Water Resources Data for New Jersey

Volume 2. Delaware River Basin and Tributaries to Delaware Bay

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-78-2

WATER YEAR 1978

Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies

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
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

Prepared in cooperation with

New Jersey Department of Environmental Protection
Division of Water Resources
Division of Fish, Game and Shell Fisheries
New Jersey Department of Agriculture
Delaware River Basin Commission
Corps of Engineers, U.S. Army
U.S. Environmental Protection Agency
North Jersey District Water Supply Commission
Passaic Valley Water Commission
County of Bergen
County of Camden
County of Morris
County of Somerset
Township of West Windsor

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1978

PREFACE

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

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New Jersey are in two volumes as follows:

Volume 1. Atlantic Slope Basins, Hudson River to Cape May
Volume 2. Delaware River Basin and Tributaries to Delaware Bay

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16. Abstracts Water resources data for the 1978 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality in wells and springs. This volume of the report contains discharge records for 22 gaging stations; tide summaries for 4 stations; stage and contents for 16 lakes and reservoirs; water quality for 17 gaging stations, 80 partial-record flow stations, and 51 wells; and water levels for 8 observation wells. Also included are 27 crest-stage partial-record stations and 19 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

17. Key Words and Document Analysis. 17a. Descriptors
*New Jersey, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

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INTRODUCTION

Water resources data for the 1978 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 22 gaging stations; tide summaries for 4 stations; stage and contents for 16 lakes and reservoirs; water quality for 17 gaging stations, 80 partial-record stations, and 51 wells; and water levels for 8 observation wells. Also included are data for 27 crest-stage partial-record stations and 19 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

Records of discharge or 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 water year 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 Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

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

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an offical Survey report on a State-boundary basis. These offical 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 of the report is identified as "U.S. Geological Survey Water-Data Report NJ-78-2."

For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (609) 989-2162.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection, Daniel J. O'Hern, commissioner.
  Division of Water Resources, Arnold Schiffman, director.
  Division of Fish, Game and Shell Fisheries, Russell A. Cookingham, director.
New Jersey Department of Agriculture, Phillip Alampi, secretary.
  Division of Rural Resources, Richard D. Chumney, director.
Delaware River Basin Commission, Gerald M. Hansler, executive director.
North Jersey District Water Supply Commission, Dean C. Noll, chief engineer.
Passaic Valley Water Commission, W.E. Inhoffer, general superintendent and chief engineer.
County of Bergen, V.J. Nunno, director of Public Works and E.R. Ranuska, county engineer.
County of Camden, Joseph T. Patermo, director of Camden County Planning Board.
County of Morris, James Plante, chairman of Morris County Municipal Utilities Authority.
County of Somerset, Thomas E. Decker, county engineer, and Thomas Harris, administrative engineer.
Township of West Windsor, Larry Ellery, chairman of Environmental Commission.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 36 surface water stations, for the collection of sediment records at two stream-sampling stations, and for the collection of ground-water quality records from 50 wells in the Wharton State Forest, and by the U.S. Environmental Protection Agency for the collection of chemical analyses at four stream-sampling stations. In addition, several stations were operated fully or partially from funds appropriated directly to the Geological Survey. Assistance was also furnished by the National Weather Service and the National Ocean Survey.

Basic water-quality data collected at many sampling stations on the main stem of the Delaware River and estuary--an interstate stream--included in this report were collected in cooperation with the following additional agencies:

City of Philadelphia Water Department, Carmen Guarino, commissioner.
Pennsylvania Department of Environmental Resources, Maurice K. Goddard, secretary.
Delaware Geological Survey, Robert R. Jordan, State geologist.
Delaware River Master, Francis P. Schaefer.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark and New Brunswick; American Cyanamid Co.; Elizabethtown Water Co.; Hackensack Water Co.; Johns-Manville Products Corp.; and Monmouth Consolidated Water Co.

Organizations that supplied data are acknowledged in station descriptions.

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New Jersey District personnel who contributed significantly to the collection and preparation of the data in this report were: A.A. Vickers, R.D. Schopp, G.R. Kish, E.W. Moshinsky, F.L. Schaefer, E.A. Pustay, S.J. Perry and C.L. Bellante.

HYDROLOGIC CONDITIONS

Streamflow during the 1978 water year was well above normal throughout New Jersey. Flooding occurred in northeastern and central New Jersey during November 8-10 and 19, new peak stages or discharges were recorded. Flooding also occurred during January and the beginning of September.

Monthly and annual discharge is compared with medians at three representative gaging stations in figures 3 and 4. The streamflow stations chosen for illustration were South Branch Raritan River near High Bridge and Great Egg Harbor River at Folsom, which reflect runoff conditions in the northern and southern parts of the State, respectively, and Delaware River at Trenton in which there is widespread interest.

Ground-water aquifers under water table conditions generally exhibited water levels slightly above average during the year. In the more heavily stressed artesian aquifers, a continued downward trend was noted in some wells. However, the seasonal lows this year in the heavily pumped Magothy-Raritan Formation were about 2 to 6 ft (.6 to 1.8 m) higher than the comparable period in the 1977 water year.

Streamflow at South Branch Raritan River near High Bridge for the year averaged 162 ft^3/s (4.59 m^3/s), 135 percent of normal. The average flow for Great Egg Harbor River at Folsom was 111 ft^3/s (3.14 m^3/s), 128 percent of normal. The observed annual mean discharge on the Delaware River at Trenton was 16,560 ft^3/s (469.0 m^3/s), 141 percent of normal. The natural flow at Trenton (adjusted for diversion and storage upstream) was 151 percent of normal for the year.

Storage in the 13 major water-supply reservoirs in New Jersey increased from 45.4 billion gallons (60 percent of usable capacity) on October 1 to 56.5 billion gallons (75 percent of usable capacity) on September 30. Storage in Wanaque Reservoir increased from 16.4 billion gallons (59 percent of usable capacity) on October 1 to 19.3 billion gallons (69 percent of usable capacity) on September 30. Pumped storage in Round Valley Reservoir on September 30 was 52.5 billion gallons (96 percent of capacity), an increase of 0.9 billion gallons during the year.

NOTICE

During water year 1978, revisions were made in the terminology used to define 134 of the water-quality parameter codes that have been used by the Geological Survey in its publication of water-quality data and in its WATSTORE data system. These revisions were made to achieve consistency in terminology and to conform to a joint USGS-EPA agreement on terminology. They do not represent a change in the way the codes have been used in the past or in the association of specific code numbers with identified analytical procedures.

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

DEFINITION OF TERMS

Terms related to streamflow, water-quality and other hydrologic data, as used in this report, and defined below. See also the table for converting Inch-pound Units to Metric Units 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.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life process. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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.

Aquifer codes and geologic names:

The following list shows the aquifer codes and geologic names of the formations in which the sampled wells are finished. The aquifer codes also appear in the column "Geologic Unit" in the ground-water quality tables:

112CPMY , CAPE MAY FORMATION UNDIFFERENTIATED
112ERNS , CAPE MAY FORMATION, ESTURINE SAND FACIES
112PLCC , PLEISTOCENE-COHANSEY SAND UNDIFFERENTIATED
121CNSY , COHANSEY SAND
121CKKD , COHANSEY SAND-KIRKWOOD FORMATION
122KRKDU, KIRKWOOD FORMATION, UPPER SAND
122KRKD , KIRKWOOD FORMATION
122KRKDL, KIRKWOOD FORMATION, LOWER SAND
124MQVC , MANASQUAN-VINCENTOWN FORMATION, UNDIFFERENTIATED
124PNPN , PINEY POINT FORMATION
125HRRS , HORNERSTOWN SAND

211MLRW , MOUNT LAUREL SAND-WENONAH FORMATION
211EGLS , ENGLISHTOWN FORMATION
211MGRR , MAGOTHY-RARITAN FORMATIONS
2110DBG , RARITAN FORMATION, OLD BRIDGE SAND MEMBER
211FRNG , RARITAN FORMATION, FARRINGTON SAND MEMBER
217PTMC , POTOMAC GROUP

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 land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, other 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 all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded 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 ± 0.2°C on M-FC medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine 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 ± 1.0°C on KF streptococcus medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

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

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

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

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

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

Organic mass or volatile mass of the living substance is the difference between the dry mass and the 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.

Bottom material: See Bed 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) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

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

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.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.

2. When water temperature records include observations taken once or more times daily.

3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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, and 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 (cfs) is the rate of discharge representing a volume 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Depth of well:

Total depth of well is the maximum depth in feet below land surface datum (lsd) at which the well was originally finished. This depth may be slightly deeper than "depth to the bottom of sample interval" because many wells have a "tailpiece" or short length of casing installed below the well screen.

Total depth of hole is the total depth in feet below land surface datum to which the hole was drilled, regardless of the finished depth of the well.

Depth to the top of water-bearing zone is the depth in feet, based on the best available information which indicates the top of the water-bearing zone that is furnishing water to the well.

Depth to bottom of water-bearing zone is the depth in feet, based on the best available information which indicates the bottom of the water-bearing zone that is furnishing water to the well.

Depth to the top of sample interval is the uppermost point in a fully cased well at which water can enter the well. In bedded sediments this is usually the uppermost part of the screened interval. In some wells the top of the well screen is installed inside and a few feet above the bottom of the casing. Under these conditions the bottom of the casing is considered to be the top of the sample interval.

Depth to the bottom of sample interval is the lowermost point in a fully cased well at which water can enter the well.

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 discharge during a specific period.

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

Dissolved that material in a representative water sample which passes through a 0.45 µm 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 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 specified 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 stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing 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 body of impounded surface water together with all tributary surface stream 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 gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide.

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.

Instantaneous flow rate is the flow rate at which water is removed from the well. Used with pump or flow period prior to sampling (see below) so that the exact volume of water pumped prior to sampling can be determined.

Land-surface datum is a datum plane that is approximately at the land surface at the well.

Low tide is the minimum height reached by each falling tide.

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

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

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 synethetic detergent compounds.

Micrograms per gram (UG/G) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1. Concentration of suspended sediment also is expressed in mg/L, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2.

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.

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

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

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliters (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 data are collected systematially 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 either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in active water (the river water at the time and point of sampling).

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.

Table 1.--Factors for conversion of chemical constituents in milligrams per liter to milliequivalents per liter:

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1}	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million†

(All values calculated to three significant figures)

Range of concentration in 1000 MG/L	Divide by	Range of concentration in 1000 MG/L	Divide by	Range of concentration in 1000 MG/L	Divide by	Range of concentration in 1000 MG/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

†Based on water density of 1.000 G/ML and a specific gravity of sediment of 2.65.

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

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 microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesireable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (PCI, pCi) is one trillionth (1×10^{-12}) of the amount radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegration 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 substance. 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 per milliliter of sample.

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 per milliliter 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.

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/m²/time for periphyton and macrophytes and mg C/m³/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 that 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_2/m²/time for periphyton and macrophytes and mg O_2/m³/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.

Pump or flow rate prior to sampling is used in conjunction with the instantaneous flow rate so that the exact volume of water pumped prior to sampling can be determined.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having an atomic weight of 35.453.

Radioisotopes that are determined in this report are natural uranium in µg/L (micrograms per liter), radium as radium-226 in PCI/L, (pCi/L, picocuries per liter), gross beta in PCI/L, and gross alpha radiation as micrograms of uranium equivalent per liter (µg/L). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

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 tranformed 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.

Supended 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 sample 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) 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 by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

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 and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

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

Substrate is the physcial surface upon which an organism lived.

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

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

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

All areas shown are those for the stage when the planimetered map was made.

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

Suspended, recoverable 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 µm 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 the total amount of a given constituent in the part of a representaive water-suspended sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analystical 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 organism 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.....Hexageria
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.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperatures of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

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 a substance in solution or suspension that passes a stream section during a 24-hour day.

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

Recoverable from bottom material 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 achhieved 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 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."

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.

Unique well number is a hyphenated, 6-digit identification number which is assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) System. This numbering system was developed in 1978 to simplify identification of wells. The first two digits are a code for the county in which the well is located, and the last four digits are a sequence number. These unique well numbers are being used now in the ground-water level manuscripts and on the corresponding location maps in these reports.

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.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports. Prior to 1976, WRD was used, which was the abbreviation for "Water-Resources Data."

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

DOWNSTREAM ORDER AND STATION NUMBER

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 triburtaries. 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 indention in a list of stations in front of the report. Each indention represents one rank. This downstream order and system of indention 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 and partial-record station 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 and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both 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 01463500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "463500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Miscellaneous downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The wells and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system prvides the geographic location of the well or miscellaneous site 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 is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, assign sequential number "01", "02", etc. as one would for wells. See figure 1 below.

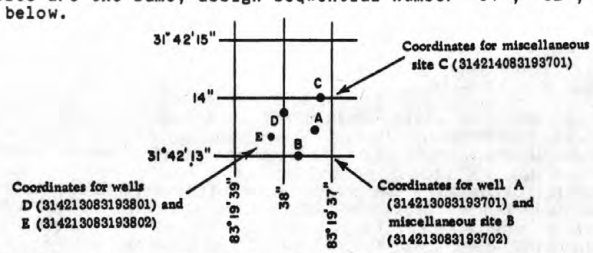

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

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 broadscale 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 stream 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 decribed in standard text-books, 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 discharge 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 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 determining 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 determining discharge.

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

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

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 discharge are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from 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 height 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 for the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present stations or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in

which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per 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 "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."

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 current year, second, the extremes for the period of record, and last information available outside the period of record. 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.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). 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 word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

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

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation 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 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

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

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water record for the 5-year period October 1, 1965 to September 30, 1970, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Paper 1302; records for October 1950 to September 1960 have been compiled and published in Water-Supply Paper 1722; records for October 1960 to September 1965 have been compiled and published in Water-Supply Paper 1902; records for October 1965 to September 1970 have been compiled and published in Water-Supply Paper 2102. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

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.

Records of stage or discharge collected by agencies other than the Geological Survey

Records of stage or discharge not published by the Geological Survey were collected in New Jersey at 30 sites during the water years October 1960 to current year by the following agencies: records at 4 sites were collected by the North Jersey District Water Supply Commission; at 14 sites by Passaic County, at 1 sites by the National Weather Service; at 3 sites by the National Ocean Survey; at 3 sites by the Corps of Engineers, and 5 sites by Delaware River Joint Toll Bridge Commission. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintain an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations characteristic of individual dissolved constituents and certain properties such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identifications of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnishes information from which daily minimums and maximums are obtained, or else where a water-quality noncontinuous-digital monitor furnishes hourly temperature readings that provide daily maximum, minimum, and mean temperature data summaries. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahreheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per

milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter (see Table 2). Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using Table 3 below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," and table for converting Inch-pound Units to Metric Units, inside back cover).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)* (Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
0.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Greeson and others.

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 many 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 possible case where an apparent inconsistency exists between the 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. Field determination of carbonate and bicarbonate was initiated in September 1976.

The daily chemical quality data in this report generally represent equal-volume composites for 2-to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

For chemical-quality stations equipped with noncontinuous-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 U.S. Geological Survey district office (for address see Page IV).

Ground-water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are collected after prepumping the well and are analyzed individually.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. 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. Influential factors, field measurement, and data representation of temperature are described by Stevens, Ficke and Smoot.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum continuous-digital water quality monitor which provide hourly readings, the records consist of daily maximum, minimum, and mean temperature data summaries.

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 sub-divided 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 sub-divided 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 quantitites of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

Remark codes for water-quality data

PRINTED OUTPUT	REMARK	PRINTED OUTPUT	REMARK
E	ESTIMATED VALUE	<	ACTUAL VALUE IS KNOWN TO BE LESS THAN THE VALUE SHOWN
>	ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE SHOWN	ND	MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED
K	RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT)		

Publications

Table 4 below, shows the annual series of water-supply papers that give information on quality of surface waters in New Jersey.

Table 4.--Water-supply paper (WSP) numbers, water years, 1945-70

Year	WSP	Year	WSP	Year	WSP
1945	1030	1954	1350	1963	1947
1946	1050	1955	1400	1964	1954
1947	1102	1956	1450	1965	1961
1948	1132	1957	1520	1966	1991
1949	1162	1958	1571	1967	2011
1950	1186	1959	1641	1968	2091
1951	1197	1960	1741	1969	2141
1952	1250	1961	1881	1970	2151
1953	1290	1962	1941		

Water-quality criteria

The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) stipulated that water-quality criteria were to be developed to assure the integrity of ground and surface waters of the United States. Criteria were set for various types of water use.

These criteria indicate limiting values of various parameters in water to provide adequate protection of water users, essential aquatic life, and consumers of such aquatic life.

Chemical constituents in bottom sediments (BTM) are reported as weight of constituent per weight of sediment. These limiting values are based not on health effects, but rather on the potential hazard which might be caused if these sediments were suspended into the water phase.

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
General Inorganics				
Alkalinity, Total (as $CACO_3$)	20*	mg/L	2	A
Antimony	50	µg/L	5	C
Antimony, BTM	500	µg/g	5	C
Arsenic	50	µg/L	4,6	A,B,C
	100	µg/L	3	A
Arsenic, BTM	200	µg/g	5	C
Barium	1000	µg/L	4,6	A,B,C
Barium, BTM	2000	µg/g	5	C
Beryllium	11	µg/L	2a	A,C
	100	µg/L	3	A
	1100	µg/L	2b	A
Beryllium, BTM	200	µg/g	5	C
Boron	750	µg/L	3	A
	1000	µg/L	5	C
Cadmium	0.4	µg/L	1a	A
	1.2	µg/L	1b	A
	4.0	µg/L	2a	A
	5.0	µg/L	8	A
	10	µg/L	4,6	A,B,C
	12	µg/L	2B	A
Cadmium, BTM	20	µg/g	5	C
Chloride	250	mg/L	6A	D
Chromium, total	50	µg/L	4,6	A,B,C
	100	µg/L	2	A
Chromium, BTM	200	µg/g	5	C
Color	15	color units	6a	D
	75	color units	4	A
Copper	1000	µg/L	4,6a	A,C,D
Copper, BTM	2000	µg/g	5	C
Cyanide	5	µg/L	2,8	A
	20	µg/L	5	C
Cyanide, BTM	100	µg/g	5	C
Fecal coliform, MF	200†	col/100 mL	7	A
Fecal coliform, MPN	200†	col/100 mL	7	A
Iron	300	µg/L	4,6a	A,D
	1000	µg/L	2	A
Lead, dissolved	50	µg/L	4,6	A,B,C
Lead, total	200	µg/L	5	C
Lead, BTM	500	µg/g	5	C
Manganese	50	µg/L	4,6a	A,D
Mercury	0.05	µg/L	2	A
	0.1	µg/L	8	A
	2	µg/L	4,6	A,B,C
Mercury, BTM	20	µg/g	5	C
Nickel	100	µg/L	2,8	A,C
Nickel, BTM	2000	µg/g	5	C
Nitrate (as N)	10	mg/L	4,6	A,B,C
Nitrite (as N)	1	mg/L	4	A,C
Oxygen, dissolved	5*	mg/L	2	A
pH	6.5-8.5		6a,8	A,C,D
	6.5-9.0		2	A
	5.0-9.0		4	A
Selenium	10	µg/L	4,6	A,B,C
Selenium, BTM	20	µg/g	5	C
Silver	50	µg/L	4,6	A,B,C
Silver, BTM	1000	µg/g	5	C
Solids, total dissolved	500	mg/L	6a	D
Sulfate	250	mg/L	6a	D
Zinc	5000	µg/L	4,6a	A,C,D
Zinc, BTM	5000	µg/g	5	C
Organics				
Aldrin-dieldrin	0.003	mg/L	2	A
Aldrin	0.01	mg/L	9	C
Aldrin, BTM	20	µg/kg	5	C
Chlordane	0.004	µg/L	8	A
	0.01	µg/L	2	A,C
Chlordane, BTM	20	µg/kg	5	C
DDT**	0.001	µg/L	2,8	A
	0.01	µg/L	9	C
DDT, BTM	20	µg/kg	5	C
Demeton	0.1	µg/L	2,8	A
Dieldrin	0.01	µg/L	9	C
Dieldrin, BTM	20	µg/kg	5	C

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
Endosulfan	0.001	µg/L	8	A
	0.003	µg/L	2	A
	0.01	µg/L	9	C
Endrin	0.004	µg/L	2,8	A
	0.01	µg/L	9	C
	0.2	µg/L	4,6	B
Endrin, BTM	20	µg/kg	5	C
Guthion	0.01	µg/L	2,8	A
Heptachlor	0.001	µg/L	2,8	A
	0.01	µg/L	9	C
Heptachlor, BTM	20	µg/kg	5	C
Heptachlor epoxide	0.01	µg/L	9	C
Heptachlor epoxide, BTM	20	µg/kg	5	C
Lindane	0.004	µg/L	8	A
	0.01	µg/L	2	A,C
	4	µg/L	4,6	A,B
Lindane, BTM	20	µg/kg	5	C
Malathion	0.1	µg/L	2,8	A,C
Malathion, BTM	20	µg/kg	5	C
MBAS (foaming agents)	0.5	mg/L	6a	D
Methoxychlor	0.03	µg/L	2,8	A,C
	100	µg/L	4,6	A,B
Methoxychlor, BTM	20	µg/kg	5	C
Mirex	0.001	µg/L	2,8	A
	.01	µg/L	9	C
Mirex, BTM	20	µg/kg	5	C
Parathion	0.04	µg/L	2,8	A,C
Parathion, BTM	20	µg/kg	5	C
PCB	0.001	µg/L	2,8	A
	0.1	µg/L	9	C
PCB, BTM	20	µg/kg	5	C
Phenols	1.0	µg/L	4	A
	5.0	µg/L	5	C
Toxaphene	0.005	µg/L	2,8	A
	1.0	µg/L	9	C
	5.0	µg/L	4,6	A,B
Toxaphene, BTM	20	µg/kg	5	C
Silvex	10	µg/L	4,6	A,B,C
Silvex, BTM	20	µg/kg		C
2, 4-D	100	µg/L	4,6	A,B,C
2, 4-D, BTM	20	µg/kg	5	C
Radiochemicals				
Radium 226	5	pCi/L	4,6	B,C
Strontium 90	8	pCi/L	4,6	B,C
Tritium	20,000	pCi/L	4,6	B,C
Gross alpha	15	pCi/L	4,6	B,C

* Minimum recommended value
† Log mean, based on not less than five samples
** Including metabolites (DDD and DDE)

Water Use and/or for the Protection of:

1a. Sensitive salmonoid species in soft water
1b. Sensitive salmonoid species in hard water
2. Freshwater aquatic life
2a. Freshwater aquatic life in soft water
2b. Freshwater aquatic life in hard water
3. Crop irrigation
4. Domestic water supply source
5. Recommended limits have not been established; limit set to arbitrarily flag no more than the upper 15 to 20 percent of values nationwide.
6. Potable drinking water, based on health effects
6a. Potable drinking water, based on aesthetic considerations
7. Primary contact
8. Marine aquatic life
9. Minimum non-zero concentration reported by the U.S. Geological Survey Central Water Quality Laboratories system.

Basis for Selection

A. Maximum levels recommended by: Quality Criteria for Water, 1976, U.S. Environmental Protection Agency.
B. Maximum contaminant level established by: National Interim Primary Drinking Water Regulations 1976, U.S. Environmental Protection Agency.
C. Suggested limiting value, U.S. Geological Survey, Quality of Water Branch.
D. Maximum contaminant level recommended for the Proposed Secondary Drinking Water Regulations, U.S. Environmental Protection Agency.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude (see figure 1) and (2) a local name and a unique well number that are provided for local needs.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (LSD, lsd). Mean sea level, now designated as NGVD, is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane is that approximately at land surface at each well. If known, the altitude of the land-surface datum above NGVD is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

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

Publications

Table 5 below, shows the series of water-supply papers that give ground-water data for New Jersey, 1935 to 1974. No water level data were published in 1975. Beginning in 1976, ground-water level data for New Jersey have been published in these annual water data reports.

Table 5.--Water-supply paper (WSP) numbers, water years, 1935-74

Year	WSP	Year	WSP	Year	WSP
1935	777	1944	1016	1953	1265
1936	817	1945	1023	1954	1321
1937	840	1946	1071	1955	1404
1938	845	1947	1096	1956-57	1537
1939	866	1948	1126	1958-62	1782
1940	906	1949	1156	1963-67	1977
1941	936	1950	1165	1968-72	2140
1942	986	1951	1191	1973-74	2164
1943	986	1952	1221		

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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. $1.60.

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. $0.85

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. $1.90.

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. $1.75.

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. $1.00.

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. $0.35.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. $0.40.

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. $1.00.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. $0.35.

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3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. $1.40.

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3-A12. *Fluorometric procedures for dye tracing,* by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. $0.70.

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. $2.50.

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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. $2.50.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. $2.10.

4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4 Chapter A1. 1968. 39 pages. $1.60.

4-A2. *Frequency curves,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. $1.20

4-B1. *Low-flow investigations,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972, 18 pages. $0.65.

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5-A2. *Determination of minor elments in water by emission spectroscopy,* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. $0.80.

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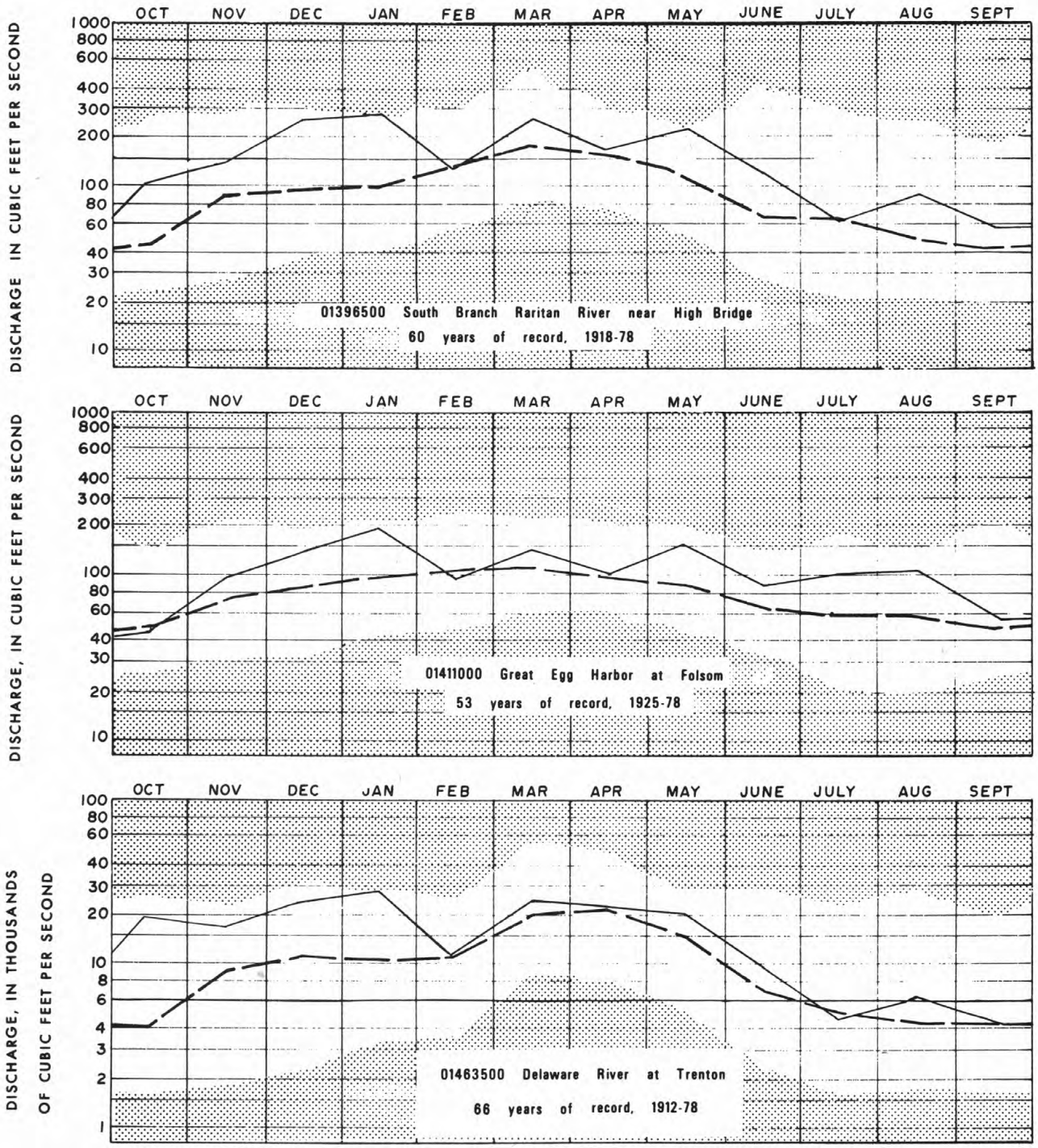
*These publications are available ONLY from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. They are in looseleaf format and are subscription items. Additional supplements will be issued to subscribers at no extra cost. Checks should be made payable to Superintendent of Documents. Requester should emphasize to Superintendent of Documents that this is a subscription item.



Unshaded area.-- Indicates range between highest and lowest mean recorded for the month prior to 1978 water year.

Dashed line -- Indicates normal (median of the monthly means) for the standard reference period 1941-70.

Solid line.-- Indicates observed monthly mean flow for the 1978 water year.

