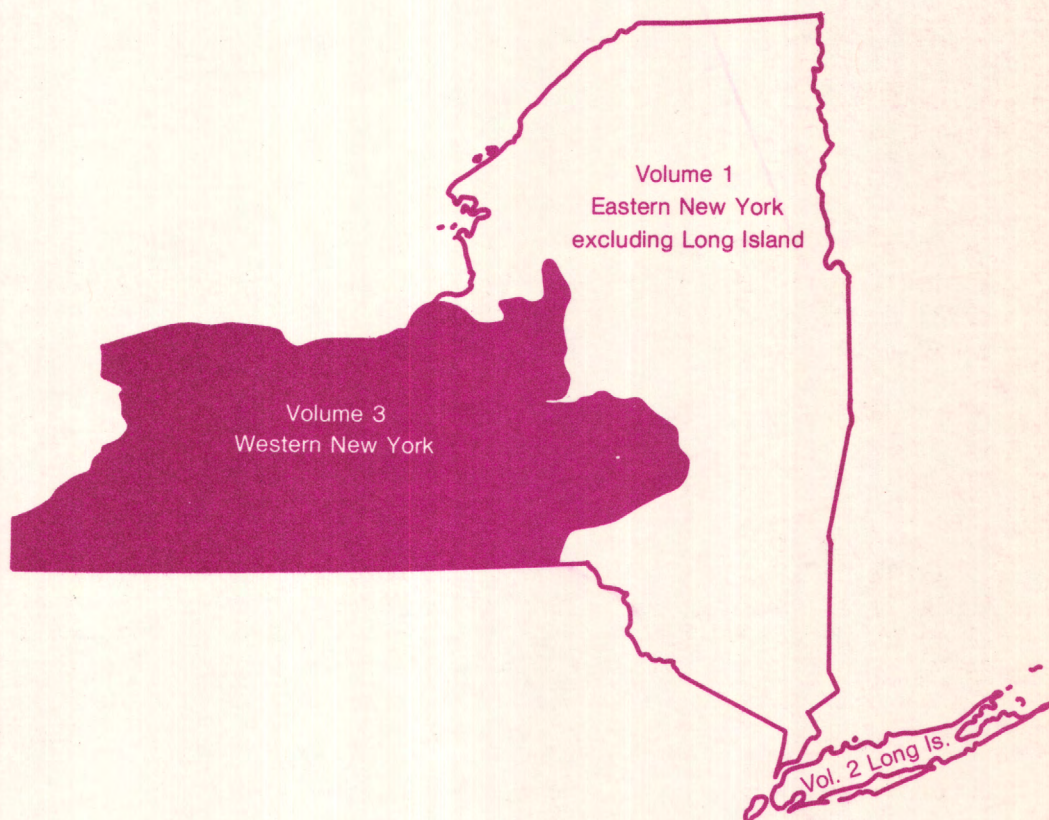
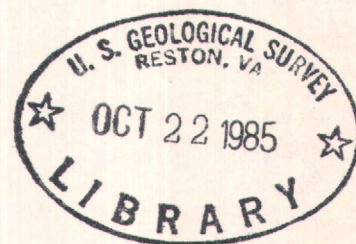


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# Water Resources Data New York Water Year 1984

Volume 3. Western New York



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-84-3  
Prepared in cooperation with the State of New York  
and with other agencies



# CALENDAR FOR WATER YEAR 1984

1983

## OCTOBER

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1984

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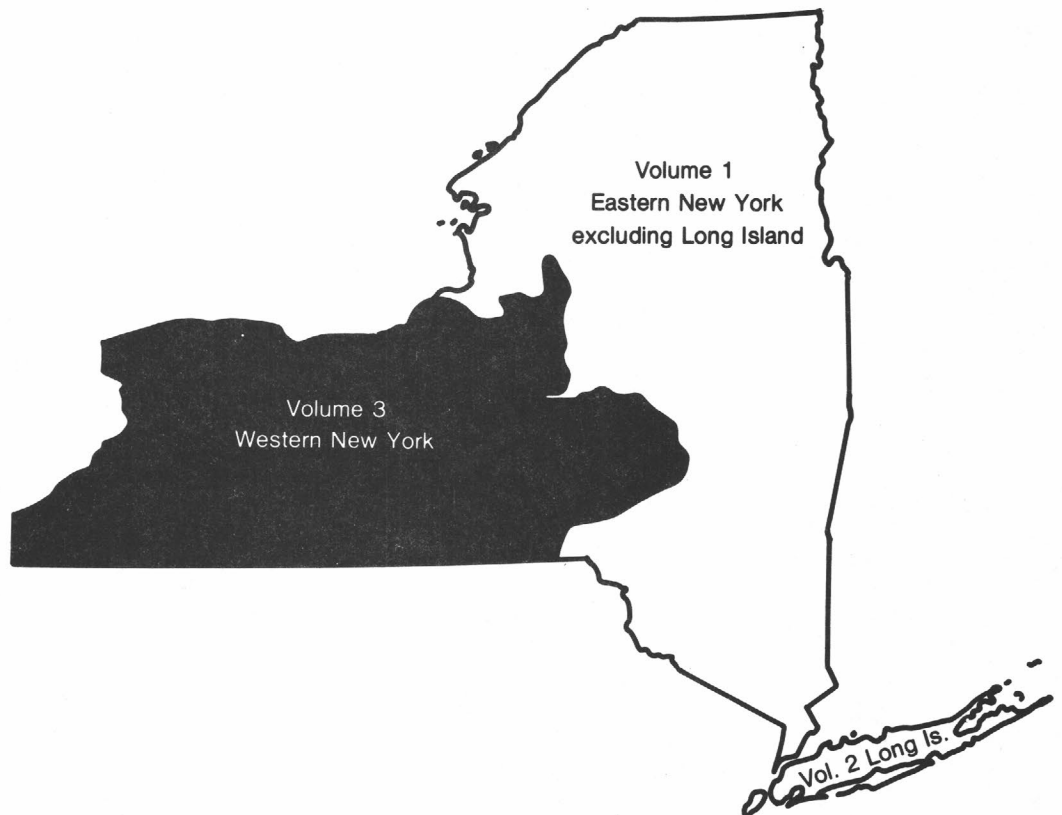




# Water Resources Data New York Water Year 1984

## Volume 3. Western New York

by J.B. Hood, Jr., W.H. Johnston, and H. J. Zajd, Jr.



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-84-3  
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 3.--Western New York

INTRODUCTION

Water resources data for the 1984 water year for New York consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 78 gaging stations; stage only at 14 gaging stations; stage and contents at 6 gaging stations; water quality at 7 gaging stations; and water levels at 22 observation wells. Also included are data for 63 crest-stage partial-record stations. Locations of these sites are shown on figure 4. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as measurements made at miscellaneous sites. These data together with the data in Volumes 1 and 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

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

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

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-84-3." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 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 3, water year 1984, through cooperative agreement with the Survey are:

- New York State Department of Environmental Conservation
- New York State Department of Transportation
- New York State Education Department
- County of Chautauqua, Planning Department
- County of Cortland, Planning Department
- County of Monroe, Department of Health
- County of Monroe, Division of Engineering
- County of Monroe, Water Authority
- County of Onondaga, Department of Public Works
- County of Onondaga, Water Authority Commission
- City of Auburn
- Town of Amherst, Erie County
- Irondequoit Bay Pure Waters District

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 following organizations aided in collecting records:

- Municipalities of Batavia, Canandaigua, Cortland, Jamestown, Lancaster, Oneida, Rochester, Syracuse; Cornell University; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Rochester Gas and Electric Corp.

Organizations that supplied data are acknowledged in station descriptions.

## SUMMARY OF HYDROLOGIC CONDITIONS

The 1984 water year in western New York began with a continuation of the normal or below-normal streamflow conditions that prevailed at the end of the 1983 water year. Precipitation in the form of rain and snowstorms during November was above average, but streamflow was generally in the normal range except for above-normal flows in the Tonawanda Creek basin and below-normal flows in the upper Genesee River basin. Heavy lake-generated snow squalls deposited more than 20 inches of snow northeast of Lake Erie at the end of November. In December, a midmonth storm produced 2 inches or more of rain over a wide area of western New York, with peak accumulations of 4 to 5 inches in Tioga, Broome, and Chenango Counties. Streams rose quickly and some flooding resulted. Extremely low temperatures and heavy snow squalls at the end of the month left more than 40 inches of snow in some areas east of Lake Erie. Temperatures in January were below average, and no major snowstorms occurred. Streamflow decreased to below-normal levels in all parts of western New York. A warming trend in February produced a snowmelt at midmonth that was accompanied by heavy rain; this caused streamflow to increase to above-normal levels. The heaviest recorded precipitation totals were along the Pennsylvania boundary. Ice jams caused flooding on some streams tributary to Lake Erie and the Niagara River. A heavy snowstorm at the end of February deposited 20 to 30 inches of snow east of Lake Erie. Below-average temperatures and above-average snowfall in March caused a return to below-normal conditions in all streams throughout western New York. Rain and snowmelt during the first week of April caused streams to rise, and some flooding resulted. Streamflow was above normal in all basins during April. This condition continued through July in the upper Susquehanna River basin, through August in the Chemung and upper Genesee River basins, and through September in the Allegheny River and the Tonawanda Creek basins. This high streamflow was maintained by frequent rainstorms throughout the summer.

May 1984 was the wettest May of record at some reporting precipitation stations as a result of large storms during the first and last weeks of the month. June, also a wet month, had heavy rain that caused flooding in southwestern New York when up to 6 inches of rain fell during a midmonth storm, and in Erie County, which received 3 to 4 inches of rain during the last week of the month. From July through September, precipitation was below average, but regional storms produced significant localized accumulations of rain and some flooding. The most significant storm during this period occurred in the second week of August in central and southwestern New York; Penn Yan reported a total of 7 inches on the 11th and 12th that caused some flooding in the Keuka Lake basin. Streams also rose several feet in the counties adjacent to Pennsylvania. In August, streamflow in the upper Susquehanna River basin returned to the normal range, as did flow in Chemung and upper Genesee River basins in September.

Analysis of stream samples and discharge data taken from the five NASQAN stations in western New York indicated no significant changes in chemical or biological quality from previous years. Fecal coliform counts of 3,800 colonies per 100 mL and fecal streptococci counts of 5,400 colonies per 100 mL were found in samples from Tonawanda Creek at Batavia on August 16. These counts, although not above period-of-record maximums, were higher by more than 3,600 and 4,800 colonies per 100 mL, respectively, than other counts observed for Tonawanda Creek at Batavia in the 1984 water year.

Ground-water levels were declining seasonally and were below the monthly average at the beginning of the water year. By late November, water levels were rising to above average in response to precipitation and the cessation of vegetation growth. Excessive precipitation in December kept water levels well above average. By late January, extreme cold weather reduced recharge, and lower water levels resulted. Warm weather in February accelerated recharge again and kept water levels above average into March. Seasonal declines started in April, but water levels generally remained above average through the end of the water year.



## DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

Bed material See Bottom material.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Organic carbon (OC) is a measure of 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 ( $\text{m}^2$ ), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

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

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



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, bottomwithdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

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

The classification is as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 [mg C/(m<sup>2</sup>.time) for periphyton and macrophytes and mg C/(m<sup>3</sup>.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 [mg O<sub>2</sub>/(m<sup>2</sup>.time) for periphyton and macrophytes and mg O<sub>2</sub>/(m<sup>3</sup>.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 emerged or submersed solid surface, such as a rock or tree, upon which an organism lived.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 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 01502500 includes the 2-digit part number "01" plus the 6-digit downstream order number "502500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

## NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

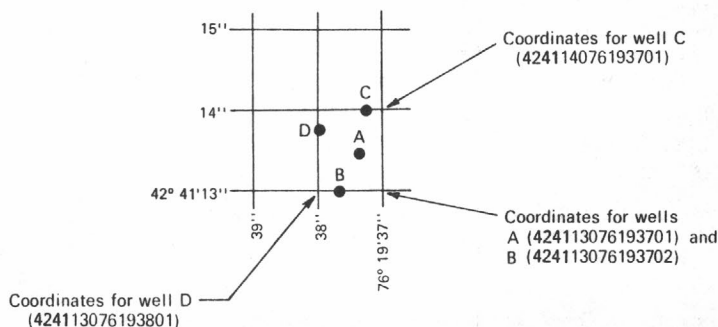


Figure 1. System for numbering wells (latitude and longitude)

## SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

## EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

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

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The daily contents are computed from gage heights and capacity tables, then the daily, monthly, and yearly change of contents are computed from the daily figures.

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 for some stations, given under "LOCATION", 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 "REVISED RECORDS" paragraph 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 noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the 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 table of daily discharge 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 table, the "TOTAL" line gives the sum of the daily figures. The "MEAN" line gives the average flow in cubic feet per second during the month. The "MAX" and "MIN" lines 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 ("CFSM" line), or in inches ("IN." line). 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 stagedischarge 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 ft<sup>3</sup>/s; to tenths between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures above 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

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

#### Other Data Available

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

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

### EXPLANATION OF WATER-QUALITY RECORDS

#### Classification of Records

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

#### Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the location of the water quality sampling site differs significantly from that of 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 follows 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.

### Categories of Water-Quality Data

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

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

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

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

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

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

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

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

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

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

### Frequency-of-Sampling Notation

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

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

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



### 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 page 17.

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.

### Revisions

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

## 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 (1sd). 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, then monthly and yearly means are computed from the daily figures. Water levels in wells not equipped with recording gages are measured periodically, usually weekly, with a weighted tape.

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

### 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 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 cost 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

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. Greens, 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.

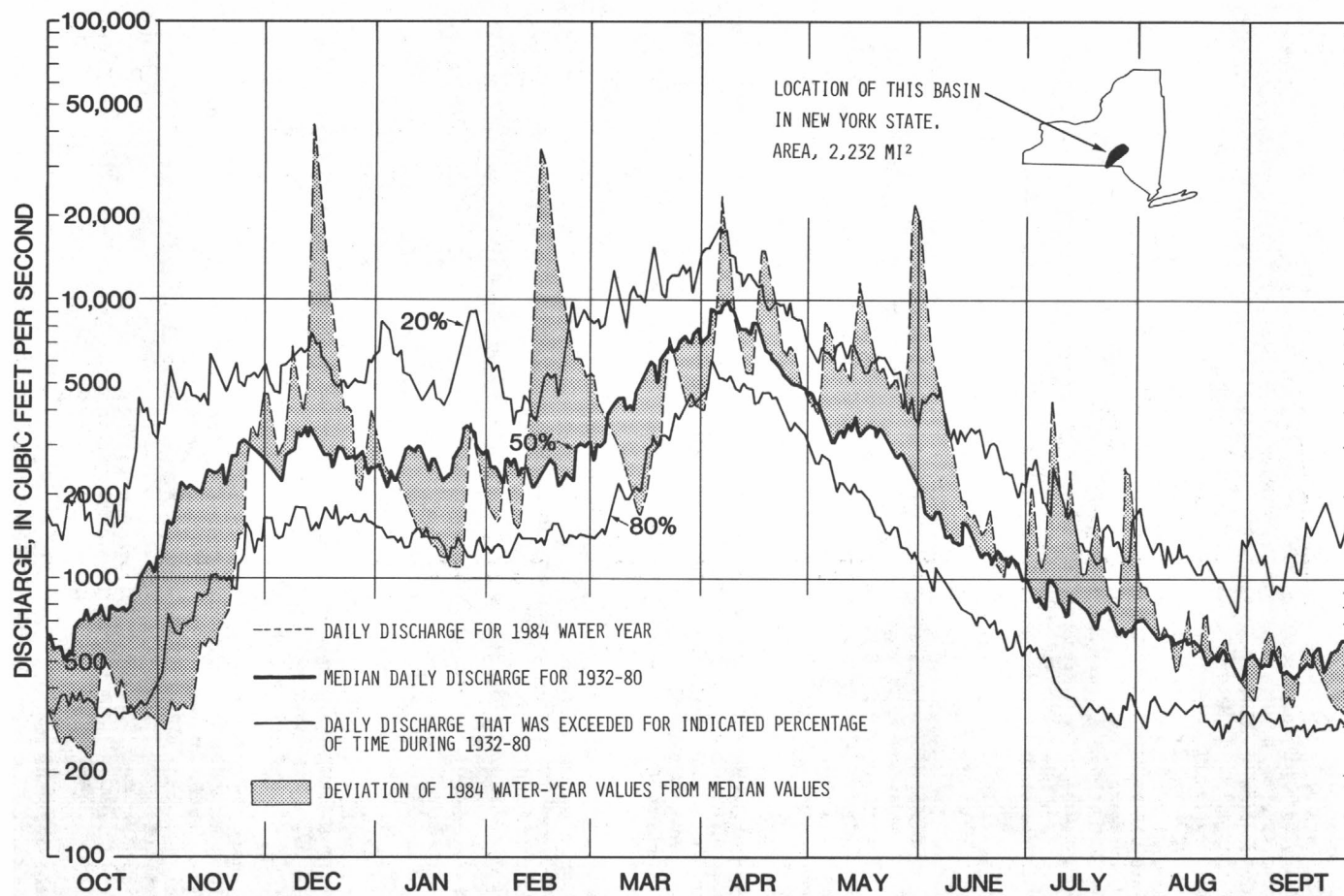


Figure 2.—Hydrographic comparisons, Susquehanna River at Conklin, N.Y.



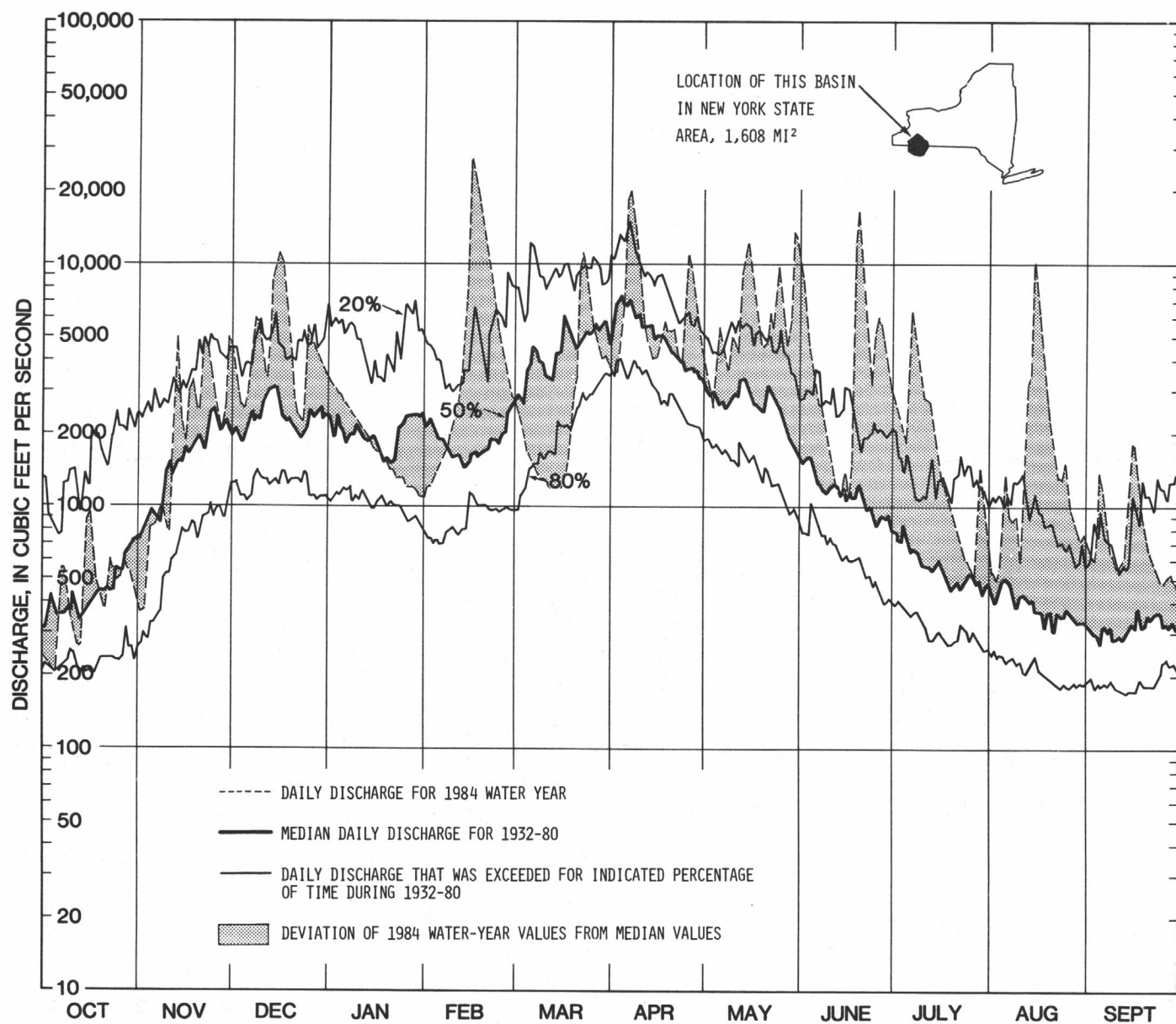


Figure 3.--Hydrographic comparisons, Allegheny River at Salamanca, N.Y.

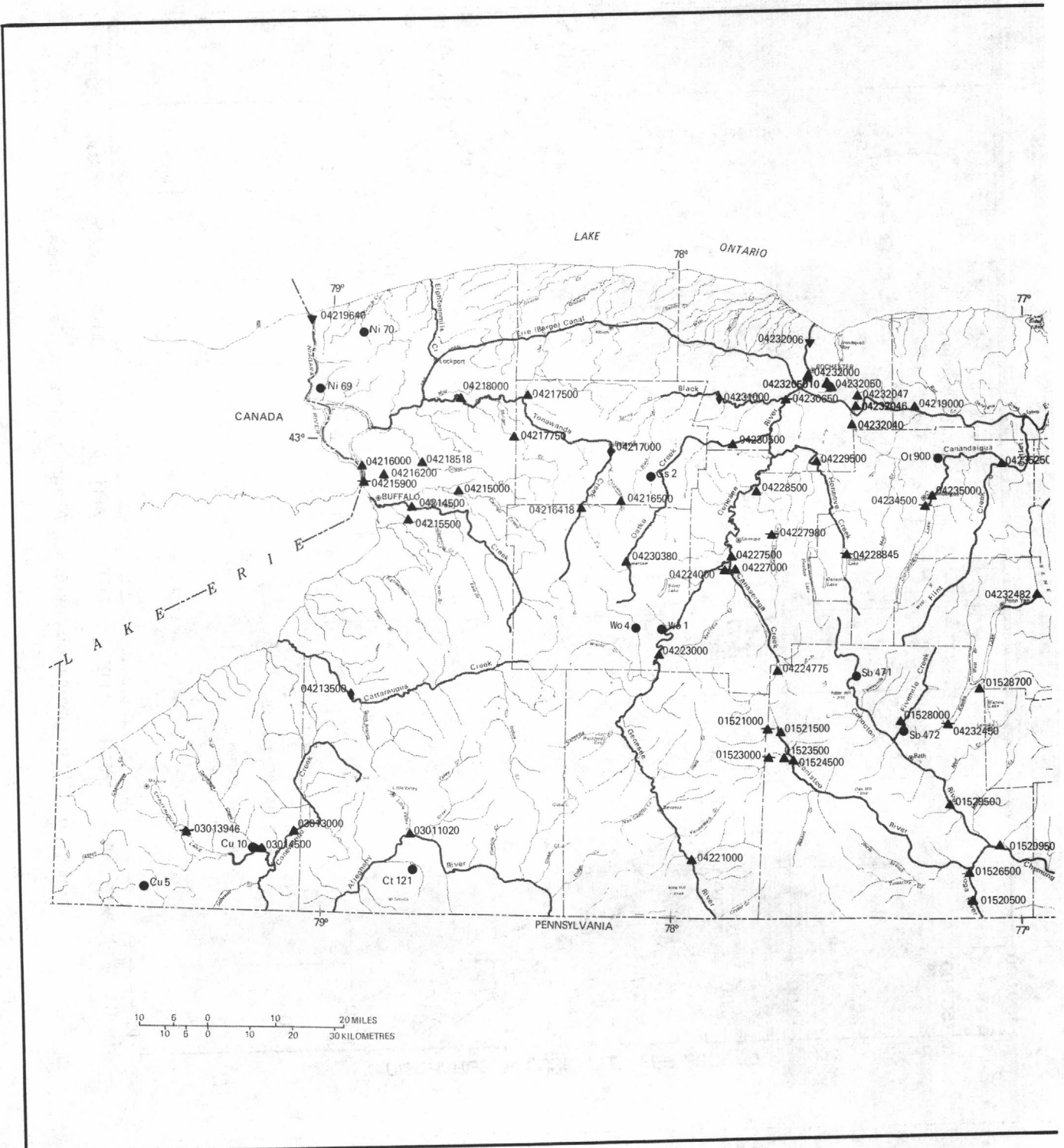
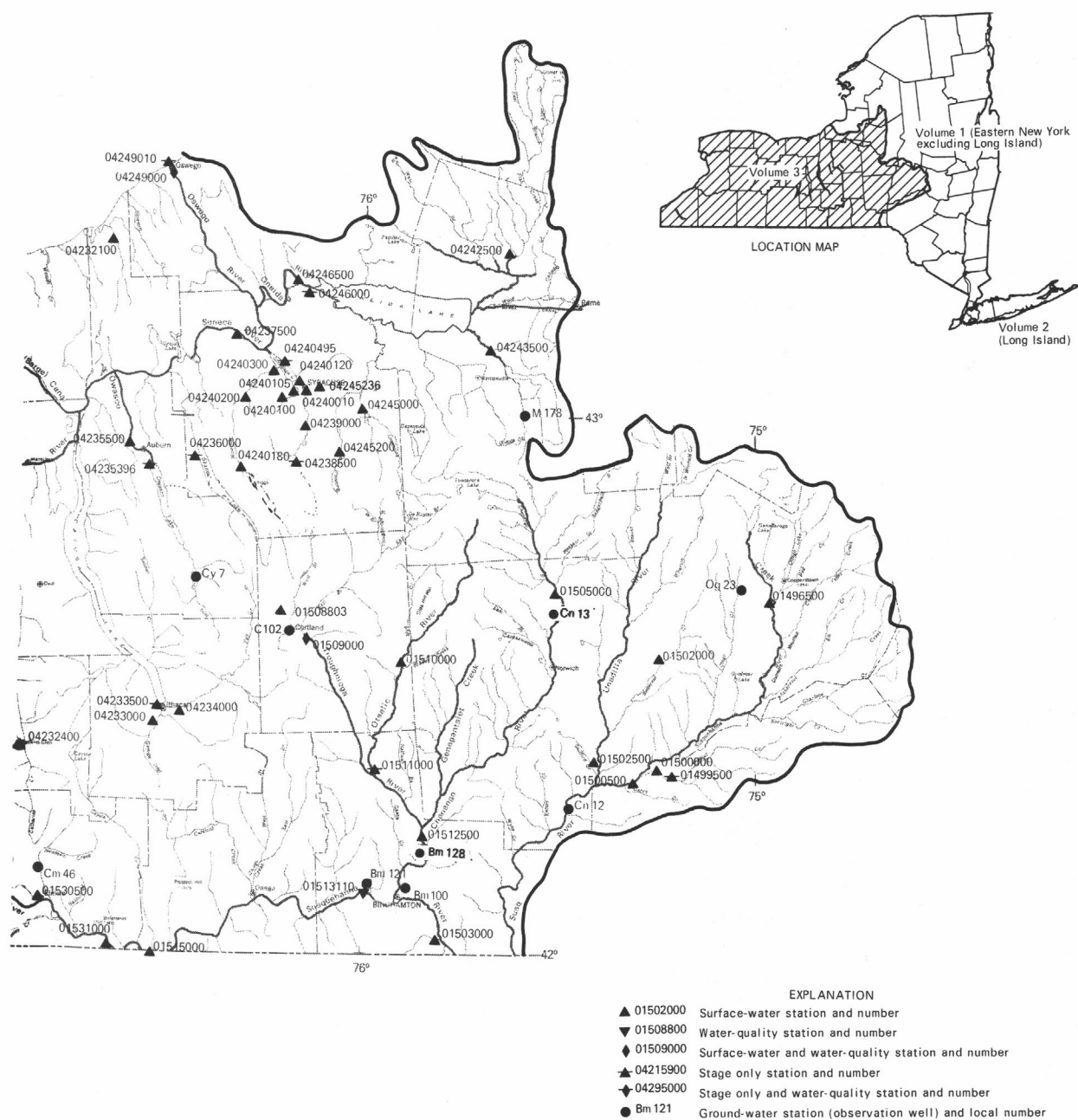


FIGURE 4.-- LOCATION OF GAGING STATIONS



AND OBSERVATION WELLS IN WESTERN NEW YORK

## SUSQUEHANNA RIVER BASIN

01496500 OAKS CREEK AT INDEX, NY

LOCATION.--Lat 42°39'56", long 74°57'36", Otsego County, Hydrologic Unit 02050101, on right bank 200 ft upstream from bridge on State Highway 28 at Index, 0.5 mi upstream from mouth, and 3 mi southwest of Cooperstown.

DRAINAGE AREA.--102 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,174.47 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1932, nonrecording gage at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Prior to June 1964 and since October 1979 flow regulated by natural storage in Canadarago Lake. June 1964 to September 1979 flow regulated by moveable gate at Panther Mountain Dam at outlet.

AVERAGE DISCHARGE.--49 years (1931-32, 1938-84), 171 ft<sup>3</sup>/s, 22.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft<sup>3</sup>/s Oct. 17, 1977, from rating extended above 1,700 ft<sup>3</sup>/s by lograthmic plotting, gage height, 7.62 ft; minimum, 1.3 ft<sup>3</sup>/s Aug. 4, 5, 1962, gage height, 1.79 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0930	1,060	5.15	Feb. 15	2300	*1,190	*5.32

Minimum discharge, 4.4 ft<sup>3</sup>/s Sept. 25, gage height, 1.98 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	5.1	43	143	230	82	334	231	281	309	27	23	38
2	5.4	40	136	220	80	322	247	261	289	27	21	46
3	5.1	40	135	210	84	302	271	248	267	23	20	54
4	5.2	39	131	200	105	282	286	362	250	23	19	48
5	6.2	37	133	180	104	265	334	379	230	62	17	43
6	8.8	35	141	160	102	259	423	339	216	135	16	38
7	7.9	33	247	140	94	240	444	322	204	172	14	34
8	7.1	32	202	130	90	220	409	312	185	105	13	30
9	6.2	29	195	120	88	200	387	334	170	88	13	28
10	5.7	29	188	110	90	180	371	315	154	79	12	24
11	5.4	39	185	100	100	170	354	301	139	75	12	24
12	5.9	45	184	100	134	160	337	391	126	72	13	27
13	7.1	41	424	98	188	150	322	378	113	66	13	21
14	9.0	37	952	94	363	140	317	415	137	60	12	16
15	9.6	36	717	90	794	137	335	377	117	54	15	13
16	7.6	43	628	88	862	137	385	360	102	63	13	9.9
17	6.8	49	572	86	695	150	438	341	91	52	11	8.2
18	6.7	48	520	84	695	138	415	320	58	56	9.4	6.7
19	6.2	46	470	82	667	134	395	305	56	49	8.6	5.6
20	5.6	49	400	80	651	152	415	290	49	41	8.0	5.3
21	5.5	73	380	78	610	211	391	284	43	37	7.2	4.9
22	5.2	76	390	76	564	271	365	262	38	35	6.9	4.7
23	29	69	360	86	522	245	349	261	34	32	13	4.6
24	55	72	330	140	493	230	351	262	34	29	12	4.6
25	52	125	270	200	466	229	360	233	41	27	9.1	4.6
26	48	118	260	170	438	230	340	219	35	25	7.4	5.1
27	45	114	250	150	401	221	320	215	31	38	6.4	5.5
28	41	118	270	130	383	219	304	260	31	49	6.4	5.5
29	39	157	300	110	367	221	293	367	29	33	5.8	5.4
30	46	158	270	100	---	223	279	361	27	28	8.9	5.2
31	45	---	250	90	---	226	---	332	---	25	11	---
TOTAL	543.3	1870	10033	3932	10312	6598	10468	9687	3605	1687	377.1	569.8
MEAN	17.5	62.3	324	127	356	213	349	312	120	54.4	12.2	19.0
MAX	55	158	952	230	862	334	444	415	309	172	23	54
MIN	5.1	29	131	76	80	134	231	215	27	23	5.8	4.6
CFSM	.17	.61	3.18	1.25	3.49	2.09	3.42	3.06	1.18	.53	.12	.19
IN.	0.20	0.68	3.66	1.43	3.76	2.41	3.82	3.53	1.31	0.62	0.14	0.21
CAL YR 1983	TOTAL	64964.7	MEAN	178	MAX	1260	MIN	4.4	CFSM	1.75	IN.	23.69
WTR YR 1984	TOTAL	59682.2	MEAN	163	MAX	952	MIN	4.6	CFSM	1.60	IN.	21.77



## 01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY

LOCATION.--Lat 42°19'40", long 75°13'42", Delaware County, Hydrologic Unit 02050101, at East Sidney Dam on Ouleout Creek, 0.3 mi upstream from bridge on County Highway 44 at East Sidney, 4.0 mi upstream from mouth, and 4.5 mi east of Unadilla.

DRAINAGE AREA.--103 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "East Sidney Reservoir at East Sidney."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1979, at datum 0.05 ft lower.

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

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,194.4 ft Apr. 6, 1960, contents, 25,100 acre-ft; minimum, 1,115.0 ft Aug. 31, 1953, Sept. 7-26, Nov. 4, 1964, contents, 56 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,172.94 ft Feb. 17, contents, 10,930 acre-ft; minimum, 1,138.74 ft Apr. 21, contents 1,477 acre-ft.

## Capacity table (elevation, in feet, and useable contents, in acre-feet)

(Based on field survey by Corps of Engineers in 1938)

1,135.0	1,080	1,160.0	5,910
1,140.0	1,630	1,170.0	9,610
1,145.0	2,360	1,180.0	14,610
1,150.0	3,280	1,190.0	21,370

ELEVATION (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	1149.40	1149.35	1147.37	1140.51	1139.87	1140.79	1139.32	1148.22	1158.73	1150.45	1150.38	1150.24
2	1149.37	1149.32	1144.64	1140.66	1139.82	1140.50	1140.79	1148.88	1151.44	1150.75	1150.23	1150.23
3	1149.34	1149.30	1142.99	1140.67	1140.51	1140.34	1141.65	1149.33	1150.55	1150.87	1150.35	1150.38
4	1149.30	1149.28	1141.23	1140.61	1141.31	1139.74	1141.48	1150.42	1150.25	1150.92	1150.49	1150.63
5	1149.31	1149.26	1140.23	1140.52	1139.95	1139.83	1141.97	1150.47	1150.16	1150.91	1150.58	1150.76
6	1149.34	1149.23	1140.31	1140.41	1140.33	1140.39	1150.95	1150.17	1150.24	1150.79	1150.63	1150.82
7	1149.35	1149.20	1141.67	1140.28	1140.11	1140.71	1149.00	1150.42	1150.17	1151.27	1150.64	1150.85
8	1149.32	1149.18	1140.47	1140.05	1140.39	1140.33	1142.96	1150.34	1150.21	1150.56	1150.63	1150.87
9	1149.30	1149.15	1140.15	1140.28	1140.74	1140.07	1141.29	1150.33	1150.11	1150.06	1150.59	1150.87
10	1149.26	1149.12	1140.81	1140.50	1140.89	1139.58	1139.83	1148.86	1150.14	1150.06	1150.52	1150.87
11	1149.21	1149.13	1140.65	1140.61	1140.47	1140.18	1140.34	1149.52	1150.26	1150.49	1150.50	1150.86
12	1149.17	1149.16	1140.29	1140.47	1140.94	1140.43	1140.19	1150.58	1150.25	1151.06	1150.72	1150.88
13	1149.15	1149.19	1146.83	1140.42	1140.94	1140.75	1140.04	1151.28	1150.19	1150.33	1150.77	1150.88
14	1149.29	1149.20	1163.05	1140.47	1141.53	1140.96	1140.56	1151.50	1150.30	1150.24	1150.76	1150.97
15	1149.45	1149.23	1170.54	1140.51	1152.92	1140.84	1141.66	1150.85	1150.43	1150.32	1150.84	1151.11
16	1149.50	1149.30	1171.92	1140.37	1166.91	1140.59	1141.54	1150.58	1150.44	1150.28	1150.84	1151.10
17	1149.54	1149.50	1166.40	1140.29	1172.09	1141.18	1140.73	1150.24	1150.39	1150.25	1150.69	1151.01
18	1149.55	1149.69	1158.20	1140.22	1170.05	1141.17	1140.03	1150.18	1150.39	1150.80	1150.52	1150.89
19	1149.56	1149.82	1148.13	1140.29	1163.88	1140.72	1140.80	1150.01	1150.66	1150.78	1150.44	1150.74
20	1149.55	1149.95	1142.78	1140.30	1156.19	1140.69	1140.79	1150.05	1150.78	1150.44	1150.37	1150.60
21	1149.54	1150.36	1140.13	1140.31	1146.46	1142.03	1139.12	1150.65	1150.73	1150.46	1150.30	1150.53
22	1149.51	1151.02	1140.56	1140.24	1141.24	1140.88	1139.41	1150.74	1150.61	1150.84	1150.26	1150.46
23	1149.49	1150.91	1140.92	1140.14	1140.19	1140.15	1140.17	1150.64	1150.45	1150.90	1150.33	1150.38
24	1149.49	1150.49	1140.25	1140.17	1140.10	1140.12	1141.67	1151.21	1150.29	1150.72	1150.44	1150.31
25	1149.49	1150.77	1139.57	1141.23	1139.91	1140.37	1143.26	1150.18	1150.32	1150.49	1150.47	1150.24
26	1149.48	1151.60	1140.40	1140.86	1140.28	1140.19	1144.08	1150.20	1150.31	1150.26	1150.46	1150.17
27	1149.47	1151.62	1140.75	1139.80	1139.83	1139.96	1144.30	1150.95	1150.20	1150.53	1150.41	1150.11
28	1149.46	1151.15	1140.15	1140.54	1139.49	1140.52	1145.00	1151.34	1150.16	1150.43	1150.35	1150.11
29	1149.43	1150.97	1141.43	1140.94	1141.31	1140.78	1146.21	1155.59	1150.14	1150.21	1150.29	1150.13
30	1149.41	1149.82	1140.58	1141.10	---	1140.35	1147.28	1165.49	1150.26	1150.42	1150.23	1150.14
31	1149.39	---	1139.98	1140.55	---	1139.69	---	1165.17	---	1150.66	1150.24	---
MEAN	1149.40	1149.84	1145.59	1140.46	1145.47	1140.48	1142.21	1151.43	1150.65	1150.57	1150.49	1150.60
MAX	1149.56	1151.62	1171.92	1141.23	1172.09	1142.03	1150.95	1165.49	1158.73	1151.27	1150.84	1151.11
MIN	1149.15	1149.12	1139.57	1139.80	1139.49	1139.58	1139.12	1148.22	1150.11	1150.06	1150.23	1150.11
†	3,157	3,025	1,668	1,655	1,814	1,545	2,849	6,674	3,353	3,399	3,332	3,315
††	-0.1	-2.2	-22.1	-0.2	+2.8	-4.4	+21.9	+62.2	-55.8	+0.8	-1.1	-0.3

CAL YR 1983 MEAN 1147.61 MAX 1181.13 MIN 1139.57 †† 0  
WTR YR 1984 MEAN 1147.27 MAX 1172.09 MIN 1139.12 †† +0.2

† Contents, in acre-ft, at end of month.

†† Change in contents, equivalent in cubic feet per second.

## SUSQUEHANNA RIVER BASIN

01500000 OULEOUT CREEK AT EAST SIDNEY, NY

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

DRAINAGE AREA.--103 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2103: Drainage area.

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

REMARKS.--Records good. Since November 1949, flow regulated by East Sidney Lake (see station 01499500).

AVERAGE DISCHARGE.--44 years, 173 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft<sup>3</sup>/s Dec. 30, 1942, gage height, 7.62 ft site and datum then in use, from rating curve extended above 4,000 ft<sup>3</sup>/s; minimum, 1.2 ft<sup>3</sup>/s Aug. 13, 14, 17, 1949, gage height, 0.32 ft.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,940 ft<sup>3</sup>/s Dec. 16 at 1800 hours, gage height, 4.83 ft; minimum, 6.7 ft<sup>3</sup>/s Apr. 30, gage height, 0.85 ft (result of regulation).

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	11	472	71	69	261	148	95	1730	12	87	11
2	11	11	343	82	33	198	164	96	909	19	52	11
3	11	11	263	82	44	197	307	97	356	25	35	11
4	11	11	246	82	283	171	412	407	303	25	34	11
5	11	11	141	82	175	143	436	417	212	49	35	11
6	11	11	144	82	132	130	477	318	186	42	35	11
7	11	11	630	81	87	131	1470	266	154	190	34	11
8	11	11	333	52	55	131	879	267	131	180	33	11
9	11	11	208	48	55	130	491	425	111	73	33	11
10	11	11	186	48	122	80	376	328	80	20	33	11
11	11	11	202	48	175	57	272	127	70	29	33	11
12	11	11	168	48	403	57	267	236	71	550	31	11
13	11	11	421	48	631	58	219	320	53	167	31	11
14	11	11	9.8	48	1110	74	200	914	46	92	31	24
15	11	11	108	48	9.7	97	394	556	46	75	31	30
16	11	11	1080	48	9.3	109	717	563	46	75	41	30
17	11	11	1820	48	344	126	1020	400	46	47	45	29
18	11	11	1710	44	1780	149	612	334	46	130	35	29
19	11	11	1090	35	1770	154	616	298	46	206	28	29
20	12	11	522	35	1660	155	686	235	46	135	27	22
21	11	11	166	35	1230	357	467	237	46	34	23	17
22	11	57	169	35	509	567	325	238	46	37	19	17
23	11	102	200	35	329	362	259	192	46	75	19	17
24	11	109	171	35	265	287	227	342	46	75	19	17
25	11	112	74	109	264	270	234	254	46	76	19	17
26	11	125	31	198	265	254	237	151	46	49	19	18
27	11	180	121	105	263	196	197	223	38	154	19	13
28	11	235	103	55	188	165	115	631	31	221	19	8.1
29	11	405	189	53	245	204	93	688	23	114	19	8.1
30	11	494	206	89	---	222	90	334	11	38	15	8.1
31	11	---	84	104	---	219	---	1740	---	71	11	---
TOTAL	342	2050	11610.8	2013	12505.0	5711	12407	11729	5067	3085	945	476.3
MEAN	11.0	68.3	375	64.9	431	184	414	378	169	99.5	30.5	15.9
MAX	12	494	1820	198	1780	567	1470	1740	1730	550	87	30
MIN	11	11	9.8	35	9.3	57	90	95	11	12	11	8.1
CAL YR 1983	TOTAL	68783.5	MEAN	188	MAX	1820	MIN	9.7				
WTR YR 1984	TOTAL	67941.1	MEAN	186	MAX	1820	MIN	8.1				

## SUSQUEHANNA RIVER BASIN

25

01500500 SUSQUEHANNA RIVER AT UNADILLA, NY

LOCATION.--Lat 42°19'17", long 75°19'01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft downstream from bridge on Bridge Street at Unadilla, 1.0 mi upstream from Carrs Creek, and 1.6 mi downstream from Ouleout Creek.

DRAINAGE AREA.--982 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 997.25 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Slight regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--46 years, 1,574 ft<sup>3</sup>/s, 21.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft<sup>3</sup>/s Mar. 14, 1977, gage height, 14.64 ft; minimum, 39 ft<sup>3</sup>/s Oct. 17, 1964, gage height, 1.38 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Mar. 18, 1936, reached a stage of 16.6 ft, from floodmarks, discharge, 31,300 ft<sup>3</sup>/s, from publications of the Corps of Engineers, Baltimore District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,800 ft<sup>3</sup>/s Dec. 14 at 1830 hours, gage height, 10.51 ft, no other peak above base of 11,000 ft<sup>3</sup>/s; minimum, 89 ft<sup>3</sup>/s Oct. 13, gage height, 1.62 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	111	153	1750	1400	700	2300	1820	2020	6390	412	482	222
2	127	165	1460	1300	580	2100	2010	1800	4580	350	297	170
3	128	140	1260	1100	520	1900	2370	1660	3270	399	327	299
4	110	168	1260	1000	1300	1800	2790	2970	2860	390	258	410
5	125	171	992	940	1200	1600	3440	3920	2410	387	211	366
6	113	163	1130	900	980	1600	5420	3280	2000	525	316	332
7	109	161	3020	860	880	1500	6580	2750	1920	1630	319	414
8	104	156	2670	820	800	1400	5100	2560	1560	1400	228	212
9	99	154	2030	780	740	1300	3800	2960	1390	964	185	160
10	94	154	1830	740	780	1100	3330	2810	1210	656	178	149
11	94	167	1680	700	920	1000	2870	2270	869	670	190	140
12	94	187	1440	660	1900	900	2760	2650	986	1200	277	164
13	92	207	5390	640	2600	800	2560	3430	650	752	385	242
14	129	202	11100	620	4900	840	2480	5250	763	602	243	282
15	170	216	10200	600	7910	900	3100	4640	871	468	251	335
16	162	207	7520	580	10400	989	4170	4080	778	553	330	307
17	133	254	6400	580	8340	1290	6580	3520	475	488	391	294
18	119	323	5260	560	7750	1290	5550	3010	567	714	526	257
19	271	326	4160	540	6780	1210	4670	2800	954	1020	309	230
20	201	274	2800	540	6130	1310	4610	2480	494	654	299	211
21	110	344	2040	520	5300	2210	3930	2550	464	509	310	193
22	99	531	2200	500	4030	3170	3260	2260	477	407	256	177
23	98	542	2300	500	3460	2770	2900	2070	494	437	300	173
24	105	493	2000	660	3160	2380	2910	2530	429	540	335	177
25	114	776	1400	1000	3000	2180	3070	2150	562	329	299	172
26	121	1310	1300	2000	3210	2110	3000	1820	545	338	252	177
27	120	1070	1400	1100	2810	1930	2500	2030	456	484	226	165
28	113	1040	1400	840	2570	1850	2300	2750	412	996	226	151
29	111	1690	1600	820	2650	1880	2130	7260	405	699	197	136
30	106	2000	1800	780	---	1830	1840	9560	393	456	198	163
31	102	---	1700	760	---	1770	---	8680	---	434	200	---
TOTAL	3784	13744	92492	25340	96300	51209	103850	104520	39634	19863	8801	6880
MEAN	122	458	2984	817	3321	1652	3462	3372	1321	641	284	229
MAX	271	2000	11100	2000	10400	3170	6580	9560	6390	1630	526	414
MIN	92	140	992	500	520	800	1820	1660	393	329	178	136
CFSM	.12	.47	3.04	.83	3.38	1.68	3.53	3.43	1.35	.65	.29	.23
IN.	0.14	0.52	3.50	0.96	3.65	1.94	3.93	3.96	1.50	0.75	0.33	0.26
CAL YR 1983	TOTAL	607469	MEAN	1664	MAX	13000	MIN	92	CFSM	1.69	IN.	23.01
WTR YR 1984	TOTAL	566417	MEAN	1548	MAX	11100	MIN	92	CFSM	1.58	IN.	21.46

## SUSQUEHANNA RIVER BASIN

01502000 BUTTERNUT CREEK AT MORRIS, NY

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

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

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

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

GAGE.--Water-stage recorder. Datum of gage 1096.21 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--46 years, 100 ft<sup>3</sup>/s, 22.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,980 ft<sup>3</sup>/s Oct. 17, 1977, gage height, 9.44 ft; minimum daily, 1.3 ft<sup>3</sup>/s Sept. 24, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0930	3,310	7.79	Feb. 15	2030	*3,460	*7.91

Minimum discharge, 3.7 ft<sup>3</sup>/s Oct. 4; minimum gage height, 1.39 ft Sept. 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	5.6	8.3	74	64	30	100	127	155	218	23	19	11
2	6.9	8.3	63	60	32	98	151	125	185	23	19	9.9
3	6.6	8.6	57	56	36	88	164	113	162	24	19	11
4	3.8	8.8	53	52	61	78	166	285	149	24	19	6.0
5	5.8	8.8	54	48	58	76	230	265	126	37	19	10
6	9.0	8.8	66	44	50	74	303	202	114	79	19	11
7	8.2	8.8	204	41	43	70	302	177	104	134	19	11
8	6.2	8.8	117	39	40	60	218	168	89	70	18	11
9	7.5	8.8	98	37	39	54	179	212	77	45	18	10
10	6.9	8.9	90	35	40	50	157	176	68	38	17	9.7
11	4.7	11	81	34	48	47	143	154	59	36	17	10
12	5.7	13	96	33	90	44	130	333	53	37	20	13
13	7.0	13	1420	32	182	43	119	298	48	29	18	11
14	6.3	13	2520	31	832	42	135	407	59	27	15	12
15	6.8	14	570	30	2340	43	173	292	52	27	15	14
16	6.4	14	339	29	1370	53	277	254	44	32	16	13
17	6.4	16	249	29	463	72	334	215	40	29	14	11
18	6.6	15	199	28	374	60	297	183	43	28	14	11
19	6.7	15	160	27	298	60	266	172	50	29	15	9.9
20	7.0	15	110	26	270	87	282	159	40	26	15	10
21	7.0	25	96	26	226	175	228	157	36	25	14	8.7
22	7.2	26	120	25	195	245	193	132	33	25	14	8.9
23	7.6	21	130	25	177	182	186	146	31	23	18	8.4
24	8.6	20	110	30	166	150	205	156	31	22	15	7.6
25	8.7	63	88	60	156	140	205	121	35	19	15	8.2
26	8.3	55	78	52	149	130	170	114	31	19	13	8.2
27	8.3	47	76	45	120	120	144	120	29	30	12	7.9
28	8.5	50	76	39	120	122	134	241	30	37	12	8.5
29	8.8	108	124	36	110	122	136	417	26	27	11	7.8
30	9.0	97	84	34	---	118	129	342	23	24	11	7.6
31	8.3	---	68	33	---	114	---	266	---	22	11	---
TOTAL	220.4	737.9	7670	1180	8115	2917	5883	6557	2085	1070	491	297.3
MEAN	7.11	24.6	247	38.1	280	94.1	196	212	69.5	34.5	15.8	9.91
MAX	9.0	108	2520	64	2340	245	334	417	218	134	20	14
MIN	3.8	8.3	53	25	30	42	119	113	23	19	11	6.0
CFSM	.12	.41	4.14	.64	4.69	1.58	3.28	3.55	1.16	.58	.26	.17
IN.	0.14	0.46	4.78	0.74	5.06	1.82	3.67	4.09	1.30	0.67	0.31	0.19
CAL YR 1983	TOTAL	39862.0	MEAN	109	MAX	2520	MIN	3.8	CFSM	1.83	IN.	24.84
WTR YR 1984	TOTAL	37223.6	MEAN	102	MAX	2520	MIN	3.8	CFSM	1.71	IN.	23.19



## SUSQUEHANNA RIVER BASIN

27

01502500 UNADILLA RIVER AT ROCKDALE, NY

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

DRAINAGE AREA.--520 mi<sup>2</sup>.

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

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

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

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

AVERAGE DISCHARGE.--50 years (water years 1931-33, 1938-84), 844 ft<sup>3</sup>/s, 22.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft<sup>3</sup>/s Dec. 31, 1942, gage height, 12.98 ft; minimum daily, 27 ft<sup>3</sup>/s Sept. 20-27, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1700	*13,400	*11.60	Feb. 16	0630	13,000	11.48

Minimum discharge, 57 ft<sup>3</sup>/s Oct. 3, gage height, 3.54 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	60	87	900	640	350	960	1050	1220	2370	221	143	81
2	59	86	716	560	330	860	1330	1120	1810	221	131	89
3	59	87	625	540	380	820	1530	924	1440	210	125	100
4	60	88	574	522	607	760	1570	1860	1280	194	124	114
5	65	91	553	512	663	720	2120	2630	1070	236	121	107
6	72	95	628	504	568	740	3300	1920	896	870	119	101
7	79	95	1660	496	480	700	3390	1500	832	1160	117	91
8	85	94	1520	460	440	560	2630	1310	727	724	111	83
9	79	93	1010	430	420	520	1940	1700	620	468	106	78
10	72	92	896	410	420	470	1610	1610	543	356	104	74
11	68	107	797	400	460	450	1400	1300	480	317	103	75
12	68	184	1040	380	760	440	1250	2210	424	306	119	95
13	72	230	6690	370	1400	430	1120	2940	379	260	133	107
14	163	182	12600	360	3800	420	1170	3230	372	225	112	124
15	207	153	10700	350	8600	430	1560	2710	450	201	100	126
16	165	165	5660	350	12200	484	2480	2150	375	199	97	139
17	118	199	3410	340	7290	649	3450	1830	313	192	104	121
18	99	235	2310	340	4390	673	2920	1520	309	187	101	105
19	90	219	1700	330	3380	613	2260	1360	385	191	95	95
20	82	197	1100	330	2990	725	2490	1240	360	177	95	88
21	78	288	900	320	2630	1360	2130	1220	296	168	93	84
22	74	563	1000	320	2130	2320	1650	1070	251	157	90	79
23	75	438	1200	320	1820	1920	1440	1020	224	148	107	75
24	85	347	1100	440	1640	1480	1590	1360	224	139	124	74
25	91	575	820	680	1490	1290	1700	1060	292	127	111	71
26	102	839	760	802	1410	1210	1530	860	277	118	100	73
27	99	678	760	651	1190	1070	1250	921	244	275	91	73
28	94	647	720	540	1140	1010	1080	1700	230	383	86	71
29	95	989	880	450	1230	1020	1070	4100	216	278	83	71
30	94	1210	1000	400	---	983	994	4550	245	198	80	68
31	91	---	780	370	---	945	---	3240	---	162	81	---
TOTAL	2800	9353	65009	13917	64608	27032	55004	57385	17934	9068	3306	2732
MEAN	90.3	312	2097	449	2228	872	1833	1851	598	293	107	91.1
MAX	207	1210	12600	802	12200	2320	3450	4550	2370	1160	143	139
MIN	59	86	553	320	330	420	994	860	216	118	80	68
CFSM	.17	.60	4.03	.86	4.28	1.68	3.52	3.56	1.15	.56	.21	.18
IN.	0.20	0.67	4.65	1.00	4.62	1.93	3.93	4.11	1.28	0.65	0.24	0.20

CAL YR 1983	TOTAL	348201	MEAN	954	MAX	12600	MIN	53	CFSM	1.83	IN.	24.91
WTR YR 1984	TOTAL	328148	MEAN	897	MAX	12600	MIN	59	CFSM	1.72	IN.	23.48

## SUSQUEHANNA RIVER BASIN

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

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

DRAINAGE AREA.--2,232 mi<sup>2</sup>.

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

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

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

REMARKS.--Records good except those for winter periods, which are fair. Minor regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--71 years (water years 1914-84), 3,608 ft<sup>3</sup>/s, 21.95 in/yr.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft<sup>3</sup>/s and maximum (\*);

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0700	*44,700	*17.17	Apr. 6	0430	28,500	13.46
Feb. 15	1900	36,700	15.48	May 30	0900	21,900	11.60

Minimum discharge, 221 ft<sup>3</sup>/s Oct. 12, gage height, 1.79 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	332	299	4540	3200	1800	5400	4010	4160	14500	1370	995	389
2	299	290	3820	2800	1700	4500	4580	4290	10600	2140	940	377
3	277	311	3220	2600	1600	4100	5790	3890	7610	1450	935	429
4	250	360	2830	2400	1700	3800	7310	5150	6230	1180	859	547
5	268	340	3040	2300	2300	3600	13700	8210	5410	1090	840	628
6	268	341	3100	2300	2400	3400	23600	7960	4700	1290	682	655
7	266	357	5140	2200	1900	3200	17200	6460	4170	3460	622	653
8	256	350	6890	2000	1600	3000	14200	5580	3780	4360	688	551
9	246	347	5590	1800	1500	2800	10400	5650	3180	3110	633	586
10	247	350	4500	1700	1600	2500	7950	6170	2790	2230	525	436
11	237	457	4050	1600	2300	2300	6790	5530	2500	1690	476	367
12	225	588	4650	1500	3700	2100	5930	5250	1970	1790	486	380
13	229	570	23000	1500	6000	1800	5450	7400	1930	2420	549	353
14	319	601	42200	1400	12000	1700	5440	9760	1710	1680	659	387
15	455	613	33600	1400	30000	1800	6760	11500	1660	1300	782	501
16	530	576	25900	1300	33200	2000	9470	9610	1720	1060	555	570
17	516	652	15800	1300	28900	2500	15200	7940	1580	1040	560	583
18	471	692	11300	1200	20300	2870	15200	6760	1460	1140	576	559
19	419	738	8890	1200	15400	2930	12900	5960	1550	1440	717	520
20	380	782	6600	1200	13200	3100	11400	5540	1780	1760	747	478
21	446	993	5200	1100	11600	4460	10000	5710	1440	1470	562	458
22	401	1280	4200	1100	9570	6580	8020	5290	1110	1150	535	422
23	328	1470	4100	1100	7700	7310	6760	4810	1050	909	556	380
24	328	1480	4000	1100	6780	6130	6420	5110	1000	840	605	361
25	326	2490	2900	1400	6250	5300	6850	5270	1190	819	614	351
26	316	3050	2200	2100	6210	4850	6600	4480	1230	814	595	353
27	318	3540	2100	3600	5950	4510	5920	4050	1160	1130	526	339
28	328	3180	2600	3000	5330	4180	5090	6550	1070	2560	475	336
29	327	3780	3400	2600	5510	4250	4690	16800	974	2460	446	330
30	318	4620	4200	2300	---	4250	4420	21800	946	1770	427	317
31	306	---	3700	2000	---	4060	---	19400	---	1230	407	---
TOTAL	10232	35497	257260	58300	248000	115280	268050	232040	92000	52152	19574	13596
MEAN	330	1183	8299	1881	8552	3719	8935	7485	3067	1682	631	453
MAX	530	4620	42200	3600	33200	7310	23600	21800	14500	4360	995	655
MIN	225	290	2100	1100	1500	1700	4010	3890	946	814	407	317
CFSM	.15	.53	3.72	.84	3.83	1.67	4.00	3.35	1.37	.75	.28	.20
IN.	0.17	0.59	4.29	0.97	4.13	1.92	4.47	3.87	1.53	0.87	0.33	0.23
CAL YR 1983	TOTAL	1444432	MEAN	3957	MAX	42200	MIN	202	CFSM	1.77	IN.	24.07
WTR YR 1984	TOTAL	1401981	MEAN	3831	MAX	42200	MIN	225	CFSM	1.72	IN.	23.37

## SUSQUHANNA RIVER BASIN

29

01505000 CHENANGO RIVER AT SHERBURNE, NY

LOCATION.--Lat 42°40'43", long 75°30'39", Chenango County, Hydrologic Unit 02050102, on right bank 20 ft downstream from bridge on State Highway 80, 0.5 mi west of Sherburne, and 0.5 mi downstream from Handsome Brook.

DRAINAGE AREA.--263 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft National Geodetic Vertical Datum of 1929. July 22 to Dec. 9, 1953, nonrecording gage or reference point and Dec. 10, 1953 to Jan. 26, 1955, water-stage recorder at temporary site 1.5 mi downstream, at datum approximately 11.9 ft lower, during period of construction of highway bridge.

REMARKS.--Records fair. Flow from 82 mi<sup>2</sup> of drainage area formerly may have been diverted into Mohawk River basin through abandoned Chenango Canal; no diversion from this cause known during period of record.

AVERAGE DISCHARGE.--46 years, 406 ft<sup>3</sup>/s, 20.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft<sup>3</sup>/s Mar. 6, 1979, gage height, 9.94 ft; maximum gage height, 9.99 ft Dec. 30, 1942 (ice jam); minimum discharge, 12 ft<sup>3</sup>/s Sept. 25, 1964; minimum gage height, 1.52 ft Sept. 19, 1963.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0800	6,470	a9.51	Feb. 15	1900	*6,640	*a9.59

a Affected by backwater from debris.

Minimum daily discharge, 41 ft<sup>3</sup>/s Oct. 3, 4; minimum gage height, 1.89 ft 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	44	52	324	340	160	440	533	651	1120	182	114	74
2	42	51	261	330	160	400	638	515	912	185	109	66
3	41	51	227	312	190	370	751	458	770	169	109	86
4	41	54	187	297	251	340	801	677	686	151	113	95
5	44	54	189	276	251	320	1590	749	551	289	106	79
6	47	53	229	260	230	350	2350	615	494	491	101	71
7	45	53	861	249	210	300	1960	530	490	975	98	68
8	44	58	503	240	200	270	1400	535	401	542	95	71
9	43	64	414	230	200	250	1090	612	351	404	85	71
10	42	63	357	230	190	240	899	544	310	323	86	69
11	42	85	297	220	213	230	781	475	262	268	83	71
12	45	108	498	210	298	220	687	1130	241	242	104	99
13	50	101	3090	200	656	210	620	916	226	223	124	94
14	64	97	5370	200	2050	210	611	1340	240	195	107	114
15	64	102	3460	190	5020	200	720	1060	215	170	89	124
16	55	125	2280	180	4010	231	1000	919	190	140	98	111
17	52	156	1610	170	2560	341	1220	801	174	131	100	102
18	50	148	1180	170	1920	290	1130	691	176	132	93	96
19	50	135	897	160	1490	280	1020	638	198	139	87	92
20	49	131	620	160	1350	385	1360	574	185	141	89	88
21	49	243	540	160	1120	966	1170	561	165	140	66	75
22	50	225	560	150	943	1340	961	470	151	133	61	66
23	50	175	620	150	836	1020	853	514	141	128	80	65
24	54	160	520	220	752	837	854	676	139	123	85	64
25	54	286	440	340	695	738	873	497	159	117	78	62
26	52	259	420	325	660	667	777	445	160	113	70	62
27	56	234	400	274	560	559	661	449	147	148	66	68
28	59	238	390	230	540	529	586	776	149	179	64	63
29	58	506	380	210	520	513	557	1840	150	145	62	59
30	55	437	370	190	---	472	517	1810	157	129	61	54
31	53	---	350	170	---	473	---	1380	---	119	68	---
TOTAL	1544	4504	27844	7043	28235	13991	28970	23848	9710	6966	2751	2379
MEAN	49.8	150	898	227	974	451	966	769	324	225	88.7	79.3
MAX	64	506	5370	340	5020	1340	2350	1840	1120	975	124	124
MIN	41	51	187	150	160	200	517	445	139	113	61	54
CFSM	.19	.57	3.41	.86	3.70	1.71	3.67	2.92	1.23	.86	.34	.30
IN.	0.22	0.64	3.94	1.00	3.99	1.98	4.10	3.37	1.37	0.99	0.39	0.34

CAL YR 1983	TOTAL	143153	MEAN	392	MAX	5370	MIN	41	CFSM	1.49	IN.	20.25
WTR YR 1984	TOTAL	157785	MEAN	431	MAX	5370	MIN	41	CFSM	1.64	IN.	22.32

## SUSQUEHANNA RIVER BASIN

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, N.Y.

LOCATION.--Lat 42°38'18", long 76°10'36", Cortland County, Hydrologic Unit 02050102, on left bank at downstream side of bridge on Wall Street at Homer and 3.4 mi upstream from confluence with East Branch.

DRAINAGE AREA.--71.5 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1966 to September 1968, October 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,114.81 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at bridge on Water Street 500 ft upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Slight diversion, maximum daily 0.3 ft<sup>3</sup>/s from Gate House Pond 13 mi upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Solvay Process Co.

AVERAGE DISCHARGE.--13 years (water years 1968, 1973-84), 131 ft<sup>3</sup>/s, 24.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,710 ft<sup>3</sup>/s Oct. 28, 1981, gage height, 8.74 ft; minimum discharge, 9.6 ft<sup>3</sup>/s Nov. 22, 1966; minimum gage height, 1.08 ft Oct. 1, 2, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0700	1,060	5.91	Apr. 6	0930	1,110	5.87
Feb. 15	0400	*1,840	*7.35				

Minimum discharge, 15 ft<sup>3</sup>/s many days in October and November; minimum gage height, 1.11 ft Oct. 3-4.

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	15	16	101	96	48	170	161	168	254	57	30	49
2	15	15	90	92	46	160	175	151	223	56	29	46
3	15	21	84	90	50	150	201	142	202	54	39	60
4	17	25	80	88	62	140	246	181	188	50	38	55
5	21	23	80	86	63	130	588	218	168	66	34	51
6	26	19	119	83	62	130	954	189	157	75	34	48
7	22	17	262	80	56	120	677	172	147	81	35	44
8	19	19	158	78	54	120	506	161	124	62	31	41
9	17	18	133	76	54	110	411	162	119	55	29	39
10	16	18	122	74	52	110	353	154	114	52	28	37
11	15	36	111	72	58	100	311	147	108	54	51	47
12	16	47	137	70	71	100	278	363	101	52	109	63
13	18	36	499	68	142	98	256	290	96	49	80	51
14	26	32	846	64	519	98	237	405	104	46	65	143
15	22	36	526	62	1410	95	247	334	96	44	62	91
16	20	70	416	60	839	101	270	289	90	43	96	78
17	24	67	342	60	594	113	273	251	87	42	89	70
18	46	52	290	58	489	105	251	224	97	43	72	63
19	47	50	255	58	425	102	225	212	103	43	65	59
20	43	56	200	56	425	119	224	198	90	39	61	56
21	43	234	170	54	369	217	212	188	84	37	54	52
22	50	119	170	54	324	229	194	171	80	37	52	49
23	53	86	177	54	298	214	183	193	75	36	67	47
24	55	78	162	56	272	189	182	210	78	34	58	45
25	54	115	140	59	245	179	212	178	82	32	51	44
26	39	92	130	58	220	171	198	168	77	30	48	60
27	32	89	120	57	200	158	177	161	73	43	44	51
28	28	104	120	56	190	155	166	222	75	39	43	49
29	24	159	115	54	190	155	160	372	71	35	45	44
30	19	121	110	52	---	154	154	347	64	33	53	43
31	17	---	100	50	---	157	---	292	---	31	56	---
TOTAL	874	1870	6365	2075	7827	4349	8682	6913	3427	1450	1648	1675
MEAN	28.2	62.3	205	66.9	270	140	289	223	114	46.8	53.2	55.8
MAX	55	234	846	96	1410	229	954	405	254	81	109	143
MIN	15	15	80	50	46	95	154	142	64	30	28	37
CFSM	.39	.87	2.87	.94	3.78	1.96	4.04	3.12	1.59	.65	.74	.78
IN.	0.45	0.97	3.31	1.08	4.07	2.26	4.52	3.60	1.78	0.75	0.86	0.87

CAL YR 1983	TOTAL	41423	MEAN	113	MAX	846	MIN	15	CFSM	1.58	IN.	21.55
WTR YR 1984	TOTAL	47155	MEAN	129	MAX	1410	MIN	15	CFSM	1.80	IN.	24.53



## 01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

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

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

## WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. Slight diversion, maximum daily, 0.3 ft<sup>3</sup>/s from Gate House Pond on West Branch 17 mi upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Solvay Process Co.

AVERAGE DISCHARGE.--46 years (water years 1939-84), 498 ft<sup>3</sup>/s, 23.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft<sup>3</sup>/s Mar. 5, 1964, gage height, 12.49 ft; maximum gage height, 13.82 ft (present datum) Apr. 5, 1950; minimum discharge, 9.8 ft<sup>3</sup>/s Sept. 20, 1939, Sept. 29, 1959; minimum daily, 17 ft<sup>3</sup>/s Sept. 26, 27, 1959.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1130	7,810	10.49	Apr. 6	1000	5,830	9.40
Feb. 15	1800	*8,530	*11.05				

Minimum discharge, 48 ft<sup>3</sup>/s Oct. 3,4, Nov. 1, gage height, 2.62 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1983<sup>4</sup>  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	49	473	330	220	538	585	640	1270	214	117	149
2	50	50	404	310	220	500	671	559	974	199	113	136
3	50	52	364	308	230	470	847	515	810	178	143	216
4	50	55	338	298	272	440	1130	728	727	163	159	224
5	54	58	331	291	309	430	2530	902	618	277	137	177
6	56	56	453	287	292	410	5240	755	548	539	129	157
7	56	54	1360	277	268	390	3840	653	514	606	129	141
8	53	54	921	260	250	360	2330	613	439	449	121	131
9	50	53	668	250	250	340	1610	671	396	331	117	129
10	50	53	564	250	250	330	1280	623	363	278	113	120
11	50	75	497	240	260	320	1070	572	333	262	134	135
12	51	157	542	230	327	310	944	1630	309	249	428	240
13	52	140	2640	220	654	300	848	1490	287	216	518	182
14	58	120	7090	220	2570	290	784	2000	302	194	331	436
15	65	117	4280	210	7660	290	829	1670	287	179	325	346
16	57	197	2320	210	5850	320	972	1300	259	165	428	292
17	53	269	1480	200	3140	439	1260	1040	244	158	603	244
18	62	213	1110	200	2170	410	1110	872	277	158	372	218
19	61	191	880	190	1810	380	930	800	309	163	294	196
20	58	190	680	190	1840	411	1070	738	253	148	262	182
21	57	560	580	180	1580	983	982	691	224	139	227	167
22	58	473	580	180	1260	1360	818	607	205	133	203	154
23	61	339	640	170	1090	1010	741	675	191	128	245	146
24	62	297	560	170	961	792	744	942	192	123	233	140
25	63	436	470	220	852	720	907	700	218	117	203	139
26	59	431	460	250	742	673	830	600	225	114	177	165
27	56	387	440	240	640	587	698	609	200	152	159	172
28	56	408	420	240	620	574	628	946	199	182	147	149
29	55	648	420	230	600	566	605	2260	192	146	149	139
30	54	609	400	230	---	514	576	2390	187	132	157	137
31	51	---	360	220	---	571	---	1730	---	124	166	---
TOTAL	1719	6791	32725	7301	37187	16028	37409	30921	11552	6616	7039	5559
MEAN	55.5	226	1056	236	1282	517	1247	997	385	213	227	185
MAX	65	648	7090	330	7660	1360	5240	2390	1270	606	603	436
MIN	50	49	331	170	220	290	576	515	187	114	113	120
CFSM	.19	.77	3.62	.81	4.39	1.77	4.27	3.41	1.32	.73	.78	.63
IN.	0.22	0.87	4.17	0.93	4.74	2.04	4.77	3.94	1.47	0.84	0.90	0.71
CAL YR 1983	TOTAL	166094	MEAN	455	MAX	7090	MIN	48	CFSM	1.56	IN.	21.16
WTR YR 1984	TOTAL	200847	MEAN	549	MAX	7660	MIN	49	CFSM	1.88	IN.	25.59

## SUSQUEHANNA RIVER BASIN

01509000 TIOUGHNIAGA RIVER AT CORTLAND, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.

CHEMICAL DATA: 1957 (e), 1970, 1972 (a).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1957, once-daily measurements, unpublished.

pH: October 1956 to September 1957, once-daily measurements, unpublished.

WATER TEMPERATURES: October 1956 to current year.

REMARKS.--Daily water-temperature measurements made at 0900 hours. Measurements are reported to half degrees Celsius.

COOPERATION.--Water-temperature records furnished by the city of Cortland.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 23.5°C July 22, 1957; minimum daily (except water year 1960), freezing point on many days during winter periods in water years 1957, 1959, 1962, 1967-83.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 19.0°C Aug 13; minimum daily, freezing point on Jan. 12,16,21 and 23.

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

(ONCE DAILY AT 0900)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	8.5	4.0	1.0	2.0	.5	5.0	9.5	9.5	14.0	13.5	16.0
2	13.0	10.5	5.0	1.5	.5	.5	4.0	8.0	9.0	14.5	13.5	16.0
3	14.0	12.0	7.5	4.5	1.0	3.5	4.0	7.5	11.0	15.0	14.0	16.5
4	14.5	9.0	6.0	5.0	1.5	2.0	4.0	7.0	10.0	16.0	15.0	16.0
5	14.5	8.0	3.5	6.5	4.0	1.0	5.0	8.0	10.0	15.5	15.5	15.5
6	12.5	9.0	6.0	5.0	3.5	1.5	5.0	8.0	10.0	15.5	14.5	15.0
7	12.5	10.0	5.0	5.0	3.0	2.0	4.5	9.0	15.0	15.0	15.0	14.0
8	12.0	10.0	2.0	4.0	3.0	.5	4.0	10.0	15.0	15.0	15.5	12.0
9	13.0	9.5	3.5	5.0	3.5	1.0	5.0	10.0	15.5	13.5	15.5	13.0
10	11.0	8.5	4.0	4.5	2.5	3.5	5.0	8.5	15.5	13.0	16.0	12.5
11	11.0	9.0	4.0	4.0	2.5	3.0	5.0	9.5	11.5	13.0	17.0	13.0
12	11.5	6.5	4.0	.0	5.0	1.5	6.0	10.0	14.0	14.5	15.5	13.5
13	12.5	5.5	4.0	3.0	5.0	1.5	7.0	10.0	14.0	14.0	19.0	14.0
14	12.0	7.0	8.0	6.0	5.0	2.5	8.0	8.0	14.0	13.5	17.0	15.0
15	11.5	8.0	5.0	4.0	2.0	2.5	8.0	8.5	14.0	14.0	18.0	8.5
16	10.0	8.0	4.5	.0	2.0	4.0	7.0	8.5	13.5	15.0	17.5	11.0
17	11.0	8.0	4.0	.5	2.5	4.0	6.5	8.0	13.5	15.0	17.0	11.0
18	11.0	5.0	4.0	1.0	5.0	3.5	7.0	8.0	---	14.0	16.0	11.0
19	11.0	7.0	---	1.0	4.5	3.5	7.5	9.0	15.0	14.5	17.0	11.5
20	11.0	7.5	2.5	2.0	3.5	4.0	7.0	11.0	14.0	13.5	16.5	12.0
21	10.5	8.0	1.0	.0	3.0	4.5	8.0	10.0	14.0	13.0	16.0	13.0
22	8.0	8.0	1.0	1.0	2.0	2.5	8.0	10.5	14.0	14.0	16.0	12.0
23	9.0	8.5	2.0	.0	2.5	3.5	7.0	13.5	14.0	14.5	15.0	13.0
24	9.5	8.0	1.0	1.5	2.5	3.5	7.5	12.0	14.0	15.5	15.0	14.5
25	9.5	6.0	.5	3.0	5.0	4.0	7.0	12.5	13.5	15.0	14.5	14.0
26	9.0	5.0	1.0	3.0	3.5	3.5	7.5	11.0	9.0	13.0	15.0	13.5
27	9.0	5.0	.5	2.0	2.0	3.0	9.5	13.0	13.0	15.5	14.0	13.0
28	9.0	6.0	1.5	2.5	2.0	3.0	10.5	12.0	---	13.0	15.0	10.0
29	8.0	6.0	4.0	2.0	2.0	3.0	11.0	11.0	14.0	14.0	14.5	10.0
30	8.0	6.0	3.0	2.5	---	2.5	10.0	11.5	15.0	13.5	15.0	11.0
31	8.0	---	.5	2.0	---	2.5	---	10.0	---	13.0	15.5	---
MEAN	11.0	8.0	3.5	2.5	3.0	2.5	6.5	10.0	13.0	14.5	15.5	13.0
MAX	14.5	12.0	8.0	6.5	5.0	4.5	11.0	13.5	15.5	16.0	19.0	16.5
MIN	8.0	5.0	0.5	0.0	0.5	0.5	4.0	7.0	9.0	13.0	13.5	8.5
CAL YR 1983	MEAN	9.0	MAX	19.0	MIN	.0						
WTR YR 1984	MEAN	8.5	MAX	19.0	MIN	.0						

## SUSQUEHANNA RIVER BASIN

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01510000 OTSELIC RIVER AT CINCINNATUS, NY

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

DRAINAGE AREA.--147 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--41 years (water years 1939-64, 1970-84), 269 ft<sup>3</sup>/s, 24.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft<sup>3</sup>/s Dec. 30, 1942; maximum gage height, 10.68 ft Apr. 4, 1950; minimum discharge, 3.8 ft<sup>3</sup>/s Sept. 25, 1939; minimum gage height, 0.24 ft Sept. 2, 1979 (result of channel clearance).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0700	*6,400	*9.45	Apr. 6	0030	3,170	6.33
Feb. 15	1600	5,720	8.82				

Minimum daily discharge, 10 ft<sup>3</sup>/s Oct. 3; minimum gage height, 0.46 ft 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	11	16	258	94	64	230	298	357	726	84	30	44
2	11	16	219	89	62	220	367	276	556	86	27	39
3	10	18	200	85	70	200	477	247	447	68	42	85
4	11	20	187	81	96	190	573	435	389	50	40	80
5	13	20	188	76	99	180	1680	468	313	523	38	59
6	14	21	306	72	91	170	2480	358	279	720	35	50
7	14	21	828	68	86	150	1700	306	253	1080	36	42
8	14	20	444	64	82	140	1200	325	217	443	31	37
9	12	20	347	62	80	140	900	388	190	301	26	33
10	12	19	305	60	78	130	720	338	166	237	22	31
11	12	45	269	58	84	130	640	299	143	229	59	36
12	11	76	428	56	135	120	560	1330	123	210	290	102
13	17	58	3070	54	366	120	500	885	108	154	382	69
14	35	45	5340	52	1920	120	440	1210	107	125	188	131
15	34	46	1800	50	5040	120	450	862	99	107	137	117
16	23	119	873	49	2700	144	600	700	78	95	194	94
17	19	141	528	48	1240	187	740	555	67	82	263	81
18	16	109	367	47	935	165	703	460	86	82	167	71
19	15	94	280	46	772	155	590	418	118	88	125	64
20	15	99	180	45	819	252	721	374	96	70	112	59
21	14	310	170	44	636	638	580	360	75	59	92	54
22	13	227	200	43	511	696	454	300	61	51	79	47
23	14	164	220	43	450	491	401	362	53	42	145	46
24	21	155	180	68	411	402	405	430	54	37	113	45
25	20	312	140	92	381	371	461	295	71	32	90	44
26	16	247	130	92	345	355	397	264	64	28	77	45
27	19	219	120	84	297	303	326	277	52	81	67	49
28	17	236	110	78	280	302	289	716	58	97	58	44
29	17	425	130	74	270	286	296	1970	51	63	54	41
30	17	343	120	70	---	289	273	1590	66	47	52	40
31	16	---	100	68	---	277	---	982	---	36	51	---
TOTAL	503	3661	18037	2012	18400	7673	20221	18137	5166	5407	3122	1779
MEAN	16.2	122	582	64.9	634	248	674	585	172	174	101	59.3
MAX	35	425	5340	94	5040	696	2480	1970	726	1080	382	131
MIN	10	16	100	43	62	120	273	247	51	28	22	31
CFSM	.11	.83	3.96	.44	4.31	1.69	4.59	3.98	1.17	1.18	.69	.40
IN.	0.13	0.93	4.56	0.51	4.66	1.94	5.12	4.59	1.31	1.37	0.79	0.45

CAL YR 1983	TOTAL	83584.2	MEAN	229	MAX	5340	MIN	9.2	CFSM	1.56	IN.	21.15
WTR YR 1984	TOTAL	104118	MEAN	284	MAX	5340	MIN	10	CFSM	1.93	IN.	26.35

## SUSQUEHANNA RIVER BASIN

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY

LOCATION.--Lat 42°20'34", long 75°57'57", Broome County, Hydrologic Unit 02050102, on left bank at control-gate structure for Whitney Point Dam on Otselic River, 0.3 mi upstream from spillway, 0.9 mi upstream from mouth, and 1.0 mi north of Whitney Point.

