540	380	877	844	285	285	258	152
CAL YR 1983	TOTAL	410406	MEAN	1124	MAX	11900	MIN	130				
WTR YR 1984	TOTAL	468528	MEAN	1280	MAX	19400	MIN	134				

DELAWARE RIVER BASIN

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.

CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).

MINOR ELEMENTS DATA: 1971-74 (a).

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

NUTRIENT DATA: 1971-75 (d).

BIOLOGICAL DATA:

Bacteria--1971 (c), 1973-75 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1967 to current year.

INSTRUMENTATION.--Temperature recorder since November 1967.

REMARKS.--No record Dec. 28 to Feb. 9, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-75, 1978, 1980-82, 1984), 31.5°C Aug. 2, 1975; minimum (water years 1968-76, 1978-79, 1981-84), freezing point on many days during winter periods, except 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 25.5°C July 16; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

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01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	12.5	10.0	11.5	20.0	17.0	18.5	23.0	19.0	21.0	21.5	17.5	19.5
2	14.0	11.5	12.5	21.5	16.0	18.5	24.0	20.5	22.0	19.5	16.0	17.5
3	12.5	10.5	11.5	22.0	18.0	20.0	22.5	21.0	21.5	18.0	17.0	17.5
4	15.0	10.5	12.5	22.5	19.0	21.0	24.0	19.5	21.5	18.5	16.0	17.0
5	16.0	11.5	13.5	21.0	19.5	20.5	22.0	20.0	21.0	17.5	15.0	16.0
6	16.5	13.0	15.0	20.5	19.0	20.0	24.0	19.5	21.5	17.0	13.5	15.0
7	19.5	14.5	17.0	20.5	18.5	19.5	23.5	20.5	22.0	17.5	12.5	15.0
8	20.0	16.5	18.5	19.0	16.0	17.5	25.0	20.5	22.5	19.0	13.5	16.0
9	22.0	17.0	19.5	19.0	15.5	17.5	24.5	21.5	23.5	19.0	14.0	16.5
10	23.0	19.0	21.0	19.0	16.0	17.5	23.0	20.5	21.5	19.0	16.0	17.5
11	23.5	19.0	21.5	21.5	17.5	19.5	20.5	18.5	20.0	21.0	16.5	18.5
12	23.0	18.0	20.5	23.0	18.5	21.0	21.0	17.0	19.0	20.5	17.5	19.0
13	22.5	18.5	20.5	24.0	19.0	21.5	22.0	18.5	20.0	20.5	16.5	18.5
14	21.5	19.0	20.0	24.5	19.5	22.0	23.5	19.5	21.0	21.0	18.0	19.5
15	19.5	16.0	18.0	24.5	20.5	23.0	21.5	18.0	20.0	19.0	14.0	17.0
16	20.0	15.0	17.5	25.5	21.5	23.5	22.0	19.0	20.0	15.5	12.5	14.0
17	18.5	16.0	17.0	25.0	20.5	23.0	22.0	18.5	20.0	17.5	12.5	14.5
18	16.0	15.5	16.0	23.0	19.0	20.5	22.0	17.0	19.5	17.5	13.0	15.0
19	21.5	15.5	18.0	21.5	18.0	19.5	19.0	16.5	17.5	17.5	13.5	15.5
20	23.0	17.5	20.5	22.5	17.5	19.5	19.0	15.5	17.0	20.0	15.0	17.5
21	23.0	17.5	20.5	21.5	19.0	19.5	20.5	15.5	18.0	19.5	15.5	17.5
22	23.0	18.0	20.5	24.0	18.0	20.5	21.0	16.5	18.5	19.0	14.5	17.0
23	21.5	18.0	20.0	25.0	20.5	23.0	21.0	18.0	19.5	20.5	15.5	18.0
24	19.5	17.5	18.5	25.5	21.5	23.5	19.5	17.5	18.0	20.5	18.0	19.0
25	21.5	17.0	19.0	24.0	19.5	21.5	21.0	16.0	18.0	22.0	18.0	19.5
26	21.0	17.5	19.0	23.5	18.0	21.0	22.0	16.5	19.0	20.0	15.0	18.0
27	22.0	16.5	19.0	21.5	16.5	18.5	21.0	17.0	19.0	15.0	12.5	13.5
28	24.0	19.0	21.5	18.0	15.5	16.5	22.0	17.5	19.5	13.0	11.5	12.5
29	23.5	20.0	21.5	20.5	15.5	18.0	22.0	19.0	20.5	15.5	11.0	13.0
30	21.0	19.5	20.5	21.0	17.5	19.5	23.0	19.5	21.5	15.0	11.5	13.0
31	---	---	---	23.0	18.0	20.5	23.5	19.5	21.0	---	---	---
MONTH	24.0	10.0	18.0	25.5	15.5	20.0	25.0	15.5	20.0	22.0	11.0	16.5

DELAWARE RIVER BASIN

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 downstream from West Brook.

DRAINAGE AREA.--332 mi².

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORD.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--34 years, 588 ft³/s, 24.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft³/s Feb. 11, 1981, gage height, 14.34 ft; minimum, 12 ft³/s Sept. 15, Nov. 22, 1964; minimum gage height, 1.86 ft Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0545	*9,090	*11.00	May 30	0130	9,000	10.96
Feb. 15	2100	7,380	10.15				

Minimum discharge, 31 ft³/s Oct. 11, 12, gage height, 2.35 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	47	835	370	210	640	594	630	2930	132	169	91
2	37	46	693	350	200	560	719	556	2100	156	157	84
3	35	46	608	330	210	520	890	514	1560	129	144	101
4	34	47	550	320	700	490	1070	1370	1280	114	136	175
5	34	48	517	310	500	480	2510	1230	996	114	126	130
6	38	47	704	280	350	490	3580	1050	818	132	122	105
7	41	46	2450	240	290	430	2870	940	704	312	112	93
8	39	46	1330	220	240	350	2080	884	594	218	106	85
9	36	45	1050	210	240	300	1580	1140	500	149	99	79
10	33	45	907	200	260	270	1290	926	446	125	93	75
11	32	63	779	200	300	250	1100	801	375	120	111	76
12	33	79	754	190	900	240	940	975	306	286	117	85
13	34	76	5350	200	1200	250	828	1140	266	184	109	85
14	109	68	7590	220	2600	260	1120	2270	254	133	106	96
15	120	65	4020	220	6330	290	1820	1850	239	113	334	143
16	81	95	2620	210	5530	354	2900	1680	206	111	225	125
17	66	140	1890	200	3230	551	3740	1390	186	95	214	111
18	61	127	1420	190	2520	443	2690	1150	191	217	183	95
19	59	111	1000	180	1970	446	2410	1020	248	279	160	85
20	56	111	700	180	1740	538	2080	938	196	160	177	81
21	53	317	540	180	1430	976	1640	1120	160	142	146	77
22	50	303	560	180	1190	1230	1320	821	143	255	126	72
23	50	231	580	180	1030	1030	1160	834	141	163	142	69
24	53	230	450	190	933	919	1190	1090	136	132	154	68
25	55	735	330	600	868	848	1200	789	179	115	128	68
26	55	657	340	580	877	763	1010	715	160	102	112	67
27	54	577	350	450	723	669	840	689	129	307	102	63
28	54	583	360	350	769	637	754	1360	122	501	96	63
29	52	1350	800	310	800	637	739	6560	114	280	90	61
30	50	1110	540	290	---	599	663	7390	113	218	88	61
31	48	---	410	270	---	585	---	4670	---	185	92	---
TOTAL	1589	7491	41027	8400	38140	17045	47327	48492	15792	5679	4276	2669
MEAN	51.3	250	1323	271	1315	550	1578	1564	526	183	138	89.0
MAX	120	1350	7590	600	6330	1230	3740	7390	2930	501	334	175
MIN	32	45	330	180	200	240	594	514	113	95	88	61
CFSM	.15	.75	3.98	.82	3.96	1.66	4.75	4.71	1.58	.55	.42	.27
IN.	0.18	0.84	4.60	0.94	4.27	1.91	5.30	5.43	1.77	0.64	0.48	0.30

CAL YR 1983	TOTAL	235085	MEAN	644	MAX	7590	MIN	32	CFSM	1.94	IN.	26.34
WTR YR 1984	TOTAL	237927	MEAN	650	MAX	7590	MIN	32	CFSM	1.96	IN.	26.66

DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY

LOCATION.--Lat 42°04'29", long 75°23'47", Delaware County, Hydrologic Unit 02040101, on right bank at Stilesville, 0.5 mi upstream from Cold Spring Creek, 1.4 mi downstream from Cannonsville Dam, and 2.0 mi northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 mi².

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 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 downstream at datum 1.37 ft higher.

REMARKS.--Records good above 700 ft³/s, poor below. Subsequent to October 1963, entire flow from 454 mi² 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 Jan. 22, 1959, gage height, 9.01 ft, site and datum then in use; maximum gage height, 12.19 ft Mar. 14, 1977; minimum daily, 7.2 ft³/s Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,210 ft³/s May 30, gage height, 10.85 ft; minimum daily, 9.9 ft³/s Dec. 3; minimum gage height, 2.43 ft Dec. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	678	16	12	36	42	283	1070	5140	342	393	1000
2	925	1000	10	12	35	42	244	940	3920	340	552	1020
3	1130	1040	9.9	21	36	42	275	868	2950	341	661	566
4	1240	1070	11	35	37	42	327	1040	2340	340	656	410
5	1270	750	11	35	36	42	727	1380	1850	340	656	598
6	1240	704	12	35	36	42	2520	1430	1420	342	656	659
7	1270	633	15	36	36	42	3430	1390	1150	342	656	1030
8	1270	624	13	35	36	42	3380	1330	1040	339	561	1050
9	1330	646	12	34	36	42	2780	1520	925	339	448	749
10	1370	401	11	35	36	42	2320	1370	714	340	650	626
11	1400	643	11	34	37	45	1950	1230	560	339	656	533
12	1200	293	12	34	39	55	1660	1250	439	339	654	747
13	550	127	31	34	42	42	1440	1390	387	339	555	817
14	496	102	40	34	52	42	1370	1840	353	339	442	1150
15	838	81	22	34	71	42	1660	2270	336	363	535	1080
16	945	34	17	34	63	42	2330	2360	336	435	644	690
17	1150	33	15	34	50	42	3910	2200	338	442	773	1000
18	1270	77	15	35	47	42	4190	1950	340	397	920	1080
19	1050	34	12	35	46	42	3870	1730	339	331	533	1090
20	910	32	14	35	45	42	3430	1560	338	334	496	1100
21	700	34	13	35	44	43	2920	1560	338	337	510	1230
22	643	33	14	34	43	43	2460	1450	339	444	491	1230
23	374	32	13	35	43	42	2070	1330	339	449	426	936
24	272	33	13	36	43	88	1890	1400	341	450	623	923
25	383	37	13	36	43	375	1800	1210	340	396	788	938
26	363	34	13	36	43	590	1680	865	340	337	526	947
27	378	34	13	36	42	702	1500	615	453	345	571	843
28	399	35	14	36	43	644	1340	618	565	340	633	1250
29	449	36	14	36	43	633	1260	2490	555	340	664	1240
30	524	35	12	36	---	569	1160	6480	348	340	571	538
31	626	---	12	36	---	383	---	6780	---	340	902	---
TOTAL	27175	9345	453.9	1025	1239	4968	60176	54916	29173	11181	18802	27070
MEAN	877	312	14.6	33.1	42.7	160	2006	1771	972	361	607	902
MAX	1400	1070	40	36	71	702	4190	6780	5140	450	920	1250
MIN	272	32	9.9	12	35	42	244	615	336	331	393	410
CAL YR 1983	TOTAL	228934.9	MEAN	627	MAX	7100	MIN	9.9				
WTR YR 1984	TOTAL	245523.9	MEAN	671	MAX	6780	MIN	9.9				

DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

CHEMICAL DATA: 1959-60 (a) unpublished, 1969 (a), 1970 (a) unpublished, 1971, 1973 (b), 1974 (d), 1975 (b).

MINOR ELEMENTS DATA: 1971 (b).

NUTRIENT DATA: 1970 (a) unpublished, 1971, 1973 (b), 1974 (d), 1975 (b).

BIOLOGICAL DATA:

Bacteria--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1962 to current year.

INSTRUMENTATION.--Temperature recorder since October 1962.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No record Oct. 1-5, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1963-78, 1980-82, 1984), 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: Maximum, 18.0°C June 8; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	13.0	12.0	12.5	4.5	3.0	4.0	.0	.0	.0
2	---	---	---	12.5	12.0	12.0	4.5	3.0	3.5	.0	.0	.0
3	---	---	---	12.0	11.5	12.0	5.0	2.0	3.0	.0	.0	.0
4	---	---	---	12.0	11.0	11.5	2.0	1.0	1.5	.0	.0	.0
5	---	---	---	11.0	11.0	11.0	5.0	2.5	4.0	.5	.0	.5
6	15.0	13.5	14.5	11.0	11.0	11.0	5.0	4.5	4.5	1.0	.5	.5
7	15.5	14.0	14.5	11.0	11.0	11.0	4.5	.5	2.0	1.0	.0	.5
8	16.0	14.0	15.0	11.0	11.0	11.0	2.5	.0	1.0	.0	.0	.0
9	15.5	15.0	15.5	11.0	10.5	11.0	2.5	1.5	2.0	1.5	.0	.5
10	16.0	15.5	15.5	11.0	10.5	10.5	3.5	2.5	3.0	1.0	.5	.5
11	16.0	15.5	16.0	10.5	7.0	10.5	4.0	2.0	3.0	.5	.5	.5
12	16.5	16.0	16.0	10.5	9.5	10.0	3.0	1.0	2.0	.5	.5	.5
13	17.0	16.0	16.5	9.5	5.0	7.0	4.0	3.0	3.5	.5	.5	.5
14	17.0	15.0	16.0	9.0	7.5	8.5	5.0	4.0	4.0	1.0	.5	.5
15	16.0	15.5	15.5	8.5	7.0	8.0	5.5	4.5	5.0	.5	.5	.5
16	16.0	15.5	16.0	8.5	7.0	7.5	5.0	2.5	3.5	.5	.5	.5
17	16.0	15.5	16.0	7.0	5.0	6.0	2.5	.5	1.5	.5	.5	.5
18	16.0	15.5	16.0	7.0	4.5	6.0	1.5	.5	1.0	.5	.5	.5
19	15.5	15.5	15.5	9.0	6.0	7.5	1.5	.0	1.0	.5	.5	.5
20	16.0	15.0	15.0	11.0	7.5	9.0	1.0	.0	.5	.5	.5	.5
21	15.5	14.5	15.0	10.0	6.5	8.5	.5	.5	.5	.5	.0	.5
22	15.0	14.5	14.5	9.5	6.0	7.5	.5	.0	.0	.0	.0	.0
23	15.0	14.0	14.5	8.5	5.5	7.0	.0	.0	.0	.0	.0	.0
24	14.5	14.0	14.0	7.5	7.0	7.5	.0	.0	.0	.5	.0	.5
25	14.5	13.5	14.0	7.5	4.0	5.0	.0	.0	.0	2.0	.5	1.0
26	14.0	14.0	14.0	7.5	4.0	5.5	.0	.0	.0	2.0	1.0	1.5
27	14.0	13.0	13.5	7.5	5.5	6.0	.0	.0	.0	3.5	1.0	2.0
28	13.5	12.5	13.0	5.5	5.0	5.5	.0	.0	.0	2.5	.5	1.0
29	14.0	12.5	13.0	6.0	5.0	5.5	.0	.0	.0	1.5	.5	1.0
30	13.0	12.0	12.5	6.5	4.5	5.0	.0	.0	.0	1.5	1.5	1.5
31	13.0	12.0	12.5	---	---	---	.0	.0	.0	1.5	.0	1.0
MONTH	17.0	12.0	15.0	13.0	4.0	8.5	5.5	.0	1.5	3.5	.0	.5

DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	14.5	12.5	13.5	7.5	7.0	7.0	9.0	6.5	7.5	8.5	7.5	8.0
2	15.0	14.0	14.5	9.5	7.0	8.0	8.5	7.0	7.5	8.5	7.5	8.0
3	14.5	13.5	14.0	9.5	7.0	7.5	8.0	7.0	7.0	8.0	7.5	7.5
4	13.5	12.0	12.5	10.0	7.0	8.0	9.0	7.0	7.5	8.0	7.5	8.0
5	14.5	12.0	13.5	9.0	7.0	7.5	8.0	7.0	7.0	8.5	7.5	8.0
6	16.5	14.5	15.5	9.0	7.0	8.0	8.5	7.0	7.5	8.5	7.5	7.5
7	17.5	15.5	16.5	9.5	7.0	8.0	8.0	7.0	7.5	8.5	7.5	8.0
8	18.0	13.5	16.0	9.0	7.0	7.5	9.5	7.0	7.5	9.0	8.0	8.0
9	15.0	13.0	14.5	10.0	7.0	8.0	9.0	7.0	8.0	8.5	8.0	8.0
10	15.0	13.0	14.0	9.0	7.0	7.5	8.5	7.5	7.5	8.5	8.0	8.0
11	14.5	11.0	12.5	10.0	7.0	8.0	8.0	7.0	7.5	8.5	8.0	8.5
12	12.5	10.0	11.0	10.5	7.0	8.5	9.0	7.0	7.5	8.5	8.0	8.5
13	10.5	8.5	9.5	10.5	7.5	8.5	8.5	7.0	7.5	9.0	8.0	8.5
14	9.5	7.0	8.0	10.5	7.5	8.5	9.0	7.0	7.5	8.5	8.0	8.5
15	9.0	6.5	7.5	11.0	7.0	8.5	9.0	7.0	7.5	8.5	8.5	8.5
16	10.0	6.0	7.5	9.5	7.5	8.5	9.0	7.0	7.5	8.5	8.0	8.5
17	8.0	6.5	7.0	10.0	7.5	8.5	8.0	7.0	7.5	8.5	8.0	8.5
18	8.0	6.5	7.0	9.0	7.5	8.0	8.5	7.0	7.5	8.5	8.5	8.5
19	9.5	6.5	7.5	10.0	7.0	8.0	8.5	7.0	7.5	8.5	8.5	8.5
20	9.5	6.5	7.5	10.5	7.5	8.5	9.0	7.0	7.5	9.0	8.5	8.5
21	10.0	6.5	7.5	9.0	7.5	8.0	9.5	7.0	8.0	9.5	8.5	9.0
22	9.5	6.5	7.5	10.0	7.0	8.5	10.0	7.0	8.0	9.5	8.5	9.0
23	8.5	6.5	7.5	10.0	7.5	8.5	9.0	7.5	8.0	9.0	9.0	9.0
24	7.5	6.5	7.0	9.5	7.0	8.0	8.5	7.5	7.5	9.0	9.0	9.0
25	9.5	6.5	7.5	9.5	6.5	7.5	8.5	7.5	7.5	9.5	9.0	9.0
26	9.5	6.5	7.5	9.5	6.5	7.5	9.5	7.0	8.0	9.5	9.0	9.0
27	10.5	6.5	7.5	7.5	6.5	7.0	9.5	7.0	8.0	9.0	9.0	9.0
28	10.0	7.0	7.5	8.0	6.5	7.0	9.0	7.5	8.0	9.5	9.0	9.0
29	9.5	7.0	7.5	9.5	6.5	7.5	9.0	7.5	8.0	10.0	9.0	9.5
30	9.0	7.0	7.5	9.5	6.5	7.5	9.0	7.5	8.0	12.0	9.0	10.0
31	---	---	---	9.5	6.5	7.5	9.0	7.0	8.0	---	---	---
MONTH	18.0	6.0	10.0	11.0	6.5	8.0	10.0	6.5	7.5	12.0	7.5	8.5

DELAWARE RIVER BASIN

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 upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--595 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 871: 1916. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft 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 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 Mar. 22, 1948, gage height, 15.69 ft; maximum gage height, 15.8 ft Sept. 30, 1924, from graph based on gage readings; minimum discharge, 17 ft³/s Oct. 20, 1963; minimum gage height, 1.03 ft Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft, from floodmarks, discharge, about 46,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,700 ft³/s May 30, gage height, 9.52 ft; maximum gage height, 10.58 ft Feb. 14, ice jam; minimum discharge, 101 ft³/s Nov. 19, 20, but may have been less during period of ice effect; minimum gage height, 1.52 ft Mar. 12, result of freezeup; minimum daily discharge, 103 ft³/s Nov. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	683	362	210	130	320	576	1260	5890	445	446	954
2	954	988	289	180	130	290	609	1140	4350	473	574	971
3	1060	1070	249	170	150	260	783	1050	3290	426	762	639
4	1250	1100	242	200	350	240	967	1490	2630	402	752	452
5	1290	807	284	250	230	220	2910	1770	2120	398	714	543
6	1250	753	427	190	170	210	4570	1760	1670	412	700	617
7	1270	669	965	170	140	190	4550	1670	1360	588	688	935
8	1280	656	589	150	120	180	3970	1580	1180	468	622	986
9	1330	653	446	150	120	170	3290	1830	1080	427	491	757
10	1350	546	369	150	120	160	2730	1630	860	411	633	599
11	1390	573	311	140	130	150	2310	1460	686	415	663	546
12	1230	618	343	130	160	150	1990	1590	555	417	663	653
13	739	178	3590	120	220	150	1730	1740	493	396	599	834
14	477	193	4720	120	2000	160	1780	2490	476	386	472	1040
15	902	165	1690	120	4530	200	2360	2770	428	396	527	1060
16	945	126	945	120	2850	220	4000	2770	414	508	641	726
17	1150	136	650	110	1440	213	5460	2520	408	481	731	874
18	1310	152	485	110	1040	183	5350	2230	432	658	885	1060
19	1110	114	381	110	826	195	5040	1990	438	480	599	1040
20	915	103	304	110	787	243	4320	1830	411	423	499	1030
21	778	341	280	110	640	432	3570	1910	399	454	549	1150
22	667	259	360	110	527	542	2920	1700	392	509	475	1180
23	468	196	330	120	450	459	2490	1680	388	510	508	924
24	344	203	280	140	401	414	2330	1760	402	501	584	876
25	402	586	230	300	385	673	2250	1530	423	454	727	877
26	447	431	210	260	393	876	2030	1170	394	369	599	913
27	435	395	200	200	330	955	1800	938	445	675	540	817
28	430	393	230	170	337	912	1600	1690	572	642	619	1110
29	502	578	350	140	404	930	1460	4580	629	505	642	1170
30	569	463	290	140	---	862	1360	8290	409	457	589	690
31	641	---	240	130	---	679	---	7740	---	430	798	---
TOTAL	28105	14128	20641	4830	19510	11838	81105	69558	33624	14516	19291	26023
MEAN	907	471	666	156	673	382	2704	2244	1121	468	622	867
MAX	1390	1100	4720	300	4530	955	5460	8290	5890	675	885	1180
MIN	344	103	200	110	120	150	576	938	388	369	446	452
CAL YR 1983	TOTAL	319156	MEAN	874	MAX	8820	MIN	74				
WTR YR 1984	TOTAL	343169	MEAN	938	MAX	8290	MIN	103				

DELAWARE RIVER BASIN

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01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.

CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).

MINOR ELEMENTS DATA: 1971-74 (a).

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

NUTRIENT DATA: 1971-74 (d), 1975 (c).

BIOLOGICAL DATA:

Bacteria--1971, 1973 (c); 1974 (d); 1975 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-77).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No record July 16-25, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-77, 1979-83), 30.5°C July 22, 23, 1972; June 16, 1981; minimum (water years 1968, 1978-84), 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 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.0	13.0	13.5	13.0	9.5	11.5	4.0	3.0	3.5	.5	.5	.5
2	15.5	13.0	14.0	13.0	10.5	11.5	3.5	2.0	2.5	.5	.5	.5
3	16.0	12.5	14.0	11.5	11.0	11.5	3.0	2.0	2.5	.5	.5	.5
4	15.0	13.5	14.0	10.5	10.0	10.5	2.0	.0	1.0	.5	.5	.5
5	15.0	14.0	14.5	11.5	9.5	10.5	4.0	1.5	3.0	.5	.5	.5
6	16.0	13.5	14.5	10.5	10.0	10.0	4.0	4.0	4.0	.5	.5	.5
7	16.5	13.5	14.5	11.0	9.5	10.5	4.0	2.0	3.0	.5	.5	.5
8	17.5	13.0	15.0	11.5	9.0	10.0	2.0	1.0	1.5	.5	.5	.5
9	15.5	15.0	15.0	12.0	9.0	10.5	2.0	1.0	1.5	.5	.5	.5
10	17.5	14.5	15.5	10.5	9.0	10.0	3.5	2.0	3.0	.5	.5	.5
11	16.5	14.5	15.5	10.5	9.5	10.0	3.0	1.0	2.5	.5	.5	.5
12	16.5	15.5	16.0	9.5	5.0	7.5	2.5	.0	1.0	.5	.5	.5
13	18.0	16.5	17.0	5.5	3.0	4.5	4.5	2.5	3.5	.5	.5	.5
14	17.5	14.5	16.0	6.0	4.0	5.0	5.0	4.5	5.0	.5	.5	.5
15	16.5	14.5	15.0	5.5	4.5	5.0	5.5	5.0	5.5	.5	.5	.5
16	17.5	14.0	15.0	7.0	5.0	6.0	5.5	4.0	4.5	.5	.5	.5
17	17.0	14.5	15.5	6.0	3.5	5.0	4.0	2.0	2.5	.5	.5	.5
18	16.0	15.0	15.5	5.0	2.5	3.5	1.5	.5	1.0	.5	.5	.5
19	16.5	14.0	15.0	6.5	4.0	5.5	1.5	.0	.5	.5	.5	.5
20	16.5	13.5	14.5	10.0	6.0	8.0	.0	.0	.0	.5	.5	.5
21	16.0	13.0	14.0	10.0	7.0	9.0	.0	.0	.0	.5	.5	.5
22	14.5	12.0	13.0	8.0	5.5	7.0	.0	.0	.0	.5	.5	.5
23	13.0	12.0	12.5	7.5	5.0	6.5	.0	.0	.0	.5	.5	.5
24	14.5	13.0	13.5	7.0	6.0	6.5	.0	.0	.0	.5	.5	.5
25	13.0	11.5	12.5	7.0	3.5	5.0	.0	.0	.0	.5	.5	.5
26	13.0	11.5	12.5	5.5	3.5	4.5	.0	.0	.0	.5	.5	.5
27	12.0	10.5	11.5	6.0	4.5	5.0	.0	.0	.0	.5	.5	.5
28	14.0	9.5	12.0	5.0	3.0	4.0	.5	.0	.0	.5	.5	.5
29	12.5	10.5	11.0	5.0	3.0	4.0	.5	.5	.5	.5	.5	.5
30	13.0	9.5	11.0	5.0	3.5	4.0	.5	.5	.5	.5	.5	.5
31	13.5	9.5	11.0	---	---	---	.5	.5	.5	.5	.5	.5
MONTH	18.0	9.5	14.0	13.0	2.5	7.5	5.5	.0	1.5	.5	.5	.5

DELAWARE RIVER BASIN

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

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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 downstream from Humphries Brook, and 6.5 mi southeast of Hancock.

DRAINAGE AREA.--1,590 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record May 23 to June 13, due to clock stoppage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-70, 1973, 1975-84) 30.5°C June 16, 1976, July 10, 1981; minimum (water years 1968-71, 1974, 1977-78, 1980-84), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C July 16; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.5	.5	.5	.0	.0	5.5	2.0	3.5	12.0	9.0	10.5
2	.5	.5	.5	.0	.0	.0	6.0	3.0	4.5	12.0	8.5	10.5
3	.5	.5	.5	.0	.0	.0	7.0	3.5	5.0	10.5	7.5	9.0
4	.5	.5	.5	.0	.0	.0	5.5	4.0	4.5	7.5	6.5	7.0
5	.5	.5	.5	.0	.0	.0	4.0	3.5	4.0	7.5	6.0	7.0
6	.5	.5	.5	.0	.0	.0	4.0	3.5	3.5	10.5	6.0	8.0
7	.5	.5	.5	.5	.0	.0	3.5	2.5	3.0	11.5	7.5	9.5
8	.5	.5	.5	.0	.0	.0	4.5	2.0	3.0	11.5	7.5	9.0
9	.5	.5	.5	.0	.0	.0	5.5	2.0	4.0	8.5	7.0	7.5
10	.5	.0	.0	.0	.0	.0	5.5	2.5	4.0	8.5	6.0	7.0
11	.0	.0	.0	.0	.0	.0	7.5	3.5	5.5	8.5	6.5	7.5
12	.0	.0	.0	.0	.0	.0	9.0	4.0	6.5	8.5	7.0	7.5
13	.0	.0	.0	.0	.0	.0	8.0	5.5	6.0	9.5	7.0	8.0
14	.0	.0	.0	.0	.0	.0	6.0	4.5	5.0	8.5	6.5	7.5
15	2.5	.0	1.0	.0	.0	.0	4.5	4.0	4.0	7.5	6.0	6.5
16	4.5	2.5	3.5	.0	.0	.0	4.0	3.5	4.0	7.0	5.5	6.0
17	4.5	4.0	4.5	.0	.0	.0	5.0	4.0	4.5	9.5	5.0	7.0
18	4.5	4.0	4.5	1.5	.0	.5	5.5	4.0	5.0	9.0	7.0	7.5
19	4.5	4.0	4.5	3.5	1.0	2.0	5.0	4.0	4.5	11.0	6.5	8.5
20	4.0	4.0	4.0	6.5	3.0	4.5	4.0	4.0	4.0	11.0	8.0	9.5
21	3.5	2.5	3.0	5.5	4.0	5.0	6.0	3.5	4.5	12.5	7.5	9.5
22	3.5	1.5	2.5	4.0	3.0	3.0	5.5	3.0	4.5	15.0	10.5	12.5
23	4.5	2.0	3.5	3.0	2.0	2.5	5.0	3.5	4.0	---	---	---
24	6.5	4.0	5.0	3.5	.5	2.5	3.5	3.5	3.5	---	---	---
25	6.5	4.0	5.5	5.0	2.0	3.5	3.5	3.5	3.5	---	---	---
26	3.5	1.5	2.0	5.0	3.0	4.0	8.0	3.0	5.5	---	---	---
27	2.0	.5	1.5	5.0	2.5	4.0	11.0	6.0	8.5	---	---	---
28	1.5	1.0	1.0	5.0	2.5	4.0	11.0	8.5	10.0	---	---	---
29	1.0	.5	1.0	2.0	.0	.5	14.0	8.5	11.0	---	---	---
30	---	---	---	1.0	.0	.5	12.5	9.0	10.5	---	---	---
31	---	---	---	4.0	1.0	2.5	---	---	---	---	---	---
MONTH	6.5	.0	2.0	6.5	.0	1.5	14.0	2.0	5.0	15.0	5.0	8.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	18.5	16.5	17.5	21.0	19.0	20.5	18.0	15.0	16.0
2	---	---	---	20.0	16.0	17.5	22.0	19.5	20.5	15.0	13.5	14.5
3	---	---	---	21.0	18.5	20.0	20.5	17.5	19.5	14.5	13.5	14.0
4	---	---	---	22.0	19.0	20.5	20.0	16.0	18.0	16.5	14.5	15.5
5	---	---	---	21.5	19.5	20.5	19.5	17.5	18.5	16.5	14.0	15.5
6	---	---	---	20.0	19.0	19.5	19.5	16.5	18.0	15.0	13.0	14.0
7	---	---	---	20.5	18.0	19.5	20.5	18.0	19.0	15.0	12.0	13.5
8	---	---	---	19.5	17.0	18.5	21.5	17.5	19.0	15.0	12.0	13.5
9	---	---	---	20.0	16.5	18.0	21.0	19.0	20.0	15.0	13.0	14.0
10	---	---	---	19.5	18.0	19.0	21.0	18.5	20.0	16.0	13.5	15.0
11	---	---	---	22.0	18.5	20.0	18.5	16.5	17.0	18.5	15.5	16.5
12	---	---	---	24.0	20.0	22.0	19.0	16.0	17.5	19.0	16.0	17.5
13	---	---	---	24.5	21.5	23.0	20.0	18.5	19.0	17.5	14.5	15.5
14	22.0	18.0	20.0	25.5	22.0	23.5	22.0	18.0	20.0	17.5	15.5	16.0
15	20.0	17.5	18.5	25.5	23.0	24.5	22.0	20.5	21.5	15.0	11.5	13.0
16	20.5	16.0	18.0	26.5	23.5	25.0	21.5	19.0	20.0	12.5	10.0	11.0
17	19.5	16.5	18.0	25.0	22.5	24.0	20.0	17.5	18.5	15.0	11.5	13.0
18	16.5	14.0	15.0	23.5	16.5	21.5	17.5	15.0	16.5	13.5	11.0	12.5
19	21.0	14.5	17.5	20.0	16.0	17.5	16.0	15.0	15.0	13.5	12.0	12.5
20	23.0	18.5	20.5	20.5	17.5	18.5	18.5	14.0	16.0	15.5	13.0	14.0
21	22.5	18.5	20.5	19.5	18.0	19.0	19.0	15.5	17.0	15.0	13.0	14.0
22	22.5	18.5	20.5	21.5	16.5	18.5	20.0	16.0	18.0	13.5	11.5	12.5
23	21.0	19.5	20.5	22.5	19.0	21.0	20.0	18.5	19.0	15.0	13.0	14.0
24	20.0	16.5	18.5	23.0	20.0	21.5	19.0	17.0	18.0	15.5	14.0	15.0
25	19.5	15.5	17.5	21.5	18.0	19.5	18.5	15.0	17.0	16.5	14.0	15.0
26	20.5	17.5	19.0	20.5	17.0	19.0	18.0	15.0	16.5	16.0	12.5	14.5
27	21.5	17.5	19.5	20.0	15.5	18.0	19.5	16.5	18.0	12.5	10.5	11.5
28	22.5	19.5	21.0	17.0	13.5	15.0	19.5	17.0	18.5	11.0	10.5	10.5
29	21.0	17.0	19.5	19.0	15.5	17.0	19.5	17.5	18.5	12.5	10.0	11.0
30	18.5	16.0	17.0	19.5	17.5	18.5	20.0	17.5	18.5	12.5	10.5	11.5
31	---	---	---	22.0	18.0	19.5	21.0	17.5	19.0	---	---	---
MONTH	23.0	14.0	19.0	26.5	13.5	20.0	22.0	14.0	18.5	19.0	10.0	14.0

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 downstream from Callicoon Creek, 0.5 mi downstream from Interstate Bridge 7, and 0.8 mi southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,820 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft, from topographic map (nearest 20 ft).

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² 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, 75,300 ft³/s Feb. 12, 1981, result of ice jam release, gage height, 13.19 ft; maximum gage height, 14.83 ft Jan. 9, 1979 (ice jam); minimum discharge, 335 ft³/s Sept. 13, 1977, gage height, 2.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,300 ft³/s May 29, gage height, 10.71 ft; minimum, 624 ft³/s Oct. 14, 15, but may have been lower during period of ice effect; minimum gage height, 2.53 ft Oct. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	1480	3220	2520	770	2200	2230	3190	19400	3330	1020	1280
2	1430	1490	2550	2350	1000	1850	2390	2800	13200	3360	1050	1280
3	1200	1480	2210	2200	1450	1600	2760	2520	9700	2060	1220	1320
4	1470	1500	2000	2090	2140	1400	3450	4520	7790	1550	1440	1080
5	1570	1500	2000	2080	3020	1250	12200	6080	6180	1340	1490	903
6	1570	1570	2680	2060	3100	1400	23700	5530	4830	1300	1390	985
7	1540	1560	7950	2070	2620	1300	13800	5080	3940	1780	1310	1020
8	1520	1470	5950	1900	2200	1150	10100	4890	3150	2230	1240	1280
9	1520	1500	4240	1600	1900	1100	7820	6070	2730	1580	1110	1250
10	1540	1540	3420	1400	1800	1180	6440	5930	2300	1320	1060	1030
11	1580	1300	2810	1300	2050	1070	5500	5240	1920	1230	1180	954
12	1620	1470	2520	1170	2350	1000	4780	5270	1570	1450	1380	895
13	1460	1480	15100	1050	3350	1040	4180	6080	1370	1440	1330	1140
14	1010	1240	34900	980	5600	1480	3910	7040	1380	1220	1160	1160
15	1100	1130	15200	900	24200	2260	4960	7650	1300	1100	1090	1480
16	1230	1010	8420	830	23700	1450	8620	7280	1130	1090	1430	1310
17	1300	863	5820	780	11800	1520	14700	6480	1060	1130	1310	956
18	1530	1300	4410	740	7900	1530	12100	5640	1110	1270	1340	1320
19	1610	1200	3570	710	6440	1450	10600	5000	1220	1610	1310	1300
20	1500	1150	2500	690	6320	1650	10800	4520	1090	1220	1190	1280
21	1520	1510	1550	680	5370	2460	9150	5090	951	1100	1190	1350
22	1510	2200	1700	680	4370	4040	7830	4610	882	1130	1040	1410
23	1500	1590	2120	720	3670	3740	6860	4230	843	1150	1100	1360
24	1380	1360	1800	860	3350	3020	6380	5040	837	1100	1100	1170
25	1280	2690	1410	1050	3080	2680	6060	4570	1020	1010	1180	1170
26	1440	3710	1570	1350	2860	2700	5500	3890	1040	893	1230	1180
27	1380	2870	1960	2000	2420	2690	4830	3370	895	1020	954	1110
28	1340	2560	2380	1700	2220	2600	4230	4150	932	2060	988	1070
29	1360	3820	3130	1400	2500	2670	3800	31100	1080	1520	1040	1370
30	1350	4210	3910	1500	---	2670	3470	41000	2000	1230	1050	1350
31	1420	---	2920	1050	---	2360	---	30000	---	1100	999	---
TOTAL	44260	53753	155920	42410	143550	60510	223150	243860	96850	45923	36921	35763
MEAN	1428	1792	5030	1368	4950	1952	7438	7866	3228	1481	1191	1192
MAX	1620	4210	34900	2520	24200	4040	23700	41000	19400	3360	1490	1480
MIN	1010	863	1410	680	770	1000	2230	2520	837	893	954	895
CAL YR 1983	TOTAL	1081433	MEAN	2963	MAX	34900	MIN	700				
WTR YR 1984	TOTAL	1182870	MEAN	3232	MAX	41000	MIN	680				

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1976-84), 29.5°C Aug. 7-9, 1980; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.5°C July 15-16; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.0	15.0	15.0	7.0	5.5	6.0	3.5	3.0	3.5	.0	.0	.0
2	17.0	15.0	16.0	8.0	6.5	7.0	3.0	2.5	3.0	.0	.0	.0
3	18.0	16.0	17.0	8.0	8.0	8.0	2.5	2.0	2.5	.0	.0	.0
4	18.0	16.5	17.0	8.0	7.0	8.0	2.0	1.0	1.0	.0	.0	.0
5	17.5	16.5	17.0	7.0	6.5	7.0	1.5	1.0	1.0	.0	.0	.0
6	17.0	16.0	16.5	6.5	6.5	6.5	2.5	1.5	2.0	.0	.0	.0
7	16.0	15.0	15.5	6.5	6.5	6.5	2.5	2.5	2.5	.0	.0	.0
8	15.5	13.5	15.0	7.0	6.0	6.5	2.5	1.5	2.0	.0	.0	.0
9	15.0	14.0	14.5	7.5	6.5	7.0	1.5	1.0	1.0	.0	.0	.0
10	14.5	13.5	14.0	7.5	7.0	7.0	1.5	1.0	1.0	.0	.0	.0
11	14.0	13.0	13.0	7.5	7.0	7.5	1.5	1.5	1.5	.0	.0	.0
12	14.0	13.0	13.5	7.5	5.0	6.0	1.5	1.5	1.5	.0	.0	.0
13	16.5	14.5	15.0	5.0	4.0	4.0	3.5	1.5	2.0	.0	.0	.0
14	16.5	15.0	16.0	3.5	2.5	3.0	4.0	3.5	3.5	.0	.0	.0
15	15.0	13.5	14.0	3.0	3.0	3.0	4.5	4.0	4.0	.0	.0	.0
16	13.5	12.0	13.0	4.5	3.0	3.5	4.5	4.0	4.5	.0	.0	.0
17	13.5	12.0	12.5	4.5	3.5	4.0	4.0	2.5	3.5	.0	.0	.0
18	13.5	13.0	13.0	3.5	3.0	3.0	2.0	1.0	1.5	.0	.0	.0
19	14.0	13.5	13.5	4.0	3.0	3.5	1.0	.0	.5	.0	.0	.0
20	13.5	12.0	13.0	7.0	4.0	5.0	.0	.0	.0	.0	.0	.0
21	12.0	10.5	11.0	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
22	10.5	9.5	10.0	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
23	9.5	9.0	9.0	6.5	6.0	6.0	.0	.0	.0	.0	.0	.0
24	10.5	9.0	9.5	6.5	6.5	6.5	.0	.0	.0	.0	.0	.0
25	10.5	9.0	9.5	6.5	4.5	5.0	.0	.0	.0	.0	.0	.0
26	9.0	9.0	9.0	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0
27	9.0	8.0	8.5	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0
28	8.5	7.0	8.0	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
29	8.5	7.5	8.0	3.5	3.5	3.5	.0	.0	.0	.0	.0	.0
30	7.5	6.0	6.5	3.5	3.5	3.5	.0	.0	.0	.0	.0	.0
31	6.5	5.0	6.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	18.0	5.0	12.5	8.0	2.5	5.5	4.5	.0	1.5	.0	.0	.0

DELAWARE RIVER BASIN

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01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	12.5	11.5	11.5	19.0	17.0	18.0	24.0	21.5	23.0	21.5	18.5	20.5
2	14.0	12.5	13.0	20.0	17.5	18.5	25.0	22.0	24.0	19.0	17.0	18.0
3	14.0	12.5	13.5	22.0	19.0	20.5	24.5	23.0	23.5	17.5	16.5	17.0
4	14.0	12.0	13.0	24.0	20.0	22.0	24.0	21.5	23.0	18.5	16.0	17.0
5	16.0	14.0	15.0	23.0	21.0	22.0	22.5	20.5	21.0	18.0	15.0	16.5
6	18.0	15.5	16.5	22.0	21.0	21.5	23.5	20.5	22.0	17.0	14.5	16.0
7	21.0	17.5	19.0	22.5	20.5	21.5	23.5	21.0	22.5	17.5	13.5	15.5
8	23.0	19.5	21.0	21.5	19.0	20.5	25.0	21.0	23.0	17.5	14.0	16.0
9	24.0	20.0	22.0	21.0	18.0	19.5	24.0	22.0	23.0	17.5	14.5	16.0
10	25.0	21.0	23.0	21.0	18.5	20.0	24.0	22.0	22.5	17.5	15.0	16.5
11	25.5	22.5	24.0	23.5	20.0	21.5	22.0	21.5	21.5	19.5	16.0	17.5
12	26.0	21.5	23.5	25.0	20.5	23.0	21.5	19.5	20.5	20.5	17.5	19.0
13	26.0	22.0	24.0	25.5	21.5	24.0	23.0	20.0	21.5	20.5	17.0	19.0
14	23.5	22.0	23.0	27.0	22.5	24.5	24.5	21.5	23.0	19.5	17.5	18.5
15	21.5	19.5	20.5	27.5	23.5	25.5	24.5	22.0	23.5	18.0	14.5	16.5
16	22.0	17.5	20.0	27.5	24.5	26.0	24.5	22.0	23.5	14.5	12.0	13.5
17	21.0	19.0	19.5	27.0	23.5	25.5	23.0	21.0	22.5	15.5	11.5	13.5
18	19.0	18.5	18.5	25.0	22.0	23.5	22.0	19.0	21.0	16.5	12.5	14.5
19	23.0	18.0	20.5	22.5	20.0	21.5	20.5	18.0	18.5	16.5	13.0	14.5
20	24.5	19.5	22.0	23.5	19.5	21.0	19.0	17.0	18.0	17.5	14.0	15.5
21	25.0	20.0	22.5	23.0	21.5	22.0	20.5	16.0	18.5	17.5	14.5	16.5
22	25.0	20.0	23.0	25.0	20.5	22.5	21.5	18.0	20.0	17.0	14.0	15.5
23	23.5	20.5	22.5	26.0	22.0	24.0	22.0	20.0	21.0	17.5	14.0	16.0
24	23.0	20.5	21.0	25.5	23.5	24.5	21.0	19.0	20.0	18.5	16.0	17.5
25	23.0	19.5	21.0	24.5	21.5	23.5	21.5	18.0	19.5	19.5	17.0	18.0
26	22.5	19.5	21.0	24.5	20.5	22.5	21.0	17.5	19.5	18.0	15.0	16.5
27	24.0	19.0	21.5	24.0	19.5	21.0	20.5	18.0	19.5	14.5	13.0	13.5
28	25.0	21.0	23.0	19.5	18.5	19.0	22.0	19.0	20.5	12.5	11.5	12.0
29	23.5	21.0	22.5	22.0	17.5	19.5	22.5	20.5	21.5	13.0	11.0	12.0
30	19.5	18.0	19.0	22.0	19.0	21.0	23.0	20.0	22.0	14.5	10.5	12.5
31	---	---	---	24.0	20.0	22.0	22.5	20.5	22.0	---	---	---
MONTH	26.0	11.5	20.0	27.5	17.0	22.0	25.0	16.0	21.5	21.5	10.5	16.0

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11", Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi upstream from Lackawaxen River, and 4.6 mi northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,020 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft 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 of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² 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 Aug. 19, 1955, gage height, 26.40 ft, from floodmarks in gage house, from rating curve extended above 55,000 ft³/s on basis of slope-area measurement at gage height 23.19 ft; minimum discharge, 122 ft³/s Sept. 5, 1953, gage height, 1.11 ft; minimum daily, 126 ft³/s Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55,100 ft³/s May 29, gage height, 15.62 ft; minimum, 606 ft³/s Oct. 15, gage height, 2.30 ft; minimum daily, 760 ft³/s Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	1420	3590	3100	840	2200	2750	3380	22500	5290	1090	1110
2	1410	1450	2880	2700	960	1900	3100	3040	15400	5740	1110	1310
3	1220	1430	2440	2500	1400	1700	3630	2760	11400	3170	1190	1370
4	1230	1450	2200	2400	1600	1600	4270	5220	8990	2250	1500	1250
5	1430	1480	2150	2300	2300	1500	14000	6970	7040	1800	1520	1010
6	1500	1480	2310	2200	3500	1600	30700	6170	5390	1770	1500	931
7	1460	1540	8220	2200	2700	1500	17600	5530	4310	2770	1360	996
8	1460	1450	7200	2000	2400	1400	12500	5210	3510	2880	1300	1220
9	1450	1440	4710	1800	2000	1300	9510	6660	3000	2170	1210	1270
10	1480	1440	3700	1700	1900	1350	7570	6620	2580	1740	1090	1090
11	1500	1510	3130	1400	1900	1300	6250	5770	2210	1560	1150	913
12	1570	1130	2710	1300	2100	1200	5320	5400	1870	1620	1330	908
13	1460	1640	12800	1200	2500	1190	4590	6470	1660	1720	1380	863
14	1280	1260	39800	1100	5000	1230	4120	7210	1720	1450	1270	1180
15	760	1230	19800	1000	30900	1400	5050	8330	1610	1260	1060	1290
16	1260	1070	10400	960	29700	1800	8760	8040	1390	1170	1330	1350
17	1210	922	6810	880	15000	2000	16800	7100	1260	1220	1390	1080
18	1370	1130	4800	840	9720	2100	14300	6070	1290	1310	1330	1070
19	1590	1410	3400	800	7650	2030	12200	5300	1470	1810	1430	1310
20	1520	1200	2400	780	7560	2290	12600	4730	1340	1460	1340	1280
21	1410	1450	1700	780	6400	2950	10800	5230	1150	1210	1240	1250
22	1500	2150	1800	780	5060	4750	9040	4960	1050	1190	1190	1360
23	1480	1800	2100	820	4180	4650	7810	4300	980	1190	1060	1390
24	1470	1460	1900	920	4160	3790	7130	5340	959	1150	1210	1170
25	1300	2290	1500	1200	3810	3290	6660	4910	1090	1090	1160	1100
26	1340	3980	1600	1700	3500	3290	5950	4190	1200	1010	1220	1100
27	1390	3210	1900	2500	3030	3200	5160	3740	1070	1010	1150	1130
28	1330	2850	2800	1900	2600	3130	4470	3830	962	1940	943	1070
29	1300	3790	4100	1600	2400	3310	3980	32800	1120	1840	1040	1290
30	1330	4530	4300	1600	---	3240	3650	47000	3040	1400	1050	1380
31	1370	---	3600	1100	---	2930	---	34800	---	1200	1020	---
TOTAL	42760	54592	172750	48060	166770	71120	260270	267080	112561	58390	38163	35041
MEAN	1379	1820	5573	1550	5751	2294	8676	8615	3752	1884	1231	1168
MAX	1590	4530	39800	3100	30900	4750	30700	47000	22500	5740	1520	1390
MIN	760	922	1500	780	840	1190	2750	2760	959	1010	943	863
CAL YR 1983	TOTAL	1182968	MEAN	3241	MAX	39800	MIN	561				
WTR YR 1984	TOTAL	1327557	MEAN	3627	MAX	47000	MIN	760				

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 winter record for water years 1969-76).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record June 13 to July 19, Sept. 13-30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-75, 1980-81, 1983), 32.0°C Aug. 2, 3, 1975, July 10, 1981; minimum (water years 1968, 1977-84), freezing point on many days during winter periods, each year except water years 1980-82.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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

01432160 DELAWARE RIVER AT BARRYVILLE, NY

LOCATION.--Lat 41°28'31", long 74°54'46", Pike County, Pa., Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft upstream from Shohola Brook.

DRAINAGE AREA.--2,659 mi².

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. Periods of no record Nov. to Jan., Mar. to July, due to loose and/or defective probe.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78, 1980-82), 32.0°C July 20, 21, 1980; 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 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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

DELAWARE RIVER BASIN

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01432805 DELAWARE RIVER AT POND EDDY, NY

LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, Pa., Hydrologic Unit 02040104, at interstate bridge at Pond Eddy, 450 ft downstream from Mill Brook, and 4.5 mi upstream from Mongaup River.

DRAINAGE AREA.--2,820 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1973.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record July 12-19, Sept. 21-30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1976, 1978, 1980-81, 1983-84) 31.0°C July 21, 1980; minimum (water years 1974, 1977-78, 1980, 1983-84), freezing point on many days during winter periods, except 1978 and 1980.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.5°C Aug. 8, 15-16; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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

DELAWARE RIVER BASIN

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01433500 MONGAUP RIVER NEAR MONGAUP, NY

LOCATION.--Lat 41°27'41", long 74°45'33", Sullivan County, Hydrologic Unit 02040104, on right bank 300 ft downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi downstream from Bush Kill, and 2.8 mi upstream from mouth and Mongaup.

DRAINAGE AREA.--200 mi².

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

REVISED RECORDS.--WDR NY-71-1: 1970. WDR NY-81-1: 1980. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft Orange and Rockland Utilities, Inc. datum. Prior to July 6, 1956, water-stage recorders at sites 25 ft upstream on Rio Tailrace and 200 ft upstream on natural channel, at datum 4.0 ft higher.

REMARKS.--Records fair. Flow regulated by storage in Cliff Lake, Swinging Bridge, and Toronto Reservoirs (see Reservoirs in Delaware River Basin) and small reservoirs above station.