FIGURE 2.-- MONTHLY STREAMFLOW AT KEY GAGING STATIONS

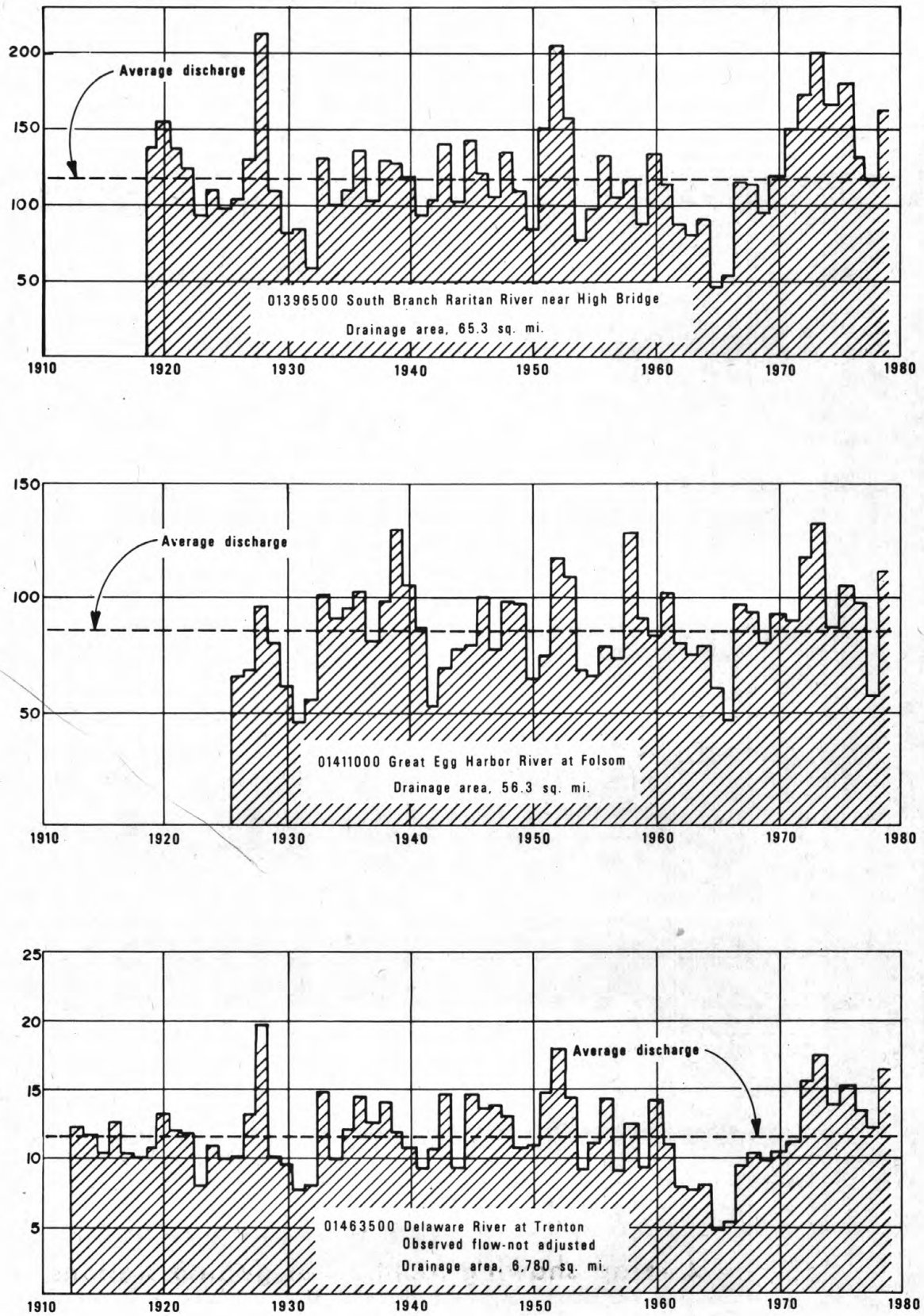


FIGURE 3.-- ANNUAL MEAN DISCHARGE AT KEY GAGING STATIONS

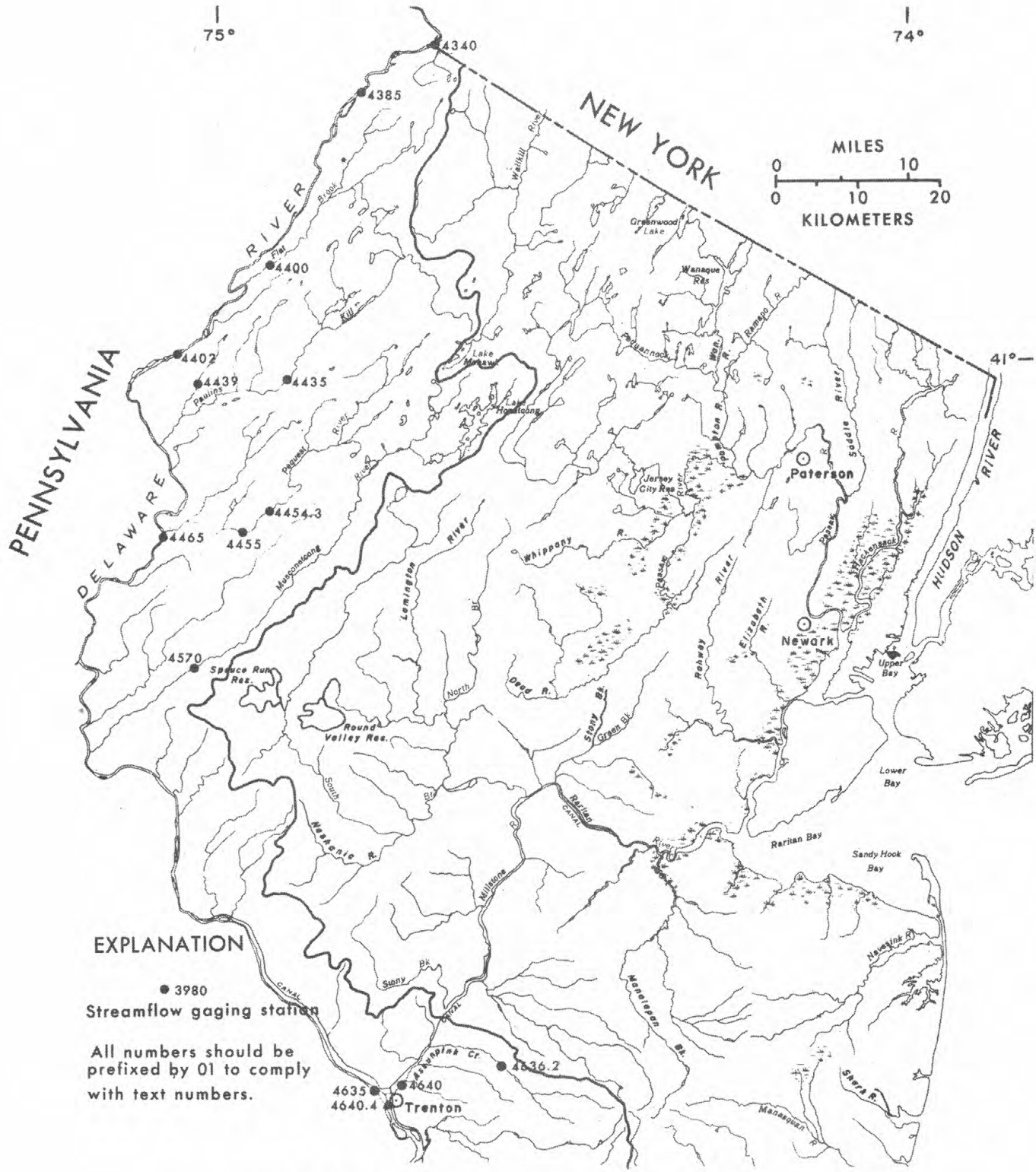


Figure 4.--Map showing location of gaging stations

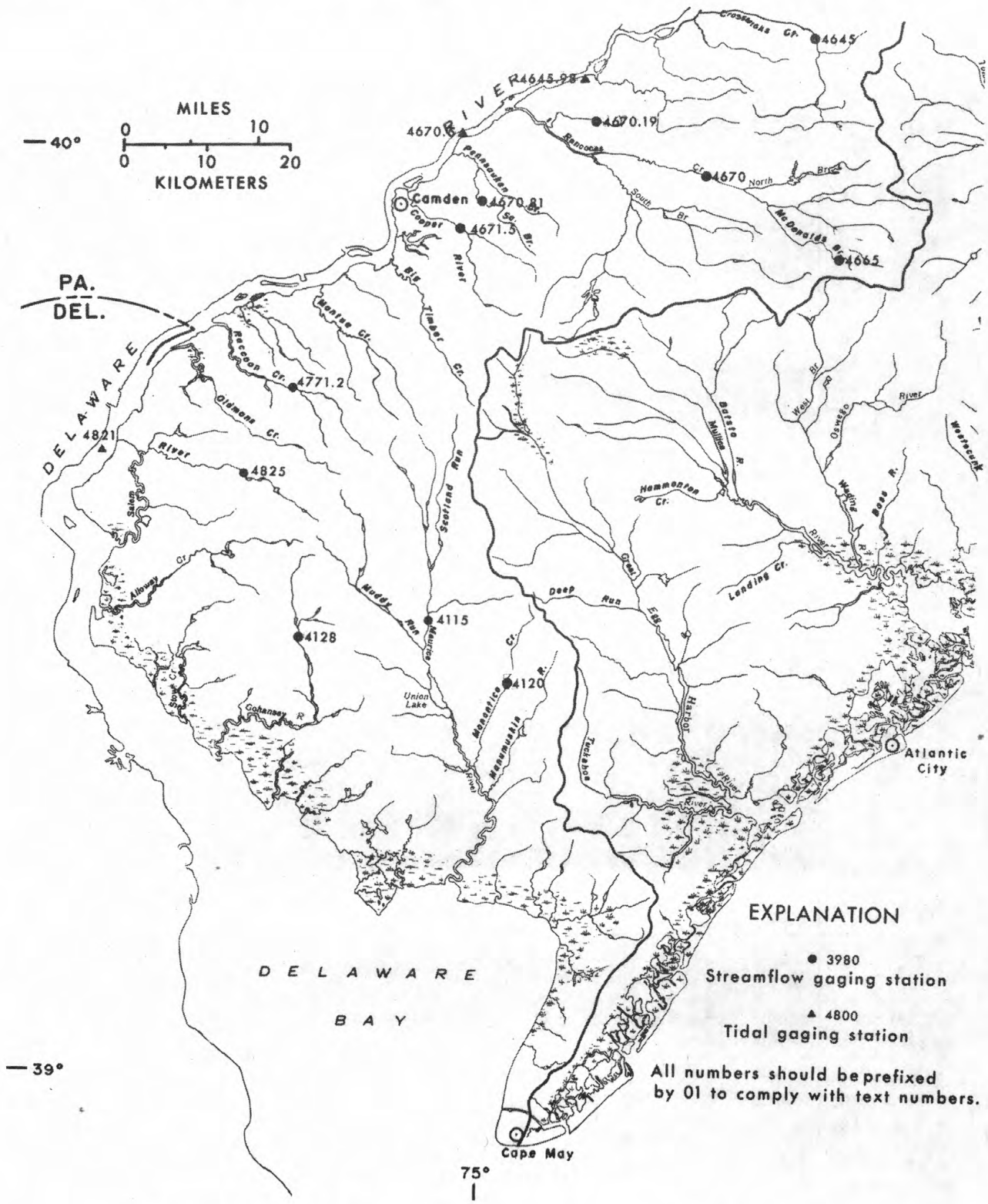


Figure 5.-- Map showing location of gaging stations

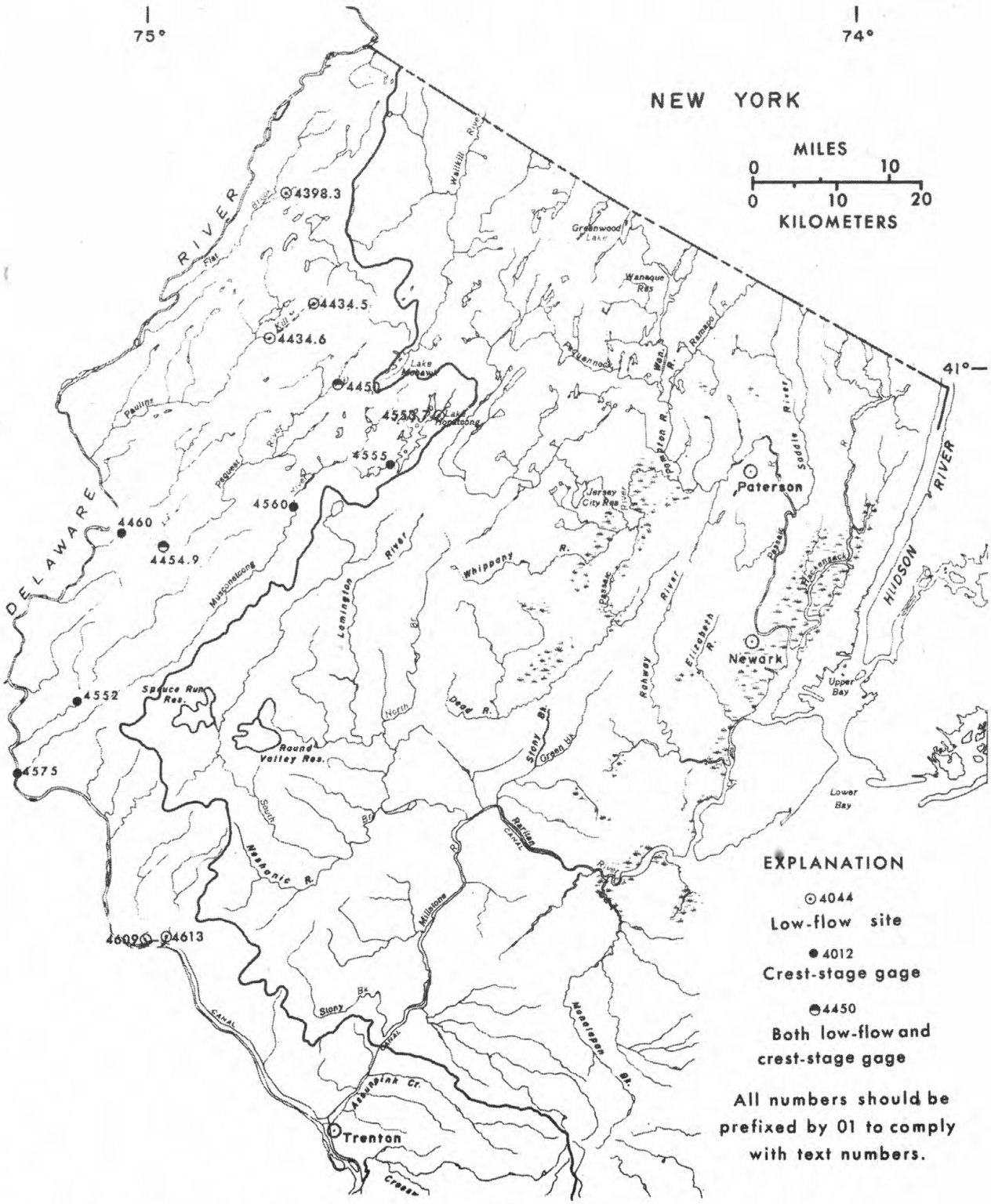


Figure 6.-- Map showing location of partial-record stations

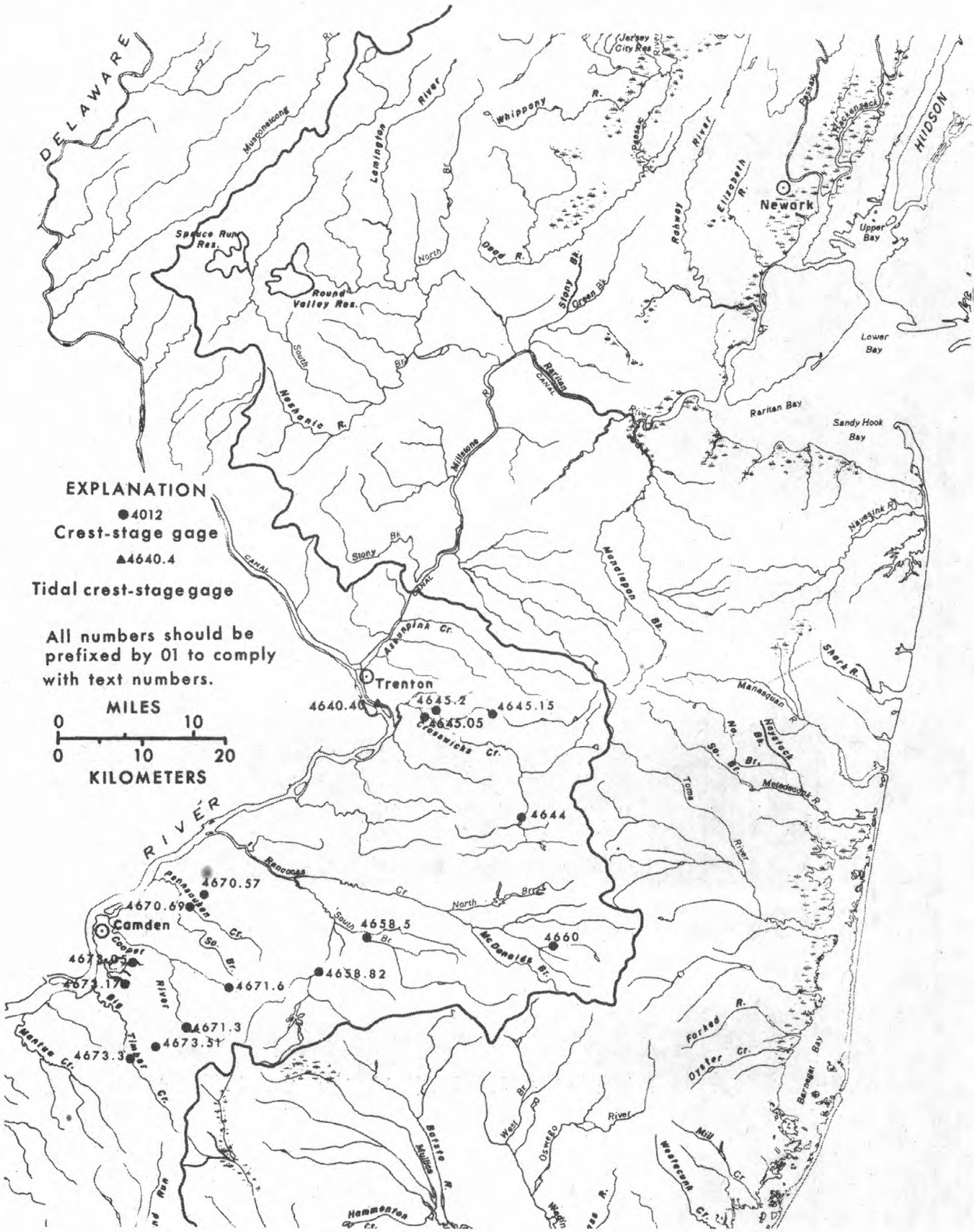


Figure 7.-- Map showing location of partial-record stations

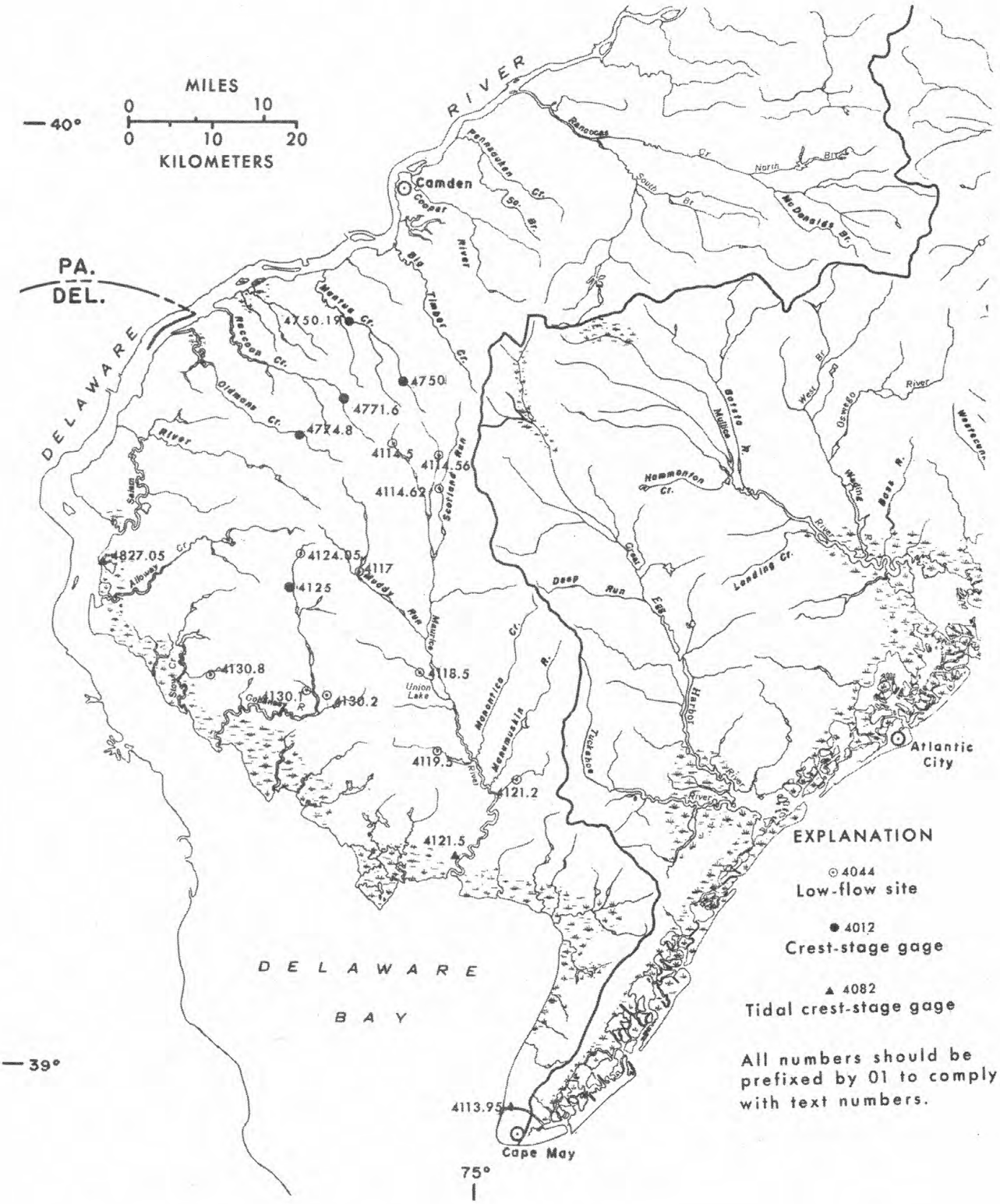


Figure 8.-- Map showing location of partial-record stations

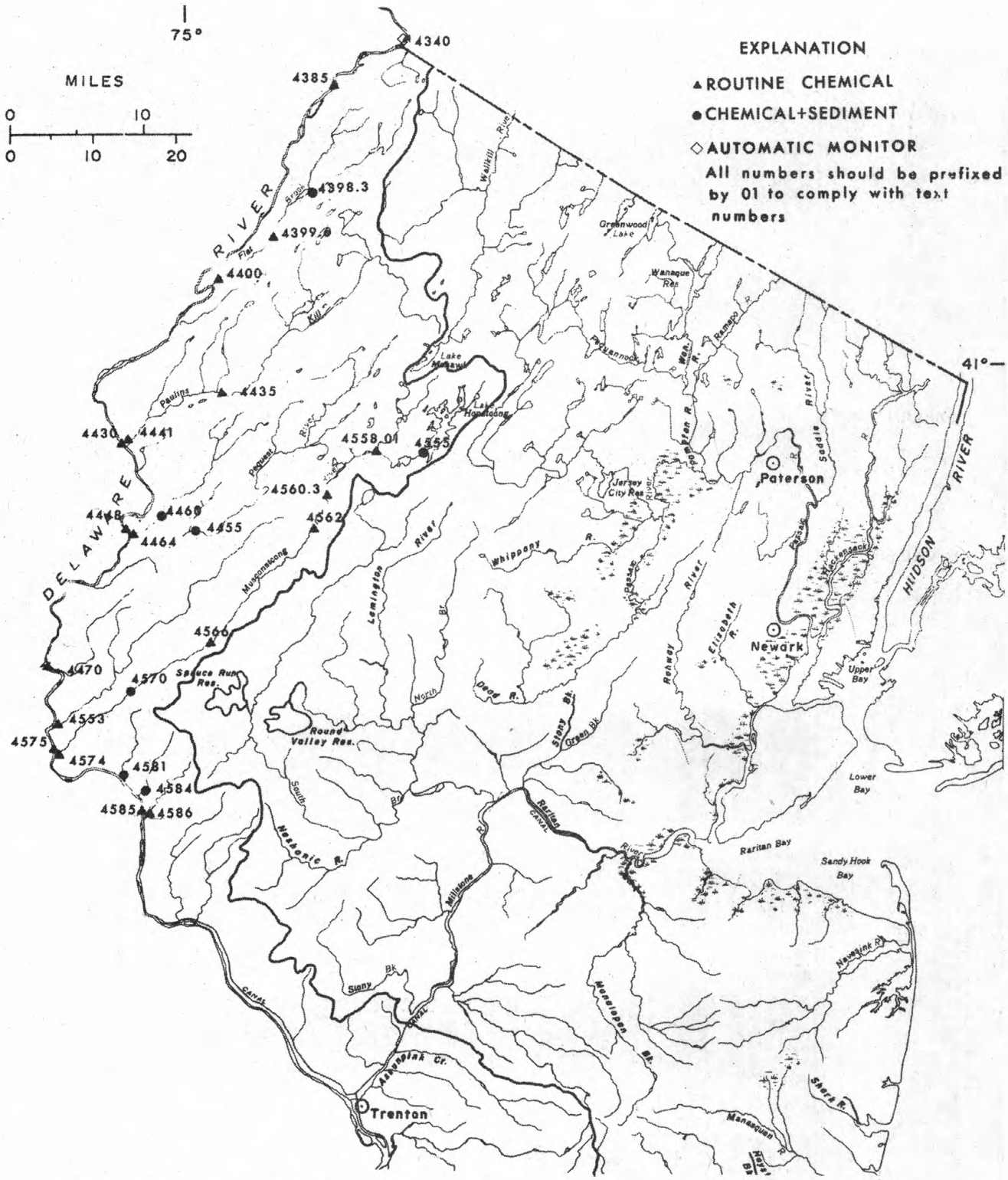


Figure 9.--Map showing location of surface-water quality stations

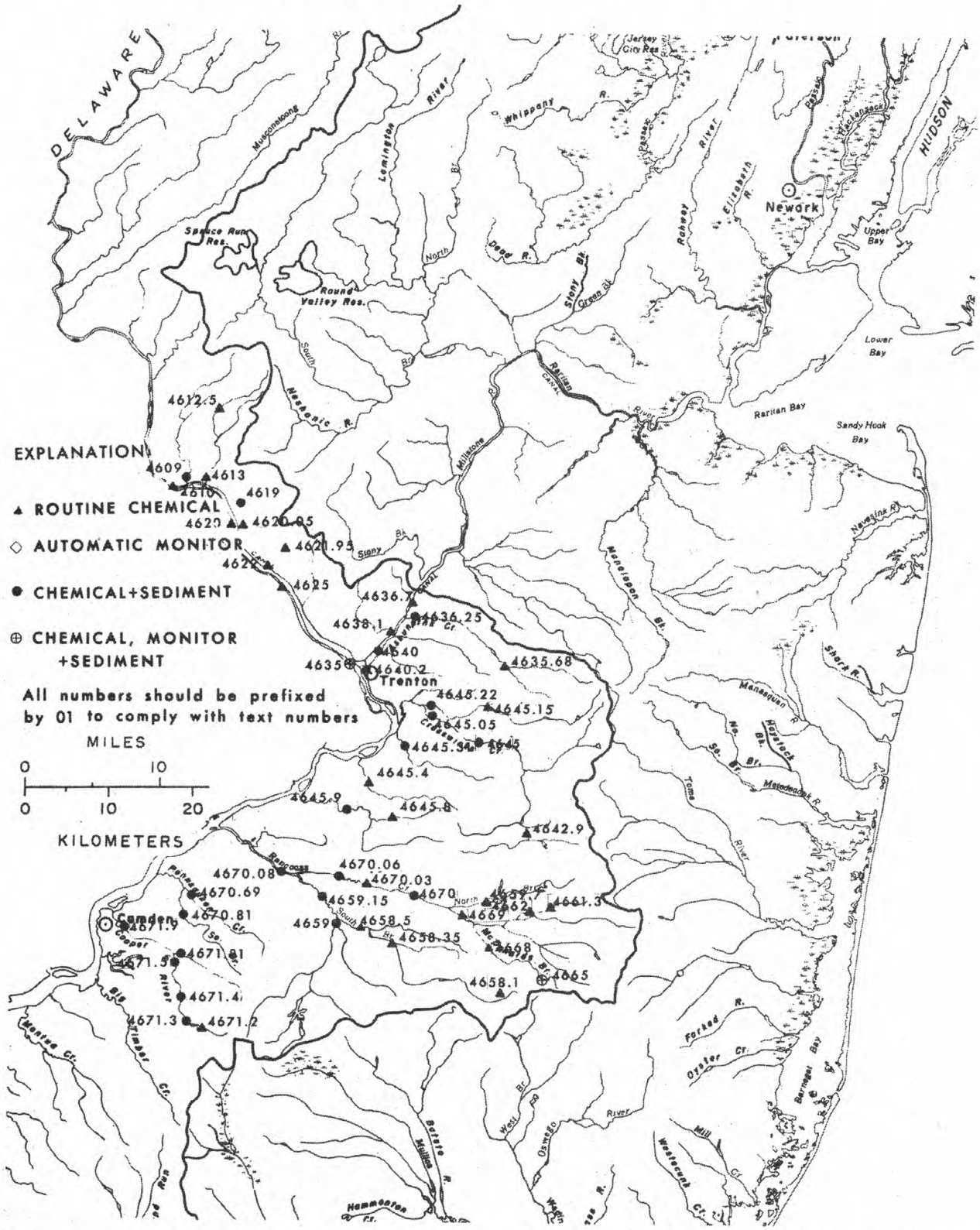


Figure 10.-- Map showing location of surface-water quality stations

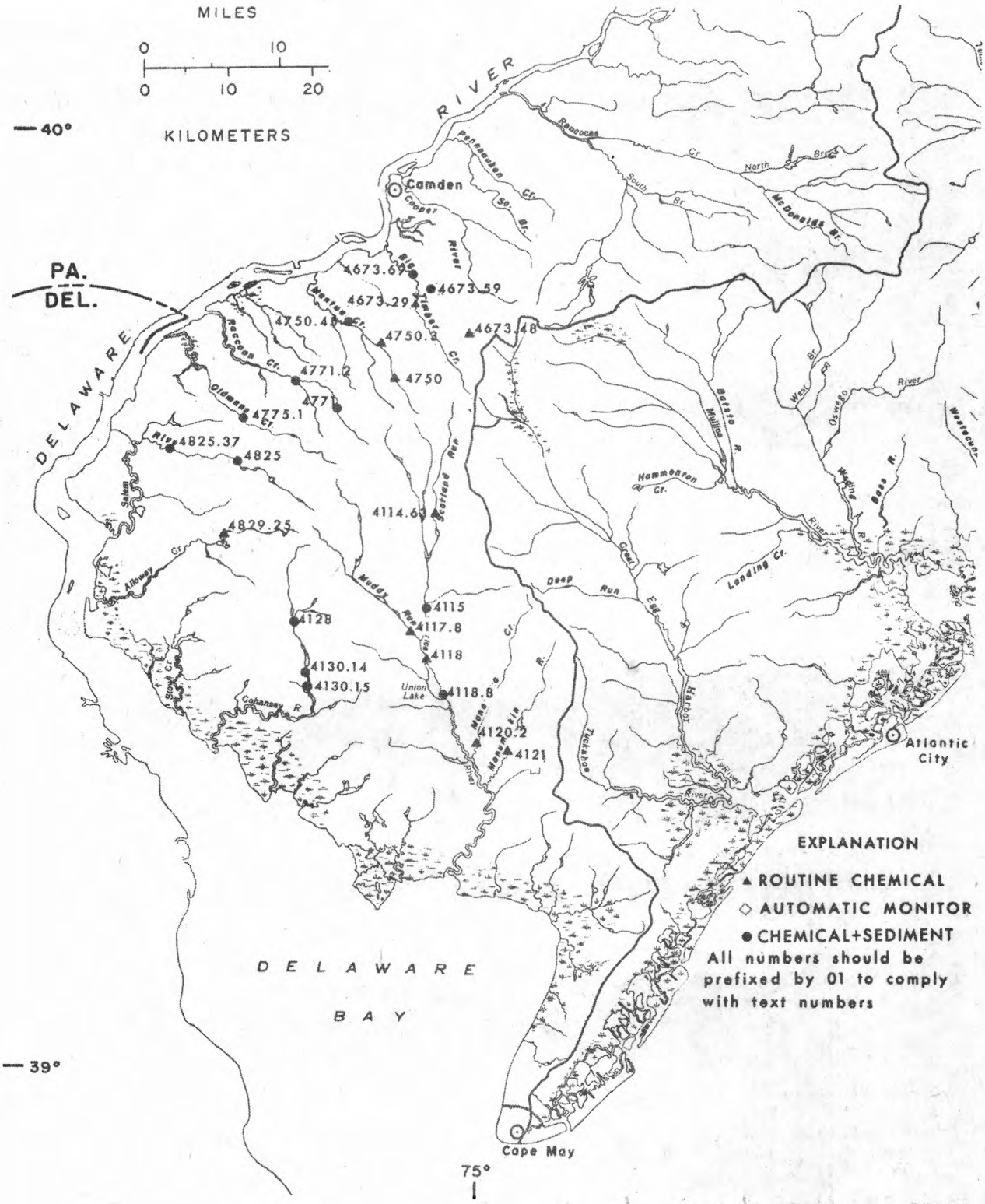


Figure 11.--Map showing location of surface-water quality stations

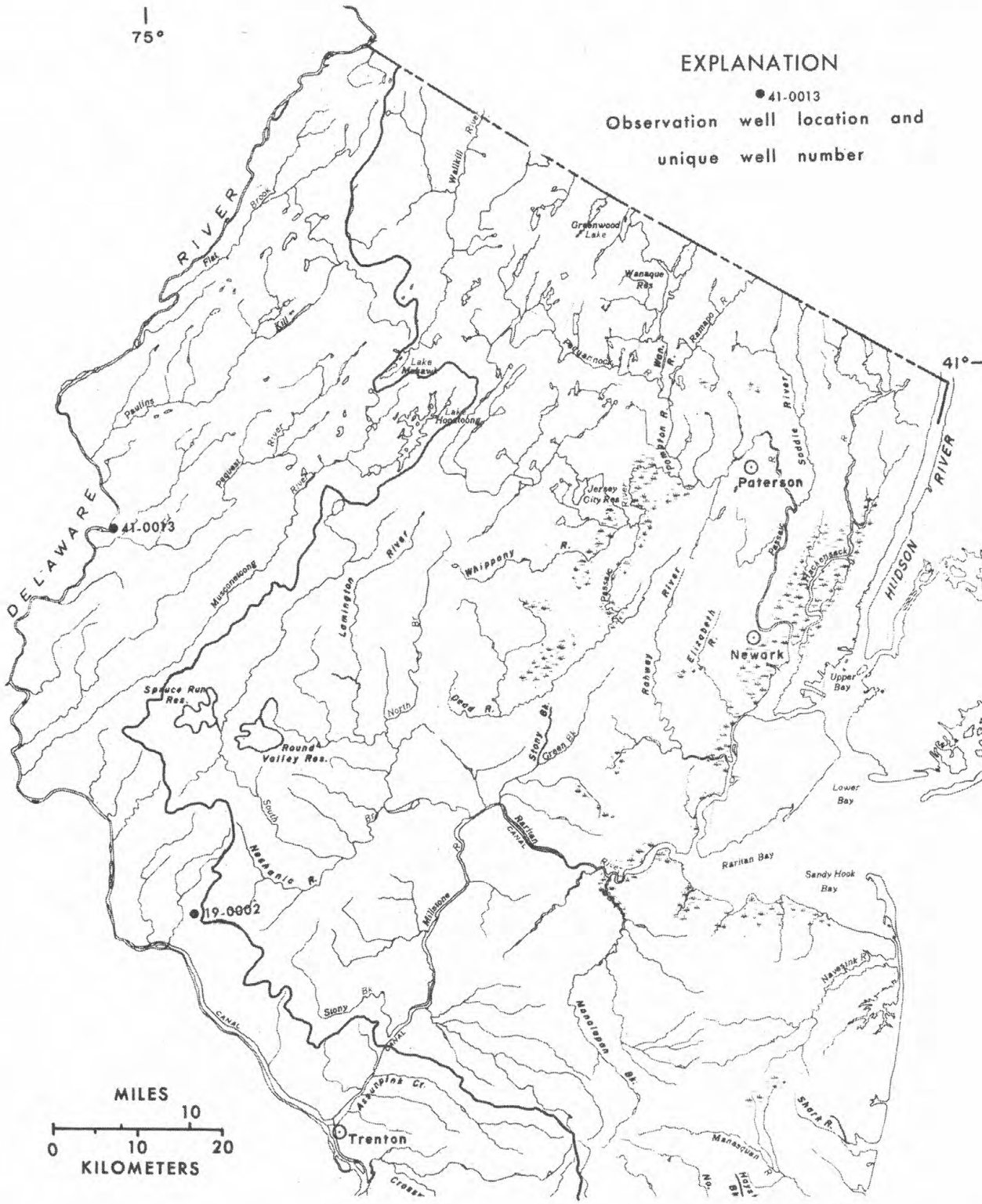


Figure 12.--Map showing location of ground-water observation wells

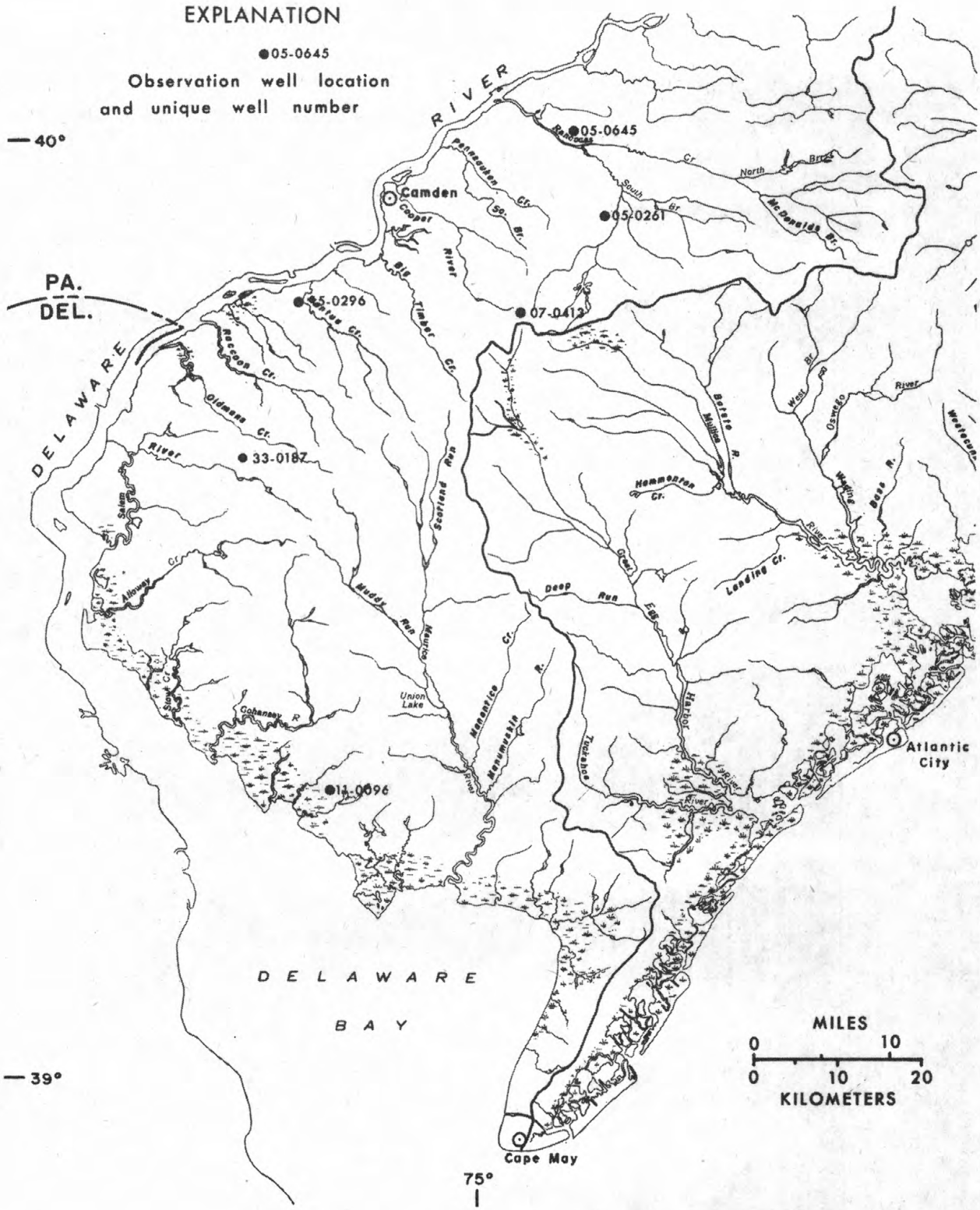


Figure 13.--Map showing location of ground-water observation wells

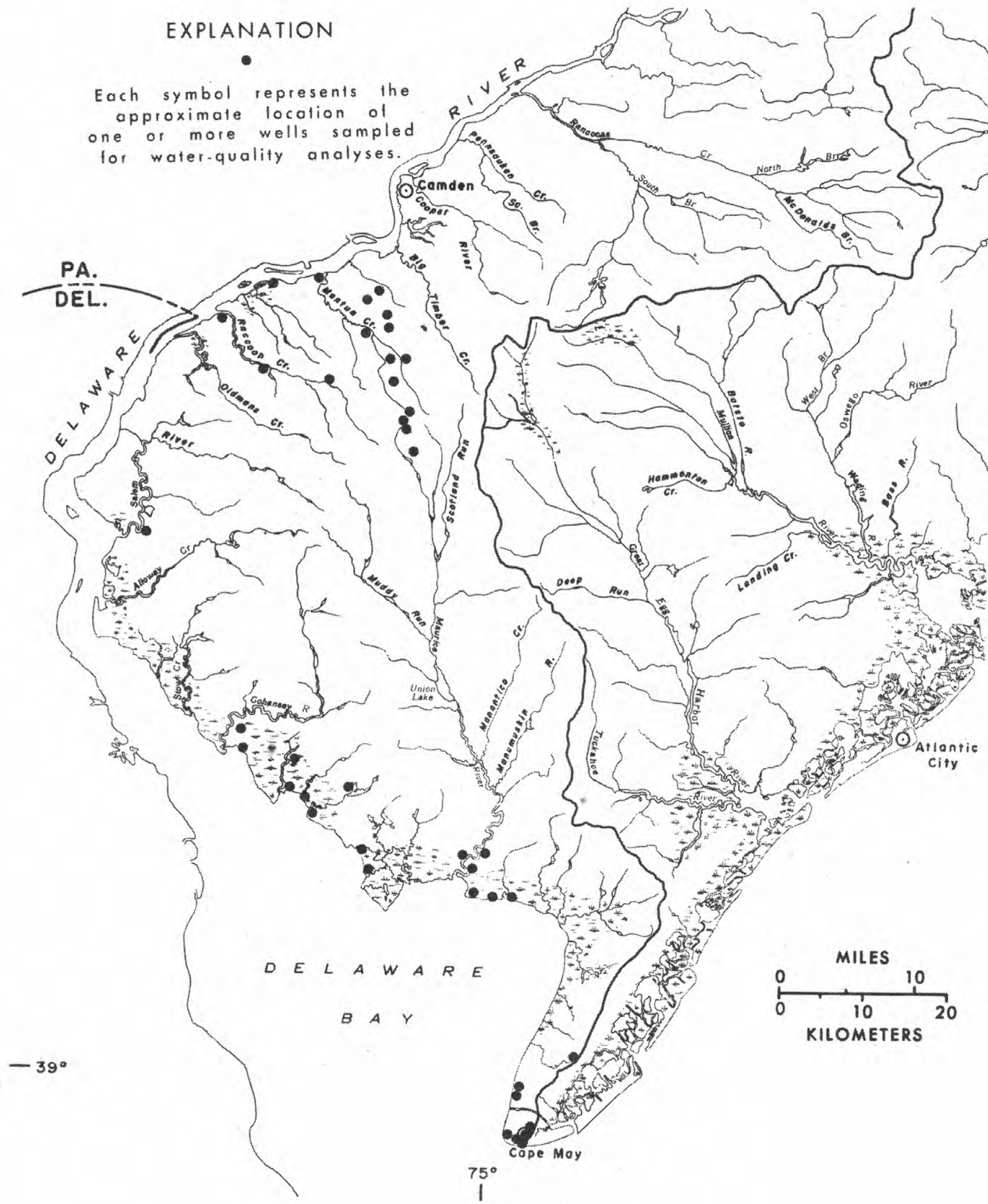


Figure 14.--Map showing location of ground-water quality stations

MAURICE RIVER BASIN

01411463 SCOTLAND RUN NEAR FRANKLINVILLE, NJ

LOCATION.--Lat 39°35'43", long 75°03'51", Gloucester County, Hydrologic Unit 02040206, at bridge on State Route 47, 1.1 mi (1.8 km) east of Porchtown, 1.1 mi (1.8 km) upstream of Malaga Lake, and 1.5 mi (2.4 km) southeast of Franklinville.

DRAINAGE AREA.--16.4 mi² (42.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
DEC										
13...	1010	80	4.5	2.5	1	12.8	--	<2	<2	19
FEB										
28...	0945	55	4.6	4.0	1	12.7	.7	8	7	12
APR										
18...	1015	57	4.9	12.5	3	10.8	1.0	2	5	12
MAY										
23...	0930	52	4.8	20.0	1	8.6	1.6	230	<2	10
JUN										
08...	1005	47	4.8	21.0	2	7.2	1.4	130	33	10

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
DEC										
13...	3.4	2.5	3.1	1.5	0	0	0	16	5.8	62
FEB										
28...	2.2	1.5	2.8	1.2	0	0	0	9.4	5.5	37
APR										
18...	2.4	1.5	2.8	1.3	2	0	2	11	7.2	44
MAY										
23...	1.6	1.5	2.9	1.1	1	0	1	9.8	5.5	47
JUN										
08...	1.8	1.3	2.6	1.0	1	0	1	8.6	5.1	42

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC										
13...	4	1.3	.00	.01	.30	.31	1.6	.01	.00	12
FEB										
28...	1	1.3	.00	.01	.03	.04	1.3	.00	.00	5.2
APR										
18...	4	.60	.00	.01	.29	.30	.90	.00	.00	4.4
MAY										
23...	17	.42	.01	.02	.49	.51	.94	.01	.00	6.5
JUN										
08...	0	.47	.00	.02	.35	.37	.84	.01	.00	5.4

01411500 MAURICE RIVER AT NORMA, NJ

LOCATION.--Lat 39°29'42", long 75°04'38", Salem County, Hydrologic Unit 02040206, on right bank just upstream from Almond Road Bridge at Norma, and 0.8 mi (1.3 km) downstream from Blackwater Branch.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1932 to current year. Monthly discharge only for December 1933, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1923, 1953, 1960-62, 1966 to current year.
SEDIMENT ANALYSES: Water years 1965-68, July to September 1978.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: July 1932 to current year.
WATER TEMPERATURES: October 1966 to January 1968.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to January 1968.

REVISED DISCHARGE RECORDS.--WSP 1382: 1933.

GAGE.--Water-stage recorder. Concrete control since Dec. 27, 1937. Datum of gage is 46.94 ft (14.307 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records good. Occasional regulation by ponds above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--46 years, 168 ft³/s (4.758 m³/s), 20.19 in/yr (513 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft³/s (10.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 23	0700	459	13.0	3.62	1.103	Mar. 29	0200	546	15.5	3.78	1.152
Jan. 20	1600	564	16.0	3.81	1.161	May 26	2400	662	18.7	3.97	1.210
Jan. 29	0100	*831	23.5	4.23	1.289	July 4	1200	546	15.5	3.78	1.152
Mar. 17	1100	387	11.0	3.47	1.058						

Minimum discharge, 46 ft³/s (1.30 m³/s) Oct. 8, gage height, 2.42 ft (7.376 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,360 ft³/s (208 m³/s) Sept. 2, 1940 (gage height, 8.72 ft or 2.658 m) from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 23 ft³/s (0.65 m³/s) Sept. 8, 1964, July 2, Sept. 7, 11-13, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	69	205	231	376	169	353	171	265	154	138	155
2	56	70	210	225	335	172	318	163	250	142	162	184
3	54	74	207	205	306	173	293	114	200	190	205	185
4	52	82	206	200	285	177	276	186	151	466	216	164
5	50	77	205	199	266	176	218	217	171	415	283	140
6	49	74	223	194	256	172	217	208	179	394	323	124
7	48	150	215	191	248	167	240	204	178	356	353	113
8	47	285	196	192	246	164	248	202	191	297	335	105
9	70	278	192	247	243	163	244	263	192	214	274	101
10	93	262	160	258	239	179	234	316	188	158	232	95
11	96	275	191	200	232	237	222	318	183	167	227	93
12	100	254	173	350	227	256	211	321	174	167	204	91
13	91	217	162	344	224	290	204	303	171	166	192	91
14	82	182	163	382	223	328	199	287	169	160	182	90
15	78	156	207	378	221	360	194	275	158	157	170	89
16	72	142	213	366	218	366	188	272	152	162	159	89
17	79	152	219	361	215	385	184	301	148	200	132	89
18	79	158	253	437	212	376	182	295	147	183	100	89
19	76	151	337	471	208	348	203	289	144	168	117	103
20	73	148	354	528	202	326	226	283	140	156	108	113
21	69	145	391	517	194	310	234	271	133	147	103	110
22	66	141	450	456	192	300	235	233	197	145	105	104
23	64	165	409	398	189	229	230	219	206	135	109	107
24	63	172	367	350	187	269	222	321	222	124	103	102
25	61	167	334	343	183	262	214	450	209	99	100	97
26	63	182	309	452	171	274	203	614	181	92	98	91
27	77	184	280	623	145	353	194	516	167	97	98	87
28	81	180	254	788	162	460	191	410	160	102	102	85
29	79	177	231	760	---	497	185	309	160	105	104	82
30	75	178	220	567	---	402	177	293	164	107	103	80
31	71	---	231	445	---	392	---	282	---	114	113	---
TOTAL	2172	4947	7767	11658	6405	8732	6739	8906	5350	5739	5250	3248
MEAN	70.1	165	251	376	229	282	225	287	178	185	169	108
MAX	100	285	450	788	376	497	353	614	265	466	353	185
MIN	47	69	160	191	145	163	177	114	133	92	98	80
CFSM	.62	1.46	2.22	3.33	2.03	2.50	1.99	2.54	1.58	1.64	1.50	.96
IN.	.72	1.63	2.56	3.84	2.11	2.87	2.22	2.93	1.76	1.89	1.73	1.07

CAL YR 1977 TOTAL 38559 MEAN 106 MAX 450 MIN 26 CFSM .94 IN 12.69
WTR YR 1978 TOTAL 76913 MEAN 211 MAX 788 MIN 47 CFSM 1.87 IN 25.32

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
DEC											
08...	1010	196	89	5.1	2.0	2	13.1	.6	49	33	21
FEB											
28...	1100	162	81	5.6	3.5	3	11.9	1.2	7	7	7
APR											
25...	1100	215	76	5.9	14.0	1	9.6	1.1	13	5	17
MAY											
23...	1245	219	70	5.9	19.0	2	7.5	1.0	79	14	16
JUN											
14...	1345	169	79	6.1	19.5	2	7.7	1.7	220	>2400	17
JUL											
20...	1035	156	75	6.2	22.0	2	6.4	1.0	240	>2400	16
AUG											
31...	1050	115	79	6.1	22.5	1	7.0	2.8	17	920	17

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
DEC											
08...	4.4	2.5	6.7	1.6	7	0	6	19	7.9	75	4
FEB											
28...	1.7	.7	2.4	.7	5	0	4	8.2	2.8	32	2
APR											
25...	3.6	1.9	6.0	1.7	5	0	4	14	8.7	64	1
MAY											
23...	3.1	1.9	6.1	1.6	6	0	5	13	9.5	60	6
JUN											
14...	3.7	1.9	6.8	2.0	7	0	6	13	8.3	82	4
JUL											
20...	3.2	1.9	6.0	2.0	9	0	7	9.2	8.3	76	0
AUG											
31...	3.4	2.0	6.4	2.0	10	0	8	8.0	8.9	36	6

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC											
08...	--	--	1.1	.00	.03	.36	.39	1.5	.02	.00	9.1
FEB											
28...	--	--	.33	.00	.02	.22	.24	.57	.00	.00	5.2
APR											
25...	--	--	1.0	.00	.04	.39	.43	1.4	.02	.00	6.2
MAY											
23...	--	--	.78	.01	.06	.71	.77	1.6	.04	.01	5.9
JUN											
14...	--	--	1.2	.01	.09	.67	.76	2.0	.07	.03	10
JUL											
20...	6	2.5	--	--	.10	.30	.40	1.5	--	--	7.0
AUG											
31...	6	1.9	--	--	.37	1.9	2.3	3.8	--	--	7.8

01411780 MUDDY RUN NEAR NORMA, NJ

LOCATION.--Lat 39°28'13", long 75°05'36", Salem County, Hydrologic Unit 02040206, at bridge on Lebanon Road, 1.0 mi (1.6 km) upstream from mouth, 1.6 mi (2.6 km) southeast of Rainbow Lake, and 1.6 mi (2.6 km) south of Norma.

DRAINAGE AREA.--56.5 mi² (146.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
DEC 08...	1110	101	6.4	1.5	3	13.2	.5	49	23	39
FEB 28...	1200	106	6.3	3.5	2	11.4	1.8	11	23	32
APR 25...	1230	100	6.4	16.0	3	10.2	1.4	170	220	29
MAY 23...	1130	87	6.7	20.5	2	8.4	1.4	49	8	28
JUN 15...	1030	97	6.8	18.5	2	6.7	1.5	110	79	31

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
DEC 08...	10	3.5	4.7	2.6	7	0	6	18	9.3	85
FEB 28...	6.9	3.6	4.5	2.1	9	0	7	14	11	49
APR 25...	6.3	3.3	4.5	2.0	11	0	9	17	10	71
MAY 23...	6.0	3.2	4.3	2.0	9	0	7	11	9.1	76
JUN 15...	7.2	3.2	4.7	2.2	15	0	12	11	9.3	82

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC 08...	5	1.8	.01	.04	.52	.56	2.4	.03	.01	12
FEB 28...	2	3.1	.01	.04	.44	.48	3.6	.02	.00	2.6
APR 25...	23	1.6	.01	.04	.42	.46	2.1	.02	.00	9.7
MAY 23...	1	1.1	.01	.06	.71	.77	1.9	.05	.01	9.2
JUN 15...	2	1.3	.01	.07	.53	.60	1.9	.06	.01	6.9

01411800 MAURICE RIVER NEAR MILLVILLE, NJ

LOCATION.--Lat 39°26'52", long 75°04'22", Cumberland County, Hydrologic Unit 02040206, at bridge on Sherman Avenue, 1.3 mi (2.1 km) downstream of Muddy Run, 3.5 mi (5.6 km) north of Union Lake dam at Millville, and 4.0 mi (6.4 km) southwest of Vineland.

DRAINAGE AREA.--193 mi² (500 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
DEC											
08...	1200	97	6.1	2.0	2	12.4	.0	33	8	24	5.0
FEB											
28...	1240	100	6.4	3.0	2	13.0	1.7	2	7	22	4.7
APR											
25...	1330	92	6.5	16.0	2	10.0	1.4	2	5	20	4.3
MAY											
24...	1015	72	6.2	17.0	15	6.6	4.0	1600	>2400	14	3.1
JUN											
14...	1220	97	6.4	19.0	2	7.9	1.7	170	540	21	4.6

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
DEC											
08...	2.8	8.1	2.1	7	0	6	--	18	9.6	--	86
FEB											
28...	2.6	7.2	2.1	9	0	7	--	12	12	--	59
APR											
25...	2.2	6.8	2.0	10	0	8	--	14	11	--	29
MAY											
24...	1.6	5.8	1.9	10	0	8	.0	10	7.3	2.3	51
JUN											
14...	2.3	8.0	2.2	13	0	11	--	12	10	--	74

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC										
08...	0	1.4	.00	.27	.43	.70	2.1	.03	.00	10
FEB										
28...	2	2.6	.01	.36	.29	.65	3.3	.03	.00	4.0
APR										
25...	2	1.3	.01	.24	.38	.62	1.9	.03	.01	6.1
MAY										
24...	44	.82	.02	.32	.88	1.2	2.0	.20	.05	7.4
JUN										
14...	6	1.3	.01	.39	.53	.92	2.2	.09	.04	9.5

MAURICE RIVER BASIN

01411800 MAURICE RIVER NEAR MILLVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	PHENOLS (UG/L)
MAY 24...	1015	150	190	50	0	480	<.5	0	9

MAURICE RIVER BASIN

01411880 MAURICE RIVER AT SHARP STREET AT MILLVILLE, NJ

LOCATION.--Lat 39°24'01", long 75°03'15", Cumberland County, Hydrologic Unit 02040206, at bridge on Sharp Street in Millville, 200 ft (61 m) downstream from Union Lake dam.

DRAINAGE AREA.--218 mi² (565 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1973 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
DEC											
13...	1130	92	6.2	2.5	2	12.0	--	33	49	23	4.6
FEB											
28...	1345	90	6.0	3.0	2	12.7	1.3	--	--	22	4.6
APR											
27...	0815	87	6.5	12.5	3	10.6	2.0	<2	<2	20	4.7
MAY											
24...	1245	75	6.5	19.0	2	9.2	1.4	8	41	18	3.5
JUN											
13...	1200	81	6.8	22.5	2	8.9	2.1	17	7	17	3.6
JUL											
20...	1145	80	6.8	24.5	2	7.5	1.9	220	31	17	3.3
AUG											
31...	1215	87	6.7	25.0	1	7.3	1.4	6	220	19	3.9

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
DEC											
13...	2.7	6.6	2.2	7	0	6	--	17	9.1	--	60
FEB											
28...	2.5	6.5	2.0	7	0	6	--	11	9.1	--	66
APR											
27...	2.1	6.5	2.0	7	0	6	--	13	11	--	60
MAY											
24...	2.2	6.0	1.9	9	0	7	.0	11	7.9	2.5	53
JUN											
13...	2.0	6.4	2.2	9	0	7	--	11	9.2	--	82
JUL											
20...	2.1	6.4	1.9	12	0	10	--	8.2	9.4	--	71
AUG											
31...	2.2	7.3	2.4	17	0	14	--	7.7	11	--	36

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC											
13...	4	--	1.3	.01	.24	.38	.62	1.9	.02	.02	11
FEB											
28...	1	--	2.7	.01	.25	.85	1.1	3.8	.02	.01	3.5
APR											
27...	1	--	1.4	.01	.13	.59	.72	2.1	.15	.01	7.3
MAY											
24...	7	--	.93	.01	.13	.46	.59	1.5	.03	.01	8.1
JUN											
13...	9	--	.99	.01	.20	.71	.91	1.9	.06	.03	7.0
JUL											
20...	8	8	--	--	.10	.70	.80	1.8	--	--	6.0
AUG											
31...	4	5	--	--	.49	1.4	1.9	2.9	--	--	11

01411880 MAURICE RIVER AT SHARP STREET AT MILLVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	PHENOLS (UG/L)
MAY									
24...	1245	130	150	70	0	150	<.5	0	0

01412000 MANANTICO CREEK NEAR MILLVILLE, NJ

LOCATION.--Lat 39°25'12", long 74°58'00", Cumberland County, Hydrologic Unit 02040206, on right bank at upstream side of Mays Landing Road (Route 552), 0.9 mi (1.4 km) downstream of Manantico Lake, 4.0 mi (6.4 km) northeast of Millville, and 7.0 mi (11.3 km) upstream from mouth.

DRAINAGE AREA.--22.3 mi² (57.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1931 to September 1957, October 1977 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 36.63 ft (11.165 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--27 years (1931-57, 1978), 37.7 ft³/s (1.068 m³/s), 2,296 in/yr (583 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 125 ft³/s (3.54 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 18	2315	152	4.30	2.75	0.838	Mar. 27	1945	148	4.19	2.71	0.826
Jan. 21	1215	137	3.88	2.60	0.792	May 10	1630	149	4.22	2.72	0.829
Jan. 27	0145	137	3.88	2.60	0.792	May 25	0715	183	5.18	3.01	0.917
Mar. 12	1330	143	4.05	2.66	0.811	July 4	1615	*255	7.22	3.58	1.091

Minimum daily discharge, 8.8 ft³/s (0.25 m³/s) Oct. 7.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Aug. 20, 1939 (gage height, 6.21 ft or 1.893 m) from rating curve extended above 300 ft³/s (8.5 m³/s); minimum, 1.4 ft³/s (0.040 m³/s) Aug. 16-18, 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	16	44	40	44	36	49	44	46	53	60	63
2	10	15	53	39	42	35	46	42	44	52	76	60
3	9.8	15	44	38	41	35	44	39	49	73	89	46
4	9.4	16	38	37	40	36	45	39	68	233	74	38
5	9.2	16	36	36	39	33	45	54	59	165	68	34
6	9.0	15	39	36	39	32	44	65	53	83	76	31
7	8.8	36	40	36	40	31	53	56	47	58	104	28
8	12	98	37	37	39	31	54	44	46	50	84	26
9	18	84	36	45	39	31	47	76	51	44	64	25
10	20	57	32	53	39	40	43	133	47	42	55	24
11	16	45	32	40	38	104	41	110	40	39	57	23
12	14	37	31	41	38	141	39	72	39	37	54	22
13	25	29	29	39	37	113	39	56	39	35	49	21
14	20	26	31	85	38	81	37	60	46	33	45	21
15	17	25	42	96	38	75	37	69	44	32	42	21
16	15	24	49	65	37	69	36	65	40	34	38	21
17	13	26	41	53	37	63	36	73	36	49	36	20
18	12	28	44	117	37	61	36	66	34	53	33	21
19	11	28	78	130	37	56	45	57	33	38	33	23
20	10	26	75	105	36	51	63	52	32	33	32	25
21	10	24	69	132	36	47	58	50	33	30	30	26
22	9.8	24	72	102	36	46	51	44	46	28	28	25
23	9.6	29	58	70	36	44	46	42	47	25	27	23
24	9.2	36	49	56	36	41	44	88	40	26	26	23
25	10	36	44	57	35	39	42	167	37	28	25	22
26	12	37	42	106	36	50	41	104	35	28	25	22
27	14	37	38	125	36	121	39	72	42	28	24	21
28	14	34	36	83	36	123	40	61	46	28	25	20
29	14	32	35	60	---	80	41	56	44	28	25	20
30	15	31	34	54	---	62	40	51	35	26	25	20
31	17	---	37	48	---	53	---	49	---	30	32	---
TOTAL	404.8	982	1365	2061	1062	1860	1321	2056	1298	1541	1461	815
MEAN	13.1	32.7	44.0	66.5	37.9	60.0	44.0	66.3	43.3	49.7	47.1	27.2
MAX	25	98	78	132	44	141	63	167	68	233	104	63
MIN	8.8	15	29	36	35	31	36	39	32	25	24	20
CFSM	.59	1.47	1.97	2.98	1.70	2.69	1.97	2.97	1.94	2.23	2.11	1.22
IN.	.68	1.64	2.28	3.44	1.77	3.10	2.20	3.43	2.17	2.57	2.44	1.36

CAL YR 1977 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1978 TOTAL 16226.8 MEAN 44.5 MAX 233 MIN 8.8 CFSM 2.00 IN 27.07

01412020 MANANTICO CREEK NEAR PORT ELIZABETH, NJ

LOCATION.--Lat 39°21'10", long 75°00'06", Cumberland County, Hydrologic Unit 02040206, at bridge on State Route 55, 1.4 mi (2.3 km) upstream from mouth, 2.0 mi (3.2 km) southeast of Millville, and 2.7 mi (4.3 km) northwest of Port Elizabeth.

DRAINAGE AREA.--37.9 mi² (98.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
13...	0910	550	6.1	12.0	7	8.6	1.7	240	70	56	6.2	9.9
DEC												
13...	1230	171	6.3	1.0	30	12.8	--	49	130	29	4.9	4.0
FEB												
23...	1010	104	5.7	1.0	10	12.0	.9	13	17	23	5.1	2.6
APR												
13...	1010	86	5.8	15.5	3	9.7	1.6	13	<2	21	5.0	2.1
MAY												
25...	1015	70	5.7	17.0	2	8.0	1.8	1600	540	19	4.3	1.9
JUN												
13...	1020	76	6.0	20.5	4	7.2	2.2	540	>2400	19	4.3	2.0

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT											
13...	74	4.8	7	0	6	--	25	140	--	295	18
DEC											
13...	19	2.8	9	0	7	--	18	32	--	99	48
FEB											
23...	7.7	2.3	6	0	5	--	14	12	--	73	22
APR											
13...	4.0	2.7	3	0	2	--	13	8.0	--	76	8
MAY											
25...	3.5	2.3	5	0	4	.0	13	6.7	4.4	52	11
JUN											
13...	3.8	2.5	5	0	4	--	12	7.9	--	65	14

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
13...	.80	.00	.04	.39	.43	380	1.2	.05	.01	4.9	.6
DEC											
13...	1.3	.01	.25	.56	.81	--	2.1	.10	.00	9.3	--
FEB											
23...	2.1	.00	.20	.59	.79	--	2.9	.07	.01	5.6	--
APR											
13...	1.8	.00	.01	.20	.21	--	2.0	.01	.00	4.0	--
MAY											
25...	1.2	.01	.05	.53	.58	--	1.8	.05	.01	8.0	--
JUN											
13...	.98	.01	.05	.57	.62	--	1.6	.06	.01	6.3	--

01412020 MANANTICO CREEK NEAR PORT ELIZABETH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT												
13...	0910	--	4	--	<10	10	--	--	<10	--	<10	--
MAY												
25...	1015	220	--	60	--	--	0	2	--	10	--	280

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)
OCT												
13...	980	<10	--	10	.0	--	<10	--	0	--	0	.00
MAY												
25...	--	--	40	--	--	15	--	30	--	4	--	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT												
13...	.0	0	.0	.0	.0	.0	.00	.0	.0	.0	.0	0
MAY												
25...	--	--	--	--	--	--	--	--	--	--	--	--

01412100 MANUMUSKIN RIVER NEAR MANUMUSKIN, NJ

LOCATION.--Lat 39°20'57", long 74°57'31", Cumberland County, Hydrologic Unit 02040206, at bridge on light-duty road, 1.1 mi (1.8 km) north of Manumuskin, 2.9 mi (4.7 km) northeast of Port Elizabeth, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--32.1 mi² (83.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
13...	1000	47	4.3	11.5	1	8.9	.4	46	5	6	1.4	.7
DEC												
15...	1010	66	4.1	5.5	2	11.0	.6	33	70	7	1.3	.9
FEB												
23...	1110	49	4.2	2.0	2	13.2	.4	<2	6	5	1.0	.7
APR												
13...	1145	54	4.2	14.0	1	9.0	.9	23	2	5	1.0	.5
MAY												
23...	1250	46	4.1	18.0	2	7.7	1.2	23	4	4	.8	.5
JUN												
06...	1055	45	4.2	17.5	2	6.4	1.2	33	8	4	.7	.5

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT											
13...	3.0	.7	0	0	0	--	8.2	4.3	--	31	3
DEC											
15...	2.5	3.0	0	0	0	--	13	4.2	--	35	0
FEB											
23...	2.3	.6	0	0	0	--	7.4	4.1	--	33	0
APR											
13...	2.4	.7	0	0	0	--	6.7	4.4	--	30	2
MAY											
23...	2.2	.5	0	0	0	.0	7.9	5.5	6.2	32	9
JUN											
06...	2.0	.4	0	0	0	--	7.5	4.4	--	46	5

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
13...	.05	.00	.01	.12	.13	1200	.18	.00	.00	7.4	4.6
DEC											
15...	.04	.00	.01	.24	.25	--	.29	.01	.01	7.2	--
FEB											
23...	.10	.00	.00	.24	.24	--	.34	.01	.00	5.1	--
APR											
13...	.01	.00	.01	.25	.26	--	.27	.00	.00	7.0	--
MAY											
23...	.02	.00	.01	.24	.25	--	.27	.01	.00	9.0	--
JUN											
06...	.03	.00	.01	.29	.30	--	.33	.01	.00	6.0	--

01412100 MANUMUSKIN RIVER NEAR MANUMUSKIN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
OCT												
13...	1000	--	0	--	--	<10	10	--	--	<10	--	<10
MAY												
23...	1250	300	--	50	0	--	--	0	0	--	0	--

DATE	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT											
13...	--	860	<10	--	0	.0	--	<10	--	0	--
MAY											
23...	540	--	--	20	--	--	6	--	20	--	2

01412800 COHANSEY RIVER AT SEELEY, NJ

LOCATION.--Lat 39°28'21", long 75°15'21", Cumberland County, Hydrologic Unit 02040206, on right bank just downstream from bridge on Silver Lake Road, 0.6 mi (1.0 km) south of Seeley, 2.6 mi (4.2 km) east of Shiloh, 4.1 mi (6.6 km) north of Bridgeton, and 22.5 mi (36.2 km) upstream from mouth.

DRAINAGE AREA.--28.0 mi² (72.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1977 to September 1978.
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 27 ft (8.2 m), from topographic map.