DRAINAGE AREA.--257 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to October 1970, published as "Whitney Point Reservoir at Whitney Point."

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

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,005.0 ft Mar. 23, 1948, contents, 71,440 acre-ft; minimum, 950.4 ft Sept. 2-4, 1953, contents, 36 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 993.36 ft Dec. 16, contents, 45,350 acre-ft; minimum, 965.29 ft Apr. 15, contents, 4,537 acre-ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)  
(Based on field survey by Corps of Engineers in 1937)

960.0	1,250	980.0	22,240
965.0	4,260	985.0	30,200
970.0	9,270	990.0	38,980
975.0	15,290	1,000.0	59,220

ELEVATION (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	972.93	973.02	973.14	965.94	966.16	966.14	966.14	969.27	978.70	973.35	973.10	973.16
2	972.91	973.02	971.79	965.93	966.12	966.09	966.21	969.86	976.12	973.35	973.16	973.16
3	972.89	973.03	970.30	965.94	966.11	966.01	966.55	970.30	973.63	973.29	973.21	973.20
4	972.87	973.03	968.83	966.02	966.24	965.86	966.86	971.01	972.92	973.19	973.23	973.18
5	972.85	973.05	967.46	966.09	966.34	966.00	968.19	972.27	972.93	973.25	973.14	973.09
6	972.85	973.06	966.35	966.13	966.38	966.06	975.88	973.14	973.13	974.18	973.03	972.98
7	972.85	973.07	967.42	966.14	966.14	966.10	981.53	973.55	973.31	973.52	973.03	972.98
8	972.84	973.07	967.34	966.12	966.08	966.06	981.37	973.52	973.22	973.06	973.03	973.00
9	972.84	973.09	966.31	966.04	966.11	966.12	979.23	973.41	973.04	973.21	973.02	973.02
10	972.83	973.10	965.85	966.04	966.19	966.16	976.69	973.15	972.97	973.31	973.00	973.04
11	972.82	973.11	965.81	966.03	966.24	966.18	973.93	973.09	972.96	973.27	973.04	973.08
12	972.81	973.12	965.91	966.00	966.39	966.18	971.08	974.21	972.98	973.23	973.28	973.14
13	972.81	973.15	969.23	966.04	966.68	966.18	968.22	974.35	973.03	973.09	973.32	973.09
14	972.82	973.20	981.54	966.15	968.77	966.18	965.83	973.52	973.09	972.94	973.08	973.08
15	972.84	973.25	990.44	966.27	977.85	966.16	965.47	972.83	973.12	972.74	972.88	973.17
16	972.87	973.30	992.99	966.33	987.99	966.22	966.12	972.70	973.12	972.68	973.08	973.06
17	972.89	973.34	991.32	966.21	992.05	966.37	967.22	972.85	973.11	972.81	973.37	972.92
18	972.90	973.36	988.42	966.10	991.76	966.52	966.77	973.05	973.13	972.98	973.18	972.88
19	972.92	973.36	985.24	966.04	989.69	966.43	966.06	973.10	973.30	973.12	972.93	972.90
20	972.93	973.34	981.48	966.03	987.59	966.33	966.02	973.08	973.08	973.19	972.74	972.96
21	972.93	973.15	977.41	966.03	985.04	966.96	966.21	972.98	973.00	973.24	972.88	973.02
22	972.94	972.96	973.39	966.04	982.44	967.79	965.71	972.93	972.99	973.23	973.02	973.06
23	972.94	972.89	969.93	966.04	979.67	966.98	965.76	973.13	972.94	973.21	973.22	973.10
24	972.94	972.87	967.84	966.05	976.76	966.29	966.25	973.34	972.91	973.17	973.23	973.14
25	972.96	972.98	966.60	966.07	973.75	966.13	966.89	973.23	972.94	973.10	973.10	973.17
26	972.97	973.92	966.14	966.15	970.74	966.16	967.44	973.15	973.02	973.03	972.96	973.20
27	972.98	974.42	965.94	966.20	967.86	966.05	967.75	973.08	973.09	973.08	972.98	973.07
28	972.98	974.64	965.92	966.22	966.33	966.03	968.01	973.13	973.18	973.06	973.04	973.03
29	972.99	974.00	966.14	966.22	966.20	966.15	968.36	975.49	973.22	972.90	973.07	973.04
30	973.00	973.73	966.28	966.20	---	966.16	968.70	980.73	973.31	972.94	973.10	973.06
31	973.01	---	966.15	966.19	---	966.20	---	980.80	---	973.02	973.14	---
MEAN	972.90	973.29	972.55	966.10	973.30	966.27	969.21	973.36	973.38	973.15	973.08	973.07
MAX	973.01	974.64	992.99	966.33	992.05	967.79	981.53	980.80	978.70	974.18	973.37	973.20
MIN	972.81	972.87	965.81	965.93	966.08	965.86	965.47	969.27	972.91	972.68	972.74	972.88
†	12,700	13,370	5,254	5,402	5,412	5,402	8,138	22,020	13,100	12,770	12,880	12,760
††	+1.5	+11.3	-132	+2.4	+0.2	-0.2	+46.0	+226	-150	-5.4	+1.8	-2.0
CAL YR 1983	MEAN 971.39	MAX 992.99	MIN 965.74	†† -0.2								
WTR YR 1984	MEAN 971.62	MAX 992.99	MIN 965.47	†† +0.2								

† Contents, in acre-feet, at end of month.

†† Change in contents, equivalent in cubic feet per second.



## SUSQUEHANNA RIVER BASIN

35

01512500 CHENANGO RIVER NEAR CHENANGO WORKS, NY

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

DRAINAGE AREA.--1,483 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 871.628 ft National Geodetic Vertical Datum of 1929. Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, waterstage recorder at site 300 ft upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 01511000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--71 years (water years 1914-84), 2,422 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft<sup>3</sup>/s July 8, 1935, gage height, 20.3 ft, from floodmarks, from rating curve extended above 32,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum, 84 ft<sup>3</sup>/s Sept. 19, 25, 1939, gage height, 2.24 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1000	*32,800	*12.44	Apr. 6	0800	21,000	10.14
Feb. 15	2400	29,300	11.80				

Minimum discharge, 181 ft<sup>3</sup>/s Oct. 3, gage height, 2.51 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	203	217	3050	1700	1100	2900	2910	2730	8410	898	494	468
2	198	211	2870	1600	1000	2600	3430	2590	6970	980	482	445
3	192	216	2590	1470	1000	2470	4560	2240	5370	896	606	503
4	191	225	2420	1390	1200	2200	6230	3300	3730	806	829	686
5	199	234	2350	1390	1700	2000	11800	4130	2940	1170	709	652
6	210	246	2350	1390	1600	2000	19300	3430	2460	3370	629	575
7	216	246	5550	1370	1500	1940	15100	3070	2330	6450	524	455
8	210	246	5410	1300	1400	1600	11900	3270	2150	3950	503	427
9	205	246	3740	1200	1300	1500	8880	4050	1870	2080	466	404
10	198	252	2920	1100	1200	1400	7450	3730	1610	1730	440	391
11	191	312	2440	1000	1200	1300	6500	3100	1380	1590	410	370
12	194	491	2400	900	1400	1300	5780	6780	1200	1650	1320	532
13	201	574	14200	840	2300	1200	5180	9250	1090	1340	2030	659
14	253	500	29900	800	8400	1200	4430	11000	1060	1120	1590	743
15	289	482	20500	780	22400	1200	5020	9020	1060	1020	1130	991
16	278	803	12400	760	25200	1290	6810	6590	969	794	790	894
17	261	1120	10800	740	15600	1740	8730	5060	893	656	1460	766
18	256	1100	8530	740	12700	1860	7810	4200	931	636	1320	637
19	252	1010	7410	720	10800	1800	6210	3820	1810	662	1070	549
20	244	970	6160	720	9940	2030	5850	3570	1380	655	846	499
21	235	1560	5200	700	9020	4130	5680	3490	987	610	611	476
22	234	1910	4900	700	7810	6810	4690	2940	854	597	558	446
23	239	1410	4500	680	6950	6040	3820	2820	781	564	776	419
24	281	1130	3500	760	6350	4490	3790	4140	781	540	883	403
25	299	1770	2700	940	5790	3750	4160	3280	864	512	792	393
26	285	1940	2000	1100	5420	3460	3840	2700	818	489	688	440
27	270	1720	2100	1300	4620	3090	3280	2760	743	882	527	527
28	243	2090	2200	1200	3650	2870	2850	5610	753	1480	489	449
29	242	3370	1900	1200	3520	2910	2640	13000	729	1010	464	405
30	238	3320	1900	1100	---	2760	2490	11800	811	646	455	384
31	229	---	1800	1100	---	2750	---	10800	---	550	478	---
TOTAL	7236	29921	180690	32690	176070	78590	191120	158270	57734	40333	24369	15988
MEAN	233	997	5829	1055	6071	2535	6371	5105	1924	1301	786	533
MAX	299	3370	29900	1700	25200	6810	19300	13000	8410	6450	2030	991
MIN	191	211	1800	680	1000	1200	2490	2240	729	489	410	370

CAL YR 1983	TOTAL	861012	MEAN	2359	MAX	29900	MIN	145
WTR YR 1984	TOTAL	993011	MEAN	2713	MAX	29900	MIN	191

## SUSQUEHANNA RIVER BASIN

01513110 SUSQUEHANNA RIVER AT JOHNSON CITY, NY

LOCATION.--Lat 42°06'37", long 75°58'30", Broome County, Hydrologic Unit 02050103, at intake of the New York State Electric and Gas Corp., Goudey Station, at Johnson City, 100 ft upstream from Little Choconut Creek, 0.5 mi downstream from C.F.J. Memorial Bridge, 3.5 mi downstream from Chenango River and 4.8 mi upstream from discontinued discharge station (01513500) at Vestal.

DRAINAGE AREA.--3,891 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1956 to current year. Prior to October 1960, published as 01513500, "at Johnson City", and prior to October 1967, published as 01513500, "at Vestal"; however, all water-temperature records were collected at present site.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1955 to current year.

REMARKS.--Daily water-temperature measurements made at 0800 hours. Measurements are reported to whole degrees Celsius. During winter periods water is at times recirculated from inside the plant through the intake to prevent icing conditions, thus resulting in reported water temperatures that are slightly above actual river temperatures.

COOPERATION.--Water-temperature records furnished by the New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1979, July 21, 1980; minimum daily, freezing point on many days during winter periods, except 1967, 1976, 1978-80 and 1982-3.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 26.0°C July 24; Aug. 5, 7-10; minimum daily, 0.0°C on Jan. 6.

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

(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	7.0	4.0	1.0	1.0	1.0	4.0	13.0	12.0	23.0	24.0	24.0
2	18.0	8.0	4.0	1.0	1.0	1.0	4.0	12.0	13.0	21.0	24.0	23.0
3	19.0	10.0	4.0	2.0	2.0	1.0	5.0	11.0	14.0	23.0	25.0	22.0
4	19.0	8.0	4.0	2.0	2.0	1.0	6.0	11.0	13.0	23.0	23.0	21.0
5	19.0	7.0	4.0	2.0	2.0	2.0	6.0	13.0	14.0	23.0	26.0	19.0
6	18.0	7.0	4.0	.0	2.0	2.0	7.0	11.0	16.0	22.0	24.0	19.0
7	16.0	7.0	4.0	1.0	2.0	2.0	6.0	11.0	17.0	21.0	26.0	18.0
8	16.0	7.0	2.0	1.0	2.0	2.0	5.0	12.0	19.0	21.0	26.0	19.0
9	16.0	10.0	2.0	1.0	2.0	2.0	6.0	11.0	19.0	19.0	26.0	19.0
10	14.0	8.0	2.0	2.0	2.0	1.0	6.0	11.0	23.0	19.0	26.0	20.0
11	13.0	9.0	3.0	2.0	2.0	2.0	6.0	11.0	22.0	20.0	25.0	21.0
12	14.0	7.0	3.0	1.0	2.0	2.0	7.0	12.0	21.0	21.0	25.0	22.0
13	15.0	4.0	3.0	2.0	1.0	2.0	9.0	12.0	22.0	22.0	24.0	21.0
14	17.0	4.0	4.0	2.0	1.0	2.0	9.0	11.0	21.0	23.0	24.0	21.0
15	14.0	4.0	5.0	2.0	1.0	1.0	8.0	10.0	20.0	24.0	24.0	20.0
16	12.0	5.0	4.0	2.0	2.0	3.0	8.0	9.0	21.0	24.0	25.0	17.0
17	12.0	6.0	4.0	2.0	4.0	3.0	7.0	9.0	21.0	24.0	24.0	17.0
18	13.0	5.0	3.0	2.0	4.0	3.0	8.0	9.0	19.0	24.0	21.0	18.0
19	12.0	6.0	2.0	2.0	4.0	4.0	9.0	10.0	21.0	23.0	22.0	18.0
20	12.0	7.0	1.0	3.0	4.0	4.0	9.0	11.0	21.0	23.0	21.0	19.0
21	11.0	10.0	1.0	2.0	3.0	5.0	8.0	12.0	21.0	24.0	21.0	20.0
22	9.0	9.0	1.0	2.0	3.0	4.0	8.0	14.0	22.0	23.0	21.0	19.0
23	10.0	8.0	1.0	2.0	3.0	3.0	8.0	16.0	22.0	25.0	23.0	20.0
24	11.0	9.0	1.0	3.0	4.0	3.0	8.0	16.0	22.0	26.0	22.0	21.0
25	11.0	8.0	1.0	3.0	5.0	3.0	8.0	16.0	20.0	24.0	21.0	22.0
26	11.0	6.0	1.0	2.0	3.0	4.0	8.0	17.0	21.0	23.0	22.0	21.0
27	9.0	6.0	1.0	2.0	3.0	4.0	10.0	17.0	21.0	23.0	22.0	17.0
28	9.0	7.0	1.0	1.0	2.0	6.0	12.0	16.0	21.0	20.0	22.0	16.0
29	9.0	6.0	1.0	2.0	2.0	4.0	12.0	13.0	23.0	21.0	23.0	16.0
30	7.0	5.0	1.0	2.0	---	2.0	14.0	13.0	23.0	22.0	24.0	16.0
31	7.0	---	1.0	2.0	---	3.0	---	12.0	---	23.0	24.0	---
MEAN	13.0	7.0	2.5	2.0	2.5	2.5	7.5	12.5	19.5	22.5	23.5	19.5
MAX	19.0	10.0	5.0	3.0	5.0	6.0	14.0	17.0	23.0	26.0	26.0	24.0
MIN	7.0	4.0	1.0	0.0	1.0	1.0	4.0	9.0	12.0	19.0	21.0	16.0
CAL YR 1983	MEAN	12.0	MAX	28.0	MIN	1.0						
WTR YR 1984	MEAN	11.5	MAX	26.0	MIN	0.0						

## 01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

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

DRAINAGE AREA.--4,773 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to November 1939, at datum 1.0 ft higher.

REMARKS.--Records good. Minor regulation by upstream lakes and reservoirs. Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--47 years (water years 1938-84), 7,605 ft<sup>3</sup>/s, 21.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft<sup>3</sup>/s June 23, 1972, gage height, 21.24 ft; minimum daily, 237 ft<sup>3</sup>/s Sept. 22, 23, 1964; minimum gage height, 0.52 ft Sept. 24, 25, 1939.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 52,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1700	*110,000	*19.94	Apr. 6	1400	94,000	18.14
Feb. 16	0100	93,100	18.03				

Minimum discharge, 484 ft<sup>3</sup>/s Oct. 11, 12, gage height, 0.78 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	718	589	9660	6200	2700	11000	9130	8810	32100	2410	2170	1070
2	624	580	8770	5400	2500	9600	10300	8770	24100	3300	2160	1060
3	564	574	7720	4900	2400	8400	13400	8320	18900	3820	2030	1100
4	542	571	6840	4600	3000	7600	19800	9520	14300	2900	1940	1410
5	541	608	6740	4200	4000	7000	40200	14200	11700	2920	2430	1540
6	540	620	7220	4000	5200	6400	85200	15100	9870	4840	1980	1530
7	541	615	10300	3800	5600	5800	61300	13000	8700	14200	1660	1470
8	523	633	14500	3600	4500	5400	39500	11600	7880	13400	1450	1320
9	516	636	13700	3300	4000	5000	29100	12600	7050	9400	1410	1180
10	499	637	10500	3200	3400	4500	21900	12700	6040	6540	1320	1130
11	490	709	8740	3100	3400	4200	18100	12000	5370	5280	1580	1040
12	495	924	7950	2900	5400	4000	15600	12700	4630	5730	3640	905
13	507	1120	30000	2700	8970	3800	14000	19700	3910	5220	4150	983
14	579	1230	101000	2600	23000	3600	13100	26500	4050	4710	3860	1160
15	660	1200	89100	2500	72900	3500	16300	27700	3550	3570	3240	1260
16	694	1220	58400	2400	87500	4000	21800	23200	3320	2960	2730	1590
17	793	1470	39100	2200	65000	5000	31200	18200	3260	2440	3490	1620
18	800	1960	27800	2100	47200	5890	30800	15000	3420	2180	3120	1510
19	806	2010	21300	2000	36100	6190	28200	13100	5050	2270	2830	1340
20	738	1910	17400	1900	30500	6470	25300	12100	4660	2500	2730	1220
21	679	2430	13500	1800	27000	10400	22300	12300	3970	2720	2280	1110
22	666	3730	11900	1700	23000	16300	18600	11400	3020	2400	1710	1040
23	683	3860	11000	1700	19200	17900	15100	10300	2500	2050	2390	975
24	650	3400	10000	1600	16800	15300	13700	11600	2340	1760	2340	912
25	634	4280	8400	1500	15200	12700	15000	11500	2500	1600	2120	871
26	659	6770	5600	2000	14300	11200	14500	10100	2620	1530	1910	832
27	638	6830	5400	2800	13500	10300	13000	9050	2550	2220	1730	832
28	632	6840	5000	3900	12200	9450	11300	13800	2480	4820	1450	905
29	600	8410	5600	3500	11400	9400	9960	42500	2340	5200	1280	879
30	604	9750	6400	3200	---	9220	9280	47200	2530	4020	1190	821
31	600	---	7000	3000	---	9250	---	40500	---	2850	1120	---
TOTAL	19215	76116	586540	94300	569870	248770	686970	515070	208710	131760	69440	34705
MEAN	620	2537	18920	3042	19650	8025	22900	16620	6957	4250	2240	1157
MAX	806	9750	101000	6200	87500	17900	85200	47200	32100	14200	4150	1620
MIN	490	571	5000	1500	2400	3500	9130	8320	2340	1530	1120	821
CFSM	.13	.53	3.96	.64	4.12	1.68	4.80	3.48	1.46	.89	.47	.24
IN.	0.15	0.59	4.57	0.73	4.44	1.94	5.35	4.01	1.63	1.03	0.54	0.27
CAL YR 1983	TOTAL	3000336	MEAN	8220	MAX	101000	MIN	460	CFSM	1.72	IN.	23.38
WTR YR 1984	TOTAL	3241466	MEAN	8856	MAX	101000	MIN	490	CFSM	1.86	IN.	25.26

## SUSQUEHANNA RIVER BASIN

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--Lat 42°01'43", long 77°07'57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi upstream from Canisteo River.

DRAINAGE AREA.--771 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1937, nonrecording gage on bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Since March 1979, floodflows regulated by detention in upstream reservoirs.

AVERAGE DISCHARGE.--54 years, 810 ft<sup>3</sup>/s, 14.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128,000 ft<sup>3</sup>/s June 23, 1972, gage height, 26.27 ft, from flood-mark in gage house, from rating curve extended above 31,000 ft<sup>3</sup>/s on basis of velocity-area and slope-area studies at gage height 19.2 ft and conveyance study and slope-area measurements at gage heights 22.87 ft and 26.27 ft; minimum, 6.1 ft<sup>3</sup>/s Sept. 1, 1939; minimum gage height, 2.68 ft Aug. 28, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 13	1900	10,700	11.83	Apr. 7	1700	*10,900	*12.14

Minimum daily discharge, 66 ft<sup>3</sup>/s Oct. 15-17, 20-22; minimum gage height, 2.93 ft 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	71	68	1080	230	173	640	1540	1090	2280	986	170	188
2	70	70	872	200	160	600	1740	1080	1620	1040	203	173
3	70	69	602	194	164	560	2850	894	1420	655	546	210
4	124	69	633	210	230	560	5340	1820	1110	371	1550	247
5	170	72	645	220	340	540	6050	1780	875	3010	739	212
6	148	70	866	220	450	500	2540	1320	740	4970	551	178
7	126	70	1530	210	340	430	9730	1210	623	5230	383	180
8	70	71	1270	210	213	390	10400	1730	606	2340	410	175
9	68	70	1130	200	184	320	9620	2230	557	1770	294	137
10	68	76	987	200	160	340	8050	1720	438	1190	340	140
11	68	115	785	200	572	350	6450	1290	378	1160	443	147
12	71	273	1040	190	1420	370	3920	3010	245	1260	1220	246
13	71	297	7510	180	2170	360	2360	2740	243	655	5160	435
14	80	167	5860	152	5960	360	1910	3280	263	484	4440	472
15	66	149	8960	150	1680	360	3200	2200	260	268	3730	97
16	66	734	7070	170	2420	676	3710	1650	276	282	1910	92
17	66	512	4800	150	9280	1350	3430	1560	313	252	1540	92
18	69	429	4000	135	9440	1330	2480	1350	834	286	1070	88
19	69	342	2460	132	8980	1260	4080	1950	1160	265	920	140
20	66	347	600	144	8850	1650	5870	2030	871	231	1070	205
21	66	874	460	140	8240	4990	3530	3880	504	198	877	204
22	66	979	520	140	6630	6230	2530	2080	200	180	636	202
23	70	951	720	160	2350	3940	2090	2540	201	133	565	146
24	68	867	620	170	1150	1730	2640	2920	296	130	512	88
25	68	873	560	290	1450	1610	6250	1610	446	124	352	87
26	70	784	520	280	1330	1510	3260	1330	365	122	294	89
27	68	807	460	270	1190	1250	2270	1250	296	1910	292	96
28	68	920	350	270	989	1170	2020	4560	349	1440	291	97
29	68	1350	310	270	870	1340	1730	8630	824	461	280	96
30	68	1280	270	250	---	1380	1420	5480	2260	373	241	93
31	68	---	240	220	---	1620	---	3270	---	210	229	---
TOTAL	2425	13755	57730	6157	77385	39716	123010	73484	20853	31986	31258	5052
MEAN	78.2	459	1862	199	2668	1281	4100	2370	695	1032	1008	168
MAX	170	1350	8960	290	9440	6230	10400	8630	2280	5230	5160	472
MIN	66	68	240	132	160	320	1420	894	200	122	170	87
CFSM	.10	.60	2.42	.26	3.46	1.66	5.32	3.07	.90	1.34	1.31	.22
IN.	.12	.66	2.79	.30	3.73	1.92	5.94	3.55	1.01	1.54	1.51	.24
CAL YR 1983	TOTAL	304458	MEAN	834	MAX	8960	MIN	64	CFSM	1.08	IN.	14.69
WTR YR 1984	TOTAL	482811	MEAN	1319	MAX	10400	MIN	66	CFSM	1.71	IN.	23.30



## 01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°43'08", Steuben County, Hydrologic Unit 02050104, on right bank 1,000 ft upstream from Arkport Dam on Canisteo River, 1.3 mi west of Arkport, and 2.3 mi upstream from small tributary.

DRAINAGE AREA.--30.5 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1552: 1951-57. WRD NY 1974: 1973.

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

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1940 for flood control; first used for flood regulation on Mar. 31, 1940. Usable capacity, 7,936 acre-ft between elevations 1,218.0 ft, sill of conduit, and 1,304.0 ft, crest of spillway. No dead storage. The flood control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,304.04 ft June 23, 1972, contents, 7,944 acre-ft; minimum, 1,226.26 ft Oct. 21, 22, 23, 24, 25, 1980, contents, 0.3 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,263.61 ft June 18, contents, 2,215 acre-ft; minimum, 1,226.34 ft September 28, contents, 0.3 acre-ft, result of reservoir clearing operations.

Capacity table (elevation, in feet, and usable contents, in acre-feet)  
(Based on field survey by Corps of Engineers in 1937)

1,226.00	0	1,235.00	264	1,270.00	2,908
1,227.00	1	1,240.00	462	1,280.00	4,142
1,228.00	8	1,245.00	719	1,290.00	5,552
1,229.00	51	1,250.00	1,040	1,300.00	7,192
1,230.00	122	1,260.00	1,861	1,310.00	9,161

ELEVATION (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	1226.39	1226.39	1226.48	1226.78	1227.11	1227.21	1227.44	1227.53	1227.63	1227.98	1227.87	1228.13
2	1226.39	1226.39	1226.43	1226.78	1226.85	1227.18	1228.91	1227.48	1227.57	1227.98	1227.87	1228.13
3	1226.39	1226.39	1226.40	1226.78	1226.79	1227.16	1229.95	1227.46	1227.55	1227.97	1227.87	1229.56
4	1226.39	1226.39	1226.39	1226.79	1226.86	1227.27	1232.62	1230.88	1227.51	1227.97	1227.88	1228.00
5	1226.39	1226.39	1226.40	1226.80	1226.89	1227.15	1245.42	1231.62	1227.46	1227.98	1227.88	1227.86
6	1226.39	1226.39	1226.60	1226.82	1226.88	1227.32	1241.45	1229.12	1227.53	1228.01	1227.88	1227.82
7	1226.38	1226.39	1226.74	1226.81	1226.88	1227.28	1230.27	1227.65	1227.46	1228.02	1228.24	1227.77
8	1226.39	1226.39	1226.55	1226.79	1226.89	1227.36	1228.26	1228.17	1227.38	1228.01	1227.90	1227.77
9	1226.38	1226.39	1226.49	1226.78	1226.82	1227.28	1227.64	1229.55	1227.33	1227.97	1227.89	1227.77
10	1226.38	1226.39	1226.46	1226.77	1226.82	1227.30	1227.57	1228.33	1227.30	1227.95	1227.89	1227.77
11	1226.38	1226.41	1226.45	1226.78	1226.95	1227.12	1227.52	1227.99	1227.26	1228.42	1227.89	1227.77
12	1226.39	1226.45	1227.16	1226.90	1227.46	1227.21	1227.51	1234.14	1227.23	1228.42	1228.59	1227.77
13	1226.39	1226.41	1229.88	1226.78	1231.44	1227.04	1227.52	1233.29	1227.21	1227.95	1235.47	1227.76
14	1226.39	1226.41	1235.76	1226.78	1242.58	1227.04	1227.56	1244.18	1227.34	1227.94	1257.40	1228.06
15	1226.38	1226.41	1228.36	1226.79	1244.46	1227.11	1230.20	1232.13	1227.29	1227.94	1247.47	1227.78
16	1226.38	1226.42	1227.58	1226.98	1228.28	1228.48	1229.86	1230.22	1227.24	1227.94	1230.15	1227.78
17	1226.38	1226.41	1227.42	1226.76	1227.60	1229.60	1229.10	1228.58	1227.25	1227.94	1228.47	1227.78
18	1226.38	1226.41	1227.29	1226.76	1227.58	1228.68	1227.77	1227.64	1246.82	1228.00	1228.26	1227.78
19	1226.38	1226.40	1227.12	1226.76	1227.54	1227.58	1228.95	1230.96	1259.04	1227.89	1228.22	1227.77
20	1226.38	1226.40	1226.99	1226.88	1227.60	1228.60	1227.91	1230.64	1240.75	1227.88	1228.16	1227.76
21	1226.38	1226.41	1226.95	1226.79	1227.52	1232.54	1227.60	1231.44	1228.61	1227.87	1228.15	1227.76
22	1226.38	1226.40	1227.06	1226.83	1227.44	1230.94	1227.57	1228.85	1228.04	1227.85	1228.14	1227.76
23	1226.38	1226.40	1227.18	1226.77	1227.41	1228.89	1227.56	1228.16	1228.04	1227.84	1228.14	1227.76
24	1226.38	1226.40	1227.06	1226.73	1227.37	1227.71	1229.59	1228.43	1232.66	1227.84	1228.13	1227.76
25	1226.38	1226.40	1227.00	1226.79	1227.33	1227.56	1240.39	1228.25	1230.86	1227.84	1228.13	1227.76
26	1226.39	1226.40	1226.94	1226.84	1227.26	1227.62	1231.42	1227.65	1228.93	1227.87	1228.13	1227.75
27	1226.39	1226.40	1226.89	1226.85	1227.20	1227.40	1228.93	1227.60	1228.34	1227.87	1228.13	1227.36
28	1226.39	1226.58	1226.86	1226.85	1227.08	1227.40	1227.65	1228.11	1229.23	1227.87	1228.13	1226.95
29	1226.39	1226.75	1226.90	1226.84	1227.19	1227.38	1227.61	1228.42	1228.46	1227.87	1228.13	1227.01
30	1226.39	1226.55	1226.85	1226.82	---	1227.38	1227.57	1228.43	1228.04	1227.87	1228.13	1227.01
31	1226.39	---	1226.80	1226.85	---	1227.35	---	1228.16	---	1227.87	1228.13	---
MEAN	1226.39	1226.42	1227.27	1226.81	1228.49	1227.84	1229.98	1229.71	1230.11	1227.96	1229.96	1227.78
MAX	1226.39	1226.75	1235.76	1226.98	1244.46	1232.54	1245.42	1244.18	1259.04	1228.42	1257.40	1229.56
MIN	1226.38	1226.39	1226.39	1226.73	1226.79	1227.04	1227.44	1227.46	1227.21	1227.84	1227.87	1226.95
†	0.4	0.5	0.8	2.0	2.4	3.8	4.9	5.6	8.0	7.1	13.6	1.0
††	0	0	0	0	0	0	0	0	0	0	+0.1	-0.2

CAL YR 1983 MEAN 1227.50 MAX 1235.76 MIN 1226.37 †† 0  
WTR YR 1984 MEAN 1228.22 MAX 1259.04 MIN 1226.38 †† 0

† Contents, in acre feet, at end of month.

†† Change in contents, equivalent in cubic feet per second.

## SUSQUEHANNA RIVER BASIN

01521500 CANISTEO RIVER AT ARKPORT, NY

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

DRAINAGE AREA.--30.6 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Since November 1939, flows above 500 ft<sup>3</sup>/s controlled by detention in Arkport Reservoir (see station 01521000).

AVERAGE DISCHARGE.--47 years, 35.5 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft<sup>3</sup>/s Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft Feb. 19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 739 ft<sup>3</sup>/s June 18 at 2130 hours, gage height, 3.21 ft; minimum discharge, 0.68 ft<sup>3</sup>/s Oct. 2, 3, 4; minimum gage height, 0.62 ft Oct. 1, 2, 3, 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	.97	2.7	25	10	7.0	20	46	27	43	12	5.7	7.0
2	.87	2.9	19	6.6	6.6	19	81	24	33	11	6.1	6.7
3	.85	3.8	16	6.4	7.0	18	137	22	28	8.8	7.3	185
4	.83	4.9	15	5.8	8.0	17	289	138	24	7.0	7.2	67
5	1.5	6.0	19	7.0	9.0	16	588	130	19	34	7.4	33
6	1.9	6.0	50	7.2	9.0	24	531	67	27	43	7.8	22
7	1.5	7.5	69	8.4	8.6	26	119	46	20	29	19	16
8	1.5	7.3	37	8.2	8.4	26	77	49	14	19	11	12
9	1.5	5.1	28	7.4	8.2	24	62	70	11	13	6.4	9.1
10	1.5	6.0	25	6.8	8.4	22	52	56	9.2	10	5.2	7.8
11	1.5	41	22	6.6	12	20	44	49	7.3	15	7.2	8.9
12	1.8	34	136	6.4	63	19	42	304	6.7	18	23	17
13	2.3	16	320	6.2	321	18	43	191	6.2	11	163	13
14	4.8	10	437	9.0	591	17	48	550	13	7.7	650	163
15	2.6	9.5	180	10	602	16	107	139	8.8	6.4	588	52
16	2.0	39	79	10	115	90	94	76	6.7	5.6	95	39
17	1.7	30	50	9.6	74	93	77	55	8.0	5.1	31	24
18	1.7	19	36	8.4	66	61	60	44	425	4.7	22	19
19	1.7	17	26	7.4	55	52	70	122	687	4.5	19	15
20	1.6	19	44	7.4	75	109	58	89	441	4.2	16	12
21	1.5	31	28	8.4	52	333	45	108	35	3.9	11	9.8
22	1.7	22	20	8.8	44	151	35	61	23	3.7	9.4	8.3
23	3.6	16	26	18	40	78	32	200	22	4.7	14	7.4
24	4.5	12	25	16	35	53	107	139	112	5.0	10	7.2
25	4.0	13	24	16	31	51	530	64	60	5.1	8.2	7.0
26	3.4	12	24	12	26	51	135	47	29	5.1	6.8	11
27	3.3	17	22	10	23	41	68	39	21	13	5.8	10
28	3.0	62	21	9.4	15	40	50	208	29	11	5.4	8.1
29	2.9	74	12	8.6	22	37	40	211	21	7.9	23	7.0
30	2.8	38	11	8.4	---	37	33	86	15	6.9	15	6.4
31	2.8	---	11	7.2	---	35	---	58	---	5.9	9.4	---
TOTAL	68.12	583.7	1857	277.6	2342.2	1614	3700	3469	2204.9	341.2	1815.3	810.7
MEAN	2.20	19.5	59.9	8.95	80.8	52.1	123	112	73.5	11.0	58.6	27.0
MAX	4.8	74	437	18	602	333	588	550	687	43	650	185
MIN	.83	2.7	11	5.8	6.6	16	32	22	6.2	3.7	5.2	6.4
CAL YR 1983	TOTAL	9579.07	MEAN	26.2	MAX	478	MIN	.80				
WTR YR 1984	TOTAL	19083.72	MEAN	52.1	MAX	687	MIN	.83				

## SUSQUEHANNA RIVER BASIN

41

01523000 ALMOND LAKE NEAR ALMOND, NY

LOCATION.--Lat 42°20'56", long 77°42'10", Steuben County, Hydrologic Unit 02050104, at Almond Dam on Canacadea Creek, 2 mi northeast of Almond, and 3 mi upstream from mouth.

DRAINAGE AREA.--55.8 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "Almond Reservoir near Almond."

REVISED RECORDS.--WSP 2103: Drainage area.

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

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

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,298.58 ft June 23, 1972, contents, 14,100 acre-ft; no contents for many days each year 1949-65.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,278.81 ft June 19, contents, 6,191 acre-ft; minimum, 1,248.48 ft Feb. 17, contents, 448 acre-ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)  
(Based on field survey by Corps of Engineers in 1938)

1,240.00	80	1,260.00	1,750
1,245.00	230	1,270.00	3,750
1,250.00	570	1,280.00	6,570
1,255.00	1,080	1,290.00	10,300

ELEVATION (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	1255.19	1250.10	1250.85	1250.40	1250.30	1250.90	1250.85	1255.06	1255.23	1255.89	1255.14	1255.16
2	1255.23	1250.08	1250.96	1250.62	1250.35	1250.29	1251.12	1255.14	1255.26	1255.73	1255.14	1255.05
3	1254.96	1250.18	1250.91	1250.65	1250.50	1250.19	1251.69	1255.23	1255.21	1255.46	1255.29	1255.31
4	1253.81	1250.53	1250.65	1250.27	1250.56	1250.47	1252.21	1255.59	1255.36	1255.32	1255.53	1255.26
5	1252.55	1250.67	1250.70	1250.24	1250.32	1250.81	1264.56	1255.78	1255.39	1255.39	1255.71	1255.11
6	1251.10	1250.05	1251.33	1250.38	1250.65	1251.08	1271.50	1255.47	1255.30	1255.04	1255.85	1255.09
7	1250.09	1250.05	1250.65	1250.49	1250.77	1250.81	1266.94	1255.40	1255.22	1255.47	1255.82	1255.16
8	1250.02	1250.16	1250.92	1250.39	1250.81	1249.94	1258.40	1255.31	1255.36	1255.53	1255.56	1255.22
9	1250.02	1250.15	1250.85	1250.42	1250.82	1250.31	1253.59	1255.40	1255.54	1255.31	1255.38	1255.24
10	1250.01	1250.20	1250.36	1250.42	1250.50	1250.53	1250.61	1255.89	1255.65	1255.07	1255.35	1255.22
11	1249.96	1251.54	1250.39	1250.41	1250.44	1250.65	1250.73	1255.46	1255.72	1255.34	1255.35	1255.21
12	1249.93	1251.91	1250.83	1250.28	1250.96	1250.50	1250.84	1257.88	1255.75	1255.28	1255.65	1255.21
13	1249.95	1250.74	1251.99	1250.53	1252.92	1250.41	1250.88	1256.94	1255.78	1255.34	1257.28	1255.16
14	1250.45	1250.64	1258.88	1250.67	1259.47	1250.25	1250.99	1260.72	1255.78	1255.30	1275.96	1255.87
15	1250.21	1250.86	1252.82	1250.51	1268.06	1250.11	1251.04	1255.56	1255.41	1255.28	1274.54	1256.64
16	1250.08	1251.35	1250.44	1250.19	1267.48	1251.28	1251.20	1255.24	1255.15	1255.35	1268.15	1257.03
17	1250.10	1250.56	1250.37	1250.31	1251.50	1251.22	1250.75	1255.30	1255.18	1255.36	1258.72	1257.15
18	1250.13	1250.34	1250.70	1250.45	1250.66	1250.34	1250.70	1255.15	1268.26	1255.35	1255.51	1257.16
19	1250.13	1250.67	1250.50	1250.56	1250.47	1250.92	1251.01	1255.44	1275.62	1255.36	1255.47	1257.13
20	1250.13	1250.89	1250.35	1250.58	1251.50	1251.24	1250.78	1255.63	1264.92	1255.33	1255.48	1257.04
21	1250.11	1250.93	1250.14	1250.58	1250.81	1251.40	1250.55	1255.71	1256.12	1255.29	1255.31	1256.94
22	1250.08	1250.30	1250.75	1250.52	1250.98	1250.97	1250.51	1255.61	1255.44	1255.23	1255.29	1256.79
23	1250.17	1250.05	1251.19	1250.55	1250.79	1250.96	1250.34	1255.54	1255.37	1255.17	1255.42	1256.64
24	1250.40	1250.11	1250.96	1250.47	1250.14	1250.87	1251.31	1255.47	1255.28	1255.18	1255.53	1256.49
25	1250.41	1250.10	1250.25	1250.72	1250.19	1251.04	1256.75	1255.63	1255.43	1255.21	1255.51	1256.32
26	1250.35	1250.21	1250.30	1250.96	1250.13	1250.89	1254.82	1255.56	1255.30	1255.24	1255.41	1256.10
27	1250.31	1250.50	1250.30	1250.66	1250.62	1250.39	1255.14	1255.38	1255.07	1255.53	1255.26	1255.53
28	1250.25	1251.03	1250.23	1250.65	1250.77	1250.74	1255.43	1256.09	1255.51	1255.71	1255.13	1255.36
29	1250.12	1250.54	1250.24	1250.10	1250.91	1250.99	1255.33	1255.76	1255.79	1255.59	1255.65	1255.36
30	1250.11	1250.38	1250.16	1250.22	---	1250.58	1255.04	1255.33	1255.87	1255.39	1255.69	1255.35
31	1250.11	---	1249.99	1250.43	---	1250.20	---	1255.29	---	1255.18	1255.26	---
MEAN	1250.85	1250.53	1250.97	1250.47	1252.22	1250.69	1253.85	1255.77	1256.88	1255.36	1257.30	1255.88
MAX	1255.23	1251.91	1258.88	1250.96	1268.06	1251.40	1271.50	1260.72	1275.62	1255.89	1275.96	1257.16
MIN	1249.93	1250.05	1249.99	1250.10	1250.13	1249.94	1250.34	1255.06	1255.07	1255.04	1255.13	1255.05

†	580	628	600	609	665	622	1,087	1,110	1,186	1,099	1,105	1,121
††	-8.4	+0.8	-0.5	+0.1	+1.0	-0.7	+7.8	+0.4	+1.3	-1.4	+0.1	+0.3

CAL YR 1983	MEAN 1252.63	MAX 1258.88	MIN 1249.93	†† 0
WTR YR 1984	MEAN 1253.39	MAX 1275.96	MIN 1249.93	†† 0

† Contents, in acre-feet, at end of month.

†† Change in contents, equivalent in cubic feet per second.

## SUSQUEHANNA RIVER BASIN

01523500 CANACADEA CREEK NEAR HORNBELL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft downstream from bridge on State Highway 21, 1.2 mi west of Hornell, 1.5 mi downstream from Almond Dam, and 2 mi upstream from mouth.

DRAINAGE AREA.--57.9 mi<sup>2</sup>.

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

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

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

REMARKS.--Records good except those for winter periods, which are fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--42 years (1940-42, 1944-84), 65.3 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,430 ft<sup>3</sup>/s May 17, 1945, gage height, 5.14 ft, from rating curve extended above 3,400 ft<sup>3</sup>/s; maximum gage height, 6.65 ft June 3, 1947; minimum discharge, 0.5 ft<sup>3</sup>/s May 29, 1965, gage height, 0.61 ft; minimum daily, 0.6 ft<sup>3</sup>/s May 30 to June 1, 1965.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,600 ft<sup>3</sup>/s Feb. 16 at 1630 hours, gage height, 4.28 ft; minimum discharge 6.1 ft<sup>3</sup>/s Oct. 1-3, Nov. 3-4; minimum gage height, 0.83 ft Oct. 1-3, result of regulation.

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	6.1	11	41	25	19	54	80	62	91	36	18	28
2	6.1	11	40	24	18	44	146	45	77	51	14	25
3	49	8.2	39	30	25	37	293	45	62	40	11	120
4	68	6.1	39	22	56	32	384	104	51	33	9.8	83
5	67	25	39	20	37	40	57	177	51	109	9.6	41
6	57	23	103	19	20	59	380	121	51	105	13	29
7	23	15	163	19	20	65	916	92	41	54	55	23
8	10	15	65	18	19	39	716	104	23	53	34	23
9	11	15	64	17	21	33	270	118	23	51	25	23
10	11	12	59	17	25	37	163	123	23	35	19	23
11	11	46	42	17	48	34	84	93	23	74	44	25
12	11	105	273	17	130	33	84	559	22	93	69	29
13	11	51	524	18	519	30	84	394	22	40	350	29
14	27	18	639	18	824	29	105	819	70	36	447	32
15	16	24	618	17	42	27	183	370	45	23	787	31
16	13	86	163	17	1060	171	174	149	29	23	862	31
17	10	73	86	16	693	227	154	118	20	23	623	31
18	10	35	64	18	160	102	119	95	168	23	53	31
19	10	29	52	18	124	98	154	336	1240	23	56	31
20	10	45	40	18	219	242	151	179	1190	23	54	30
21	10	68	36	18	138	566	97	251	288	23	39	30
22	10	69	33	17	83	293	86	155	58	23	32	29
23	10	27	50	17	109	157	71	306	58	18	73	29
24	13	32	45	17	83	107	226	277	56	15	31	29
25	15	32	37	25	70	107	718	116	56	15	31	29
26	15	32	34	40	52	106	273	114	56	15	31	46
27	15	32	33	54	44	79	118	88	41	28	30	49
28	15	123	31	43	43	66	99	430	33	33	19	19
29	13	157	30	30	40	72	101	433	33	32	28	19
30	11	66	28	25	---	93	78	178	33	33	58	19
31	11	---	26	20	---	69	---	128	---	23	38	---
TOTAL	575.2	1291.3	3536	691	4741	3148	6564	6669	4034	1206	3963.4	1016
MEAN	18.6	43.0	114	22.3	163	102	219	215	134	38.9	128	33.9
MAX	68	157	639	54	1060	566	916	819	1240	109	862	120
MIN	6.1	6.1	26	16	18	27	57	45	20	15	9.6	19
CAL YR 1983	TOTAL	20308.5	MEAN	55.6	MAX	1170	MIN	6.1				
WTR YR 1984	TOTAL	37434.9	MEAN	102	MAX	1240	MIN	6.1				



## 01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY

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

DRAINAGE AREA.--158 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversion from Carrington Creek, a tributary upstream from station, by city of Hornell for municipal supply (1984 average, 3.0 ft<sup>3</sup>/s); sewage enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to materially affect figures of monthly runoff.

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

AVERAGE DISCHARGE.--42 years, 158 ft<sup>3</sup>/s, 13.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft<sup>3</sup>/s June 23, 1972, gage height, 13.45 ft from flood-mark, from rating curve extended above 7,600 ft<sup>3</sup>/s on basis of critical-depth measurement of peak flow; minimum, 7.4 ft<sup>3</sup>/s Sept. 13, 14, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,040 ft<sup>3</sup>/s Aug. 13 at 2330 hours, gage height, 8.44 ft; minimum, 17 ft<sup>3</sup>/s Oct. 1, 2, 3, gage height, 0.49 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	17	23	114	50	46	120	199	174	248	97	46	71
2	17	23	100	48	48	110	336	144	203	111	45	71
3	51	25	92	56	50	90	584	137	176	95	55	360
4	72	24	92	60	58	80	1030	392	152	84	55	224
5	69	39	98	56	60	92	1410	475	137	227	39	121
6	72	41	181	57	50	120	1660	293	143	270	40	93
7	39	35	263	54	46	130	1480	225	126	160	93	77
8	21	35	117	54	44	86	1090	202	94	129	70	71
9	22	31	128	49	44	86	470	202	86	115	57	66
10	21	33	125	48	43	80	328	202	79	96	48	64
11	20	145	102	47	100	66	232	205	74	121	134	70
12	21	197	364	46	273	72	219	1080	69	164	229	86
13	25	105	1180	46	1040	74	215	889	66	94	923	77
14	44	59	1710	47	2070	74	234	1950	116	84	2120	305
15	33	63	1090	47	1120	70	384	914	94	67	1810	153
16	27	181	384	46	1300	222	365	427	78	65	1300	133
17	23	153	235	45	1010	424	321	312	71	61	858	102
18	22	90	184	49	330	235	273	258	881	59	162	89
19	21	79	139	49	275	213	324	601	2240	57	166	82
20	21	93	100	52	412	412	298	405	1950	55	142	77
21	21	136	84	52	281	1160	231	598	525	48	112	72
22	21	125	82	52	198	736	198	334	163	49	96	70
23	27	74	90	50	218	377	179	663	143	47	109	68
24	30	72	78	50	187	256	402	702	240	45	95	68
25	29	79	76	48	164	246	2070	319	206	38	86	66
26	28	79	74	56	135	239	687	261	150	36	81	88
27	28	86	70	66	116	196	345	216	124	80	78	94
28	28	243	66	56	108	180	275	664	127	69	67	58
29	25	329	64	50	100	182	246	735	108	61	89	56
30	23	171	64	48	---	198	207	440	100	60	113	55
31	23	---	58	46	---	172	---	320	---	52	87	---
TOTAL	941	2868	7604	1580	9926	6798	16292	14739	8969	2796	9405	3087
MEAN	30.4	95.6	245	51.0	342	219	543	475	299	90.2	303	103
MAX	72	329	1710	66	2070	1160	2070	1950	2240	270	2120	360
MIN	17	23	58	45	43	66	179	137	66	36	39	55
CAL YR 1983	TOTAL	46712	MEAN	128	MAX	1780	MIN	17				
WTR YR 1984	TOTAL	85005	MEAN	232	MAX	2240	MIN	17				

## SUSQUEHANNA RIVER BASIN

01526500 TIOGA RIVER NEAR ERWINS, NY

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

DRAINAGE AREA.--1,377 mi<sup>2</sup>.

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

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

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

REMARKS.--Records good except those for winter periods, which are fair. High flows regulated by upstream reservoirs.

AVERAGE DISCHARGE.--66 years, 1,384 ft<sup>3</sup>/s, 13.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft<sup>3</sup>/s June 23, 1972, from rating curve extended above 90,000 ft<sup>3</sup>/s on basis of computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi and 2.0 mi upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft, from floodmarks; minimum, 18 ft<sup>3</sup>/s Sept. 2, 3, 1939; minimum gage height, 0.40 ft Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0100	20,500	11.29	Apr. 5	0700	21,400	11.54
Feb. 14	2400	*25,200	*12.54				

Minimum discharge, 96 ft<sup>3</sup>/s Oct. 3, 4, gage height, 0.65 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	101	107	1660	620	450	1000	2430	2000	3980	1440	325	388
2	101	111	1360	600	410	960	2960	1850	2820	1310	281	336
3	98	115	995	560	450	900	4740	1600	2410	1140	498	422
4	127	116	959	540	600	860	8670	2440	1980	759	1090	1060
5	283	129	976	500	800	800	19400	3540	1560	1420	760	614
6	264	126	1260	560	1000	720	14400	2610	1330	5010	702	448
7	254	154	2830	500	760	660	13900	2150	1130	5460	457	388
8	154	146	2080	480	600	600	13400	2410	1030	2740	572	351
9	118	146	1710	460	520	540	11700	3280	919	1970	445	302
10	104	151	1520	440	460	560	10000	3000	757	1520	387	278
11	104	326	1240	430	785	640	7750	2240	676	1290	309	287
12	109	875	1330	410	2080	600	5810	5290	508	1580	1060	365
13	115	746	11300	390	3690	580	3370	6120	465	1040	5280	593
14	154	447	16200	370	11500	580	3030	8460	511	788	8090	706
15	154	340	12200	360	13100	587	4410	6230	654	528	9770	590
16	154	1180	9630	350	4390	854	5350	3790	531	483	4410	378
17	128	1240	6490	420	10500	2750	5590	3060	530	443	3210	331
18	126	861	5120	390	11100	2440	4210	2620	1370	439	1960	280
19	124	644	3610	380	10500	2240	5490	2960	4960	431	1480	280
20	113	618	1170	360	10800	2600	7820	4220	4590	394	1990	354
21	111	1160	860	340	10000	7590	5720	5980	3160	342	1320	342
22	109	1460	820	330	8520	11200	3950	4030	1190	315	1010	330
23	117	1290	1100	320	3920	6770	3160	3900	724	261	1010	290
24	123	1110	1000	330	2060	3210	3750	6140	684	233	953	202
25	126	1180	960	380	2360	2950	11900	3380	1100	223	685	196
26	132	1140	900	410	2100	2750	7690	2570	963	214	569	195
27	127	1140	860	500	1700	2320	4430	2380	736	880	529	213
28	123	1280	800	660	1400	2080	3650	6430	673	1710	512	232
29	120	2590	760	640	1100	2240	3050	15300	901	690	478	196
30	114	2240	720	580	---	2230	2590	9840	1750	549	464	184
31	111	---	660	500	---	2480	---	5720	---	389	465	---
TOTAL	4198	23168	93080	14110	117655	67291	204320	135540	44592	35991	51071	11131
MEAN	135	772	3003	455	4057	2171	6811	4372	1486	1161	1647	371
MAX	283	2590	16200	660	13100	11200	19400	15300	4960	5460	9770	1060
MIN	98	107	660	320	410	540	2430	1600	465	214	281	184
CFSM	.10	.56	2.18	.33	2.95	1.58	4.95	3.18	1.08	.84	1.20	.27
IN.	0.11	0.63	2.51	0.38	3.18	1.82	5.52	3.66	1.20	0.97	1.38	0.30
CAL YR 1983	TOTAL	487213	MEAN	1335	MAX	16200	MIN	88	CFSM	.97	IN.	13.16
WTR YR 1984	TOTAL	802147	MEAN	2192	MAX	19400	MIN	98	CFSM	1.59	IN.	21.67

SUSQUEHANNA RIVER BASIN

45

01528000 FIVEMILE CREEK NEAR KANONA, NY

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

DRAINAGE AREA.--66.8 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 1.00 ft higher.

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

AVERAGE DISCHARGE.--47 years, 76.5 ft<sup>3</sup>/s, 15.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft<sup>3</sup>/s June 23, 1972, gage height, 6.95 ft present datum; maximum gage height, 7.10 ft present datum, Mar. 31, 1940 (ice jam); minimum discharge, 0.04 ft<sup>3</sup>/s Sept. 27, 29, 1941; minimum gage height, 0.53 ft Sept. 20, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 880 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0600	1,090	4.45	Feb. 15	0430	*1,600	5.07
Feb. 14	0300	ice jam	*5.98	Apr. 6	0630	1,480	4.94

Minimum discharge, 0.64 ft<sup>3</sup>/s Oct. 9, gage height, 0.55 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	1.1	2.1	90	50	20	64	106	101	130	18	6.0	14
2	1.0	2.1	63	48	35	60	166	83	97	16	6.6	11
3	.94	2.7	53	47	45	60	298	78	81	19	14	17
4	.93	3.1	52	52	52	70	539	276	71	13	12	23
5	1.2	3.7	49	58	54	58	1090	354	58	51	9.4	22
6	1.3	3.9	77	50	48	50	1310	198	57	88	7.7	17
7	1.2	3.6	172	45	42	45	817	133	48	64	6.5	14
8	1.0	3.3	102	38	40	40	331	115	39	42	6.2	11
9	1.0	3.8	78	36	39	38	212	142	32	28	5.3	8.8
10	1.0	4.9	72	35	35	36	166	117	29	23	4.8	8.6
11	1.0	32	57	33	52	35	138	101	27	26	16	9.3
12	1.1	35	72	31	140	33	120	403	23	25	103	15
13	1.7	26	459	29	230	31	107	381	21	17	109	14
14	3.6	17	1030	28	820	30	97	742	24	14	113	139
15	4.2	15	714	27	1390	36	117	448	19	12	151	97
16	3.0	33	321	26	804	53	154	233	16	12	67	64
17	2.4	45	184	25	320	108	176	162	17	11	131	45
18	2.1	30	131	24	225	121	156	127	168	11	68	33
19	1.9	25	92	23	186	94	203	117	447	8.9	77	26
20	1.5	26	84	22	248	97	176	109	113	8.2	76	20
21	1.6	55	110	21	178	394	138	139	65	8.0	43	15
22	1.6	52	140	20	144	470	109	106	47	7.7	30	10
23	2.8	37	110	21	130	243	95	143	34	7.1	52	9.0
24	3.5	32	90	30	121	146	106	211	38	5.9	40	8.6
25	3.9	33	74	50	108	136	434	125	40	5.7	28	9.0
26	3.2	41	72	45	89	134	302	91	28	5.1	21	10
27	2.8	37	70	35	78	115	178	78	25	13	13	11
28	2.5	77	72	29	68	107	133	183	28	11	10	10
29	2.0	223	70	25	66	98	159	506	24	10	12	9.7
30	2.0	133	64	21	---	93	124	408	22	8.0	20	8.2
31	2.2	---	54	16	---	98	---	197	---	6.7	21	---
TOTAL	61.27	1037.2	4878	1040	5807	3193	8257	6607	1868	595.3	1279.5	709.2
MEAN	1.98	34.6	157	33.5	200	103	275	213	62.3	19.2	41.3	23.6
MAX	4.2	223	1030	58	1390	470	1310	742	447	88	151	139
MIN	.93	2.1	49	16	20	30	95	78	16	5.1	4.8	8.2
CFSM	.03	.52	2.35	.50	2.99	1.54	4.12	3.19	.93	.29	.62	.35
IN.	0.03	0.58	2.72	0.58	3.23	1.78	4.60	3.68	1.04	0.33	0.71	0.39
CAL YR 1983	TOTAL	22908.55	MEAN	62.8	MAX	1030	MIN	.88	CFSM	.94	IN.	12.76
WTR YR 1984	TOTAL	35332.47	MEAN	96.5	MAX	1390	MTN	.93	CFSM	1.44	IN.	19.68

01528700 DIVERSION FROM WANETA LAKE TO KEUKA LAKE AT KEUKA, NY

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

DRAINAGE AREA.--45.5 mi<sup>2</sup>.

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

GAGE.--Daily power generation records.

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

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

AVERAGE DISCHARGE.--18 years, 20.4 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft<sup>3</sup>/s June 23, 1972; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72 ft<sup>3</sup>/s many days; no flow many days.

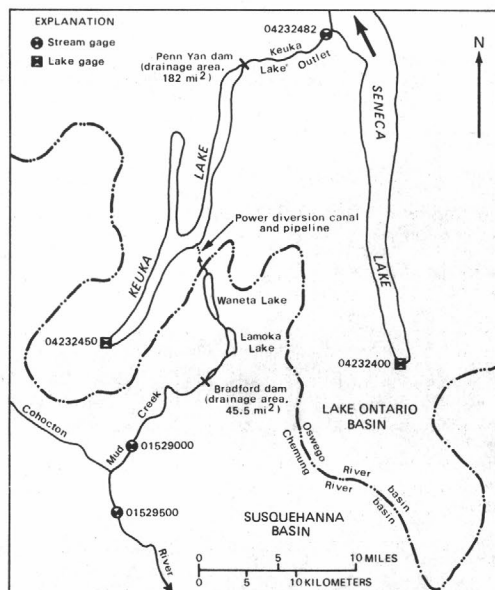


Figure 5.--Gaging stations and transbasin diversion, Cohocton River-Keuka Lake area.

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	.00	.00	.00	.00	55	72	72	71	54	.00	.00	.00
2	.00	.00	.00	.00	55	72	72	71	71	39	.00	.00
3	.00	.00	.00	.00	33	72	72	71	71	.00	.00	.00
4	19	.00	.00	.00	.00	72	72	72	71	.00	.00	.00
5	42	.00	.00	.00	.00	72	72	72	71	42	.00	.00
6	42	.00	.00	.00	.00	72	72	72	71	42	.00	.00
7	19	.00	.00	.00	.00	72	72	71	71	.00	9.0	.00
8	.00	.00	.00	.00	.00	72	72	71	36	.00	9.0	.00
9	.00	.00	18	.00	.00	60	72	60	.00	38	.00	.00
10	.00	.00	.00	.00	.00	72	72	71	.00	71	.00	.00
11	23	.00	.00	.00	.00	72	72	45	.00	71	.00	.00
12	42	.00	.00	.00	.00	71	72	71	.00	71	.00	.00
13	42	.00	11	.00	.00	71	72	71	.00	41	.00	.00
14	26	.00	51	.00	.00	71	72	71	.00	.00	.00	.00
15	.00	.00	17	.00	.00	72	72	51	.00	.00	.00	.00
16	.00	.00	.00	6.0	.00	42	69	36	.00	38	.00	.00
17	24	.00	.00	15	27	.00	69	71	.00	68	.00	.00
18	42	.00	.00	15	72	.00	69	71	.00	69	.00	.00
19	42	.00	.00	15	72	42	72	71	.00	32	.00	.00
20	42	.00	.00	15	72	72	72	71	.00	.00	.00	.00
21	21	.00	.00	.00	60	72	72	51	41	.00	.00	.00
22	.00	.00	.00	.00	42	72	72	36	45	.00	.00	.00
23	.00	.00	.00	42	72	72	71	71	.00	.00	12	.00
24	.00	.00	.00	72	72	72	71	71	.00	.00	.00	.00
25	.00	.00	.00	33	18	72	72	71	42	.00	.00	.00
26	.00	.00	.00	.00	.00	72	72	71	72	.00	.00	.00
27	.00	.00	.00	.00	42	72	60	71	42	.00	.00	.00
28	.00	.00	.00	.00	51	72	71	71	72	.00	.00	.00
29	.00	.00	.00	.00	33	60	71	71	42	.00	.00	.00
30	.00	.00	12	27	---	69	71	71	.00	.00	.00	.00
31	.00	---	.00	60	---	72	---	71	---	.00	.00	---
TOTAL	426.00	.00	109.00	300.00	776.00	1998.00	2134	2057	872.00	622.00	30.00	.00
MEAN	13.7	.00	3.52	9.68	26.8	64.5	71.1	66.4	29.1	20.1	.97	.00
MAX	42	.00	51	72	72	72	72	72	72	71	12	.00
MIN	.00	.00	.00	.00	.00	.00	60	36	.00	.00	.00	.00
CAL YR 1983	TOTAL	4102.00	MEAN	11.2	MAX	72	MIN	.00				
WTR YR 1984	TOTAL	9324.00	MEAN	25.5	MAX	72	MIN	.00				



## 01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'09", long 77°13'01", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi upstream from Michigan Creek, and 2 mi north of Campbell.

DRAINAGE AREA.--470 mi<sup>2</sup>.

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

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

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

REMARKS.--Records good except those for winter periods, which are fair. During each year since March 1931, a large part of flow from 45.5 mi<sup>2</sup> of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, is diverted into Keuka Lake (Oswego River basin), for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--66 years, 451 ft<sup>3</sup>/s.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0500	6,170	6.06	Apr. 6	0900	*9,800	*7.16
Feb. 15	0230	7,880	6.93	May 14	0430	5,400	5.62

Minimum discharge, 30 ft<sup>3</sup>/s many days in October, gage height, 0.03 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	36	44	541	230	140	430	682	921	1150	274	112	146
2	33	47	442	210	130	410	945	791	1010	281	118	139
3	34	58	381	200	160	390	1410	709	878	248	215	227
4	30	68	352	190	210	370	2720	1210	754	220	217	320
5	36	77	352	180	190	350	7220	1440	616	539	167	219
6	44	81	488	190	170	330	8850	1130	564	931	140	176
7	41	84	911	180	160	310	5050	916	504	590	133	155
8	38	85	607	170	150	300	3000	856	438	423	121	142
9	34	79	507	160	140	280	2260	1030	388	335	108	130
10	33	79	459	150	130	260	1880	903	355	295	111	123
11	33	259	413	140	180	290	1600	797	322	300	108	124
12	30	413	480	130	413	250	1360	2320	295	312	417	174
13	35	259	2420	120	1210	240	1160	2070	277	255	599	163
14	84	202	5020	110	4360	250	1000	4320	335	219	1490	563
15	75	178	2960	110	6270	276	990	2750	296	199	1470	496
16	59	402	1990	100	3250	364	1080	1990	252	184	708	408
17	50	371	1470	130	2120	664	1210	1530	243	171	585	320
18	44	284	1190	120	1670	572	1200	1310	1350	162	468	264
19	38	252	966	110	1300	526	1450	1300	2540	156	483	226
20	36	249	735	100	1470	561	1400	1180	967	144	476	195
21	36	360	514	98	1170	1950	1260	1390	642	139	353	174
22	35	352	500	96	960	2190	1060	993	501	133	329	155
23	48	283	560	94	884	1450	882	1180	420	127	380	142
24	71	255	470	100	768	1040	1110	1440	421	118	340	141
25	70	298	400	110	679	949	3170	1070	460	113	276	136
26	63	311	360	120	590	886	2120	916	371	111	211	142
27	60	309	340	160	520	762	1560	824	318	234	185	141
28	61	439	310	200	490	717	1310	1600	332	234	209	131
29	59	1030	280	190	470	689	1310	2850	296	164	240	124
30	52	724	270	170	---	688	1060	2220	313	137	214	117
31	50	---	250	150	---	645	---	1520	---	120	167	---
TOTAL	1448	7932	26938	4518	30354	19389	61309	45476	17608	7868	11150	6113
MEAN	46.7	264	869	146	1047	625	2044	1467	587	254	360	204
MAX	84	1030	5020	230	6270	2190	8850	4320	2540	931	1490	563
MIN	30	44	250	94	130	240	682	709	243	111	108	117
CAL YR 1983	TOTAL	148685	MEAN	407	MAX	5020	MIN	30				
WTR YR 1984	TOTAL	240103	MEAN	656	MAX	8850	MIN	30				

## SUSQUEHANNA RIVER BASIN

01529950 CHEMUNG RIVER AT CORNING, NY

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

DRAINAGE AREA.--2,006 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi<sup>2</sup> of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--10 years, 2,274 ft<sup>3</sup>/s, 15.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127,000 ft<sup>3</sup>/s Sept. 26, 1975, gage height, 32.46 ft; minimum, 102 ft<sup>3</sup>/s Oct. 3, 1980, gage height, 14.22 ft.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 24,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0500	30,500	23.00	Apr. 5	2200	33,700	23.45
Feb. 14	2400	*45,000	*24.85				

Minimum discharge, 141 ft<sup>3</sup>/s Oct. 4, gage height, 14.35 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	153	158	2600	1300	450	1750	3410	3350	5700	1810	491	593
2	150	161	2170	1200	500	1680	4210	3000	4250	1830	429	508
3	150	169	1640	1100	700	1480	6630	2640	3680	1480	837	628
4	153	175	1530	1000	800	1320	12200	4470	3060	1020	1680	1440
5	341	211	1540	960	900	1380	30100	5550	2480	5800	1090	931
6	341	210	1910	900	760	1320	28000	4240	2190	8960	1030	677
7	330	237	4160	840	700	1250	20500	3490	1880	7790	666	568
8	229	244	3140	800	660	1010	17200	3790	1660	3780	766	509
9	175	238	2540	760	600	1000	14400	4950	1480	2720	626	451
10	158	244	2320	700	580	1000	12300	4310	1260	2160	543	407
11	156	547	1940	660	700	960	9830	3430	1120	1870	517	402
12	161	1400	1930	620	2100	920	7930	10700	901	2190	1520	470
13	172	1250	15500	600	5400	880	5070	8850	832	1520	7780	737
14	220	793	25200	580	22200	920	4530	15300	941	1190	10100	1130
15	233	606	16900	540	24800	960	5990	9860	1070	868	12200	1250
16	226	1620	12600	520	9960	1280	7170	6680	866	787	5630	876
17	190	1960	8650	480	15200	3730	7370	5250	848	712	4250	743
18	178	1380	6900	460	13400	3250	6040	4470	4190	686	2810	629
19	175	1060	5220	440	12300	3020	8350	5230	9510	663	2320	560
20	161	997	2300	430	12900	3360	10300	5920	5750	610	2970	624
21	158	1610	2000	420	11600	11800	7570	8540	3880	538	1990	585
22	155	2170	1900	410	9920	14000	5630	5560	1860	500	1550	547
23	164	1850	1700	400	5410	8740	4550	5890	1340	437	1600	509
24	177	1560	1600	420	3130	4850	5910	8300	1330	392	1560	402
25	195	1750	1500	450	3270	4460	16900	4970	2020	372	1180	387
26	191	1740	1700	500	2840	4160	10600	3920	1540	357	918	373
27	180	1710	2400	600	2500	3540	6760	3570	1240	1530	824	392
28	177	1910	2200	580	2240	3200	5560	10200	1200	2450	790	409
29	169	4140	2000	540	1960	3280	5070	19500	1720	997	788	368
30	169	3550	1600	520	---	3170	4200	12800	3400	787	745	341
31	162	---	1500	500	---	3450	---	7850	---	578	703	---
TOTAL	5949	35650	140790	20230	168480	97120	294280	206580	73198	57384	70903	18446
MEAN	192	1188	4542	653	5810	3133	9809	6664	2440	1851	2287	615
MAX	341	4140	25200	1300	24800	14000	30100	19500	9510	8960	12200	1440
MIN	150	158	1500	400	450	880	3410	2640	832	357	429	341
CAL YR 1983	TOTAL	712942	MEAN	1953	MAX	25200	MIN	150				
WTR YR 1984	TOTAL	1189010	MEAN	3249	MAX	30100	MIN	150				

## SUSQUEHANNA RIVER BASIN

49

01530500 NEWTOWN CREEK AT ELMIRA, NY

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

DRAINAGE AREA.--77.5 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Diurnal fluctuation at low flow caused by operations of a sand and gravel plant upstream.

AVERAGE DISCHARGE.--46 years, 87.9 ft<sup>3</sup>/s, 15.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,000 ft<sup>3</sup>/s June 23, 1972 (backwater from Chemung River); maximum gage height, 19.28 ft June 23, 1972, from floodmarks (backwater from Chemung River); minimum daily, 3.5 ft<sup>3</sup>/s Oct. 6, 7, 1980.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0730	2,510	14.11	May 29	1015	1,790	11.81
Feb. 15	0245	*3,410	*16.21	July 5	1515	1,250	9.99
Apr. 6	1015	2,190	13.24				

Minimum discharge, 5.0 ft<sup>3</sup>/s Oct. 1; minimum gage height, 4.86 ft Jan. 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	6.0	20	73	27	20	68	134	83	243	241	23	44
2	6.6	21	57	26	21	60	227	68	177	105	28	41
3	6.7	25	49	25	24	55	408	60	140	68	105	73
4	6.4	26	47	24	40	47	699	215	120	54	64	123
5	7.9	29	49	26	54	50	1540	181	97	625	270	67
6	12	29	107	27	39	42	1790	112	86	508	126	51
7	13	30	275	26	31	36	723	88	77	545	78	45
8	11	31	107	21	25	33	386	155	65	193	55	35
9	11	27	81	20	24	31	267	214	58	117	44	31
10	10	29	69	19	25	29	206	145	52	86	38	28
11	8.9	44	61	18	66	28	169	115	47	84	123	31
12	8.7	48	121	18	118	27	145	635	43	144	421	30
13	6.7	38	1290	17	237	26	129	322	41	68	519	27
14	8.7	33	1780	17	920	25	133	665	43	52	294	28
15	7.1	34	569	17	2230	30	312	328	39	43	332	28
16	8.1	57	293	16	812	104	397	248	35	37	186	26
17	7.1	40	189	16	415	170	327	182	36	32	190	23
18	8.2	30	136	16	327	97	302	144	152	30	125	22
19	8.0	26	106	16	260	98	382	138	401	28	223	21
20	8.8	26	79	15	305	164	444	133	98	26	206	20
21	9.3	92	60	15	208	477	298	181	66	25	134	19
22	9.5	37	71	14	159	397	210	123	54	24	103	19
23	12	22	69	14	137	223	171	228	46	22	154	19
24	13	19	53	15	124	155	196	234	53	22	110	19
25	14	106	44	17	108	141	729	142	106	20	83	18
26	14	71	40	25	88	125	316	124	62	19	70	17
27	14	73	38	26	75	101	191	132	51	67	63	19
28	15	109	36	26	76	100	139	764	49	50	59	19
29	15	242	33	25	76	99	119	1420	48	32	56	18
30	17	114	30	23	---	113	98	614	142	27	51	17
31	19	---	28	21	---	111	---	346	---	24	50	---
TOTAL	322.7	1528	6040	628	7044	3262	11587	8539	2727	3418	4383	978
MEAN	10.4	50.9	195	20.3	243	105	386	275	90.9	110	141	32.6
MAX	19	242	1780	27	2230	477	1790	1420	401	625	519	123
MIN	6.0	19	28	14	20	25	98	60	35	19	23	17
CFSM	.13	.66	2.52	.26	3.14	1.35	4.98	3.55	1.17	1.42	1.82	.42
IN.	0.15	0.73	2.90	0.30	3.38	1.57	5.56	4.10	1.31	1.64	2.10	0.47
CAL YR 1983	TOTAL	29716.9	MEAN	81.4	MAX	1780	MIN	5.3	CFSM	1.05	IN.	14.26
WTR YR 1984	TOTAL	50456.7	MEAN	138	MAX	2230	MIN	6.0	CFSM	1.78	IN.	24.22

## SUSQUEHANNA RIVER BASIN

01531000 CHEMUNG RIVER AT CHEMUNG, NY

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

DRAINAGE AREA.--2,506 mi<sup>2</sup>.

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

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

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

REMARKS.--Records good except those for winter periods, which are fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi<sup>2</sup> of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--78 years (water years 1906-13, 1915-84), 2,551 ft<sup>3</sup>/s, 13.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft<sup>3</sup>/s June 23, 1972, gage height, 31.62 ft, from flood-mark, from rating curve extended above 65,000 ft<sup>3</sup>/s on basis of slope-area and velocity-area studies at gage height 19.57 ft and slope-area and contracted opening measurements at gage heights 23.97 and 31.62 ft; minimum, 49 ft<sup>3</sup>/s Aug. 14, 1911, gage height, 1.47 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1100	44,800	15.82	Apr. 6	0700	54,100	17.25
Feb. 15	0900	*61,200	*18.20				

Minimum discharge, 177 ft<sup>3</sup>/s Oct. 3, gage height, 3.18 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	190	210	3390	1540	640	2540	4370	4410	7440	2600	697	883
2	189	222	2650	1360	720	2450	5260	3830	5690	2110	652	775
3	185	222	2130	1260	860	2230	7730	3390	4760	1880	932	924
4	184	223	1770	1160	1200	1890	14500	4500	4050	1400	1530	1760
5	203	243	1740	1000	1610	2000	36600	6830	3310	4240	2080	1590
6	347	269	1940	960	1090	1900	49000	5410	2790	12700	1630	1120
7	357	268	4070	900	1020	1500	27800	4460	2400	11200	1110	906
8	345	295	4270	840	900	1300	22300	4600	2100	5610	925	798
9	277	290	3160	800	751	1200	18200	5910	1850	3790	925	728
10	219	291	2720	760	669	1100	15200	5810	1640	2970	771	650
11	195	359	2370	720	795	1000	11200	4480	1430	2380	886	633
12	195	823	2150	680	2370	960	10200	10600	1260	2720	2150	676
13	215	1490	14800	660	4370	900	5650	11600	1100	2170	6530	802
14	262	1140	40100	640	18400	980	6020	17100	1160	1590	11000	1000
15	271	838	22800	580	50000	1100	6650	13400	1320	1280	15200	1560
16	278	856	17200	560	17300	1530	8790	8380	1200	1060	7470	1130
17	276	2150	10600	540	17100	3940	9690	6550	1100	980	5840	954
18	249	1730	7970	520	17000	4240	7670	5550	2430	902	4190	818
19	244	1310	6840	490	15000	3770	8490	5130	12000	878	3240	718
20	223	1090	3450	470	15500	3720	12800	7210	7020	821	4570	699
21	205	1480	2340	440	13900	10800	10800	8870	5000	754	2950	716
22	196	2340	2100	430	11600	19000	7250	7240	2830	693	2250	677
23	208	2100	2000	420	7620	11900	5810	5910	1750	650	2230	642
24	223	1800	1800	480	4500	6540	6230	9700	1530	582	2250	592
25	228	1940	1700	600	4440	5620	18600	6480	2130	531	1730	514
26	248	2210	2270	780	3970	5290	16900	4990	2010	505	1360	494
27	243	2080	2730	1100	3500	4600	8820	4550	1540	939	1170	474
28	233	2100	2640	900	3250	4130	7020	9390	1390	3350	1060	501
29	231	3800	2310	800	2920	4310	6110	28500	1510	1620	1050	504
30	210	4620	2060	700	---	4120	5370	20700	3480	1050	1010	459
31	214	---	1790	660	---	4380	---	10700	---	871	972	---
TOTAL	7343	38789	179860	23750	222995	120940	381030	256180	89220	74826	90360	24697
MEAN	237	1293	5802	766	7689	3901	12700	8264	2974	2414	2915	823
MAX	357	4620	40100	1540	50000	19000	49000	28500	12000	12700	15200	1760
MIN	184	210	1700	420	640	900	4370	3390	1100	505	652	459
CFSM	.09	.52	2.32	.31	3.07	1.56	5.07	3.30	1.19	.96	1.16	.33
IN.	0.11	0.58	2.67	0.35	3.31	1.80	5.66	3.80	1.32	1.11	1.34	0.37
CAL YR 1983	TOTAL	902605	MEAN	2473	MAX	40100	MIN	172	CFSM	.99	IN.	13.40
WTR YR 1984	TOTAL	1509990	MEAN	4126	MAX	50000	MIN	184	CFSM	1.65	IN.	22.41

## LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

- 01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).
- 01523000 ALMOND LAKE NEAR ALMOND, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

## DIVERSION OF WATER AFFECTING THE SUSQUEHANNA RIVER BASIN

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



## OHIO RIVER MAIN STEM

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

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

DRAINAGE AREA.--1,608 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi downstream at different datum. Oct. 1, 1964 to Sept. 30, 1967, at present site at datum 0.04 ft lower.