AVERAGE DISCHARGE.--45 years, 343 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft³/s (corrected) Aug. 19, 1955, gage height, 15.22 ft, present datum; minimum daily, 6 ft³/s Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,070 ft³/s May 30, gage height, 8.48 ft; minimum daily, 28 ft³/s Nov. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	38	298	544	317	797	694	703	2310	258	366	134
2	61	38	297	446	380	749	705	682	1420	644	369	53
3	94	37	109	504	486	757	575	509	1350	390	368	50
4	67	37	81	470	245	742	778	542	1070	458	177	176
5	43	35	80	397	134	748	2390	505	829	681	77	247
6	159	33	94	377	272	744	2760	571	823	733	205	258
7	154	32	203	369	487	686	2170	738	760	951	385	266
8	48	31	398	295	436	480	1220	749	735	892	619	124
9	39	29	733	335	363	439	971	766	726	835	624	54
10	34	28	720	296	470	243	842	738	690	728	308	88
11	107	34	268	351	229	91	806	716	681	725	193	219
12	184	57	346	352	278	288	773	467	665	706	71	277
13	54	44	988	357	106	479	648	408	672	678	202	321
14	42	41	1570	181	155	648	530	646	689	680	290	288
15	41	41	1980	70	714	644	732	687	667	661	233	155
16	36	53	1620	57	959	648	904	522	648	658	270	54
17	31	59	925	54	843	653	1030	359	648	646	260	135
18	29	53	838	50	841	648	999	650	666	693	145	153
19	30	46	817	46	828	656	953	277	664	664	58	59
20	31	45	757	49	882	666	901	105	297	642	51	43
21	115	73	700	51	842	579	850	285	97	279	139	41
22	111	61	731	56	799	788	825	404	67	91	277	37
23	49	55	728	46	786	598	791	357	215	305	146	34
24	52	51	704	117	866	579	779	453	412	469	185	113
25	44	108	467	99	864	573	772	480	348	198	122	236
26	43	114	437	61	829	711	753	389	200	67	54	298
27	42	112	567	51	824	549	738	399	80	71	160	307
28	38	236	667	46	832	543	728	223	61	71	311	203
29	50	173	542	42	845	737	724	1800	54	64	276	142
30	42	117	524	41	---	705	711	6740	84	231	275	49
31	39	---	504	109	---	692	---	4250	---	347	249	---
TOTAL	2111	1911	19693	6319	16912	18860	29052	27120	18628	15516	7465	4614
MEAN	68.1	63.7	635	204	583	608	968	875	621	501	241	154
MAX	202	236	1980	544	959	797	2760	6740	2310	951	624	321
MIN	29	28	80	41	106	91	530	105	54	64	51	34
CAL YR 1983	TOTAL	161163	MEAN	442	MAX	5080	MIN	28				
WTR YR 1984	TOTAL	168201	MEAN	460	MAX	6740	MIN	28				

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi upstream from Neversink River, and 6.5 mi downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,070 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 1031: 1905-36. WDR NY-71-1: 1970. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft 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 of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² 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 Aug. 19, 1955, gage height, 23.91 ft, from floodmarks in gage house, from rating curve extended above 89,000 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 26.6 ft Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft³/s Sept. 23, 1908, gage height, 0.6 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s Oct. 10, 1903, gage height, 23.1 ft, from rating curve extended above 70,000 ft³/s by velocity-area studies; stage on Mar. 8, 1904 was 25.5 ft, ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 84,400 ft³/s May 30, gage height, 14.04 ft; minimum, 759 ft³/s Oct. 16, gage height, 1.71 ft; minimum daily, 1,120 ft³/s Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	1560	5750	4090	1700	5900	4700	6050	35500	8410	2530	1540
2	1620	1580	4660	3490	1600	5190	5430	5230	22900	14400	2970	1540
3	1480	1580	3760	3420	1700	4690	6290	4760	17500	8380	2730	1590
4	1290	1580	3370	3430	1600	4120	7890	9490	14500	5560	2620	1740
5	1510	1580	3620	3040	2000	4270	28300	13300	11200	4570	2110	1770
6	1640	1580	4130	2960	2900	4370	52300	11500	9060	4600	2310	1600
7	1710	1640	11000	2610	3420	4670	31500	10400	7780	8450	2740	1640
8	1580	1610	12300	2100	3350	3990	21400	8970	6760	7780	2730	1540
9	1540	1530	8490	2400	2610	3690	16100	10500	5480	6080	2830	1580
10	1540	1530	6450	2500	2740	3230	13200	10600	4240	5160	2200	1520
11	1570	1730	4980	2700	2080	2760	11400	9260	4090	4640	2030	1490
12	1830	1500	4730	2500	2180	2830	10000	7760	4310	4480	1650	1510
13	1660	1780	17100	3000	3030	3270	8880	8050	3980	4360	1880	1490
14	1510	1590	56900	2600	5600	3320	8020	8870	4110	3970	2180	1730
15	1130	1430	34400	2200	34500	3430	8780	10300	3940	3330	1920	1730
16	1120	1460	19800	2200	42500	4080	13200	9850	3360	3240	1840	1770
17	1280	1440	13500	2500	23000	4760	22700	8700	2440	3420	2230	1580
18	1370	1280	10600	2400	15600	4110	19700	7800	2650	3650	1990	1450
19	1740	1680	8850	2400	12700	4550	16800	6640	3110	4120	1690	1710
20	1710	1610	7180	2500	12800	4890	17300	5830	2860	3880	1710	1660
21	1670	1730	6510	2100	11400	5710	15100	6280	1890	3020	1840	1610
22	1760	2610	5550	1900	9320	8410	12500	6570	1630	1820	1970	1670
23	1640	2610	5880	1900	7960	8320	11500	5800	1550	2060	1750	1620
24	1730	2050	5890	1900	8390	6600	11200	6960	1720	3010	1800	1540
25	1690	2850	5390	2200	8150	5480	10600	6680	1840	2620	1770	1690
26	1530	5550	4590	2200	7150	5750	9740	5700	1890	2230	1490	1720
27	1610	4850	4320	2900	6410	5590	8690	5430	1640	2340	1560	1690
28	1510	4340	3960	2800	6170	5480	7300	4830	1420	3100	1700	1490
29	1460	5370	4430	2100	6490	6010	5940	39900	1490	2940	1800	1520
30	1460	7320	5560	1600	---	5980	5870	75300	4460	2500	1750	1560
31	1450	---	5150	1400	---	5170	---	55400	---	2780	2040	---
TOTAL	47930	70550	298800	78040	249050	150620	422330	392710	189300	140900	64360	48290
MEAN	1546	2352	9639	2517	8588	4859	14080	12670	6310	4545	2076	1610
MAX	1830	7320	56900	4090	42500	8410	52300	75300	35500	14400	2970	1770
MIN	1120	1280	3370	1400	1600	2760	4700	4760	1420	1820	1490	1450
CAL YR 1983	TOTAL	1952960	MEAN	5351	MAX	56900	MIN	1020				
WTR YR 1984	TOTAL	2152880	MEAN	5882	MAX	75300	MIN	1120				

DELAWARE RIVER BASIN

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 Sept. 24-30, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1957-59, 1973-81, 1983-84), 30.0°C July 13, 1981; minimum (water years 1958-60, 1973, 1975-84), freezing point on many days during winter periods, except 1984.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.5°C Aug. 15-17; minimum, 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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

DELAWARE RIVER BASIN

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0143400690 EAST BRANCH NEVERSINK RIVER ABOVE TRAY MILL BROOK, NEAR DENNING, NY

LOCATION.--Lat 41°57'51", long 74°27'02", Ulster County, Hydrologic Unit 02040104, 500 ft upstream from Tray Mill Brook, and 2.2 mi northeast of Denning.

DRAINAGE AREA.--9.15 mi².

PERIOD OF RECORD.--June 1984.

CHEMICAL DATA: 1984 (a).

MINOR ELEMENT DATA: 1984 (a).

ORGANIC DATA: OC--1984 (a).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS H)
JUN 13...	1630	19	19	4.7	14.5	5	3	<.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)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
JUN 13...	1.3	.53	.40	.25	6.3	.51	<.01	<.10	2.0

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
JUN 13...	13	.16	<.001	<.001	200	6	58	1.8

DELAWARE RIVER BASIN

01434010 EAST BRANCH NEVERSINK RIVER AT DENNING, NY

LOCATION.--Lat 41°57'30", long 74°46'18", Ulster County, Hydrologic Unit 02040104, on downstream side of bridge on private road at Strauss Estate, 0.9 mi upstream from Ertz Brook, 0.4 mi downstream from Riley Brook, and 1.0 mi northeast of Denning.

DRAINAGE AREA.--13.3 mi².

PERIOD OF RECORD.--August 1983 to current year.

CHEMICAL DATA: 1983 (a), 1984 (e).

MINOR ELEMENT DATA: 1983 (a), 1984 (e).

ORGANIC DATA: OC--1983 (a), 1984 (e).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)	
NOV										
02...	1520	11	22	5.1	7.0	7	2	<.1	1.5	
16...	1415	64	27	5.1	5.0	7	2	.1	1.7	
DEC										
14...	1225	444	25	4.5	5.0	5	0	.1	1.2	
FEB										
01...	1000	--	29	5.2	.0	8	2	.1	1.8	
MAR										
06...	1535	37	28	5.1	.5	7	7	<.1	1.6	
21...	1530	44	24	5.1	1.0	7	7	.1	1.5	
21...	1650	52	24	5.0	1.0	6	6	<.1	1.5	
21...	1800	65	25	5.0	1.0	7	7	<.1	1.5	
21...	1920	80	24	5.0	1.0	7	7	<.1	1.5	
21...	2024	83	24	4.9	1.0	7	7	<.1	1.6	
21...	2115	88	24	4.9	1.0	6	4	<.1	1.5	
21...	2325	86	25	4.9	1.0	6	4	.1	1.5	
APR										
03...	0945	32	31	5.2	1.0	7	5	<.1	1.6	
05...	0930	1470	26	4.5	1.5	4	5	<.1	1.0	
05...	1445	3900	28	4.5	1.5	3	1	.2	.89	
05...	2037	1930	30	4.5	1.5	4	5	.2	.88	
06...	1415	330	26	4.6	2.0	4	2	.1	1.1	
17...	0940	241	24	4.6	3.5	5	6	.2	1.1	
MAY										
30...	1520	471	26	4.6	8.5	4	6	.1	1.0	
JUN										
13...	1700	24	--	5.1	14.5	6	4	<.1	1.4	
JUL										
20...	0830	17	21	5.1	12.0	6	4	.1	1.4	
SEP										
12...	1640	7.2	22	5.0	14.5	6	4	.4	1.5	
DATE		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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS STO2)
NOV										
02...		.74	.40	.24	.00	6.6	.80	<.01	<.10	2.3
16...		.67	.40	.26	-.60	6.7	.86	<.01	<.10	2.3
DEC										
14...		.44	.40	.28	-1.6	5.5	.58	.02	<.10	1.4
FEB										
01...		.76	.60	.23	-.10	7.1	.68	.02	<.10	2.3
MAR										
06...		.66	.40	.25	-.40	6.7	.68	.03	<.10	1.9
21...		.69	.40	.24	-.30	6.4	.66	.03	<.10	1.8
21...		.66	.40	.24	.00	6.4	.67	.03	<.10	1.8
21...		.71	.40	.24	-.50	6.5	.68	.02	<.10	1.7
21...		.67	.40	.25	-.50	6.3	.66	.04	<.10	1.7
21...		.68	.40	.26	-.20	6.3	.65	.03	<.10	1.6
21...		.64	.40	.25	-.60	6.4	.63	.03	<.10	1.7
21...		.62	.40	.25	-.40	6.3	.66	.02	<.10	1.7
APR										
03...		.69	.40	.23	.20	6.6	.59	.06	<.10	1.9
05...		.38	.30	.34	-1.0	4.2	.39	.06	<.10	1.0
05...		.30	.20	.45	-1.3	3.8	.25	<.01	<.10	.7
05...		.34	.30	.36	-1.6	4.3	.34	.04	<.10	.8
06...		.40	.30	.30	-.90	5.1	.39	.04	<.10	1.1
17...		.49	.30	.25	-1.2	5.9	.44	.03	<.10	1.3
MAY										
30...		.41	.30	.26	-1.4	5.4	.31	.02	<.10	1.3
JUN										
13...		.59	.40	.25	--	6.6	.53	.04	<.10	2.1
JUL										
20...		.60	.50	.17	-.40	6.5	.63	.05	<.10	2.1
SEP										
12...		.62	.50	.25	-1.6	6.0	.58	.05	<.10	2.3

DELAWARE RIVER BASIN

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01434010 EAST BRANCH NEVERSINK RIVER AT DENNING NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV								
02...	16	.18	<.001	.006	160	5	46	2.3
16...	17	.24	.079	<.001	240	20	75	3.1
DEC								
14...	13	.26	.024	.016	420	32	100	5.0
FEB								
01...	19	.43	.022	<.001	180	7	34	3.4
MAR								
06...	13	.38	.009	.010	160	5	51	1.7
21...	12	.37	.005	.001	140	7	49	1.7
21...	12	.37	<.001	<.001	150	8	51	1.6
21...	12	.38	<.001	<.001	140	12	54	2.2
21...	12	.40	.003	<.001	210	13	57	2.1
21...	12	.40	.005	<.001	150	16	59	1.8
21...	13	.41	.016	<.001	160	17	61	2.3
21...	13	.42	<.001	<.001	170	20	62	2.2
APR								
03...	14	.35	.024	<.001	160	7	42	1.5
05...	8	.38	<.001	<.001	360	54	93	4.8
05...	8	.41	<.001	<.001	320	57	130	5.4
05...	7	.37	<.001	<.001	340	59	110	4.5
06...	10	.35	<.001	<.001	320	26	94	3.1
17...	10	.26	.003	<.001	340	29	80	3.3
MAY								
30...	9	.12	.055	.011	360	52	71	4.5
JUN								
13...	13	.15	.004	<.001	170	7	51	1.7
JUL								
20...	13	.15	<.001	<.001	160	6	43	1.8
SEP								
12...	13	.16	<.001	<.001	100	5	34	1.2

DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK AT FROST VALLEY, NY

LOCATION.--Lat 41°59'43", long 74°30'05", Ulster County, Hydrologic Unit 02040104, on right bank 0.2 mi upstream from Pigeon Brook, 0.6 mi upstream from mouth and 0.8 mi northeast of Frost Valley. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.80 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year. February to May 1983 (occasional discharge measurements).

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 2,060 ft from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 803 ft³/s Apr. 5, 1984, gage height, 2.89 ft; minimum, 0.40 ft³/s Sept. 16, 1983; minimum gage height, 0.22 ft Sept. 15, 16, 1983.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1900	218	2.11	Apr. 16	1530	368	2.40
Feb. 15	1500	340	2.34	May 29	1000	394	2.44
Apr. 5	1530	*803	*2.89				

Minimum discharge, 0.61 ft³/s Oct. 5; minimum gage height, 0.25 ft Sept. 21, 22, 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	.87	8.6	8.0	3.7	12	9.0	8.6	29	12	2.5	1.2
2	1.1	.91	7.0	7.0	3.6	10	9.9	8.0	22	6.1	2.4	1.2
3	.76	.95	6.2	6.4	9.9	9.0	11	8.1	18	4.2	2.3	2.0
4	.67	.95	5.7	6.0	16	8.2	11	38	15	3.5	2.3	2.4
5	1.1	.91	5.3	6.0	7.1	7.6	297	19	13	3.4	2.4	1.5
6	2.6	.94	19	5.6	5.8	7.0	122	14	11	4.1	2.3	1.2
7	2.8	.94	40	5.2	5.2	6.6	40	13	9.4	20	2.2	1.2
8	2.6	.90	18	4.9	5.0	6.4	22	18	8.1	6.2	2.1	1.2
9	2.8	.94	14	4.7	5.0	6.0	16	19	7.3	4.4	1.9	1.2
10	3.2	1.0	12	4.6	5.0	5.8	15	14	6.6	3.6	2.0	1.2
11	2.9	5.9	10	4.4	5.2	5.6	15	12	5.9	3.7	2.2	1.3
12	4.0	4.9	13	4.3	6.0	5.8	17	17	5.3	12	3.1	1.7
13	5.1	2.5	135	4.1	7.2	6.4	18	16	5.0	4.3	3.1	1.2
14	5.6	1.9	113	4.1	84	7.8	17	21	5.0	3.8	2.1	1.7
15	2.7	1.5	41	3.9	244	6.9	24	16	4.3	3.3	2.0	1.5
16	2.1	5.0	25	3.8	104	7.9	127	14	3.9	3.2	1.8	1.3
17	2.0	3.9	17	3.8	45	7.6	59	12	4.2	3.2	1.8	1.1
18	2.4	2.7	13	3.8	31	7.3	34	11	5.8	5.2	1.6	1.0
19	4.5	2.8	12	3.8	29	7.2	27	9.9	4.7	3.8	1.7	.96
20	2.6	3.9	12	3.4	37	11	24	10	3.6	3.4	2.0	.96
21	1.9	18	14	3.4	25	17	19	12	3.2	3.7	1.5	.89
22	1.8	7.7	13	3.4	19	17	16	8.7	3.0	3.2	1.4	.86
23	3.3	5.1	10	3.8	17	12	14	12	2.8	3.0	2.3	.87
24	5.4	6.6	9.0	34	22	9.9	14	11	7.3	2.8	1.7	.94
25	1.9	22	8.0	12	20	9.9	14	8.7	6.8	2.5	1.6	.98
26	1.4	11	8.0	6.0	17	9.7	12	8.2	3.5	2.4	1.5	.95
27	1.1	8.2	9.0	5.3	15	10	11	7.6	3.0	5.6	1.4	.83
28	.95	6.9	34	4.5	14	9.7	10	18	2.7	4.0	1.4	1.0
29	1.0	18	37	4.1	13	19	9.8	196	2.6	3.1	1.4	1.0
30	.92	12	13	3.9	---	18	9.1	131	4.8	2.9	1.5	.87
31	.92	---	9.4	3.8	---	10	---	50	---	2.7	1.5	---
TOTAL	73.06	159.81	691.2	182.0	820.7	294.3	1043.8	761.8	226.8	149.3	61.0	36.21
MEAN	2.36	5.33	22.3	5.87	28.3	9.49	34.8	24.6	7.56	4.82	1.97	1.21
MAX	5.6	22	135	34	244	19	297	196	29	20	3.1	2.4
MIN	.67	.87	5.3	3.4	3.6	5.6	9.0	7.6	2.6	2.4	1.4	.83
CFSM	.62	1.40	5.87	1.54	7.45	2.50	9.16	6.47	1.99	1.27	.52	.32
IN.	0.72	1.56	6.77	1.78	8.03	2.88	10.22	7.46	2.22	1.46	0.60	0.35

WTR YR 1984 TOTAL 4499.98 MEAN 12.3 MAX 297 MIN .67 CFSM 3.24 IN. 44.05

DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK, AT FROST VALLEY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1983 to current year.

CHEMICAL DATA: 1983-84 (e).

MINOR ELEMENT DATA: 1983-84 (e).

ORGANIC DATA: 1983-84 (e)

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT									
06...	0925	2.6	30	6.4	--	10	3	.1	2.9
NOV									
02...	0945	.87	25	6.4	5.0	10	8	<.1	2.9
10...	1845	.67	29	6.4	6.0	10	8	<.1	2.9
10...	2110	1.0	28	6.3	5.5	10	9	<.1	2.9
11...	0030	2.6	28	6.4	6.0	10	3	<.1	2.9
11...	0320	2.7	30	6.2	6.0	11	9	<.1	3.0
11...	0830	2.3	30	6.6	6.0	10	3	<.1	3.0
16...	1230	7.4	30	6.5	5.0	11	4	.1	3.3
30...	1320	11	28	6.1	3.5	10	9	.1	2.9
DEC									
13...	1605	174	22	5.1	--	8	2	.1	2.3
14...	1340	96	23	5.6	5.0	8	3	.1	2.3
JAN									
12...	1615	4.3	28	6.5	.0	11	9	.1	3.1
FEB									
01...	1430	3.7	24	6.2	.0	10	3	.1	2.9
MAR									
06...	1315	7.0	29	6.1	.5	9	8	<.1	2.6
21...	1045	12	26	--	2.0	9	6	<.1	2.5
21...	1411	14	25	6.0	2.0	9	8	<.1	2.5
21...	1530	16	25	6.0	1.5	8	8	<.1	2.5
21...	1631	19	24	5.9	1.5	8	8	<.1	2.5
21...	1905	26	26	5.9	1.0	8	8	<.1	2.4
21...	2250	27	26	--	1.0	9	6	<.1	2.5
28...	1715	10	29	6.2	1.5	9	6	<.1	2.6
APR									
03...	1000	8.9	23	5.2	1.5	6	4	.1	1.8
03...	1335	10	31	6.1	4.5	9	6	<.1	2.6
04...	2305	11	26	6.2	2.0	9	8	<.1	2.5
05...	0033	13	27	6.2	2.5	9	8	<.1	2.6
05...	0130	14	26	6.1	2.5	9	8	<.1	2.5
05...	0233	18	28	6.1	2.0	8	7	<.1	2.5
05...	0332	23	26	6.1	2.0	8	7	<.1	2.4
05...	0430	30	24	6.0	2.0	8	7	<.1	2.3
05...	0540	43	25	5.9	1.5	7	4	<.1	2.2
05...	0640	64	22	5.8	1.0	7	6	<.1	2.1
05...	0745	119	23	5.6	1.5	7	6	.1	2.0
05...	0850	163	22	5.3	1.5	7	6	<.1	1.9
05...	1100	261	22	5.1	1.5	6	6	.2	1.8
05...	1200	346	23	5.1	1.5	6	6	.2	1.8
05...	1300	435	24	5.1	1.5	6	6	.2	1.8
05...	1405	577	25	5.1	1.5	6	6	.2	1.7
05...	1500	656	24	5.0	1.5	6	6	.2	1.7
05...	1600	642	24	4.9	1.5	6	6	.2	1.7
05...	1700	467	26	4.9	2.0	6	6	.1	1.6
05...	1805	585	28	4.9	1.5	5	6	.1	1.6
05...	1900	490	26	4.9	2.0	6	6	.1	1.7
05...	2000	415	28	4.9	1.5	6	4	.1	1.7
05...	2100	401	27	4.9	1.5	6	7	<.1	1.8
05...	2215	313	27	5.0	2.0	6	6	.1	1.8
05...	2315	286	26	4.9	2.0	6	6	.1	1.8
06...	0015	265	26	5.0	2.0	6	6	.1	1.8
06...	0115	255	26	5.0	2.0	6	7	.1	1.8
06...	0305	218	28	5.0	2.0	6	7	.1	1.9
06...	0535	190	25	5.1	2.0	6	7	<.1	1.9
06...	0730	157	25	5.1	2.0	6	6	<.1	1.9
06...	1025	130	25	5.2	2.5	6	4	<.1	1.9
06...	1250	115	24	5.2	2.5	7	7	<.1	2.0
10...	1500	18	21	5.9	3.5	8	5	.1	2.3
17...	1205	50	20	5.4	5.5	7	7	<.1	2.1
MAY									
30...	1300	153	20	5.3	8.5	6	6	<.1	1.8
JUN									
12...	1530	5.1	24	6.4	14.5	8	5	<.1	2.3
JUL									
20...	1215	3.5	30	6.5	14.0	9	6	<.1	2.6
AUG									
14...	1830	2.1	27	5.9	17.0	9	6	<.1	2.8
SEP									
12...	1000	1.6	30	6.2	12.5	10	7	.2	2.8

DELAWARE RIVER BASIN

01434025 BISCUIT BROOK ABOVE PIGEON BROOK, AT FROST VALLEY NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	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, CARBON- ATE IT-FLD - (MG/L - CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT									
06...	.70	.70	.45	1.7	7.0	1.0	<.01	<.10	2.6
NOV									
02...	.70	.80	.24	1.8	7.6	1.1	<.01	<.10	2.2
10...	.72	.60	.25	1.8	7.5	1.1	<.01	<.10	2.1
10...	.74	.60	.26	1.7	7.4	1.0	<.01	<.10	2.0
11...	.71	.70	.30	2.1	7.3	1.0	<.01	<.10	2.0
11...	.77	.70	.29	1.9	7.6	1.1	<.01	<.10	2.1
11...	.70	.80	.27	-.20	7.7	1.1	<.01	<.10	2.1
16...	.63	.50	.28	1.5	7.3	1.0	<.01	<.10	2.3
30...	.65	.60	.20	.60	7.4	.79	<.01	<.10	2.0
DEC									
13...	.46	.40	.29	-.60	5.7	.54	.03	<.10	1.4
14...	.50	.50	.24	.10	6.7	.58	.03	<.10	1.5
JAN									
12...	.68	.50	.20	1.6	7.5	.73	<.01	<.10	2.3
FEB									
01...	.70	.50	.18	.80	7.4	.69	.04	<.10	2.0
MAR									
06...	.61	.40	.19	.70	7.3	.70	.03	<.10	1.8
21...	.58	.40	.19	.90	6.9	.64	.04	<.10	1.6
21...	.57	.40	.19	.80	6.6	.65	.03	<.10	1.6
21...	.53	.40	.19	.70	6.6	.63	.03	<.10	1.6
21...	.54	.40	.19	.70	6.5	.64	.03	<.10	1.5
21...	.54	.40	.19	.70	6.4	.76	.04	<.10	1.5
21...	.56	.40	.19	.80	6.4	.59	.04	<.10	1.5
28...	.56	.40	.19	1.0	6.9	.65	.06	<.10	1.6
APR									
03...	.41	.30	.28	1.1	4.8	.39	.05	<.10	1.1
03...	.59	.40	.18	1.1	6.8	.58	.05	<.10	1.6
04...	.60	.40	.19	1.2	6.8	.58	.05	<.10	1.6
05...	.54	.40	.19	1.0	6.6	.56	.05	<.10	1.5
05...	.55	.40	.19	.90	6.5	.56	.05	<.10	1.5
05...	.54	.40	.19	1.0	6.8	.72	.05	<.10	1.5
05...	.53	.40	.19	.90	6.2	.55	.05	<.10	1.4
05...	.53	.30	.19	.90	5.9	.52	.05	<.10	1.4
05...	.47	.40	.21	.60	5.5	.48	.05	<.10	1.3
05...	.43	.30	.22	.60	5.3	.45	.04	<.10	1.2
05...	.41	.30	.24	.50	5.0	.42	.07	<.10	1.2
05...	.46	.40	.26	.30	4.8	.39	.04	<.10	1.1
05...	.40	.30	.32	.00	4.7	.37	.04	<.10	1.0
05...	.37	.30	.37	.00	4.6	.36	.05	<.10	1.0
05...	.33	.30	.39	-.20	4.5	.34	.06	<.10	.9
05...	.34	.30	.39	-.30	4.6	.34	.04	<.10	.9
05...	.38	.30	.38	-.40	4.6	.33	.05	<.10	.9
05...	.33	.30	.39	-.50	4.8	.34	.05	<.10	1.1
05...	.38	.30	.36	-.60	4.8	.34	.04	<.10	.9
05...	.33	.30	.35	-.40	4.8	.34	.04	<.10	.9
05...	.36	.30	.34	-.50	4.9	.34	.04	<.10	1.0
05...	.38	.30	.32	-.40	4.9	.34	<.01	<.10	1.0
05...	.42	.50	.32	-.40	5.0	.34	.04	<.10	1.0
05...	.30	.20	.31	-.60	5.1	.37	.05	<.10	1.0
05...	.39	.40	.30	-.30	5.1	.37	.06	<.10	1.0
06...	.38	.30	.29	-.20	5.3	.37	.04	<.10	1.0
06...	.41	.50	.29	-.50	5.3	.37	.04	<.10	1.1
06...	.37	.30	.28	-.40	5.3	.37	.05	<.10	1.1
06...	.35	.30	.27	.00	5.4	.25	<.01	<.10	1.1
06...	.38	.30	.26	.20	5.5	.39	.04	<.10	1.2
06...	.38	.30	.26	.00	5.6	.27	<.01	<.10	1.2
06...	.41	.40	.28	.10	5.6	.51	.05	<.10	1.2
10...	.48	.30	.21	.20	6.9	.55	.03	<.10	1.6
17...	.43	.30	.22	.10	6.3	.40	.04	<.10	1.4
MAY									
30...	.42	.30	.24	.20	5.8	.29	<.01	<.10	1.4
JUN									
12...	.51	.30	--	1.2	6.8	.54	.07	<.10	2.0
JUL									
20...	.59	.40	.16	1.6	7.0	.53	.06	<.10	2.2
AUG									
14...	.60	.50	1.4	.40	7.3	.78	.05	<.10	2.3
SEP									
12...	.65	.50	.26	.00	6.7	.78	.05	<.10	2.3

DELAWARE RIVER BASIN

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01434025 BISCUIT BROOK ABOVE PIGEON BROOK, AT FROST VALLEY NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) AS N	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L) AS P	ALUM- INUM, DIS- SOLVED (UG/L) AS AL	IRON, DIS- SOLVED (UG/L) AS FE	MANGA- NESE, DIS- SOLVED (UG/L) AS MN	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C
OCT								
06...	20	.16	.110	<.001	20	4	6	2.0
NOV								
02...	17	.11	.008	.007	20	6	1	2.3
10...	17	.16	.007	.007	20	3	3	2.0
10...	17	.15	<.001	.006	20	4	3	3.1
11...	20	.17	.041	.007	40	4	3	3.3
11...	17	.16	.058	.008	20	4	2	3.1
11...	21	.18	<.001	.007	30	<3	2	2.7
16...	21	.25	.070	.020	70	11	7	3.1
30...	16	.21	<.001	<.001	80	10	11	2.7
DEC								
13...	16	.28	<.001	.009	230	19	69	5.0
14...	17	.26	.027	.005	210	13	55	4.2
JAN								
12...	17	.32	.035	<.001	30	<3	2	2.6
FEB								
01...	20	.33	.036	.004	50	5	<1	2.6
MAR								
06...	14	.34	.022	.004	10	4	6	1.5
21...	15	.33	.012	<.001	50	4	10	1.9
21...	13	.33	.045	.004	30	3	10	2.0
21...	13	.35	.020	<.001	50	4	11	2.2
21...	13	.33	.051	.013	50	5	13	1.8
21...	13	.36	.011	<.001	50	6	16	1.9
21...	14	.38	.017	<.001	50	7	19	2.8
28...	15	.23	.089	.016	50	5	5	1.8
APR								
03...	11	.36	.083	.008	200	24	51	3.7
03...	15	.19	.035	.005	50	<3	6	1.7
04...	13	.23	<.001	<.001	80	<3	8	1.5
05...	13	.24	.006	.019	80	3	8	1.6
05...	13	.24	.060	.009	80	5	8	1.6
05...	13	.26	<.001	.001	80	6	10	1.6
05...	13	.24	.451	.020	110	8	11	1.8
05...	12	.26	.053	<.001	90	10	15	2.1
05...	13	.26	.147	.005	110	11	19	2.7
05...	11	.30	<.001	.017	140	14	25	2.8
05...	10	.32	<.001	.026	150	18	35	3.2
05...	10	.32	<.001	.001	180	22	45	3.4
05...	9	.38	<.001	<.001	210	25	58	4.2
05...	9	.42	<.001	<.001	210	28	65	4.4
05...	9	.42	.032	.002	220	29	71	4.4
05...	9	.42	<.001	<.001	230	27	77	4.4
05...	9	.42	<.001	.011	220	30	78	4.2
05...	9	.43	<.001	.013	300	110	100	4.1
05...	10	.42	<.001	.370	220	31	77	4.2
05...	9	.42	<.001	.151	230	30	77	4.0
05...	10	.42	.020	.210	230	30	76	3.9
05...	11	.42	<.001	.272	220	28	73	3.7
05...	9	.42	<.001	<.001	220	30	71	3.6
05...	9	.42	.026	.006	250	25	69	3.5
05...	10	.42	<.001	.010	220	23	66	3.6
06...	10	.40	<.001	.012	210	22	65	3.5
06...	10	.40	.007	<.001	200	23	63	3.0
06...	10	.39	<.001	<.001	240	22	60	3.2
06...	10	.37	.002	.006	230	20	56	3.0
06...	10	.38	<.001	.002	230	18	54	3.0
06...	11	.38	<.001	.002	220	15	<50	2.8
06...	11	.36	<.001	.003	220	14	49	3.3
10...	14	.25	<.001	.003	70	<3	12	1.9
17...	11	.23	.006	<.001	140	9	35	2.7
MAY								
30...	11	.12	.033	<.001	180	19	35	3.9
JUN								
12...	--	.16	.076	<.001	--	<3	1	2.3
JUL								
20...	16	.17	.002	<.001	160	<3	1	1.2
AUG								
14...	18	.28	.008	.004	40	<3	1	1.3
SEP								
12...	16	.32	<.001	<.001	130	4	2	1.2

DELAWARE RIVER BASIN

0143402705 PIGEON BROOK AT MOUTH, AT FROST VALLEY, NY

LOCATION.--Lat 41°59'13", long 74°30'11", Ulster County, Hydrologic Unit 02040104, at bridge on private road, 250 ft upstream from Biscuit Brook, at Frost Valley, and 0.4 mi north of West Branch Road.

DRAINAGE AREA.--2.67 mi².

PERIOD OF RECORD.--April 1983 to current year.

CHEMICAL DATA: 1983 (a), 1984 (d).

MINOR ELEMENT DATA: 1983 (a), 1984 (d).

ORGANIC DATA: OC--1983 (a), 1984 (d).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 03...	0930	.73	30	6.8	6.0	13	8	<.1	4.0
DEC 14...	1640	38	22	5.6	5.0	8	3	<.1	2.3
FEB 01...	1600	2.8	23	6.5	.0	12	4	.1	3.6
APR 03...	1305	6.9	30	6.5	4.5	10	8	<.1	3.1
05...	0815	53	23	5.8	2.0	7	6	<.1	2.1
05...	1535	65	25	5.2	1.5	7	7	.1	2.0
06...	0950	45	25	5.5	3.0	7	7	<.1	2.2
17...	1240	30	19	5.8	5.5	7	4	<.1	2.3
MAY 30...	1315	44	18	5.7	8.5	7	6	<.1	2.1
JUN 12...	1700	4.3	25	6.7	14.5	9	6	<.1	2.8
JUL 20...	1145	2.6	28	6.8	13.0	11	6	.2	3.3
SEP 12...	1200	1.2	31	6.8	12.5	12	6	.2	3.8
DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
NOV 03...	.72	.70	.27	4.5	7.7	1.1	<.01	<.10	2.3
DEC 14...	.53	.40	.24	.30	6.0	.62	.03	<.10	1.5
FEB 01...	.61	.50	.19	2.5	7.5	.68	.03	<.10	2.1
APR 03...	.51	.40	.19	2.0	6.7	.56	.07	<.10	1.6
05...	.38	.30	.24	.80	4.8	.43	.04	<.10	1.1
05...	.37	.30	.36	.00	4.8	.34	<.01	<.10	.9
06...	.38	.30	.25	.30	5.5	.39	.04	<.10	1.2
17...	.40	.30	.22	.80	6.4	.42	.05	<.10	1.4
MAY 30...	.34	.30	.23	.80	5.7	.30	<.01	<.10	1.4
JUN 12...	.51	.40	.20	2.3	7.0	.59	.04	<.10	2.0
JUL 20...	.58	.40	.15	2.6	7.0	.51	.06	<.10	2.2
SEP 12...	.62	.50	.24	2.6	6.9	.75	.06	<.10	2.4

DELAWARE RIVER BASIN

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0143402705 PIGEON BROOK AT MOUTH, AT FROST VALLEY, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV 03...	20	.09	<.001	.012	<10	<3	<1	3.5
DEC 14...	16	.25	.011	--	200	10	54	4.0
FEB 01...	22	.32	.017	<.001	50	5	<1	3.9
APR 03...	14	.17	.069	.002	80	3	2	1.7
05...	10	.25	<.001	<.001	150	38	23	3.8
05...	9	.42	<.001	<.001	200	33	58	4.3
06...	11	.36	.058	.008	150	19	37	3.0
17...	13	.24	.008	<.001	100	10	21	2.5
MAY 30...	11	.10	.049	.005	150	24	22	3.4
JUN 12...	15	.14	<.001	<.001	20	4	<1	2.7
JUL 20...	17	<.05	.013	<.001	60	5	<1	1.9
SEP 12...	19	.24	<.001	.001	10	5	<1	1.4

DELAWARE RIVER BASIN

0143410505 HIGH FALLS BROOK AT FROST VALLEY, NY

LOCATION.--Lat 41°58'33", long 74°31'19", Ulster County, Hydrologic Unit 02040104, at bridge on West Branch Road, 0.1 mi upstream from mouth, and 1.0 southwest of Frost Valley.

DRAINAGE AREA.--2.76 mi².

PERIOD OF RECORD.--August 1983 to current year.

CHEMICAL DATA: 1983 (a), 1984 (c).

MINOR ELEMENT DATA: 1983 (a), 1984 (c).

ORGANIC DATA: OC--1983 (a), 1984 (c).

REMARKS.--All cation analysis were performed on water samples which passed through a 0.1-micrometer membrane filter; while anion analysis were performed on water samples which passed through a 0.4-micrometer membrane filter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 03...	0930	.85	35	7.1	6.0	17	9	<.1	5.6
DEC 14...	1755	55	21	5.9	5.0	9	3	<.1	2.9
FEB 01...	1155	3.4	30	6.8	.0	15	4	.1	4.7
APR 03...	1115	7.5	36	6.7	4.0	12	8	<.1	3.8
05...	2130	205	26	5.2	2.0	7	7	<.1	2.2
17...	1120	37	23	5.9	5.5	9	8	<.1	2.9
JUN 13...	1415	5.8	--	6.9	16.0	12	7	<.1	3.9
JUL 20...	1540	2.4	33	7.2	14.5	14	7	<.1	4.4
SEP 12...	1815	.98	39	7.0	14.0	17	7	.2	5.5

DATE	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, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
NOV 03...	.83	.70	.30	8.9	7.6	.82	<.01	<.10	2.4
DEC 14...	.40	.40	.24	.70	6.2	.59	.04	<.10	1.6
FEB 01...	.69	.50	.20	4.9	7.8	.65	.02	<.10	2.2
APR 03...	.57	.30	.19	3.5	6.9	.56	.06	<.10	1.7
05...	.33	.30	.32	.00	5.1	.37	<.01	<.10	1.0
17...	.37	.70	.33	1.1	6.1	1.1	.03	<.10	1.3
JUN 13...	.51	.50	.23	4.2	7.0	.71	.05	<.10	2.0
JUL 20...	.61	.40	.17	5.7	7.2	.47	.05	<.10	2.4
SEP 12...	.71	.40	.27	7.0	7.1	.60	.05	<.10	2.5

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV 03...	24	.13	.008	.002	<10	3	2	2.4
DEC 14...	17	.25	<.001	<.001	120	13	32	4.0
FEB 01...	25	.36	.017	.002	30	6	<1	3.3
APR 03...	16	.20	.009	<.001	40	4	2	1.5
05...	10	.42	<.001	<.001	190	28	57	3.8
17...	14	.25	.072	.008	70	12	17	--
JUN 13...	18	.17	.005	<.001	20	5	2	1.7
JUL 20...	20	.12	<.001	<.001	30	3	<1	1.1
SEP 12...	23	.26	<.001	<.001	10	<3	1	1.1

DELAWARE RIVER BASIN

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01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, on left bank 50 ft downstream from covered bridge, 300 ft upstream from small tributary, 2.2 mi downstream from confluence of East and West Branches, and 2.2 mi southwest of Claryville.

DRAINAGE AREA.--66.6 mi².

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,522.37 ft National Geodetic Vertical Datum of 1929. Prior to October 1, 1974, at datum 6.00 ft higher. Oct. 1, 1974 to Sept. 30, 1979 at datum 5.00 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--33 years, 190 ft³/s, 38.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft³/s Mar. 21, 1980; maximum gage height, 13.83 ft present datum, July 10, 1952; minimum discharge, 6.8 ft³/s Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 15.0 ft present datum, from floodmarks, discharge, 23,400 ft³/s by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0245	3,170	9.21	Apr. 5	1500	*10,700	*12.28
Feb. 15	1715	4,510	9.82	May 29	1830	4,410	9.99

Minimum discharge, 16 ft³/s Oct. 10, 11, 12, gage height, 5.16 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	30	197	143	76	209	158	188	514	141	55	33
2	23	30	170	136	80	192	174	172	362	124	55	32
3	23	30	154	132	90	177	197	158	290	87	53	44
4	21	30	145	126	275	204	216	603	258	81	55	54
5	20	28	135	121	174	155	4900	330	237	70	60	43
6	20	27	262	115	139	181	1980	257	209	72	63	37
7	19	26	785	107	120	153	845	244	185	216	54	33
8	18	25	305	100	110	151	537	267	164	154	51	32
9	17	25	232	96	100	138	410	296	146	111	49	31
10	17	26	201	94	100	131	364	247	134	96	49	31
11	17	72	176	90	113	134	330	234	120	89	54	32
12	18	127	179	110	131	123	322	245	110	135	66	35
13	26	72	1520	102	148	111	322	251	106	94	102	33
14	48	58	2060	96	483	130	310	273	110	81	71	36
15	40	53	762	87	3290	123	400	251	98	73	64	35
16	30	90	475	86	2050	132	1500	244	92	70	55	33
17	25	100	353	80	919	149	800	224	86	67	54	31
18	24	75	294	76	603	133	560	212	96	81	48	29
19	35	68	249	76	520	134	450	203	98	76	45	29
20	35	69	179	76	658	160	370	195	83	65	50	28
21	29	349	184	76	444	266	310	218	75	68	44	27
22	26	195	212	76	349	327	260	182	70	65	42	26
23	27	141	219	80	306	229	290	196	66	61	49	27
24	95	136	174	90	370	189	280	237	87	61	48	28
25	68	387	143	217	343	176	250	191	152	58	43	28
26	51	245	147	124	305	175	220	182	83	56	39	25
27	44	195	149	101	259	171	200	182	69	89	39	24
28	39	173	171	90	260	179	190	266	63	85	38	25
29	34	319	320	83	274	169	210	2560	59	67	38	28
30	32	253	196	80	---	168	200	2030	86	61	37	26
31	31	---	167	78	---	160	---	917	---	57	35	---
TOTAL	974	3454	10915	3144	13089	5229	17555	12255	4308	2711	1605	955
MEAN	31.4	115	352	101	451	169	585	395	144	87.5	51.8	31.8
MAX	95	387	2060	217	3290	327	4900	2560	514	216	102	54
MIN	17	25	135	76	76	111	158	158	59	56	35	24
CFSM	.47	1.73	5.29	1.52	6.77	2.54	8.78	5.93	2.16	1.31	.78	.48
IN.	.54	1.93	6.10	1.76	7.31	2.92	9.81	6.85	2.41	1.51	.90	.53
CAL YR 1983	TOTAL	75238	MEAN	206	MAX	2610	MIN	15	CFSM	3.09	IN.	42.02
WTR YR 1984	TOTAL	76194	MEAN	208	MAX	4900	MIN	17	CFSM	3.12	IN.	42.56

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 downstream from Neversink Dam and State Highway 55, 1.7 mi southwest of Neversink, and 2.6 mi upstream from Wynkoop Brook.

DRAINAGE AREA.--92.6 mi².

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WDR NY-72-1: 1961 (M), 1968 (M). WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,255.24 ft Board of Water Supply, City of New York datum. Prior to Jan. 17, 1953, water-stage recorder at site 650 ft downstream at datum 0.20 ft lower. Jan. 17, 1953 to Apr. 16, 1954, water-stage recorder at present site at datum 0.41 ft higher.

REMARKS.--Records fair. Subsequent to June 1953, entire flow from 91.8 mi² 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 Nov. 25, 1950, from rating curve extended above 2,600 ft³/s on basis of contracted-opening and critical-depth measurements of peak flow; maximum gage height, 11.65 ft 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, 3,210 ft³/s May 30, gage height, 6.17 ft; minimum, 2.5 ft³/s Oct. 31, gage height, 2.26 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	26	5.5	4.4	24	24	45	42	870	46	56	63
2	41	21	5.2	4.2	24	24	50	44	593	45	68	47
3	40	22	4.6	13	24	24	51	49	447	43	79	46
4	39	21	4.6	24	24	24	48	47	260	44	90	46
5	40	21	4.6	24	24	25	49	42	49	44	89	46
6	39	21	5.0	24	25	24	49	43	45	43	89	46
7	39	21	4.9	24	25	24	46	44	46	42	91	46
8	39	22	4.9	24	25	25	46	45	55	42	84	46
9	39	22	5.0	24	25	25	47	45	64	41	73	46
10	40	17	5.0	24	25	25	48	43	66	42	80	46
11	41	100	5.0	24	25	25	48	42	64	42	92	48
12	41	129	5.0	24	25	24	47	41	66	43	92	46
13	41	21	5.7	24	25	24	46	40	63	51	86	46
14	40	17	5.2	24	25	24	46	41	63	65	73	47
15	39	11	4.8	24	27	24	46	41	63	66	71	48
16	39	5.1	4.7	24	26	26	46	41	63	66	70	49
17	39	8.9	4.7	24	25	25	588	41	63	66	70	49
18	72	13	4.7	24	25	25	878	41	49	58	62	47
19	40	11	4.6	24	25	25	557	41	43	49	47	45
20	40	21	4.6	24	26	25	266	41	45	48	47	46
21	40	13	4.7	24	25	25	254	41	45	47	48	49
22	40	4.9	4.8	24	24	26	50	42	45	56	49	49
23	40	5.2	4.8	24	25	24	48	43	42	72	47	46
24	41	5.5	4.8	24	25	24	48	43	42	72	46	47
25	41	5.6	4.7	24	24	24	56	43	42	58	46	48
26	41	5.4	4.7	24	23	24	46	43	42	45	48	48
27	41	5.4	4.7	24	24	24	44	43	43	45	49	47
28	40	5.6	4.7	24	25	24	43	44	44	45	48	46
29	39	5.7	4.5	24	24	24	43	242	51	46	47	46
30	41	5.7	4.5	24	---	24	43	2730	46	48	57	46
31	30	---	4.5	24	---	30	---	1560	---	42	72	---
TOTAL	1263	613.0	149.7	693.6	718	764	3722	5728	3519	1562	2066	1421
MEAN	40.7	20.4	4.83	22.4	24.8	24.6	124	185	117	50.4	66.6	47.4
MAX	72	129	5.7	24	27	30	878	2730	870	72	92	63
MIN	30	4.9	4.5	4.2	23	24	43	40	42	41	46	45
CAL YR 1983	TOTAL	16041.9	MEAN	44.0	MAX	1130	MIN	4.5				
WTR YR 1984	TOTAL	22219.3	MEAN	60.7	MAX	2730	MIN	4.2				

DELAWARE RIVER BASIN

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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 downstream from highway bridge at Woodbourne, 0.3 mi upstream from outlet of South Wind Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--113 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to September 1973, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft, from topographic map. Prior to Sept. 20, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are poor. Subsequent to June 1953, entire flow from 91.8 mi² 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 FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s Nov. 26, 1950, gage height, 11.19 ft on basis of slope-area measurement; maximum gage height, 11.2 ft July 22, 1938, from floodmarks and graph based on gage readings; minimum discharge, 6.7 ft³/s June 27, 1953; minimum gage height, 0.80 ft Aug. 25, 27, 28, 1949; minimum daily discharge, 8.2 ft³/s June 25, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,500 ft³/s May 30, gage height, 6.55 ft; minimum discharge, 17 ft³/s Oct. 31, gage height, 1.20 ft; minimum daily discharge, 23 ft³/s Nov. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	40	54	50	40	68	96	76	1060	156	57	71
2	52	27	46	47	37	76	117	69	746	104	75	51
3	48	29	43	50	40	61	121	74	563	76	81	53
4	47	31	41	73	70	61	119	262	384	68	94	56
5	48	30	39	70	64	57	1010	132	110	64	95	50
6	48	28	105	62	60	66	411	106	96	71	94	49
7	47	29	250	56	56	59	217	96	90	241	95	49
8	47	30	94	52	52	55	156	110	90	101	92	49
9	46	28	67	48	50	54	133	124	98	79	79	49
10	47	29	59	45	50	52	118	98	99	70	81	50
11	47	86	52	43	50	52	108	89	92	68	98	51
12	49	209	55	41	70	52	102	95	91	68	98	51
13	49	41	397	39	98	52	95	94	91	67	97	51
14	52	33	385	37	160	52	93	101	99	84	78	51
15	49	27	164	35	492	54	110	88	89	84	77	54
16	49	43	109	34	290	60	322	83	85	84	76	52
17	48	35	83	34	178	81	669	78	85	86	75	53
18	80	38	67	34	144	76	1010	75	80	89	72	52
19	57	23	56	33	149	75	750	75	66	68	52	49
20	51	36	45	33	203	86	416	76	64	62	50	49
21	47	85	40	33	127	135	357	91	61	59	50	52
22	46	42	49	33	100	156	138	77	59	63	51	51
23	51	31	53	33	88	107	109	93	55	81	52	49
24	83	35	46	50	125	85	111	105	62	84	50	49
25	58	130	43	80	105	78	111	82	72	72	49	49
26	53	73	43	60	93	72	97	80	58	53	49	49
27	52	58	42	54	77	67	87	81	55	62	49	48
28	50	51	49	50	78	68	81	135	56	58	49	47
29	49	104	107	47	88	76	82	899	65	54	49	46
30	50	70	67	45	---	66	78	3020	89	56	53	46
31	41	---	53	42	---	66	---	1880	---	49	74	---
TOTAL	1591	1551	2803	1443	3234	2225	7424	8544	4810	2481	2191	1526
MEAN	51.3	51.7	90.4	46.5	112	71.8	247	276	160	80.0	70.7	50.9
MAX	83	209	397	80	492	156	1010	3020	1060	241	98	71
MIN	41	23	39	33	37	52	78	69	55	49	49	46
CAL YR 1983	TOTAL	33366	MEAN	91.4	MAX	1250	MIN	20				
WTR YR 1984	TOTAL	39823	MEAN	109	MAX	3020	MIN	23				

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 1979 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977.

REMARKS.--No record Oct. 24-25, Aug. 6-28, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum (water years 1979-83), 26.5°C June 16, 1981; minimum (water years 1980-84), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Minimum, freezing point Jan. 22, 24, 25.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	12.5	12.5	9.5	5.5	7.0	4.0	3.0	3.5	.5	.5	.5
2	15.0	11.5	13.5	10.0	6.5	7.5	4.0	2.5	3.0	.5	.5	.5
3	14.0	12.0	13.0	9.0	8.0	8.5	4.5	2.5	3.0	.5	.5	.5
4	15.0	12.0	13.5	9.0	6.5	7.5	2.5	1.0	1.5	.5	.5	.5
5	15.0	12.0	13.5	7.5	3.5	5.5	4.0	1.0	2.5	.5	.5	.5
6	13.0	10.0	11.5	6.5	4.0	5.0	4.0	3.5	4.0	.5	.5	.5
7	13.0	9.0	11.0	8.0	5.5	6.5	3.5	1.5	2.5	.5	.5	.5
8	12.0	10.0	10.5	9.0	4.5	6.5	2.0	.5	1.5	.5	.5	.5
9	12.5	9.0	10.5	10.0	5.5	7.0	2.0	.5	1.5	.5	.5	.5
10	11.0	9.0	10.0	7.5	6.0	7.0	3.5	2.0	3.0	.5	.5	.5
11	12.0	10.5	11.5	8.5	7.5	8.0	3.0	2.0	2.5	.5	.5	.5
12	13.5	12.0	12.5	8.5	5.5	7.5	2.5	1.0	1.5	.5	.5	.5
13	14.5	10.5	12.5	5.5	2.5	4.0	4.0	2.5	3.0	.5	.5	.5
14	13.0	9.0	11.0	5.5	3.0	4.5	5.0	4.0	4.5	.5	.5	.5
15	12.0	8.5	10.0	5.0	4.0	4.5	5.5	4.5	5.0	.5	.5	.5
16	10.0	9.0	9.5	7.0	4.0	5.5	5.0	3.5	4.5	.5	.5	.5
17	11.5	9.5	10.5	5.5	3.5	4.5	3.5	2.0	3.0	.5	.5	.5
18	13.5	10.0	11.5	4.5	2.5	3.0	2.0	1.0	1.5	.5	.5	.5
19	12.0	7.0	9.5	7.0	3.5	5.0	2.0	.5	1.0	.5	.5	.5
20	10.5	6.5	8.0	9.0	6.0	7.0	1.0	.5	.5	.5	.5	.5
21	9.5	6.0	7.5	9.0	7.0	8.5	1.0	.5	.5	.5	.5	.5
22	9.0	7.5	8.5	8.5	5.5	6.5	.5	.5	.5	.5	.0	.5
23	10.0	8.0	9.5	7.5	5.0	6.0	1.0	.5	.5	.5	.5	.5
24	---	---	---	7.0	6.5	6.5	.5	.5	.5	.5	.0	.5
25	---	---	---	7.0	4.0	5.5	.5	.5	.5	.5	.0	.0
26	10.0	8.0	9.0	5.5	3.5	4.5	.5	.5	.5	.5	.5	.5
27	9.0	7.5	8.0	6.0	4.0	4.5	.5	.5	.5	.5	.5	.5
28	10.5	6.5	8.0	5.0	3.5	4.0	.5	.5	.5	.5	.5	.5
29	10.0	8.0	9.0	4.5	3.5	4.0	.5	.5	.5	.5	.5	.5
30	8.5	5.0	7.0	5.0	3.5	4.0	.5	.5	.5	.5	.5	.5
31	9.0	5.5	7.0	---	---	---	.5	.5	.5	.5	.5	.5
MONTH	15.0	5.0	10.5	10.0	2.5	6.0	5.5	.5	2.0	.5	.0	.5

DELAWARE RIVER BASIN

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01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

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 downstream from Basher Kill, 0.8 mi southeast of Godeffroy, 1.7 mi south of Cuddebackville, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--307 mi².

PERIOD OF RECORD.--August to October 1903, July 1937 to current year. Gage heights and discharge measurements, August 1909 to April 1914. Twice-daily figures of discharge, January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 1502: 1951(M). WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft 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 higher).

REMARKS.--Records fair 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 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 Aug. 19, 1955, gage height, 12.49 ft, from rating curve extended above 11,000 ft³/s on basis of slope-area measurement of peak flow; minimum, practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,800 ft³/s Apr. 5, gage height, 10.00 ft; minimum discharge, 75 ft³/s Sept. 8, 9, 26; minimum gage height, 3.04 ft Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	126	523	350	200	654	607	460	3540	1030	192	113
2	128	151	453	340	190	577	706	423	2520	1120	197	109
3	128	150	408	320	220	520	818	412	1890	740	207	96
4	108	146	394	342	286	470	930	1390	1520	778	215	105
5	103	161	387	347	351	465	6360	1180	1030	566	222	94
6	113	141	433	341	325	509	5360	944	784	517	218	88
7	108	123	1130	324	295	497	3390	808	658	2040	211	82
8	102	117	726	280	280	420	2420	769	557	1320	207	79
9	99	113	586	270	260	400	1820	883	496	967	198	77
10	98	112	517	294	258	370	1410	722	449	798	184	82
11	97	192	462	270	263	350	1170	640	404	658	204	83
12	107	386	441	260	337	330	950	591	361	576	220	87
13	121	249	1810	250	438	310	824	581	339	482	216	82
14	123	177	2990	240	627	340	739	582	364	418	205	80
15	116	162	1940	230	2390	400	804	537	341	382	189	85
16	107	264	1460	230	2390	452	1590	494	314	359	182	89
17	101	278	1190	220	1650	520	2210	455	319	333	190	83
18	105	213	986	220	1340	565	2340	420	325	395	178	81
19	176	199	840	210	1220	540	1980	399	299	383	158	80
20	153	181	690	200	1510	603	1560	385	260	320	142	80
21	128	381	617	190	1190	779	1340	429	238	295	134	79
22	120	359	576	190	974	1170	1080	390	219	285	121	82
23	120	271	569	190	828	977	862	380	207	265	124	80
24	229	259	526	230	1030	854	795	631	216	256	120	79
25	214	668	490	260	990	769	735	460	306	239	112	79
26	175	620	480	288	875	699	679	422	244	217	108	82
27	177	541	450	268	729	623	609	499	212	229	104	87
28	158	476	420	261	722	601	553	547	198	276	102	88
29	140	653	529	245	771	639	522	3550	197	239	101	88
30	141	639	450	234	---	615	487	6810	560	218	101	86
31	137	---	400	220	---	575	---	5460	---	206	102	---
TOTAL	4053	8508	23873	8114	22939	17593	45650	32653	19367	16907	5164	2585
MEAN	131	284	770	262	791	568	1522	1053	646	545	167	86.2
MAX	229	668	2990	350	2390	1170	6360	6810	3540	2040	222	113
MIN	97	112	387	190	190	310	487	380	197	206	101	77

CAL YR 1983 TOTAL 193534 MEAN 530 MAX 5070 MIN 89
WTR YR 1984 TOTAL 207406 MEAN 567 MAX 6810 MIN 77

DELAWARE RIVER BASIN

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01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Pike County, PA, Hydrologic Unit 02040104, on right bank 1,500 ft upstream from toll bridge (on U.S. Route 206) between Montague, N.J. and Milford, Pa. 0.8 mi downstream from Sawkill Creek, and at river mile 246.3.