REMARKS.--Discharge records good. Flow diverted above gage during summer months for irrigation.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 18	0700	723	20.5	5.88	1.792	Mar. 11	2100	418	11.8	5.48	1.670
Jan. 25	2245	*1170	33.1	6.28	1.914	May 24	1715	455	12.9	5.67	1.728

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Oct. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	66	44	34	31	30	28	33	25	58	89
2	14	17	50	35	34	30	28	29	32	24	67	78
3	14	21	33	33	34	32	28	28	32	76	58	30
4	14	26	28	31	33	32	31	35	31	166	38	25
5	15	21	31	31	30	28	31	53	32	63	65	24
6	16	20	39	32	34	29	29	38	32	35	45	24
7	16	101	32	33	35	29	34	32	32	31	40	24
8	40	145	28	35	34	30	32	32	34	30	33	24
9	66	68	32	99	34	32	31	81	33	28	30	24
10	32	38	28	65	33	53	31	66	31	28	30	21
11	25	32	25	34	33	188	30	42	28	30	29	21
12	21	28	24	35	31	232	30	33	28	27	29	23
13	20	26	26	40	32	130	30	32	34	26	27	24
14	24	25	35	143	34	87	33	59	31	27	27	22
15	26	26	75	85	33	81	30	53	29	28	27	22
16	21	26	51	45	32	57	27	51	29	32	26	23
17	24	42	35	52	33	53	28	57	29	38	26	21
18	21	42	77	430	33	46	30	47	29	31	25	21
19	19	31	132	95	31	43	46	39	29	29	24	27
20	18	27	59	62	31	46	48	35	29	27	23	26
21	17	26	67	67	32	39	38	32	30	26	23	24
22	17	28	61	50	31	40	33	31	73	25	25	24
23	16	51	41	39	30	36	30	31	51	21	24	26
24	14	43	36	37	30	35	30	220	33	21	23	23
25	16	33	36	150	31	33	30	121	28	23	23	22
26	18	46	34	553	31	58	30	50	28	23	24	22
27	29	33	32	109	32	104	31	41	36	22	23	22
28	23	29	32	52	31	75	31	37	33	30	26	23
29	19	28	30	39	---	38	30	37	28	29	27	22
30	17	31	32	37	---	32	28	36	27	24	26	22
31	16	---	57	35	---	31	---	34	---	30	32	---
TOTAL	662	1127	1364	2627	906	1810	948	1540	984	1075	1003	823
MEAN	21.4	37.6	44.0	84.7	32.4	58.4	31.6	49.7	32.8	34.7	32.4	27.4
MAX	66	145	132	553	35	232	48	220	73	166	67	89
MIN	14	17	24	31	30	28	27	28	27	21	23	21
CFSM	.76	1.34	1.57	3.03	1.16	2.09	1.13	1.78	1.17	1.24	1.16	.98
IN.	.88	1.50	1.81	3.49	1.20	2.40	1.26	2.05	1.31	1.43	1.33	1.09

CAL YR 1977 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1978 TOTAL 14869 MEAN 40.7 MAX 553 MIN 14 CFSM 1.45 IN 19.75

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
12...	0930	22	224	6.6	13.5	4	8.4	1.1	5	170	51	10
DEC												
06...	1030	39	201	6.5	7.5	20	10.8	1.4	540	33	51	10
FEB												
15...	0930	33	218	6.4	2.5	7	12.2	.6	17	49	60	12
APR												
18...	1145	30	227	6.9	11.5	4	13.0	2.1	49	25	55	11
MAY												
22...	0930	31	200	6.9	17.5	4	9.1	2.6	49	23	54	11
JUN												
08...	1130	34	215	6.6	21.0	2	7.3	2.2	130	79	58	12
JUL												
25...	1100	24	237	6.8	22.0	0	6.6	2.0	540	1600	60	12
AUG												
30...	1030	26	233	6.6	22.5	0	6.8	1.6	100	330	55	11
SEP												
28...	1125	22	233	6.9	16.5	--	8.7	1.4	--	--	60	12

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT												
12...	6.3	15	5.3	13	0	11	--	24	31	--	--	132
DEC												
06...	6.2	12	4.5	15	0	12	--	24	24	--	--	135
FEB												
15...	7.2	13	3.4	6	0	5	--	26	27	--	--	137
APR												
18...	6.7	13	3.9	15	0	12	--	24	27	--	--	144
MAY												
22...	6.5	13	3.2	20	0	16	--	23	26	--	--	134
JUN												
08...	6.7	13	4.3	18	0	15	--	21	27	--	--	127
JUL												
25...	7.2	16	4.1	22	0	18	--	19	32	--	--	161
AUG												
30...	6.8	16	4.7	17	0	14	--	20	32	--	--	156
SEP												
28...	7.3	16	4.6	20	0	16	.0	21	33	.1	5.7	131

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
12...	7	--	--	4.0	.01	.07	.44	.51	4.5	.05	.01	7.1
DEC												
06...	17	--	--	3.4	.03	.18	.45	.63	4.0	.11	.05	8.1
FEB												
15...	2	--	--	--	--	--	--	--	--	--	--	.8
APR												
18...	5	--	--	4.4	.03	.12	.42	.54	4.9	.04	.00	4.0
MAY												
22...	9	--	--	3.7	.06	.19	.70	.89	4.7	.10	.03	9.0
JUN												
08...	0	--	--	4.1	.05	.09	.72	.81	4.9	.08	.03	6.0
JUL												
25...	7	6	.39	--	--	--	--	--	--	--	--	5.6
AUG												
30...	10	5	.35	--	--	<.10	--	<.40	--	--	--	2.4
SEP												
28...	--	4	.24	--	--	<.10	--	--	--	--	--	2.5

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
SEP 28...	1125	50	1	0	<10	3	70	<.5	8	0	20	0

01413014 COHANSEY RIVER AT OUTLET OF SUNSET LAKE AT BRIDGETON, NJ

LOCATION.--Lat 39°26'44", long 75°14'16", Cumberland County, Hydrologic Unit 02040206, at bridge on Park Drive in Bridgeton, at central outlet of Sunset Lake, and 20.7 mi (32.3 km) upstream from mouth.

DRAINAGE AREA.--45.7 mi² (118.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July to September 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
12...	1045	190	6.6	13.5	7	9.8	2.4	4	23	48	9.4	5.9
DEC												
06...	1135	214	6.5	9.0	40	3.5	2.0	8	34	56	12	6.4
FEB												
15...	1045	188	6.4	2.5	8	11.5	.6	2	<2	51	10	6.4
APR												
18...	1245	188	6.4	17.0	15	7.1	2.2	<2	2	48	10	5.6
MAY												
22...	1100	161	7.3	21.0	4	9.2	4.3	22	2	46	9.1	5.6
JUN												
08...	1210	181	6.7	22.5	6	8.2	3.1	240	130	49	10	5.8
JUL												
25...	1155	183	6.4	24.0	5	2.8	2.9	33	920	53	11	6.1
AUG												
30...	1130	196	7.0	23.5	1	4.2	2.7	170	350	51	10	6.3
SEP												
26...	1330	185	6.4	17.5	--	2.9	3.5	49	33	53	11	6.2

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT												
12...	13	4.2	17	0	14	--	21	24	--	--	96	6
DEC												
06...	13	3.8	64	0	52	--	17	23	--	--	123	28
FEB												
15...	11	3.4	10	0	8	--	23	22	--	--	125	0
APR												
18...	12	3.5	31	0	25	--	20	22	--	--	107	10
MAY												
22...	9.2	3.7	17	0	14	.0	19	19	--	5.0	109	0
JUN												
08...	10	4.1	17	0	14	--	18	21	--	--	106	0
JUL												
25...	11	3.8	44	0	36	--	11	21	--	--	105	12
AUG												
30...	12	4.0	37	0	30	--	17	26	--	--	132	0
SEP												
26...	12	3.6	53	0	43	--	5.7	22	.1	11	108	--

01413014 COHANSEY RIVER AT OUTLET OF SUNSET LAKE AT BRIDGETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT												
12...	--	2.9	.01	.07	.64	.71	170	3.6	.06	.01	6.0	.6
DEC												
06...	--	.63	.01	.97	.43	1.4	--	2.0	.07	.00	10	--
FEB												
15...	--	--	--	--	--	--	--	--	--	--	1.2	--
APR												
18...	--	1.2	.01	.38	.39	.77	--	2.0	.02	.00	7.1	--
MAY												
22...	--	2.8	.04	.07	.78	.85	--	3.7	.10	.02	4.1	--
JUN												
08...	--	3.2	.03	.05	.76	.81	--	4.0	.12	.02	6.5	--
JUL												
25...	9	--	--	.10	.30	.40	--	1.4	--	--	8.1	--
AUG												
30...	9	--	--	<.10	--	<.40	--	--	--	--	5.3	--
SEP												
26...	28	--	--	.80	--	--	--	--	--	--	6.2	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
OCT										
12...	1045	--	0	--	--	<10	32	--	--	<10
MAY										
22...	1100	30	--	40	0	--	--	0	0	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
OCT									
12...	--	<10	--	370	<10	--	10	.0	--
MAY									
22...	4	--	50	--	--	140	--	--	11

DATE	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
12...	<10	--	0	--	0	.00	.0	0	1.0
MAY									
22...	--	20	--	3	--	--	--	--	--

01413014 COHANSEY RIVER AT OUTLET OF SUNSET LAKE AT BRIDGETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 12...	.9	1.4	.0	.00	.0	.0	.0	.0	0
MAY 22...	--	--	--	--	--	--	--	--	--

01413015 COHANSEY RIVER AT BRIDGETON, NJ

LOCATION.--Lat 39°25'54", long 75°14'11", Cumberland County, Hydrologic Unit 02040206, at bridge on Washington Street in Bridgeton, 1.3 mi (2.1 km) downstream from Sunset Lake, and 18.6 mi (29.9 km) upstream from mouth.

DRAINAGE AREA.--47.3 mi² (122.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July to September 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
12...	1135	2750	6.7	14.0	20	5.4	7.1	2	27	280	25	53
DEC												
06...	1225	218	6.6	8.5	15	7.3	2.3	350	63	51	10	6.3
FEB												
15...	1200	211	6.5	4.0	10	9.8	.8	49	33	50	10	6.1
APR												
27...	0635	243	6.9	11.5	9	8.5	3.7	240	240	51	10	6.2
MAY												
22...	1215	287	6.8	21.0	15	6.7	5.7	130	170	51	9.3	6.7
JUN												
14...	1010	190	6.7	19.5	5	7.7	2.8	920	540	52	11	5.9
JUL												
25...	1240	235	6.9	25.0	8	4.4	4.0	790	1700	53	10	6.8
AUG												
30...	1225	258	6.7	25.0	1	4.2	2.5	3500	790	53	10	6.7
SEP												
26...	1105	243	6.8	18.0	--	6.1	2.2	920	1600	55	10	7.3

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT												
12...	360	20	45	0	37	--	110	370	--	--	1510	3
DEC												
06...	20	4.4	28	0	23	--	25	30	--	--	144	21
FEB												
15...	16	3.5	26	0	21	--	26	23	--	--	116	3
APR												
27...	20	3.4	27	0	22	--	25	35	--	--	138	14
MAY												
22...	24	4.0	27	0	22	--	24	43	--	--	160	15
JUN												
14...	13	3.6	27	0	22	--	20	20	--	--	118	26
JUL												
25...	18	4.3	37	0	30	--	20	29	--	--	140	29
AUG												
30...	22	4.3	39	0	32	--	21	37	--	--	158	18
SEP												
26...	22	4.8	30	0	29	.0	23	33	.1	7.6	145	--

01413015 COHANSEY RIVER AT BRIDGETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT												
12...	--	1.8	.02	.53	1.1	1.6	1200	3.4	.34	.13	8.0	9.8
DEC												
06...	--	2.4	.02	.36	.45	.81	--	3.2	.10	.00	8.7	--
FEB												
15...	--	--	--	--	--	--	--	--	--	--	2.6	--
APR												
27...	--	2.9	.02	.20	.74	.94	--	3.8	.31	.04	5.9	--
MAY												
22...	--	2.3	.05	.41	1.2	1.6	--	3.9	.27	.08	5.0	--
JUN												
14...	--	2.9	.02	.24	.96	1.2	--	4.1	.14	.01	5.4	--
JUL												
25...	49	--	--	.10	.30	.40	--	2.4	--	--	7.5	--
AUG												
30...	26	--	--	.40	.00	.40	--	2.4	--	--	5.3	--
SEP												
26...	29	--	--	.30	--	--	--	--	--	--	3.8	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT										
12...	1135	--	--	1	--	<10	--	20	<10	--
SEP										
26...	1105	40	2	--	0	--	20	--	--	12

DATE	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)
OCT									
12...	<10	890	40	--	0	--	.0	--	<10
SEP									
26...	--	--	--	110	--	<.5	--	8	--

DATE	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
12...	--	--	20	--	57	.00	.0	0	15
SEP									
26...	0	50	--	0	--	--	--	--	--

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
12...	9.4	2.8	1.1	.00	.0	.0	.0	.0	0
SEP									
26...	--	--	--	--	--	--	--	--	--

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, PA, Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge on U.S. Highways 6 and 209 at Port Jervis, 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi² (7,967 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1904 to current year.
CHEMICAL ANALYSES: Water years 1958-59, 1964 to 1976.
SUSPENDED-SEDIMENT DISCHARGE: Water years 1957 to 1960, 1970 to 1976.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1904 to current year.
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960; March 1970 to June 1976.

REVISED DISCHARGE RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD-NY 1971: 1970.

GAGE.--Water-stage recorder. Temperature recorder since January 1973. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft (76.2 m) upstream at present datum. Operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Discharge records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoir (see Delaware River Basin, reservoirs in) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Delaware River Basin, reservoirs in). part of flow these reservoirs diverted for city of New York municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low-flow in the lower Delaware River Basin, as directed by the Delaware River Master. New York State Water-quality Surveillance Network station 14 0010.

EXTREMES FOR CURRENT YEAR.--
WATER DISCHARGE: Maximum discharge, 62,400 ft³/s (1,770 m³/s) Jan. 9, gage height, 12.44 ft (3.792 m); minimum discharge, 664 ft³/s (18.8 m³/s) Sept. 26, gage height, 1.64 ft (0.500 m); minimum daily, 995 ft³/s (28.2 m³/s) Sept. 26.
WATER TEMPERATURES: Maximum recorded, 28.5°C July 24; minimum, 0.0°C on many days during winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 233,000 ft³/s (6,600 m³/s) Aug. 19, 1955, (gage height, 23.91 ft or 7.288 m, from floodmark in gage house), from rating curve extended above 89,000 ft³/s (2,520 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft³/s (4.96 m³/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).
WATER TEMPERATURES: Maximum, 29.5°C July 19, 1959, Aug. 3, 1975; minimum (1957-60, 73, 75-78), 0.0°C on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 760 mg/L June 29, 1973; minimum daily mean, less than 1 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily 187,000 tons (170,000 tonnes) June 29, 1973; minimum daily, 1 ton (0.9 tonnes) Aug. 29, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, 205,000 ft³/s (5,810 m³/s) Oct. 10, 1903, (gage height, 23.1 ft or 7.04 m, reported by National Weather Service), from rating curve extended above 70,000 ft³/s (1,980 m³/s) by velocity-area studies; maximum stage known, 25.5 ft (7.77 m) Mar. 8, 1904 (ice jam).

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5940	4050	8500	5220	10800	2600	19500	3090	3900	1340	1780	1450
2	15000	3730	16400	5150	9100	2500	24700	2700	3760	1270	1350	1420
3	13800	3760	16700	5390	8710	2500	23100	2380	3230	1250	1330	1350
4	9750	3290	14600	4920	7610	2820	19000	2130	3480	1250	1650	1260
5	7020	2890	12500	4700	6230	2110	18000	2480	3480	3970	1530	1370
6	5870	3140	11200	4730	5910	2530	18300	3650	3590	3280	1910	1390
7	5770	3650	10100	4920	5150	3180	18100	3560	3340	2500	3580	1410
8	4570	6270	8970	4350	6120	2400	20200	3310	3820	1880	3750	1410
9	5020	10900	8090	35200	6270	2150	17900	3560	5980	1490	3280	1450
10	12100	10400	7210	43500	5730	2290	15100	5940	5660	1590	2880	1540
11	9620	15600	5700	27600	4920	2150	12900	5980	4350	1700	2320	1390
12	7290	18100	4950	18800	4200	2000	14200	5120	3960	1690	1740	1590
13	5870	14600	5120	14900	4170	2020	15100	4540	3950	1600	1580	1260
14	5350	11600	6160	13000	4760	3180	14000	4140	4060	1470	2140	1410
15	7170	9660	12600	11500	4510	5390	11500	6680	3820	1530	1750	1460
16	10900	8300	17700	9620	4600	8840	9360	7690	3160	1470	1640	1480
17	15800	7210	15400	7100	4510	8220	8500	10800	2530	1490	1310	1560
18	29600	7410	13300	6450	3990	6870	7930	14600	2160	1670	1240	1720
19	21800	6900	11900	6340	3210	5940	6340	17900	2530	1750	1270	2520
20	22300	6160	10500	5420	3210	6490	6410	15500	2410	1680	1250	2170
21	19700	5520	10100	5020	3760	7170	7650	13100	2250	2110	1230	1690
22	15500	5150	11900	4860	3700	14600	7290	11400	2070	2020	1360	1670
23	12800	4950	10400	4510	3850	18200	6230	9230	2420	1660	1460	1120
24	10700	4570	8670	5700	3530	20700	5910	7970	2010	1520	1360	1030
25	9230	4380	7730	6090	2890	16800	5290	9440	1520	1560	1540	1190
26	7730	5020	10700	16000	2170	13500	4630	7930	1740	1380	1570	995
27	7130	6340	9890	40400	2200	18100	4290	6230	1530	1420	1600	1310
28	6270	5560	9010	27200	2800	30900	3990	5350	1760	1740	1480	1410
29	5220	5020	7730	19200	---	26800	3670	4760	1520	1390	1600	1420
30	4440	4920	6940	15000	---	24200	3400	4570	1420	1490	1690	1610
31	4260	---	6490	12600	---	20800	---	4290	---	1810	1320	---
TOTAL	323520	209050	317160	395390	138610	287950	352490	210020	91410	53970	55490	44055
MEAN	10440	6968	10230	12750	4950	9289	11750	6775	3047	1741	1790	1469
MAX	29600	18100	17700	43500	10800	30900	24700	17900	5980	3970	3750	2520
MIN	4260	2890	4950	4350	2170	2000	3400	2130	1420	1250	1230	995

CAL YR 1977 TOTAL 2382998 MEAN 6529 MAX 69100 MIN 800
WTR YR 1978 TOTAL 2479115 MEAN 6792 MAX 43500 MIN 995

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	1.5	.5	1.0	6.0	4.5	5.5	12.5	10.0	11.0
2	.5	.5	.5	1.5	.5	1.0	6.0	5.0	5.5	12.5	9.5	11.0
3	1.5	.5	.5	.5	.0	.5	5.0	3.5	4.0	14.0	10.0	12.0
4	.5	.5	.5	1.0	.0	.5	4.0	3.0	3.5	13.5	10.5	12.0
5	1.0	.0	.5	1.0	.0	.5	4.5	4.0	4.0	11.5	10.0	10.5
6	.5	.5	.5	1.0	.5	.5	5.5	4.0	5.0	10.0	9.5	9.5
7	.5	.0	.5	1.5	.5	1.0	6.0	4.5	5.5	11.0	9.5	10.0
8	.5	.5	.5	1.5	.5	1.0	6.0	5.0	5.5	12.0	10.0	11.0
9	.5	.5	.5	2.0	.5	1.0	5.5	4.5	5.0	14.0	11.5	12.5
10	.5	.5	.5	2.0	.5	1.5	6.5	4.5	5.5	14.0	12.5	13.5
11	.5	.0	.5	3.0	.5	2.0	7.5	6.0	6.5	15.0	12.0	13.5
12	1.0	.0	.5	3.0	2.0	2.5	8.5	7.0	7.5	15.5	13.5	14.5
13	1.0	.5	.5	4.0	1.5	3.0	8.5	7.5	8.0	14.5	14.0	14.0
14	1.0	.5	.5	2.5	1.5	2.0	8.5	7.0	7.5	14.0	13.0	13.5
15	1.0	.5	.5	2.0	1.0	1.5	7.0	6.5	6.5	13.0	12.0	12.5
16	1.0	.5	.5	1.0	.5	1.0	7.0	5.5	6.0	12.0	11.5	12.0
17	1.5	.5	1.0	2.0	.5	1.5	8.0	6.0	6.5	12.0	11.5	12.0
18	1.0	.5	1.0	2.0	.5	1.5	8.5	6.5	7.5	12.0	11.5	12.0
19	1.0	.0	.5	2.5	1.0	1.5	8.0	7.5	7.5	14.0	12.0	13.0
20	1.0	.5	.5	2.5	1.5	2.0	8.0	7.5	8.0	15.5	14.0	14.5
21	1.0	.5	.5	3.5	2.0	3.0	8.0	7.0	7.5	16.5	15.5	16.0
22	1.0	.0	.5	3.5	1.5	2.5	9.0	6.5	8.0	16.0	15.0	15.5
23	1.0	.5	.5	3.5	1.5	2.5	10.0	7.5	9.0	16.0	14.5	15.5
24	1.0	.5	.5	4.0	3.0	3.5	11.5	8.5	10.0	15.5	15.0	15.5
25	1.5	.5	1.0	3.5	2.5	3.0	11.0	9.0	10.0	16.0	14.5	15.0
26	1.5	.5	1.0	2.5	2.0	2.0	12.5	10.5	11.5	18.0	15.0	16.5
27	1.0	.5	.5	3.0	2.0	2.5	11.5	9.0	11.5	20.0	17.0	18.5
28	1.5	.5	1.0	3.5	2.5	3.0	13.0	10.5	11.5	21.0	19.0	20.0
29	---	---	---	4.5	3.0	4.0	13.5	11.0	12.5	22.0	20.0	21.0
30	---	---	---	4.5	3.5	4.0	13.5	11.0	12.5	22.5	20.5	21.5
31	---	---	---	5.0	3.5	4.5	---	---	---	22.0	20.5	21.5
MONTH	1.5	.0	.5	5.0	.0	2.0	13.5	3.0	7.5	22.5	9.5	14.0

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

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, NY, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY".

REVISED DISCHARGE RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M). WDR-NJ-77-2: 1976.

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Discharge records good except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi² (238 km²) of drainage area controlled by Neversink Reservoir (see Delaware River Basin, reservoirs in). Part of flow diverted for city of New York municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low-flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,810 ft³/s (165 m³/s) Jan. 9, gage height, 7.69 ft (2.344 m); minimum, 86 ft³/s (2.44 m³/s) Sept. 30; minimum gage height, 2.80 ft (0.853 m) Aug. 30, 31.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft³/s (935 m³/s) Aug. 19, 1955 (gage height, 12.49 ft or 3.087 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	443	309	1260	350	500	180	1940	266	719	135	127	196
2	1400	290	1330	320	450	170	2090	257	522	131	138	143
3	862	276	1060	310	380	170	1600	244	473	131	123	129
4	678	280	955	300	300	180	1330	236	639	240	121	121
5	608	285	838	300	300	180	1340	367	497	329	121	120
6	528	276	775	300	450	170	1240	540	426	203	138	111
7	485	295	678	300	600	160	1260	473	390	173	467	106
8	414	1490	540	310	560	160	1250	431	654	162	372	105
9	631	2280	500	3680	500	160	1020	589	678	167	240	106
10	862	1540	460	2520	440	160	887	678	602	159	176	102
11	608	1590	430	1500	400	160	830	558	473	162	156	105
12	522	1260	420	1100	360	170	822	485	408	152	170	108
13	461	1030	420	960	340	180	736	455	408	131	162	112
14	437	862	450	880	320	600	654	595	408	125	145	105
15	727	752	1100	800	310	560	616	2430	329	133	135	105
16	639	662	1040	660	300	500	558	1770	295	129	135	106
17	990	589	854	600	280	450	497	1970	271	131	143	105
18	973	608	752	560	270	430	426	3120	266	145	135	108
19	782	534	678	520	260	420	443	3220	280	127	129	244
20	990	479	608	500	250	450	616	2360	257	125	127	220
21	775	455	719	470	240	600	623	1840	236	147	123	164
22	639	461	912	440	230	900	540	1500	217	145	120	150
23	570	437	759	420	220	1300	473	964	199	143	109	141
24	510	414	670	390	210	1590	378	912	182	147	103	126
25	467	390	752	360	200	1370	367	1270	176	135	108	114
26	443	694	880	1400	190	1190	455	1030	162	121	106	103
27	455	702	640	1600	190	2330	367	830	167	112	105	97
28	437	570	560	1000	180	3060	329	711	159	118	105	94
29	402	522	520	800	---	2760	309	631	149	114	109	91
30	372	516	450	600	---	2450	290	564	143	133	106	88
31	340	---	400	560	---	2050	---	534	---	133	118	---
TOTAL	19450	20848	22410	24810	9230	25210	24286	31830	10785	4638	4672	3725
MEAN	627	695	723	800	330	813	810	1027	360	150	151	124
MAX	1400	2280	1330	3680	600	3060	2090	3220	719	329	467	244
MIN	340	276	400	300	180	160	290	236	143	112	103	88

CAL YR 1977 TOTAL 173289 MEAN 475 MAX 5300 MIN 94
WTR YR 1978 TOTAL 201894 MEAN 553 MAX 3680 MIN 88

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

DRAINAGE AREA.--3,480 mi² (9,013 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1956-73, 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1939 to current year.
WATER TEMPERATURES: October 1956 to September 1957.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Discharge records excellent except those for February, which are good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--39 years, 5,961 ft³/s (168.8 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68,100 ft³/s (1,929 m³/s) Jan. 10, gage height, 18.27 ft (5.569 m); minimum daily, 1,320 ft³/s (37.4 m³/s) Sept. 24.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s (7,080 m³/s) Aug. 19, 1955 (gage height, 35.15 ft or 10.714 m), from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of flood-routing study; minimum, 382 ft³/s (10.8 m³/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m); minimum daily, 412 ft³/s (11.7 m³/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage during period 1903-78, 35.5 ft (10.82 m) Oct. 10, 1903, present datum, from floodmark.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6640	4570	9600	6000	12800	2900	23100	3790	4990	1620	2330	1790
2	15600	4250	18300	5800	11300	2800	27900	3290	4700	1540	1620	1830
3	15400	4270	18600	6000	10100	2700	26600	2960	4230	1540	1700	1740
4	10900	3940	16300	5400	8860	3100	22000	2620	4440	1560	1910	1610
5	8030	3390	14000	5200	7090	2400	20400	2960	4220	3860	1900	1670
6	6690	3580	12500	5280	6810	2500	20900	4450	4360	3750	2260	1800
7	6460	3940	11400	5460	6170	3600	20300	4420	4040	2910	3800	1670
8	5310	7400	10000	4910	6800	2900	22700	4160	4700	2330	4730	1770
9	5590	13800	9120	34100	7000	2470	20200	4250	6860	1850	3990	1740
10	12700	12700	8190	52400	6200	2710	17000	6780	6880	1850	3450	1810
11	10800	16500	6600	32800	5400	2670	14700	7150	5240	2030	2810	1790
12	8260	20500	5320	21700	5000	2470	15600	6140	4580	2020	2320	1780
13	6630	16500	5600	16600	4500	2300	16700	5420	4650	1910	1910	1660
14	6030	13100	6600	14300	5500	3770	15500	5010	4750	1760	2520	1550
15	7750	11000	13500	12800	5000	6570	13200	9340	4460	1870	2290	1770
16	11900	9410	19700	11300	5000	10000	10700	10400	3780	1750	2030	1940
17	15200	8240	17200	8610	5000	9530	9570	13600	3200	1750	1780	1820
18	31200	8380	14800	7620	4500	8000	8960	18500	2670	1960	1610	1830
19	23500	7850	13200	7710	3900	7010	7410	22400	2990	2070	1600	2630
20	23800	7020	11800	6420	3500	7470	7410	19400	2950	1980	1570	2610
21	21400	6340	11300	6110	4100	8320	8760	16100	2740	2440	1590	2090
22	16800	5910	13600	5940	4100	16200	8380	14000	2510	2440	1720	2090
23	13900	5680	12000	5230	4200	21000	7300	11200	2810	2000	1730	1640
24	11600	5270	10100	6170	3800	23900	6660	9590	2450	1770	1740	1320
25	10000	5080	8940	6920	3400	19900	6250	11600	1890	2020	1840	1330
26	8480	5970	12100	15400	2500	16000	5460	9880	2020	1700	1910	1360
27	7890	7650	11100	44100	2400	21200	5090	7920	2020	1740	1890	1480
28	7000	6600	10200	30700	3100	36400	4700	6730	2110	1970	1840	1670
29	6070	5910	8600	21600	---	32000	4360	5980	1860	1750	1940	1620
30	5070	5790	7600	16700	---	28900	4050	5530	1720	1760	2080	1950
31	4720	---	7400	14100	---	24800	---	5310	---	2020	1730	---
TOTAL	351320	240540	355270	443380	158030	336490	401860	260880	110820	63520	68140	53360
MEAN	11330	8018	11460	14300	5644	10850	13400	8415	3694	2049	2198	1779
MAX	31200	20500	19700	52400	12800	36400	27900	22400	6880	3860	4730	2630
MIN	4720	3390	5320	4910	2400	2300	4050	2620	1720	1540	1570	1320

CAL YR 1977 TOTAL 2652260 MEAN 7266 MAX 76100 MIN 900
WTR YR 1978 TOTAL 2843610 MEAN 7791 MAX 52400 MIN 1320

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT											
13...	1200	6050	63	7.5	10.0	1	7.2	--	80	7	20
NOV											
15...	1200	10500	58	7.3	6.0	1	12.5	1.0	20	11	19
FEB											
16...	1210	5150	72	7.8	1.0	2	12.2	1.0	230	8	22
MAR											
30...	1145	28700	49	7.0	5.0	5	13.1	1.0	130	33	15
APR											
26...	1200	5390	60	7.1	12.0	2	11.6	<1.0	110	33	19
MAY											
17...	1200	13300	54	7.1	13.0	6	10.3	1.0	170	350	17
JUL											
20...	1230	1560	74	8.5	24.5	0	7.8	1.0	330	6	23
AUG											
09...	1230	3810	70	7.2	23.0	5	8.4	1.0	80	13	21
SEP											
25...	1300	1090	110	--	18.0	--	--	1.0	--	--	27

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
13...	6.0	1.1	3.2	.9	--	.0	10	2.8	--	2.5	38
NOV											
15...	5.6	1.3	2.2	1.0	--	--	10	3.2	--	--	44
FEB											
16...	6.7	1.3	3.3	.9	--	--	11	5.4	--	--	46
MAR											
30...	4.5	1.0	3.1	.7	--	--	9.4	3.1	--	--	40
APR											
26...	5.8	1.2	3.0	1.0	--	--	10	3.1	--	--	46
MAY											
17...	5.0	1.1	2.9	.8	--	--	9.4	4.0	--	--	36
JUL											
20...	6.9	1.4	3.8	1.1	--	--	9.1	4.5	--	--	48
AUG											
09...	6.1	1.4	3.3	1.6	--	--	8.8	4.9	--	--	44
SEP											
25...	7.9	1.8	6.5	1.1	16	--	13	7.6	.0	1.6	54

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
13...	5	.00	.00	.00	1.3	1.3	1.3	.08	.04	7.7
NOV										
15...	5	.28	.00	.01	1.1	1.1	1.4	.02	.01	15
FEB										
16...	5	--	--	--	--	--	--	--	--	2.0
MAR										
30...	18	.39	.00	.01	.15	.16	.55	.03	.00	3.0
APR										
26...	0	.22	.00	.00	.19	.19	.41	.01	.00	4.3
MAY										
17...	18	.21	.01	.02	.40	.42	.64	.04	.00	9.6
JUL										
20...	4	--	--	.10	.30	.40	--	--	--	4.3
AUG										
09...	12	--	--	<.10	--	1.5	--	--	--	4.9
SEP										
25...	--	--	--	--	--	--	--	--	--	2.0

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 13...	1200	70	3	30	0	0	0	33

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 13...	40	9	40	<.5	4	0	20	4

01439830 BIG FLAT BROOK AT TUTTLES CORNER, NJ

LOCATION.--Lat 41°12'00", long 74°48'56", Sussex County, Hydrologic Unit 02040104, at bridge on State Route 521 in Tuttles Corner, 0.7 mi (1.1 km) west of intersection of U.S. Route 206 with State Route 521, 1.2 mi (1.9 km) south of Layton, and 2.0 mi (3.2 km) upstream from Little Flat Brook.

DRAINAGE AREA.--28.3 mi² (73.3 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: May to September 1978.
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
13...	1100	--	84	7.6	8.0	2	11.1	1.0	50	8	27	7.5
NOV												
15...	1115	--	60	7.1	2.5	1	13.8	1.0	20	2	22	5.7
FEB												
16...	1115	--	72	7.3	.5	1	13.4	2.0	<20	<2	27	7.0
MAR												
30...	1100	--	45	7.7	4.0	1	12.7	1.0	<20	23	22	7.2
APR												
26...	1100	--	66	7.6	11.0	1	12.0	1.0	80	17	24	6.5
MAY												
17...	1115	268	46	7.0	10.0	2	7.3	1.0	20	350	19	5.2
JUL												
20...	1100	11	97	8.4	19.0	0	9.5	1.0	130	>2400	34	9.1
AUG												
09...	1130	20	83	7.5	19.5	1	9.2	2.0	50	920	28	7.7
SEP												
25...	1130	7.4	112	--	13.0	--	8.9	1.0	--	--	39	10

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT												
13...	2.1	3.2	.8	--	14	3.9	--	--	53	8	--	--
NOV												
15...	1.8	2.0	.7	--	13	3.7	--	--	50	4	--	--
FEB												
16...	2.4	2.7	.7	--	13	4.2	--	--	48	4	--	--
MAR												
30...	1.0	2.0	.5	--	11	2.8	--	--	49	4	--	--
APR												
26...	2.0	4.0	.7	--	12	3.6	--	--	48	0	--	--
MAY												
17...	1.4	2.4	.7	--	11	1.1	--	--	35	11	--	--
JUL												
20...	2.8	3.7	.9	--	9.1	5.6	--	--	62	7	--	--
AUG												
09...	2.2	3.4	1.0	--	9.3	4.7	--	--	53	0	--	--
SEP												
25...	3.4	4.4	.8	27	11	6.4	.0	4.5	64	--	12	.24

01439830 BIG FLAT BROOK AT TUTTLES CORNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
13...	.02	.00	.04	.29	.33	490	.35	.03	.01	8.1	1.4
NOV											
15...	.03	.00	.00	.19	.19	--	.22	.01	.00	14	--
FEB											
16...	--	--	--	--	--	--	--	--	--	1.8	--
MAR											
30...	.06	.00	.00	.26	.26	--	.32	.01	.00	5.0	--
APR											
26...	.01	.00	.00	.13	.13	--	.14	.01	.00	5.9	--
MAY											
17...	.04	.00	.01	.28	.29	--	.33	.01	.00	9.5	--
JUL											
20...	--	--	.10	.70	.80	--	--	--	--	4.3	--
AUG											
09...	--	--	<.10	--	1.2	--	--	--	--	4.8	--
SEP											
25...	--	--	--	--	--	760	--	--	--	4.0	--

DATE	TIME	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
OCT												
13...	1100	1	<10	10	<10	<10	820	20	180	.0	<10	20
SEP												
25...	1130	0	<10	<10	<10	<10	1900	<10	280	.0	<10	20

DATE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT											
13...	0	.00	.0	0	.0	.0	.0	--	.0	.00	.0
SEP											
25...	0	--	.0	0	.0	.1	.0	.0	.0	--	.0

DATE	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT											
13...	--	.0	.0	.0	--	--	--	--	--	0	--
SEP											
25...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01439960 FLAT BROOK AT WALLPACK CENTER, NJ

LOCATION.--Lat 41°09'25", long 74°52'39", Sussex County, Hydrologic Unit 02040104, at bridge at Wallpack Center, 1.3 mi (2.1 km) southeast of Shapnack Island, 3.3 mi (5.3 km) downstream from Little Flat Brook, and 3.8 mi (6.1 km) northeast of Buck Bar.

DRAINAGE AREA.--51.3 mi² (132.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutirents were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
13...	1300	151	7.8	10.0	1	10.1	--	50	33	58
NOV										
15...	1310	88	7.4	6.0	1	--	1.0	20	8	36
FEB										
16...	1310	175	--	--	2	--	--	--	--	74
MAR										
30...	1300	69	--	--	1	--	--	--	--	25
APR										
26...	1300	134	8.2	12.5	1	11.2	2.0	50	2	57
MAY										
17...	1310	71	--	--	2	--	--	--	--	29
JUN										
15...	1145	119	7.7	14.0	1	10.5	1.0	<20	20	61

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT										
13...	17	3.8	4.3	.9	--	18	6.5	--	84	4
NOV										
15...	10	2.7	2.2	.8	--	15	4.2	--	65	4
FEB										
16...	22	4.6	5.1	.7	--	18	9.3	--	91	2
MAR										
30...	7.2	1.7	2.0	.5	--	12	3.2	--	50	13
APR										
26...	17	3.5	4.3	.8	--	16	6.6	--	94	0
MAY										
17...	8.4	2.0	2.3	.6	.0	12	2.3	3.9	50	12
JUN										
15...	18	3.8	4.2	.8	--	15	7.3	--	89	1

01439960 FLAT BROOK AT WALLPACK CENTER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
13...	.03	.00	.02	.21	.23	.26	.01	.00	7.1
NOV									
15...	.06	.00	.00	.36	.36	.42	.01	.00	13
FEB									
16...	--	--	--	--	--	--	--	--	1.0
MAR									
30...	.07	.00	.01	.10	.11	.18	.01	.00	3.6
APR									
26...	.05	.00	.00	.11	.11	.16	.01	.00	7.6
MAY									
17...	.06	.00	.01	.28	.29	.35	.01	.01	11
JUN									
15...	.13	.00	.02	.25	.27	.40	.01	.00	8.5

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS, (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY												
17...	1310	70	20	0	0	0	4	80	30	0	20	1

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'09", Sussex County, Hydrologic Unit 02040104, on right bank 1.0 mi (1.6 km) upstream from Flatbrookville, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--65.1 mi² (168.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1923 to current year.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1968, 1969, 1971-75.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1432: 1924(M), 1928(M), 1929, 1930(M), 1932, 1933(M), 1936, 1938(M), 1939-40, 1949(M), 1952-53(M).

GAGE.--Water-stage recorder. Concrete control since Aug. 19, 1929. Datum of gage is 347.73 ft (105.988 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 6, 1926, nonrecording gage at same site and datum.

REMARKS.--Discharge records poor. Flow occasionally regulated by ponds above station.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--55 years, 109 ft³/s (3.087 m³/s) 22.74 in/yr (578 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 9	1730	*2360	66.8	6.52	1.987	Mar. 27	2300	1380	39.1	5.06	1.542
Jan. 26	2200	838	23.7	4.08	1.244	May 18	0915	724	20.5	3.85	1.173
Mar. 24	0345	779	22.1	3.96	1.207						

Minimum discharge, 11 ft³/s (0.312 m³/s) Sept. 29, gage height, 1.79 ft (0.546 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft³/s (271 m³/s) Aug. 19, 1955 (gage height, 12.58 ft or 3.834 m, from high-water mark in gage house) from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s (0.10 m³/s) Sept. 25, 26, 1964, Sept. 11, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	43	398	138	190	64	393	64	129	43	35	21
2	101	42	382	131	163	62	340	61	112	38	31	20
3	67	41	263	116	155	56	281	59	132	43	27	18
4	47	41	218	104	141	65	256	59	259	85	29	18
5	39	39	188	107	131	67	238	77	156	77	27	16
6	36	37	185	105	125	66	212	111	119	56	30	15
7	33	47	157	100	136	64	220	96	106	45	51	14
8	32	378	130	118	133	58	204	86	207	41	88	14
9	80	424	125	1400	133	51	172	148	234	37	60	16
10	160	250	106	916	131	54	155	205	201	36	42	16
11	92	316	90	486	136	54	144	141	140	33	32	16
12	69	246	92	323	106	57	145	113	119	32	31	15
13	60	185	98	264	99	71	133	104	124	30	35	14
14	60	149	127	247	98	163	123	134	123	29	31	13
15	163	136	399	218	93	473	110	488	99	32	27	14
16	136	120	339	180	93	335	106	383	85	32	24	15
17	123	110	245	170	87	249	101	536	77	33	24	16
18	115	165	213	172	84	202	98	675	76	35	22	16
19	99	131	200	155	82	181	96	527	118	31	19	36
20	145	110	173	146	76	216	132	376	104	28	19	29
21	117	100	300	148	89	263	135	291	81	26	19	22
22	92	102	443	134	94	552	111	234	76	25	18	19
23	79	97	279	126	94	616	97	196	65	25	17	24
24	68	100	227	122	87	692	89	245	57	25	16	23
25	60	91	296	143	69	561	82	365	52	25	16	20
26	56	200	360	567	67	462	82	254	50	25	16	18
27	57	196	232	715	64	994	80	197	52	25	17	16
28	52	144	193	445	62	1070	79	170	52	29	17	16
29	52	125	165	312	---	785	72	150	46	29	17	13
30	45	128	155	245	---	609	68	137	49	25	16	13
31	43	---	148	207	---	468	---	129	---	29	17	---
TOTAL	2413	4293	6926	8760	3018	9680	4554	6811	3300	1104	870	536
MEAN	77.8	143	223	283	108	312	152	220	110	35.6	28.1	17.9
MAX	163	424	443	1400	190	1070	393	675	259	85	88	36
MIN	32	37	90	100	62	51	68	59	46	25	16	13
CFSM	1.20	2.20	3.43	4.35	1.66	4.79	2.34	3.38	1.69	.55	.43	.28
IN.	1.38	2.45	3.96	5.01	1.72	5.53	2.60	3.89	1.89	.63	.50	.31

CAL YR 1977 TOTAL 45049.3 MEAN 123 MAX 1400 MIN 7.8 CFSM 1.89 IN 25.74
WTR YR 1978 TOTAL 52265.0 MEAN 143 MAX 1400 MIN 13 CFSM 2.20 IN 29.87

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
13...	1330	60	143	7.8	10.0	1	9.2	--	70	27
NOV										
15...	1345	138	111	7.6	6.0	1	12.7	--	20	5
FEB										
16...	1350	103	168	8.0	2.0	1	14.3	3.0	20	8
MAR										
30...	1330	589	81	7.2	6.0	2	13.4	2.0	20	5
APR										
26...	1330	83	174	8.1	14.0	1	11.0	<1.0	80	2
MAY										
17...	1345	518	74	7.2	11.0	3	10.3	1.0	230	920
JUN										
15...	1310	98	115	8.3	16.0	1	11.4	2.0	20	79
JUL										
20...	1340	29	201	8.2	24.0	0	10.1	1.0	20	>2400
AUG										
09...	1350	53	142	8.5	23.0	1	10.8	2.0	20	350

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT										
13...	53	15	3.7	4.0	.9	.0	18	5.8	3.5	78
NOV										
15...	48	14	3.2	3.0	.8	--	16	5.3	--	65
FEB										
16...	68	20	4.5	4.6	.7	--	18	8.3	--	95
MAR										
30...	33	10	1.9	3.5	.6	--	12	3.8	--	60
APR										
26...	74	22	4.6	5.8	.7	--	18	10	--	107
MAY										
17...	31	9.1	2.0	2.7	.7	.0	11	2.3	3.9	50
JUN										
15...	61	18	3.8	3.8	.8	--	15	6.8	--	92
JUL										
20...	88	25	6.3	5.6	1.0	--	16	9.5	--	126
AUG										
09...	62	18	4.2	4.0	1.1	--	13	7.3	--	79

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
13...	9	.01	.00	.02	.16	.18	.19	.01	.00	8.2
NOV										
15...	0	.08	.00	.00	.59	.59	.67	.01	.00	12
FEB										
16...	4	--	--	--	--	--	--	--	--	2.7
MAR										
30...	0	.10	.00	.01	.17	.18	.28	.00	.00	4.3
APR										
26...	0	.08	.00	.02	.15	.17	.25	.00	.00	7.0
MAY										
17...	18	.07	.01	.01	.58	.59	.67	.02	.00	12
JUN										
15...	3	.06	.00	.01	.23	.24	.30	.01	.00	8.1
JUL										
20...	9	--	--	.10	.30	.40	--	--	--	7.9
AUG										
09...	0	--	--	<.10	--	--	--	--	--	6.4

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 13...	1330	70	2	30	1	0	0	38
MAY 17...	1345	50	--	2	0	0	0	3

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 13...	60	16	10	<.5	8	0	10	0
MAY 17...	80	--	40	--	0	--	20	1

01440200 DELAWARE RIVER BELOW TOCKS ISLAND DAMSITE, NEAR DELAWARE WATER GAP, PA

LOCATION.--Lat 41°00'42", long 75°05'09", Warren County, Hydrologic Unit 02040105, on left bank 40 ft (12 m) streamward from River Road, 1.0 mi (1.6 km) downstream from Tocks Island, 3.7 mi (6.0 km) northeast of Delaware Water Gap, PA, 4.0 mi (6.4 km) upstream from bridge on Interstate Highway 80, and at mile 216.1 (347.7 km).

DRAINAGE AREA.--3,850 mi² (9,970 km²) approximately.

PERIOD OF RECORD.--
WATER DISCHARGE: May 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 293.64 ft (89.501 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records fair. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--14 years, 6,592 ft³/s (186.7 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 74,100 ft³/s (2,099 m³/s) Jan. 10, maximum gage height, 22.99 ft (7.007 m) Jan. 11, result of ice jam; minimum daily discharge, 1,430 ft³/s (40.5 m³/s) Sept. 27.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 30, 1973, gage height, 23.82 ft (7.260 m); minimum daily, 580 ft³/s (16.4 m³/s) July 7, 8, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8570	5860	8970	7700	14500	3400	27900	4300	6130	1960	2720	1750
2	12900	5580	19200	7000	12500	3200	30400	4000	5440	1780	2010	2040
3	19400	5400	21300	6600	11000	3100	31700	3600	5010	1850	1800	1960
4	13500	5370	18800	6200	9700	3400	26900	3200	4940	2070	1930	1760
5	10200	4550	15800	6000	7900	2900	23800	3500	4840	2840	2150	1690
6	8450	4450	14200	6100	7300	2800	24900	4800	4910	5470	2330	1910
7	7570	4840	13000	6300	6700	3800	23700	5200	4500	3710	2810	1780
8	7170	7850	11700	6000	7150	3400	24700	5010	5220	3040	5530	1800
9	6500	15100	10400	30700	7750	2800	22300	5120	7020	2240	4980	1850
10	11600	15400	9500	66100	7100	3000	18900	6980	8530	2040	3980	1780
11	13900	15900	9130	46600	6300	3000	16300	8020	6450	2330	3380	2010
12	10400	24200	6320	33700	5750	2900	15900	6450	5440	2240	2690	1860
13	8410	19800	7350	23100	5200	2600	17700	6170	5470	2120	1880	2150
14	7530	15700	7450	18600	6100	4200	16800	7660	5440	1960	2100	1750
15	8490	13400	12500	17500	5600	8700	15000	11700	5360	2040	2630	2040
16	13100	11200	21500	15400	5600	11900	12500	14800	4740	1910	2270	2120
17	13300	9620	19800	11800	5600	14300	11100	17900	3920	2040	2150	1960
18	33400	9330	16700	11000	5200	12700	9960	22600	3200	2300	1780	2300
19	27600	9130	15100	9500	4500	11300	8650	24900	3130	2350	1710	3040
20	25800	8170	13500	8600	4000	9220	7980	22500	3550	2210	1680	3500
21	25300	7350	13100	7200	4500	10200	9650	18100	3350	2440	1690	2780
22	20000	6820	15800	7000	4550	17900	9260	15300	3110	2840	1780	2380
23	16200	6640	14700	6900	4700	26800	8650	12700	3040	2300	1690	2180
24	13700	6250	12600	6800	4300	29300	7660	10700	3320	2120	1990	1490
25	12000	5900	10900	7100	4000	27000	7250	12100	2440	2220	1850	1460
26	10500	6360	13100	12000	3100	22800	6740	11400	2150	1830	2070	1730
27	9620	8650	12300	36000	2800	27200	5750	9420	2270	1830	1910	1430
28	8610	7690	12000	39000	3400	43900	5300	7610	2440	1960	2120	2300
29	7850	7070	10000	23000	---	40200	5000	6630	2300	2100	2150	2720
30	6530	6780	8800	19000	---	35900	4700	5960	2040	1800	2270	2900
31	5930	---	9000	16000	---	31000	---	5960	---	2180	2120	---
TOTAL	404030	280360	404520	524500	176800	424820	457050	304290	129700	72120	74150	62420
MEAN	13030	9345	13050	16920	6314	13700	15240	9816	4323	2326	2392	2081
MAX	33400	24200	21500	66100	14500	43900	31700	24900	8530	5470	5530	3500
MIN	5930	4450	6320	6000	2800	2600	4700	3200	2040	1780	1680	1430

CAL YR 1977 TOTAL 3045030 MEAN 8343 MAX 67500 MIN 1200
WTR YR 1978 TOTAL 3314760 MEAN 9082 MAX 66100 MIN 1430

01443000 DELAWARE RIVER AT PORTLAND, PA

LOCATION.--Lat 40°55'26", long 75°05'46", Northampton County, Hydrologic Unit 02040105, at walkbridge connecting Portland, PA and Columbia, NJ, and 0.5 mi (0.8 km) upstream of Paulins Kill.

DRAINAGE AREA.--4,165 mi² (10,787 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
11...	1200	68	6.8	10.0	4	9.9	1.0	<20	240	22
NOV										
28...	1030	63	7.1	.0	1	--	--	170	11	23
FEB										
15...	1200	75	7.1	1.0	2	13.8	2.0	220	2	26
MAR										
29...	1200	54	7.1	6.0	10	11.6	2.0	310	49	15
APR										
25...	1150	62	7.1	13.0	2	11.5	1.0	20	540	21
MAY										
16...	1200	60	7.0	11.5	3	10.3	2.0	230	180	20
JUL										
24...	1020	90	8.1	27.0	0	7.5	--	50	<2	26
AUG										
16...	1330	87	8.8	27.0	0	8.0	1.0	<20	7	27

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT										
11...	6.7	1.3	2.6	1.1	--	12	3.9	--	45	10
NOV										
28...	7.0	1.4	2.9	.9	--	11	4.3	--	42	3
FEB										
15...	7.8	1.5	3.4	.9	--	12	5.2	--	50	5
MAR										
29...	4.3	1.0	2.5	.8	--	10	3.6	--	42	16
APR										
25...	6.2	1.3	2.8	.8	--	12	6.0	--	45	0
MAY										
16...	6.0	1.2	3.0	.8	.0	11	4.2	3.8	40	11
JUL										
24...	8.0	1.5	3.5	1.0	--	10	5.6	--	52	9
AUG										
16...	8.1	1.6	4.0	1.1	--	9.4	4.1	--	60	0

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	.27	.00	.02	.27	.29	.56	.03	.01	6.3
NOV 28...	.26	.00	.01	.18	.19	.45	.02	.00	10
FEB 15...	--	--	--	--	--	--	--	--	1.0
MAR 29...	.33	.00	.03	.85	.88	1.2	.03	.00	4.0
APR 25...	.22	.00	.01	.16	.17	.39	.01	.00	7.2
MAY 16...	.21	.01	.04	.34	.38	.60	.01	.00	6.3
JUL 24...	--	--	.10	.30	.40	--	--	--	--
AUG 16...	--	--	<.10	--	--	--	--	--	2.2

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 16...	1200	40	10	0	0	0	40	80	70	4	30	0

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'44", long 74°57'15", Warren County, Hydrologic Unit 02040105, on right bank 1,200 ft (370 m) upstream from bridge on State Highway 94 in Blairstown, 1,400 ft (430 m) upstream from Blairs Creek, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to September 1976, October 1977 to September 1978.
CHEMICAL ANALYSES: Water years 1921, 1925, 1957-60, 1962-63, 1976 to current year.

REVISED DISCHARGE RECORDS.--WSP 971: 1942. WSP 1382: 1952-53(M).

GAGE.--Water-stage recorder and concrete control (Aug. 1, 1931, to Aug. 3, 1941, concrete control at site 280 ft or 85 m, downstream). Datum of gage is 335.86 ft (102.370 m) National Geodetic Vertical Datum of 1929. Prior to May 24, 1922, nonrecording gage and May 24, 1922, to July 31, 1931, water-stage recorder, at site of former highway bridge 1,300 ft (400 m) downstream at different datum. Aug. 1, 1931 to July 28, 1939, water-stage recorder at site 100 ft (30 m) downstream at present datum.

REMARKS.--Discharge good. Diurnal fluctuation caused by powerplant above station and flow regulated slightly by Swartswood Lake. Water-quality samples collected at bridge 1,200 ft (370 m) downstream from gage at high flows.