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

AVERAGE DISCHARGE.--81 years, 2,790 ft<sup>3</sup>/s, 23.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft<sup>3</sup>/s June 23, 1972, gage height, 24.01 ft from flood-marks; minimum daily, 79 ft<sup>3</sup>/s Sept. 10, 11, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 15	0200	*29,600	*13.73	June 19	0100	19,100	10.62
Apr. 5	2300	21,000	11.23				

Minimum discharge, 209 ft<sup>3</sup>/s Oct. 4,5, gage height, 2.83 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	231	363	3630	3300	1200	2400	3600	3400	8730	2750	520	650
2	221	379	3060	3100	1200	2200	4420	2890	6200	2440	493	599
3	212	569	2670	3000	1300	1900	5390	2550	4570	2120	552	738
4	210	820	2490	2900	1400	1700	7530	4060	3950	1820	856	1370
5	274	837	2820	2700	1500	1600	17400	5400	3030	2820	1330	1170
6	557	891	3460	2600	1600	1500	20500	4500	2660	6480	897	839
7	556	1030	5880	2500	1700	1400	18100	3910	2580	5930	861	699
8	453	1050	5790	2400	2000	1300	14100	3760	2120	4670	894	626
9	351	905	4750	2300	2200	1300	9850	4990	1770	3550	785	575
10	300	792	4010	2200	2500	1300	6860	4850	1560	2850	608	550
11	277	2250	3450	2100	3000	1200	5250	4380	1360	2760	1120	569
12	263	5020	4170	2000	3500	1200	4540	8730	1190	2740	3180	712
13	272	3470	8460	1900	4500	1200	4100	10600	1070	2180	3550	665
14	861	2340	9900	1800	8000	1200	4120	12300	1220	1690	10200	1810
15	951	1880	11000	1700	27200	1200	4540	10900	1380	1400	9960	1790
16	699	2980	10100	1700	24500	1300	5180	8600	1050	1220	7990	1480
17	511	3360	8100	1600	21800	1500	5940	6500	1490	1070	4830	1130
18	432	2720	5960	1600	17500	2000	5390	5080	12100	983	3190	883
19	405	2510	4550	1500	13100	2900	5350	4590	16400	915	2370	743
20	377	3120	2900	1400	11500	3500	5420	4700	11300	834	1930	665
21	456	4840	2400	1400	9680	9650	4740	6210	7370	749	1610	598
22	610	4620	2200	1300	7850	11500	4090	5430	4560	684	1300	540
23	545	3610	2600	1300	6260	9190	4020	7060	3200	633	1280	515
24	493	3030	5600	1300	5180	6860	5820	10100	5050	591	1540	493
25	501	2690	5000	1200	4450	5770	11200	6780	6000	549	1180	473
26	537	2390	4700	1200	3840	5100	9450	5290	5740	508	970	512
27	574	2110	4400	1200	3250	4440	7200	4480	4690	768	854	522
28	543	2550	4200	1200	2900	4040	5780	5990	4160	1420	779	485
29	479	5050	3800	1100	2710	4150	4820	13700	3410	983	728	447
30	428	4600	3600	1100	---	4000	4000	12900	2920	674	760	433
31	383	---	3500	1100	---	3590	---	11000	---	578	710	---
TOTAL	13962	72776	149150	57700	197320	102090	218700	205630	132830	59359	67827	23281
MEAN	450	2426	4811	1861	6804	3293	7290	6633	4428	1915	2188	776
MAX	951	5050	11000	3300	27200	11500	20500	13700	16400	6480	10200	1810
MIN	210	363	2200	1100	1200	1200	3600	2550	1050	508	493	433
CFSM	.28	1.51	2.99	1.16	4.23	2.05	4.53	4.13	2.75	1.19	1.36	.48
IN.	0.32	1.68	3.45	1.33	4.56	2.36	5.06	4.76	3.07	1.37	1.57	0.54
CAL YR 1983	TOTAL	836468	MEAN	2292	MAX	13500	MIN	210	CFSM	1.43	IN.	19.35
WTR YR 1984	TOTAL	1300625	MEAN	3554	MAX	27200	MIN	210	CFSM	2.21	IN.	30.09

## ALLEGHENY RIVER BASIN

53

03013000 CONEWANGO CREEK AT WATERBORO, N.Y.

LOCATION.--Lat 42°10'15", long 79°04'10", Chautauqua County, Hydrologic Unit 05010002, on right bank 300 ft downstream from bridge on State Highway 394 at Waterboro, 0.2 mi downstream from Davis Brook, 0.4 mi upstream from Harris Brook, and 1.9 mi northeast of Kennedy.

DRAINAGE AREA.--290 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 1,255.30 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Nov. 7, 1939, nonrecording gages at site 1,300 ft upstream at various datums. Nov. 7, 1939 to Nov. 4, 1940, nonrecording gage at site 1,100 ft upstream at datum 0.79 ft higher, and Nov. 5, 1940 to May 28, 1948, nonrecording gage at site 700 ft downstream at present datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--46 years, 534 ft<sup>3</sup>/s, 25.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft<sup>3</sup>/s Apr. 7, 1947; maximum gage height, 12.13 ft Feb. 22, 1981; minimum discharge observed, 22 ft<sup>3</sup>/s Aug. 18, 1940, Sept. 27, 29, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 16	1500	*5,000	*11.00	Apr. 7	2300	2,640	8.64
Mar. 23	2400	2,550	8.52	June 20	0400	4,090	10.28

Minimum discharge, 77 ft<sup>3</sup>/s Aug. 1,2; minimum gage height, 2.84 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	100	131	1040	310	190	300	875	415	1280	263	78	98
2	91	133	774	300	200	290	1010	331	908	235	78	94
3	86	372	608	290	200	280	1110	289	629	214	103	164
4	81	606	674	290	210	260	1260	878	523	200	134	260
5	87	570	1120	280	220	250	1850	1320	419	221	157	182
6	155	671	1300	280	230	250	2330	1170	365	352	134	137
7	186	955	1570	280	250	240	2590	792	348	519	149	117
8	153	952	1610	270	260	230	2610	675	298	364	137	106
9	125	702	1460	270	280	220	2340	1050	254	256	109	99
10	112	503	1190	270	310	220	1810	987	235	207	100	98
11	101	864	944	260	350	210	1420	829	212	213	135	105
12	106	1410	1290	260	450	220	1110	1390	195	273	488	132
13	149	1350	1860	250	1000	240	804	1570	181	225	716	137
14	388	1100	2070	250	2700	260	659	1750	194	185	1110	648
15	321	776	2190	240	3900	290	645	1740	201	155	1090	627
16	222	1010	2100	240	4940	310	628	1480	181	141	758	521
17	176	1210	1740	230	4610	500	703	1120	417	127	423	351
18	151	1130	1310	230	4060	700	704	763	2670	133	256	241
19	136	1080	973	220	3580	1000	664	626	3750	128	187	188
20	124	1350	599	220	3040	1400	650	705	4070	117	159	159
21	118	1620	420	220	2510	1970	573	1130	3900	106	136	141
22	112	1620	400	210	1890	2320	483	972	3460	100	126	128
23	125	1380	370	210	1520	2510	458	1450	2610	96	128	122
24	169	1080	340	210	1290	2470	507	1970	2090	90	122	118
25	179	764	330	200	1080	2120	1050	2010	1620	86	112	115
26	200	545	350	200	829	1740	1410	1660	1180	82	105	147
27	239	462	350	200	600	1440	1270	1220	861	106	100	174
28	218	647	350	190	430	1210	891	1170	573	114	97	147
29	187	1310	340	190	310	1040	604	1640	370	98	97	130
30	166	1240	330	190	---	910	476	1760	300	88	100	119
31	144	---	320	190	---	835	---	1670	---	82	102	---
TOTAL	4907	27543	30322	7450	41439	26235	33494	36532	34294	5576	7726	5805
MEAN	158	918	978	240	1429	846	1116	1178	1143	180	249	194
MAX	388	1620	2190	310	4940	2510	2610	2010	4070	519	1110	648
MIN	81	131	320	190	190	210	458	289	181	82	78	94
CFSM	.54	3.17	3.37	.83	4.93	2.92	3.85	4.06	3.94	.62	.86	.67
IN.	0.63	3.53	3.89	0.96	5.32	3.37	4.30	4.69	4.40	0.72	0.99	0.74

CAL YR 1983	TOTAL	166677	MEAN	457	MAX	2190	MIN	50	CFSM	1.58	IN.	21.38
WTR YR 1984	TOTAL	261323	MEAN	714	MAX	4940	MIN	78	CFSM	2.46	IN.	33.52

## ALLEGHENY RIVER BASIN

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

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

DRAINAGE AREA.--189 mi<sup>2</sup>.

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

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

REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi<sup>2</sup>.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft Mar. 5, 1976; minimum, 1,306.35 ft Mar. 11, 12, 13, 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,309.74 ft June 19, minimum, 1,306.68 ft Feb. 2.

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	1308.20	1307.85	1308.07	1307.73	1306.71	1307.96	1308.14	1308.14	1308.37	1308.33	1308.00	1308.18
2	1308.19	1307.80	1308.01	1307.65	1306.69	1307.90	1308.15	1308.14	1308.29	1308.29	1308.03	1308.15
3	1308.18	1307.86	1307.95	1307.59	1306.70	1307.84	1308.18	1308.16	1308.27	1308.28	1308.07	1308.34
4	1308.17	1307.88	1307.94	1307.54	1306.72	1307.78	1308.29	1308.31	1308.25	1308.28	1308.10	1308.44
5	1308.21	1307.87	1308.00	1307.49	1306.73	1307.74	1308.66	1308.35	1308.24	1308.32	1308.14	1308.48
6	1308.25	1307.90	1308.06	1307.44	1306.73	1307.72	1308.83	1308.31	1308.27	1308.36	1308.14	1308.27
7	1308.25	1307.93	1308.20	1307.41	1306.73	1307.71	1308.82	1308.25	1308.28	1308.42	1308.30	1308.25
8	1308.24	1307.90	1308.22	1307.36	1306.70	1307.67	1308.78	1308.28	1308.29	1308.40	1308.31	1308.24
9	1308.24	1307.85	1308.20	1307.32	1306.69	1307.63	1308.71	1308.38	1308.29	1308.38	1308.31	1308.22
10	1308.22	1307.77	1308.18	1307.31	1306.69	1307.58	1308.62	1308.36	1308.28	1308.35	1308.33	1308.23
11	1308.20	1307.78	1308.12	1307.27	1306.76	1307.55	1308.55	1308.33	1308.27	1308.35	1308.40	1308.27
12	1308.24	1307.79	1308.31	1307.22	1306.93	1307.50	1308.46	1308.40	1308.26	1308.36	1308.50	1308.30
13	1308.29	1307.98	1308.58	1307.17	1307.63	1307.48	1308.38	1308.38	1308.26	1308.33	1308.60	1308.37
14	1308.37	1307.94	1308.62	1307.13	1308.13	1307.44	1308.32	1308.39	1308.28	1308.30	1308.75	1308.56
15	1308.36	1307.89	1308.64	1307.09	1308.17	1307.39	1308.27	1308.33	1308.26	1308.26	1308.70	1308.55
16	1308.33	1307.94	1308.63	1307.07	1308.18	1307.43	1308.29	1308.24	1308.24	1308.23	1308.57	1308.40
17	1308.30	1308.07	1308.57	1307.04	1308.25	1307.57	1308.25	1308.16	1308.33	1308.21	1308.45	1308.41
18	1308.28	1308.06	1308.51	1307.02	1308.28	1307.59	1308.20	1308.15	1309.25	1308.21	1308.30	1308.32
19	1308.25	1308.07	1308.44	1306.97	1308.30	1307.60	1308.15	1308.18	1309.71	1308.19	1308.29	1308.24
20	1308.22	1308.19	1308.36	1306.93	1308.28	1307.67	1308.12	1308.25	1309.62	1308.17	1308.27	1308.22
21	1308.20	1308.35	1308.28	1306.89	1308.22	1308.05	1308.09	1308.35	1309.46	1308.16	1308.24	1308.21
22	1308.15	1308.35	1308.23	1306.85	1308.19	1308.27	1308.05	1308.31	1309.30	1308.15	1308.22	1308.19
23	1308.17	1308.29	1308.14	1306.82	1308.15	1308.30	1308.04	1308.43	1309.16	1308.13	1308.22	1308.17
24	1308.18	1308.22	1308.11	1306.83	1308.12	1308.25	1308.06	1308.60	1309.11	1308.11	1308.21	1308.17
25	1308.17	1308.14	1308.09	1306.83	1308.08	1308.22	1308.32	1308.56	1309.00	1308.08	1308.18	1308.15
26	1308.19	1308.06	1308.04	1306.81	1308.04	1308.21	1308.39	1308.49	1308.86	1308.07	1308.17	1308.17
27	1308.16	1308.00	1307.95	1306.79	1307.98	1308.18	1308.33	1308.42	1308.73	1308.09	1308.15	1308.15
28	1308.10	1308.02	1307.92	1306.77	1308.00	1308.16	1308.26	1308.41	1308.64	1308.07	1308.13	1308.12
29	1308.02	1308.10	1307.89	1306.76	1308.00	1308.20	1308.18	1308.57	1308.54	1308.05	1308.20	1308.10
30	1307.95	1308.09	1307.86	1306.75	---	1308.19	1308.16	1308.54	1308.44	1308.03	1308.17	1308.07
31	1307.90	---	1307.80	1306.74	---	1308.16	---	1308.46	---	1308.01	1308.20	---
MEAN	1308.20	1308.00	1308.19	1307.12	1307.54	1307.84	1308.33	1308.34	1308.62	1308.22	1308.28	1308.27
MAX	1308.37	1308.35	1308.64	1307.73	1308.30	1308.30	1308.83	1308.60	1309.71	1308.42	1308.75	1308.56
MIN	1307.90	1307.77	1307.80	1306.74	1306.69	1307.39	1308.04	1308.14	1308.24	1308.01	1308.00	1308.07
CAL YR 1983	MEAN	1307.98	MAX	1308.79	MIN	1306.66						
WTR YR 1984	MEAN	1308.08	MAX	1309.71	MIN	1306.69						

ALLEGHENY RIVER BASIN

55

03014500 CHADAKOIN RIVER AT FALCONER, NY

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

DRAINAGE AREA.--194 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,256.41 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chautauqua Lake. Diurnal fluctuation caused by mills upstream from station. Monthly figures for 1951-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--49 years (water years 1936-84), 353 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft<sup>3</sup>/s Sept. 14, 1979, gage height, 4.93 ft; minimum, 2.7 ft<sup>3</sup>/s Nov. 20, 21, 1960, gage height, 0.15 ft; minimum daily, 3.0 ft<sup>3</sup>/s Nov. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft<sup>3</sup>/s June 19 at 1500 hours, gage height, 3.66 ft; minimum, 7.6 ft<sup>3</sup>/s July 23, gage height, 0.25 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	55	456	685	615	333	730	794	169	884	733	70	56
2	55	607	669	605	321	707	792	130	560	65	145	58
3	55	630	659	591	324	685	788	104	238	62	73	406
4	56	621	664	575	324	648	831	501	234	62	69	815
5	67	615	669	551	325	635	1040	748	97	75	67	714
6	56	614	669	542	325	637	1070	736	58	106	68	341
7	55	615	765	534	231	627	1080	724	77	176	211	59
8	55	611	669	509	338	612	1040	800	76	172	231	57
9	55	603	690	485	336	604	998	900	75	232	149	56
10	55	605	695	484	220	583	969	894	73	276	69	61
11	53	640	659	477	351	582	943	876	74	287	145	59
12	59	645	790	467	359	552	902	941	74	272	384	70
13	125	627	819	452	440	537	880	897	69	272	652	146
14	244	619	862	452	720	536	842	918	73	270	969	503
15	243	612	870	426	800	526	832	891	70	267	936	715
16	241	626	865	388	799	562	845	868	69	135	880	709
17	240	661	853	383	804	569	830	660	313	64	835	697
18	238	642	834	381	831	569	816	174	1240	79	490	648
19	190	648	824	380	842	584	636	174	1430	73	80	529
20	160	658	806	374	855	604	465	319	1380	71	80	124
21	159	789	788	368	844	724	464	725	1310	71	79	105
22	159	829	775	361	817	835	386	717	1230	69	81	169
23	166	804	761	357	798	855	267	824	1160	68	77	169
24	160	798	742	365	774	821	276	780	1170	71	76	115
25	161	776	716	366	773	810	510	765	1120	69	77	162
26	247	674	696	365	753	811	866	766	1050	69	77	169
27	442	664	672	366	727	794	855	753	1000	84	77	162
28	437	732	663	361	739	784	830	780	959	69	76	162
29	439	690	658	360	751	818	585	893	911	70	90	162
30	430	690	644	360	---	817	170	949	885	73	60	162
31	429	---	628	360	---	805	---	928	---	70	58	---
TOTAL	5586	19801	22759	13660	16854	20963	22602	21304	17959	4532	7431	8360
MEAN	180	660	734	441	581	676	753	687	599	146	240	279
MAX	442	829	870	615	855	855	1080	949	1430	733	969	815
MIN	53	456	628	357	220	526	170	104	58	62	58	56
CAL YR 1983	TOTAL	125906	MEAN	345	MAX	977	MIN	36				
WTR YR 1984	TOTAL	181811	MEAN	497	MAX	1430	MIN	53				

ALLEGHENY RIVER BASIN  
LAKES IN ALLEGHENY RIVER BASIN

03013946 Chautauqua Lake at Bemus Point, NY (see station for daily mean elevation).



04213500 CATTARAUGUS CREEK AT GOWANDA, NY  
(National stream-quality accounting network station)

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

DRAINAGE AREA.--436 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1969, at datum 0.11 ft lower.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low and medium flow caused by powerplant 20 mi upstream from station.

AVERAGE DISCHARGE.--44 years (water years 1941-84), 740 ft<sup>3</sup>/s, 23.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft<sup>3</sup>/s Mar. 7, 1956, gage height, 14.14 ft; minimum, about 6 ft<sup>3</sup>/s Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft Oct. 26, 1951; minimum daily discharge, 52 ft<sup>3</sup>/s Sept. 13, 1945, Aug. 1, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 18	2000	13,500	9.11	May 23	1500	9,530	7.76
Apr. 5	1000	8,080	7.19	June 18	2330	*22,500	*11.57

Minimum discharge, 84 ft<sup>3</sup>/s Oct. 4, 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	117	152	793	800	580	580	1140	577	1110	429	187	181
2	118	156	659	740	620	560	1410	524	898	400	203	182
3	114	452	607	700	680	540	1570	496	837	374	214	339
4	115	553	827	660	740	520	2140	2020	739	363	268	583
5	168	448	1400	600	820	580	5800	2020	622	472	292	311
6	364	548	1890	580	900	740	3320	1150	555	762	223	244
7	231	785	2470	540	1000	640	2070	834	517	627	279	212
8	179	632	1220	520	900	560	1570	989	465	443	265	194
9	160	425	948	500	800	540	1420	1490	428	385	218	179
10	145	363	818	480	740	500	1100	1090	412	356	196	177
11	136	1480	736	470	700	470	950	986	382	431	341	200
12	140	1790	2580	450	640	460	861	3850	349	467	836	323
13	150	787	3170	440	620	460	816	2670	334	352	839	333
14	438	558	2260	420	580	500	865	4350	692	308	1570	2900
15	286	541	2350	420	800	530	855	1910	462	285	1380	1100
16	208	2080	1460	410	1450	2540	1090	1390	361	288	558	894
17	168	1380	937	400	5230	2180	1440	1050	762	256	391	540
18	160	887	730	400	12000	1380	1010	882	12100	272	315	405
19	151	1200	596	400	6000	1180	964	1840	8870	258	279	331
20	142	1700	445	450	2530	2140	912	1640	2070	239	251	283
21	129	2550	402	500	1910	5660	768	1920	1200	227	224	254
22	129	1240	641	580	2230	3210	657	1120	886	224	212	233
23	169	786	633	660	1340	1710	659	4900	721	216	275	222
24	283	642	548	760	933	1260	1290	3290	1060	206	240	226
25	212	545	410	900	843	1300	3840	1540	833	200	206	223
26	225	483	518	1100	730	1210	1770	1150	632	194	193	438
27	254	436	857	900	651	993	1100	976	552	281	186	380
28	224	1090	1000	800	606	962	868	2250	520	284	180	271
29	191	2770	1110	760	633	1020	750	5270	481	225	189	236
30	166	1130	1040	700	---	954	662	2150	470	203	199	220
31	161	---	900	620	---	935	---	1450	---	186	202	---
TOTAL	5833	28589	34955	18660	48206	36814	43667	57774	40320	10213	11411	12614
MEAN	188	953	1128	602	1662	1188	1456	1864	1344	329	368	420
MAX	438	2770	3170	1100	12000	5660	5800	5270	12100	762	1570	2900
MIN	114	152	402	400	580	460	657	496	334	186	180	177
CFSM	.43	2.19	2.59	1.38	3.81	2.72	3.34	4.28	3.08	.75	.84	.96
IN.	0.50	2.44	2.98	1.59	4.11	3.14	3.73	4.93	3.44	0.87	0.97	1.08
CAL YR 1983	TOTAL	207229	MEAN	568	MAX	3690	MTN	95	CFSM	1.30	IN.	17.68
WTR YR 1984	TOTAL	349056	MEAN	954	MAX	12100	MTN	114	CFSM	2.19	IN.	29.78

## STREAMS TRIBUTARY TO LAKE ERIE

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1963-64, 1972 to current year.

CHEMICAL DATA: 1959 (e), 1963 (b), 1972 (a), 1975 (b), 1976-78 (c), 1979-80 (d), 1981-82 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978-84 (b).

ORGANIC DATA: OC--1975 (b), 1976-77 (c), 1978-80 (d), 1981 (c).

NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978-80 (d), 1981-82 (c), 1983-84 (b).

## BIOLOGICAL DATA:

Bacterial--1978-80 (d), 1981-82 (c), 1983-84 (b).

Phytoplankton--1978 (b), 1979-80 (c), 1981 (b).

SEDIMENT DATA: 1964 (b), 1978-82 (c), 1983-84 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1958 to September 1959, unpublished; January 1978 to September 1981.

pH: October 1958 to September 1959, unpublished.

WATER TEMPERATURES: October 1958 to September 1959, January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 952 micromhos Oct. 7, 1958; minimum daily, 150 micromhos Feb. 19, 1981.

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 19, 1978; 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 (MG/L)	COLI- FORM, FECAL, 0.7 NM-MF (COLS./ 100 ML)
NOV 02...	0930	156	400	8.4	9.0	1.4	750	11.3	99	56
FEB 23...	1330	1040	269	7.9	4.5	40	740	12.6	100	270
JUN 07...	1530	514	330	8.5	24.5	2.0	745	7.9	97	64
AUG 16...	1430	520	347	8.4	24.0	65	740	8.4	103	820

DATE	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- LINIT LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)
NOV 02...	230	180	41	54	11	17	1.7	140	38	24
FEB 23...	K1300	120	31	37	6.3	8.5	1.3	88	24	15
JUN 07...	K4	150	29	47	8.0	10	1.4	122	31	16
AUG 16...	270	160	30	50	8.3	9.2	2.0	129	33	16

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

04213500 - CATTARAUGUS CREEK AT GOWANDA, 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)
NOV 02...	.10	.8	237	230	.450	.390	.70	.010	<.010	<.010
FEB 23...	<.10	4.5	185	150	1.30	.180	.30	.030	.010	<.010
JUN 07...	.10	3.0	239	190	1.20	.060	.90	.020	.030	<.010
AUG 16...	.10	5.7	229	200	1.00	.110	.70	.080	.020	<.010

DATE	ALUM- INIUM, 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)
NOV 02...	20	1	84	<.5	1	<1	<3	3	13	4
FEB 23...	30	1	49	<.5	1	<1	<3	1	24	1
JUN 07...	30	1	67	<.5	<1	<1	<3	2	7	1
AUG 16...	10	1	74	<.5	<1	<1	<3	3	22	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)
NOV 02...	<4	7	.1	<10	<1	<1	<1	100	<6	13
FEB 23...	9	10	<.1	<10	1	<1	<1	62	<6	8
JUN 07...	4	3	.1	<10	2	<1	<1	84	<6	8
AUG 16...	<4	6	.1	<10	4	<1	<1	92	<6	<3

04213500 - CATTARAUGUS CREEK AT GOWANDA, NY--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV								
02...	0935	25	2.20	1.0	401	8.4	9.0	11.4
02...	0940	50	1.60	1.0	400	8.4	9.0	11.5
02...	0945	75	1.70	1.0	400	8.4	9.0	11.3
02...	0950	100	1.70	1.0	401	8.4	9.0	11.3
02...	0955	125	1.50	1.0	401	8.4	9.0	11.4
02...	1000	150	1.60	1.0	404	8.4	9.0	11.2
FEB								
23...	1335	20	4.20	3.0	271	7.9	4.5	12.3
23...	1340	40	3.40	3.0	270	7.9	4.5	12.5
23...	1345	60	2.30	2.0	269	7.9	4.5	12.6
23...	1350	80	2.30	2.0	268	8.0	4.5	12.7
23...	1355	100	2.20	2.0	266	8.0	4.5	13.1
JUN								
07...	1535	25	2.10	1.0	332	8.5	24.5	7.9
07...	1540	50	2.60	1.0	332	8.5	24.5	7.8
07...	1545	75	2.40	1.0	331	8.5	24.5	7.9
07...	1550	100	2.50	1.0	330	8.5	24.5	7.8
07...	1555	125	2.70	1.0	329	8.5	24.5	7.9
07...	1600	150	2.60	1.0	329	8.5	24.5	8.2
AUG								
16...	1435	20	1.50	1.0	348	8.3	24.0	8.4
16...	1440	40	1.60	1.0	348	8.3	24.0	8.4
16...	1445	60	1.40	1.0	347	8.3	24.0	8.4
16...	1450	80	1.50	1.0	347	8.3	24.0	8.4
16...	1455	100	1.40	1.0	346	8.3	24.0	8.4
16...	1500	120	1.30	1.0	345	8.4	24.0	8.6

## 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
NOV					
02...	0930	156	4	1.7	--
FEB					
23...	1330	1040	94	264	95
JUN					
07...	1530	514	6	8.3	--
AUG					
16...	1430	520	141	198	87

## 04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'17", long 78°45'19", Erie County, Hydrologic Unit 04120103, on left bank 300 ft downstream from bridge on Union Road in Gardenville, 2 mi upstream from Cayuga Creek, and 10.1 mi upstream from mouth.

DRAINAGE AREA.--142 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft downstream at same datum.

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

AVERAGE DISCHARGE.--46 years, 199 ft<sup>3</sup>/s, 19.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft<sup>3</sup>/s Mar. 1, 1955, Mar. 7, 1956, from rating curve extended above 3,200 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 7.07 ft; maximum gage height, 14.34 ft Mar. 21, 1978 (ice jam); minimum discharge, 0.2 ft<sup>3</sup>/s Sept. 1, 1964; minimum gage height, 0.60 ft July 20, 21, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,750 ft<sup>3</sup>/s and maximum (\*);

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 13	2300	a6,300	b7.41	May 29	0800	4,400	6.06
Mar. 16	1430	ice jam	b6.29	June 18	1500	*7,560	*7.71
May 23	1730	3,820	5.61	Sept. 14	0630	4,030	6.33

a About.

b Backwater from ice.

Minimum discharge, 10 ft<sup>3</sup>/s Aug. 2, gage height, 0.61 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	18	37	240	300	170	100	421	125	211	51	12	21
2	18	37	221	280	430	110	530	109	162	46	11	20
3	16	93	217	270	600	110	498	105	153	40	13	460
4	16	189	400	260	900	130	429	1440	146	42	12	247
5	32	175	671	250	1000	180	1770	808	111	69	40	86
6	83	245	1570	240	800	170	712	321	106	154	21	54
7	88	372	1000	230	700	160	493	211	100	108	207	40
8	49	244	350	220	620	150	352	449	84	63	76	32
9	37	120	250	220	560	140	328	489	75	44	56	27
10	31	88	232	200	500	140	227	274	69	37	31	26
11	27	625	210	200	700	160	190	202	62	61	24	91
12	31	753	1830	190	1500	180	168	662	56	69	75	251
13	47	255	974	180	2000	210	151	444	53	44	105	199
14	293	175	658	180	3000	240	158	1340	123	33	364	2350
15	123	178	665	170	1310	350	174	416	97	29	622	532
16	59	963	376	170	580	1200	258	305	64	26	104	381
17	43	506	240	160	474	914	427	219	68	25	50	164
18	35	292	190	160	576	437	240	175	3710	27	35	110
19	31	344	160	150	431	321	197	233	1210	27	29	83
20	28	421	140	150	460	722	208	245	271	23	26	71
21	26	454	130	140	330	2360	162	368	138	20	23	63
22	25	254	170	140	251	986	129	205	95	18	23	55
23	43	161	500	140	326	460	128	1550	272	17	136	51
24	127	135	450	130	251	313	208	800	1160	15	63	51
25	86	121	410	130	218	376	1370	288	390	13	33	50
26	70	100	390	130	180	333	434	192	133	13	24	144
27	97	86	370	120	120	244	249	156	87	15	22	130
28	99	366	350	120	90	232	191	409	72	20	19	73
29	61	800	340	120	90	246	164	2030	61	18	19	58
30	46	290	320	120	---	264	142	485	57	14	44	50
31	42	---	310	110	---	293	---	284	---	13	25	---
TOTAL	1827	8879	14334	5580	19167	12231	11108	15339	9396	1194	2344	5970
MEAN	58.9	296	462	180	661	395	370	495	313	38.5	75.6	199
MAX	293	963	1830	300	3000	2360	1770	2030	3710	154	622	2350
MIN	16	37	130	110	90	100	128	105	53	13	11	20
CFSM	.41	2.08	3.25	1.27	4.65	2.78	2.61	3.49	2.20	.27	.53	1.40
IN.	0.48	2.33	3.76	1.46	5.02	3.20	2.91	4.02	2.46	0.31	0.61	1.56
CAL YR 1983	TOTAL	55405.0	MEAN	152	MAX	1830	MTN	9.0	CFSM	1.07	IN.	14.51
WTR YR 1984	TOTAL	107369	MEAN	293	MAX	3710	MTN	11	CFSM	2.06	IN.	28.13



## STREAMS TRIBUTARY TO LAKE ERIE

04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'43", Erie County, Hydrologic Unit 04120103, on right bank 150 ft upstream from low dam in Como Lake Park, 700 ft downstream from bridge on Bowen Road, 800 ft downstream from Little Buffalo Creek, 2 mi southeast of Lancaster, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--96.4 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1938 to September 1968. October 1971 to April 1974 (peak discharges only). May 1974 to current year.

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

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow.

AVERAGE DISCHARGE.--40 years (water years 1939-68, 1975-84) 130 ft<sup>3</sup>/s, 18.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft<sup>3</sup>/s Sept. 14, 1979, gage height, 10.48 ft; maximum gage height, 12.58 ft Mar. 30, 1960 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stoplogs were installed in the dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 6	2215	2,800	6.78	Feb. 14	1700	2,940	6.87
Dec. 12	1745	2,810	6.79	Mar. 16	1415	ice jam	7.10
Feb. 13	1945	ice jam	*8.37	June 18	1400	*2,350	7.07

Minimum discharge, 2.9 ft<sup>3</sup>/s Oct. 20; minimum gage height, 2.66 ft. Oct. 2, 3, 4, 5, Sept. 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	3.6	7.0	163	120	76	54	337	59	148	46	8.2	7.7
2	3.6	6.7	173	120	90	62	411	50	106	40	8.9	7.8
3	5.1	24	177	110	110	74	414	47	107	34	10	11
4	3.8	63	241	100	150	90	357	984	102	32	11	11
5	9.6	66	421	96	250	130	1280	470	65	133	10	8.9
6	21	115	1210	90	190	210	494	199	54	265	8.9	7.7
7	13	168	1200	84	140	190	322	143	43	166	33	6.9
8	7.7	123	324	78	120	160	226	392	38	77	26	6.1
9	6.4	58	223	72	100	120	187	343	31	47	19	5.1
10	6.1	38	188	68	92	100	139	186	28	38	13	5.4
11	6.0	330	171	64	150	82	120	142	24	115	10	50
12	6.0	348	1560	62	450	78	104	519	20	87	14	109
13	8.2	144	945	60	1900	78	90	320	19	40	25	101
14	95	98	566	60	2100	76	90	858	45	29	40	1030
15	35	103	640	58	796	76	114	270	34	23	147	262
16	16	499	329	56	355	560	190	204	22	21	37	193
17	9.5	267	210	54	293	600	264	148	26	18	21	82
18	7.2	168	180	52	328	270	160	121	1290	31	19	44
19	7.3	207	160	52	266	190	163	121	520	28	12	28
20	4.5	252	150	52	252	300	134	120	171	19	10	22
21	4.3	259	130	50	199	1400	107	164	87	15	9.0	18
22	4.2	152	170	48	170	704	78	112	58	15	8.4	15
23	8.7	101	450	60	203	346	73	951	91	13	59	12
24	39	82	400	70	168	257	136	507	895	11	33	12
25	23	64	290	100	148	286	940	194	537	9.9	17	13
26	17	49	210	160	110	251	251	136	246	9.6	12	51
27	25	41	180	140	80	198	153	102	121	11	9.1	46
28	28	141	170	110	30	187	117	197	77	12	8.1	25
29	15	424	150	92	46	190	92	1230	60	10	11	19
30	10	176	140	80	---	197	74	302	55	9.2	9.6	20
31	8.2	---	130	70	---	248	---	194	---	8.2	9.4	---
TOTAL	457.0	4573.7	11651	2488	9362	7764	7617	9785	5120	1412.9	668.6	2229.6
MEAN	14.7	152	376	80.3	323	250	254	316	171	45.6	21.6	74.3
MAX	95	499	1560	160	2100	1400	1280	1230	1290	265	147	1030
MIN	3.6	6.7	130	48	30	54	73	47	19	8.2	8.1	5.1
CFSM	.15	1.58	3.90	.83	3.35	2.59	2.63	3.28	1.77	.47	.22	.77
IN.	0.18	1.76	4.50	0.96	3.61	3.00	2.94	3.78	1.98	0.55	0.26	0.86
CAL YR 1983	TOTAL	40382.8	MEAN	111	MAX	1560	MIN	1.4	CFSM	1.15	IN.	15.58
WTR YR 1984	TOTAL	63128.8	MEAN	172	MAX	2100	MIN	3.6	CFSM	1.78	IN.	24.36

## 04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'31", Erie County, Hydrologic Unit 04120103, on right bank 30 ft upstream from bridge on Ridge Road in Ebenezer, 4.0 mi upstream from mouth, and 5 mi southeast of Buffalo.

DRAINAGE AREA.--135 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft National Geodetic Vertical Datum of 1929. Prior to Apr. 4, 1955, at datum 2.00 ft higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi downstream at different datum.

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

AVERAGE DISCHARGE.--44 years (water years 1941-84), 230 ft<sup>3</sup>/s, 23.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft<sup>3</sup>/s Mar. 1, 1955, gage height, 15.82 ft present datum, from rating curve extended above 7,700 ft<sup>3</sup>/s; minimum, 2.6 ft<sup>3</sup>/s Nov. 7, 1953; minimum gage height, 1.87 ft June 28,

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1445	ice jam	7.82	May 29	0600	5,530	8.82
Feb. 13	0845	ice jam	9.49	June 18	1115	*6,410	*9.50
Feb. 13	2030	6,000	9.19	Sept. 14	0445	4,760	8.17
May 23	1530	4,720	8.14				

Minimum discharge, 16 ft<sup>3</sup>/s Oct. 3, 4, gage height, 1.98 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	31	236	370	210	98	423	109	233	58	19	28	
2	18	30	194	360	400	100	471	97	169	52	19	29	
3	18	184	182	350	600	110	445	93	161	48	19	681	
4	19	308	396	330	900	130	467	1730	140	60	19	284	
5	32	184	699	320	1000	160	1980	850	104	83	22	119	
6	141	220	1570	310	800	180	797	344	100	182	22	74	
7	111	290	1210	290	700	160	563	219	87	139	129	49	
8	51	250	407	280	600	150	408	597	76	80	45	38	
9	37	122	261	270	520	140	414	521	66	57	57	31	
10	31	92	205	260	480	130	274	351	62	50	31	30	
11	28	722	174	260	680	130	222	241	58	80	24	134	
12	31	692	1870	250	1300	120	197	807	53	72	74	351	
13	60	230	1140	240	1800	120	182	604	52	54	106	272	
14	392	150	568	240	2800	110	185	1280	195	41	168	2140	
15	110	166	687	230	1200	110	204	495	87	36	319	485	
16	58	980	350	220	646	1180	304	319	60	34	92	328	
17	43	560	270	220	579	850	445	214	76	38	48	137	
18	36	279	150	210	821	421	249	171	3100	39	36	88	
19	31	346	120	200	569	317	205	412	1230	36	31	67	
20	27	473	98	200	612	777	208	341	307	31	28	57	
21	25	555	130	200	386	2480	162	483	155	27	25	48	
22	23	245	190	190	278	959	133	224	106	26	27	41	
23	37	149	500	180	352	468	130	1990	326	25	111	38	
24	116	131	480	180	287	337	509	899	847	23	50	37	
25	76	109	470	180	244	354	1670	342	346	21	32	37	
26	78	90	450	180	180	363	472	215	137	21	26	267	
27	98	79	430	170	130	268	261	166	98	23	23	147	
28	73	461	430	170	120	271	186	608	80	27	22	76	
29	50	998	410	170	100	301	150	2520	71	25	25	58	
30	38	332	400	160	---	290	132	559	64	21	45	47	
31	33	---	380	160	---	327	---	342	---	19	33	---	
TOTAL	1941	9458	15057	7350	19294	11911	12448	18143	8646	1528	1727	6218	
MEAN	62.6	315	486	237	665	384	415	585	288	49.3	55.7	207	
MAX	392	998	1870	370	2800	2480	1980	2520	3100	182	319	2140	
MIN	18	30	98	160	100	98	130	93	52	19	19	28	
CFSM	.46	2.33	3.60	1.76	4.93	2.84	3.07	4.33	2.13	.37	.41	1.53	
IN.	.53	2.61	4.15	2.03	5.32	3.28	3.43	5.00	2.38	.42	.48	1.71	
CAL YR 1983	TOTAL	60535.6		MEAN	166	MAX	1870	MIN	9.8	CFSM	1.23	IN.	16.68
WTR YR 1984	TOTAL	113721		MEAN	311	MAX	3100	MIN	18	CFSM	2.30	IN.	31.34

## LAKE ERIE

04215900 LAKE ERIE AT BUFFALO, NY

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

DRAINAGE AREA.--263,700 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

REVISED RECORDS.--WDR NY-75-1: 1974.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Feb. 5, 1890, nonrecording gages.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 579.09 ft Nov. 3, 1955; minimum, 564.17 ft Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 576.96 ft Apr. 30; minimum elevation, 569.55 ft Mar. 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571.56	571.31	572.35	571.50	571.09	572.29	572.36	572.74	572.44	572.45	572.29	572.09
2	571.70	571.33	572.09	571.69	571.03	571.95	572.36	571.87	572.32	572.48	572.24	572.10
3	571.86	571.50	571.36	571.74	571.25	571.76	572.02	571.52	572.62	572.52	572.24	572.12
4	571.90	571.40	571.42	571.71	571.09	571.54	571.84	571.99	572.53	572.56	572.26	572.08
5	571.84	571.28	571.75	571.55	571.18	572.04	572.31	572.06	572.36	572.58	572.34	571.94
6	572.25	571.48	572.20	571.71	571.25	572.01	572.84	571.89	572.43	572.65	572.41	571.95
7	571.66	571.36	573.49	571.49	571.19	571.76	572.56	571.87	572.44	572.81	572.47	571.92
8	571.80	571.50	572.10	571.71	571.19	570.96	572.28	572.30	572.48	572.59	572.27	572.06
9	571.10	571.24	571.91	571.27	571.07	571.78	571.88	572.40	572.48	572.46	572.50	572.19
10	571.26	571.18	571.79	571.48	571.04	572.08	572.07	572.16	572.46	572.52	572.36	572.13
11	571.47	571.37	570.98	571.41	571.12	572.18	572.20	572.07	572.51	572.74	572.05	571.89
12	571.42	571.64	571.73	570.96	571.03	571.34	571.94	572.27	572.31	572.68	572.11	571.77
13	572.14	571.37	571.55	571.23	571.07	571.46	572.18	571.76	572.53	572.52	572.18	572.16
14	573.78	571.38	571.73	571.60	571.34	571.70	571.98	572.33	572.51	572.53	572.34	571.80
15	571.61	571.08	572.83	571.32	571.36	571.57	572.11	572.25	572.18	572.58	572.51	571.80
16	571.37	571.87	573.12	571.30	571.11	571.99	572.22	572.11	572.27	572.70	572.46	572.02
17	571.74	572.17	572.63	571.41	571.39	571.03	572.28	572.06	572.36	572.62	572.16	571.87
18	571.47	571.53	572.31	571.29	571.54	571.18	572.14	572.10	572.68	572.67	572.13	571.98
19	570.83	571.44	571.85	571.51	571.64	571.52	572.15	572.39	572.59	572.58	572.06	572.22
20	570.55	571.77	571.31	571.33	571.92	571.41	572.25	572.16	572.34	572.54	571.84	572.25
21	570.89	572.63	571.37	571.27	571.83	572.00	572.03	572.06	572.37	572.40	572.05	571.78
22	571.22	571.71	573.25	571.19	571.58	573.01	571.58	572.18	572.25	572.34	572.34	571.74
23	571.41	571.22	573.19	571.14	571.57	572.63	571.94	572.45	572.34	572.50	572.09	571.98
24	570.93	572.42	574.32	571.19	571.61	572.05	572.40	572.31	572.85	572.46	572.02	571.83
25	571.62	572.62	573.58	571.37	571.82	571.78	572.37	572.36	572.67	572.34	572.07	572.06
26	571.67	571.88	573.55	571.12	571.69	571.95	571.97	572.53	572.50	572.16	572.03	572.10
27	571.77	570.99	572.42	571.26	570.59	571.77	571.95	572.11	572.87	572.17	572.05	571.74
28	572.76	571.22	571.76	571.09	570.55	571.01	572.06	571.22	572.60	572.17	572.03	571.76
29	571.38	573.21	572.64	571.24	572.29	571.66	571.89	572.66	572.43	572.20	572.15	571.77
30	571.24	573.42	572.43	571.09	---	572.35	572.86	572.50	572.32	572.24	572.30	571.52
31	571.17	---	571.99	571.22	---	572.44	---	572.46	---	572.26	572.24	---
MEAN	571.59	571.68	572.29	571.37	571.33	571.81	572.17	572.17	572.47	572.48	572.21	571.95
MAX	573.78	573.42	574.32	571.74	572.29	573.01	572.86	572.74	572.87	572.81	572.51	572.25
MIN	570.55	570.99	570.98	570.96	570.55	570.96	571.58	571.22	572.18	572.16	571.84	571.52
CAL YR 1983	MEAN	571.96	MAX	574.32	MIN	570.47						
WTR YR 1984	MEAN	571.96	MAX	574.32	MIN	570.55						

## ST. LAWRENCE RIVER MAIN STEM

65

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°55'00", Erie County, Hydrologic Unit 04120104, at head of Niagara River at Buffalo, and 34.3 mi upstream from mouth.

DRAINAGE AREA.--263,700 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936 (M), WNR NY-77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

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

AVERAGE DISCHARGE.--124 years, 204,600 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 299,000 ft<sup>3</sup>/s Nov. 17, 1955; minimum daily, 90,000 ft<sup>3</sup>/s Jan. 13, 1964, Aug. 29, 1984. Maximum monthly mean discharge, 264,700 ft<sup>3</sup>/s May 1974; minimum monthly mean, 116,200 ft<sup>3</sup>/s February 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 278,000 ft<sup>3</sup>/s Dec. 24; minimum daily, 190,000 ft<sup>3</sup>/s Feb. 28, Apr. 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	218000	212000	240000	195000	213000	237000	243000	248000	241000	229000	227000	230000
2	223000	216000	238000	216000	211000	223000	241000	233000	241000	232000	225000	228000
3	225000	218000	222000	215000	214000	232000	233000	222000	243000	233000	225000	229000
4	225000	217000	214000	220000	211000	223000	231000	229000	243000	233000	227000	228000
5	229000	214000	228000	215000	213000	228000	238000	237000	238000	233000	229000	225000
6	234000	220000	233000	214000	214000	233000	253000	232000	238000	236000	228000	225000
7	223000	218000	272000	212000	210000	222000	245000	230000	238000	240000	232000	225000
8	227000	220000	236000	213000	214000	207000	241000	238000	240000	235000	228000	228000
9	208000	215000	235000	211000	210000	211000	228000	243000	240000	234000	232000	230000
10	212000	214000	232000	213000	210000	233000	226000	239000	240000	236000	229000	230000
11	216000	215000	213000	204000	212000	232000	236000	236000	239000	239000	227000	226000
12	217000	225000	231000	197000	213000	226000	231000	239000	236000	239000	226000	223000
13	227000	218000	230000	191000	216000	216000	231000	230000	236000	237000	226000	230000
14	271000	218000	230000	217000	228000	225000	233000	240000	238000	238000	230000	226000
15	231000	212000	248000	214000	228000	222000	234000	237000	230000	237000	233000	223000
16	217000	228000	261000	216000	224000	230000	235000	236000	232000	241000	233000	229000
17	224000	236000	249000	214000	222000	215000	238000	235000	234000	237000	229000	227000
18	217000	226000	240000	211000	229000	208000	235000	234000	241000	238000	229000	227000
19	207000	221000	232000	214000	226000	224000	235000	240000	240000	238000	226000	233000
20	198000	223000	219000	217000	231000	220000	235000	235000	235000	234000	221000	232000
21	202000	251000	216000	209000	228000	234000	233000	232000	233000	233000	226000	224000
22	211000	229000	249000	206000	224000	255000	222000	234000	230000	231000	230000	221000
23	219000	214000	261000	211000	222000	253000	227000	240000	229000	232000	226000	228000
24	207000	237000	278000	214000	222000	241000	237000	240000	241000	233000	226000	228000
25	219000	240000	266000	215000	226000	230000	240000	241000	237000	228000	228000	227000
26	225000	238000	254000	212000	226000	231000	232000	242000	235000	226000	227000	232000
27	221000	213000	229000	213000	207000	229000	190000	236000	238000	223000	226000	220000
28	248000	207000	198000	209000	190000	217000	232000	218000	237000	225000	226000	223000
29	220000	254000	220000	213000	231000	216000	229000	239000	232000	225000	228000	223000
30	215000	269000	197000	209000	---	239000	245000	243000	230000	225000	231000	218000
31	213000	---	191000	209000	---	240000	---	241000	---	226000	229000	---
TOTAL	6849000	6738000	7262000	6539000	6325000	7052000	7009000	7319000	7105000	7226000	7065000	6794000
MEAN	220900	224600	234300	210900	218100	227500	233600	236100	236800	233100	227900	226500
MAX	271000	269000	278000	220000	231000	255000	253000	248000	243000	241000	233000	233000
MIN	198000	207000	191000	191000	190000	207000	190000	218000	229000	223000	221000	218000
CAL YR 1983	TOTAL	83108000	MEAN	227700	MAX	278000	MIN	186000				
WTR YR 1984	TOTAL	83283000	MEAN	227500	MAX	278000	MIN	190000				

## NIAGARA RIVER BASIN

04216200 SCAJAQUADA CREEK AT BUFFALO, NY

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

DRAINAGE AREA.--15.4 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 626.26 ft National Geodetic Vertical Datum of 1929 (city of Buffalo bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Prior to July 1982 discharge included flow diverted from Lake Erie and Niagara River as sewage-plant effluent entering basin upstream from station.

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

AVERAGE DISCHARGE.--27 years, 34.4 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft<sup>3</sup>/s Aug. 7, 1963, gage height, 14.38 ft; minimum, 1.2 ft<sup>3</sup>/s Sept. 12, 13, 1982, gage height, 1.36 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 12	0730	968	7.00	June 18	0745	*1,170	*7.96
May 4	0645	656	5.40	June 24	0715	1,080	7.54

Minimum discharge, 1.3 ft<sup>3</sup>/s June 12, 13; minimum gage height, 1.38 ft June 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	2.0	3.1	25	7.2	8.2	4.8	19	4.6	4.2	4.4	2.5	3.0
2	2.2	3.7	27	6.8	7.6	6.0	11	4.5	3.1	4.0	2.9	8.2
3	2.2	51	30	6.6	10	8.0	9.4	5.2	26	3.8	2.8	22
4	4.5	23	65	6.2	45	9.6	20	269	5.4	5.6	21	3.7
5	140	52	90	6.0	30	19	189	36	3.1	6.1	4.4	3.0
6	106	29	260	5.8	20	35	49	13	2.9	41	2.9	2.6
7	14	13	135	5.6	13	21	55	8.1	2.7	11	57	2.5
8	9.2	8.1	45	5.4	9.0	12	19	93	2.7	4.1	4.7	2.4
9	8.6	6.0	25	5.2	7.4	8.0	11	33	2.4	3.3	61	2.2
10	4.0	12	27	5.0	12	7.0	7.8	13	2.7	5.3	5.8	7.6
11	3.3	82	22	4.8	70	6.2	6.4	9.0	2.4	4.6	4.2	105
12	50	45	446	4.7	140	5.8	5.7	12	1.7	3.6	25	12
13	99	17	112	4.5	212	5.6	5.9	64	4.2	3.0	17	101
14	69	11	61	4.4	245	6.0	6.0	60	35	2.8	62	45
15	13	71	74	4.3	62	13	12	18	4.2	2.5	15	39
16	6.2	92	45	4.2	28	100	27	9.9	3.2	2.6	5.6	11
17	4.7	69	30	4.0	25	60	34	6.8	41	3.3	4.2	5.4
18	3.8	27	25	3.9	29	34	13	5.4	344	22	3.0	4.1
19	3.5	25	18	3.8	26	25	9.2	13	26	4.1	3.8	3.7
20	3.4	23	15	3.7	25	120	7.3	12	8.4	3.0	3.0	4.7
21	3.4	53	11	3.6	14	353	6.1	8.5	5.0	2.8	2.9	3.2
22	2.6	16	100	3.5	11	81	5.0	6.5	4.1	2.5	12	2.9
23	56	10	45	4.5	10	38	10	147	26	2.5	9.2	2.9
24	15	8.9	25	20	9.1	24	37	35	438	2.7	3.4	3.2
25	11	6.4	15	30	10	27	116	11	218	2.6	3.2	3.9
26	11	5.2	11	25	7.0	21	19	5.7	70	2.5	2.5	48
27	8.8	4.5	9.8	15	4.6	15	9.8	4.2	23	3.7	2.5	5.6
28	5.4	67	9.0	12	3.0	12	6.9	26	13	2.5	2.9	3.8
29	4.1	53	8.6	11	2.9	20	5.2	50	7.2	2.1	9.3	2.8
30	3.2	18	8.0	11	---	48	5.0	11	5.4	2.1	29	2.5
31	3.1	---	7.6	9.6	---	31	---	5.7	---	2.4	6.1	---
TOTAL	672.2	904.9	1827.0	247.3	1095.8	1176.0	736.7	1000.1	1335.0	168.5	390.8	466.9
MEAN	21.7	30.2	58.9	7.98	37.8	37.9	24.6	32.3	44.5	5.44	12.6	15.6
MAX	140	92	446	30	245	353	189	269	438	41	62	105
MIN	2.0	3.1	7.6	3.5	2.9	4.8	5.0	4.2	1.7	2.1	2.5	2.2
CAL YR 1983	TOTAL	7188.9	MEAN	19.7	MAX	446	MIN	1.5				
WTR YR 1984	TOTAL	10021.2	MEAN	27.4	MAX	446	MIN	1.7				



## 04216418 TONAWANDA CREEK AT ATTICA, NY

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi upstream from Tannery Creek.

DRAINAGE AREA.--76.9 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR NY-79-1: 1978 (M). WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 954.63 ft National Geodetic Datum of 1929.

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

AVERAGE DISCHARGE.--7 years, 119 ft<sup>3</sup>/s, 21.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,690 ft<sup>3</sup>/s Sept. 14, 1979, gage height, 9.10 ft; maximum gage height, 12.40 ft Feb. 18, 1979 (backwater from ice); minimum discharge, 5.4 ft<sup>3</sup>/s July 27-29, 1983, gage height, 3.34 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft<sup>3</sup>/s June 23, 1972, gage height, about 12.0 ft present site and datum, from information supplied by Village of Attica.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 13	1830	2,500	7.11	May 23	1400	1,790	6.38
Mar. 16	1715	1,240	5.74	May 29	0430	2,700	7.30
Apr. 5	0230	1,950	6.56	June 18	1400	*2,800	*7.40
May 4	1015	1,370	5.90	Sept. 14	0645	2,320	6.94

Minimum daily discharge, 10 ft<sup>3</sup>/s Oct. 1-4; minimum gage height, 3.39 ft Oct. 1-5.

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	10	25	110	90	48	56	157	67	151	38	16	23
2	10	25	102	80	55	66	255	65	118	34	15	21
3	10	59	99	76	66	80	401	63	98	31	18	32
4	10	74	141	74	114	100	535	690	94	33	35	46
5	19	70	224	74	100	130	1260	405	79	49	45	31
6	35	84	603	76	77	170	588	198	72	68	20	25
7	27	170	415	84	55	140	321	136	66	58	90	25
8	19	120	186	72	56	120	229	177	58	44	40	23
9	17	74	138	68	60	100	199	209	52	39	26	20
10	15	66	118	52	67	90	163	141	49	37	22	19
11	13	484	102	48	123	80	150	109	41	60	46	70
12	13	278	632	47	302	70	139	377	38	51	81	96
13	16	126	436	50	1450	64	135	297	37	32	67	106
14	106	91	202	52	1550	64	139	579	67	27	150	939
15	42	140	254	50	509	166	143	256	49	25	180	317
16	30	487	133	49	277	415	253	194	40	22	163	193
17	25	229	119	47	222	344	251	139	40	21	196	102
18	21	146	112	45	241	218	191	114	1030	21	65	76
19	19	199	93	43	205	156	225	115	393	21	46	61
20	19	312	70	41	235	193	169	115	136	21	37	51
21	18	327	77	39	153	1040	127	155	85	19	30	46
22	16	150	178	38	126	512	101	100	67	19	32	45
23	38	104	176	38	152	251	96	821	58	17	187	40
24	66	92	133	45	127	161	109	353	103	16	63	40
25	44	76	113	96	107	178	576	173	109	16	42	40
26	40	67	102	88	84	167	236	123	69	15	33	75
27	53	63	100	80	74	124	151	102	54	16	28	59
28	45	205	105	74	58	121	115	283	48	21	26	46
29	34	296	140	68	54	116	94	1120	42	19	33	41
30	31	138	120	60	---	116	77	308	41	18	35	38
31	27	---	110	54	---	111	---	203	---	16	27	---
TOTAL	888	4777	5643	1898	6747	5719	7585	8187	3384	924	1894	2746
MEAN	28.6	159	182	61.2	233	184	253	264	113	29.8	61.1	91.5
MAX	106	487	632	96	1550	1040	1260	1120	1030	68	196	939
MIN	10	25	70	38	48	56	77	63	37	15	15	19
CFSM	.37	2.07	2.37	.80	3.03	2.39	3.29	3.43	1.47	.39	.79	1.19
IN.	0.43	2.31	2.73	0.92	3.26	2.77	3.67	3.96	1.64	0.45	0.92	1.33
CAL YR 1983	TOTAL	33458.5	MEAN	91.7	MAX	762	MIN	5.4	CFSM	1.19	IN.	16.19
WTR YR 1984	TOTAL	50392	MEAN	138	MAX	1550	MIN	10	CFSM	1.79	IN.	24.38

## NIAGARA RIVER BASIN

04216500 LITTLE TONAWANDA CREEK AT LINDEN, NY

LOCATION.--Lat 42°52'37", long 78°09'48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on County Highway 13A (Depot Road) in Linden and 9.3 mi upstream from mouth.

DRAINAGE AREA.--22.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1912 to November 1919, April 1920 to September 1968, October 1977 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 15, 1930. Datum of gage is 1,081.62 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1943, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--62 years (water years 1913-19, 1921-68, 1978-84), 27.3 ft<sup>3</sup>/s, 16.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft<sup>3</sup>/s Mar. 7, 1956, gage height, 16.04 ft, from high-water mark; minimum, 0.08 ft<sup>3</sup>/s Aug. 3, 4, 1955; minimum gage height, -0.14 ft Jan. 17, 1966 (siphonic action).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 530 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 13	2115	833	6.95	May 29	0815	745	6.50
Apr. 5	0500	*1,470	*9.96	Aug. 15	0030	591	5.69

Minimum discharge, 0.63 ft<sup>3</sup>/s Oct. 3; minimum gage height, 0.00 ft Jan. 18 (siphonic action).

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	.84	1.9	32	27	10	14	63	21	42	4.5	1.2	4.7
2	.84	2.0	29	24	10	16	99	19	31	4.0	1.2	4.3
3	.84	3.1	29	22	14	19	152	19	30	4.4	1.4	5.6
4	.81	6.2	32	21	22	24	226	226	26	4.1	1.4	5.6
5	1.2	8.3	43	21	21	33	760	143	19	6.8	1.3	4.6
6	1.6	13	133	21	18	50	248	60	16	8.6	1.3	3.7
7	1.2	25	201	22	15	40	121	40	13	7.2	2.4	2.9
8	1.1	20	66	20	14	35	79	51	11	5.1	1.5	2.6
9	1.1	12	44	19	14	29	64	58	9.5	3.7	1.6	2.4
10	1.1	11	38	17	13	25	52	40	8.5	3.6	1.3	2.4
11	1.1	83	33	15	26	22	45	32	7.2	6.4	10	23
12	1.2	87	168	15	75	18	41	121	6.5	6.0	31	22
13	1.6	34	190	17	378	18	38	86	6.0	3.8	36	20
14	6.6	23	191	20	563	22	34	215	17	3.2	121	139
15	3.6	37	158	17	218	22	50	82	8.9	2.9	197	96
16	2.2	134	83	14	100	122	84	56	6.9	2.9	47	51
17	1.9	73	51	13	75	127	86	41	7.8	2.6	105	24
18	2.1	43	42	12	76	72	54	35	40	3.0	31	15
19	2.0	46	33	11	65	53	51	34	33	2.5	18	12
20	1.9	71	27	11	70	78	40	31	16	2.3	12	10
21	1.8	82	25	10	49	341	33	37	9.9	2.2	7.9	8.4
22	1.7	43	51	10	42	173	27	25	7.3	2.1	6.8	7.2
23	4.1	29	64	10	49	88	29	182	6.1	2.0	80	6.0
24	7.6	25	49	26	41	64	36	118	15	1.6	26	5.5
25	4.3	22	34	52	35	68	181	45	20	1.5	13	5.8
26	3.7	19	20	29	30	64	77	31	11	1.9	9.2	14
27	5.4	17	22	22	24	53	44	25	8.2	2.1	6.7	10
28	5.3	45	35	16	16	53	34	75	6.7	1.7	5.4	7.9
29	3.4	75	53	16	14	46	29	364	5.6	1.5	7.9	6.5
30	2.4	41	37	14	---	46	25	101	5.5	1.5	8.3	5.8
31	1.9	---	29	12	---	48	---	59	---	1.3	5.7	---
TOTAL	76.43	1131.5	2042	576	2097	1883	2902	2472	450.6	107.0	799.5	527.9
MEAN	2.47	37.7	65.9	18.6	72.3	60.7	96.7	79.7	15.0	3.45	25.8	17.6
MAX	7.6	134	201	52	563	341	760	364	42	8.6	197	139
MIN	.81	1.9	20	10	10	14	25	19	5.5	1.3	1.2	2.4
CFSM	.11	1.71	2.98	.84	3.27	2.75	4.38	3.61	.68	.16	1.17	.80
IN.	0.13	1.90	3.44	0.97	3.53	3.17	4.88	4.16	0.76	0.18	1.35	0.89

CAL YR 1983	TOTAL	9534.25	MEAN	26.1	MAX	212	MIN	.41	CFSM	1.18	IN.	16.05
WTR YR 1984	TOTAL	15064.93	MEAN	41.2	MAX	760	MIN	.81	CFSM	1.86	IN.	25.36

NIAGARA RIVER BASIN

69

04217000 TONAWANDA CREEK AT BATAVIA, NY  
(National stream-quality accounting network station)

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft downstream from municipal dam, 500 ft upstream from bridge on Walnut Street in Batavia, and 5.0 mi downstream from Little Tonawanda Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--171 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 876.33 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage.

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

AVERAGE DISCHARGE.--40 years, 210 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft<sup>3</sup>/s Mar. 31, 1960, gage height, 12.70 ft; maximum gage height, 13.85 ft Apr. 6, 1947; minimum discharge, 0.4 ft<sup>3</sup>/s Aug. 5-7, 1955; minimum gage height, 0.59 ft July 26, 27, 1948.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 14	1400	*4,030	*9.44	Apr. 5	2300	3,490	8.67
Mar. 21	2330	2,650	7.30	May 30	1100	2,140	6.44

Minimum discharge, 9.2 ft<sup>3</sup>/s Oct. 4, gage height, 1.36 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	31	257	166	94	100	399	178	432	68	18	43
2	11	30	241	157	92	120	571	158	305	60	19	43
3	13	34	231	150	103	140	748	147	252	50	25	63
4	10	105	238	148	142	170	891	509	237	49	43	78
5	15	102	387	149	216	204	2090	1310	190	92	72	62
6	48	137	587	152	184	306	2540	754	155	124	46	46
7	45	222	1150	154	147	342	1180	376	140	107	54	38
8	34	254	1090	119	124	241	651	340	112	83	107	32
9	27	148	477	110	114	231	504	540	95	62	50	29
10	25	108	325	100	112	190	396	376	84	54	40	27
11	20	300	279	98	151	170	340	290	74	57	36	65
12	21	665	487	94	450	150	304	531	65	93	145	265
13	26	392	1390	95	867	140	279	594	59	60	142	143
14	95	233	1250	107	3470	140	278	858	86	45	209	561
15	92	191	1050	105	2900	142	286	917	106	39	522	832
16	45	615	796	99	1200	354	352	520	67	37	284	654
17	36	738	438	96	622	778	628	355	60	34	616	302
18	33	392	326	92	536	970	416	286	226	38	295	188
19	30	317	260	88	478	649	404	260	736	38	160	135
20	28	478	196	84	481	465	351	257	468	32	114	103
21	26	517	161	80	399	1550	287	294	210	30	84	87
22	25	376	224	78	303	2160	239	254	138	27	67	76
23	30	242	403	76	345	1010	220	316	105	26	246	69
24	89	197	351	79	304	503	250	1100	126	23	197	68
25	75	176	272	112	269	486	635	940	268	20	107	66
26	58	151	241	167	238	455	845	374	176	19	75	85
27	62	129	207	157	214	371	410	272	124	22	61	134
28	80	132	199	142	143	345	294	233	98	31	51	80
29	55	537	200	130	110	336	249	776	81	29	46	66
30	44	360	190	120	---	327	205	1790	73	22	63	60
31	35	---	181	110	---	329	---	956	---	19	51	---
TOTAL	1246	8309	14084	3614	14898	13874	17242	16861	5348	1490	4045	4500
MEAN	40.2	277	454	117	514	448	575	544	178	48.1	130	150
MAX	95	738	1390	167	3470	2160	2540	1790	736	124	616	832
MIN	10	30	161	76	92	100	205	147	59	19	18	27
CAL YR 1983	TOTAL	66354.1	MEAN	182	MAX	1390	MTN	4.9				
WTR YR 1984	TOTAL	105511	MEAN	288	MAX	3470	MIN	10				

## NIAGARA RIVER BASIN

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1978 to current year.

CHEMICAL DATA: 1971 (a), 1978 (c), 1980 (d), 1981-82 (c), 1983-84 (b).

MINOR ELEMENT DATA: 1978-84 (b).

ORGANIC DATA: OC--1978-80 (c), 1981 (b).

NUTRIENT DATA: 1971 (a), 1978 (c), 1979-80 (d), 1981-82 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1978 (c), 1979-80 (d), 1981 (b), 1982 (c), 1983-84 (b).

Phytoplankton--1978 (b), 1979-80 (c), 1981 (b).

SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c), 1983-84 (b).

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, 850 micromhos Mar. 14, 1978; minimum daily, 200 micromhos Feb. 20, 1981.

WATER TEMPERATURES: Maximum daily, 27.0°C July 15, 19, 1979, July 19, 21, 1980; 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 SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 01...	1330	32	480	8.0	7.0	3.0	750	10.5	88	92
FEB 24...	1015	309	335	7.6	4.0	16	735	12.3	97	170
JUN 08...	0930	114	416	7.7	22.5	4.5	740	7.5	89	160
AUG 16...	0830	267	305	7.5	21.0	30	740	8.1	94	3800

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS NONCAR- BONATE (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- LINEITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 01...	150	220	50	66	14	16	3.1	173	46	29
FEB 24...	570	160	38	48	9.3	11	1.6	121	28	21
JUN 08...	K14	190	25	56	12	11	1.7	165	27	21
AUG 16...	5400	140	26	42	7.8	8.4	3.5	111	28	15

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

04217000 TONAWANDA CREEK AT BATAVIA, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 01...	.20	4.5	291	280	.430	.030	1.0	.060	.030	.020
FEB 24...	<.10	4.6	232	200	1.30	.040	.30	<.010	<.010	<.010
JUN 08...	.10	2.3	249	230	.850	<.010	.90	.030	.020	<.010
AUG 16...	.10	6.9	208	180	.850	.680	.70	.130	.050	.040

DATE	ALUM- INIUM, 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)
NOV 01...	20	1	90	<.5	<1	<1	<3	5	59	3
FEB 24...	10	1	50	<.5	1	<1	<3	1	28	3
JUN 08...	30	1	72	<.5	<1	<1	<3	3	36	2
AUG 16...	40	1	57	<.5	1	<1	<3	5	99	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)
NOV 01...	<4	46	.1	<10	<1	<1	<1	180	<6	6
FEB 24...	7	36	<.1	<10	<1	<1	<1	100	<6	6
JUN 08...	<4	16	<.1	<10	2	<1	<1	140	<6	11
AUG 16...	<4	15	.3	<10	2	<1	<1	100	<6	5



## NIAGARA RIVER BASIN

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV								
01...	1335	20	1.2	1.0	477	8.0	7.0	10.6
01...	1340	30	1.5	1.0	477	8.0	7.0	10.5
01...	1345	40	1.5	1.0	477	8.0	7.0	10.6
01...	1350	50	1.7	1.0	479	8.0	7.5	10.4
01...	1355	60	1.5	1.0	480	8.0	7.5	10.3
FEB								
24...	1020	20	2.2	1.0	336	7.6	4.0	12.3
24...	1025	30	2.6	1.0	335	7.6	4.0	12.4
24...	1030	40	2.3	1.0	335	7.6	4.0	12.4
24...	1035	50	2.8	1.0	335	7.6	4.0	12.0
24...	1040	60	2.0	1.0	336	7.6	4.0	12.1
JUN								
08...	0935	15	1.7	1.0	414	7.8	22.5	7.4
08...	0940	25	2.0	1.0	415	7.8	22.5	7.4
08...	0945	35	2.0	1.0	415	7.7	22.5	7.5
08...	0950	45	2.3	1.0	416	7.7	22.5	7.5
08...	0955	55	1.6	1.0	420	7.7	22.5	7.7
AUG								
16...	0835	10	2.0	1.0	304	7.6	21.0	8.0
16...	0840	20	2.4	1.0	305	7.6	21.0	8.1
16...	0845	30	2.5	1.0	305	7.5	21.0	8.1
16...	0850	40	2.5	1.0	304	7.5	21.0	8.2
16...	0855	50	2.2	1.0	304	7.6	21.0	8.2

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
NOV					
01...	1330	32	16	1.4	--
FEB					
24...	1015	309	50	42	97
JUN					
08...	0930	114	9	2.8	--
AUG					
16...	0830	267	72	52	74

NIAGARA RIVER BASIN

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04217500 TONAWANDA CREEK NEAR ALABAMA, NY

LOCATION.--Lat 43°05'28", long 78°27'15", Genesee County, Hydrologic Unit 04120104, on right bank 15 ft downstream from bridge on Meadville Road, 0.4 mi downstream from inoperable canal feeder connecting Tonawanda and Oak Orchard Creeks, 1.1 mi upstream from small tributary, and 3.2 mi west of Alabama.

DRAINAGE AREA.--231 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973. WDR NY-75-1: 1959 (P).

GAGE.--Water-stage recorder. Datum of gage is 605.93 ft National Geodetic Vertical Datum of 1929. Prior to October 1965, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--29 years, 283 ft<sup>3</sup>/s, 16.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft<sup>3</sup>/s Mar. 31, 1960, gage height, 14.28 ft; maximum gage height, 15.95 ft Jan. 23, 1959 (ice jam); minimum daily, 7.7 ft<sup>3</sup>/s Sept. 14, 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0300	2,110	10.52	Mar. 18	1300	ice jam	10.50
Feb. 14	1230	ice jam	*13.98	Mar. 22	0930	2,850	11.72
Feb. 14	1900	*4,190	13.04	Apr. 6	1200	2,990	11.99

Minimum discharge, 16 ft<sup>3</sup>/s Oct. 3,4, gage height, 5.03 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	19	42	350	240	140	190	632	264	647	101	27	58
2	18	39	309	220	130	200	827	228	429	90	27	53
3	17	40	297	210	140	210	1010	209	337	78	28	72
4	17	53	302	200	170	240	1100	521	302	68	31	78
5	22	122	414	210	250	270	1620	1460	254	74	94	93
6	36	123	698	210	310	380	2780	1260	204	141	88	70
7	46	177	1230	220	240	480	1690	661	180	156	60	55
8	42	293	1540	220	200	450	1080	569	154	126	102	46
9	34	216	929	170	170	350	777	829	129	96	93	42
10	27	137	538	150	160	290	626	681	110	84	60	40
11	25	167	434	140	300	250	517	483	99	82	49	88
12	26	692	748	130	700	230	445	521	88	92	59	272
13	31	687	1630	130	1500	210	400	910	78	102	179	274
14	50	339	1900	150	3600	190	376	936	77	73	214	514
15	111	241	1630	150	3370	240	386	1270	122	58	486	1080
16	73	476	1310	140	1950	500	479	839	103	50	517	967
17	47	946	811	130	1090	1300	832	563	82	48	557	541
18	39	665	557	130	844	1800	734	419	115	51	577	298
19	37	414	400	120	789	1400	567	356	670	54	252	206
20	34	492	320	120	717	1100	537	344	782	48	166	156
21	31	618	240	110	670	1440	433	350	339	43	123	124
22	30	608	300	110	501	2720	348	372	194	39	96	107
23	34	351	500	110	473	1700	301	390	142	36	102	94
24	46	254	560	110	473	995	322	1200	251	34	348	89
25	93	217	410	120	410	831	753	1270	422	33	162	87
26	73	186	350	140	362	791	1230	603	384	31	107	101
27	61	156	310	230	317	679	767	380	237	31	81	146
28	67	150	270	210	280	593	479	323	170	32	69	128
29	77	421	270	190	250	572	370	939	135	36	62	94
30	58	612	260	170	---	536	304	1810	114	40	59	81
31	48	---	250	150	---	554	---	1240	---	32	76	---
TOTAL	1369	9934	20067	5040	20506	21691	22722	22200	7350	2059	4951	6054
MEAN	44.2	331	647	163	707	700	757	716	245	66.4	160	202
MAX	111	946	1900	240	3600	2720	2780	1810	782	156	577	1080
MIN	17	39	240	110	130	190	301	209	77	31	27	40
CFSM	.19	1.43	2.80	.71	3.06	3.03	3.28	3.10	1.06	.29	.69	.87
IN.	0.22	1.60	3.23	0.81	3.30	3.49	3.66	3.58	1.18	0.33	0.80	0.97

CAL YR 1983	TOTAL	88912	MEAN	244	MAX	1900	MIN	11	CFSM	1.06	IN.	14.32
WTR YR 1984	TOTAL	143943	MEAN	393	MAX	3600	MIN	17	CFSM	1.70	IN.	23.18

## STREAMS TRIBUTARY TO LAKE ERIE

04217750 MURDER CREEK NEAR AKRON, NY

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

DRAINAGE AREA.--58.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 623.78 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those for periods of no gage-height record Jan. 20-30 Mar. 15 to Apr. 11, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,660 ft<sup>3</sup>/s Apr. 6, 1984 gage height, 5.96 ft (from floodmarks); and minimum discharge, 2.8 ft<sup>3</sup>/s Sept. 26, Oct. 1, 2, 1983; minimum gage height, 1.55 ft Sept. 16, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Minimum measured discharge, 1.61 ft<sup>3</sup>/s Oct. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0830	694	4.61	Mar. 22	unknown	a700	unknown
Feb. 14	2230	1,440	5.71	Apr. 6	unknown	*1,660	*5.96

a About

Minimum discharge, 2.8 ft<sup>3</sup>/s Oct. 1, 2, gage height, 1.56 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	2.9	7.3	57	70	45	30	90	56	135	35	4.5	4.6
2	2.8	6.5	73	58	40	31	120	48	88	28	4.9	4.5
3	3.2	9.3	72	58	39	33	180	41	66	23	4.8	6.9
4	3.2	8.0	77	59	43	36	210	130	56	19	4.5	6.4
5	8.7	11	91	58	50	45	350	226	49	15	4.2	6.5
6	6.0	15	152	56	56	56	600	276	43	17	4.2	7.0
7	4.0	20	247	54	58	62	300	172	36	24	4.9	6.3
8	3.2	29	311	50	54	60	160	142	32	26	4.5	5.7
9	3.5	29	437	47	52	54	130	194	27	20	5.9	5.3
10	3.3	23	290	45	52	48	110	194	24	16	6.1	5.3
11	3.4	26	188	42	63	44	100	145	21	15	4.7	13
12	5.1	38	301	40	111	40	80	108	17	13	4.8	9.0
13	6.4	65	465	39	265	36	68	118	15	12	5.3	29
14	8.8	79	641	38	961	35	60	190	16	10	5.7	43
15	5.0	58	545	36	1130	45	59	210	14	8.6	7.5	41
16	7.0	62	450	35	529	80	73	193	13	7.8	9.1	55
17	9.5	80	306	34	307	170	120	135	15	6.8	13	49
18	7.2	105	239	33	236	230	150	99	24	7.5	8.9	42
19	5.8	89	200	32	195	170	129	78	26	7.0	8.9	28
20	4.9	71	150	31	174	120	100	69	31	6.7	7.7	21
21	4.2	72	130	30	147	350	83	68	25	7.0	6.0	16
22	3.7	73	160	30	124	500	68	69	18	6.2	5.5	13
23	6.4	64	200	31	107	300	58	104	14	5.8	5.8	11
24	5.1	51	190	35	100	140	58	182	50	5.4	5.3	11
25	4.6	40	180	50	90	120	181	259	186	5.2	5.0	9.9
26	8.3	36	160	70	77	110	232	166	190	4.7	5.2	14
27	9.9	31	140	66	68	100	214	97	156	4.8	4.9	11
28	8.2	31	120	62	40	90	135	72	97	4.5	4.8	15
29	7.8	45	120	54	35	86	94	120	62	4.1	4.9	16
30	7.6	63	110	52	---	82	71	202	44	4.3	6.9	12
31	7.5	---	84	47	---	80	---	237	---	4.7	5.2	---
TOTAL	177.2	1337.1	6886	1442	5248	3383	4383	4400	1590	374.1	183.6	517.4
MEAN	5.72	44.6	222	46.5	181	109	146	142	53.0	12.1	5.92	17.2
MAX	9.9	105	641	70	1130	500	600	276	190	35	13	55
MIN	2.8	6.5	57	30	35	30	58	41	13	4.1	4.2	4.5
CFSM	.10	.76	3.78	.79	3.08	1.85	2.48	2.41	.90	.21	.10	.29
IN.	0.11	0.85	4.36	0.91	3.32	2.14	2.77	2.78	1.01	0.24	0.12	0.33
CAL YR 1983	TOTAL	21247.4	MEAN	58.2	MAX	641	MIN	2.8	CFSM	.99	IN.	13.44
WTR YR 1984	TOTAL	29921.4	MEAN	81.8	MAX	1130	MIN	2.8	CFSM	1.39	IN.	18.93

NIAGARA RIVER BASIN

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04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi east of Pendleton, 4.9 mi downstream from Reeman Creek, and 5.9 mi upstream from Mud Creek.