DRAINAGE AREA.--3,480 mi².

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.

REVISED RECORDS.--WDR-NJ-81-2: 1980.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft 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 lower.

REMARKS.--Water-discharge records excellent except those for winter months, which are 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.--45 years, 5,850 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s Aug. 19, 1955, gage height, 35.15 ft, from rating curve extended above 90,000 ft³/s on basis of flood-routing study; minimum, 382 ft³/s Aug. 24, 1954, gage height, 3.83 ft, minimum daily, 412 ft³/s Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft from floodmark, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 89,500 ft³/s May 30, gage height, 20.75 ft; minimum discharge, 936 ft³/s Oct. 16, gage height, 4.33 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1720	1670	6950	4700	1700	7370	5800	7060	40200	8650	2820	1890
2	1770	1720	5630	4000	1900	6400	6570	6100	26500	15700	3180	1670
3	1660	1730	4550	3800	1900	5720	7790	5590	20300	9560	2990	1740
4	1490	1740	4080	3900	2000	5080	9670	11200	16400	6850	3030	1940
5	1610	1730	4150	3600	2400	5110	34100	16000	12600	5290	2400	2050
6	1750	1730	4850	3500	3200	5270	64300	13400	10300	5290	2410	1840
7	1890	1780	11400	3300	3700	5570	40300	11900	8930	9990	3010	1790
8	1740	1740	13500	2600	3700	4830	27600	10500	7780	9460	2970	1710
9	1690	1650	9650	2600	3100	4420	20500	12000	6530	7390	3080	1740
10	1680	1660	7690	3000	3100	3870	16200	12100	5020	6250	2590	1700
11	1710	1890	6010	3100	2700	3400	13700	10600	4580	5630	2550	1660
12	1980	1980	5390	3000	2600	3260	12000	9150	4940	5100	1990	1670
13	1890	2020	16400	3300	3300	3860	10700	9220	4430	5010	2160	1700
14	1750	1880	57100	3200	6000	4050	9660	9940	4620	4520	2490	1800
15	1420	1620	38600	2600	30000	4090	10200	11400	4420	3820	2250	1920
16	1190	1760	22900	2400	50600	4820	15200	10900	3940	3630	2130	1930
17	1450	1850	15300	2900	28900	5650	27600	9740	2850	3830	2590	1730
18	1480	1550	12000	2700	19500	5120	25100	8810	2890	4120	2290	1650
19	1890	1890	10200	2700	15300	5470	21100	7580	3640	4580	1940	1810
20	1920	1860	8410	2700	15500	5930	21100	6580	3290	4310	1960	1790
21	1830	2050	7230	2600	13800	6920	18400	6940	2250	3640	2060	1760
22	1920	2980	6300	2200	11300	10400	14800	7460	1930	2230	2180	1790
23	1830	3070	6700	1900	9770	10300	13100	6440	1790	2260	2060	1770
24	2030	2430	6700	2200	10200	8490	12900	8010	1970	3320	1970	1700
25	2020	3440	6000	2300	10200	6900	12200	7680	2210	3080	2040	1850
26	1760	6560	5200	2700	8970	6870	11300	6490	2230	2730	1700	1910
27	1820	5890	4800	2900	7970	6780	10100	6250	1940	2750	1720	1860
28	1730	5190	4500	3300	7610	6590	8790	5520	1690	3410	1920	1640
29	1640	6280	5000	2400	8080	7230	7040	36500	1710	3300	1980	1670
30	1620	8380	6100	1900	---	7170	6720	82700	4400	2600	1930	1710
31	1620	---	5900	1800	---	6450	---	61900	---	3070	2150	---
TOTAL	53500	81720	329190	89800	289000	183390	514540	435660	216280	161370	72540	53390
MEAN	1726	2724	10620	2897	9966	5916	17150	14050	7209	5205	2340	1780
MAX	2030	8380	57100	4700	50600	10400	64300	82700	40200	15700	3180	2050
MIN	1190	1550	4080	1800	1700	3260	5800	5520	1690	2230	1700	1640

CAL YR 1983 TOTAL 2236530 MEAN 6127 MAX 57100 MIN 1090
WTR YR 1984 TOTAL 2480380 MEAN 6777 MAX 82700 MIN 1190

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near release chamber at Downsview Dam on East Branch Delaware River, and 1.6 mi east of Downsview, N.Y. DRAINAGE AREA, 371 mi². 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 between minimum operating level, elevation, 1,152.0 ft and crest of spillway, elevation, 1,280.0 ft. Capacity: at crest of spillway 149,799 mil gal (corrected); at minimum operating level, 9,609 mil gal; at sill of diversion tunnel, elevation, 1,143.0 ft, 6,098 mil gal; in dead storage below release outlet, elevation, 1,126.50 ft, 1,898 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this section), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records 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 Apr. 5, 1960, elevation, 1,282.27 ft; minimum observed (after first filling), 9,575 mil gal Dec. 26, 1964, elevation, 1,151.92 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 153,857 mil gal May 30, elevation, 1,282.18 ft; minimum, 71,319 mil gal Nov. 24, elevation, 1,228.18 ft.

01424997 CANNONVILLE 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 southeast of Stilesville, N.Y. DRAINAGE AREA, 454 mi². PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WDR NY-72-1: 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 between minimum operating level, elevation, 1,040.0 ft and crest of spillway, elevation, 1,150.0 ft. Capacity, at crest of spillway, 98,618 mil gal; at minimum operating level, 2,912 mil gal; at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft, 1,892 mil gal; in dead storage below release outlet elevation, 1,020.5 ft, 328 mil gal. Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 108,116 mil gal Mar. 15, 1977, elevation, 1,155.85 ft; minimum observed (after first filling), 11,901 mil gal Nov. 7, 1968, elevation, 1,066.24 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 105,136 mil gal May 31, elevation, 1,154.05 ft; minimum, 19,322 mil gal Nov. 21, elevation, 1,079.09 ft.

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 northwest of Fowlersville, N.Y. DRAINAGE AREA, 118 mi² 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.

Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft³ between elevations 1,010.0 ft, minimum operating pool, and 1,071.2 ft, top of flashboards. Capacity below elevation 1,010.0 ft, minimum operating pool, about 212.7 mil ft³. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft. Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft³ Mar. 14, 1977, elevation, 1,071.8 ft; minimum (after first filling), -141.4 mil ft³ Dec. 2, 1938, elevation, 987.5 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,359 mil ft³ Apr. 14, elevation, 1,069.3 ft; minimum, 447.8 mil ft³ Oct. 31, Nov. 11, elevation, 1,040.5 ft.

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi southeast of village of Black Lake, N.Y. DRAINAGE AREA, 23.2 mi². 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.

Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity 1,098.2 mil ft³ between elevations 1,165.0 ft, minimum operating pool, and 1,220.0 ft, top of permanent flashboards. Capacity below elevation 1,165.0 ft, minimum operating pool, about 26.8 mil ft³. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft³ July 20, 1945, elevation, 1,222.0 ft; minimum observed (after first filling), -26.8 mil ft³ Nov. 15, 1928, elevation, 1,144.5 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 1,163.8 mil ft³ June 1, elevation, 1,221.8 ft; minimum observed, 211.4 mil ft³ Nov. 30, Dec. 1, elevation, 1,185.0 ft.

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi northwest of Fowlersville, N.Y. DRAINAGE AREA, 6.46 mi², 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.

Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft³ between elevations 1,043.3 ft, minimum operating pool, and 1,072.0 ft, top of permanent flashboards. Capacity below elevation 1,043.3 ft, minimum operating pool, about 6.54 mil ft³. Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft³ July 30, 31, 1945, elevation, 1,073.1 ft; minimum observed (after first filling), about -6.54 mil ft³ Mar. 16, 1963, elevation, 1,038.0 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 136.9 mil ft³ June 1, elevation, 1,072.1 ft; minimum observed, 3.56 mil ft³ Oct. 31, Nov. 1, elevation, 1,045.2 ft.

DELAWARE RIVER BASIN

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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 southwest of Neversink, N.Y. DRAINAGE AREA, 91.8 mi². 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 between minimum operating level, elevation, 1,319.0 ft and crest of spillway, elevation, 1,440.0 ft. Capacity at crest of spillway 37,146 mil gal; at minimum operating level, 2,205 mil gal; dead storage below diversion sill and outlet sill, elevation 1,314.0 ft, 1,680 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records 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 Apr. 25, 1961, elevation, 1,441.67 ft; minimum observed (after first filling), 1,985 mil gal Nov. 25, 1964, elevation, 1,316.98 ft. EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,768 mil gal May 30, elevation, 1,441.25 ft; minimum observed, 15,737 mil gal Nov. 21, elevation, 1,385.87 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	1,252.33	103,600		1,111.61	48,179		1,041.1	462	
Oct. 31	1,239.01	84,850	- 936	1,089.28	26,735	-1,070	1,040.5	448	- 5.2
Nov. 30	1,229.14	72,460	- 639	1,085.36	23,702	- 156	1,058.5	959	+197
Dec. 31	1,242.10	88,996	+ 825	1,117.84	55,262	+1,575	1,063.9	1,150	+ 71.3
CAL YR 1983	-	-	+ 67.9	-	-	+ 103	-	-	+ 2.8
Jan. 31	1,239.18	85,075	- 196	1,123.61	62,191	+ 346	1,063.2	1,124	- 9.7
Feb. 29	1,258.24	112,667	+1,472	1,143.41	88,714	+1,415	1,068.0	1,307	+ 73.0
Mar. 31	1,261.33	117,584	+ 245	1,150.47	99,374	+ 532	1,061.2	1,052	- 95.2
Apr. 30	1,280.12	150,021	+1,673	1,151.03	100,275	+ 46.5	1,066.4	1,245	+ 74.5
May 31	1,281.40	152,398	+ 119	1,153.45	104,170	+ 194	1,068.5	1,327	+ 30.6
June 30	1,276.14	142,777	- 496	1,147.94	95,485	- 448	1,062.4	1,095	- 89.5
July 31	1,270.78	133,348	- 471	1,143.14	88,324	- 357	1,064.4	1,169	+ 27.6
Aug. 31	1,264.65	122,996	- 517	1,130.93	71,488	- 840	1,062.4	1,095	- 27.6
Sept. 30	1,257.13	110,929	- 622	1,116.29	53,454	- 930	1,063.1	1,121	+ 10.0
WTR YR 1984	-	-	+ 31.0	-	-	+ 22.3	-	-	+ 20.8

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	1,196.0	422		1,048.0	9.8		1,401.87	21,005	
Oct. 31	1,196.4	431	+ 3.4	1,045.2	3.6	- 2.3	1,391.22	17,398	-180
Nov. 30	1,185.0	211	- 84.9	1,061.0	59.4	+21.5	1,389.48	16,848	- 28.4
Dec. 31	1,193.5	368	+ 58.6	1,064.4	79.8	+ 7.6	1,405.97	22,499	+282
CAL YR 1983	-	-	+ 3.6	-	-	+ 0.5	-	-	+ 33.8
Jan. 31	1,196.5	434	+ 24.6	1,062.8	69.9	- 3.7	1,402.92	21,382	- 55.8
Feb. 29	1,206.0	671	+ 94.6	1,069.0	112	+16.8	1,421.53	28,687	+390
Mar. 31	1,206.1	674	+ 1.1	1,061.9	64.5	-17.7	1,425.01	30,179	+ 74.5
Apr. 30	1,217.3	1,005	+128	1,067.5	101	+14.1	1,438.13	36,228	+312
May 31	1,221.7	1,160	+ 57.9	1,071.7	134	+12.3	1,440.63	37,459	+ 61.4
June 30	1,216.6	981	- 69.1	1,068.2	106	-10.8	1,431.85	33,249	-217
July 31	1,215.7	952	- 10.8	1,069.6	116	+ 3.7	1,425.16	30,245	-150
Aug. 31	1,207.5	712	- 89.6	1,064.2	78.5	-14.0	1,413.10	25,233	-250
Sept. 30	1,196.8	440	-105	1,064.6	81.1	+ 1.0	1,401.50	20,873	-225
WTR YR 1984	-	-	+ 0.6	-	-	+ 2.3	-	-	- 0.56

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, WDR NY-71-1: 1970. WDR NY-81-1: 1980.

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.
REVISED RECORDS, WDR NY-81-1: 1980.

01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WDR NY-82-1: 1976, 1977.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Month	01415200 <u>Pepacton Reservoir</u>	01423900 <u>Cannonsville Reservoir</u>	01435800 <u>Neversink Reservoir</u>
October.....	701	290	171
November.....	688	224	161
December.....	697	212	157
CAL YR 1983	483	168	191
January.....	488	5.19	147
February.....	62.0	474	144
March.....	372	83.1	115
April.....	226	105	322
May.....	471	106	324
June.....	625	165	301
July.....	655	260	215
August.....	696	387	239
September.....	696	170	210
WTR YR 1984	534	206	209

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 upstream from highway bridge on Liberty Street, 0.2 mi downstream from tributary, 2.5 mi downstream from Adams, and 10.0 mi upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--128 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft 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.--27 years, 274 ft³/s, 29.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s Apr. 4, 1963, gage height, 11.01 ft, from rating curve extended above 5,500 ft³/s on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft³/s Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,760 ft³/s Feb. 15, gage height, 10.57 ft, no other peaks above base of 3,000 ft³/s; minimum, 9.0 ft³/s Aug. 10, 11, gage height, 0.95 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	52	403	200	140	220	418	475	281	27	11	69
2	20	50	370	200	140	210	485	293	213	25	12	41
3	18	116	317	200	150	200	537	221	169	22	12	38
4	18	187	254	190	160	190	572	636	153	21	11	41
5	52	133	292	190	170	180	1290	848	132	35	9.9	32
6	228	116	496	180	160	170	1930	506	115	41	9.9	27
7	293	99	1480	180	150	160	1060	347	104	41	10	22
8	129	87	793	170	150	150	713	298	91	34	10	19
9	133	79	667	170	140	140	601	506	80	28	9.6	16
10	98	75	560	160	140	130	526	361	72	24	9.3	15
11	71	481	429	160	150	120	468	265	62	41	11	22
12	57	581	503	150	250	120	554	744	55	78	13	63
13	57	283	1530	150	500	120	565	525	50	48	39	50
14	352	176	1910	140	1500	120	607	462	53	33	27	502
15	204	183	1660	140	6900	130	828	346	49	28	44	163
16	127	654	1160	140	2640	130	1220	273	43	51	38	96
17	95	617	773	140	1520	140	1240	226	38	39	32	83
18	77	403	622	140	1630	150	1080	189	47	31	24	63
19	65	279	509	130	1430	160	675	175	72	37	20	46
20	55	326	330	130	1760	180	669	162	60	26	19	37
21	48	1510	310	130	1120	500	545	150	48	22	16	31
22	45	747	300	130	766	1390	393	139	40	20	13	27
23	48	504	290	130	664	875	326	573	33	18	20	24
24	78	375	280	140	520	608	454	776	31	16	46	25
25	71	420	260	180	450	500	609	396	74	14	41	25
26	63	340	250	180	400	430	453	242	60	13	26	108
27	83	272	240	170	320	380	328	191	44	15	20	97
28	97	255	230	170	280	350	261	227	37	17	16	57
29	79	555	220	160	223	340	275	875	32	15	19	44
30	64	505	210	160	---	331	269	634	30	13	40	37
31	57	---	210	150	---	331	---	406	---	12	150	---
TOTAL	2905	10460	17858	4960	24523	9155	19951	12467	2368	885	778.7	1920
MEAN	93.7	349	576	160	846	295	665	402	78.9	28.5	25.1	64.0
MAX	352	1510	1910	200	6900	1390	1930	875	281	78	150	502
MIN	18	50	210	130	140	120	261	139	30	12	9.3	15
CFSM	.73	2.73	4.50	1.25	6.61	2.30	5.20	3.14	.62	.22	.20	.50
IN.	0.84	3.04	5.19	1.44	7.13	2.66	5.80	3.62	0.69	0.26	0.23	0.56
CAL YR 1983	TOTAL	92596.2	MEAN	254	MAX	1910	MIN	9.2	CFSM	1.98	IN.	26.91
WTR YR 1984	TOTAL	108230.7	MEAN	296	MAX	6900	MIN	9.3	CFSM	2.31	IN.	31.45

STREAMS TRIBUTARY TO LAKE ONTARIO

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); 1979-80 (d), 1981-84 (c).

MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c), 1981-84 (b).

ORGANIC DATA: OC--1978 (c), 1979-80 (d), 1981 (c).

NUTRIENT DATA: 1978 (c), 1979-80 (d), 1981-84 (c).

BIOLOGICAL DATA:

Bacteria--1978 (c), 1979-80 (d), 1981-84 (c).

Phytoplankton--1978-80 (c), 1981 (b).

Periphyton--1978-80 (b).

SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981-84 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Once daily January 1978 to September 1980. Recorder July 1980 to September 1984 (discontinued).

WATER TEMPERATURES: Once daily January 1978 to September 1980. Recorder July 1980 to September 1984 (discontinued).

INSTRUMENTATION.--Specific conductance and water temperature digital recorder installed July 29, 1980 at gaging station.

REMARKS.--Once-daily specific conductance and water temperature measurements were made at site 2 mi downstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 563 micromhos Jan. 21, 1983; minimum recorded, 86 micromhos Oct. 15, 1982.

WATER TEMPERATURES: Maximum (water years 1979-80, 1983-84), 33.0°C July 24, 1979; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 410 micromhos July 5; minimum recorded, 103 micromhos Apr. 5.

WATER TEMPERATURES: Maximum, 30.5°C July 14; minimum, freezing point on several days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, PECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 03...	1330	18	368	8.5	17.5	1.1	750	13.5	144	160
JAN 16...	1330	147	315	8.3	.5	1.1	750	--	--	180
APR 03...	1300	474	199	8.4	5.5	4.6	755	12.8	102	220
MAY 22...	1300	139	292	8.7	14.0	<1.0	750	11.5	113	190
JUL 25...	1145	15	370	8.5	20.5	1.0	755	9.6	108	67
AUG 20...	1400	19	338	8.5	18.0	.50	750	13.2	142	40

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 03...	77	170	36	61	5.2	9.3	1.7	138	30	15
JAN 16...	K20	160	21	58	4.1	6.3	1.2	141	19	11
APR 03...	K18	100	15	36	2.6	4.0	1.0	86	12	7.0
MAY 22...	130	140	18	51	3.5	5.0	1.0	124	13	8.3
JUL 25...	58	160	23	57	5.0	12	1.9	140	20	20
AUG 20...	K22	150	22	51	4.7	8.9	1.7	125	29	15

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

STREAMS TRIBUTARY TO LAKE ONTARIO

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04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 03...	<.10	.6	202	210	.44	<.010	.40	.030	.020	.020
JAN 16...	<.10	4.6	204	190	1.5	.030	.40	.020	.020	.030
APR 03...	<.10	2.7	131	120	.71	.170	.40	.010	<.010	<.010
MAY 22...	.20	1.4	172	160	.35	.060	<.10	.050	.030	.010
JUL 25...	.20	2.8	177	200	.52	<.010	.50	.070	.070	.080
AUG 20...	.10	2.3	187	190	.41	<.010	.70	.040	.010	.030

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 03...	10	1	46	<.5	<1	<1	<3	3	11	2
APR 03...	20	<1	19	<.5	1	<1	<3	2	17	1
MAY 22...	<10	<1	26	<.5	<1	<1	<3	1	13	<1
AUG 20...	10	1	32	<.5	<1	1	<3	3	6	1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	7	5	.1	<10	2	<1	<1	130	<6	18
APR 03...	5	3	<.1	<10	<1	<1	<1	71	<6	7
MAY 22...	8	5	.1	<10	2	<1	<1	100	<6	8
AUG 20...	9	3	.2	<10	4	<1	1	120	<6	9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 03...	1330	18	2	.10	--	MAY 22...	1300	139	1	.38	--
JAN 16...	1330	147	3	1.2	--	JUL 25...	1145	15	4	.16	--
APR 03...	1300	474	7	9.0	--	AUG 20...	1400	19	4	.21	55

STREAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	365	343	354	---	---	---	275	263	268	256	252	253
2	374	344	359	---	---	---	277	266	273	258	256	257
3	382	348	364	---	---	---	288	274	279	276	258	267
4	392	365	377	---	---	---	312	278	294	275	270	272
5	394	342	375	---	---	---	280	275	278	273	269	270
6	334	246	263	---	---	---	285	177	262	281	260	270
7	251	219	234	---	---	---	227	157	190	307	269	287
8	282	247	267	---	---	---	244	213	227	288	283	285
9	283	268	274	---	---	---	260	240	253	289	281	283
10	301	273	287	---	---	---	270	261	265	326	285	305
11	321	300	308	---	---	---	301	271	283	328	292	309
12	339	320	325	---	---	---	286	190	270	---	---	---
13	340	319	330	---	---	---	190	169	178	---	---	---
14	323	218	246	---	---	---	206	171	186	---	---	---
15	269	240	255	303	276	286	210	189	200	---	---	---
16	295	269	282	267	226	234	245	212	232	---	---	---
17	315	295	305	269	232	250	258	246	251	307	301	304
18	330	315	319	294	271	285	266	251	260	303	298	300
19	339	321	327	306	294	301	300	250	267	312	299	303
20	345	329	336	306	261	293	325	302	313	316	305	310
21	354	337	344	250	155	186	349	293	324	320	305	312
22	356	334	347	273	214	250	298	237	278	308	307	308
23	358	338	349	291	274	283	234	223	226	315	309	311
24	345	285	310	300	292	297	253	232	239	336	303	316
25	306	283	293	299	269	272	278	254	271	302	247	271
26	---	---	---	296	274	280	278	269	273	252	249	250
27	---	---	---	300	292	289	277	241	269	255	251	254
28	---	---	---	308	274	296	289	235	247	264	247	257
29	---	---	---	264	229	232	270	233	245	287	261	278
30	---	---	---	263	238	242	234	219	226	293	284	287
31	---	---	---	---	---	---	251	234	244	299	290	293
MONTH	394	218	313	308	155	267	349	157	254	336	247	285

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	309	270	295	301	290	295	229	199	217	222	189	204
2	315	293	307	302	286	293	213	183	202	236	222	230
3	323	307	312	303	285	294	203	173	187	247	238	241
4	313	257	291	308	285	294	187	168	179	247	154	201
5	279	269	274	304	284	296	166	103	132	219	156	188
6	282	278	280	294	281	290	144	111	124	239	220	230
7	294	267	285	305	277	288	170	148	163	251	241	245
8	313	278	296	323	290	310	188	172	181	254	246	252
9	312	288	307	322	296	310	191	172	183	244	204	218
10	317	310	312	320	293	309	190	176	183	242	222	232
11	317	296	311	309	292	302	205	183	191	250	243	247
12	291	262	270	322	296	313	185	160	169	249	157	195
13	265	206	253	307	293	300	179	152	166	235	189	218
14	205	167	283	301	282	297	172	157	162	236	225	230
15	201	172	186	300	279	288	159	133	150	249	236	243
16	243	184	276	292	253	278	175	129	154	257	249	252
17	256	219	237	249	221	237	189	137	170	266	258	261
18	231	214	223	230	220	225	201	154	178	272	266	269
19	228	202	220	245	225	238	214	204	210	280	271	275
20	223	194	204	251	238	246	212	193	199	283	275	279
21	247	226	239	236	141	181	240	202	215	302	280	289
22	265	249	258	188	144	173	243	227	236	296	273	291
23	273	258	266	218	185	203	249	243	246	299	149	247
24	260	250	255	227	204	217	241	180	223	240	156	204
25	255	240	247	250	223	235	204	174	187	274	245	259
26	281	256	268	253	226	238	222	205	214	283	275	280
27	304	268	286	268	229	247	233	224	228	289	282	286
28	303	290	296	253	225	240	239	233	236	296	238	281
29	299	291	295	235	218	223	238	229	233	235	158	193
30	---	---	---	239	222	231	241	212	235	246	193	227
31	---	---	---	238	218	230	---	---	---	267	248	257
MONTH	323	167	270	323	141	262	249	103	192	302	149	243

STREAMS TRIBUTARY TO LAKE ONTARIO

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04250750 SANDY CREEK NEAR ADAMS, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	281	268	273	383	343	368	359	337	349	268	240	252
2	288	281	284	387	342	370	367	340	358	297	269	279
3	300	292	298	396	347	377	360	333	349	309	295	302
4	305	296	302	407	385	397	354	326	341	309	282	298
5	311	295	305	410	378	398	359	329	346	309	281	298
6	315	301	310	371	317	338	361	337	353	315	292	305
7	363	298	312	370	337	352	373	350	363	326	303	315
8	329	310	321	352	329	342	377	351	367	335	306	322
9	347	330	336	364	338	353	376	360	368	347	316	332
10	358	331	342	375	355	367	377	322	354	355	324	348
11	366	341	354	386	344	374	360	342	353	380	348	361
12	370	346	361	325	280	292	360	334	348	358	276	303
13	376	339	363	323	299	306	362	292	324	284	273	278
14	380	353	371	335	318	326	318	300	309	283	170	196
15	370	344	363	351	330	341	336	286	311	232	192	213
16	376	346	364	353	307	333	308	289	300	253	232	243
17	383	342	366	327	307	315	317	277	301	256	252	254
18	389	364	376	349	330	342	319	281	303	270	252	257
19	363	328	340	353	312	335	330	303	316	287	270	274
20	350	330	338	344	313	332	342	309	327	297	280	290
21	359	334	347	361	330	346	350	305	329	307	285	299
22	363	327	351	364	325	347	349	313	337	315	295	307
23	375	341	360	370	339	354	363	332	354	324	299	313
24	387	370	379	379	347	366	354	294	323	332	295	326
25	386	306	330	374	309	340	296	261	277	330	311	321
26	332	304	311	350	317	333	304	271	291	326	211	278
27	354	320	333	355	329	347	325	290	307	---	---	---
28	360	332	349	369	321	347	341	308	325	---	---	---
29	374	346	361	355	318	339	349	323	336	---	---	---
30	379	344	367	347	315	334	342	306	325	---	---	---
31	---	---	---	350	325	338	304	231	248	---	---	---
MONTH	389	268	339	410	280	347	377	231	329	380	170	291

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

STEAMS TRIBUTARY TO LAKE ONTARIO

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	15.5	9.5	12.5	24.0	18.5	21.5	24.0	20.5	21.5	22.5	19.0	20.5
2	18.0	11.5	14.5	27.0	18.5	22.5	24.5	20.0	22.0	19.0	18.0	19.0
3	17.5	13.5	14.5	28.5	19.5	24.0	25.0	21.0	22.5	18.0	16.5	17.5
4	18.0	11.5	14.5	24.5	20.5	22.0	27.0	20.5	23.0	19.0	15.0	17.0
5	20.5	14.5	17.5	21.0	18.5	20.0	27.5	21.0	23.5	18.5	15.0	16.5
6	21.5	17.5	19.5	25.0	17.5	21.0	25.5	21.5	23.5	18.5	13.0	15.5
7	24.5	19.5	22.0	22.5	18.5	20.0	27.5	22.0	24.0	19.0	13.0	16.0
8	24.5	21.5	23.0	24.0	15.5	19.0	28.5	22.0	24.5	20.0	15.0	17.5
9	24.0	21.5	22.5	23.0	16.0	19.5	26.5	23.5	24.5	21.5	17.5	19.0
10	26.0	20.5	23.0	23.0	17.5	20.0	29.0	23.5	26.0	19.5	17.5	18.5
11	26.0	21.5	23.5	22.0	19.0	20.5	27.0	23.5	25.5	18.5	16.0	17.5
12	25.0	18.5	21.5	24.0	18.0	20.5	26.0	22.5	24.0	19.0	15.0	17.0
13	26.5	20.0	22.5	29.5	19.5	24.0	25.5	21.5	23.5	19.0	17.0	18.0
14	24.0	20.0	22.0	30.5	19.5	24.5	24.5	23.0	23.5	19.0	17.0	18.0
15	22.5	18.0	19.5	28.5	21.0	25.0	25.5	21.5	23.5	17.0	13.0	14.5
16	23.0	15.5	19.0	29.5	21.0	24.5	25.0	22.5	23.5	13.0	11.5	12.0
17	21.5	17.0	19.5	27.5	20.5	24.0	23.0	20.0	21.5	14.5	11.5	12.5
18	22.5	18.0	20.0	23.5	19.0	21.5	22.5	17.0	20.0	17.0	13.5	14.5
19	24.0	19.5	21.0	26.5	17.0	21.0	21.0	18.5	19.5	16.5	13.5	15.0
20	23.5	18.5	20.5	27.0	17.5	21.5	21.0	16.0	18.5	18.5	13.5	16.0
21	24.0	17.5	20.0	24.5	18.5	22.0	22.0	17.0	19.0	17.5	13.5	16.0
22	25.0	17.5	21.0	27.5	18.0	22.5	22.0	19.0	20.5	18.0	13.5	16.0
23	25.5	17.5	21.5	28.5	20.0	24.0	21.5	19.0	21.0	19.5	16.5	18.5
24	23.0	19.0	20.0	28.5	22.0	25.5	22.5	17.0	19.5	21.5	18.0	20.0
25	22.0	16.5	19.0	26.0	20.0	21.5	24.0	18.5	21.0	21.5	19.5	20.5
26	21.5	17.5	19.5	20.5	18.0	19.5	24.5	17.5	21.0	21.0	14.0	17.5
27	21.0	15.5	18.0	19.5	17.0	18.0	24.5	19.0	21.5	---	---	---
28	24.0	16.5	19.5	21.0	16.5	18.5	23.5	20.5	22.5	---	---	---
29	21.5	17.0	19.5	22.5	17.0	19.5	25.5	22.0	23.5	---	---	---
30	25.5	17.0	20.5	24.0	18.0	21.0	24.5	22.0	23.0	---	---	---
31	---	---	---	25.0	19.5	22.0	23.0	19.5	21.5	---	---	---
MONTH	26.5	9.5	19.5	30.5	15.5	21.5	29.0	16.0	22.5	22.5	11.5	17.0

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 upstream from Sugar River, and 2 mi northeast of Boonville.

DRAINAGE AREA.--304 mi².

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

REVISED RECORDS.--WSP 784: 1934. WSP 1084: 1912(M), 1913, 1917-1919(M), 1922(M), 1924(M), 1926(M), 1928(M), 1930(M), 1933(M). WSP 1307: 1914(M). WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 935.50 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those above 4,000 ft³/s and those for winter periods, which are fair. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi upstream. That portion of diverted water which does not pass Black River Canal (flowing south), returns to Black River below station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill above station.

AVERAGE DISCHARGE.--73 years, 702 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft³/s Apr. 18, 1982, gage height, 11.31 ft; maximum gage height, 13.10 ft Feb. 21, 1981 (ice jam); minimum observed discharge, about 5 ft³/s Aug. 26, 1918, gage height, 2.40 ft; minimum daily, 7 ft³/s Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	1930	*7,990	10.13	Feb. 16	unknown	a4,400	unknown
Feb. 15	0445	ice jam	*10.43				

a About.

Minimum discharge, 149 ft³/s Oct. 3, gage height, 3.80 ft; minimum daily, 152 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	281	848	780	360	683	617	1210	1330	509	202	1150
2	154	276	707	680	350	646	673	1240	1040	485	194	749
3	152	292	624	640	360	620	740	984	834	384	195	663
4	156	342	537	600	640	583	829	959	659	321	201	724
5	187	361	587	580	780	574	1050	1140	581	661	196	738
6	416	346	661	540	540	606	2880	1020	523	1940	189	592
7	480	336	2060	520	380	562	3330	843	479	2260	207	434
8	389	319	2200	500	350	450	2320	740	436	2090	232	347
9	324	299	1460	470	340	450	1540	902	396	1020	250	292
10	294	295	1180	470	340	440	1290	1050	366	604	670	292
11	273	582	927	450	350	440	1180	916	336	489	684	375
12	278	838	870	440	390	440	1190	1560	312	722	1160	978
13	353	678	2860	430	520	440	1310	2510	291	858	833	847
14	567	495	6590	400	900	460	1470	1980	358	531	529	985
15	638	445	5900	380	2900	440	1780	1410	364	479	427	1580
16	439	529	3250	360	4000	430	2330	1010	320	463	388	1290
17	326	700	2110	350	3640	450	3550	829	284	459	723	819
18	297	624	1560	340	3020	500	3250	714	290	399	780	611
19	265	510	1080	330	2850	450	2430	652	558	373	572	508
20	221	468	680	330	2750	499	1970	617	569	332	530	453
21	194	1150	620	330	2490	798	1630	621	395	289	435	409
22	198	1780	680	330	1810	1440	1300	597	309	265	351	372
23	210	1420	937	380	1370	1400	1080	670	266	248	781	342
24	275	1140	974	580	1180	1100	1380	1310	296	230	1300	329
25	297	1080	791	900	1130	836	2010	1170	938	217	865	328
26	268	922	660	740	1060	758	1820	880	1010	207	574	394
27	259	733	640	520	882	691	1190	891	595	253	458	559
28	268	650	660	450	867	687	913	898	470	336	370	529
29	282	813	800	420	786	715	862	1600	409	300	311	473
30	302	1010	1000	390	---	654	873	2250	380	250	358	433
31	290	---	880	370	---	604	---	1960	---	220	802	---
TOTAL	9214	19714	45333	15000	37335	19846	48787	35133	15394	18194	15767	18595
MEAN	297	657	1462	484	1287	640	1626	1133	513	587	509	620
MAX	638	1780	6590	900	4000	1440	3550	2510	1330	2260	1300	1580
MIN	152	276	537	330	340	430	617	597	266	207	189	292

CAL YR 1983	TOTAL	262404	MEAN	719	MAX	6590	MIN	135
WTR YR 1984	TOTAL	298312	MEAN	815	MAX	6590	MIN	152

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 downstream from Chase Lake Outlet, 4.2 mi northeast of Glenfield, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--88.7 mi².

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 972.84 ft 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.--42 years, 193 ft³/s, 29.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,530 ft³/s Apr. 18, 1982, gage height, 9.73 ft; minimum observed, 18 ft³/s Sept. 17, 1948, Aug. 4, 5, 1949, gage height, 2.85 ft.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 22	0230	1,400	6.31	Feb. 16	0100	1,340	6.22
Dec. 14	1700	*3,830	*8.61	Apr. 6	2200	1,230	6.08

Minimum discharge, 36 ft³/s Aug. 5, 6, minimum gage height, 3.23 ft Oct. 3; minimum daily discharge, 36 ft³/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	90	322	150	86	210	192	291	362	83	39	126
2	48	85	266	150	88	190	209	289	249	86	39	97
3	46	93	222	140	90	180	234	225	189	73	39	107
4	49	127	195	140	94	160	271	227	163	63	39	152
5	75	137	201	130	98	150	375	346	140	119	37	131
6	206	131	196	130	100	140	968	306	125	217	36	104
7	309	124	623	120	100	130	991	230	114	173	43	86
8	259	114	775	120	100	130	579	190	104	131	48	74
9	191	106	523	120	98	130	389	244	95	100	62	65
10	147	100	350	110	96	120	323	267	86	80	352	61
11	116	329	264	110	94	120	280	219	78	71	422	69
12	103	613	255	100	110	120	291	276	70	99	385	125
13	106	378	1120	100	150	120	353	404	66	116	255	132
14	210	251	3090	96	200	120	380	313	64	88	171	303
15	295	199	2000	94	300	120	440	266	64	70	371	419
16	229	211	966	90	1240	110	644	242	62	77	365	242
17	170	284	627	88	892	110	1030	207	59	73	299	173
18	133	270	458	86	816	110	763	180	61	70	204	136
19	111	217	369	84	846	110	497	162	109	64	141	111
20	96	199	267	80	814	110	496	148	120	61	116	97
21	87	755	242	78	777	130	411	141	88	55	96	87
22	81	1130	240	76	510	200	310	130	70	51	83	78
23	86	554	230	76	381	517	253	149	60	48	112	71
24	132	347	220	76	344	348	297	375	64	45	182	72
25	152	345	210	78	320	277	386	320	125	43	159	74
26	133	329	200	92	280	239	336	219	131	41	118	106
27	130	265	190	98	250	213	261	216	97	43	97	212
28	131	225	180	96	240	205	216	202	85	49	81	166
29	126	294	170	92	230	213	205	408	74	50	71	126
30	115	388	170	90	---	206	197	750	70	47	72	104
31	101	---	160	88	---	196	---	589	---	42	116	---
TOTAL	4223	8690	15301	3178	9744	5434	12577	8531	3244	2428	4650	3906
MEAN	136	290	494	103	336	175	419	275	108	78.3	150	130
MAX	309	1130	3090	150	1240	517	1030	750	362	217	422	419
MIN	46	85	160	76	86	110	192	130	59	41	36	61
CFSM	1.53	3.27	5.57	1.16	3.79	1.97	4.72	3.10	1.22	.88	1.69	1.47
IN.	1.77	3.64	6.42	1.33	4.09	2.28	5.27	3.58	1.36	1.02	1.95	1.64

CAL YR 1983	TOTAL	77440	MEAN	212	MAX	3090	MIN	32	CFSM	2.39	IN.	32.48
WTR YR 1984	TOTAL	81906	MEAN	224	MAX	3090	MIN	36	CFSM	2.53	IN.	34.35

STREAMS TRIBUTARY TO LAKE ONTARIO

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04256460 CRANBERRY POND OUTLET NEAR BIG MOOSE, NY

LOCATION.--Lat 43°51'52", long 74°58'44", Herkimer County, Hydrologic Unit 04150101, on right bank at mouth of Cranberry Pond, 1.6 mi northwest of Woods Lake, and 4.5 mi northwest of Big Moose.

DRAINAGE AREA.--0.60 mi².

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 1,940 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period January to September, 11 ft³/s Feb. 15, gage height, 1.79 ft; minimum daily, 0.01 ft³/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				.66	.28	1.2	.73	1.5	2.7	.20	.02	.16
2				.62	.26	.91	.92	1.5	1.7	.14	.02	.16
3				.58	.26	.74	1.1	1.2	1.2	.10	.02	.25
4				.54	.45	.61	1.4	1.2	.92	.08	.02	.50
5				.52	.47	.53	2.9	1.8	.71	.23	.02	1.1
6				.49	.51	.57	6.1	1.8	.55	.36	.01	1.1
7				.48	.50	.52	5.3	1.4	.47	.38	.04	.84
8				.44	.42	.44	4.0	1.2	.38	.28	.06	.57
9				.42	.40	.38	2.7	1.4	.28	.19	.06	.41
10				.44	.37	.35	2.1	1.5	.19	.14	.22	.30
11				.43	.36	.33	1.8	1.3	.14	.17	.26	.35
12				.36	.48	.30	2.1	2.3	.09	.34	.27	.63
13				.31	.60	.30	2.9	3.0	.06	.29	.26	.59
14				.31	2.6	.37	3.5	2.4	.05	.20	.53	1.8
15				.33	9.0	.33	4.3	1.9	.06	.14	2.2	2.1
16				.30	6.5	.35	6.5	1.5	.04	.26	2.1	1.6
17				.29	5.1	.51	6.3	1.2	.04	.25	2.8	1.3
18				.27	5.2	.55	4.7	.94	.05	.22	1.9	.90
19				.27	5.3	.60	3.6	.79	.30	.21	1.2	.65
20				.27	5.4	.64	2.5	.68	.36	.15	.75	.53
21				.25	4.8	1.8	1.9	.59	.27	.12	.52	.42
22				.21	3.5	4.5	1.5	.52	.20	.09	.37	.34
23				.21	2.3	3.8	1.1	.93	.15	.06	.69	.27
24				.29	1.8	2.4	1.3	2.8	.20	.07	.75	.29
25				.45	1.8	1.6	1.8	2.3	.51	.04	.65	.26
26				.43	1.8	1.2	1.8	1.6	.45	.03	.51	.82
27				.40	1.6	.95	1.5	1.4	.38	.04	.37	1.3
28				.37	1.4	.80	1.1	1.2	.37	.06	.27	1.2
29				.33	1.5	1.0	1.1	2.9	.30	.05	.22	.91
30				.32	---	1.1	1.1	4.8	.24	.04	.17	.67
31				.32	---	.80	---	4.2	---	.03	.15	---
TOTAL				11.91	64.96	30.48	79.65	53.75	13.36	4.96	17.43	22.32
MEAN				.38	2.24	.98	2.65	1.73	.45	.16	.56	.74
MAX				.66	9.0	4.5	6.5	4.8	2.7	.38	2.8	2.1
MIN				.21	.26	.30	.73	.52	.04	.03	.01	.16
CFSM				.63	3.73	1.63	4.42	2.88	.75	.27	.93	1.23
IN.				0.74	4.03	1.89	4.94	3.33	0.83	0.31	1.08	1.38

STREAMS TRIBUTARY TO LAKE ONTARIO

04256485 WOODS LAKE OUTLET NEAR BIG MOOSE, NY

LOCATION.--Lat 43°51'57", long 74°57'20", Herkimer County, Hydrologic Unit 04150101, on right bank 45 ft downstream from dam on Woods Lake.

DRAINAGE AREA.--0.80 mi².

PERIOD OF RECORD.--October 1977 to December 1981; December 1983 to current year.

REVISED RECORDS.--WDR NY-81-1: 1980 (M).

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 1,980 ft, from topographic map.

REMARKS.--Records good except those during period of doubtful gage height record, Aug. 19 to Sept. 30, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft³/s Oct. 30, 1978, from rating curve extended above 15 ft³/s; minimum daily, 0.01 ft³/s several days in 1978 and 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December 1983 to September 1984, 22 ft³/s Dec. 14; minimum daily, 0.08 ft³/s Aug. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			3.1	1.2	.60	2.1	1.2	1.7	2.1	.40	.09	.22
2			2.8	1.1	.57	1.7	1.1	2.4	1.2	.32	.09	.21
3			2.4	1.0	.53	1.4	1.1	1.7	.95	.33	.09	.23
4			2.0	.92	.59	1.3	1.3	1.7	.80	.29	.09	.26
5			1.8	.89	.63	1.2	1.9	2.2	.53	.45	.08	.68
6			1.7	.86	.68	1.1	4.8	1.5	.41	.53	.08	.92
7			4.3	.85	.68	1.0	5.6	.99	.30	.53	.17	.97
8			4.7	.85	.65	.92	5.3	.64	.18	.46	.23	.83
9			4.5	.82	.64	.81	4.7	1.4	.17	.40	.24	.68
10			3.7	.80	.62	.72	4.3	1.5	.21	.35	.43	.60
11			3.2	.80	.63	.68	3.7	1.3	.22	.38	.44	.62
12			2.9	.75	.69	.65	3.6	1.2	.49	.49	.48	.70
13			7.3	.71	.71	.65	3.9	1.3	.46	.45	.47	.71
14			20	.68	.96	.73	4.4	2.0	.43	.39	.53	.91
15			12	.68	5.1	.68	4.9	2.4	.39	.37	.95	1.1
16			8.4	.66	7.1	.65	5.9	2.2	.31	.51	1.1	1.2
17			6.8	.62	6.8	.73	8.9	1.7	.25	.48	1.4	1.2
18			5.8	.62	6.7	.75	7.8	1.4	.29	.47	1.3	1.1
19			4.9	.62	6.8	.77	6.7	1.2	.63	.46	1.1	.97
20			3.5	.60	7.0	.79	6.0	1.1	.63	.40	1.0	.85
21			3.2	.56	6.9	.94	5.2	.98	.54	.36	.90	.75
22			2.7	.54	6.1	2.1	4.5	.79	.47	.31	.88	.68
23			2.7	.52	5.2	2.8	3.7	.60	.39	.18	.99	.62
24			2.6	.56	4.3	2.6	3.4	1.1	.42	.23	1.0	.62
25			2.1	.65	3.9	2.1	3.4	.80	.65	.17	.93	.62
26			1.6	.64	3.5	1.7	2.8	.71	.60	.12	.73	.88
27			1.4	.65	3.1	1.4	1.9	1.2	.57	.10	.48	1.1
28			1.3	.63	2.5	1.3	.81	1.8	.56	.13	.27	1.0
29			1.4	.62	2.5	1.3	.69	2.0	.50	.12	.13	.95
30			1.4	.63	---	1.4	.81	2.2	.44	.12	.13	.87
31			1.3	.62	---	1.2	---	3.1	---	.11	.19	---
TOTAL			127.5	22.65	86.68	38.17	114.31	46.81	16.09	10.41	16.99	23.05
MEAN			4.11	.73	2.99	1.23	3.81	1.51	.54	.34	.55	.77
MAX			20	1.2	7.1	2.8	8.9	3.1	2.1	.53	1.4	1.2
MIN			1.3	.52	.53	.65	.69	.60	.17	.10	.08	.21
CFSM			5.14	.91	3.74	1.54	4.76	1.89	.67	.42	.69	.96
IN.			5.93	1.05	4.03	1.77	5.32	2.18	0.75	0.48	0.79	1.07

NOTE.--Doubtful gage height record Aug. 19 to Sept. 30.

STREAMS TRIBUTARY TO LAKE ONTARIO

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04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam on Beaver River, 2.5 mi upstream from Moshier Creek, and 7.5 mi west of Beaver River Post Office.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, month end contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

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 between elevations 1,650.3 ft and 1,679.3 ft (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft. Capacity below elevation 1,650.3 ft, 90 mil ft³, 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.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft May 20, 1969, contents, 4,939 mil ft³; minimum observed since first filling, 1,644.80 ft Mar. 25-27, 1949, contents, 8 mil ft³.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,678.63 ft June 2, contents, 4,520 mil ft³; minimum observed, 1,664.23 ft Nov. 5-7, contents, 1,397 mil ft³.

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 (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1666.23	1664.57	1668.23	1676.00	1672.73	1674.32	1673.03	1678.29	1678.60	1677.68	1675.45	1674.16
2	1666.08	1664.38	1668.39	1675.94	1672.59	1674.29	1672.94	1678.34	1678.63	1677.62	1675.30	1674.09
3	1665.98	1664.33	1668.53	1675.87	1672.45	1674.23	1672.87	1678.38	1678.59	1677.55	1675.16	1674.11
4	1665.87	1664.26	1668.63	1675.79	1672.36	1674.17	1672.82	1678.33	1678.56	1677.48	1675.03	1674.04
5	1665.82	1664.23	1668.76	1675.71	1672.25	1674.11	1672.82	1678.27	1678.54	1677.49	1674.88	1673.93
6	1665.82	1664.23	1668.84	1675.64	1672.13	1674.07	1673.05	1678.30	1678.54	1677.50	1674.74	1673.80
7	1665.78	1664.23	1669.23	1675.55	1672.00	1673.97	1673.50	1678.32	1678.54	1677.46	1674.62	1673.68
8	1665.85	1664.24	1669.63	1675.45	1671.81	1673.89	1673.81	1678.29	1678.52	1677.41	1674.55	1673.56
9	1665.92	1664.24	1669.95	1675.35	1671.62	1673.80	1674.06	1678.30	1678.48	1677.33	1674.40	1673.41
10	1665.97	1664.24	1670.21	1675.28	1671.43	1673.70	1674.25	1678.30	1678.44	1677.28	1674.46	1673.27
11	1666.00	1664.49	1670.41	1675.18	1671.25	1673.59	1674.44	1678.30	1678.38	1677.21	1674.43	1673.23
12	1665.83	1664.80	1670.58	1675.07	1671.10	1673.49	1674.65	1678.34	1678.33	1677.32	1674.44	1673.11
13	1665.82	1665.04	1671.17	1674.94	1670.91	1673.38	1674.91	1678.42	1678.24	1677.29	1674.40	1673.04
14	1665.78	1665.14	1672.74	1674.83	1670.88	1673.28	1675.20	1678.47	1678.20	1677.23	1674.37	1673.10
15	1665.70	1665.22	1674.04	1674.72	1671.25	1673.18	1675.58	1678.48	1678.16	1677.17	1674.50	1673.12
16	1665.76	1665.27	1674.70	1674.62	1671.88	1673.06	1676.04	1678.46	1678.08	1677.18	1674.57	1673.12
17	1665.74	1665.28	1675.17	1674.48	1672.33	1672.96	1676.90	1678.44	1678.01	1677.12	1674.66	1673.07
18	1665.65	1665.33	1675.57	1674.37	1672.73	1672.85	1677.53	1678.38	1677.95	1677.06	1674.67	1673.03
19	1665.57	1665.34	1675.90	1674.26	1673.20	1672.78	1677.56	1678.30	1678.08	1676.98	1674.65	1672.96
20	1665.46	1665.33	1676.02	1674.14	1673.68	1672.68	1677.88	1678.26	1678.10	1676.93	1674.60	1672.88
21	1665.34	1665.58	1676.00	1674.02	1673.93	1672.62	1677.94	1678.19	1678.08	1676.85	1674.54	1672.80
22	1665.26	1666.25	1676.00	1673.88	1674.07	1672.71	1677.97	1678.13	1678.03	1676.79	1674.47	1672.71
23	1665.22	1666.61	1676.16	1673.75	1674.12	1672.82	1677.95	1678.04	1677.96	1676.68	1674.50	1672.63
24	1665.27	1666.82	1676.20	1673.63	1674.14	1672.83	1677.95	1678.16	1677.91	1676.60	1674.52	1672.57
25	1665.18	1667.07	1676.23	1673.55	1674.20	1672.94	1678.01	1678.16	1677.95	1676.46	1674.49	1672.49
26	1665.08	1667.28	1676.20	1673.44	1674.26	1673.05	1678.11	1678.11	1677.92	1676.30	1674.45	1672.47
27	1665.00	1667.47	1676.17	1673.33	1674.26	1673.16	1678.16	1678.10	1677.87	1676.16	1674.40	1672.51
28	1664.91	1667.60	1676.13	1673.21	1674.30	1673.25	1678.21	1678.08	1677.83	1676.04	1674.33	1672.45
29	1664.82	1667.78	1676.16	1673.09	1674.30	1673.23	1678.26	1678.16	1677.78	1675.90	1674.28	1672.40
30	1664.73	1667.97	1676.13	1672.96	---	1673.18	1678.27	1678.37	1677.73	1675.77	1674.22	1672.34
31	1664.62	---	1676.08	1672.84	---	1673.11	---	1678.54	---	1675.61	1674.21	---
MEAN	1665.55	1665.49	1673.04	1674.54	1672.70	1673.38	1675.82	1678.29	1678.20	1676.95	1674.59	1673.14
MAX	1666.23	1667.97	1676.23	1676.00	1674.30	1674.32	1678.27	1678.54	1677.68	1675.45	1674.55	1674.16
MIN	1664.62	1664.23	1668.23	1672.84	1670.88	1672.62	1672.82	1678.04	1677.73	1675.61	1674.21	1672.34
#	1452	2067	3816	3027	3387	3094	4421	4506	4260	3681	3356	2919
**	-105	+237	+653	-295	+144	-109	+512	+31.7	-94.9	-216	-121	-169
CAL YR 1983	MEAN	1672.76	MAX	1679.44	MIN	1664.23	**	+0.98				
WTR YR 1984	MEAN	1673.48	MAX	1678.63	MIN	1664.23	**	+37.5				

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

04257000 BEAVER RIVER BELOW STILLWATER DAM, NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'56", long 75°03'08", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam, 2.5 mi upstream from Moshier Creek, and 7.5 mi west of Beaver River Post Office.

DRAINAGE AREA.--171 mi².

PERIOD OF RECORD.--May 1908 to current year. Published as "at State dam, near Beaver River" prior to June 1924.

REVISED RECORDS.--WDR NY-73-1: 1971. WDR NY-82-1: Drainage area.

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 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.--76 years, 382 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,700 ft³/s May 3, 1926; minimum, practically no flow at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,020 ft³/s May 4, minimum daily, 48 ft³/s Oct. 8-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	399	394	235	602	610	605	596	621	642	413	606	395
2	399	392	236	600	609	604	591	622	643	412	604	395
3	396	392	237	599	607	604	590	839	642	412	602	395
4	395	391	237	599	607	603	590	1020	504	410	601	472
5	395	271	238	598	606	603	590	753	431	409	600	591
6	395	217	238	598	655	603	591	621	431	410	598	590
7	164	217	239	598	751	552	54	621	431	410	597	588
8	48	217	116	596	748	600	54	621	430	408	597	587
9	48	217	51	595	745	600	55	621	429	407	596	585
10	48	217	51	595	743	599	55	621	428	407	595	584
11	290	218	51	594	740	598	55	621	426	406	595	583
12	409	219	51	594	732	596	55	622	425	407	595	477
13	408	221	52	592	529	595	55	622	424	407	595	347
14	408	222	53	591	149	595	55	622	423	406	595	347
15	681	351	54	590	52	594	55	622	422	406	397	347
16	157	416	55	589	52	593	56	622	421	406	398	347
17	341	416	55	587	53	591	56	622	420	406	398	347
18	405	417	55	586	53	590	540	622	418	406	398	347
19	405	418	249	585	54	590	1000	621	420	405	398	345
20	404	418	814	583	515	589	1010	621	421	404	398	344
21	371	291	814	583	758	588	1010	621	421	404	398	344
22	209	226	814	581	721	589	1010	620	420	405	397	344
23	208	228	673	580	762	590	1010	620	418	449	397	344
24	337	229	603	579	717	232	1010	620	417	586	398	344
25	401	230	569	605	603	53	753	620	417	616	397	343
26	401	231	603	618	604	54	620	620	417	615	396	342
27	401	232	603	617	604	54	620	628	416	613	396	343
28	398	233	602	616	604	285	620	629	416	612	396	342
29	397	234	602	614	605	594	621	630	415	611	396	342
30	396	234	602	612	---	593	621	634	414	610	395	342
31	395	---	602	611	---	593	---	639	---	608	395	---
TOTAL	10509	8609	10454	18487	15588	16129	14598	20058	13402	14286	15124	12443
MEAN	339	287	337	596	538	520	487	647	447	461	488	415
MAX	681	418	814	618	762	605	1010	1020	643	616	606	591
MIN	48	217	51	579	52	53	54	620	414	404	395	342
CAL YR 1983	TOTAL	162028	MEAN	444	MAX	1610	MIN	48				
WTR YR 1984	TOTAL	169687	MEAN	464	MAX	1020	MIN	48				

STREAMS TRIBUTARY TO LAKE ONTARIO

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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 upstream from Black Creek, and 0.5 mi west of Croghan.