COOPERATION.--Field data (dissolved oxygen, water temperature, pH) and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years, (1922-76, 1978) 193 ft³/s (5.466 m³/s), 20.80 in/yr (528 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 25	2245	1090	30.9	3.57	1.088	Mar. 23	0245	1260	35.7	4.09	1.247
Jan. 9	1800	*1770	50.1	5.28	1.609	Mar. 27	2400	1680	47.6	5.11	1.558
Jan. 27	0030	1430	40.5	4.57	1.393	May 19	0130	1230	34.8	3.97	1.210

Minimum discharge, 31 ft³/s (0.878 m³/s) Sept. 14, gage height, 1.54 ft (0.469 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft³/s (248 m³/s) Aug. 19, 1955, gage height, 11.12 ft (3.389 m) from high-water mark in gage house; minimum, about 2.8 ft³/s (0.08 m³/s) Nov. 1, 1922; minimum daily, 5 ft³/s (0.14 m³/s) Aug. 13, 14, 1930.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	91	626	294	340	119	599	117	247	73	62	60
2	172	92	627	278	307	113	504	113	221	66	50	54
3	152	90	471	251	288	112	423	108	212	71	46	46
4	124	87	396	227	257	119	397	106	283	118	51	43
5	99	93	359	230	234	109	381	127	239	113	58	38
6	93	88	350	218	219	110	349	150	202	94	61	36
7	89	103	312	211	216	109	354	143	192	79	217	35
8	82	363	264	236	259	105	339	129	287	73	317	37
9	153	459	248	1350	235	102	298	196	334	68	249	45
10	260	350	216	1170	213	104	268	208	303	63	173	42
11	199	371	202	787	197	103	257	177	235	59	129	40
12	162	316	186	548	195	111	268	158	203	56	150	39
13	142	275	183	435	194	145	249	150	195	54	187	40
14	134	237	235	416	194	273	227	188	187	52	144	33
15	228	218	625	378	181	921	208	326	161	80	112	35
16	227	203	652	330	171	839	196	343	143	72	90	37
17	213	203	492	309	171	538	187	616	130	64	77	39
18	195	280	443	305	166	423	189	1020	123	58	69	45
19	186	241	424	286	163	377	186	1140	146	54	62	120
20	240	209	388	251	147	458	227	874	154	50	57	125
21	217	194	529	277	156	575	234	580	136	49	51	87
22	190	200	775	299	142	1080	207	442	151	47	48	74
23	168	201	545	255	140	1210	184	369	132	44	46	72
24	146	206	457	228	135	1200	169	442	113	42	43	62
25	133	194	754	259	133	1040	164	684	97	42	43	55
26	124	323	913	904	130	892	157	504	88	42	40	48
27	121	343	549	1220	124	1430	148	397	87	49	42	42
28	110	276	436	902	118	1500	139	345	85	51	47	41
29	104	250	374	636	---	1240	132	304	78	48	45	38
30	96	257	338	472	---	1030	126	278	80	54	43	37
31	94	---	316	393	---	776	---	252	---	64	51	---
TOTAL	4762	6813	13685	14355	5425	17263	7766	10986	5244	1949	2860	1545
MEAN	154	227	441	463	194	557	259	354	175	62.9	92.3	51.5
MAX	260	459	913	1350	340	1500	599	1140	334	118	317	125
MIN	82	87	183	211	118	102	126	106	78	42	40	33
CFSM	1.22	1.80	3.50	3.68	1.54	4.42	2.06	2.81	1.39	.50	.73	.41
IN.	1.41	2.01	4.04	4.24	1.60	5.10	2.29	3.24	1.55	.58	.84	.46

CAL YR 1977 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1978 TOTAL 92653 MEAN 254 MAX 1500 MIN 33 CFSM 2.02 IN 27.35

DELAWARE RIVER BASIN

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
11...	1040	199	370	7.9	10.0	1	10.7	1.0	<20	540
NOV										
01...	1030	93	349	8.5	8.0	1	6.9	1.0	50	240
FEB										
15...	1045	189	350	8.1	1.0	2	14.0	2.0	330	13
MAR										
29...	1045	1260	207	7.8	6.5	4	11.1	1.0	80	33
APR										
25...	1030	161	341	8.4	11.5	2	12.5	1.0	50	48
MAY										
16...	1045	303	338	8.1	12.5	1	10.2	2.0	330	240
JUN										
20...	1250	157	361	8.2	20.5	1	8.2	1.0	130	240
JUL										
18...	1030	E58	460	8.5	22.0	0	6.4	1.0	110	94
AUG										
29...	1015	46	415	8.1	21.5	1	6.2	--	330	33

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT										
11...	150	40	12	15	2.1	--	36	28	--	208
NOV										
01...	150	38	13	15	1.9	--	33	26	--	207
FEB										
15...	150	36	14	13	1.4	--	28	25	--	193
MAR										
29...	77	20	6.6	10	1.2	--	17	18	--	124
APR										
25...	150	37	14	13	1.3	--	25	27	--	170
MAY										
16...	150	39	13	14	1.3	.0	25	27	3.8	195
JUN										
20...	150	36	14	15	1.4	--	19	27	--	225
JUL										
18...	170	42	16	17	1.7	--	23	31	--	273
AUG										
29...	180	44	18	17	2.1	--	25	31	--	262

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
11...	6	.53	.01	.03	.41	.44	.98	.06	.03	6.4
NOV										
01...	0	.42	.00	.01	.55	.56	.98	.03	.01	8.3
FEB										
15...	3	--	--	--	--	--	--	--	--	3.9
MAR										
29...	12	.60	.01	.06	.63	.69	1.3	.03	.01	3.3
APR										
25...	2	.42	.01	.02	.25	.27	.70	.02	.00	6.3
MAY										
16...	15	.44	.03	.16	.40	.56	1.0	.06	.01	7.9
JUN										
20...	5	.40	.01	.04	.59	.63	1.0	.05	.03	8.2
JUL										
18...	4	--	--	.10	.50	.60	1.6	--	--	5.4
AUG										
29...	4	--	--	<.10	--	1.1	--	--	--	4.6

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 16...	1045	20	0	0	0	0	2	70	70	0	20	1

01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 75°02'25", Warren County, Hydrologic Unit 02040105, on left bank 100 ft (30 m) upstream from bridge on Hainesburg-Mount Vernon Road, 2.2 mi (3.5 km) northeast of Hainesburg, 2.4 mi (3.9 km) upstream from mouth, and 4.2 mi (6.8 km) west of Blairstown.

DRAINAGE AREA.--7.16 mi² (18.54 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1966 to current year.

REVISED DISCHARGE RECORDS.--WDR-NJ-77-2: 1976.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 618 ft (188 m), from topographic map.

REMARKS.--Discharge records good. Complete regulation by the Jersey Central Power and Light Co., at Yards Creek Reservoir above station.

AVERAGE DISCHARGE.--12 years, 11.2 ft³/s (0.317 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 175 ft³/s (4.96 m³/s) Jan. 10, gage height, 3.15 ft (0.960 m); minimum daily, 0.57 ft³/s (0.02 m³/s) Sept. 14.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft³/s (9.63 m³/s) Feb. 24, 1977, gage height, 3.92 ft (1.195 m); no flow Sept. 12, 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	2.2	37	24	34	3.3	20	2.3	26	3.1	1.4	1.5
2	3.1	4.3	46	20	31	3.5	18	2.4	20	2.0	1.1	1.3
3	2.1	4.3	48	24	35	3.5	19	2.4	14	2.6	1.0	1.3
4	1.9	4.5	42	25	51	3.5	24	2.0	12	2.8	1.4	1.1
5	1.6	4.5	42	22	69	5.1	28	2.7	11	2.1	1.3	1.0
6	1.7	4.0	45	21	60	3.2	30	2.7	11	2.1	1.2	.94
7	1.6	6.6	45	21	65	3.3	30	2.4	10	2.0	2.7	.94
8	1.6	8.4	42	26	44	3.3	20	2.2	4.0	2.1	2.4	.87
9	7.6	8.4	27	75	34	3.3	18	4.9	4.1	3.6	1.1	1.1
10	4.0	15	4.3	135	25	3.5	18	3.2	3.3	5.1	.98	.91
11	3.1	16	4.3	116	20	3.5	20	3.0	3.0	4.9	1.2	.83
12	2.7	16	5.1	86	19	3.5	18	2.7	2.7	4.0	1.3	.87
13	2.3	15	4.5	54	16	4.1	12	3.0	3.5	3.6	1.3	.67
14	4.0	13	12	5.1	16	15	13	12	2.8	4.0	1.0	.57
15	5.6	13	27	4.3	18	27	13	10	2.6	4.7	.98	.73
16	3.5	13	41	5.8	18	25	12	16	4.7	4.1	.98	.77
17	3.1	15	39	4.5	18	23	11	36	5.1	4.3	2.0	.77
18	2.8	16	39	4.7	17	22	11	50	2.5	4.0	1.4	1.0
19	3.4	15	34	6.0	16	20	9.0	143	2.3	3.8	1.1	3.6
20	2.9	13	31	3.8	16	20	7.0	58	4.7	3.6	1.1	1.1
21	2.5	13	37	3.8	18	22	6.8	47	11	3.6	.98	.87
22	2.5	16	33	3.3	20	27	6.5	42	11	3.8	.98	1.2
23	2.4	24	29	3.1	18	27	6.0	45	11	3.6	1.3	1.2
24	2.0	23	27	2.8	16	25	5.6	53	11	3.1	1.3	.87
25	2.0	21	32	16	15	24	5.6	50	11	1.8	1.4	.73
26	2.1	26	26	42	13	25	5.6	36	10	.87	1.4	.67
27	2.1	21	29	28	11	33	6.3	4.9	11	1.2	1.4	1.3
28	2.1	21	31	31	3.8	27	6.3	4.1	11	1.5	1.8	1.5
29	2.2	24	41	27	---	24	2.7	3.5	6.0	1.3	1.4	1.6
30	2.0	24	26	29	---	22	2.5	7.6	6.3	1.3	1.4	1.6
31	1.7	---	25	28	---	21	---	26	---	1.7	2.0	---
TOTAL	85.9	420.2	951.2	897.2	736.8	475.6	404.9	680.0	248.6	92.27	42.30	33.41
MEAN	2.77	14.0	30.7	28.9	26.3	15.3	13.5	21.9	8.29	2.98	1.36	1.11
MAX	7.6	26	48	135	69	33	30	143	26	5.1	2.7	3.6
MIN	1.6	2.2	4.3	2.8	3.8	3.2	2.5	2.0	2.3	.87	.98	.57

CAL YR 1977 TOTAL 5161.77 MEAN 14.1 MAX 225 MIN .49
WTR YR 1978 TOTAL 5068.38 MEAN 13.9 MAX 143 MIN .57

01444100 PAULINS KILL AT MOUTH AT COLUMBIA, NJ

LOCATION.--Lat 40°55'14", long 75°05'18", Warren County, Hydrologic Unit 02040206, at bridge on U.S. Route 46 in Columbia, 2.3 mi (3.7 km) southwest of Polkville, and 3.2 mi (5.2 km) southeast of Knowlton.

DRAINAGE AREA.--177 mi² (458 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: November 1977 to September 1978.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 11...	1330	--	338	7.8	10.0	2	12.2	--	20	240
NOV 01...	1300	--	335	8.3	8.0	1	13.0	1.0	170	46
FEB 15...	1310	--	326	7.9	1.5	2	13.7	3.0	80	8
MAR 29...	1310	E3000	197	7.9	7.5	5	10.2	<1.0	130	920
APR 25...	1300	--	326	8.3	13.0	3	10.9	1.0	230	240
MAY 16...	1330	670	304	7.8	12.0	1	10.4	2.0	1100	170
JUN 20...	1100	--	341	8.0	21.0	1	8.3	--	330	350
JUL 18...	1330	--	395	8.5	22.0	0	8.8	2.0	790	350
AUG 29...	1140	--	395	8.1	21.5	1	8.3	--	1300	23

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 11...	140	38	11	13	2.0	.0	37	24	5.7	195
NOV 01...	150	37	13	13	1.7	--	32	22	--	196
FEB 15...	140	35	13	12	1.2	--	27	22	--	193
MAR 29...	77	20	6.6	8.8	1.1	--	18	15	--	130
APR 25...	150	36	14	11	1.2	--	25	23	--	161
MAY 16...	130	35	11	12	1.3	--	25	22	--	173
JUN 20...	150	36	14	12	1.3	--	19	22	--	202
JUL 18...	160	39	15	14	1.6	--	23	25	--	242
AUG 29...	170	41	17	14	1.9	--	25	26	--	238

01444100 PAULINS KILL AT MOUTH AT COLUMBIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	0	.51	.01	.02	.44	.46	.98	.06	.02	8.5
NOV 01...	3	.46	.00	.01	.33	.34	.80	.03	.01	8.1
FEB 15...	17	--	--	--	--	--	--	--	--	1.3
MAR 29...	3	.60	.01	.04	.33	.37	.98	.03	.01	7.9
APR 25...	2	.46	.01	.03	.27	.30	.77	.02	.00	5.4
MAY 16...	6	.44	.02	.11	.37	.48	.94	.04	.01	10
JUN 20...	6	.52	.01	.09	.53	.62	1.2	.05	.02	10
JUL 18...	0	--	--	.30	--	--	--	--	--	5.5
AUG 29...	1	--	--	<.10	--	.40	--	--	--	4.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 11...	1330	10	1	50	0	0	0	3

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 11...	80	0	30	<.5	4	0	10	3

01444800 DELAWARE RIVER NEAR RICHMOND, PA (BELVIDERE, NJ)

LOCATION.--Lat 40°49'44", long 75°05'06", Warren County, NJ, Hydrologic Unit 02040104, at bridge at Belvidere, 200 ft (61 m) upstream from Pequest River, and 4.1 mi (6.5 km) southwest of Buttzville.

DRAINAGE AREA.--4,380 mi² (11,344 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 05...	1145	70	7.3	14.0	2	10.4	--	170	34	23
NOV 28...	1130	74	7.4	.5	15	13.9	--	130	8	30
FEB 01...	1300	74	7.3	.5	2	14.3	--	140	14	27
MAR 22...	1250	87	7.2	6.0	4	12.0	1.0	40	49	29
APR 20...	1020	78	7.2	10.0	2	11.7	1.0	20	49	26
MAY 10...	1245	83	7.3	13.0	15	10.4	<1.0	490	26	31
JUL 24...	1240	105	8.4	29.0	0	7.7	--	80	280	34
AUG 16...	1000	218	8.9	27.5	0	7.3	1.0	20	5	34

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 05...	6.9	1.5	2.8	1.0	--	12	3.7	--	46	5
NOV 28...	8.8	1.9	3.3	.9	--	12	4.4	--	50	2
FEB 01...	7.9	1.7	3.3	.9	--	12	4.8	--	48	7
MAR 22...	8.3	1.9	4.5	1.1	--	13	8.3	--	62	12
APR 20...	7.8	1.7	3.7	.8	--	11	4.8	--	56	1
MAY 10...	9.2	2.0	3.8	.8	.0	12	5.6	1.6	57	9
JUL 24...	10	2.1	4.6	1.1	--	11	6.5	--	53	8
AUG 16...	10	2.2	5.4	1.1	--	13	5.7	--	70	0

01444800 DELAWARE RIVER NEAR RICHMOND, PA (BELVIDERE, NJ)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
05...	.26	.00	.01	.37	.38	.64	.02	.01	6.8
NOV									
28...	.28	.00	.00	.09	.09	.37	.02	.00	9.1
FEB									
01...	.45	.00	.02	.17	.19	.64	.01	.00	1.6
MAR									
22...	.43	.01	.02	.47	.49	.93	.03	.01	7.4
APR									
20...	.32	.00	.00	.51	.51	.83	.02	.00	8.5
MAY									
10...	.20	.01	.03	.45	.48	.69	.02	.00	7.2
JUL									
24...	--	--	.10	.70	.80	1.8	--	--	--
AUG									
16...	--	--	<.10	--	.60	--	--	--	2.9

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY												
10...	1245	20	10	0	0	0	44	50	30	7	30	0

01445430 PEQUEST RIVER AT TOWNSBURY, NJ

LOCATION.--Lat 40°51'06", long 74°56'02", Warren County, Hydrologic Unit 02040105, on left upstream abutment of highway bridge in Townsbury and 2.1 mi (3.4 km) upstream from Furnace Brook.

DRAINAGE AREA.--92.5 mi² (239.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (146 m), from topographic map.

REMARKS.--Discharge records fair.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 21	1800	690	19.5	3.25	0.991	Mar. 22	2215	642	18.2	3.17	0.966
Jan. 9	1315	990	28.0	3.75	1.143	Mar. 27	1800	696	19.7	3.26	0.994
Jan. 26	1715	*1030	29.2	3.81	1.161	May 19	0500	684	19.4	3.24	0.988
Mar. 15	2045	678	19.2	3.23	0.985	Aug. 8	0630	666	18.9	3.21	0.978

Minimum discharge, 25 ft³/s (0.71 m³/s) July 26, 27, gage height, 1.30 ft (0.396 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) Jan. 26, 1978, gage height, 3.81 ft (1.161 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 16, 1977, gage height, 1.11 ft (0.338 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	58	410	215	260	88	346	89	193	52	49	51
2	89	60	350	212	240	86	330	85	172	48	44	45
3	83	60	318	206	200	84	326	83	174	54	36	41
4	68	58	278	199	180	82	294	83	245	80	38	38
5	61	57	250	168	168	80	278	100	205	80	45	37
6	54	56	290	168	180	79	250	117	169	68	48	37
7	38	70	243	165	180	78	246	112	152	57	281	35
8	35	180	195	172	170	77	236	105	186	52	550	36
9	89	199	180	780	165	77	218	150	177	49	359	48
10	130	172	150	500	162	76	194	145	155	45	242	42
11	103	186	120	350	160	76	182	121	137	41	163	38
12	80	152	125	310	158	80	188	110	122	37	166	38
13	59	130	130	280	155	110	175	105	122	34	152	40
14	51	113	180	260	150	200	162	243	118	34	134	36
15	128	103	400	240	148	560	150	290	108	51	111	35
16	110	96	350	220	145	475	141	246	96	78	94	37
17	100	103	300	210	140	314	145	363	92	61	83	40
18	90	152	290	210	135	310	155	475	89	51	74	42
19	95	127	298	200	130	298	160	595	87	42	66	125
20	120	111	286	160	125	378	180	490	89	37	61	120
21	110	101	460	170	120	455	180	422	85	35	56	78
22	90	108	480	190	115	575	160	350	125	33	51	61
23	80	137	406	180	110	595	150	290	108	30	48	57
24	75	142	354	160	105	585	140	374	89	28	44	51
25	72	125	450	495	100	500	130	490	78	27	42	45
26	71	240	430	732	95	480	114	394	74	26	42	42
27	71	195	390	600	92	780	112	314	74	26	40	40
28	66	180	300	500	90	732	107	266	68	36	44	38
29	60	165	240	430	---	600	100	232	61	36	46	36
30	58	175	210	360	---	475	94	212	57	34	42	35
31	57	---	210	300	---	398	---	200	---	42	45	---
TOTAL	2430	3811	9073	9342	4178	9783	5643	7651	3707	1404	3296	1444
MEAN	78.4	127	293	301	149	316	188	247	124	45.3	106	48.1
MAX	130	240	480	780	260	780	346	595	245	80	550	125
MIN	35	56	120	160	90	76	94	83	57	26	36	35
CFSM	.85	1.37	3.17	3.25	1.61	3.42	2.03	2.67	1.34	.49	1.15	.52
IN.	.98	1.53	3.65	3.76	1.68	3.93	2.27	3.08	1.49	.56	1.33	.58

CAL YR 1977 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1978 TOTAL 61762 MEAN 169 MAX 780 MIN 26 CFSM 1.83 IN 24.84

01445500 PEQUEST RIVER AT PEQUEST, NJ

LOCATION.--Lat 40°49'43", long 74°58'45", Warren County, Hydrologic Unit 02040105, on right bank at Pequest, 100 ft (30 m) upstream from Lehigh and Hudson River Railway Bridge, and 300 ft (91 m) downstream from Furnace Brook.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1958 to current year.

REVISED DISCHARGE RECORDS.--WSP 1902: 1940(M), 1945, 1955(M), 1957, 1959(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft (121.548 m) National Geodetic Vertical Datum of 1929. Prior to June 22, 1926, nonrecording gage at site 10 ft (3 m) upstream at same datum.

REMARKS.--Discharge records good except those for periods of no gage-height record, which are fair.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--57 years, 153 ft³/s (4.333 m³/s), 19.23 in/yr (488 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 21	1915	696	19.7	3.27	0.997	Mar. 22	2345	760	21.5	3.41	1.039
Jan. 9	1215	954	27.0	3.83	1.167	Mar. 27	1815	1000	28.3	3.93	1.198
Jan. 26	1115	*1030	29.2	3.98	1.213	May 19	0615	714	20.2	3.31	1.009
Mar. 15	2130	805	22.8	3.51	1.070						

Minimum daily discharge, 45 ft³/s (1.27 m³/s) Sept. 6, 14, 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft³/s (51.3 m³/s) Mar. 14, 1936, gage height, 4.97 ft (1.515 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 17-22, Dec. 10, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	74	448	248	330	116	489	119	234	77	76	60
2	107	75	357	248	301	112	431	114	211	72	64	56
3	105	75	323	228	266	112	385	112	224	80	66	50
4	92	74	291	208	228	109	361	112	298	107	70	49
5	83	71	284	202	218	105	345	131	252	103	76	47
6	80	71	323	202	234	105	323	147	211	90	200	45
7	63	88	273	196	221	105	319	139	196	82	400	46
8	58	231	228	221	231	105	301	131	228	75	430	60
9	158	224	208	805	224	101	280	184	218	72	300	58
10	142	187	178	521	208	101	255	172	193	69	200	50
11	116	202	153	439	193	101	238	150	172	66	200	50
12	98	169	158	385	193	112	248	134	155	62	190	52
13	77	147	167	353	184	145	228	129	155	61	170	47
14	92	131	252	319	184	305	208	291	150	59	140	45
15	153	121	507	305	172	687	196	345	137	75	120	47
16	124	114	385	273	165	624	187	298	124	98	105	50
17	124	124	334	266	165	431	178	418	119	87	92	52
18	112	178	326	270	160	357	175	579	116	77	86	150
19	124	153	334	255	160	349	184	633	112	69	80	147
20	147	137	319	202	150	426	228	530	114	65	72	105
21	129	116	489	228	145	512	221	457	112	61	66	92
22	107	130	521	248	139	705	199	381	150	61	62	78
23	96	150	431	221	134	714	175	323	131	56	58	73
24	94	160	376	208	134	700	164	422	112	54	56	67
25	90	140	466	323	131	615	155	543	101	52	56	61
26	90	180	466	897	126	606	150	439	96	52	52	58
27	92	190	357	656	121	906	145	361	96	52	56	54
28	83	200	334	610	114	873	139	312	90	62	60	52
29	75	190	287	535	---	750	131	280	83	62	56	48
30	74	218	266	448	---	629	126	259	82	58	58	45
31	72	---	252	376	---	543	---	245	---	74	64	---
TOTAL	3118	4320	10093	10896	5231	12161	7164	8890	4672	2190	3781	1894
MEAN	101	144	326	351	187	392	239	287	156	70.6	122	63.1
MAX	158	231	521	897	330	906	489	633	298	107	430	150
MIN	58	71	153	196	114	101	126	112	82	52	52	45
CFSM	.94	1.33	3.02	3.25	1.73	3.63	2.21	2.66	1.44	.65	1.13	.58
IN.	1.07	1.49	3.48	3.75	1.80	4.19	2.47	3.06	1.61	.75	1.30	.65

CAL YR 1977 TOTAL 59132 MEAN 162 MAX 1160 MIN 20 CFSM 1.50 IN 20.37
WTR YR 1978 TOTAL 74410 MEAN 204 MAX 906 MIN 45 CFSM 1.89 IN 25.63

NOTE.--No gage-height record Aug. 1 to Sept. 20.

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
05...	1000	83	460	8.1	9.5	2	10.2	2.0	330	350
NOV										
01...	0950	69	522	8.2	9.0	1	12.2	1.0	130	33
FEB										
01...	1030	357	390	8.1	1.0	3	13.3	--	80	46
MAR										
22...	1030	673	283	7.9	4.5	10	10.3	2.0	490	240
APR										
20...	1330	241	419	8.5	10.0	4	12.1	1.0	490	130
MAY										
10...	1030	175	401	8.5	13.5	1	11.2	2.0	330	49
JUN										
19...	1100	112	439	8.4	19.5	2	10.2	--	230	240
JUL										
13...	1045	61	443	8.6	17.0	0	9.9	1.0	220	540
AUG										
03...	1015	E66	460	8.2	19.0	2	8.4	2.0	790	>2400
SEP										
26...	1000	58	500	--	12.5	--	10.4	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT									
05...	200	47	21	12	2.0	--	--	--	46
NOV									
01...	240	56	25	13	1.9	--	--	--	42
FEB									
01...	210	51	20	10	1.4	--	--	--	32
MAR									
22...	130	29	13	6.8	2.1	--	--	--	25
APR									
20...	200	46	21	10	1.4	--	--	--	32
MAY									
10...	210	46	22	10	1.3	--	--	.0	32
JUN									
19...	210	48	23	12	1.4	--	--	--	31
JUL									
13...	230	49	25	11	1.7	--	--	--	28
AUG									
03...	210	46	22	13	1.8	--	--	--	29
SEP									
26...	230	52	25	14	1.7	190	.0	--	37

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
OCT									
05...	19	--	--	258	7	--	--	.60	.01
NOV									
01...	28	--	--	291	2	--	--	.99	.01
FEB									
01...	19	--	--	231	2	--	--	1.3	.01
MAR									
22...	14	--	--	160	32	--	--	1.1	.01
APR									
20...	19	--	--	235	8	--	--	.64	.01
MAY									
10...	18	--	4.7	247	8	--	--	.80	.01
JUN									
19...	21	--	--	279	5	--	--	1.1	.01
JUL									
13...	19	--	--	297	0	--	--	--	--
AUG									
03...	22	--	--	303	0	--	--	--	--
SEP									
26...	22	.1	8.1	302	--	3	.47	--	--

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
OCT									
05...	.03	.69	.72	--	1.3	.06	.01	4.1	--
NOV									
01...	.01	.52	.53	--	1.5	.05	.02	8.9	--
FEB									
01...	.02	.22	.24	--	1.5	.04	.01	2.4	--
MAR									
22...	.13	.65	.78	--	1.9	.12	.05	7.7	--
APR									
20...	.01	.63	.64	--	1.3	.09	.01	7.0	--
MAY									
10...	.03	.49	.52	--	1.3	.08	.02	6.4	--
JUN									
19...	.04	.39	.43	--	1.5	.33	.26	7.0	--
JUL									
13...	.10	.30	.40	--	1.4	--	--	6.1	--
AUG									
03...	--	--	1.5	--	--	--	--	4.6	--
SEP									
26...	--	--	--	800	--	--	--	5.4	2.7

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
MAY 10...	1030	20	--	--	--	90	--	--	--	0	0	--
SEP 26...	1000	40	1	0	0	--	<10	20	<10	--	--	<10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)
MAY 10...	3	--	60	--	--	40	--	--	--	5	--	--
SEP 26...	8	<10	--	4600	10	30	360	<.5	.0	6	10	0

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 10...	20	--	2	--	--	--	--	--	--	--	--	--
SEP 26...	20	60	0	0	.0	1	.0	.0	.0	.0	.0	.0

DATE	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 26...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01446000 BEAVER BROOK NEAR BELVIDERE, NJ

LOCATION.--Lat 40°50'40", long 75°02'48", Warren County, Hydrologic Unit 02040105, 2,000 ft (610 m) upstream from mouth, and 2.0 mi (3.2 km) east of Belvidere.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1922-61, 1963 to current year.
CHEMICAL ANALYSES: Water years 1923-25, 1958, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
05...	1100	--	441	8.3	11.0	1	11.5	--	170	350	210	51
NOV												
01...	1340	21	392	8.9	9.0	1	13.4	2.0	20	240	200	48
FEB												
01...	1130	--	355	7.5	1.0	2	13.2	--	<20	14	190	48
MAR												
22...	1140	--	250	7.8	5.0	7	12.3	2.0	70	240	110	26
APR												
20...	1215	--	372	8.4	10.0	2	12.3	2.0	310	170	180	43
MAY												
10...	1145	--	358	8.3	15.0	1	10.4	1.0	490	130	180	41
JUN												
19...	1245	--	400	8.5	21.5	2	8.8	--	2400	540	200	48
JUL												
13...	1200	11	493	8.7	19.0	0	11.3	1.0	1700	240	210	48
AUG												
03...	1130	12	420	8.3	21.0	1	9.0	1.0	490	170	200	48
SEP												
26...	1300	12	420	--	14.0	--	11.4	--	--	--	220	52

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)
OCT												
05...	20	8.5	2.1	--	--	48	14	--	--	257	8	--
NOV												
01...	19	8.3	1.7	--	--	40	15	--	--	241	0	--
FEB												
01...	17	8.6	1.4	--	--	33	17	--	--	210	7	--
MAR												
22...	9.9	7.0	1.6	--	--	22	13	--	--	144	17	--
APR												
20...	18	8.0	1.2	--	--	30	15	--	--	205	7	--
MAY												
10...	18	7.6	1.1	--	--	30	15	--	--	234	1	--
JUN												
19...	19	7.8	1.3	--	--	29	15	--	--	237	2	--
JUL												
13...	21	7.5	1.5	--	--	31	16	--	--	264	10	--
AUG												
03...	20	7.6	1.6	--	--	32	15	--	--	280	3	--
SEP												
26...	22	8.5	1.5	180	.0	32	15	.0	6.7	280	--	24

01446000 BEAVER BROOK NEAR BELVIDERE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)
OCT 05...	--	.61	.00	.01	.44	.45	--	1.1	.03	.02	6.7	--
NOV 01...	--	.32	.00	.00	.49	.49	--	.81	.01	.01	9.2	--
FEB 01...	--	1.7	.01	.01	.10	.11	--	1.8	.01	.00	.8	--
MAR 22...	--	1.1	.01	.02	.50	.52	--	1.6	.04	.01	4.7	--
APR 20...	--	.78	.01	.00	.49	.49	--	1.3	.02	.00	8.6	--
MAY 10...	--	.58	.01	.04	.26	.30	--	.89	.02	.00	8.3	--
JUN 19...	--	.96	.01	.05	.48	.53	--	1.5	.03	.01	7.1	--
JUL 13...	--	--	--	.10	.30	.40	--	1.4	--	--	4.5	--
AUG 03...	--	--	--	.10	.80	.90	--	1.9	--	--	5.5	--
SEP 26...	.81	--	--	--	--	--	1800	--	--	--	3.8	4.3

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
SEP 26...	1300	40	1	0	0	<10	10	10	<10	4	<10

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
SEP 26...	11000	20	20	330	<.5	.0	5	<10	0	10	30

DATE	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP 26...	0	0	.0	0	.0	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP 26...	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01446400 PEQUEST RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at last highway bridge before mouth in Belvidere, and 0.3 mi (0.4 km) upstream from mouth.

DRAINAGE AREA.--158 mi² (409 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1977 to current year.
CHEMICAL ANALYSES: Water years 1957, 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
05...	1315	--	447	8.5	12.0	2	10.8	--	230	240
NOV										
01...	1100	--	461	8.5	10.0	1	11.6	2.0	20	9
FEB										
01...	1345	--	380	8.2	1.5	4	14.0	--	140	22
MAR										
22...	1330	--	274	8.0	6.5	15	11.8	2.0	310	540
APR										
20...	1130	--	396	8.5	11.0	5	11.5	3.0	330	350
MAY										
10...	1340	--	389	9.0	14.0	1	11.6	1.0	80	920
JUN										
19...	1345	--	420	8.9	22.0	2	11.8	--	130	130
JUL										
13...	1330	79	455	8.7	20.5	0	10.6	2.0	1300	350
AUG										
03...	1300	87	470	8.6	21.0	1	10.2	1.0	230	240

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT										
05...	200	47	20	12	2.0	.0	49	19	8.1	257
NOV										
01...	220	52	23	10	1.7	--	40	19	--	264
FEB										
01...	200	50	19	10	1.5	--	32	18	--	222
MAR										
22...	120	28	12	7.3	1.9	--	24	13	--	163
APR										
20...	190	43	19	11	1.3	--	30	20	--	223
MAY										
10...	190	43	20	11	1.3	--	32	18	--	234
JUN										
19...	210	47	22	10	1.4	--	29	18	--	248
JUL										
13...	220	48	24	9.6	1.5	--	27	17	--	275
AUG										
03...	210	48	22	11	1.7	--	29	19	--	296

01446400 PEQUEST RIVER AT BELVIDERE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
05...	10	.91	.01	.02	.63	.65	1.6	.08	.04	5.4
NOV										
01...	0	.69	.00	.01	.39	.40	1.1	.04	.01	8.5
FEB										
01...	11	1.1	.01	.01	.59	.60	1.7	.04	.00	3.5
MAR										
22...	47	1.1	.01	.10	.59	.69	1.8	.10	.05	8.2
APR										
20...	8	.89	.01	.01	.49	.50	1.4	.07	.01	9.3
MAY										
10...	7	.62	.01	.03	.46	.49	1.1	.11	.05	9.1
JUN										
19...	3	.87	.01	.02	.33	.35	1.2	.20	.16	7.9
JUL										
13...	2	--	--	.10	.20	.30	1.3	--	--	4.7
AUG										
03...	1	--	--	.10	.20	.30	1.3	--	--	8.1

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
05...	1315	0	1	60	0	0	0	6

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
05...	50	4	50	<.5	2	0	0	0

01446500 DELAWARE RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'36", long 75°05'02", Warren County, Hydrologic Unit 02040105, on left bank at Belvidere, 800 ft (240 m) downstream from Pequest River, and at mile 197.7 (318.1 km).

DRAINAGE AREA.--4,535 mi² (11,746 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1922 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: 1933(M). WSP 951: 1940-41, Drainage area. WSP 1432: 1923, 1924(M).

GAGE.--Water-stage recorder. Datum of gage is 226.43 ft (69.016 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1929, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Discharge records excellent. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--56 years, 7,963 ft³/s (225.5 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 80,500 ft³/s (2,280 m³/s) Jan. 10, gage height, 16.03 ft (4.886 m); minimum, 1,310 ft³/s (37.1 m³/s) Sept. 27, gage height, 2.88 ft (0.878 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 273,000 ft³/s (7,730 m³/s) Aug. 19, 1955 (gage height, 30.21 ft or 9.208 m, from high-water mark in gage house), from rating curve extended above 170,000 ft³/s (4,810 m³/s) on basis of flood-routing study; minimum, 609 ft³/s (17.2 m³/s) Sept. 28, 29, 1943, gage height, 2.11 ft (0.643 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 28.6 ft (8.72 m), from floodmark, discharge, 220,000 ft³/s (6,230 m³/s) from rating curve extended above 170,000 ft³/s (4,810 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9960	6030	23000	10300	17200	4620	31800	5370	9020	2460	2680	2040
2	12500	5670	20000	9060	14900	4360	33100	4960	7940	2310	2500	2060
3	20500	5370	23000	7740	12900	4250	35700	4510	7260	2310	2020	2020
4	15000	5430	21500	7460	11000	3970	29900	4100	7220	2770	2020	1900
5	11700	4790	18500	7360	9420	4000	25700	4050	6980	2830	2460	1750
6	9600	4540	17800	7560	8300	3400	26300	5280	6660	5670	2330	1820
7	8440	5280	15900	7820	8060	4050	24800	6270	6240	4360	3850	1900
8	8120	10500	14300	7780	8060	4570	26900	5940	7500	3610	7380	1850
9	7600	17100	12500	35200	8980	3780	26100	6360	9340	2890	6240	2010
10	12000	17900	11100	73900	8740	3590	22000	7620	10800	2500	5020	1920
11	15700	18000	9420	49600	8220	3730	19100	9540	8660	2540	4280	1970
12	12100	26000	6660	33400	7500	3760	18100	8580	7140	2560	3610	1900
13	9920	22300	7620	25600	6810	3800	19700	7580	7100	2500	3170	1990
14	8800	18100	9020	21400	7180	4930	19000	9060	6980	2370	2820	1770
15	10200	15100	14700	18700	7060	11200	17400	14700	6660	2370	3230	1770
16	14000	13000	24100	16000	6600	14800	14100	17000	6030	2440	2660	1950
17	14900	11400	23800	13200	6980	15300	12200	20900	5190	2500	2480	1990
18	32400	11100	20600	10600	6810	13100	11700	27500	4440	2440	2140	2060
19	29900	10900	19100	10100	6090	11100	10300	32100	4180	2520	1970	3040
20	27100	9860	17000	9260	5040	11200	10200	29100	4620	2520	1900	3710
21	27100	8780	17800	8380	5220	13100	11000	23500	4250	2440	1820	3040
22	21700	8180	21900	8460	5430	19000	11300	19700	4020	2850	1820	2540
23	17800	7940	19900	7860	5520	30300	10200	17200	3800	2680	1920	2440
24	15000	7620	17000	7180	5670	33400	8980	15100	3970	2330	1940	1970
25	12900	7060	15400	9460	5430	31400	8580	16900	3280	2180	1920	1620
26	11200	8620	17400	18300	4650	25800	7660	15800	2870	2200	2040	1590
27	10000	10600	17700	54200	3880	33800	7060	13100	3060	2010	2060	1720
28	9020	9780	14800	44500	4100	53400	6570	10800	2870	2130	2270	1630
29	8260	9020	12400	32400	---	49400	6210	9620	2910	2330	2110	1850
30	6750	13800	10700	29700	---	42800	5760	8660	2680	2040	2180	1840
31	6120	---	11600	19000	---	36500	---	8300	---	2220	2310	---
TOTAL	436290	329770	506220	621480	215750	502410	517420	389200	173670	81880	87150	61660
MEAN	14070	10990	16330	20050	7705	16210	17250	12550	5789	2641	2811	2055
MAX	32400	26000	24100	73900	17200	53400	35700	32100	10800	5670	7380	3710
MIN	6120	4540	6660	7180	3880	3400	5760	4050	2680	2010	1820	1590

CAL YR 1977 TOTAL 3597040 MEAN 9855 MAX 80000 MIN 1470
WTR YR 1978 TOTAL 3922900 MEAN 10750 MAX 73900 MIN 1590

01446700 DELAWARE RIVER AT EASTON, PA

LOCATION.--Lat 40°42'43", long 75°11'48", Northampton County, PA, Hydrologic Unit 02040105, on right bank 200 ft (61 m) upstream from city of Easton pumping station, and 1.2 mi (1.9 km) upstream from Bushkill Creek at Easton.

DRAINAGE AREA.--4,636 mi² (12,007 km²).

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1967 to November 1977 (discontinued).
SPECIFIC CONDUCTANCE: November 1967 to June 1978 (discontinued).
pH: November 1967 to June 1978 (discontinued).
WATER TEMPERATURES: October 1947 to September 1949, October 1957 to September 1958, October 1963 to September 1964, November 1967 to June 1978 (discontinued).
DISSOLVED OXYGEN: November 1967 to June 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 157.84 ft (48.110 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, Cannonsville, Pepacton, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversion from Cannonsville, Pepacton, and Neversink Reservoirs (see Delaware River basin, diversions).

AVERAGE DISCHARGE.--10 years (1968-77), 9,016 ft³/s (255.3 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to November, 39,100 ft³/s (1,110 m³/s) Oct. 18, gage height, 14.57 ft (4.441 m); minimum, 4,890 ft³/s (138 m³/s) Nov. 6, gage height, 5.48 ft (1.670 m).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, about 100,000 ft³/s (2,830 m³/s) Dec. 22, 1973; minimum, 1,640 ft³/s (46.4 m³/s) Aug. 16, 1971, gage height, 3.87 ft (1.180 m); minimum gage height, 3.68 ft (1.122 m) Jan. 31, Feb. 1, July 29, 1977.
SPECIFIC CONDUCTANCE: Maximum, 499 micromhos Nov. 26, 1970; minimum, 40 micromhos Apr. 6, 1970.
pH: Maximum, 9.8 May 16, 1970; minimum, 5.7 May 24, 1970.
WATER TEMPERATURES: Maximum, 30.0°C July 18, 1968, July 28-29, 1970; minimum, freezing point on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 18.1 mg/L Jan. 21, 1975; minimum, 4.8 mg/L July 9, 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9870	6560										
2	10500	6190										
3	21000	5860										
4	15800	5930										
5	11700	5350										
6	9310	4990										
7	8100	5690										
8	7810	11100										
9	7230	17700										
10	10800	18900										
11	16300	18700										
12	12100	26400										
13	9740	23200										
14	8480	18800										
15	9660	15700										
16	13500	13600										
17	16000	12000										
18	31100	11600										
19	31700	11400										
20	28200	10300										
21	28600	9310										
22	23200	8740										
23	18900	8450										
24	15800	8230										
25	13500	7700										
26	11900	9040										
27	10600	11000										
28	9670	10600										
29	8830	9630										
30	7480	9060										
31	6750	---										
TOTAL	444130	341730										
MEAN	14330	11390										
MAX	31700	26400										
MIN	6750	4990										

01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA

LOCATION.--Lat 40°41'30", long 75°12'15", Northampton County, Hydrologic Unit 02040105, at bridge on Northampton Street in Easton, 600 ft (182 m) upstream from Lehigh River, and 0.2 mi (0.3 km) downstream from U.S. Route 22 toll bridge in Easton.

DRAINAGE AREA.--4,717 mi² (12,217 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT 26...	1000	78	7.2	9.0	1	11.4	2.0	<20	17
NOV 28...	1245	91	7.5	2.0	1	12.6	--	1100	110
FEB 27...	1020	129	--	--	3	--	--	--	--
APR 10...	1015	68	7.2	7.5	3	11.9	--	<20	9
MAY 01...	1020	110	8.0	13.0	2	11.0	--	20	2
JUN 14...	1000	107	7.7	19.0	3	9.3	1.0	80	70
JUL 27...	1030	185	8.5	25.0	1	6.9	1.0	1300	6
AUG 14...	1115	204	8.0	24.5	1	8.4	--	790	40

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 26...	32	9.2	2.1	3.4	1.0	12	4.8	49	5
NOV 28...	36	10	2.6	3.6	1.0	14	5.0	47	2
FEB 27...	47	13	3.6	5.6	.9	17	8.2	73	7
APR 10...	26	7.6	1.7	2.9	.8	10	4.0	46	0
MAY 01...	45	13	3.0	4.8	1.0	16	7.6	70	0
JUN 14...	54	14	4.6	6.4	1.4	19	8.3	99	8
JUL 27...	58	16	4.5	6.0	1.4	19	7.1	91	3
AUG 14...	65	17	5.4	7.8	1.5	19	11	98	8

01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 26...	.31	.01	.00	.27	.27	.59	.02	.01	6.1
NOV 28...	.37	.01	.01	.10	.11	.49	.01	.00	16
FEB 27...	.63	.02	.04	.06	.10	.75	.02	.01	2.8
APR 10...	.39	.00	.00	.31	.31	.70	.01	.00	7.4
MAY 01...	.29	.01	.01	.26	.27	.57	.01	.00	6.3
JUN 14...	.72	.04	.18	.33	.51	1.3	.09	.05	7.0
JUL 27...	--	--	.10	.20	.30	1.3	--	--	7.4
AUG 14...	--	--	<.10	--	--	--	--	--	3.1

01453000 LEHIGH RIVER AT BETHLEHEM, PA

LOCATION.--Lat 40°36'55", long 75°22'45", Lehigh County, PA, Hydrologic Unit 02040106, on left bank 1110 ft (34 m) upstream from New Street Bridge at Bethlehem, and 1,800 ft (549 m) upstream from Monocacy Creek. Records include flow of Monocacy Creek.

DRAINAGE AREA.--1,279 mi² (3,313 km²) includes that of Monocacy Creek. At site used prior to Oct. 1, 1928, 1,229 mi² (3,183 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1902 to February 1905, April 1909 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at South Bethlehem" prior to October 1913.

REVISED RECORDS.--WSP 261: 1903-05. WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft (64.295 m) National Geodetic Vertical Datum of 1929. Prior to October 1928, nonrecording gage at New Street Bridge 120 ft (37 m) downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft (1,295 m) downstream at datum 2.49 ft (0.759 m) lower. Oct. 1, 1963 to Dec. 14, 1975, water-stage recorder at site 40 ft (12 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Wild Creek Reservoir since January 1941, Penn Forest Reservoir since October 1958, Francis E. Walter Reservoir since February 1961, and Beltzville Lake since February 1971 (see Delaware River Basin, reservoirs in).

AVERAGE DISCHARGE.--71 years (1902-04, 1909-78), 2,339 ft³/s (66.24 m³/s), 24.83 in/yr (631 mm/yr), adjusted for diversion 1902-04, 1909-42 and, for recirculated water, October 1, 1959 to September 30, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,600 ft³/s (952 m³/s) Jan. 26, gage height, 12.64 ft (3.853 m); minimum, 615 ft³/s (17.4 m³/s) Sept. 8, gage height, 1.35 ft (0.411 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,000 ft³/s (2,610 m³/s) May 23, 1942, (gage height, about 25.9 ft or 7.89 m, from floodmark, present site and datum), from rating curve extended above 48,000 ft³/s (1,360 m³/s); minimum, 125 ft³/s (3.54 m³/s) June 28, 1965, gage height, 0.94 ft (0.287 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1902, reached a stage of 24.9 ft (7.59 m) from floodmark, present site and datum, discharge, about 88,000 ft³/s (2,490 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2780	2600	7520	3760	6050	1410	9130	1850	3010	1080	1040	1220
2	3280	2520	8530	3560	4700	1400	6880	1780	2690	1040	1000	948
3	2320	2520	6940	3260	4260	1410	6350	1750	2690	2200	811	826
4	1880	2580	5860	3000	3580	1400	7800	1630	2820	2700	900	798
5	1610	2630	4950	3000	3110	1250	7680	1730	2730	2000	975	769
6	1510	2530	5220	2950	3090	1280	6910	1930	2520	1310	1000	699
7	1450	3930	4580	2900	2790	1270	5700	2000	2190	1190	1780	657
8	2360	10300	3950	3130	3070	1330	4970	2090	2610	1120	3760	727
9	4310	8480	3780	18200	2710	1280	4810	2690	3180	1080	2540	886
10	5580	7900	3470	10700	2520	1270	4330	2430	3160	1060	1910	841
11	4480	8730	3270	8920	2450	1280	3660	2170	2760	1000	2470	727
12	3980	7520	3150	9380	2450	1430	3520	2100	2430	930	3110	685
13	3620	6650	2960	10600	2340	1930	3320	2070	2430	900	2960	671
14	2950	5960	3520	6360	2280	4240	3030	6540	2460	900	2190	643
15	4740	5420	6220	5500	2160	10100	2670	12600	2250	1140	1760	798
16	4960	4460	6820	5220	2000	7500	2500	9760	2070	1050	1550	855
17	11300	4160	5810	4570	2020	4850	2450	12300	1750	1190	1350	826
18	8960	4210	6260	4610	1960	4280	2370	12200	1730	975	1270	812
19	10200	3660	7260	4230	1930	4350	2450	12400	1760	885	1200	2320
20	9040	3400	6010	3860	1760	5050	3090	10900	1640	825	1200	2560
21	9250	3220	9460	3300	1780	5070	3010	9480	1700	797	1050	1910
22	8180	2970	12300	2990	1650	6880	2940	8240	1930	755	1010	1680
23	7180	2990	8440	2810	1650	7530	2710	7100	1640	699	948	1600
24	4970	2890	6830	2730	1630	7880	2600	5710	1390	671	798	1380
25	4560	2780	7180	3290	1650	7060	2260	6680	1260	671	769	1040
26	4330	4200	6960	20300	1580	7680	2140	5700	1250	685	769	979
27	4280	4110	6340	14000	1510	18200	2140	4880	1340	671	826	948
28	3800	3780	5420	10000	1380	16700	2120	4330	1250	800	1220	932
29	3300	3460	4860	8330	---	11900	1980	3990	1170	685	1220	901
30	3000	3540	4350	7390	---	13500	1880	3560	1120	670	1050	855
31	2800	---	3970	6690	---	12600	---	3280	---	1200	1220	---
TOTAL	146960	134100	182190	199540	70060	173310	117400	165870	62930	32879	45656	31493
MEAN	4741	4470	5877	6437	2502	5591	3913	5351	2098	1061	1473	1050
MAX	11300	10300	12300	20300	6050	18200	9130	12600	3180	2700	3760	2560
MIN	1450	2520	2960	2730	1380	1250	1880	1630	1120	670	769	643
CFSM	3.71	3.50	4.60	5.03	1.96	4.37	3.06	4.18	1.64	.83	1.15	.82
IN.	4.27	3.90	5.30	5.80	2.04	5.04	3.41	4.82	1.83	.96	1.33	.92

CAL YR 1977 TOTAL 1150028 MEAN 3151 MAX 18100 MIN 545 CFSM 2.46 IN 33.45
WTR YR 1978 TOTAL 1362388 MEAN 3733 MAX 20300 MIN 643 CFSM 2.92 IN 39.63

01455300 POHATCONG CREEK AT CARPENTERSVILLE, NJ

LOCATION.--Lat 40°37'30", long 75°11'10", Warren County, Hydrologic Unit 02040105, at bridge on Carpentersville-Riegelsville Road in Carpentersville, and 2,000 ft (610 m) upstream from mouth.