DRAINAGE AREA.--349 mi<sup>2</sup>, includes 0.76 mi<sup>2</sup> in Mud Creek from which flow is diverted into Black Creek.

PERIOD OF RECORD.--August 1955 to September 1965, March 1978 to September 1979 (seasonal gage-height records only), October 1979 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 571.19 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--15 years (water years 1956-65, 1980-84) 376 ft<sup>3</sup>/s, 14.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft<sup>3</sup>/s Apr. 1, 1960, gage height, 16.96 ft; minimum 4.5 ft<sup>3</sup>/s July 28, 1983, gage height, 0.91 ft (result of diversion into Erie Barge Canal).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 15	1530	2,690	9.74	Mar. 23	1800	3,570	12.05
Feb. 16	0130	*4,710	*14.54	Apr. 7	1800	2,970	10.55

Minimum discharge, 21 ft<sup>3</sup>/s Oct. 3, 4, 5, gage height, 1.13 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	26	67	736	330	240	240	886	391	1550	180	43	85
2	24	58	500	310	210	240	934	344	824	153	38	70
3	22	60	443	290	190	230	1080	309	514	133	38	65
4	22	71	439	280	220	220	1240	542	421	114	39	83
5	30	96	488	260	300	320	1640	1160	375	102	43	93
6	42	181	863	250	400	410	2110	1710	319	114	98	101
7	56	186	1390	240	500	500	2820	1570	268	183	98	82
8	68	225	1630	230	400	580	2480	959	235	193	75	66
9	66	296	1860	210	300	500	1570	1000	202	164	115	56
10	52	240	1730	200	220	450	1010	1120	173	131	111	48
11	42	190	1170	190	350	400	757	903	149	120	80	79
12	39	297	1200	180	600	360	609	666	134	114	71	141
13	44	680	1960	180	1570	310	522	751	121	122	97	290
14	68	694	2280	170	2660	270	472	1080	116	124	193	346
15	90	433	2650	170	3890	250	459	1300	114	97	238	541
16	147	457	2590	160	4550	440	487	1470	149	80	447	911
17	110	802	2240	160	3660	748	743	1070	122	68	434	936
18	70	1050	1630	160	2190	1290	1050	698	122	60	518	614
19	54	841	1000	150	1440	1600	897	529	226	64	473	345
20	46	597	820	150	1170	1710	730	461	670	66	263	237
21	41	692	720	150	1030	1920	622	441	649	61	179	183
22	37	774	600	150	899	2650	503	450	338	56	138	148
23	38	690	540	150	725	3420	426	469	215	51	115	126
24	45	460	800	140	672	2980	399	811	194	49	177	111
25	62	358	700	160	620	1920	662	1380	414	46	283	106
26	108	309	580	220	546	1420	1210	1410	612	46	170	107
27	103	269	470	300	485	1210	1450	773	542	45	119	121
28	86	243	410	400	438	1010	1010	486	407	43	94	164
29	86	318	370	360	259	883	620	547	290	41	81	146
30	99	580	350	320	---	856	466	1190	222	44	76	113
31	82	---	340	270	---	889	---	1770	---	49	77	---
TOTAL	1905	12214	33499	6890	30734	30226	29864	27760	10687	2913	5021	6514
MEAN	61.5	407	1081	222	1060	975	995	895	356	94.0	162	217
MAX	147	1050	2650	400	4550	3420	2820	1770	1550	193	518	936
MIN	22	58	340	140	190	220	399	309	114	41	38	48
CFSM	.18	1.17	3.10	.64	3.04	2.79	2.85	2.56	1.02	.27	.46	.62
IN.	0.20	1.30	3.57	0.73	3.28	3.22	3.18	2.96	1.14	0.31	0.54	0.69

CAL YR 1983	TOTAL	132760.8	MEAN	364	MAX	2650	MIN	4.8	CFSM	1.04	IN.	14.15
WTR YR 1984	TOTAL	198227	MEAN	542	MAX	4550	MIN	22	CFSM	1.55	IN.	21.13

## NIAGARA RIVER BASIN

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi upstream from sewage treatment plant, 1.4 mi northwest of Williamsville, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--81.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 586.41 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Regulation by intermittent pumping from stone quarry into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 04218500 between October 1955 and September 1972.

AVERAGE DISCHARGE.--12 years, 133 ft<sup>3</sup>/s, 22.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft<sup>3</sup>/s Mar. 5, 1979, gage height, 9.16 ft; maximum gage height, 9.23 ft Sept. 26, 1977; no flow for part of July 27, 1976, gage height, 0.73 ft result of pipeline construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 7	2400	1,040	5.78	Mar. 22	1145	1,720	7.10
Dec. 13	2145	1,340	6.64	May 5	1100	1,020	5.22
Feb. 14	2000	*2,280	*8.50	June 25	1530	1,200	5.73

Minimum discharge, 8.8 ft<sup>3</sup>/s June 20, gage height, 1.09 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	12	32	115	120	86	82	400	88	132	73	16	18
2	11	32	141	120	80	78	500	61	105	65	18	19
3	11	50	167	110	88	80	640	69	104	58	17	28
4	21	33	182	110	100	90	700	331	76	54	47	22
5	80	61	248	100	136	110	600	770	83	53	20	21
6	68	89	411	98	158	137	990	327	75	72	17	19
7	47	111	680	94	140	175	700	166	69	106	24	18
8	34	105	766	90	110	160	500	180	62	85	33	17
9	30	77	345	86	90	130	350	510	56	62	40	16
10	25	64	197	84	78	110	240	286	52	52	23	20
11	25	108	130	80	110	96	160	165	47	49	19	78
12	52	210	462	78	251	86	120	152	41	47	25	62
13	77	221	1130	74	711	80	98	300	40	42	26	88
14	97	115	870	72	1850	80	93	379	50	25	52	93
15	80	103	600	70	1780	80	99	416	40	22	38	140
16	54	192	593	68	669	140	120	251	40	22	49	97
17	39	291	298	66	342	374	239	144	62	21	46	66
18	31	210	150	64	271	606	226	114	242	28	24	43
19	27	141	120	64	245	414	148	102	159	23	21	42
20	25	150	100	62	219	319	125	98	79	21	19	25
21	25	180	100	60	182	876	111	101	61	20	18	31
22	23	192	150	60	149	1590	98	107	48	19	24	20
23	45	124	190	58	130	740	90	181	65	18	23	20
24	37	95	200	56	120	580	105	685	375	19	35	20
25	51	83	180	70	110	430	378	352	991	33	19	32
26	48	71	170	110	100	450	547	154	747	33	18	43
27	37	58	160	120	94	390	219	108	321	33	19	41
28	37	84	150	110	90	320	135	104	152	19	17	33
29	39	183	140	100	86	290	107	226	101	17	21	26
30	37	249	130	94	---	310	94	535	83	17	29	22
31	35	---	130	90	---	330	---	211	---	13	30	---
TOTAL	1260	3714	9405	2638	8575	9733	8932	7673	4558	1221	827	1220
MEAN	40.6	124	303	85.1	296	314	298	248	152	39.4	26.7	40.7
MAX	97	291	1130	120	1850	1590	990	770	991	106	52	140
MIN	11	32	100	56	78	78	90	61	40	13	16	16
CFSM	.50	1.52	3.71	1.04	3.63	3.85	3.65	3.04	1.86	.48	.33	.50
IN.	0.57	1.69	4.29	1.20	3.91	4.44	4.07	3.50	2.08	0.56	0.38	0.56
CAL YR 1983	TOTAL	37810.3	MEAN	104	MAX	1130	MTN	4.2	CFSM	1.27	IN.	17.24
WTR YR 1984	TOTAL	59756	MEAN	163	MAX	1850	MIN	11	CFSM	2.00	IN.	27.24



NIAGARA RIVER BASIN

77

04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft downstream from headgate in old Erie Canal, 700 ft downstream from bridge on State Highway 350, 0.2 mi downstream from Lock 30, and 2.6 mi upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1977 to current year (navigation seasons only), October 1950 to September 1977. Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft National Geodetic Vertical Datum of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--Records good except those for non-navigation season, which are poor. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the non-navigation period, when the pool upstream from Lock 30 is drained, discharge consists of leakage through guard gates, runoff from small areas tributary to canal upstream from station, or diversion for use downstream in the Canal system.

COOPERATION.--Records of gate openings, lockages, lock-valve openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--27 years (water years 1951-77), 200 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft<sup>3</sup>/s Dec. 3, 1969; minimum recorded daily, 0.04 ft<sup>3</sup>/s Mar. 31, Apr. 1, 2, 5, 6, 1983.

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	268	265				.18	.85	.41	228	251	315	297
2	271	265				.20	.49	.57	203	241	325	271
3	268	262				.20	.52	.68	209	252	319	284
4	258	262				.14	.68	11	212	239	308	273
5	257	262				.24	1.9	25	213	236	319	273
6	263	261				.28	1.4	29	204	234	309	277
7	252	261				.22	1.0	115	218	244	315	277
8	258	258				.13	.77	220	227	248	309	284
9	287	260				.10	.58	233	228	249	305	295
10	296	262				.10	.62	144	232	253	313	289
11	292	270				.10	.60	88	216	251	305	288
12	299	267				.10	.52	70	224	257	305	278
13	309	264				.10	.63	53	221	248	307	278
14	305	268				.10	.50	103	226	236	297	290
15	311	257				.13	1.0	132	228	246	306	274
16	301	262				.73	1.3	138	227	244	303	277
17	284	269				.29	1.1	142	234	245	294	277
18	254	259				.11	.84	137	232	249	294	268
19	263	254				.10	.76	137	232	252	286	269
20	261	248				.56	1.3	140	241	254	286	271
21	260	245				.95	1.0	144	234	246	292	283
22	257	244				.49	.47	149	243	258	288	278
23	254	243				.36	.28	156	235	252	290	277
24	254	223				.33	.77	173	237	269	289	280
25	249	270				.31	1.2	176	231	298	302	280
26	246	330				.30	.77	216	228	317	299	280
27	249	280				.28	.75	220	247	326	277	278
28	254	230				.29	.66	235	236	315	284	278
29	269	190				.64	.57	275	236	324	281	283
30	266	180				.51	.39	300	248	318	279	287
31	262	---				.78	---	289	---	329	292	---
TOTAL	8377	7671				9.35	24.22	4251.66	6830	8181	9293	8394
MEAN	270	256				.30	.81	137	228	264	300	280
MAX	311	330				.95	1.9	300	248	329	325	297
MIN	246	180				.10	.28	.41	203	234	277	268

## ST. LAWRENCE RIVER MAIN STEM

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY  
(National stream-quality accounting network station)

## WATER QUALITY RECORDS

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

DRAINAGE AREA.--265,000 mi<sup>2</sup>.

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

CHEMICAL DATA: 1971 (a), 1973-74 (b), 1975-82 (c), 1983-84 (b).

MINOR ELEMENT DATA: 1971 (a), 1972-84 (b).

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

NUTRIENT DATA: 1971 (a), 1973-74 (b), 1975-82 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1973 (b), 1974 (d), 1975-82 (c), 1983-84 (b).

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

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

SEDIMENT DATA: 1975-77 (c), 1978 (b), 1979-82 (c), 1983-84 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1973 to June 1980.

WATER TEMPERATURES: September 1973 to June 1980.

REMARKS.--Published in 1971 as "at Youngstown". Discharge is the daily mean reported for Niagara River at Buffalo (station 04216000).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	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)
NOV 02...	1430	216000	290	8.3	12.0	<1.0	760	11.2	104	240
APR 30...	1330	245000	247	8.5	5.5	2.5	740	15.9	130	K30
JUN 07...	0930	238000	269	8.4	13.0	1.5	755	11.2	107	K22
AUG 28...	0815	226000	278	8.5	22.0	.70	750	9.6	112	43

DATE	STREP- TOCOCCI 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- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 02...	140	130	30	38	8.5	9.3	1.3	100	25	18
APR 30...	K14	120	27	35	7.9	8.8	1.3	93	25	15
JUN 07...	K6	120	27	34	7.7	9.1	1.3	90	30	17
AUG 28...	26	120	24	35	8.1	8.6	1.2	97	25	17

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

04219640 - NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, 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)
NOV 02...	.20	.0	158	160	.120	.010	1.3	.020	<.010	<.010
APR 30...	.10	.2	179	150	.170	<.010	1.5	<.010	<.010	<.010
JUN 07...	.10	.0	164	150	.340	<.010	.80	.010	<.010	<.010
AUG 28...	.10	.2	163	150	<.100	<.010	.50	<.010	<.010	<.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)
NOV 02...	20	1	39	<.5	<1	<1	<3	4	<3	<1
APR 30...	<10	1	31	<1	<1	<1	<3	1	5	3
JUN 07...	30	2	30	<.5	<1	<1	<3	3	4	1
AUG 28...	10	1	33	<.5	1	<1	<3	4	<3	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)
NOV 02...	<4	<1	.1	<10	<1	<1	<1	160	<6	8
APR 30...	<4	2	<.1	<10	3	<1	<1	150	<6	8
JUN 07...	5	<1	.1	<10	2	<1	3	160	<6	6
AUG 28...	8	<1	.3	<10	3	<1	<1	170	<6	<3

## ST. LAWRENCE RIVER MAIN STEM

04219640 - NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV								
02...	1435	200	32.0	3.0	293	8.3	12.5	11.0
02...	1440	200	32.0	10.0	292	8.3	12.5	11.0
02...	1445	200	32.0	20.0	292	8.3	12.5	11.2
02...	1450	200	32.0	30.0	290	8.3	12.5	11.3
02...	1455	800	62.0	3.0	293	8.3	12.0	11.2
02...	1500	800	62.0	10.0	292	8.3	12.0	11.0
02...	1505	800	62.0	30.0	290	8.3	12.0	11.0
02...	1510	800	62.0	50.0	288	8.4	12.0	10.9
JUN								
07...	0935	200	36.0	3.0	270	8.3	13.0	11.2
07...	0940	200	36.0	12.0	269	8.4	13.0	11.1
07...	0945	200	36.0	24.0	269	8.2	13.0	11.3
07...	0950	200	36.0	36.0	268	8.4	13.0	11.1
07...	0955	800	56.0	3.0	269	8.2	13.0	11.3
07...	1000	800	56.0	12.0	269	8.2	13.0	11.3
07...	1005	800	56.0	30.0	268	8.2	12.5	11.2
07...	1010	800	56.0	48.0	267	8.2	13.0	11.2
AUG								
28...	0820	200	36.0	3.0	278	8.4	22.5	9.6
28...	0825	200	36.0	10.0	278	8.5	22.0	9.5
28...	0830	200	36.0	20.0	277	8.5	22.0	9.5
28...	0835	200	36.0	30.0	277	8.5	22.0	9.4
28...	0840	800	54.0	3.0	278	8.5	22.0	9.6
28...	0845	800	54.0	10.0	278	8.5	22.0	9.5
28...	0850	800	54.0	23.0	277	8.5	22.0	9.5
28...	0855	800	54.0	36.0	277	8.5	22.0	9.5
28...	0900	800	54.0	49.0	276	8.5	22.0	9.5

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)	SFD. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
02...	1430	216000	6	3500	--
APR					
30...	1330	245000	8	5290	--
JUN					
07...	0930	238000	3	1930	--
AUG					
28...	0815	226000	1	610	17

## 04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft upstream from concrete weir at Wellsville, 0.5 mi upstream from bridge on State Highway 17, 0.6 mi upstream from Crowner Brook and sewage treatment plant, 0.6 mi downstream from Dyke Creek, and 140.9 mi upstream from mouth.

DRAINAGE AREA.--288 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft National Geodetic Vertical Datum of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi upstream at datum 3.00 ft higher. August 1955 to September 1957, at same site at datum 8.00 ft higher.

REMARKS.--Records good except those for winter periods, which are fair. Record for station 04221500 Genesee River at Scio, 5.2 mi downstream, published for June 1916 to September 1972.

AVERAGE DISCHARGE.--15 years (water years 1956-58, 1973-84), 411 ft<sup>3</sup>/s, 19.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft<sup>3</sup>/s Mar. 8, 1956 (site and datum then in use, from graph based on gage readings) and Oct. 28, 1981 (present site and datum); maximum gage height, 13.60 ft October 28, 1981; minimum daily, 18 ft<sup>3</sup>/s Sept. 9, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since June 1916, 38,500 ft<sup>3</sup>/s June 23, 1972, gage height, 20.7 ft present datum, from floodmark, on basis of contracted-opening measurement of peak flow 0.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 13	2000	6,540	9.76	May 12	0430	4,120	8.35
Feb. 14	2400	9,100	11.00	May 28	1300	4,870	8.82
Apr. 5	1900	5,110	8.97	Aug. 14	2000	*9,680	*11.26
Apr. 25	0430	3,600	8.00				

Minimum discharge, 26 ft<sup>3</sup>/s Oct. 3, 4, gage height, 4.26 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	28	36	372	150	78	380	540	543	879	499	83	120
2	28	38	325	140	100	340	681	477	688	511	78	109
3	28	43	292	130	96	320	922	433	623	378	77	180
4	28	47	275	120	90	300	1710	751	515	326	112	193
5	37	52	302	110	88	270	4720	735	411	1560	235	136
6	49	56	561	110	88	250	3340	551	368	1510	140	116
7	40	67	783	100	86	220	1950	478	313	1010	116	104
8	35	64	483	98	86	200	1360	544	263	684	100	94
9	33	57	435	98	86	190	1080	673	229	540	91	87
10	33	84	396	96	92	180	912	543	204	453	87	83
11	30	483	354	94	110	170	788	523	177	421	255	95
12	30	435	846	94	160	170	711	2740	153	371	685	145
13	35	224	2820	92	1500	160	726	1480	140	293	1830	99
14	113	174	4060	90	6130	160	756	2120	265	253	4050	165
15	67	201	1910	88	5660	180	989	1270	168	216	2530	134
16	49	490	1300	88	2180	350	970	1020	139	189	1040	133
17	43	348	929	86	1500	592	892	815	173	162	743	107
18	41	244	697	84	1430	465	758	682	1260	149	525	94
19	43	254	564	82	1180	535	1390	1090	1070	137	537	87
20	43	275	400	82	1490	1020	1080	1030	427	125	474	82
21	39	490	350	80	1020	2210	894	1310	315	114	340	76
22	36	342	310	80	846	1680	743	832	256	103	286	70
23	42	275	280	80	751	1110	718	1260	218	95	463	66
24	49	260	260	90	649	862	1740	1010	377	89	297	65
25	48	302	240	120	574	804	2960	744	411	82	236	67
26	47	285	220	110	488	703	1620	649	270	75	199	69
27	47	300	200	100	432	602	1190	562	235	422	175	67
28	43	673	190	94	410	581	966	2520	330	203	159	65
29	41	688	180	86	400	584	791	2440	320	127	170	63
30	40	455	170	82	---	547	656	1500	868	107	151	60
31	39	---	160	80	---	507	---	1120	---	95	140	---
TOTAL	1304	7742	20664	3034	27800	16642	38553	32445	12065	11299	16404	3031
MEAN	42.1	258	667	97.9	959	537	1285	1047	402	364	529	101
MAX	113	688	4060	150	6130	2210	4720	2740	1260	1560	4050	193
MIN	28	36	160	80	78	160	540	433	139	75	77	60
CFSM	.15	.90	2.32	.34	3.33	1.86	4.46	3.64	1.40	1.26	1.84	.35
IN.	0.17	1.00	2.67	0.39	3.59	2.15	4.98	4.19	1.56	1.46	2.12	0.39
CAL YR 1983	TOTAL	112359	MEAN	308	MAX	4060	MIN	24	CFSM	1.07	IN.	14.51
WTR YR 1984	TOTAL	190983	MEAN	522	MAX	6130	MIN	28	CFSM	1.81	IN.	24.67



## 04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft downstream from bridge on State Highway 436, 800 ft upstream from abandoned railroad bridge piers, 0.9 mi upstream from Upper Falls, and 89.8 mi upstream from mouth.

DRAINAGE AREA.--984 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112; WDR NY-82-3: Drainage area. WRD NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft downstream at datum 2.60 ft higher (destroyed by flood of June 1972). July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft upstream at datum 11.48 ft higher.

REMARKS.--Records good except those for winter periods, which are fair. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake.

AVERAGE DISCHARGE.--76 years (water years 1909-84), 1,259 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft<sup>3</sup>/s June 23, 1972, gage height, 35.25 ft site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft<sup>3</sup>/s on basis of contracted-opening measurement of 71,000 ft<sup>3</sup>/s at highway bridge 0.4 mi upstream and contracted-opening measurement of 98,200 ft<sup>3</sup>/s 0.7 mi downstream from gage; minimum, 18 ft<sup>3</sup>/s Oct. 5, 17, 1913, gage height, 1.70 ft site and datum then in use.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0800	15,300	15.66	May 14	0430	15,800	15.83
Feb. 15	0330	23,800	18.49	June 18	2300	*38,700	*23.48
Apr. 5	1030	23,600	18.45	Aug. 14	1130	15,300	15.67

Minimum discharge, 138 ft<sup>3</sup>/s Oct. 13, gage height, 8.37 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	329	569	1360	420	280	969	2170	1350	2470	1080	267	363
2	335	477	1080	410	280	960	3170	1140	1870	996	256	346
3	332	200	907	400	290	1100	4490	1080	1540	914	299	580
4	331	309	846	390	320	960	7350	4010	1440	703	360	930
5	316	648	1070	380	350	1100	18900	4730	1160	997	380	578
6	162	667	1820	370	330	1200	11400	2410	968	4010	435	418
7	198	663	4060	360	310	920	6670	1780	856	2040	567	364
8	387	418	2180	350	300	800	4230	1700	729	1380	519	337
9	376	341	1630	340	290	740	3440	3060	639	1040	352	318
10	367	303	1390	340	300	660	2700	2410	569	879	283	309
11	360	1140	1240	330	500	640	2160	1870	492	1010	287	332
12	327	2570	2480	330	1000	580	1810	7640	448	1510	1130	421
13	163	1140	7430	320	4000	600	1570	5920	416	812	2740	433
14	245	722	12400	320	18000	640	1980	11900	587	618	9810	1800
15	393	575	7950	310	17500	912	3100	5200	688	536	8840	1200
16	378	1520	4640	310	7140	2030	3490	3610	541	481	3190	994
17	457	1660	3060	310	4730	4550	3720	2620	434	433	1830	703
18	438	1080	2170	310	4520	2790	2570	2040	18000	403	1220	657
19	381	909	1630	300	3680	2640	3080	3730	13400	384	966	641
20	160	1180	1070	300	4520	3330	3270	3710	3040	362	980	378
21	203	2000	798	300	3280	9220	2240	5310	1720	336	781	554
22	554	1600	700	300	2390	7490	1720	3070	1220	318	630	873
23	593	1010	600	310	2240	4070	1590	6190	950	321	671	864
24	626	813	560	320	1870	2840	3010	6980	1770	389	752	860
25	634	767	490	350	1620	2740	8170	3110	1900	306	556	855
26	562	786	490	380	1420	2680	5040	2270	1150	252	482	674
27	239	804	470	380	1220	2360	3260	2040	852	301	433	357
28	300	1520	460	340	1060	2220	2380	6230	951	650	403	511
29	612	3950	450	310	1000	2170	1900	10900	905	426	396	848
30	574	2050	440	290	---	2080	1610	5640	1020	333	458	841
31	564	---	430	280	---	1960	---	3570	---	292	393	---
TOTAL	11896	32391	66301	10460	84740	67951	122190	127220	62725	24512	40666	19339
MEAN	384	1080	2139	337	2922	2192	4073	4104	2091	791	1312	645
MAX	634	3950	12400	420	18000	9220	18900	11900	18000	4010	9810	1800
MIN	160	200	430	280	280	580	1570	1080	416	252	256	309
CAL YR 1983	TOTAL	376982	MEAN	1033	MAX	12400	MIN	94				
WTR YR 1984	TOTAL	670391	MEAN	1832	MAX	18900	MIN	160				

## 04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi northwest of Mount Morris, 5 mi upstream from Canaseraga Creek, and 69.3 mi upstream from mouth.

DRAINAGE AREA.--1,080 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."

REVISED RECORDS.--WSP 1437: 1955. WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.

REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft between elevation 585.0 ft, sill of conduits, and 760.0 ft, crest of spillway. Dead storage, 609 acre-ft. Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft June 25, 1972, contents, 322,600 acre-ft; minimum, 584.23 ft Sept. 2, 1976, contents, 475.8 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 670.79 ft Feb. 17, contents, 99,960 acre-ft; minimum, about 586 ft Aug. 5, 6, contents, about 780 acre-ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)  
(Furnished by Corps of Engineers in 1953)

584.00	436	600.00	5,610	640.00	43,700
586.00	782	605.00	8,250	660.00	78,200
588.00	1,210	610.00	11,600	680.00	119,800
590.00	1,730	620.00	19,800	700.00	166,300
595.00	3,410	630.00	30,500	730.00	245,200
				750.00	305,100

ELEVATION (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	607.23	614.71	616.20	609.11	589.83	596.05	609.64	602.19	639.64	595.30	587.20	588.00
2	607.04	614.55	619.30	609.99	589.53	597.29	608.72	595.97	634.30	594.22	586.70	588.00
3	607.28	615.69	621.40	610.60	589.81	601.71	612.62	593.88	627.98	594.54	586.70	588.00
4	607.52	615.10	620.80	610.67	590.34	604.86	620.02	599.19	621.34	593.10	586.70	588.00
5	607.85	614.72	620.20	608.07	590.97	606.17	641.29	617.87	613.41	594.85	586.50	588.00
6	608.19	615.10	622.70	601.10	591.28	605.95	659.03	618.00	604.46	611.28	586.30	588.00
7	607.94	615.70	625.40	591.86	590.97	606.63	664.96	613.00	594.22	620.82	586.40	589.11
8	607.45	616.50	626.40	590.33	590.38	602.97	664.39	604.00	592.63	624.39	586.50	589.04
9	607.57	616.70	629.00	590.13	590.04	593.18	660.24	604.47	591.81	625.89	586.50	588.95
10	608.06	616.29	629.70	590.42	590.01	592.38	654.50	606.84	591.25	622.33	586.50	588.85
11	608.52	613.82	628.40	590.31	590.64	592.97	649.28	605.85	590.86	613.63	586.50	588.94
12	608.95	615.72	626.60	589.67	592.88	591.89	643.42	611.75	590.72	605.29	589.00	589.15
13	609.14	615.70	631.80	589.43	603.55	591.85	637.14	625.93	590.66	593.93	592.40	589.13
14	609.07	612.80	642.30	589.90	636.40	592.79	631.47	636.88	591.07	591.10	605.80	589.87
15	608.99	608.90	651.10	590.11	660.41	593.42	626.87	642.24	592.95	591.05	616.80	590.96
16	609.00	604.79	653.90	589.75	669.61	595.85	624.69	640.54	591.70	591.09	616.20	590.37
17	609.47	606.64	652.20	589.63	670.54	610.23	623.84	636.56	590.74	591.08	611.00	589.89
18	610.23	606.55	647.70	590.67	669.34	615.40	621.44	631.40	607.33	591.03	605.00	589.43
19	610.88	603.89	642.20	591.04	666.89	616.12	618.01	626.47	648.80	591.09	595.00	589.34
20	611.10	600.93	635.40	590.80	663.79	616.62	618.55	625.40	650.61	591.13	588.90	589.26
21	611.00	601.92	627.37	590.38	660.28	626.09	617.18	624.38	646.73	591.12	588.00	588.78
22	610.68	606.19	618.78	590.20	654.19	638.27	613.76	622.50	640.92	591.06	588.00	588.52
23	611.00	605.60	610.12	590.58	646.25	641.76	608.49	618.37	633.98	591.02	588.00	588.81
24	611.42	602.51	597.30	590.92	639.09	642.12	602.88	626.84	626.33	591.82	588.00	588.97
25	612.38	596.64	590.99	591.37	632.84	641.60	616.28	625.89	619.43	591.42	588.00	589.02
26	613.70	594.38	589.79	591.19	626.15	639.74	627.08	620.18	611.25	590.18	588.00	589.44
27	614.79	594.29	591.93	591.71	618.94	636.57	626.91	612.28	599.35	590.24	588.00	589.00
28	614.27	595.04	594.88	591.28	611.08	633.00	623.40	606.05	592.01	589.96	588.00	588.43
29	613.70	608.45	601.40	590.50	597.91	628.55	618.54	630.00	593.26	588.00	588.00	588.11
30	613.70	613.00	606.65	590.50	---	621.34	611.11	641.60	592.78	587.90	588.00	588.33
31	613.87	---	608.30	590.37	---	613.63	---	643.29	---	587.80	588.00	---
MEAN	610.06	608.76	621.94	593.95	621.17	612.48	628.52	619.67	610.42	597.34	591.63	588.92
MAX	614.79	616.70	653.90	610.67	670.54	642.12	664.96	643.29	650.61	625.89	616.80	590.96
MIN	607.04	594.29	589.79	589.43	589.53	591.85	602.88	593.88	590.66	587.80	586.30	588.00
†	14,840	15,320	10,700	1,796	3,472	12,560	9,712	46,640	3,422	1,168	1,210	1,350
††	+79.0	+8.07	-75.1	-145	+29.1	+148	-47.9	+601	-726	-36.7	+0.68	+2.35

CAL YR 1983 MEAN 605.97 MAX 653.90 MIN 589.50 †† -2.43  
WTR YR 1984 MEAN 608.67 MAX 670.54 MIN 586.30 †† -11.9

† Contents, in acre-feet, at end of month.

†† Change in contents, equivalent in cubic feet per second.

Note.--No gage-height record below elevation 590 ft May 6-8, June 11-14, 17, and July 13 to Sept. 30; mean daily elevation estimated on the basis of data furnished by Corps of Engineers.

## STREAMS TRIBUTARY TO LAKE ONTARIO

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 0413002, on right bank on Poags Hole Road, 0.7 mi upstream from Stony Brook, and 1.7 mi south of Dansville.

DRAINAGE AREA.--88.9 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1974 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 101 ft<sup>3</sup>/s, 15.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft<sup>3</sup>/s Sept. 20, 1977, gage height, 5.51 ft; minimum discharge, 7.4 ft<sup>3</sup>/s Sept. 11, 1975; minimum gage height, 0.70 ft several days in August, September, and October 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0130	1,140	3.35	May 13	2145	1,270	3.52
Feb. 14	2315	1,240	3.48	May 28	1200	1,030	3.20
Apr. 5	0215	1,960	3.67	June 18	2100	*2,790	*5.19
Apr. 25	0645	1,140	3.35				

Minimum discharge, 7.4 ft<sup>3</sup>/s Oct. 3, gage height, 0.81 ft (from minimum-stage indicator).

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	8.8	10	107	31	23	54	86	151	203	137	18	12
2	8.6	10	84	29	21	50	130	143	162	107	40	13
3	8.2	13	69	27	20	45	236	140	142	71	55	41
4	8.2	14	68	30	20	54	594	329	129	61	27	35
5	8.7	17	85	34	19	48	1480	346	119	197	24	21
6	11	18	148	31	19	43	910	245	113	236	23	17
7	8.9	23	195	28	19	39	428	191	106	183	23	14
8	9.3	30	129	26	19	36	234	193	99	142	23	13
9	9.3	24	107	25	19	34	193	234	92	90	19	11
10	8.9	24	100	24	18	32	162	192	86	62	18	10
11	8.7	102	90	23	38	30	150	175	78	101	26	18
12	8.9	119	223	22	100	27	146	460	69	121	75	39
13	10	60	491	21	500	24	144	412	51	54	240	22
14	17	43	640	21	946	22	144	724	60	43	590	315
15	15	40	445	20	632	28	207	361	42	38	294	157
16	12	119	266	19	293	38	209	281	32	35	155	136
17	11	112	187	18	226	60	213	251	46	29	126	87
18	10	72	142	17	198	78	208	217	840	27	94	65
19	10	62	62	16	164	60	235	254	894	25	70	53
20	10	70	60	16	178	78	181	239	364	24	56	45
21	9.9	98	56	15	151	200	152	267	265	23	42	36
22	9.7	83	64	15	130	290	146	216	227	21	33	31
23	13	62	56	14	110	200	144	425	227	20	34	29
24	15	54	52	21	100	120	227	328	331	19	26	28
25	14	56	45	29	90	94	745	247	234	19	21	26
26	13	53	43	39	78	82	342	215	208	18	19	30
27	13	58	42	34	68	72	263	196	192	32	17	28
28	12	136	40	31	60	64	208	503	186	31	16	24
29	11	221	38	29	56	60	182	542	167	21	19	23
30	10	141	35	26	---	58	164	320	154	20	17	21
31	10	---	33	24	---	70	---	244	---	19	14	---
TOTAL	333.1	1944	4202	755	4315	2190	8863	9041	5918	2026	2254	1400
MEAN	10.7	64.8	136	24.4	149	70.6	295	292	197	65.4	72.7	46.7
MAX	17	221	640	39	946	290	1480	724	894	236	590	315
MIN	8.2	10	33	14	18	22	86	140	32	18	14	10
CFSM	.12	.73	1.53	.27	1.68	.79	3.32	3.28	2.22	.74	.82	.53
IN.	0.14	0.81	1.76	0.32	1.81	0.92	3.71	3.78	2.48	0.85	0.94	0.59
CAL YR 1983	TOTAL	25066.7	MEAN	68.7	MAX	640	MIN	7.8	CFSM	.77	IN.	10.49
WTR YR 1984	TOTAL	43241.1	MEAN	118	MAX	1480	MIN	8.2	CFSM	1.33	IN.	18.09

## 04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'27", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft upstream from bridge on State Highway 408 at Shakers Crossing, 1.4 mi upstream from mouth, and 1.5 mi northeast of Mount Morris.

DRAINAGE AREA.--335 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 545.52 ft National Geodetic Vertical Datum of 1929. Prior to July 1981 at site 250 ft east on left bank of old filled-in channel at same datum and prior to November 1958 at site 250 ft east and 40 ft north at datum 5.52 ft lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi downstream from base gage.

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

AVERAGE DISCHARGE.--21 years (water years 1960-70, 1975-84), 292 ft<sup>3</sup>/s, 11.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,270 ft<sup>3</sup>/s Mar. 4, 1976, gage height, 13.33 ft; maximum gage height, 23.62 ft present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft<sup>3</sup>/s Aug. 19, 1970, gage height, 2.26 ft, result of temporary regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached an estimated discharge of 11,200 ft<sup>3</sup>/s from Corps of Engineers publication (Tropical Storm Agnes, June 1972).

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0500	3,520	10.98	May 14	0300	3,280	10.79
Feb. 14	2330	3,400	10.72	May 29	0400	*4,060	*11.83
Apr. 5	0630	3,860	11.81	June 18	2400	3,620	11.10
Apr. 25	1000	3,200	10.55				

Note.--All peaks affected by backwater from Genesee River.

Minimum discharge, 27 ft<sup>3</sup>/s Oct. 4; minimum gage height, 3.45 ft 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	32	44	219	50	80	130	605	392	782	169	97	84
2	30	43	178	57	80	140	709	367	594	162	92	82
3	29	49	155	95	100	150	742	348	538	148	152	189
4	32	61	159	130	240	170	1060	1570	395	131	145	242
5	35	75	233	134	323	220	3170	1640	334	197	113	135
6	48	73	308	130	195	330	2660	906	292	390	107	105
7	41	78	400	100	120	320	1870	601	320	234	105	99
8	33	92	260	84	98	190	1210	620	289	187	102	87
9	32	78	234	80	94	170	728	902	264	144	105	78
10	33	69	206	76	96	160	483	551	249	76	99	72
11	33	198	173	74	360	160	356	443	220	106	142	76
12	32	328	372	72	700	150	297	1440	219	157	357	160
13	35	154	1190	72	1300	150	281	1240	222	135	432	163
14	85	113	2250	70	2600	160	340	2590	200	120	1820	960
15	62	101	1760	70	2520	167	618	1480	187	110	887	490
16	47	259	1160	70	1620	952	734	1030	157	107	320	379
17	42	255	635	68	1080	1200	802	624	160	103	309	245
18	40	167	406	68	818	589	682	479	1390	97	294	186
19	40	139	320	66	626	524	1280	585	2530	95	213	150
20	40	142	240	66	522	680	880	524	1050	82	200	131
21	39	176	72	68	633	1970	583	691	547	76	163	117
22	39	174	120	68	722	1840	445	411	267	74	128	108
23	55	130	240	72	196	1030	393	1440	197	70	179	103
24	73	118	220	80	92	605	717	1110	483	68	135	104
25	59	119	150	100	166	533	2690	541	375	70	113	103
26	53	118	130	159	149	465	1980	397	247	76	105	114
27	68	121	120	129	161	387	1290	331	224	86	94	110
28	54	207	140	116	140	353	846	1830	219	97	92	108
29	44	515	152	109	130	373	566	3060	197	99	105	96
30	44	296	50	109	---	363	452	1950	185	99	99	91
31	44	---	40	100	---	399	---	1180	---	99	99	---
TOTAL	1373	4492	12292	2742	15961	15030	29469	31273	13333	3864	7403	5167
MEAN	44.3	150	397	88.5	550	485	982	1009	444	125	239	172
MAX	85	515	2250	159	2600	1970	3170	3060	2530	390	1820	960
MIN	29	43	40	50	80	130	281	331	157	68	92	72
CFSM	.13	.45	1.19	.26	1.64	1.45	2.93	3.01	1.33	.37	.71	.51
IN.	0.15	0.50	1.36	0.30	1.77	1.67	3.27	3.47	1.48	0.43	0.82	0.57
CAL YR 1983	TOTAL	77897	MEAN	213	MAX	2250	MIN	29	CFSM	.64	IN.	8.65
WTR YR 1984	TOTAL	142399	MEAN	389	MAX	3170	MIN	29	CFSM	1.16	IN.	15.81

## STREAMS TRIBUTARY TO LAKE ONTARIO

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft north of Jones Bridge Road, 0.8 mi downstream from Canaseraga Creek, 2.8 mi northeast of Mount Morris and 63.0 mi upstream from mouth.

DRAINAGE AREA.--1,424 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."

REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112; WDR NY-82-3: Drainage area. WDR NY-78-1: 1974-77 (M, m).

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft lower.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221991) since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--74 years (water years 1909-13, 1916-84), 1,671 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft<sup>3</sup>/s May 17, 1916, gage height, 25.44 ft; maximum gage height, 25.77 ft, present datum (ice jam); minimum discharge, 12 ft<sup>3</sup>/s July 23, 1955, gage height, 0.22 ft, partially obstructed intake; minimum daily, 30 ft<sup>3</sup>/s Aug. 8, 1909.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,500 ft<sup>3</sup>/s Feb. 23 at 0900 hours, gage height, 15.56 ft; minimum, 311 ft<sup>3</sup>/s Aug. 2, gage height, 2.18 ft, result of regulation.

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	330	378	997	2400	620	1490	3500	3300	7730	1590	349	436
2	334	381	386	2400	620	1460	3540	2300	7220	1280	324	411
3	334	389	811	2400	640	1690	3690	1860	6300	1330	417	584
4	342	438	1680	2400	660	1950	4650	3640	5350	1020	418	1210
5	344	636	1280	2300	700	2160	7120	4430	4400	842	451	972
6	352	643	898	1800	720	2400	4730	4270	3250	926	479	590
7	342	526	3090	1200	700	2410	5990	5210	1910	648	572	467
8	334	425	1960	1000	680	2250	7940	5110	1400	616	747	410
9	336	418	844	880	680	1100	9560	3650	1200	1550	510	379
10	338	808	2110	820	760	1000	9830	3440	1050	3670	375	359
11	340	1490	2760	780	1500	940	9300	3260	861	4000	380	380
12	343	2200	2510	740	2740	900	8300	4230	748	3180	1090	531
13	350	2250	3900	700	4950	862	7490	4900	681	1730	2500	538
14	379	1950	6610	680	6410	970	7380	7020	809	939	7960	2280
15	364	1820	5340	660	5650	1200	6220	7800	1100	764	10000	2650
16	356	1850	5760	660	5220	2300	5880	7550	893	664	5160	1900
17	352	1910	7030	660	6580	3520	5930	7360	741	585	1510	1310
18	356	1820	7770	640	7030	3190	5600	6720	2940	540	2770	847
19	381	1690	7350	640	7770	3050	5560	5900	7530	501	4110	1060
20	396	1580	6760	660	8270	3230	4940	5790	7830	465	1420	613
21	354	1620	5860	660	8430	4930	4550	5890	7400	437	1120	476
22	351	1800	4630	660	9690	5070	4170	6060	7180	407	904	1000
23	479	1750	3770	660	9930	4340	3780	6270	6660	387	916	1100
24	485	1620	2500	660	8310	3890	3700	7480	6430	430	1050	1090
25	380	1340	973	660	6490	4020	6160	6770	5540	434	757	1080
26	382	1030	1200	660	5640	4930	6260	6040	4180	336	628	1120
27	393	1010	1400	660	4520	5120	6290	5360	2480	365	549	571
28	437	1230	1500	660	3570	4940	6000	5360	1270	635	497	445
29	612	2450	1600	640	2370	5320	5360	7350	1400	666	485	923
30	611	2170	2000	640	---	5830	4440	4710	1170	455	526	1040
31	487	---	2300	640	---	4440	---	5990	---	388	505	---
TOTAL	11974	39622	97579	31620	121850	90902	177860	165020	107653	31780	49479	26772
MEAN	386	1321	3148	1020	4202	2932	5929	5323	3588	1025	1596	892
MAX	612	2450	7770	2400	9930	5830	9830	7800	7830	4000	10000	2650
MIN	330	378	386	640	620	862	3500	1860	681	336	324	359

CAL YR 1983	TOTAL	520114	MEAN	1425	MAX	9000	MIN	124
WTR YR 1984	TOTAL	952111	MEAN	2601	MAX	10000	MIN	324



## STREAMS TRIBUTARY TO LAKE ONTARIO

87

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft east of State Highway 256, and 3.0 mi south of Lakeville.

DRAINAGE AREA.--69.8 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1963 to current year. Since 1930 in files of village of Geneseo.

REVISED RECORDS.--WSP 2112; WDR NY-82-3; Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft downstream at datum 796.59 ft higher.

REMARKS.--Lake level maintained by plank and pile dam at outlet. Area of water surface, 5.08 mi<sup>2</sup>. Daily average of about 2 ft<sup>3</sup>/s diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft June 24, 1972; minimum observed, 816.33 ft present datum, Nov. 3-8, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 820.10 ft May 30-31; minimum, 816.59 ft Nov. 3-4.

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	817.09	816.71	817.08	817.71	817.12	818.13	818.60	819.75	820.04	818.36	818.01	818.17
2	817.09	816.60	817.08	817.68	817.11	818.10	818.64	819.67	819.95	818.37	817.97	818.15
3	817.09	816.60	817.08	817.66	817.09	818.07	818.68	819.59	819.87	818.35	817.96	818.17
4	817.08	816.60	817.08	817.62	817.09	818.04	818.72	819.64	819.78	818.34	817.95	818.15
5	817.11	816.62	817.12	817.59	817.10	818.01	818.95	819.77	819.69	818.33	817.92	818.13
6	817.11	816.64	817.13	817.55	817.10	817.97	819.23	819.80	819.65	818.34	817.93	818.10
7	817.09	816.64	817.16	817.51	817.09	817.97	819.35	819.77	819.52	818.34	817.92	818.07
8	817.06	816.63	817.18	817.48	817.08	817.95	819.39	819.74	819.45	818.36	817.92	818.06
9	817.04	816.63	817.18	817.46	817.06	817.94	819.38	819.77	819.36	818.28	817.91	818.04
10	817.03	816.66	817.21	817.48	817.05	817.92	819.33	819.76	819.29	818.29	817.88	818.06
11	816.97	816.76	817.17	817.47	817.09	817.89	819.29	819.71	819.20	818.29	817.91	818.06
12	816.95	816.83	817.20	817.43	817.14	817.86	819.23	819.73	819.11	818.28	817.98	818.09
13	816.96	816.82	817.33	817.40	817.26	817.83	819.17	819.73	819.01	818.26	818.05	818.10
14	817.02	816.81	817.64	817.39	817.55	817.82	819.13	819.88	819.02	818.25	818.13	818.20
15	816.93	816.76	817.83	817.38	817.90	817.80	819.12	819.94	818.92	818.26	818.30	818.22
16	816.85	816.75	817.93	817.34	818.06	817.84	819.12	819.93	818.85	818.25	818.22	818.24
17	816.84	816.78	817.98	817.32	818.14	818.02	819.14	819.88	818.75	818.24	818.19	818.23
18	816.82	816.78	818.01	817.30	818.18	818.09	819.13	819.82	818.78	818.22	818.19	818.21
19	816.80	816.79	817.99	817.29	818.21	818.15	819.14	819.74	818.93	818.20	818.18	818.25
20	816.79	816.81	817.97	817.27	818.23	818.17	819.14	819.67	818.91	818.17	818.16	818.41
21	816.77	816.88	817.95	817.25	818.22	818.34	819.11	819.63	818.85	818.14	818.14	818.05
22	816.75	816.91	817.92	817.22	818.21	818.54	819.07	819.56	818.77	818.09	818.16	818.04
23	816.74	816.88	817.92	817.20	818.19	818.63	819.02	819.56	818.71	818.12	818.24	818.04
24	816.79	816.88	817.91	817.20	818.18	818.66	819.04	819.68	818.65	818.12	818.24	818.04
25	816.78	816.92	817.91	817.20	818.15	818.66	819.60	819.69	818.65	818.10	818.24	818.05
26	816.77	816.91	817.87	817.19	818.15	818.64	819.93	819.66	818.59	818.06	818.22	818.06
27	816.74	816.91	817.83	817.18	818.15	818.60	820.00	819.61	818.51	818.07	818.21	818.04
28	816.78	816.93	817.79	817.17	818.15	818.57	819.97	819.60	818.44	818.06	818.20	818.03
29	816.77	817.00	817.77	817.14	818.15	818.58	819.92	819.93	818.40	818.05	818.22	818.01
30	816.77	817.03	817.76	817.13	---	818.62	819.84	820.08	818.39	818.05	818.21	817.99
31	816.77	---	817.75	817.13	---	818.60	---	820.09	---	818.03	818.20	---
MEAN	816.91	816.78	817.57	817.37	817.66	818.19	819.25	819.75	819.07	818.22	818.10	818.12
MAX	817.11	817.03	818.01	817.71	818.23	818.66	820.00	820.09	820.04	818.37	818.30	818.41
MIN	816.74	816.60	817.08	817.13	817.05	817.80	818.60	819.56	818.39	818.03	817.88	817.99
CAL YR 1983	MEAN	817.73	MAX	819.77	MIN	816.60						
WTR YR 1984	MEAN	818.08	MAX	820.09	MIN	816.60						

## STREAMS TRIBUTARY TO LAKE ONTARIO

04228500 GENESEE RIVER AT AVON, NY

LOCATION.--Lat 42°55'04", long 77°45'27", Livingston County, Hydrologic Unit 04130003, on right bank 250 ft downstream from bridge on U.S. Highway 20 (State Highway 5), 0.3 mi west of Avon, 0.8 mi downstream from Conesus Creek, and 35.6 mi upstream from mouth.

DRAINAGE AREA.--1,673 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.11 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221990), at high flows by Mount Morris Lake (see station 04224000), and by Conesus Lake (see station 04227980). Monthly figures of discharge and runoff August 1955 to September 1965 adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--29 years (water years 1956-84), 1,951 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft<sup>3</sup>/s June 25, 1972, gage height, 40.67 ft; minimum, 47 ft<sup>3</sup>/s Oct. 10-11, 1980, gage height, 13.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,700 ft<sup>3</sup>/s May 29 at 1800 hours, gage height, 32.93 ft; minimum, 342 ft<sup>3</sup>/s Aug. 3, gage height, 14.76 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	349	479	1700	2670	660	2010	4630	4110	7200	1320	405	558
2	346	434	826	2670	660	1680	4550	3140	7470	1390	366	504
3	348	456	610	2600	660	1690	4440	2270	6900	1300	368	515
4	350	469	1410	2560	700	1930	4510	3490	5890	1200	468	845
5	374	634	2000	2540	760	2050	8250	5760	5170	1030	479	1170
6	385	818	1410	2450	760	2550	7710	5010	4100	1020	498	845
7	387	799	2760	2080	740	2780	6350	5030	2930	860	565	613
8	368	579	3650	1270	720	2640	7200	5800	1840	742	713	516
9	363	522	1430	1030	720	1970	8740	4690	1530	746	679	457
10	364	522	1490	960	780	1580	9630	4060	1360	2480	499	419
11	364	1430	2510	880	1030	1500	9550	3750	1230	3820	407	450
12	372	2300	3070	820	1940	1500	8620	4300	1080	3380	647	551
13	380	2630	4030	780	3220	1400	7690	4770	991	2520	1690	653
14	451	2180	6840	740	6070	1400	6770	5900	1030	1230	4320	1210
15	445	1970	7080	720	8000	1500	6450	8240	1170	910	8160	3030
16	406	2260	6390	700	6350	1900	6170	7840	1230	789	8890	2180
17	400	2310	6090	700	6460	3990	6290	7530	1060	703	4130	1580
18	394	2130	6830	680	6970	4060	5960	7040	1210	646	1580	1120
19	397	1910	7320	680	7480	3700	5950	6290	5480	594	3120	962
20	446	1750	6940	680	8080	3470	5440	5910	7370	552	3400	944
21	418	1680	6380	660	8120	5590	4930	5840	7190	517	1430	623
22	388	1800	5580	660	8840	6960	4510	6040	6980	480	1100	703
23	427	1820	4630	660	9850	5800	4180	6200	6620	446	1150	1080
24	654	1720	3910	640	8960	4760	3900	7620	6290	427	1080	1090
25	499	1550	2720	660	7130	4340	6290	7320	5980	492	1030	1080
26	442	1230	2000	680	6080	4650	7200	6500	4950	440	814	1110
27	450	1120	1630	700	5150	5250	6630	5810	3530	380	702	961
28	450	1260	1660	700	4190	5190	6350	5340	2000	454	626	596
29	577	2370	2050	680	3390	5100	5770	9210	1410	773	583	663
30	686	3070	2470	660	---	5790	5140	7890	1300	601	564	1060
31	679	---	2670	660	---	5720	---	5900	---	470	622	---
TOTAL	13359	44202	110086	35570	124470	104450	189800	178600	112491	32712	51085	28088
MEAN	431	1473	3551	1147	4292	3369	6327	5761	3750	1055	1648	936
MAX	686	3070	7320	2670	9850	6960	9630	9210	7470	3820	8890	3030
MIN	346	434	610	640	660	1400	3900	2270	991	380	366	419
CAL YR 1983	TOTAL	584981	MEAN	1603	MAX	8490	MIN	149				
WTR YR 1984	TOTAL	1024913	MEAN	2800	MAX	9850	MIN	346				

## STREAMS TRIBUTARY TO LAKE ONTARIO

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04228845 HONEOYE LAKE NEAR HONEOYE, NY

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

DRAINAGE AREA.--41.0 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. July 10, 1963 to Sept. 28, 1967, nonrecording gage and Sept. 29, 1967 to Sept. 30, 1969, recording gage at datum 800.35 ft higher. Oct. 1, 1969 to Sept. 30, 1975, at datum 800.00 ft higher.

REMARKS.--Area of water surface, 2.71 mi<sup>2</sup>.

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

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 804.19 ft Apr. 6-7; minimum, 802.36 ft Oct. 22, 23.

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	802.47	802.39	803.24	803.25	803.09	803.49	803.60	803.68	803.86	803.23	802.86	803.15
2	802.47	802.39	803.24	803.24	803.09	803.46	803.62	803.62	803.79	803.21	802.85	803.15
3	802.47	802.42	803.24	803.25	803.08	803.43	803.66	803.58	803.75	803.19	802.85	803.16
4	802.46	802.44	803.27	803.24	803.08	803.40	803.74	803.71	803.69	803.17	802.85	803.16
5	802.49	802.47	803.29	803.22	803.08	803.39	803.98	803.83	803.63	803.18	802.87	803.14
6	802.50	802.49	803.31	803.21	803.08	803.38	804.15	803.82	803.59	803.20	802.86	803.12
7	802.48	802.50	803.35	803.19	803.08	803.37	804.18	803.79	803.55	803.18	802.89	803.11
8	802.47	802.50	803.33	803.19	803.08	803.35	804.13	803.78	803.51	803.15	802.89	803.09
9	802.46	802.50	803.33	803.18	803.08	803.33	804.05	803.79	803.47	803.14	802.88	803.08
10	802.45	802.53	803.32	803.16	803.07	803.31	803.96	803.75	803.43	803.13	802.88	803.06
11	802.45	802.62	803.30	803.16	803.09	803.29	803.87	803.72	803.39	803.16	802.88	803.10
12	802.43	802.72	803.34	803.15	803.13	803.27	803.80	803.77	803.36	803.16	802.92	803.12
13	802.44	802.75	803.48	803.14	803.27	803.26	803.74	803.77	803.33	803.14	802.98	803.15
14	802.48	802.76	803.83	803.13	803.57	803.26	803.68	803.92	803.33	803.13	803.09	803.22
15	802.45	802.79	803.94	803.12	803.85	803.24	803.65	803.93	803.29	803.11	803.17	803.24
16	802.44	802.83	803.95	803.11	803.93	803.32	803.62	803.90	803.27	803.10	803.19	803.24
17	802.44	802.88	803.90	803.12	803.93	803.46	803.61	803.85	803.25	803.07	803.19	803.24
18	802.43	802.89	803.85	803.12	803.89	803.48	803.59	803.80	803.33	803.05	803.19	803.23
19	802.41	802.91	803.79	803.12	803.85	803.49	803.56	803.75	803.41	803.03	803.19	803.23
20	802.40	802.94	803.72	803.12	803.79	803.50	803.54	803.70	803.41	803.01	803.17	803.23
21	802.40	802.98	803.66	803.12	803.75	803.64	803.50	803.67	803.39	802.99	803.16	803.22
22	802.39	802.99	803.64	803.12	803.70	803.75	803.47	803.63	803.36	802.97	803.15	803.22
23	802.41	803.02	803.62	803.12	803.66	803.76	803.45	803.70	803.34	802.96	803.22	803.22
24	802.42	803.03	803.41	803.12	803.62	803.74	803.47	803.78	803.35	802.94	803.21	803.22
25	802.42	803.05	803.34	803.12	803.58	803.70	803.79	803.75	803.34	802.91	803.20	803.23
26	802.41	803.05	803.32	803.11	803.55	803.67	803.88	803.71	803.32	802.89	803.19	803.25
27	802.42	803.06	803.30	803.11	803.51	803.63	803.87	803.66	803.30	802.92	803.19	803.24
28	802.44	803.12	803.28	803.10	803.53	803.60	803.83	803.77	803.27	802.92	803.18	803.24
29	802.41	803.19	803.28	803.10	803.52	803.64	803.79	803.96	803.25	802.90	803.19	803.22
30	802.39	803.23	803.27	803.10	---	803.64	803.75	803.97	803.24	802.89	803.19	803.22
31	802.39	---	803.26	803.10	---	803.61	---	803.93	---	802.88	803.17	---
MEAN	802.44	802.78	803.46	803.15	803.43	803.48	803.75	803.77	803.43	803.06	803.05	803.18
MAX	802.50	803.23	803.95	803.25	803.93	803.76	804.18	803.97	803.86	803.23	803.22	803.25
MIN	802.39	802.39	803.24	803.10	803.07	803.24	803.45	803.58	803.24	802.88	802.85	803.06
CAL YR 1983	MEAN	803.13	MAX	804.38	MIN	802.39						
WTR YR 1984	MEAN	803.25	MAX	804.18	MIN	802.39						

## STREAMS TRIBUTARY TO LAKE ONTARIO

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

LOCATION.--Lat 42°57'26", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft downstream from bridge on State Highway 65 at Honeoye Falls, and 15.3 mi upstream from mouth.

DRAINAGE AREA.--196 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft NGVD.

REMARKS.--Records fair except those for winter periods, which are poor. Outlet of Honeoye Lake not controlled (see station 04228845). Some diversion from and regulation of Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gal/min (1.33 ft<sup>3</sup>/s). This pumped water enters creek upstream from gage.

AVERAGE DISCHARGE.--37 years (water years 1946-70, 1973-84), 121 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft<sup>3</sup>/s Mar. 28, 1950, gage height, 6.42 ft datum then in use, from rating curve extended above 2,700 ft<sup>3</sup>/s by logarithmic plotting; minimum, 0.06 ft<sup>3</sup>/s Aug. 28, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 6.3 ft current datum; discharge, about 6,600 ft<sup>3</sup>/s, from rating curve extended above 2,700 ft<sup>3</sup>/s by logarithmic plotting.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,420 ft<sup>3</sup>/s May 29 at 2200 hours, gage height, 3.47 ft; maximum gage height, 3.54 ft Feb. 14 (ice jam); minimum daily discharge, 2.2 ft<sup>3</sup>/s Oct. 6, 7; minimum observed gage height, 0.20 ft Oct. 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	4.0	6.3	115	88	46	100	297	248	612	29	5.1	6.9
2	2.9	5.4	84	82	43	110	468	209	480	27	5.1	7.3
3	2.5	6.2	73	78	42	120	641	180	390	24	4.8	12
4	2.4	11	71	76	58	110	522	419	348	23	4.8	20
5	2.3	22	94	72	110	110	647	775	296	25	4.8	15
6	2.2	44	179	72	120	140	866	530	249	30	4.5	10
7	2.2	49	229	70	92	170	612	357	183	36	4.5	7.5
8	2.4	36	149	68	66	170	455	343	108	28	4.5	5.7
9	2.4	26	116	62	56	160	367	468	88	22	4.5	5.1
10	2.5	22	94	56	54	140	311	363	78	18	4.5	4.8
11	2.6	71	88	52	110	130	278	283	65	18	5.0	6.8
12	2.7	247	101	47	340	140	245	465	54	19	6.0	14
13	4.0	136	356	43	410	140	224	466	47	20	8.2	27
14	5.0	71	980	40	780	120	231	786	56	16	14	72
15	5.0	53	857	38	840	94	249	658	61	14	53	118
16	6.3	80	474	37	540	180	277	537	46	11	52	76
17	5.4	99	308	36	390	540	342	448	40	10	35	48
18	5.4	86	237	35	327	472	284	377	53	9.0	30	30
19	5.0	66	150	34	287	300	284	338	223	9.1	21	21
20	5.0	58	150	33	264	260	234	308	159	8.2	19	16
21	4.9	53	120	32	232	620	204	302	76	7.2	14	13
22	4.8	52	120	32	207	612	169	281	53	7.2	11	10
23	5.8	45	140	31	192	423	155	360	43	6.0	55	9.2
24	6.6	38	130	30	175	295	179	721	40	5.4	72	8.3
25	15	38	120	38	160	260	1050	618	44	4.8	37	7.9
26	13	40	120	66	140	230	936	507	45	4.8	22	11
27	12	37	110	70	120	200	510	437	39	6.4	15	20
28	10	48	110	64	80	181	347	478	34	6.8	13	19
29	11	237	110	60	72	191	348	1230	34	8.1	11	15
30	10	189	98	54	---	197	301	1200	32	6.4	10	12
31	8.3	---	92	49	---	236	---	815	---	5.4	7.7	---
TOTAL	173.6	1971.9	6175	1645	6353	7151	12033	15507	4076	465.7	558.0	648.5
MEAN	5.60	65.7	199	53.1	219	231	401	500	136	15.0	18.0	21.6
MAX	15	247	980	88	840	620	1050	1230	612	36	72	118
MIN	2.2	5.4	71	30	42	94	155	180	32	4.8	4.5	4.8
CAL YR 1983	TOTAL	38533.2	MEAN	106	MAX	980	MIN	2.2				
WTR YR 1984	TOTAL	56757.7	MEAN	155	MAX	1230	MIN	2.2				

STREAMS TRIBUTARY TO LAKE ONTARIO

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04230380 OATKA CREEK AT WARSAW, NY

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft downstream from bridge on Court Street, Warsaw.

DRAINAGE AREA.--39.1 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 987.15 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--20 years (water years 1965-84), 53.4 ft<sup>3</sup>/s, 18.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,010 ft<sup>3</sup>/s June 23, 1972, gage height, 9.75 ft, from rating curve extended above 1,770 ft<sup>3</sup>/s on basis of slope-area measurement of peak discharge; minimum, 0.90 ft<sup>3</sup>/s Aug. 1, 1965; minimum gage height, 0.96 ft Aug. 30-31, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 690 ft<sup>3</sup>/s and maximum(\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 13	1800	ice jam	4.89	June 18	1145	988	4.39
Apr. 5	0145	*2,790	*7.84	Aug. 14	1730	1,550	5.61
May 29	0345	1,370	5.41	Sept. 14	0545	739	3.80

Minimum discharge, 3.2 ft<sup>3</sup>/s Oct. 4, gage height, 1.15 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	3.6	8.7	37	26	19	49	86	54	82	22	7.5	12
2	3.6	8.7	34	25	19	48	123	51	71	20	9.8	13
3	3.6	17	34	24	19	47	206	55	63	18	13	26
4	3.5	17	36	23	31	45	461	362	58	17	9.9	22
5	8.2	19	52	22	24	43	1150	162	47	31	11	15
6	9.8	24	220	21	21	42	304	96	44	37	9.5	13
7	7.4	36	179	20	20	41	172	83	36	26	35	11
8	5.8	26	72	20	19	40	133	97	30	20	13	9.8
9	5.5	19	45	19	20	39	116	94	25	17	11	8.9
10	5.5	25	39	19	21	38	101	82	25	16	9.7	9.3
11	5.2	141	36	19	22	38	93	71	25	21	88	35
12	5.4	76	211	18	88	38	91	155	26	21	87	34
13	10	34	216	19	290	39	93	138	25	15	77	36
14	24	28	268	19	780	42	96	228	35	14	376	284
15	11	45	202	20	262	46	121	115	28	12	135	88
16	8.9	116	87	21	126	56	159	95	25	12	48	53
17	8.0	68	53	21	104	76	126	78	28	11	46	32
18	7.6	41	43	20	112	70	105	71	439	13	27	24
19	7.2	51	40	20	101	64	107	74	174	11	20	20
20	6.8	109	38	20	107	116	93	75	64	9.7	17	17
21	6.7	120	37	19	82	487	84	82	45	9.2	15	15
22	6.6	42	40	18	76	199	74	64	38	10	28	13
23	17	33	52	18	79	104	73	267	31	9.1	62	13
24	16	31	47	18	72	88	90	119	41	8.1	28	13
25	13	28	42	19	64	90	216	71	52	7.6	19	13
26	13	26	38	21	57	86	104	58	37	7.7	16	38
27	17	24	35	25	52	77	84	51	28	21	13	22
28	13	128	31	24	50	76	78	198	25	13	12	19
29	10	123	30	21	50	65	71	605	24	9.7	22	16
30	9.4	49	29	20	---	66	64	147	25	8.5	13	16
31	8.8	---	27	19	---	70	---	101	---	7.7	15	---
TOTAL	281.1	1513.4	2350	638	2787	2425	4874	3999	1696	475.3	1293.4	941.0
MEAN	9.07	50.4	75.8	20.6	96.1	78.2	162	129	56.5	15.3	41.7	31.4
MAX	24	141	268	26	780	487	1150	605	439	37	376	284
MIN	3.5	8.7	27	18	19	38	64	51	24	7.6	7.5	8.9
CFSM	.23	1.29	1.94	.53	2.46	2.00	4.14	3.30	1.45	.39	1.07	.80
IN.	0.27	1.44	2.24	0.61	2.65	2.31	4.64	3.80	1.61	0.45	1.23	0.90
CAL YR 1983	TOTAL	14903.6	MEAN	40.8	MAX	268	MIN	3.0	CFSM	1.04	IN.	14.18
WTR YR 1984	TOTAL	23273.2	MEAN	63.6	MAX	1150	MIN	3.5	CFSM	1.63	IN.	22.14



## STREAMS TRIBUTARY TO LAKE ONTARIO

04230500 OATKA CREEK AT GARBUTT, NY

LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft downstream from bridge on Union Street in Garbutt, 1.5 mi west of Scottsville, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--200 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area. WRD NY 1971: 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--39 years, 213 ft<sup>3</sup>/s, 14.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft<sup>3</sup>/s Mar. 31, 1960, gage height, 8.64 ft; minimum, 3.3 ft<sup>3</sup>/s Sept. 11, 12, 1958; minimum gage height, 1.88 ft June 19, 1959, result of regulation; minimum daily discharge, 13 ft<sup>3</sup>/s Oct. 30 to Nov. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 15	1045	2,570	6.32	Apr. 6	1245	*3,360	*6.91
Mar. 22	1945	1,790	5.64				

Minimum discharge, 32 ft<sup>3</sup>/s Oct.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	36	43	397	190	110	200	506	303	711	112	57	66
2	36	41	274	180	110	210	635	276	489	108	60	64
3	36	45	243	170	110	220	711	260	410	101	59	84
4	34	49	241	178	124	220	736	532	367	102	58	82
5	37	69	264	179	162	236	1500	873	330	123	60	81
6	38	92	437	180	178	274	2970	952	292	122	57	75
7	35	111	789	170	150	330	1770	647	273	131	58	67
8	34	124	701	150	130	280	941	483	258	120	55	61
9	35	118	654	140	120	240	698	504	242	106	57	58
10	34	97	440	130	120	210	582	490	231	99	61	57
11	35	154	351	120	139	200	512	420	217	108	63	75
12	34	463	457	110	265	190	465	491	204	114	68	125
13	36	445	850	120	540	180	428	575	194	102	190	142
14	48	336	1080	120	1400	180	406	752	206	94	226	215
15	44	229	1180	120	2420	180	432	788	228	85	300	350
16	55	513	994	120	1680	278	498	726	191	81	329	456
17	40	569	755	124	865	553	585	526	171	76	412	324
18	37	528	533	123	633	578	585	429	196	77	224	193
19	37	392	380	119	563	595	528	385	323	76	143	150
20	37	335	290	120	529	524	469	365	476	71	109	129
21	37	367	260	120	511	991	423	365	421	69	93	116
22	37	379	290	110	433	1620	353	373	213	69	86	107
23	43	296	300	102	393	1370	325	465	162	66	122	100
24	42	227	310	103	386	813	339	677	171	67	189	95
25	54	202	270	110	347	628	598	699	214	65	133	92
26	56	180	250	130	311	589	674	537	218	64	98	98
27	52	163	240	146	281	540	640	383	166	66	83	101
28	48	164	220	140	220	499	461	368	142	63	75	118
29	51	328	210	130	160	495	380	924	127	62	70	98
30	50	447	200	128	---	466	337	1220	118	61	69	90
31	46	---	190	124	---	463	---	1230	---	60	69	---
TOTAL	1274	7506	14050	4206	13390	14352	20487	18018	7961	2720	3733	3869
MEAN	41.1	250	453	136	462	463	683	581	265	87.7	120	129
MAX	56	569	1180	190	2420	1620	2970	1230	711	131	412	456
MIN	34	41	190	102	110	180	325	260	118	60	55	57
CFSM	.21	1.25	2.26	.68	2.31	2.31	3.41	2.90	1.32	.44	.60	.64
IN.	0.24	1.40	2.61	0.78	2.49	2.67	3.81	3.35	1.48	0.51	0.69	0.72

CAL YR 1983	TOTAL	72289	MEAN	198	MAX	1180	MIN	34	CFSM	.99	IN.	13.45
WTR YR 1984	TOTAL	111566	MEAN	305	MAX	2970	MIN	34	CFSM	1.52	IN.	20.75

## STREAMS TRIBUTARY TO LAKE ONTARIO

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04230650 GENESEE RIVER AT BALLANTYNE BRIDGE, NEAR MORTIMER, NY

LOCATION.--Lat 43°05'32", long 77°40'50", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft upstream from Ballantyne Bridge on State Highway 252, 1.6 mi west of Mortimer, and 2.8 mi upstream from Erie (Barge) Canal.

DRAINAGE AREA.--2,210 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1973 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--River regulated for operation of Erie (Barge) Canal, downstream powerplants, and at high stages by Mount Morris Lake (see station 04224000).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.33 ft Mar. 5, 1976; minimum, 8.20 ft Nov. 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 16.51 ft Feb. 15; minimum, 10.77 ft Jan. 24.

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	11.89	12.04	12.25	12.49	11.97	12.05	13.21	12.96	14.47	12.16	11.78	11.96
2	11.99	11.96	11.84	12.58	11.87	11.83	13.31	12.54	14.32	12.26	11.83	11.82
3	12.14	12.09	11.87	12.43	11.43	11.76	13.41	12.18	13.90	12.21	11.93	11.95
4	12.06	12.20	12.09	12.41	11.62	12.23	13.18	12.74	13.48	12.18	12.00	12.01
5	12.02	12.10	12.19	12.34	12.09	12.04	14.73	14.26	12.74	12.20	12.07	12.17
6	11.99	12.21	12.09	12.25	12.21	12.39	16.14	13.90	12.29	12.16	12.11	11.99
7	12.07	12.20	12.72	11.82	11.92	12.61	15.00	13.49	12.66	11.98	12.22	11.97
8	12.05	11.95	12.94	11.73	11.43	12.55	14.44	13.72	12.27	11.87	12.20	11.85
9	11.96	12.02	12.22	11.87	11.98	13.05	14.78	13.37	12.17	11.82	12.03	11.87
10	11.93	12.15	11.80	11.85	11.94	11.72	15.07	13.15	12.07	12.38	11.73	11.83
11	12.03	12.14	12.28	11.93	11.90	12.39	14.98	13.02	12.19	12.71	11.64	12.01
12	12.10	12.50	12.69	12.17	12.34	11.99	14.52	13.30	12.10	12.49	12.02	11.97
13	12.14	12.64	13.24	11.88	12.71	11.83	13.93	13.67	12.15	12.28	12.13	12.12
14	12.05	12.30	14.04	11.57	14.19	12.13	13.33	14.48	12.23	11.94	12.72	12.27
15	12.06	12.31	15.08	11.57	16.19	11.76	13.36	15.01	12.28	12.14	13.85	12.66
16	11.93	12.55	14.02	11.67	15.51	11.58	14.02	14.78	12.25	11.92	14.38	12.40
17	12.04	12.61	13.54	11.58	14.34	12.39	14.18	14.40	12.12	12.01	12.99	12.35
18	12.06	12.41	13.59	11.48	13.98	12.44	13.96	14.16	12.18	11.82	12.01	12.13
19	12.08	12.30	13.42	11.59	13.90	12.04	13.88	13.87	13.16	11.98	12.40	11.91
20	12.10	12.32	13.46	11.52	14.11	11.78	13.59	13.56	14.00	11.98	12.63	12.17
21	12.12	12.21	13.29	11.71	14.12	13.81	13.14	13.49	13.99	11.82	11.82	11.97
22	12.08	12.25	12.83	11.66	14.23	15.12	13.10	13.55	13.70	11.73	11.80	11.70
23	12.10	12.24	12.67	12.05	14.68	14.49	13.00	13.73	13.61	11.84	12.20	11.91
24	12.11	12.00	12.83	11.21	14.53	13.29	12.96	14.72	13.58	11.88	11.95	11.94
25	12.16	11.86	12.96	11.70	13.52	12.42	14.32	14.65	13.45	11.81	11.88	11.93
26	12.07	12.00	11.75	11.83	12.69	12.53	14.62	14.09	13.14	11.81	11.87	12.14
27	12.00	11.97	11.25	11.99	12.95	13.57	14.12	13.65	12.74	11.78	11.86	12.10
28	11.95	11.93	11.89	12.11	12.84	13.36	13.84	13.37	12.29	11.81	11.79	11.91
29	12.03	12.42	12.29	11.79	12.47	13.43	13.62	15.27	12.07	12.02	11.96	11.91
30	12.20	12.50	12.52	11.94	---	13.76	13.44	15.49	12.29	12.16	11.92	12.15
31	12.17	---	12.51	11.84	---	13.77	---	14.19	---	11.98	11.92	---
MEAN	12.05	12.21	12.71	11.89	13.09	12.65	13.97	13.83	12.86	12.04	12.18	12.04
MAX	12.20	12.64	15.08	12.58	16.19	15.12	16.14	15.49	14.47	12.71	14.38	12.66
MIN	11.89	11.86	11.25	11.21	11.43	11.58	12.96	12.18	12.07	11.73	11.64	11.70
CAL YR 1983	MEAN	12.21	MAX	15.08	MIN	10.47						
WTR YR 1984	MEAN	12.62	MAX	16.19	MIN	11.21						

## STREAMS TRIBUTARY TO LAKE ONTARIO

04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft downstream from main-line tracks of Penn Central Transportation Co., and 0.3 mi downstream from Black Creek Dam.

DRAINAGE AREA.--130 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder. Datum of gage is 551.88 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station.

AVERAGE DISCHARGE.--39 years, 115 ft<sup>3</sup>/s, 12.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft<sup>3</sup>/s Mar. 31, 1960, gage height, 9.44 ft; minimum, 0.22 ft<sup>3</sup>/s Aug. 19, 1970; minimum gage height, 0.93 ft Aug. 5-7, Sept. 15, 1959.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0630	1,310	5.75	Mar. 22	2400	*1,760	6.57
Feb. 15	0600	ice jam	*6.60	Apr. 6	1730	1,050	5.21
Feb. 15	1500	1,730	6.52				

Minimum discharge, 2.7 ft<sup>3</sup>/s Oct. 4, gage height, 1.25 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	4.4	24	124	90	47	79	364	98	329	38	11	25
2	4.4	18	126	88	47	91	409	91	219	33	17	23
3	4.0	21	128	86	47	102	405	86	168	31	21	33
4	3.8	27	130	84	48	110	370	134	142	28	18	43
5	7.4	48	139	84	52	120	543	142	124	30	17	37
6	15	67	238	82	58	140	971	142	106	37	17	29
7	15	69	418	82	52	150	761	248	95	42	22	25
8	12	56	638	80	46	200	457	286	81	38	23	21
9	9.4	47	629	80	48	180	350	393	69	31	20	19
10	20	43	377	80	52	160	276	396	57	30	17	18
11	19	105	262	76	54	140	232	259	50	35	16	45
12	16	202	370	74	80	120	207	214	46	34	21	99
13	25	246	818	72	150	117	185	225	45	30	25	116
14	43	203	1240	70	350	113	168	285	45	25	41	131
15	49	131	1050	68	1300	131	182	339	47	21	59	196
16	36	205	821	64	1190	152	219	348	47	19	78	204
17	25	265	564	62	638	220	284	254	45	18	79	165
18	25	303	387	60	454	284	329	208	57	25	82	89
19	22	236	275	56	393	382	270	180	78	26	86	53
20	20	160	231	54	350	425	230	165	83	21	52	33
21	13	143	196	50	296	644	199	159	61	19	37	24
22	18	133	154	47	248	1300	165	160	47	18	32	21
23	23	112	140	45	223	1430	149	229	41	17	40	20
24	30	97	130	44	213	775	210	362	47	15	45	20
25	32	87	130	46	199	527	309	431	87	13	40	21
26	31	77	120	49	170	440	458	307	100	12	31	23
27	34	71	120	54	149	387	350	200	76	14	25	27
28	34	72	110	52	96	330	219	173	57	14	21	27
29	23	96	110	48	64	306	152	360	47	14	24	24
30	21	128	100	47	---	302	120	557	42	13	26	21
31	26	---	96	47	---	316	---	559	---	12	28	---
TOTAL	660.4	3492	10371	2021	7114	10173	9543	7990	2538	753	1071	1632
MEAN	21.3	116	335	65.2	245	328	318	258	84.6	24.3	34.5	54.4
MAX	49	303	1240	90	1300	1430	971	559	329	42	86	204
MIN	3.8	18	96	44	46	79	120	86	41	12	11	18
CFSM	.16	.89	2.58	.50	1.88	2.52	2.45	1.98	.65	.19	.27	.42
IN.	0.19	1.00	2.97	0.58	2.04	2.91	2.73	2.29	0.73	0.22	0.31	0.47
CAL YR 1983	TOTAL	38780.2	MEAN	106	MAX	1240	MIN	2.3	CFSM	.82	IN.	11.10
WTR YR 1984	TOTAL	57358.4	MEAN	157	MAX	1430	MIN	3.8	CFSM	1.21	IN.	16.41

## 04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft downstream from Rochester Gas and Electric Corp. plant 5, 100 ft upstream from bridge on Driving Park Avenue in Rochester, and 6.4 mi upstream from mouth.

DRAINAGE AREA.--2,467 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.24 ft National Geodetic Vertical Datum of 1929 (247.00 ft, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi upstream at datum 506.85 ft, Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 3.00 ft higher.

REMARKS.--Records fair. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--77 years, (water years 1905-18, 1921-84), 2,813 ft<sup>3</sup>/s, 15.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft<sup>3</sup>/s Mar. 30, 1916, gage height, 15.3 ft site and datum then in use; maximum at present site, 34,400 ft<sup>3</sup>/s Mar. 19, 1942; maximum gage height, 17.08 ft Apr. 2, 1940, present datum; minimum discharge, less than 10 ft<sup>3</sup>/s, occurred during low-water periods when powerplant was shut down; minimum daily, 91 ft<sup>3</sup>/s Jan. 9, 29, Feb. 1, 8, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge on Mar. 18, 1865, was about 54,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,200 ft<sup>3</sup>/s Apr. 25 at 1930 hours, gage height, 15.55 ft, result of regulation; minimum, 232 ft<sup>3</sup>/s Oct. 25, gage height, 1.45 ft, result of regulation.