DRAINAGE AREA.--291 mi².

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 806.20 ft 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.--54 years, 598 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft³/s May 21, 1969, gage height, 6.98 ft; minimum, 11 ft³/s Jan. 22, 29, Feb. 4, 1967, gage height, 0.63 ft; minimum daily, 22 ft³/s July 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,130 ft³/s Dec. 14, gage height, 5.60 ft; minimum, 96 ft³/s Oct. 12, gage height, 1.42 ft; minimum daily, 217 ft³/s Oct. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	497	543	945	702	886	799	1030	994	479	582	439
2	300	593	430	831	635	760	792	995	981	401	792	333
3	404	554	383	753	636	742	570	981	972	442	750	338
4	285	461	377	703	593	666	608	1040	969	501	420	329
5	316	439	362	746	821	649	639	1070	917	496	420	485
6	318	425	397	605	832	802	916	1010	746	548	620	761
7	386	409	585	640	910	822	946	967	756	581	780	661
8	382	433	716	767	955	845	875	988	836	533	786	529
9	365	440	873	636	947	858	857	1000	694	295	774	525
10	364	542	749	672	783	862	835	989	692	383	735	539
11	272	514	601	753	802	884	514	958	555	439	582	640
12	217	608	559	920	613	889	470	1030	392	392	559	633
13	487	488	1130	842	654	616	398	1030	268	477	510	813
14	479	460	2420	828	1040	558	378	1000	462	499	658	668
15	464	419	2660	781	1680	746	436	966	375	429	882	684
16	417	511	1570	872	1680	642	667	896	354	492	915	798
17	429	773	1090	750	1390	646	1060	804	397	552	786	598
18	428	620	983	732	1260	608	1060	753	399	572	460	697
19	408	493	581	610	1140	579	1070	616	612	626	293	861
20	370	582	730	609	1140	598	1080	741	745	611	354	745
21	353	892	943	723	1040	959	1030	819	472	581	469	550
22	340	1210	948	762	999	1220	999	840	378	593	631	467
23	347	1010	947	708	935	1100	995	876	281	573	649	440
24	369	810	760	642	869	1020	1050	801	346	397	525	460
25	469	692	739	778	893	1000	1080	668	535	443	685	463
26	389	505	828	650	936	976	1140	773	494	466	465	473
27	428	538	879	607	979	969	1060	943	652	609	580	475
28	437	499	1020	543	953	763	1000	994	448	685	581	517
29	438	482	1030	479	860	430	994	1150	564	660	605	497
30	428	478	964	562	---	428	1000	1110	418	646	671	554
31	433	---	989	590	---	783	---	1040	---	570	550	---
TOTAL	11867	17377	27786	22039	27677	24306	25318	28878	17704	15971	19069	16972
MEAN	383	579	896	711	954	784	844	932	590	515	615	566
MAX	487	1210	2660	945	1680	1220	1140	1150	994	685	915	861
MIN	217	409	362	479	593	428	378	616	268	295	293	329
CAL YR 1983	TOTAL	238759		MEAN	654	MAX	2660	MIN	217			
WTR YR 1984	TOTAL	254964		MEAN	697	MAX	2660	MIN	217			

STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY
(National stream-quality accounting 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 upstream from Philomel Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,874 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WDR NY-77-1: 1974. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft 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 higher.

REMARKS.--Records good except those for January, 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).

AVERAGE DISCHARGE.--64 years, 4,029 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s Mar. 16, 1977, gage height, 12.98 ft; minimum, 10 ft³/s Sept. 2, 1934, gage height, 0.81 ft present datum; minimum daily discharge, 137 ft³/s Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 39,700 ft³/s Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	0830	*33,600	*11.78	Feb. 19	0015	23,400	10.05

Minimum discharge, 161 ft³/s Oct. 22, gage height, 1.40 ft; minimum daily discharge, 1,150 ft³/s Oct. 3, Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	1770	5460	5400	2720	4160	4410	6650	8360	1700	1330	2500
2	1190	1800	5300	5110	2740	4450	4530	6550	8180	1850	1430	3040
3	1150	1860	4740	4760	2230	4670	4840	6460	7400	1860	1410	2550
4	1170	1920	3960	4490	2320	4590	5150	6450	6310	1720	1520	2390
5	1160	2060	3510	4160	2600	4200	6010	7210	5240	2000	1250	2730
6	1400	2010	3710	3930	3470	3930	9520	7160	4120	2810	1170	2930
7	2750	2000	5690	3760	3780	3930	11000	6720	3360	4890	1360	2630
8	2790	2040	7080	3690	3680	3820	12700	6060	3020	5420	1490	2210
9	2460	1890	8380	3790	3210	3390	13000	5520	2820	5780	1580	1800
10	2120	1910	8820	3460	3230	3310	11500	5390	2500	5340	1720	1600
11	1950	2340	8010	3200	2750	3180	9680	5500	2410	4030	2550	1750
12	1570	4430	6770	3500	2890	2900	8430	5650	1920	3060	3080	1910
13	1640	5130	8120	3200	3320	2920	7870	6540	1700	3510	3250	3210
14	2090	4670	13100	2700	6220	2610	7520	7010	1360	3580	3230	4120
15	3130	3920	24700	2900	13500	2660	8100	7440	1510	2800	2840	5400
16	3370	3380	32400	3000	15500	2710	9310	7350	1690	2410	2720	6190
17	2880	4330	25800	2800	18300	2910	11600	6550	1500	2110	3260	6470
18	2350	4700	18500	2700	21500	3230	13500	5570	1480	2070	3340	6000
19	2050	4280	13100	2500	21900	3360	15400	4700	1640	2050	3130	4930
20	1880	3600	9150	2400	19500	3200	14700	3960	2270	1930	2340	4050
21	1750	5340	6270	2300	17500	3770	13000	3690	2620	1840	2170	2700
22	1490	7780	5500	2200	15200	7920	11600	3660	2120	1710	2020	2420
23	1480	8240	5340	2200	13000	9540	10200	3610	1690	1550	2040	2100
24	1520	8360	5210	2320	11200	9750	9150	4600	1490	1530	2460	1930
25	1880	7600	5540	2400	9860	8910	9120	5470	2060	1400	3510	1840
26	1990	6700	5760	2850	8590	7660	9230	5660	3340	1210	3370	1840
27	1920	6010	5820	3150	7740	6470	9230	5410	3330	1150	2550	2030
28	1950	5340	5580	3570	6850	5580	8730	4940	2790	1360	2250	2390
29	1820	4980	5430	3260	5390	4900	7790	5730	2270	1560	1990	2650
30	1910	5370	5370	2600	---	4360	7040	7510	2020	1650	1650	2300
31	1850	---	5470	2630	---	4280	---	7910	---	1550	2000	---
TOTAL	60140	125760	277590	100930	250690	143270	283860	182630	92520	77430	70010	90610
MEAN	1940	4192	8955	3256	8644	4622	9462	5891	3084	2498	2258	3020
MAX	3370	8360	32400	5400	21900	9750	15400	7910	8360	5780	3510	6470
MIN	1150	1770	3510	2200	2230	2610	4410	3610	1360	1150	1170	1600
CAL YR 1983	TOTAL	1522604	MEAN	4172	MAX	32400	MIN	877				
WTR YR 1984	TOTAL	1755440	MEAN	4796	MAX	32400	MIN	1150				

STREAMS TRIBUTARY TO LAKE ONTARIO

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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), 1966-81 (d), 1982-84 (c).

MINOR ELEMENTS DATA: 1970-71 (a), 1974-79 (b), 1980 (c), 1981-84 (b).

PESTICIDE DATA: 1975-79 (b), 1980-82 (a).

ORGANIC DATA: OC--1973 (c), 1974 (a), 1975 (c), 1976-77 (b), 1978-81 (d).

PCB--1978-79 (b), 1980-82 (a).

NUTRIENT DATA: 1968 (b), 1969-81 (d), 1982-84 (c).

BIOLOGICAL DATA:

Bacteria--1973-81 (d), 1982-84 (c).

Phytoplankton--1975-77 (d), 1978-79 (c), 1980 (b), 1981 (c).

Periphyton--1975-80 (b).

SEDIMENT DATA: 1975-76 (d), 1977 (c), 1978-81 (d), 1982-84 (c).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1955 to September 1959, July 1962 to March 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
DATE	TIME									
OCT 04...	0845	758	89	7.5	17.5	1.8	750	9.6	102	180
JAN 17...	0900	2290	100	7.8	.5	1.8	760	13.8	96	250
APR 04...	0800	5110	104	7.5	6.0	3.5	760	12.3	99	100
MAY 23...	0800	3570	78	7.5	15.0	2.1	745	10.5	107	520
JUL 26...	0915	1340	86	7.9	22.5	1.5	755	7.6	89	350
AUG 21...	0945	1760	72	7.3	21.0	1.3	760	8.9	100	160
	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DATE										
OCT 04...	150	35	7	12	1.3	5.1	.70	28	18	2.6
JAN 17...	55	40	5	14	1.3	8.5	.70	35	15	3.9
APR 04...	44	46	9	16	1.4	3.4	.80	37	10	4.9
MAY 23...	740	35	8	12	1.1	3.3	.60	27	10	2.6
JUL 26...	130	32	6	11	1.2	4.4	.60	26	16	2.8
AUG 21...	K37	29	6	9.9	1.1	2.7	.60	23	7.3	1.9
	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DATE										
OCT 04...	.10	5.5	70	63	.19	.040	.30	.020	.010	<.010
JAN 17...	.10	6.9	70	71	.50	.030	.20	.040	.030	.020
APR 04...	.20	5.5	81	65	.52	.050	.30	.020	<.010	<.010
MAY 23...	.10	4.7	70	51	.29	.220	.90	.030	.030	<.010
JUL 26...	.10	5.5	69	57	.32	.020	.40	.010	<.010	.020
AUG 21...	.10	5.9	60	44	.20	.020	.80	.030	<.010	<.010

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

STREAMS TRIBUTARY TO LAKE ONTARIO

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 04...	40	1	25	<.5	<1	<1	<3	4	260	3
APR 04...	100	1	18	<.5	<1	<1	<3	3	110	1
MAY 23...	70	1	18	<.5	<1	<1	<3	<1	210	<1
AUG 21...	70	1	16	<.5	<1	<1	<3	2	290	2

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 04...	<4	19	<.1	<10	1	<1	<1	33	<6	15
APR 04...	4	25	<.1	<10	1	<1	<1	40	<6	14
MAY 23...	8	33	<.1	<10	1	<1	<1	34	<6	13
AUG 21...	5	15	.1	<10	2	<1	1	29	<6	7

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 04...	0845	758	3	6.1	--	MAY 23...	0800	3570	5	48	--
JAN 17...	0900	2290	4	25	--	JUL 26...	0915	1340	5	18	--
APR 04...	0800	5110	2	28	--	AUG 21...	0945	1760	19	90	68

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04253300 SIXTH LAKE.--Lat 43°44'43", long 74°46'58", Hamilton County, Hydrologic Unit 04150101, on dam at outlet of Sixth Lake at Inlet, and 11.2 mi upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi². PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. 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 ft higher elevation. Storage began around 1881. The present structure is a concrete dam with control gates which were installed in 1938. Usable capacity 296.6 mil ft³ between minimum operating level, elevation 1,775.1 ft and crest of spillway, elevation 1,786.0 ft; no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 332 mil ft³ Oct. 3, 1945, elevation, 1,787.1 ft; minimum observed, less than 900,000 ft³ Nov. 18, 1943, water level below elevation 1,775.6 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 295.0 mil ft³ May 31, elevation, 1,785.95 ft; minimum observed, 170.0 mil ft³ Nov. 10, elevation, 1,781.95 ft.

04253400 FIRST LAKE (formerly published as "Old Forge Reservoir").--Lat 43°42'44", long 74°58'12", Herkimer County, Hydrologic Unit 04150101, at dam on Middle Branch Moose River, and 100 ft downstream from bridge on State Highway 28 at Old Forge, 11.2 mi downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 52.1 mi². PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Hudson River-Black River Regulating District).

The First through Fifth Lakes of Fulton Chain Lakes are partially formed and controlled by a concrete dam with 12-inch flashboards. Storage began around 1881 or 1882 with a wooden crib dam. This dam was replaced with a concrete dam in 1905 and gates were installed in 1927. Usable capacity with flashboards, 895.6 mil ft³, elevation, 1,707.0 ft. Usable capacity without flashboards, 764.3 mil ft³, elevation, 1,706.1 ft; 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 June 17, 1972, elevation, 1,707.9 ft; minimum observed, 6,500,000 ft³ Nov. 3, 1939, elevation, 1,699.8 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 940.8 mil ft³ June 1, elevation, 1,707.22 ft; minimum observed, 396.8 mil ft³ Nov. 1, elevation, 1,703.04 ft.

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

	*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)
04253300 Sixth Lake				04253400 First Lake		
Sept. 30.....	1,783.77	226.1		1,705.66	731.8	
Oct. 31.....	1,782.50	186.7	-14.7	1,703.35	435.5	-111
Nov. 30.....	1,782.32	181.1	- 2.16	1,704.65	600.5	+ 63.7
Dec. 31.....	1,784.58	251.4	+26.2	1,704.70	607.0	+ 2.43
CAL YR 1983			+ 2.11			- 0.12
Jan. 31.....	1,782.63	190.7	-22.7	1,704.62	596.6	- 3.88
Feb. 29.....	1,785.00	264.8	+29.6	1,704.68	604.4	+ 3.11
Mar. 31.....	1,783.50	217.7	-17.6	1,704.61	595.3	- 3.40
Apr. 30.....	1,784.65	253.6	+13.8	1,705.37	694.1	+ 38.1
May 31.....	1,785.85	291.8	+14.3	1,707.21	939.4	+ 91.6
June 30.....	1,785.07	267.0	- 9.57	1,706.86	891.4	- 18.5
July 31.....	1,785.37	276.4	+ 3.51	1,706.95	903.5	+ 4.52
Aug. 31.....	1,785.50	280.6	+ 1.57	1,707.00	910.0	+ 2.43
Sept. 30.....	1,785.50	280.6	0.0	1,706.36	823.8	- 33.3
WTR YR 1984			+ 1.72			+ 2.91

* Elevation at 2400 hours, by interpolation.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", St. Lawrence County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi northeast of Geers Corners, 1.5 mi downstream from Big Creek, and 4.0 mi downstream from Harrisville.

DRAINAGE AREA.--244 mi².

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 784: 1934. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.51 ft 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.--68 years, 516 ft³/s, 28.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,080 ft³/s Mar. 15, 1977, gage height, 9.31 ft; maximum gage height, 9.6 ft Jan. 9, 1930; minimum discharge, 25 ft³/s Sept. 1, 1934, gage height, 0.86 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	1000	*5,950	*8.65	Feb. 16	0400	5,460	8.25

Minimum discharge, 80 ft³/s Aug. 1, 2, gage height, 1.49 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	190	826	560	240	540	543	696	1100	224	82	409
2	86	170	749	540	230	520	590	770	894	214	84	353
3	95	170	672	500	230	490	662	720	697	189	84	321
4	86	220	572	460	240	450	741	694	564	157	85	336
5	87	300	567	440	260	430	867	924	465	189	87	310
6	151	360	578	410	270	400	1280	1060	384	355	92	271
7	307	390	955	390	270	370	1970	950	326	338	92	237
8	291	380	1610	360	270	350	1960	780	293	283	95	192
9	251	360	2200	350	260	320	1560	817	258	243	110	159
10	218	350	1690	340	260	300	1220	950	226	202	141	141
11	186	380	1230	320	269	290	988	880	204	173	136	151
12	161	640	1030	300	326	280	851	825	170	179	242	317
13	159	820	1410	280	424	280	825	961	155	225	273	424
14	221	720	3780	270	742	280	866	1010	148	213	231	415
15	356	540	5710	260	3370	280	983	918	160	186	259	572
16	317	580	4570	250	4940	270	1290	788	170	196	484	576
17	277	620	3170	250	3690	280	2010	680	157	262	448	508
18	243	690	2050	240	2960	300	2420	600	157	233	369	442
19	208	610	1390	230	2670	330	1940	524	262	215	308	354
20	187	520	1280	230	2480	420	1460	461	412	234	247	283
21	163	600	1200	230	2390	478	1180	420	364	195	190	236
22	145	1200	1100	220	1970	833	990	387	298	161	151	197
23	137	1700	1100	220	1550	1300	836	416	241	137	160	169
24	146	1400	1000	220	1280	1380	744	836	203	126	263	152
25	160	1200	920	310	1130	1260	777	1180	316	115	348	146
26	168	920	860	320	900	1000	816	1040	519	102	297	155
27	179	820	800	320	740	793	767	784	476	99	236	290
28	204	660	740	300	650	678	669	647	371	101	191	351
29	220	632	700	280	600	628	612	721	309	100	180	305
30	214	766	640	260	---	588	595	1030	258	95	242	263
31	200	---	600	250	---	544	---	1220	---	89	346	---
TOTAL	5915	18908	45699	9910	35611	16662	33012	24689	10557	5830	6553	9035
MEAN	191	630	1474	320	1228	537	1100	796	352	188	211	301
MAX	356	1700	5710	560	4940	1380	2420	1220	1100	355	484	576
MIN	86	170	567	220	230	270	543	387	148	89	82	141
CFSM	.78	2.58	6.04	1.31	5.03	2.20	4.51	3.26	1.44	.77	.86	1.23
IN.	0.90	2.88	6.97	1.51	5.43	2.54	5.03	3.76	1.61	0.89	1.00	1.38

CAL YR 1983	TOTAL	195196	MEAN	535	MAX	5710	MIN	57	CFSM	2.19	IN.	29.76
WTR YR 1984	TOTAL	222381	MEAN	608	MAX	5710	MIN	82	CFSM	2.49	IN.	33.90

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 downstream from Beaver Creek, and 2.5 mi upstream from Heuvelton. Water-quality sampling site at discharge station.

DRAINAGE AREA.--965 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records excellent except those for winter periods, which are fair. 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 above station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows.

AVERAGE DISCHARGE.--68 years, 1,730 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s Apr. 6, 1960, gage height, 10.36 ft; minimum recorded, 130 ft³/s Aug. 17, 1949, gage height, 0.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 13,500 ft³/s Feb. 17, gage height, 8.80 ft (ice jam); minimum discharge, 204 ft³/s Jul. 31, Aug. 1, gage height, 0.76 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	508	609	2790	2300	1000	1900	3270	2260	3570	935	222	670
2	449	622	2800	2100	960	1800	3390	2280	3210	735	569	865
3	349	785	2760	1900	940	1700	3510	2370	2960	694	517	760
4	272	793	2470	1800	1000	1700	3560	2270	2380	737	381	578
5	254	969	2210	1800	1100	1600	4010	2870	2010	547	232	539
6	325	1090	2250	1700	1200	1500	4640	3300	1790	455	240	733
7	448	969	3540	1600	1200	1400	5230	3190	1580	547	260	741
8	526	949	3500	1500	1200	1400	5430	2960	1560	995	270	623
9	653	1080	4000	1400	1200	1300	5140	3130	1450	874	330	515
10	640	1060	4390	1300	1200	1200	4500	3120	1360	637	328	378
11	588	1020	4300	1300	1200	1200	3610	3090	1090	606	433	419
12	512	1800	4000	1200	1400	1100	3040	3050	1110	576	388	445
13	487	2380	4800	1200	1700	1000	2690	2730	1160	552	446	671
14	498	2300	5800	1100	2200	1000	2560	2610	1180	607	649	1010
15	578	1970	8000	1100	3000	1000	2690	2490	906	649	799	1030
16	670	2120	9400	1000	7000	1100	3790	2510	681	557	737	1290
17	760	2910	11000	1000	12000	1100	5320	2430	412	566	855	1040
18	703	2970	8600	960	11000	1200	6410	2170	330	715	935	888
19	627	2690	5800	940	10000	1210	6600	1960	461	799	786	895
20	588	2300	5200	920	9400	1270	6140	1930	753	731	601	892
21	545	2670	4700	900	9000	1430	5160	1590	976	714	515	814
22	474	3910	4500	900	7400	1740	4150	1490	1040	531	488	719
23	523	4590	4200	900	6200	3000	3530	1640	877	479	484	673
24	444	4600	3900	900	4900	3940	3080	2150	871	547	434	546
25	498	4120	3700	980	4000	3820	3060	3210	618	465	580	412
26	590	3470	3400	1100	3500	3440	3050	3400	711	576	796	561
27	756	2940	3200	1200	2800	3320	2860	2850	1100	543	649	658
28	731	2490	3000	1300	2500	3110	2650	2360	1180	407	521	633
29	865	2550	2800	1200	1960	3000	2450	2440	1080	494	576	890
30	952	2660	2600	1100	---	2880	2300	3360	890	388	661	848
31	794	---	2400	1100	---	2970	---	3850	---	226	617	---
TOTAL	17607	65386	136010	39700	112160	59330	117820	81060	39296	18884	16299	21736
MEAN	568	2180	4387	1281	3868	1914	3927	2615	1310	609	526	725
MAX	952	4600	11000	2300	12000	3940	6600	3850	3570	995	935	1290
MIN	254	609	2210	900	940	1000	2300	1490	330	226	222	378
CAL YR 1983	TOTAL	670819	MEAN	1838	MAX	11000	MIN	162				
WTR YR 1984	TOTAL	725288	MEAN	1982	MAX	12000	MIN	222				

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), 1979-80 (d), 1981-82 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c), 1981-84 (b).

ORGANIC DATA: OC--1978 (c), 1979-80 (d), 1981 (c).

NUTRIENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1978 (c), 1979-80 (d), 1981-82 (c), 1983-84 (b).

Phytoplankton--1978-80 (c), 1981 (b).

Periphyton--1978-80 (b).

SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981-84 (c).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1978 to September 1981.

WATER TEMPERATURES: January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 155 micromhos Jan. 31, 1981; minimum daily, 22 micromhos sometime in February 1980.

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.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
OCT 13...	1100	484	131	7.2	14.5	1.2	760	10.6	104	K20	
MAR 20...	0930	1250	122	7.0	1.0	1.5	750	13.0	93	87	
JUN 05...	1030	2020	87	6.9	16.0	2.4	755	8.8	90	64	
AUG 14...	0945	637	98	7.2	26.5	.30	760	8.0	100	46	
DATE	TIME	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 13...	92	55	15	16	3.6	5.2	1.1	40	20	5.0	
MAR 20...	57	49	16	14	3.5	3.4	.80	34	16	4.0	
JUN 05...	K10	34	8	9.8	2.3	2.1	.50	26	11	2.5	
AUG 14...	21	41	11	12	2.6	4.0	.60	30	14	3.7	
DATE	TIME	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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	
OCT 13...	.20	5.0	84	81	.31	.020	.50	.020	.010	<.010	
MAR 20...	.10	7.2	85	70	.33	.020	.40	<.010	<.010	<.010	
JUN 05...	.10	3.8	62	48	.13	.090	.60	.020	.010	<.010	
AUG 14...	.20	3.7	64	59	<.10	<.010	.20	<.010	<.010	<.010	

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 1983 TO SEPTEMBER 1984

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 13...	20	1	39	<.5	1	5	<3	3	310	4
MAR 20...	40	<1	30	.6	<1	<1	<3	2	280	5
JUN 05...	120	1	23	<.5	<1	<1	<3	4	210	5
AUG 14...	30	<1	28	<.5	<1	<1	<3	2	190	3

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 13...	<4	23	<.1	<10	1	<1	<1	76	<6	9
MAR 20...	5	42	.1	<10	1	<1	<1	62	<6	21
JUN 05...	<4	25	<.1	<10	3	<1	<1	43	<6	17
AUG 14...	<4	22	.2	<10	1	<1	<1	56	<6	10

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAM- PLING DEPTH (FEET)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN									
05...	1050	87	1.0	5.8	89	6.9	16.0	8.7	89
05...	1051	87	4.8	5.8	89	6.9	16.0	8.6	88
05...	1055	128	1.0	7.3	88	6.9	16.0	8.7	89
05...	1056	128	6.3	7.3	88	6.9	16.0	8.7	89
05...	1057	169	1.0	6.6	87	6.9	16.0	8.8	90
05...	1058	169	5.6	6.6	87	6.9	16.0	8.7	89
05...	1100	209	1.0	5.1	86	6.9	16.0	8.8	90
05...	1101	209	4.1	5.1	86	6.9	16.0	8.8	90
05...	1102	251	1.0	2.5	86	7.0	16.0	8.9	91
05...	1103	251	1.5	2.5	86	7.0	16.0	8.9	91

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 13...	1100	484	4	5.2	--	JUN 05...	1030	2020	4	22	--
MAR 20...	0930	1250	1	3.4	--	AUG 14...	0945	637	1	1.7	--

ST. LAWRENCE RIVER MAIN STEM

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 west of Waddington, 2.5 mi upstream from Sucker Brook, and 3.3 mi downstream from Iroquois Dam.

DRAINAGE AREA.--298,500 mi².

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 Apr. 6, 1976; minimum daily, 236.30 ft Feb. 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 243.53 ft May 1; minimum recorded, 237.87 ft Feb. 3.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	239.48	240.08	239.70	238.10	240.71	---	243.24	242.43	241.97	241.46	240.40
2	---	239.46	239.93	240.06	238.01	240.30	---	242.89	242.28	242.05	241.31	240.23
3	---	239.64	239.73	240.70	237.96	240.10	241.38	242.38	242.40	242.06	241.26	239.81
4	---	239.77	239.15	241.00	238.08	240.00	241.23	241.80	242.55	242.06	241.15	239.88
5	---	238.88	239.18	240.86	238.12	239.96	241.03	241.96	242.53	242.00	241.05	240.02
6	---	238.97	239.32	240.83	238.31	---	241.53	242.25	242.45	241.94	241.04	239.99
7	---	239.39	239.94	240.68	238.48	---	241.85	242.18	242.52	242.13	241.03	---
8	---	239.53	240.10	240.93	238.64	---	242.11	242.18	242.48	242.19	240.85	---
9	---	239.74	240.05	241.03	238.66	240.11	242.01	242.65	242.57	242.10	240.79	---
10	---	239.50	239.73	240.62	238.40	240.20	242.02	242.82	242.52	241.98	240.84	---
11	---	239.28	238.83	240.34	238.25	240.53	242.09	242.58	242.53	241.92	240.68	---
12	---	239.42	238.71	239.93	238.17	240.23	242.06	---	242.50	242.09	240.53	---
13	---	239.58	239.18	239.46	238.05	239.77	241.49	---	242.43	---	240.58	---
14	240.68	239.51	239.11	239.26	238.25	239.61	241.31	---	242.38	---	240.61	---
15	241.11	239.36	239.76	239.12	238.73	239.53	241.22	---	242.22	---	240.83	---
16	240.32	239.02	240.05	239.02	238.98	239.47	241.30	---	242.25	---	240.93	---
17	240.18	239.52	240.13	238.86	239.27	239.55	242.13	---	242.23	---	240.66	---
18	240.24	239.84	239.87	238.76	239.75	---	242.41	---	242.27	---	240.51	---
19	239.96	239.60	239.78	238.80	240.05	---	242.76	---	242.41	---	240.41	---
20	239.60	239.19	239.53	238.80	240.73	---	243.14	---	242.20	---	240.29	---
21	239.35	239.59	239.90	238.45	240.80	---	243.11	---	242.18	---	240.39	---
22	239.53	239.74	240.68	238.29	240.80	---	242.83	---	242.10	---	240.43	---
23	239.45	239.48	242.48	238.08	240.88	---	242.54	---	241.98	---	240.45	---
24	239.13	239.40	242.82	238.06	240.88	---	242.37	---	242.01	---	240.35	---
25	239.17	239.65	242.52	238.31	241.01	---	242.38	---	242.35	---	240.28	---
26	239.55	239.90	242.58	238.37	241.33	---	242.43	242.64	242.28	---	240.37	240.14
27	239.65	239.55	241.89	238.31	241.25	---	242.28	242.60	242.19	---	240.43	239.96
28	240.09	239.03	240.80	238.27	240.35	---	242.23	242.30	242.41	---	240.37	239.95
29	240.04	239.12	240.70	238.18	240.35	---	242.45	241.58	242.27	---	240.35	240.33
30	239.68	239.86	240.55	238.23	---	---	242.53	242.06	242.05	---	240.36	240.44
31	239.63	---	240.40	238.10	---	---	---	242.43	---	241.47	240.40	---
MEAN	---	239.47	240.24	239.34	239.33	---	---	---	242.33	---	240.68	---
MAX	---	239.90	242.82	241.03	241.33	---	---	---	242.57	---	241.46	---
MIN	---	238.88	238.71	238.06	237.96	---	---	---	241.98	---	240.28	---

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270000	274000	276000	249000	260000	270000	286000	299000	309000	308000	300000	303000
2	270000	273000	276000	220000	260000	270000	286000	304000	310000	308000	300000	303000
3	270000	270000	273000	222000	260000	280000	287000	305000	310000	308000	300000	303000
4	270000	260000	273000	228000	260000	280000	286000	305000	310000	308000	306000	303000
5	270000	271000	273000	232000	260000	280000	286000	305000	310000	308000	306000	303000
6	270000	272000	273000	236000	260000	280000	286000	306000	310000	308000	306000	303000
7	271000	271000	272000	233000	260000	280000	283000	305000	310000	307000	306000	303000
8	273000	271000	274000	220000	260000	280000	271000	306000	310000	306000	306000	299000
9	273000	260000	273000	220000	260000	280000	271000	306000	310000	305000	306000	299000
10	273000	263000	282000	220000	260000	280000	271000	306000	310000	307000	306000	299000
11	273000	264000	282000	220000	265000	280000	271000	306000	310000	304000	304000	299000
12	273000	265000	274000	220000	265000	280000	278000	307000	310000	306000	304000	299000
13	273000	266000	282000	220000	265000	280000	291000	307000	310000	306000	304000	299000
14	273000	266000	268000	230000	265000	281000	298000	307000	310000	303000	304000	299000
15	272000	266000	282000	230000	265000	281000	298000	307000	310000	303000	304000	299000
16	272000	265000	282000	233000	265000	281000	290000	307000	310000	303000	304000	279000
17	272000	266000	288000	240000	265000	281000	278000	307000	310000	303000	305000	303000
18	272000	266000	288000	240000	265000	281000	270000	307000	310000	303000	307000	303000
19	272000	268000	288000	242000	265000	281000	258000	309000	310000	303000	307000	303000
20	272000	268000	288000	247000	265000	281000	258000	309000	310000	303000	307000	303000
21	272000	271000	255000	250000	265000	281000	262000	309000	310000	305000	307000	303000
22	267000	274000	244000	250000	265000	280000	272000	309000	311000	307000	307000	297000
23	277000	275000	220000	250000	265000	280000	283000	309000	308000	305000	307000	297000
24	274000	275000	200000	250000	265000	280000	288000	309000	308000	312000	307000	297000
25	273000	275000	211000	250000	270000	280000	288000	309000	308000	312000	304000	297000
26	273000	276000	237000	250000	270000	280000	290000	309000	308000	312000	304000	297000
27	273000	276000	253000	255000	270000	280000	293000	309000	308000	311000	304000	297000
28	274000	276000	253000	255000	270000	280000	293000	309000	308000	300000	304000	297000
29	2740											

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1966 to current year. Prior to October 1970, published as "near Massena, NY."

CHEMICAL DATA: 1955 (a), 1974 (c), 1975-81 (d), 1982-84 (c).

MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a), 1979 (b), 1980 (c), 1981-84 (b).

RADIOCHEMICAL DATA: 1974-84 (a).

ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-81 (d).

NUTRIENT DATA: 1974-75 (c), 1976-81 (d), 1982-84 (c).

BIOLOGICAL DATA:

Bacteria--1974 (c), 1975-81 (d), 1982-84 (c).

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

Periphyton--1974 (a), 1975 (c), 1976-80 (b).

SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d), 1982-84 (c).

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 observations made approximately 68 ft below normal forebay level. Temperature observations from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station.

COOPERATION.--Water-temperature record furnished by the New York Power Authority.

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, 1982-84.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 350 micromhos Aug. 1, 9; minimum daily, 280 micromhos Feb. 25, May 25.

WATER TEMPERATURES: Maximum daily, 24.0°C Aug. 16-17; minimum daily, 0.5°C on several days during January and February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MP (COLS./ 100 ML)	
OCT 21...	0915	272000	324	8.0	13.5	1.8	780	10.7	100	K5	
JAN 26...	1000	250000	300	8.0	.5	1.1	760	11.6	81	K1	
MAR 26...	0915	280000	340	7.3	1.0	2.0	760	14.0	99	K5	
MAY 24...	0930	309000	330	8.8	12.5	<1.0	755	12.0	114	K3	
JUN 27...	0840	308000	290	8.1	17.0	1.4	755	9.2	96	K5	
AUG 28...	1000	304000	310	8.3	20.0	.90	755	8.8	98	K3	
DATE	100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 21...	21	130	37	37	8.3	12	1.5	90	27	26	
JAN 26...	K1	130	29	37	8.2	14	1.4	97	27	25	
MAR 26...	K3	130	32	38	7.8	12	1.4	95	28	28	
MAY 24...	<1	130	35	39	7.5	11	1.4	94	25	23	
JUN 27...	<1	130	36	39	7.6	12	1.4	93	27	25	
AUG 28...	K2	120	34	36	8.0	12	1.3	89	28	24	

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

ST. LAWRENCE RIVER MAIN STEM

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04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

D. TE	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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 21...	.20	.4	176	170	.33	.190	.40	.040	.010	.020
JAN 26...	.10	.4	188	170	.27	<.010	1.1	.020	.010	<.010
MAR 26...	.10	.3	160	170	.31	<.010	.50	<.010	.020	<.010
MAY 24...	.20	.1	199	160	.16	.310	1.3	.040	.020	<.010
JUN 27...	.20	.2	200	170	.72	.020	.40	<.010	<.010	<.010
AUG 28...	.20	.6	184	160	.11	.060	.50	.020	.040	<.010

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 21...	10	1	32	<.5	<1	<1	<3	2	4	1
MAR 26...	<10	1	29	<.5	1	<1	<3	2	12	<1
MAY 24...	<10	1	33	<.5	<1	<1	<3	1	48	<1
AUG 28...	10	2	30	<.5	<1	<1	<3	1	6	2

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 21...	5	<1	.5	<10	3	<1	<1	180	<6	14
MAR 26...	12	1	.1	<10	1	<1	<1	180	<6	21
MAY 24...	7	48	<.1	<10	1	<1	<1	180	<6	14
AUG 28...	6	2	.1	<10	2	<1	<1	180	<6	24

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/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 (PCI/L METHOD EXTRAC- TION (UG/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
MAR 26...	0915	<3.5	<.4	<2.5	<.4	<2.2	<.4	.06	.27
JUN 27...	0840	<3.4	<.4	2.7	.7	2.3	.6	.05	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 21...	0915	272000	4	2940	--	MAY 24...	0930	309000	4	3340	--
JAN 26...	1000	250000	4	2700	--	JUN 27...	0840	308000	4	3330	--
MAR 26...	0915	280000	0	.00	--	AUG 28...	1000	304000	6	4920	44

ST. LAWRENCE RIVER MAIN STEM

04264331 ST. LAWRENCE RIVER AT CORNWALL ONTARIO--NEAR MASSENA, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	12.0	---	.5	1.0	1.0	1.5	7.0	---	---	22.0	20.5
2	19.5	12.0	6.0	.5	.5	1.0	2.0	7.0	11.5	---	22.0	20.5
3	19.5	12.0	6.0	.5	.5	1.0	2.0	7.0	---	19.0	---	20.5
4	19.0	---	---	.5	.5	1.0	2.0	---	12.0	---	---	20.0
5	18.5	11.0	5.0	.5	.5	1.0	2.5	7.0	12.0	19.0	---	20.0
6	18.0	10.0	5.0	.5	.5	---	2.5	7.0	13.0	---	---	19.5
7	17.5	---	5.0	.5	---	1.0	3.0	7.5	13.0	19.5	23.0	19.5
8	17.5	10.0	4.0	.5	.5	.5	3.0	8.0	13.0	---	---	19.0
9	---	10.0	4.0	.5	1.0	1.0	3.0	8.0	14.0	---	23.5	19.5
10	17.0	10.0	4.0	.5	1.0	1.0	3.0	8.0	14.0	19.5	23.5	19.5
11	17.0	10.0	---	.5	---	1.0	3.0	8.0	---	20.0	---	19.5
12	17.0	10.0	3.5	.5	---	---	4.0	8.5	---	20.0	23.0	20.0
13	17.0	9.0	3.5	.5	---	---	4.0	9.0	16.0	20.0	---	---
14	17.0	9.0	---	---	---	---	4.0	9.0	16.0	20.5	23.5	19.0
15	16.0	8.5	4.0	.5	---	---	4.5	9.0	16.0	20.5	23.5	18.0
16	16.0	8.0	3.5	---	---	---	4.5	9.0	16.0	21.0	24.0	---
17	15.5	8.0	3.5	.5	---	---	4.5	9.0	16.0	21.0	24.0	18.0
18	15.5	8.0	3.0	1.0	---	---	4.5	9.0	---	21.0	23.0	---
19	15.0	---	3.0	1.0	---	---	4.5	9.0	17.0	21.0	---	18.0
20	15.0	7.0	3.0	1.0	---	---	5.0	9.0	17.0	21.0	22.5	18.0
21	14.0	---	2.0	1.0	---	1.0	5.0	9.0	17.0	22.0	---	18.0
22	---	---	---	1.0	---	1.0	5.0	10.0	17.5	---	21.5	---
23	14.0	---	---	1.0	---	1.0	---	10.5	18.0	---	21.0	18.0
24	13.5	7.5	---	1.0	1.0	1.0	5.5	10.0	18.0	22.0	21.0	---
25	13.0	---	1.0	1.0	1.0	1.0	---	10.5	18.0	22.0	20.0	18.0
26	13.0	---	1.0	.5	1.0	1.0	5.0	11.0	19.0	22.0	20.0	18.5
27	13.0	7.0	1.0	.5	1.0	---	6.0	11.0	17.5	22.0	20.0	18.5
28	13.0	7.0	1.0	.5	1.0	1.0	6.0	---	---	---	---	17.5
29	---	7.0	1.0	.5	1.0	1.0	6.5	---	17.5	---	---	---
30	---	7.0	1.0	.5	---	---	---	11.0	18.0	---	---	---
31	12.0	---	---	.5	---	1.0	---	11.0	---	---	---	---
MEAN	16.0	9.0	3.0	.5	1.0	1.0	4.0	9.0	15.5	20.5	22.5	19.0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	310	330	330	320	290	325	310	---	---	350	320
2	310	310	320	330	320	300	320	320	290	---	---	320
3	310	310	330	335	310	305	325	320	---	320	---	320
4	315	---	---	335	320	290	320	---	290	315	315	315
5	315	310	330	340	320	300	320	320	290	320	---	310
6	310	310	320	330	305	---	320	---	290	---	340	310
7	315	---	330	335	---	310	320	315	290	315	---	295
8	310	310	325	340	320	310	320	310	295	---	---	295
9	---	315	325	---	320	310	320	320	300	---	350	295
10	320	315	340	340	320	310	320	320	300	315	315	300
11	320	310	---	335	---	315	315	320	---	320	---	300
12	315	310	320	335	---	---	320	320	---	315	310	315
13	320	310	---	---	---	---	325	320	290	320	---	---
14	315	315	---	340	320	---	310	315	305	320	310	300
15	320	315	325	340	330	---	310	320	305	310	310	320
16	320	310	320	---	---	---	320	320	305	320	310	---
17	320	310	320	340	---	---	315	320	305	320	310	300
18	320	310	315	340	---	315	320	320	---	320	310	---
19	320	---	315	340	---	---	320	320	305	325	---	300
20	325	310	320	340	---	---	320	315	305	330	310	300
21	---	---	320	340	---	320	320	310	305	330	---	300
22	---	---	---	345	---	315	320	310	300	---	310	---
23	325	---	320	340	---	315	---	315	305	---	310	300
24	330	310	330	---	300	315	320	330	310	320	---	---
25	320	---	330	340	280	315	---	280	310	320	310	300
26	320	320	330	335	300	300	290	290	300	310	320	---
27	320	315	330	315	300	---	310	---	---	310	310	---
28	---	320	325	315	300	320	320	---	---	---	310	---
29	---	---	330	320	300	320	320	---	310	---	310	---
30	325	335	330	320	---	---	---	290	315	---	315	---
31	---	---	---	320	---	320	---	---	---	---	320	---
MEAN	318	313	325	334	311	310	318	314	301	319	317	306

04265605 LITTLE SIMON POND OUTLET NEAR TUPPER LAKE, NY

LOCATION.--Lat 44°09'40", long 74°26'30", Franklin County, Hydrologic Unit 04150305, on left bank 15 ft upstream from dam on Little Simon Pond, 3.0 mi south of Tupper Lake.

DRAINAGE AREA.--2.95 mi².

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is about 1,790 ft, from topographic map.

REMARKS.--Records poor. Flow affected by diversion by village of Tupper Lake for water supply.

COOPERATION.--Figures for diversion furnished by village of Tupper Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period January to September, 35 ft³/s Apr. 17, gage height, 2.76 ft; minimum daily, 0.14 ft³/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				1.9	.84	7.0	3.8	9.5	14	.77	.29	.49
2				1.8	.76	5.8	3.7	8.9	11	.72	.26	.43
3				1.7	.64	5.0	3.8	7.7	8.6	.65	.24	.52
4				1.6	.60	4.4	4.2	8.0	7.0	.59	.20	.56
5				1.5	.64	3.9	5.0	9.8	5.8	1.0	.17	.53
6				1.4	.66	3.4	11	9.5	5.0	1.3	.14	.49
7				1.4	.66	3.0	18	8.4	4.5	1.3	.21	.43
8				1.4	.66	2.7	16	7.6	4.0	1.1	.21	.38
9				1.3	.65	2.5	14	7.6	3.5	1.0	.17	.33
10				1.3	.60	2.4	11	7.2	3.0	.90	.19	.28
11				1.3	.60	2.3	9.7	6.6	2.6	.94	.24	.34
12				1.2	.64	2.3	9.1	8.2	2.2	1.2	.32	.45
13				1.2	.65	2.3	10	9.5	1.9	1.2	.38	.47
14				1.1	1.0	2.5	13	9.7	1.9	1.1	.56	.84
15				1.1	13	2.4	17	8.9	1.9	.94	.92	1.1
16				1.0	25	2.4	24	8.1	1.6	1.1	1.1	1.3
17				.96	24	2.5	34	7.3	1.4	1.1	1.1	1.4
18				.92	24	2.7	30	6.4	1.4	1.1	.93	1.3
19				.86	25	2.8	23	6.0	1.6	1.0	.83	1.3
20				.80	25	3.0	18	7.0	1.5	.93	.73	1.2
21				.78	23	3.2	15	6.8	1.4	.82	.63	1.1
22				.76	20	4.0	12	6.4	1.2	.74	.55	1.0
23				.74	16	7.4	9.8	6.6	1.1	.67	.63	.93
24				.80	12	8.4	10	9.0	1.0	.58	.67	.90
25				.92	9.6	6.4	11	8.8	1.0	.54	.62	.85
26				.92	9.2	5.6	11	7.8	.93	.46	.57	1.1
27				.92	8.8	4.8	9.5	7.0	.82	.40	.51	1.2
28				.92	8.4	4.5	8.7	6.3	.74	.47	.46	1.1
29				.92	8.0	4.2	8.3	14	.66	.42	.45	1.0
30				.92	---	4.1	8.2	24	.63	.36	.52	.96
31				.88	---	4.0	---	20	---	.32	.55	---
TOTAL				35.22	260.60	121.9	381.8	278.6	93.88	25.72	15.35	24.28
MEAN				1.14	8.99	3.93	12.7	8.99	3.13	.83	.50	.81
MAX				1.9	25	8.4	34	24	14	1.3	1.1	1.4
MIN				.74	.60	2.3	3.7	6.0	.63	.32	.14	.28
CFSM				.39	3.05	1.33	4.31	3.05	1.06	.28	.17	.27
IN.				0.44	3.29	1.54	4.81	3.51	1.18	0.32	0.19	0.31
*				1.2	1.3	1.3	1.4	1.2	1.1	1.0	1.0	1.0

* Indicated net diversion, in cubic feet per second, for diversion and return in downstream supply.

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 downstream from powerplant at Piercefield, and 1.5 mi upstream from Dead Creek.

DRAINAGE AREA.--721 mi².

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 1387: 1910, 1913, 1914(M), 1916, 1921. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1912, nonrecording gage at same site (datum of gage lowered 2 ft 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.--76 years, 1,300 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,360 ft³/s May 8, 1972, gage height, 12.25 ft; minimum daily, 4.1 ft³/s Oct. 12, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,570 ft³/s Dec. 18, gage height, 10.32 ft; minimum daily, 173 ft³/s Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382	751	2100	2800	674	2700	1460	3370	2710	902	462	656
2	278	702	2080	2600	503	2580	1450	3330	2650	825	504	626
3	337	573	2020	2400	715	2470	1440	3220	2710	798	491	477
4	430	570	1940	2250	703	2350	1430	3440	2590	712	486	339
5	453	638	1850	2100	615	2290	1470	3260	2540	840	472	502
6	561	638	1810	1960	702	2170	1600	3220	2470	796	380	507
7	933	741	1850	1760	922	2110	1790	3140	2400	812	280	518
8	848	765	1820	1590	889	1950	1910	3020	2310	932	276	526
9	774	748	1970	1410	839	1800	2070	2950	2220	846	220	598
10	788	915	2110	1360	686	1700	2120	2820	2110	829	226	440
11	745	925	2150	1270	553	1600	2170	2760	2060	834	360	600
12	673	1030	2260	1260	627	1500	2220	2740	1930	825	520	567
13	789	1360	2750	1190	625	1400	2270	2660	1780	857	530	494
14	817	1620	3790	1120	697	1300	2340	2630	1600	829	642	573
15	842	1650	4550	1110	1280	1300	2450	2600	1460	883	954	615
16	635	1610	5030	1090	1990	1280	2700	2550	1040	947	1040	612
17	636	1570	5390	1060	2240	1270	3110	2520	887	1080	966	722
18	616	1510	5530	791	2510	1250	3360	2460	980	855	875	850
19	620	1510	5400	820	2650	1250	3660	2390	1040	1010	764	845
20	631	1460	5300	863	2780	1230	3820	2350	674	875	573	808
21	625	1530	5200	848	2920	1250	3830	2270	720	802	460	760
22	594	1630	5000	839	3000	1340	3940	2210	951	768	190	676
23	481	1800	4800	846	3040	1510	3990	2200	936	659	173	587
24	485	1940	4500	813	3080	1690	3990	2240	854	318	338	632
25	490	1960	4300	760	3060	1670	3930	2240	1070	202	397	673
26	591	2120	4100	859	3000	1660	3900	2240	877	222	479	549
27	606	2170	3800	855	2970	1710	3780	2190	970	440	340	519
28	742	2150	3600	852	2910	1720	3690	2170	924	461	621	615
29	686	2130	3400	771	2840	1650	3550	2340	881	464	633	613
30	767	2120	3200	587	---	1580	3460	2530	830	470	699	506
31	751	---	3000	699	---	1480	---	2640	---	454	733	---
TOTAL	19606	40836	106600	39533	50020	52760	82900	82700	47174	22547	16084	18005
MEAN	632	1361	3439	1275	1725	1702	2763	2668	1572	727	519	600
MAX	933	2170	5530	2800	3080	2700	3990	3440	2710	1080	1040	850
MIN	278	570	1810	587	503	1230	1430	2170	674	202	173	339
CAL YR 1983	TOTAL	533602	MEAN	1462	MAX	5620	MIN	121				
WTR YR 1984	TOTAL	578765	MEAN	1581	MAX	5530	MIN	173				

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 upstream from bridge on State Highway 56 at South Colton, 500 ft downstream from Niagara Mohawk Power Corp. powerplant, and 0.8 mi upstream from Cold Brook.

DRAINAGE AREA.--937 mi².

PERIOD OF RECORD.--January 1953 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated 16 mi upstream by Carry Falls Reservoir since 1953; considerable natural storage in large lakes above Piercefield. Large diurnal fluctuation caused by five powerplants.

AVERAGE DISCHARGE.--31 years, 1,775 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft³/s May 11, 1971, gage height, 9.80 ft; minimum, 1.3 ft³/s Feb. 1, 1962, Aug. 8, 1964, gage height, 1.53 ft; minimum daily, 4.6 ft³/s June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,930 ft³/s Dec. 14, gage height, 8.86 ft; minimum, 9.4 ft³/s Oct. 2, Aug. 5, gage height, 1.67 ft; minimum daily, 46 ft³/s June 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	1390	1540	3770	1200	3380	1810	3200	3650	161	866	602
2	990	1090	1400	3480	1460	3310	2170	2470	3640	1400	1400	535
3	865	1140	1600	3430	1460	3280	1720	2680	3640	1330	930	529
4	978	1370	1290	3510	870	3090	1680	3290	3390	916	1030	649
5	1000	675	1850	3550	455	3230	1820	3530	2840	1080	570	941
6	847	371	1500	3310	1350	3380	1620	3540	2490	904	1470	1250
7	804	980	1760	2880	1190	3110	1750	3540	3250	506	1110	1150
8	919	1100	1760	2970	1430	3530	2140	3650	2330	456	1180	873
9	462	1250	2710	2830	1430	3200	2200	3620	3030	955	542	980
10	600	1260	2590	2780	1380	3320	2060	3590	2560	1190	1210	966
11	1270	1270	2690	2990	1110	3210	2110	3390	2560	833	576	1290
12	1470	470	2380	2880	880	2690	1910	3650	3040	980	936	788
13	1000	920	2840	3170	1160	3370	1950	3090	2780	1090	912	1360
14	1230	1440	3970	2850	1500	3300	1620	3160	2830	523	918	896
15	301	1260	5250	2840	1340	3140	1680	2940	2650	234	839	742
16	635	1160	7210	2810	2170	3360	1740	2340	1770	1330	775	869
17	1070	1280	6690	1330	2160	3130	2260	2140	2050	1070	1190	1280
18	1100	993	6800	1440	2240	3410	3410	2810	1960	1010	1060	1350
19	1270	1030	6240	1650	2320	3470	3520	2800	1550	1240	750	790
20	1310	594	5930	1500	2330	2790	3350	2530	1690	1230	978	1100
21	1160	1310	4680	1390	1930	3470	3670	2900	1360	1200	1180	995
22	485	1350	6160	1290	2720	3140	3190	3220	1090	1110	1310	1130
23	244	1550	6200	1890	3060	3290	3340	2810	1460	1180	1050	334
24	1310	1480	6850	1390	3080	3060	3610	3690	46	1010	820	1060
25	1440	1620	6640	1400	3170	2660	3430	3660	1030	1380	1120	1470
26	1670	1430	6600	1700	3150	3150	3660	3660	1380	1310	1010	1260
27	1290	1450	6550	1320	3210	2590	4310	3650	1660	1080	1160	1190
28	1220	1560	6280	1660	3200	1920	4040	3650	1380	926	1190	1170
29	626	1740	4820	1460	3120	2100	3680	3560	1350	1270	718	956
30	209	1800	3910	1660	---	1390	3660	3660	172	1070	1210	961
31	1080	---	3770	1450	---	1900	---	3650	---	1110	779	---
TOTAL	29895	36333	130460	72580	56075	93370	79110	100070	64628	31084	30789	29466
MEAN	964	1211	4208	2341	1934	3012	2637	3228	2154	1003	993	982
MAX	1670	1800	7210	3770	3210	3530	4310	3690	3650	1400	1470	1470
MIN	209	371	1290	1290	455	1390	1620	2140	46	161	542	334
CAL YR 1983	TOTAL	709650	MEAN	1944	MAX	7210	MIN	209				
WTR YR 1984	TOTAL	753860	MEAN	2060	MAX	7210	MIN	46				

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 upstream from bridge on Grant Road at Raymondville, 0.3 mi downstream from Trout Brook, 0.4 mi downstream from Niagara Mohawk Power Corp. powerplant, and 18.0 mi upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,125 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good 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 upstream and by Niagara Mohawk Power Corp. powerplant, 0.4 mi upstream; considerable natural storage in large lakes above Piercefield.