DRAINAGE AREA.--57.1 mi² (147.9 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June to September 1978.
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
NOV 01...	1440	295	8.1	8.0	1	13.4	<1.0	110	<2
JAN 31...	1300	269	7.7	1.5	10	13.8	2.0	140	7
MAR 20...	1245	213	7.7	6.0	15	11.6	--	50	240
APR 18...	1300	273	8.6	12.0	15	13.1	1.0	70	18
MAY 09...	1300	228	7.8	12.5	10	10.0	1.0	5400	1600
JUN 13...	1250	279	8.1	17.5	5	8.7	1.0	9200	>2400

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV 01...	130	29	14	7.2	2.2	26	9.5	142	1
JAN 31...	140	33	13	8.1	2.0	28	13	160	26
MAR 20...	85	20	8.4	7.5	2.8	22	11	131	22
APR 18...	120	28	13	6.4	1.8	27	12	177	7
MAY 09...	98	23	9.8	6.5	1.8	26	8.9	138	42
JUN 13...	120	29	12	6.4	2.1	26	9.0	186	25

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 01...	.99	.00	.00	.22	.22	1.2	.08	.07	7.1
JAN 31...	2.2	.01	.08	.16	.24	2.4	.06	.03	1.0
MAR 20...	1.4	.01	.22	.50	.72	2.1	.13	.04	9.8
APR 18...	2.0	.02	.00	.21	.21	2.2	.06	.04	8.0
MAY 09...	1.8	.03	.10	.78	.88	2.7	.16	.06	8.4
JUN 13...	2.1	.02	.02	.52	.54	2.6	.12	.05	5.1

01455500 MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, NJ

LOCATION.--Lat 40°55'00", long 74°39'55", Morris County, Hydrologic Unit 02040105, just upstream of bridge on Warren County Route 43 and 300 ft (91 m) downstream from Lake Hopatcong dam in Landing.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1928 to current year.
CHEMICAL ANALYSES: Water years 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 27...	1130	229	7.7	11.0	3	5.2	1.0	50	<2	52	14
JAN 30...	1045	215	7.2	.5	1	9.0	--	20	17	50	13
MAR 21...	1030	208	7.1	3.0	1	11.5	2.0	<20	22	49	13
APR 17...	1020	213	7.2	9.5	2	11.3	--	<20	<2	49	13
MAY 08...	1045	218	7.6	13.0	3	10.3	--	<20	11	53	14
JUN 12...	1000	208	7.6	22.0	1	8.6	4.0	20	17	48	13

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
OCT 27...	4.1	17	1.3	--	16	34	--	147	16	.07
JAN 30...	4.3	20	1.2	--	20	36	--	124	1	.21
MAR 21...	4.0	18	1.3	--	19	33	--	121	7	.28
APR 17...	4.1	18	1.1	--	18	36	--	142	2	.24
MAY 08...	4.4	20	1.1	.0	20	38	2.3	142	12	.08
JUN 12...	3.8	18	1.2	--	15	37	--	138	10	.01

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT 27...	.00	.04	.84	.88	450	.95	.03	.00	8.1	3.0
JAN 30...	.00	.01	.31	.32	--	.53	.01	.00	1.4	--
MAR 21...	.01	.06	.23	.29	--	.58	.01	.00	6.3	--
APR 17...	.00	.01	.32	.33	--	.57	.01	.00	6.7	--
MAY 08...	.00	.01	.52	.53	--	.61	.02	.00	5.0	--
JUN 12...	.01	.05	.52	.57	--	.59	.04	.00	8.1	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
OCT												
27...	1130	--	5	--	--	<10	<10	--	--	<10	--	<10
MAY												
08...	1045	10	--	80	0	--	--	0	0	--	3	--

DATE	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT												
27...	--	1500	--	70	--	190	.0	--	12	--	30	--
MAY												
08...	60	--	0	--	60	--	--	21	--	10	--	0

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT												
27...	8	.0	0	.4	.0	.0	.0	.0	.0	.0	.0	0
MAY												
08...	--	--	--	--	--	--	--	--	--	--	--	--

01455801 MUSCONETCONG RIVER AT LOCKWOOD, NJ

LOCATION.--Lat 40°55'10", long 74°44'07", Sussex County, Hydrologic Unit 02040105, at bridge in Lockwood, at boundary between Sussex County and Morris County, 0.2 mi (0.4 km) southeast of Cage Hill, 0.4 mi (0.7 km) south of Jefferson Lake, and 0.9 mi (1.4 km) downstream from Lubbers Run.

DRAINAGE AREA.--60.5 mi² (156.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 31...	1200	314	8.4	9.5	1	11.4	--	9200	1600	98
JAN 30...	1230	234	7.4	.0	2	8.2	--	1300	1600	69
MAR 21...	1145	266	7.6	6.0	3	11.9	3.0	630	240	71
APR 17...	1140	276	7.8	11.0	2	10.6	--	<20	5	78
MAY 08...	1155	288	8.1	13.0	7	10.6	--	16000	540	92
JUN 12...	1120	268	7.8	22.0	2	8.7	4.0	2530	920	74

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 31...	25	8.6	19	2.0	--	21	36	--	170	0
JAN 30...	19	5.3	20	1.2	--	19	37	--	114	1
MAR 21...	18	6.4	21	1.6	--	20	41	--	154	9
APR 17...	20	6.9	20	1.5	--	21	42	--	178	1
MAY 08...	23	8.4	22	1.5	.0	24	41	3.7	176	23
JUN 12...	19	6.5	18	1.2	--	15	36	--	167	13

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 31...	.58	.17	.17	.36	.53	1.3	.23	.21	6.5
JAN 30...	.38	.01	.24	.47	.71	1.1	.11	.05	4.0
MAR 21...	.52	.02	.30	.36	.66	1.2	.09	.05	5.8
APR 17...	.23	.01	.29	.40	.69	.93	.10	.04	7.4
MAY 08...	.31	.12	.39	1.1	1.5	1.9	.50	.14	4.9
JUN 12...	.36	.06	.20	.75	.95	1.4	.14	.06	7.6

01455801 MUSCONETCONG RIVER AT LOCKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 08...	1155	20	50	0	0	0	13

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 08...	50	0	60	23	20	0

01456030 MUSCONETCONG RIVER AT STEPHENS STATE PARK, NJ

LOCATION.--Lat 40°52'24", long 74°48'23", Warren County, Hydrologic Unit 02040105, at bridge in Stephens State Park, 2.0 mi (3.2 km) northwest of outlet of Budd Lake, 2.4 mi (3.9 km) northwest of Drakestown, and 3.9 mi (6.3 km) upstream of Mine Brook.

DRAINAGE AREA.--72.5 mi² (187.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT 31...	0950	296	7.9	10.0	1	12.8	--	<20	11
JAN 30...	1330	214	7.4	.0	1	7.7	--	130	4
MAR 21...	1230	233	7.7	6.0	3	11.3	2.0	130	79
APR 17...	1300	240	9.1	11.5	2	14.6	--	50	2
MAY 08...	1310	253	9.1	12.5	2	12.8	--	20	79
JUN 12...	1245	260	8.1	22.5	1	9.2	2.0	50	350

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 31...	100	25	9.1	16	1.7	21	31	173	0
JAN 30...	67	18	5.3	16	1.1	18	31	108	0
MAR 21...	65	16	6.2	17	1.3	18	33	126	8
APR 17...	77	19	7.1	15	1.2	19	32	154	1
MAY 08...	90	22	8.6	16	1.2	20	32	59	8
JUN 12...	76	19	7.0	15	1.0	14	30	158	11

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 31...	.27	.01	.01	.29	.30	.58	.08	.04	5.8
JAN 30...	.31	.01	.14	.14	.28	.60	.02	.01	13
MAR 21...	.42	.01	.11	.26	.37	.80	.04	.02	5.4
APR 17...	.20	.01	.04	.34	.38	.59	.02	.01	6.6
MAY 08...	.25	.02	.04	.37	.41	.68	.07	.02	4.3
JUN 12...	.22	.02	.02	.41	.43	.67	.08	.04	7.2

01456200 MUSCONETCONG RIVER AT BEATYESTOWN, NJ

LOCATION.--Lat 40°48'48", long 74°50'32", Warren County, Hydrologic Unit 02040105, at bridge at Beatyestown, 1.6 mi (2.6 km) upstream of Hanes Brook, 2.1 mi (3.4 km) northeast of Stephensburg, and 3.5 mi (5.7 km) northeast of Scrappy Corner.

DRAINAGE AREA.--90.7 mi² (234.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT 31...	1130	383	7.9	11.0	0	10.6	--	<20	8
JAN 30...	1415	232	7.6	.5	2	11.2	--	130	4
MAR 21...	1340	257	8.3	8.0	3	12.8	1.0	<20	49
APR 17...	1350	272	9.2	12.0	2	13.2	--	<20	23
MAY 08...	1400	294	8.9	12.0	3	10.7	--	50	9
JUN 12...	1340	300	8.4	22.0	2	9.9	4.0	270	33

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 31...	170	37	19	8.8	1.8	17	15	203	0
JAN 30...	77	20	6.5	16	1.2	19	30	123	6
MAR 21...	80	19	8.0	16	1.5	19	30	142	9
APR 17...	97	23	9.7	14	1.4	20	30	169	1
MAY 08...	110	26	12	16	1.5	23	30	180	10
JUN 12...	100	24	9.9	15	1.2	16	29	180	10

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 31...	1.9	.00	.00	.04	.04	1.9	.01	.00	5.7
JAN 30...	.52	.01	.18	.22	.40	.93	.06	.04	4.4
MAR 21...	.59	.02	.23	.38	.61	1.2	.10	.06	3.7
APR 17...	.41	.02	.24	.31	.55	.98	.12	.09	7.1
MAY 08...	.71	.04	.28	.42	.70	1.5	.24	.18	3.2
JUN 12...	.67	.03	.05	.46	.51	1.2	.17	.13	7.8

01456600 MUSCONETCONG RIVER AT HAMPTON, NJ

LOCATION.--Lat 40°42'42", long 74°58'06", Hunterdon County 02030105, at bridge on State Route 31 in Hampton, 0.7 mi (1.1 km) downstream of dam at pond in New Hampton, 2.6 mi (4.2 km) northwest of Mount Kipp, and 4.2 mi (6.8 km) north of Van Syckel.

DRAINAGE AREA.--122 mi² (316 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
31...	1035	325	8.1	7.5	1	9.6	--	130	34	130
JAN										
31...	1015	238	7.4	1.0	4	13.3	2.0	330	8	95
MAR										
20...	1020	250	7.8	6.0	4	11.7	--	20	49	84
APR										
18...	1010	272	8.6	11.0	2	13.2	1.0	<20	6	110
MAY										
09...	1015	249	7.8	12.0	4	9.9	<1.0	5400	920	99
JUN										
13...	1000	291	8.0	18.5	1	8.8	1.0	1100	>2400	110

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT										
31...	30	13	13	1.9	--	20	22	--	179	6
JAN										
31...	24	8.4	14	1.3	--	19	26	--	132	7
MAR										
20...	19	8.9	13	1.6	--	18	25	--	149	9
APR										
18...	24	11	12	1.3	--	19	24	--	160	3
MAY										
09...	23	10	11	1.4	.0	20	21	12	153	9
JUN										
13...	25	11	12	1.4	--	17	21	--	157	8

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
31...	1.4	.01	.00	.38	.38	1.8	.13	.11	5.3
JAN									
31...	.82	.01	.09	.23	.32	1.2	.05	.02	1.3
MAR									
20...	1.1	.01	.13	.34	.47	1.6	.08	.03	3.2
APR									
18...	.98	.02	.02	.31	.33	1.3	.05	.04	3.4
MAY									
09...	1.1	.03	.11	.76	.87	2.0	.13	.07	10
JUN									
13...	1.4	.02	.01	.52	.53	1.9	.12	.07	8.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 09...	1015	20	7	0	0	0	8	60	50	7	10	0

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ

LOCATION.--Lat 40°40'20", long 75°03'40", Warren County, Hydrologic Unit 02040105, on right bank just downstream from highway bridge, 1.5 mi (2.4 km) upstream from Bloomsbury, and 9.5 mi (15.3 km) upstream from mouth.

DRAINAGE AREA.--143 mi² (370 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1903 to March 1907, July 1921 to current year.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1958, 1971-74.

REVISED DISCHARGE RECORDS.--WSP 521: Drainage area. WSP 1051: 1944-45. WSP 1382: 1904-06, 1922, 1923-29(M), 1931(M), 1933-34(M), 1936(M), 1940, 1942(M), 1944-45(M), 1951-52(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1932. Datum of gage is 274.83 ft (83.768 m) National Geodetic Vertical Datum of 1929. July 1903 to Mar. 31, 1907, nonrecording gage at bridge 15 ft (4.6 m) upstream at different datum. July 26 to Sept. 12, 1921, nonrecording gage at bridge at present datum.

REMARKS.--Discharge records good except those for January and February, which are fair. Flow regulated by Lake Hopatcong (see Delaware River Basin, reservoirs in). Diurnal fluctuation caused by small powerplants above station.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--60 years (1903-06, 1921-78), 232 ft³/s (6.570 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 14	2300	1030	29.2	3.60	1.097	Mar. 14	2015	1450	41.1	4.30	1.311
Dec. 21	1500	1050	29.7	3.64	1.109	Mar. 27	1645	1190	33.7	3.86	1.177
Jan. 9	Unknown	3700	105	6.56	1.999	May 14	2115	1070	30.3	3.67	1.119

Minimum discharge, 70 ft³/s (1.98 m³/s) Sept. 29, 30, gage height, 1.30 ft (0.396 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,960 ft³/s (197 m³/s) Oct. 10, 1903 (gage height, 8.00 ft or 2.438 m, from graph of gage readings, site and datum then in use) from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of slope-area measurement at gage height, 6.95 ft (2.118 m); minimum, 8.1 ft³/s (0.23 m³/s) Aug. 2, 1955; minimum daily 27 ft³/s (0.76 m³/s) Sept. 8, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	135	739	298	450	189	577	195	396	125	137	117
2	122	175	655	290	410	184	519	187	357	122	125	103
3	120	163	569	273	380	183	483	184	416	139	110	96
4	103	166	525	251	350	180	460	181	492	171	122	91
5	93	163	509	244	330	178	451	198	404	165	147	87
6	86	160	569	255	320	178	420	215	338	145	210	87
7	88	244	504	280	310	168	416	214	311	132	470	84
8	81	474	454	1050	310	171	402	210	358	125	649	94
9	202	469	449	2800	300	168	366	303	323	120	387	112
10	238	388	425	1600	300	171	334	281	288	117	281	96
11	181	366	489	900	290	176	326	246	259	110	246	91
12	135	321	449	700	280	189	346	215	239	105	249	87
13	115	294	425	600	260	236	322	214	236	103	236	87
14	115	276	604	500	240	600	302	474	223	101	204	84
15	205	260	810	420	230	936	286	543	207	112	179	82
16	190	283	655	380	220	644	277	529	192	132	163	87
17	196	301	579	350	210	488	263	640	187	142	150	87
18	184	336	629	330	207	404	249	783	184	122	137	91
19	187	294	684	310	223	433	273	853	173	112	127	184
20	244	266	624	300	210	460	362	793	152	108	120	187
21	232	260	834	290	210	514	334	679	147	101	115	137
22	202	276	874	290	204	665	296	595	176	96	108	117
23	181	357	759	300	204	680	277	519	163	94	103	103
24	166	366	684	400	198	720	256	202	152	94	99	96
25	154	340	749	1100	195	655	246	705	147	89	96	89
26	149	484	719	1800	192	680	236	639	145	87	99	84
27	151	444	624	1400	192	1030	233	561	145	89	94	84
28	143	411	574	1000	189	1010	220	506	137	105	103	79
29	132	384	535	700	---	858	210	457	129	112	110	77
30	130	406	439	600	---	726	201	413	127	101	103	77
31	127	---	328	500	---	629	---	387	---	125	105	---
TOTAL	4745	9262	18465	20511	7414	14503	9943	13121	7203	3601	5584	2977
MEAN	153	309	596	662	265	468	331	423	240	116	180	99.2
MAX	244	484	874	2800	450	1030	577	853	492	171	649	187
MIN	81	135	328	244	189	168	201	181	127	87	94	77

CAL YR 1977 TOTAL 89770 MEAN 246 MAX 1430 MIN 38
WTR YR 1978 TOTAL 117329 MEAN 321 MAX 2800 MIN 77

NOTE.--No gage-height record Jan. 9 to Feb. 17.

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
31...	1135	125	326	8.7	8.5	1	11.4	--	210	49
JAN										
31...	1130	E500	249	7.6	1.5	3	13.2	1.0	330	8
MAR										
20...	1130	413	256	7.5	6.0	4	12.1	--	20	49
APR										
18...	1115	256	278	8.9	12.0	1	13.5	1.0	<20	6
MAY										
09...	1130	346	269	8.1	12.0	4	10.7	1.0	790	920
JUN										
13...	1115	239	289	8.1	18.5	2	9.2	2.0	1300	920
JUL										
13...	1030	101	340	8.4	17.5	0	10.1	2.0	310	94
AUG										
03...	1000	110	329	8.5	20.0	1	9.1	1.0	790	920
SEP										
20...	1000	198	298	8.0	15.5	--	9.5	2.0	330	240

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT									
31...	140	31	14	12	1.8	--	--	--	21
JAN									
31...	100	26	9.5	13	1.4	--	--	--	19
MAR									
20...	95	22	9.7	12	1.7	--	--	--	20
APR									
18...	110	25	12	11	1.4	--	--	--	20
MAY									
09...	110	26	12	11	1.5	--	--	.0	21
JUN									
13...	110	26	11	11	1.5	--	--	--	18
JUL									
13...	150	32	17	9.8	1.7	--	--	--	19
AUG									
03...	140	31	16	11	2.0	--	--	--	18
SEP									
20...	120	28	12	12	1.7	92	.0	--	21

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
OCT									
31...	21	--	--	185	0	--	--	1.2	.01
JAN									
31...	23	--	--	147	6	--	--	1.4	.01
MAR									
20...	22	--	--	148	13	--	--	1.6	.02
APR									
18...	24	--	--	169	2	--	--	1.2	.01
MAY									
09...	20	--	6.4	161	20	--	--	1.4	.03
JUN									
13...	19	--	--	156	10	--	--	1.5	.01
JUL									
13...	19	--	--	225	0	--	--	--	--
AUG									
03...	20	--	--	221	1	--	--	--	--
SEP									
20...	22	.1	11	189	--	26	14	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)
OCT									
31...	.00	.47	.47	--	1.7	.09	.04	4.7	--
JAN									
31...	.11	.17	.28	--	1.7	.05	.03	2.6	--
MAR									
20...	.13	.40	.53	--	2.1	.07	.04	3.0	--
APR									
18...	.01	.27	.28	--	1.5	.04	.02	3.9	--
MAY									
09...	.05	.59	.64	--	2.0	.12	.05	7.1	--
JUN									
13...	.01	.39	.40	--	1.9	.10	.06	7.6	--
JUL									
13...	.10	.30	.40	--	2.4	--	--	3.9	--
AUG									
03...	.10	1.1	1.2	--	2.7	--	--	4.6	--
SEP									
20...	.38	--	--	780	--	--	--	4.3	.5

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
MAY										
09...	1130	10	--	--	--	30	0	--	--	--
SEP										
20...	1000	40	1	0	0	--	--	<10	10	10

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAY										
09...	0	0	--	4	--	60	--	0	--	40
SEP										
20...	--	--	<10	4	<10	--	1700	--	20	40

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY										
09...	--	--	--	4	--	--	10	--	0	--
SEP										
20...	340	<.5	.0	8	<10	0	30	20	1	43

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 09...	--	--	--	--	--	--	--	--	--	--
SEP 20...	.0	2	1.2	.0	.2	.0	.9	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 09...	--	--	--	--	--	--	--	--	--
SEP 20...	.0	.0	.0	.0	.0	.0	.0	0	.0

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'20", Warren County, Hydrologic Unit 02040105, at bridge on State Highway 13 in Riegelsville, 0.2 mi (0.4 km) north of Mount Joy, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--156 mi² (404 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1977 to current year.
CHEMICAL ANALYSES: Water years 1962, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT 31...	1345	335	8.2	--	1	--	1.0	--	--	140	31	14
JAN 31...	1345	253	7.3	1.5	6	13.4	2.0	490	46	110	27	9.8
MAR 20...	1350	248	7.9	7.0	7	12.0	--	2	220	91	21	9.4
APR 18...	1345	286	8.8	12.0	2	12.2	<1.0	<20	<2	120	27	13
MAY 09...	1345	282	8.2	13.0	5	10.3	1.0	1300	>2400	120	28	13
JUN 13...	1345	292	8.1	18.5	2	8.5	2.0	3500	1600	120	27	12
JUL 27...	1500	369	8.4	21.0	1	8.3	1.0	490	240	160	34	18
AUG 29...	1330	335	8.2	20.5	0	8.7	--	3500	>2400	150	32	17
SEP 27...	1300	355	--	14.0	--	10.0	<1.0	--	--	160	34	19

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)
OCT 31...	11	1.8	--	--	--	22	20	--	--	185	10	--
JAN 31...	13	1.4	--	--	--	21	24	--	--	146	18	--
MAR 20...	12	1.9	--	--	--	20	21	--	--	142	18	--
APR 18...	11	1.4	--	--	--	22	23	--	--	172	3	--
MAY 09...	10	1.5	--	--	.0	23	19	--	6.4	176	17	--
JUN 13...	10	1.5	--	--	--	21	19	--	--	163	14	--
JUL 27...	10	1.9	--	--	--	23	20	--	--	222	6	--
AUG 29...	10	1.8	--	--	--	22	18	--	--	273	5	--
SEP 27...	10	1.7	120	.0	--	25	18	.1	9.1	205	--	9

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
OCT											
31...	1.5	.01	.00	.25	.25	--	1.8	.08	.04	7.1	--
JAN											
31...	1.2	.01	.07	.23	.30	--	1.5	.05	.02	2.2	--
MAR											
20...	1.5	.01	.12	.40	.52	--	2.0	.09	.03	7.8	--
APR											
18...	.74	.01	.00	.24	.24	--	.99	.03	.01	4.2	--
MAY											
09...	1.2	.01	.01	.68	.69	--	1.9	.08	.02	5.9	--
JUN											
13...	1.5	.01	.01	.83	.84	--	2.3	.09	.03	7.0	--
JUL											
27...	--	--	.10	1.4	1.5	--	3.0	--	--	4.2	--
AUG											
29...	--	--	<.10	--	.80	--	--	--	--	2.3	--
SEP											
27...	--	--	<.10	--	--	3800	--	--	--	4.4	18

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
MAY												
09...	1345	60	--	--	--	10	0	--	--	--	0	0
SEP												
27...	1300	20	1	0	0	--	--	<10	<10	10	--	--

DATE	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
MAY												
09...	--	6	--	60	--	--	50	--	--	--	9	--
SEP												
27...	<10	3	10	--	4600	40	30	250	<.5	.0	5	<10

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
MAY												
09...	--	50	--	1	--	--	--	--	--	--	--	--
SEP												
27...	0	10	50	0	10	.0	6	1.5	4.5	2.2	.0	2.6

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 27...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'36", long 75°11'17", Warren County, Hydrologic Unit 02040105, at suspension bridge in Rieglesville, and 600 ft (183 m) upstream from Musconetcong River.

DRAINAGE AREA.--6,328 mi² (16,390 km²), includes that of Musconetcong River.

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1906 to current year.
CHEMICAL ANALYSES: Water years 1969-74, 1976 to current year.

REMARKS.--Discharge records include flow of Musconetcong River. Water-quality records at periods of base flow probably are influenced by inflow from Musconetcong River.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 26...	1100	101	7.5	9.0	1	11.7	3.0	<20	350	39
NOV 28...	1330	122	7.3	4.0	2	14.0	--	330	110	48
FEB 27...	1145	184	7.7	2.5	3	13.3	--	170	17	69
APR 10...	1130	88	7.4	9.0	3	8.4	--	<20	11	32
MAY 01...	1145	149	8.2	13.0	2	11.1	--	<20	2	63
JUN 14...	1145	165	7.6	19.5	2	8.7	2.0	490	130	78
JUL 27...	1330	262	8.5	25.5	1	7.9	1.0	220	<2	83
AUG 14...	1315	218	7.7	25.0	2	7.6	--	490	4	77

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 26...	11	2.9	4.4	1.2	--	16	5.8	--	53	5
NOV 28...	13	3.7	4.8	1.3	--	19	6.3	--	78	3
FEB 27...	18	5.8	8.0	1.4	--	28	11	--	97	5
APR 10...	8.9	2.3	3.6	.9	--	12	4.7	--	62	5
MAY 01...	17	5.0	7.1	1.3	.0	24	37	1.8	88	1
JUN 14...	19	7.3	7.5	1.4	--	24	8.7	--	140	2
JUL 27...	21	7.5	9.7	2.0	--	28	13	--	138	5
AUG 14...	20	6.5	8.8	2.3	--	26	12	--	133	2

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 26...	.51	.01	.11	.36	.47	.99	.05	.03	7.3
NOV 28...	.80	.01	.15	.14	.29	1.1	.04	.02	4.9
FEB 27...	.73	.02	.25	.24	.49	1.2	.08	.04	3.2
APR 10...	.46	.01	.08	.17	.25	.72	.03	.01	5.0
MAY 01...	.60	.02	.21	.22	.43	1.1	.06	.03	7.0
JUN 14...	1.1	.00	.01	.21	.22	1.3	.02	.01	6.5
JUL 27...	--	--	.10	.50	.60	1.6	--	--	4.9
AUG 14...	--	--	<.10	--	.40	1.6	--	--	3.6

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 01...	1145	30	9	0	1	5	50	50	6	20	3

01458100 HAKIHOKAKE CREEK AT MILFORD, NJ

LOCATION.--Lat 40°34'06", long 75°05'44", Hunterdon County, Hydrologic Unit 02040105, at bridge on Bridge Street at Milford, and 4,000 ft (1,220 m) upstream from mouth.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1977 to current year.
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT 18...	1010	270	7.8	6.5	0	11.0	--	40	540	110	28	8.6
NOV 02...	1200	261	8.8	10.0	0	12.8	--	220	33	110	27	11
FEB 27...	1310	219	7.9	4.0	2	13.6	--	<2	<2	85	21	7.9
APR 10...	1300	182	--	13.0	1	12.2	--	<20	49	70	18	6.0
MAY 01...	1320	192	9.2	14.0	1	12.0	--	50	8	90	24	7.3
JUN 14...	1320	211	8.3	18.0	1	10.0	2.0	1800	920	47	14	2.8
JUL 13...	1240	230	8.8	21.0	0	11.4	2.0	9200	1600	93	22	9.2
AUG 03...	1200	241	9.1	23.5	1	12.2	1.0	2400	920	99	24	9.5
SEP 20...	1240	215	8.0	18.0	--	9.6	<1.0	490	540	85	22	7.4

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)
OCT 18...	10	2.1	--	--	--	31	15	--	--	167	1	--
NOV 02...	10	1.7	--	--	--	33	10	--	--	165	2	--
FEB 27...	8.9	1.2	--	--	--	27	13	--	--	118	1	--
APR 10...	7.6	1.3	--	--	--	25	9.5	--	--	112	2	--
MAY 01...	7.4	1.2	--	--	.0	28	9.4	--	13	122	0	--
JUN 14...	5.2	1.4	--	--	--	15	5.5	--	--	84	9	--
JUL 13...	7.2	1.5	--	--	--	23	8.8	--	--	161	3	--
AUG 03...	7.4	1.7	--	--	--	23	9.1	--	--	157	2	--
SEP 20...	9.0	1.6	57	.0	--	25	13	.1	13	150	--	6

01458100 HAKIHOKAKE CREEK AT MILFORD, NJ--Continued

WATER QUALITY DATA WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
18...	1.9	.00	.00	.23	.23	720	2.1	.03	.02	5.4	1.0
NOV											
02...	1.3	.00	.01	.13	.14	--	1.4	.02	.00	7.5	--
FEB											
27...	1.5	.00	.00	.05	.05	--	1.6	.02	.01	1.3	--
APR											
10...	.95	.00	.04	.11	.15	--	1.1	.01	.00	6.1	--
MAY											
01...	.97	.01	.01	.16	.17	--	1.2	.01	.00	6.7	--
JUN											
14...	.62	.01	.04	.31	.35	--	.98	.04	.02	3.9	--
JUL											
13...	--	--	.10	.30	.40	--	1.4	--	--	3.2	--
AUG											
03...	--	--	.10	.50	.60	--	1.6	--	--	3.1	--
SEP											
20...	--	--	<.10	--	--	--	--	--	--	4.9	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)
OCT											
18...	1010	--	--	42	--	--	--	<10	--	<10	--
MAY											
01...	1320	10	--	--	--	0	0	--	--	--	0
SEP											
20...	1240	40	1	--	0	--	--	--	<10	--	--

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
18...	--	<10	--	<10	--	1300	--	<10	--	230
MAY										
01...	0	--	11	--	30	--	0	--	10	--
SEP										
20...	--	--	2	--	--	--	--	--	20	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
18...	--	.0	--	<10	--	--	10	--	0	.0
MAY										
01...	--	--	5	--	--	10	--	0	--	--
SEP										
20...	<.5	--	9	--	0	20	--	0	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 18...	0	.0	.0	.0	1.8	.0	.0	.0	.0	0
MAY 01...	--	--	--	--	--	--	--	--	--	--
SEP 20...	--	--	--	--	--	--	--	--	--	--

01458400 HARIHOKAKE CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°32'53", long 75°04'09", Hunterdon County, Hydrologic Unit 02040105, at bridge on Frenchtown-Milford Road, 1,600 ft (490 m) upstream from mouth, and 1.5 mi (2.4 km) north of Frenchtown.

DRAINAGE AREA.--9.75 mi² (25.25 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
18...	1115	224	7.5	7.0	0	11.8	--	<20	220	80	24	4.8
NOV												
02...	1245	186	8.0	10.0	1	5.5	--	<20	11	72	21	4.8
FEB												
27...	1400	131	7.2	1.0	2	14.4	--	80	17	47	14	2.8
APR												
10...	1345	117	--	14.0	2	11.5	--	<20	9	43	13	2.5
MAY												
01...	1415	118	9.2	15.0	2	11.5	--	<20	8	48	15	2.6
JUN												
14...	1410	128	7.9	19.0	2	9.3	1.0	790	110	39	11	2.9
JUL												
13...	1320	139	7.8	21.5	0	8.2	2.0	230	240	48	14	3.1
AUG												
03...	1330	150	7.3	23.5	1	8.2	1.0	790	920	51	15	3.4
SEP												
20...	1400	165	7.8	18.5	--	9.3	1.0	5400	920	64	19	4.1

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)
OCT											
18...	8.4	2.5	--	--	30	13	--	--	148	2	--
NOV											
02...	7.7	2.2	--	--	25	11	--	--	109	3	--
FEB											
27...	6.2	1.1	--	--	17	10	--	--	74	0	--
APR											
10...	5.2	1.3	--	--	18	5.5	--	--	69	1	--
MAY											
01...	5.4	1.2	--	--	17	6.4	--	--	78	1	--
JUN											
14...	4.6	1.0	--	--	12	5.9	--	--	70	4	--
JUL											
13...	5.6	1.7	--	--	13	7.0	--	--	88	5	--
AUG											
03...	5.7	2.0	--	--	13	7.1	--	--	95	2	--
SEP											
20...	7.5	2.2	39	.0	24	9.8	.1	11	116	--	8

01458400 HARIHOKAKE CREEK NEAR FRENCHTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
18...	2.5	.00	.01	.41	.42	1300	2.9	.03	.03	3.9	2.6
NOV											
02...	.70	.00	.00	.14	.14	--	.84	.02	.01	9.0	--
FEB											
27...	1.0	.00	.00	.00	.00	--	1.0	.03	.01	1.0	--
APR											
10...	.55	.00	.00	.20	.20	--	.75	.02	.00	7.3	--
MAY											
01...	.11	.01	.00	.18	.18	--	.30	.01	.00	6.2	--
JUN											
14...	.35	.01	.04	.32	.36	--	.72	.04	.01	5.1	--
JUL											
13...	--	--	--	--	--	--	--	--	--	4.1	--
AUG											
03...	--	--	.10	.20	.30	--	1.3	--	--	7.2	--
SEP											
20...	--	--	.15	--	--	--	--	--	--	3.8	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)
OCT												
18...	1115	--	--	18	--	<10	--	<40	<10	--	<10	1500
SEP												
20...	1400	40	1	--	0	--	<10	--	--	5	--	--

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT												
18...	<10	--	260	--	.0	--	<10	--	--	10	--	0
SEP												
20...	--	20	--	<.5	--	9	--	0	10	--	0	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
18...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
SEP											
20...	--	--	--	--	--	--	--	--	--	--	--

01458500 DELAWARE RIVER AT FRENCHTOWN, NJ

LOCATION.--Lat 40°31'34", long 75°03'55", Hunterdon County, Hydrologic Unit 02040105, at bridge at Frenchtown, 1,000 ft (300 m) upstream from Nishisakawick Creek, and 3.4 mi (5.5 km) southeast of Milford.

DRAINAGE AREA.--6,420 mi² (16,628 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 26...	1230	118	7.5	10.0	1	10.4	3.0	<20	220	47
NOV 28...	1430	130	7.5	3.0	3	13.6	--	1700	130	57
FEB 28...	1030	197	7.9	3.0	2	13.7	3.0	40	70	75
APR 11...	1015	104	7.4	9.0	2	11.9	1.0	80	13	36
MAY 03...	1140	173	--	15.0	2	11.6	1.0	20	2	70
JUL 25...	0945	205	8.2	27.0	0	7.0	1.0	80	110	85

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 26...	13	3.6	5.4	1.4	--	18	6.9	--	74	0
NOV 28...	16	4.1	5.0	2.4	--	20	6.8	--	68	4
FEB 28...	19	6.6	8.0	1.5	--	26	12	--	115	2
APR 11...	9.5	2.9	4.0	1.0	--	14	6.2	--	60	7
MAY 03...	19	5.4	7.6	1.4	.0	24	9.1	1.7	100	1
JUL 25...	22	7.4	9.0	2.1	--	24	14	--	158	6

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 26...	.62	.02	.16	1.0	1.2	1.8	.05	.02	8.4
NOV 28...	.81	.01	.15	.21	.36	1.2	.04	.02	9.3
FEB 28...	1.2	.03	.33	.14	.47	1.7	.09	.06	3.2
APR 11...	.54	.01	.09	.27	.36	.91	.04	.01	8.1
MAY 03...	.68	.03	.20	.37	.57	1.3	.08	.06	7.4
JUL 25...	--	--	.10	.30	.40	1.4	--	--	5.4

01458500 DELAWARE RIVER AT FRENCHTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY												
03...	1140	30	9	0	0	3	41	50	30	10	50	5

01458600 NISHISAKAWICK CREEK AT FRENCHTOWN, NJ

LOCATION.--Lat 40°31'27", long 75°03'42", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29 in Frenchtown, 700 ft (213 m) upstream from mouth.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
04...	1120	234	8.1	12.0	1	11.3	--	50	240	78
NOV										
02...	1330	190	9.4	11.0	1	12.3	--	490	33	67
FEB										
21...	1115	160	7.8	1.0	1	11.5	1.0	490	79	54
APR										
12...	1110	148	8.6	12.0	1	12.6	2.0	20	2	47
MAY										
02...	1015	156	8.1	10.0	1	10.1	2.0	330	24	59
JUN										
21...	1100	152	7.9	20.0	4	9.0	1.0	460	39	51

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT										
04...	20	6.7	14	2.6	.0	22	24	8.9	131	8
NOV										
02...	17	5.9	11	2.0	--	24	15	--	111	6
FEB										
21...	14	4.5	9.9	1.3	--	18	15	--	97	29
APR										
12...	12	4.1	7.7	1.5	--	18	9.6	--	100	0
MAY										
02...	16	4.6	8.8	1.3	--	18	10	--	93	1
JUN										
21...	13	4.4	8.3	1.9	--	15	9.8	--	103	6

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
04...	1.4	.00	.00	.21	.21	1.6	.03	.02	9.1
NOV									
02...	1.9	.01	.00	.30	.30	2.2	.01	.01	8.7
FEB									
21...	2.9	.00	.00	.06	.06	3.0	.03	.02	--
APR									
12...	2.2	.01	.00	.63	.63	2.8	.01	.00	7.6
MAY									
02...	1.6	.02	.05	.30	.35	2.0	.01	.00	6.7
JUN									
21...	1.8	.01	.03	.36	.39	2.2	.04	.01	5.1

01458600 NISHISAKAWICK CREEK AT FRENCHTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 04...	1120	20	1	30	0	0	0	3

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 04...	50	0	10	<.5	1	0	0	6

01460500 DELAWARE AND RARITAN CANAL AT KINGSTON, NJ

LOCATION.--Lat 40°22'24", long 74°37'08", Middlesex County, Hydrologic Unit 02040105, on right bank at canal lock at Kingston, and 250 ft (76 m) upstream from new bridge on State Highway 27.

PERIOD OF RECORD.--
WATER DISCHARGE: March 1947 to current year.

GAGE.--Two water-stage recorders and concrete control. Datum of gage is 40.00 ft (12.192 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records fair. The canal diverts water from the Delaware River at Raven Rock and discharges into Raritan River at New Brunswick. Some water wasted to the Millstone River 500 ft (152 m) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	83	108	99	91	99	108	105	96	83	65	74
2	77	85	96	99	86	99	106	105	96	79	61	74
3	79	83	93	97	81	99	106	105	88	77	60	74
4	79	85	96	96	81	99	105	103	88	87	62	72
5	80	85	97	94	81	99	103	105	91	85	60	71
6	79	85	106	96	85	99	103	103	88	85	58	70
7	81	88	102	96	81	97	103	102	85	83	62	70
8	83	96	99	96	81	97	103	100	88	80	65	74
9	85	91	99	96	81	97	103	103	90	77	65	80
10	83	87	99	95	83	97	105	105	85	79	69	77
11	81	85	96	94	83	99	105	105	85	76	74	74
12	85	87	94	94	81	100	105	103	88	75	77	74
13	84	87	94	92	81	103	105	103	88	75	74	75
14	83	87	96	99	83	100	105	102	87	74	79	75
15	84	87	103	95	83	110	103	103	88	76	84	75
16	83	93	102	96	88	106	103	102	91	76	76	71
17	85	99	100	96	91	97	103	102	93	76	72	71
18	83	103	97	97	91	102	103	106	88	75	70	72
19	81	100	88	106	91	105	105	106	85	72	70	77
20	85	97	94	75	90	110	110	103	85	62	70	80
21	84	96	105	81	93	105	108	99	85	57	76	77
22	83	96	106	82	94	108	108	94	87	55	76	76
23	84	97	105	97	94	102	108	94	85	55	76	76
24	83	99	97	82	96	102	108	126	87	55	76	77
25	83	99	99	85	96	102	108	109	88	57	76	79
26	84	103	102	150	97	102	106	104	88	58	76	77
27	85	90	102	103	99	111	106	99	90	57	76	75
28	85	93	100	102	99	103	106	94	88	58	76	74
29	83	94	99	101	---	105	106	91	84	59	88	71
30	83	96	99	100	---	106	106	87	83	62	81	71
31	81	---	99	96	---	106	---	88	---	66	76	---
TOTAL	2557	2756	3072	2987	2461	3166	3162	3156	2638	2191	2226	2233
MEAN	82.5	91.9	99.1	96.4	87.9	102	105	102	87.9	70.7	71.8	74.4
MAX	85	103	108	150	99	111	110	126	96	87	88	80
MIN	77	83	88	75	81	97	103	87	83	55	58	70

CAL YR 1977 TOTAL 32438 MEAN 88.9 MAX 108 MIN 71
WTR YR 1978 TOTAL 32605 MEAN 89.3 MAX 150 MIN 55

01460900 LOCKATONG CREEK NEAR RAVEN ROCK, NJ

LOCATION.--Lat 40°24'28", long 75°00'52", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, 300 ft (90 m) upstream from mouth, and 1.1 mi (1.8 km) east of Raven Rock.

DRAINAGE AREA.--23.3 mi² (60.3 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: March to September 1978.
CHEMICAL ANALYSES: Water years 1956, 1959-62, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
04...	1000	134	8.0	12.0	2	12.2	--	1700	79	43	11
NOV											
02...	1200	152	7.9	12.0	1	10.2	--	240	330	57	14
FEB											
21...	1010	161	7.4	1.0	2	12.7	<1.0	20	7	43	10
APR											
12...	1000	147	7.2	11.5	2	12.2	3.0	20	8	42	10
MAY											
02...	1300	154	10.2	15.5	2	15.3	1.0	<20	6	50	13
JUN											
21...	0945	162	7.6	20.0	2	8.6	1.0	130	350	53	13
JUL											
13...	1430	152	9.2	24.5	0	12.0	1.0	330	130	49	12
AUG											
03...	1430	169	7.7	25.0	1	9.1	1.0	1300	540	50	12
SEP											
21...	1100	153	7.6	18.0	--	10.4	<1.0	1300	23	53	13

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT											
04...	3.7	6.4	2.1	--	.0	21	8.0	--	3.8	78	6
NOV											
02...	5.3	11	2.1	--	--	25	9.9	--	--	92	7
FEB											
21...	4.4	9.0	1.9	--	--	26	13	--	--	98	0
APR											
12...	4.2	7.8	2.0	--	--	26	8.6	--	--	98	7
MAY											
02...	4.3	9.7	1.7	--	--	26	9.0	--	--	87	0
JUN											
21...	5.1	9.0	2.4	--	--	24	10	--	--	119	10
JUL											
13...	4.7	8.7	2.5	--	--	25	10	--	--	101	4
AUG											
03...	4.8	7.9	2.5	--	--	22	8.5	--	--	107	0
SEP											
21...	5.0	7.1	2.6	29	--	26	7.3	.1	11	97	--

01460900 LOCKATONG CREEK NEAR RAVEN ROCK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
OCT											
04...	.47	.01	.05	.26	.31	--	.79	.02	.01	9.5	--
NOV											
02...	.42	.02	.08	.31	.39	--	.83	.04	.01	7.5	--
FEB											
21...	--	.00	.01	.26	.27	--	--	.02	.01	1.4	--
APR											
12...	1.7	.01	.00	.23	.23	--	1.9	.00	.00	7.3	--
MAY											
02...	.98	.01	.03	.30	.33	--	1.3	.01	.00	6.1	--
JUN											
21...	1.5	.01	.02	.36	.38	--	1.9	.02	.00	4.9	--
JUL											
13...	--	--	.10	.30	.40	--	1.4	--	--	5.0	--
AUG											
03...	--	--	.10	.50	.60	--	1.8	--	--	5.3	--
SEP											
21...	--	--	.30	--	--	1200	--	--	--	--	.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT												
04...	1000	30	1	--	40	0	--	--	0	0	--	4
SEP												
21...	1100	--	--	0	--	--	<10	10	--	--	<10	--

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT												
04...	--	90	--	6	--	40	--	<.5	--	5	--	0
SEP												
21...	<10	--	10000	--	20	--	960	--	.0	--	20	--

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT												
04...	20	--	4	--	--	--	--	--	--	--	--	--
SEP												
21...	--	50	--	1	.0	0	.0	.0	.0	.0	.0	.0

DATE	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT											
04...	--	--	--	--	--	--	--	--	--	--	--
SEP											
21...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi (2.3 km) upstream of Lockatong Creek.

DRAINAGE AREA.--6,598 mi² (17,089 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 26...	1320	108	7.6	9.5	1	10.1	2.0	<20	260	41
NOV 29...	1000	137	7.4	2.0	2	15.0	2.0	330	350	51
FEB 28...	0945	198	7.8	2.0	3	13.7	1.0	20	13	72
APR 11...	1120	96	7.3	9.5	2	11.8	1.0	50	4	34
MAY 03...	1010	171	--	14.5	2	11.0	2.0	20	<2	70
JUL 25...	1130	217	8.4	27.0	0	7.1	1.0	20	130	89
AUG 21...	0915	242	8.2	24.0	0	7.9	--	50	7	95

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 26...	11	3.2	4.7	1.2	--	17	6.2	--	62	0
NOV 29...	14	3.9	5.7	1.3	--	21	7.9	--	82	3
FEB 28...	18	6.5	8.0	1.4	--	26	12	--	114	3
APR 11...	8.8	2.8	4.1	1.0	--	15	6.4	--	62	12
MAY 03...	19	5.4	7.6	1.2	.0	24	9.1	1.4	101	1
JUL 25...	23	7.6	9.2	2.1	--	25	13	--	144	8
AUG 21...	24	8.4	12	2.1	--	32	14	--	153	0

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 26...	.58	.02	.11	.34	.45	1.1	.05	.03	8.1
NOV 29...	.89	.02	.13	.45	.58	1.5	.04	.02	12
FEB 28...	1.1	.03	.32	.28	.60	1.7	.08	.06	4.6
APR 11...	.54	.01	.09	.31	.40	.95	.04	.02	6.2
MAY 03...	.68	.04	.14	.35	.49	1.2	.06	.04	5.8
JUL 25...	--	--	.10	.30	.40	1.4	--	--	6.2
AUG 21...	--	--	<.10	--	1.1	2.4	--	--	5.1

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 03...	1010	30	10	0	0	0	26	50	30	12	60	1

01461250 WICKECHEOKE CREEK AT LOCKTOWN, NJ

LOCATION.--Lat 40°29'09", long 74°58'15", Hunterdon County, Hydrologic Unit 02040105, at bridge on unnamed road in Locktown, 2.4 mi (3.9 km) upstream from Plum Brook, and 3.1 mi (5.0 km) northwest of Sergentsville.

DRAINAGE AREA.--9.24 mi² (23.93 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 04...	1300	5740	8.3	14.0	2	18.0	--	80	46	140
NOV 02...	1415	2670	7.9	10.0	1	10.0	--	<20	2	100
APR 12...	1245	1080	8.2	14.0	4	11.8	1.0	50	2	58
MAY 02...	1130	338	9.2	14.0	2	12.6	2.0	<20	5	46
JUN 21...	1200	8000	7.6	23.0	2	7.8	--	460	>2400	170

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 04...	29	16	1300	5.2	--	420	1600	--	3360	6
NOV 02...	22	12	540	4.2	--	170	710	--	1530	3
APR 12...	13	6.2	250	2.3	--	100	340	--	740	3
MAY 02...	11	4.5	170	1.7	.0	71	210	3.6	448	1
JUN 21...	38	18	1400	5.6	--	330	1900	--	3720	8

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	.26	.02	.03	.76	.79	1.1	.00	.00	13
NOV 02...	.02	.00	.01	.60	.61	.63	.02	.00	7.9
APR 12...	.41	.01	.00	.35	.35	.77	.01	.00	4.8
MAY 02...	.01	.00	.02	.43	.45	.46	.03	.01	4.8
JUN 21...	.09	.01	.06	.70	.76	.86	.03	.00	4.7

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 02...	1130	40	20	0	0	0	4	120	40	10	10	3

01461300 WICKECHEOKE CREEK AT STOCKTON, NJ

LOCATION.--Lat 40°24'41", long 74°59'13", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29 in Stockton, 900 ft (270 m) upstream from mouth.

DRAINAGE AREA.--26.5 mi² (68.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1977 to current year.
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 04...	1345	1040	9.2	14.0	0	9.3	--	170	79	85
NOV 02...	1130	780	8.4	13.0	1	12.7	--	180	240	85
FEB 21...	1320	907	7.9	1.0	1	13.7	<1.0	<20	8	65
APR 12...	1345	403	--	16.0	1	10.6	1.0	50	4	43
MAY 02...	1400	605	9.6	17.5	1	12.7	2.0	50	14	63
JUN 21...	1345	450	8.8	23.0	1	9.6	2.0	230	350	--
JUL 25...	1330	600	9.5	23.5	0	10.3	1.0	330	280	70
AUG 21...	1030	690	7.8	19.5	0	8.8	--	210	130	67

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 04...	20	8.6	170	3.8	.0	77	250	6.3	615	6
NOV 02...	20	8.4	120	3.4	--	61	170	--	431	3
FEB 21...	15	6.7	160	2.2	--	73	200	--	485	6
APR 12...	10	4.4	60	2.2	--	42	76	--	228	0
MAY 02...	16	5.6	95	2.0	--	56	130	--	296	1
JUN 21...	--	--	--	--	--	38	79	--	272	12
JUL 25...	17	6.7	85	3.0	--	43	120	--	317	4
AUG 21...	16	6.6	110	2.6	--	53	150	--	376	6

01461300 WICKECHEOKE CREEK AT STOCKTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	.73	.00	.00	.57	.57	1100	1.3	.11	.02	9.2
NOV 02...	1.1	.00	.00	.31	.31	--	1.4	.02	.01	8.0
FEB 21...	2.7	.01	.02	.35	.37	--	3.1	.04	.03	5.4
APR 12...	1.2	.01	.00	.40	.40	--	1.6	.01	.01	5.2
MAY 02...	1.5	.02	.04	.35	.39	--	1.9	.02	.01	5.2
JUN 21...	3.0	.01	.03	.40	.43	--	3.4	.06	.05	5.2
JUL 25...	--	--	.10	.30	.40	--	1.5	--	--	7.0
AUG 21...	--	--	<.10	--	--	--	--	--	--	3.6

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 04...	1345	20	2	19	40	0	<10	40	0	1

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT 04...	<10	5	<10	100	490	3	27	10	470	<.5

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	.0	5	<10	0	20	20	2	0	.0	0

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	.0	.0	.0	.0	.0	.0	.0	.0	0

01461900 ALEXAUKEN CREEK NEAR LAMBERTVILLE, NJ

LOCATION.--Lat 40°22'51", long 74°56'54", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, 0.4 mi (0.6 km) upstream from mouth, and 1.1 mi (1.8 km) north of Lambertville.

DRAINAGE AREA.--14.9 mi² (38.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1959-63, 1977 to current year.
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.
SEDIMENT ANALYSES: September 1978.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
18...	1300	--	278	7.9	8.5	0	13.7	--	20	240	120	32
NOV												
02...	1045	--	280	7.5	--	2	16.3	--	<20	23	120	30
FEB												
21...	1410	--	228	7.6	1.0	2	13.0	1.0	130	33	84	21
MAR												
28...	0950	610	142	7.2	6.5	10	10.9	<1.0	130	350	50	13
APR												
24...	1030	30	197	9.4	10.5	2	15.1	--	260	240	71	18
MAY												
15...	0950	80	158	7.5	11.5	2	9.9	--	9200	920	61	15
JUL												
26...	1430	--	292	9.9	25.0	1	13.6	2.0	130	240	110	27
AUG												
15...	0945	5.6	260	8.0	22.5	2	9.8	--	50	220	110	28
SEP												
27...	1500	--	295	--	--	--	--	--	--	--	120	30

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
18...	10	20	3.3	--	--	--	41	37	--	--	213	1
NOV												
02...	11	12	2.6	--	--	--	50	15	--	--	155	3
FEB												
21...	7.7	10	1.6	--	--	--	40	17	--	--	143	0
MAR												
28...	4.3	6.5	2.0	--	--	--	23	9.7	--	--	95	13
APR												
24...	6.3	8.3	1.8	--	--	--	33	13	--	--	142	0
MAY												
15...	5.8	8.0	2.1	--	--	.0	27	8.8	--	13	116	3
JUL												
26...	9.6	11	2.8	--	--	--	50	20	--	--	180	4
AUG												
15...	9.5	11	2.7	--	--	--	44	14	--	--	189	0
SEP												
27...	12	11	2.4	63	.0	--	49	15	.1	9.2	180	--

01461900 ALEXAUKEN CREEK NEAR LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
18...	--	1.2	.00	.00	.46	.46	1200	1.7	.03	.02	4.8
NOV											
02...	--	.95	.01	.00	.21	.21	--	1.2	.02	.00	7.9
FEB											
21...	--	2.5	.00	.02	.17	.19	--	2.7	.03	.02	1.4
MAR											
28...	--	2.0	.01	.07	.34	.41	--	2.4	.05	.03	4.1
APR											
24...	--	1.1	.01	.02	.31	.33	--	1.4	.02	.00	9.2
MAY											
15...	--	1.5	.01	.05	.43	.48	--	2.0	.07	.03	9.8
JUL											
26...	--	--	--	.10	.30	.40	--	1.4	--	--	4.9
AUG											
15...	--	--	--	<.10	--	.40	--	--	--	--	3.2
SEP											
27...	3	--	--	<.10	--	--	--	--	--	--	4.0

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
18...	1300	--	--	19	--	--	--	<10	--	<10
MAY										
15...	0950	60	--	--	--	50	0	--	--	--
SEP										
27...	1500	10	1	--	0	--	--	--	<10	--

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
18...	--	--	<10	--	<10	--	1500	<10	--	270
MAY										
15...	0	0	--	5	--	70	--	--	30	--
SEP										
27...	--	--	--	18	--	--	--	--	0	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
18...	--	.0	--	<10	--	--	20	--	0	.0
MAY										
15...	--	--	6	--	--	20	--	1	--	--
SEP										
27...	<.5	--	5	--	0	10	--	0	--	--

01461900 ALEXAUKEN CREEK NEAR LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
18...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY										
15...	--	--	--	--	--	--	--	--	--	--
SEP										
27...	--	--	--	--	--	--	--	--	--	--

01462000 DELAWARE RIVER AT LAMBERTVILLE, NJ

LOCATION.--Lat 40°21'53", long 74°56'57", Hunterdon County, Hydrologic Unit 02040105, at U.S. Route 202 bridge connecting Lambertville, NJ, and New Hope, PA, and 600 ft (183 m) upstream of Swan Creek.