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	842	956	3760	2790	1380	3210	7410	5210	10300	1810	538	4570
2	644	845	2610	2910	1320	2700	7550	4400	10300	2100	404	5030
3	740	871	1820	2950	1350	2680	7720	3080	8810	2080	386	5030
4	862	1010	2680	2990	1200	2730	7570	4930	7740	1950	393	4690
5	898	1370	3730	3040	1820	3090	13000	9510	6670	1890	414	3140
6	822	1440	3920	3050	2190	3600	14700	9200	5040	1810	432	1990
7	728	1870	5630	2790	2090	4200	12300	7850	4130	1640	495	1410
8	755	1770	6900	1750	1610	3730	11500	8190	3140	1420	694	1480
9	780	1140	4490	1510	1380	3380	12100	7730	2630	1350	970	1340
10	593	1530	3620	1450	1460	2190	12600	6320	2210	2380	750	1380
11	554	3100	4090	1330	1910	2200	12300	5640	2060	4650	596	1720
12	582	4630	5370	1310	3190	2190	11400	6320	1580	4790	550	1560
13	853	4940	7490	1350	5310	1900	10300	7680	1470	3260	1760	1600
14	990	4550	12200	1260	11100	2040	9110	10500	1480	1820	4110	1900
15	869	3840	13400	1280	15600	2150	8470	12100	1860	908	8060	4530
16	746	4510	11300	1240	13900	3050	8870	11600	2170	1060	9730	4020
17	590	5170	10400	1290	11600	6630	9220	10600	1860	759	6290	3000
18	579	4820	10500	1210	11100	6850	8760	9450	2030	740	2220	2410
19	579	4020	9660	1280	11000	6380	8480	8410	6140	584	2670	1950
20	578	3690	9000	1260	11300	6040	7940	7650	8750	689	4300	1820
21	640	3730	8180	1240	11300	10500	6870	7440	8690	708	1920	1520
22	707	3350	7440	1060	11500	13200	5660	7530	7920	542	1170	1410
23	873	3510	6040	1140	12200	12100	5280	8320	7280	499	1460	1850
24	939	3110	5230	1540	11900	9470	5120	10900	7140	472	1580	2030
25	976	2960	3170	1140	10100	7940	9960	10900	6840	446	1360	1960
26	949	2420	2030	1540	8060	6900	11800	9110	5600	373	1120	2200
27	1000	2170	1510	1620	6680	8030	9570	7810	4140	390	816	2080
28	891	2450	1660	1550	6020	7700	8700	6850	2600	376	822	1660
29	740	3820	2110	1530	4210	7430	7240	12700	1970	428	659	1420
30	910	5210	2520	1590	---	8490	6250	13600	1750	622	765	2010
31	991	---	2760	1300	---	8310	---	9790	---	588	777	---
TOTAL	24200	88802	175220	53290	193780	171010	277750	261320	144300	43134	58211	72710
MEAN	781	2960	5652	1719	6682	5516	9258	8430	4810	1391	1878	2424
MAX	1000	5210	13400	3050	15600	13200	14700	13600	10300	4700	9730	5030
MIN	554	845	1510	1060	1200	1900	5120	3080	1470	373	386	1340
CAL YR 1983	TOTAL	1012364	MEAN	2774	MAX	13400	MIN	554				
WTR YR 1984	TOTAL	1563727	MEAN	4272	MAX	15600	MIN	373				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY  
(National stream-quality accounting network station)

## WATER QUALITY RECORDS

LOCATION.--Lat 43°13'26", long 77°36'59", Monroe County, Hydrologic Unit 04130003, at Charlotte Docks, at the Rochester Cement Corp., in Rochester, 0.4 mi upstream from Rattlesnake Point, 1.6 mi upstream from Stutson Street Bridge, and 3.9 mi downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,457 mi<sup>2</sup> at station 04232000.

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

CHEMICAL DATA: 1971-72 (a), 1974 (b), 1975-82 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1971-73 (a), 1974-84 (b).

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

NUTRIENT DATA: 1971 (a), 1974 (b), 1975-82 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1974 (b), 1975-82 (c), 1983-84 (b).

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

Periphyton--1975-80 (b).

SEDIMENT DATA: 1974 (b), 1975-82 (c), 1983-84 (b).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	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 (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 03...	1000	871	1000	7.7	12.0	5.7	755	9.1	85	600
MAY 01...	1100	5210	383	7.8	14.0	27	750	11.9	117	420
JUN 06...	1100	5040	383	8.0	17.5	26	755	9.7	102	2300
AUG 27...	1300	816	696	8.1	22.0	25	765	8.2	94	360

DATE	STREP- TOCOCCHI 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)
NOV 03...	390	250	122	75	15	100	4.3	128	100	170
MAY 01...	140	140	54	42	9.3	20	1.9	90	48	32
JUN 06...	150	150	46	44	9.3	18	1.9	103	49	30
AUG 27...	K28	220	81	65	13	53	3.0	136	79	89

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



04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, 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)
NOV 03...	.30	2.1	576	550	1.00	1.10	1.8	.070	.030	.020
MAY 01...	.10	3.2	292	210	1.10	<.010	1.2	.030	<.010	<.010
JUN 06...	.10	3.4	239	220	.910	<.010	1.8	.060	.020	<.010
AUG 27...	.20	5.2	419	390	1.10	.250	.90	.070	.040	.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)
NOV 03...	30	1	67	<.5	2	<1	<3	12	58	2
MAY 01...	<10	1	43	<1	<1	<1	<3	2	43	2
JUN 06...	20	1	44	<.5	<1	<1	<3	4	33	3
AUG 27...	20	2	69	<.5	1	1	<3	5	9	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)
NOV 03...	6	67	.1	<10	<1	<1	<1	860	<6	68
MAY 01...	6	18	.1	<10	1	<1	<1	380	<6	23
JUN 06...	6	9	<.1	<10	3	<1	<1	370	<6	10
AUG 27...	29	18	.4	<10	5	<1	<1	700	<6	12

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV								
03...	1005	40	18.0	3.0	1010	7.7	12.0	9.2
03...	1010	40	18.0	7.0	1010	7.7	12.0	9.3
03...	1015	40	18.0	12.0	1010	7.7	12.0	9.1
03...	1020	40	18.0	16.0	1010	7.7	12.0	9.1
03...	1025	100	13.0	3.0	1010	7.7	12.0	9.1
03...	1030	100	13.0	7.0	1010	7.7	12.0	9.0
03...	1035	100	13.0	10.0	1010	7.7	12.0	8.9
03...	1040	180	10.0	3.0	1010	7.7	12.0	9.0
03...	1045	180	10.0	5.0	1010	7.7	12.0	9.0
03...	1050	180	10.0	9.0	1010	7.7	12.0	9.0
MAY								
01...	1105	40	18.0	3.0	383	7.8	14.0	12.0
01...	1110	40	18.0	7.0	383	7.9	14.0	11.6
01...	1115	40	18.0	12.0	383	7.8	14.0	11.5
01...	1120	40	18.0	15.0	382	7.9	14.0	11.5
01...	1125	100	14.0	3.0	384	7.8	14.0	11.9
01...	1130	100	14.0	7.0	383	7.8	14.0	11.7
01...	1135	100	14.0	10.0	383	7.8	14.0	11.6
01...	1140	100	14.0	12.0	383	7.8	14.0	11.5
01...	1145	180	12.0	3.0	386	7.8	14.0	11.8
01...	1150	180	12.0	7.0	386	7.8	14.0	11.7
01...	1155	180	12.0	10.0	385	7.8	14.0	11.7
JUN								
06...	1105	40	22.0	3.0	382	8.0	17.5	9.5
06...	1110	40	22.0	7.0	382	8.0	17.5	9.3
06...	1115	40	22.0	14.0	382	8.0	17.5	9.4
06...	1120	40	22.0	20.0	382	8.0	17.5	9.3
06...	1125	100	16.0	3.0	382	8.0	17.5	9.8
06...	1130	100	16.0	7.0	382	8.0	17.5	9.6
06...	1135	100	16.0	10.0	382	8.0	17.5	9.6
06...	1140	100	16.0	14.0	382	8.0	17.5	9.6
06...	1145	180	14.0	3.0	384	7.9	17.5	9.9
06...	1150	180	14.0	7.0	384	8.0	17.5	9.8
06...	1155	180	14.0	12.0	384	8.0	17.5	9.8
AUG								
27...	1305	40	20.0	3.0	696	8.0	22.0	7.9
27...	1310	40	20.0	7.0	696	8.0	22.0	8.1
27...	1315	40	20.0	12.0	698	8.0	22.0	8.1
27...	1320	40	20.0	18.0	696	8.0	22.0	8.0
27...	1325	100	16.0	3.0	697	8.1	22.0	8.2
27...	1330	100	16.0	7.0	697	8.1	22.0	8.2
27...	1335	100	16.0	12.0	697	8.1	22.0	8.0
27...	1340	100	16.0	15.0	694	8.1	22.0	7.2
27...	1345	180	12.0	3.0	694	8.2	22.5	8.4
27...	1350	180	12.0	7.0	694	8.2	22.0	8.4
27...	1355	180	12.0	10.0	693	8.2	22.0	7.9

## 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
NOV					
03...	1000	871	11	26	--
MAY					
01...	1100	5210	82	1150	98
JUN					
06...	1100	5040	77	1050	98
AUG					
27...	1300	816	35	77	98

## STREAMS TRIBUTARY TO LAKE ONTARIO

99

04232040 IRONDEQUOIT CREEK NEAR PITTSFORD, NY

LOCATION.--Lat 43°03'15", long 77°29'28", Monroe County, Hydrologic Unit 04140101, on right bank 140 ft upstream from bridge on Thorneil Road, 0.9 mi south of creek passage under Erie (Barge) Canal, and 2.7 mi southeast of Pittsford.

DRAINAGE AREA.--44.4 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1961-62, 1964-66, 1968, and annual maximum, water years 1962-63, 1965-66, 1968-70, 1972. March 1980 to current year.

REVISED RECORDS.--WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder. Prior to March 1980, nonrecording gage and crest-stage gage at site 150 ft downstream at same datum. Altitude of gage is 405 ft, from Corps of Engineers river-profile map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,140 ft<sup>3</sup>/s Mar. 12, 1962, gage height, 8.6 ft at site then in use; minimum discharge measured, 8.10 ft<sup>3</sup>/s Sept. 17, 1964; minimum gage height at present site, 2.98 ft Sept. 12, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 360 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1945	*496	*7.27	Apr. 25	1845	391	6.59
Feb. 14	2115	380	6.50	May 29	1145	426	6.85

Minimum discharge, 16 ft<sup>3</sup>/s Oct. 3,4; minimum gage height, 3.00 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	17	22	55	36	30	38	116	48	65	25	20	26
2	17	22	49	38	31	37	158	46	56	24	22	28
3	16	30	47	39	33	36	100	45	51	24	22	39
4	16	40	47	40	42	36	73	180	50	24	23	34
5	21	70	53	40	53	39	118	269	43	32	22	28
6	25	74	119	41	47	47	157	90	39	31	20	26
7	21	56	168	39	40	43	84	67	37	27	23	25
8	19	44	66	37	36	38	69	67	37	25	21	25
9	19	38	53	36	36	37	60	84	34	23	20	23
10	19	38	51	35	37	38	55	66	32	24	20	23
11	18	144	51	33	59	37	52	58	29	28	28	51
12	19	203	81	31	130	36	50	172	28	27	44	57
13	21	78	200	33	193	37	49	115	27	24	47	46
14	43	57	412	35	347	36	52	195	31	22	86	144
15	27	61	231	33	325	37	72	97	31	21	143	70
16	22	97	90	32	109	68	82	72	28	21	77	59
17	21	77	76	33	79	165	95	62	28	20	61	46
18	20	66	68	35	73	92	76	57	36	21	38	38
19	19	58	54	32	69	68	65	56	47	21	44	34
20	19	49	45	29	66	70	68	53	33	20	39	32
21	19	48	36	28	60	260	61	57	29	19	31	29
22	19	45	40	30	56	210	53	51	27	19	30	28
23	31	43	38	31	55	94	52	77	25	19	74	28
24	35	40	36	35	53	72	63	111	27	19	48	28
25	27	41	35	39	51	64	301	62	29	18	34	28
26	25	41	34	39	49	61	141	53	26	18	28	38
27	36	39	35	36	46	54	72	52	25	25	26	35
28	32	58	35	34	41	53	61	71	25	24	42	32
29	26	140	34	33	38	63	60	371	25	21	55	29
30	24	72	33	33	---	68	53	248	26	20	35	29
31	22	---	34	32	---	77	---	81	---	20	31	---
TOTAL	715	1891	2406	1077	2284	2111	2568	3133	1026	706	1254	1158
MEAN	23.1	63.0	77.6	34.7	78.8	68.1	85.6	101	34.2	22.8	40.5	38.6
MAX	43	203	412	41	347	260	301	371	65	32	143	144
MIN	16	22	33	28	30	36	49	45	25	18	20	23
CFSM	.52	1.42	1.75	.78	1.77	1.53	1.93	2.27	.77	.51	.91	.87
IN.	0.60	1.58	2.02	0.90	1.91	1.77	2.15	2.62	0.86	0.59	1.05	0.97
CAL YR 1983	TOTAL	14884	MEAN	40.8	MAX	412	MIN	11	CFSM	.92	IN.	12.47
WTR YR 1984	TOTAL	20329	MEAN	55.5	MAX	412	MIN	16	CFSM	1.25	IN.	17.03

## STREAMS TRIBUTARY TO LAKE ONTARIO

04232046 THOMAS CREEK AT FAIRPORT, NY

LOCATION.--Lat 43°06'22, long 77°27'44", Monroe County, Hydrologic Unit 04140101, on right bank 48 ft upstream from culvert on Foreman Center Road, 0.5 mi northwest of Fairport, and 0.8 mi upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--28.5 mi<sup>2</sup>, flow from 0.86 mi<sup>2</sup> noncontributing.

PERIOD OF RECORD.--March 1980 to current year.

REVISED RECORDS.--WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 403 ft, from topographic map.

REMARKS.--Records poor. Unpublished water-quality records are available in files of Monroe County Health Department. Discharge subsequent to July 20, 1983 includes undetermined diversion (maximum 8 ft<sup>3</sup>/s) from Erie (Barge) Canal upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 232 ft<sup>3</sup>/s Feb. 15, 1984, gage height, 2.71 ft; maximum gage height, 3.62 ft Jan. 12, 1982 (ice jam); minimum discharge, 2.0 ft<sup>3</sup>/s Aug. 19, 20, Sept. 10, 1982; minimum gage height, 1.22 ft June 7, 8, 13, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 140 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 15	0115	177	2.47	Mar. 22	0630	166	2.42
Feb. 14	1915	debris jam	*2.81	May 29	2145	193	2.54
Feb. 15	0030	*232	2.71				

Minimum discharge, 2.7 ft<sup>3</sup>/s Aug. 10, gage height, 1.38 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	4.2	5.4	27	11	9.6	7.4	65	17	30	8.4	3.2	7.6
2	4.2	5.9	20	8.8	10	7.4	74	14	15	8.2	4.4	8.5
3	4.2	9.4	17	8.5	11	7.0	62	13	13	7.9	3.5	11
4	5.2	15	16	8.6	12	6.8	44	67	10	8.4	3.2	8.3
5	8.5	24	17	8.8	16	7.8	61	107	8.7	17	3.1	7.9
6	8.2	23	41	9.0	15	11	86	86	8.1	9.7	3.1	7.2
7	5.3	16	77	8.8	13	9.6	78	46	7.4	7.6	5.4	6.7
8	5.3	13	80	8.6	11	8.6	52	35	6.9	6.2	3.5	6.4
9	5.4	13	48	8.2	11	8.8	35	49	6.2	5.9	3.2	6.4
10	4.7	16	29	8.0	12	9.2	26	43	5.8	6.3	3.0	6.4
11	4.4	53	24	7.6	19	9.0	21	25	5.0	6.5	3.5	19
12	4.8	64	43	7.2	51	8.4	18	34	4.6	5.9	12	18
13	8.3	53	95	8.0	106	8.4	17	48	4.8	5.5	11	15
14	13	32	161	8.8	188	8.8	16	71	5.2	4.9	20	21
15	6.2	31	153	8.4	219	9.4	25	75	5.0	4.4	26	16
16	4.7	47	104	8.0	152	15	36	49	5.4	4.2	21	14
17	4.6	57	72	8.4	97	34	45	34	5.4	4.1	21	11
18	4.4	51	48	9.2	65	38	39	25	8.5	5.4	13	9.0
19	4.2	38	35	8.6	48	27	27	22	10	4.1	13	8.0
20	4.3	28	30	7.4	41	28	25	23	7.0	3.8	11	7.4
21	4.6	25	30	6.8	34	86	22	23	6.5	3.8	7.6	6.6
22	4.6	22	32	7.6	25	149	17	25	6.6	3.8	10	6.4
23	10	20	30	8.4	21	93	14	55	7.2	3.6	21	6.3
24	8.4	17	27	10	18	70	24	77	9.9	3.6	13	6.2
25	7.5	16	25	12	15	56	81	62	8.6	3.3	9.7	6.1
26	5.7	14	23	12	14	47	80	36	8.1	3.5	7.9	9.9
27	12	12	21	11	11	41	46	22	7.8	7.4	7.0	7.1
28	7.5	18	18	11	8.6	36	28	38	7.8	4.9	10	6.9
29	6.1	33	17	10	7.8	39	24	172	8.5	4.2	19	6.4
30	5.6	36	16	10	---	46	21	147	8.4	4.0	11	6.4
31	5.4	---	14	10	---	48	---	60	---	3.6	9.0	---
TOTAL	191.5	807.7	1390	278.7	1261.0	980.6	1209	1600	251.4	180.1	312.3	283.1
MEAN	6.18	26.9	44.8	8.99	43.5	31.6	40.3	51.6	8.38	5.81	10.1	9.44
MAX	13	64	161	12	219	149	86	172	30	17	26	21
MIN	4.2	5.4	14	6.8	7.8	6.8	14	13	4.6	3.3	3.0	6.1
CFSM	.22	.97	1.62	.32	1.57	1.14	1.45	1.86	.30	.21	.36	.34
IN.	0.26	1.08	1.87	0.37	1.69	1.32	1.62	2.15	0.34	0.24	0.42	0.38
CAL YR 1983	TOTAL	7235.3	MEAN	19.8	MAX	161	MIN	2.5	CFSM	.71	IN.	9.72
WTR YR 1984	TOTAL	8745.4	MEAN	23.9	MAX	219	MIN	3.0	CFSM	.86	IN.	11.74

## STREAMS TRIBUTARY TO LAKE ONTARIO

101

04232047 IRONDEQUOIT CREEK AT LINDEN AVENUE, EAST ROCHESTER, NY

LOCATION.--Lat 43°07'16", long 77°28'36", Monroe County, Hydrologic Unit 04140101, on left bank 200 ft upstream from bridge on Linden Avenue, 2.2 mi upstream from Allen Creek, and 7.8 mi upstream from mouth.

DRAINAGE AREA.--101 mi<sup>2</sup>, flow from 4.95 mi<sup>2</sup> noncontributing.

PERIOD OF RECORD.--August 1973 to current year.

REVISED RECORDS.--WDR NY-78-1: 1977. WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 341.46 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for period of no gage-height record Nov. 2 to Dec. 5, which are poor. Prior to 1980, flow of undetermined magnitude diverted from Erie (Barge) Canal into Thomas Creek, a tributary upstream from station; diversion resumed July 20, 1983.

AVERAGE DISCHARGE.--11 years, 95.1 ft<sup>3</sup>/s, 12.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft<sup>3</sup>/s Oct. 29, 1974, gage height, 15.64 ft (result of dewatering of Erie (Barge) Canal through accidental break in canal wall at Bushnell Basin); minimum, 18 ft<sup>3</sup>/s July 19, 1981, gage height, 11.15 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 570 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0945	723	14.09	Mar. 21	1845	694	14.02
Feb. 14	1900	872	14.43	May 29	unknown	*966	*14.63

Minimum daily discharge, 28 ft<sup>3</sup>/s Oct. 1-4, July 25,26; minimum gage height, 11.25 ft Oct. 1-4.

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	28	41	98	66	58	66	251	82	146	42	29	40
2	28	42	98	68	60	64	303	75	115	41	38	46
3	28	54	98	68	64	62	220	72	101	39	35	59
4	28	66	100	68	78	62	156	349	94	42	35	50
5	41	110	103	69	96	68	274	474	80	83	33	43
6	47	110	232	70	88	84	369	248	78	57	31	40
7	39	96	336	68	76	76	236	146	68	47	41	37
8	37	82	191	66	68	68	160	149	62	43	33	37
9	38	74	134	64	68	66	125	183	57	40	30	35
10	37	80	117	62	70	68	107	138	55	43	29	35
11	36	200	107	58	110	66	96	110	51	46	36	110
12	35	230	185	56	284	64	88	219	49	44	77	98
13	40	110	392	58	442	66	86	235	48	39	66	64
14	82	100	680	62	724	64	89	314	49	37	129	204
15	54	110	560	60	721	66	143	229	48	34	206	116
16	41	130	283	58	371	120	182	145	46	34	137	88
17	39	110	187	60	224	250	205	116	46	33	122	65
18	37	98	141	64	176	190	160	106	66	41	62	55
19	37	96	110	58	153	150	126	99	82	35	72	50
20	36	94	94	51	144	167	130	92	54	33	63	46
21	35	94	86	50	125	545	114	94	48	32	48	42
22	35	94	94	54	112	556	94	90	46	31	56	40
23	58	92	90	56	106	307	91	140	47	30	125	39
24	66	92	84	64	100	189	140	223	58	29	76	39
25	54	90	80	72	94	155	492	136	54	28	53	40
26	45	88	76	72	88	135	355	99	48	28	45	62
27	68	130	74	66	80	115	174	85	45	50	41	51
28	62	180	72	64	70	106	136	98	44	40	60	44
29	48	110	70	62	66	129	123	700	44	35	119	41
30	43	100	68	62	---	145	103	620	44	32	54	40
31	41	---	66	60	---	163	---	230	---	30	47	---
TOTAL	1343	3103	5106	1936	4916	4432	5328	6096	1873	1218	2028	1756
MEAN	43.3	103	165	62.5	170	143	178	197	62.4	39.3	65.4	58.5
MAX	82	230	680	72	724	556	492	700	146	83	206	204
MIN	28	41	66	50	58	62	86	72	44	28	29	35
CFSM	.45	1.07	1.72	.65	1.77	1.49	1.85	2.05	.65	.41	.68	.61
IN.	0.52	1.20	1.98	0.75	1.90	1.72	2.06	2.36	0.73	0.47	0.79	0.68
CAL YR 1983	TOTAL	30406	MEAN	83.3	MAX	680	MIN	20	CFSM	.87	IN.	11.78
WTR YR 1984	TOTAL	39135	MEAN	107	MAX	724	MIN	28	CFSM	1.11	IN.	15.16



## STREAMS TRIBUTARY TO LAKE ONTARIO

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1.3 mi upstream from Irondequoit Creek.

DRAINAGE AREA.--30.1 mi<sup>2</sup>, flow from 3.5 mi<sup>2</sup> noncontributing.

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WRD NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M, P), 1960-63, 1972-74.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Discharge prior to January 1980 included undetermined diversion (maximum 20 ft<sup>3</sup>/s) from Erie (Barge) Canal upstream from station. January 1980 to present, diversion reduced to a maximum of 3 ft<sup>3</sup>/s for use by Oak Hill County Club.

AVERAGE DISCHARGE.--24 years (water years 1961-84), 33.1 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft<sup>3</sup>/s May 17, 1974, gage height, 7.42 ft, from rating curve extended above 1,000 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak discharge and step-backwater analysis; minimum daily, 1.7 ft<sup>3</sup>/s Jan. 24, 1963; minimum gage height, 1.16 ft Feb. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0400	*774	*4.58	Apr. 25	0300	727	4.51
Feb. 14	2000	767	4.57	May 4	1115	599	4.32
Mar. 21	1845	*774	*4.58	May 29	0715	699	4.47

Minimum discharge, 9.0 ft<sup>3</sup>/s Oct. 3, gage height, 2.07 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	9.8	13	29	18	17	21	120	20	30	14	12	13
2	9.7	14	25	18	17	20	83	18	24	20	25	19
3	9.4	25	24	19	19	19	61	19	21	26	23	25
4	14	46	24	19	26	18	56	355	19	20	16	15
5	41	83	38	24	28	22	190	155	17	59	14	15
6	24	51	201	27	26	27	115	58	19	25	13	14
7	14	30	142	22	24	24	68	41	15	17	29	13
8	14	23	66	19	22	22	54	88	17	15	16	13
9	18	19	53	17	19	19	45	75	17	15	14	12
10	12	37	48	17	19	19	41	43	17	18	16	14
11	11	204	39	17	74	18	34	37	17	18	24	123
12	13	120	164	16	140	18	31	70	17	15	41	37
13	27	53	206	17	238	18	30	60	17	14	81	29
14	45	37	419	17	432	19	30	112	16	13	63	62
15	16	83	164	16	238	20	71	53	16	13	26	36
16	13	108	94	15	82	70	94	40	16	12	90	27
17	12	71	63	15	58	110	80	33	16	12	43	20
18	12	45	45	15	52	68	59	30	23	27	22	18
19	12	34	29	14	45	53	47	29	29	13	32	16
20	11	30	24	14	46	100	52	26	20	12	22	16
21	11	34	23	14	38	456	41	26	16	12	17	15
22	12	25	24	14	33	204	32	26	15	11	42	14
23	39	19	26	15	31	93	34	140	15	11	66	13
24	20	17	23	21	29	59	94	79	34	11	26	14
25	15	16	20	24	28	56	362	38	22	11	19	14
26	15	14	19	24	24	47	76	29	18	11	16	28
27	39	13	18	22	21	37	40	23	16	27	14	16
28	18	46	20	18	16	34	38	47	15	15	16	16
29	15	51	19	18	17	54	28	357	15	13	15	14
30	14	34	18	18	---	81	23	70	15	12	15	14
31	14	---	18	17	---	101	---	40	---	12	14	---
TOTAL	549.9	1395	2125	561	1859	1927	2129	2237	564	524	882	695
MEAN	17.7	46.5	68.5	18.1	64.1	62.2	71.0	72.2	18.8	16.9	28.5	23.2
MAX	45	204	419	27	432	456	362	357	34	59	90	123
MIN	9.4	13	18	14	16	18	23	18	15	11	12	12
CAL YR 1983	TOTAL	11606.4	MEAN	31.8	MAX	419	MIN	5.8				
WTR YR 1984	TOTAL	15447.9	MEAN	42.2	MAX	456	MIN	9.4				

0423205010 IRONDEQUOIT CREEK AT BLOSSOM ROAD, ROCHESTER, NY

LOCATION.--Lat 43°08'50", long 77°30'48", Monroe County, Hydrologic Unit 04140101, on right bank 120 ft downstream from bridge on Blossom Road, 1.6 mi east of Rochester, 2.5 mi downstream from Allen Creek, and 3.6 mi upstream from mouth.

DRAINAGE AREA.--143 mi<sup>2</sup>, flow from 8.45 mi<sup>2</sup> noncontributing.

PERIOD OF RECORD.--Occasional discharge measurements water years 1977-80. December 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 246.31 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those above 300 ft<sup>3</sup>/s and those for winter periods, which are poor. Discharge includes undetermined diversion from Erie (Barge) Canal. Water-quality sampling site operated by Monroe County Department of Health; data in files of that organization.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft<sup>3</sup>/s Feb. 14, 1984; maximum gage height, 7.91 ft Feb. 14, 1984; minimum discharge, 28 ft<sup>3</sup>/s Sept. 11, 14, 1982, gage height, 1.69 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1315	1,190	7.73	Mar. 22	0145	1,130	7.67
Feb. 14	2300	*1,370	*7.91	May 29	2000	1,100	7.64

Minimum discharge, 37 ft<sup>3</sup>/s July 26; minimum gage height, 1.95 ft Oct. 1, 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	43	59	156	94	84	96	352	136	234	61	40	58
2	43	60	133	96	86	94	378	123	181	61	62	66
3	43	86	124	98	98	92	303	116	158	74	56	93
4	48	121	122	98	120	90	235	551	146	61	51	71
5	93	215	140	110	140	100	401	681	127	155	45	62
6	87	199	327	110	130	130	483	397	126	97	42	56
7	59	141	451	100	110	110	341	242	107	76	71	52
8	51	109	274	96	100	100	249	265	100	66	49	50
9	60	95	206	90	98	96	201	298	93	60	44	47
10	51	105	182	88	100	98	144	221	88	63	40	49
11	48	375	165	84	186	94	113	178	83	71	57	218
12	50	447	287	80	359	92	106	292	79	65	128	162
13	64	257	499	84	533	94	164	304	76	57	140	99
14	151	172	1020	88	1020	94	179	416	77	52	209	258
15	78	197	848	84	1140	96	237	330	77	48	234	173
16	61	315	465	80	612	219	273	228	73	48	225	132
17	56	210	296	82	362	373	296	185	71	46	204	100
18	53	173	230	86	284	308	240	165	101	77	100	84
19	51	167	180	80	250	234	194	155	124	52	111	73
20	51	122	150	74	234	247	196	142	83	46	98	69
21	51	115	130	70	208	725	174	143	72	44	72	62
22	51	141	140	76	186	880	145	134	67	41	84	58
23	100	163	130	80	177	502	141	277	64	40	215	56
24	92	131	120	96	167	309	194	316	95	39	120	56
25	73	120	110	110	158	261	696	200	86	39	83	58
26	65	110	110	110	130	230	500	149	72	38	70	97
27	111	100	100	100	110	196	259	128	67	79	61	73
28	87	149	100	94	94	176	206	179	64	59	69	64
29	69	260	100	90	92	207	180	883	63	47	145	61
30	62	202	94	90	---	244	154	834	64	43	76	56
31	60	---	94	86	---	266	---	370	---	41	68	---
TOTAL	2062	5116	7483	2804	7368	6853	7734	9038	2918	1846	3069	2613
MEAN	66.5	171	241	90.5	254	221	258	292	97.3	59.5	99.0	87.1
MAX	151	447	1020	110	1140	880	696	883	234	155	234	258
MIN	43	59	94	70	84	90	106	116	63	38	40	47
CAL YR 1983	TOTAL	45841	MEAN	126	MAX	1020	MIN	33				
WTR YR 1984	TOTAL	58904	MEAN	161	MAX	1140	MIN	38				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04232100 STERLING CREEK AT STERLING, NY

LOCATION.--Lat 43°19'31", long 76°38'51", Cayuga County, Hydrologic Unit 04140101, on right bank at Sterling, 25 ft downstream from bridge on State Highway 104A, 1.8 mi southwest of Sterling Valley, and 1.9 mi upstream from Sterling Valley Creek.

DRAINAGE AREA.--44.4 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 264.69 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--27 years (water years 1958-84), 66.9 ft<sup>3</sup>/s, 20.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft<sup>3</sup>/s Mar. 22, 1980, gage height, 5.99 ft, from rating curve extended above 960 ft<sup>3</sup>/s, minimum, 0.32 ft<sup>3</sup>/s Sept. 14, 1966, gage height, 1.50 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 630 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1445	767	3.95	Feb. 15	0400	*1,060	*4.55

Minimum discharge, 2.5 ft<sup>3</sup>/s July 26, 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	3.4	11	89	43	48	45	176	62	104	11	3.4	46
2	3.7	12	71	41	46	45	177	58	80	9.4	3.3	36
3	3.5	16	66	41	48	43	155	55	66	8.2	6.9	49
4	3.6	24	56	42	52	41	140	164	58	8.8	7.7	84
5	7.0	27	57	40	54	44	218	216	49	20	6.9	82
6	14	29	93	40	50	48	342	159	47	18	6.1	67
7	9.8	27	160	40	48	50	265	113	43	17	10	53
8	7.9	24	138	41	46	50	176	106	45	13	13	41
9	7.7	33	127	42	45	50	128	130	37	11	10	33
10	7.2	20	110	42	47	50	111	106	31	10	13	27
11	7.0	72	84	40	60	50	92	86	26	11	17	49
12	12	122	101	38	115	52	76	131	22	9.6	31	69
13	8.6	87	300	38	233	54	68	155	19	8.5	32	60
14	28	63	722	39	600	52	64	178	19	8.5	37	178
15	17	56	605	39	1010	56	102	148	20	7.0	60	107
16	13	74	371	38	728	64	192	116	19	7.1	61	82
17	11	85	203	37	448	93	234	91	18	5.5	85	63
18	8.9	78	110	37	269	95	189	78	18	4.8	57	54
19	8.2	66	70	36	197	93	133	73	18	4.6	57	45
20	7.3	59	82	35	163	102	135	68	17	4.2	57	39
21	6.7	78	80	34	131	251	120	65	16	4.2	45	33
22	6.3	86	78	30	108	377	99	61	14	3.9	37	26
23	9.3	67	72	29	101	380	85	127	14	3.5	56	22
24	14	57	66	30	88	281	81	144	15	3.5	50	19
25	13	64	62	66	78	242	92	98	19	3.0	42	18
26	14	66	58	70	69	229	84	74	16	2.8	34	23
27	21	64	52	68	62	189	72	62	13	4.5	28	24
28	20	70	48	62	48	168	67	70	13	7.0	23	23
29	17	127	48	58	46	172	73	297	11	6.1	20	20
30	15	122	46	54	---	165	69	221	11	4.4	30	19
31	12	---	45	50	---	152	---	149	---	3.8	61	---
TOTAL	337.1	1786	4270	1340	5038	3783	4015	3661	898	243.9	1000.3	1491
MEAN	10.9	59.5	138	43.2	174	122	134	118	29.9	7.87	32.3	49.7
MAX	28	127	722	70	1010	380	342	297	104	20	85	178
MIN	3.4	11	45	29	45	41	64	55	11	2.8	3.3	18
CFSM	.25	1.34	3.11	.97	3.92	2.75	3.02	2.66	.67	.18	.73	1.12
IN.	0.28	1.50	3.58	1.12	4.22	3.17	3.36	3.07	0.75	0.20	0.84	1.25

CAL YR 1983	TOTAL	22849.5	MEAN	62.6	MAX	748	MIN	1.9	CFSM	1.41	IN.	19.14
WTR YR 1984	TOTAL	27863.3	MEAN	76.1	MAX	1010	MIN	2.8	CFSM	1.71	IN.	23.34

## 04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft from lake on shorter of two boat slips at Watkins Glen.

DRAINAGE AREA.--704 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datm of 1929 (1.59 ft Barge Canal datum). Prior to Oct. 1, 1975, at datum 438.41 ft higher.

REMARKS.--Area of water surface, 67.6 mi<sup>2</sup>. Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. For table of diversion, see station 01528700. Lake regulated by taintor gates on Seneca River at lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.88 ft June 25, 1972; minimum, 442.64 ft Mar. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 446.27 ft Apr. 8; minimum, 443.63 ft Feb. 10, 11.

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	444.30	443.94	444.33	444.70	443.87	444.59	445.09	445.63	446.01	445.30	445.05	445.12
2	444.29	443.98	444.29	444.69	443.79	444.55	445.09	445.59	445.97	445.28	445.07	445.09
3	444.26	444.02	444.29	444.68	443.77	444.51	445.17	445.53	445.89	445.24	445.06	445.13
4	444.23	444.03	444.30	444.63	443.81	444.45	445.27	445.60	445.83	445.23	445.09	445.14
5	444.29	444.05	444.30	444.59	443.83	444.37	445.59	445.69	445.78	445.26	445.09	445.09
6	444.29	444.04	444.28	444.55	443.83	444.37	446.05	445.68	445.71	445.29	445.07	445.03
7	444.29	444.04	444.28	444.57	443.80	444.34	446.24	445.64	445.65	445.32	445.12	444.89
8	444.23	443.99	444.25	444.53	443.75	444.27	446.26	445.61	445.59	445.37	445.13	444.81
9	444.30	443.98	444.22	444.54	443.72	444.23	446.22	445.58	445.56	445.34	445.05	444.80
10	444.23	444.03	444.22	444.54	443.65	444.18	446.18	445.57	445.51	445.26	445.06	444.79
11	444.13	444.12	444.22	444.55	443.68	444.21	446.13	445.51	445.48	445.26	445.10	444.89
12	444.18	444.14	444.22	444.52	443.74	444.22	446.07	445.64	445.45	445.26	445.20	444.94
13	444.19	444.12	444.47	444.47	443.77	444.22	446.01	445.76	445.37	445.20	445.24	444.87
14	444.19	444.08	444.89	444.49	443.99	444.27	445.95	445.97	445.34	445.17	445.29	445.02
15	444.26	444.07	445.05	444.49	444.56	444.25	445.94	446.03	445.35	445.19	445.33	445.10
16	444.21	444.10	445.09	444.45	444.69	444.29	445.95	446.04	445.31	445.20	445.32	445.04
17	444.13	444.12	445.11	444.41	444.70	444.41	445.98	446.00	445.26	445.19	445.41	445.03
18	444.19	444.11	445.13	444.36	444.71	444.44	446.01	445.96	445.31	445.13	445.42	444.98
19	444.19	444.11	445.16	444.30	444.67	444.48	446.00	445.93	445.46	445.17	445.41	444.91
20	444.16	444.07	445.09	444.21	444.69	444.50	445.98	445.91	445.48	445.12	445.51	444.95
21	444.13	444.11	444.98	444.18	444.66	444.62	445.98	445.89	445.43	445.08	445.40	444.95
22	444.06	444.16	444.92	444.17	444.62	444.76	445.91	445.83	445.35	445.11	445.28	444.93
23	444.05	444.16	444.88	444.15	444.57	444.81	445.85	445.81	445.31	445.07	445.37	444.91
24	444.16	444.15	444.88	444.10	444.55	444.85	445.82	445.83	445.32	445.10	445.38	444.99
25	444.13	444.20	444.89	444.08	444.59	444.91	445.83	445.79	445.38	445.14	445.31	444.95
26	444.07	444.22	444.85	444.04	444.58	444.96	445.81	445.76	445.40	445.05	445.30	445.03
27	444.13	444.24	444.85	443.98	444.58	444.97	445.77	445.75	445.35	445.14	445.28	445.01
28	444.05	444.23	444.79	443.97	444.65	445.01	445.72	445.77	445.26	445.17	445.22	444.92
29	444.08	444.28	444.77	443.93	444.65	445.19	445.70	445.92	445.26	445.11	445.22	444.99
30	444.07	444.29	444.71	443.95	---	445.18	445.65	446.04	445.28	445.11	445.16	444.97
31	444.00	---	444.68	443.93	---	445.11	---	446.04	---	445.07	445.14	---
MEAN	444.18	444.11	444.66	444.35	444.22	444.57	445.84	445.78	445.49	445.19	445.23	444.98
MAX	444.30	444.29	445.16	444.70	444.71	445.19	446.26	446.04	446.01	445.37	445.51	445.14
MIN	444.00	443.94	444.22	443.93	443.65	444.18	445.09	445.51	445.26	445.05	445.05	444.79
CAL YR 1983	MEAN	444.70	MAX	446.43	MIN	443.93						
WTR YR 1984	MEAN	444.88	MAX	446.26	MIN	443.65						

## STREAMS TRIBUTARY TO LAKE ONTARIO

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY  
(Formerly published as Keuka Lake at Hammondsport)

LOCATION.--Lat 42°24'22", long 77°13'08", Steuben County, Hydrologic Unit 04140201, on left bank of Keuka Inlet at end of Liberty Street extension at Hammondsport, and 300 ft upstream from mouth.

DRAINAGE AREA.--Keuka Inlet 25.0 mi<sup>2</sup>; Keuka Lake at mouth 182 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1, 1975, at datum 710.00 ft higher.

REMARKS.--Lake regulated by village of Penn Yan; prior to July 1962, by New York State Electric and Gas Corp. Area of water surface, 18.3 mi<sup>2</sup>. During each year, a large part of flow from 45.5 mi<sup>2</sup> of drainage area of Mud Creek (Susquehanna River basin) is diverted into Keuka Lake for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 719.35 ft June 24, 1972; minimum daily, 711.40 ft Feb. 2, 3, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 716.21 May 15; minimum, 712.41 ft Feb. 2, 11.

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	713.31	713.16	712.87	713.19	712.48	714.22	714.26	715.62	716.10	714.61	714.33	714.00
2	713.31	713.14	712.83	713.19	712.50	714.18	714.32	715.58	716.05	714.56	714.34	714.01
3	713.28	713.15	712.82	713.19	712.51	714.15	714.46	715.54	715.98	714.54	714.39	714.05
4	713.28	713.14	712.81	712.94	712.52	714.10	714.68	715.64	715.92	714.52	714.41	714.05
5	713.31	713.16	712.80	712.81	712.54	714.06	715.18	715.72	715.87	714.60	714.41	714.03
6	713.32	713.14	712.78	712.80	712.53	714.04	715.77	715.73	715.81	714.66	714.40	714.01
7	713.32	713.12	712.77	712.77	712.54	714.01	715.95	715.70	715.75	714.69	714.42	713.97
8	713.30	713.10	712.76	712.73	712.54	713.98	716.00	715.68	715.69	714.69	714.42	713.95
9	713.32	713.08	712.74	712.71	712.54	713.95	715.99	715.66	715.62	714.67	714.40	713.90
10	713.28	713.09	712.73	712.72	712.53	713.95	715.97	715.65	715.55	714.70	714.42	713.90
11	713.25	713.16	712.72	712.68	712.56	713.95	715.94	715.62	715.47	714.70	714.55	713.94
12	713.27	713.15	712.71	712.66	712.61	713.95	715.91	715.74	715.40	714.69	714.70	713.99
13	713.28	713.14	712.90	712.62	712.67	713.95	715.87	715.83	715.30	714.65	714.74	713.96
14	713.31	713.11	713.32	712.59	712.94	713.95	715.83	716.10	715.26	714.59	714.74	714.08
15	713.32	713.11	713.44	712.56	713.49	713.94	715.82	716.15	715.22	714.54	714.69	714.09
16	713.31	713.10	713.46	712.53	713.65	713.76	715.83	716.14	715.13	714.49	714.69	714.01
17	713.29	713.07	713.45	712.53	713.72	713.80	715.84	716.11	715.07	714.43	714.60	713.97
18	713.29	713.04	713.43	712.53	713.80	713.78	715.84	716.06	715.12	714.40	714.58	713.91
19	713.31	713.02	713.41	712.53	713.87	713.76	715.84	716.03	715.26	714.38	714.50	713.85
20	713.29	712.98	713.38	712.53	713.98	713.74	715.83	716.00	715.22	714.36	714.40	713.80
21	713.27	712.97	713.32	712.53	714.05	713.84	715.82	716.00	715.14	714.36	714.34	713.78
22	713.24	712.97	713.30	712.53	714.10	713.94	715.77	715.95	715.08	714.35	714.30	713.73
23	713.26	712.95	713.28	712.53	714.15	713.97	715.73	715.95	715.01	714.33	714.21	713.68
24	713.30	712.93	713.24	712.53	714.20	713.97	715.70	715.97	714.93	714.34	714.12	713.66
25	713.27	712.92	713.20	712.53	714.24	713.97	715.75	715.93	714.90	714.33	714.07	713.60
26	713.26	712.90	713.16	712.50	714.25	713.98	715.76	715.89	714.85	714.29	714.05	713.60
27	713.26	712.88	713.20	712.48	714.27	713.99	715.74	715.84	714.78	714.40	714.04	713.54
28	713.20	712.89	713.19	712.47	714.31	714.02	715.70	715.90	714.73	714.38	714.03	713.49
29	713.22	712.92	713.19	712.46	714.26	714.18	715.70	716.07	714.71	714.36	714.04	713.45
30	713.21	712.88	713.19	712.46	---	714.21	715.65	716.14	714.67	714.35	714.02	713.40
31	713.19	---	713.19	712.47	---	714.23	---	716.12	---	714.33	714.02	---
MEAN	713.28	713.05	713.08	712.65	713.32	713.98	715.61	715.87	715.32	714.49	714.37	713.85
MAX	713.32	713.16	713.46	713.19	714.31	714.23	716.00	716.15	716.10	714.70	714.74	714.09
MIN	713.19	712.88	712.71	712.46	712.48	713.74	714.26	715.54	714.67	714.29	714.02	713.40
CAL YR 1983	MEAN	713.71	MAX	715.50	MIN	712.71						
WTR YR 1984	MEAN	714.07	MAX	716.15	MIN	712.46						



## 04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--207 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 444.67 ft (revised) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1982, at datum 2.00 ft higher.

REMARKS.--Records good. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi<sup>2</sup> of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--19 years, 206 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft<sup>3</sup>/s June 22, 1972, gage height, 10.37 ft, present datum, from rating curve extended above 2,100 ft<sup>3</sup>/s on basis of contracted-opening measurement at Mays Mill, adjusted for intervening area; minimum, 3.2 ft<sup>3</sup>/s Sept. 6, 7, 8, 9, 10, 1982, gage height, 1.47 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,180 ft<sup>3</sup>/s Aug. 11 at 1830 hours, gage height, 5.78 ft; minimum, 5.3 ft<sup>3</sup>/s Jan. 29, gage height, 1.57 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	18	102	161	140	15	395	206	546	720	356	20	29
2	19	103	157	140	16	401	286	549	693	261	20	29
3	19	104	152	130	16	388	414	547	683	113	21	34
4	19	103	152	130	17	382	528	701	675	27	21	31
5	20	103	152	130	18	382	975	667	661	33	20	29
6	19	101	157	120	19	382	847	617	649	34	20	28
7	19	99	165	120	20	370	610	595	634	31	20	28
8	19	100	152	120	21	364	550	582	631	27	20	27
9	19	98	152	110	23	323	580	567	639	26	19	27
10	19	102	148	110	26	268	592	548	622	98	16	27
11	19	105	144	110	31	257	586	535	599	172	257	35
12	19	102	148	110	37	263	580	599	585	260	121	39
13	20	96	311	100	54	252	557	582	555	313	262	37
14	22	94	435	100	136	274	557	771	549	310	660	227
15	19	96	292	100	157	335	592	652	433	306	526	295
16	19	132	252	98	76	376	610	621	356	292	509	281
17	19	177	247	96	64	382	592	600	357	287	484	271
18	19	170	223	94	58	358	616	599	373	291	435	263
19	19	170	206	94	54	346	604	621	463	35	419	256
20	19	174	197	92	50	382	614	610	494	22	410	258
21	19	174	189	90	45	500	596	604	474	21	401	248
22	19	165	190	88	41	442	583	598	461	21	393	242
23	22	161	180	86	38	414	577	611	442	21	395	239
24	20	161	170	84	37	401	578	597	436	20	369	232
25	20	161	170	82	35	395	597	614	435	20	358	228
26	20	157	160	80	33	237	587	662	433	20	347	219
27	20	152	160	80	165	157	571	647	427	23	265	212
28	19	161	150	13	395	161	559	698	419	21	126	207
29	19	170	150	14	401	165	560	859	396	21	128	204
30	19	165	150	14	---	177	553	760	377	21	76	200
31	44	---	140	15	---	181	---	740	---	20	32	---
TOTAL	625	3958	5812	2890	2098	10110	17257	19499	15671	3523	7170	4482
MEAN	20.2	132	187	93.2	72.3	326	575	629	522	114	231	149
MAX	44	177	435	140	401	500	975	859	720	356	660	295
MIN	18	94	140	13	15	157	206	535	356	20	16	27
CAL YR 1983	TOTAL	52496.5	MEAN	144	MAX	700	MIN	5.9				
WTR YR 1984	TOTAL	93095	MEAN	254	MAX	975	MIN	13				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi upstream from Enfield (formerly Butternut) Creek, and 5 mi south of Ithaca.

DRAINAGE AREA.--35.2 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

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

AVERAGE DISCHARGE.--47 years (water years 1938-84), 38.9 ft<sup>3</sup>/s, 15.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft<sup>3</sup>/s June 23, 1972, gage height, 8.10 ft, from rating curve extended above 1,600 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 5.5 ft and 7.58 ft; minimum discharge, 1.7 ft<sup>3</sup>/s July 22, 1955; minimum gage height, 0.42 ft Aug. 30, 31, Sept. 1, 2, 1939, July 22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 13	2400	1,190	3.89	Apr. 6	0230	1,430	4.47
Feb. 14	2200	*1,830	*4.89	May 29	0530	747	3.06

Minimum discharge, 3.7 ft<sup>3</sup>/s Oct. 3, 4, gage height, 0.53 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	4.0	5.8	27	18	13	38	71	78	120	33	22	9.5
2	4.3	6.1	22	17	13	35	93	60	96	25	19	10
3	4.0	7.6	20	17	18	32	144	74	82	20	26	21
4	4.3	8.2	20	18	32	39	250	150	76	19	21	24
5	5.3	7.9	23	20	25	32	781	130	62	200	17	16
6	6.4	7.7	51	21	19	30	853	90	57	146	15	13
7	5.3	7.3	67	19	16	29	299	64	52	145	18	12
8	4.6	6.8	37	18	15	27	194	71	45	90	14	11
9	4.3	6.4	30	17	15	25	146	75	41	73	13	9.9
10	4.6	6.7	28	16	16	24	119	66	38	61	12	9.6
11	4.6	17	25	15	57	24	101	61	34	56	12	10
12	5.5	17	58	15	76	23	90	275	31	48	21	15
13	7.0	11	489	14	148	22	80	201	29	38	28	11
14	13	9.2	642	14	532	21	110	335	33	31	25	22
15	8.0	12	214	15	718	24	140	171	30	27	30	20
16	6.7	22	125	14	299	61	160	129	27	24	37	15
17	6.1	15	87	13	174	53	140	103	26	21	45	13
18	5.7	12	68	12	141	43	120	88	64	20	26	11
19	5.5	11	52	11	115	39	110	84	74	19	23	9.0
20	5.3	11	46	10	133	62	100	78	41	17	22	8.3
21	5.3	45	42	9.4	99	144	90	77	30	16	17	7.9
22	5.3	23	52	10	83	118	76	64	25	16	15	7.5
23	7.1	17	40	11	74	86	70	98	21	15	24	7.4
24	9.1	15	28	14	67	71	88	85	25	14	19	7.5
25	7.6	46	23	30	61	66	130	65	36	13	15	7.8
26	7.0	31	24	21	51	59	96	65	31	12	13	9.4
27	7.4	27	25	18	44	52	80	60	25	74	12	8.5
28	7.0	35	24	16	43	54	76	295	26	77	11	7.9
29	6.3	52	22	15	41	46	60	501	21	48	11	7.5
30	6.0	35	21	14	---	64	68	240	43	33	10	7.3
31	5.9	---	19	13	---	66	---	157	---	26	11	---
TOTAL	188.5	533.7	2451	485.4	3138	1509	4935	4090	1341	1457	604	340.0
MEAN	6.08	17.8	79.1	15.7	108	48.7	165	132	44.7	47.0	19.5	11.6
MAX	13	52	642	30	718	144	853	501	120	200	45	24
MIN	4.0	5.8	19	9.4	13	21	60	60	21	12	10	7.3
CRSM	.17	.51	2.25	.45	3.07	1.38	4.69	3.75	1.27	1.34	.55	.33
IN.	0.20	0.56	2.59	0.51	3.32	1.59	5.22	4.32	1.42	1.54	0.64	0.37
CAL YR 1983	TOTAL	13325.3	MEAN	36.5	MAX	642	MIN	3.4	CRSM	1.04	IN.	14.08
WTR YR 1984	TOTAL	21081.6	MEAN	57.6	MAX	853	MIN	4.0	CRSM	1.64	IN.	22.28

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY  
(Formerly published as Cayuga Lake at Ithaca)

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank of natural channel 40 ft upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1 mi upstream from mouth of Inlet, at Ithaca.

DRAINAGE AREA.--Cayuga Inlet 143 mi<sup>2</sup>; Cayuga Lake at mouth 1,564 mi<sup>2</sup>; Cayuga Lake portion 785 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.43 ft Barge Canal datum). Prior to September 1925, nonrecording gage at several sites within 1 mi of present site. Prior to October 1968, at datum 378.57 ft higher. October 1968 to September 1975, at datum 376.57 ft higher.

REMARKS.--Lake regulated at Mud Lock by New York State Department of Transportation. Area of water surface, 66.9 mi<sup>2</sup>. Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi upstream from Mud Lock and is included in first drainage area given above.

EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.33 ft June 26, 1972; minimum daily, 377.64 ft present datum, Mar. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 383.77 ft May 16; minimum, 377.05 ft Jan. 13, 196.

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	381.32	380.96	380.88	379.63	379.55	381.48	381.42	382.29	383.59	382.58	382.22	382.14
2	381.32	380.98	380.79	379.51	379.51	381.41	381.55	382.24	383.59	382.56	382.22	382.08
3	381.29	381.05	380.77	379.38	379.51	381.34	381.70	382.20	383.48	382.56	382.20	382.12
4	381.25	381.05	380.66	379.32	379.56	381.25	381.85	382.35	383.42	382.48	382.22	382.13
5	381.31	381.06	380.60	379.29	379.58	381.11	382.30	382.51	383.33	382.52	382.21	382.04
6	381.33	381.05	380.53	379.32	379.59	381.12	383.06	382.59	383.23	382.61	382.18	382.05
7	381.32	381.03	380.63	379.35	379.62	381.07	383.38	382.61	383.13	382.66	382.22	381.95
8	381.24	380.98	380.56	379.25	379.60	380.97	383.48	382.68	383.01	382.66	382.23	381.90
9	381.33	380.97	380.51	379.23	379.60	380.90	383.49	382.76	382.89	382.53	382.15	381.86
10	381.23	380.98	380.49	379.29	379.56	380.69	383.49	382.81	382.76	382.47	382.18	381.86
11	381.12	381.08	380.36	379.28	379.59	380.55	383.44	382.77	382.66	382.51	382.22	381.96
12	381.14	381.13	380.29	379.21	379.64	380.42	383.36	382.99	382.53	382.54	382.32	382.01
13	381.15	381.07	380.65	379.16	379.72	380.29	383.26	383.20	382.47	382.49	382.34	381.92
14	381.20	381.00	381.31	379.19	380.13	380.32	383.14	383.54	382.53	382.43	382.41	382.09
15	381.29	380.95	381.44	379.18	381.24	380.25	383.11	383.63	382.58	382.39	382.49	382.15
16	381.21	380.97	381.43	379.13	381.57	380.27	383.14	383.65	382.46	382.38	382.52	382.07
17	381.14	381.03	381.37	379.18	381.73	380.40	383.16	383.59	382.38	382.37	382.62	382.08
18	381.20	380.99	381.27	379.23	381.88	380.38	383.16	383.50	382.40	382.35	382.54	382.04
19	381.21	380.94	381.21	379.30	381.93	380.40	383.13	383.45	382.57	382.37	382.46	382.09
20	381.17	380.84	381.08	379.31	382.08	380.39	383.09	383.38	382.62	382.26	382.46	382.10
21	381.13	380.89	380.91	379.31	382.14	380.49	383.11	383.33	382.59	382.24	382.29	382.12
22	381.05	380.92	380.80	379.28	382.10	380.68	382.97	383.22	382.56	382.23	382.24	382.05
23	381.04	380.87	380.76	379.26	382.06	380.89	382.85	383.20	382.48	382.19	382.36	382.03
24	381.17	380.83	380.60	379.31	382.04	380.94	382.79	383.22	382.40	382.26	382.37	382.08
25	381.12	380.90	380.43	379.39	382.01	380.99	382.78	383.14	382.47	382.25	382.23	382.02
26	381.10	380.87	380.20	379.46	381.85	381.03	382.71	383.09	382.53	382.13	382.16	382.17
27	381.16	380.87	380.06	379.52	381.69	381.01	382.64	383.06	382.47	382.26	382.07	382.08
28	381.07	380.79	379.96	379.52	381.65	381.02	382.50	383.09	382.52	382.27	382.05	381.97
29	381.16	380.88	379.95	379.46	381.57	381.23	382.45	383.37	382.62	382.25	382.06	382.02
30	381.08	380.89	379.85	379.50	---	381.32	382.30	383.55	382.61	382.24	382.07	381.98
31	381.02	---	379.73	379.58	---	381.34	---	383.57	---	382.21	382.15	---
MEAN	381.19	380.96	380.65	379.33	380.77	380.84	382.83	383.05	382.76	382.40	382.27	382.04
MAX	381.33	381.13	381.44	379.63	382.14	381.48	383.49	383.65	383.59	382.66	382.62	382.17
MIN	381.02	380.79	379.73	379.13	379.51	380.25	381.42	382.20	382.38	382.13	382.05	381.86
CAL YR 1983	MEAN	381.45	MAX	384.74	MIN	378.92						
WTR YR 1984	MEAN	381.59	MAX	383.65	MIN	379.13						

## STREAMS TRIBUTARY TO LAKE ONTARIO

04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi east of Ithaca, 0.5 mi upstream from Cornell University dam, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--126 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.

REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft National Geodetic Vertical Datum of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Diversion from point about 1 mi upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University.

AVERAGE DISCHARGE.--59 years (water years 1926-84), 187 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft<sup>3</sup>/s July 8, 1935, gage height, 9.52 ft, from average of computed flow over each of four dams; maximum gage height, 11.16 ft Feb. 21, 1971 (ice jam); minimum discharge, about 3 ft<sup>3</sup>/s Aug. 25, 1927, result of regulation; minimum daily, 3.6 ft<sup>3</sup>/s Aug. 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	0930	4,110	5.10	Apr. 6	1030	4,310	5.21
Feb. 15	0630	*4,550	*5.33	May 12	1130	1,900	3.67

Minimum discharge, 12 ft<sup>3</sup>/s Oct. 3,4, gage height, 0.32 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	21	206	110	66	190	275	259	386	164	41	56
2	14	21	175	110	64	180	359	204	307	119	40	46
3	13	25	159	110	77	160	564	185	262	85	48	63
4	13	51	151	120	150	160	870	418	255	72	60	76
5	18	45	178	120	195	170	2350	527	206	268	71	57
6	27	37	236	110	158	160	3500	319	198	481	46	50
7	28	33	539	96	124	130	1460	248	187	515	41	43
8	20	29	272	86	94	130	749	245	159	235	40	38
9	16	26	206	84	86	110	521	368	140	162	36	36
10	15	25	187	80	100	110	412	303	127	138	32	34
11	15	56	172	74	164	100	351	247	114	148	57	39
12	15	125	185	70	358	98	312	1350	100	146	266	136
13	19	83	1610	66	588	96	283	732	95	108	279	84
14	39	61	3370	64	1490	96	268	1260	102	87	131	179
15	32	58	1210	62	3840	120	430	664	100	77	146	170
16	23	165	626	60	1890	200	541	482	90	69	266	100
17	19	171	424	56	841	340	544	372	86	64	608	78
18	18	114	324	54	634	218	402	309	162	61	200	65
19	17	93	250	52	529	187	392	298	510	88	132	56
20	16	97	170	52	663	208	365	272	185	66	112	53
21	15	493	150	50	486	542	322	286	122	56	88	47
22	15	291	200	54	374	542	256	235	99	51	74	41
23	21	173	170	60	355	335	234	298	87	46	120	40
24	45	148	150	70	322	258	243	446	86	43	121	41
25	36	300	130	160	283	249	454	265	111	39	86	42
26	26	252	130	120	242	227	353	225	94	36	67	49
27	30	230	140	100	210	196	261	259	85	130	56	79
28	34	238	140	90	210	196	223	809	89	140	51	54
29	28	416	130	80	200	196	207	1530	84	73	55	46
30	26	291	120	76	---	196	197	868	84	54	56	43
31	23	---	120	70	---	258	---	522	---	46	63	---
TOTAL	689	4168	12230	2566	14793	6358	17698	14805	4712	3867	3489	1941
MEAN	22.2	139	395	82.8	510	205	590	478	157	125	113	64.7
MAX	45	493	3370	160	3840	542	3500	1530	510	515	608	179
MIN	13	21	120	50	64	96	197	185	84	36	32	34
CFSM	.18	1.10	3.13	.66	4.05	1.63	4.68	3.79	1.25	.99	.90	.51
IN.	0.20	1.23	3.61	0.76	4.37	1.88	5.23	4.37	1.39	1.14	1.03	0.57
CAL YR 1983	TOTAL	66505.4	MEAN	182	MAX	3370	MIN	9.4	CFSM	1.44	IN.	19.63
WTR YR 1984	TOTAL	87316	MEAN	239	MAX	3840	MIN	13	CFSM	1.90	IN.	25.78

## STREAMS TRIBUTARY TO LAKE ONTARIO

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## 04234500 CANANDIAGUA LAKE AT CANANDIAGUA, NY

LOCATION.--Lat 42°52'19", long 77°16'22", Ontario County, Hydrologic Unit 04140201, at south end of city pier at northern end of Canandaigua Lake, 1 mi southeast of Canandaigua.

DRAINAGE AREA.--184 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.

REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft and 684.94 ft, respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi<sup>2</sup>.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft June 24, 1972; minimum daily, 685.62 ft Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 689.08 ft Apr. 7-8; minimum, 686.42 ft Nov. 9-10.

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	686.87	686.46	686.68	687.02	686.71	687.56	688.14	688.73	688.77	688.43	688.18	688.10
2	686.85	686.47	686.68	687.00	686.70	687.54	688.17	688.67	688.75	688.43	688.17	688.10
3	686.86	686.45	686.65	686.98	686.71	687.50	688.26	688.64	688.75	688.42	688.16	688.12
4	686.84	686.45	686.67	686.96	686.69	687.47	688.36	688.71	688.75	688.43	688.16	688.10
5	686.84	686.45	686.68	686.93	686.70	687.48	688.58	688.83	688.72	688.45	688.16	688.08
6	686.84	686.45	686.73	686.92	686.71	687.43	688.91	688.85	688.68	688.51	688.16	688.05
7	686.81	686.44	686.75	686.89	686.70	687.40	689.06	688.84	688.65	688.49	688.14	688.04
8	686.81	686.44	686.72	686.89	686.69	687.38	689.07	688.82	688.61	688.46	688.13	688.03
9	686.74	686.43	686.73	686.87	686.68	687.35	689.04	688.81	688.56	688.46	688.13	688.02
10	686.74	686.45	686.72	686.86	686.68	687.34	689.00	688.77	688.51	688.45	688.11	687.98
11	686.75	686.57	686.72	686.85	686.69	687.32	688.95	688.75	688.47	688.49	688.12	687.96
12	686.73	686.57	686.77	686.84	686.72	687.27	688.90	688.76	688.45	688.48	688.25	687.98
13	686.74	686.56	686.81	686.83	686.80	687.25	688.86	688.77	688.45	688.47	688.28	688.02
14	686.78	686.55	687.15	686.83	687.00	687.23	688.81	688.90	688.58	688.47	688.33	688.06
15	686.71	686.58	687.33	686.82	687.31	687.21	688.78	688.95	688.91	688.46	688.41	688.07
16	686.69	686.59	687.40	686.81	687.47	687.23	688.75	688.93	689.04	688.44	688.44	688.10
17	686.68	686.60	687.39	686.80	687.55	687.30	688.75	688.91	688.97	688.43	688.49	688.09
18	686.65	686.58	687.38	686.79	687.58	687.36	688.75	688.87	688.82	688.39	688.49	688.09
19	686.62	686.57	687.36	686.79	687.61	687.40	688.73	688.83	688.67	688.37	688.49	688.07
20	686.59	686.60	687.33	686.79	687.62	687.45	688.72	688.79	688.57	688.36	688.46	688.06
21	686.57	686.63	687.32	686.77	687.62	687.60	688.66	688.72	688.55	688.33	688.46	688.03
22	686.57	686.58	687.35	686.75	687.62	687.81	688.64	688.73	688.50	688.31	688.45	688.03
23	686.60	686.59	687.28	686.74	687.60	687.90	688.62	688.74	688.50	688.31	688.50	688.02
24	686.57	686.60	687.25	686.75	687.58	687.94	688.59	688.73	688.56	688.25	688.45	688.00
25	686.58	686.58	687.22	686.74	687.56	687.98	688.70	688.73	688.52	688.24	688.40	688.01
26	686.56	686.56	687.21	686.73	687.55	687.99	688.77	688.79	688.50	688.22	688.35	688.01
27	686.57	686.55	687.17	686.73	687.53	688.02	688.77	688.91	688.54	688.23	688.30	688.00
28	686.58	686.65	687.16	686.72	687.54	688.04	688.76	688.89	688.49	688.23	688.25	687.98
29	686.51	686.69	687.13	686.72	687.57	688.10	688.77	688.86	688.46	688.23	688.22	687.95
30	686.48	686.69	687.09	686.71	---	688.16	688.77	688.83	688.43	688.22	688.18	687.94
31	686.47	---	687.05	686.72	---	688.15	---	688.78	---	688.21	688.14	---
MEAN	686.68	686.55	687.03	686.82	687.15	687.59	688.72	688.80	688.62	688.38	688.29	688.04
MAX	686.87	686.69	687.40	687.02	687.62	688.16	689.07	688.95	689.04	688.51	688.50	688.12
MIN	686.47	686.43	686.65	686.71	686.68	687.21	688.14	688.64	688.43	688.21	688.11	687.94
CAL YR 1983	MEAN	687.60	MAX	689.50	MIN	686.43						
WTR YR 1984	MEAN	687.72	MAX	689.07	MIN	686.43						



## STREAMS TRIBUTARY TO LAKE ONTARIO

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft upstream from bridge on State Highway 488, and 4.1 mi downstream from Canandaigua Lake.

DRAINAGE AREA.--195 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 671.44 ft National Geodetic Vertical Datum of 1929. Prior to June 25, 1974, at site 0.1 mi upstream at datum 676.90 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966.

AVERAGE DISCHARGE.--44 years (water years 1941-84), 154 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft<sup>3</sup>/s June 24, 1972, gage height, 11.08 ft present datum, at site then in use; minimum, 4.6 ft<sup>3</sup>/s Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 693 ft<sup>3</sup>/s May 29 at 1200 hours, gage height, 5.43 ft; maximum gage height, 6.09 ft Dec. 31 at 1200 hours (ice jam); minimum daily discharge, 28 ft<sup>3</sup>/s July 13; minimum gage height, 3.13 ft July 13.

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	45	30	50	180	37	190	430	403	571	61	51	61
2	45	30	48	180	37	190	501	385	553	55	52	61
3	45	30	46	150	38	254	467	372	543	38	54	81
4	44	30	46	130	40	267	470	539	534	39	55	64
5	46	32	49	120	42	220	573	591	493	44	55	60
6	44	31	72	110	41	198	646	537	433	42	55	58
7	43	30	76	100	41	200	634	520	385	40	55	56
8	42	30	55	98	40	200	627	545	144	40	56	45
9	40	29	50	90	39	190	617	546	124	41	59	44
10	40	29	49	84	40	190	596	518	124	41	58	44
11	41	47	47	78	57	190	581	499	123	33	61	53
12	39	51	58	62	83	180	560	545	113	31	68	57
13	40	37	127	62	145	180	544	553	71	28	57	59
14	47	33	235	60	174	182	527	635	68	32	66	122
15	38	36	188	60	153	185	519	584	54	33	78	62
16	37	49	187	58	101	195	530	569	48	33	112	54
17	37	43	201	56	138	123	550	558	44	34	75	48
18	36	40	197	54	236	93	539	549	101	35	99	45
19	37	38	190	52	240	83	500	539	386	35	115	43
20	36	39	190	50	240	80	507	525	404	36	89	42
21	35	40	180	48	230	78	482	516	392	37	104	42
22	34	39	180	47	230	76	465	505	277	37	128	40
23	39	38	180	46	220	74	436	552	64	38	364	39
24	37	40	180	45	220	84	385	560	58	38	343	39
25	34	40	180	44	210	100	465	521	58	38	324	38
26	34	40	180	43	210	104	430	511	58	39	310	40
27	36	41	190	42	200	102	414	496	59	43	299	37
28	34	54	190	40	200	102	412	546	59	39	289	36
29	31	84	190	39	190	184	419	666	59	38	280	34
30	31	59	190	38	---	385	411	608	61	41	229	33
31	30	---	180	38	---	400	---	585	---	49	84	---
TOTAL	1197	1189	4181	2304	3872	5279	15237	16578	6461	1208	4124	1537
MEAN	38.6	39.6	135	74.3	134	170	508	535	215	39.0	133	51.2
MAX	47	84	235	180	240	400	646	666	571	61	364	122
MIN	30	29	46	38	37	74	385	372	44	28	51	33
CAL YR 1983	TOTAL	50708	MEAN	139	MAX	992	MIN	29				
WTR YR 1984	TOTAL	63167	MEAN	173	MAX	666	MIN	28				

## STREAMS TRIBUTARY TO LAKE ONTARIO

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04235250 FLINT CREEK AT PHELPS, NY

LOCATION.--Lat 42°57'28", long 77°04'06", Ontario County, Hydrologic Unit 04140201, on right bank 25 ft downstream from bridge on Eagle Street at Phelps, and 1.1 mi upstream from Canandaigua Outlet.

DRAINAGE AREA.--102 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Small diversion (during periods of low ground-water level) by Phelps Cement Products, Inc., located about 0.2 mile upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft<sup>3</sup>/s.

AVERAGE DISCHARGE.--25 years, 90.1 ft<sup>3</sup>/s, 12.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft<sup>3</sup>/s Mar. 30, 1960, gage height, 5.83 ft; maximum gage height, 6.20 ft Mar. 17, 1963 (ice jam); no flow for many days 1962-65, 1969.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 15	0530	1,050	4.38	Apr. 6	0300	*1,080	*4.43

Minimum discharge, 0.27 ft<sup>3</sup>/s Oct. 4,5, gage height, 0.70 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	2.4	4.8	67	27	21	48	210	147	238	17	4.8	22
2	2.0	5.0	50	26	20	46	362	124	172	24	5.1	19
3	1.0	5.7	40	25	19	45	518	111	141	17	4.1	40
4	.39	5.6	35	26	19	48	550	330	122	14	4.0	35
5	.44	7.0	36	26	24	52	854	496	96	19	5.7	31
6	2.1	8.5	59	25	22	56	994	333	78	41	4.4	23
7	1.5	15	91	25	21	54	842	224	65	44	4.9	19
8	1.1	9.0	86	24	20	50	591	202	53	29	4.1	16
9	1.1	7.9	70	23	19	48	346	205	42	22	4.5	14
10	.96	8.0	54	23	20	45	245	179	36	19	3.9	12
11	.76	17	47	23	49	43	194	150	32	25	6.3	24
12	1.4	40	52	22	195	40	165	218	28	28	108	36
13	2.5	39	196	22	348	40	148	283	25	24	128	46
14	5.0	26	674	21	664	39	138	540	32	17	76	197
15	4.0	24	571	20	892	42	151	464	28	13	50	121
16	3.0	28	389	19	655	70	190	328	24	11	49	94
17	2.4	36	242	19	411	161	246	227	21	9.4	122	72
18	1.9	36	150	18	279	188	272	174	30	8.6	68	51
19	4.5	28	90	17	222	162	212	153	93	7.9	58	40
20	2.9	23	50	16	197	176	264	141	59	7.2	51	32
21	2.3	26	52	15	171	517	237	140	35	6.2	32	28
22	2.1	27	54	15	145	570	178	130	26	5.6	25	21
23	4.2	29	48	17	130	414	151	157	21	5.3	168	20
24	4.9	24	43	20	120	264	147	270	19	5.3	94	18
25	5.0	23	40	25	109	204	255	215	33	4.7	53	18
26	5.7	22	37	22	95	178	273	150	30	4.3	34	24
27	6.3	23	35	25	80	152	218	125	20	6.3	25	21
28	5.3	31	35	24	70	138	171	166	20	8.3	20	19
29	5.0	76	33	23	50	150	200	671	17	9.7	39	18
30	5.0	84	32	23	---	140	178	583	18	8.1	47	18
31	4.6	---	30	22	---	162	---	376	---	6.2	28	---
TOTAL	91.75	738.5	3488	678	5087	4342	9500	8012	1654	467.1	1326.8	1149
MEAN	2.96	24.6	113	21.9	175	140	317	258	55.1	15.1	42.8	38.3
MAX	6.3	84	674	27	892	570	994	671	238	44	168	197
MIN	.39	4.8	30	15	19	39	138	111	17	4.3	3.9	12
CFSM	.03	.24	1.11	.21	1.72	1.37	3.11	2.53	.54	.15	.42	.38
IN.	0.03	0.27	1.27	0.25	1.86	1.58	3.46	2.92	0.60	0.17	0.48	0.42
CAL YR 1983	TOTAL	26792.35	MEAN	73.4	MAX	787	MIN	.04	CFSM	.72	IN.	9.77
WTR YR 1984	TOTAL	36534.15	MEAN	99.8	MAX	994	MIN	.39	CFSM	.98	IN.	13.32

## STREAMS TRIBUTARY TO LAKE ONTARIO

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°53'56", long 76°32'17", Cayuga County, Hydrologic Unit 04140201, on east side of breakwater at city of Auburn water intake and pumping station, 1 mi south of city limits of Auburn, and 1.8 mi upstream from State dam.

DRAINAGE AREA.--205 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 1, 1982, nonrecording gage read once daily by employees of city of Auburn Water Division at same site and datum. Reference mark at elevation 718.59 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi<sup>2</sup>.

COOPERATION.--Records furnished by city of Auburn until April 30, 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.88 ft June 25, 1972; minimum observed, 708.58 ft Feb. 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since 1912, 716.91 ft Mar. 23, 1936, Apr. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 713.49 ft May 30; minimum, 709.17 ft Feb. 5-6.

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	711.14	710.89	711.64	711.76	709.44	712.04	710.88	713.01	713.16	712.27	712.06	712.01
2	711.15	710.91	711.58	711.62	709.34	711.81	710.92	713.01	713.20	712.31	712.05	711.94
3	711.11	710.97	711.57	711.57	709.26	711.59	711.00	712.99	713.10	712.33	712.04	711.94
4	711.09	711.00	711.55	711.52	709.21	711.37	711.20	713.06	713.11	712.31	712.05	711.91
5	711.14	710.99	711.54	711.45	709.17	710.84	711.64	713.11	713.10	712.41	712.05	711.84
6	711.19	710.97	711.51	711.41	709.18	710.71	712.52	713.16	713.10	712.50	712.05	711.78
7	711.18	710.97	711.65	711.45	709.22	710.71	713.05	713.05	713.08	712.55	712.11	711.70
8	711.08	710.95	711.69	711.27	709.25	710.71	713.04	713.04	713.07	712.60	712.08	711.62
9	711.14	710.95	711.66	711.28	709.28	710.67	712.88	713.11	713.04	712.48	712.10	711.56
10	711.11	710.94	711.68	711.21	709.31	710.60	712.90	713.13	712.98	712.39	712.09	711.70
11	710.99	711.07	711.62	711.16	709.35	710.50	712.96	713.06	712.93	712.35	712.07	711.88
12	711.04	711.13	711.64	711.07	709.48	710.45	713.00	713.30	712.85	712.30	712.15	712.01
13	711.00	711.16	712.14	710.97	709.74	710.38	713.01	713.29	712.83	712.25	712.35	711.90
14	711.13	711.18	712.87	710.91	710.35	710.33	713.02	713.36	712.78	712.17	712.33	712.31
15	711.14	711.19	713.16	710.83	711.67	710.25	713.08	713.34	712.70	712.10	712.43	712.37
16	711.12	711.24	713.05	710.74	712.40	710.22	713.00	713.21	712.65	712.12	712.42	712.33
17	711.00	711.30	712.84	710.65	712.51	710.20	712.96	713.16	712.60	712.09	712.74	712.27
18	711.07	711.31	712.61	710.56	712.47	710.24	712.93	713.17	712.54	712.13	712.84	712.13
19	711.06	711.30	712.41	710.47	712.23	710.23	712.88	713.20	712.54	712.16	712.81	712.08
20	711.05	711.31	712.32	710.40	712.27	710.22	712.92	713.22	712.52	712.09	712.75	712.01
21	711.02	711.54	712.21	710.31	712.17	710.22	712.95	713.24	712.47	712.10	712.68	712.02
22	710.92	711.59	712.00	710.22	712.19	710.23	712.97	713.15	712.40	712.05	712.68	711.86
23	710.90	711.55	712.13	710.12	712.22	710.60	712.97	713.16	712.31	712.05	712.60	711.77
24	711.03	711.43	712.12	710.04	712.33	710.65	712.90	713.10	712.30	712.04	712.55	711.71
25	710.94	711.47	712.11	709.98	712.33	710.70	712.92	713.00	712.43	712.04	712.50	711.68
26	711.03	711.46	711.99	709.90	712.33	710.74	712.99	712.99	712.40	712.05	712.44	711.69
27	711.04	711.43	711.80	709.82	712.33	710.75	713.00	713.06	712.27	712.05	712.37	711.64
28	710.97	711.41	711.83	709.75	712.31	710.77	712.95	713.11	712.22	712.09	712.29	711.54
29	711.03	711.54	711.93	709.66	712.26	710.82	712.98	713.35	712.24	712.08	712.25	711.48
30	711.02	711.64	711.86	709.59	---	710.87	712.98	713.42	712.25	712.08	712.25	711.41
31	711.01	---	711.75	709.51	---	710.87	---	713.23	---	712.08	712.11	---
MEAN	711.06	711.23	712.01	710.68	710.88	710.69	712.65	713.15	712.71	712.21	712.33	711.87
MAX	711.19	711.64	713.16	711.76	712.51	712.04	713.08	713.42	713.20	712.55	712.84	712.37
MIN	710.90	710.89	711.51	709.51	709.17	710.20	710.88	712.99	712.22	712.04	712.04	711.41
CAL YR 1983	MEAN	711.75	MAX	713.78	MIN	709.87						
WTR YR 1984	MEAN	711.79	MAX	713.42	MIN	709.17						

## STREAMS TRIBUTARY TO LAKE ONTARIO

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04235500 OWASCO OUTLET NEAR AUBURN, NY

LOCATION.--Lat 42°56'48", long 76°35'56", Cayuga County, Hydrologic Unit 04140201, on left bank 2.5 mi downstream from center of Auburn, and 4 mi downstream from State dam at outlet of Owasco Lake.