AVERAGE DISCHARGE.--40 years (1945-84), 2,072 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s Apr. 5, 1974, gage height, 8.40 ft; maximum gage height, 9.24 ft Feb. 22, 1954 (backwater from ice); minimum discharge, 2.2 ft³/s Sept. 18, 19, 1966; minimum gage height, 0.42 ft July 13, 1950; minimum daily discharge, 7.0 ft³/s Oct. 15, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,700 ft³/s Dec. 16, gage height, 6.93 ft; maximum gage height, 7.02 ft Feb. 15 (backwater from ice); minimum discharge, 19 ft³/s Oct. 15, 16, 17, 20, 22, 23, gage height, 0.59 ft; minimum daily, 446 ft³/s July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	1720	2110	4780	2000	3860	2560	3760	4200	485	1090	910
2	1050	1440	2090	4950	2000	3830	2670	2900	4110	903	1270	534
3	1080	1570	2040	5000	1800	3860	2620	2980	4050	1210	1280	676
4	1160	1590	1990	4470	1600	3790	2660	3200	4010	1240	1110	880
5	1210	992	2010	4130	1500	3860	3300	3850	3000	987	1310	1120
6	1170	799	2000	4080	1700	3760	3400	4000	2920	1180	1130	1200
7	1100	1040	2510	3560	1700	3670	3130	3910	3040	759	1190	1180
8	1110	1470	2810	3310	1800	3680	2860	4010	3140	550	1070	1220
9	661	1730	3430	3400	1900	3650	2780	4750	2990	1160	1190	1210
10	648	1640	3090	3500	1900	3670	2620	4600	2930	1010	862	1180
11	1330	1520	3110	3700	1700	3710	2680	4160	2940	1150	1060	1240
12	1500	1460	3900	3800	1500	3050	2570	4050	2950	1200	1110	1250
13	1410	1440	4270	4000	1700	3940	2090	4020	2950	1070	922	1310
14	1480	1550	6340	3800	2000	4010	2280	3790	3010	964	1090	1030
15	905	1540	7290	3700	2300	3790	2370	3560	2960	446	1200	1310
16	528	1950	9190	3600	2700	3670	2710	2790	2160	943	1050	1280
17	813	2110	9020	3100	2900	3730	4210	2660	1960	1340	1110	1170
18	1610	1880	7910	2300	2900	3790	4550	2930	2170	1320	1070	1280
19	1650	1470	7350	2100	2900	3670	4200	2950	2150	1430	1160	1240
20	1480	1350	6840	2000	3000	3630	3960	2810	1660	1290	1300	1170
21	1450	1800	6350	1900	2700	3620	4070	2850	1880	1250	1160	1380
22	1530	2130	5690	2000	3500	3750	4140	3420	1470	1320	1110	1040
23	642	2180	6670	2300	3900	3960	3680	3640	1720	1360	1300	1240
24	886	2150	7800	2200	4000	3980	3780	4950	726	1160	1380	1270
25	1510	2100	8460	2100	3800	3990	4800	4640	1060	1310	1260	1360
26	1500	2050	8940	2100	3500	3850	4910	4510	1470	1320	1270	1250
27	1590	2010	9220	2100	3300	3140	4450	3970	1430	1320	1210	1250
28	1510	1910	8650	2100	3300	2580	4270	4000	1560	1340	1230	1210
29	910	2110	6310	2100	3500	2810	4340	4290	1470	1280	1070	1230
30	557	2160	5740	2100	---	2440	4190	4590	1010	1080	1230	1220
31	786	---	4550	2000	---	2440	---	4330	---	1280	1220	---
TOTAL	35886	50861	167680	96280	73000	111180	102850	116870	73096	34657	36014	34840
MEAN	1158	1695	5409	3106	2517	3586	3428	3770	2437	1118	1162	1161
MAX	1650	2180	9220	5000	4000	4010	4910	4950	4200	1430	1380	1380
MIN	528	799	1990	1900	1500	2440	2090	2660	726	446	862	534
CAL YR 1983	TOTAL	900622	MEAN	2467	MAX	9220	MIN	528				
WTR YR 1984	TOTAL	933214	MEAN	2550	MAX	9220	MIN	446				

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957, 1960-61, 1969-72, 1979 to current year.

CHEMICAL DATA: 1955, 57 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d), 1981-82 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1969 (a), 1970, 1979 (b), 1980 (d), 1981-84 (b).

PESTICIDE DATA: 1970 (a).

ORGANIC DATA: OC--1979-80 (d), 1981 (c).

NUTRIENT DATA: 1955, 57 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d), 1981-82 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1969-71 (a), 1979-80 (d), 1981-82 (c), 1983-84 (b).

Phytoplankton--1979-80 (c), 1981 (b).

Periphyton--1979-80 (b).

SEDIMENT DATA: 1979 (c), 1980 (d), 1981-82 (c), 1983-84 (b).

REVISIONS.--Records of specific conductance, April to September 1979, and water temperatures, October 1959 to September 1961, April to September 1979, previously published are unreliable and should not be used.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
OCT 06...	1045	1890	57	6.9	15.5	1.2	755	9.7	98	230	
MAR 21...	1100	3640	56	7.0	.5	2.0	755	15.0	105	98	
JUN 08...	0830	3150	53	6.9	19.5	1.2	755	9.6	106	84	
AUG 15...	0945	31	60	7.0	25.0	.80	755	7.8	95	76	
DATE	100 ML	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML)	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)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 06...	220	20	6	5.5	1.4	1.9	.50	14	10	2.0	
MAR 21...	55	22	11	5.8	1.7	1.9	.50	11	8.4	2.5	
JUN 08...	57	17	7	4.8	1.2	1.6	.40	10	8.4	1.9	
AUG 15...	280	26	7	7.1	2.0	2.1	.50	19	8.2	3.3	
DATE	AS F	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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 06...	<.10	4.1	42	34	.13	.020	.50	.010	<.010	<.010	
MAR 21...	<.10	6.4	39	34	.25	<.010	.30	<.010	<.010	<.010	
JUN 08...	.10	4.1	46	29	.20	.050	1.8	.020	<.010	.020	
AUG 15...	<.10	3.6	46	38	.11	.030	.40	<.010	.010	<.010	

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 06...	20	1	24	<.5	<1	<1	<3	3	150	5
MAR 21...	30	<1	17	<.5	<1	<1	<3	2	130	3
JUN 08...	80	1	17	<.5	3	<1	<3	4	95	4
AUG 15...	40	1	17	<.5	<1	<1	<3	1	110	4

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 06...	<4	18	<.1	<10	2	<1	<1	23	<6	5
MAR 21...	<4	13	.2	<10	3	<1	<1	23	<6	12
JUN 08...	<4	13	<.1	<10	3	<1	<1	20	<6	18
AUG 15...	<4	7	.2	<10	<1	<1	<1	28	<6	5

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAM- PLING DEPTH (FEET)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN									
08...	0850	40	1.0	4.5	68	7.2	19.5	9.3	102
08...	0855	40	3.5	4.5	66	7.2	19.5	9.5	104
08...	0900	80	1.0	2.6	55	6.7	19.5	9.6	106
08...	0905	140	1.0	3.9	55	6.7	19.5	9.6	106
08...	0910	140	2.9	3.9	55	6.7	19.5	9.6	106
08...	0915	180	1.0	2.7	54	6.6	19.5	9.6	106
08...	0920	240	1.0	3.0	54	6.6	19.5	9.6	106

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 06...	1045	1890	4	20	--	JUN 08...	0830	3150	3	26	--
MAR 21...	1100	3640	1	9.8	--	AUG 15...	0945	31	1	.08	--

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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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 upstream from highway bridge at Brasher Center, and 6.5 mi downstream from West Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--612 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1910-16, 1917(M), WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 217.23 ft National Geodetic Vertical Datum of 1929. Prior to June 24, 1916, nonrecording gage at site 600 ft downstream at different datum. June 24, 1916 to Nov. 10, 1917, and Jan. 1, 1919 to Aug. 13, 1920, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diurnal fluctuation caused by powerplant operations above station.

AVERAGE DISCHARGE.--74 years, 1,046 ft³/s, 23.21 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s Apr. 6, 1937, gage height, 12.82 ft; maximum gage height recorded, about 15.3 ft Apr. 6, 1937 (ice jam); minimum discharge observed, about 34 ft³/s Aug. 8, 1917, gage height, 5.25 ft; minimum daily, 37 ft³/s Aug. 8, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	2215	*7,710	10.03	Feb. 20	1830	ice jam	*12.37
Feb. 15	1530	unknown	all.97				

a Ice jam.

Minimum discharge, 183 ft³/s Aug. 6, 7, gage height, 5.83 ft; minimum daily, 214 ft³/s Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	568	1450	1000	520	1200	1260	1390	1920	403	251	707
2	285	537	1270	920	540	1100	1530	1440	1650	392	242	577
3	272	529	1150	880	540	1000	1680	1340	1450	347	248	495
4	265	648	1100	840	560	960	1800	1300	1260	336	236	480
5	367	792	1100	800	580	900	2300	1740	1120	337	228	457
6	632	879	1020	760	600	840	3590	1820	977	370	218	402
7	772	879	1990	740	600	800	3640	1570	973	494	214	363
8	789	960	3020	700	580	740	3090	1480	1240	480	216	328
9	704	1020	3260	680	580	700	2530	2170	1140	410	217	305
10	608	1060	2610	640	600	640	2120	2100	927	391	230	289
11	527	1300	3530	620	620	640	1830	1800	760	370	331	302
12	474	2100	5420	600	660	640	1710	1760	660	521	296	347
13	450	1930	6030	600	780	640	1750	1740	534	549	293	388
14	484	1470	6660	580	1000	640	1920	1570	516	511	338	393
15	600	1230	7210	560	2000	620	2140	1490	430	452	479	385
16	680	1250	6700	540	6400	620	2620	1380	469	428	482	422
17	611	1360	5080	540	6200	640	3790	1320	480	495	519	440
18	620	1240	3900	520	5400	680	3390	1220	425	527	443	405
19	490	990	2870	520	5000	740	2910	1100	460	540	377	364
20	416	917	2010	520	4700	840	2500	1230	723	607	336	336
21	409	1640	1900	500	4400	917	2200	1400	786	509	306	317
22	388	2650	1800	500	4000	1730	1980	1340	610	478	284	306
23	382	2160	1600	500	2800	2870	1800	1460	464	420	363	300
24	483	1770	1500	520	2400	2530	1880	2930	472	382	800	286
25	595	1570	1400	560	2000	2030	2240	2540	641	346	1050	278
26	639	1510	1400	700	1700	1680	2170	1890	826	309	829	290
27	673	1320	1300	680	1500	1300	1930	1690	764	306	569	317
28	724	1200	1200	620	1400	1100	1690	1410	652	283	458	347
29	712	1360	1200	600	1300	1000	1500	1680	508	285	414	335
30	727	1580	1100	560	---	1000	1380	2510	454	269	450	316
31	681	---	1100	540	---	1080	---	2210	---	253	748	---
TOTAL	16756	38419	82880	19840	59960	32817	66870	52020	24291	12800	12465	11277
MEAN	541	1281	2674	640	2068	1059	2229	1678	810	413	402	376
MAX	789	2650	7210	1000	6400	2870	3790	2930	1920	607	1050	707
MIN	265	529	1020	500	520	620	1260	1100	425	253	214	278
CFSM	.88	2.09	4.37	1.05	3.38	1.73	3.64	2.74	1.32	.67	.66	.61
IN.	1.02	2.34	5.04	1.21	3.64	1.99	4.06	3.16	1.48	0.78	0.76	0.69

CAL YR 1983	TOTAL	421627	MEAN	1155	MAX	7210	MIN	211	CFSM	1.89	IN.	25.63
WTR YR 1984	TOTAL	430395	MEAN	1176	MAX	7210	MIN	214	CFSM	1.92	IN.	26.16

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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), 1975-81 (d), 1982 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1975, 1977-79 (b), 1980 (c), 1981-84 (b).

ORGANIC DATA: OC--1974 (b), 1978-81 (d).

NUTRIENT DATA: 1970-71 (a), 1975-81 (d); 1982 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1975-81 (d), 1982 (c), 1983-84 (b).

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

Periphyton--1975-80 (b).

SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d), 1982 (c), 1983-84 (b).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: September 1974 to September 1981.

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.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 07...	1130	754	92	7.2	14.0	1.5	765	10.6	102	--
MAR 19...	0930	765	82	6.9	.0	1.5	760	12.4	85	130
JUN 04...	1015	1320	64	7.1	16.5	1.3	755	9.8	101	K30
AUG 13...	1000	282	90	7.4	24.0	.70	760	7.8	93	58
DATE	100 ML)	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 07...	52	37	7	9.6	3.2	2.1	.60	30	10	2.8
MAR 19...	110	33	9	8.6	2.9	2.2	.50	24	8.6	4.5
JUN 04...	K22	22	7	5.8	1.8	1.4	.30	15	7.6	1.9
AUG 13...	K13	43	6	11	3.7	2.5	.60	37	8.0	3.4
DATE	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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 07...	<.10	6.8	67	54	.10	<.010	.10	.010	.010	<.010
MAR 19...	<.10	8.6	56	51	.31	<.010	.40	<.010	<.010	<.010
JUN 04...	.10	4.6	--	33	<.10	.030	1.1	.010	.010	<.010
AUG 13...	<.10	5.3	66	57	.10	<.010	.20	<.010	.020	<.010

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

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 1983 TO SEPTEMBER 1984

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 07...	20	1	28	<.5	<1	1	<3	1	310	3
MAR 19...	20	--	20	.6	<1	<1	<3	2	160	3
JUN 04...	100	1	17	<.5	<1	<1	<3	3	260	4
AUG 13...	30	1	24	<.5	<1	<1	<3	1	280	2
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 07...	<4	13	<.1	<10	1	<1	<1	29	<6	8
MAR 19...	<4	4	.3	<10	1	--	--	26	<6	21
JUN 04...	<4	13	<.1	<10	2	<1	<1	21	<6	13
AUG 13...	<4	22	.4	<10	1	<1	<1	37	<6	8

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAM- PLING DEPTH (FEET)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN									
04...	1040	194	1.0	3.2	64	6.7	15.5	9.9	100
04...	1041	194	2.2	3.2	66	7.0	15.5	9.8	99
04...	1045	159	1.0	5.0	63	7.1	15.5	9.8	99
04...	1046	159	4.0	5.0	62	7.1	15.5	9.8	99
04...	1048	123	1.0	6.1	62	7.1	15.5	9.8	99
04...	1049	123	5.1	6.1	62	7.1	15.5	9.8	99
04...	1050	87	1.0	5.4	62	7.1	15.5	9.8	99
04...	1051	87	4.4	5.4	62	7.1	15.5	9.8	99
04...	1055	51	1.0	4.1	62	7.1	15.5	9.8	99
04...	1056	51	3.1	4.1	62	7.1	15.5	9.8	99

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 07...	1130	754	4	8.1	--	AUG 13...	1000	282	0	.00	--
MAR 19...	0930	765	2	4.1	--						

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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 downstream from bridge on road to Fort Covington Center, 0.5 mi east of village of Bombay, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--92.2 mi².

PERIOD OF RECORD.--August to November 1957, July 1958 to current year. Occasional low-flow measurements, water years 1954-55, 1957.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft National Geodetic Vertical Datum of 1929. August to November 1957, at site 100 ft upstream at datum 0.72 ft higher.

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

AVERAGE DISCHARGE.--26 years (1959-84), 119 ft³/s, 17.53 in./yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s Apr. 4, 1974, gage height, 12.90 ft; minimum, 8.0 ft³/s Aug. 6, 7, 1965, gage height, 1.52 ft; minimum gage height, 0.85 ft Sept. 2, 1957, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	---	a2,100	ice jam	Feb. 15	---	*a2,400	*b12.00
a About. b Ice jam.							

Minimum discharge, 14 ft³/s Aug. 6, 7, gage height, 1.42 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	39	191	84	46	100	110	118	155	30	17	75
2	17	38	155	80	45	96	120	107	122	29	18	59
3	17	48	125	76	45	90	140	92	100	26	20	43
4	16	63	98	74	52	86	170	110	96	25	18	44
5	29	94	155	70	76	82	270	232	87	27	16	40
6	59	97	131	68	64	76	417	178	76	32	15	35
7	49	97	556	80	56	84	360	125	89	30	15	30
8	36	116	420	74	52	72	240	161	97	26	19	27
9	40	109	310	68	50	64	176	499	74	28	19	25
10	41	104	240	62	50	60	145	211	61	23	21	24
11	31	141	210	60	54	56	128	137	55	23	31	30
12	28	238	190	56	62	55	121	201	53	44	34	40
13	28	165	300	54	86	54	120	234	46	44	40	36
14	34	100	1900	52	140	54	124	162	47	30	31	31
15	41	149	1200	50	2000	53	149	143	48	26	36	31
16	35	195	660	48	1400	53	300	123	44	38	36	33
17	31	231	450	46	900	56	556	118	41	33	31	34
18	27	197	320	45	620	60	387	104	39	29	25	30
19	25	166	260	44	540	68	228	96	42	29	22	26
20	24	183	230	44	640	78	166	104	40	28	22	25
21	22	342	210	43	470	94	142	107	36	25	21	27
22	23	319	180	43	350	150	120	93	33	23	20	24
23	24	162	160	43	270	300	112	212	32	21	31	22
24	41	140	150	48	310	290	126	625	35	20	222	21
25	52	168	140	64	240	230	220	226	58	18	123	20
26	41	189	130	68	170	190	202	141	55	18	63	22
27	51	152	120	60	130	180	140	115	44	18	43	32
28	62	141	110	56	110	170	115	99	40	20	34	27
29	56	258	100	52	105	200	102	244	35	21	33	24
30	51	284	94	50	---	170	92	370	32	20	47	22
31	44	---	90	47	---	130	---	220	---	18	102	---
TOTAL	1092	4725	9585	1809	9133	3501	5798	5707	1812	822	1225	959
MEAN	35.2	158	309	58.4	315	113	193	184	60.4	26.5	39.5	32.0
MAX	62	342	1900	84	2000	300	556	625	155	44	222	75
MIN	16	38	90	43	45	53	92	92	32	18	15	20
CFSM	.38	1.71	3.35	.63	3.42	1.23	2.09	2.00	.66	.29	.43	.35
IN.	0.44	1.91	3.87	0.73	3.68	1.41	2.34	2.30	0.73	0.33	0.49	0.39

CAL YR 1983	TOTAL	51218	MEAN	140	MAX	1900	MIN	15	CFSM	1.52	IN.	20.66
WTR YR 1984	TOTAL	46168	MEAN	126	MAX	2000	MIN	15	CFSM	1.37	IN.	18.63

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04270510 CHATEAUGAY RIVER BELOW CHATEAUGAY, NY

LOCATION.--Lat 44°57'49", long 74°07'53", Franklin County, Hydrologic Unit 04150307, on left bank 10 ft downstream from bridge on Sam Cook Road, 0.2 mi downstream from Marble River, 2.4 mi upstream from international boundary, and 4.1 mi northeast of Chateaugay.

DRAINAGE AREA.--151 mi².

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft 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.--18 years (1967-84), 251 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft³/s Apr. 4, 1974, gage height, 7.33 ft, from rating curve extended above 1,600 ft³/s; maximum gage height, 10.99 ft Feb. 11, 1966 (ice jam); minimum discharge, 14 ft³/s Sept. 5, 6, 1982, gage height, 2.32 ft, result of regulation; minimum daily, 37 ft³/s Aug. 23, 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,310 ft³/s Dec. 14, gage height, 5.21 ft; maximum gage height, 10.49 ft Feb. 14 (ice jam); minimum discharge, 24 ft³/s Sept. 21, gage height, 2.44 ft; minimum daily discharge, 63 ft³/s Oct. 2, July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	173	329	340	240	320	229	223	587	115	68	130
2	63	169	330	330	280	300	254	262	503	100	69	113
3	69	171	340	320	290	280	263	226	437	95	69	115
4	76	166	350	350	270	260	270	212	400	80	68	114
5	95	156	350	360	240	250	304	324	347	81	67	102
6	90	152	353	330	220	230	394	346	326	80	67	101
7	101	156	370	300	220	210	360	317	326	78	74	102
8	101	151	380	290	210	200	435	380	263	77	84	101
9	110	149	390	280	210	190	485	505	205	74	81	101
10	137	143	408	280	210	170	624	452	166	76	88	99
11	267	179	431	270	240	170	666	416	165	106	94	107
12	377	191	586	260	310	170	657	406	153	140	93	99
13	361	162	822	250	500	170	591	364	130	165	92	94
14	378	164	1030	250	720	170	564	342	129	163	104	95
15	393	154	1170	240	800	170	622	322	121	162	114	96
16	401	163	1060	240	486	160	824	332	103	135	97	95
17	385	161	980	230	539	170	861	399	118	112	91	81
18	352	155	860	230	606	180	780	356	121	111	90	78
19	298	183	760	240	564	190	722	360	119	98	89	78
20	270	157	680	250	724	200	647	411	115	96	89	86
21	248	285	600	260	630	205	573	377	113	91	87	68
22	228	229	560	290	529	305	519	356	112	80	86	76
23	217	206	500	330	526	259	431	511	111	80	104	75
24	214	216	470	350	483	216	425	581	115	79	138	74
25	202	236	440	340	424	215	451	452	155	74	150	75
26	196	243	420	320	410	206	361	608	128	63	166	85
27	195	295	400	290	380	197	301	555	127	66	164	79
28	189	295	390	270	350	200	259	467	125	72	162	75
29	181	356	380	250	340	203	207	632	123	69	160	75
30	169	334	360	230	---	195	195	695	123	68	164	74
31	176	---	350	220	---	201	---	634	---	67	136	---
TOTAL	6615	5950	16849	8790	11951	6562	14274	12823	6066	2953	3205	2743
MEAN	213	198	544	284	412	212	476	414	202	95.3	103	91.4
MAX	401	356	1170	360	800	320	861	695	587	165	166	130
MIN	63	143	329	220	210	160	195	212	103	63	67	68
CAL YR 1983	TOTAL	97489	MEAN	267	MAX	1250	MIN	63				
WTR YR 1984	TOTAL	98781	MEAN	270	MAX	1170	MIN	63				

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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 downstream from Imperial Paper and Color Corp. dam, 3.0 mi upstream from mouth, and 5.5 mi downstream from Mead Brook.

DRAINAGE AREA.--608 mi².

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 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 upstream at different datum.

REMARKS.--Records excellent except those for January, which are good. 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 7.17 ft³/s from Saranac River and Mead and West Brooks, tributaries above station, for municipal supply. About 1 ft³/s diverted from Great Chazy River basin into Saranac River for water supply of State Institutions at Dannemora.

AVERAGE DISCHARGE.--68 years, 836 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s Apr. 8, 1928, from computation of flow over dam and through waste gates and powerplant; minimum daily, 3.6 ft³/s June 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,460 ft³/s Dec. 14, gage height, 9.32 ft; minimum, 91 ft³/s June 30, July 1, gage height, 2.19 ft; minimum daily discharge, 156 ft³/s July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	521	1340	1200	540	1190	882	1750	2160	156	445	641
2	202	603	1360	1230	540	1120	971	1610	1950	483	230	497
3	298	499	1170	1250	548	1030	1060	1470	1710	384	204	492
4	401	475	944	1240	558	1000	1170	1550	1610	313	241	395
5	521	777	933	1240	604	955	1460	2170	1460	321	264	297
6	409	944	1080	1220	673	860	2350	1880	1310	627	246	478
7	336	955	1680	1200	673	800	2840	1680	1370	710	262	502
8	556	867	1470	1030	640	740	2230	1590	1360	772	470	188
9	418	840	1430	941	620	680	1820	2000	1240	596	333	324
10	578	888	1470	891	600	640	1660	1770	1150	506	310	332
11	204	1520	1290	880	593	620	1430	1520	1100	513	421	322
12	427	2180	1160	840	633	620	1680	1540	1060	544	411	371
13	459	1700	3840	820	669	640	1890	1620	953	544	385	387
14	518	1340	7690	780	718	653	2070	1510	836	522	238	372
15	549	1250	5810	740	1540	712	2170	1490	779	565	272	363
16	611	1170	4760	720	2700	848	2680	1420	687	501	494	428
17	568	1130	3960	680	2230	847	3210	1370	528	442	410	431
18	587	1080	3230	660	2270	806	3480	1270	538	814	439	423
19	575	968	2650	624	2460	800	2760	1250	470	808	459	451
20	457	937	1720	673	2520	824	2400	1540	618	673	466	480
21	514	1010	1700	799	2350	920	2270	1510	850	560	358	422
22	472	1630	1600	914	1920	1190	2000	1340	472	511	232	477
23	360	1460	1500	820	1720	1320	1730	1260	637	483	348	443
24	430	1350	1400	626	1690	1200	1840	1640	436	462	419	258
25	430	1570	1400	616	1660	1070	2370	1360	536	501	253	269
26	381	1620	1300	601	1560	886	2270	1210	632	369	335	417
27	411	1380	1300	580	1270	895	1930	1180	445	384	451	438
28	494	1220	1300	540	1100	952	1740	1200	493	385	422	404
29	494	1310	1300	500	960	895	1680	1910	626	359	352	486
30	494	1400	1200	520	---	784	1560	3600	325	339	306	471
31	538	---	1200	520	---	920	---	2640	---	384	376	---
TOTAL	14018	34594	64187	25895	36559	27417	59603	50850	28341	15531	10852	12259
MEAN	452	1153	2071	835	1261	884	1987	1640	945	501	350	409
MAX	611	2180	7690	1250	2700	1320	3480	3600	2160	814	494	641
MIN	202	475	933	500	540	620	882	1180	325	156	204	188
CAL YR 1983	TOTAL	342532	MEAN	938	MAX	7690	MIN	92				
WTR YR 1984	TOTAL	380106	MEAN	1039	MAX	7690	MIN	156				

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

201

04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY

LOCATION.--Lat 44°26'20", long 73°40'55", Essex County, Hydrologic Unit 02010004, on left bank 700 ft upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi².

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 National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft upstream from confluence with West Branch at datum 3.54 ft lower.

REMARKS.--Records good except those during winter periods, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown.

AVERAGE DISCHARGE.--60 years, 313 ft³/s, 21.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft³/s Sept. 22, 1938, gage height, 12.91 ft, from rating curve extended above 5,800 ft³/s on basis of velocity-area studies; minimum observed, 20 ft³/s Aug. 11, 14, 28, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 14	0500	*5,820	*7.22	Apr. 16	2200	4,670	6.53
Apr. 6	0500	5,240	6.88	May 29	1700	3,750	5.91

Minimum discharge, 47 ft³/s Aug. 9, 10, 11, gage height 1.02 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	124	377	240	150	230	241	2080	919	105	56	115
2	58	116	318	220	160	210	293	1030	672	98	57	83
3	55	116	283	210	160	200	385	685	529	89	55	75
4	52	176	214	200	190	190	439	1120	448	85	53	94
5	83	321	292	180	250	170	1150	1560	372	164	51	88
6	313	289	252	170	230	160	3990	942	352	336	50	77
7	253	298	957	160	210	150	1970	782	446	938	49	69
8	177	279	499	160	200	140	1120	961	388	507	50	62
9	136	375	394	150	190	140	750	1570	291	303	48	59
10	112	626	353	150	180	140	591	963	236	206	47	55
11	99	2180	249	150	180	140	516	698	204	166	55	60
12	93	1940	273	150	170	130	594	1670	177	271	302	93
13	147	846	1920	140	180	140	734	1310	156	207	172	87
14	504	524	4770	140	220	140	932	962	149	160	115	133
15	447	386	2620	140	2100	140	1300	756	158	132	98	173
16	279	369	1500	140	1600	150	2070	627	137	138	89	204
17	204	356	800	140	900	150	2740	534	126	128	72	165
18	159	287	520	130	800	160	2720	478	120	112	63	125
19	135	226	300	130	900	180	1600	485	142	126	58	102
20	117	222	230	130	700	200	1340	942	149	108	59	89
21	105	1670	210	130	600	483	1210	721	129	94	56	77
22	99	1330	220	130	500	1200	863	626	116	85	52	65
23	97	780	350	140	440	647	730	1270	104	80	63	61
24	119	563	300	160	420	413	1280	1590	99	76	81	59
25	137	985	210	200	450	335	2010	889	264	68	110	56
26	130	810	200	220	330	290	1310	677	226	62	90	60
27	124	547	200	160	280	263	1120	600	165	66	73	80
28	118	425	230	150	270	249	1150	492	136	75	64	76
29	155	460	270	150	260	253	1470	1900	116	73	59	71
30	171	473	350	150	---	199	1500	2140	109	66	57	67
31	139	---	270	150	---	258	---	1460	---	61	110	---
TOTAL	4876	18099	19931	4970	13220	7850	38118	32520	7635	5185	2414	2680
MEAN	157	603	643	160	456	253	1271	1049	255	167	77.9	89.3
MAX	504	2180	4770	240	2100	1200	3990	2140	919	938	302	204
MIN	52	116	200	130	150	130	241	478	99	61	47	55
CFSM	.79	3.05	3.25	.81	2.30	1.28	6.42	5.30	1.29	.84	.39	.45
IN.	0.92	3.40	3.74	0.93	2.48	1.47	7.16	6.11	1.43	0.97	0.45	0.50

CAL YR 1983	TOTAL	152921	MEAN	419	MAX	6070	MIN	43	CFSM	2.12	IN.	28.73
WTR YR 1984	TOTAL	157498	MEAN	430	MAX	4770	MIN	47	CFSM	2.17	IN.	29.59

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04278000 LAKE GEORGE AT ROGERS ROCK, NY

LOCATION.--Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft north of Hooper's dock at Rogers Rock, and 0.4 mi west of Baldwin.

DRAINAGE AREA.--233 mi² at outlet at Ticonderoga.

PERIOD OF RECORD.--July 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 315.93 ft 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.09 ft Apr. 9, 1936; minimum, 0.64 ft Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.62 ft Dec. 16; minimum, 3.09 ft Nov. 5.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.46	3.17	3.94	4.03	3.25	3.83	3.76	3.92	4.24	3.79	3.71	3.67
2	3.46	3.17	3.92	4.01	3.25	3.79	3.73	3.85	4.13	3.81	3.70	3.63
3	3.47	3.17	3.82	3.97	3.25	3.74	3.70	3.80	4.21	3.83	3.71	3.61
4	3.44	3.18	3.84	3.92	3.25	3.68	3.68	3.81	4.18	3.84	3.71	3.62
5	3.49	3.18	3.83	3.85	3.26	3.66	3.70	3.89	4.13	3.89	3.73	3.61
6	3.55	3.21	3.90	3.82	3.30	3.65	3.90	3.90	4.09	4.01	3.74	3.57
7	3.51	3.23	4.11	3.73	3.28	3.63	4.01	3.87	4.08	4.14	3.77	3.56
8	3.51	3.25	4.07	3.64	3.30	3.60	4.03	3.88	4.06	4.07	3.77	3.54
9	3.39	3.23	4.04	3.57	3.27	3.58	4.01	3.94	4.03	4.03	3.79	3.54
10	3.43	3.21	3.96	3.53	3.29	3.58	3.98	3.91	3.96	3.98	3.80	3.52
11	3.43	3.24	3.91	3.48	3.28	3.57	3.97	3.88	3.93	3.94	3.76	3.48
12	3.42	3.35	3.90	3.40	3.30	3.54	3.95	3.89	3.87	3.91	3.77	3.50
13	3.48	3.34	4.03	3.36	3.30	3.54	3.93	3.87	3.81	3.85	3.77	3.53
14	3.52	3.35	4.48	3.30	3.30	3.62	3.92	3.85	3.77	3.81	3.77	3.51
15	3.44	3.35	4.58	3.45	3.36	3.64	3.89	3.85	3.66	3.75	3.82	3.47
16	3.36	3.40	4.61	3.40	3.55	3.66	3.92	3.81	3.67	3.69	3.83	3.53
17	3.37	3.49	4.60	3.36	3.63	3.65	4.02	3.77	3.66	3.68	3.76	3.50
18	3.29	3.50	4.57	3.31	3.72	3.66	4.12	3.76	3.66	3.72	3.76	3.50
19	3.22	3.48	4.51	3.28	3.82	3.71	4.15	3.75	3.65	3.78	3.76	3.49
20	3.21	3.48	4.45	3.30	3.88	3.73	4.17	3.76	3.60	3.79	3.71	3.49
21	3.19	3.61	4.40	3.29	3.95	3.74	4.11	3.76	3.62	3.77	3.74	3.43
22	3.21	3.72	4.41	3.28	3.96	3.83	4.10	3.76	3.60	3.77	3.73	3.43
23	3.21	3.73	4.43	3.27	3.96	3.90	4.08	3.80	3.60	3.80	3.77	3.43
24	3.18	3.74	4.37	3.28	3.93	3.90	4.05	3.81	3.63	3.76	3.71	3.40
25	3.23	3.90	4.31	3.32	3.90	3.89	4.05	3.82	3.78	3.73	3.69	3.42
26	3.23	3.94	4.26	3.31	3.90	3.89	4.01	3.84	3.78	3.73	3.69	3.43
27	3.21	3.90	4.18	3.30	3.86	3.88	3.99	3.77	3.80	3.70	3.68	3.38
28	3.26	3.95	4.13	3.28	3.81	3.84	3.97	3.75	3.83	3.72	3.66	3.37
29	3.20	4.02	4.22	3.29	3.88	3.80	3.92	3.92	3.80	3.72	3.65	3.35
30	3.18	4.01	4.16	3.28	---	3.81	3.91	4.17	3.79	3.73	3.67	3.32
31	3.17	---	4.13	3.27	---	3.78	---	4.26	---	3.73	3.70	---
MEAN	3.35	3.48	4.20	3.48	3.55	3.72	3.96	3.86	3.85	3.82	3.74	3.49
MAX	3.55	4.02	4.61	4.03	3.96	3.90	4.17	4.26	4.24	4.14	3.83	3.67
MIN	3.17	3.17	3.82	3.27	3.25	3.54	3.68	3.75	3.60	3.68	3.65	3.32
CAL YR 1983	MEAN	3.75	MAX	4.78	MIN	3.00						
WTR YR 1984	MEAN	3.71	MAX	4.61	MIN	3.17						

04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY

LOCATION.--Lat 43°39'48", long 73°36'14", Warren County, Hydrologic Unit 02010001, on left bank 10 ft downstream from county bridge on Padanarum Road, 7.7 mi north of Bolton Landing.

DRAINAGE AREA.--23.4 mi².

PERIOD OF RECORD.--October 1965 to September 1968, October 1971 to current year. Annual maximum, water years 1969-71.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 423.60 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft higher.

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

AVERAGE DISCHARGE.--16 years (1966-68, 1972-84), 37.3 ft³/s, 21.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft³/s Feb. 11, 1981, gage height, 6.35 ft from rating curve extended above 190 ft³/s on basis of slope-area measurement at gage height 5.53 ft; maximum gage height, 7.14 ft Feb. 11, 1981 (ice jam); minimum discharge recorded, 0.28 ft³/s Sept. 27, 28, 29, 1968, gage height, 0.18 ft present datum.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 7	0330	505	3.83	Apr. 6	0115	432	3.45
Dec. 13	2145	*890	*4.67	Apr. 18	0130	402	3.35
Feb. 15	1730	581	3.90	May 29	1345	432	3.45

Minimum discharge, 1.6 ft³/s Oct. 1, 2, 3; minimum gage height, 0.81 ft Oct. 1, 2, 3, Sept. 9, 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.1	83	45	11	44	52	57	98	6.0	3.6	5.6
2	1.7	4.2	66	37	10	40	65	46	68	5.5	4.4	4.0
3	1.7	4.4	55	31	11	37	74	41	53	5.2	4.9	5.2
4	1.8	7.1	50	27	22	34	76	129	44	5.3	3.9	5.3
5	3.2	19	47	25	19	31	167	137	35	27	3.3	4.6
6	7.5	32	76	23	15	29	285	86	33	36	4.0	3.8
7	4.4	26	319	22	13	28	194	67	32	61	10	3.2
8	3.3	21	120	20	12	27	134	79	27	31	13	2.9
9	2.9	17	93	18	11	26	92	126	22	19	6.4	2.7
10	2.6	15	69	17	11	24	72	85	18	14	5.0	2.6
11	2.4	34	55	16	11	23	62	65	15	25	4.9	6.0
12	2.9	78	52	15	12	22	60	72	13	40	5.9	13
13	6.8	50	371	14	13	21	58	69	11	20	5.0	6.9
14	14	36	470	14	25	22	62	88	11	14	4.1	11
15	9.0	30	200	13	352	21	63	71	9.1	11	6.8	9.2
16	6.4	66	130	13	250	21	103	58	8.0	8.9	4.6	8.8
17	5.5	77	100	12	142	21	155	51	7.5	7.6	3.7	7.5
18	4.9	57	80	12	302	22	264	45	7.8	17	3.1	6.1
19	4.4	43	70	12	208	22	132	40	8.7	21	3.1	5.3
20	4.2	36	60	11	243	24	97	36	6.9	13	4.5	4.8
21	4.1	200	52	11	149	40	78	33	5.8	10	3.6	4.4
22	3.9	115	90	11	103	106	63	29	5.1	9.4	3.0	3.9
23	4.4	77	80	11	86	85	55	41	4.6	7.8	9.6	3.6
24	7.0	63	45	18	85	60	65	58	4.5	6.7	6.7	3.6
25	6.4	181	40	26	87	52	67	42	50	5.6	5.1	3.4
26	5.8	120	38	18	76	48	57	34	18	4.9	4.0	3.6
27	5.5	86	38	15	60	45	49	29	11	5.9	3.4	3.3
28	5.2	69	41	14	54	43	44	32	9.1	7.0	3.1	3.0
29	5.1	129	100	13	48	42	39	236	7.4	5.6	3.0	2.9
30	5.0	114	70	13	---	40	40	286	6.6	4.6	3.9	2.9
31	4.3	---	56	12	---	41	---	162	---	4.0	8.4	---
TOTAL	147.9	1810.8	3216	559	2441	1141	2824	2430	650.1	459.0	158.0	153.1
MEAN	4.77	60.4	104	18.0	84.2	36.8	94.1	78.4	21.7	14.8	5.10	5.10
MAX	14	200	470	45	352	106	285	286	98	61	13	13
MIN	1.6	4.1	38	11	10	21	39	29	4.5	4.0	3.0	2.6
CFSM	.20	2.58	4.44	.77	3.60	1.57	4.02	3.35	.93	.63	.22	.22
IN.	0.24	2.88	5.11	0.89	3.88	1.81	4.49	3.86	1.03	0.73	0.25	0.24
CAL YR 1983	TOTAL	18097.7	MEAN	49.6	MAX	470	MIN	1.2	CFSM	2.12	IN.	28.77
WTR YR 1984	TOTAL	15989.9	MEAN	43.7	MAX	470	MIN	1.6	CFSM	1.87	IN.	25.42

ST. LAWRENCE RIVER BASIN

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT.

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi downstream from Carver Falls, 1.9 mi upstream from Hubbardton River, and 3.2 mi northwest of Fair Haven.

DRAINAGE AREA.--187 mi².

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. Elevation of gage is 105 ft, from topographic map.

REMARKS.--Records good except those for winter period and shifting control period May 31 to Sept. 30, which are fair, and those for no gage-height record Dec. 20-27, June 12 to July 5, July 21 to Aug. 6, 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.--56 years, 428 ft³/s, 18.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s July 20, 1945, gage height, 24.36 ft, from high-water mark in well, from rating curve extended above 2,600 ft³/s on basis of computations of flow over dam at gage heights 16.10 ft, 21.40 ft, and 24.36 ft; minimum daily, 2.1 ft³/s Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 7	1700	3730	13.49	Feb. 16	0345	4110	14.11
Dec. 14	0645	*6250	16.95	May 30	2045	5540	16.09

Minimum daily discharge, 5.9 ft³/s Oct. 17-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	18	883	360	240	324	537	499	2480	66	38	66
2	13	26	745	320	230	310	619	461	1630	59	40	58
3	23	23	667	300	240	294	690	439	1270	62	43	48
4	29	35	599	290	420	269	771	621	959	55	47	63
5	6.4	48	549	310	500	243	813	770	687	110	35	54
6	38	109	548	290	430	215	1270	652	588	253	40	43
7	70	79	2500	260	410	205	1410	585	545	1020	38	48
8	19	93	1700	240	390	200	1290	561	425	1180	41	43
9	33	71	1090	230	370	195	1050	715	306	763	60	43
10	18	57	949	230	360	190	917	625	263	383	55	30
11	33	181	827	240	420	185	716	516	228	293	50	36
12	16	314	715	250	450	180	663	466	130	398	46	34
13	31	314	1300	230	560	180	617	587	120	398	43	51
14	47	231	5210	210	876	256	627	714	82	354	43	43
15	22	201	2880	200	2040	246	851	722	80	306	44	67
16	23	223	1920	210	3220	299	851	744	57	193	49	70
17	42	293	1430	200	1820	336	1020	697	56	209	77	51
18	14	279	1150	195	1540	326	1240	618	46	223	75	56
19	38	206	990	190	1390	317	985	567	56	346	43	48
20	5.9	160	700	185	1330	303	1080	574	53	189	46	46
21	42	216	540	200	1160	420	1230	498	43	64	55	46
22	5.9	369	400	230	939	877	1030	376	41	130	26	41
23	8.9	263	380	210	715	845	912	397	39	84	45	28
24	51	346	360	290	659	654	843	560	38	74	75	49
25	40	782	340	370	613	624	789	528	37	70	48	37
26	32	1030	330	450	568	622	715	476	90	69	34	34
27	28	780	320	410	478	565	639	481	76	58	49	35
28	24	663	300	330	434	557	586	463	84	60	30	37
29	37	1020	370	280	389	580	535	1230	74	130	40	31
30	26	1150	470	260	---	492	498	3490	80	44	48	44
31	30	---	390	250	---	463	---	4010	---	35	86	---
TOTAL	852.4	9580	31552	8220	23191	11772	25794	24642	10663	7678	1489	1380
MEAN	27.5	319	1018	265	800	380	860	795	355	248	48.0	46.0
MAX	70	1150	5210	450	3220	877	1410	4010	2480	1180	86	70
MIN	5.9	18	300	185	230	180	498	376	37	35	26	28
CFSM	.15	1.71	5.44	1.42	4.28	2.03	4.60	4.25	1.90	1.33	.26	.25
IN.	.17	1.91	6.28	1.64	4.61	2.34	5.13	4.90	2.12	1.53	.30	.27

CAL YR 1983 TOTAL 140381.9 MEAN 385 MAX 5210 MIN 3.1 CFSM 2.06 IN 27.93
WTR YR 1984 TOTAL 156813.4 MEAN 428 MAX 5210 MIN 5.9 CFSM 2.29 IN 31.19

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft south of Gulf Oil Co. dock at Burlington, 0.1 mi north of Burlington Water Department pumping station, and 0.5 mi north of railroad station.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.7 mi south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi south, both at present datum.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.26 ft Dec. 18, 19, affected by seiche; minimum, 1.55 ft Nov. 3, affected by seiche.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.97	1.64	4.46	6.40	4.10	5.21	4.52	6.13	6.51	4.64	3.68	2.76
2	1.95	1.59	4.49	6.29	4.04	5.17	4.51	6.12	6.65	4.54	3.64	2.73
3	1.90	1.60	4.50	6.20	3.96	5.11	4.52	6.07	6.65	4.46	3.59	2.71
4	1.90	1.74	4.51	6.10	3.94	5.05	4.52	6.08	6.60	4.36	3.55	2.67
5	1.95	1.92	4.51	6.04	3.92	4.97	4.57	6.11	6.58	4.35	3.50	2.62
6	1.98	2.01	4.50	5.95	3.90	4.92	4.72	6.11	6.53	4.33	3.43	2.59
7	1.98	2.09	4.70	5.88	3.86	4.86	5.00	6.09	6.53	4.46	3.40	2.55
8	1.95	2.10	4.95	5.81	3.82	4.79	5.25	6.03	6.71	4.59	3.38	2.47
9	1.95	2.15	5.03	5.72	3.79	4.71	5.37	6.03	6.75	4.63	3.32	2.40
10	1.96	2.17	5.08	5.64	3.74	4.62	5.40	6.02	6.70	4.60	3.22	2.35
11	1.87	2.33	5.11	5.56	3.70	4.54	5.41	5.98	6.61	4.56	3.22	2.40
12	1.87	2.55	5.05	5.47	3.67	4.48	5.41	5.93	6.52	4.55	3.25	2.41
13	1.89	2.73	5.29	5.38	3.65	4.41	5.39	5.97	6.41	4.56	3.21	2.35
14	1.92	2.82	5.95	5.30	3.68	4.40	5.40	5.99	6.33	4.55	3.18	2.34
15	1.91	2.84	6.56	5.23	3.89	4.34	5.45	5.97	6.22	4.49	3.18	2.35
16	1.93	2.94	6.97	5.16	4.23	4.26	5.55	5.95	6.11	4.47	3.17	2.34
17	1.87	2.99	7.16	5.07	4.48	4.24	5.74	5.91	5.99	4.42	3.12	2.32
18	1.88	3.05	7.23	5.00	4.64	4.18	6.02	5.85	5.83	4.41	3.10	2.26
19	1.88	3.11	7.23	4.93	4.76	4.17	6.19	5.78	5.73	4.40	3.05	2.22
20	1.87	3.12	7.16	4.84	4.91	4.12	6.25	5.79	5.65	4.35	2.98	2.20
21	1.85	3.17	7.08	4.78	5.09	4.07	6.33	5.77	5.54	4.31	2.96	2.21
22	1.82	3.36	6.94	4.69	5.18	4.16	6.32	5.68	5.44	4.26	2.89	2.19
23	1.78	3.49	6.96	4.64	5.19	4.37	6.28	5.65	5.35	4.19	2.91	2.14
24	1.81	3.48	6.92	4.57	5.22	4.50	6.29	5.75	5.20	4.13	2.92	2.13
25	1.79	3.73	6.86	4.52	5.24	4.57	6.36	5.76	5.14	4.08	2.91	2.11
26	1.78	3.96	6.78	4.46	5.23	4.59	6.36	5.70	5.06	4.02	2.84	2.11
27	1.77	4.11	6.68	4.40	5.22	4.59	6.34	5.70	4.97	3.95	2.79	2.09
28	1.69	4.16	6.56	4.35	5.25	4.58	6.29	5.66	4.87	3.90	2.74	2.07
29	1.70	4.24	6.58	4.27	5.25	4.59	6.26	5.73	4.80	3.85	2.73	2.05
30	1.68	4.38	6.53	4.22	---	4.60	6.19	6.00	4.73	3.79	2.73	2.03
31	1.65	---	6.44	4.17	---	4.55	---	6.30	---	3.72	2.77	---
MEAN	1.86	2.85	5.96	5.19	4.40	4.57	5.61	5.92	5.96	4.32	3.14	2.34
MAX	1.98	4.38	7.23	6.40	5.25	5.21	6.36	6.30	6.75	4.64	3.68	2.76
MIN	1.65	1.59	4.46	4.17	3.65	4.07	4.51	5.65	4.73	3.72	2.73	2.03

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD.--March 1871 to current year. Maximum and minimum monthly gage heights at St. Johns, Quebec, October 1863 to December 1870, published in WSP 97. Prior to October 1970, daily gage heights published in WSP 894. 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 Supply of Canada annual reports. Gage heights prior to October 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point."

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 higher.

REMARKS.--Area of lake surface about 490 mi². Total volume below 92.5 ft elevation, reported by Lake Champlain Studies Center, 902.2 bil ft³.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft Mar. 30, 1903; minimum observed, 92.17 ft Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 100.30 ft Dec. 22; minimum, 94.20 ft Nov. 4.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.88	94.55	97.29	99.18	96.92	98.02	97.35	99.03	99.30	97.48	96.55	95.56
2	94.83	94.60	97.38	99.17	96.88	97.97	97.33	98.94	99.31	97.41	96.49	95.52
3	94.90	94.52	97.29	99.10	96.84	97.92	97.33	98.90	99.48	97.37	96.45	95.51
4	94.70	94.39	97.33	99.02	96.75	97.86	97.36	98.81	99.47	97.33	96.41	95.51
5	94.78	94.49	97.35	98.89	96.71	97.84	97.38	98.89	99.42	97.28	96.37	95.46
6	94.83	94.80	97.38	98.83	96.70	97.74	97.57	98.95	99.40	97.28	96.34	95.40
7	94.82	94.91	97.54	98.65	96.68	97.65	97.78	98.91	99.40	97.33	96.28	95.40
8	94.95	95.09	97.79	98.62	96.66	97.60	97.96	98.93	99.56	97.42	96.20	95.50
9	94.75	94.97	97.97	98.53	96.59	97.51	98.06	98.92	99.60	97.48	96.29	95.50
10	94.78	95.07	97.87	98.44	96.59	97.46	98.12	98.86	99.52	97.49	96.32	95.43
11	94.97	95.03	97.83	98.37	96.53	97.39	98.15	98.88	99.44	97.54	96.09	95.26
12	94.83	95.24	98.11	98.28	96.50	97.27	98.14	98.87	99.37	97.44	96.08	95.22
13	94.82	95.51	97.99	98.21	96.52	97.23	98.19	98.77	99.26	97.42	96.07	95.43
14	94.85	95.64	98.72	98.12	96.57	97.17	98.23	98.78	99.14	97.44	96.06	95.18
15	94.74	95.75	99.40	98.03	96.68	97.14	98.25	98.79	99.01	97.42	96.05	95.12
16	94.75	95.69	99.79	97.97	97.01	97.09	98.35	98.74	98.97	97.38	96.00	95.17
17	95.00	95.81	99.94	97.92	97.30	96.98	98.55	98.72	98.92	97.31	95.91	95.18
18	94.73	95.85	100.00	97.83	97.45	96.94	98.79	98.68	98.95	97.28	95.90	95.25
19	94.65	95.91	99.94	97.74	97.63	96.95	98.98	98.65	98.59	97.26	95.89	95.19
20	94.64	95.98	99.93	97.70	97.74	96.94	99.07	98.62	98.48	97.29	95.80	95.21
21	94.62	96.04	99.88	97.59	97.88	96.92	98.94	98.58	98.39	97.22	95.81	95.04
22	94.64	96.17	100.02	97.56	98.01	97.01	99.12	98.60	98.26	97.15	95.82	95.03
23	94.67	96.31	99.83	97.48	98.06	97.19	99.12	98.55	98.15	97.17	95.77	95.11
24	94.54	96.59	99.71	97.43	98.04	97.32	99.06	98.55	98.27	96.95	95.66	94.99
25	94.62	96.48	99.65	97.36	98.00	97.37	99.05	98.69	98.01	96.86	95.68	95.04
26	94.60	96.76	99.66	97.27	98.00	97.39	99.13	98.65	97.91	96.87	95.74	94.93
27	94.58	96.87	99.59	97.21	98.01	97.39	99.14	98.50	97.87	96.80	95.74	94.94
28	94.80	97.01	99.54	97.15	97.95	97.37	99.13	98.44	97.81	96.75	95.73	94.94
29	94.40	97.13	99.42	97.12	98.06	97.30	99.06	98.50	97.67	96.70	95.67	94.90
30	94.52	97.24	99.38	97.04	---	97.31	99.12	98.79	97.57	96.66	95.72	94.86
31	94.56	---	99.36	96.96	---	97.36	---	99.12	---	96.64	95.62	---
MEAN	94.73	95.68	98.80	98.02	97.22	97.37	98.39	98.76	98.82	97.21	96.02	95.23
MAX	95.00	97.24	100.02	99.18	98.06	98.02	99.14	99.12	99.60	97.54	96.55	95.56
MIN	94.40	94.39	97.29	96.96	96.50	96.92	97.33	98.44	97.57	96.64	95.62	94.86
CAL YR 1983	MEAN	96.79	MAX	101.31	MIN	94.39						
WTR YR 1984	MEAN	97.19	MAX	100.02	MIN	94.39						

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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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), 1974-82 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1974-84 (b).

PESTICIDE DATA: 1976-79 (b), 1980 (a), 1982 (b).

ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979-81 (c).

PCB--1978-79 (b), 1980 (a), 1982 (b).

NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-82 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1974 (a), 1975-82 (c), 1983-84 (b).

Phytoplankton--1974 (a), 1975-78 (c), 1979 (b), 1980-81 (c).

Periphyton--1975 (c), 1976-80 (b).

SEDIMENT DATA: 1975-82 (c), 1983-84 (b).

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	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)
OCT 19...	1015	148	7.3	12.0	<1.0	775	11.5	105	51	K5
APR 11...	1000	131	7.4	2.5	1.3	760	13.8	101	<1	<1
MAY 09...	0900	152	8.3	7.5	<1.0	750	12.7	108	<1	<1
AUG 16...	0945	151	8.2	25.5	.50	760	8.3	102	K3	K1

DATE	HARD- NESS (MG/L AS CACO3)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 19...	62	11	18	4.1	6.1	1.3	51	15	9.2	<.10
APR 11...	56	9	16	3.8	5.8	1.2	47	12	8.8	<.10
MAY 09...	59	15	17	3.9	5.9	1.2	44	15	8.9	<.10
AUG 16...	58	11	17	3.7	6.1	1.0	47	14	8.4	<.10

DATE	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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
OCT 19...	.7	86	85	<.10	.190	.40	.040	<.010	<.010	<10
APR 11...	1.6	72	78	<.10	.400	1.6	<.010	<.010	<.010	<10
MAY 09...	1.1	94	80	.15	.060	.70	.050	<.010	<.010	<10
AUG 16...	1.0	84	80	<.10	<.010	.30	.010	.010	.010	<10

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

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
OCT 19...	<1	12	<.5	<1	<1	<3	2	5	1	<4
APR 11...	1	12	<.5	<1	1	<3	2	21	3	<4
MAY 09...	<1	9	<1	<1	<1	<3	2	16	<1	<4
AUG 16...	1	11	<.5	<1	<1	<3	1	18	2	<4

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 19...	2	.4	<10	1	<1	<1	84	<6	5
APR 11...	2	<.1	<10	1	<1	<1	79	<6	9
MAY 09...	2	.1	<10	2	<1	<1	82	<6	5
AUG 16...	8	.2	<10	<1	<1	<1	82	<6	15

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAM- PLING DEPTH (FEET)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY									
09...	0915	275	1	17	152	8.2	25.5	8.3	102
09...	0916	275	5	17	151	8.1	25.5	8.3	102
09...	0917	275	10	17	151	8.1	25.5	8.4	103
09...	0918	275	15	17	152	7.9	25.5	8.6	105
09...	0930	550	1	26	151	8.3	25.5	8.2	101
09...	0931	550	5	26	152	8.3	25.5	8.2	101
09...	0932	550	10	26	151	8.3	25.5	8.2	101
09...	0933	550	15	26	151	8.3	25.5	8.2	101
09...	0934	550	20	26	151	8.3	25.5	8.3	102
09...	0935	550	25	26	150	8.2	25.5	8.5	104
09...	0945	825	1	27	152	8.3	25.5	8.2	101
09...	0946	825	5	27	152	8.3	25.5	8.2	101
09...	0947	825	10	27	151	8.3	25.5	8.2	101
09...	0948	825	15	27	151	8.3	25.5	8.2	101
09...	0949	825	20	27	150	8.3	25.5	8.4	103
09...	0950	825	25	27	150	8.3	25.5	8.6	105
09...	1000	1100	1	15	152	8.2	25.5	8.1	99
09...	1001	1100	5	15	151	8.2	25.5	8.0	98
09...	1002	1100	10	15	151	8.2	25.5	8.1	99
09...	1003	1100	15	15	151	8.2	25.5	8.0	98
09...	1015	1330	1	12	152	8.3	25.5	8.1	99
09...	1016	1330	5	12	151	8.3	25.5	8.2	101
09...	1017	1330	10	12	151	8.2	25.5	8.4	103

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SEDIMENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	SEDIMENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	1015	4	--	MAY 09...	0900	0	--
APR 11...	1000	1	--	AUG 16...	0945	1	50

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04260990 CRANBERRY LAKE AT CRANBERRY LAKE, NY--Lat 44°13'14", long 74°50'55", St. Lawrence County, Hydrologic Unit 04150302, on right wall at outlet structure, at village of Cranberry Lake. DRAINAGE AREA, 140 mi² (corrected). PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft 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 is 2,530 mil ft³. Crest at spillway is at elevation, 1,486.43 ft. Length of spillway is 110 ft. Area of water surface at crest elevation is 10.9 mi². Records furnished by Oswegatchie River-Cranberry Reservoir Commission.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 2,985 mil ft³ May 13-15, 1971, gage height, 18.5 ft; minimum observed, 70 mil ft³ Apr. 1-4, 1956, gage height, 6.0 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,590 mil ft³ Dec. 17-18, gage height, 17.2 ft; minimum observed, 1,318 mil ft³ Feb. 12-14, gage height, 12.4 ft.