DRAINAGE AREA.--6,680 mi² (17,301 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT									
26...	1415	107	7.6	9.5	1	10.9	2.0	<20	240
NOV									
29...	1130	145	7.5	2.0	1	8.3	1.0	790	40
FEB									
28...	1145	193	8.0	3.0	2	11.8	1.0	230	8
APR									
11...	1250	98	7.2	10.0	2	11.8	1.0	140	5
MAY									
03...	1315	171	--	16.5	1	11.8	6.0	<20	<2
JUL									
26...	1300	250	8.6	26.0	1	7.9	1.0	20	2
AUG									
15...	1100	202	7.8	25.0	4	7.3	1.0	170	5

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT									
26...	43	12	3.2	4.6	1.3	16	6.1	64	0
NOV									
29...	49	13	3.9	7.3	1.3	21	9.7	86	7
FEB									
28...	71	18	6.3	8.2	1.4	26	12	122	0
APR									
11...	34	9.2	2.7	4.2	1.0	14	6.5	65	6
MAY									
03...	70	19	5.5	7.5	1.3	23	9.3	99	1
JUL									
26...	85	21	8.0	9.5	2.1	28	6.0	139	0
AUG									
15...	78	20	6.7	7.5	2.0	25	11	140	8

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
26...	.58	.02	.10	.35	.45	1.1	.05	.03	7.4
NOV									
29...	.90	.02	.12	.53	.65	1.6	.03	.02	13
FEB									
28...	1.3	.03	.31	.24	.55	1.9	.08	.06	.8
APR									
11...	.54	.01	.08	.19	.27	.82	.03	.01	4.9
MAY									
03...	.66	.04	.10	.43	.53	1.2	.06	.03	4.0
JUL									
26...	--	--	.10	.30	.40	1.4	--	--	7.8
AUG									
15...	--	--	<.10	--	<.40	--	--	--	3.3

01462005 SWAN CREEK AT LAMBERTVILLE, NJ

LOCATION.--Lat 40°21'51", long 74°56'41", Hunterdon County, Hydrologic Unit 02040105, at bridge in Lambertville 250 ft (76 m) upstream from Delaware-Raritan Canal, 350 ft (107 m) downstream from State Route 29, and 500 ft (152 m) upstream from mouth.

DRAINAGE AREA.--3.28 mi² (8.50 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
18...	1345	375	7.9	9.0	1	11.4	--	<20	920	110
NOV										
02...	1000	354	6.3	9.0	1	9.6	--	490	1600	140
FEB										
23...	1345	334	7.3	2.0	3	14.1	2.5	<20	17	90
MAR										
28...	1110	233	7.3	7.0	3	11.6	1.0	340	1600	73
APR										
24...	1130	198	8.1	10.5	9	11.6	--	3500	240	67
MAY										
15...	1100	161	7.3	13.0	2	9.8	--	2800	280	58

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT										
18...	29	9.1	9.7	3.0	--	41	14	--	165	2
NOV										
02...	33	13	19	3.8	--	42	31	--	216	3
FEB										
23...	23	8.0	28	1.9	--	32	58	--	223	4
MAR										
28...	19	6.2	14	2.5	--	27	33	--	148	1
APR										
24...	17	5.9	10	1.8	--	32	17	--	138	8
MAY										
15...	14	5.7	10	1.8	.0	26	12	14	116	1

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
18...	2.0	.01	.01	.31	.32	2.3	.04	.01	5.1
NOV									
02...	1.5	.00	.00	.26	.26	1.8	.04	.02	4.8
FEB									
23...	.00	.01	.01	.33	.34	.35	.04	.01	1.9
MAR									
28...	1.7	.00	.04	.56	.60	2.3	.03	.01	3.7
APR									
24...	.51	.00	.00	.24	.24	.75	.04	.01	10
MAY									
15...	.57	.01	.02	.52	.54	1.1	.04	.00	7.9

01462005 SWAN CREEK AT LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 15...	1100	40	50	0	0	0	21	80	40	9	40	0

01462195 MOORES CREEK NEAR LAMBERTVILLE, NJ

LOCATION.--Lat 40°20'39", long 74°53'11", Hunterdon County, Hydrologic Unit 02040105, at bridge 2.4 mi (3.9 km) north of Titusville, 2.5 mi (4.0 km) upstream of mouth, 2.7 mi (4.3 km) east of Goat Hill, and 3.3 mi (5.3 km) southeast of Lambertville.

DRAINAGE AREA.--4.51 mi² (11.68 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
NOV									
02...	1430	228	8.2	11.0	1	10.2	--	790	240
FEB									
23...	1020	184	7.2	1.0	1	13.7	1.2	70	49
MAR									
28...	1300	140	7.3	7.0	8	10.8	<1.0	70	13
APR									
24...	1250	172	8.1	10.5	2	12.4	--	490	8
MAY									
15...	1240	165	7.8	12.0	1	10.4	<1.0	9200	540

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV									
02...	85	20	8.6	12	2.4	36	16	142	6
FEB									
23...	67	15	7.1	9.4	1.4	28	12	128	0
MAR									
28...	48	12	4.4	7.9	2.1	24	9.2	82	8
APR									
24...	59	14	5.9	9.0	1.5	29	12	123	2
MAY									
15...	61	14	6.4	9.3	1.9	28	10	113	12

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV									
02...	.36	.00	.00	.22	.22	.58	.01	.00	8.1
FEB									
23...	1.5	.00	.02	.16	.18	1.7	.02	.01	.6
MAR									
28...	1.6	.01	.03	.50	.53	2.1	.03	.01	3.3
APR									
24...	.60	.00	.00	.21	.21	.81	.02	.00	7.4
MAY									
15...	.89	.02	.04	.33	.37	1.3	.03	.01	10

01462200 MOORES CREEK NEAR TITUSVILLE, NJ

LOCATION.--Lat 40°19'26", long 74°55'02", Mercer County, Hydrologic Unit 02040105, at bridge on State Route 29, 400 ft (120 m) upstream from mouth, and 2.1 mi (3.4 km) northwest of Titusville.

DRAINAGE AREA.--10.2 mi² (26.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
NOV 29...	1300	192	7.4	1.0	2	6.1	1.0	110	130
MAR 28...	1150	132	7.3	7.5	6	10.4	<1.0	70	49
APR 24...	1340	158	9.4	13.0	4	13.4	--	230	<2
MAY 15...	1340	152	7.4	12.0	2	9.2	--	1400	540

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV 29...	72	18	6.6	10	2.1	32	11	129	8
MAR 28...	46	12	4.0	7.3	1.9	23	8.5	86	3
APR 24...	56	14	5.0	8.2	1.6	28	9.7	111	1
MAY 15...	54	13	5.3	8.1	2.0	27	7.4	101	7

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 29...	2.3	.00	.01	.75	.76	3.1	.01	.01	12
MAR 28...	1.3	.00	.03	.53	.56	1.9	.04	.01	3.4
APR 24...	.41	.00	.04	.29	.33	.74	.05	.00	9.1
MAY 15...	.83	.01	.09	.23	.32	1.2	.03	.01	12

01462500 DELAWARE RIVER AT WASHINGTON CROSSING, NJ

LOCATION.--Lat 40°17'20", long 74°52'08", Mercer County, Hydrologic Unit 02040105, at bridge at Washington Crossing, 1.4 mi (2.3 km) upstream of Jacobs Creek.

DRAINAGE AREA.--6,735 mi² (17,444 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT									
18...	1440	122	7.1	8.0	1	12.5	--	50	280
NOV									
29...	1415	141	7.5	2.0	2	13.6	1.0	330	33
FEB									
28...	1320	192	7.5	3.0	2	13.4	2.0	230	<2
APR									
11...	1345	99	7.4	10.0	2	12.3	1.0	170	7
MAY									
03...	1410	169	--	16.5	1	12.8	5.0	<20	<2
JUL									
26...	0930	290	8.7	25.9	1	7.9	1.0	<20	48
AUG									
15...	1300	205	8.0	26.0	5	7.8	<1.0	330	5

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT									
18...	42	12	2.9	4.5	1.5	19	6.9	79	24
NOV									
29...	49	13	3.9	6.7	1.3	21	8.7	85	9
FEB									
28...	71	18	6.3	8.2	1.4	26	12	106	0
APR									
11...	34	9.2	2.7	4.1	1.0	15	6.6	56	6
MAY									
03...	70	19	5.4	7.3	1.3	23	9.0	97	1
JUL									
26...	85	21	7.8	9.4	2.0	27	14	141	5
AUG									
15...	77	20	6.6	7.5	2.0	25	10	150	4

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
18...	.83	.01	.07	.64	.71	1.6	.10	.00	6.3
NOV									
29...	.94	.02	.14	.76	.90	1.9	.04	.02	10
FEB									
28...	1.2	.03	.25	.23	.48	1.7	.07	.05	2.3
APR									
11...	.39	.01	.07	.19	.26	.66	.03	.01	4.3
MAY									
03...	.71	.04	.05	.46	.51	1.3	.05	.02	5.5
JUL									
26...	--	--	.10	.70	.80	1.8	--	--	10
AUG									
15...	--	--	.20	.20	.40	1.7	--	--	4.7

01463500 DELAWARE RIVER AT TRENTON, NJ

(National stream quality accounting network, Pesticide program, and Radiochemical program station)

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, on left bank 450 ft (137 m) upstream from Calhoun Street Bridge at Trenton, 0.5 mi (0.8 km) upstream from Assunpink Creek, and at mile 134.5 (216.4 km).

DRAINAGE AREA.--6,780 mi² (17,560 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: February 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.
CHEMICAL ANALYSES: Water years 1945 to current year.
SEDIMENT ANALYSES: Water years 1948 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: February 1913 to current year.
SPECIFIC CONDUCTANCE: June 1968 to current year.
pH: June 1968 to current year.
WATER TEMPERATURES: October 1944 to current year.
DISSOLVED OXYGEN: October 1962 to current year.
SUSPENDED-SEDIMENT DISCHARGE: September 1949 to current year.

REVISED DISCHARGE RECORDS.--WSP 951: Drainage area. WSP 1302: 1913-20. WSP 1382: 1924, 1928.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1965, at datum 7.77 ft (2.368 m) higher. Feb. 24, 1913, to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 500 ft (152 m) downstream.

INSTRUMENTATION.--Temperature recorder since October 1944, water-quality recorder since October 1962.

REMARKS.--Discharge records excellent. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack and Hopatcong, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, Neversink, and Wild Creek Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs and to Delaware and Raritan Canal (see Delaware River Basin, diversions). Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply (see Delaware River Basin, diversions). Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism. Daily sediment data omitted from the 1977 Annual Report are included in this report.

AVERAGE DISCHARGE.--66 years, 11,744 ft³/s (332.6 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50,000 ft³/s (1,420 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 10	1700	*89500	2535	17.26	5.261
Jan. 27	2000	76300	2161	16.35	4.983
Mar. 28	1845	74300	2104	16.21	4.941

Minimum discharge, 3,040 ft³/s (86.1 m³/s) Sept. 28, 29, gage height, 8.02 ft (2.444 m).
WATER TEMPERATURES: Maximum, 30.0°C July 23, 24.
SEDIMENT CONCENTRATIONS:
Water year 1977: Maximum daily mean, 923 mg/L Feb. 25, 1977; minimum daily mean, 1 mg/L December 22, 27, 1976 and April 20, 1977.
Water year 1978: Maximum daily mean, 306 mg/L Jan. 10, 1978; minimum daily mean, 1 mg/L on several days in March and September 1978.
SEDIMENT LOADS:
Water year 1977: Maximum daily, 119,000 tons (108,000 tonnes) March 15, 1977; minimum daily, 12 tons (11 tonnes) on numerous days during the year.
Water year 1978: Maximum daily, 66,500 tons (60,300 tonnes) Jan. 10, 1978; minimum daily, 9.2 tons (8.3 tonnes) on Sept. 14, 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 329,000 ft³/s (9.320 m³/s) Aug. 20, 1955 (elevation, 28.60 ft or 8.717 m, from high-water mark in gage house) from rating curve extended above 230,000 ft³/s (6,510 m³/s); minimum, 1,180 ft³/s (33.4 m³/s) Oct. 31, 1963, elevation, 7.26 ft (2.213 m). Flow in Delaware and Raritan Canal not included.
SPECIFIC CONDUCTANCE: Maximum, 400 micromhos Jan. 24, 1959; minimum, 50 micromhos Mar. 19, 1945.
pH: Maximum, 10.2 July 5, 6, 1971, June 14, 15, 1974; minimum, 5.3 June 22, 1972.
WATER TEMPERATURES: Maximum, 34.0°C June 18, 1957; minimum 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 17.3 mg/L July 9, 1974; minimum, 4.0 mg/L Nov. 9, 1972.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,720 mg/L Nov. 26, 1950; minimum daily, less than 0.5 mg/L Oct. 21, 1952 and Jan. 18, 1970.
SEDIMENT LOADS: Maximum daily, 1,087,000 tons (986,126 tonnes) Aug. 20, 1955; minimum daily, less than 0.5 ton (0.45 tonnes) Oct. 21, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft (8.69 m) National Geodetic Vertical Datum of 1929, discharge estimated, 295,000 ft³/s (8,350 m³/s). Maximum elevation since 1903, 30.6 ft (9.33 m) National Geodetic Vertical Datum of 1929, Mar. 8, 1904, from floodmark (ice jam).

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14500	9710	23200	17200	26400	7000	45600	8760	14000	4830	4520	6530
2	13500	9330	29600	15200	23400	7230	39500	8280	13300	4450	4670	5070
3	21100	9270	34600	13800	20300	7090	43000	7780	12200	4640	4410	4300
4	20800	9450	32500	12400	18100	6850	39900	7330	12700	7830	3940	3900
5	16100	9270	28100	12100	15800	6620	36400	7090	12100	7000	4110	3620
6	12700	8730	27000	12300	14200	6260	34300	7380	11200	6120	4410	3360
7	11000	11100	23500	12200	13000	5860	33000	9020	10900	8390	10400	3290
8	10200	21200	20800	12400	13700	6760	32000	9630	10800	6620	12700	3420
9	11800	26700	18800	31100	13300	6950	32800	10700	12500	5770	13800	4520
10	16200	28000	17200	79200	13500	6120	29600	11900	15500	4950	10400	4190
11	21500	27300	15100	65800	12800	6120	25700	12600	14700	4480	8650	3730
12	18800	32000	14000	45800	12100	6530	23200	13000	12300	4370	9630	3560
13	15600	32800	11400	41000	11600	7530	23700	11700	11100	4330	12300	3490
14	13200	27500	13400	35200	11000	11500	23900	14300	11400	4260	8860	3420
15	14600	23400	22900	28200	11300	30200	22200	30000	10700	4410	6900	3360
16	17400	20000	29900	24800	10700	31600	19700	29100	10200	4600	6530	3360
17	24700	17800	33500	22100	10300	26000	17200	34900	9240	5270	5520	3690
18	33000	17500	33000	20400	10500	22100	15800	44900	8180	5350	5030	3690
19	44300	16700	33600	18400	10300	20200	15300	46300	7380	4450	4520	4950
20	39200	15300	28700	17500	9190	21700	15800	44600	7090	4300	4190	7930
21	37800	14000	32400	14700	8080	23100	16200	37500	7430	4220	4040	7530
22	33900	12600	41500	14400	8550	28900	16300	31800	7780	4080	3760	6040
23	27900	13000	35100	13300	8390	39500	15400	27600	7280	4450	3690	5310
24	23200	12900	28900	12500	8490	43700	13900	28900	6480	4220	3660	4990
25	20100	12000	26200	14000	8600	44400	12700	29600	6480	3800	3490	4260
26	17700	15000	27600	47700	8340	39500	12000	26500	5730	3620	3460	3560
27	16000	16900	27300	69500	7280	57100	11100	22300	5350	3690	3560	3390
28	14900	17300	24300	63400	6580	71200	10600	19100	5520	3620	5150	3420
29	13300	15600	21700	48300	---	67000	9910	16900	5230	3690	5190	3290
30	12100	14900	18900	36900	---	58900	9350	15100	5310	3830	4520	3490
31	10600	---	17400	30800	---	53000	---	13900	---	3730	4370	---
TOTAL	617700	517260	792100	902600	345800	776520	696060	638470	290080	149370	190380	128660
MEAN	19930	17240	25550	29120	12350	25050	23200	20600	9669	4818	6141	4289
MAX	44300	32800	41500	79200	26400	71200	45600	46300	15500	8390	13800	7930
MIN	10200	8730	11400	12100	6580	5860	9350	7090	5230	3620	3460	3290

CAL YR 1977 TOTAL 5195970 MEAN 14240 MAX 107000 MIN 2200
WTR YR 1978 TOTAL 6045000 MEAN 16560 MAX 79200 MIN 3290

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
21...	1255	39150	88	7.2	11.0	6	--	10.9	1.2	290
NOV										
28...	1015	17600	139	7.7	5.0	5	--	12.0	1.4	140
DEC										
19...	1030	34000	116	7.2	4.0	1	--	12.8	--	K720
JAN										
18...	1310	20700	134	7.4	1.0	6	--	14.0	1.1	K55
FEB										
17...	1100	10400	159	7.2	2.0	3	--	13.4	1.6	180
MAR										
23...	1215	40400	129	7.0	8.0	15	--	12.2	2.0	140
APR										
12...	1010	22700	104	--	9.0	2	--	11.6	1.5	K18
MAY										
02...	1600	8230	159	9.4	14.5	2	--	15.2	3.9	K3
JUN										
21...	1200	7780	176	8.8	24.0	--	4.0	8.6	2.8	35
JUL										
11...	1020	4480	190	8.9	25.0	--	2.0	10.4	3.1	22
AUG										
24...	1245	3730	238	9.4	26.0	--	4.0	11.8	3.8	K5
31...	0955	4370	--	--	--	--	--	--	--	--
SEP										
27...	1150	3260	223	8.1	18.0	--	2.0	9.6	2.3	12

01463500 DELAWARE RIVER AT TRENTON, NJ--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 21...	120	30	8.5	2.2	3.7	1.3	18	15	16	5.5
NOV 28...	600	51	14	4.0	5.4	1.5	34	28	21	6.8
DEC 19...	--	20	5.8	1.3	2.3	.6	29	24	10	4.1
JAN 18...	550	48	13	3.8	6.2	1.1	26	21	17	9.1
FEB 17...	66	58	15	5.1	7.5	1.2	37	30	22	12
MAR 23...	450	41	11	3.3	6.0	1.4	26	21	17	8.4
APR 12...	<1	37	10	2.9	4.2	1.0	23	19	14	6.1
MAY 02...	K1	67	18	5.3	6.3	1.4	49	40	22	9.6
JUN 21...	660	66	17	5.8	7.6	1.7	--	41	24	11
JUL 11...	--	75	19	6.8	8.3	1.9	--	53	24	12
AUG 24...	130	96	24	8.7	10	2.2	--	60	29	13
31...	--	--	--	--	--	--	--	--	--	--
SEP 27...	80	92	22	9.1	9.5	2.0	--	56	29	14

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT 21...	.1	3.9	59	--	15	46	4860	62	.52	.05
NOV 28...	.0	2.6	77	--	8	--	--	--	.89	.10
DEC 19...	.0	5.8	35	--	16	--	--	--	.92	.11
JAN 18...	.0	5.0	80	--	12	12	671	77	.90	.11
FEB 17...	.0	5.1	84	100	6	8	225	100	1.1	.19
MAR 23...	.0	4.5	69	--	54	101	11000	62	.80	.11
APR 12...	.0	3.1	65	--	6	10	613	76	.62	.06
MAY 02...	.1	.8	100	--	0	4	89	100	.63	.01
JUN 21...	.1	1.2	124	--	3	10	210	87	.88	.01
JUL 11...	.1	3.1	131	--	2	7	85	100	.89	.00
AUG 24...	.1	3.2	163	--	--	--	--	--	.86	.00
31...	--	--	--	--	--	22	260	95	--	--
SEP 27...	.1	3.9	143	--	2	3	26	93	1.6	.06

01463500 DELAWARE RIVER AT TRENTON, NJ--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT										
21...	--	--	--	.60	--	.05	.02	6.8	--	--
NOV										
28...	--	--	--	.49	--	.06	.03	--	5.9	1.1
DEC										
19...	--	--	--	.20	--	.05	.03	7.6	--	--
JAN										
18...	--	--	--	.33	--	.06	.03	9.5	--	--
FEB										
17...	.34	.53	.31	.22	1.6	.06	.05	--	6.0	.6
MAR										
23...	.62	.73	.30	.43	1.5	.10	.02	3.9	--	--
APR										
12...	.19	.25	.01	.24	.87	.03	.03	4.6	--	--
MAY										
02...	.34	.35	.10	.25	.98	.04	.03	--	7.3	.5
JUN										
21...	.59	.60	.26	.34	1.5	.06	.06	5.6	--	--
JUL										
11...	.54	.54	.28	.26	1.4	.08	.03	4.3	--	--
AUG										
24...	1.1	1.1	.74	.36	2.0	.17	.04	--	6.4	--
31...	--	--	--	--	--	--	--	--	--	--
SEP										
27...	.24	.30	.00	.30	1.9	.10	.09	3.2	2.8	.4

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)
NOV												
28...	1015	--	--	1	--	--	0	--	--	--	--	--
FEB												
17...	1100	0	0	0	0	0	0	0	0	0	<10	<10
MAY												
02...	1600	2	1	1	0	0	0	--	0	--	10	8
AUG												
24...	1245	1	0	1	100	0	100	--	0	--	<10	<6
SEP												
27...	1150	1	--	1	0	0	0	--	--	--	<10	<10

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
NOV												
28...	--	--	--	--	--	--	--	--	--	110	--	--
FEB												
17...	0	0	0	0	6	4	2	410	--	20	5	1
MAY												
02...	2	0	0	0	6	2	4	140	--	30	--	0
AUG												
24...	4	3	1	2	8	5	3	1700	1700	30	--	--
SEP												
27...	0	1	0	1	15	7	8	80	40	40	--	--

01463500 DELAWARE RIVER AT TRENTON, NJ--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)
NOV												
28...	--	--	--	30	<.5	.0	<.5	--	--	0	--	--
FEB												
17...	4	40	0	40	<.5	.0	<.5	0	0	0	0	0
MAY												
02...	--	30	10	20	<.5	.0	<.5	0	0	0	0	0
AUG												
24...	--	160	150	10	<.5	.0	<.5	0	0	0	0	0
SEP												
27...	--	30	20	10	<.5	.0	<.5	1	0	1	0	0

DATE	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
NOV												
28...	--	--	--	150	--	--	--	--	--	--	--	--
FEB												
17...	0	50	20	30	<.9	<.4	2.1	<.4	1.9	<.4	.12	.02
MAY												
02...	0	20	10	10	--	--	--	--	--	--	--	--
AUG												
24...	0	70	60	10	<1.0	.9	2.2	1.1	2.1	1.0	.04	.25
SEP												
27...	0	20	10	10	--	--	--	--	--	--	--	--

DATE	TIME	AROCLOR TOTAL 1254 PCB SERIES (UG/L)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ATRA-ZINE, TOTAL (UG/L)	ATRA-ZINE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL (UG/L)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL (UG/L)
NOV											
28...	1015	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
17...	1100	.0	--	--	ND	--	ND	--	ND	--	ND
MAY											
02...	1600	--	ND	--	ND	--	ND	--	ND	--	ND
AUG											
24...	1245	--	ND	--	--	--	ND	--	ND	--	ND

DATE	P,P' DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL (UG/L)	P,P' DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL (UG/L)	P,P' DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV											
28...	.9	ND	.9	ND	2.3	ND	ND	ND	ND	ND	ND
FEB											
17...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
02...	--	ND	--	ND	--	ND	--	ND	--	ND	--
AUG											
24...	--	ND	--	ND	--	ND	--	ND	--	ND	--

01463500 DELAWARE RIVER AT TRENTON, NJ--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 28...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 17...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 02...	ND	--	ND	--	ND	--	ND	--	ND	--
AUG 24...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	METHOXYCHLOR, TOTAL (UG/L)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL COULSON COND. (UG/L)	SIMAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)
NOV 28...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 17...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 02...	ND	--	ND	--	ND	--	ND	--	ND	--
AUG 24...	ND	--	ND	--	ND	--	ND	--	--	--

DATE	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL (UG/L)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 28...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 17...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 02...	ND	--	ND	--	--	--	--	--	--	--
AUG 24...	ND	--	ND	--	--	--	--	--	--	--

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGIGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m²) Dry weight	Biomass (g/m²) Ash weight	Chlorophyll a (mg/m²)	Chlorophyll b (mg/m²)	Sampling method
Nov 2	46	.787	.472	0.0	0.0	Polyethylene strip
Nov 2	46	.157	.079	0.0	0.0	

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO JULY 1978

DATE	NOV 28,77	MAR 23,78	MAY 2,78	JUN 21,78	JUL 11,78
TIME	1015	1215	1600	1200	1020
TOTAL CELLS/ML	660	950	4300	6600	170000
DIVERSITY: DIVISION	1.4	0.0	0.7	1.1	1.3
.CLASS	1.6	0.0	0.7	1.1	1.3
..ORDER	1.8	0.0	1.6	2.0	1.5
...FAMILY	3.3	2.2	3.0	2.8	2.6
....GENUS	3.5	2.2	3.2	3.0	3.5

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	670	10	5100	3
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	13000	7
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	72	2	--	-	--	-
....MICRACTINIUM	63	10	--	-	--	-	--	-	18000	10
...OOCYSTACEAE										
....ANKISTRODESMUS	8	1	--	-	*	0	190	3	4000	2
....CHODATELLA	--	-	--	-	*	0	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	1400	1
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	2900	2
....QUADRIGULA	--	-	--	-	--	-	--	-	*	0
....SELENASTRUM	--	-	--	-	*	0	--	-	5400	3
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	--	-	190	3	16000	9
....CRUCIGENIA	--	-	--	-	--	-	--	-	5800	3
....SCENEDESMUS	16	2	--	-	110	2	2200#	33	18000	11
....TETRASTRUM	--	-	--	-	--	-	--	-	1400	1
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	1400#	21	1400	1
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	140	3	--	-	1800	1
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	--	-	1400	1
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	--	-	170	3	--	-
....SPONDYLOSIUM	--	-	--	-	*	0	--	-	--	-
..CHLOROCOCCALES										
...OOCYSTACEAE										
....GLOEOACTINIUM	--	-	--	-	--	-	--	-	1400	1

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO JULY 1978

DATE TIME	NOV 28,77 1015		MAR 23,78 1215		MAY 2,78 1600		JUN 21,78 1200		JUL 11,78 1020	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	32	5	--	-	1200#	27	480	7	9400	5
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	63	10	--	-	--	-	--	-	--	-
....COCCONEIS	16	2	14	1	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	32	5	190#	20	320	7	170	3	--	-
...DIATOMACEAE										
....DIATOMA	24	4	--	-	89	2	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	72	2	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	240	4	--	-
....HANNAEA	--	-	--	-	590	14	--	-	--	-
....SYNEDRA	16	2	290#	30	130	3	170	3	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	40	6	120	13	*	0	--	-	--	-
...NAVICULACEAE										
....NAVICULA	87	13	300#	31	770#	18	170	3	--	-
....NEIDIUM	24	4	--	-	--	-	--	-	--	-
....PINNULARIA	--	-	--	-	--	-	*	0	--	-
...NITZSCHIACEAE										
....NITZSCHIA	55	8	--	-	410	10	96	1	2200	1
...SURIRELLACEAE										
....SURIRELLA	--	-	41	4	140	3	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....DINOBRYON	16	2	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROCCOCCALES										
...CHROCCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	12000	7
....ANACYSTIS	--	-	--	-	210	5	480	7	52000#	30
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	160#	24	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	16	2	--	-	--	-	--	-	*	0

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	118	114	116	135	133	134	159	148	152	136	133	134
2	122	118	119	139	135	137	157	138	150	135	131	133
3	125	122	124	141	137	139	136	121	126	135	130	133
4	125	112	117	143	140	141	120	116	118	139	133	137
5	114	109	113	143	141	142	119	115	116	139	135	137
6	119	114	116	145	142	143	133	118	125	148	137	141
7	123	119	121	157	139	145	131	128	129	142	141	142
8	125	123	124	157	138	143	129	126	127	140	133	136
9	132	124	128	140	124	131	129	126	127	135	117	126
10	132	128	---	124	115	118	134	126	130	127	97	102
11	125	123	124	115	110	111	133	128	131	101	100	100
12	125	115	118	113	96	108	131	128	130	105	104	105
13	119	118	118	98	95	96	142	127	133	114	108	110
14	122	118	120	98	95	96	140	134	138	127	117	122
15	124	122	123	104	97	101	140	125	130	134	128	132
16	124	120	122	109	103	106	125	105	115	135	132	133
17	121	112	116	111	103	108	103	96	98	143	135	136
18	116	112	114	111	103	107	100	94	96	165	146	153
19	120	112	---	111	107	109	107	98	103	173	153	165
20	---	---	---	111	106	108	114	108	111	170	158	162
21	115	113	---	112	107	110	113	100	108	160	159	160
22	114	113	114	114	111	113	117	110	115	165	161	163
23	115	113	114	123	115	120	113	110	110	166	162	164
24	115	114	115	129	125	128	116	112	115	171	165	167
25	119	115	117	132	131	132	125	118	122	198	171	182
26	122	119	120	136	130	133	128	123	127	168	128	147
27	125	122	123	139	133	138	127	122	125	159	122	139
28	125	125	125	139	134	136	129	124	126	121	116	118
29	127	125	126	139	137	138	140	134	137	117	113	115
30	127	126	127	150	144	147	141	137	139	121	115	118
31	134	126	129	---	---	---	143	138	141	120	117	118
MONTH	134	109	120	157	95	124	159	94	124	198	97	136

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	130	119	124	---	---	---	---	---	---	184	178	181
2	132	126	129	195	192	---	---	---	---	175	153	162
3	139	127	133	199	193	196	---	---	---	167	160	163
4	141	134	137	213	197	205	---	---	---	184	180	182
5	142	135	139	221	199	208	---	---	---	204	186	193
6	146	139	143	217	202	209	---	---	---	222	205	214
7	151	145	148	215	206	210	---	---	---	225	211	220
8	156	147	149	222	212	218	---	---	---	207	185	193
9	151	149	150	218	196	206	---	---	---	187	181	184
10	149	145	146	203	199	201	---	---	---	187	178	183
11	147	146	---	224	204	213	---	---	---	183	161	176
12	---	---	---	226	219	222	---	---	---	160	150	155
13	---	---	---	230	207	219	---	---	---	---	---	---
14	---	---	---	224	205	---	128	120	---	---	---	---
15	---	---	---	---	---	---	132	123	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	130	120	---
18	---	---	---	---	---	---	---	---	---	143	127	133
19	---	---	---	---	---	---	147	127	---	128	115	123
20	---	---	---	---	---	---	166	151	160	118	101	110
21	---	---	---	---	---	---	173	168	170	107	102	106
22	---	---	---	---	---	---	174	155	170	113	107	110
23	---	---	---	138	128	---	176	150	169	120	112	117
24	---	---	---	---	---	---	177	150	171	143	120	131
25	---	---	---	---	---	---	183	180	182	146	128	137
26	---	---	---	---	---	---	187	173	182	145	141	144
27	---	---	---	---	---	---	183	175	178	145	130	141
28	---	---	---	---	---	---	193	180	187	148	140	146
29	---	---	---	---	---	---	197	188	194	151	140	148
30	---	---	---	---	---	---	196	186	191	151	143	150
31	---	---	---	---	---	---	---	---	---	161	143	152
MONTH	---	---	---	---	---	---	---	---	---	225	101	156

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	192	185	189	245	235	239	268	213	230
2	---	---	---	210	195	203	254	242	248	261	207	227
3	---	---	---	218	140	197	245	231	238	249	212	229
4	---	---	---	300	160	215	236	225	232	231	207	221
5	---	---	---	308	256	270	239	229	236	227	167	208
6	---	---	---	273	231	244	242	230	237	233	201	220
7	---	---	---	236	177	213	231	174	210	236	228	232
8	---	---	---	181	171	174	207	175	196	234	217	227
9	---	---	---	181	173	178	209	187	200	214	191	200
10	---	---	---	189	184	186	191	185	188	236	193	207
11	---	---	---	195	187	193	192	186	190	229	211	219
12	---	---	---	217	202	210	217	192	200	236	226	230
13	---	---	---	216	207	212	203	182	190	230	219	225
14	---	---	---	214	207	209	205	184	195	---	---	---
15	---	---	---	219	178	212	211	205	209	---	---	---
16	149	142	---	222	215	218	220	212	216	---	---	---
17	---	---	---	225	219	222	224	221	222	---	---	---
18	---	---	---	242	195	213	234	230	233	---	---	---
19	---	---	---	224	209	214	244	232	239	---	---	---
20	---	---	---	223	212	217	243	240	241	---	---	---
21	183	175	---	224	220	217	250	243	247	---	---	---
22	179	173	175	215	204	210	251	246	249	---	---	---
23	184	178	182	210	207	209	249	243	245	---	---	---
24	187	184	185	214	206	209	246	234	242	---	---	---
25	187	181	184	214	206	209	244	224	239	---	---	---
26	183	174	180	223	216	220	245	223	235	---	---	---
27	192	178	185	230	226	228	241	231	237	234	226	---
28	209	193	201	236	221	231	241	173	215	243	231	236
29	210	196	206	249	234	244	242	226	235	244	233	239
30	205	202	203	254	248	251	243	238	241	256	244	250
31	---	---	---	252	234	245	238	227	235	---	---	---
MONTH	---	---	---	308	140	215	254	173	225	---	---	---

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.2	7.1	7.2	7.5	7.4	7.5	7.3	7.1	7.2	7.3	7.3	7.3
2	7.3	7.1	7.2	7.5	7.3	7.4	7.3	7.2	7.2	7.4	7.3	7.4
3	7.3	7.1	7.2	7.4	7.2	7.3	7.2	7.1	7.2	7.5	7.4	7.4
4	7.3	7.1	7.2	7.3	7.1	7.2	7.2	7.2	7.2	7.4	7.4	7.4
5	7.3	7.2	7.2	7.3	7.1	7.2	7.2	7.2	7.2	7.4	7.3	7.3
6	7.3	7.3	7.3	7.2	7.1	7.2	7.3	7.2	7.2	7.3	7.3	7.3
7	7.4	7.2	7.3	7.1	7.0	7.1	7.4	7.3	7.4	7.3	7.2	7.3
8	7.4	7.3	7.4	7.2	6.9	7.1	7.4	7.3	7.4	7.2	7.2	7.2
9	7.4	7.3	7.3	7.2	7.1	7.2	7.5	7.3	7.4	7.4	7.0	7.3
10	7.4	7.3	---	7.2	7.1	7.1	7.5	7.4	7.5	7.4	6.9	7.1
11	7.5	7.3	7.4	7.2	7.1	7.2	7.5	7.4	7.4	7.0	6.9	6.9
12	7.5	7.2	7.4	7.2	7.1	7.2	7.4	7.3	7.4	7.1	7.0	7.0
13	7.5	7.2	7.3	7.2	7.1	7.2	7.4	7.3	7.3	7.1	7.0	7.0
14	7.5	7.4	7.4	7.2	7.2	7.2	7.4	7.2	7.3	7.1	7.0	7.0
15	7.5	7.3	7.4	7.2	7.1	7.1	7.3	7.2	7.2	7.2	7.2	7.2
16	7.4	7.2	7.3	7.2	7.1	7.1	7.3	7.2	7.2	7.3	7.2	7.3
17	7.3	7.2	7.3	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.2	7.2
18	7.3	7.0	7.2	7.3	7.2	7.2	7.2	7.1	7.2	7.2	7.1	7.2
19	7.2	7.0	---	7.3	7.2	7.2	7.2	7.1	7.2	7.3	7.2	7.2
20	---	---	---	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.3
21	7.3	7.2	---	7.3	7.1	7.2	7.2	7.0	7.2	7.3	7.3	7.3
22	7.3	7.2	7.3	7.2	7.1	7.2	7.3	7.2	7.2	7.3	7.3	7.3
23	7.3	7.3	7.3	7.2	7.2	7.2	7.3	7.1	7.2	7.4	7.3	7.3
24	7.4	7.3	7.4	7.2	7.1	7.2	7.2	7.1	7.2	7.4	7.3	7.3
25	7.4	7.4	7.4	7.2	7.2	7.2	7.3	7.1	7.2	7.3	7.1	7.2
26	7.4	7.4	7.4	7.3	7.2	7.2	7.4	7.3	7.4	7.3	6.9	7.0
27	7.3	7.3	7.3	7.3	7.2	7.3	7.4	7.3	7.4	7.4	7.0	7.2
28	7.3	7.3	7.3	7.4	7.2	7.3	7.4	7.3	7.3	7.0	7.0	7.0
29	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.1	7.0	7.0
30	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.2	7.3	7.2	7.1	7.1
31	7.5	7.4	7.5	---	---	---	7.3	7.2	7.2	7.2	7.1	7.2
MONTH	7.5	7.0	7.3	7.5	6.9	7.2	7.5	7.0	7.3	7.5	6.9	7.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.2	7.1	7.1	---	---	---	---	---	---	9.4	9.2	9.3
2	7.2	7.1	7.2	7.7	7.5	---	---	---	---	9.6	9.3	9.4
3	7.2	7.1	7.2	7.6	7.4	7.5	---	---	---	9.7	9.1	9.4
4	7.3	7.2	7.2	7.7	7.4	7.6	7.9	7.7	---	9.4	8.5	9.1
5	7.3	7.2	7.2	7.8	7.5	7.6	---	---	---	8.6	7.7	8.2
6	7.3	7.2	7.2	7.8	7.5	7.6	---	---	---	8.2	7.8	8.0
7	7.3	7.2	7.2	7.9	7.5	7.7	---	---	---	9.0	7.9	8.4
8	7.3	7.2	7.2	7.9	7.4	7.6	---	---	---	8.4	8.0	8.2
9	7.3	7.2	7.3	7.9	7.4	7.6	---	---	---	8.2	7.8	8.0
10	7.3	7.2	7.2	7.8	7.3	7.5	---	---	---	8.0	7.9	8.0
11	7.3	7.2	---	8.0	7.3	7.7	---	---	---	8.4	8.1	8.2
12	---	---	---	8.0	7.4	7.7	---	---	---	8.4	8.0	8.3
13	---	---	---	8.1	7.4	7.8	---	---	---	---	---	---
14	---	---	---	8.2	7.4	---	7.5	7.0	---	---	---	---
15	---	---	---	---	---	---	7.0	6.8	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	7.1	7.0	---
18	---	---	---	---	---	---	---	---	---	6.8	6.8	6.8
19	---	---	---	---	---	---	7.2	6.8	---	6.8	6.7	6.7
20	---	---	---	---	---	---	7.1	6.9	7.0	6.7	6.6	6.7
21	---	---	---	---	---	---	7.2	7.1	7.2	6.7	6.6	6.7
22	---	---	---	---	---	---	7.7	7.3	7.4	6.7	6.6	6.7
23	---	---	---	8.0	7.6	---	8.0	7.5	7.6	6.7	6.6	6.7
24	---	---	---	---	---	---	8.3	7.7	7.8	6.7	6.6	6.6
25	---	---	---	---	---	---	8.0	7.9	8.0	7.1	6.7	6.8
26	---	---	---	---	---	---	8.5	8.1	8.3	6.9	6.8	6.8
27	---	---	---	---	---	---	9.1	8.6	8.8	7.3	6.9	7.0
28	---	---	---	---	---	---	9.3	8.8	9.0	7.1	7.0	7.1
29	---	---	---	---	---	---	8.8	8.4	8.6	7.5	7.2	7.2
30	---	---	---	---	---	---	9.0	8.5	8.7	7.6	7.3	7.4
31	---	---	---	---	---	---	---	---	---	8.1	7.2	7.6
MONTH	---	---	---	---	---	---	---	---	---	9.7	6.6	7.7

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.8	8.1	8.5	7.6	7.3	7.4	7.3	7.1	7.2
2	---	---	---	8.8	8.1	8.5	7.6	7.3	7.4	7.5	7.1	7.3
3	---	---	---	8.5	7.1	7.9	7.6	7.3	7.4	7.9	7.3	7.6
4	---	---	---	7.4	7.3	7.4	7.6	7.2	7.4	8.3	7.5	7.8
5	---	---	---	7.7	7.5	7.6	7.4	7.2	7.3	8.5	7.7	8.1
6	---	---	---	8.1	7.6	7.8	7.5	7.2	7.4	8.7	7.8	8.3
7	---	---	---	8.1	7.7	7.9	7.3	7.1	7.2	8.5	8.0	8.2
8	---	---	---	8.2	7.7	7.9	7.3	7.1	7.2	8.1	7.4	7.8
9	7.2	7.0	---	8.4	7.8	8.1	7.3	7.2	7.2	7.8	7.4	7.6
10	---	---	---	8.5	7.9	8.2	7.4	7.2	7.3	8.2	7.5	7.7
11	---	---	---	8.6	8.0	8.3	7.4	7.3	7.3	8.3	7.5	7.8
12	---	---	---	8.8	8.2	8.6	7.3	7.3	7.3	8.3	7.5	7.8
13	---	---	---	9.0	8.5	8.8	7.3	7.2	7.3	8.4	7.6	8.0
14	---	---	---	8.9	8.0	8.6	7.4	7.3	7.3	8.4	7.8	8.2
15	---	---	---	8.2	7.6	7.9	7.7	7.3	7.5	8.1	7.8	8.0
16	7.6	7.4	---	8.2	7.8	8.0	7.8	7.3	7.5	8.2	7.7	7.9
17	---	---	---	8.1	7.8	7.9	8.4	7.4	7.9	8.2	7.7	7.9
18	---	---	---	8.0	7.6	7.8	8.5	7.8	8.1	8.1	7.7	7.9
19	---	---	---	8.4	7.9	8.1	8.6	8.1	8.4	7.8	7.6	7.7
20	---	---	---	8.9	8.2	8.5	8.7	8.2	8.5	7.6	7.5	7.5
21	8.3	7.4	---	9.0	8.5	8.5	8.8	8.2	8.5	7.5	7.4	7.4
22	8.4	7.5	7.9	9.0	8.3	8.7	8.9	8.3	8.7	7.4	7.4	7.4
23	8.5	7.6	8.1	9.0	8.1	8.6	9.0	8.5	8.7	7.6	7.4	7.5
24	8.7	7.7	8.3	9.0	7.9	8.5	8.8	8.4	8.6	7.7	7.5	7.6
25	8.8	7.9	8.4	8.6	7.9	8.2	8.5	8.0	8.3	7.8	7.5	7.6
26	8.7	7.9	8.3	8.6	7.6	8.1	8.3	7.4	7.9	8.1	7.6	7.8
27	8.6	7.7	8.1	8.4	7.7	8.0	8.0	7.3	7.7	8.2	7.3	7.6
28	8.7	7.8	8.2	8.6	7.6	8.1	7.4	6.6	6.9	8.2	7.6	7.8
29	8.9	7.9	8.4	8.7	7.7	8.2	7.1	6.9	7.0	8.3	7.7	7.9
30	8.6	7.9	8.3	8.7	7.7	8.3	7.4	7.0	7.1	8.3	7.7	7.9
31	---	---	---	8.3	7.4	7.6	7.7	7.1	7.3	---	---	---
MONTH	---	---	---	9.0	7.1	8.2	9.0	6.6	7.6	8.7	7.1	7.8

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.0	17.0	17.5	12.0	11.5	11.5	6.0	5.0	5.5	3.0	2.5	2.5
2	19.0	17.5	18.5	12.5	12.0	12.0	6.0	5.5	6.0	2.5	2.0	2.5
3	17.5	16.0	17.0	13.5	12.5	13.0	6.0	5.5	5.5	2.0	1.5	2.0
4	16.5	15.0	16.0	14.5	13.5	14.0	5.5	5.0	5.5	2.0	1.0	1.5
5	16.0	14.0	15.0	15.5	14.5	15.0	5.5	5.0	5.5	2.0	1.0	1.5
6	16.5	14.0	15.5	15.0	14.5	14.5	5.0	4.5	5.0	3.5	2.0	3.0
7	17.5	15.0	16.0	14.5	13.5	14.0	4.5	3.5	4.0	3.5	3.0	3.5
8	16.0	14.5	15.0	13.5	13.0	13.5	3.5	3.0	3.0	4.5	3.5	4.0
9	15.5	14.5	15.0	13.5	13.0	13.0	3.0	2.0	3.0	6.0	3.5	5.0
10	15.0	14.0	---	13.5	13.0	13.0	2.0	1.5	1.5	3.5	0.5	1.5
11	15.0	13.0	14.5	13.0	11.5	12.0	1.5	1.0	1.5	1.0	0.5	1.0
12	14.5	12.0	13.5	11.5	10.0	11.0	1.5	1.0	1.0	1.5	1.0	1.0
13	15.0	13.5	14.5	10.0	8.0	9.0	2.0	1.5	1.5	1.5	1.0	1.5
14	13.0	12.5	12.5	8.0	7.5	7.5	3.5	2.0	2.5	2.0	1.5	2.0
15	14.0	13.0	13.5	8.0	7.0	7.5	4.0	3.0	3.5	1.5	1.0	1.5
16	13.0	12.0	12.5	8.5	7.5	8.0	3.5	3.0	3.5	1.5	1.0	1.0
17	12.5	11.0	11.5	9.5	8.5	9.0	3.5	3.0	3.0	1.5	1.0	1.5
18	11.0	10.0	10.5	9.5	9.0	9.0	3.5	3.0	3.5	2.5	1.5	2.0
19	12.0	10.0	---	9.0	8.5	9.0	4.0	3.5	4.0	2.5	1.5	2.0
20	---	---	---	8.5	8.0	8.5	4.5	4.0	4.0	1.5	1.5	1.5
21	11.5	11.0	---	8.5	8.0	8.0	5.5	4.5	5.0	1.5	1.5	1.5
22	11.5	10.5	11.0	8.5	8.0	8.5	5.0	4.0	4.5	2.0	1.5	1.5
23	11.5	11.0	11.0	8.0	8.0	8.0	4.0	4.0	4.0	2.0	1.5	1.5
24	11.5	10.5	11.0	8.5	8.0	8.5	4.5	4.0	4.0	2.0	1.5	2.0
25	11.5	10.5	11.0	8.5	8.0	8.0	5.0	4.5	4.5	2.0	2.0	2.0
26	11.5	11.0	11.5	8.0	6.5	7.5	4.5	3.0	4.0	3.0	1.5	2.0
27	12.5	11.5	12.0	6.5	6.0	6.0	3.0	2.0	2.5	1.5	0.5	1.0
28	14.0	12.5	13.0	6.0	5.5	5.5	2.5	1.5	2.0	1.0	0.5	1.0
29	14.0	13.0	13.5	5.0	4.5	5.0	1.5	1.5	1.5	1.5	1.0	1.0
30	14.0	12.5	13.0	5.0	4.5	5.0	2.5	1.0	1.5	2.0	1.0	1.5
31	12.5	11.5	12.5	---	---	---	3.0	2.5	3.0	2.0	1.5	2.0
MONTH	19.0	10.0	13.5	15.5	4.5	10.0	6.0	1.0	3.5	6.0	0.5	2.0