DRAINAGE AREA.--206 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1912 to current year. Prior to October 1966, published as "Owasco Lake Outlet."

REVISED RECORDS.--WSP 824: 1913-14, 1916, 1920(M), 1922(M), 1928(M), 1929, 1932(M). WSP 2112: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 533.92 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diurnal fluctuation caused by mills in Auburn; regulation at State dam at outlet of lake.

AVERAGE DISCHARGE.--71 years (water years 1914-84), 289 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft<sup>3</sup>/s June 23, 1972, gage height, 6.28 ft; minimum, about 2 ft<sup>3</sup>/s Dec. 5, 1936; minimum gage height, 1.03 ft Oct. 13, 14, 21, 1982; minimum daily discharge, 5 ft<sup>3</sup>/s Nov. 11, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,540 ft<sup>3</sup>/s Apr. 7 at 0945 hours, May 30 at 1445 hours, gage height, 3.69 ft; minimum, 14 ft<sup>3</sup>/s Feb. 7, 8, July 4, gage height, 1.05 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	29	25	303	354	343	1050	370	358	568	84	38	319
2	29	25	305	363	343	1030	359	362	372	28	39	326
3	29	26	306	358	341	1020	341	360	337	26	41	345
4	29	25	300	351	333	972	345	626	323	33	37	329
5	36	23	303	354	247	926	370	736	315	58	36	331
6	34	22	307	352	33	569	980	564	320	209	43	188
7	29	23	300	357	17	353	1530	387	319	311	38	29
8	28	22	317	364	34	353	1480	362	313	314	37	24
9	28	22	330	353	41	352	993	368	310	312	37	24
10	28	28	328	354	44	350	514	368	314	310	37	42
11	28	32	327	354	65	349	369	372	310	309	39	38
12	29	26	340	360	67	377	366	1100	313	308	52	26
13	33	24	744	360	72	467	365	1410	312	307	176	33
14	30	23	1260	360	251	467	371	1420	318	305	313	206
15	26	25	1480	360	690	446	596	1310	314	140	303	322
16	26	25	1440	360	1120	361	912	1080	317	48	354	321
17	26	26	1360	360	1150	356	1050	567	314	43	330	318
18	26	24	1270	360	1130	352	826	377	320	34	332	316
19	26	23	812	360	1100	351	583	374	315	62	347	315
20	25	22	432	360	1090	330	464	387	314	32	338	315
21	25	126	349	360	688	292	392	382	314	50	336	311
22	25	288	364	360	405	287	374	494	310	49	340	311
23	26	247	348	360	356	281	392	932	310	46	365	311
24	25	310	348	360	358	279	374	997	337	41	359	316
25	24	320	343	362	356	279	376	603	300	40	345	312
26	25	321	343	366	353	274	373	474	312	39	322	325
27	26	315	343	369	354	255	363	388	314	49	317	316
28	25	302	343	367	477	241	347	664	205	38	321	313
29	25	256	347	366	854	311	339	1110	53	37	318	315
30	25	147	355	360	---	408	340	1400	63	38	321	314
31	25	---	354	347	---	386	---	1160	---	38	318	---
TOTAL	850	3123	16401	11131	12712	14124	16854	21492	9156	3738	6629	7311
MEAN	27.4	104	529	359	438	456	562	693	305	121	214	244
MAX	36	321	1480	369	1150	1050	1530	1420	568	314	365	345
MIN	24	22	300	347	17	241	339	358	53	26	36	24
CAL YR 1983	TOTAL	96291	MEAN	264	MAX	1810	MIN	18				
WTR YR 1984	TOTAL	123521	MEAN	337	MAX	1530	MIN	17				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04236000 SKANEATELES LAKE AT SKANEATELES, NY

LOCATION.--Lat 42°56'42", long 76°25'46", Onondaga County, Hydrologic Unit 04140201, on east side of breakwater, enclosed in city of Syracuse boathouse, at Skaneateles.

DRAINAGE AREA.--72.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1967 to current year. Records since September 1890 collected by, and in files of, city of Syracuse.

GAGE.--Nonrecording gages read once daily by employees of Syracuse Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. October 1967 to September 1975, at same site at datum 801.75 ft higher.

REMARKS.--Lake elevation regulated by gates at outlet by Syracuse Water Division. Area of water surface, 13.6 mi<sup>2</sup>.

COOPERATION.--Records furnished by city of Syracuse.

EXTREMES FOR PERIOD OF RECORD.--(since 1890): Maximum observed elevation, 866.95 ft June 25, 26, 1972; minimum observed, 858.90 ft Nov. 15, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 864.81 ft May 31, June 1; minimum observed, 861.09 ft Nov. 28.

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	862.02	861.28	861.16	861.85	861.42	862.74	863.01	864.25	864.81	864.39	863.93	863.96
2	862.02	861.26	861.16	861.79	861.42	862.75	863.05	864.30	864.75	864.39	863.88	863.95
3	862.01	861.25	861.15	861.80	861.41	862.74	863.07	864.30	864.73	864.37	863.85	863.93
4	861.98	861.24	861.16	861.79	861.39	862.73	863.11	864.32	864.72	864.35	864.00	863.96
5	861.95	861.23	861.13	861.78	861.37	862.74	863.30	864.36	864.70	864.39	863.93	863.90
6	861.93	861.22	861.13	861.75	861.39	862.72	863.50	864.34	864.65	864.50	863.90	863.86
7	861.90	861.19	861.13	861.73	861.39	862.70	863.75	864.39	864.65	864.46	863.91	863.85
8	861.90	861.17	861.15	861.71	861.37	862.72	863.95	864.35	864.60	864.42	863.90	863.84
9	861.85	861.15	861.15	861.69	861.37	862.70	863.95	864.39	864.60	864.40	863.87	863.78
10	861.80	861.13	861.17	861.68	861.36	862.69	863.97	864.39	864.50	864.40	863.85	863.71
11	861.78	861.20	861.15	861.67	861.36	862.67	863.97	864.39	864.49	864.35	863.85	863.70
12	861.75	861.19	861.16	861.66	861.37	862.65	863.97	864.45	864.47	864.36	863.87	863.72
13	861.73	861.17	861.35	861.65	861.44	862.64	863.98	864.55	864.50	864.36	863.95	863.67
14	861.71	861.15	861.68	861.64	861.60	862.62	864.00	864.67	864.45	864.34	863.97	863.80
15	861.70	861.14	861.80	861.64	862.05	862.61	864.01	864.68	864.45	864.31	864.09	863.82
16	861.67	861.14	861.85	861.63	862.27	862.62	864.03	864.70	864.45	864.29	864.10	863.81
17	861.67	861.13	861.87	861.62	862.35	862.60	864.10	864.69	864.40	864.27	864.25	863.81
18	861.62	861.13	861.89	861.61	862.41	862.60	864.20	864.66	864.46	864.23	864.32	863.78
19	861.60	861.11	861.93	861.61	862.47	862.63	864.22	864.65	864.46	864.20	864.30	863.75
20	861.57	861.10	861.94	861.60	862.54	862.63	864.28	864.60	864.42	864.19	864.25	863.70
21	861.55	861.15	861.94	861.57	862.59	862.67	864.19	864.60	864.39	864.19	864.22	863.67
22	861.51	861.15	861.96	861.54	862.61	862.70	864.20	864.57	864.37	864.15	864.20	863.67
23	861.49	861.13	861.93	861.52	862.63	862.73	864.20	864.56	864.37	864.10	864.20	863.65
24	861.49	861.12	861.92	861.50	862.65	862.79	864.17	864.60	864.37	864.05	864.17	863.61
25	861.46	861.12	861.92	861.50	862.65	862.80	864.19	864.60	864.49	864.02	864.15	863.61
26	861.44	861.11	861.90	861.51	862.63	862.81	864.20	864.65	864.48	864.02	864.09	863.65
27	861.42	861.10	861.90	861.51	862.66	862.82	864.21	864.63	864.46	863.99	864.04	863.64
28	861.40	861.09	861.88	861.48	862.66	862.84	864.21	864.65	864.45	863.98	864.00	863.60
29	861.37	861.10	861.87	861.46	862.74	862.86	864.21	864.70	864.45	863.98	864.00	863.59
30	861.35	861.15	861.86	861.46	---	863.00	864.21	864.78	864.41	863.95	863.96	863.55
31	861.30	---	861.85	861.44	---	863.01	---	864.81	---	863.93	863.99	---
MEAN	861.68	861.16	861.58	861.63	861.99	862.73	863.91	864.53	864.52	864.24	864.03	863.75
MAX	862.02	861.28	861.96	861.85	862.74	863.01	864.28	864.81	864.81	864.50	864.32	863.96
MIN	861.30	861.09	861.13	861.44	861.36	862.60	863.01	864.25	864.37	863.93	863.85	863.55
CAL YR 1983	MEAN	862.68	MAX	864.74	MIN	861.09						
WTR YR 1984	MEAN	862.98	MAX	864.81	MIN	861.09						



## 04237500 SENECA RIVER AT BALDWINVILLE, NY

LOCATION.--Lat 43°09'25", long 76°19'55", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft downstream from bridge on State Highways 31 and 48 in Baldwinsville, and 400 ft downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WDR NY-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 361.38 ft National Geodetic Vertical Datum of 1929 (362.60 ft Erie (Barge) Canal Datum). Prior to Dec. 31, 1908, nonrecording gage at same site at different datum.

REMARKS.--Records good except those below 2,400 ft<sup>3</sup>/s, which are poor. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge, since November 1949, computed by using fall as determined by auxiliary water-stage recorder. Published discharge represents the total flow at Baldwinsville and includes flow in Erie (Barge) Canal.

A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Large diurnal fluctuations at low and medium flows caused by powerplants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of year, entire flow from 45.5 mi<sup>2</sup> of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin (see station 01529000).

COOPERATION.--Records of lockages at lock 24 furnished by New York State Department of Transportation (since November 1949).

AVERAGE DISCHARGE.--34 years (water years 1951-84), 3,458 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,200 ft<sup>3</sup>/s Apr. 4, 1960, June 28, 1972; maximum gage height, 9.21 ft Apr. 4, 1960, June 30, 1972; minimum daily discharge, 237 ft<sup>3</sup>/s Nov. 10, 1957; minimum gage height, 0.70 ft Feb. 20, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 10,000 ft<sup>3</sup>/s Apr. 9; maximum gage height, 7.00 ft Dec. 25 (from maximum-stage indicator, result of ice jam); minimum daily discharge, 295 ft<sup>3</sup>/s Aug. 1; minimum gage height, 0.80 ft Sept. 10, from minimum-stage indicator.

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	596	692	3500	2900	1200	6360	3930	8190	9220	1750	295	2260
2	1150	626	4080	2400	1200	6460	4400	7870	9010	2110	700	1480
3	583	1020	4050	2600	1510	6380	4980	7300	8540	2040	1290	1650
4	736	1210	3890	3000	1680	6270	5830	6620	8130	2100	1110	1760
5	728	514	3970	3300	1600	6240	6790	6530	7850	2110	1070	2660
6	424	810	4250	3000	1400	6300	7820	6730	7650	2460	932	2830
7	759	1080	4620	2550	1200	6170	8900	6770	7470	2810	830	2610
8	870	832	5090	2400	1100	6030	9650	6810	7340	3270	944	1960
9	379	482	5180	2100	1200	5930	10000	6850	7170	3340	964	1040
10	991	1200	5070	2000	1400	5820	9900	6730	6960	3290	1020	818
11	694	1330	4910	1800	1600	5700	9330	6720	6720	3340	1110	1170
12	411	2020	4740	1600	1900	5140	8730	6800	6460	3350	1110	1540
13	1010	1660	5680	1500	3400	4160	8340	7120	5570	3220	1650	1610
14	1300	2050	8110	1600	6420	3750	8160	7590	4390	3000	1910	1590
15	926	1830	8940	1500	9200	3110	8210	8320	3740	2590	1790	2040
16	734	1860	9420	1400	9710	2450	8470	8760	3460	1970	3450	2760
17	462	2140	9530	1200	9740	2270	8920	8740	1990	1370	5080	2850
18	650	1950	9270	1100	9610	2610	9240	8570	1350	1250	5160	1970
19	594	2530	8850	1000	9210	3170	9310	8290	1790	1650	4850	1550
20	642	2440	8240	940	8730	3450	9270	8060	3000	1410	4640	1550
21	619	2070	7640	860	8180	3580	9170	7870	3630	1100	4230	1540
22	396	2170	7320	800	7740	5610	8970	7680	3630	1030	3780	1570
23	1150	2430	7100	760	7540	6830	8740	7690	3550	1100	3700	1560
24	918	2620	6600	840	7280	6670	8540	7910	3160	890	4070	1430
25	568	2690	6200	1460	7030	6000	8360	8060	2490	444	4360	1510
26	850	2740	6000	1720	6790	5250	8320	8050	2170	382	4280	1560
27	763	2610	5400	1670	6490	4660	8500	7870	2100	516	3870	1550
28	676	2610	5200	1500	6250	4000	8450	7720	2050	1020	3130	1480
29	504	3130	5400	1400	6300	3360	8330	8100	1480	996	3170	1400
30	359	3410	5000	1400	---	3390	8200	8750	1500	926	3200	1550
31	952	---	4000	1300	---	3600	---	9120	---	416	2890	---
TOTAL	22394	54756	187250	53600	146610	150720	245760	238190	143570	57250	80585	52848
MEAN	722	1825	6040	1729	5056	4862	8192	7684	4786	1847	2600	1762
MAX	1300	3410	9530	3300	9740	6830	10000	9120	9220	3350	5160	2850
MIN	359	482	3500	760	1100	2270	3930	6530	1350	382	295	818
CAL YR 1983	TOTAL	1059696	MEAN	2903	MAX	12900	MIN	263				
WTR YR 1984	TOTAL	1433533	MEAN	3917	MAX	10000	MIN	295				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY

LOCATION.--Lat 42°55'51", long 76°10'24", Onondaga County, Hydrologic Unit 04140201, at Onondaga Dam on Onondaga Creek, 3.5 mi southwest of Nedrow, 4 mi south of Syracuse, and 10.5 mi upstream from Onondaga Lake.

DRAINAGE AREA.--67.7 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1949 to September 1952 (monthly elevations and contents), October 1952 to current year.

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

REMARKS.--Reservoir is formed by a rolled earthfill dam, completed by Corps of Engineers in August 1949 for flood control; first used for flood regulation about a year prior to completion. Usable capacity, 18,200 acre-ft between elevations 457.0 ft, conduit invert at intake, and 504.5 ft crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually. Storage includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin.

COOPERATION.--Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 485.9 ft Apr. 1, 1960, contents, 5,960 acre-ft; no contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 476.58 ft Feb. 16, contents, 2,440 acre-ft; minimum elevation, 459.59 ft Sept. 26, no contents many days.

Capacity table (elevation, in feet, and contents, in acre-feet)

460.00	0	470.00	700
461.00	5	473.00	1,420
462.00	15	478.00	2,880
464.00	50	482.00	4,230
467.00	225	486.00	6,010

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	459.93	460.07	460.87	460.58	460.44	461.67	463.37	463.00	463.79	460.62	460.45	459.83
2	459.95	460.09	460.71	460.59	460.40	461.59	464.30	462.33	463.10	460.67	460.43	459.79
3	459.94	460.18	460.62	460.59	460.56	461.47	465.54	462.00	462.73	460.59	460.78	460.77
4	459.93	460.26	460.54	460.61	461.34	461.53	466.60	463.93	462.60	460.52	460.94	460.55
5	459.95	460.30	460.59	460.68	461.26	461.35	468.80	465.14	462.16	462.55	460.63	460.09
6	460.06	460.23	461.03	460.67	461.07	461.45	472.87	463.76	462.22	464.72	460.41	459.90
7	460.01	460.18	462.94	460.70	460.99	461.39	473.21	462.68	462.07	463.71	460.35	459.81
8	459.99	460.15	461.60	460.68	461.04	461.32	470.69	462.42	461.69	461.89	460.39	459.75
9	459.98	460.12	461.09	460.64	460.91	461.32	467.54	462.72	461.47	461.21	460.33	459.70
10	459.98	460.12	460.91	460.57	460.82	461.49	465.01	462.47	461.34	460.99	460.24	459.66
11	459.97	460.77	460.82	460.53	461.70	461.11	463.81	462.10	461.19	460.98	460.76	459.74
12	459.97	461.03	461.16	460.39	463.59	460.97	463.36	464.44	461.10	461.03	461.97	460.63
13	460.04	460.63	466.95	460.42	465.48	460.89	463.04	465.28	461.03	460.95	461.75	460.01
14	460.27	460.41	471.43	460.47	468.82	460.90	462.85	466.18	461.72	460.75	461.13	461.44
15	460.18	460.31	470.58	460.46	474.42	460.93	463.57	466.06	461.39	460.60	460.94	460.75
16	460.09	460.46	466.14	460.38	475.85	462.08	464.28	464.71	461.09	460.53	461.83	460.22
17	460.05	460.53	462.19	460.43	473.08	463.86	465.33	463.64	460.97	460.45	463.87	459.98
18	460.03	460.49	461.65	460.42	469.60	462.62	464.06	463.17	461.08	460.47	462.44	459.86
19	460.02	460.38	461.35	460.41	465.79	462.16	463.15	463.15	461.41	460.72	461.05	459.80
20	460.00	460.33	461.19	460.34	463.98	462.28	463.92	462.89	461.11	460.69	460.89	459.77
21	460.00	461.16	460.90	460.35	463.27	465.17	463.46	462.80	461.09	460.65	460.63	459.73
22	460.01	460.79	461.06	460.30	462.73	466.05	462.73	462.45	460.87	460.63	460.23	459.69
23	460.04	460.54	461.40	460.33	462.54	464.18	462.62	463.19	460.74	460.58	460.72	459.66
24	460.19	460.42	461.08	460.43	462.29	462.71	462.78	465.37	460.93	460.53	461.15	459.63
25	460.15	460.77	460.80	460.98	462.14	462.45	463.92	463.22	463.00	460.51	460.64	459.60
26	460.11	460.77	460.76	460.94	461.90	462.19	463.36	462.51	461.29	460.50	460.18	459.68
27	460.14	460.65	460.75	460.81	461.69	461.90	462.65	462.64	460.94	460.90	459.96	459.81
28	460.16	460.84	460.73	460.73	461.76	461.85	462.31	463.62	460.89	460.99	459.87	459.78
29	460.13	461.61	460.87	460.58	461.73	462.03	462.29	466.56	460.77	460.76	459.82	459.73
30	460.10	461.20	460.76	460.62	---	462.67	462.17	466.62	460.69	460.61	459.81	459.68
31	460.08	---	460.59	460.57	---	462.93	---	465.23	---	460.52	459.86	---
MEAN	460.05	460.53	462.07	460.55	463.83	462.15	464.79	463.75	461.55	461.03	460.79	459.97
MAX	460.27	461.61	471.43	460.98	475.85	466.05	473.21	466.62	463.79	464.72	463.87	461.44
MIN	459.93	460.07	460.54	460.30	460.40	460.89	462.17	462.00	460.69	460.45	459.81	459.60
†	0.4	5.0	2.8	2.6	8.3	38.1	27.2	61.2	3.2	2.4	0	0
††	+0.1	+0.8	-0.4	0	+1.0	+4.8	-1.8	+5.5	-9.7	-0.1	-0.4	0

CAL YR 1983 MEAN 461.43 MAX 474.81 MIN 459.90 †† 0  
WTR YR 1984 MEAN 461.74 MAX 475.85 MIN 459.60 †† 0

† Contents, in acre-feet, at end of month.

†† Change in contents, equivalent in cubic feet per second.

## STREAMS TRIBUTARY TO LAKE ONTARIO

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04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft upstream from bridge on Dorwin Avenue, at Syracuse, and 4 mi downstream from Onondaga Reservoir.

DRAINAGE AREA.--88.5 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.19 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tiohgnioaga River basin.

AVERAGE DISCHARGE.--33 years, 126 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft<sup>3</sup>/s July 3, 1974, gage height, 6.48 ft; minimum daily, 5.5 ft<sup>3</sup>/s Aug. 17, 1965; minimum gage height, 1.15 ft Sept. 16, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,890 ft<sup>3</sup>/s Feb. 15 at 0230 hours, gage height, 5.29 ft; minimum, 16 ft<sup>3</sup>/s Oct. 4, 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	18	20	63	70	58	120	210	189	236	58	31	58
2	19	21	54	66	56	120	280	151	193	58	31	54
3	17	25	51	66	60	110	395	136	171	52	58	136
4	16	30	47	66	110	110	502	283	162	52	67	94
5	18	30	50	66	102	110	812	320	140	106	49	72
6	24	27	74	66	88	110	1110	233	145	273	39	61
7	21	24	225	64	78	100	980	176	135	212	47	54
8	20	23	121	64	78	96	825	162	119	112	45	50
9	20	22	86	62	84	96	569	178	109	80	38	47
10	19	23	76	62	92	94	335	160	111	70	35	44
11	18	68	70	62	121	90	246	141	372	71	73	61
12	18	71	104	64	263	86	216	320	358	70	185	113
13	22	47	689	64	452	84	195	343	350	64	142	68
14	34	36	1030	66	811	80	185	473	159	56	81	180
15	26	33	868	66	1340	90	233	407	216	51	104	109
16	23	44	578	66	1080	163	290	287	339	47	189	82
17	21	47	211	66	955	273	334	219	320	44	328	68
18	20	44	150	64	784	188	255	190	185	43	207	61
19	20	38	128	63	485	157	205	189	96	44	104	56
20	19	36	110	66	320	174	242	174	77	40	95	54
21	18	91	100	70	264	383	217	170	77	38	75	50
22	19	60	106	74	222	429	177	153	68	37	64	48
23	21	46	100	82	206	300	171	236	65	33	133	45
24	28	41	100	92	183	200	186	329	81	31	132	45
25	24	65	96	128	166	179	249	204	208	30	90	46
26	22	59	94	100	149	161	207	167	97	30	70	67
27	24	53	90	78	135	141	170	171	76	60	59	62
28	24	65	100	72	140	138	153	267	72	55	55	53
29	23	110	98	66	130	134	149	525	66	43	57	48
30	22	83	90	62	---	143	158	500	62	36	61	45
31	20	---	80	60	---	176	---	332	---	33	67	---
TOTAL	658	1382	5839	2183	9012	4835	10256	7785	4865	2119	2811	2031
MEAN	21.2	46.1	188	70.4	311	156	342	251	162	68.4	90.7	67.7
MAX	34	110	1030	128	1340	429	1110	525	372	273	328	180
MIN	16	20	47	60	56	80	149	136	62	30	31	44
CAL YR 1983	TOTAL	40927	MEAN	112	MAX	1110	MIN	16				
WTR YR 1984	TOTAL	53776	MEAN	147	MAX	1340	MIN	16				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft upstream from bridge on Spencer Street in Syracuse, 1,000 ft upstream from Erie (Barge) Canal terminal, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--110 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WRD NY 1972: 1971(M). WRD NY 1975: 1972(M), 1974(M). WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 362.29 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.75 ft.

AVERAGE DISCHARGE.--14 years, 197 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft<sup>3</sup>/s July 3, 1974, gage height, 8.73 ft; minimum, 21 ft<sup>3</sup>/s Oct. 24, 1981, gage height, 2.18 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,740 ft<sup>3</sup>/s July 4 at 2215 hours, gage height, 6.96 ft; minimum, 30 ft<sup>3</sup>/s Oct. 18, 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	33	35	91	99	76	175	286	281	290	91	54	75
2	33	48	80	99	74	170	356	234	246	90	56	70
3	33	43	76	94	100	160	472	228	216	82	75	155
4	33	44	72	92	139	150	564	390	209	188	91	112
5	49	44	77	92	141	160	784	409	186	321	70	90
6	41	44	127	90	124	171	1030	327	194	338	68	78
7	38	47	249	90	100	164	905	262	178	261	80	71
8	36	45	158	88	96	143	820	241	159	156	64	66
9	36	41	118	88	94	137	648	254	147	120	57	63
10	37	99	105	86	100	128	414	240	135	107	80	59
11	36	127	99	84	201	137	330	222	124	109	138	83
12	45	98	251	80	335	120	300	437	117	98	226	130
13	63	72	828	80	552	124	272	431	123	91	166	97
14	57	59	965	80	964	130	260	540	207	81	112	193
15	43	58	796	78	1140	129	335	474	127	75	111	131
16	37	69	597	76	956	226	397	363	114	72	177	98
17	35	77	222	76	871	344	417	297	106	69	313	83
18	34	67	128	74	748	254	333	265	136	72	227	74
19	34	60	115	74	517	220	256	258	125	64	130	69
20	34	57	101	70	377	239	305	245	110	63	112	67
21	33	138	116	70	324	465	296	238	108	61	93	63
22	33	89	150	68	281	500	254	221	100	61	118	60
23	43	71	130	70	264	381	249	331	96	60	156	58
24	41	66	120	110	243	277	270	377	141	56	148	56
25	41	88	110	121	223	247	323	267	230	54	111	57
26	40	87	110	118	206	224	293	221	130	54	89	100
27	41	79	100	108	189	204	255	220	110	107	79	79
28	41	107	100	100	194	201	237	326	105	80	74	67
29	39	143	120	94	188	199	233	580	101	66	74	62
30	39	113	107	94	---	200	254	528	94	60	85	58
31	37	---	98	90	---	251	---	382	---	55	98	---
TOTAL	1215	2215	6516	2733	9817	6630	12148	10089	4464	3262	3532	2524
MEAN	39.2	73.8	210	88.2	339	214	405	325	149	105	114	84.1
MAX	63	143	965	121	1140	500	1030	580	290	338	313	193
MIN	33	35	72	68	74	120	233	220	94	54	54	56
CAL YR 1983	TOTAL	53040	MEAN	145	MAX	1250	MIN	32				
WTR YR 1984	TOTAL	65145	MEAN	178	MAX	1140	MIN	33				

## 04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'09", long 76°10'55", Onondaga County, Hydrologic Unit 04140201, on left bank 160 ft upstream from bridge on Holden Street at Syracuse, 220 ft downstream from gated outlet of Velasco Road Detention Basin, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--10.0 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-82-3: 1981 (M).

GAGE.--Water-stage recorder. Datum of gage is 391.16 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1978, at site 1,660 ft upstream and Oct. 1, 1978 to May 31, 1980, at site 1,800 ft upstream at datum 3.63 ft higher.

REMARKS.--Records poor. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flows can be regulated at detention basin by Onondaga County.

AVERAGE DISCHARGE.--25 years, 9.03 ft<sup>3</sup>/s, 12.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft<sup>3</sup>/s July 3, 1974, gage height, 8.34 ft datum then in use, from rating curve extended above 180 ft<sup>3</sup>/s on basis of slope-area measurements of peak flow; minimum, 0.11 ft<sup>3</sup>/s, gage height, 0.77 ft Aug. 8, 1980, result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 227 ft<sup>3</sup>/s Feb. 15 at 0030 hours, gage height, 5.50 ft, from rating curve extended above 60 ft<sup>3</sup>/s on basis of indirect measurement of peak flow; minimum daily, 0.51 ft<sup>3</sup>/s June 15; minimum gage height, 0.82 ft June 16, result of regulation.

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	2.9	5.1	6.4	4.5	3.9	7.7	14	10	11	4.7	6.7	4.5
2	2.9	6.1	6.2	4.5	3.7	7.5	18	9.6	10	4.6	6.4	4.7
3	3.0	5.8	6.2	4.3	4.8	7.2	29	11	9.7	4.8	6.2	6.8
4	3.1	5.5	6.0	4.3	4.6	7.1	30	20	9.1	14	5.2	4.6
5	4.7	5.1	6.5	4.6	4.3	7.6	45	16	8.7	58	5.2	4.2
6	3.5	5.0	9.9	5.1	4.2	7.5	79	13	9.3	17	6.4	4.2
7	3.2	4.8	8.0	4.6	4.0	6.9	28	11	8.2	12	6.2	4.0
8	3.3	4.7	6.8	4.3	3.9	6.7	22	11	7.9	6.1	3.8	4.2
9	3.0	4.9	6.8	4.3	4.0	6.6	19	11	7.7	5.5	3.9	4.2
10	3.0	11	7.2	4.3	4.2	6.4	18	10	7.6	5.2	5.4	4.3
11	3.1	11	6.6	4.0	8.7	6.4	17	10	7.3	5.4	9.5	6.5
12	4.0	6.7	21	4.0	15	6.2	16	24	4.3	4.5	4.8	4.3
13	5.0	5.5	89	4.0	47	6.2	15	17	1.3	4.7	4.0	6.3
14	4.5	5.0	67	4.0	71	6.2	14	26	18	4.4	5.7	5.8
15	3.2	5.0	21	4.2	87	6.5	20	17	.51	4.9	4.1	3.9
16	3.4	6.4	15	4.2	24	11	25	15	14	5.3	4.2	3.6
17	4.7	7.3	13	4.3	18	9.5	19	14	6.6	5.6	3.9	3.6
18	4.7	6.7	11	4.3	16	7.7	16	12	8.7	5.8	4.3	3.6
19	3.5	6.6	9.1	4.3	15	7.8	15	12	6.3	5.3	6.1	3.6
20	3.7	6.6	8.4	4.2	15	14	15	11	2.2	5.5	5.2	3.8
21	4.6	9.6	8.0	4.2	13	36	14	11	8.7	5.5	5.2	3.7
22	4.8	7.0	9.5	4.1	12	21	13	10	5.5	5.8	8.9	3.6
23	6.0	6.7	7.6	4.2	11	15	12	19	5.6	5.6	7.9	3.6
24	5.2	7.0	6.7	6.5	11	13	14	12	10	5.8	5.1	3.6
25	5.3	8.8	6.2	5.5	9.4	12	14	11	6.4	5.6	4.5	3.6
26	5.4	6.4	5.4	4.8	8.7	12	12	10	5.6	6.6	4.5	6.6
27	5.6	6.0	5.2	4.7	8.3	11	12	9.4	5.4	9.8	4.9	3.6
28	5.0	8.3	5.5	4.7	8.5	10	11	14	4.8	5.6	5.3	3.3
29	5.2	7.6	5.3	4.7	8.1	10	10	28	5.1	6.1	5.1	3.3
30	5.2	6.4	4.7	1.7	---	10	12	15	4.7	6.7	5.6	3.3
31	5.1	---	4.5	5.5	---	11	---	12	---	6.7	5.8	---
TOTAL	129.8	198.6	399.7	136.9	448.3	313.7	598	432.0	220.21	253.1	170.0	128.9
MEAN	4.19	6.62	12.9	4.42	15.5	10.1	19.9	13.9	7.34	8.16	5.48	4.30
MAX	6.0	11	89	6.5	87	36	79	28	18	58	9.5	6.8
MIN	2.9	4.7	4.5	1.7	3.7	6.2	10	9.4	.51	4.4	3.8	3.3
CFSM	.42	.66	1.29	.44	1.55	1.01	1.99	1.39	.73	.82	.55	.43
IN.	0.48	0.74	1.49	0.51	1.67	1.17	2.22	1.61	0.82	0.94	0.63	0.48
CAL YR 1983	TOTAL	3165.8	MEAN	8.67	MAX	97	MIN	2.6	CFSM	.87	IN.	11.78
WTR YR 1984	TOTAL	3429.21	MEAN	9.37	MAX	89	MIN	.51	CFSM	.94	IN.	12.76



## STREAMS TRIBUTARY TO LAKE ONTARIO

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft downstream from culvert on Hiawatha Boulevard, in Syracuse, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--11.3 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 365.86 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flow can be regulated at Velasco Road Detention Basin 2.1 mi upstream.

AVERAGE DISCHARGE.--14 years, 14.7 ft<sup>3</sup>/s, 17.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft<sup>3</sup>/s July 3, 1974, gage height, 7.91 ft from rating curve extended above 160 ft<sup>3</sup>/s on basis of step-backwater computations; maximum gage height, 8.15 ft Sept. 26, 1975 (backwater from debris jam); minimum discharge, 1.0 ft<sup>3</sup>/s June 25, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 382 ft<sup>3</sup>/s July 4 at 2145 hours, gage height, 5.62 ft; minimum 1.1 ft<sup>3</sup>/s July 13, gage height, 1.58 ft, result of regulation.

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	4.2	6.3	6.1	4.8	11	20	12	14	5.4	6.0	4.4
2	3.4	6.9	6.0	6.1	4.7	10	23	11	13	5.3	5.6	4.8
3	3.4	5.8	6.0	5.8	7.7	10	33	13	12	5.1	7.2	8.2
4	3.4	5.6	5.9	5.8	6.6	10	36	26	11	27	4.7	4.7
5	7.2	5.3	7.2	6.3	6.0	11	52	18	11	69	4.6	4.3
6	3.5	5.3	14	7.6	5.6	11	80	14	13	22	7.4	4.2
7	3.2	6.4	8.3	6.6	5.3	10	36	12	11	14	11	4.0
8	3.0	7.2	6.4	6.0	5.3	9.5	28	12	9.9	7.7	7.4	4.0
9	2.9	6.9	6.0	6.0	5.1	9.2	24	11	9.6	6.9	7.4	3.9
10	2.8	16	6.7	5.8	5.6	9.0	22	11	9.5	6.4	12	4.0
11	2.8	20	5.7	5.3	12	8.8	21	11	9.6	7.6	16	7.6
12	4.5	7.5	31	5.6	17	8.3	19	38	31	6.3	6.8	4.0
13	6.9	5.9	90	5.7	43	8.1	18	24	4.7	5.9	5.0	7.1
14	6.0	5.6	69	6.1	77	8.2	17	33	29	5.7	7.6	6.3
15	3.3	5.7	24	5.8	96	9.0	27	19	2.3	5.5	7.1	4.2
16	3.2	7.8	16	5.6	31	16	32	18	14	5.5	7.2	4.5
17	4.0	8.8	13	5.6	23	13	23	16	8.2	5.3	4.5	5.3
18	3.9	6.4	10	5.5	21	10	18	15	15	5.8	4.3	4.2
19	3.0	5.9	9.0	5.6	18	10	18	14	7.2	5.0	5.4	4.1
20	3.0	5.8	7.9	5.5	19	17	18	13	4.0	4.9	4.3	4.2
21	3.4	13	7.4	6.0	20	41	15	13	8.5	4.8	4.2	3.9
22	3.4	6.7	9.8	5.8	18	27	14	12	6.7	4.7	12	3.9
23	5.4	6.5	8.8	5.6	15	20	17	20	6.4	4.8	9.7	3.8
24	3.9	6.6	8.0	8.6	14	17	18	16	16	4.9	5.5	3.9
25	4.1	10	7.0	7.4	13	17	16	14	7.2	4.5	5.3	3.8
26	4.1	6.7	7.0	6.6	12	15	14	13	6.1	4.8	5.1	8.9
27	5.0	6.5	6.8	6.4	11	15	13	11	6.1	13	5.4	3.8
28	4.0	11	7.3	6.2	11	14	12	20	5.7	4.9	4.9	3.8
29	3.8	8.8	7.1	6.2	11	14	12	38	6.6	4.6	5.0	3.8
30	3.9	6.5	6.3	3.3	---	15	15	19	5.5	4.6	6.7	3.7
31	4.0	---	6.2	5.3	---	17	---	15	---	4.4	6.7	---
TOTAL	121.8	231.3	430.1	185.8	538.7	421.1	711	532	313.8	286.3	212.0	141.3
MEAN	3.93	7.71	13.9	5.99	18.6	13.6	23.7	17.2	10.5	9.24	6.84	4.71
MAX	7.2	20	90	8.6	96	41	80	38	31	69	16	8.9
MIN	2.8	4.2	5.7	3.3	4.7	8.1	12	11	2.3	4.4	4.2	3.7
CFSM	.35	.68	1.23	.53	1.65	1.20	2.10	1.52	.93	.82	.61	.42
IN.	0.40	0.76	1.42	0.61	1.77	1.39	2.34	1.75	1.03	0.94	0.70	0.47
CAL YR 1983	TOTAL	3644.5	MEAN	9.98	MAX	124	MIN	2.8	CFSM	.88	IN.	12.00
WTR YR 1984	TOTAL	4125.2	MEAN	11.3	MAX	96	MIN	2.3	CFSM	1.00	IN.	13.58

## 04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi upstream from bridge on Park Street, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--29.9 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M).

GAGE.--Water-stage recorder and steel "H" beam control since July 9, 1984. Datum of gage is 362.76 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1978, at same site at datum 0.08 ft higher.

REMARKS.--Records fair except those for winter periods and those for periods of backwater from Onondaga Lake Dec. 15-26, Feb. 15-29, Mar. 22-28, and Apr. 3 to June 24, which are poor. Prior to July 9, 1984 flow may be affected by backwater from Onondaga Lake whenever the lake water surface elevation exceeds about 363.0 ft. Subsequent to installation of the control backwater may occur when lake levels exceed 364.5 ft.

AVERAGE DISCHARGE.--11 years (water years 1974-84), 45.6 ft<sup>3</sup>/s, 20.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft<sup>3</sup>/s Sept. 26, 1975, gage height, 6.17 ft, from rating curve extended above 530 ft<sup>3</sup>/s; minimum daily, 1.9 ft<sup>3</sup>/s Feb. 6, 7, 1977; minimum gage height, 0.28 ft Feb. 6-8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1030	587	3.28	July 5	1800	543	3.09
Feb. 15	0300	*756	*4.06				

Minimum daily discharge, 7.1 ft<sup>3</sup>/s Sept. 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	10	10	31	25	16	20	111	38	60	10	10	17
2	10	25	25	24	13	19	90	35	45	10	11	11
3	10	24	22	21	26	18	70	45	35	10	24	64
4	10	17	18	20	46	17	60	70	34	10	12	22
5	21	14	24	21	43	25	80	58	45	428	9.3	15
6	22	12	61	27	35	47	230	50	40	192	10	13
7	10	11	123	22	28	43	86	45	35	96	28	10
8	9.4	11	67	19	25	36	64	40	30	35	10	8.7
9	8.9	11	48	17	26	31	44	36	25	28	12	7.4
10	9.1	22	42	17	28	27	40	35	25	14	41	9.2
11	9.4	118	36	16	56	24	38	46	23	54	81	26
12	20	55	63	13	79	23	36	160	21	35	174	22
13	17	30	412	13	111	22	34	140	20	19	109	13
14	45	22	525	14	250	21	33	120	80	13	26	44
15	12	22	420	13	580	29	60	100	20	10	21	14
16	9.5	38	360	13	480	62	100	86	16	11	16	11
17	8.9	47	260	12	220	72	60	72	11	9.4	12	14
18	10	36	180	12	160	57	45	62	20	14	9.9	11
19	12	25	100	12	130	57	44	52	17	13	11	8.9
20	11	20	60	11	120	92	42	45	12	11	11	9.5
21	9.6	71	40	11	80	177	37	39	11	12	9.2	9.3
22	9.8	33	60	11	60	200	34	35	12	12	11	7.5
23	23	24	70	12	50	170	40	60	10	11	78	7.1
24	18	21	50	20	45	120	50	50	18	8.4	15	12
25	12	61	35	35	35	76	41	36	36	8.6	9.7	10
26	12	37	19	33	27	50	39	32	16	8.5	7.9	41
27	23	28	16	29	23	40	37	50	12	54	8.6	12
28	12	45	17	25	22	35	35	100	14	17	8.8	8.7
29	10	63	23	23	21	40	37	200	16	10	9.7	7.9
30	9.9	43	30	24	---	55	40	120	14	9.3	51	7.2
31	9.9	---	27	20	---	81	---	80	---	8.9	68	---
TOTAL	424.4	996	3264	585	2835	1786	1757	2137	773	1182.1	915.1	473.4
MEAN	13.7	33.2	105	18.9	97.8	57.6	58.6	68.9	25.8	38.1	29.5	15.8
MAX	45	118	525	35	580	200	230	200	80	428	174	64
MIN	8.9	10	16	11	13	17	33	32	10	8.4	7.9	7.1
CFSM	.46	1.11	3.51	.63	3.27	1.93	1.96	2.30	.86	1.27	.99	.53
IN.	0.53	1.24	4.06	0.73	3.53	2.22	2.19	2.66	0.96	1.47	1.14	0.59

CAL YR 1983	TOTAL	17501.9	MEAN	48.0	MAX	686	MIN	7.2	CFSM	1.61	IN.	21.77
WTR YR 1984	TOTAL	17128.0	MEAN	46.8	MAX	580	MIN	7.1	CFSM	1.57	IN.	21.31

## STREAMS TRIBUTARY TO LAKE ONTARIO

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft upstream from bridge on Schuyler Road, 0.9 mi north of Marietta, and 1.8 mi downstream from Otisco Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--45.1 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WRD NY 1971: 1966(M), 1968, 1969. WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.25 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--20 years (water years 1965-84), 40.3 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft<sup>3</sup>/s June 23, 1972, gage height, 8.65 ft; minimum, 0.80 ft<sup>3</sup>/s Sept. 13, 18, 19, 1966, gage height, 0.61 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 419 ft<sup>3</sup>/s Apr. 6 at 1500 hours, gage height, 5.83 ft; minimum daily discharge 3.5 ft<sup>3</sup>/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	3.7	7.0	12	7.6	7.4	48	105	57	136	9.6	6.6	21
2	3.6	7.9	12	7.4	8.2	46	116	28	121	9.1	6.7	21
3	3.5	8.7	11	7.0	9.0	48	137	28	113	8.9	36	42
4	3.7	8.5	12	8.0	11	50	150	48	103	13	8.9	31
5	4.3	7.7	12	9.2	9.5	50	215	56	88	22	7.7	26
6	4.6	7.5	18	9.0	9.0	48	388	57	65	20	7.8	23
7	4.3	7.2	18	9.0	8.8	46	394	58	41	20	8.9	20
8	4.2	6.9	13	8.8	8.6	44	343	58	39	15	7.8	18
9	4.3	6.1	12	8.6	8.4	46	297	59	34	12	7.7	17
10	4.2	6.7	12	8.4	8.7	49	254	56	30	11	7.6	14
11	5.3	13	12	8.2	15	39	222	56	26	11	11	23
12	7.1	8.2	23	8.0	19	38	196	85	24	8.9	16	22
13	8.3	6.0	70	7.8	45	35	176	90	21	7.9	12	19
14	8.0	5.7	57	7.6	83	34	157	129	23	7.6	46	50
15	5.8	6.2	19	7.4	87	35	153	150	18	7.8	23	35
16	5.7	7.6	14	7.2	23	39	152	139	17	7.6	96	33
17	5.5	8.2	12	7.0	18	42	150	129	16	7.2	99	29
18	5.7	7.6	11	6.8	17	42	139	119	17	7.4	63	26
19	5.7	7.8	10	6.6	18	41	129	111	15	7.1	58	23
20	5.7	8.2	10	6.4	31	45	128	104	13	7.1	51	21
21	5.8	13	11	6.2	40	67	119	98	13	7.0	45	18
22	6.2	9.3	14	6.0	46	75	113	92	12	6.9	41	16
23	7.5	8.8	13	10	50	78	107	103	12	6.9	56	15
24	7.3	9.2	11	13	52	77	98	108	18	6.9	49	13
25	6.7	13	10	16	53	75	103	103	21	6.7	43	13
26	6.6	11	9.8	13	53	70	98	98	17	6.7	37	16
27	7.3	11	9.4	12	50	59	93	91	16	8.7	33	14
28	6.8	16	8.8	10	50	40	90	103	15	7.0	29	13
29	6.8	18	8.4	9.0	50	18	76	144	12	6.8	29	12
30	7.0	14	8.0	8.0	---	52	69	148	10	6.7	28	11
31	7.0	---	7.8	7.8	---	107	---	149	---	6.7	26	---
TOTAL	178.2	276.0	481.2	267.0	888.6	1583	4967	2854	1106	297.2	996.7	655
MEAN	5.75	9.20	15.5	8.61	30.6	51.1	166	92.1	36.9	9.59	32.2	21.8
MAX	8.3	18	70	16	87	107	394	150	136	22	99	50
MIN	3.5	5.7	7.8	6.0	7.4	18	69	28	10	6.7	6.6	11
CAL YR 1983	TOTAL	10014.8	MEAN	27.4	MAX	452	MIN	3.5				
WTR YR 1984	TOTAL	14549.9	MEAN	39.8	MAX	394	MIN	3.5				

## STREAMS TRIBUTARY TO LAKE ONTARIO

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04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft downstream from bridge on State Highway 48, 0.6 mi downstream from Geddes Brook, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--115 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.

REVISED RECORDS.--WDR NY-83-3: 1972 (M), 1976 (M), 1979 (M), 1982 (M).

GAGE.--Water-stage recorder. Datum of gage is 360.67 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply. Flow affected by backwater from Onondaga Lake whenever lake level exceeds about 362 ft NGVD.

AVERAGE DISCHARGE.--11 years (1972-73, 1976-84), 220 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,110 ft<sup>3</sup>/s June 23, 1972; maximum gage height, 8.75 ft Sept. 26, 1975 (backwater from Onondaga Lake); minimum daily discharge, 28 ft<sup>3</sup>/s Aug. 30, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,480 ft<sup>3</sup>/s Feb. 15; maximum gage height, 7.69 ft Feb. 15; minimum daily discharge, 42 ft<sup>3</sup>/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	43	69	134	76	76	160	247	215	373	87	77	132
2	48	84	102	74	74	160	277	150	294	90	77	109
3	45	90	93	70	87	150	319	117	252	82	170	180
4	42	92	96	66	129	153	380	211	259	79	177	168
5	57	83	95	89	134	157	462	239	246	270	112	141
6	55	80	143	98	119	174	893	191	220	220	95	127
7	58	80	259	101	107	160	843	166	151	170	122	107
8	54	77	197	83	90	157	700	157	114	131	101	102
9	52	73	144	80	86	143	595	172	95	114	77	93
10	72	107	132	80	92	127	485	160	77	90	90	82
11	56	195	124	78	163	117	399	143	93	96	172	102
12	67	153	222	76	280	112	330	330	84	106	181	157
13	87	107	786	76	451	110	292	328	77	90	197	115
14	96	92	1200	74	927	104	248	450	177	75	232	237
15	72	95	703	72	1480	93	308	412	115	76	421	174
16	57	114	633	69	614	142	362	378	95	73	271	153
17	54	134	479	70	340	187	407	313	80	58	767	136
18	58	124	350	68	215	151	357	287	148	66	335	122
19	63	119	240	66	199	142	290	275	102	63	239	107
20	67	107	170	66	241	181	285	246	115	63	218	98
21	52	169	150	64	230	365	285	230	110	71	181	89
22	47	141	134	64	230	428	244	209	92	68	166	82
23	67	117	124	63	241	357	222	290	90	61	280	80
24	72	110	110	104	230	278	235	357	109	71	246	72
25	61	153	100	117	218	237	262	262	155	84	199	72
26	61	141	98	115	197	203	241	232	110	75	172	124
27	66	124	92	110	181	175	215	228	99	126	148	99
28	68	151	90	104	185	155	187	294	101	117	127	87
29	68	218	86	96	170	125	193	537	90	102	144	87
30	62	189	82	86	---	112	187	546	89	90	141	80
31	66	---	78	82	---	193	---	428	---	80	168	---
TOTAL	1893	3588	7446	2537	7786	5508	10750	8553	4212	3044	6103	3514
MEAN	61.1	120	240	81.8	268	178	358	276	140	98.2	197	117
MAX	96	218	1200	117	1480	428	893	546	373	270	767	237
MIN	42	69	78	63	74	93	187	117	77	58	77	72
CAL YR 1983	TOTAL	56065	MEAN	154	MAX	1200	MIN	36				
WTR YR 1984	TOTAL	64934	MEAN	177	MAX	1480	MIN	42				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04240495 ONONDAGA LAKE AT LIVERPOOL, NY

LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft southwest of Onondaga Lake Parkway, and 1.9 mi upstream from outlet of lake.

DRAINAGE AREA.--285 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year. Elevation records, at Barge Canal datum, since February 1927 collected by, and in files of, New York State Department of Transportation at Syracuse.

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

REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi<sup>2</sup>.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.21 ft June 30, 1972; minimum, 361.54 ft Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 365.79 ft Feb. 15, Apr. 9; minimum, 362.33 ft Jan. 17.

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	362.58	362.62	363.22	363.89	362.91	363.67	362.96	364.45	364.98	362.77	362.66	362.84
2	362.67	362.69	363.16	363.87	362.76	363.76	363.16	364.40	364.93	362.90	362.61	362.57
3	362.72	362.75	363.04	363.81	362.79	363.63	363.43	364.17	364.67	362.92	362.82	362.69
4	362.62	363.10	362.87	363.58	362.83	363.48	363.78	363.83	364.42	362.78	362.91	362.76
5	362.70	362.72	362.86	363.23	362.87	363.36	364.18	363.74	364.27	362.94	362.91	362.88
6	362.68	362.67	363.12	363.09	362.93	363.34	364.86	363.77	364.15	363.07	362.90	362.95
7	362.79	362.78	363.47	362.82	362.94	363.33	365.32	363.79	364.06	363.04	362.80	362.83
8	362.96	362.84	363.48	362.53	362.90	363.36	365.64	363.76	363.94	363.05	362.85	362.86
9	362.91	362.78	363.46	362.41	362.80	363.37	365.77	363.82	363.81	363.09	362.93	362.65
10	362.88	363.11	363.43	362.56	362.79	363.31	365.64	363.86	363.70	363.13	362.79	362.44
11	362.90	363.18	363.36	362.67	362.63	363.19	365.29	363.85	363.56	363.17	362.82	362.85
12	362.56	363.05	363.45	362.68	362.65	363.11	364.91	364.06	363.58	363.14	362.95	362.87
13	362.77	363.00	364.05	362.68	363.06	363.22	364.65	364.13	363.37	362.99	362.96	362.75
14	362.99	362.87	365.03	362.68	364.19	363.18	364.55	364.35	363.18	363.10	362.98	362.91
15	362.92	362.95	365.26	362.63	365.58	362.99	364.59	364.74	362.92	362.91	363.03	362.82
16	362.78	362.92	365.35	362.52	365.70	362.75	364.76	364.89	363.41	362.72	362.93	363.00
17	362.77	363.01	365.39	362.44	365.59	362.66	365.06	364.87	363.12	362.85	363.33	363.01
18	362.73	363.04	365.29	362.38	365.50	362.66	365.22	364.75	363.04	362.86	363.26	362.93
19	362.71	363.13	365.10	362.58	365.25	362.77	365.21	364.55	362.79	362.90	363.20	362.87
20	362.77	363.03	364.75	362.70	364.98	362.95	365.17	364.45	362.92	362.95	363.12	362.87
21	362.78	362.96	364.35	362.82	364.65	363.27	365.08	364.35	363.20	362.97	362.99	362.85
22	362.64	362.89	364.01	362.86	364.36	363.93	364.92	364.18	363.19	362.81	362.93	362.82
23	362.60	362.89	363.84	362.80	364.33	364.30	364.72	364.20	363.16	362.86	362.99	362.79
24	362.82	363.02	363.85	362.74	364.22	364.12	364.61	364.33	363.07	362.89	362.99	362.78
25	362.68	363.12	363.69	362.83	364.06	363.82	364.63	364.35	362.98	362.83	363.05	362.71
26	362.71	363.16	363.23	362.92	363.91	363.47	364.56	364.31	362.77	362.66	363.07	362.87
27	362.70	363.00	362.84	362.98	363.70	363.36	364.60	364.21	362.93	362.68	363.03	362.71
28	362.70	362.99	362.70	362.98	363.51	363.16	364.59	364.16	362.87	362.82	362.81	362.67
29	362.65	363.23	362.78	362.98	363.48	362.92	364.48	364.51	362.77	362.87	362.71	362.81
30	362.58	363.44	363.52	362.98	---	362.83	364.35	364.87	362.76	362.89	362.87	362.69
31	362.62	---	363.86	362.97	---	362.81	---	364.94	---	362.81	362.98	---
MEAN	362.74	362.96	363.80	362.89	363.79	363.29	364.69	364.28	363.48	362.92	362.94	362.80
MAX	362.99	363.44	365.39	363.89	365.70	364.30	365.77	364.94	364.98	363.17	363.33	363.01
MIN	362.56	362.62	362.70	362.38	362.63	362.66	362.96	363.74	362.76	362.66	362.61	362.44
CAL YR 1983	MEAN	363.21	MAX	367.13	MIN	362.39						
WTR YR 1984	MEAN	363.38	MAX	365.77	MIN	362.38						



## STREAMS TRIBUTARY TO LAKE ONTARIO

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04242500 EAST BRANCH FISH CREEK AT TABERG, NY

LOCATION.--Lat 43°18'06", long 75°37'09", Oneida County, Hydrologic Unit 04140202, on left bank at downstream side of bridge on Main Street at Taberg, just downstream from Furnace Creek, 300 ft upstream from bridge on State Highway 69, and 2.8 mi upstream from confluence of East and West Branches near Blossvale.

DRAINAGE AREA.--188 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1034: 1944. WSP 1054: 1923-45. WDR NY-83-3: 1980 (M).

GAGE.--Water-stage recorder. Datum of gage is 490.12 ft National Geodetic Vertical Datum of 1929. Prior to May 20, 1969, at datum 1.00 ft higher.

REMARKS.--Records fair except those for winter periods, which are poor. Diversion above station for municipal water supply by cities of Rome and Oneida (1984 average, 24 ft<sup>3</sup>/s). Diurnal fluctuation at low flow caused by diversion and small power operations upstream.

AVERAGE DISCHARGE.--61 years (water years 1924-84), 541 ft<sup>3</sup>/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft<sup>3</sup>/s June 22, 1972, gage height, 11.71 ft; maximum gage height, 11.90 ft, present datum, Oct. 2, 1945; minimum discharge, 4.9 ft<sup>3</sup>/s Aug. 15, 16, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,780 ft<sup>3</sup>/s Dec. 14 at 0645 hours, gage height, 6.91 ft, no other peak above base of 4,900 ft<sup>3</sup>/s; minimum, 43 ft<sup>3</sup>/s July 24, gage height, 0.73 ft (result of regulation).

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	78	158	579	360	220	400	466	902	594	239	67	503
2	73	151	491	350	200	400	532	714	455	178	62	275
3	66	186	479	340	220	380	605	531	354	141	61	302
4	67	241	368	330	270	350	719	811	308	120	61	355
5	134	241	406	320	400	360	1590	1220	259	1060	79	255
6	665	213	625	300	390	350	3750	761	223	1170	66	190
7	493	194	1860	270	340	300	2730	540	203	646	83	150
8	301	176	1320	230	300	250	1720	477	177	392	84	127
9	218	162	1040	220	270	230	1410	789	158	259	156	116
10	182	155	852	210	250	220	1250	703	140	189	514	111
11	159	694	632	210	240	210	1120	530	133	184	357	212
12	149	921	641	200	300	210	1630	1840	110	686	268	942
13	222	549	2840	200	400	220	1960	1280	103	360	332	520
14	665	363	5250	190	1000	230	1850	924	231	209	279	1470
15	596	326	3400	190	4040	250	2530	683	207	153	376	1320
16	367	556	2000	180	3300	279	3150	521	141	135	268	577
17	253	752	1230	180	2410	333	3230	439	117	146	212	482
18	206	575	856	180	2200	355	2560	369	202	118	168	385
19	177	432	620	180	1940	316	1930	331	1030	109	147	276
20	160	421	420	190	2710	317	2230	301	548	94	160	224
21	134	2570	360	190	1940	709	1620	285	272	85	126	192
22	117	1830	490	200	1210	1340	1140	262	171	79	111	166
23	127	886	600	210	913	931	962	434	138	80	551	156
24	262	635	540	270	901	598	1380	924	219	85	483	155
25	266	760	480	400	978	505	1670	522	1130	70	279	153
26	237	673	440	450	747	471	1150	366	591	54	199	283
27	360	546	420	400	587	422	920	356	329	82	154	426
28	300	472	410	340	540	442	786	409	312	123	122	291
29	245	706	400	290	440	462	749	1890	255	100	111	219
30	200	768	380	270	---	394	727	1790	211	81	148	193
31	174	---	370	240	---	442	---	912	---	72	508	---
TOTAL	7653	17312	30799	8090	29656	12676	48066	22816	9321	7499	6592	11026
MEAN	247	577	994	261	1023	409	1602	736	311	242	213	368
MAX	665	2570	5250	450	4040	1340	3750	1890	1130	1170	551	1470
MIN	66	151	360	180	200	210	466	262	103	54	61	111
CAL YR 1983	TOTAL	166500	MEAN	456	MAX	5250	MIN	28				
WTR YR 1984	TOTAL	211506	MEAN	578	MAX	5250	MIN	54				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft upstream from bridge on Sconondoa Street at Oneida, and 500 ft downstream from Sconondoa Creek.

DRAINAGE AREA.--113 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-78-1: 1951, 1956, 1958, 1961, 1963, 1964, 1972, 1976 (P). WDR NY-83-3: 1950 (M), 1977 (M), 1979 (M).

GAGE.--Water-stage recorder. Datum of gage is 409.33 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Occasional regulation by small mills upstream from station.

AVERAGE DISCHARGE.--35 years, 166 ft<sup>3</sup>/s, 19.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,110 ft<sup>3</sup>/s Oct. 9, 1976, gage height, 15.01 ft; minimum, 12 ft<sup>3</sup>/s Aug. 5, 6, 1962, Oct. 28, 1964; minimum gage height, 1.30 ft Aug. 3, 6, 1955, Aug. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1000	*4,450	*12.34	Feb. 15	0930	2,850	10.08

Minimum discharge, 20 ft<sup>3</sup>/s Oct. 1, gage height, 1.57 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	29	159	140	86	160	351	200	259	80	38	86
2	26	30	124	140	84	160	529	161	210	74	37	66
3	26	36	110	150	150	160	591	148	175	62	43	181
4	25	38	97	160	350	160	528	233	161	60	46	113
5	29	35	99	160	250	170	893	304	134	255	40	80
6	33	34	239	150	200	165	1160	197	146	257	38	69
7	29	34	780	140	170	150	794	160	130	452	41	58
8	23	33	275	140	150	140	496	153	112	126	38	53
9	26	32	192	130	120	140	364	184	101	91	36	49
10	27	34	169	120	100	130	300	157	94	77	41	47
11	27	103	151	110	150	130	258	133	85	207	115	58
12	29	85	268	110	200	120	230	390	81	136	263	85
13	35	69	2140	100	350	120	211	284	78	76	168	58
14	62	59	3310	98	1100	120	206	552	336	62	102	99
15	35	60	1070	94	2450	120	278	302	113	56	192	70
16	30	89	596	90	1140	176	507	232	89	54	80	62
17	30	100	375	88	648	333	516	198	81	54	67	58
18	29	90	265	86	529	217	366	177	105	58	56	53
19	28	76	215	84	414	195	275	160	160	53	54	50
20	28	73	190	86	493	411	609	146	97	47	65	50
21	27	160	180	86	375	886	412	148	80	45	51	52
22	23	129	250	90	294	818	287	132	72	45	48	46
23	30	91	300	100	260	520	258	243	67	41	95	44
24	40	80	280	130	232	350	273	278	68	36	130	45
25	33	197	250	200	212	297	301	162	105	37	77	44
26	30	167	230	170	200	266	255	138	68	37	60	60
27	35	164	200	140	180	224	210	146	66	64	51	52
28	38	191	190	120	170	213	182	367	67	60	47	46
29	33	416	170	110	170	216	178	960	72	46	49	44
30	30	246	160	100	---	222	177	584	79	42	84	43
31	30	---	150	90	---	238	---	361	---	40	174	---
TOTAL	949	2980	13184	3712	11227	7727	11995	7990	3491	2830	2426	1921
MEAN	30.6	99.3	425	120	387	249	400	258	116	91.3	78.3	64.0
MAX	62	416	3310	200	2450	886	1160	960	336	452	263	181
MIN	23	29	97	84	84	120	177	132	66	36	36	43
CFSM	.27	.88	3.76	1.06	3.42	2.20	3.54	2.28	1.03	.81	.69	.57
IN.	0.31	0.98	4.34	1.22	3.70	2.54	3.95	2.63	1.15	0.93	0.80	0.63

CAL YR 1983	TOTAL	65661	MEAN	180	MAX	3310	MIN	20	CFSM	1.59	IN.	21.62
WTR YR 1984	TOTAL	70432	MEAN	192	MAX	3310	MIN	23	CFSM	1.70	IN.	23.19

## 04245000 LIMESTONE CREEK AT FAYETTEVILLE, N.Y.

LOCATION.--Lat 43°01'48", long 76°00'49", Onondaga County, Hydrologic Unit 04140202, on left bank 100 ft downstream from bridge on Genesee Street at Fayetteville, and 8 mi upstream from mouth.

DRAINAGE AREA.--85.5 mi<sup>2</sup>, not including 14.0 mi<sup>2</sup> of Middle Branch Tioughnioga Creek basin, flow from which may be completely diverted into Limestone Creek basin through DeRuyter Reservoir, and 0.8 mi<sup>2</sup> in closed basin.

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

REVISED RECORDS.--WSP 954: 1941. WSP 1912: 1958 (M).

GAGE.--Water-stage recorder. Datum of gage is 427.73 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow slightly regulated by DeRuyter Reservoir.

AVERAGE DISCHARGE.--44 years (water years 1941-84), 142 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,490 ft<sup>3</sup>/s Oct. 28, 1981, gage height, 10.14 ft, from rating curve extended above 4,200 ft<sup>3</sup>/s; m<sup>3</sup>/s; minimum, 1.4 ft<sup>3</sup>/s Aug. 19, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	1930	1,830	4.96	Apr. 6	0530	1,930	5.09
Feb. 15	0200	*2,370	*5.63				

Minimum discharge, 15 ft<sup>3</sup>/s Oct. 8-11,12, gage height, 1.40 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	18	33	91	96	66	130	236	209	268	65	32	48
2	17	34	75	90	70	130	306	172	224	64	32	43
3	17	36	69	86	76	120	442	162	197	57	34	74
4	17	40	64	83	119	120	594	282	189	67	34	71
5	19	39	66	85	117	127	1220	291	160	113	32	53
6	21	38	76	87	101	129	1560	217	169	147	31	46
7	20	38	235	86	90	121	824	183	158	144	31	42
8	15	36	192	72	80	109	504	178	130	89	31	39
9	15	35	120	70	76	100	369	193	119	72	29	37
10	15	37	105	68	86	96	306	172	111	66	27	36
11	15	64	100	64	135	94	266	155	100	69	31	40
12	16	69	91	62	273	90	235	405	94	64	98	88
13	17	52	419	62	528	88	216	307	91	57	73	56
14	31	46	1350	64	981	86	211	553	170	53	67	102
15	32	43	1000	62	1850	90	238	347	110	50	100	73
16	30	51	453	60	990	176	335	276	92	49	61	58
17	29	62	272	58	487	284	473	233	86	46	59	51
18	29	52	211	58	361	190	445	207	102	48	50	45
19	30	46	181	56	306	173	317	203	123	49	49	41
20	29	49	145	56	351	238	506	186	87	46	55	40
21	29	98	124	56	281	507	351	185	76	44	46	38
22	29	80	175	58	236	426	261	162	70	43	46	37
23	32	55	160	70	222	271	245	251	65	40	73	36
24	34	49	150	90	201	222	262	313	76	39	73	38
25	32	76	140	120	183	206	355	186	127	37	54	37
26	31	83	130	100	167	185	278	173	80	35	45	49
27	33	71	150	89	150	163	222	179	69	45	41	58
28	33	75	130	82	140	161	199	321	68	48	39	48
29	33	159	120	72	140	168	188	725	65	36	40	45
30	33	134	110	66	---	172	194	555	63	34	49	45
31	33	---	100	64	---	211	---	345	---	33	58	---
TOTAL	784	1780	6804	2292	8863	5383	12158	8326	3539	1849	1520	1514
MEAN	25.3	59.3	219	73.9	306	174	405	269	118	59.6	49.0	50.5
MAX	34	159	1350	120	1850	507	1560	725	268	147	100	102
MIN	15	33	64	56	66	86	188	155	63	33	27	36
CFSM	.30	.69	2.56	.86	3.58	2.04	4.74	3.15	1.38	.70	.57	.59
IN.	0.34	0.77	2.96	1.00	3.86	2.34	5.29	3.62	1.54	0.80	0.66	0.66
CAL YR 1983	TOTAL	45280	MEAN	124	MAX	1350	MIN	15	CFSM	1.45	IN.	19.70
WTR YR 1984	TOTAL	54812	MEAN	150	MAX	1850	MIN	15	CFSM	1.75	IN.	23.85

## 04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY

LOCATION.--Lat 42°56'02", long 76°03'44", Onondaga County, Hydrologic Unit 04140202, on left bank 15 ft downstream from bridge on Walberger Road, 125 ft downstream from tributary from Stebbins Gulf, 2.2 mi upstream from Jamesville Reservoir, and 4 mi south of Jamesville.

DRAINAGE AREA.--32.2 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-58. July 1958 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.93 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for periods of no gage-height record Nov. 17 to Feb. 2 and Mar. 26 to Apr. 10, which are poor.

AVERAGE DISCHARGE.--26 years, 50.1 ft<sup>3</sup>/s, 21.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,820 ft<sup>3</sup>/s July 3, 1974, gage height, 7.84 ft; maximum gage height 8.46 ft Oct. 28, 1981; minimum discharge, 2.0 ft<sup>3</sup>/s Sept. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 14	unknown	743	7.39	Apr. 6	unknown	671	7.56
Feb. 14	2230	*1,530	*8.33				

Minimum discharge, 4.5 ft<sup>3</sup>/s Oct. 3, 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	4.8	6.2	30	34	16	58	78	65	92	19	8.4	11
2	5.0	7.2	23	33	20	54	86	55	79	20	8.4	12
3	4.7	10	20	31	30	50	100	53	72	17	12	48
4	4.9	11	19	30	71	50	120	110	68	17	12	22
5	6.6	8.9	20	31	50	52	200	101	57	43	9.5	17
6	8.8	7.9	23	33	41	49	400	73	66	45	8.9	14
7	6.3	7.6	80	30	36	45	250	63	55	49	11	13
8	5.3	6.9	50	27	28	45	180	61	46	22	9.3	11
9	5.2	6.6	35	25	26	44	140	65	41	17	8.7	11
10	5.1	7.2	31	23	29	42	112	57	38	16	8.6	11
11	5.3	33	29	22	72	41	103	52	34	18	20	37
12	6.2	25	30	21	112	40	91	133	32	16	71	40
13	7.2	13	150	20	255	40	84	99	29	13	34	21
14	13	9.7	500	19	548	41	78	164	62	12	18	61
15	7.3	12	250	18	777	44	92	108	34	12	18	28
16	6.1	22	150	17	350	80	117	91	29	11	38	22
17	5.8	20	80	16	187	81	113	78	26	10	31	18
18	5.8	17	64	16	160	61	99	70	38	11	17	16
19	5.8	13	50	15	139	56	93	72	36	11	16	15
20	5.6	16	44	15	151	82	118	65	26	9.8	17	15
21	5.8	28	40	16	123	159	91	64	22	9.4	13	14
22	5.8	24	45	18	106	134	77	56	21	9.3	12	13
23	7.9	20	54	22	97	98	75	97	20	8.8	32	13
24	10	16	47	37	87	83	84	89	35	8.4	23	14
25	7.3	24	41	33	79	77	112	59	51	8.0	15	14
26	6.6	22	43	30	70	68	83	58	26	8.1	12	29
27	9.2	20	45	26	64	62	70	55	22	21	11	19
28	8.1	25	42	23	62	56	64	111	23	14	11	15
29	7.1	60	39	20	60	58	62	196	21	11	11	15
30	6.6	50	37	18	---	62	63	140	19	9.6	15	14
31	6.4	---	36	17	---	70	---	110	---	8.9	15	---
TOTAL	205.6	549.2	2147	736	3846	1982	3435	2670	1220	505.3	546.8	603
MEAN	6.63	18.3	69.3	23.7	133	63.9	115	86.1	40.7	16.3	17.6	20.1
MAX	13	60	500	37	777	159	400	196	92	49	71	61
MIN	4.7	6.2	19	15	16	40	62	52	19	8.0	8.4	11
CFSM	.21	.57	2.15	.74	4.13	1.98	3.57	2.67	1.26	.51	.55	.62
IN.	0.24	0.63	2.48	0.85	4.44	2.29	3.97	3.08	1.41	0.58	0.63	0.70

CAL YR 1983	TOTAL	16386.4	MEAN	44.9	MAX	652	MIN	4.5	CFSM	1.39	IN.	18.93
WTR YR 1984	TOTAL	18445.9	MEAN	50.4	MAX	777	MIN	4.7	CFSM	1.57	IN.	21.31

## 04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY

LOCATION.--Lat 43°02'30", long 76°06'02", Onondaga County Hydrologic Unit 04140202, on right bank 170 ft downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--2.90 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (peak discharge only), October 1978 to current year.

REVISED RECORDS.--WDR NY-75-1: 1974 (M); WDR NY-78-1: 1977 (M).

GAGE.--Water-stage recorder and artificial control. Datum of gage is 511.50 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 1.0 ft<sup>3</sup>/s, which are poor. Flow includes storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--7 years (water years 1972, 1979-84), 1.96 ft<sup>3</sup>/s, 9.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 595 ft<sup>3</sup>/s Oct. 21, 1976, gage height, 5.31 ft; maximum gage height, 6.51 ft July 3, 1974 (backwater from downstream channel conditions; Type IV flow); minimum discharge, 0.02 ft<sup>3</sup>/s Sept. 11, 1972.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
June 14	0015	107	2.90	Aug. 12	1715	*570	*5.14
July 4	2200	314	4.13				

Minimum discharge, 0.20 ft<sup>3</sup>/s Oct. 18, gage height, 1.04 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	.76	.92	1.1	1.4	1.7	5.0	2.1	2.0	.89	.52	.72
2	.37	1.4	.89	1.0	1.4	1.7	6.2	1.7	1.9	.89	1.1	.57
3	.40	1.1	.88	1.0	2.4	1.7	4.5	2.3	1.9	.81	1.2	2.6
4	.45	.78	.77	1.1	2.7	1.7	3.3	8.2	1.9	15	.73	.86
5	1.4	.54	1.5	1.0	1.9	2.3	6.0	2.8	1.7	20	.60	.67
6	1.1	.48	5.3	1.3	1.6	2.7	8.7	2.0	2.9	4.1	1.1	.46
7	.54	.45	2.8	1.3	1.3	2.1	3.0	1.9	1.6	2.1	2.7	.45
8	.45	.45	1.3	1.0	1.3	1.9	2.4	2.0	1.5	.92	.77	.46
9	.45	.49	1.1	.98	1.3	1.7	2.1	2.1	1.5	.78	.58	.52
10	.45	3.2	1.3	.98	1.5	1.5	2.1	1.9	1.4	.78	1.6	.55
11	.45	6.9	1.1	.96	6.3	1.5	2.0	2.2	1.3	1.4	5.3	2.6
12	1.1	2.0	13	.96	4.0	1.5	1.9	11	1.3	1.1	29	1.0
13	2.0	.77	25	.96	3.9	1.5	1.9	5.3	1.4	.78	2.7	1.7
14	2.2	.53	12	.94	18	1.5	1.7	6.9	7.6	.78	1.1	2.3
15	.43	.61	2.3	.92	16	1.8	4.9	2.6	1.3	.77	.79	.80
16	.37	2.0	1.8	.89	3.6	9.0	6.0	2.3	1.1	.69	.53	.69
17	.30	2.4	1.5	.89	2.7	3.3	2.5	2.1	1.1	.69	.58	.69
18	.30	1.1	1.5	.90	2.6	2.3	2.0	2.1	3.7	.88	.52	.69
19	.30	.67	1.4	.90	2.4	2.2	2.1	2.1	1.4	1.0	1.8	.69
20	.31	.72	1.3	.90	2.6	4.1	2.3	2.0	1.0	1.0	.84	.74
21	.32	4.6	1.3	.90	2.2	4.5	1.9	2.0	.94	1.0	.52	.78
22	.30	.91	2.3	1.0	2.1	3.1	1.7	2.1	.89	1.0	2.7	.78
23	1.3	.72	1.6	1.5	2.0	2.4	2.7	7.9	.89	.87	4.1	.78
24	.70	1.2	1.2	5.1	1.9	2.1	4.1	2.4	4.4	.69	.65	.79
25	.39	4.0	1.2	2.8	1.9	2.0	2.9	2.1	2.8	.52	.52	.71
26	.42	1.2	1.2	1.7	1.7	1.9	2.0	2.4	1.0	.52	.52	3.5
27	.77	.92	1.2	1.6	1.7	1.7	1.9	2.0	1.0	3.9	.52	.69
28	.51	4.0	1.2	1.4	1.7	1.7	1.9	7.4	.92	.88	.69	.52
29	.45	2.6	1.4	1.4	1.7	1.8	1.7	11	1.1	.60	.75	.52
30	.49	1.1	1.1	1.4	---	2.4	3.9	2.5	.91	.57	1.5	.49
31	.61	---	1.1	1.4	---	3.0	---	2.1	---	.52	2.9	---
TOTAL	20.00	48.60	92.46	40.18	95.8	74.3	95.3	109.5	54.35	66.43	69.43	29.32
MEAN	.65	1.62	2.98	1.30	3.30	2.40	3.18	3.53	1.81	2.14	2.24	.98
MAX	2.2	6.9	25	5.1	18	9.0	8.7	11	7.6	20	29	3.5
MIN	.30	.45	.77	.89	1.3	1.5	1.7	1.7	.89	.52	.52	.45
CFSM	.22	.56	1.03	.45	1.14	.83	1.10	1.22	.62	.74	.77	.34
IN.	0.26	0.62	1.19	0.52	1.23	0.95	1.22	1.40	0.70	0.85	0.89	0.38
CAL YR 1983	TOTAL	637.31	MEAN	1.75	MAX	25	MIN	.14	CFSM	.60	IN.	8.18
WTR YR 1984	TOTAL	795.67	MEAN	2.17	MAX	29	MIN	.30	CFSM	.75	IN.	10.21



## 04246000 ONEIDA LAKE AT BREWERTON, NY

LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft west of bridge on U.S. Highway 11, at Brewerton.

DRAINAGE AREA.--1,382 mi<sup>2</sup>, at dam at Caughdenoy.

PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.01 ft Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft higher.

REMARKS.--Elevation of lake surface regulated by taintor-gate dam on Oneida River at Caughdenoy and gates on Oneida Canal and Erie (Barge) Canal. Lake volume at elevation 369 ft NGVD, 49,600 mil ft<sup>3</sup>. Area of water surface, 79.8 mi<sup>2</sup>; axes, 20.9 mi by 5.5 mi; shoreline length, 54.7 mi.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 372.83 ft June 26, 1972; minimum daily, 366.12 ft Feb. 11, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1936, reached a water surface elevation of 373.5 ft, from Corps of Engineers report "Flood Plain Information, Oneida Creek, New York."

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 369.99 ft Oct. 5; minimum, 366.05 ft Feb. 11.