04266700 CARRY FALLS RESERVOIR NEAR SOUTH COLTON, NY--Lat 44°26'07", long 74°44'50", St. Lawrence County, Hydrologic Unit 04150305, near center of upstream wall of dam between Carry Falls and Stark Falls Reservoirs, 2.0 mi southeast of Stark, and 8.8 mi southeast of South Colton. DRAINAGE AREA, 873 mi². PERIOD OF RECORD, October 1954 to current year. GAGE, nonrecording gage read daily at 0800 hours. 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 is 5,114.9 mil ft³. Crest at spillway is at elevation 1,386.0 ft. Length of spillway is 830 ft. Area of water surface at crest elevation is 5.16 mi² (3,300 acres). The pond has a length of 6 mi and a perimeter of 25 mi. Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft, and 2 sluice gates, 10 ft x 10 ft. Records furnished by Niagara Mohawk Power Corp.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 5,146 mil ft³ June 1, 5, 6, 1955, elevation, 1,386.1 ft; minimum observed, 8.64 mil ft³ Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 5,132 mil ft³ May 21, elevation, 1,386.0 ft; minimum observed, 1,322 mil ft³ Mar. 28, elevation, 1,352.8 ft.

04278000 LAKE GEORGE AT ROGERS ROCK, NY (see station for daily mean gage heights).

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT (see station for daily mean gage heights).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY (see station for daily mean elevations).

MONTHEND GAGE HEIGHT, ELEVATION, AND CONTENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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.....	15.2	2,022		1,364.6	2,464.1	
Oct. 31.....	15.1	1,996	- 9.71	1,362.1	2,204.9	- 96.8
Nov. 30.....	15.2	2,022	+ 10.0	1,376.0	3,784.3	+ 609
Dec. 31.....	15.2	2,022	0	1,375.6	3,732.5	- 19.3
CAL YR 1983			+ 8.24			- 33.9
Jan. 31.....	13.0	1,460	-210	1,360.4	2,028.7	- 636
Feb. 29.....	13.6	1,606	+ 58.3	1,372.6	3,355.8	+ 530
Mar. 31.....	13.4	1,556	- 18.7	1,353.7	1,399.7	- 730
Apr. 30.....	16.1	2,268	+275	1,379.0	4,173.1	+1,070
May 31.....	16.9	2,500	+ 86.6	1,384.7	4,952.4	+ 291
June 30.....	16.1	2,268	- 89.5	1,381.8	4,551.6	- 155
July 31.....	15.4	2,074	- 72.4	1,380.3	4,344.2	- 77.4
Aug. 31.....	15.3	2,048	- 9.71	1,374.3	3,563.1	- 292
Sept. 30.....	14.7	1,892	- 60.2	1,369.5	2,993.8	- 220
WTR YR 1984			- 4.11			+ 16.8

* Gage heights or elevations at 2400 hours, by interpolation.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are usually presented in two tables. The first is usually a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table. No discharge measurements were made at low-flow partial-record stations for the 1984 water year.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1984

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							
01199400	Webatuck Creek near South Amenia, NY	Lat 41°46'51", long 73°33'21", Dutchess County, Hydrologic Unit 01100005, at bridge on Pump House Road, 200 ft upstream from confluence with Wassaic Creek, and 1.6 mi southwest of South Amenia.	81.0	1962-69, 1971-76, 1984	5-29-84	10.5	-
01199420	Tenmile River near Wassaic, NY	Lat 41°46'45", long 73°33'34", Dutchess County, Hydrologic Unit 01100005, at county bridge A-30, 0.2 mi downstream from confluence of Wassaic and Webatuck Creeks, and 1.6 mi south of Wassaic.	120	1959-60*, 1961-65, 1967-76, 1984	5-29-84	10.72	-
01199477	Stony Brook near Dover Plains, NY	Lat 41°42'38", long 73°37'18", Dutchess County, Hydrologic Unit 01100005, on town road, 100 ft upstream from mouth, and 2.9 mi southwest of Dover Plains.	1.93	1976-84	5-29-84	5.31	415
01199490	Swamp River near Dover Plains, NY	Lat 41°41'56", long 73°35'03", Dutchess County, Hydrologic Unit 01100005, on left bank at old highway bridge, 0.2 mi upstream from bridge on State Highway 22, 0.4 mi downstream from Mill River, 1.7 mi upstream from Tenmile River, and 2.8 mi south of Dover Plains.	46.6	1961-68*, 1969-74, 1984	5-29-84	6.11	-
Mamaroneck River basin							
01300800	Mamaroneck River at Winfield Avenue at Mamaroneck, NY	Lat 40°58'07", long 73°44'15", Westchester County, Hydrologic Unit 02030102, at bridge on Winfield Avenue, 0.1 mi downstream from Mamaroneck Reservoir, and 1.6 mi upstream from gaging station at Mamaroneck (01301000).	14.5	1972, 1983-84	7- 7-84	10.1	1,950
Hudson River basin							
01319800	West Branch Sacandaga River at Arietta, NY	Lat 43°15'03", long 74°31'06", Hamilton County, Hydrologic Unit 02020002, at bridge on State Highway 10, 0.4 mi north of Arietta.	28.9	1963-84	3-14-78 3-25-79 12-14-83	11.02 12.76 11.60	R1,050 R1,940 1,300
01328000	Bond Creek at Dunham Basin, NY	Lat 43°18'25", long 73°32'55", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 800 ft upstream from bridge on State Highway 196, and 1.9 mi east of courthouse at Hudson Falls.	14.7	1947-82*, 1984	5-29-84	15.82	c613

* Operated as a continuous-record gaging station.

R Revised.

f From floodmarks.

c Not the maximum for the year.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--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					
01329154	Steele Brook at Shushan, NY	Lat 43°05'35", long 73°19'38", Washington County, Hydrologic Unit 02020003, at bridge on county road, 1.1 mi upstream from mouth, and 0.8 mi east of Shushan.	2.85	1979-84	5-30-84	4.95	97
01329500	Batten Kill at Battenville, NY	Lat 43°06'05", long 73°25'55", Washington County, Hydrologic Unit 02020003, on left bank, 1.2 mi upstream from Trout Brook, and 1 mi southwest of Battenville.	394	1922-68*, 1984	5-30-84	11.7	11,600
01329780	Sessions Brook at Porters Corners, NY	Lat 43°09'21", long 73°52'45", Saratoga County, Hydrologic Unit 02020003, at culvert on County Highway 17, 0.7 mi northeast of Porters Corners, and 0.9 mi upstream from mouth.	1.04	1968-71, 1973, 1975-76, 1978-84	8-30-84	12.16	51
01329900	Glowegee Creek tributary at Mosherville, NY	Lat 43°03'24", long 74°00'58", Saratoga County, Hydrologic Unit 02020003, at culvert on Parkis Mill Road, 0.4 mi south of Mosherville.	1.42	1968-75, 1979-84	4- 5-84	12.99	128
01330880	Saratoga Lake tributary near Bemis Heights, NY	Lat 42°59'43", long 73°43'06", Saratoga County, Hydrologic Unit 02020003, at culvert on State Highway 423, 1.4 mi upstream from mouth, and 4.6 mi northwest of Bemis Heights.	2.98	1968, 1970-71, 1973, 1975-84	4- 6-84	14.75	186
01333367	Little Hoosic River at Cherry Plain, NY	Lat 42°37'57", long 73°21'23", Rensselaer County, Hydrologic Unit 02020003, at bridge on town road, just upstream from Kronk Brook, in Cherry Plain, 4.2 mi south of Berlin.	2.22	1976-84	5-29-84	2.45	113
01346820	Mohawk River tributary at Indian Castle, NY	Lat 43°00'34", long 74°47'47", Herkimer County, Hydrologic Unit 02020004, at culvert on State Highway 5S, 0.35 mi west of Indian Castle, and 0.4 mi upstream from mouth.	1.40	1974-84	4-16-84	1.81	64
01347460	Spruce Lake tributary near Salisbury Center, NY	Lat 43°10'51", long 74°48'44", Herkimer County, Hydrologic Unit 02020004, at culvert on town road (Jerseyfield Road), 1.3 mi upstream from mouth, and 2.9 mi north of Salisbury Center.	.53	1975-84	12-13-83	3.36	41
01348420	North Creek near Ephratah, NY	Lat 43°00'28", long 74°33'54", Fulton County, Hydrologic Unit 02020004, at culvert on town road, 0.4 mi upstream from mouth, and 1.2 mi northwest of Ephratah.	6.68	1975-84	2-15-84	3.88	103
01349360	Van Wie Creek tributary near Randall, NY	Lat 42°54'11", long 74°25'55", Montgomery County, Hydrologic Unit 02020004, at culvert on Brumley Road, 0.3 mi south of intersection with Argisinger Road, and 0.9 mi southwest of Randall.	1.00	1974-84	4-16-84	7.41	135
01349850	Batavia Kill at Hensonville, NY	Lat 42°22'17", long 74°12'55", Greene County, Hydrologic Unit 02020005, on County Highway 40, at Hensonville, 0.7 mi upstream from Silver Lake Outlet, and 1.8 mi upstream from Nauvo Stream.	13.5	1955, 1960-66, 1972, 1974, 1976, 1978-84	4- 5-84	3.77	982
01350900	Beaverdam Creek near Knox, NY	Lat 42°38'55", long 74°07'56", Albany County, Hydrologic Unit 02020005, 250 ft downstream from bridge, 1.2 mi south of Knox, and 1.7 mi upstream from mouth.	6.91	1963-64, 1966-74, 1976-77, 1979-84	4- 5-84	6.16	-

* Operated as a continuous-record gaging station.

f From floodmarks.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis-charge (ft ³ /s)
Hudson River basin--Continued							
01354300	Plotter Kill at Rynex Corners, NY	Lat 42°49'16", long 74°04'20", Schenectady County, Hydrologic Unit 02020004, at bridge on State Highway 159, in hamlet of Rynex Corners.	3.70	1958, 1960-68, 1970-74, 1976-84	5-29-84	5.74	342
01358500	Poesten Kill near Troy, NY	Lat 42°44'00", long 73°38'00", Rensselaer County, Hydrologic Unit 02020006, on left bank, 600 ft downstream from bridge on State Highway 2, 0.25 mi downstream from Sweet Milk Creek, 1.5 mi west of Eagle Mills, 3.0 mi east of Troy, and 5.0 mi upstream from mouth.	89.4	1923-68+, 1984	5-30-84	6.7	4,220
01359519	Normans Kill near Westmere, NY	Lat 42°40'43", long 73°54'25", Albany County, Hydrologic Unit 02020006, on right bank, 100 ft upstream from bridge on State Highway 155 (State Farm Road), 1.6 mi southwest of Westmere, and 1.8 mi southeast of Guilderland.	131	1968-79+, 1984	5-30-84	10.8	4,740
01359528	Normans Kill at Albany, NY	Lat 42°38'00", long 73°48'22", Albany County, Hydrologic Unit 02020006, on left bank, 0.35 mi upstream from bridge on Normans Kill Road at Normansville, and 0.40 mi upstream from Delaware Avenue bridge in Albany.	168	1979-83+, 1984	5-30-84	10.7	6,930
01361000	Kinderhook Creek at Rossman, NY	Lat 42°19'50", long 73°44'40", Columbia County, Hydrologic Unit 02020006, on right bank, just downstream from highway bridge in Rossman, 1.0 mi upstream from Claverack Creek, and 2.25 mi downstream from Stuyvesant Falls.	329	1909-13, 1928-68+, 1984	5-30-84	10.80	12,700
01361200	Claverack Creek at Claverack, NY	Lat 42°12'54", long 73°43'46", Columbia County, Hydrologic Unit 02020006, on right bank, 70 ft upstream from bridge on State Highway 9H, 0.5 mi south of Claverack, and 2.2 mi upstream from Taghkanic Creek.	60.6	1961-68+, 1968-80, 1984	5-30-84	9.6	3,360
01361245	Tributary to Taghkanic Creek tributary near Craryville, NY	Lat 42°09'54", long 73°34'15", Columbia County, Hydrologic Unit 02020006, at culvert on County Highway 7, 300 ft upstream from mouth, 0.1 mi northwest of intersection of Routes 7 and 7A, 1.1 mi upstream from Taghkanic Creek, and 1.4 mi southeast of Craryville.	0.39	1982-84	5-30-84	3.59	81
01361453	Catskill Creek tributary at Franklinton, NY	Lat 42°31'35", long 74°18'33", Schoharie County, Hydrologic Unit 02020006, at culvert on town road, 0.15 mi upstream from mouth, and 0.5 mi northwest of Franklinton.	3.61	1968-72, 1974-84	4- 5-84	5.27	178
01361900	Shingle Kill at Cairo, NY	Lat 42°18'22", long 74°00'13", Greene County, Hydrologic Unit 02020006, at bridge on town road at Cairo, southeast of State Highway 32, about 400 ft south of State Highway 23, and 0.8 mi upstream from mouth.	13.9	1953, 1960, 1965-74, 1976-84	9-12-60 4- 1-67 5-29-68 4-23-69 12-11-69 5-31-71 6-22-72 6-30-73 7- 3-74 8- 1-76 9-20-77 12- 9-77 9- 6-79 3-21-80 3-19-83 4- 5-84	R9.88 5.91 6.68 5.62 5.56 5.62 7.46 4.94 4.92 5.33 4.57 9.70 5.30 10.80 4.75 9.57	R2,970 R970 R1,270 R870 R850 R870 R1,610 R657 R651 R775 R555 R2,850 R766 R3,600 R603 2,770

* Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--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					
01362100	Roeliff Jansen Kill near Hillsdale, NY	Lat 42°09'14", long 73°31'14", Columbia County, Hydrologic Unit 02020006, at bridge on county highway off State Highway 22, 1.8 mi south of Hillsdale.	27.5	1958-60#, 1963-64, 1968-84	5-30-84	6.4	1,540
01362197	Bushnellsville Creek at Shandaken, NY	Lat 42°07'25", long 74°24'02", Ulster County, Hydrologic Unit 02020006, along State Highway 42, 0.4 mi upstream from Esopus Creek, and 0.6 mi northwest of Shandaken.	11.4	1951, 1956, 1972, 1976-84	4- 5-84	10.36	896
01363388	Dry Brook at West Shokan, NY	Lat 41°58'22", long 74°17'50", Ulster County, Hydrologic Unit 02020006, at bridge on town road, 0.6 mi northwest of West Shokan, and 1.2 mi upstream from mouth.	1.67	1976, 1978-84	4- 5-84	3.37	245
01368000	Wallkill River near Unionville, NY	Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank, 0.6 mi upstream from small tributary, 2.0 mi south of the New York-New Jersey State line, and 3.0 mi south of Unionville.	140	1937-81#, 1984	4- 5-84	19.80	2,360
01368500	Rutgers Creek at Gardnerville, NY	Lat 41°20'40", long 74°29'10", Orange County, Hydrologic Unit 02020007, on left bank, 2.2 mi upstream from mouth, and 1.7 mi southeast of Johnson.	59.7	1943-68#, 1984	4- 5-84	16.93	2,240
01369500	Quaker Creek at Florida, NY	Lat 41°20'21", long 74°21'45", Orange County, Hydrologic Unit 02020007, on right bank, just downstream from Browns Creek, at Florida, and 5.0 mi southwest of Goshen.	9.74	1937-79#, 1984	4- 5-84	14.08	440
01370000	Wallkill River at Pellets Island Mountain, NY	Lat 41°22'50", long 74°24'50", Orange County, Hydrologic Unit 02020007, on right bank, 2.0 mi downstream from small tributary, and 4.5 mi south of Middletown.	385	1919-68#, 1984	4- 5-84	117.8	6,200
01371000	Shawangunk Kill at Pine Bush, NY	Lat 41°37'07", long 74°17'38", Orange County, Hydrologic Unit 02020007, on left bank, 2.3 mi downstream from Pakanasink Creek, 12.9 mi above the mouth at Ganahgote, and 0.5 mi northeast of Pine Bush.	102	1924-32#, 1957-71#, 1984	4- 5-84	18.78	5,460
01372200	Wappinger Creek near Clinton Corners, NY	Lat 41°48'55", long 73°45'50", Dutchess County, Hydrologic Unit 02020008, on right down- stream wingwall of highway bridge, 850 ft downstream from abandoned railroad bridge abutment, 1,900 ft downstream from East Branch Wappinger Creek, and 1.0 mi south of Clinton Corners.	92.4	1956-75#, 1977-82, 1984	5-30-84	13.83	4,700
01372300	Little Wappinger Creek at Salt Point, NY	Lat 41°48'18", long 73°47'38", Dutchess County, Hydrologic Unit 02020008, on right bank, 200 ft downstream from abandoned railroad bridge abutment at Salt Point, and 0.6 mi upstream from Wappinger Creek.	32.9	1956-75#, 1984	5-30-84	6.81	1,120
01372800	Fishkill Creek at Hopewell Junction, NY	Lat 41°34'22", long 73°48'25", Dutchess County, Hydrologic Unit 02020008, on right bank, 400 ft upstream from bridge on State Highway 376, 500 ft upstream from small tributary, 0.6 mi south of State Highway 82, at Hopewell Junction.	57.3	1957-63#, 1964-75#, 1984	5-30-84	7.92	1,460

Operated as a continuous-record gaging station.

f From floodmarks.

No winter record.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Hudson River basin--Continued							
01373500	Fishkill Creek at Beacon, NY	Lat 41°30'40", long 73°56'55", Dutchess County, Hydrologic Unit 02020008, on left bank at upstream side of Bridge Street bridge in Beacon, 2.5 mi upstream from mouth.	190	1882-1902, 1944-68+, 1984	5-30-84	10.8	6,960
01373690	Woodbury Creek near Highland Mills, NY	Lat 41°22'00", long 74°06'17", Orange County, Hydrologic Unit 02020008, on left bank, 40 ft downstream from culvert type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft downstream from bridge on State Highway 32, and 1.9 mi north of Highland Mills.	11.2	1966-68+, 1971-72, 1977-84	5-12-81 6-7-82 3-19-83 4-5-84	2.94 2.45 4.29 6.3	R260 R150 R662 1,940
01374130	Canopus Creek at Oscawana Corners, NY	Lat 41°22'43", long 73°52'23", Putnam County, Hydrologic Unit 02030101, at bridge on Hortun Hollow Road, 0.4 mi downstream from West Branch, and 0.8 mi west of Oscawana Corners.	8.30	1975-84	3-14-77 4-10-80 4-6-84	4.86 4.89 5.26	R360 R365 416
01374250	Peekskill Hollow Creek at Tompkins Corners, NY	Lat 41°23'18", long 73°48'47", Putnam County, Hydrologic Unit 02030101, at bridge on Bryant Pond Road, 0.9 mi southwest of Tompkins Corners, and 1.1 mi downstream from Wiccopee Brook.	14.9	1975-84	1-25-79 5-30-84	3.54 4.46	R496 916
01376420	Saw Mill River at Elmsford, NY	Lat 41°03'19", long 73°49'16", Westchester County, Hydrologic Unit 02030101, at bridge on State Highway 119, 0.6 mi upstream from Rum Brook, and 0.8 mi downstream from Mine Brook at Elmsford.	15.4	1979-84	4-5-84	11.57	950
Passaic River basin							
01387410	Torne Brook at Ramapo, NY	Lat 41°08'34", long 74°09'44", Rockland County, Hydrologic Unit 02030103, 0.2 mi upstream from mouth, and 0.5 mi east of Ramapo.	2.60	1960, 1962-84	3-12-62 11-10-62 1-10-64 8-10-65 2-13-66 3-16-67 3-25-69 4-2-70 8-28-71 3-3-72 6-22-72 2-2-73 12-21-73 3-20-75 1-27-76 2-25-77 11-8-77 9-6-79 3-22-80 5-12-81 5-29-82 3-19-83 4-5-84	R6.26 R5.83 R6.01 R6.33 R6.02 R5.62 R6.40 R7.11 R9.40 R6.18 R6.18 R7.12 R7.08 R6.18 R6.45 R7.60 R11.02 7.09 7.39 7.10 6.50 6.99 8.10	R187 R109 R139 R201 R141 R78 R215 R428 R1,280 R171 R171 R432 R418 R171 R228 R640 1,520 R416 R533 R420 R196 R382 900
Delaware River basin							
01417185	Campbell Brook tributary near Downsville, NY	Lat 42°02'41", long 74°58'37", Delaware County, Hydrologic Unit 02040102, at culvert on Campbell Brook Road, 200 ft upstream from mouth, 2.0 mi southwest of Downsville Dam, and 2.7 mi southeast of Downsville.	.41	1975-84	5-29-84	2.39	30

* Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
Delaware River basin--Continued							
01434010	East Branch Neversink River at Denning, NY	Lat 41°57'30", long 74°46'18", Ulster County, Hydrologic Unit 02040104, on downstream side of bridge on private road at Strauss Estate, 0.9 mi upstream from Erts Brook, 0.4 mi downstream from Riley Brook, and 1.0 mi northeast of Denning.	13.3	1984	4- 5-84	5.39	4,060
Streams tributary to Lake Ontario							
042490673	North Branch Grindstone Creek near Altmar, NY	Lat 43°29'31", long 76°05'41", Oswego County, Hydrologic Unit 04140102, at culvert on Hong Kong Road, 4.1 mi upstream from confluence with South Branch Grindstone Creek, and 4.1 mi southwest of Altmar.	11.2	1976-84	2-14-84	12.89	414
04256040	Mill Creek tributary near Lowville, NY	Lat 43°45'43", long 75°31'13", Lewis County, Hydrologic Unit 04150101, at culvert on West Road, 2.0 mi southwest of Lowville, and 2.2 mi upstream from mouth.	1.66	1976-84	3-21-84 2-15-84	10.36 b10.84	94
04258700	Deer River at Deer River, NY	Lat 43°55'49", long 75°35'27", Lewis County, Hydrologic Unit 04150101, on left bank 350 ft upstream from bridge on State Highway 26 at Deer River, and 2 mi upstream from mouth.	94.8	1957-69*, 1977-84	2-15-84	*b7.78	a5,500
04260575	Horse Creek tributary near Dexter, NY	Lat 44°04'47", long 76°03'28", Jefferson County, Hydrologic Unit 04150102, at bridge on Weaver Road, 0.3 mi upstream from mouth, 1.0 mi southwest of Reynolds Corners, and 5.1 mi north of Dexter.	4.59	1976-84	3-21-84 2-15-84	10.46 b14.19	142 -
Streams tributary to St. Lawrence River							
04263445	Birch Creek at Pierces Corners, NY	Lat 44°25'42", long 75°32'15", St. Lawrence County, Hydrologic Unit 04150303, at culvert on Old State Road at Pierces Corners, 4.4 mi southeast of Pope Mills, and 11.1 mi upstream from mouth.	1.56	1977-84	12-15-83 2-15-84	3.31 b3.45	39 -
04264300	Brandy Brook near Waddington, NY	Lat 44°49'42", long 75°09'32", St. Lawrence County, Hydrologic Unit 04150301, at bridge on Halfway House Road, 3.2 mi southeast of Waddington, and 4.4 mi upstream from mouth.	27.0	1959-63*, 1964-84	2-15-84 4- 6-84	b6.93 6.81	- 210
04265100	Elm Creek near Hermon, NY	Lat 44°26'15", long 75°12'49", St. Lawrence County, Hydrologic Unit 04150304, on left bank, 100 ft downstream from highway bridge, 2.3 mi south of Hermon, and 6.8 mi upstream from confluence with Tanner Creek.	32.6	1959-68*, 1969-84	12-15-83	7.33	713
04267800	Trout Brook at Allen Corners, NY	Lat 44°47'34", long 75°02'01", St. Lawrence County, Hydrologic Unit 04150305, at abandoned bridge off State Highway 56A, at Allen Corners, and 2 mi southwest of Norfolk.	54.2	1959-63*, 1964-65, 1967-74, 1976-84	2-15-84 5-24-84	b10.37 9.18	- 1,240
04268200	Plum Brook near Grantville, NY	Lat 44°52'46", long 74°54'54", St. Lawrence County, Hydrologic Unit 04150305, at bridge on Grant Road, 0.7 mi downstream from unnamed tributary, 1.1 mi upstream from mouth, 1.4 mi north of Grantville, and 2.3 mi southwest of Massena city limits.	43.9	1959-63*, 1964-68, 1971-84	12-15-83 2-15-84	4.95 b5.48	524 -

a Approximately.

b Ice jam.

* Operated as a continuous-record gaging station.

* Maximum recorded, equipment malfunction.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis-charge (ft ³ /s)
Streams tributary to St. Lawrence River--Continued							
04268720	Hopkinton Brook at Hopkinton, NY	Lat 44°40'59", long 74°41'58", St. Lawrence County, Hydrologic Unit 04150306, at bridge on town road, 0.4 mi upstream from unnamed tributary, 0.6 mi south of Hopkinton, and 2.0 mi upstream from mouth.	20.0	1961-69, 1971-74, 1976-84	12-15-83 2-15-84	3.04 b5.24	461 -
04268800	West Branch St. Regis River near Parishville, NY	Lat 44°35'55", long 74°44'15", St. Lawrence County, Hydrologic Unit 04150306, at highway bridge, 4.1 mi downstream from Mud Pond Outlet, 4.2 mi southeast of Parishville, and 4.8 mi upstream from Niagara Mohawk Power Corp. dam.	171	1959-68*, 1969-84	12-15-83	4.56	2,370
04269050	Allen Brook near Brasher Falls, NY	Lat 44°48'07", long 74°43'41", St. Lawrence County, Hydrologic Unit 04150306, at bridge on U.S. Highway 11, 0.8 mi upstream from mouth, and 2.2 mi east of Brasher Falls.	16.0	1961-66*, 1967-74, 1976-84	12-15-83	5.05	1,070
04269100	Lawrence Brook near Moira, NY	Lat 44°50'20", long 74°35'46", Franklin County, Hydrologic Unit 04150306, at highway bridge, 2.4 mi northwest of Moira, and 5.4 mi upstream from mouth.	25.7	1959-60*, 1961-84	12-15-83 2-15-84	5.67 b6.42	632 -
04270100	West Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'49", long 74°28'51", Franklin County, Hydrologic Unit 04150307, at highway bridge, 0.8 mi west of Fort Covington Center, 2.1 mi upstream from East Branch, and 3.1 mi south of Fort Covington.	32.4	1962-74, 1976-84	12-15-83 2-15-84	5.63 b6.63	746 -
04270150	East Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'53", long 74°27'50", Franklin County, Hydrologic Unit 04150307, at highway bridge, at Fort Covington Center, 1.9 mi upstream from West Branch, and 3.2 mi south of Fort Covington.	23.9	1961-62*, 1963-74, 1976-84	12-15-83 2-15-84	5.52 b6.43	690 -
04270162	East Branch Little Salmon River near Skerry, NY	Lat 44°47'13", long 74°22'12", Franklin County, Hydrologic Unit 04150307, at culvert on Adams Road, 100 ft downstream from Limekiln Brook, 1.1 mi northeast of Skerry, and 5.7 mi upstream from mouth.	7.11	1978-84	12-15-83 2-15-84	3.12 b3.48	85 -
04270700	Trout River at Trout River, NY	Lat 44°59'23", long 74°17'56", Franklin County, Hydrologic Unit 04150307, at bridge on county highway, 0.2 mi east of State Highway 30, at Trout River, 0.5 mi upstream from international boundary, 1.5 mi downstream from unnamed tributary, and 3.3 mi downstream from Little Trout River.	107	1960-66*, 1967-84	12-15-83 2-15-84	5.47 b6.52	2,260 -
04273700	Salmon River at South Plattsburgh, NY	Lat 44°38'24", long 73°29'43", Clinton County, Hydrologic Unit 02010004, on left bank, at bridge on Salmon River Road, at South Plattsburgh, 0.4 mi west of State Highway 22, and 3.9 mi upstream from mouth.	61.9	1960-68*, 1969-84	12-14-83	5.79	1,890
04274000	West Branch Ausable River near Lake Placid, NY	Lat 44°18'40", long 73°55'00", Essex County, Hydrologic Unit 02010004, on right bank, 4 mi northeast of Lake Placid, 4 mi downstream from Lake Placid outlet, and 150 ft upstream from Monument Falls.	116	1917, 1920-27, 1928-68*, 1983-84	12-14-83	7.56	3,210

b Ice jam.

* Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1984

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Hudson River basin						
01362285 Woodland Creek	Esopus Creek	Lat 42°02'06", long 74°21'59", Ulster County, Hydrologic Unit 02020006, at bridge 0.9 mi upstream from Dougherty Branch, and 2.3 mi southwest of Woodland.	5.18		8-15-83	*1.3
					11- 1-83	*2.51
					12-15-83	93.3
					2- 2-84	6.00
					4- 2-84	19.4
					4-16-84	468
					6-12-84	7.76
					7-19-84	2.96
	9-11-84	*1.24				
01364959 Rondout Creek	Wallkill River	Lat 41°56'13", long 74°22'30", Ulster County, Hydrologic Unit 02020007, 500 ft upstream from mouth of Red Brook, 0.8 mi upstream from outlet of Peekamoose Lake, and 0.8 mi north of Peekamoose.	5.36		6-11-84	14.0
					7-19-84	8.11
					9-13-84	*2.36
01364960 Rondout Creek	Wallkill River	Lat 41°56'06", long 74°22'34", Ulster County, Hydrologic Unit 02020007, 300 ft upstream from private bridge at Peekamoose, and 0.6 mi upstream from outlet of Peekamoose Lake.	6.21		8-16-83	*3.7
					2- 2-84	11.0
					4- 3-84	27.2
					4-17-84	86.6
Delaware River basin						
01417820 Beaver Kill	East Branch Delaware River	Lat 42°00'40", long 74°36'15", Ulster County, Hydrologic Unit 02040102, 900 ft upstream from Black Brook, and 5.5 mi southeast of Turnwood.	8.08		11- 3-83	*3.49
					12-15-83	93.8
					1-31-84	6.76
					4- 2-84	19.7
					6-13-84	12.6
					7-19-84	8.36
	9-13-84	*3.91				
01421200 Cadosia Creek	East Branch Delaware River	Lat 41°58'03", long 75°15'51", Delaware County, Hydrologic Unit 02040102, at bridge on State Highway 236, 0.3 mi upstream from mouth, at Cadosia.	17.9	1949-50, 1955, 1957-71, 1973-82	6- 8-84	21.4
					6-15-84	*10.1
					8- 2-84	*6.46
					8-31-84	*3.52
01426000 Oquaga Creek	West Branch Delaware River	Lat 42°03'31", long 75°25'42", Broome County, Hydrologic Unit 02040101, on left bank, 150 ft downstream from Bone Creek, 400 ft upstream from Mill Street Bridge in Deposit, and 0.3 mi upstream from mouth.	67.6	1941-73*, 1975-76, 1979-83	10-19-83	*13.9
					6-15-84	27.1
					8- 2-84	31.1
					8-31-84	*8.58
01427500 Callicoon Creek	Delaware River	Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank, 0.7 mi southeast of Callicoon, 0.9 mi upstream from mouth, and 1.0 mi west of Hortonville.	110	1941-82*, 1983	5-25-84	203
					6-15-84	85.1
					7-31-84	49.6
					9-12-84	*23.3
01428000 Tenmile River	Delaware River	Lat 41°33'51", long 75°00'56", Sullivan County, Hydrologic Unit 02040101, on left bank 0.5 mi downstream from East Branch Tenmile River, 0.8 mi upstream from mouth, and 0.6 mi northeast of Tusten.	45.6	1946-73*, 1978-83	5-24-84	*105
					7-31-84	17.6
					9-12-84	*6.73
0143400690 East Branch Neversink River	Neversink River	Lat 41°57'51", long 74°27'02", Ulster County, Hydrologic Unit 02040104, 500 ft upstream from Tray Mill Brook, and 2.2 mi northeast of Denning.	9.15		6-13-84	18.6
0143402705 Pigeon Brook	Biscuit Brook	Lat 41°59'13", long 74°30'11", Ulster County, Hydrologic Unit 02040104, 0.4 mi north of West Branch Road, at bridge, 250 ft upstream from mouth, at Frost Valley.	2.67		8-15-83	*.96
					11- 3-83	*.73
					12-14-83	57.6
					2- 1-84	2.82
					4- 3-84	6.89
					4-17-84	33.0
					6-12-84	4.27
					7-20-84	2.58
					9-12-84	*1.24

* Base flow.

Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1984--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Delaware River basin--Continued						
0143410505 High Falls Brook	West Branch Neversink River	Lat 41°58'33", long 74°31'19", Ulster County, Hydrologic Unit 02040104, at bridge on West Branch Road, 0.1 mi upstream from mouth, and 1.0 mi southwest of Frost Valley.	2.76		8-15-83 11- 3-83 2- 1-84 4- 3-84 4-17-84 6-13-84 7-20-84 9-12-84	*1.0 *.85 3.37 7.48 37.6 5.76 2.42 *.98
01438000 Neversink River	Delaware River	Lat 41°21'40", long 74°41'07", Orange County, Hydrologic Unit 02040104, at Tristates Bridge on East Main Street (U.S. Highway 6), in Port Jervis, 450 ft upstream from Clove Brook, and 0.6 mi upstream from mouth.	336	1902-03, 1943, 1945, 1960-62, 1965-83	10-18-83 2-10-84 6- 7-84 7-30-84 9-13-84	97.3 304 805 217 121
Streams tributary to Lake Ontario						
04253715 Moss Lake Tributary	Moss Lake	Lat 43°47'20", long 74°50'41", Herkimer County, Hydrologic Unit 04150101, at culvert on Big Moose Road, 2.0 mi northwest of Eagle Bay.	.50	1982-83	12- 1-83 4- 5-84 6-13-84	1.01 2.58 *.44
04256456 Cranberry Pond Inlet	Cranberry Pond	Lat 43°51'53", long 74°58'23", Herkimer County, Hydrologic Unit 04150101, at site 300 ft west of access logging road to Cranberry Pond, 1.6 mi northwest of Woods Lake, and 4.5 mi northwest of Big Moose.	.39		5- 3-84 6-12-84 8-30-84	.79 .03 *.06
04256480 Woods Lake Tributary	Woods Lake	Lat 43°52'17", long 74°57'17", Herkimer County, Hydrologic Unit 04150101, on right bank 65 ft upstream from mouth, 1.4 mi north of Woods Lake, and 4.2 mi northwest of Big Moose.	.12		8-30-84	*.07
04258022 Black River	Lake Ontario	Lat 43°53'38", long 75°30'18", Lewis County, Hydrologic Unit 04150101, at bridge on State Highway 410, at Castorland.	1,622		3-29-84 4- 6-84 4- 7-84 4- 8-84 4- 9-84 4-10-84	3,880 6,010 9,580 12,200 10,100 8,740
Streams tributary to St. Lawrence River						
04265598 Little Simon Pond Inlet	Little Simon Pond	Lat 44°09'07", long 74°27'26", Franklin County, Hydrologic Unit 04150305, at culvert on access road from Moody, 1.0 mi southeast of Mount Morris, and 4.8 mi south of Tupper Lake.	.35		5- 4-84 7- 2-84 7-18-84 8-22-84	1.32 .07 .13 <.01
04280425 Mettawee River	Champlain Canal	Lat 43°22'59", long 73°17'00", Washington County, Hydrologic Unit 02010001, at bridge on State Highway 22, at Middle Granville.	156		5-31-84	5,380
04280746 Winchell Creek	Champlain Canal	Lat 43°24'51", long 73°25'04", Washington County, Hydrologic Unit 02010001, at culvert on Brayton Road, 0.6 mi north of Bull Hill, and 3.5 mi east of Fort Ann.	9.77		5-31-84	535

* Base flow.

CHEMICAL QUALITY OF PRECIPITATION

219

HUDSON RIVER BASIN

AT HINCKLEY, NY

LOCATION.--Lat 43°18'35", long 75°06'35", Oneida County, at National Weather Service station "Hinckley," at Hinckley Dam on West Canada Creek, on Cody Road in Hinckley.

PERIOD OF RECORD.--Water years 1966 to January 1980, November 1983 to August 1984 (discontinued) (monthly composite).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethylene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, NOVEMBER 1983 TO AUGUST 1984

MONTHLY COMPOSITE

COLLECTION PERIOD	INCHES OF PRECIPITATION	SPECIFIC CONDUCTANCE (uS/CM)	PH (UNITS)	CALCIUM (MG/L)	MAGNESIUM (MG/L)	SODIUM (MG/L)	POTASSIUM (MG/L)	SULFATE (MG/L)	CHLORIDE (MG/L)	NITRATE AS N (MG/L)	NITROGEN AMMONIA AS N (MG/L)
NOV 8 TO DEC 3	4.30	14.8	6.26	1.50	0.28	0.16	0.06	1.92	0.20	0.44	0.33
DEC 3 TO DEC 23	-	6.3	5.78	0.58	0.10	0.11	0.03	0.82	0.02	0.21	0.01
DEC 23 TO JAN 28	6.95	18.0	5.18	1.20	0.23	0.35	0.04	2.92	0.42	0.75	0.91
JAN 28 TO FEB 15	-	18.0	5.08	0.96	0.18	0.36	0.04	2.23	0.47	0.74	0.31
FEB 15 TO MAR 15	-	22.6	5.40	4.00	0.95	0.21	0.04	3.41	0.32	0.89	0.30
APR 10 TO MAY 1	-	15.5	4.83	0.70	0.09	0.12	0.07	2.84	0.20	0.46	0.55
MAY 1 TO MAY 26	-	19.6	4.77	0.74	0.10	0.07	0.14	3.53	0.20	0.51	0.60
MAY 26 TO JUNE21	3.68	14.8	5.66	0.59	0.11	0.12	0.27	3.23	0.20	0.34	0.99
JUNE21 TO JULY17	4.40	27.8	5.81	1.30	0.13	0.21	0.55	5.64	0.37	0.85	3.30
JULY17 TO AUG 14	3.99	51.0	4.10	1.20	0.17	0.23	0.61	5.51	0.24	1.91	1.30

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

NEAR DELMAR, NY

LOCATION.--Lat 42°36'36", long 73°53'34", Albany County, at New York State Department of Environmental Conservation's Five River Educational Center, 600 ft northwest of visitor's center, 0.7 mi north of State Highway 443, 3.0 mi west of Delmar.

PERIOD OF RECORD.--December 1979 to October 1982, November 1983 to August 1984 (monthly composite, discontinued).
November 1980 to November 1982 (storm event wetfall, discontinued).
November 1980 to November 1982 (monthly dustfall, discontinued).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. in diameter which drains into a Teflon® receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

CHEMICAL ANALYSES, NOVEMBER 1983 TO AUGUST 1984

MONTHLY COMPOSITE

COLLECTION PERIOD	INCHES OF PRECIP- ITATION	SPECIFIC CONDUCT- ANCE (uS/CM)	PH (UNITS)	CAL- CIUM (MG/L)	MAGNE- SIUM (MG/L)	SODIUM (MG/L)	POTAS- SIUM (MG/L)	SUL- FATE (MG/L)	CHLO- RIDE (MG/L)	NITRATE AS N (MG/L)	NITRO- GEN AMMONIA AS N (MG/L)
NOV 9 TO DEC 7	6.06	12.1	5.18	0.12	0.32	0.10	0.03	1.65	0.21	0.28	0.12
DEC 7 TO FEB 9	5.22	13.7	5.20	0.30	0.60	0.29	0.05	2.13	0.47	0.45	0.17
FEB 9 TO MAR 12	2.70	30.1	4.41	0.48	0.28	0.59	0.06	3.11	1.07	0.66	0.31
APR 18 TO MAY 14	4.60	20.0	4.54	0.78	0.24	0.09	0.11	2.95	0.20	0.61	0.23
MAY 14 TO JUNE 11	5.02	10.4	5.79	0.28	0.09	0.11	0.29	1.77	0.20	0.29	0.80
JUNE 11 TO JULY 1	1.24	45.6	6.43	3.40	0.38	0.30	0.57	7.45	0.59	0.83	1.80
JULY 1 TO AUG 3	3.97	40.0	7.20	0.75	0.20	0.09	-	3.59	0.21	0.45	3.50

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CHEMICAL QUALITY OF PRECIPITATION

221

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY

LOCATION.--Lat 44°34'40", long 75°06'40", St. Lawrence County, at National Weather Service station "Canton 4SE," on the Canton State University Farm on State Highway 68, 2.5 mi southeast of U.S. Highway 11 and Canton.

PERIOD OF RECORD.--August 1965 to October 1982, December 1983 to August 1984 (monthly composite, discontinued).
October 1981 to November 1982 (storm event wetfall, discontinued).
October 1981 to November 1982 (monthly dustfall, discontinued).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, DECEMBER 1983 TO AUGUST 1984

MONTHLY COMPOSITE

COLLECTION PERIOD	INCHES OF PRECIPITATION	SPECIFIC CONDUCTANCE (uS/CM)	PH (UNITS)	CALCIUM (MG/L)	MAGNESIUM (MG/L)	SODIUM (MG/L)	POTASSIUM (MG/L)	SULFATE (MG/L)	CHLORIDE (MG/L)	NITRATE AS N (MG/L)	NITROGEN AMMONIA AS N (MG/L)
DEC 1 TO JAN 3	6.41	35.0	4.18	0.19	0.04	0.59	0.02	1.53	0.92	0.13	0.09
JAN 3 TO FEB 3	1.18	68.0	4.07	1.10	0.41	2.20	0.07	4.60	3.65	1.65	0.34
FEB 3 TO MAR 1	2.92	24.0	4.50	0.46	0.15	0.51	0.03	2.10	0.70	0.52	0.10
MAR 1 TO APR 2	1.08	42.8	4.67	1.10	0.41	1.90	0.07	4.14	2.44	0.89	0.40
APR 2 TO MAY 1	3.75	14.7	4.51	0.57	0.17	0.18	0.06	2.71	0.27	0.34	0.27
MAY 1 TO JUNE 1	5.00	25.3	4.42	0.65	0.30	0.09	0.90	4.03	0.20	0.51	0.46
JUNE 1 TO JULY 2	2.30	32.0	4.63	1.20	0.42	0.17	0.71	5.01	0.57	0.55	1.10
JULY 2 TO AUG 6	4.44	40.0	4.10	0.98	0.21	0.10	0.19	4.93	0.33	0.45	0.32

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GROUND-WATER LEVELS

ALBANY COUNTY

424114073495402. Local number, A 636.

LOCATION.--Lat 42°41'14", long 73°49'54", Hydrologic Unit 02020006, Fuller Road, Albany.

Owner: State University of New York at Albany.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 24 ft, cased to 22 ft, 2-in. jet point (60-gauge screen 22 ft to 24 ft). Well gravel packed from original depth of 26 ft.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 260 ft, from topographic map. Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Well was drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft north, which has a period of record from November 1965 to May 1974 (unpublished).

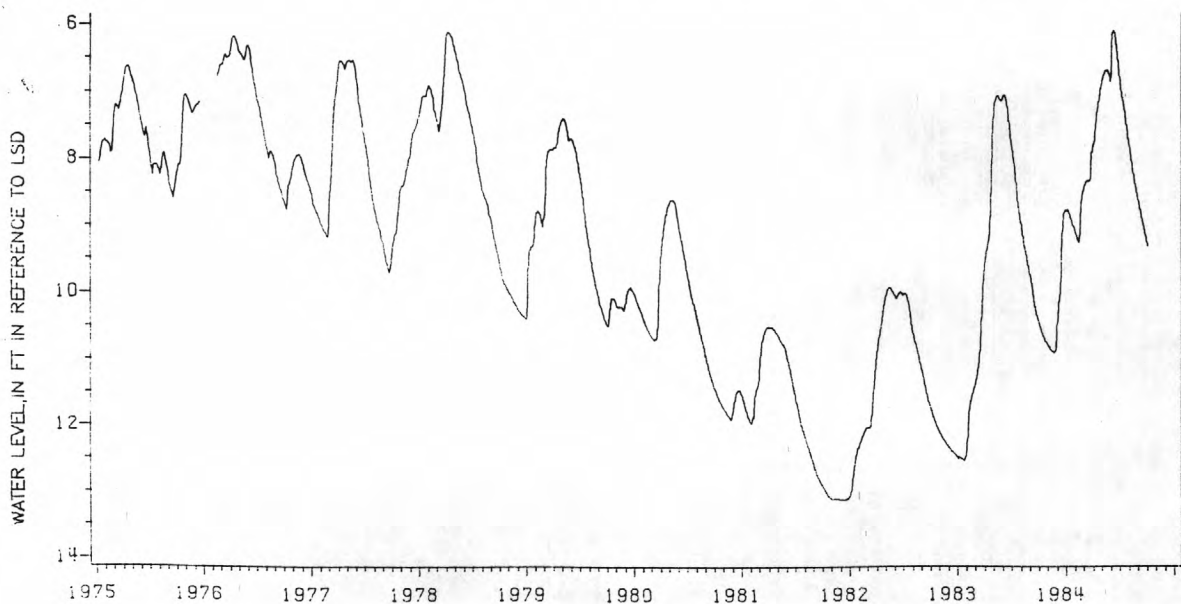
PERIOD OF RECORD.--May 1974 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft below land-surface datum, Apr. 12, 13, 1978, June 5, 6-7, 8, 1984; lowest, 13.13 ft below land-surface datum, Oct. 29, Nov. 25, 26-Dec. 17, 18, 20, 21-22, 23, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.49	10.83	10.52	8.81	---	8.44	7.82	6.85	6.29	6.96	7.89	8.72
2	10.50	10.84	10.46	8.81	---	8.43	7.81	6.84	6.20	7.00	7.93	8.75
3	10.51	10.84	10.39	8.80	---	8.42	7.80	6.83	6.16	7.04	7.96	8.77
4	10.53	10.85	10.33	8.80	9.20	8.41	7.78	6.80	6.14	7.07	7.99	8.78
5	10.54	10.86	10.28	8.80	9.20	8.40	7.75	6.78	6.13	7.10	8.03	8.79
6	10.55	10.86	10.23	8.79	9.20	8.38	7.68	6.78	6.12	7.13	8.06	8.82
7	10.57	10.87	10.17	8.79	9.22	8.37	7.62	6.77	6.12	7.15	8.09	8.84
8	10.58	10.88	10.14	8.81	9.24	8.37	7.56	6.75	6.12	7.16	8.12	8.86
9	10.60	10.89	10.10	8.82	9.25	8.36	7.51	6.73	6.13	7.18	8.16	8.89
10	10.62	10.90	10.06	8.84	9.27	8.36	7.44	6.72	6.15	7.20	8.19	8.91
11	10.63	10.90	10.02	8.85	9.28	8.35	7.38	6.72	6.18	7.22	8.22	8.93
12	10.65	10.89	9.97	8.87	9.27	8.36	7.34	6.72	6.21	7.24	8.24	8.96
13	10.65	10.91	9.90	8.90	9.27	8.37	7.32	6.72	6.24	7.27	8.27	8.98
14	10.66	10.91	9.76	8.91	9.24	8.36	7.30	6.72	6.27	7.30	8.30	9.00
15	10.67	10.92	9.60	8.92	9.16	8.37	7.27	6.72	6.31	7.34	8.32	9.02
16	10.69	10.92	9.43	---	8.99	8.36	7.24	6.71	6.35	7.37	8.35	9.03
17	10.70	10.92	9.28	---	8.87	8.37	7.20	6.72	6.39	7.40	8.37	9.05
18	10.71	10.92	9.16	---	8.79	8.37	7.18	6.73	6.42	7.44	8.40	9.08
19	10.72	10.93	9.07	---	8.74	8.36	7.15	6.72	6.45	7.47	8.42	9.09
20	10.73	10.93	9.02	---	8.68	8.35	7.12	6.73	6.49	7.50	8.44	9.11
21	10.75	10.93	8.98	---	8.64	8.32	7.09	6.74	6.54	7.54	8.46	9.13
22	10.76	10.93	8.91	---	8.61	8.18	7.07	6.75	6.58	7.57	8.48	9.16
23	10.76	10.93	8.87	---	8.59	8.06	7.04	6.76	6.62	7.60	8.50	9.18
24	10.77	10.92	8.84	---	8.55	8.01	7.00	6.78	6.67	7.63	8.53	9.20
25	10.77	10.91	8.82	---	8.53	7.97	6.97	6.80	6.71	7.67	8.55	9.22
26	10.78	10.89	8.82	---	8.51	7.94	6.96	6.81	6.75	7.71	8.58	9.25
27	10.78	10.86	8.81	---	8.51	7.92	6.94	6.84	6.79	7.74	8.60	9.27
28	10.79	10.80	8.80	---	8.48	7.89	6.91	6.87	6.83	7.77	8.63	9.30
29	10.80	10.69	8.79	---	8.45	7.86	6.89	6.88	6.88	7.80	8.65	9.32
30	10.81	10.60	8.80	---	---	7.85	6.87	6.76	6.92	7.83	8.68	9.34
31	10.82	---	8.80	---	---	7.84	---	6.49	---	7.86	8.70	---

WTR YEAR 1984 HIGHEST 6.12 June 5, 6-7, 8, 1984 LOWEST 10.93 Nov. 18, 19-23, 24, 1983



GROUND-WATER LEVELS

223

ALBANY COUNTY

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.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 198 ft, cased to 193 ft, 30-slot plastic screen 193 ft to 198 ft.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 220 ft, from topographic map. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Water level affected by pumping from distant municipal well field.