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.0	2.0	2.5	---	---	---	---	---	---	13.5	12.5	13.0
2	3.0	2.0	2.5	3.5	2.5	---	---	---	---	15.5	12.0	13.5
3	3.0	2.5	3.0	2.5	1.0	2.5	---	---	---	16.5	13.5	14.5
4	3.5	2.5	3.0	2.5	0.5	1.5	6.0	5.5	---	15.0	13.0	14.0
5	3.5	2.5	3.0	2.5	0.0	1.0	---	---	---	13.0	12.0	12.5
6	4.0	3.5	4.0	3.0	0.5	1.5	---	---	---	12.0	11.5	12.0
7	4.5	4.0	4.5	4.0	0.5	2.0	---	---	---	13.5	11.5	12.5
8	4.5	4.0	4.0	2.5	2.0	2.0	---	---	---	12.5	12.0	12.5
9	4.5	4.0	4.5	3.5	2.0	3.0	---	---	---	14.0	12.5	13.0
10	5.0	4.0	4.5	3.5	3.0	3.5	---	---	---	14.0	13.0	13.5
11	4.5	4.0	---	6.0	2.5	4.5	---	---	---	16.0	13.5	14.5
12	---	---	---	7.0	4.5	5.5	---	---	---	16.0	14.5	15.0
13	---	---	---	7.0	4.5	5.5	---	---	---	---	---	---
14	---	---	---	5.5	4.5	---	11.0	9.5	---	---	---	---
15	---	---	---	---	---	---	10.5	9.5	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	12.5	12.0	---
18	---	---	---	---	---	---	---	---	---	12.5	12.5	12.5
19	---	---	---	---	---	---	9.5	9.0	---	14.0	12.5	13.0
20	---	---	---	---	---	---	10.0	9.5	9.5	15.0	13.5	14.0
21	---	---	---	---	---	---	10.0	9.5	10.0	16.0	14.5	15.0
22	---	---	---	---	---	---	10.5	9.5	10.0	16.0	15.0	15.5
23	---	---	---	7.0	6.0	---	11.0	10.0	10.5	16.5	15.5	16.0
24	---	---	---	---	---	---	11.0	10.5	11.0	16.0	14.5	15.5
25	---	---	---	---	---	---	12.0	10.5	11.0	16.0	14.5	15.0
26	---	---	---	---	---	---	12.0	11.5	11.5	16.5	15.5	16.0
27	---	---	---	---	---	---	12.0	11.5	11.5	17.5	16.5	17.0
28	---	---	---	---	---	---	13.0	11.0	12.0	18.0	16.5	17.5
29	---	---	---	---	---	---	13.5	12.0	12.5	18.5	17.5	18.0
30	---	---	---	---	---	---	14.5	13.0	13.5	20.0	18.0	19.0
31	---	---	---	---	---	---	---	---	---	23.0	18.5	21.0
MONTH	---	---	---	---	---	---	---	---	---	23.0	11.5	15.0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.9	7.4	8.1	11.5	10.7	11.0	13.0	12.4	12.7	13.4	13.0	13.2
2	8.5	7.3	8.0	11.4	10.6	10.9	12.6	12.4	12.5	13.4	12.8	13.2
3	9.3	7.3	8.2	11.0	10.3	10.7	12.8	12.3	12.6	13.1	12.6	13.0
4	10.5	8.2	9.1	11.0	10.1	10.5	12.8	12.6	12.7	13.4	13.0	13.2
5	10.3	8.1	9.0	10.8	9.9	10.3	12.9	12.6	12.8	13.3	12.8	13.1
6	10.1	8.2	9.2	10.6	9.9	10.2	12.8	12.5	12.7	12.9	12.3	12.7
7	9.8	7.8	8.9	10.2	9.7	10.0	13.3	12.8	13.1	12.4	12.1	12.3
8	11.8	8.1	10.9	10.3	9.7	10.0	13.7	13.3	13.5	12.2	11.6	12.0
9	10.7	8.1	9.4	10.0	9.7	9.9	13.9	13.7	13.7	11.5	10.3	11.0
10	10.6	9.0	---	10.0	9.6	9.9	14.2	13.7	14.0	13.8	11.4	12.8
11	11.8	8.1	10.6	10.3	9.7	10.0	14.5	14.0	14.3	14.1	13.3	13.7
12	12.0	8.4	10.6	10.7	10.3	10.5	14.6	14.1	14.4	14.3	13.3	14.0
13	11.6	8.4	10.7	11.5	10.7	11.0	14.4	14.0	14.2	14.2	12.9	13.6
14	10.2	8.5	9.2	11.7	11.3	11.5	14.1	13.2	13.7	13.8	13.0	13.4
15	10.3	8.4	9.3	11.9	11.5	11.7	13.6	13.0	13.3	13.5	13.0	13.2
16	11.0	8.5	9.5	11.8	11.3	11.6	13.8	13.0	13.4	13.6	13.0	13.4
17	11.6	8.1	9.8	11.4	10.8	11.1	13.9	13.0	13.5	13.6	12.7	13.3
18	11.5	8.1	10.3	11.1	10.7	10.9	13.6	12.8	13.3	12.7	12.2	12.4
19	10.8	8.1	---	11.3	10.8	11.0	13.4	12.8	13.1	12.4	12.0	12.2
20	---	---	---	11.7	11.1	11.4	13.3	12.9	13.1	12.1	11.7	11.9
21	11.8	8.9	---	11.5	11.0	11.3	12.9	12.1	12.5	11.8	11.5	11.7
22	11.4	10.6	10.9	11.3	10.9	11.1	13.1	12.0	12.4	11.8	11.2	11.6
23	11.1	10.7	10.9	11.4	11.0	11.2	12.8	12.4	12.6	11.6	11.4	11.5
24	11.3	10.7	11.0	11.5	11.1	11.2	13.0	12.5	12.8	11.4	11.0	11.3
25	11.3	10.9	11.1	11.8	11.3	11.5	12.6	12.2	12.4	10.8	10.3	10.5
26	11.1	10.7	10.9	11.7	11.3	11.4	13.0	12.4	12.7	12.2	11.0	11.6
27	11.0	10.2	10.6	12.4	11.7	12.1	14.1	13.0	13.5	13.0	12.2	12.5
28	10.6	10.1	10.4	12.7	12.4	12.5	14.8	13.8	14.2	13.3	12.8	13.0
29	10.6	10.1	10.3	12.9	12.6	12.8	14.4	13.9	14.2	13.8	13.0	13.4
30	10.9	10.2	10.5	13.1	12.8	13.0	14.3	13.7	14.0	13.5	13.0	13.3
31	11.2	10.1	10.7	---	---	---	13.7	13.2	13.5	14.1	12.9	13.6
MONTH	12.0	7.3	9.9	13.1	9.6	11.1	14.8	12.0	13.3	14.3	10.3	12.6

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.1	12.3	12.6	---	---	---	---	---		---	---	---
2	12.7	12.0	12.3	15.1	14.3	---	---	---		16.6	12.5	---
3	12.3	11.7	12.0	14.8	13.9	14.3	---	---		16.6	10.6	---
4	12.0	11.2	11.6	15.1	13.8	14.5	15.0	13.7		13.9	10.2	11.4
5	11.6	11.0	11.3	15.5	14.1	14.8	---	---		11.3	9.3	10.1
6	12.2	11.1	11.5	15.6	14.2	14.9	---	---		11.7	9.2	10.4
7	11.7	11.1	11.3	15.9	14.1	14.9	---	---		13.9	9.9	11.9
8	12.0	11.3	11.7	15.4	13.8	14.5	---	---		12.6	10.9	11.7
9	12.3	11.6	11.9	15.7	13.6	14.5	---	---		11.9	10.0	10.9
10	12.4	11.7	12.0	14.9	13.3	14.0	---	---		10.9	7.8	9.7
11	12.4	11.6	---	16.0	13.0	14.4	---	---		10.4	8.2	---
12	---	---	---	16.0	12.9	14.2	---	---		10.0	8.4	---
13	---	---	---	15.8	12.7	14.1	---	---		---	---	---
14	---	---	---	13.2	12.1	---	11.0	9.5		---	---	---
15	---	---	---	---	---	---	11.9	9.8		---	---	---
16	---	---	---	---	---	---	---	---		---	---	---
17	---	---	---	---	---	---	---	---		10.0	8.7	---
18	---	---	---	---	---	---	---	---		9.8	8.5	9.1
19	---	---	---	---	---	---	---	---		9.8	8.9	9.3
20	---	---	---	---	---	---	---	---		9.2	8.4	8.9
21	---	---	---	---	---	---	---	---		9.2	8.3	8.5
22	---	---	---	---	---	---	---	---		8.7	8.2	8.4
23	---	---	---	11.6	9.6	---	---	---		8.7	8.4	8.5
24	---	---	---	---	---	---	---	---		8.7	7.9	8.3
25	---	---	---	---	---	---	---	---		10.9	7.9	8.6
26	---	---	---	---	---	---	---	---		8.9	8.4	8.6
27	---	---	---	---	---	---	---	---		11.3	8.2	8.8
28	---	---	---	---	---	---	---	---		8.7	7.8	8.1
29	---	---	---	---	---	---	---	---		9.5	7.7	8.0
30	---	---	---	---	---	---	---	---		9.1	7.5	7.7
31	---	---	---	---	---	---	---	---		10.5	7.2	8.2
MONTH	---	---	---	---	---	---	---	---		16.6	7.2	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.9	7.6	9.7	7.9	6.2	6.9	7.2	6.6	6.9
2	---	---	---	11.5	7.8	9.7	8.3	6.7	7.4	8.1	6.7	7.3
3	---	---	---	9.1	7.2	8.0	8.2	6.6	7.4	8.7	6.8	7.6
4	---	---	---	7.9	7.4	7.7	7.9	6.0	7.0	9.2	6.9	7.9
5	---	---	---	9.3	7.9	8.5	7.1	6.0	6.5	9.7	7.2	8.2
6	---	---	---	10.0	8.0	9.0	7.1	5.9	6.5	9.2	7.0	7.9
7	---	---	---	9.6	8.2	8.8	6.4	5.8	6.2	8.4	6.3	7.0
8	---	---	---	9.6	8.0	8.8	6.7	6.0	6.4	6.9	6.1	6.4
9	7.6	5.8	---	9.4	7.8	8.6	7.0	6.6	6.7	8.3	6.2	7.1
10	---	---	---	9.2	7.5	8.4	7.4	6.8	7.0	9.0	6.9	7.8
11	---	---	---	11.2	7.7	9.2	7.6	6.9	7.2	9.2	7.2	8.0
12	---	---	---	12.2	7.9	10.0	7.3	6.8	7.1	9.3	6.9	7.9
13	---	---	---	12.7	8.4	10.4	7.4	6.9	7.1	9.7	6.9	8.2
14	---	---	---	10.4	7.6	8.8	7.8	7.1	7.5	9.2	8.1	8.6
15	---	---	---	9.5	7.3	8.3	8.4	7.1	7.7	8.5	7.5	8.0
16	8.8	7.4	---	9.0	7.5	8.2	8.4	7.0	7.6	8.9	7.4	8.1
17	---	---	---	9.4	7.3	8.3	9.4	6.9	8.0	8.9	7.3	8.1
18	---	---	---	8.6	7.2	7.8	12.0	7.1	9.3	8.7	7.2	7.9
19	---	---	---	9.8	7.4	8.5	12.6	7.4	9.9	7.6	7.1	7.4
20	---	---	---	10.0	7.6	8.8	11.1	7.3	9.3	7.5	6.9	7.2
21	11.2	8.1	---	11.3	7.6	9.2	11.6	7.4	9.5	7.4	6.8	7.0
22	10.9	7.8	9.1	11.1	6.6	8.8	11.2	7.6	9.5	7.1	6.8	6.9
23	11.5	8.0	9.7	10.3	6.4	8.4	11.8	7.9	9.7	7.6	6.9	7.2
24	12.1	8.1	10.1	9.8	6.0	7.8	11.4	7.8	9.5	7.8	7.2	7.5
25	12.2	8.5	10.4	8.1	5.8	6.9	8.7	6.5	7.5	8.0	7.2	7.5
26	11.4	8.5	9.6	8.9	5.8	7.3	10.0	6.3	8.1	8.4	7.4	7.8
27	11.2	7.7	9.4	8.2	6.1	7.1	9.9	7.0	8.5	9.0	7.5	8.1
28	10.6	7.7	9.2	9.4	5.6	7.3	8.0	6.4	7.1	9.0	7.2	8.0
29	10.5	7.6	8.9	9.9	6.3	8.0	7.8	6.6	7.1	9.4	7.5	8.3
30	11.5	7.2	9.2	10.1	6.5	8.3	7.9	6.5	7.1	9.5	7.6	8.5
31	---	---	---	8.0	6.1	6.6	8.2	6.4	7.1	---	---	---
MONTH	---	---	---	12.7	5.6	8.4	12.6	5.8	7.7	9.7	6.1	7.7

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	6890	14	262	19900	10	564	6230	4	65
2	6440	15	263	21900	10	613	6120	2	37
3	6510	13	228	19800	10	535	5620	2	30
4	6830	13	252	17400	7	322	4760	2	27
5	7940	19	397	16400	5	217	4810	3	39
6	8150	15	327	16100	4	173	4670	3	38
7	6910	14	261	14900	4	160	4860	7	108
8	6420	17	300	13900	4	149	17200	110	5480
9	7400	18	371	13200	3	111	17400	67	3190
10	34300	56	6160	12700	3	102	15800	27	1160
11	50700	70	10100	11500	3	79	14000	22	830
12	29500	32	2550	10700	2	62	12400	18	597
13	21700	21	1210	10400	3	85	11100	14	432
14	18900	15	706	9990	3	81	8000	12	259
15	18100	10	447	9210	3	75	7700	10	208
16	16200	6	251	8890	3	72	7950	8	172
17	13000	4	127	8750	6	132	8250	9	200
18	11500	4	107	8490	8	182	7600	6	123
19	10600	4	114	8030	8	173	6800	4	73
20	11200	6	180	7720	8	166	6300	3	51
21	14500	15	627	7330	8	158	6150	3	50
22	33000	53	5170	7290	8	164	4500	1	12
23	35500	47	4620	7090	8	158	5650	2	31
24	25900	20	1420	6940	7	131	6550	2	35
25	22000	10	598	6710	7	119	5000	2	27
26	23200	12	741	6370	6	103	4700	2	25
27	26200	13	903	5690	6	89	4400	1	12
28	23800	9	580	5560	5	75	3950	2	21
29	20400	9	480	5480	5	74	4700	5	63
30	18100	8	387	5670	4	67	4250	4	46
31	16800	8	342	---	---	---	4350	4	47
TOTAL	558590	---	40481	324010	---	5191	231770	---	13488
		JANUARY			FEBRUARY			MARCH	
1	3350	4	36	2200	2	12	27900	74	5570
2	3600	3	29	3160	5	43	26000	57	4060
3	3700	3	30	3000	4	32	21600	33	1970
4	4200	3	34	2770	4	30	21400	28	1600
5	4900	6	79	2720	3	22	47700	238	33300
6	4450	6	72	2920	5	39	55900	211	32400
7	4000	4	43	3520	5	48	43700	102	12100
8	3500	4	38	3940	7	74	33100	53	4790
9	4050	5	55	4670	11	139	26900	28	2020
10	4250	5	57	4730	12	153	23900	21	1380
11	3300	4	36	4080	10	110	22800	19	1190
12	3900	4	42	4270	8	92	23000	21	1300
13	3650	3	30	4850	10	131	26400	285	21900
14	4150	4	45	5670	14	214	72900	484	96700
15	4750	5	64	5300	13	247	107000	406	119000
16	4150	4	45	5050	10	165	69800	171	33500
17	2950	3	24	5270	19	296	50100	80	10800
18	2500	3	20	5270	17	270	40000	63	6890
19	4450	10	120	4970	8	118	33600	34	3080
20	4350	8	94	4440	9	128	28700	23	1750
21	4250	6	69	4150	11	138	24300	16	1030
22	4000	5	54	3970	17	204	31400	121	15200
23	3650	4	39	4050	24	270	62900	427	72100
24	3750	4	40	4930	37	545	50100	97	13600
25	3550	3	29	32200	923	85900	38200	38	4010
26	4400	5	59	26100	321	23500	31100	21	1740
27	3650	4	39	24400	89	5810	26500	16	1180
28	3050	3	25	27700	108	8090	23600	12	789
29	2950	3	24	---	---	---	24100	14	890
30	2750	2	15	---	---	---	28300	20	1500
31	2250	2	12	---	---	---	47700	60	7980
TOTAL	116400	---	1398	210300	---	126820	1190600	---	515319

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	54200	87	12800	17100	8	352	3690	4	42
2	45500	57	7120	14600	14	562	3760	4	40
3	44700	39	4720	13900	7	270	3790	5	47
4	50600	45	6090	13900	5	187	3530	6	53
5	54700	61	9050	13900	5	196	3380	6	55
6	51700	43	6040	15200	6	251	3230	6	57
7	46100	29	3640	19000	11	567	3890	14	152
8	39400	20	2140	17200	11	503	3960	11	120
9	33100	15	1320	14900	9	363	4160	7	73
10	27800	13	958	14400	13	503	4820	11	147
11	24300	10	642	15900	9	371	7100	18	347
12	22100	10	622	15500	6	269	8050	18	389
13	20300	12	637	14900	7	282	6280	12	202
14	18800	10	493	14100	8	309	5050	26	345
15	17300	9	421	13700	7	262	4230	12	136
16	15800	8	345	12400	6	201	4270	6	64
17	13900	7	251	11600	7	203	4130	6	71
18	11700	5	157	10500	5	144	3890	7	76
19	10800	3	92	9800	5	144	3820	8	86
20	10700	1	41	9800	6	159	3850	10	99
21	10100	2	45	9380	6	152	4020	11	119
22	9140	3	85	8960	6	146	4480	12	150
23	8400	3	69	7400	6	120	4780	12	158
24	8550	4	87	6550	6	106	4740	9	120
25	17000	20	961	6190	6	100	4300	7	87
26	29700	52	4180	5920	6	96	4300	12	140
27	30000	41	3340	5660	6	92	4890	28	363
28	26100	21	1480	5160	8	115	4560	19	237
29	23300	10	631	4340	7	80	4340	16	188
30	20000	8	459	3960	5	51	4340	24	282
31	---	---	---	3760	5	50	---	---	---
TOTAL	795790	---	68916	349580	---	7206	133630	---	4445
		JULY			AUGUST			SEPTEMBER	
1	4230	21	243	3410	27	300	3320	6	57
2	3960	15	162	3380	54	498	3060	7	53
3	3760	11	109	3440	29	264	3170	7	60
4	3560	8	81	4930	30	410	2970	12	96
5	3020	7	60	4130	33	378	3030	15	115
6	2960	7	57	3560	19	186	2670	13	96
7	3080	14	121	3410	18	168	2640	15	109
8	3560	13	124	3350	17	156	2810	19	142
9	4130	19	216	3410	16	150	3140	18	152
10	4160	18	205	3960	15	164	2990	16	131
11	3890	12	132	4410	15	173	2730	17	124
12	3790	20	205	4090	14	153	2730	17	123
13	6950	219	4630	3660	13	129	2670	12	83
14	4560	46	589	3960	12	129	2520	8	54
15	4060	15	163	3560	13	121	2940	8	59
16	3850	13	132	3200	7	63	2850	11	82
17	4170	11	115	3320	8	69	3420	19	173
18	3350	11	96	3560	10	97	4200	35	394
19	3630	7	71	3760	10	106	5280	59	903
20	3960	8	91	3320	7	67	5880	46	775
21	4970	14	189	3200	19	172	5320	26	376
22	4300	11	127	3530	12	112	8150	60	1720
23	4300	12	139	3720	4	40	10800	81	2460
24	3470	15	137	3320	5	49	9140	44	1100
25	2860	10	73	3600	10	94	9320	17	421
26	3170	9	81	3500	14	134	19700	107	8150
27	3020	8	62	3320	8	73	39600	154	16400
28	2670	5	39	3240	6	48	39000	85	9260
29	2440	6	37	2580	6	42	24500	44	3010
30	2580	7	50	2490	8	55	17700	26	1240
31	2990	8	65	2640	7	48	---	---	---
TOTAL	115400	---	8601	108960	---	4648	248250	---	47918
YEAR	4383280		844431						

01463500 DELAWARE RIVER AT TRENTON, NJ--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	14500	17	662	9710	3	71	23200	25	1610
2	13500	20	725	9330	15	373	29600	66	5320
3	21100	38	2160	9270	10	249	34600	84	7870
4	20800	31	1750	9450	6	144	32500	29	2570
5	16100	19	837	9270	5	122	28100	13	970
6	12700	12	405	8730	5	122	27000	10	712
7	11000	9	251	11100	10	358	23500	9	563
8	10200	9	240	21200	48	2770	20800	8	438
9	11800	12	363	26700	80	5730	18800	7	355
10	16200	44	1950	28000	53	4020	17200	6	292
11	21500	33	1810	27300	22	1610	15100	5	219
12	18800	21	1060	32000	31	2760	14000	7	271
13	15600	12	523	32800	23	2080	11400	6	165
14	13200	12	413	27500	11	789	13400	6	226
15	14600	11	420	23400	6	367	22900	42	2560
16	17400	20	933	20000	5	270	29900	60	4750
17	24700	34	2290	17800	6	273	33500	27	2460
18	33000	60	5710	17500	6	300	33000	51	4700
19	44300	68	8280	16700	7	298	33600	23	2080
20	39200	54	5710	15300	5	191	28700	13	1040
21	37800	41	4190	14000	3	126	32400	35	3320
22	33900	19	1700	12600	3	109	41500	22	2460
23	27900	16	1210	13000	4	141	35100	12	1110
24	23200	15	932	12900	5	172	28900	14	1090
25	20100	10	531	12000	9	283	26200	16	1160
26	17700	6	267	15000	21	877	27600	19	1400
27	16000	6	248	16900	23	1060	27300	14	1040
28	14900	5	185	17300	11	513	24300	13	816
29	13300	3	121	15600	5	207	21700	9	537
30	12100	4	113	14900	4	175	18900	7	357
31	10600	3	90	---	---	---	17400	6	297
TOTAL	617700	---	46079	517260	---	26560	792100	---	52758
		JANUARY			FEBRUARY			MARCH	
1	17200	6	279	26400	10	707	7000	3	58
2	15200	4	184	23400	9	569	7230	2	39
3	13800	4	149	20300	9	494	7090	2	38
4	12400	4	132	18100	8	399	6850	2	37
5	12100	4	129	15800	8	342	6620	3	61
6	12300	5	179	14200	8	306	6260	19	321
7	12200	6	219	13000	7	246	5860	7	105
8	12400	3	108	13700	7	260	6760	2	37
9	31100	46	5920	13300	7	252	6950	2	38
10	79200	306	66500	13500	6	220	6120	1	20
11	65800	191	34800	12800	6	209	6120	2	28
12	45800	99	13200	12100	8	261	6530	1	25
13	41000	63	7000	11600	6	181	7530	3	54
14	35200	41	3940	11000	5	162	11500	7	286
15	28200	27	2030	11300	6	190	30200	170	14800
16	24800	19	1240	10700	7	204	31600	136	12000
17	22100	15	900	10300	6	165	26000	46	3260
18	20400	12	662	10500	5	135	22100	26	1560
19	18400	9	440	10300	4	112	20200	23	1220
20	17500	6	303	9190	4	93	21700	28	1630
21	14700	5	186	8080	3	66	23100	35	2190
22	14400	4	141	8550	3	69	28900	44	3420
23	13300	3	104	8390	2	48	39500	88	9560
24	12500	3	87	8490	2	46	43700	99	11700
25	14000	7	271	8600	2	55	44400	76	9140
26	47700	204	32600	8340	2	47	39500	57	6090
27	69500	231	42900	7280	2	39	57100	174	27900
28	63400	124	21500	6580	3	47	71200	199	38100
29	48300	108	14200	---	---	---	67000	107	19500
30	36900	39	3990	---	---	---	58900	63	9960
31	30800	13	1120	---	---	---	53000	43	6110
TOTAL	902600	---	255413	345800	---	5924	776520	---	179287

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	45600	30	3730	8760	3	71	14000	14	529
2	39500	26	2800	8280	4	82	13300	18	625
3	43000	25	2930	7780	2	52	12200	53	1720
4	39900	24	2600	7330	2	40	12700	88	3030
5	36400	20	1950	7090	3	56	12100	41	1340
6	34300	16	1490	7380	3	62	11200	18	540
7	33000	15	1350	9020	4	97	10900	13	371
8	32000	19	1670	9630	5	138	10800	12	358
9	32800	17	1480	10700	7	211	12500	14	519
10	29600	14	1100	11900	9	298	15500	18	760
11	25700	11	757	12600	9	297	14700	19	773
12	23200	10	617	13000	12	397	12300	14	470
13	23700	6	362	11700	10	313	11100	11	320
14	23900	7	448	14300	56	2790	11400	13	387
15	22200	8	471	30000	180	14700	10700	10	285
16	19700	6	345	29100	84	6590	10200	7	204
17	17200	5	246	34900	62	5860	9240	15	363
18	15800	4	182	44900	89	10800	8180	41	900
19	15300	6	259	46300	73	9020	7380	17	342
20	15800	11	490	44600	57	6830	7090	5	96
21	16200	9	412	37500	44	4510	7430	6	123
22	16300	5	226	31800	35	2990	7780	9	180
23	15400	4	166	27600	26	1940	7280	12	229
24	13900	3	118	28900	34	2690	6480	11	200
25	12700	3	103	29600	36	2850	6480	10	178
26	12000	3	97	26500	27	1930	5730	11	164
27	11100	3	90	22300	20	1210	5350	13	183
28	10600	3	86	19100	15	768	5520	10	150
29	9910	3	80	16900	13	592	5230	8	114
30	9350	3	76	15100	13	531	5310	9	129
31	---	---	---	13900	12	439	---	---	---
TOTAL	696060	---	26731	638470	---	79154	290080	---	15582
		JULY			AUGUST			SEPTEMBER	
1	4830	7	93	4520	6	79	6530	22	391
2	4450	7	80	4670	7	88	5070	13	182
3	4640	9	111	4410	8	95	4300	3	33
4	7830	34	730	3940	9	93	3900	2	19
5	7000	25	482	4110	10	107	3620	2	18
6	6120	12	195	4410	9	103	3360	3	26
7	8390	9	203	10400	181	5890	3290	2	14
8	6620	10	172	12700	97	2990	3420	7	68
9	5770	8	132	13800	44	1640	4520	9	112
10	4950	7	98	10400	38	1070	4190	12	138
11	4480	6	68	8650	31	732	3730	4	40
12	4370	6	66	9630	38	987	3560	2	19
13	4330	5	64	12300	80	2610	3490	1	11
14	4260	5	54	8860	55	1360	3420	1	9.2
15	4410	4	48	6900	26	483	3360	2	15
16	4600	5	62	6530	21	364	3360	3	29
17	5270	7	100	5520	17	253	3690	6	56
18	5350	8	115	5030	11	147	3690	4	40
19	4450	7	79	4520	8	93	4950	7	99
20	4300	7	77	4190	6	72	7930	21	460
21	4220	6	73	4040	5	50	7530	26	532
22	4080	5	59	3760	3	33	6040	18	298
23	4450	5	60	3690	3	30	5310	13	187
24	4220	4	50	3660	5	49	4990	9	123
25	3800	4	41	3490	3	31	4260	6	67
26	3620	5	46	3460	3	27	3560	5	48
27	3690	6	57	3560	2	19	3390	4	33
28	3620	5	52	5150	42	624	3420	3	28
29	3690	5	50	5190	16	218	3290	3	27
30	3830	5	53	4520	5	64	3490	3	28
31	3730	6	60	4370	7	79	---	---	---
TOTAL	149370	---	3630	190380	---	20480	128660	---	3150.2

01463568 ASSUNPINK CREEK AT CARSONS MILLS, NJ

LOCATION.--Lat 40°13'05", long 74°33'08", Mercer County, Hydrologic Unit 02040105, at bridge at Carsons Mills, 0.1 mi (0.2 km) upstream from New Sharon Branch, and 1.3 mi (2.0 km) northeast of Pages Corner.

DRAINAGE AREA.--12.5 mi² (32.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB									
01...	1430	112	--	1.5	5	--	20	170	31
22...	1250	142	5.5	2.0	4	11.7	<20	2	38
MAY									
03...	1420	120	7.3	13.0	3	12.2	40	<2	38

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB									
01...	6.9	3.3	6.4	2.5	22	14	65	11	.41
22...	7.9	4.4	7.0	2.4	26	14	84	5	1.5
MAY									
03...	8.2	4.3	4.0	1.8	28	10	88	1	.99

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB								
01...	.01	.05	.36	.41	.83	.05	.00	2.2
22...	.00	.11	.31	.42	1.9	.04	.00	4.3
MAY								
03...	.01	.09	.34	.43	1.4	.04	.00	4.9

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ

LOCATION.--Lat 40°16'11", long 74°40'20", Mercer County, Hydrologic Unit 02040105, on left bank 200 ft (61 m) upstream from bridge on Quaker Bridge Road, 1.9 mi (3.1 km) south of Clarksville, 2.0 mi (3.2 km) upstream from Shipetaukin Creek, and 7.6 mi (12.2 km) upstream of mouth.

DRAINAGE AREA.--34.3 mi² (88.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Occasional low-flow measurements water years 1963-67. October 1972 to current year.

REVISED DISCHARGE RECORDS.--WRD-NJ 1974: 1973(M). WDR-NJ-75-1: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 49.28 ft (15.021 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records poor. Some regulation from dams and ponds upstream.

AVERAGE DISCHARGE.--6 years, 56.2 ft³/s (1.592 m³/s), 22.24 in/yr (565 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 6	1245	264	7.48	5.92	1.804	Mar. 15	0745	323	9.15	6.22	1.896
Dec. 22	0130	253	7.16	5.87	1.789	Aug. 12	2045	233	6.60	5.82	1.774
Jan. 26	1915	*921	26.1	8.66	2.640						

Minimum daily discharge, 18 ft³/s (0.51 m³/s) July 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) July 21, 1975, gage height, 9.36 ft (2.853 m), from crest-stage gage; minimum daily, 7.0 ft³/s (0.20 m³/s) July 31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 10.9 ft (3.32 m), discharge, 1,500 ft³/s (42.5 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	34	127	81	148	38	100	34	80	34	26	67
2	46	33	134	78	128	38	80	33	68	31	26	77
3	40	32	112	76	101	37	70	31	60	35	26	78
4	36	31	105	74	87	38	64	31	54	62	29	68
5	32	31	101	63	76	37	65	34	49	78	41	60
6	33	31	137	56	70	37	65	36	45	86	48	52
7	29	51	137	49	63	36	62	37	43	76	80	46
8	26	89	124	57	62	35	61	37	45	65	94	43
9	29	119	107	81	61	35	58	44	45	57	80	51
10	38	168	93	92	58	35	56	52	43	50	68	52
11	39	131	90	111	55	37	52	55	39	43	77	50
12	38	107	84	111	53	43	51	54	35	38	197	46
13	36	107	80	93	50	58	49	50	31	33	187	43
14	35	90	80	99	49	112	44	51	31	30	163	38
15	38	74	92	100	47	267	43	58	29	34	151	36
16	39	64	103	94	45	240	41	64	28	34	127	35
17	44	61	108	88	46	201	39	69	27	36	96	34
18	49	60	127	131	44	185	38	72	25	35	75	32
19	50	59	185	178	44	173	40	75	25	33	60	34
20	51	59	170	187	43	168	48	78	25	31	50	35
21	50	59	197	173	42	151	52	74	26	29	43	35
22	50	61	221	128	41	136	53	63	32	27	37	32
23	49	64	194	100	40	120	51	58	34	26	33	31
24	45	66	167	86	39	108	50	75	32	24	29	29
25	42	70	151	84	38	96	47	134	30	23	26	28
26	40	88	133	476	38	98	44	159	29	24	24	26
27	39	98	111	606	38	160	42	157	31	22	23	26
28	40	92	100	283	38	160	39	146	34	23	43	24
29	40	77	94	203	---	143	37	120	38	22	69	24
30	38	75	87	178	---	130	36	104	37	21	70	22
31	37	---	82	163	---	116	---	90	---	22	67	---
TOTAL	1248	2181	3833	4379	1644	3268	1577	2175	1150	1184	2165	1254
MEAN	40.3	72.7	124	141	58.7	105	52.6	70.2	38.3	38.2	69.8	41.8
MAX	51	168	221	606	148	267	100	159	80	86	197	78
MIN	26	31	80	49	38	35	36	31	25	21	23	22
CFSM	1.18	2.12	3.62	4.11	1.71	3.06	1.53	2.05	1.12	1.11	2.04	1.22
IN.	1.35	2.37	4.16	4.75	1.78	3.54	1.71	2.36	1.25	1.28	2.35	1.36

CAL YR 1977 TOTAL 14999.1 MEAN 41.1 MAX 221 MIN 7.0 CFSM 1.20 IN 16.27
WTR YR 1978 TOTAL 26058.0 MEAN 71.4 MAX 606 MIN 21 CFSM 2.08 IN 28.26

01463625 ASSUNPINK CREEK AT BAKERSVILLE, NJ

LOCATION.--Lat 40°16'06", long 74°42'07", Mercer County, Hydrologic Unit 02040105, at bridge on Basin Road in Bakersville, 1.4 mi (2.3 km) southeast of Franklin Corner, and 2.1 mi (3.4 km) upstream of mouth.

DRAINAGE AREA.--38.6 mi² (100.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1977 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July to September 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
NOV										
10...	0930	160	110	6.7	13.5	40	8.0	3.1	2300	130
FEB										
02...	0945	140	106	5.9	1.0	8	13.5	1.1	350	130
APR										
13...	1110	47	125	6.9	14.0	5	11.4	1.8	20	50
MAY										
24...	1130	165	87	6.5	16.0	25	8.5	3.8	16000	>2400
JUN										
21...	1400	17	122	7.1	23.5	2	8.1	1.7	130	1100
JUL										
18...	0945	29	118	6.8	22.0	2	6.7	1.7	130	49
AUG										
17...	1400	98	91	6.6	26.0	6	6.6	2.9	920	110
SEP										
27...	1330	17	129	6.8	16.0	--	9.9	2.7	23	33

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)
NOV									
10...	35	7.8	3.8	4.8	4.4	13	0	11	--
FEB									
02...	30	6.5	3.3	4.8	2.3	6	0	5	--
APR									
13...	38	8.2	4.2	5.2	2.6	12	0	10	--
MAY									
24...	27	5.8	3.0	4.1	2.0	11	0	9	--
JUN									
21...	40	8.3	4.6	5.2	2.6	18	0	15	--
JUL									
18...	38	8.3	4.3	4.6	2.2	18	0	15	--
AUG									
17...	29	6.6	3.1	3.0	3.0	16	0	13	--
SEP									
27...	36	5.2	5.7	5.3	2.8	17	0	18	.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV									
10...	--	22	11	--	--	101	36	--	--
FEB									
02...	--	22	9.3	--	--	63	12	--	--
APR									
13...	--	24	12	--	--	85	0	--	--
MAY									
24...	.0	17	8.7	--	3.1	70	51	--	--
JUN									
21...	--	17	12	--	--	93	8	--	--
JUL									
18...	--	17	9.8	--	--	87	5	16	1.3
AUG									
17...	--	16	6.3	--	--	84	0	26	6.9
SEP									
27...	--	17	12	.1	2.3	85	--	14	.64

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV									
10...	1.3	.01	.02	.81	.83	2.1	.17	.03	10
FEB									
02...	--	--	--	--	--	--	--	--	1.4
APR									
13...	1.7	.01	.00	.56	.56	2.3	.02	.00	5.3
MAY									
24...	.79	.02	.04	.44	.48	1.3	.17	.04	8.4
JUN									
21...	1.4	.01	.03	.59	.62	2.0	.03	.00	7.0
JUL									
18...	--	--	.10	.30	.40	1.4	--	--	6.6
AUG									
17...	--	--	<.10	--	1.9	--	--	--	6.4
SEP									
27...	--	--	<.10	--	--	--	--	--	3.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
MAY									
24...	1130	110	--	--	80	0	--	0	0
SEP									
27...	1330	30	1	0	--	--	10	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
24...	5	260	100	--	7	--	50	1
SEP								
27...	2	--	70	<.5	6	0	20	0

01463670 SHIPETAUKIN CREEK AT BAKERSVILLE, NJ

LOCATION.--Lat 40°16'26", long 74°42'10", Mercer County, Hydrologic Unit 02040105, at bridge on State Route 546 in Bakersville, 0.4 mi (0.6 km) upstream from mouth, and 2.2 mi (3.5 km) southeast of Lawrenceville.

DRAINAGE AREA.--8.96 mi² (23.21 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1963, 1965, 1967, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
NOV										
10...	0845	157	6.9	14.0	6	6.8	2.0	200	<20	63
FEB										
02...	0845	198	6.9	1.0	6	13.4	.6	<200	<200	64
APR										
13...	0940	193	7.4	12.0	5	12.8	1.5	1700	920	64
MAY										
24...	0915	86	6.7	13.5	40	9.0	7.2	16000	>2400	26
JUN										
21...	1245	210	7.3	19.5	3	7.8	2.1	2400	>2400	68

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV										
10...	16	5.6	8.8	2.9	34	0	28	30	12	125
FEB										
02...	15	6.4	10	1.8	34	0	28	30	15	132
APR										
13...	15	6.4	11	2.0	49	0	40	30	15	125
MAY										
24...	5.9	2.7	4.8	1.5	21	0	17	14	5.5	68
JUN										
21...	16	6.9	11	2.2	54	0	44	25	15	147

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
10...	4	1.3	.01	.05	.44	.49	1.8	.08	.02	8.5
FEB										
02...	11	--	--	--	--	--	--	--	--	1.8
APR										
13...	6	1.2	.01	.03	.58	.61	1.8	.03	.00	5.9
MAY										
24...	143	.68	.03	.09	1.6	1.7	2.4	.32	.07	4.3
JUN										
21...	8	2.0	.03	.12	.56	.68	2.7	.12	.08	7.2

01463810 SHABAKUNK CREEK NEAR LAWRENCEVILLE, NJ

LOCATION.--Lat 40°15'19", long 74°44'17", Mercer County, Hydrologic Unit 02040105, at bridge on Princeton Pike, 0.8 mi (1.3 km) downstream from West Branch, 2.0 mi (3.3 km) southwest of Franklin Corner, 2.2 mi (3.5 km) southwest of Bakersville, and 2.8 mi (4.5 km) south of Lawrenceville.

DRAINAGE AREA.--11.7 mi² (30.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
NOV										
10...	1040	297	7.5	15.0	6	9.6	1.3	9200	220	120
FEB										
02...	1100	318	7.1	1.0	3	14.3	.6	1400	50	100
APR										
13...	1230	281	8.3	16.0	3	17.0	2.6	33	<2	95
MAY										
25...	0845	234	7.3	14.0	6	9.4	2.8	16000	>2400	85
JUN										
21...	1500	337	7.9	23.0	1	12.2	1.5	16000	130	120

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV										
10...	32	9.1	16	3.6	79	0	65	52	19	216
FEB										
02...	27	8.7	19	2.6	67	0	55	45	26	195
APR										
13...	25	8.0	16	2.6	68	0	56	42	21	176
MAY										
25...	24	6.2	10	2.5	59	0	48	40	12	141
JUN										
21...	34	8.6	16	3.2	87	0	71	53	22	223

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
10...	2	1.8	.01	.09	.40	.49	2.3	.05	.02	12
FEB										
02...	7	--	--	--	--	--	--	--	--	1.0
APR										
13...	1	1.1	.02	.00	.42	.42	1.5	.02	.01	7.2
MAY										
25...	12	1.4	.02	.09	.62	.71	2.1	.10	.03	3.9
JUN										
21...	9	1.2	.03	.03	.54	.57	1.8	.03	.01	4.0

01464000 ASSUNPINK CREEK AT TRENTON, NJ

LOCATION.--Lat 40°13'27", long 74°44'58", Mercer County, Hydrologic Unit 02040105, on left bank at Chambers Street Bridge in Trenton, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--89.4 mi² (231.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: August 1923 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: Water years 1971-75, 1977 to current year.

GAGE.--Water-stage recorder. Concrete control since July 10, 1932. Datum of gage is 24.76 ft (7.547 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records good. Records include water diverted from outside the basin since February 1954 for municipal supply which returns to Assunpink Creek through Ewing-Lawrence Sewerage Authority Treatment Plant, 2.4 mi (3.9 km) above station (records given herein). In addition there is an average inflow of about 2.0 ft³/s (0.057 m³/s) from industrial use of water that originates outside the basin. Some diversion for irrigation in headwater area during summer months.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--55 years, 127 ft³/s (3.597 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0600	1110	31.4	6.47	1.972	Mar. 14	2045	1180	33.4	6.65	2.027
Dec. 1	0515	1140	32.3	6.53	1.990	Mar. 27	0330	1230	34.8	6.81	2.076
Dec. 18	1900	1210	34.3	6.75	2.057	May 24	1330	1820	51.5	8.31	2.533
Dec. 21	1330	1720	48.7	8.04	2.451	July 3	2115	1030	29.2	6.23	1.899
Jan. 9	0800	1250	35.4	6.86	2.091	Aug. 28	1045	1000	28.3	6.16	1.878
Jan. 26	1415	*2720	77.0	10.55	3.216						

Minimum discharge, 48 ft³/s (1.36 m³/s) July 31, gage height, 2.70 ft (0.823 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,450 ft³/s (154 m³/s) July 21, 1975, gage height, 14.61 ft (4.453 m), from high-water mark in gage house; minimum, 1.0 ft³/s (0.028 m³/s) Aug. 21, Oct. 22, 1931, gage height, 0.25 ft (0.076 m); minimum daily, 4.0 ft³/s (0.11 m³/s) July 21, Aug. 8, Sept. 2, 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	76	777	162	312	106	235	89	215	72	101	202
2	87	74	437	160	282	102	198	87	160	66	76	182
3	77	82	329	148	235	102	173	84	140	304	82	154
4	70	84	274	136	198	102	162	111	138	414	144	133
5	65	76	363	133	173	95	195	144	120	200	129	118
6	64	72	449	133	167	95	162	109	109	164	146	104
7	61	591	321	134	156	95	173	97	164	140	321	92
8	55	870	261	175	150	94	154	104	188	118	210	162
9	261	417	237	805	150	95	138	293	150	102	158	269
10	140	341	188	315	144	102	134	177	115	92	142	134
11	109	315	171	248	136	131	133	140	99	83	263	115
12	94	253	158	245	131	200	136	127	92	76	637	106
13	86	235	156	227	129	301	123	118	123	70	329	97
14	131	207	279	537	131	585	115	205	89	68	274	87
15	212	182	420	318	123	791	106	188	81	186	248	95
16	115	162	269	240	122	604	99	230	77	92	222	87
17	115	237	237	225	122	473	99	269	73	131	182	78
18	109	222	630	725	118	423	97	346	71	90	146	82
19	107	171	660	464	115	393	195	248	76	78	123	186
20	146	154	420	366	113	405	269	202	71	72	102	106
21	115	150	1030	352	111	366	167	171	78	68	90	92
22	101	158	614	307	109	396	138	148	107	65	89	86
23	89	393	417	255	106	301	123	131	79	59	81	81
24	87	263	352	222	106	253	118	1110	76	58	76	74
25	84	220	349	485	111	215	115	677	68	56	76	73
26	89	506	290	2070	118	372	107	446	111	56	70	70
27	150	304	225	1200	118	963	104	349	101	56	64	67
28	120	248	193	630	109	506	104	315	78	81	464	67
29	100	235	175	449	---	372	95	271	97	60	240	65
30	86	290	164	381	---	312	90	235	87	52	162	61
31	78	---	177	346	---	274	---	220	---	109	171	---
TOTAL	3293	7588	11022	12593	4095	9624	4257	7441	3233	3338	5618	3325
MEAN	106	253	356	406	146	310	142	240	108	108	181	111
MAX	261	870	1030	2070	312	963	269	1110	215	414	637	269
MIN	55	72	156	133	106	94	90	84	68	52	64	61
(†)	13.0	16.6	21.2	15.8	15.0	17.3	16.2	16.0	14.8	13.0	13.1	12.8

CAL YR 1977 TOTAL 49452 MEAN 135 MAX 1030 MIN 26 † 13.4
WTR YR 1978 TOTAL 75427 MEAN 207 MAX 2070 MIN 52 † 15.4

† Inflow from outside the basin, 2.4 mi (3.9 km) upstream of station through plant of Ewing-Lawrence Sewerage Authority, in cubic feet per second.

DELAWARE RIVER BASIN

01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV												
08...	1130	921	140	7.1	13.0	40	9.6	5.6	>24000	1100	42	11
FEB												
02...	1210	287	195	6.8	2.0	9	14.2	1.5	130	220	50	12
APR												
13...	1405	125	270	7.3	15.0	7	10.2	4.1	70	2	65	16
MAY												
25...	1100	643	142	6.9	15.0	15	8.5	3.6	9200	790	45	12
JUN												
29...	0830	74	350	7.1	23.0	8	5.6	7.8	--	--	73	19
JUL												
18...	1200	94	260	7.1	23.0	6	6.3	6.6	4900	400	61	15
AUG												
16...	1345	225	167	7.0	25.0	10	7.1	3.3	200	<200	42	10

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
NOV												
08...	3.6	9.5	3.9	26	0	21	--	21	15	--	96	56
FEB												
02...	4.8	13	2.7	27	0	22	--	35	20	--	144	10
APR												
13...	6.1	20	3.4	45	0	37	--	45	27	--	161	13
MAY												
25...	3.6	8.2	2.3	24	0	20	.0	24	12	5.7	87	54
JUN												
29...	6.3	29	4.1	60	0	49	--	50	35	--	203	15
JUL												
18...	5.8	19	3.6	52	0	43	--	35	21	--	158	0
AUG												
16...	4.1	12	3.4	29	0	24	--	24	15	--	119	23

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV											
08...	--	--	.84	.01	.11	1.2	1.3	2.2	.09	.09	9.6
FEB											
02...	--	--	--	--	--	--	--	--	--	--	2.2
APR											
13...	--	--	1.7	.03	1.4	.90	2.3	4.0	.46	.30	6.1
MAY											
25...	--	--	1.2	.03	.21	.73	.94	2.1	.26	.10	7.0
JUN											
29...	--	--	1.9	.22	1.9	1.1	3.0	5.1	.54	.37	4.3
JUL											
18...	16	4.1	--	--	1.0	1.3	2.3	3.7	--	--	3.9
AUG											
16...	28	17	--	--	<.10	--	<.40	--	--	--	7.9

01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	PHENOLS (UG/L)
MAY 25...	1100	90	0	60	0	190	<.5	0	3

01464020 ASSUNPINK CREEK AT PEACE STREET AT TRENTON, NJ

LOCATION.--Lat 40°13'02", long 74°46'08", Mercer County, Hydrologic Unit 02040105, at bridge on Peace Street in Trenton, 900 ft (274 m) upstream from mouth, 0.3 mi (0.5 km) northwest of Trent House, and 0.7 mi (1.1 km) southeast of the Trenton Filtration Plant.

DRAINAGE AREA.--91.4 mi² (236.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July to September 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV											
28...	1345	163	7.3	7.0	15	12.0	1.2	700	200	58	14
FEB											
02...	1315	200	6.8	2.0	10	13.4	2.4	20	17	53	13
APR											
12...	1415	270	7.5	14.0	8	10.6	5.7	>2400	>2400	64	16
MAY											
25...	1245	147	6.9	15.5	15	9.1	4.4	E22000	>3300	45	12
JUN											
29...	1015	338	7.2	23.5	4	6.5	8.4	7900	120	75	19
JUL											
18...	1410	252	7.0	25.5	5	6.6	6.0	92000	800	64	16
AUG											
09...	1405	202	7.3	26.0	9	7.0	3.9	5400	500	54	13
SEP											
27...	1500	331	7.2	17.0	--	8.3	9.6	17000	2500	64	12

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV											
28...	5.6	11	3.3	34	0	28	33	18	--	--	125
FEB											
02...	5.0	13	2.7	27	0	22	33	20	--	--	126
APR											
12...	5.9	19	3.1	35	0	29	39	28	--	--	156
MAY											
25...	3.7	8.4	2.3	24	0	20	24	13	--	--	103
JUN											
29...	6.6	30	4.2	60	0	49	50	34	--	--	207
JUL											
18...	5.9	17	3.5	49	0	40	34	21	--	--	156
AUG											
09...	5.2	14	3.1	35	0	29	26	19	--	--	118
SEP											
27...	8.2	27	4.4	65	0	52	40	32	.2	7.0	190

01464020 ASSUNPINK CREEK AT PEACE STREET AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV											
28...	10	--	1.5	.03	.86	.54	1.4	2.9	.22	.11	13
FEB											
02...	8	--	--	--	--	--	--	--	--	--	3.4
APR											
12...	6	--	1.8	.04	1.2	.80	2.0	3.8	.37	.25	9.2
MAY											
25...	36	--	1.3	.03	.30	1.0	1.3	2.6	.24	.09	4.1
JUN											
29...	16	--	2.7	.26	1.7	.90	2.6	5.6	.40	.40	5.2
JUL											
18...	8	12	--	--	.70	1.2	1.9	3.5	--	--	5.2
AUG											
09...	20	23	--	--	.50	1.3	1.8	2.8	--	--	8.2
SEP											
27...	--	9	--	--	2.0	--	--	--	--	--	2.7

01464040 DELAWARE RIVER AT MARINE TERMINAL, AT TRENTON, NJ

LOCATION.--Lat 40°11'21", long 74°45'22", Mercer County, Hydrologic Unit 02040201, on left bank at downstream end of wharf at Marine Terminal, Trenton, 1.6 mi (2.6 km) downstream from toll bridge on U.S. Highway 1, 2.0 mi (3.2 km) downstream from Assunpink Creek, and at river mile 131.80 (212.07 km).

DRAINAGE AREA.--6,870 mi² (17,790 km²).

PERIOD OF DAILY RECORD.--
TIDE ELEVATION: May 1964 to February 1978. March 1921 to June 1946 (at municipal pier, 1.5 mi or 2.4 km upstream), August 1951 to June 1954, September 1957 to April 1964, in files of Philadelphia District Corps of Engineers, gage operated by National Ocean Survey since March 1978.
SPECIFIC CONDUCTANCE: October 1972 to June 1976.
WATER TEMPERATURES: October 1972 to June 1976.

GAGE.--Water-stage recorder. Datum of gage is -12.90 ft (-3.932 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication. Some periods cannot be estimated and are noted by dash (--) lines.

REMARKS.--Records of tide elevations fair. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy.

EXTREMES FOR CURRENT YEAR.--
TIDE ELEVATIONS: Maximum, 9.30 ft (2.835 m) Jan. 26; minimum, -3.87 ft (-1.180 m) Feb. 7, 23.

EXTREMES FOR PERIOD OF DAILY RECORD.--
TIDE ELEVATIONS: Maximum, 9.30 ft (2.835 m) Jan. 26, 1978; minimum, -7.00 ft (-2.134 m) Feb. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 17.9 ft (5.46 m) Aug. 20, 1955, from high-water mark; minimum, -8.6 ft (-2.62 m) Dec. 31, 1962, at site 1.4 mi (2.2 km) downstream.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	7.15	7.72	--	9.30	7.00							
high tide	Date	14	8	--	26	9							
Minimum	Elevation	-3.47	-3.84	--	--	-3.87							
low tide	Date	18	19	--	--	7,23							
Mean high tide		5.78	5.80	--	--	5.53							
Mean water level		1.99	2.02	--	--	1.48							
Mean low tide		-2.22	-2.14	--	--	-2.80							

NOTE.--Missing or doubtful gage-height record Dec. 2 to Jan. 10, Jan. 18 to Feb. 1.