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	369.44	369.36	368.06	368.00	366.24	368.39	367.57	368.14	368.87	368.80	368.60	368.59
2	369.40	369.34	368.11	367.90	366.22	368.31	367.59	368.21	368.83	368.80	368.62	368.70
3	369.41	369.28	368.07	367.80	366.19	368.23	367.64	368.28	368.86	368.80	368.65	368.73
4	369.43	369.26	368.37	367.70	366.16	368.14	367.72	368.41	368.77	368.79	368.67	368.67
5	369.46	369.24	368.04	367.61	366.16	368.09	367.82	368.45	368.74	368.89	368.67	368.65
6	369.41	369.17	368.08	367.54	366.17	367.97	368.00	368.59	368.71	369.04	368.69	368.67
7	369.45	369.13	367.67	367.45	366.17	367.89	368.28	368.69	368.67	369.02	368.74	368.68
8	369.49	369.13	368.18	367.39	366.16	367.82	368.47	368.72	368.70	369.02	368.80	368.68
9	369.43	369.08	368.16	367.32	366.14	367.72	368.57	368.69	368.69	369.00	368.81	368.63
10	369.50	369.14	368.09	367.27	366.13	367.65	368.54	368.72	368.71	368.92	368.81	368.59
11	369.55	369.04	368.30	367.20	366.12	367.55	368.52	368.83	368.64	368.77	368.83	368.58
12	369.61	369.02	368.34	367.12	366.13	367.49	368.50	368.87	368.71	368.72	368.94	368.60
13	369.44	369.12	368.14	367.06	366.20	367.45	368.56	369.07	368.68	368.76	368.99	368.66
14	369.30	369.19	368.76	366.97	366.40	367.33	368.55	369.11	368.62	368.77	368.97	368.66
15	369.20	369.48	369.34	366.91	366.96	367.27	368.59	369.06	368.70	368.78	368.99	368.72
16	369.33	368.10	369.58	366.85	367.64	367.21	368.52	369.01	368.75	368.69	368.97	368.70
17	369.27	368.03	369.58	366.78	368.12	367.15	368.67	368.95	368.74	368.71	368.91	368.73
18	369.18	368.10	369.59	366.72	368.40	367.14	368.78	368.89	368.75	368.67	368.88	368.71
19	369.13	368.12	369.48	366.66	368.57	367.11	368.82	368.73	368.80	368.64	368.82	368.64
20	369.16	368.17	369.39	366.61	368.68	367.11	368.81	368.67	368.95	368.65	368.70	368.58
21	369.18	368.03	369.24	366.55	368.80	367.21	368.76	368.58	368.96	368.64	368.68	368.55
22	369.21	368.13	369.13	366.50	368.85	367.37	368.82	368.57	368.92	368.64	368.67	368.55
23	369.25	368.29	368.98	366.45	368.83	367.50	368.86	368.44	368.90	368.60	368.61	368.47
24	369.15	368.21	368.86	366.44	368.77	367.60	368.69	368.48	368.84	368.50	368.64	368.43
25	369.26	368.03	368.77	366.41	368.70	367.63	368.64	368.52	368.77	368.55	368.66	368.41
26	369.09	368.11	368.65	366.39	368.64	367.61	368.66	368.43	368.76	368.58	368.67	368.27
27	369.15	368.14	368.52	366.37	368.58	367.61	368.64	368.39	368.83	368.62	368.67	368.46
28	369.14	368.50	368.43	366.35	368.52	367.58	368.60	368.46	368.77	368.60	368.65	368.47
29	369.10	368.15	368.31	366.34	368.45	367.57	368.44	368.63	368.80	368.61	368.61	368.47
30	369.26	368.11	368.22	366.31	---	367.59	368.36	368.74	368.80	368.62	368.58	368.50
31	369.29	---	368.11	366.27	---	367.57	---	368.84	---	368.62	368.58	---
MEAN	369.31	368.67	368.60	366.94	367.35	367.61	368.43	368.65	368.77	368.74	368.74	368.59
MAX	369.61	369.48	369.59	368.00	368.85	368.39	368.86	369.11	368.96	369.04	368.99	368.73
MIN	369.09	368.03	367.67	366.27	366.12	367.11	367.57	368.14	368.62	368.50	368.58	368.27
CAL YR 1983 MEAN	369.05			371.25		367.39						
WTR YR 1984 MEAN	368.37			369.61		366.12						

## 04246500 ONEIDA RIVER AT CAUGHDENY, NY

LOCATION.--Lat 43°14'49", long 76°10'12", Oswego County, Hydrologic Unit 04140202, on left bank at point of diversion to New York State Erie (Barge) Canal, 1.6 mi downstream from Oneida Lake, and 2.6 mi upstream from navigation dam at Caughdeny.

DRAINAGE AREA.--1,382 mi<sup>2</sup>; 1902-9, 1,439 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1902 to December 1909 (published as "near Euclid"), January 1910 to December 1912, and October 1947 to current year in reports of Geological Survey. September 1902 to December 1909 and January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Base gage: Water-stage recorder. Datum of gage is 360.98 ft National Geodetic Vertical Datum of 1929 (362.00 ft Barge Canal datum). Prior to June 5, 1907, headwater readings, and June 5, 1907 to Dec. 31, 1909, nonrecording gage readings at former Oak Orchard State Dam 5.5 mi downstream at different datum. Jan. 1, 1910 to Dec. 31, 1912, nonrecording gage at site 2.5 mi downstream from present site at different datum. From Oct. 9, 1947 to Nov. 7, 1951, waterstage recorder at site 2.5 mi downstream at present datum.

Auxiliary gage: Water-stage recorder at site 2.5 mi downstream, 350 ft upstream from navigation dam at present datum (base gage site 1947-51).

Supplementary gage: Water-stage recorder at site 2.6 mi downstream, 180 ft downstream from navigation dam at present datum.

REMARKS.--Records fair. Jan. 1, 1910 to Dec. 31, 1912: Flow over dam computed on basis of coefficient determined for model of dam of same general type; flow through gate and diversion through lock culverts estimated by theoretical calculations.

1947 to current year: Record represents total discharge at Caughdeny, including flow in Oneida and Erie (Barge) Canals. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Occasional large diurnal fluctuations caused by seiche in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi<sup>2</sup> of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below lock 23, furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--47 years (water years 1903-12, 1948-84), 2,554 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,800 ft<sup>3</sup>/s Mar. 25-27, 1903; minimum daily, 52 ft<sup>3</sup>/s Oct. 24, 1910.

1947 to current year: Maximum daily discharge, 10,100 ft<sup>3</sup>/s June 25, 1972; minimum daily, 62 ft<sup>3</sup>/s July 29, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,100 ft<sup>3</sup>/s Dec.18; minimum daily, 159 ft<sup>3</sup>/s Oct. 31.

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	160	2760	4270	1880	4880	3630	4710	3740	1120	207	1130
2	226	166	2840	4100	1860	4750	3650	4470	3480	1120	215	1100
3	221	1070	2840	3950	1820	4610	3720	3020	3580	1100	235	1120
4	194	1920	2840	3800	1790	4480	3840	1780	3850	1100	263	1110
5	216	1880	2780	3670	1790	4410	4000	1780	3790	1110	259	1100
6	556	1850	2800	3560	1790	4210	4270	1780	3500	2240	247	1090
7	819	1850	2860	3440	1790	4080	4700	1770	2670	2820	223	1090
8	843	1860	3880	3370	1780	3980	5030	1770	1680	2790	558	1100
9	826	1840	4520	3270	1770	3820	5210	2140	1710	3390	1070	1080
10	822	1870	4410	3200	1770	3730	5160	2410	1720	3800	1040	868
11	822	1860	4780	3100	1750	3570	5130	2380	1390	3680	1060	1100
12	797	1770	4850	3000	1760	3500	5090	2270	1130	2430	1070	1240
13	806	1760	4500	2940	1850	3460	5200	2390	1110	1360	1600	1200
14	1260	1780	5580	2810	2070	3280	5200	4240	1090	1430	1940	1780
15	2010	1850	6650	2710	2790	3210	5270	5450	1100	1400	2140	2570
16	2020	1810	7080	2620	3730	3120	5130	5410	1130	1360	2360	2590
17	1930	1810	7070	2530	4460	3040	5380	5340	1100	1410	2370	2580
18	1920	2440	7100	2450	4900	3040	5590	5280	1070	1400	2380	2590
19	1310	2840	6880	2370	5210	3000	5660	5110	333	1400	2330	2540
20	632	2810	6690	2300	5390	3000	5640	5040	1360	1070	2300	2540
21	218	2690	6440	2230	5610	3160	5550	4170	2400	832	2030	2540
22	179	2840	6230	2170	5700	3350	5660	3570	2610	805	1180	2540
23	183	2940	5930	2110	5670	3520	5740	3490	2600	601	1180	2500
24	223	2700	5700	2100	5550	3660	5420	3500	2560	433	1150	2460
25	187	2750	5540	2060	5400	3700	5310	3530	2560	429	1140	1140
26	193	2860	5320	2050	5310	3680	5350	3510	2050	409	1140	250
27	176	2840	5110	2020	5210	3670	5320	3550	1230	414	1120	215
28	189	2660	4950	2000	5110	3650	5260	3630	1230	447	1100	214
29	164	2670	4750	2000	4980	3620	4970	3710	1240	453	1090	235
30	164	2820	4600	1950	---	3650	4870	3680	1180	429	1130	222
31	159	---	4440	1900	---	3630	---	3570	---	241	1130	---
TOTAL	20476	62966	152720	86050	100490	114460	149950	108450	60193	43023	37257	43834
MEAN	661	2099	4926	2776	3465	3692	4998	3498	2006	1388	1202	1461
MAX	2020	2940	7100	4270	5700	4880	5740	5450	3850	3800	2380	2590
MIN	159	160	2760	1900	1750	3000	3630	1770	333	241	207	214
CAL YR 1983	TOTAL	781225	MEAN	2140	MAX	7390	MIN	159				
WTR YR 1984	TOTAL	979869	MEAN	2677	MAX	7100	MIN	159				

## STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY  
(National stream-quality accounting network station)

LOCATION.--Lat 43°27'06", long 76°30'20", Oswego County, Hydrologic Unit 04140203, on right bank at New York State Barge Canal (Oswego Canal) Lock 7 in Oswego, 0.8 mi upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--5,100 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1900 to April 1906, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to January 1904, published as "above Minetto" or "near Minetto." January 1904 to April 1906, published as "at Battle Island." Records for April 1897 to September 1900, published in WSP 65 and for October 1927 to September 1928, published in WSP 644, have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR NY 78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 245.12 ft National Geodetic Vertical Datum of 1929. Prior to 1933, nonrecording gage at site about 6 mi upstream at different datum.

REMARKS.--Records good. Prior to 1933 and subsequent to 1972, flow in Oswego (Barge) Canal not included. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Erie (Barge) and Oswego (Barge) Canal systems in the river basin. Large diurnal fluctuations at low and medium flow caused by powerplants upstream from station. Oswego River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. Water may be diverted into or received from Mohawk River basin through summit levels of Erie (Barge) Canal between New London and Utica. During part of year entire flow from 45.5 mi<sup>2</sup> of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Nearly all of flow from 14 mi<sup>2</sup> of the Troughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of lockages at Lock 7 furnished by New York State Department of Transportation, record of elevations of Lake Ontario by Corps of Engineers, daily discharge records for Oswego River High Dam upstream by Niagara Mohawk Power Corp.

AVERAGE DISCHARGE.--51 years (1933-1984), 6,708 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft<sup>3</sup>/s Mar. 28, 1936, includes daily mean discharge of canals; maximum gage height, 13.46 ft Apr. 10, 1940; minimum discharge (river only), 30 ft<sup>3</sup>/s Nov. 6, 1944; minimum daily, 274 ft<sup>3</sup>/s Oct. 10, 1969; minimum gage height, 0.97 ft Aug. 24, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 20,200 ft<sup>3</sup>/s Feb. 16; maximum gage height, 9.77 ft Feb. 15; minimum daily discharge, 881 ft<sup>3</sup>/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	881	981	7350	9870	4140	11600	9140	13700	14800	2100	1280	4370
2	1000	1160	7210	9840	4040	12300	9510	13400	14500	2900	936	3570
3	1300	1230	7670	9900	3830	12400	10100	12600	14100	3400	1510	2760
4	1060	2910	7740	9630	3970	12000	10900	10700	13500	3400	1510	3230
5	1230	3380	6770	9160	4100	11700	12600	10200	12600	2900	1510	3580
6	1210	2240	7090	7820	4250	11700	15200	9690	12500	5400	1510	4120
7	1260	2730	8500	7770	4360	11100	16700	9740	11500	6400	1380	3940
8	2120	3000	9600	6940	4230	10800	17400	9610	9350	6400	1670	3400
9	1680	2080	10800	6230	3820	10700	18000	9710	9070	6600	2270	3210
10	1690	2490	10600	5340	4610	10600	18100	9920	8830	7400	2500	1560
11	2260	4330	10400	5630	4780	10400	17500	9940	8100	7400	2900	1700
12	2120	4530	10600	5720	4760	9320	16500	10600	8100	7000	2440	4290
13	1130	4010	12800	6040	5720	8120	15600	11300	7730	4210	3890	2910
14	2650	4110	18200	5890	10100	8080	15200	12300	6900	3760	4150	4270
15	3310	3920	19500	5730	18800	7700	15300	15200	4000	4880	4790	4690
16	3110	4220	19500	5750	20200	7140	15900	15800	4050	3020	5740	4400
17	2730	4040	19300	5230	19600	6680	16800	16000	3720	2230	7100	5260
18	2610	4600	18700	3830	19300	6820	17500	15700	3700	2640	7920	4690
19	1920	5370	18000	3610	18700	7200	17400	15200	2980	2540	7300	3690
20	1540	6200	17000	3740	18000	7350	17200	14100	2900	2560	7190	3680
21	1310	6020	16000	3990	17300	8670	16900	13800	6180	1880	6680	3670
22	907	5480	15000	4220	15800	12100	16800	12600	6120	2290	4970	3610
23	1020	5320	14000	3930	14900	13500	16500	12700	6330	1510	5160	3390
24	1490	5540	12700	3740	14700	13500	15800	12900	6430	1450	5220	3420
25	1080	5640	12200	3890	14200	12700	15500	13000	6280	1570	5360	2880
26	991	6210	12100	4110	13700	11400	15400	12900	3900	1290	5380	1810
27	1230	6290	11300	4360	13300	10100	15400	12700	3350	1140	5340	2670
28	1140	5420	10900	4320	13000	9840	15300	12600	3980	1320	4980	1390
29	933	5880	9900	4430	11800	9150	15000	13700	2500	1520	4390	1820
30	1010	6820	8750	4300	---	8710	14400	14700	2540	1810	3920	1980
31	927	---	10100	4130	---	8840	---	14800	---	1200	4460	---
TOTAL	48849	126151	380280	179090	310010	312220	459550	391810	220540	104120	125356	99960
MEAN	1576	4205	12270	5777	10690	10070	15320	12640	7351	3359	4044	3332
MAX	3310	6820	19500	9900	20200	13500	18100	16000	14800	7400	7920	5260
MIN	881	981	6770	3610	3820	6680	9140	9610	2500	1140	936	1390
CAL YR 1983	TOTAL	2191848	MEAN	6005	MAX	26100	MIN	881				
WTR YR 1984	TOTAL	2757936	MEAN	7535	MAX	20200	MIN	881				

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1964-66, 1971 to current year.

CHEMICAL DATA: 1957 (a), 1958-60 (a) unpublished, 1964 (b), 1965 (c), 1966 (a), 1971-72 (a), 1974 (a), 1975 (c), 1976-81 (d), 1982 (c), 1983-84 (b).

MINOR ELEMENTS DATA: 1971-1973 (a), 1975 (b), 1976 (a), 1977-84 (b).

ORGANIC DATA: OC--1975 (b), 1978-81 (d).

NUTRIENT DATA: 1971 (a), 1974 (a), 1975 (c), 1976-81 (d), 1982 (c), 1983-84 (b).

BIOLOGICAL DATA:

Bacteria--1974 (a), 1975 (c), 1976-81 (d), 1982 (c), 1983-84 (b).

Phytoplankton--1974 (a), 1975 (c), 1976 (d), 1977-81 (c).

Periphyton--1975-80 (a).

SEDIMENT DATA: 1974 (a), 1975 (c), 1976 (d), 1977 (b), 1978-79 (c), 1980-81 (d), 1982 (c), 1983-84 (b).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1975 to September 1981.

WATER TEMPERATURES: July 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1975-78, 1981): Maximum recorded, 2,290 micromhos Oct. 25, 1980; minimum recorded, 430 micromhos Apr. 19, 1976.

WATER TEMPERATURES (water years 1975-78, 1981): 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, (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 31...	1230	1660	1980	8.4	10.0	3.6	770	12.3	109	K780
FEB 22...	1015	15800	734	7.4	2.0	6.1	760	14.7	107	490
JUN 05...	1115	12700	731	8.0	16.0	6.0	760	--	--	190
AUG 15...	1015	4140	1290	7.5	25.5	2.0	755	6.7	83	2100

DATE	STREP- TOCOCCI 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 31...	210	520	417	180	16	170	4.3	100	100	510
FEB 22...	570	230	131	73	11	56	2.2	98	57	140
JUN 05...	K240	220	103	69	12	54	2.1	120	55	130
AUG 15...	740	330	242	110	14	110	3.2	92	86	320

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

## STREAMS TRIBUTARY TO LAKE ONTARIO

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 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 31...	.30	.0	1240	1000	.500	.270	.90	.080	<.010	<.010
FEB 22...	.10	3.1	490	400	1.10	.320	.50	.030	.020	.030
JUN 05...	.10	1.0	449	400	.640	<.010	1.1	.060	.010	<.010
AUG 15...	.20	2.0	946	700	.310	.190	.80	.100	.030	.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 31...	10	1	75	<.5	1	<1	<3	6	7	3
FEB 22...	10	1	44	<.5	<1	<1	<3	4	30	1
JUN 05...	10	1	51	<.5	<1	<1	<3	4	12	2
AUG 15...	<10	1	67	<.5	<1	<1	<3	5	8	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 31...	26	6	.1	<10	3	<1	<1	1100	<6	12
FEB 22...	15	15	.1	<10	<1	<1	<1	530	<6	16
JUN 05...	11	3	<.1	<10	3	<1	<1	550	<6	6
AUG 15...	21	10	.4	<10	5	<1	<1	960	<6	4



04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 to SEPTEMBER 1984

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
JUN								
05...	1120	30	14.0	3.0	731	8.0	16.0	9.8
05...	1125	30	14.0	10.0	730	8.0	16.0	9.8
05...	1130	100	15.0	3.0	731	8.0	16.0	9.9
05...	1135	100	15.0	10.0	731	8.0	16.0	9.9
05...	1140	200	14.0	3.0	731	8.0	16.0	10.3
05...	1145	200	14.0	10.0	731	8.0	16.0	10.1
05...	1150	300	7.0	3.0	728	8.0	16.0	10.2
AUG								
15...	1020	30	11.0	3.0	1290	7.5	25.5	6.8
15...	1025	30	11.0	10.0	1290	7.5	25.5	6.8
15...	1030	100	12.0	3.0	1290	7.5	25.5	6.7
15...	1035	100	12.0	10.0	1290	7.5	25.5	6.7
15...	1040	200	11.0	3.0	1290	7.5	25.5	6.6
15...	1045	200	11.0	10.0	1290	7.5	25.5	6.6
15...	1050	300	3.5	1.0	1290	7.5	25.5	6.6

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
OCT					
31...	1230	1660	10	45	--
FEB					
22...	1015	15800	11	469	--
JUN					
05...	1115	12700	57	1950	95
AUG					
15...	1015	4140	7	78	75

## LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

- 04221990 RUSHFORD LAKE AT CANEADEA DAM, NY.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit  
04130002, at Caneadea Dam, 2.4 mi (3.9 km) upstream from Caneadea Creek mouth.  
Lake is formed by Caneadea Dam completed in 1928 with capacity of 1,104,000 ft<sup>3</sup> (31,625 m<sup>3</sup>) and is used for  
power generation (see station 04221991 for monthly mean discharges).
- 04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table,  
monthly contents, and change in contents).
- 04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).
- 04228845 HONEOYE LAKE NEAR HONEOYE, NY (see station for daily mean elevation).
- 04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).
- 04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY (see station for daily mean elevation).
- 04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY (see station for daily mean elevation).
- 04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).
- 04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).
- 04236000 SKANEATELES LAKE AT SKEATELES, NY (see station for daily elevation).
- 04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY (see station for daily mean elevation, skeleton capacity table,  
monthly contents, and change in contents).
- 04240495 ONONDAGA LAKE AT LIVERPOOL, NY (see station for daily mean elevation).
- 04246000 ONEIDA LAKE AT BREWERTON, NY (see station for daily mean elevation).

## 04249010 LAKE ONTARIO AT OSWEGO, NY

LOCATION.--Lat 43°27'51", long 76°30'42" Oswego County, Hydrologic Unit 04150200, in southwest corner of Port of Oswego Authority building at mouth of Oswego River at Oswego.

DRAINAGE AREA.--295,800 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Jan. 1, 1933, nonrecording gages.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 248.96 ft June 6, 1952; minimum observed, 240.94 ft Dec. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 246.80 ft May 8, June 13; minimum, 243.59 ft Nov. 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244.51	243.96	244.11	244.57	244.59	245.34	245.38	246.39	246.68	246.45	245.85	245.39
2	244.50	243.95	243.99	244.63	244.49	245.31	245.39	246.37	246.69	246.40	245.84	245.27
3	244.45	244.09	244.01	244.64	244.50	245.32	245.38	246.34	246.66	246.37	245.84	245.23
4	244.46	244.06	243.89	244.62	244.53	245.19	245.33	246.46	246.66	246.35	245.81	245.18
5	244.59	244.03	243.97	244.57	244.57	245.14	245.50	246.44	246.62	246.38	245.78	245.19
6	244.74	244.02	243.98	244.66	244.66	245.29	245.62	246.43	246.65	246.37	245.78	245.14
7	244.64	243.97	244.52	244.71	244.67	245.32	245.73	246.39	246.63	246.45	245.82	245.03
8	244.56	243.91	244.12	244.65	244.63	245.21	245.72	246.47	246.62	246.41	245.78	244.96
9	244.50	243.89	244.07	244.70	244.53	245.20	245.74	246.49	246.63	246.36	245.72	244.94
10	244.38	243.86	244.14	244.70	244.45	245.17	245.76	246.50	246.60	246.31	245.70	244.97
11	244.27	244.07	243.96	244.72	244.49	245.46	245.80	246.47	246.64	246.35	245.66	245.04
12	244.27	244.14	244.00	244.63	244.48	245.15	245.80	246.53	246.59	246.36	245.63	245.01
13	244.31	243.98	244.25	244.54	244.43	245.03	245.77	246.53	246.58	246.32	245.60	244.99
14	244.59	243.90	244.24	244.73	244.52	245.17	245.79	246.57	246.65	246.29	245.65	245.08
15	244.58	243.76	244.32	244.72	244.73	245.09	245.84	246.60	246.61	246.27	245.70	244.99
16	244.38	243.96	244.40	244.67	244.72	245.22	245.95	246.60	246.53	246.31	245.72	244.98
17	244.44	244.17	244.48	244.71	244.71	245.16	245.99	246.55	246.46	246.28	245.66	244.96
18	244.41	244.03	244.46	244.70	244.80	245.10	246.04	246.52	246.52	246.33	245.63	244.92
19	244.35	243.93	244.49	244.81	244.79	245.15	246.09	246.56	246.55	246.32	245.64	244.92
20	244.23	243.90	244.40	244.81	244.96	245.05	246.14	246.53	246.53	246.25	245.52	244.94
21	244.16	244.03	244.26	244.71	244.99	245.05	246.19	246.52	246.51	246.23	245.46	244.89
22	244.08	244.06	244.53	244.64	244.95	245.13	246.13	246.50	246.50	246.19	245.44	244.83
23	244.11	243.89	244.69	244.58	244.97	245.40	246.13	246.61	246.45	246.15	245.60	244.82
24	244.15	243.98	244.73	244.59	245.02	245.26	246.24	246.61	246.45	246.26	245.51	244.79
25	244.08	244.19	244.74	244.76	245.18	245.28	246.32	246.59	246.51	246.16	245.49	244.74
26	244.26	244.09	244.64	244.64	245.17	245.28	246.30	246.62	246.50	246.10	245.42	244.97
27	244.18	243.98	244.58	244.71	245.04	245.28	246.31	246.60	246.43	246.04	245.35	244.79
28	244.17	243.80	244.57	244.60	245.11	245.26	246.29	246.60	246.46	245.98	245.33	244.72
29	244.24	244.03	244.77	244.55	245.42	245.37	246.32	246.63	246.48	245.93	245.35	244.71
30	244.06	244.13	244.72	244.64	---	245.37	246.32	246.62	246.48	245.91	245.35	244.67
31	244.02	---	244.61	244.69	---	245.36	---	246.64	---	245.87	245.43	---
MEAN	244.34	243.99	244.34	244.66	244.76	245.23	245.91	246.53	246.56	246.25	245.61	244.97
MAX	244.74	244.19	244.77	244.81	245.42	245.46	246.32	246.64	246.69	246.45	245.85	245.39
MIN	244.02	243.76	243.89	244.54	244.43	245.03	245.33	246.34	246.43	245.87	245.33	244.67
CAL YR 1983	MEAN	244.97	MAX	246.30	MIN	243.76						
WTR YR 1984	MEAN	245.27	MAX	246.69	MIN	243.76						

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

#### 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 <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
		Susquehanna River basin					
01496370	Mink Creek at Richfield Springs, NY	Lat 42°50'55", long 75°00'10", Otsego County, Hydrologic Unit 02050101, at bridge on State Highway 28, 0.4 mi southwest of Richfield Springs and 1 mi up, stream from mouth.	10.4	1969-84	2-15-84	5.45	182
01497805	Little Elk Creek near Westford, NY	Lat 42°38'01", long 74°47'45", Otsego County, Hydrologic Unit 02050101, at culvert on Green- bush Road, 1.2 mi south of Westford, and 2.2 mi upstream from mouth.	3.73	1978-84	2-15-84	15.80	69
01501015	Mill Brook at New Berlin, NY	Lat 42°37'32", long 75°19'43", Chenango County, Hydrologic Unit 02050101, at bridge on Academy Street at New Berlin, and 80 ft upstream from mouth.	4.64	1975-80*, 1981-84	2-14-84	2.23	270
01501140	Wharton Creek tributary near Edmeston, NY	Lat 42°42'35", long 75°13'19", Otsego County, Hydrologic Unit 02050101, at culvert on town road, 1.1 mi upstream from mouth, and 1.4 mi northeast of Edmeston.	2.02	1976-84	12-14-83	4.10	153
01502701	Susquehanna River at Afton, NY	Lat 42°13'38", long 75°31'27", Chenango County, Hydrologic Unit 02050101, on right bank at downstream side of bridge on State Highway 41, 0.1 mi southeast of Afton and inter- section of State Highways 7 and 41, and 0.2 mi downstream from Kelsey Brook.	1,716	1972,77, 1979-84	12-14-83	14.59	28,200
01502714	Ouaquaga Creek near Belden, NY	Lat 42°10'12", long 75°40'45", Broome County, Hydrologic Unit 02050101, at culvert on Kane Road, 2.3 mi south of Belden, 2.8 mi (4.5 km) west of Harpurs- ville, and 4.5 mi upstream from mouth.	3.37	1975-84	12-14-83	4.68	308

\* Operated as a continuous-record gaging station.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Susquehanna River basin--Continued							
01503960	Electric Light Stream near Morrisville, NY	Lat 42°52'51", long 75°38'37", Madison County, Hydrologic Unit 02050102, at bridge on Eaton- Morrisville Road, in Eagleville, 0.4 mi upstream from mouth, and 1.3 mi south of Morrisville.	7.21	1976-84	2-15-84	10.16	292
01503980	Chenango River at Eaton, NY	Lat 42°51'02", long 75°36'21", Madison County, Hydrologic Unit 02050102, at bridge on Landon Road at Eaton, 0.1 mi upstream from Eaton Brook, and 0.1 mi down- stream from State Highway 26.	24.3	1964-65, 1967-84	12-14-83	7.57	1,100
01505017	Cold Brook near North Norwich, NY	Lat 42°36'30", long 75°32'16", Chenango County, Hydrologic Unit 02050102, at culvert on town road, 0.4 mi west of railroad tracks, 0.8 mi southwest of North Norwich, and 1.8 mi up- stream from mouth.	5.80	1980-84	12-14-83 2-15-84	22.61 d24.02	230 151
01507000	Chenango River at Greene, NY	Lat 42°19'28", long 75°46'18", Chenango County, Hydrologic Unit 02050102, on left bank 1,700 ft downstream from bridge on State Highway 206 at Greene, and 0.6 mi downstream from Birdsall Creek.	593	1937-70*, 1971-84	12-14-83	15.78	14,500
01508946	Otter Creek tributary at State Highway 222 near Cortland, NY	Lat 42°35'22", long 76°14'01", Cortland County, Hydrologic Unit 02050102, at culvert on State Highway 222, 1.0 mi upstream from mouth, and 1.8 mi west of Cortland.	2.85	1976-84	2-15-84	11.09	48
01510610	Merril Creek tributary near Texas Valley, NY	Lat 42°28'03", long 75°59'19", Cortland County, Hydrologic Unit 02050102, at bridge on town road, 0.3 mi upstream from mouth, and 1.4 mi southwest of Texas Valley.	5.32	1976-81, 1983-84	12-14-83	d2.49	500
01511500	Tioughnioga River at Itaska, NY	Lat 42°17'53", long 75°54'33", Broome County, Hydrologic Unit 02050102, on right bank at Itaska, 3.8 mi downstream from Otselic River and village of Whitney Point, and 6 mi upstream from mouth.	730	1930-67*, 1968-84	2-15-84	9.28	14,500
01513500	Susquehanna River at Vestal, NY	Lat 42°05'27", long 76°03'23", Broome County, Hydrologic Unit 02050103, on left bank 400 ft downstream from highway bridge at Vestal, and 800 ft upstream from Choconut Creek.	3,941	1936, 1937-67*, 1968-72, 1974-84	12-14-83	27.03	84,200
01513712	Nanticoke Creek tributary at Nanticoke, NY	Lat 42°16'40", long 76°02'51", Broome County, Hydrologic Unit 02050103, at culvert on Rabbit Road, 0.4 mi northeast of Nan- ticoke, and 0.6 mi upstream from mouth.	1.70	1975-84	4-16-84	3.42	178
01514000	Owego Creek near Owego, NY	Lat 42°07'45", long 76°16'15", Tioga County, Hydrologic Unit 02050103, on right bank of right channel 300 ft upstream from bridge on State Highway 96, 0.5 mi upstream from Catatonk Creek, and 1.5 mi north of Owego.	185	1930-78*, 1979-84	12-14-83	10.48	12,100

\* Operated as a continuous-record gaging station.

d Backwater from debris.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Susquehanna River basin--Continued							
01521596	Big Creek near Howard, NY	Lat 42°22'01", long 77°34'33", Steuben County, Hydrologic Unit 02050104, at culvert on town road, 0.1 mi south of State Highway 70, 1.3 mi north of Butch Corner, 3.4 mi west of Howard, and 6.2 mi up- stream from mouth.	6.32	1977-84	5-13-84	14.44	136
01525500	Canisteo River at West Cameron, NY	Lat 42°13'20", long 77°25'05", Steuben County, Hydrologic Unit 02050104, on right bank 250 ft downstream from bridge on County Highway 119, 0.3 mi southeast of West Cameron, and 1.7 mi north of Cameron.	340	1930-31*, 1937-70*, 1971-72, 1974-84	8-14-84	14.19	10,000
01527000	Cohocton River at Cohocton, NY	Lat 42°30'00", long 77°30'02", Steuben County, Hydrologic Unit 02050105, on left bank 450 ft downstream from bridge on U.S. Highway 15 at Cohocton, 800 ft downstream from small tributary, and 1.4 mi upstream from Reynolds Creek.	52.2	1951-81*, 1982-84	4- 6-84	5.23	457
01530301	Cuthrie Run near Big Flats, NY	Lat 42°10'43", long 75°55'32", Chemung County, Hydrologic Unit 02050105, at culvert on Breed Hollow Road, 0.9 mi north of intersection of Eacher Hollow Road and Breed Hollow Road, 2.3 mi north of State Highway 17, and 3.0 mi north of Big Flats.	5.39	1976, 1979-81, 1983-84	7- 5-84	15.61	342
Allegheny River basin							
03010734	Ischua Creek tributary near Machias, NY	Lat 42°24'28", long 78°33'33", Cattaraugus County, Hydrologic Unit 05010001, at culvert on Very Road, 0.2 mi upstream from mouth, 0.7 mi north of State Highway 242, and 1.5 mi west of Machias.	5.12	1978-81, 1983-84	1-26-84 6-18-84	b9.09 9.06	- 359
03010743	Johnson Creek near Franklinville, NY	Lat 42°22'37", long 78°26'37", Cattaraugus County, Hydrologic Unit 05010001, at culvert on Pigeon Hill Road, 0.2 mi north of State Highway 98, 1.7 mi up- stream from mouth, and 2.5 mi north of Franklinville.	5.25	1977-78, 1982-84	6-18-84	13.62	150
03010800	Olean Creek near Olean, NY	Lat 42°07'12", long 78°25'12", Cattaraugus County, Hydrologic Unit 05010001, on right bank at upstream side of highway bridge, 1,000 ft west of State Highway 16, 1.4 mi northeast of Olean, and 4.6 mi upstream from mouth.	198	1958-68*, 1969-84	2-15-84	10.40	3,710
03011000	Great Valley Creek near Salamanca, NY	Lat 42°10'28", long 78°41'28", Cattaraugus County, Hydrologic Unit 05010001, at bridge on old State Highway 98, 275 ft upstream from bridge on U. S. Highway 219, 1.5 mi northeast of Salamanca, and 2.1 mi upstream from mouth.	137	1951-68*, 1972, 1977-84	2-15-84	15.75	5,950

\* Operated as a continuous-record gaging station.

b Ice jam.



## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Allegheny River basin--Continued							
03013800	Ball Creek at Stow, NY	Lat 42°09'13", long 79°24'27", Chautauqua County, Hydrologic Unit 05010002, on left bank 75 ft upstream from bridge on State Highway 394 at Stow, and 0.4 mi upstream from mouth.	9.06	1955-64\$, 1965, 1967-68#, 1974*, 1975-84	8-14-84	16.59	696
Streams tributary to Lake Erie							
04213399	Walnut Creek tributary near Forestville, NY	Lat 42°28'12", long 79°08'07", Chautauqua County, Hydrologic Unit 04120101, at culvert on Quarry Road, 1.6 mi east of Forestville and 2.3 mi upstream from mouth.	1.02	1979, 1981-84	6-18-84	12.31	73
04213490	South Branch Cattaraugus Creek near Otto, NY	Lat 42°21'54", long 78°48'04", Cattaraugus County, Hydrologic Unit 04120102, at highway bridge, 0.2 mi upstream from Mansfield Creek, and 1.7 mi northeast of Otto, and 5.5 mi upstream from mouth.	25.1	1963-84	6-18-84	6.87	2,050
04214040	Delaware Creek near Angola, NY	Lat 42°37'46", long 79°03'15", Erie County, Hydrologic Unit 04120103, at bridge on State Highway 5, 1.5 mi southwest of Angola, and 1.6 mi upstream from mouth.	8.32	1963-84	6-18-84	5.11	657
04214410	Hunter Creek at Colegrave, NY	Lat 42°44'11", long 78°32'55", Erie County, Hydrologic Unit 04120103, at bridge on Center Line Road, 0.3 mi east of Cole- grave, and 3.6 mi upstream from mouth.	14.0	1964-84	2-13-84 6-18-84	b5.14 5.01	- 734
Streams tributary to Niagara River							
04216400	Tonawanda Creek near Johnsonburg, NY	Lat 42°43'05" long 78°19'20", Wyoming County, Hydrologic Unit 04120104, on State Highway 98 near Johnsonburg, and 0.6 mi downstream from East Fork.	23.7	1962-84	6-18-84	9.02	1,240
04216875	Little Tonawanda Creek Tributary near Batavia, NY	Lat 43°56'33", long 78°09'46", Genesee County, Hydrologic Unit 04120104, at culvert on Francis Road, 1.6 mi upstream of mouth, and 2.9 mi south of the city limits of Batavia.	1.02	1976-84	4- 5-84	12.57	95
04217700	Murder Creek at Pembroke, NY	Lat 42°59'37", long 78°26'08", Genesee County, Hydrologic Unit 04120104, at bridge on Lake Road, 0.3 mi south of Pembroke, and 12.5 mi west of Batavia.	43.6	1962-72, 1974-84	2-14-84	8.72	1,350
04219645	Fourmile Creek near Youngstown, NY	Lat 43°13'49", long 79°01'01", Niagara County, Hydrologic Unit 04120104, at culvert on Balmer Road, 200 ft east of State Highway 18, 1.5 mi southeast of Youngstown, and 3.4 mi above the mouth.	4.88	1970-73, 1976-80, 1982-84	2-14-84	8.07	170

# Operated as a continuous-record gaging station.

\$ Operated as a low-flow partial-record station.

# Miscellaneous measurements made.

b Ice jam.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Streams tributary to Lake Ontario							
04219738	Eighteenmile Creek tributary near Lockport, NY	Lat 43°12'20", long 78°46'47", Niagara County, Hydrologic Unit 04130001, at culvert on Budd Road, 3.3 mi northwest of Lockport and 4.1 mi upstream from mouth.	2.53	1979-84	12-14-83 12.98 2-14-84>b14.03	209 †	
04219900	Johnson Creek near Lyndonville, NY	Lat 43°20'21", long 78°20'55", Orleans County, Hydrologic Unit 04130001, at bridge on Woodworth Road, 3.3 mi downstream from dam at Lyndonville, and 4.4 mi up- stream from mouth.	87.7	1962-70, 1972-73, 1976-84	6-18-84	6.88	1,810
04219922	Oak Orchard Creek at Barrville Road near Elba, NY	Lat 43°05'42", long 78°08'43", Genesee County, Hydrologic Unit 04130001, at culvert on Barr- ville Road, 2.3 mi northeast of Elba, and 6.0 mi north of Batavia.	6.48	1976-84	4- 5-84	9.03	152
04220245	West Creek near Hamlin, NY	Lat 43°17'42", long 77°53'32", Monroe County, Hydrologic Unit 04130001, at culvert on Hamlin Center Road, 1.5 mi east of State Highway 19, and 1.6 mi southeast of Hamlin.	4.56	1978-81, 1983-84	4- 5-84	5.88	520
04221769	Black Creek at Hyder Flats Road at Black Creek, NY	Lat 42°16'03", long 78°13'38", Allegany County, Hydrologic Unit 04130002, at culvert on Hyder Flats Road, 0.6 mi south of Black Creek, and 11.3 mi upstream from mouth.	10.7	1978-84	6-18-84	6.99	774
04222600	Wiscoy Creek at Bliss, NY	Lat 42°34'59", long 78°14'17", Wyoming County, Hydrologic Unit 04130002, at bridge on county road, 0.1 mi north of State Highway 39, and 0.6 mi east of Bliss.	22.0	1962-65, 1967-84	3-22-78 3.04 9-14-79 2.84 12-25-79 2.62 2-20-81 2.66 3-31-82 2.60 11- 3-82 1.93 12-24-82 1.93 6-18-84 3.88	920 778 637 661 625 312 312 1,660	
04224700	Sugar Creek near Ossian, NY	Lat 42°30'52", long 77°48'14", Livingston County, Hydrologic Unit 04130002, on right bank 300 ft downstream from bridge on Linzy Road, 1.3 mi southwest of Ossian, and 5.6 mi upstream from mouth.	10.0	1964-73, 1975, 1977-84	6-18-84	7.06	1,460
04224807	Stony Brook tributary at South Dansville, NY	Lat 42°28'16", long 77°40'21", Steuben County, Hydrologic Unit 04130002, at culvert on Willey Road, 0.6 mi from mouth, and 0.9 mi west of South Dansville.	3.15	1977-82, 1984	6-18-84	10.20	188
04224900	Mill Creek at Patchinville, NY	Lat 42°31'13", long 77°35'06", Steuben County, Hydrologic Unit 04130002, at bridge on Ellinger Road, 0.1 mi east of State Highway 21, 0.8 mi south of Patchinville, 3.3 mi south of Wayland, and 9.3 mi upstream from mouth.	4.22	1964-84	8-13-84	3.44	1,230
04231040	Hotel Creek at Griffin Road near Churchville, NY	Lat 43°03'36", long 77°52'28", Monroe County, Hydrologic Unit 04130003, at bridge on Griffin Road, 3.0 mi upstream from mouth, and 3.1 mi southeast of Church- ville.	4.57	1976-84	2-14-84	12.58	75

† Discharge not determined.

&gt; Greater than.

b Ice jam.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Streams tributary to Lake Ontario--Continued							
042320527	Mill Creek tributary near Webster, NY	Lat 43°14'45", long 77°26'43", Monroe County, Hydrologic Unit 04140101, at culvert on Woodboro Farms Road, 400 ft east of Holt Road, and 1.8 mi north of Webster.	1.95	1971-72, 1976-84	5-28-84	11.73	108
042320578	Bear Creek at Ontario, NY	Lat 43°13'30", long 77°17'00", Wayne County, Hydrologic Unit 04140101, at culvert on New Street in Ontario, 100 ft west of Furnaceville Road, and 4.0 mi upstream from mouth.	6.74	1971-73, 1975-84	2-14-84	11.93	86
04232071	Second Creek tributary at Alton, NY	Lat 43°12'36", long 76°59'32", Wayne County, Hydrologic Unit 04140101, at culvert on Bond Road, 200 ft south of U.S. Highway 104, 0.3 mi from mouth, and 0.6 mi west of Alton.	1.07	1970, 1973, 1976-84	5-29-84	12.52	38
04232087	Red Creek tributary No. 16 near Red Creek, NY	Lat 43°13'36", long 76°42'23", Cayuga County, Hydrologic Unit 04140101, at culvert on town road (Red Creek Road), 1.3 mi southeast of Red Creek.	2.90	1969, 1976-84	2-15-84	7.73	88
04232460	Sugar Creek at Guyanoga, NY	Lat 42°37'23", long 77°09'30", Yates County, Hydrologic Unit 04140201, at bridge on Sid White Road, 0.4 mi east of Guyanoga, and 2.3 mi upstream from mouth.	28.9	1966-84	8-16-84	4.36	381
04232630	Kendig Creek near MacDougall, NY	Lat 42°50'57", long 76°53'33", Seneca County, Hydrologic Unit 04140201, at downstream side of bridge on County Highway 120, 3.0 mi north of MacDougall, 3.5 mi (5.6 km) southwest of Waterloo, and 4.6 mi upstream from mouth.	13.8	1965-68*, 1969-84	2-15-84	5.15	437
04233255	Cayuga Inlet at Ithaca, NY	Lat 42°25'38", long 76°31'19", Tompkins County, Hydrologic Unit 04140201, on upstream abutment face of flood-control weir, at east end of Burt Place, south of Ithaca city line, 0.3 mi east of State Highway 13a, 0.9 mi downstream from Buttermilk Creek, and 2.4 mi upstream from mouth.	86.7	1971-72, 1975-84	2-14-84	10.69	5,080
04233310	Sixmile Creek near Ithaca, NY	Lat 42°24'33", long 76°27'14", Tompkins County, Hydrologic Unit 04140201, at bridge on Burns Road, 1.8 mi southeast of Ithaca, and 4.4 mi upstream from mouth.	42.0	1967-69, 1971-73, 1976-84	4- 5-84	6.21	2,180
04233676	Virgil Creek at Mill Street, Dryden, NY	Lat 42°29'18", long 76°18'08", Tompkins County, Hydrologic Unit 04140201, at bridge on Mill Street at Dryden, and 0.1 mi upstream from Dryden Lake Outlet.	20.7	1966-70, 1972, 1975-84	4- 6-84	4.30	1,290
04233700	Virgil Creek at Freeville, NY	Lat 42°30'18", long 76°21'01", Tompkins County, Hydrologic Unit 04140201, on left bank, 10 ft upstream from bridge on Johnson Street in Freeville, and 0.7 mi upstream from Fall Creek.	40.3	1974-75*, 1976-84	2-15-84	19.30	2,140
042340202	Cayuga Lake tributary No. 8 near Jacksonville, NY	Lat 42°32'24", long 76°35'35", Tompkins County, Hydrologic Unit 04140201, at culvert on State Highway 89 (Taughannock Boulevard), 0.1 mi upstream from mouth, and 2.4 mi northeast of Jacksonville.	1.36	1977-84	2-15-84	7.30	144

\* Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Streams tributary to Lake Ontario--Continued							
042340588	Yawger Creek tributary near Auburn, NY	Lat 42°54'41", long 76°39'46", Cayuga County, Hydrologic Unit 04140201, at culvert on Chamber- lain Road, 3.5 mi west of Auburn, and 4.3 mi upstream from mouth.	1.76	1976-84	2-15-84	9.59	16
04234138	Schaeffer Creek near Canandaigua NY	Lat 42°54'25", long 72°22'14", Ontario County, Hydrologic Unit 04140201, at culvert on McCann Road, 0.8 mi upstream from Mud Creek, 1.7 mi north of U.S. Highway 20, and 3.2 mi west of Canandaigua.	7.84	1980-84	12-15-83	10.79	166
04234200	Mud Creek at East Victor, NY	Lat 42°58'28", long 77°22'58", Ontario County, Hydrologic Unit 04140201, 25 ft downstream from bridge on State Highway 96 at East Victor, 0.3 mi upstream from Fish Creek, and 0.5 mi upstream from mouth.	64.2	1958-68*, 1972, 1976-84	12-15-83	5.56	966
04234363	Marbletown Creek tributary near Newark, NY	Lat 43°02'47", long 77°02'57", Wayne County, Hydrologic Unit 04140201, at culvert at inter- section of Brumm and Sutton Roads, and 1.2 mi east of Newark.	0.58	1976-84	5-29-84	4.54	20
04235255	Canandaigua Outlet tributary near Alloway, NY	Lat 43°00'21", long 77°00'54", Ontario County, Hydrologic Unit 04140201, at bridge on Pre- Emption Road, 0.5 mi south of Wayne-Ontario County line, 1.8 mi southwest of Alloway, and 2.9 mi upstream from mouth.	2.94	1978-84	2-15-84	6.65	131
04235276	Black Brook at Tyre, NY	Lat 42°59'30", long 76°48'13", Seneca County, Hydrologic Unit 04140201, at bridge on County Highway 101, in village of Tyre, and 0.8 mi upstream from mouth.	19.0	1966-73, 1975-84	2-15-84	4.01	492
04242795	Canada Creek tributary near Lee Center, NY	Lat 43°19'40", long 75°31'52", Oneida County, Hydrologic Unit 04140202, at culvert on Streum Road at Negro Road, 1.6 mi upstream from mouth, 1.7 mi northwest of Lee Center, and 7.6 mi northwest of Rome.	1.34	1977-84	12-14-83	3.43	-
04245840	Scriba Creek near Constantia, NY	Lat 43°15'35" long 76°00'11", Oswego County, Hydrologic Unit 04140202, on right bank, 8 ft upstream from road to Ingersol Road, and about 0.8 mi north of village of Constantia.	38.4	1966-68*, 1969, 1971-84	12-14-83	6.22	882
04249050	Catfish Creek at New Haven, NY	Lat 43°29'00", long 76°19'34", Oswego County, Hydrologic Unit 04140102, at bridge on State Highway 104B, at New Haven, and 1.4 mi upstream from mouth.	31.7	1962-66, 1968-84	5-29-84	6.00	715

\* 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 <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Susquehanna River basin						
#01502714 Ouaquaga Creek	Susquehanna River	Lat 42°10'12", long 75°40'45", Broome County, Hydrologic Unit 02050101, at culvert on Kane Road, 2.3 mi south of Belden, 2.8 mi (4.5 km) west of Harpurs- ville, and 4.5 mi upstream from mouth.	3.37	1976, 1980	4- 5-84 4-16-84	e140 103
#01508946 Otter Creek Tributary	Otter Creek	Lat 42°35'22", long 76°14'01", Cortland County, Hydrologic Unit 02050102, at culvert on State Highway 222, 1.0 mi upstream from mouth, and 1.8 mi west of Cortland.	2.85	1977, 1982	3-19-82 4- 5-84	11.5 18.4
#01510610 Merril Creek Tributary	Merril Creek	Lat 42°28'03", long 75°59'19", Cortland County, Hydrologic Unit 02050102, at bridge on town road, 0.3 mi upstream from mouth, and 1.4 mi southwest of Texas Valley.	5.32	1977, 1980-81	2-11-81 12-14-83 4- 5-84	51.8 144 191
#01511500 Toughnioga River	Chenango River	Lat 42°17'53", long 75°54'33", Broome County, Hydrologic Unit 02050102, on right bank at Itaska, 3.8 mi downstream from Otselic River and village of Whitney Point, and 6 mi upstream from mouth.	730	1929-67 <sup>a</sup> / 1968-79, 1982-83	11-15-83 3-26-84	225 1,780
01513420 Willow Run	Susquehanna River	Lat 42°05'33", long 76°00'50", Broome County, Hydrologic Unit 02050103, 300 ft upstream from culvert on State Highway 434 at Twin Orchards.			10- 4-83	0.10
01513421 Willow Run	Susquehanna River	Lat 42°05'38", long 76°00'54", Broome County, Hydrologic Unit 02050103, at upstream entrance to culvert on State Highway 434 at Twin Orchards.			10- 4-83	0.04
01513460 Brixius Creek	Susquehanna River	Lat 42°06'40", long 76°02'28", Broome County, Hydrologic Unit 02050103, 150 ft downstream from culvert on Witherill Street at Endicott.		1983	10- 5-83	0.57
01513464 Brixius Creek	Susquehanna River	Lat 42°06'31", long 76°02'22", Broome County, Hydrologic Unit 02050103, 45 ft downstream from culvert on Hayes Avenue at Endicott.		1983	10- 5-83	0.42
01513469 Brixius Creek	Susquehanna River	Lat 42°06'26", long 76°01'34", Broome County, Hydrologic Unit 02050103, 125 ft upstream from culvert on Main Street at Endwell.			10- 5-83	0.64
015134695 Brixius Creek	Susquehanna River	Lat 42°06'22", long 76°01'34", Broome County, Hydrologic Unit 02050103, 100 ft downstream from culvert on Main Street at Endwell.			10- 5-83	0.53

\* Also a crest-stage partial-record station.

<sup>a</sup>/ Operated as a continuous-record gaging station.

e Estimated.

## 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 <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Susquehanna River basin--continued						
01513697 Choconut Creek	Susquehanna River	Lat 42°04'46", long 76°03'31", Broome County, Hydrologic Unit 02050103, at end of Leland Avenue at Vestal.			10- 4-83	0.94
01513702 Choconut Creek	Susquehanna River	Lat 42°05'15", long 76°03'48", Broome County, Hydrologic Unit 02050103, 250 ft downstream from bridges on State Highway 17 at Vestal.		1983	10- 4-83	0.24
*01513712 Nanticoke Creek Tributary	Nanticoke Creek	Lat 42°16'40", long 76°02'51", Broome County, Hydrologic Unit 02050103, at culvert on Rabbit Road, 0.4 mi northeast of Nan- ticoke, and 0.6 mi upstream from mouth.	1.70	1976,	5-29-84	45.7
01513794 Nanticoke Creek Tributary	Nanticoke Creek	Lat 42°06'51", long 76°04'59", Broome County, Hydrologic Unit 02050103, 40 ft downstream from bridge on Day Hollow Road at West Corners.			10- 5-83	0.08
01513795 Nanticoke Creek Tributary	Nanticoke Creek	Lat 42°06'49", long 76°04'51", Broome County, Hydrologic Unit 02050103, at end of Irma Avenue at West Corners.		1983	10- 5-83	0.14
015137955 Nanticoke Creek Tributary	Nanticoke Creek	Lat 42°06'48", long 76°04'38", Broome County, Hydrologic Unit 02050103, at end of Carrie Avenue at West Corners.			10- 5-83	0.05
01513796 Nanticoke Creek Tributary	Nanticoke Creek	Lat 42°06'45", long 76°04'31", Broome County, Hydrologic Unit 02050103, 75 ft upstream from end of Leona Avenue at West Corners.		1983	10- 5-83	0.17
01513797 Nanticoke Creek Tributary	Nanticoke Creek	Lat 42°06'45", long 76°04'12", Broome County, Hydrologic Unit 02050103, 30 ft downstream from culvert on State Highway 26 at West Corners.		1983	10- 5-83	0.18
01513807 Tracy Creek	Susquehanna River	Lat 42°03'41", long 76°06'05", Broome County, Hydrologic Unit 02050103, 1/2 mile upstream from bridge on old State Highway 17 at Ross Corners.		1983	10- 4-83	0
01513816 Susquehanna River Tributary	Susquehanna River	Lat 42°04'17", long 76°07'06", Broome County, Hydrologic Unit 02050103, 50 ft downstream from culvert on State Highway 17C at Crestview Heights.		1983	10- 4-83	0.02
Allegheny River Basin						
*03013800 Ball Creek	Chautauqua Lake	Lat 42°09'13", long 79°24'27", Chautauqua County, Hydrologic Unit 05010002, on left bank 75 ft upstream from bridge on State Highway 394 at Stow, and 0.4 mi upstream from mouth.	9.06	1965, 1967-68, 1974 <sup>a</sup> , 1979	9-14-79 4- 5-84	2,000 325

\* Also a crest-stage partial-record station.

<sup>a</sup>/ 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--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Streams tributary to Niagara River						
#04216875 Little Tonawanda Creek Tributary	Little Tonawanda Creek	Lat 43°56'33", long 78°09'46", Genesee County, Hydrologic Unit 04120104, at culvert on Francis Road, 1.6 mi upstream of mouth, and 2.9 mi south of the city limits of Batavia.	1.02	1983	4-18-84	2.47
04218452 Ellicott Creek Tributary	Ellicott Creek	Lat 42°57'56", long 78°29'11", Erie County, Hydrologic Unit 04120104, 40 ft downstream of culvert on Dorsch Road, 0.4 mi west of Crittenden-Murrays Corners Road, and 1.4 mi north- east of South Newstead.	1.14		6-26-84 7-18-84 8- 9-84 9-18-84	16.9 6.40 2.31 1.84
042184525 Ellicott Creek Tributary	Ellicott Creek	Lat 42°58'00", long 78°27'53", Erie County, Hydrologic Unit 04120104, at culvert on Ayer Road, 0.7 mi northeast of South Newstead and 1.0 mi west of Crittenden-Murrays Corners Road.			9-18-84	1.51
04218453 Ellicott Creek Tributary	Ellicott Creek	Lat 42°57'56", long 78°30'34", Erie County, Hydrologic Unit 04120104, at downstream end of culvert on Dorsch Road, 0.2 mi east of South Newstead Road at South Newstead.	4.43		6-26-84 7-18-84 8- 9-84 9-18-84	11.3 4.41 2.85 1.56
Streams tributary to Lake Ontario						
#04219900 Johnson Creek	Lake Ontario	Lat 43°20'21", long 78°20'55", Orleans County, Hydrologic Unit 04130001, at bridge on Woodworth Road, 3.3 mi downstream from dam at Lyndonville, and 4.4 mi up- stream from mouth.	87.7	1961-62, 1964-65, 1968, 1979, 1983	11- 9-83 4-18-84	45.3 210
#04222600 Wiscoy Creek	Genesee River	Lat 42°34'59", long 78°14'17", Wyoming County, Hydrologic Unit 04130002, at bridge on County Highway 37, 0.1 mi north of State Highway 39, and 0.6 mi east of Bliss.	22.0	1961-62 1964-65, 1972, 1977, 1980, 1983	5-29-84 5-29-84	220 205
#04224700 Sugar Creek	Canaseraga Creek	Lat 42°30'52", long 77°48'14", Livingston County, Hydrologic Unit 04130002, on right bank 300 ft downstream from bridge on Linzy Road, 1.3 mi southwest of Ossian, and 5.6 mi upstream from mouth.	10.0	1964-66, 1970-72, 1976-77, 1980	4- 5-84	150

\* Also a crest-stage partial-record 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 <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
Streams tributary to Lake Ontario--Continued						
#04224900 Mill Creek	Canaseraga Creek	Lat 42°31'13", long 77°35'06", Steuben County, Hydrologic Unit 04130002, at bridge on Ellinger Road, 0.1 mi east of State Highway 21, 0.8 mi south of Patchinville, 3.3 mi south of Wayland, and 9.3 mi upstream from mouth.	4.22	1964-66, 1969, 1972, 1977	4- 5-84	38.4 1,230
#04233310 Sixmile Creek	Cayuga Inlet	Lat 42°24'33", long 76°27'14", Tompkins County, Hydrologic Unit 04140201, at bridge on Burns Road, 1.8 mi southeast of Ithaca, and 4.4 mi upstream from mouth.	42.0	1965-72, 1974, 1979	4- 5-84	1,700
#04233676 Virgil Creek	Fall Creek	Lat 42°29'18", long 76°18'08", Tompkins County, Hydrologic Unit 04140201, at bridge on Mill Street at Dryden, and 0.1 mi upstream from Dryden Lake Outlet.	20.7	1963, 1966-67, 1970-72, 1974-75, 1979, 1982	10-27-81 4- 6-84	4,660 862
0423369030 Egypt Creek Lateral A	Egypt Creek	Lat 42°29'26", long 76°17'44", Tompkins County, Hydrologic Unit 04140201, at culvert on East Main Street in the Village of Dryden.	0.57		10-27-81	148
0423369130 Egypt Creek Lateral D	Egypt Creek	Lat 42°29'52", long 76°18'22", Tompkins County, Hydrologic Unit 04140201, at bridge on State Highway 38 in the Village of Dryden.	2.08		10-28-81	270
#042340202 Cayuga Lake Tributary No 8	Cayuga Lake	Lat 42°32'24", long 76°35'35", Tompkins County, Hydrologic Unit 04140201, at culvert on State Highway 89 (Taughannock Boulevard), 0.1 mi upstream from mouth, and 2.4 mi northeast of Jacksonville.	1.36	1979	4- 5-84	18.7

\* Also a crest-stage partial-record station.

## BROOME COUNTY

420646075531201. Local number, Bm 100.

LOCATION.--Lat 42°06'46", long 75°53'12", Hydrologic Unit 02050103, at Moeller and Frederick Streets, Binghamton.

Owner: U.S. Geological Survey.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 52 ft, cased to 52 ft, slotted 40 ft to 45 ft.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Land-surface datum is 851.05 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter base, 2.86 ft above land-surface datum.

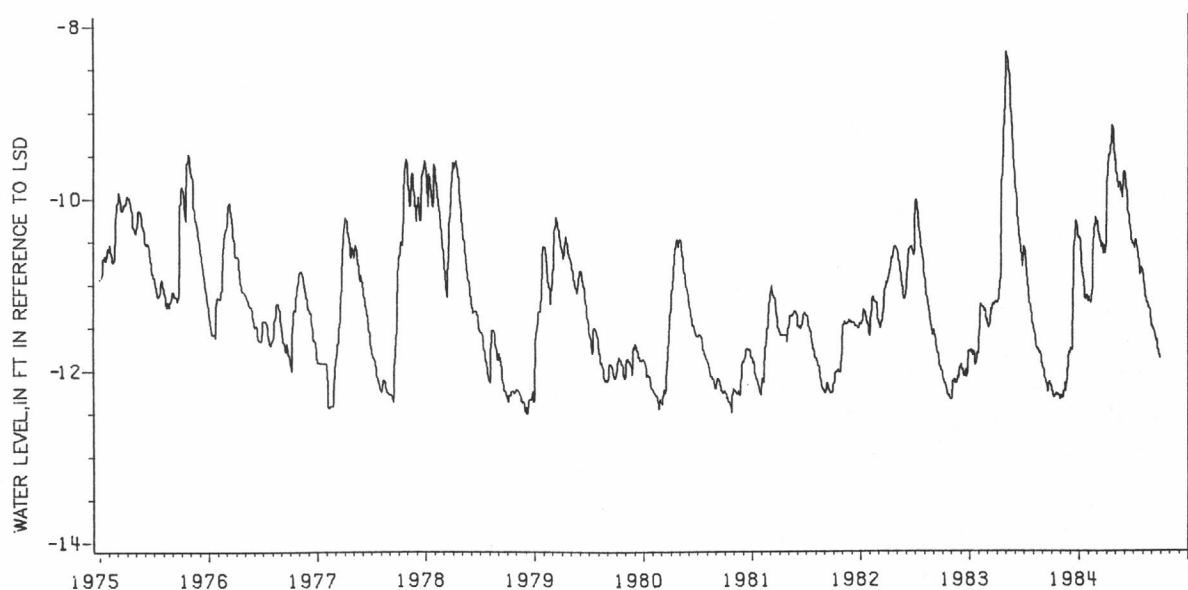
PERIOD OF RECORD.--October 1946 to July 1955, April 1966 to current year. Unpublished record for October 1946 to July 1955 (intermittent), April 1966 to April 1968 (intermittent) and May 1968 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.29 ft below land-surface datum, May 4, 1983; lowest measured 12.83 ft below land-surface datum, October 13, 1946.

EXTREMES FOR CURRENT YEAR.--Highest water level, 9.15 ft below land-surface datum, April 24; lowest, 12.34 ft below land-surface datum, Oct. 30.

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	12.19	12.32	11.80	10.45	11.19	10.26	10.62	9.51	9.73	10.54	10.83	11.48
2	12.19	12.31	11.80	10.45	11.20	10.28	10.56	9.57	9.70	10.54	10.87	11.50
3	12.23	12.29	11.78	10.46	11.19	10.29	10.49	9.59	9.70	10.54	10.88	11.48
4	12.24	12.29	11.77	10.45	11.18	10.30	10.41	9.56	9.72	10.55	10.90	11.48
5	12.24	12.30	11.77	10.47	11.15	10.28	10.22	9.63	9.76	10.56	10.92	11.50
6	12.26	12.30	11.74	10.47	11.17	10.27	10.04	9.70	9.78	10.59	10.98	11.51
7	12.29	12.31	11.74	10.53	11.19	10.32	9.83	9.73	9.81	10.54	11.00	11.53
8	12.29	12.32	11.77	10.58	11.20	10.33	9.73	9.72	9.82	10.53	11.01	11.53
9	12.30	12.31	11.76	10.67	11.20	10.38	9.63	9.74	9.88	10.50	11.04	11.54
10	12.31	12.30	11.75	10.69	11.22	10.44	9.55	9.80	9.93	10.49	11.09	11.54
11	12.31	12.24	11.76	10.75	11.22	10.43	9.51	9.82	9.94	10.48	11.12	11.56
12	12.30	12.26	11.72	10.84	11.20	10.49	9.51	9.83	9.99	10.50	11.15	11.60
13	12.29	12.26	11.53	10.86	11.18	10.49	9.51	9.89	10.02	10.53	11.17	11.60
14	12.29	12.24	10.96	10.86	11.14	10.49	9.52	9.85	10.06	10.56	11.18	11.60
15	12.29	12.22	10.63	10.89	11.05	10.53	9.51	9.83	10.15	10.59	11.20	11.60
16	12.28	12.14	10.57	10.90	10.84	10.51	9.47	9.83	10.19	10.59	11.21	11.62
17	12.26	12.16	10.54	10.97	10.65	10.57	9.40	9.83	10.19	10.62	11.21	11.67
18	12.27	12.24	10.50	11.00	10.56	10.56	9.39	9.83	10.19	10.65	11.22	11.66
19	12.28	12.21	10.46	11.00	10.51	10.55	9.37	9.82	10.21	10.70	11.22	11.64
20	12.29	12.14	10.46	11.08	10.47	10.56	9.31	9.83	10.27	10.71	11.25	11.65
21	12.29	12.11	10.43	11.14	10.45	10.54	9.29	9.88	10.30	10.73	11.27	11.73
22	12.29	12.11	10.29	11.16	10.44	10.55	9.26	9.92	10.33	10.81	11.27	11.76
23	12.27	12.10	10.29	11.17	10.37	10.59	9.19	9.91	10.35	10.81	11.25	11.77
24	12.27	12.06	10.26	11.16	10.31	10.65	9.16	9.94	10.35	10.82	11.27	11.77
25	12.29	11.99	10.28	11.14	10.30	10.62	9.19	9.94	10.41	10.88	11.28	11.77
26	12.29	11.96	10.31	11.15	10.32	10.61	9.30	9.95	10.47	10.89	11.29	11.79
27	12.29	11.93	10.32	11.13	10.32	10.64	9.35	10.00	10.49	10.86	11.29	11.83
28	12.29	11.87	10.32	11.15	10.22	10.63	9.39	9.99	10.51	10.83	11.33	11.83
29	12.31	11.79	10.33	11.14	10.22	10.55	9.44	9.93	10.52	10.81	11.39	11.83
30	12.33	11.80	10.43	11.16	---	10.60	9.45	9.84	10.53	10.81	11.40	11.87
31	12.32	---	10.46	11.17	---	10.65	---	9.78	---	10.81	11.44	---



## BROOME COUNTY

420657075583501. Local number, Bm 121.

LOCATION.--Lat 42°06'57", long 75°58'35", Hydrologic Unit 02050103, at Camden and Main Streets, Johnson City.

Owner: U.S. Geological Survey.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 53 ft, cased to 53 ft open end.

METHOD OF MEASUREMENT.--Water-stage recorder. Prior to May 1950 taped by observer.

DATUM.--Land-surface datum is 833.62 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter base, 3.42 ft above land-surface datum.

REMARKS.--Well cleaned from 46 ft, to original depth on Oct. 19, 1970. Water level affected by floods of Susquehanna River, and by pumping from municipal well field 1,100 ft south.

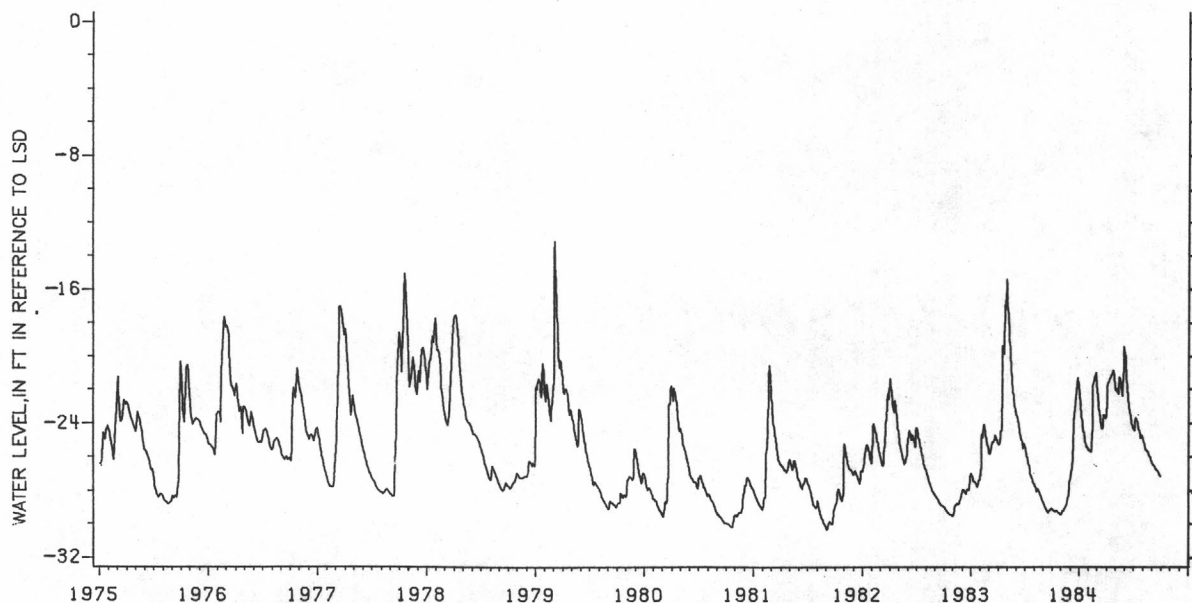
PERIOD OF RECORD.--March 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.73 ft below land-surface datum, Apr. 8, 1956; lowest, 33.47 ft below land-surface datum, Sept. 23, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 19.32 ft below land-surface datum, June 1; lowest 29.43 ft below land-surface datum, Nov. 2.

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	29.05	29.41	27.44	21.72	25.49	21.55	23.68	21.62	19.36	24.31	24.84	26.35
2	29.06	29.42	27.27	21.89	25.54	21.71	23.64	21.78	19.44	24.32	24.93	26.39
3	29.07	29.40	27.16	22.07	25.59	21.73	23.52	21.93	19.69	24.31	24.99	26.43
4	29.10	29.34	27.08	22.24	25.63	---	23.29	22.03	20.01	24.36	25.05	26.43
5	29.13	29.30	27.02	22.45	25.61	22.39	22.87	22.01	20.35	24.41	25.09	26.44
6	29.15	29.27	26.95	22.64	25.56	22.58	21.76	21.93	20.65	24.40	25.14	26.45
7	29.17	29.24	26.87	22.86	25.54	22.77	---	21.93	20.93	24.13	25.20	26.47
8	29.19	29.22	26.69	23.06	25.55	22.94	---	22.01	21.18	23.80	25.28	26.50
9	29.20	29.21	26.45	23.28	25.60	23.12	---	22.07	21.41	23.65	25.36	26.54
10	29.22	29.21	26.33	23.46	25.66	23.29	---	22.10	21.64	23.64	25.44	26.57
11	29.23	29.19	26.29	23.64	25.70	23.44	---	22.14	21.85	23.68	25.52	26.61
12	29.25	29.15	26.26	23.84	25.68	23.63	---	22.21	22.07	23.74	25.59	26.66
13	29.26	29.09	26.07	24.01	25.55	23.77	---	22.04	22.27	23.78	25.59	26.69
14	29.26	29.03	23.85	24.17	25.25	23.93	---	21.73	22.45	23.83	25.56	26.71
15	29.23	28.99	---	24.31	24.22	24.06	---	21.36	22.64	23.91	25.57	26.73
16	29.20	28.96	---	24.42	21.76	24.15	---	21.17	22.82	23.99	25.61	26.71
17	29.17	28.92	---	24.55	---	24.25	---	21.20	22.97	24.10	25.66	26.71
18	29.17	28.86	---	24.68	---	24.27	---	21.33	23.10	24.21	25.67	26.73
19	29.19	28.81	---	24.78	---	24.28	---	21.45	23.20	24.30	25.68	26.76
20	29.22	28.76	---	24.88	---	24.30	---	21.61	23.28	24.35	25.71	26.79
21	29.25	28.70	---	24.99	---	24.23	---	21.73	23.38	24.40	25.76	26.83
22	29.27	28.63	---	25.10	---	24.04	---	21.83	23.50	24.47	25.82	26.88
23	29.28	28.52	---	25.20	---	23.76	---	21.97	23.63	24.54	25.88	26.91
24	29.30	28.45	---	25.28	---	23.57	---	22.08	23.76	24.63	25.91	26.95
25	29.31	28.38	---	25.34	---	23.48	---	22.13	23.86	24.74	25.95	26.99
26	29.31	28.25	---	25.39	---	23.46	20.78	22.22	23.96	24.83	25.99	27.04
27	29.33	28.10	---	25.41	20.95	23.50	20.89	22.35	24.04	24.89	26.03	27.07
28	29.34	27.95	21.25	25.38	21.07	23.54	21.09	22.39	24.12	24.80	26.09	27.10
29	29.37	27.81	21.34	25.35	21.31	23.57	21.29	21.79	24.19	24.70	26.16	27.13
30	29.38	27.63	21.46	25.39	---	23.62	21.44	20.67	24.25	24.68	26.23	27.16
31	29.39	---	21.58	25.44	---	23.67	---	19.76	---	24.74	26.29	---



## BROOME COUNTY

421138075511301. Local number, Bm 128.

LOCATION.--Lat 42°11'38", long 75°51'13", Hydrologic Unit 02050102, at end of Jeffery Drive on Chenango Forks School District property at Kattelville. Owner: U. S. Geological Survey.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 53 ft, cased to 48.5 ft, screened 48.5 to 53 ft.

METHOD OF MEASUREMENT.--Taped by USGS hydrographer.

DATUM.--Land-surface datum is 908.58 ft National Geodetic Vertical Datum of 1929. Measuring point: Double file mark on top of coupling, 3.20 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping in nearby village and school wells.

PERIOD OF RECORD.--April to September 1984. Unpublished record for September 1980 to February 1982 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.17 ft below land-surface datum, Apr. 16, 1984; lowest measured, 32.48 ft below land surface datum, Oct. 27, 1981.

EXTREMES FOR CURRENT PERIOD APRIL TO SEPTEMBER.--Highest water level measured, 19.17 ft below land-surface datum, April 16; lowest measured, 26.97 ft below land-surface datum, Sept. 27.

## 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
APR 16, 1984	19.17	JUL 20, 1984	22.39	AUG 15, 1984	22.80	SEP 05, 1984	25.28
MAY 11	20.39	AUG 06	22.70	24	24.39	27	26.97
JUN 25	22.36						

## CATTARAUGUS COUNTY

420530078445201. Local number, Ct 121.

LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in, depth 53 ft, cased to 53 ft, open end.

METHOD OF MEASUREMENT.--Float tape read by observer.

DATUM.--Land-surface datum is 1,467.08 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.30 ft above land-surface datum.

REMARKS.--The well is located in a New York State operated campgrounds area. A new central water system for the campgrounds, utilizing a well about 1.5 mi from the observation well put in operation in 1980, is reflected by higher ground water levels in summer and fall comparable to those experienced prior to 1969 when the lowest level measured was 13.23 ft below land-surface datum on Feb. 1, 1961. Extreme low levels occurred during late summer and early fall months from 1969 to 1979 due to the effect of pumping the old supply system from a nearby well.

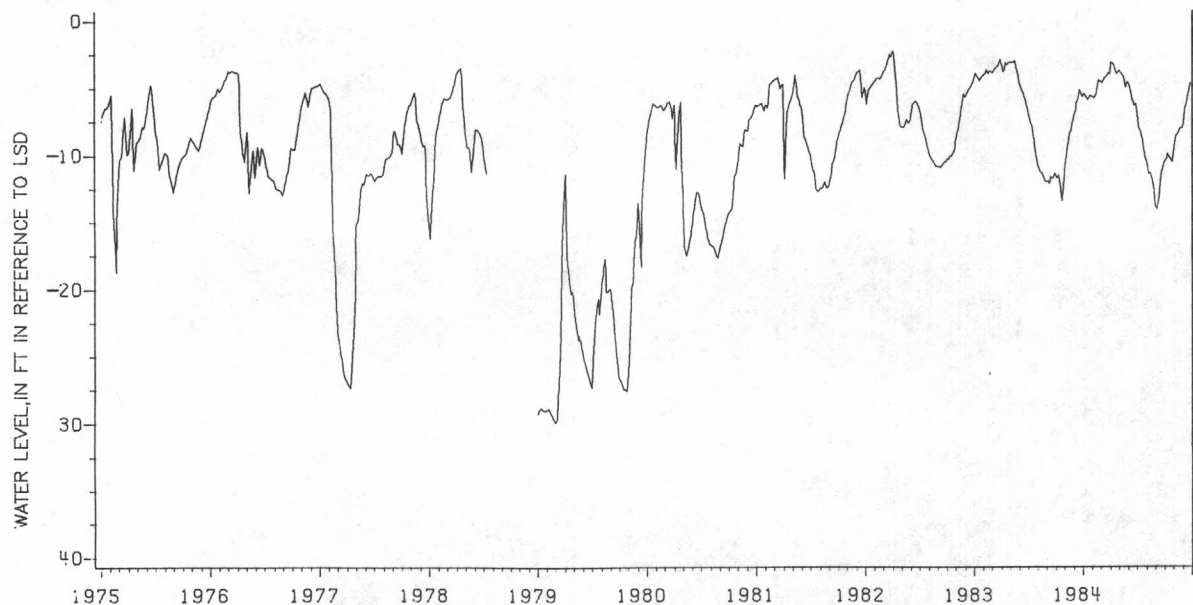
PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 2.12 ft below land-surface datum, Apr. 8, 1982; lowest measured 34.87 ft below land-surface datum, Nov. 21, 1972.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 3.03 ft below land-surface datum, Apr. 6; lowest measured, 14.04 ft below land-surface datum, Sept. 7.

## 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	11.27	JAN 07, 1984	5.31	APR 04, 1984	3.89	JUL 07, 1984	7.80
08	11.69	14	5.57	06	3.03	15	8.37
15	11.46	21	5.86	14	3.14	21	9.05
23	13.40	28	5.54	20	3.71	28	9.99
29	12.19	FEB 04	5.58	27	3.90	30	10.16
NOV 05	10.63	11	5.71	MAY 04	3.66	AUG 04	10.61
12	9.56	15	5.38	12	3.94	11	11.34
19	8.57	22	4.60	18	4.13	17	11.25
26	7.79	24	4.36	25	4.94	25	12.18
DEC 03	7.07	MAR 02	4.45	JUN 01	4.51	SEP 01	13.72
11	6.58	09	4.61	08	4.80	07	14.04
12	6.04	16	4.18	15	5.63	14	13.02
17	5.94	23	4.06	22	6.30	22	11.48
24	5.04	30	3.85	29	6.11	28	10.58
31	5.65						





## CAYUGA COUNTY

424158076251901. Local number, Cy 7.

LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia.

Owner: Earl Van Pelt.

AQUIFER.--Water-table aquifer in clayey gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in, depth 28 ft, cased to 26 ft 1.25-in well point (60-gauze screen 26 ft to 28 ft).

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Land-surface datum is 760.70 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter base, 3.08 ft above land-surface datum.