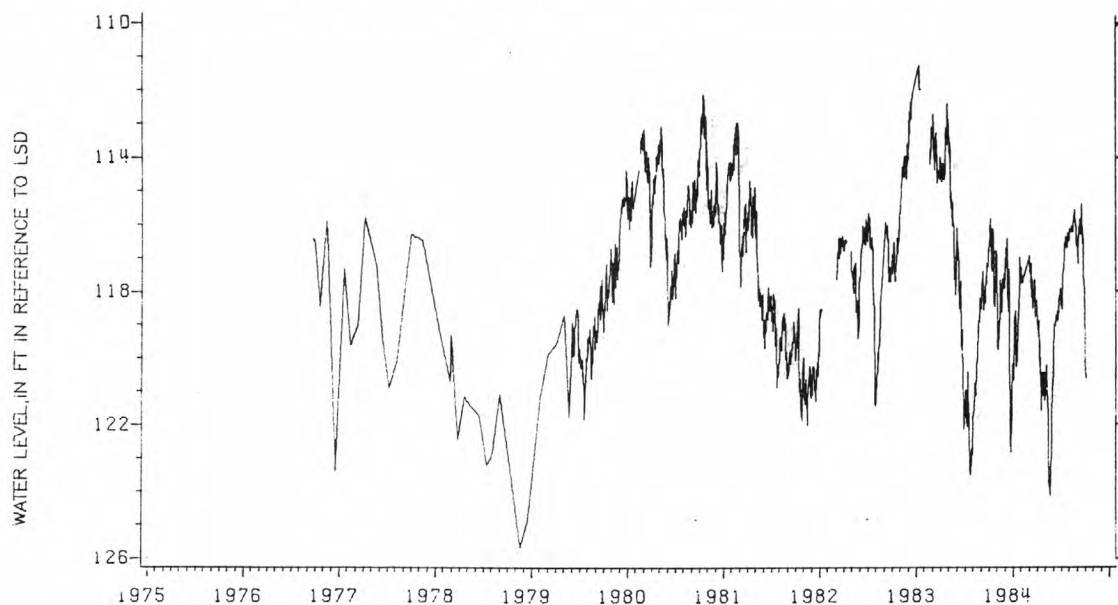
PERIOD OF RECORD.--September 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 111.11 ft below land-surface datum, Jan. 7, 1983; lowest measured, 126.55 ft below land-surface datum, Sept. 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116.45	119.66	117.23	120.41	117.75	117.19	119.01	120.72	119.29	118.40	116.15	117.19
2	116.06	119.77	117.27	120.13	---	117.44	118.89	120.72	118.99	118.26	116.21	116.95
3	116.08	119.54	117.04	119.69	---	117.39	119.35	120.89	118.99	118.06	116.17	116.48
4	115.86	119.50	116.73	119.08	---	117.39	119.23	120.24	118.98	117.84	116.18	116.26
5	115.81	119.40	116.99	118.82	---	117.48	119.16	120.88	119.06	117.59	116.20	116.18
6	116.61	119.03	116.41	118.61	---	117.16	118.90	120.89	119.00	117.50	116.20	116.10
7	116.93	118.90	116.41	118.99	---	117.74	119.69	120.72	118.93	117.35	116.09	116.03
8	117.30	119.06	117.27	119.05	---	118.18	120.03	121.02	118.82	117.36	116.18	115.88
9	117.32	118.78	117.83	119.68	---	118.06	119.98	121.65	118.72	117.21	116.25	115.90
10	117.39	118.32	118.12	119.77	---	118.14	120.25	122.49	118.75	116.96	116.26	116.01
11	117.16	117.66	118.63	119.69	---	117.60	120.03	123.15	118.77	116.61	116.21	116.13
12	116.66	118.02	118.06	120.29	---	118.06	120.36	123.40	118.92	116.55	116.21	116.32
13	116.14	118.31	117.81	120.11	---	118.51	121.08	123.76	118.71	116.66	116.11	115.99
14	116.17	118.63	117.34	119.73	---	118.15	121.62	123.80	118.60	116.71	115.97	115.52
15	116.74	118.66	117.66	119.51	---	118.19	121.18	123.62	118.82	116.61	115.88	115.41
16	116.88	117.77	118.76	119.50	---	118.23	120.47	124.02	118.88	116.39	115.82	116.00
17	116.82	117.84	120.23	119.25	---	118.30	120.56	124.14	118.60	116.48	115.72	116.39
18	117.88	118.03	121.36	118.97	---	117.98	120.84	123.91	118.30	116.42	115.65	116.56
19	118.37	117.95	122.19	118.50	---	117.67	121.13	123.71	118.20	116.65	115.58	116.33
20	118.48	118.03	122.51	118.45	---	118.10	120.88	123.47	118.29	116.69	115.63	116.53
21	118.35	117.64	122.83	118.44	---	117.84	121.15	123.28	118.22	116.66	115.82	117.18
22	118.02	117.91	122.69	118.32	---	118.03	121.04	123.02	118.14	116.66	116.04	117.56
23	117.54	117.89	122.48	118.06	---	118.17	120.44	122.17	118.16	116.46	116.05	117.96
24	117.26	117.76	121.64	117.42	---	118.81	120.44	121.95	118.04	116.27	116.06	118.43
25	117.22	117.49	121.37	116.96	---	118.52	120.48	121.52	117.93	116.43	116.12	118.50
26	116.80	117.64	121.17	117.76	---	118.29	121.03	121.13	118.10	116.47	116.30	119.26
27	116.84	117.90	120.88	117.53	---	118.70	120.94	121.20	118.25	116.38	116.63	120.06
28	116.82	117.63	120.54	117.76	116.99	118.53	121.28	120.96	118.38	116.45	116.69	120.22
29	117.83	117.00	120.21	117.46	116.94	118.45	121.01	120.46	118.41	116.51	116.94	120.19
30	119.15	117.24	120.42	117.31	---	118.62	120.45	120.06	118.55	116.39	116.98	120.63
31	119.54	---	120.65	117.48	---	119.16	---	119.64	---	116.24	117.08	---

WTR YEAR 1984 HIGHEST 115.28 Sept. 15, 1984 LOWEST 124.23 May 16, 1984



GROUND-WATER LEVELS

DUTCHESS COUNTY

414737073563301. Local number, Du 321.

LOCATION.--Lat 41°47'37", long 73°56'33", Hydrologic Unit 02020008, near Hyde Park.

Owner: U.S. National Park Service.

AQUIFER.--Confined aquifer in shale of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 128 ft, cased to unknown depth, open hole.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 170 ft, from topographic map. Measuring point: Top of extended casing, 3.10 ft above land-surface datum.

REMARKS.--Water level responds to semidiurnal earth tides (approximately 0.05 ft).

PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft below land-surface datum, June 22, 1953; lowest, 73.85 ft below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.02	70.25	69.89	69.76	69.59	69.17	68.90	68.37	67.47	67.40	67.78	68.15
2	69.97	70.23	69.96	69.76	69.68	69.24	68.93	68.36	67.41	67.39	67.78	68.21
3	69.92	70.14	69.97	69.71	69.73	69.31	68.95	68.35	67.38	67.42	67.79	68.22
4	69.89	70.06	69.95	69.63	69.66	69.39	68.96	68.16	67.36	67.44	67.79	68.17
5	69.86	70.02	69.91	69.56	69.55	69.41	68.82	68.03	67.37	67.44	67.80	68.20
6	69.87	70.02	69.88	69.51	69.49	69.30	68.57	68.11	67.38	67.44	67.81	68.27
7	69.95	70.05	69.70	69.48	69.55	69.26	68.52	68.19	67.36	67.37	67.78	68.34
8	70.04	70.12	69.74	69.55	69.65	69.30	68.61	68.21	67.35	67.35	67.74	68.40
9	70.10	70.16	69.86	69.62	69.71	69.31	68.70	68.08	67.32	67.41	67.78	68.42
10	70.16	70.16	69.95	69.68	69.77	69.33	68.73	68.05	67.31	67.45	67.84	68.39
11	70.20	69.99	70.01	69.68	69.79	69.30	68.67	68.09	67.30	67.44	67.87	68.34
12	70.17	69.83	70.00	69.75	69.76	69.34	68.62	68.10	67.33	67.41	67.89	68.34
13	70.02	69.91	69.77	69.84	69.74	69.41	68.60	68.08	67.33	67.45	67.92	68.37
14	69.95	70.02	69.48	69.83	69.70	69.29	68.60	68.05	67.30	67.52	67.94	68.36
15	69.96	70.09	69.44	69.78	69.61	69.25	68.53	68.05	67.31	67.57	67.95	68.35
16	70.01	70.02	69.51	69.74	69.53	69.23	68.41	68.07	67.37	67.56	67.95	68.40
17	70.05	69.93	69.61	69.71	69.51	69.20	68.29	68.11	67.40	67.53	67.91	68.48
18	70.06	69.98	69.72	69.71	69.49	69.19	68.29	68.12	67.36	67.49	67.90	68.54
19	70.06	70.06	69.73	69.66	69.47	69.15	68.34	68.06	67.29	67.47	67.91	68.52
20	70.10	70.10	69.77	69.67	69.40	69.10	68.40	68.00	67.29	67.54	67.93	68.46
21	70.15	70.04	69.83	69.72	69.34	69.03	68.43	67.99	67.33	67.61	67.99	68.44
22	70.16	70.02	69.75	69.78	69.37	68.94	68.47	68.02	67.36	67.65	68.04	68.51
23	70.11	70.07	69.61	69.82	69.40	68.93	68.46	68.03	67.38	67.67	68.03	68.58
24	69.99	70.08	69.50	69.78	69.33	68.99	68.33	68.02	67.39	67.65	68.02	68.60
25	69.96	69.93	69.45	69.63	69.25	69.04	68.25	68.03	67.34	67.65	68.07	68.60
26	69.93	69.86	69.51	69.57	69.27	69.05	68.29	68.03	67.33	67.68	68.13	68.59
27	69.91	69.92	69.58	69.55	69.39	69.04	68.38	68.05	67.34	67.68	68.17	68.67
28	69.95	69.98	69.62	69.54	69.36	69.02	68.45	68.09	67.36	67.67	68.17	68.73
29	70.00	69.92	69.55	69.54	69.19	68.88	68.48	67.94	67.40	67.73	68.16	68.74
30	70.12	69.86	69.59	69.55	---	68.76	68.44	67.62	67.41	67.77	68.14	68.74
31	70.21	---	69.70	69.53	---	68.84	---	67.50	---	67.78	68.12	---

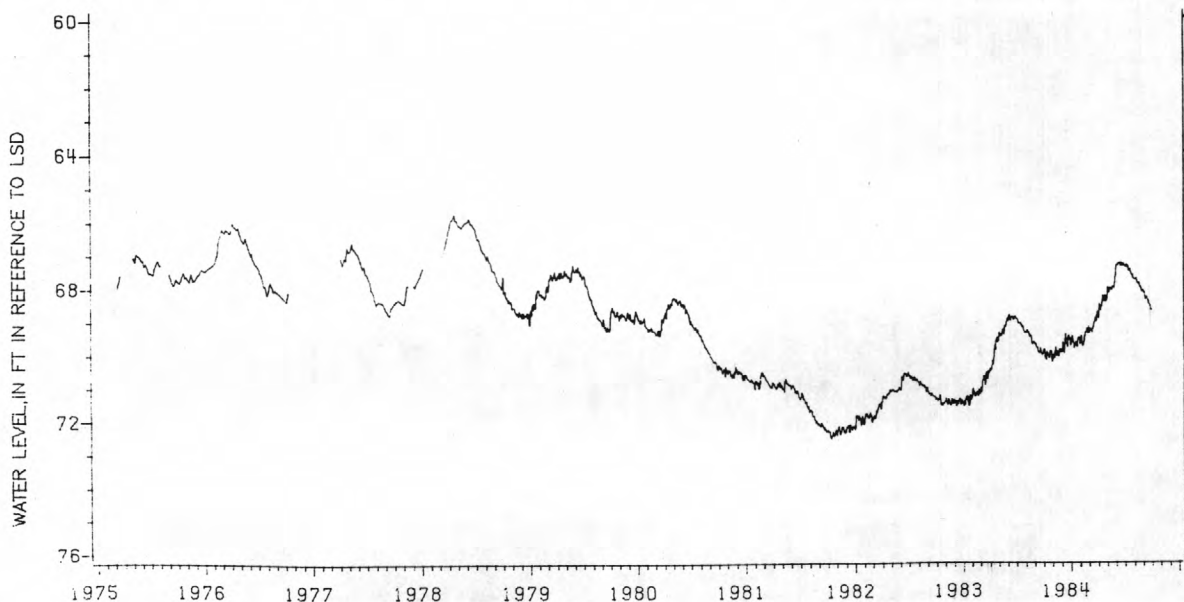
WTR YEAR 1984

HIGHEST

67.26 June 15, 1984

LOWEST

70.27 Nov. 1, 2, 1983



GROUND-WATER LEVELS

225

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: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in., depth 28 ft in July 1979, cased to 25 ft, 1.25-in. well point (60-gauge screen 25 ft to 27 ft, damaged during well installation).

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Altitude of land-surface datum is 330 ft, from topographic map. Measuring point: Top of casing, 2.10 ft above land-surface datum.

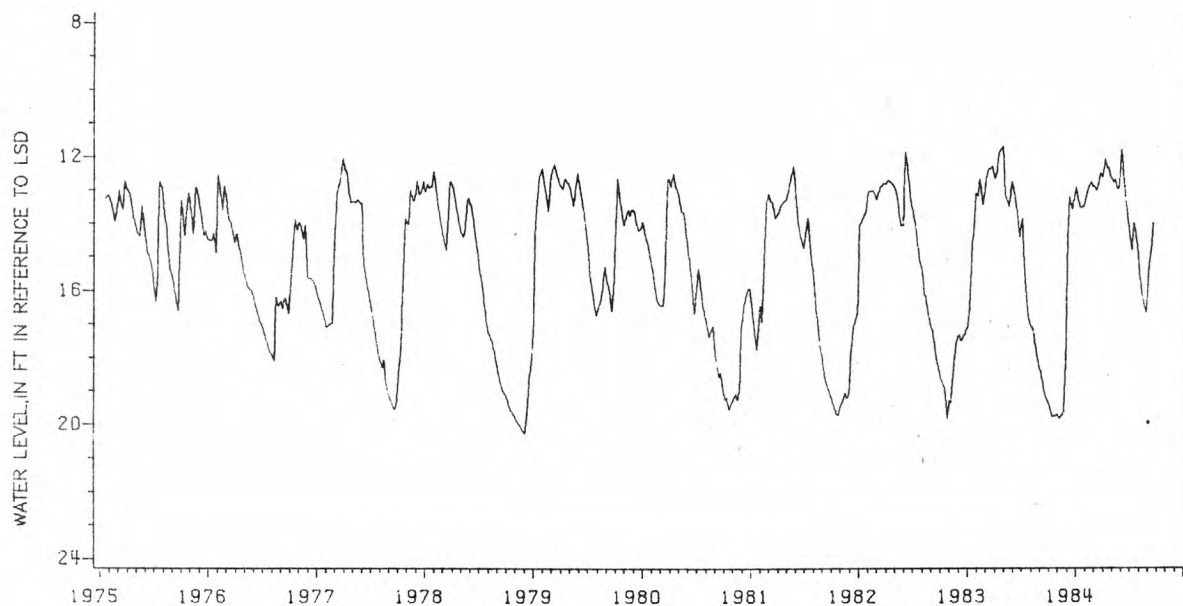
PERIOD OF RECORD.--October 1965 to April 1969, June 1971 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.70 ft below land-surface datum, May 2, 1983; lowest measured, 20.60 ft below land-surface datum, Nov. 24, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1983	19.40	JAN 10, 1984	13.25	APR 16, 1984	12.35	JUL 16, 1984	14.01
11	19.75	16	13.50	23	12.35	23	14.20
17	19.75	30	13.50	30	12.60	25	14.37 Z
24	19.75	FEB 06	13.20	MAY 07	12.75	30	14.70
31	19.70	14	12.95	14	12.70	AUG 06	15.50
NOV 07	19.80	21	12.75	21	12.95	14	16.15
15	19.75	27	12.85	29	12.95	20	16.45
21	19.55	MAR 05	12.90	JUN 05	11.80	27	16.65
28	18.05	12	13.00	11	12.55	SEP 06	15.20
DEC 05	14.45	19	12.85	18	13.15	14	14.80
12	13.20	26	12.50	25	13.80	21	14.01
19	13.55	APR 02	12.60	JUL 02	14.20		
JAN 03, 1984	12.90	10	12.05	10	14.80		

Z Measured by USGS personnel.



GROUND-WATER LEVELS

GREENE COUNTY

422319073482001. Local number, G 1.

LOCATION.--Lat 42°23'19", long 73°48'20", Hydrologic Unit 02020006, near West Coxsackie.

Owner: Harry Andrews.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in., depth 17.6 in September 1984 (originally reported as 19 ft), tile-lined to 2 ft, stone-lined to 19 ft.

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Altitude of land-surface datum is 130 ft, from topographic map. Measuring point: Chiseled square on top of inner step on curb, 0.18 ft below land-surface datum.

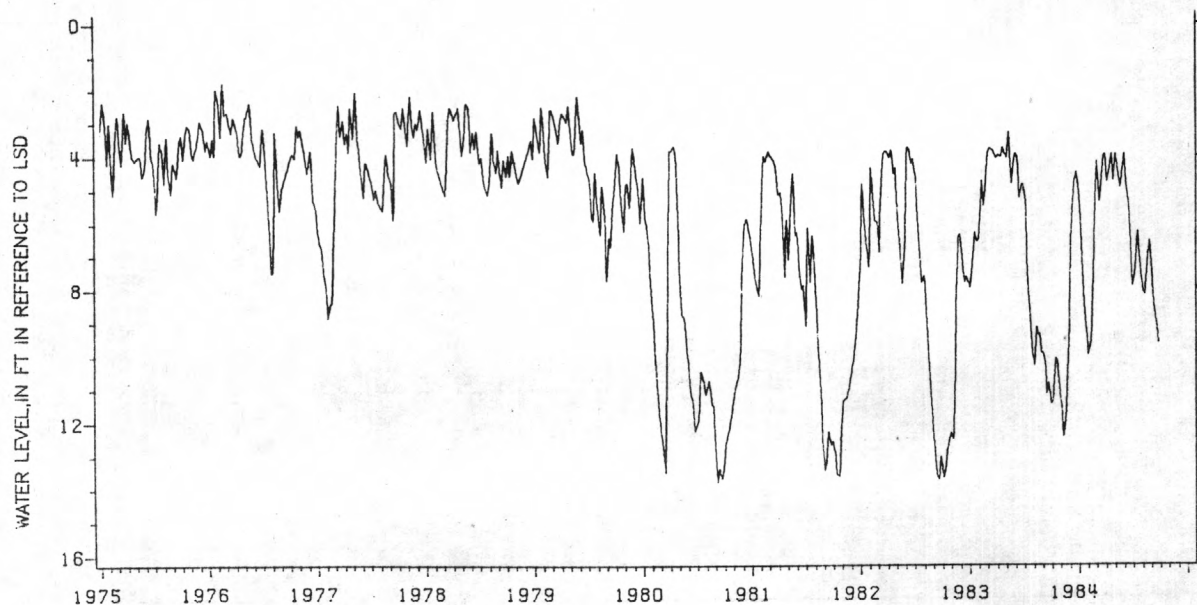
PERIOD OF RECORD.--December 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft below land-surface datum, Mar. 15, 1962; lowest measured, 15.56 ft below land-surface datum, Feb. 27, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1983	11.35	JAN 06, 1984	6.27	APR 07, 1984	4.79	JUL 07, 1984	7.59
14	10.07	14	7.48	14	4.37	15	6.25
21	10.19	20	8.76	21	3.95	22	6.99
30	11.14	27	9.28	27	4.75	29	7.56
NOV 04	11.54	FEB 03	9.98	MAY 05	3.97	AUG 05	8.10
11	12.41	10	9.56	12	4.57	12	8.17
18	11.96	18	7.38	19	4.97	19	6.94
26	9.56	24	5.27	26	4.56	26	6.54
DEC 02	6.50	MAR 03	4.16	JUN 02	3.96	SEP 02	7.51
09	5.58	10	5.37	09	4.84	09	8.48
16	4.81	17	4.83	16	5.51	16	8.86
23	4.47	24	4.02	23	6.69	20	9.23
31	5.26	31	3.95	30	7.91	24	9.62

Z Measured by USGS personnel.



HAMILTON COUNTY

432832074122201. Local number, H 3.

LOCATION.--Lat 43°28'32", long 74°12'22", Hydrologic Unit 02020002, near Griffin.

Owner: F. B. Girard.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in., depth 16.4 ft in July 1983, filled in from original depth of 19 ft, cased to 16 ft, 1.25-in. well point (60-gauze screen 16 ft to 19 ft, damaged during well installation).

METHOD OF MEASUREMENT.--Taped by USGS personnel.

DATUM.--Altitude of land-surface datum is 1,290 ft, from topographic map. Measuring point: Top of casing, 2.30 ft above land-surface datum, however, casing has settled about 0.5 ft since well completion, probably in first year.

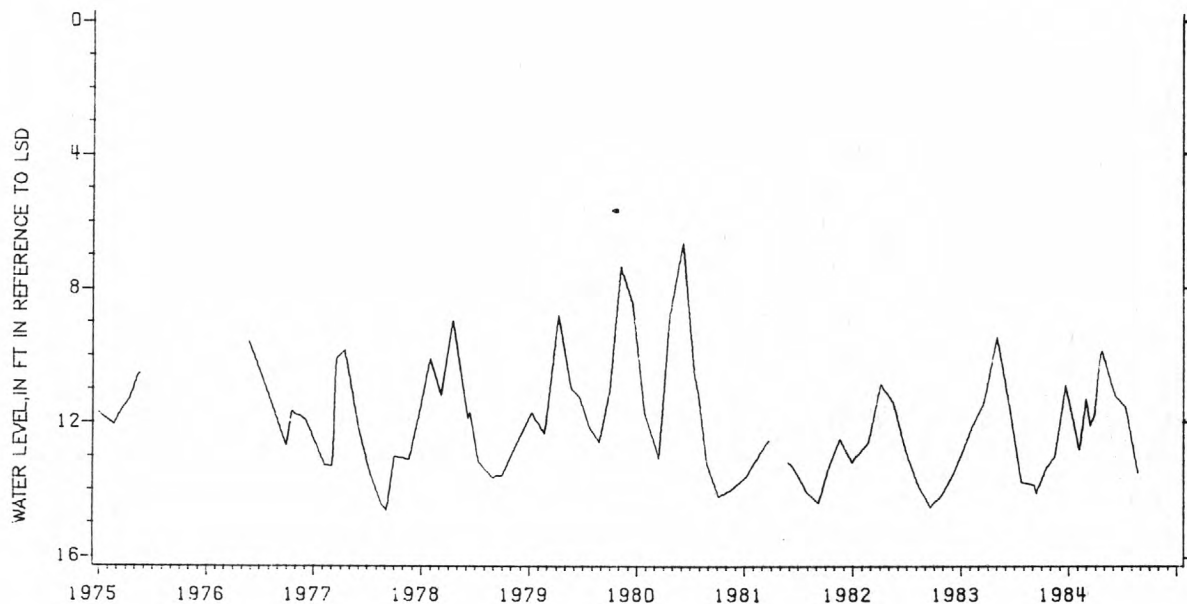
PERIOD OF RECORD.--November 1965 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.63 ft below land-surface datum, June 6, 1980; lowest measured, 15.44 ft below land-surface datum, Oct. 21, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1983	13.36	FEB 01, 1984	12.67	MAR 13, 1984	12.08 S	APR 23, 1984	9.85 S
NOV 16	13.00	09	12.80 S	27	11.76 S	JUN 06	11.20
DEC 21	10.88	29	11.26 S	APR 10	10.36 S	JUL 10	11.50
JAN 30, 1984	12.52	MAR 07	11.72	17	9.98	AUG 23	13.48

S Measured by Board of Hudson River-Black River Regulating District personnel.



GROUND-WATER LEVELS

MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.

LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.

Owner: Keith Handy.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 24 in., depth 12 ft, stone-lined.

METHOD OF MEASUREMENT.--Tape gage read by observer.

DATUM.--Altitude of land-surface datum is 710 ft, from topographic map. Measuring point: Top edge of limestone slab at northeast corner of well opening, at land-surface datum.

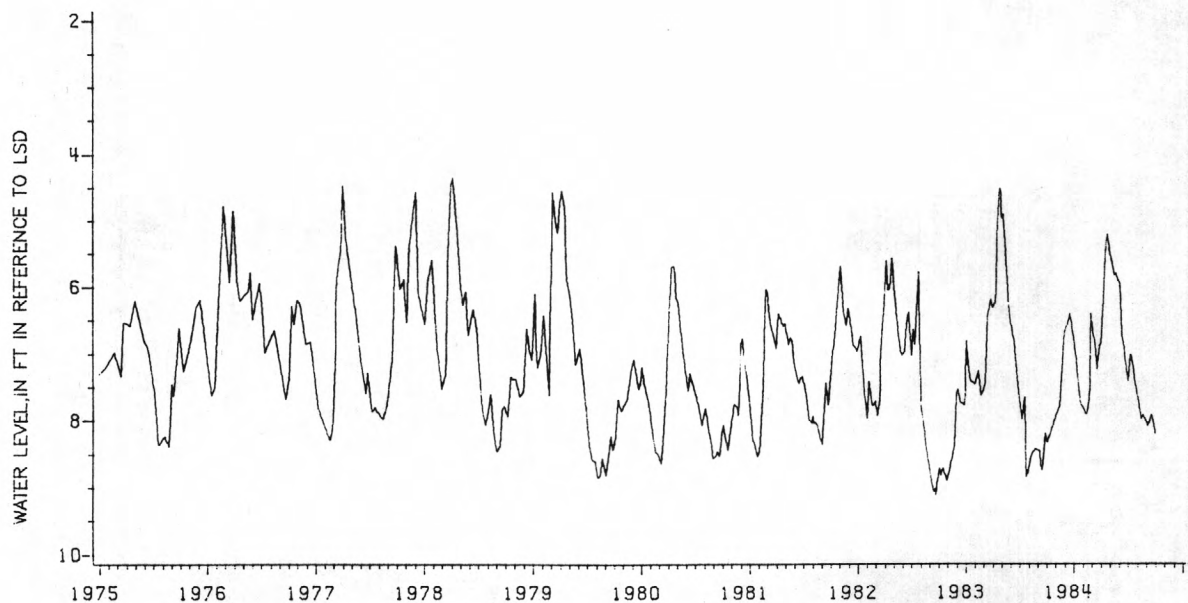
PERIOD OF RECORD.--October 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.74 ft below land-surface datum, Apr. 10, 1971; lowest measured, 9.99 ft below land-surface datum, Aug. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1983	8.32	JAN 30, 1984	7.81	APR 28, 1984	5.51	JUL 28, 1984	7.58
08	8.24	FEB 04	7.88	MAY 05	5.58	AUG 04	7.77
29	7.94	11	7.91	12	5.82	11	7.97
NOV 13	7.76	18	7.67	19	5.80	18	7.92
27	6.67	25	6.39	JUN 02	5.97	25	7.98
DEC 04	6.60	MAR 03	6.65	09	6.73	SEP 01	8.08
10	6.54	10	6.86	13	6.85	08	8.01
17	6.39	17	7.23	17	7.00	15	7.91
24	6.58	24	6.88	24	7.23	22	8.00
31	6.90	31	6.83	30	7.41	27	8.18
JAN 07, 1984	7.12	APR 07	6.37	JUL 07	7.01		
14	7.44	14	5.32	14	7.07		
21	7.75	21	5.21	21	7.43		

Z Measured by USGS personnel.



ONEIDA COUNTY

433112075091501. Local number, Oe 151.

LOCATION.--Lat 43°31'12", long 75°09'15", Hydrologic Unit 04150101, at Woodgate.

Owner: Henry Rubyor.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in., depth 31.1 ft in July 1984, stone-lined.

METHOD OF MEASUREMENT.--Tape gage read by observer.

DATUM.--Land-surface datum is 1,484.94 ft National Geodetic Vertical Datum of 1929. Measuring point:

Top of 2-ft square concrete well cover at midpoint of south side of rectangular opening, 1.00 ft above land-surface datum.

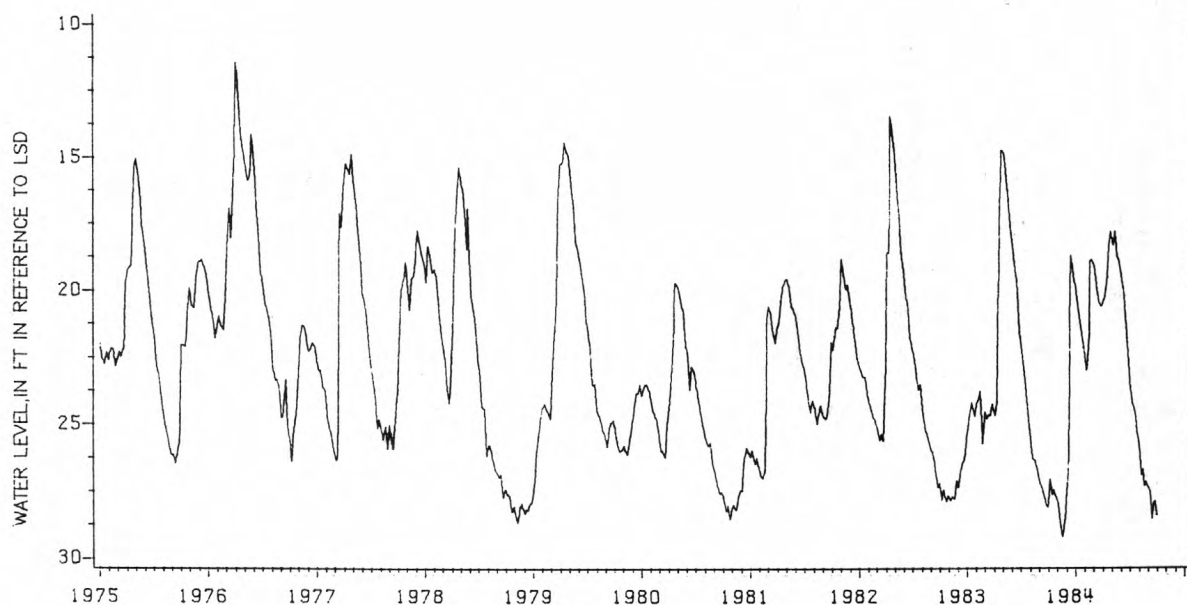
PERIOD OF RECORD.--July 1926 to August 1945, October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.43 ft below land-surface datum, Apr. 3, 1976; lowest measured, 30.31 ft below land-surface datum, Feb. 25, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1983	28.11	JAN 07, 1984	19.90	APR 14, 1984	20.21	JUL 14, 1984	24.20
08	27.05	14	20.52	21	19.71	21	24.55
15	27.60	21	21.21	28	18.38	28	25.28
22	27.50	28	21.67	MAY 05	17.79	AUG 04	25.81
29	27.75	FEB 04	22.43	12	18.32	11	26.90
NOV 05	27.99	11	22.98	19	17.80	18	26.69
12	28.86	18	22.11	26	18.70	21	27.31
19	29.21	25	18.91	JUN 02	18.95	25	27.18
26	28.48	MAR 03	18.82	09	19.43	SEP 01	27.30
DEC 03	27.50	10	19.10	16	20.22	08	27.49
10	26.72	17	19.85	23	21.37	15	28.55
17	21.50	24	20.41	30	22.37	22	27.91
24	18.70	31	20.58	JUL 07	23.71	27	27.85
31	19.65	APR 07	20.60	10	23.95	Z 29	28.38

Z Measured by USGS personnel.



GROUND-WATER LEVELS

ONEIDA COUNTY

433012075134202. Local number, Oe 766.

LOCATION.--Lat 43°30'12", long 75°13'42", Hydrologic Unit 04150101, near Hawkinsville.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven-washed observation well, diameter 6 in., depth 30.7 ft in December 1983, filled in from original depth of 33 ft, cased to 33 ft, open end.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Land-surface datum is 1,190.22 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of extended casing, 2.63 ft above land-surface datum.

REMARKS.--Well was driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft east, which has a period of record from November 1965 to November 1968 (unpublished).

PERIOD OF RECORD.--November 1968 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.87 ft below land-surface datum, May 21, 1972; lowest recorded, 23.58 ft below land-surface datum, Feb. 20, 21, 22, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.88	22.46	22.94	22.48	21.73	21.70	20.81	20.36	19.32	19.70	20.48	21.22
2	21.89	22.47	22.96	22.42	21.73	21.68	20.81	20.29	19.31	19.74	20.52	21.24
3	21.90	22.48	22.98	22.37	21.72	21.65	20.81	20.21	19.31	19.76	20.54	21.26
4	21.92	22.50	22.99	22.33	21.72	21.63	20.81	20.13	19.31	19.78	20.56	21.28
5	21.93	22.52	23.00	22.29	21.72	21.58	20.81	20.07	19.33	19.79	20.59	21.30
6	21.96	22.54	23.01	22.25	21.72	21.54	20.81	20.01	19.34	19.82	20.61	21.33
7	21.99	22.55	23.02	22.23	21.72	21.50	20.81	19.94	19.34	19.84	20.62	21.35
8	22.00	22.56	23.05	22.22	21.72	21.45	20.83	19.86	19.35	19.88	20.65	21.37
9	22.03	22.57	23.06	22.15	21.72	21.41	20.85	19.80	19.34	19.91	20.67	21.39
10	22.05	22.59	23.06	22.11	21.72	21.35	20.85	19.75	19.35	19.93	20.69	21.41
11	22.07	22.60	23.08	22.09	21.72	21.30	20.85	19.69	19.36	19.94	20.72	21.43
12	22.09	22.63	23.09	22.06	21.73	21.26	20.85	19.64	19.39	19.96	20.75	21.45
13	22.10	22.65	23.10	22.03	21.74	21.21	20.85	19.61	19.39	19.99	20.78	21.47
14	22.12	22.67	23.09	22.01	21.75	21.17	20.85	19.57	19.39	20.02	20.80	21.48
15	22.15	22.69	23.10	21.98	21.76	21.12	20.84	19.53	19.42	20.05	20.82	21.50
16	22.16	22.70	23.11	21.95	21.77	21.07	---	19.50	19.45	20.06	20.84	21.52
17	22.18	22.72	23.11	21.93	21.78	21.05	---	19.47	19.45	20.09	20.86	21.55
18	22.19	22.74	23.11	21.91	21.78	21.02	---	19.44	19.43	20.12	20.88	21.57
19	22.22	22.76	23.11	21.88	21.78	20.99	---	19.41	19.44	20.15	20.90	21.59
20	22.24	22.78	23.10	21.87	21.78	20.96	---	19.40	19.48	20.18	20.94	21.60
21	22.26	22.79	23.06	21.86	21.78	20.92	---	19.39	19.51	20.21	20.97	21.64
22	22.27	22.80	23.00	21.85	21.78	20.90	20.77	19.38	19.52	20.23	20.99	21.66
23	22.29	22.82	22.96	21.83	21.78	20.89	20.74	19.36	19.54	20.25	21.00	21.67
24	22.31	22.83	22.88	21.80	21.78	20.88	20.71	19.36	19.54	20.27	21.04	21.69
25	22.32	22.84	22.83	21.79	21.78	20.86	20.68	19.35	19.56	20.31	21.06	21.71
26	22.34	22.86	22.78	21.79	21.78	20.84	20.65	19.33	19.59	20.34	21.08	21.73
27	22.36	22.88	22.73	21.76	21.77	20.84	20.60	19.35	19.61	20.36	21.10	21.76
28	22.37	22.90	22.66	21.76	21.73	20.83	20.56	19.35	19.63	20.39	21.12	21.78
29	22.40	22.91	22.62	21.74	21.71	20.81	20.50	19.33	19.66	20.42	21.14	21.80
30	22.43	22.93	22.56	21.73	---	20.81	20.42	19.33	19.68	20.44	21.17	21.81
31	22.44	---	22.52	21.73	---	20.81	---	19.33	---	20.46	21.19	---

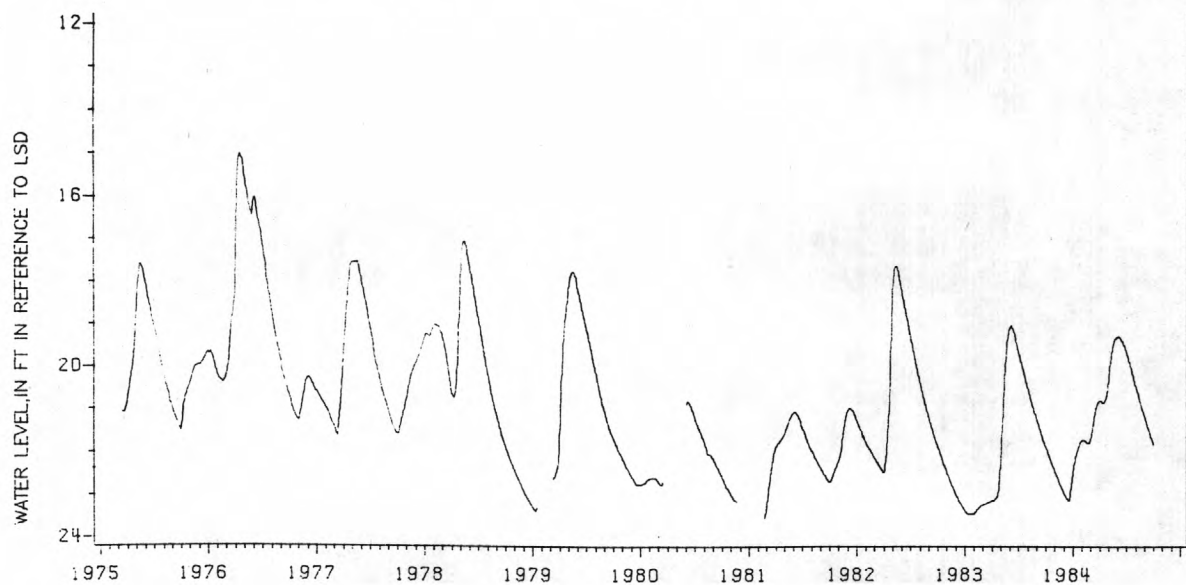
WTR YEAR 1984

HIGHEST

19.31 June 1, 2-3, 4, 1984

LOWEST

23.11 Dec. 15, 16-19, 20, 1983



GROUND-WATER LEVELS

231

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.--Water-table aquifer in limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 70 ft in October 1979 (previously reported as 98 ft), cased to 73 ft, open end.

METHOD OF MEASUREMENT.--Water-stage recorder, removed April 18, 1984. Converted to tape measurement by USGS personnel.

DATUM.--Altitude of land-surface datum is 445 ft, from topographic map. Measuring point: Top of casing, 4.19 ft above land-surface datum.

REMARKS.--Water-level fluctuations show hydraulic response to high flow in Seeley Brook, 500 ft west.

PERIOD OF RECORD.--September 1964 to June 1974, February 1975 to August 1976, October 1978 to current

year. Records for the 1977 water year, published in WDR NY-77-1, are unreliable and should not be used. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

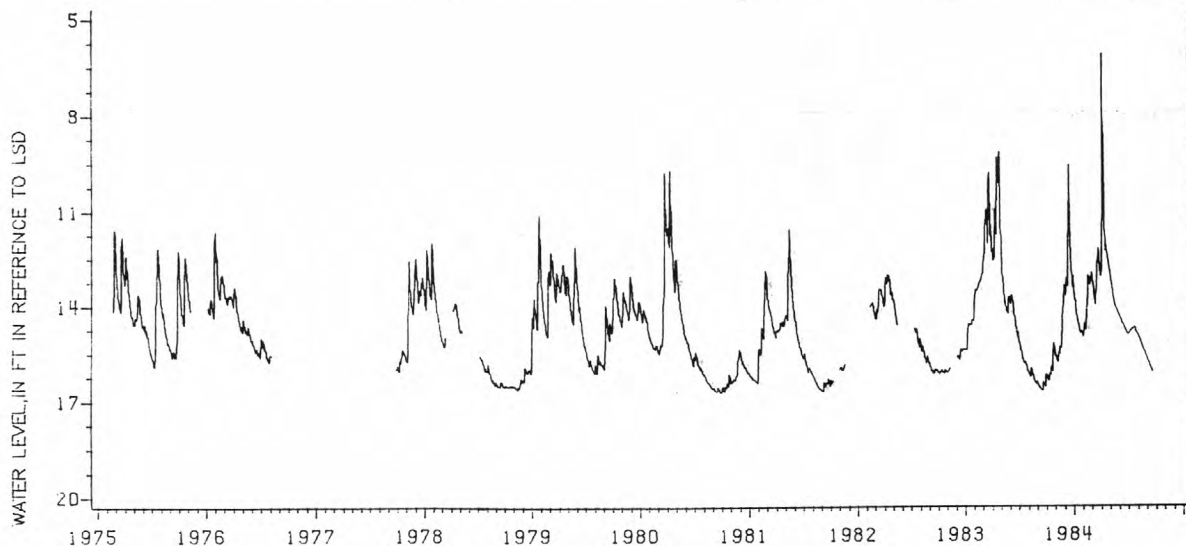
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.89 ft below land-surface datum, Apr. 6, 1984; lowest, 16.70 ft below land-surface datum, Sept. 19, 20, 21, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.21	15.56	13.43	13.55	14.96	13.05	13.08					
2	16.17	15.60	13.54	13.64	15.00	13.14	12.92					
3	16.17	15.61	13.67	13.71	15.00	13.23	12.62					
4	16.20	15.64	13.69	13.77	14.75	13.33	12.13					
5	16.23	15.66	13.54	13.83	14.60	13.40	9.71					
6	16.27	15.69	13.52	13.90	14.61	13.41	6.13					
7	16.30	15.72	13.17	13.99	14.65	13.49	7.36					
8	16.32	15.75	13.13	14.07	14.70	13.62	8.86					
9	16.34	15.78	13.15	14.17	14.72	13.69	9.91					
10	16.36	15.79	13.22	14.23	14.75	13.77	10.62					
11	16.38	15.64	13.37	14.29	14.72	13.83	11.15					
12	16.36	15.51	13.42	14.39	14.51	13.94	11.57					
13	16.22	15.50	11.98	14.45	14.36	14.00	11.94					
14	16.16	15.51	9.88	14.48	14.19	13.70	12.20					
15	16.17	15.53	9.58	14.53	13.67	13.46	12.32					
16	16.18	15.41	10.24	14.58	13.12	13.35	12.24					
17	16.17	15.31	10.91	14.63	13.07	13.11	12.09	13.96 S				
18	16.17	15.30	11.45	14.68	13.12	12.95	---					
19	15.96	15.31	---	14.71	13.18	12.81	---					
20	15.94	15.33	---	14.77	13.16	12.67	---					16.09 S
21	15.97	15.05	12.60	14.83	13.22	12.45	---					
22	16.03	14.87	12.73	14.87	13.31	12.22	---					
23	16.07	14.86	12.77	14.91	13.36	12.22	---					
24	15.56	14.85	12.91	14.91	13.22	12.35	---			14.72 S		
25	15.21	14.39	13.09	14.84	13.13	12.47	---					
26	15.20	13.93	13.27	14.83	13.16	12.58	---					
27	15.27	13.80	13.41	14.83	13.22	12.80	---					
28	15.33	13.75	13.46	14.83	13.12	12.93	---		14.94 S			
29	15.41	13.43	13.11	14.86	12.98	12.95	---					
30	15.47	13.37	13.28	14.89	---	13.03	---					
31	15.52	---	13.44	14.91	---	13.11	---					

S Steel tape measurement.

WTR YEAR 1984 HIGHEST RECORDED 5.89 Apr. 6, 1984 LOWEST RECORDED 16.39 Oct. 11, 12, 1983



GROUND-WATER LEVELS

PUTNAM COUNTY

412450073413101. Local number, P 609.

LOCATION.--Lat 41°24'50", long 73°41'31", Hydrologic Unit 02030101, near Carmel.

Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in., depth 16 ft in June 1984, stone-lined.

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Altitude of land-surface datum is 540 ft, from topographic map. Measuring point: Top (north side) of 3-in. coupling set in concrete well cover, at land-surface datum.

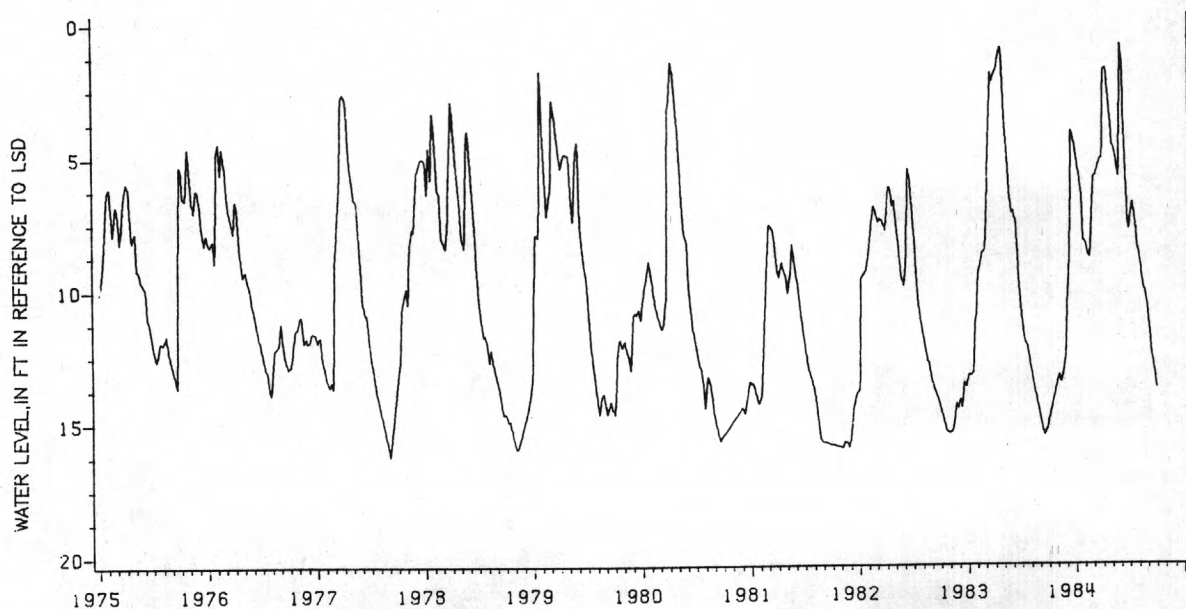
REMARKS.--Original depth measured at 17 ft. Depth measured at 16.6 ft October 1979, filled in to 16 ft September 1981.

PERIOD OF RECORD.--January 1935 to September 1945, September 1950 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.84 ft below land-surface datum, June 2, 1984; lowest measured, dry, Nov. 1, 30, 1935, Jan. 7, 1936, Sept. 1, 1939, several days in 1953, 1957, 1964, 1966, 1978, Sept. 25, 1980, several days in 1981, 1982, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1983	DRY	DEC 31, 1983	4.84	MAR 31, 1984	5.10	JUN 30, 1984	7.80
08	DRY	JAN 07, 1984	5.42	APR 07	1.84	JUL 14	6.80
15	DRY	14	5.75	14	1.74	21	7.60
22	DRY	21	6.55	21	2.70	28	8.40
29	13.50	28	8.20	28	3.65	AUG 04	8.80
NOV 05	13.25	FEB 04	8.35	MAY 05	4.60	11	9.35
12	13.50	11	8.75	12	4.90	18	9.88
19	13.25	18	8.85	19	5.40	25	10.25
26	12.60	25	7.20	26	5.80	SEP 01	10.73
DEC 02	10.60	MAR 03	5.84	JUN 02	0.84	08	11.70
10	9.40	10	5.72	09	1.60	15	12.50
17	4.12	17	5.40	16	5.10	22	12.90
24	4.24	24	5.15	23	7.20	29	13.75



GROUND-WATER LEVELS

233

RENSSELAER COUNTY

423834073391001. Local number, Re 700.

LOCATION.--Lat 42°38'34", long 73°39'10", Hydrologic Unit 02020006, near Defreestville.

Owner: William P. Hofmann.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 4 ft, depth 15.8 ft in October 1983, stone-lined.

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Altitude of land-surface datum is 405 ft, from topographic map. Measuring point: Top edge of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft above land-surface datum.

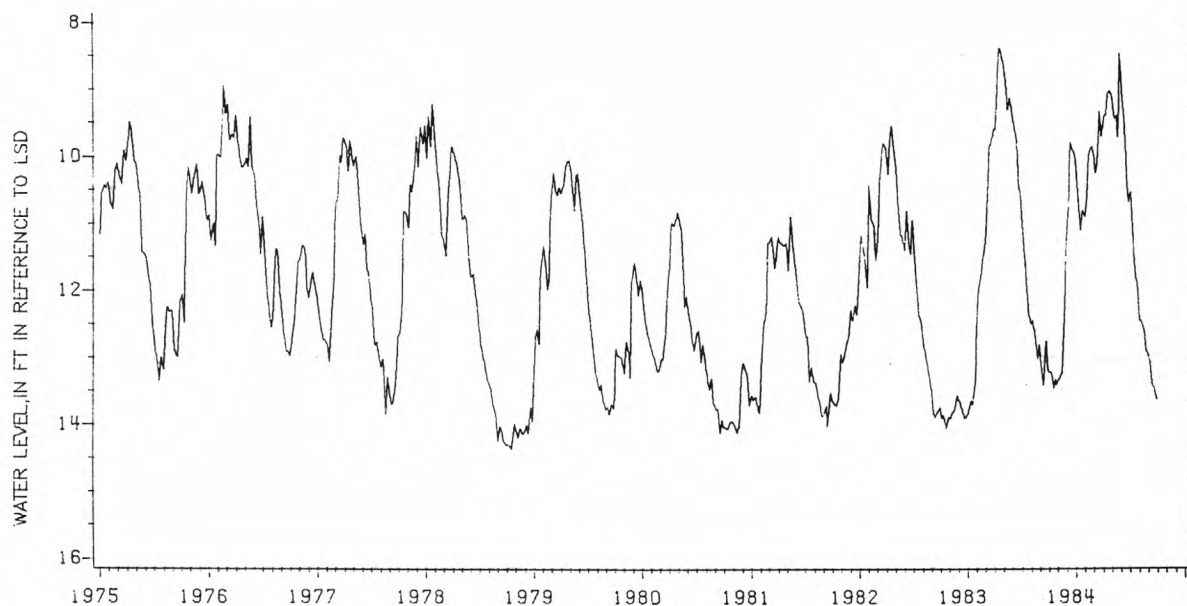
PERIOD OF RECORD.--September 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.38 ft below land-surface datum, Apr. 23, 1983; lowest measured, 15.49 ft below land-surface datum, Oct. 3, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1983	13.20	DEC 31, 1983	9.99	APR 12, 1984	9.39	JUL 15, 1984	11.45
08	13.22	JAN 07, 1984	10.30	16	9.38	23	11.80
15	13.24	14	10.66	21	9.06	28	11.88
22	13.47	21	11.10	28	9.02	AUG 04	12.44
27	13.33	28	10.80	MAY 05	9.06	11	12.45
29	13.39	FEB 04	10.88	12	9.43	19	12.60
NOV 05	13.35	12	10.60	21	9.40	26	12.89
12	13.29	17	9.98	26	9.71	SEP 01	12.93
19	13.24	25	9.88	JUN 02	8.45	08	13.08
27	12.20	MAR 03	9.85	09	9.02	15	13.38
DEC 04	11.22	10	10.25	16	9.56	24	13.50
11	10.74	17	10.10	24	10.30	30	13.61
17	9.79	25	9.33	30	10.68		
24	9.88	31	9.70	JUL 07	10.53		

Z Measured by USGS personnel.



GROUND-WATER LEVELS

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.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in., depth 16 ft, cased to 13 ft, 1.5-in. well point (60-gauge screen 13 ft to 16 ft).

METHOD OF MEASUREMENT.--Taped by USGS personnel.

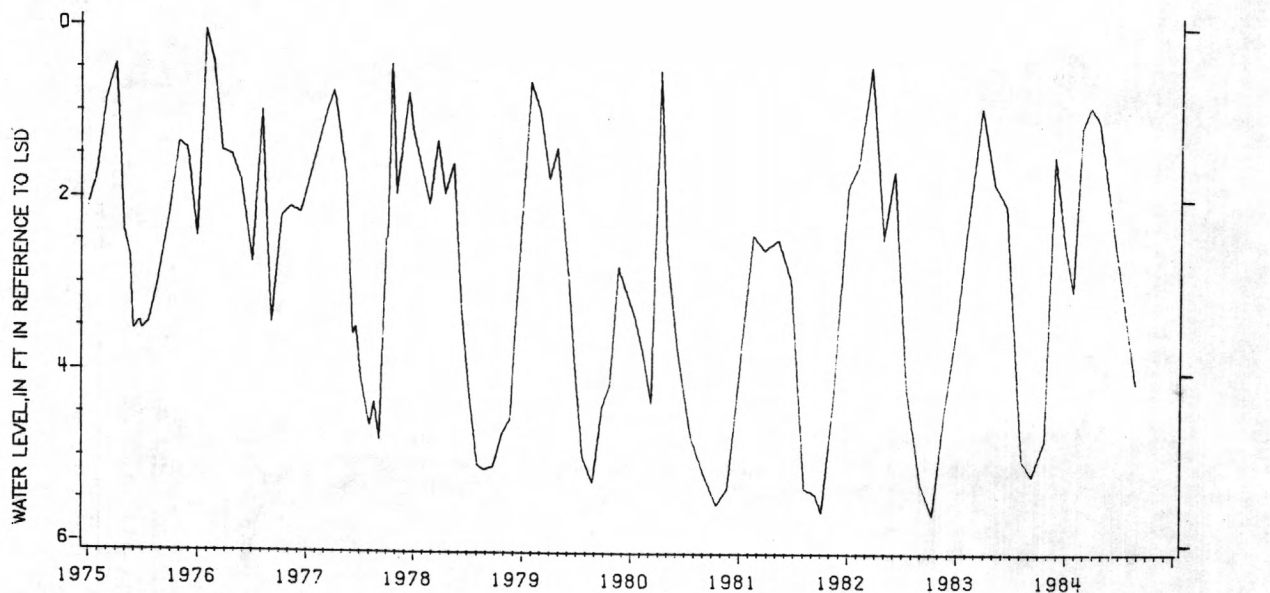
DATUM.--Altitude of land-surface datum is 175 ft, from topographic map. Measuring point: Top of casing, 3.30 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to September 1984 (discontinued). Records prior to October 1977 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft above land-surface datum, Nov. 29, 1972; lowest measured, 6.42 ft below land-surface datum, Sept. 22, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1983	4.79	JAN 31, 1984	3.06	MAR 28, 1984	0.90	JUN 08, 1984	2.15
NOV 29	1.47	FEB 27	1.15	APR 27	1.07	AUG 29	4.12
JAN 04, 1984	2.52						



RENSSELAER COUNTY

423534073423401. Local number, Re 703.

LOCATION.--Lat 42°35'34", long 73°42'34", Hydrologic Unit 02020006, in East Greenbush.

Owner: Town of East Greenbush.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 80 ft, cased to 78 ft, 50-slot plastic screen 78 ft to 80 ft.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 275 ft, from topographic map. Measuring point: Top of flange, 2.9 ft above land-surface datum.

REMARKS.--Well was drilled October 1982 as a replacement for 423532073423701 (local number Re 701), located about 300 ft southwest and 15.8 ft lower in land-surface datum, which has a period of record from March 1961 to May 1980. Hydrograph shows water levels plotted for Re 701 (through 1980) adjusted to altitude of water levels plotted for Re 703. Water level may be affected by nearby pumping.