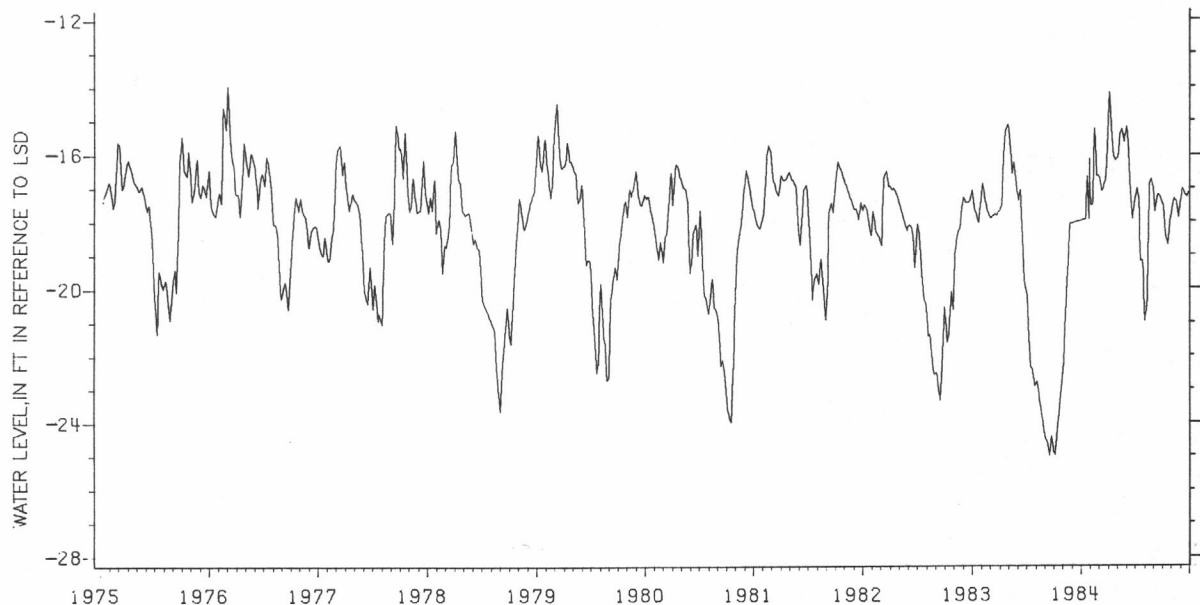
PERIOD OF RECORD.--December 1965 to current year. Unpublished record for December 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft below land-surface datum, June 26, 1972; lowest measured, 25.00 ft below land-surface datum, Sept. 19, 1983.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 14.15 below land-surface datum, Apr. 9; lowest measured, 24.99 ft below land-surface datum, Oct. 10.

## 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	24.84	FEB 20, 1984	15.23	APR 30, 1984	16.18	JUL 16, 1984	17.38
10	24.99	25	16.65	MAY 07	16.11	23	19.16
NOV 07	22.20	MAR 05	16.65	14	15.40	30	19.14
14	20.73	12	17.10	21	15.24	AUG 06	20.98
21	19.18	19	17.05	28	15.66	13	20.35
28	18.04	27	16.63	JUN 04	15.16	20	16.89
JAN 20, 1984	17.93	APR 09	14.15	11	15.95	27	16.72
25	16.65	10	14.36	18	17.15	SEP 03	17.04
30	17.94	16	15.55	25	17.94	10	17.71
FEB 02	16.12	23	16.06	JUL 02	17.47	17	17.19
06	17.54	24	16.07	09	17.00	24	17.23
13	17.50						



## GROUND-WATER LEVELS

## CHAUTAUQUA COUNTY

420326079295801. Local number, Cu 5.

LOCATION.--Lat 42°03'26", long 79°29'58", Hydrologic Unit 05010002, near Panama.

Owner: State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in, depth 33 ft, stone-lined.

METHOD OF MEASUREMENT.--Float tape read by observer.

DATUM.--Altitude of land-surface datum is 1,750 ft, from topographic map. Measuring point: Top of 0.25-in steel-plate well cover, inside shelter door, 0.44 ft below land-surface datum.

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

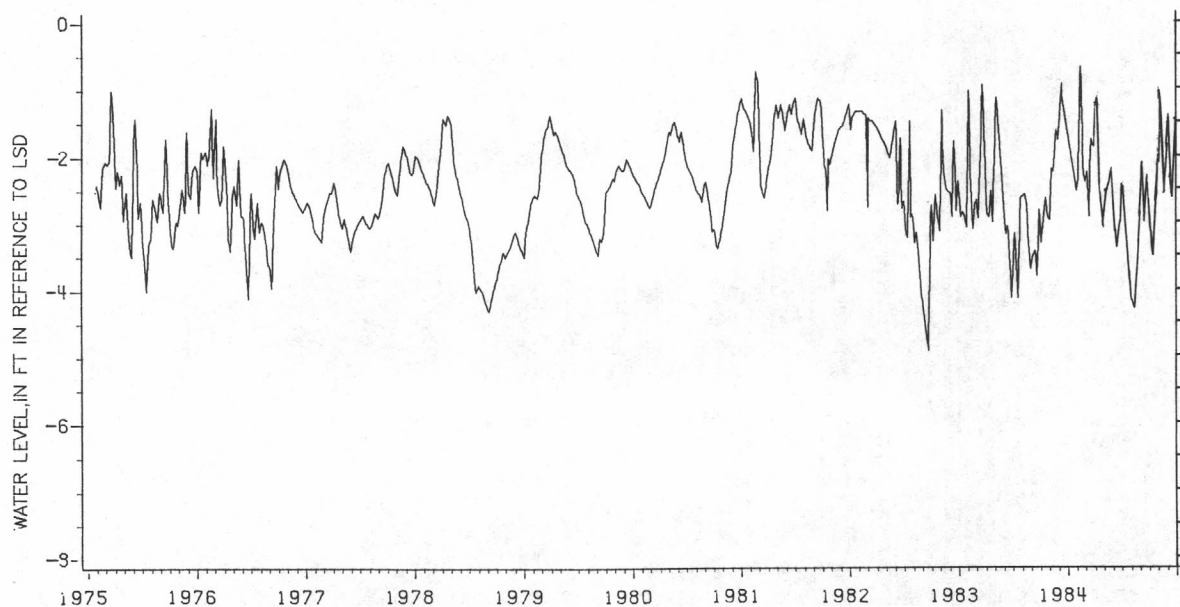
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.70 ft below land-surface datum, Feb. 19, 1981;

lowest measured 9.41 ft below land-surface datum, May 24, 1949.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.65 ft below land-surface datum, Feb. 13; lowest measured, 4.32 ft below land-surface datum, Aug. 7.

## 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 02, 1983	3.29	JAN 29, 1984	2.50	APR 02, 1984	1.28	JUN 11, 1984	3.35
17	2.60	FEB 06	2.30	04	1.09	27	2.88
24	2.88	13	0.65	09	2.45	JUL 05	2.34
31	2.95	22	2.26	16	2.73	24	3.83
NOV 07	2.17	27	2.37	23	2.97	AUG 01	4.23
14	2.22	MAR 05	2.22	MAY 07	2.53	07	4.32
21	1.58	12	2.90	15	2.46	SEP 03	2.05
28	1.74	19	1.73	29	2.24	10	2.93
DEC 12	0.90	26	1.83	JUN 07	3.12	17	2.45
13	1.09						



## CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.

LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer.

Owner: City of Jamestown.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 12 in to 10 in, depth 232 ft, filled in from original depth of 240 ft, cased 12 in 0 ft to 130 ft, 10 in 130 ft to 240 ft, slotted 130 ft to 144 ft, open end.

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Elevation of land-surface datum is 1,252.52 ft National Geodetic Vertical Datum of 1929. Measuring point:

Top of shelter base, 5.44 ft above land-surface datum.

REMARKS.--Water level affected by pumping from municipal well field. Digital recorder installed Dec. 18, 1978, removed Sept. 16, 1982.

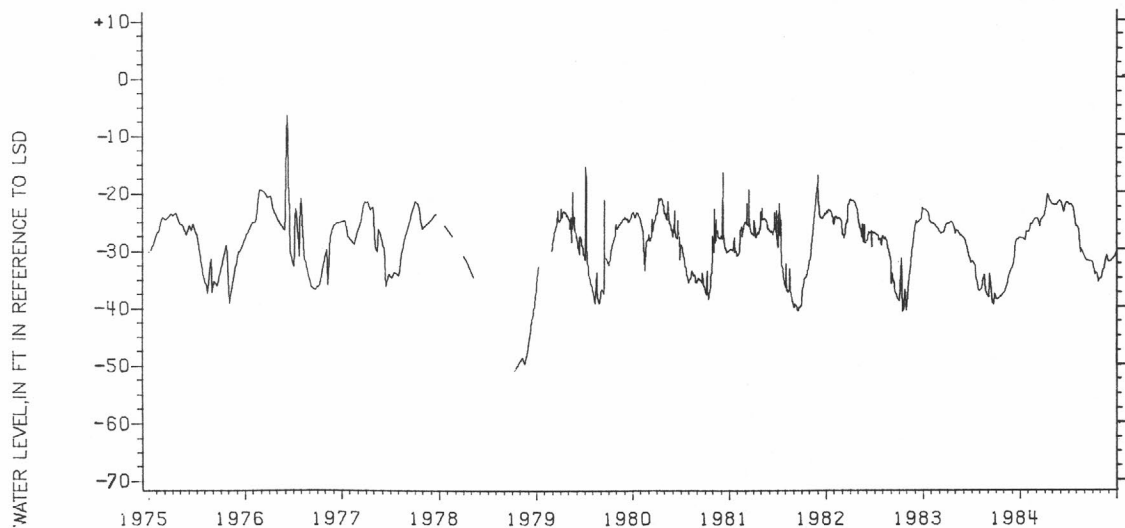
PERIOD OF RECORD.--November 1939 to September 1943, August 1946 to current year. Unpublished record for November 1939 to September 1943, August 1946 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.2 ft below land-surface datum, Mar. 14, 1942; lowest, 66.6 ft below land-surface datum, Nov. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Highest water level, 20.21 ft below land-surface datum, Apr. 15; lowest, 38.43 ft, Oct. 5, 10.

## 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 05, 1983	38.43	JAN 05, 1984	27.70	APR 05, 1984	23.79	JUN 30, 1984	21.70
10	38.43	15	27.92	10	21.21	JUL 06	22.14
15	38.21	20	28.21	15	20.21	10	21.97
20	37.92	25	26.63	20	21.24	15	21.97
25	37.85	31	26.60	25	21.38	20	22.70
31	37.49	FEB 05	26.65	30	21.90	30	25.71
NOV 05	37.09	10	25.28	MAY 05	21.95	AUG 05	25.96
10	36.31	15	25.33	10	22.09	10	26.22
15	35.33	20	25.09	20	22.12	15	30.46
20	34.40	25	24.33	25	21.63	20	29.65
25	33.65	MAR 03	24.40	30	21.36	25	30.41
DEC 05	32.40	05	24.40	JUN 05	21.46	30	30.80
10	31.76	10	24.38	10	22.19	SEP 05	31.70
15	28.46	15	25.92	15	23.31	20	31.85
20	28.07	20	24.75	20	22.29	25	31.86
25	27.99	25	24.21	25	21.46	30	31.96
30	27.75	30	24.09				



## CHAUTAUQUA COUNTY

420748079062701. Local number, Cu 104.

LOCATION.--Lat 42°07'48", long 79°06'27", Hydrologic Unit 05010002, 59 ft west of Conewango Creek, 20 ft north of County Highway 325 and 1 mi southeast of Poland Center.

Owner: City of Jamestown.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Water-level recorder on drilled observation well, diameter 6 in, depth 79 ft, screened 69 ft to 79 ft.

METHOD OF MEASUREMENT.--Water stage recorder.

DATUM.--Elevation of land-surface datum is 1,247.62 ft National geodetic Vertical Datum of 1929. Measuring point: Chisled marks at top of metal shelter base, 6.22 ft above land-surface datum.

REMARKS.--This well drilled by the U.S.G.S. and used for a pump test on Oct. 31 to Nov. 2, 1962. The water level is affected by pumping from the municipal well field by the City of Jamestown water works and by river stages in Conewango Creek which is within 100 ft of the wells. Records are considered good.

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

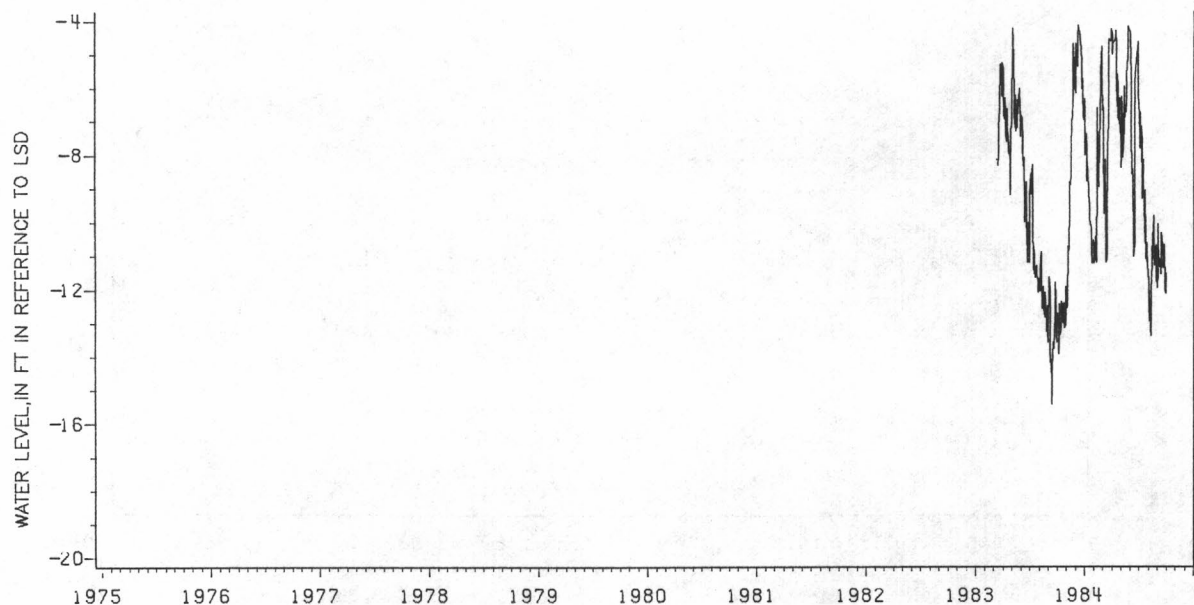
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.09 ft above land-surface datum, Feb. 20, 1984; lowest, 18.35 ft below land-surface datum, June 29, 1983, July 26, 1984.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1.09 ft above land-surface datum, Feb. 20; lowest, 18.35 ft, below land-surface datum, July 26.

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	12.89	12.51	5.98	6.68	10.61	6.54	4.21	7.49	3.70	6.49	11.73	11.95
2	12.70	12.55	6.15	6.31	11.20	6.67	4.40	7.69	4.35	6.42	12.19	10.73
3	13.01	12.55	5.07	6.83	11.21	6.55	4.91	8.39	4.55	7.35	12.47	10.03
4	13.00	12.36	4.66	7.09	11.09	6.52	4.98	8.02	5.63	7.79	12.96	10.74
5	13.07	11.78	5.24	8.01	10.66	6.98	4.66	6.82	7.01	7.73	11.99	11.17
6	13.37	10.69	5.25	7.80	10.63	7.85	3.68	6.23	7.21	7.56	12.17	11.11
7	13.91	10.89	5.25	7.95	10.65	9.53	2.68	6.93	8.11	6.70	12.67	11.25
8	13.54	10.89	5.24	7.36	10.42	9.73	1.35	8.09	7.98	7.22	12.68	11.32
9	12.42	10.82	5.36	8.77	10.85	9.74	2.02	7.75	8.58	7.11	13.17	11.06
10	13.28	10.84	4.45	7.85	11.19	8.67	2.36	7.84	8.41	7.72	13.40	11.11
11	13.36	10.38	3.64	8.15	10.99	8.10	2.60	7.83	8.88	8.24	12.55	11.30
12	13.33	9.69	4.13	8.41	10.46	9.06	3.03	7.24	9.44	7.43	12.03	11.41
13	13.30	8.78	4.10	8.50	9.69	9.21	3.75	5.93	10.03	7.70	11.22	11.52
14	13.24	8.79	3.37	8.70	6.58	11.19	4.51	5.95	10.93	9.30	11.30	11.18
15	12.76	8.89	2.91	8.90	3.76	11.09	4.25	6.70	11.02	8.12	10.71	11.29
16	12.33	8.84	2.59	9.20	2.58	11.10	5.50	6.89	10.65	9.08	11.10	10.30
17	12.43	8.78	1.74	9.50	1.32	9.83	5.86	6.54	10.52	9.12	10.30	10.70
18	12.77	8.66	1.95	9.82	8.95	8.21	5.96	6.49	5.76	9.20	10.72	10.80
19	12.82	7.67	2.92	9.97	-0.53	7.63	6.55	6.61	3.48	9.35	9.76	10.90
20	12.87	6.64	3.98	9.97	.42	7.74	5.60	6.72	3.03	9.62	9.99	11.04
21	12.95	6.84	4.81	10.00	.37	7.07	5.56	6.36	1.32	10.64	10.66	11.22
22	12.99	6.63	5.27	10.08	1.38	6.08	5.86	6.25	1.38	10.25	10.77	11.35
23	12.39	6.54	5.70	10.11	1.72	4.52	6.38	5.61	1.14	9.05	11.07	10.65
24	12.74	5.29	6.02	10.46	2.69	3.54	6.91	5.03	1.19	11.03	11.26	11.25
25	12.86	4.66	5.68	10.80	2.16	3.03	6.96	4.12	1.99	11.10	11.13	11.42
26	12.97	5.23	5.76	11.23	3.07	3.11	6.58	3.86	2.26	10.97	10.88	11.46
27	13.14	6.03	6.27	10.87	4.73	3.17	6.86	3.73	3.48	10.61	10.67	11.99
28	13.05	5.88	6.69	10.70	5.42	3.34	6.32	3.09	4.59	10.83	11.44	12.12
29	12.54	5.83	6.69	10.67	5.98	4.56	6.29	3.39	5.33	11.16	11.77	11.51
30	11.89	5.83	6.89	10.62	---	4.61	6.96	3.67	6.19	11.03	11.79	11.74
31	12.36	---	6.95	10.53	---	4.53	---	3.54	---	11.26	11.94	---

Note.--Negative value represents water level above land-surface datum.



## CHEMUNG COUNTY

420829076484801. Local number, Cm 46.

LOCATION.--Lat 42°08'29", long 76°48'48", Hydrologic Unit 02050105, near Horseheads.

Owner: Original owner deceased.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in, depth 34 ft, cased to 34 ft, open end.

METHOD OF MEASUREMENT.--Taped by USGS personnel. Prior to April 1984 float tape read by observer or USGS personnel.

DATUM.--Land-surface datum is 885.69 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of pipe flange, 3.44 ft above land-surface datum.

REMARKS.--Water level affected by stage of Newtown Creek.

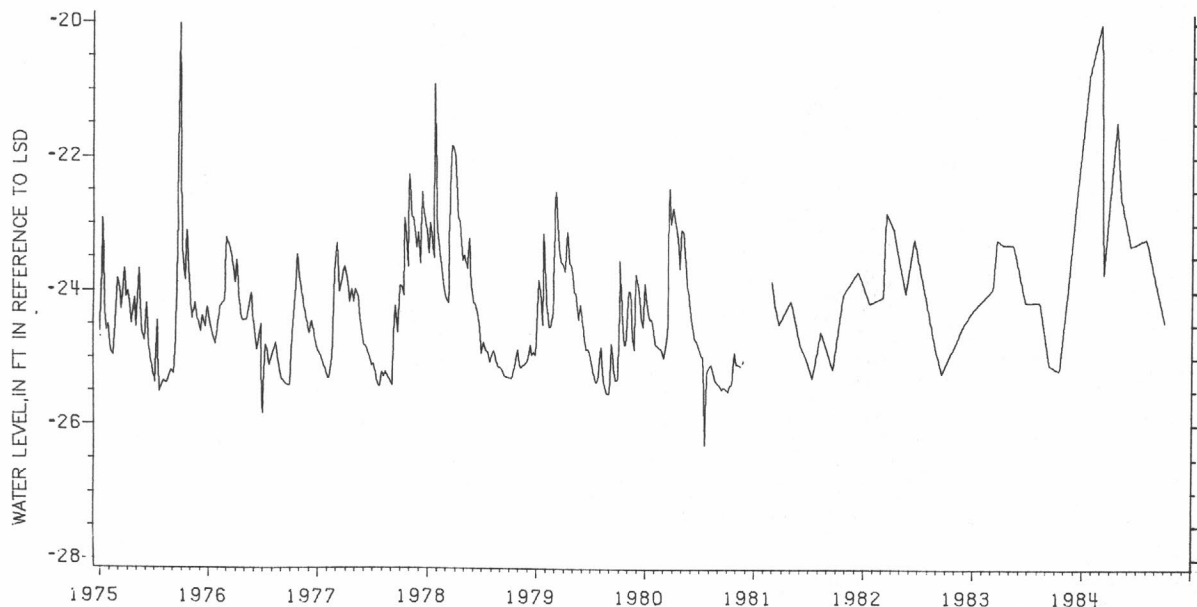
PERIOD OF RECORD.--October 1955 to current year. Unpublished record for October 1955 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.93 ft below land-surface datum, April 25, 1961; lowest measured, 26.30 ft below land-surface datum, July 18, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 19.86 ft below land-surface datum, Dec. 22; lowest measured, 25.18 ft below land-surface datum, Oct. 18.

## 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	25.18	MAR 05, 1984	20.00	MAY 09, 1984	22.54	SEP 10, 1984	23.94
DEC 22	19.86	12	23.74	JUN 12	23.31		
JAN 25, 1984	20.77	APR 25	21.46	AUG 06	23.19		



## CHENANGO COUNTY

421556075281602. Local number, Cn 12.

LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, 400 ft south of intersection of County Highways 39 and 12, 0.5 mi east of Susquehanna River, and 2.0 mi south of Bainbridge.

Owner: Ilse Maehlman.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 13 ft, cased to 13 ft gravel-packed, open end.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Land-surface datum is 979.28 ft National Geodetic Vertical Datum of 1929. Measuring point: File mark at top of shelter base, 1.37 ft above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft north, which has a period of record from October 1965 to September 1972 (unpublished).

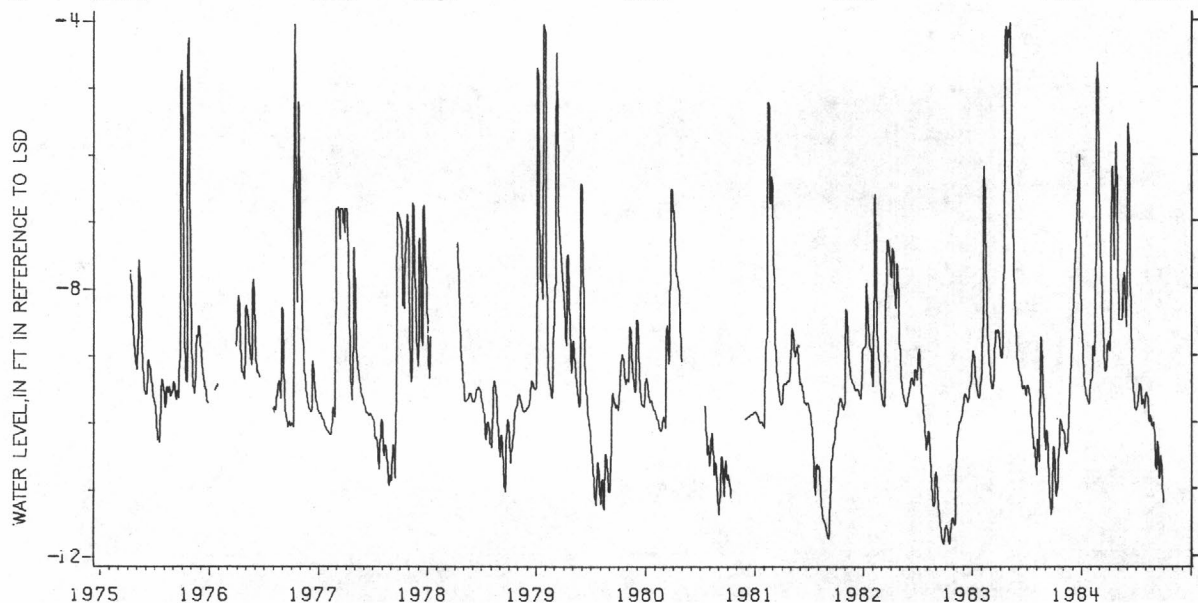
PERIOD OF RECORD.--April 1975 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.79 ft below land-surface datum, Mar. 7, 1979; lowest, 11.81 ft below land-surface datum, Sept. 26-29, 1982.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.59 ft below land-surface datum, Feb. 18-19; lowest, 11.19 ft below land-surface datum, Sept. 30.

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	10.10	---	8.72	9.35	7.36	8.89	8.13	5.61	9.80	9.55	10.35
2	10.58	10.12	---	8.78	9.36	7.43	8.92	8.40	5.51	9.78	9.54	10.46
3	10.69	10.16	---	8.84	9.37	7.51	8.92	8.46	5.62	9.74	9.53	10.56
4	10.80	10.21	---	8.95	9.31	7.59	8.82	8.46	5.88	9.70	9.53	10.64
5	10.89	10.27	---	9.06	9.00	7.70	8.52	8.46	6.24	9.67	9.55	10.69
6	10.96	10.33	---	9.14	8.86	7.85	8.08	8.46	6.67	9.66	9.58	10.61
7	11.03	10.37	---	9.22	8.84	8.01	7.28	8.46	7.10	9.65	9.61	10.44
8	11.08	10.40	---	9.29	8.86	8.17	6.56	8.46	7.51	9.58	9.65	10.32
9	11.09	10.42	---	9.36	8.90	8.34	6.21	8.46	7.87	9.49	9.70	10.26
10	11.04	10.43	---	9.40	8.96	8.51	6.15	8.46	8.17	9.43	9.76	10.27
11	10.97	10.44	---	9.44	9.00	8.65	6.21	8.46	8.43	9.40	9.83	10.34
12	10.92	10.45	---	9.47	8.92	8.80	6.38	8.46	8.65	9.40	9.92	10.44
13	10.90	10.43	---	9.50	8.65	8.92	6.65	8.34	8.82	9.40	9.97	10.57
14	10.88	10.36	---	9.55	8.22	9.02	6.93	8.12	8.97	9.42	9.95	10.68
15	10.81	10.26	---	9.57	7.57	9.09	7.22	8.14	9.09	9.45	9.91	10.77
16	10.56	10.19	---	9.58	6.12	9.16	7.47	8.35	9.19	9.49	9.88	10.82
17	10.30	---	---	9.60	4.96	9.20	7.56	7.89	9.28	9.55	9.87	10.80
18	10.12	---	---	9.61	4.62	9.22	7.07	7.79	9.36	9.63	9.90	10.68
19	10.03	---	---	9.63	4.60	9.22	6.26	7.74	9.43	9.71	9.94	10.57
20	9.98	---	---	9.64	4.72	9.21	5.90	7.75	9.48	9.72	9.98	10.50
21	9.94	---	---	9.66	4.91	9.20	5.79	7.83	9.51	9.69	10.01	10.48
22	9.94	---	5.98	9.68	5.19	9.17	5.81	7.94	9.56	9.66	10.02	10.53
23	9.97	---	6.34	9.69	5.51	9.11	5.92	8.06	9.60	9.64	10.02	10.62
24	10.00	---	6.87	9.71	5.84	9.02	6.11	8.18	9.65	9.64	10.04	10.72
25	10.04	---	7.33	9.71	6.18	8.91	6.35	8.29	9.72	9.65	10.03	10.82
26	10.09	---	7.71	9.68	6.51	8.83	6.64	8.38	9.77	9.68	10.00	10.90
27	10.11	---	8.03	9.59	6.80	8.78	6.89	8.48	9.78	9.73	9.98	10.98
28	10.10	---	8.27	9.49	7.03	8.76	7.13	8.56	9.78	9.78	10.00	11.06
29	10.09	---	8.45	9.41	7.23	8.77	7.36	8.49	9.78	9.74	10.06	11.12
30	10.09	---	8.57	9.37	---	8.80	7.74	7.54	9.80	9.66	10.15	11.17
31	10.09	---	8.64	9.35	---	8.84	---	6.20	---	9.59	10.25	---





## CHENANGO COUNTY

423849075315701. Local number, Cn 13.

LOCATION.--Lat 42°38'49", long 75°31'57", Hydrologic Unit 02050102, at junction of Chenango County Road 23 and Erie-Lackawanna Railroad tracks, 2.1 mi north of North Norwich and 2.7 mi south of NYS Rt. 80 near Sherburne.

Owner: U. S. Geological Survey.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 125 ft, cased to 123 ft, screened 123 ft to 125 ft.

METHOD OF MEASUREMENT.--Taped by observer or USGS hydrographer.

DATUM.--Land-surface datum is 1065.77 ft National Geodetic Vertical Datum of 1929. Measuring point: Double file mark on top of coupling, 4.00 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping from nearby farm well.

PERIOD OF RECORD.--April to September 1984.

EXTREMES FOR CURRENT PERIOD APRIL TO SEPTEMBER.--Highest water level measured, 5.37 ft below land-surface datum, May 14; lowest measured, 7.17 ft below land-surface datum, Sept. 25.

## 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
APR 10, 1984	5.56	JUL 17, 1984	5.95	AUG 13, 1984	5.98	SEP 07, 1984	6.94
MAY 14	5.37	18	5.54	20	6.40	11	6.90
JUN 19	5.76	24	5.97	23	6.47	18	6.95
JUL 03	5.84	31	5.74	27	6.60	25	7.17
10	5.92	AUG 06	5.94	SEP 04	6.70		

## CORTLAND COUNTY

423541076114701. Local number, C 102.

LOCATION.--Lat 42°35'41", long 76°11'47", Hydrologic Unit 02050102, at Municipal Water Works, Cortland.

Owner: City of Cortland.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven unused well, diameter 1.25 in, depth 45 ft, 1.25 in well point.

METHOD OF MEASUREMENT.--Taped by U.S.G.S. personnel.

DATUM.--Land-surface datum is 1136.59 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of coupling, 2.0 ft above land-surface datum.

REMARKS.--Water level is affected by pumping from adjacent municipal supply wells. This well is a replacement for 423539076114801 (local number C 19), located 80 ft southwest, which has a period of record from February 1947 to May 1976.

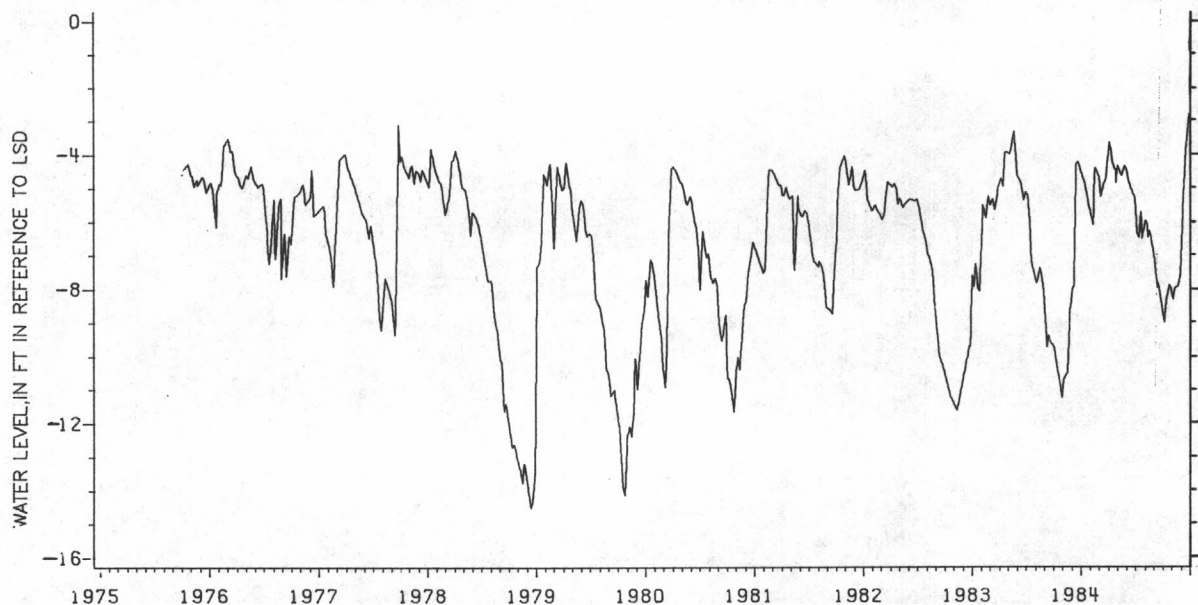
PERIOD OF RECORD.--October 1975 to current year. Unpublished record for October 1975 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft below land-surface datum, September 25, 1977; lowest measured, 14.50 ft below land-surface datum, Dec. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 3.60 ft below land-surface datum, Apr. 6; lowest measured, 11.25 ft below land-surface datum, Oct. 28.

## 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	9.70	DEC 29, 1983	4.38	APR 13, 1984	4.24	JUL 05, 1984	6.34
07	9.89	JAN 06, 1984	4.70	20	4.38	12	6.47
14	10.40	13	4.80	26	4.50	18	5.68
21	10.63	27	5.49	27	4.84	22	6.50
28	11.25	FEB 10	6.10	MAY 02	4.30	AUG 03	5.96
NOV 04	10.71	16	4.36	10	4.52	08	6.07
18	10.46	24	4.51	17	4.62	10	6.47
25	8.78	MAR 02	4.68	24	4.31	16	6.25
DEC 02	8.00	09	5.24	31	4.44	24	6.49
09	7.87	16	4.82	JUN 08	4.80	30	6.98
16	4.25	23	4.80	20	5.08	SEP 12	7.97
22	4.20	APR 06	3.60	29	5.30	14	7.78



## GENESEE COUNTY

425516078032001. Local number, Gs 2.

LOCATION.--Lat 42°55'16", long 78°03'20", Hydrologic Unit 04130003, near Pavilion.

Owner: Angeline C. Rigoni.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in, depth 21 ft, stone-lined.

METHOD OF MEASUREMENT.--Float tape read by observer.

DATUM.--Land-surface datum is 1,032.05 ft National Geodetic Vertical Datum of 1929. Measuring point: Painted arrow on top edge of concrete well cover, inside shelter door, 1.12 ft above land-surface datum.

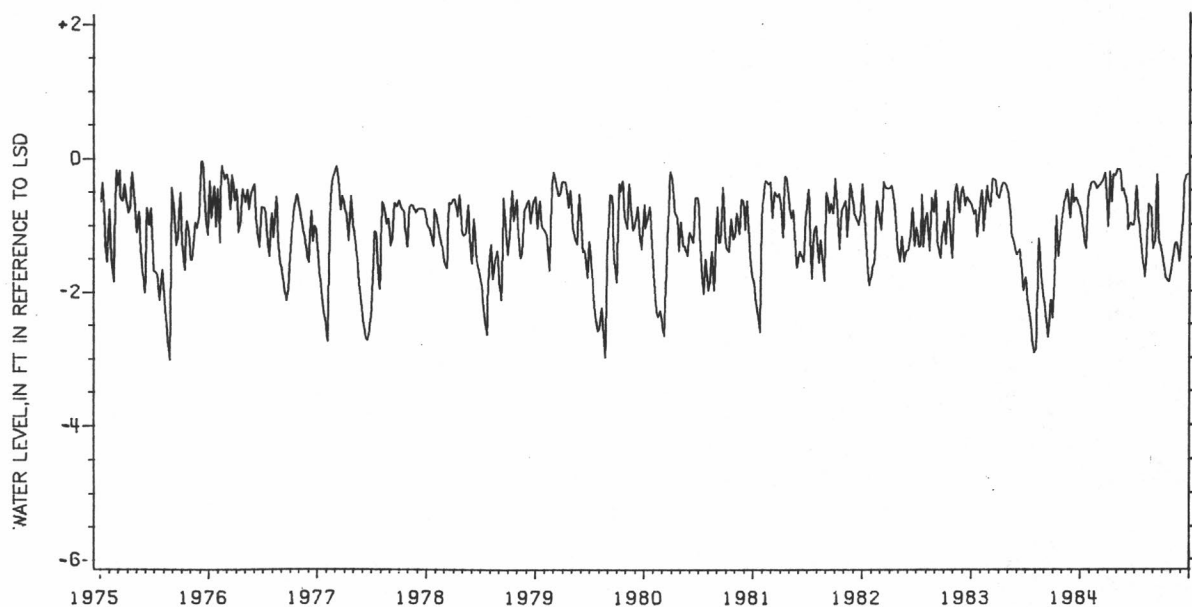
PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.10 ft below land-surface datum, May 14, 1960, Feb. 28, 1971, and Feb. 13, 1976; lowest measured 6.55 ft below land-surface datum, Feb. 11, 1961.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.15 ft below land-surface datum, May 5, 14; lowest measured, 2.39 ft below land-surface datum, Oct. 1.

## 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	2.39	JAN 07, 1984	0.94	APR 14, 1984	0.65	JUL 14, 1984	0.83
08	1.62	15	1.22	21	0.23	21	1.24
13	0.84	21	1.35	28	0.26	28	1.48
22	1.47	28	0.58	MAY 05	0.15	AUG 04	1.77
29	1.01	FEB 04	0.38	14	0.15	11	1.42
NOV 08	0.68	11	0.35	19	0.50	18	0.68
14	0.57	18	0.35	26	0.45	25	0.75
19	0.45	25	0.46	JUN 04	0.70	SEP 01	1.35
26	0.89	MAR 10	0.38	09	1.06	08	1.24
DEC 05	0.38	17	0.33	16	0.96	15	0.24
10	0.66	24	0.21	23	0.99	22	1.19
17	0.58	APR 03	1.02	30	1.00	28	1.36
31	0.77	09	0.19	JUL 07	0.40		



## MADISON COUNTY

430056075354102. Local number, M 178.

LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills.

Owner: Donald L. Greene.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 16 ft cased to 16 ft, open end.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Land-surface datum is 573.76 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.06 ft above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft west, which has a period of record from October 1965 to September 1973 (unpublished).

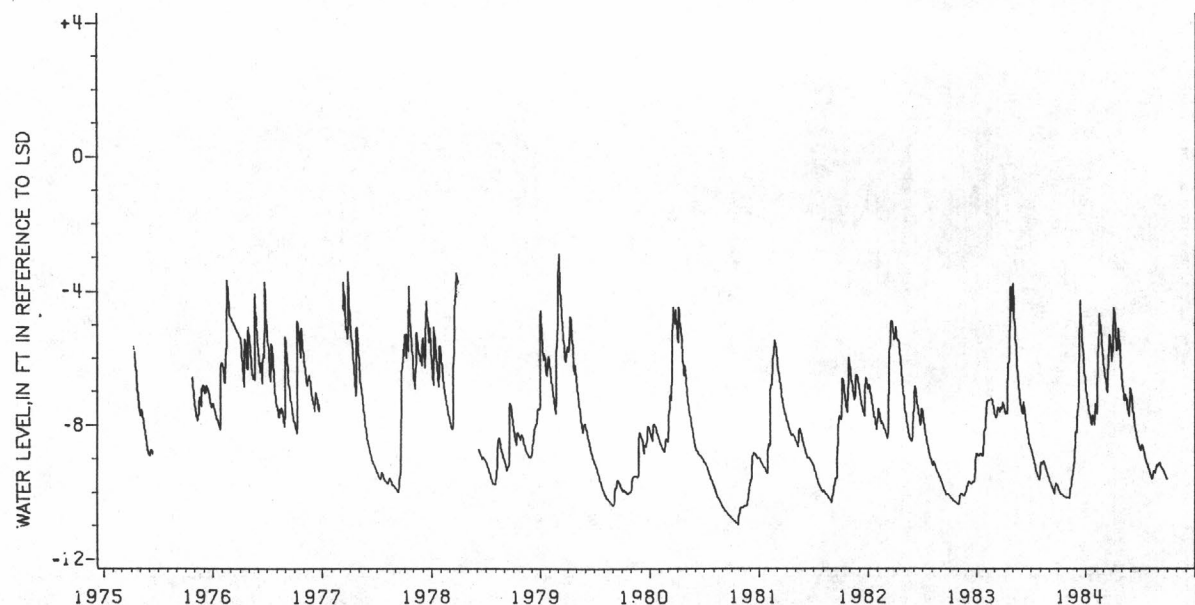
PERIOD OF RECORD.--April 1975 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.60 ft below land-surface datum, Mar. 5, 1979; lowest, 10.97 ft below land-surface datum, Oct. 24, 25, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.04 ft below land-surface datum, Dec. 14; lowest, 10.17 ft below land-surface datum, Nov. 10-11.

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	9.84	10.15	8.21	6.61	7.94	5.98	6.03	6.37	6.89	8.66	9.33	9.18
2	9.87	10.15	8.16	6.73	8.00	6.09	5.72	6.50	6.94	8.69	9.36	9.17
3	9.89	10.15	8.16	6.82	7.94	6.19	5.13	6.60	7.03	8.72	9.39	9.16
4	9.92	10.15	8.17	6.90	7.43	6.28	4.98	6.67	7.12	8.75	9.42	9.13
5	9.94	10.15	8.21	6.99	7.35	6.32	4.90	6.75	7.22	8.76	9.44	9.11
6	9.96	10.15	8.17	7.05	7.41	6.39	4.46	6.84	7.31	8.68	9.47	9.10
7	9.99	10.15	7.78	7.13	7.50	6.45	4.46	6.92	7.39	8.62	9.49	9.12
8	10.01	10.16	7.44	7.18	7.56	6.50	4.66	6.98	7.48	8.59	9.52	9.14
9	10.03	10.16	7.34	7.26	7.61	6.56	4.86	7.07	7.56	8.57	9.55	9.17
10	10.04	10.17	7.33	7.31	7.67	6.63	5.02	7.16	7.65	8.58	9.58	9.21
11	---	10.13	7.33	7.36	7.42	6.69	5.18	7.24	7.73	8.60	9.61	9.25
12	---	10.04	7.30	7.42	6.75	6.81	5.36	7.26	7.82	8.65	9.59	9.28
13	---	9.96	6.31	7.51	6.37	6.88	5.53	7.26	7.89	8.68	9.56	9.30
14	---	9.89	4.26	7.55	5.99	6.94	5.69	7.16	7.95	---	9.55	9.30
15	---	9.83	4.27	7.61	5.10	7.02	5.77	7.07	8.01	---	9.48	9.30
16	---	9.77	4.55	7.65	4.66	6.96	5.73	7.09	8.07	---	9.40	9.31
17	---	9.70	4.77	7.71	4.79	6.38	5.55	7.16	8.12	---	9.37	9.33
18	---	9.63	4.96	7.76	4.90	6.21	5.59	7.23	8.16	---	9.35	9.34
19	---	9.55	5.13	7.81	4.98	6.11	5.71	7.28	8.21	---	9.36	9.36
20	10.09	9.48	5.31	7.86	4.96	5.98	5.36	7.35	8.26	---	9.38	9.38
21	10.10	9.42	5.49	7.91	4.99	5.51	5.09	7.43	8.30	---	9.40	9.41
22	10.11	9.36	5.56	7.96	5.11	5.28	5.22	7.49	8.35	---	9.42	9.44
23	10.12	9.28	5.55	8.00	5.21	5.26	5.33	7.54	8.39	---	9.44	9.46
24	10.12	9.23	5.65	7.99	5.31	5.34	5.43	7.56	8.43	---	9.36	9.49
25	10.12	9.17	5.81	7.77	5.43	5.41	5.56	7.59	8.46	---	9.27	9.51
26	10.13	9.07	5.96	7.69	5.59	5.52	5.71	7.64	8.49	9.15	9.22	9.54
27	10.13	8.94	6.09	7.69	5.72	5.65	5.85	7.71	8.52	9.18	9.18	9.56
28	10.12	8.80	6.18	7.72	5.75	5.76	5.99	7.73	8.56	9.21	9.17	9.58
29	10.12	8.59	6.30	7.75	5.85	5.86	6.13	7.53	8.59	9.24	9.19	9.60
30	10.14	8.35	6.43	7.81	---	5.98	6.25	7.14	8.62	9.27	9.22	9.62
31	10.14	---	6.54	7.87	---	6.08	---	6.93	---	9.30	9.21	---



## NIAGARA COUNTY

430655079022001. Local number, N1 69.

LOCATION.--Lat 43°06'55", long 79°02'20", Hydrologic Unit 04120104, 20th Street and Beech Avenue, Niagara Falls.

Owner: City of Niagara Falls.

AQUIFER.--Confined and water-table aquifer in Lockport Dolomite of Middle Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in to 6 in, depth 36 ft, cased 8 in 0 ft to 17 ft, open hole 6 in 17 ft to 36 ft.

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Land-surface datum is 596.21 ft U.S. Lake Survey datum (levels by Uhl, Hall, and Rich). Measuring point: top of 2 in opening in 6 in plug of 8 in extended casing, 3.60 ft above land-surface datum.

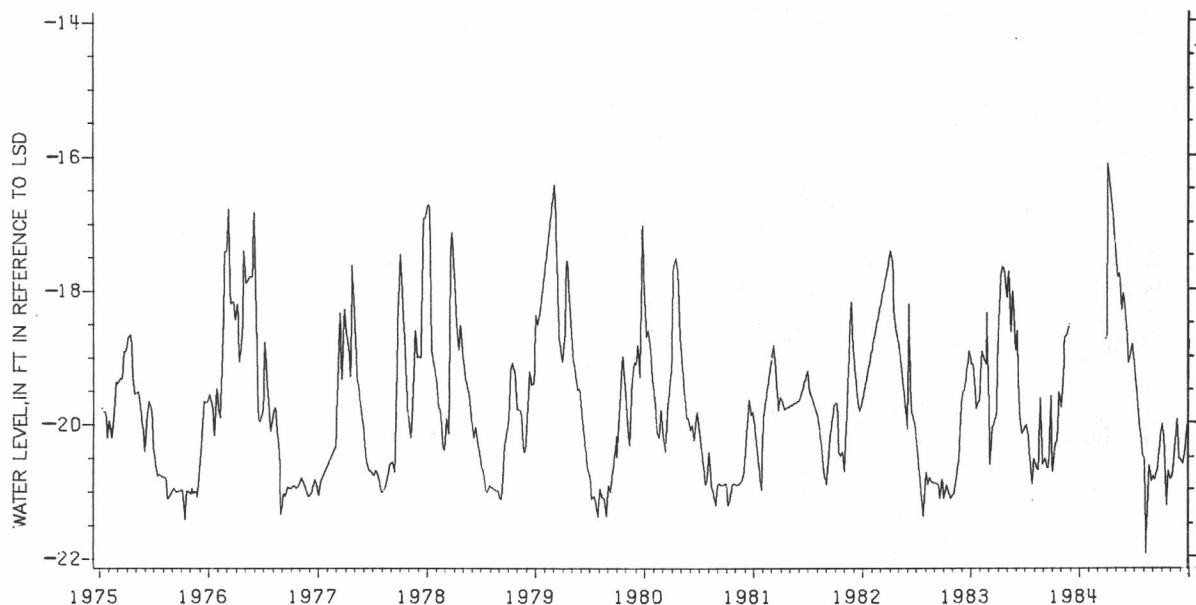
PERIOD OF RECORD.--October 1958 to current year. Unpublished record for October 1958 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.08 ft below land-surface datum, Apr. 6, 1984; lowest measured, 22.21 ft below land-surface datum, Aug. 3, 1959.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 16.08 ft below land-surface datum, Apr. 6; lowest measured, 21.92 ft below land-surface datum, Aug. 7.

## 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	20.70	MAR 27, 1984	18.72	JUN 11, 1984	19.08	AUG 06, 1984	20.49
11	20.27	APR 03	18.69	19	18.93	07	21.92
17	20.25	06	16.08	25	18.78	21	20.60
24	19.50	19	16.75	JUL 02	19.08	27	20.85
31	19.74	MAY 07	17.79	09	19.58	SEP 04	20.75
NOV 09	19.09	14	17.73	16	19.96	10	20.82
14	18.70	21	18.29	23	20.14	17	20.60
21	18.65	29	18.04	30	20.48	26	20.20
28	18.50	JUN 04	18.50				



## GROUND-WATER LEVELS

## NIAGARA COUNTY

431308078544501. Local number, N1 70.

LOCATION.--Lat 43°13'08", long 78°54'45", Hydrologic Unit 04130001, near Ransomville.

Owner: Calvin C. Schultz.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 4 ft to 5 ft (reported), stone-lined, depth 24 ft.

METHOD OF MEASUREMENT.--Float tape read by observer.

DATUM.--Land-surface datum is 335.95 ft, National Geodetic Vertical Datum of 1929. Measuring point: Top of 1 in hole in steel cover, at land-surface datum.

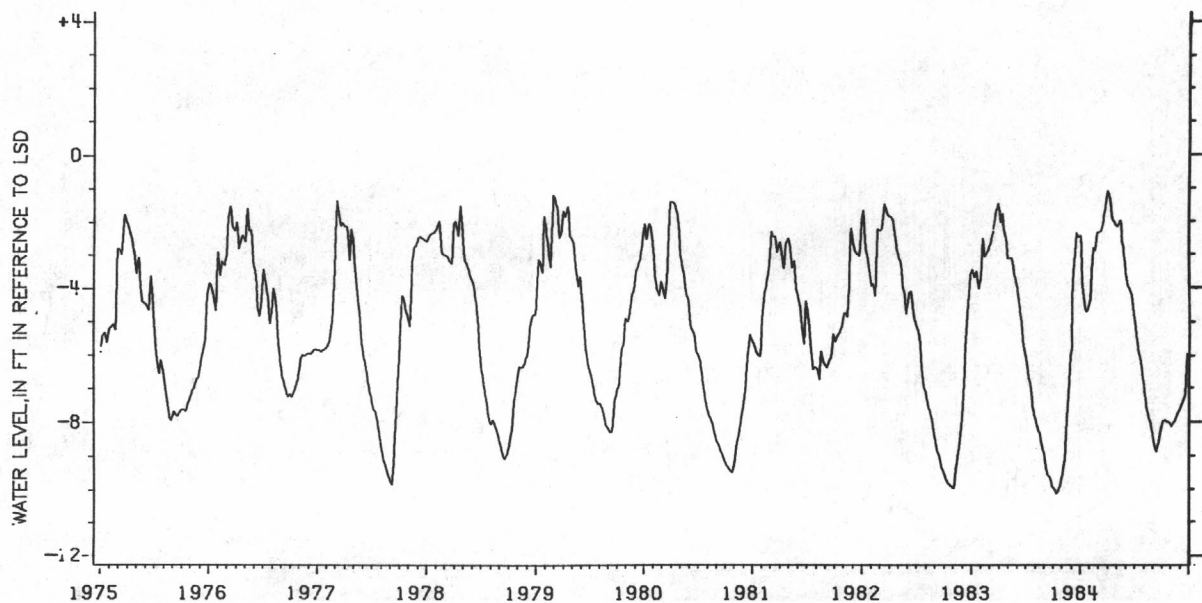
PERIOD OF RECORD.--August 1972 to current year. Unpublished record for August 1972 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.14 ft below land-surface datum, Feb. 24, 1979; lowest measured, 9.97 ft below land-surface datum, Nov. 6, 1982.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.05 ft below land-surface datum, Mar. 31; lowest measured, 10.14 ft below land-surface datum, Oct. 15.

## 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	9.94	DEC 31, 1983	2.38	APR 15, 1984	1.93	JUL 14, 1984	5.83
08	9.98	JAN 07, 1984	3.76	21	1.98	21	6.17
15	10.14	14	4.26	28	2.10	28	6.57
22	10.08	21	4.70	MAY 05	2.12	AUG 04	7.01
29	9.82	28	4.67	12	1.93	11	7.48
NOV 05	9.52	FEB 04	4.31	19	2.56	18	7.76
12	9.12	13	2.75	26	2.82	25	8.04
19	7.90	18	2.87	JUN 03	3.46	SEP 01	8.39
26	5.99	25	2.32	09	3.88	08	8.76
DEC 03	5.76	MAR 03	2.29	16	4.05	15	8.88
10	3.54	10	2.25	23	4.22	23	8.46
17	2.32	31	1.05	30	4.73	29	8.17
24	2.43	APR 07	1.16	JUL 07	5.36		





## ONTARIO COUNTY

425840077133901. Local number, Ot 900.

LOCATION.--Lat 42°58'40", long 77°13'39", Hydrologic Unit 04140201, at New York State Thruway Interchange 43, near Manchester.

Owner: New York State Thruway Authority.

AQUIFER.--Confined aquifer in Camillus Shale of the Salina Group of Late Silurian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in, depth 139 ft, cased to 11 ft, open hole.

METHOD OF MEASUREMENT.--Float tape read by observer.

DATUM.--Land-surface datum is 556.70 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 11.63 ft above land-surface datum.

PERIOD OF RECORD.--May 1955 to current year.

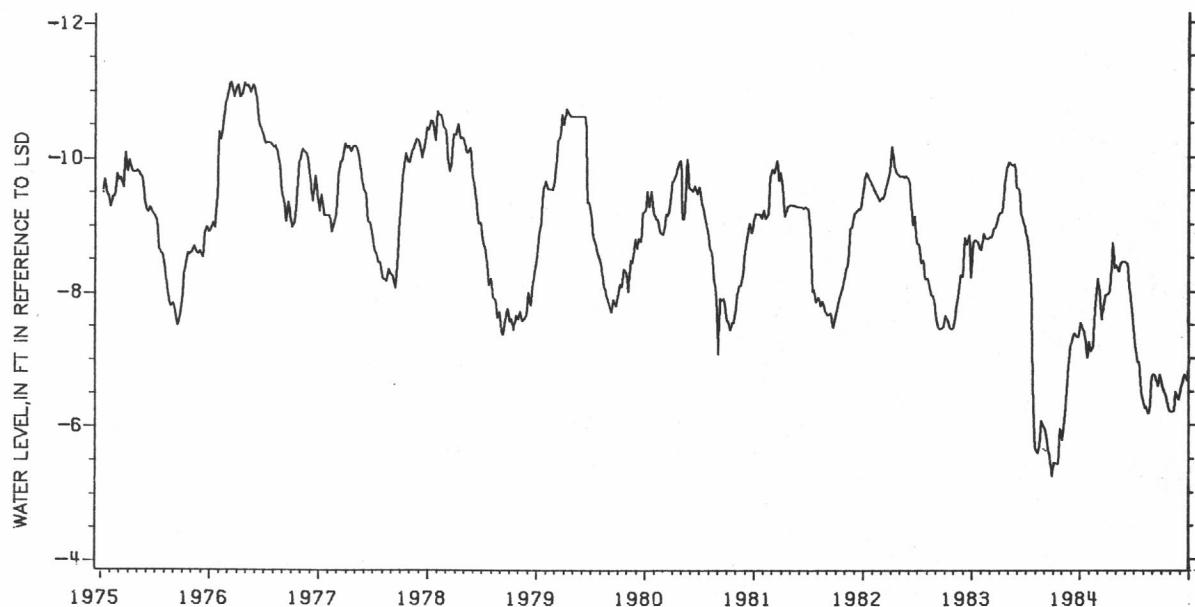
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.14 ft above land-surface datum, Mar. 15, 1976;

lowest measured 4.59 ft above land-surface datum, Nov. 11, 1957.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 8.76 ft above land-surface datum, Apr. 16; lowest measured, 5.46 ft above land-surface datum, Oct. 17.

## WATER LEVEL, IN FEET ABOVE 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	5.48	JAN 02, 1984	7.75	APR 02, 1984	8.00	JUL 02, 1984	7.27
10	5.47	9	7.48	09	8.04	09	6.98
17	5.46	16	7.43	16	8.76	16	6.99
24	5.99	23	7.04	23	8.38	23	6.55
31	5.80	30	7.29	30	8.44	30	6.39
NOV 07	6.02	FEB 06	7.14	MAY 07	8.32	AUG 06	6.28
14	6.30	13	7.20	14	8.47	07	6.33
21	6.91	20	7.76	21	8.48	13	6.19
28	7.21	27	8.24	28	8.48	20	6.43
DEC 05	7.31	MAR 05	8.01	JUN 04	8.45	27	6.78
12	7.41	12	7.61	11	8.12	SEP 03	6.81
19	7.35	13	7.68	18	7.92	10	6.76
26	7.35	19	7.78	25	7.57	17	6.61
		26	7.99			24	6.79



## GROUND-WATER LEVELS

## OTSEGO COUNTY

424136075025101. Local number, Og 23.

LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, at "Wild Creek Farm", 0.6 mi northeast of intersection of State Highway 205 and Kallan Road, 2.2 mi north of Hartwick, and 3.2 mi southeast of Oaksville.

Owner: Thomas Kallan.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in, depth 15 ft, stone-lined.

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Land-surface datum is 1,432.44 ft National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.

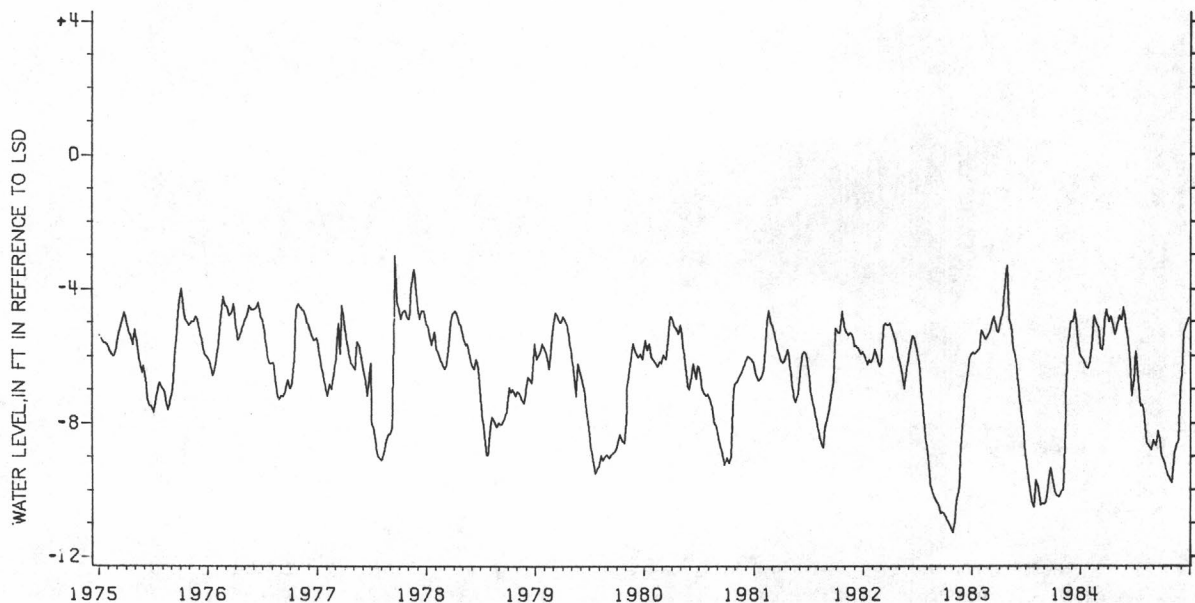
PERIOD OF RECORD.--May 1953 to current year. Unpublished record for May 1953 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft below land-surface datum, Nov. 14, 1964.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.52 ft below land-surface datum, May 29; lowest measured, 10.20 ft below land-surface datum, Oct. 23.

## 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 02, 1983	9.75	JAN 08, 1984	6.02	APR 15, 1984	4.80	JUL 23, 1984	7.49
09	10.05	15	6.10	22	5.08	31	7.42
16	10.15	22	6.30	30	5.38	AUG 05	7.90
23	10.20	29	6.37	MAY 06	5.16	12	8.58
30	10.04	FEB 05	6.12	14	4.78	20	8.69
NOV 06	9.97	12	5.70	21	4.93	27	8.80
13	8.70	19	4.79	29	4.52	SEP 04	8.50
22	5.80	26	5.00	JUN 03	4.98	11	8.68
29	5.20	MAR 04	5.16	10	5.56	17	8.22
DEC 04	4.95	11	5.78	18	6.18	23	8.50
11	4.98	18	5.82	24	7.20	30	9.00
18	4.60	25	5.02	JUL 01	6.70		
26	5.56	APR 01	4.60	08	5.85		
JAN 01, 1984	5.96	08	5.00	17	6.94		



## STEBEN COUNTY

423121077281201. Local number, Sb 471.

LOCATION.--Lat 42°31'21", long 77°28'12", Hydrologic Unit 02050105, near Cohocton.

Owner: Myron Crouch.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in, depth 24 ft, filled in from original depth of 25 ft, cased to 24 ft, 1.25-in well point (60-gauze screen 24 ft to 25 ft, damaged during well installation).

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Land-surface datum is 1,303.32 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land-surface datum.

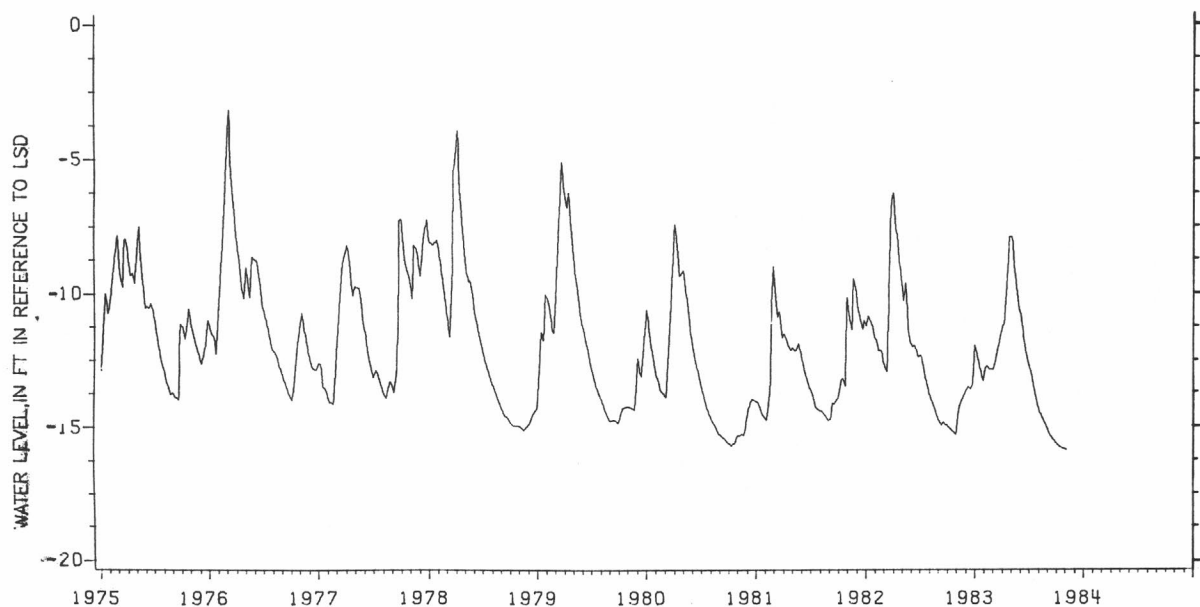
PERIOD OF RECORD.--October 1965 to November 1983 (discontinued, well damaged beyond repair). Unpublished record for October 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.46 ft below land-surface datum, June 26, 1972; lowest measured, 17.50 ft below land-surface datum, Oct. 28, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 15.65 ft below land-surface datum, Oct. 2; lowest measured, 15.87 ft below land-surface datum, Nov. 6.

## 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 02, 1983	15.65	OCT 16, 1983	15.79	OCT 30, 1983	15.83	NOV 06, 1983	15.87
09	15.73						



## GROUND-WATER LEVELS

## STEBEN COUNTY

422445077203301. Local number, Sb 472.

LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona.

Owner: David Owens.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in, depth 17 ft, filled in from original depth of 18 ft, cased to 16 ft, 1.25 in well point (60-gauge screen 16 ft to 18 ft, damaged during well installation).

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Land-surface datum is 1,209.78 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

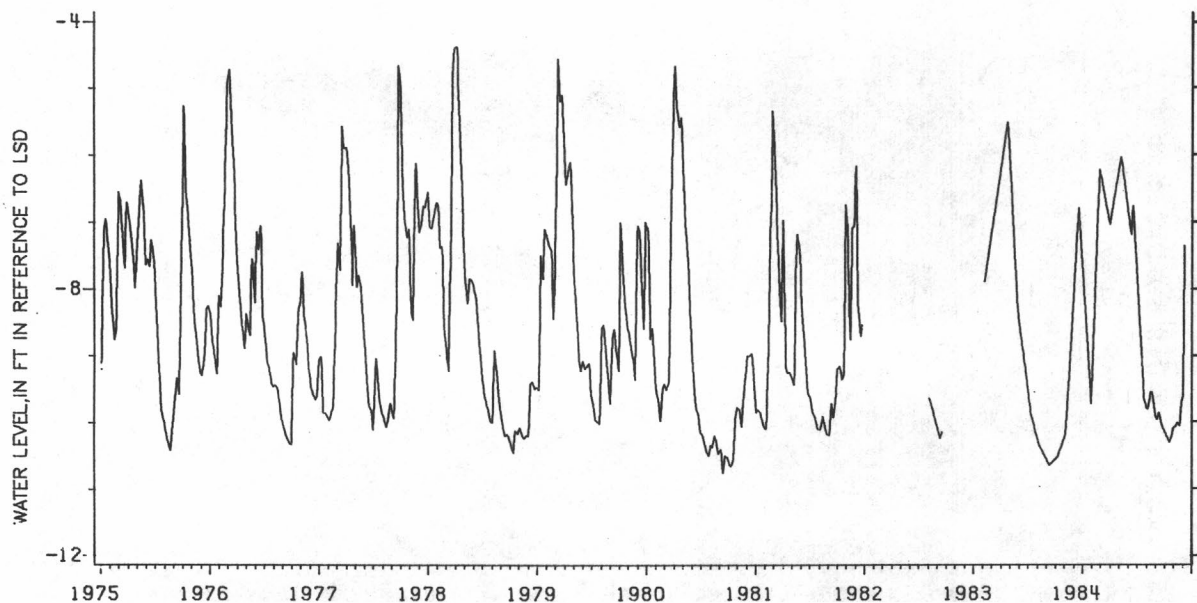
PERIOD OF RECORD.--November 1965 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft below land-surface datum, June 25, 1972; lowest measured, 10.84 ft below land-surface datum, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.03 ft below land-surface datum, May 9; lowest measured, 10.50 ft below land-surface datum, Oct. 13.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 1983	10.50	MAY 09, 1984	6.03	AUG 09, 1984	9.80
NOV 07	10.18	JUN 13	7.20	16	9.54
DEC 20	6.79	19	6.77	22	9.55
JAN 31, 1984	9.73	JUL 18	9.07	28	9.77
FEB 29	6.22	26	9.62	31	9.90
APR 03	7.05	AUG 01	9.79	SEP 07	9.95
				SEP 14, 1984	9.85
				21	10.00
				26	10.08



## WYOMING COUNTY

423739077595501. Local number, Wo 1.

LOCATION.--Lat 42°37'39", long 77°59'55", Hydrologic Unit 04130002, Letchworth State Park, near Castile.

Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Driven unused well, diameter 2 in, depth 14 ft, well point (60-gauge screen 12 ft to 14 ft).

METHOD OF MEASUREMENT.--Taped by observer.

DATUM.--Altitude of land-surface datum is 1,020 ft, from topographic map. Measuring point: Top of 2 in by 1 in reducing coupling, 3.33 ft above land-surface datum.

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

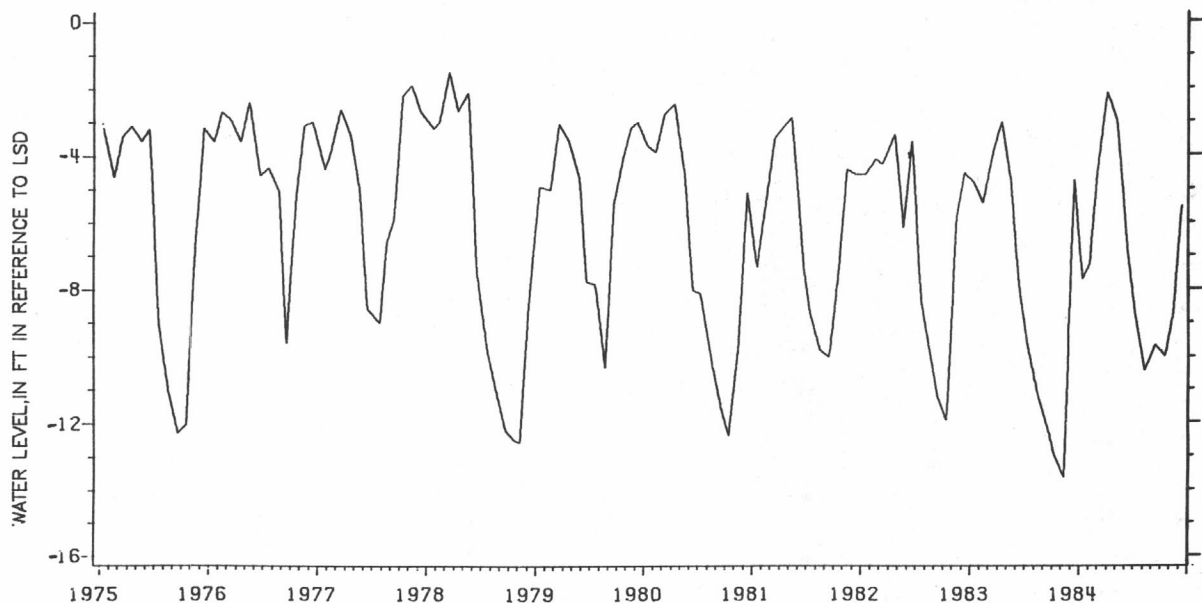
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft below land-surface datum, Apr. 5, 1947;

lowest measured, dry, Dec. 6-27, 1964, Jan. 2, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 2.09 ft below land-surface datum, Apr. 7; lowest measured, 13.63 ft below land-surface datum, Nov. 13.

## 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 10, 1983	12.91	JAN 14, 1984	7.66	APR 07, 1984	2.09	JUL 08, 1984	8.60
NOV 13	13.63	FEB 07	7.20	MAY 07	2.94	AUG 07	10.42
DEC 15	4.71	MAR 01	4.54	JUN 11	6.73	SEP 16	9.63



## WYOMING COUNTY

423743078070802. Local number, Wo 4.

LOCATION.--Lat 42°37'43", long 78°07'08", Hydrologic Unit 04130002, near Gainesville.

Owner: Letchworth Central School.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 20 ft, cased to 20 ft, open end.

METHOD OF MEASUREMENT.--Water-stage recorder.

DATUM.--Elevation of land-surface datum is 1,606.76 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 2.60 ft above land-surface datum.

REMARKS.--This well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft southeast, which has a period of record from November 1965 to May 1974 (unpublished).

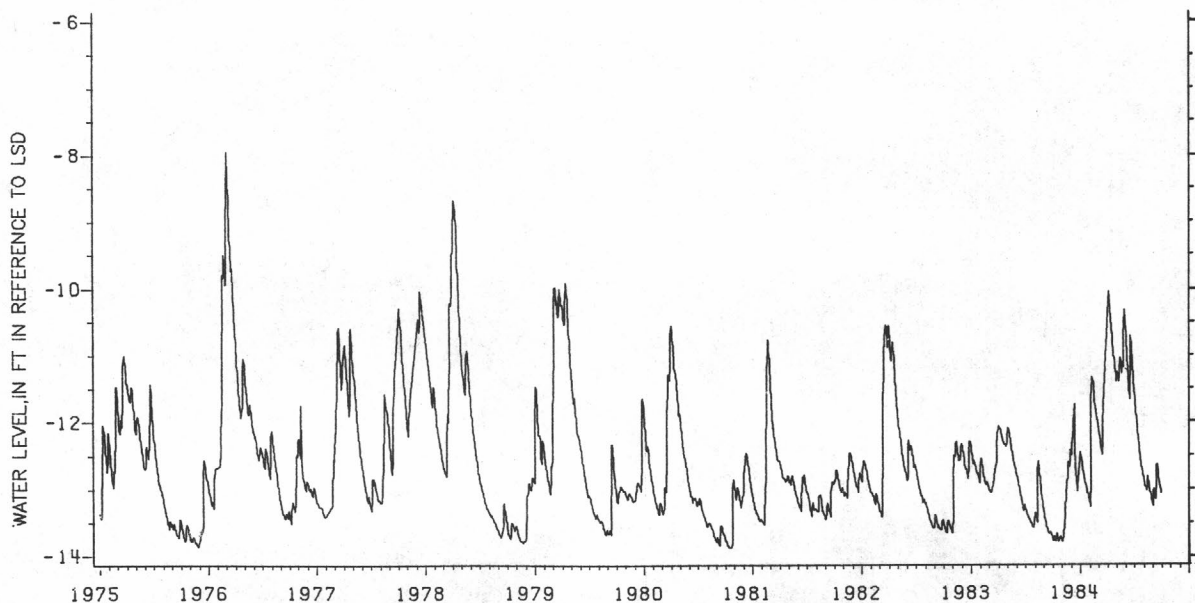
PERIOD OF RECORD.--May 1974 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.89 ft below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft below land-surface datum, Nov. 3, 1974.

EXTREMES FOR CURRENT YEAR.--Highest observed water level, 10.05 ft below land-surface datum, Apr. 9; lowest, 13.80 ft below land-surface datum, Oct. 13, 23.

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	13.74	13.77	12.42	---	13.19	---	---	11.29	10.38	11.49	12.83	13.24
2	13.75	13.79	12.42	---	13.19	---	---	11.35	10.46	11.56	12.86	13.26
3	13.77	13.79	12.44	---	13.19	---	---	11.40	10.56	11.63	12.89	13.17
4	13.78	13.78	12.46	12.45	13.19	---	---	11.33	10.66	11.70	12.91	13.03
5	13.78	13.75	12.50	---	13.27	12.12	10.36	11.28	10.76	11.75	12.93	13.00
6	13.74	13.72	12.47	---	13.16	---	---	11.27	10.85	11.79	12.96	13.01
7	13.72	13.67	12.35	---	12.95	---	---	11.26	10.94	11.84	12.96	13.04
8	13.71	13.62	12.21	---	12.40	---	---	11.28	11.02	11.88	12.96	13.07
9	13.72	13.60	12.15	---	11.65	---	10.05	11.30	11.11	11.93	12.97	13.10
10	13.76	13.59	12.15	---	11.38	---	---	11.36	11.19	11.98	12.99	13.14
11	13.78	13.53	12.18	---	11.32	---	---	11.40	11.29	12.03	13.01	13.16
12	13.79	13.39	12.17	---	11.32	---	---	11.39	11.37	12.07	13.02	13.09
13	13.79	13.29	12.01	---	11.36	---	---	11.37	11.44	12.11	13.02	13.08
14	13.69	13.20	11.74	---	11.38	---	---	11.22	11.49	12.16	12.99	12.90
15	13.66	13.18	12.41	---	11.42	12.50	---	11.08	11.55	12.21	12.87	12.71
16	13.66	13.12	12.49	12.83	11.48	---	---	11.04	11.62	12.26	12.82	12.65
17	13.68	13.04	12.54	---	11.52	---	10.60	11.05	11.67	12.30	12.84	12.64
18	13.70	12.96	12.68	---	11.58	---	10.64	11.09	11.43	12.34	12.88	12.67
19	13.73	12.89	12.87	---	11.63	---	10.71	11.13	10.86	12.40	12.91	12.70
20	13.75	12.84	12.90	---	11.71	---	10.77	11.19	10.72	12.45	12.96	12.74
21	13.77	12.74	12.92	---	11.78	---	10.85	11.24	10.74	12.49	13.00	12.80
22	13.79	12.66	12.98	---	11.81	---	10.92	11.29	10.82	12.52	13.03	12.85
23	13.78	12.61	13.04	13.02	---	---	10.96	11.24	10.91	12.57	13.04	12.89
24	13.75	12.60	---	13.06	---	11.35	11.02	11.13	10.97	12.61	13.05	12.93
25	13.74	12.62	---	13.06	---	---	11.05	11.10	11.04	12.65	13.07	12.97
26	13.74	12.66	---	13.07	---	---	11.05	11.12	11.10	12.67	13.09	12.99
27	13.73	12.68	---	13.07	---	---	11.07	11.20	11.17	12.69	13.11	13.00
28	13.72	12.68	---	13.07	---	---	11.11	11.18	11.27	12.70	13.15	13.01
29	13.72	12.57	---	13.08	---	---	11.17	10.71	11.35	12.72	13.18	13.04
30	13.73	12.47	---	13.10	---	---	11.21	10.35	11.43	12.76	13.21	13.06
31	13.75	---	---	13.11	---	---	---	10.32	---	12.79	13.22	---





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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)	$2.54 \times 10^1$	millimeters (mm)
	$2.54 \times 10^{-2}$	meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$	square meters (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	square hectometers (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometers (km <sup>2</sup> )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$	liters (L)
	$3.785 \times 10^0$	cubic decimeters (dm <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic meters (m <sup>3</sup> )
million gallons	$3.785 \times 10^3$	cubic meters (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeters (dm <sup>3</sup> )
	$2.832 \times 10^{-2}$	cubic meters (m <sup>3</sup> )
cfs-days	$2.447 \times 10^3$	cubic meters (m <sup>3</sup> )
	$2.447 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
acre-feet (acre-ft)	$1.233 \times 10^3$	cubic meters (m <sup>3</sup> )
	$1.233 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$1.233 \times 10^{-6}$	cubic kilometers (km <sup>3</sup> )
<i>Flow</i>		
cubic feet per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liters per second (L/s)
	$2.832 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$2.832 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
gallons per minute (gal/min)	$6.309 \times 10^{-2}$	liters per second (L/s)
	$6.309 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s)
	$6.309 \times 10^{-5}$	cubic meters per second (m <sup>3</sup> /s)
million gallons per day	$4.381 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$4.381 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	megagrams (Mg) or metric tons



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