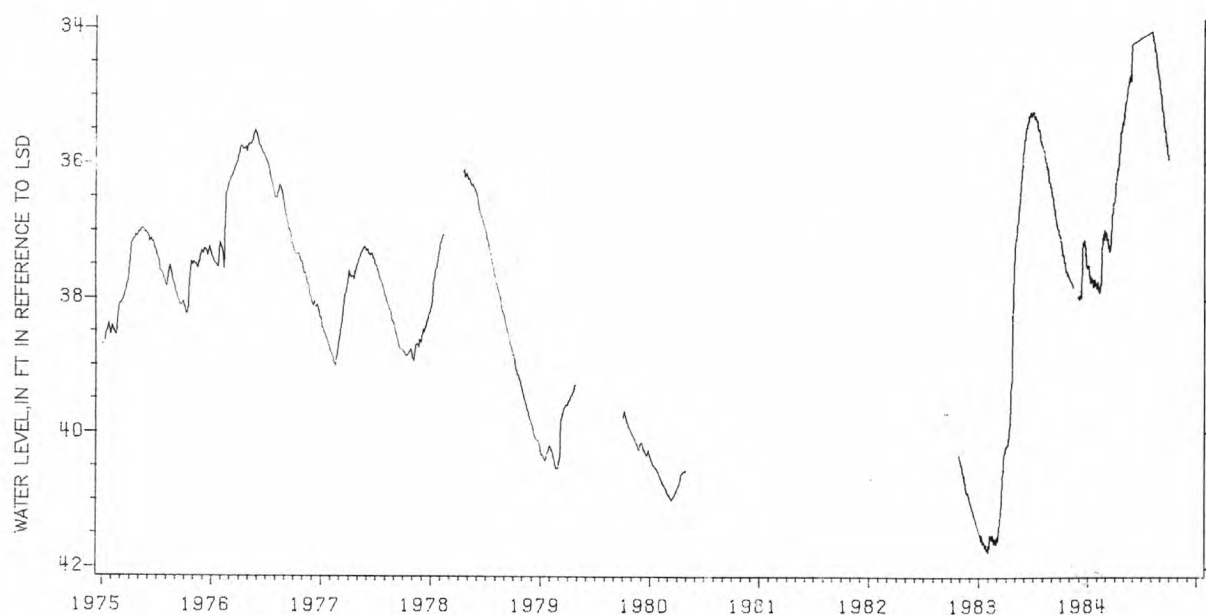
PERIOD OF RECORD.--October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 33.06 ft below land-surface datum, June 4, 5, 6, 7, 8, 9, July 11, 1984; lowest recorded, 41.77 ft below land-surface datum, Feb. 1, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.08	---	37.97	37.53	37.83	37.01	36.57	35.40	33.37	33.14	33.76	34.86
2	37.08	---	37.98	37.50	37.85	37.03	36.55	35.41	33.17	33.16	33.81	34.90
3	37.10	---	37.98	37.51	37.80	37.05	36.54	35.38	33.11	33.17	33.84	34.91
4	37.13	---	37.97	37.49	37.77	37.08	36.51	35.26	33.07	33.16	33.88	34.95
5	37.14	---	38.00	37.52	37.74	37.02	36.42	35.27	33.08	33.17	33.92	35.00
6	37.19	---	37.96	37.51	37.79	37.00	36.35	35.23	33.07	33.20	33.95	35.06
7	37.24	---	37.95	37.57	37.84	37.07	36.28	35.18	33.07	33.14	33.97	35.11
8	37.26	---	37.98	37.62	37.87	37.10	36.24	35.11	33.07	33.11	34.02	35.15
9	37.29	---	37.96	37.67	37.86	37.11	36.19	35.07	33.07	33.11	34.08	35.17
10	37.33	---	37.94	37.64	37.89	37.13	36.13	35.08	33.09	33.10	34.12	35.19
11	37.35	---	37.98	37.68	37.85	37.10	36.08	35.07	33.11	33.08	34.15	35.22
12	37.34	---	37.91	37.74	37.88	37.22	36.07	35.03	33.16	33.13	34.18	35.27
13	37.32	---	37.83	37.75	37.87	37.23	36.08	35.02	33.13	33.21	34.21	35.30
14	37.35	---	37.60	37.69	37.81	37.19	36.09	34.96	33.13	33.25	34.24	35.31
15	37.40	---	37.37	37.72	37.76	37.24	36.05	34.91	33.19	33.27	34.27	35.36
16	37.44	---	37.26	37.70	37.68	37.21	35.98	34.87	33.21	33.25	34.30	35.42
17	37.45	---	37.20	37.72	37.56	37.27	35.91	34.86	33.16	33.31	34.31	35.48
18	37.48	---	37.16	37.74	37.44	37.26	35.84	34.82	33.12	33.32	34.33	35.50
19	37.51	---	37.14	37.71	37.35	37.22	35.80	34.76	33.12	33.36	34.36	35.50
20	37.55	---	37.18	37.77	37.24	37.21	35.73	34.78	33.15	33.39	34.41	35.52
21	37.58	---	37.20	37.80	37.18	37.15	35.68	34.79	33.15	33.42	34.46	35.59
22	37.59	---	37.12	37.82	37.16	37.09	35.66	34.77	33.13	33.46	34.48	35.65
23	37.58	---	37.18	37.81	37.11	37.01	35.59	34.72	33.12	33.47	34.49	35.68
24	37.59	---	37.14	37.74	37.05	36.92	35.52	34.74	33.11	33.47	34.54	35.71
25	37.63	---	37.23	37.70	37.03	36.81	35.52	34.70	33.09	33.54	34.61	35.73
26	37.61	---	37.32	37.78	37.11	36.75	35.52	34.68	33.09	33.58	34.65	35.78
27	---	---	37.37	37.74	37.10	36.70	35.48	34.75	33.09	33.60	34.67	35.85
28	---	---	37.35	37.77	36.97	36.65	35.46	34.73	33.11	33.63	34.70	35.87
29	---	---	37.40	37.76	36.97	36.57	35.44	34.58	33.14	33.68	34.73	35.90
30	---	37.97	37.49	37.77	---	36.60	35.39	34.22	33.13	33.71	34.76	35.93
31	---	---	37.51	37.76	---	36.60	---	33.71	---	33.73	34.80	---

WTR YEAR 1984 HIGHEST 33.06 June 4, 5, 6, 7, 8, 9, July 11, 1984 LOWEST 38.02 Dec. 5, 6, 1983



GROUND-WATER LEVELS

ROCKLAND COUNTY

411802073593001. Local number, Ro 18.

LOCATION.--Lat 41°18'02", long 73°59'30", Hydrologic Unit 02030101, in Bear Mountain State Park near Lemon Road and Seven Lakes Drive.

Owner: Palisades Interstate Park Commission.

AQUIFER.--Confined aquifer in Storm King Granite of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 60 ft, cased to 53 ft, open hole.

METHOD OF MEASUREMENT.--Tape gage read by observer.

DATUM.--Altitude of land-surface datum is 390 ft, from topographic map. Measuring point: Top of extended casing, 3.65 ft above land-surface datum.

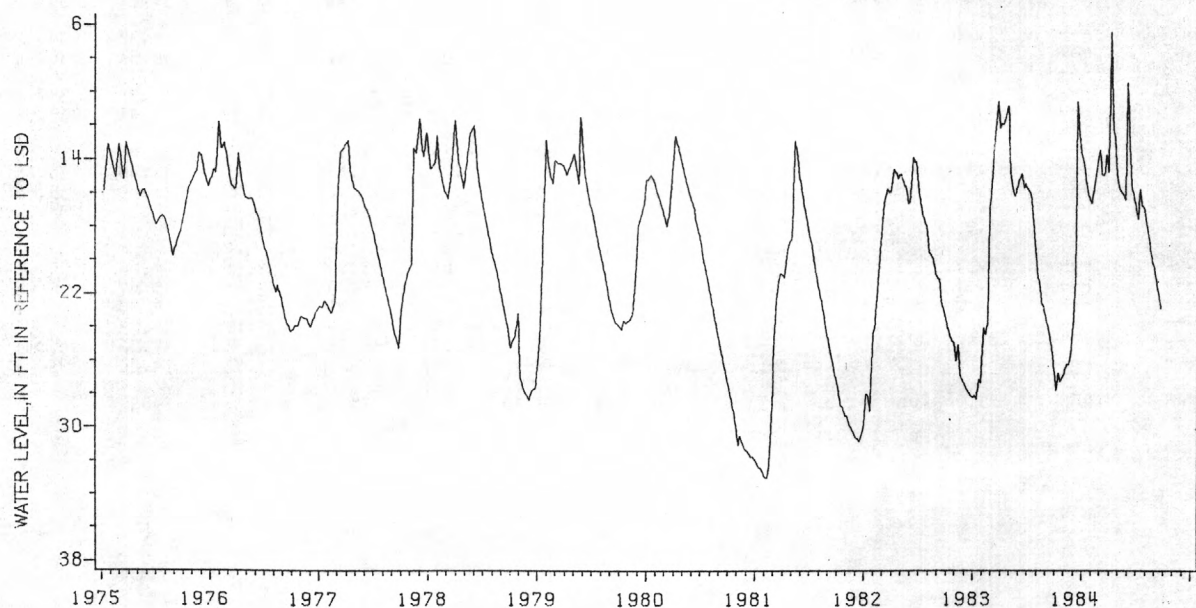
PERIOD OF RECORD.--July 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.32 ft below land-surface datum, Apr. 6, 1984; lowest measured, 33.02 ft below land-surface datum, Feb. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1983	27.72	JAN 13, 1984	15.13	APR 20, 1984	12.70	JUL 10, 1984	15.99 Z
14	26.70	20	15.96	27	14.83	13	15.68
21	27.20	27	16.27	MAY 04	15.59	20	16.58
29	26.87	FEB 03	16.51	11	15.81	25	16.74 Z
NOV 11	26.21	17	14.84	18	16.00	27	16.89
18	26.22	24	13.83	25	16.35	AUG 03	17.77
25	25.55	MAR 03	13.38	JUN 01	9.32	10	18.40
DEC 02	23.40	09	14.77	08	13.05	17	19.23
09	20.94	16	14.87	15	15.46	24	19.92
16	10.48	23	13.62	22	16.24	31	20.60
23	12.48	30	14.66	28	16.82 Z	SEP 07	21.42
30	13.48	APR 06	6.32	29	16.84	15	22.08
JAN 06, 1984	14.19	13	12.18	JUL 06	17.48	21	22.76

Z Measured by USGS personnel.



GROUND-WATER LEVELS

237

ST. LAWRENCE COUNTY

444904074455201. Local number, St 40.

LOCATION.--Lat 44°49'04", long 74°45'52", Hydrologic Unit 04150306, near Brasher Falls.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in., depth 11.3 ft in June 1984, filled in from original depth of 12 ft, concrete cased to 12 ft, open end.

METHOD OF MEASUREMENT.--Tape gage read by observer.

DATUM.--Altitude of land-surface datum is 300 ft, from topographic map. Measuring point: Chisled mark on top edge of 6-in. by 8-in. opening of concrete well cover, 0.65 ft above land-surface datum.

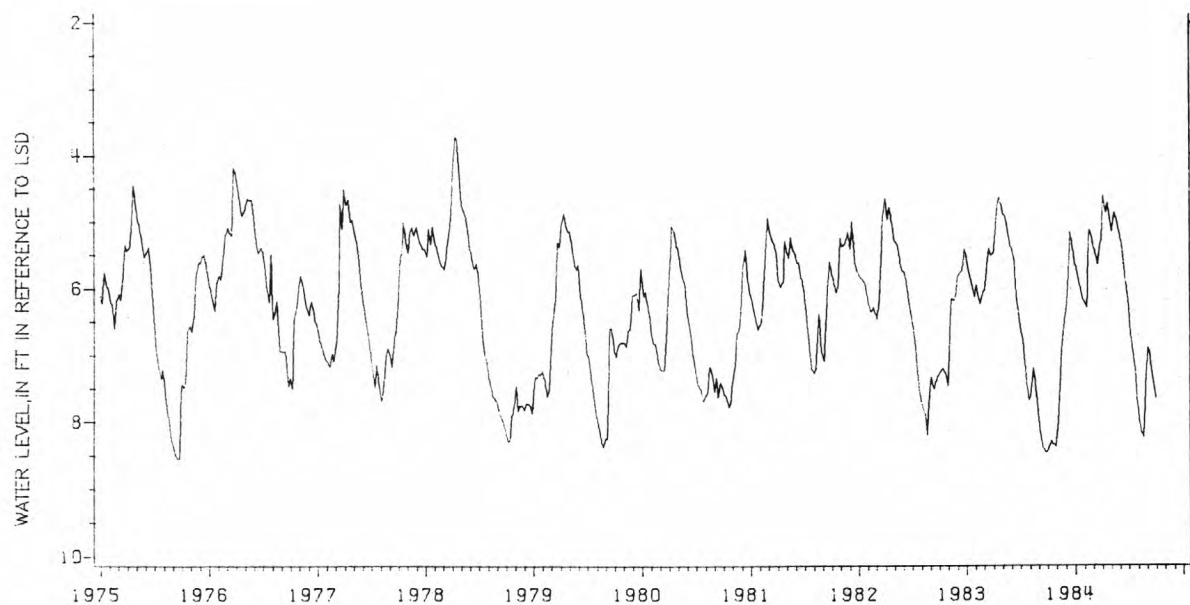
PERIOD OF RECORD.--May 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.24 ft below land-surface datum, Apr. 21, 1971; lowest measured, 9.38 ft below land-surface datum, Oct. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1983	8.45	JAN 08, 1984	5.70	APR 14, 1984	4.87	JUL 15, 1984	7.03
08	8.36	14	5.88	21	4.72	21	7.23
16	8.28	21	6.00	29	4.95	29	7.64
22	8.33	28	6.15	MAY 06	5.15	AUG 05	7.95
29	8.36	FEB 04	6.23	13	4.87	12	8.14
NOV 06	8.00	12	6.30	20	4.93	19	8.23
12	7.46	19	5.13	27	5.09	26	7.46
19	6.92	26	5.14	JUN 03	5.24	SEP 03	6.89
26	6.50	MAR 03	5.32	09	5.36	08	6.96
DEC 03	6.33	10	5.49	17	5.80	16	7.22
10	5.98	18	5.65	24	6.01	23	7.48
17	5.15	24	5.39	28	6.20	30	7.64
24	5.33	APR 01	5.25	JUL 01	6.34		
31	5.64	07	4.60	08	6.70		

Z Measured by USGS personnel.



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.--Confined aquifer in dolomite of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in., depth 304 ft, cased to 189 ft, open hole.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 305 ft, from topographic map. Measuring point: Top of casing, 3.38 ft (above land-surface datum).

REMARKS.--Water level affected by earthquakes and distant pumping.

PERIOD OF RECORD.--May 1949 to November 1961, August 1964 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.70 ft below land-surface datum, Jan. 7, 1981; lowest, 56.20 ft below land-surface datum, July 29, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.94	46.18	45.81	45.54	46.69	46.36	45.35	46.45	46.26	47.08	48.89	50.72
2	46.72	46.05	45.87	45.32	46.85	46.53	45.26	46.60	46.20	47.23	49.01	50.74
3	46.62	45.82	45.85	45.19	46.65	46.67	45.21	46.57	46.32	47.32	49.02	50.61
4	46.50	45.79	45.74	45.04	46.54	46.76	45.07	46.21	46.37	47.39	49.10	50.62
5	46.40	45.81	45.70	45.05	46.42	46.55	44.77	46.42	46.44	47.47	49.11	50.74
6	46.49	45.78	45.41	44.97	46.53	46.35	44.82	46.62	46.47	47.53	49.13	51.00
7	46.66	45.83	45.21	45.31	46.72	46.52	45.05	46.62	46.46	47.45	49.06	51.25
8	46.57	45.92	45.58	45.99	46.90	46.64	45.38	46.19	46.53	47.50	49.23	51.35
9	46.59	45.89	45.70	46.58	46.93	46.62	45.51	46.14	46.54	47.54	49.46	51.31
10	46.57	45.84	45.72	46.81	47.04	46.60	45.38	46.33	46.57	47.49	49.50	51.23
11	46.48	45.44	45.89	47.13	46.91	46.37	45.33	46.45	46.59	47.36	49.50	51.16
12	46.31	45.58	45.55	47.66	46.94	46.74	45.36	46.35	46.73	47.39	49.60	51.44
13	46.13	45.87	45.21	47.82	46.92	46.71	45.56	46.43	46.60	47.59	49.54	51.56
14	46.30	45.90	44.98	47.71	46.77	46.39	45.70	46.31	46.61	47.71	49.46	51.50
15	46.32	45.88	45.10	47.53	46.73	46.43	45.65	46.40	46.90	47.72	49.46	51.61
16	46.36	45.49	45.30	47.12	46.79	46.24	45.44	46.54	46.98	47.60	49.75	51.82
17	46.17	45.55	45.48	46.85	46.66	46.43	45.50	46.66	46.81	47.73	50.00	52.01
18	46.10	45.91	45.50	46.67	46.55	46.40	45.74	46.61	46.64	47.82	50.09	51.87
19	46.17	46.01	45.47	46.43	46.49	46.26	45.95	46.38	46.61	48.15	50.17	51.15
20	46.30	45.91	45.67	46.47	46.26	46.25	45.95	46.41	46.83	48.36	50.31	51.03
21	46.33	45.67	45.73	46.50	46.30	46.10	46.05	46.48	46.92	48.41	50.43	51.28
22	46.23	45.82	45.26	46.41	46.60	45.95	46.18	46.52	46.91	48.41	50.45	51.50
23	46.00	46.02	45.19	46.25	46.61	46.04	45.94	46.39	46.88	48.37	50.45	51.42
24	45.88	45.82	44.97	45.87	46.41	46.16	45.71	46.53	46.81	48.43	50.66	51.41
25	45.87	45.48	45.07	45.77	46.33	46.00	45.90	46.55	46.69	48.73	50.87	51.27
26	45.63	45.67	45.20	46.21	46.58	45.86	46.24	46.54	46.74	48.76	50.91	50.94
27	45.71	45.82	45.27	46.24	46.69	45.83	46.37	46.78	46.83	48.75	50.87	51.49
28	45.68	45.81	45.12	46.43	46.27	45.69	46.46	46.80	46.91	48.80	50.73	51.72
29	45.90	45.52	45.14	46.43	46.07	45.34	46.49	46.50	47.03	48.92	50.60	51.90
30	46.19	45.64	45.47	46.45	---	45.40	46.36	46.35	47.04	48.92	50.53	52.11
31	46.17	---	45.57	46.41	---	45.45	---	46.31	---	48.88	50.54	---

WTR YEAR 1984

HIGHEST 44.70 Apr. 5, 1984

LOWEST 52.19 Sept. 30, 1984



SARATOGA COUNTY

430013073370401. Local number, Sa 1072.

LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, Saratoga National Historical Park near Stillwater.

Owner: U.S. National Park Service.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 24 ft, cased to 21 ft, 2-in. well point (30-gauge screen 21 ft to 24 ft).

METHOD OF MEASUREMENT.--Water-stage recorder, removed June 28, 1984. Converted to tape measurement by observer.

DATUM.--Altitude of land-surface datum is 223.8 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.31 ft above land-surface datum.

REMARKS.--Water level affected by adjacent wells pumping.

PERIOD OF RECORD.--July 1959 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

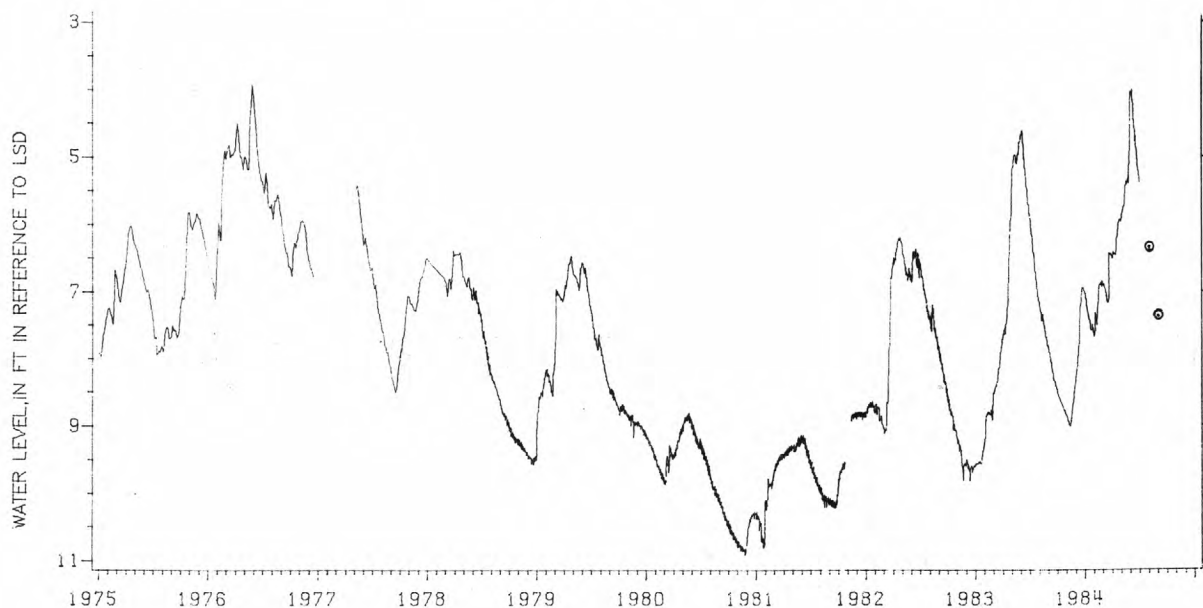
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft below land-surface datum, May 25, 1976; lowest, 11.91 ft below land-surface datum, Oct. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.46	8.84	---	7.02	7.65	6.87	6.46	5.94	4.20		6.33 S	
2	8.47	8.85	---	7.04	7.67	6.89	6.48	5.98	4.07			
3	8.49	8.85	---	7.05	7.68	6.90	6.48	5.98	4.04			
4	8.50	8.86	---	7.08	7.58	6.92	6.50	5.92	4.04			7.38 S
5	---	8.87	---	7.10	7.41	6.90	6.45	5.89	4.08			
6	---	8.89	---	7.13	7.33	6.90	6.43	5.86	4.12			
7	---	8.90	---	7.17	7.35	6.92	6.42	5.82	4.03			
8	---	8.92	---	7.21	7.38	6.94	6.44	5.80	4.06			
9	---	8.93	8.06	7.25	7.43	6.95	6.46	5.76	4.14			
10	---	8.94	7.99	7.27	7.47	6.98	6.44	5.76	4.25			
11	---	8.96	7.95	7.29	7.50	6.97	6.44	5.75	4.33			
12	---	8.97	7.89	7.35	7.43	7.07	6.44	5.73	4.46			
13	---	8.99	7.85	7.36	7.34	7.08	6.45	5.67	4.49			
14	---	9.00	7.76	7.37	7.24	7.07	6.47	5.61	4.51			
15	---	9.00	7.62	7.39	7.14	7.13	6.43	5.51	4.57			
16	---	9.01	7.47	7.42	6.98	7.13	6.37	5.48	4.63			
17	---	9.01	7.35	7.44	6.97	7.17	6.29	5.44	4.67			
18	---	---	7.24	7.47	6.95	7.16	6.22	5.43	4.78			
19	---	---	7.16	7.48	6.93	7.17	6.17	5.38	4.73			
20	---	---	7.10	7.52	6.89	7.17	6.12	5.41	4.82			
21	---	---	7.06	7.54	6.89	7.11	6.09	5.40	4.86			
22	---	---	7.00	7.57	6.89	6.77	6.06	5.41	4.93			
23	---	---	6.98	7.58	6.89	6.43	6.03	5.39	4.97			
24	---	---	6.95	7.58	6.87	6.44	5.99	5.35	5.04			
25	---	---	6.95	7.57	6.88	6.45	5.96	5.34	5.05			
26	8.77	---	6.95	7.57	6.91	6.44	5.96	5.35	5.11			
27	8.78	---	6.96	7.51	6.93	6.45	5.94	5.40	5.14			
28	8.78	---	6.95	7.55	6.86	6.44	5.94	5.40	---			
29	8.81	---	6.97	7.56	6.85	6.44	5.93	5.23	---			
30	8.82	---	6.99	7.59	---	6.46	5.94	4.82	---			
31	8.83	---	7.01	7.61	---	6.47	---	4.43	---			

S Steel tape measurement.

WTR YEAR 1984 HIGHEST RECORDED 4.02 June 7, 1984 LOWEST RECORDED 9.08 Nov. 16, 1983



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.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 54.5 ft in April 1980, filled in from original depth of 57 ft, cased to 57 ft, open end.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Land-surface datum is 228.50 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.47 ft above land-surface datum.

REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 16.4 Mgal/d in 1984) from adjacent municipal well field. Well was drilled June 1960 as a replacement for 424926073592201 (local number Sn 128), located 1,540 ft northwest, which has a period of record from April 1946 to March 1961.

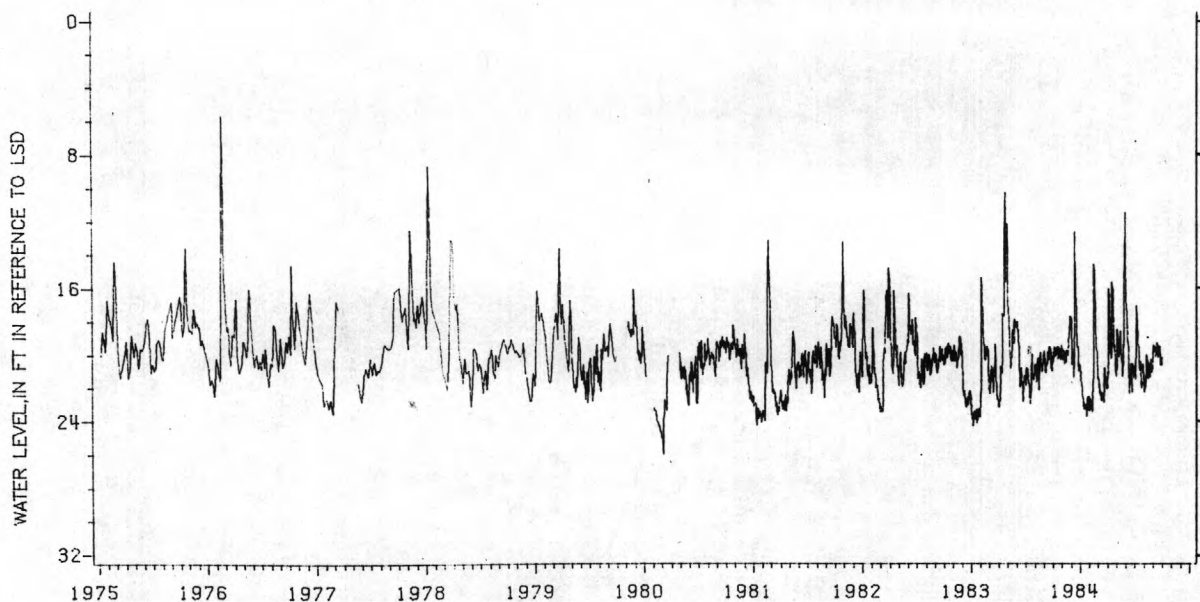
PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.60	19.90	17.72	20.78	22.52	20.88	21.88	21.25	14.14	20.78	21.70	20.10
2	20.25	19.48	17.80	20.73	22.73	21.48	21.90	21.34	15.79	20.67	22.12	19.50
3	20.12	20.04	17.96	21.18	23.30	21.42	21.43	21.01	16.69	21.45	22.28	19.42
4	20.36	20.31	18.66	21.38	23.25	21.49	21.08	20.82	17.58	21.30	22.05	19.87
5	20.22	20.12	19.59	21.56	23.02	21.57	21.14	18.87	18.23	20.73	21.86	19.51
6	20.06	19.77	20.41	21.70	22.63	21.91	18.92	18.49	18.46	19.62	21.94	19.61
7	19.88	19.76	20.63	21.70	22.88	21.82	16.05	19.32	18.21	17.79	21.94	19.72
8	19.81	19.87	19.88	21.80	22.93	22.25	16.38	19.51	18.77	17.03	21.34	19.62
9	19.60	20.10	20.13	22.08	23.21	22.16	17.38	19.84	19.17	17.82	21.37	19.50
10	19.65	20.03	20.43	22.43	23.04	22.39	18.61	19.89	19.54	18.81	21.11	20.08
11	20.01	20.52	20.79	22.43	23.06	22.31	19.01	20.08	20.15	19.08	20.10	20.01
12	19.80	20.38	21.32	22.79	23.15	22.25	19.88	19.91	20.86	18.62	19.98	19.65
13	19.82	19.91	21.39	23.04	23.42	22.68	20.00	19.07	21.86	18.97	20.48	19.92
14	20.08	19.97	16.70	22.90	22.57	22.59	20.21	19.06	22.27	19.35	20.83	19.83
15	19.71	20.44	12.61	22.90	21.15	22.66	20.23	18.61	21.93	19.71	21.35	19.31
16	19.64	20.37	12.98	23.24	15.59	22.51	19.87	18.96	21.77	20.42	21.11	19.37
17	19.71	20.21	14.83	23.17	14.53	22.38	17.20	19.70	21.17	20.46	21.08	19.85
18	19.55	19.78	16.39	23.22	15.01	22.46	15.65	20.07	21.03	20.48	21.34	20.13
19	19.89	19.76	17.31	23.02	15.68	22.68	16.12	20.04	20.59	20.40	20.82	19.60
20	19.65	19.96	18.37	23.19	16.13	22.61	16.85	20.23	20.67	20.86	20.56	19.83
21	20.12	20.07	18.68	23.00	17.05	22.78	17.40	20.78	21.09	20.96	21.00	19.88
22	20.24	20.04	18.87	23.13	17.65	21.99	18.21	21.04	21.96	20.44	21.36	19.59
23	19.66	19.55	19.02	23.35	18.74	21.44	18.63	21.32	22.21	21.16	21.16	19.46
24	19.72	19.57	19.44	23.67	18.94	20.77	19.41	20.39	21.35	21.75	20.98	19.88
25	19.79	19.16	19.64	23.37	19.45	21.26	19.67	19.39	20.89	21.62	20.30	20.32
26	19.76	18.53	20.01	23.26	19.70	21.20	19.46	19.52	20.56	21.94	20.27	20.56
27	20.18	18.31	20.57	22.99	19.84	21.42	19.67	19.30	20.67	21.76	20.76	20.62
28	20.29	18.47	20.98	22.60	20.34	21.49	20.14	18.77	21.38	20.87	21.02	20.47
29	20.06	18.39	20.77	22.76	20.63	21.80	20.34	16.47	21.01	20.56	20.94	20.62
30	20.09	17.77	20.66	22.59	---	21.66	20.97	11.49	21.07	20.60	20.77	20.21
31	19.77	---	20.61	22.52	---	21.96	---	11.81	---	20.91	20.28	---

WTR YEAR 1984 HIGHEST 10.95 May 30, 1984 LOWEST 23.80 Jan. 24, 1984



ULSTER COUNTY

414425074213601. Local number, U 204.

LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.

Owner: New York State Department of Correction.

AQUIFER.--Water-table aquifer in deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in., depth 46 ft, cased to unknown depth, filled in from original depth of 67 ft.

METHOD OF MEASUREMENT.--Tape gage read by observer.

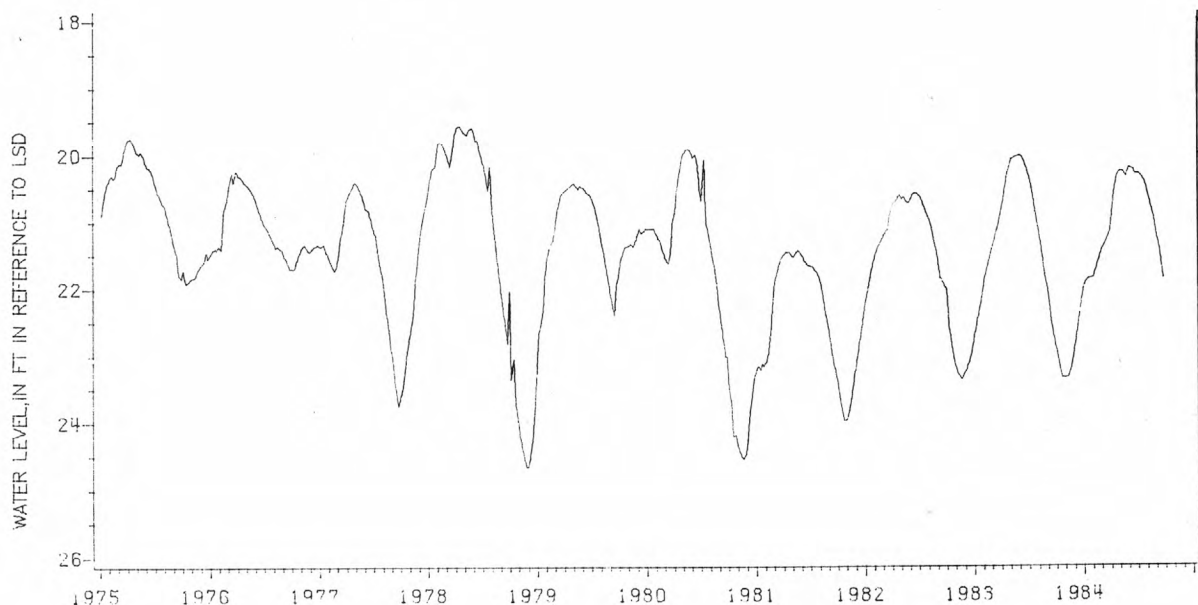
DATUM.--Altitude of land-surface datum is 300 ft, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1954 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft below land-surface datum, Mar. 24, 1955; lowest measured, 26.90 ft below land-surface datum, Dec. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1983	22.85	DEC 06, 1983	22.94	MAR 27, 1984	21.22	JUN 05, 1984	20.21
11	23.03	13	22.75	APR 03	21.14	19	20.22
18	23.21	JAN 03, 1984	22.02	17	20.59	26	20.28
25	23.34	10	21.93	25	20.34	JUL 17	20.33
NOV 01	23.35	17	21.87	MAY 01	20.28	31	20.43
08	23.35	FEB 07	21.85	08	20.26	AUG 28	20.97
15	23.33	28	21.53	15	20.26	SEP 04	21.17
22	23.25	MAR 06	21.44	22	20.29	11	21.40
29	23.12	13	21.38	29	20.34	25	21.86



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.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in., depth 36 ft, cased to 34 ft, 2-in. well point (60-gauze screen 34 ft to 36 ft).

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Altitude of land-surface datum is 240 ft, from topographic map. Measuring point: Top of casing, 0.47 ft above land-surface datum.

REMARKS.--Originally a dug well, diameter 36 in., depth 21 ft, stone-lined. Well deepened by power auger, October 1965.

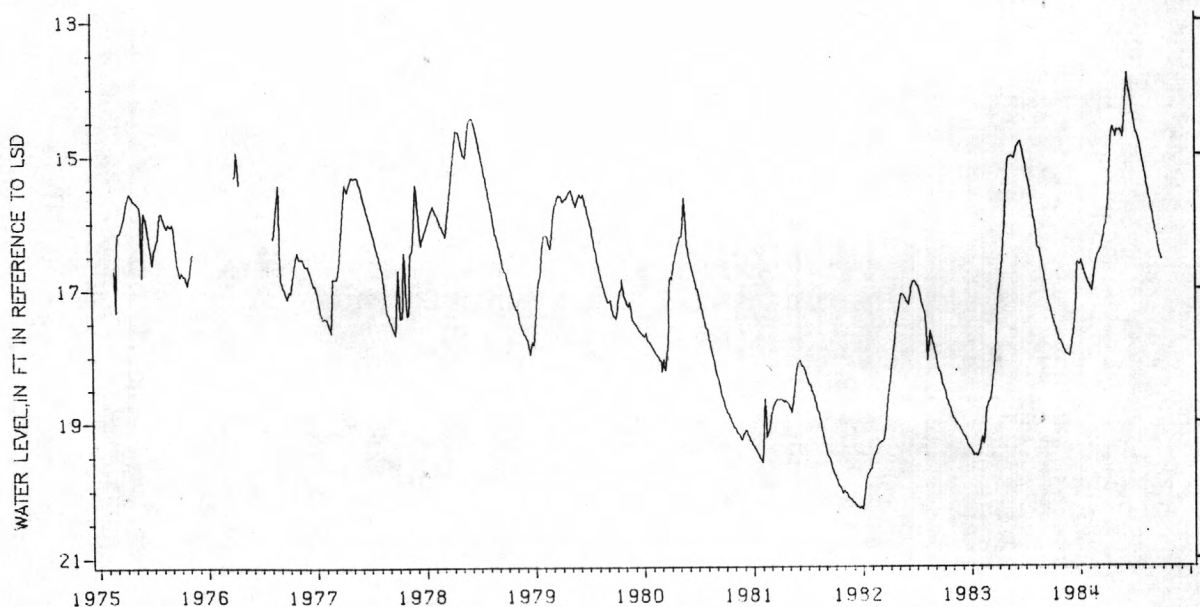
PERIOD OF RECORD.--October 1964 to July 1965, March 1966 to December 1974, April 1976 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.80 ft below land-surface datum, June 9, 1984; lowest measured, 20.71 ft below land-surface datum, Jan. 24, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1983	17.45	JAN 07, 1984	16.59	APR 14, 1984	14.75	JUL 07, 1984	14.66
08	17.56	14	16.73	21	14.59	14	14.71
15	17.64	21	16.82	28	14.68	21	14.89
22	17.76	28	16.89	MAY 02	14.74	28	15.09
29	17.80	FEB 04	16.98	05	14.65	AUG 04	15.25
NOV 05	17.90	11	17.05	12	14.64	11	15.43
12	17.97	18	16.76	19	14.65	18	15.59
19	18.00	25	16.59	26	14.75	25	15.76
26	18.02	MAR 03	16.50	JUN 02	14.22	SEP 01	15.94
DEC 03	17.81	10	16.43	09	13.80	08	16.12
10	17.65	17	16.35	15	14.06	15	16.23
17	17.29	24	16.11	16	14.08	22	16.41
24	16.62	31	16.03	23	14.31	29	16.57
31	16.63	APR 07	15.71	30	14.47		

Z Measured by USGS personnel.



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.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug fire-protection well, approximate size 8 ft by 12 ft, depth 14 ft, filled in from original depth of 15 ft, stone-lined.

METHOD OF MEASUREMENT.--Taped by USGS personnel.

DATUM.--Land-surface datum is 485.5 ft National Geodetic Vertical Datum of 1929. Measuring point: Top edge of concrete cover at east side of square opening, 0.30 ft above land-surface datum.

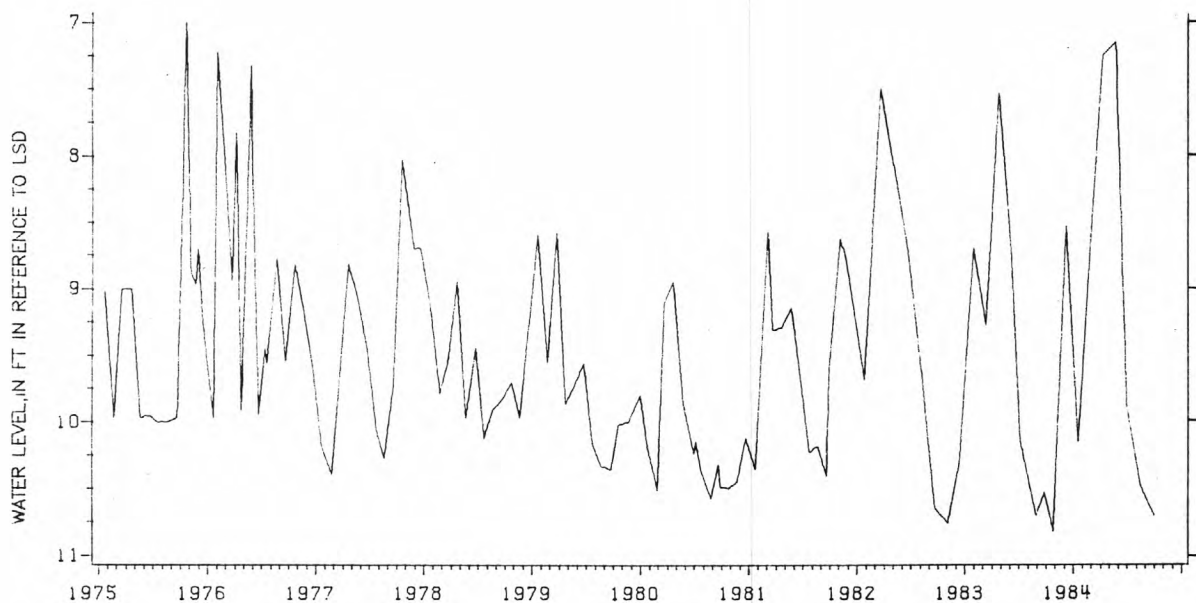
REMARKS.--Water level affected by stage of nearby stream.

PERIOD OF RECORD.--July 1946 to September 1984 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.62 ft below land-surface datum, Apr. 4, 1960; lowest measured, 11.70 ft below land-surface datum, Oct. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26, 1983	10.82	MAR 01, 1984	8.61	MAY 24, 1984	7.15	AUG 16, 1984	10.49
DEC 08	8.53	APR 11	7.25	JUN 28	9.87	SEP 28	10.70
JAN 19, 1984	10.15						



GROUND-WATER LEVELS

WASHINGTON COUNTY

431030073192101. Local number, W 533.

LOCATION.--Lat 43°10'30", long 73°19'21", Hydrologic Unit 02020003, in Salem.

Owner: Salem Central High School.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 15 ft, cased to 16 ft, open end.

Well backfilled 1.6 ft with coarse gravel.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 489.5 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land-surface datum.

REMARKS.--Well was drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft northwest, which has a period of record from October 1965 to June 1973 (unpublished).

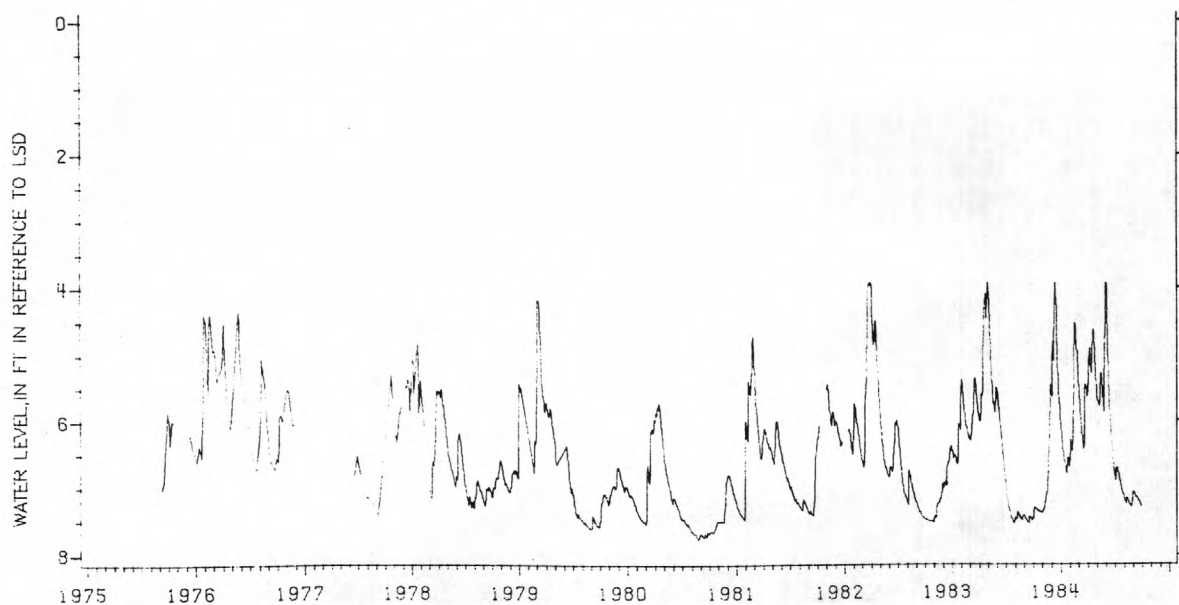
PERIOD OF RECORD.--March 1974 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.92 ft below land-surface datum, May 3, 4-5, 6, 1983; lowest recorded, 7.75 ft below land-surface datum, Aug. 26, 27-29, 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.48	7.37	5.47	5.89	6.65	5.20	5.63	5.46	3.93	6.77	7.12	7.08
2	7.46	7.37	5.46	5.96	6.68	5.30	5.56	5.55	3.93	6.81	7.14	7.07
3	7.46	7.38	5.50	6.02	6.69	5.40	5.51	5.63	3.93	6.84	7.15	7.07
4	7.46	7.38	5.54	6.08	6.41	5.49	5.47	5.65	3.96	6.87	7.17	7.07
5	7.46	7.37	5.60	6.13	6.29	5.57	5.43	5.66	4.19	6.89	7.19	7.07
6	7.38	7.35	5.63	6.18	6.31	5.64	5.32	5.69	4.44	6.86	7.21	7.08
7	7.33	7.33	5.03	6.23	6.35	5.72	5.13	5.72	4.65	6.79	7.22	7.09
8	7.31	7.32	4.80	6.28	6.38	5.80	4.91	5.74	4.82	6.71	7.22	7.10
9	7.30	7.32	4.82	6.34	6.41	5.87	4.90	5.74	4.99	6.71	7.24	7.12
10	7.30	7.31	4.90	6.39	6.44	5.95	4.95	5.75	5.16	6.73	7.25	7.13
11	7.30	7.30	5.01	6.43	6.45	6.01	5.05	5.78	5.32	6.75	7.21	7.15
12	7.31	7.28	5.09	6.48	6.37	6.09	5.15	5.77	5.47	6.72	7.16	7.14
13	7.31	7.24	4.77	6.52	6.26	6.15	5.23	5.66	5.60	6.74	7.15	7.14
14	7.31	7.22	3.94	6.55	6.00	6.20	5.28	5.50	5.70	6.77	7.16	7.15
15	7.31	7.20	3.93	6.58	5.50	6.25	5.17	5.32	5.80	6.79	7.17	7.15
16	7.31	7.19	3.93	6.61	5.09	6.29	5.09	5.27	5.90	6.82	7.19	7.14
17	7.32	7.14	3.94	6.64	4.93	6.33	4.96	5.27	5.98	6.84	7.20	7.15
18	7.32	7.09	4.10	6.67	4.77	6.35	4.86	5.31	6.07	6.86	7.21	7.16
19	7.33	7.06	4.32	6.68	4.58	6.38	4.82	5.36	6.14	6.87	7.23	7.16
20	7.34	7.04	4.55	6.70	4.53	6.41	4.81	5.43	6.21	6.89	7.24	7.17
21	7.34	6.99	4.77	6.73	4.56	6.36	4.64	5.50	6.28	6.91	7.25	7.19
22	7.35	6.87	4.92	6.76	4.67	5.89	4.65	5.57	6.35	6.94	7.26	7.20
23	7.35	6.79	5.06	6.79	4.76	5.51	4.72	5.64	6.41	6.96	7.25	7.21
24	7.34	6.74	5.18	6.79	4.84	5.46	4.80	5.67	6.46	6.98	7.26	7.22
25	7.34	6.57	5.33	6.70	4.91	5.44	4.91	5.73	6.51	7.00	7.26	7.23
26	7.34	6.24	5.47	6.62	4.91	5.44	5.00	5.78	6.55	7.02	7.27	7.24
27	7.35	6.07	5.59	6.58	4.96	5.48	5.10	5.83	6.60	7.04	7.28	7.26
28	7.35	5.98	5.68	6.55	5.02	5.51	5.19	5.87	6.65	7.05	7.29	7.26
29	7.36	5.81	5.66	6.58	5.09	5.52	5.28	5.59	6.69	7.07	7.30	7.27
30	7.36	5.56	5.73	6.60	---	5.57	5.37	4.31	6.73	7.09	7.18	7.28
31	7.36	---	5.81	6.62	---	5.62	---	3.93	---	7.10	7.11	---

WTR YEAR 1984 HIGHEST 3.93 Dec. 14, 15-16, 17, 1983, May 30, 31-June 3, 4, 1984 LOWEST 7.49 Oct. 1, 2, 1983



WESTCHESTER COUNTY

411421073481201. Local number, We 3.

LOCATION.--Lat 41°14'21", long 73°48'12", Hydrologic Unit 02030101, near Yorktown Heights.

Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in., depth cleaned out to 17.6 ft November 9, 1981, original depth reported to be 18.2 ft, filled in to 17.1 ft as of November 1956, to 16.3 ft as of June 1971, to 15.5 ft as of October 1977, to 15.3 ft as of November 1978, cleaned out to 16.1 ft September 23, 1981, stone lined.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Altitude of land-surface datum is 252.5 ft National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in wooden well cover, 1.13 ft above land-surface datum.

PERIOD OF RECORD.--April 1934 to September 1937, April 1938 to September 1945, March 1951 to current year.

Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.58 ft below land-surface datum, Apr. 26, 1983; lowest measured, dry Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6 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, Sept. 6 to 30, 1980, Oct. 1, 1980 to Mar. 3, 1981, Oct. 25 to Nov. 8, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.42	16.23	16.65	---	10.96	8.77	7.51	5.68	4.58	9.96	---	12.91
2	15.45	16.25	16.61	---	10.97	8.60	7.49	5.87	4.33	10.02	---	12.98
3	15.49	16.26	16.56	---	10.93	8.44	7.44	6.03	4.23	10.02	---	13.04
4	15.52	16.28	16.51	---	10.88	8.32	7.33	6.12	4.31	9.96	---	13.10
5	15.55	16.30	16.47	---	10.84	8.18	6.29	6.26	4.48	9.89	---	13.18
6	15.58	16.33	16.42	---	10.84	8.08	3.45	6.33	4.65	9.82	---	13.24
7	15.62	16.35	16.37	---	10.84	8.05	3.24	6.41	4.79	9.01	---	13.30
8	15.66	16.38	16.31	---	10.82	8.02	3.20	6.47	5.01	7.18	11.10	13.35
9	15.69	16.40	16.25	---	10.77	8.00	3.27	6.57	5.26	6.52	11.21	13.39
10	15.73	16.42	16.16	10.16	10.73	8.01	3.37	6.67	5.53	6.25	11.31	13.43
11	15.76	16.44	16.08	10.23	10.65	8.00	3.54	6.75	5.80	6.11	11.40	13.47
12	15.79	16.47	15.96	10.31	10.59	8.14	3.71	6.83	6.09	5.95	11.49	13.50
13	15.81	16.49	15.83	10.36	10.53	8.15	3.90	6.95	6.34	6.01	11.58	13.53
14	15.84	16.52	14.24	10.38	10.45	8.13	4.04	7.06	6.61	6.23	11.66	13.56
15	15.87	16.54	12.34	10.43	10.37	8.12	3.98	7.19	6.89	6.44	11.73	13.58
16	15.91	16.56	11.28	10.45	10.32	8.03	3.66	7.33	7.15	6.65	11.80	13.62
17	15.94	16.58	10.68	10.50	10.24	7.97	3.39	7.48	7.37	6.94	11.86	13.67
18	15.97	16.61	10.32	10.55	10.14	7.86	3.53	7.63	7.58	7.21	11.93	13.70
19	16.00	16.63	10.09	10.58	10.02	7.73	3.69	7.76	7.82	7.52	11.99	13.73
20	16.03	16.65	---	10.63	9.87	7.60	3.81	7.93	8.05	7.82	12.06	13.76
21	16.06	16.67	---	10.68	9.74	7.43	3.98	8.10	8.27	8.10	12.13	13.80
22	16.08	16.69	---	10.72	9.64	7.32	4.15	8.27	8.49	8.37	12.20	13.86
23	16.11	16.71	---	10.75	9.52	7.26	4.26	8.41	8.70	8.63	12.26	13.91
24	16.14	16.72	---	10.77	9.39	7.22	4.41	8.56	8.90	8.86	12.34	13.95
25	16.16	16.73	---	10.78	9.30	7.17	4.61	8.70	9.07	9.12	12.42	13.99
26	16.15	16.74	---	10.83	9.27	7.17	4.81	8.82	9.23	9.29	12.49	14.05
27	16.15	16.75	---	10.83	9.19	7.22	5.00	8.97	---	---	12.56	14.11
28	16.16	16.74	---	10.87	9.02	7.26	5.17	9.09	---	---	12.63	14.15
29	16.17	16.71	---	10.89	8.91	7.25	5.34	9.15	---	---	12.70	14.19
30	16.19	16.68	---	10.90	---	7.44	5.49	7.97	9.85	---	12.76	14.22
31	16.21	---	---	10.92	---	7.51	---	5.46	---	---	12.83	---

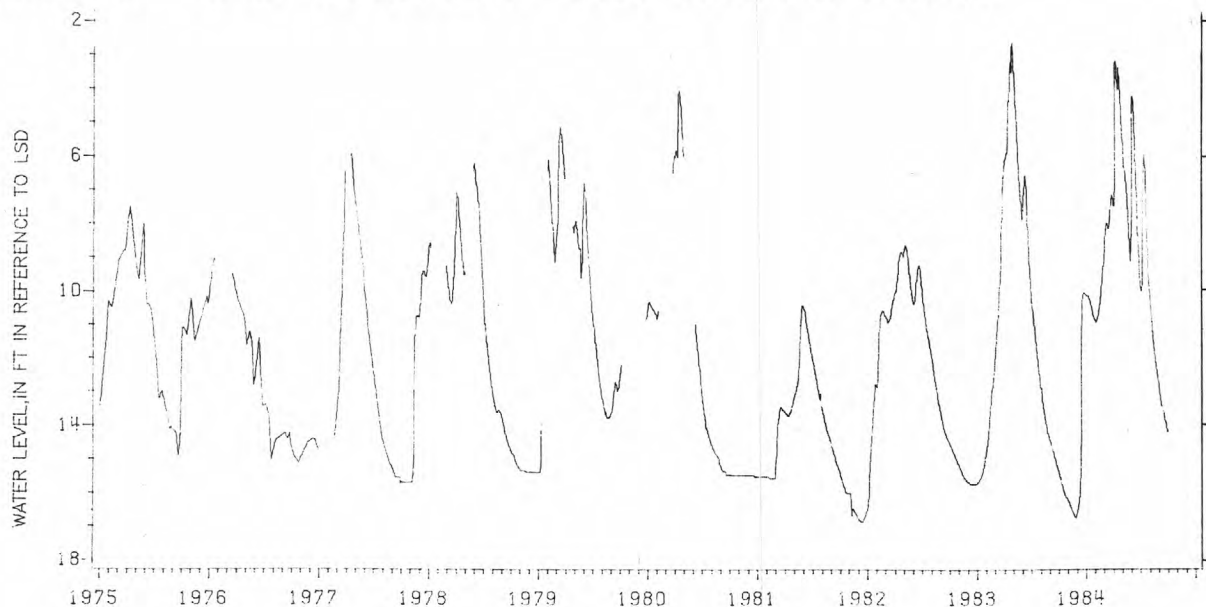
WTR YEAR 1984

HIGHEST

3.17 Apr. 8, 1984

LOWEST

16.75 Nov. 26, 27, 28, 1983



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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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