01464290 CROSSWICKS CREEK AT HOCKAMIK ROAD NEAR COOKSTOWN, NJ

LOCATION.--Lat 40°02'10", long 74°32'11", Burlington County, Hydrologic Unit 02040201, at bridge on Hockamik Road, 0.2 mi (0.3 km) downstream of Jumping Brook, 1.6 mi (2.6 km) southwest of Brindletown, and 2.8 mi (4.5 km) southeast of Cookstown.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
NOV										
03...	0915	116	6.5	15.5	6	5.4	3.8	33	130	26
FEB										
28...	1245	137	6.7	4.0	10	9.8	9.2	<20	<20	28
APR										
11...	0910	110	6.7	12.0	7	7.3	4.9	17	540	25
MAY										
16...	0900	71	5.9	13.0	4	6.5	2.0	17	240	17
JUN										
26...	0930	149	6.5	20.5	8	3.5	--	110	540	31

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV										
03...	7.7	1.6	7.3	2.6	20	0	16	18	10	67
FEB										
28...	8.2	1.8	8.0	2.5	30	0	25	19	10	81
APR										
11...	7.3	1.6	7.0	2.1	22	0	18	17	9.5	66
MAY										
16...	4.7	1.2	4.5	1.5	9	0	7	14	6.7	59
JUN										
26...	9.1	2.0	9.4	3.0	34	0	28	18	13	106

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
03...	12	.25	.05	2.5	.60	3.1	3.4	.53	.32	8.7
FEB										
28...	8	.30	.03	2.4	.70	3.1	3.4	.74	.32	11
APR										
11...	16	.39	.05	1.6	.70	2.3	2.7	.55	.30	5.9
MAY										
16...	14	.31	.03	.66	.64	1.3	1.6	.26	.15	7.1
JUN										
26...	21	--	.10	3.3	.70	4.0	6.6	.65	.31	7.0

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ

LOCATION.--Lat 40°08'15", long 74°36'02", Mercer County, Hydrologic Unit 02040201, on right bank upstream from highway bridge on Extonville, 0.5 mi (0.8 km) upstream from Pleasant Run, and 0.7 mi (1.1 km) downstream from Mercer-Monmouth County line.

DRAINAGE AREA.--83.6 mi² (216.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1940 to current year.
CHEMICAL ANALYSES: Water years 1965 to current year.
SEDIMENT ANALYSES: Water years 1965-73, 1977 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: August 1940 to October 1951, October 1952 to current year.
WATER TEMPERATURES: October 1966 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to June 1970.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.94 ft (7.602 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records good. Flow regulated occasionally by lakes above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--37 years (1940-51, 1952-78), 135 ft³/s (3.823 m³/s), 21.92 in/yr (557 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft³/s (21.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	1800	2620	74.2	11.17	3.405	Mar. 15	0100	1760	49.8	9.72	2.963
Dec. 12	0400	1010	28.6	7.85	2.393	Mar. 27	2100	974	27.6	7.73	2.356
Dec. 19	1700	920	26.1	7.55	2.301	May 25	0900	1320	37.4	8.81	2.685
Dec. 22	0700	900	25.5	7.48	2.280	July 4	2300	1100	31.2	8.16	2.487
Jan. 19	1000	1520	43.0	9.24	2.816	Sept. 1	1500	*4860	138	14.18	4.322
Jan. 26	1800	3590	102	12.56	3.828						

Minimum discharge, 45 ft³/s (1.27 m³/s) Aug. 25, 26, 27, 28, gage height, 2.49 ft (0.759 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.180 ft³/s (147 m³/s) Aug. 28, 1971, gage height, 13.93 ft (4.246 m); maximum gage height, 14.18 ft (4.322 m) Sept. 1, 1978; minimum discharge, 13.1 ft³/s (0.37 m³/s) Feb. 14, 1942 (result of freezeup); minimum daily, 16 ft³/s (0.45 m³/s) Aug. 30 to Sept. 3, Sept. 12, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	90	562	197	172	110	150	88	114	77	110	2490
2	77	88	806	169	148	105	134	83	103	64	105	2320
3	72	86	399	152	142	105	121	83	97	108	92	650
4	64	105	260	158	144	116	123	86	92	729	97	261
5	60	103	213	146	132	108	132	127	88	749	268	163
6	58	97	588	127	114	99	123	110	83	300	289	127
7	60	278	511	142	136	99	130	70	81	160	243	110
8	58	2010	292	160	163	99	132	101	108	116	172	110
9	150	1670	217	445	134	99	119	210	157	97	127	244
10	358	658	222	526	130	105	112	334	112	83	105	164
11	217	401	192	261	123	125	108	236	90	83	119	127
12	134	257	205	225	121	189	114	160	79	68	138	112
13	116	183	154	157	119	364	110	127	77	62	136	103
14	105	157	171	322	130	852	103	148	86	62	108	94
15	202	144	422	467	123	1530	97	224	72	94	90	90
16	196	136	430	306	121	749	94	174	66	90	81	94
17	194	211	267	194	121	436	92	203	64	168	74	88
18	188	370	288	895	119	349	92	189	66	136	66	81
19	154	283	768	1260	116	322	121	163	68	101	60	169
20	168	189	566	472	114	358	231	132	125	86	56	142
21	146	161	529	351	116	279	182	114	83	74	54	105
22	116	152	772	299	110	274	144	101	134	66	51	58
23	101	299	388	231	110	233	123	90	132	62	49	92
24	92	460	262	213	105	183	110	395	125	56	47	88
25	86	306	214	248	108	157	103	1150	120	54	45	81
26	86	443	188	2570	114	191	99	586	135	54	47	77
27	123	538	155	1820	114	733	97	313	147	54	47	70
28	166	300	157	670	112	664	101	202	125	72	174	70
29	121	205	174	394	---	355	97	164	99	72	381	66
30	105	237	136	244	---	222	92	146	94	58	178	64
31	94	---	166	186	---	171	---	127	---	62	164	---
TOTAL	3948	10617	10674	14007	3511	9781	3586	6436	3022	4117	3773	8510
MEAN	127	354	344	452	125	316	120	208	101	133	122	284
MAX	358	2010	806	2570	172	1530	231	1150	157	749	381	2490
MIN	58	86	136	127	105	99	92	70	64	54	45	58
CFSM	1.52	4.23	4.12	5.41	1.50	3.78	1.44	2.49	1.21	1.59	1.46	3.40
IN.	1.76	4.72	4.75	6.23	1.56	4.35	1.60	2.86	1.34	1.83	1.68	3.79

CAL YR 1977 TOTAL 53148 MEAN 146 MAX 2010 MIN 23 CFSM 1.75 IN 23.65
WTR YR 1978 TOTAL 81982 MEAN 225 MAX 2570 MIN 45 CFSM 2.69 IN 36.48

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV												
28...	1225	293	80	7.1	4.5	8	11.4	1.2	330	230	34	10
FEB												
28...	1020	110	149	7.0	1.5	8	11.4	2.3	70	50	43	13
APR												
12...	1215	116	129	7.4	13.0	6	10.4	3.0	240	70	41	12
MAY												
18...	0930	188	117	6.7	14.0	15	8.2	3.3	220	920	41	12
JUN												
28...	1245	140	129	6.9	23.0	25	6.5	5.1	>2400	1600	40	12
JUL												
26...	1245	54	164	7.2	22.0	4	6.6	2.2	<200	1600	55	17
AUG												
17...	1245	77	142	7.1	24.5	6	6.0	2.9	<200	700	46	14

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
NOV												
28...	2.2	3.7	2.4	15	0	12	--	20	7.0	--	78	7
FEB												
28...	2.6	6.3	2.4	32	0	26	--	22	11	--	94	2
APR												
12...	2.6	5.5	2.6	29	0	24	--	24	11	--	97	15
MAY												
18...	2.6	4.8	2.3	18	0	15	.0	21	7.7	7.5	82	37
JUN												
28...	2.4	5.2	2.8	24	0	20	--	20	12	--	95	59
JUL												
26...	3.0	7.0	3.0	32	0	26	--	21	13	--	116	16
AUG												
17...	2.6	5.8	2.8	32	0	26	--	19	10	--	117	13

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV											
28...	--	--	.68	.01	.15	.37	.52	1.2	.26	.26	11
FEB											
28...	--	--	.83	.02	.78	.03	.81	1.7	.16	.09	3.6
APR											
12...	--	--	.91	.03	.31	.36	.67	1.6	.19	.02	6.5
MAY											
18...	--	--	.70	.02	.17	.58	.75	1.5	.31	.10	9.2
JUN											
28...	--	--	.95	.05	.32	.78	1.1	2.1	.47	.14	12
JUL											
26...	12	1.7	--	--	.10	.30	.40	1.7	--	--	2.4
AUG											
17...	23	4.8	--	--	.30	1.2	1.5	2.6	--	--	11

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY												
18...	0930	40	110	0	0	4	11	180	140	22	30	1

01464505 CROSSWICKS CREEK AT GROVEVILLE, NJ

LOCATION.--Lat 40°10'26", long 74°40'48", Mercer County, Hydrologic Unit 02040201, at bridge on U.S. Route 130 in Groveville, 0.3 mi (0.5 km) upstream from Doctors Creek, and 0.6 mi (1.0 km) southwest of Yardville.

DRAINAGE AREA.--94.5 mi² (244.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV											
28...	0920	79	6.8	4.5	15	11.4	1.4	130	350	36	10
FEB											
23...	1330	200	6.9	1.0	6	13.0	2.5	<20	20	49	14
APR											
06...	1305	160	7.2	12.5	7	9.6	4.8	49	130	40	11
MAY											
17...	0850	156	6.7	13.0	10	9.2	3.2	4300	3500	43	12
JUN											
28...	0845	147	6.8	21.5	45	6.9	4.4	>2400	>2400	39	11
JUL											
26...	0940	209	7.2	22.5	6	6.4	2.2	1300	540	53	15
AUG											
09...	1210	130	7.1	24.0	15	7.2	2.1	1100	1100	39	11

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV										
28...	2.6	4.2	2.7	12	0	10	22	8.0	79	12
FEB										
23...	3.5	16	2.6	28	0	23	26	23	126	4
APR										
06...	3.1	9.0	2.5	22	0	18	26	15	94	11
MAY										
17...	3.2	13	2.3	17	0	14	23	21	111	37
JUN										
28...	2.7	7.0	3.1	22	0	18	22	14	104	80
JUL										
26...	3.7	15	3.1	29	0	24	24	25	131	14
AUG										
09...	2.9	5.8	2.8	21	0	17	19	11	87	39

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
28...	--	.83	.01	.13	.47	.60	1.4	.15	.01	12
FEB										
23...	--	1.2	.01	.70	.50	1.2	2.4	.18	.10	4.3
APR										
06...	--	1.2	.03	.24	.45	.69	1.9	.14	.06	5.3
MAY										
17...	--	.88	.02	.09	.65	.74	1.6	.26	.09	3.4
JUN										
28...	--	1.1	.06	.23	.87	1.1	2.3	.59	.19	8.4
JUL										
26...	16	--	--	.10	.30	.40	1.8	--	--	6.1
AUG										
09...	53	--	--	.20	1.9	2.1	--	--	--	11

01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'57", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi (1.3 km) downstream from Conines Millpond dam.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV											
28...	1125	149	7.1	4.5	15	11.1	1.5	<2	<2	53	13
FEB											
28...	0855	144	6.8	1.0	7	13.4	1.3	2	27	49	11
APR											
12...	1020	166	7.4	13.0	4	11.3	2.2	11	14	44	10
MAY											
17...	1145	144	7.0	13.0	3	9.2	2.3	1600	220	45	10
JUN											
28...	1100	128	7.1	23.0	20	7.5	2.4	>2400	79	39	9.2

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV											
28...	5.1	6.7	4.0	37	0	30	--	30	13	--	104
FEB											
28...	5.3	6.9	2.6	20	0	16	--	24	15	--	99
APR											
12...	4.7	5.7	2.8	22	0	18	--	40	28	--	81
MAY											
17...	4.9	6.0	2.3	27	0	22	.0	22	12	6.0	80
JUN											
28...	4.0	4.3	2.6	27	0	22	--	16	13	--	83

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
28...	8	1.5	.03	1.8	.30	2.1	3.6	.35	.17	8.6
FEB										
28...	2	2.6	.02	.59	.13	.72	3.3	.10	.02	2.3
APR										
12...	0	1.1	.01	.36	.35	.71	1.8	.08	.03	7.6
MAY										
17...	12	.79	.03	.75	.75	1.5	2.3	.16	.09	10
JUN										
28...	29	.47	.03	.36	.61	.97	1.5	.23	.10	10

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY												
17...	1145	30	7	0	0	0	2	120	100	0	10	1

01464522 DOCTORS CREEK AT ROUTE 130 NEAR YARDVILLE, NJ

LOCATION.--Lat 40°10'31", long 74°40'33", Mercer County, Hydrologic Unit 02040201, at bridge on U.S. Route 130, 0.3 mi (0.5 km) upstream from mouth, 0.4 mi (0.7 km) northwest of Groveville, 0.6 mi (1.0 km) southwest of Yardville, and 2.5 mi (4.0 km) southwest of Haines Corner.

DRAINAGE AREA.--25.8 mi² (66.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV											
28...	1015	144	7.1	4.5	2	12.1	1.0	<2	<2	52	12
FEB											
23...	1230	205	6.5	2.0	5	13.2	3.2	<20	130	55	12
APR											
12...	0900	175	7.1	11.0	3	10.4	4.9	>2400	>2400	48	10
MAY											
17...	1030	162	7.0	12.5	4	9.6	2.8	250	7	50	11
JUN											
28...	0940	125	7.1	22.0	25	7.4	4.3	1600	350	40	9.3
JUL											
26...	1045	200	7.4	21.0	4	7.4	2.9	<2	4	61	14
AUG											
09...	1100	160	7.1	23.5	6	7.5	2.4	350	70	48	11

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV										
28...	5.4	6.9	3.4	20	0	16	28	13	100	3
FEB										
23...	6.1	12	2.9	26	0	21	30	23	121	6
APR										
12...	5.6	8.7	3.0	21	0	17	25	14	99	0
MAY										
17...	5.4	7.5	2.3	22	0	18	25	14	103	20
JUN										
28...	4.1	4.5	2.7	24	0	20	17	11	85	80
JUL										
26...	6.4	9.8	3.7	39	0	32	22	20	127	6
AUG										
09...	5.0	7.0	3.2	27	0	22	20	15	90	12

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
28...	--	2.0	.01	.49	.36	.85	2.9	.17	.04	8.3
FEB										
23...	--	2.6	.04	.95	.45	1.4	4.0	.23	.13	9.6
APR										
12...	--	1.7	.03	.77	.33	1.1	2.8	.20	.12	7.2
MAY										
17...	--	1.4	.03	.48	.49	.97	2.4	.15	.07	9.4
JUN										
28...	--	.72	.04	.22	.88	1.1	1.9	.39	.10	8.3
JUL										
26...	6	--	--	1.2	1.1	2.3	3.7	--	--	9.2
AUG										
09...	13	--	--	.60	2.1	2.7	3.7	--	--	6.4

01464531 BLACKS CREEK AT BORDENTOWN, NJ

LOCATION.--Lat 40°08'14", long 74°42'42", Burlington County, Hydrologic Unit 02040201, at bridge on U.S. Route 130 in Bordentown, 1.0 mi (1.6 km) northeast of Fieldsboro, 1.3 mi (2.1 km) upstream of mouth, and 3.1 mi (4.9 km) southwest of Groveville.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BRTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV											
08...	1030	107	6.7	13.5	65	7.6	4.9	16000	5400	33	8.0
FEB											
23...	0930	264	6.9	1.0	9	14.0	7.5	<20	230	67	17
APR											
06...	1145	203	7.2	11.0	10	9.2	5.3	2	2	57	14
MAY											
22...	1310	218	6.8	17.5	8	8.4	2.4	<20	E11	61	15
JUN											
27...	1310	139	6.9	20.0	40	8.0	5.8	>2400	>2400	41	10
JUL											
26...	1420	230	6.9	22.0	7	6.7	4.9	<2	>2400	62	16
AUG											
08...	1420	162	7.1	24.0	15	7.6	4.1	920	1600	46	11

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
NOV										
08...	3.2	3.1	7.0	17	0	14	18	9.4	65	82
FEB										
23...	6.0	19	4.1	37	0	30	36	33	168	7
APR										
06...	5.3	11	3.4	27	0	22	35	18	131	14
MAY										
22...	5.7	10	3.8	27	0	22	37	21	134	5
JUN										
27...	3.9	5.1	3.9	23	0	19	21	11	94	204
JUL										
26...	5.3	14	4.6	49	0	40	30	20	145	14
AUG										
08...	4.6	7.0	3.7	24	0	20	26	13	103	9

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
08...	--	.96	.02	.07	.74	.81	1.8	.56	.12	9.2
FEB										
23...	--	1.5	.01	1.0	1.6	2.6	4.1	.63	.14	11
APR										
06...	--	1.1	.02	.66	.74	1.4	2.5	.35	.09	7.6
MAY										
22...	--	1.9	.05	1.1	.70	1.8	3.7	.50	.38	7.9
JUN										
27...	--	1.2	.05	.26	.94	1.2	2.4	.94	.11	14
JUL										
26...	12	--	--	1.0	1.6	2.6	4.0	--	--	5.4
AUG										
08...	29	--	--	.50	2.2	2.7	3.8	--	--	7.3

01464540 CRAFTS CREEK AT HEDDING, NJ

LOCATION.--Lat 40°06'01", long 74°45'23", Burlington County, Hydrologic Unit 02040201, at bridge on Old York Road in Hedding, 1.6 mi (2.6 km) southeast of Roebling, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--10.6 mi² (27.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
NOV										
08...	0910	108	6.9	13.5	25	8.2	5.1	16000	9200	33
FEB										
23...	1030	418	6.5	.0	6	13.4	.9	79	8	72
APR										
11...	1315	260	7.0	12.0	2	10.3	.9	49	17	63
MAY										
22...	1145	266	6.8	16.0	5	8.8	1.0	E2200	>920	68
JUN										
26...	1250	218	6.9	21.5	4	7.3	--	2400	5400	64

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV										
08...	6.8	3.8	4.6	6.8	18	0	15	17	12	77
FEB										
23...	15	8.4	42	3.7	12	0	10	44	82	232
APR										
11...	13	7.3	18	3.4	12	0	10	39	40	147
MAY										
22...	14	8.1	17	3.5	17	0	14	38	38	165
JUN										
26...	13	7.6	11	3.8	15	0	12	32	25	147

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
08...	47	.74	.02	.01	1.4	1.4	2.2	.30	.07	9.2
FEB										
23...	1	1.9	.01	.23	.59	.82	2.7	.02	.00	1.8
APR										
11...	0	2.2	.01	.01	.31	.32	2.5	.01	.01	4.1
MAY										
22...	1	2.1	.03	.19	.55	.74	2.8	.05	.01	4.0
JUN										
26...	4	2.1	.12	.12	.50	.62	2.8	.04	.01	6.2

01464580 ASSISCUNK CREEK AT COLUMBUS, NJ

LOCATION.--Lat 40°03'25", long 74°43'27", Burlington County, Hydrologic Unit 02040201, at bridge on U.S. Route 206, 1.1 mi (1.8 km) south of Columbus, 1.2 mi (1.9 km) downstream of Annaricken Brook, and 2.1 mi (3.4 km) northwest of Jobstown.

DRAINAGE AREA.--8.28 mi² (21.45 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1958-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
NOV										
03...	1025	167	6.5	15.0	6	7.4	1.1	9	240	54
JAN										
26...	1300	37	6.3	2.0	30	12.6	5.8	1600	>2400	8
APR										
11...	1040	156	6.9	10.5	7	10.8	1.1	2	350	42
MAY										
16...	1050	152	6.4	11.0	5	9.0	1.2	540	540	48
JUN										
26...	1115	167	6.3	17.0	10	7.6	--	700	3500	56

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV										
03...	14	4.7	4.5	4.5	13	0	11	46	12	123
JAN										
26...	2.0	.8	1.6	2.5	7	0	6	5.8	3.1	30
APR										
11...	10	4.2	5.0	3.8	17	0	14	39	13	99
MAY										
16...	12	4.4	4.9	3.6	12	0	10	38	9.9	109
JUN										
26...	13	5.6	5.0	4.5	16	0	13	38	12	129

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
03...	6	.46	.01	.04	.42	.46	.93	.09	.01	7.9
JAN										
26...	34	.25	.01	.22	.69	.91	1.2	.38	.13	4.9
APR										
11...	5	.78	.00	.05	.18	.23	1.0	.07	.02	4.8
MAY										
16...	8	.68	.01	.25	.40	.65	1.3	.12	.07	12
JUN										
26...	12	.78	.01	.12	.34	.46	1.3	.12	.01	7.9

01464580 ASSISCUNK CREEK AT COLUMBUS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 31...	1015	0	.0	3	1.9	.6	1.0

DATE	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 31...	.6	.0	.0	.0	.0	0

01464590 ASSISCUNK CREEK NEAR BURLINGTON, NJ

LOCATION.--Lat 40°04'19", long 74°47'57", Burlington County, Hydrologic Unit 02040201, at bridge on Old York Road, 1.4 mi (2.3 km) southwest of Bustleton, 2.8 mi (4.5 km) northeast of Deacons, 3.2 mi (5.1 km) east of Burlington, and 4.2 mi (6.8 km) upstream from mouth.

DRAINAGE AREA.--37.2 mi² (96.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV											
03...	1110	167	6.7	14.0	4	8.2	.9	350	540	56	13
FEB											
15...	0900	213	6.1	.0	3	11.8	.5	2	2	54	12
APR											
11...	1150	163	7.1	11.5	3	12.0	.8	79	33	48	11
MAY											
16...	1220	136	6.5	12.5	7	9.0	2.8	3500	460	51	13
JUN											
26...	1200	159	6.7	21.0	10	6.3	--	2400	1300	53	12
JUL											
24...	1210	172	7.1	25.5	3	7.5	1.2	790	1300	57	13
AUG											
09...	0935	134	6.7	23.0	10	6.5	1.5	--	--	44	10

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV											
03...	5.7	5.8	4.0	15	0	12	--	38	15	--	117
FEB											
15...	5.9	13	3.2	7	0	6	--	39	27	--	130
APR											
11...	5.1	6.5	3.2	15	0	12	--	34	16	--	102
MAY											
16...	4.6	5.5	2.4	12	0	10	.0	30	11	11	93
JUN											
26...	5.6	5.3	3.7	17	0	14	--	32	13	--	128
JUL											
24...	5.9	6.0	4.2	23	0	19	--	28	15	--	117
AUG											
09...	4.5	4.5	3.4	18	0	15	--	24	10	--	97

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV											
03...	7	--	.59	.01	.01	.38	.39	.99	.06	.01	7.7
FEB											
15...	6	--	--	--	--	--	--	--	--	--	.7
APR											
11...	0	--	.89	.00	.00	.26	.26	1.2	.04	.02	4.8
MAY											
16...	24	--	.64	.02	.14	.66	.80	1.5	.12	.06	8.3
JUN											
26...	11	--	.47	.09	.05	.51	.56	1.1	.12	.07	8.5
JUL											
24...	10	24	--	--	.20	2.1	2.3	3.3	--	--	11
AUG											
09...	14	26	--	--	--	--	--	--	--	--	13

01464590 ASSISCUNK CREEK NEAR BURLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 31...	1040	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	1220	40	20	0	0	0	2	170	130	4	30	0

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 31...	0	.0	3	6.8	5.0	5.0	.8	.0	.0	.0	.0	0
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--

01464598 DELAWARE RIVER AT BURLINGTON, NJ

LOCATION.--Lat 40°04'42", long 74°52'28", Burlington County, Hydrologic Unit 02040201, on left bank at the intake canal of the Public Service Electric and Gas Company, 0.3 mi (0.5 km) downstream from Burlington-Bristol Bridge, 1.4 mi (2.3 km) downstream from Assiscunk Creek, and at river mile 117.40 (188.89 km).

DRAINAGE AREA.--7,160 mi² (18,540 km²).

PERIOD OF RECORD.--
TIDE ELEVATIONS: July 1964 to current year. March 1921 to July 1926, January 1931 to November 1939, August 1951 to June 1954, July 1957 to June 1964, in files of Philadelphia District Corps of Engineers.

REVISED RECORDS.--WDR NJ-76-1: 1973(m).

GAGE.--Water-stage recorder. Datum of gage is -12.90 ft (-3.932 m) National Geodetic Vertical Datum of 1929. Prior to May 20, 1971, water-stage recorder at site 0.8 mi (1.3 km) upstream at same datum. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--Records good. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 8.47 ft (2.582 m) Jan. 26; minimum, -5.10 ft (-1.554 m) Dec. 10.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.58 ft (2.615 m) June 30, 1973; minimum, -6.60 ft (-2.012 m) Feb. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 10.8 ft (3.29 m) Aug. 20, 1955, from high-water mark at site 1.4 mi (2.3 km) upstream; minimum, -9.1 ft (-2.77 m) Dec. 31, 1962, at present site.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.65	7.17	7.60	8.47	5.59	7.35	7.09	6.79	6.30	6.39	6.43	6.36
high tide	Date	14	8	21	26	5	27	20	21	22	18	17	14
Minimum	Elevation	-3.62	-3.80	-5.10	-3.826	-4.74	-4.58	-3.00	-3.02	-3.37	-3.57	-3.42	-3.03
low tide	Date	18	19	10	4	7	7	16	2	14	11	21	13
Mean high tide		5.20	5.10	5.20	--	--	5.15	5.48	5.69	5.24	5.23	5.38	5.29
Mean water level		1.68	1.70	1.74	--	--	1.60	1.82	2.01	1.36	1.50	1.07	1.66
Mean low tide		-2.04	-2.03	-1.88	--	--	-1.99	-1.96	-1.80	-2.63	-2.50	-2.28	-2.24

NOTE.--Missing or doubtful record on Jan. 6-18, Feb. 6 to Mar. 1.

01465810 GUM SPRING AT FOURMILE, NJ

LOCATION.--Lat 39°52'52", long 74°35'43", Burlington County, Hydrologic Unit 02040202, at bridge on unnamed road at Fourmile, 0.5 mi (0.8 km) south of Four Mile Circle, 0.7 mi (1.1 km) upstream from mouth, and 4.7 mi (7.6 km) southwest of Mount Misery.

DRAINAGE AREA.--0.65 mi² (1.68 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
JAN											
05...	1030	168	5.7	4.3	2	13.2	.9	<2	<2	12	0

DATE	ALKALINITY (MG/L AS CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN										
05...	10	92	3	.01	.05	.32	.37	2.6	.00	12

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ

LOCATION.--Lat 39°55'23", long 74°43'05", Burlington County, Hydrologic Unit 02040202, at bridge on light-duty road in Retreat, 40 ft (12.2 m) upstream of Friendship Creek, 1.2 mi (1.9 km) southwest of Buddtown, and 1.8 mi (2.9 km) northeast of Beaverville.

DRAINAGE AREA.--44.4 mi² (115.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
03...	1025	96	4.0	16.5	4	7.2	1.1	17	350	12	2.7	1.3
NOV												
09...	1135	85	3.9	14.5	2	5.8	1.7	240	23	13	3.2	1.2
JAN												
30...	1140	78	4.1	.0	3	13.4	.7	<2	5	8	2.0	.8
MAR												
22...	1215	76	4.1	10.0	3	12.1	1.4	4	<2	10	2.3	1.0
MAY												
15...	1330	69	4.2	14.5	2	8.6	1.9	140	12	11	2.6	1.0
JUN												
22...	0900	59	4.4	22.0	4	5.6	1.7	350	>2400	9	2.3	.9

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT											
03...	3.2	1.4	0	0	0	--	18	5.2	--	17	0
NOV											
09...	3.0	1.8	0	0	0	--	18	6.0	--	59	5
JAN											
30...	2.5	.8	0	0	0	--	12	4.5	--	39	0
MAR											
22...	2.4	1.3	0	0	0	--	14	3.7	--	42	7
MAY											
15...	4.9	1.2	0	0	0	.0	14	3.8	3.3	44	3
JUN											
22...	2.9	1.2	0	0	0	--	11	4.4	--	50	11

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
03...	.06	.00	.05	.35	.40	1100	.46	.06	.01	10	6.4
NOV											
09...	.05	.00	.00	.40	.40	--	.45	.06	.02	7.6	--
JAN											
30...	.15	.00	.00	.31	.31	--	.46	.03	.01	10	--
MAR											
22...	.31	.00	.01	.39	.40	--	.71	.06	.01	9.0	--
MAY											
15...	.14	.00	.05	.66	.71	--	.85	.04	.02	10	--
JUN											
22...	.14	.01	.12	.74	.86	--	1.0	.12	.06	8.1	--

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT 03...	1025	--	2	--	<10	<10	--	--	<10	--	<10	--
MAY 15...	1330	300	--	40	--	--	0	0	--	8	--	600

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	5000	20	--	0	.0	--	<10	--	0	--	0
MAY 15...	--	--	30	--	--	4	--	40	--	3	--

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	.0	0	55	9.2	38	4.0	.0	.0	.0	.0	0
MAY 15...	--	--	--	--	--	--	--	--	--	--	--

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ

LOCATION.--Lat 39°56'22", long 74°45'50", Burlington County, Hydrologic Unit 02040202, at bridge on Lumberton-Vincentown Road at Vincentown, 2.9 mi (4.7 km) southeast of Lumbertown, and 3.1 mi (5.0 km) upstream from Southwest Branch.

DRAINAGE AREA.--53.3 mi² (138.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1961 to current year.
CHEMICAL ANALYSES: Water years 1925, 1959-62, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT											
12...	1200	75	104	5.0	13.0	3	8.4	1.4	1600	920	29
NOV											
09...	1235	600	77	4.8	14.5	3	6.5	2.8	350	240	22
JAN											
30...	1225	247	68	4.4	.0	3	13.3	1.2	13	140	14
MAR											
23...	0910	171	71	5.1	9.0	2	10.0	1.2	40	140	18
MAY											
15...	1155	180	71	5.5	14.0	3	8.0	2.0	16000	490	21
JUN											
26...	1200	69	58	5.8	21.5	5	6.3	--	490	490	16

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT											
12...	8.3	2.1	4.3	1.9	2	0	2	.0	27	7.1	8.1
NOV											
09...	5.7	1.9	3.0	2.6	1	0	1	--	20	6.3	--
JAN											
30...	4.3	.9	2.8	1.0	0	0	0	--	13	5.5	--
MAR											
23...	4.9	1.5	3.1	1.5	2	0	2	--	18	5.9	--
MAY											
15...	5.9	1.6	3.3	1.6	2	0	2	--	18	5.5	--
JUN											
26...	4.4	1.1	3.2	1.2	4	0	3	--	10	6.1	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	78	10	.35	.00	.00	.41	.41	.76	.05	.01	5.8
NOV											
09...	76	4	.26	.01	.00	.70	.70	.97	.15	.10	17
JAN											
30...	37	4	.28	.00	.05	.23	.28	.56	.03	.01	17
MAR											
23...	50	2	.42	.01	.04	.48	.52	.95	.05	.02	18
MAY											
15...	61	7	.26	.01	.11	.68	.79	1.1	.10	.05	11
JUN											
26...	58	9	.00	.01	.15	.53	.68	.69	.18	.11	4.9

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 12...	1200	470	3	50	0	0	0	32

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 12...	280	10	30	<.5	6	0	40	0

01465900 SOUTHWEST BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ

LOCATION.--Lat 39°56'49", long 74°47'58", Burlington County, Hydrologic Unit 02040202, at bridge on East Bella Bridge Road in Eayrestown, 0.3 mi (0.5 km) upstream from mouth, and 2.7 mi (4.3 km) west of Vincentown.

DRAINAGE AREA.--76.0 mi² (196.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1925, 1959-61, 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	1110	146	6.4	13.0	4	8.4	1.5	3500	790	43	13
NOV											
09...	1330	94	5.7	14.5	2	6.8	3.1	1300	230	33	10
JAN											
12...	1300	106	6.3	.0	8	13.3	.8	80	23	36	11
MAR											
23...	1020	101	6.3	8.5	6	10.2	1.3	8	49	32	10
MAY											
17...	0920	110	6.6	13.0	7	9.2	2.4	>2400	>2400	37	11
JUN											
27...	1345	118	6.8	22.0	7	6.3	2.4	920	>2400	35	11
JUL											
20...	1250	108	6.7	24.0	5	6.4	1.6	1600	>2400	32	10
AUG											
17...	0930	100	6.7	24.5	5	5.7	2.5	1400	790	33	10

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT										
12...	2.6	6.2	2.8	12	0	10	34	8.4	86	10
NOV										
09...	2.0	3.4	3.3	5	0	4	26	7.1	89	16
JAN										
12...	2.1	4.9	1.8	7	0	6	22	8.2	73	7
MAR										
23...	1.8	4.8	2.2	10	0	8	23	8.6	70	5
MAY										
17...	2.3	4.4	2.3	12	0	10	24	6.9	84	10
JUN										
27...	1.9	5.7	2.6	21	0	17	17	7.8	63	21
JUL										
20...	1.7	5.3	2.3	16	0	13	17	7.8	86	18
AUG										
17...	1.9	4.3	2.4	20	0	16	17	7.1	113	14

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
12...	--	.48	.02	.18	.44	.62	1.1	.23	.16	5.3
NOV										
09...	--	.19	.00	.03	.62	.65	.84	.19	.06	16
JAN										
12...	--	.54	.01	.30	.34	.64	1.2	.13	.03	8.5
MAR										
23...	--	.42	.02	.25	.46	.71	1.2	.17	.06	8.9
MAY										
17...	--	.42	.02	.20	.68	.88	1.3	.22	.12	8.5
JUN										
27...	--	.89	.05	.20	.67	.87	1.8	.43	.31	11
JUL										
20...	8	--	--	.30	.80	1.1	2.1	--	--	6.3
AUG										
17...	14	--	--	.30	1.2	1.5	--	--	--	19

01465915 SOUTH BRANCH RANCOCAS CREEK AT HAINESPORT, NJ

LOCATION.--Lat 39°58'44", long 74°49'28", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 38 in Hainesport, 0.4 mi (0.6 km) west of intersection of State Route 38 with Hainesport Road, 1.8 mi (2.9 km) west of intersection of State Route 38 with State Route 541, and 2.0 mi (3.2 km) downstream of Masons Creek.

DRAINAGE AREA.--156 mi² (404 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and September 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
03...	0915	134	6.7	17.5	7	5.3	1.9	220	350	38
NOV										
09...	1430	87	5.7	14.5	7	5.7	3.5	2400	2800	28
JAN										
12...	1005	101	6.1	.0	7	12.8	.9	130	4	32
MAR										
23...	1245	100	6.0	10.0	6	9.5	1.2	79	49	29
MAY										
10...	1110	101	6.3	15.0	10	7.9	3.9	240	1600	32
JUN										
27...	1230	102	6.6	22.0	9	5.2	2.7	1400	1300	28
JUL										
20...	1130	94	6.4	23.5	5	5.0	1.8	1800	2400	28
AUG										
08...	1155	82	6.0	25.0	6	5.4	2.1	1800	130	25
SEP										
26...	1245	119	6.5	17.0	--	7.2	3.2	5400	220	34

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)
OCT										
03...	11	2.6	6.2	3.0	12	0	10	--	.0	26
NOV										
09...	7.8	2.0	3.0	3.5	6	0	5	--	--	22
JAN										
12...	9.1	2.2	4.5	1.8	5	0	4	--	--	23
MAR										
23...	8.0	2.1	4.3	2.3	9	0	7	--	--	22
MAY										
10...	9.6	2.0	4.1	2.0	10	0	8	--	.0	23
JUN										
27...	8.1	1.9	5.8	2.1	12	0	10	--	--	17
JUL										
20...	8.2	1.8	4.5	2.2	11	0	9	--	--	17
AUG										
08...	7.3	1.6	3.4	2.2	9	0	7	--	--	17
SEP										
26...	9.8	2.4	7.0	2.5	16	0	12	.0	--	20

01465915 SOUTH BRANCH RANCOCAS CREEK AT HAINESPORT, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT									
03...	9.5	--	9.1	93	9	--	.52	.01	.20
NOV									
09...	6.6	--	--	82	14	--	.28	.01	.02
JAN									
12...	8.4	--	--	71	6	--	.63	.01	.21
MAR									
23...	7.9	--	--	70	6	--	.53	.01	.17
MAY									
10...	7.6	--	4.6	81	35	--	.43	.01	.19
JUN									
27...	8.3	--	--	81	33	--	.57	.02	.21
JUL									
20...	7.6	--	--	80	19	20	--	--	.30
AUG									
08...	5.8	--	--	78	12	24	--	--	.30
SEP									
26...	10	.1	7.6	86	--	20	--	--	.30

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT									
03...	.37	.57	2400	1.1	.35	.02	11	--	8.8
NOV									
09...	.75	.77	--	1.1	.24	.13	19	--	--
JAN									
12...	.46	.67	--	1.3	.10	.05	7.8	--	--
MAR									
23...	.56	.73	--	1.3	.14	.05	7.8	--	--
MAY									
10...	1.0	1.2	--	1.6	.26	.09	6.3	--	--
JUN									
27...	.55	.76	--	1.4	.33	.20	9.2	--	--
JUL									
20...	1.2	1.5	--	2.5	--	--	7.2	--	--
AUG									
08...	.90	1.2	--	--	--	--	18	--	--
SEP									
26...	--	--	1000	--	--	--	7.4	8.0	--

01465915 SOUTH BRANCH RANCOCAS CREEK AT HAINESPORT, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT										
03...	0915	40	2	22	--	0	0	<10	--	<10
MAY										
10...	1110	140	--	--	--	40	0	--	--	--
SEP										
26...	1245	60	1	0	0	--	--	<10	10	10

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT										
03...	0	0	<10	15	<10	90	5000	7	20	90
MAY										
10...	0	2	--	8	--	180	--	--	--	60
SEP										
26...	--	--	<10	6	<10	--	17000	--	20	60

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
03...	35	<.5	.0	4	<10	0	30	60	2	0
MAY										
10...	--	--	--	6	--	--	30	--	1	--
SEP										
26...	20	<.5	.0	7	<10	0	30	70	0	5

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
03...	.0	7	6.1	4.0	8.6	--	.3	.0	--	.0
MAY										
10...	--	--	--	--	--	--	--	--	--	--
SEP										
26...	.0	6	6.4	2.6	2.2	.0	3.1	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
03...	.0	.0	--	--	--	--	--	0	--
MAY									
10...	--	--	--	--	--	--	--	--	--
SEP									
26...	.0	.0	.0	.0	.0	.0	.0	0	.0

01465970 NORTH BRANCH RANCOCAS CREEK AT BROWNS MILLS, NJ

LOCATION.--Lat 39°58'04", long 74°34'48", Burlington County, Hydrologic Unit 02040202, at bridge on Lakehurst Road at outflow of Mirror Lake in Browns Mills, 1.5 mi (2.4 km) north of Browns Mills Junction, and 2.0 mi (3.2 km) northwest of outflow of Country Lake.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
03...	1315	52	4.4	18.5	4	8.6	.7	8	22	12	3.3	1.0
NOV												
10...	1200	54	4.0	15.0	0	8.8	1.8	540	130	12	3.3	.8
JAN												
30...	0840	48	4.5	1.0	5	13.6	.2	11	33	7	1.7	.6
MAR												
22...	0915	47	4.6	4.0	2	12.1	1.0	<2	5	7	1.8	.7
MAY												
17...	1330	45	4.6	14.0	3	10.4	1.1	130	79	9	2.1	.8
JUN												
22...	1330	41	5.4	22.5	3	6.7	1.5	920	130	9	2.0	.9

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT											
03...	2.6	1.0	0	0	0	.0	7.5	5.7	5.9	36	0
NOV											
10...	2.3	.9	0	0	0	--	10	4.5	--	39	5
JAN											
30...	2.3	.6	0	0	0	--	9.1	4.3	--	29	0
MAR											
22...	2.4	1.0	0	0	0	--	9.6	3.9	--	34	1
MAY											
17...	2.6	1.0	0	0	0	.0	9.1	3.1	2.3	30	4
JUN											
22...	2.8	1.0	3	0	2	--	6.4	4.0	--	42	2

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
03...	.01	.00	.00	.10	.10	420	.11	.02	.00	10	1.7
NOV											
10...	.00	.00	.00	.46	.46	--	.46	.03	.01	9.3	--
JAN											
30...	.10	.00	.01	.27	.28	--	.38	.01	.00	7.1	--
MAR											
22...	.18	.00	.09	.42	.51	--	.69	.02	.00	5.9	--
MAY											
17...	.07	.00	.01	.36	.37	--	.44	.02	.01	10	--
JUN											
22...	.09	.01	.11	.55	.66	--	.76	.05	.02	7.5	--

01465970 NORTH BRANCH RANCOCAS CREEK AT BROWNS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 03...	1315	190	0	1	0	0	<10	<10	0	0
MAY 17...	1330	170	--	--	30	0	--	--	0	0

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT 03...	<10	5	<10	260	4000	13	20	50	0	<.5
MAY 17...	--	9	--	220	--	--	--	50	--	--

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	.0	4	<10	0	30	0	1	82	.0	0
MAY 17...	--	8	--	--	30	--	3	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 03...	6.4	1.1	12	.0	.0	.0	.0	.0	0
MAY 17...	--	--	--	--	--	--	--	--	--

01466130 POLE BRIDGE BRANCH NEAR BUCKINGHAM, NJ

LOCATION.--Lat 39°56'43", long 74°28'52", Ocean County, Hydrologic Unit 02040202, at bridge on unnamed road, 0.6 mi (1.0 km) downstream from Deer Park Branch, 2.0 mi (3.2 km) northwest of Buckingham, and 5.5 mi (8.8 km) west of Whiting.

DRAINAGE AREA.--12.8 mi² (33.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
JAN 05...	1130	109	3.8	1.0	1	11.1	.3	<2	<2	0	0

DATE	ALKALINITY (MG/L AS CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 05...	0	41	4	.04	.00	.01	.18	.19	.23	.00	10

01466200 POLE BRIDGE BRANCH NEAR BROWNS MILLS, NJ

LOCATION.--Lat 39°56'48", long 74°33'22", Burlington County, Hydrologic Unit 02040202, at bridge on unnamed road, 200 ft (61.0 m) downstream from outlet of Country Lake, 2.2 mi (3.5 km) southeast of Browns Mills, and 2.6 mi (4.2 km) east of Whitesbog.

DRAINAGE AREA.--24.9 mi² (64.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
JAN 05...	1110	85	4.0	3.0	1	11.6	.5	8	<2	0	0

DATE	ALKALINITY (MG/L AS CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 05...	0	39	3	.09	.00	.05	.33	.38	.47	.00	9.0

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ
(Hydrologic bench-mark station)

LOCATION.--Lat 39°53'05", long 74°30'20", Burlington County, Hydrologic Unit 02040202, on right bank in Lebanon State Forest, 25 ft (7.6 m) upstream from Butterworth Road Bridge, 3.4 mi (5.5 km) upstream from confluence with Cooper Branch, and 7.0 mi (11.3 km) southeast of Browns Mills.

DRAINAGE AREA.--2.31 mi² (5.98 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1953 to current year. Prior to October 1962, published as "McDonald Branch in Lebanon State Forest".
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1969-72, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1953 to current year.
SPECIFIC CONDUCTANCE: October 1968 to current year.
WATER TEMPERATURES: October 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 117.73 ft (35.884 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor since October 1968.

REMARKS.--Discharge records good. Gage-height record is collected above concrete control and discharge record, which includes leakage around control, is at site 785 ft (239 m) downstream. Missing continuous water-quality record are the result of malfunction of sensor or sampling mechanism.

AVERAGE DISCHARGE.--25 years, 2.32 ft³/s (0.066 m³/s), 13.64 in/yr (346 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7.0 ft³/s (0.198 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	1715	13	0.37	1.75	0.533	May 25	0330	*20	0.57	1.91	0.582
Jan. 18	1645	11	0.31	1.69	0.515	July 4	1200	14	0.40	1.78	0.543
Jan. 26	1545	18	0.51	1.87	0.570	Aug. 28	1230	10	0.28	1.68	0.512
Mar. 15	1500	8.9	0.25	1.63	0.497						

Minimum discharge, 1.0 ft³/s (0.02 m³/s) Oct. 4-8, gage height, 1.05 ft (0.320 m).
SPECIFIC CONDUCTANCE: Maximum, 108 micromhos Dec. 2; minimum, 25 micromhos Sept. 14, 15.
WATER TEMPERATURES: Maximum, 21.0°C Aug. 13, 14; minimum, 0.0°C on several days during January.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 35 ft³/s (0.991 m³/s) Aug. 25, 1968, gage height, 2.33 ft (0.710 m); minimum daily, 0.8 ft³/s (0.023 m³/s) July 6, 19, 1967.
SPECIFIC CONDUCTANCE: Maximum, 182 micromhos June 16, 1969; minimum, 21 micromhos Sept. 27, 1970, Sept. 1, 1975.
WATER TEMEPRATURES: Maximum, 22.0°C Aug. 1, 1970; minimum, 0.0°C on many days during winter months.

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	4.1	3.1	4.1	3.0	3.6	2.7	3.5	2.2	2.2	3.2
2	1.1	1.2	4.7	3.2	3.9	2.8	3.6	2.6	3.3	2.2	2.2	3.3
3	1.1	1.3	3.9	3.1	3.6	2.8	3.5	2.6	3.6	3.6	2.2	2.8
4	1.1	1.3	3.2	3.0	3.6	2.8	3.3	2.6	4.3	11	2.3	2.5
5	1.1	1.3	3.3	2.8	3.6	2.8	3.3	2.8	3.6	7.0	2.8	2.3
6	1.1	1.3	3.9	2.6	3.5	2.8	3.3	2.7	3.3	4.7	2.7	2.2
7	1.1	2.6	4.1	2.6	3.5	2.8	3.5	2.6	3.2	3.8	3.0	2.2
8	1.1	6.8	3.6	2.7	3.5	2.8	3.3	2.6	3.3	3.3	2.5	2.1
9	1.3	8.4	3.3	3.3	3.5	2.8	3.2	3.5	3.3	3.1	2.2	2.1
10	1.3	4.7	3.2	3.3	3.5	2.7	3.2	3.5	3.2	3.0	2.1	2.0
11	1.2	3.6	3.2	3.2	3.5	2.8	3.1	3.5	3.0	2.8	2.3	2.0
12	1.2	3.1	3.2	2.7	3.5	3.1	3.1	3.1	2.8	2.7	3.5	2.0
13	1.2	2.8	3.2	2.6	3.5	3.3	3.1	3.0	2.8	2.5	5.4	2.0
14	1.2	2.7	3.2	3.5	3.3	4.9	3.1	3.2	2.8	2.5	4.1	1.9
15	1.3	2.4	4.3	4.1	3.3	7.5	3.0	3.2	2.7	2.7	3.1	2.0
16	1.3	2.3	3.8	3.3	3.3	6.3	2.8	3.2	2.6	2.7	2.7	2.0
17	1.4	2.6	3.5	3.1	3.3	5.1	2.8	3.3	2.6	3.2	2.4	1.9
18	1.3	2.7	3.6	6.5	3.3	4.5	2.8	3.1	2.6	3.0	2.2	1.9
19	1.3	2.5	4.9	5.8	3.3	4.5	3.3	3.0	2.7	2.7	2.1	1.9
20	1.3	2.5	5.1	4.3	3.3	4.5	3.6	2.8	3.0	2.6	2.0	1.9
21	1.3	2.4	5.4	4.3	3.1	4.3	3.3	2.7	2.8	2.3	2.0	1.8
22	1.3	2.3	5.6	4.3	3.2	4.3	3.2	2.6	3.6	2.2	1.9	1.8
23	1.2	3.0	4.7	3.9	3.3	3.8	3.1	2.5	3.2	2.2	1.9	1.8
24	1.2	3.0	3.9	3.5	3.2	3.6	3.0	7.3	2.8	2.1	1.8	1.8
25	1.2	3.2	3.6	3.8	3.2	3.5	2.8	16	2.6	2.1	1.8	1.8
26	1.2	4.5	3.6	10	3.2	3.9	2.7	8.1	2.5	2.0	1.8	1.8
27	1.3	4.3	3.3	8.9	3.1	6.8	2.8	6.0	2.6	2.0	1.8	1.8
28	1.3	3.8	3.1	5.8	3.0	6.5	2.8	5.4	2.5	2.1	6.0	1.7
29	1.3	3.1	2.8	4.9	---	5.1	2.7	4.9	2.4	2.0	4.7	1.7
30	1.3	3.0	2.8	4.3	---	4.3	2.7	4.5	2.3	2.0	3.2	1.7
31	1.2	---	3.1	3.6	---	3.8	---	3.6	---	2.0	3.0	---
TOTAL	37.9	89.9	117.2	126.1	95.2	124.5	93.6	123.2	89.5	94.3	83.9	61.9
MEAN	1.22	3.00	3.78	4.07	3.40	4.02	3.12	3.97	2.98	3.04	2.71	2.06
MAX	1.4	8.4	5.6	10	4.1	7.5	3.6	16	4.3	11	6.0	3.3
MIN	1.1	1.2	2.8	2.6	3.0	2.7	2.7	2.5	2.3	2.0	1.8	1.7
CFSM	.53	1.30	1.64	1.76	1.47	1.74	1.35	1.72	1.29	1.32	1.17	.89
IN.	.61	1.45	1.89	2.03	1.53	2.00	1.51	1.98	1.44	1.52	1.35	1.00

CAL YR 1977 TOTAL 608.51 MEAN 1.67 MAX 8.4 MIN .90 CFSM .72 IN 9.80
WTR YR 1978 TOTAL 1137.20 MEAN 3.12 MAX 16 MIN 1.1 CFSM 1.35 IN 18.31

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
17...	1350	1.4	--	--	--	--	--	--	--	--
NOV										
29...	1320	3.1	118	3.7	5.5	1	7.2	.2	22	K1
DEC										
15...	1100	E4.3	--	--	3.5	--	--	--	--	--
JAN										
13...	1245	3.2	121	3.6	2.0	--	8.0	.2	14	K1
MAR										
21...	1430	4.3	62	3.9	6.0	2	7.8	.9	<1	<1
MAY										
09...	1245	3.6	62	3.9	10.0	1	4.8	.5	80	K4
JUL										
06...	1200	4.7	50	3.9	16.0	1	2.8	.5	76	12
SEP										
20...	1435	1.9	28	4.5	15.0	--	3.0	.6	13	K1

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	ACIDITY (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)
OCT									
17...	--	--	--	--	--	--	--	--	--
NOV									
29...	K17	12	--	--	--	3.4	.9	2.2	.2
DEC									
15...	--	--	--	--	--	--	--	--	--
JAN									
13...	7	6	6	--	--	1.3	.6	2.0	.3
MAR									
21...	22	4	4	--	--	.8	.4	1.5	.4
MAY									
09...	25	5	5	.3	15	1.0	.5	1.9	.3
JUL									
06...	--	3	3	--	--	.7	.3	1.4	.1
SEP									
20...	170	2	1	--	--	.4	.3	1.8	.1

DATE	BICAR-BONATE (MG/L AS HCO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT									
17...	--	--	--	--	--	--	--	--	--
NOV									
29...	--	--	15	3.5	.0	3.4	45	59	<1
DEC									
15...	--	--	--	--	--	--	--	--	--
JAN									
13...	0	0	10	3.9	.1	3.4	31	--	--
MAR									
21...	0	0	10	2.9	.0	2.3	35	--	1
MAY									
09...	0	0	16	8.2	.0	2.3	32	--	4
JUL									
06...	--	0	6.8	3.3	.1	2.4	35	--	0
SEP									
20...	--	1	3.8	3.4	.0	3.7	26	--	--

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	1	.00	--	--	--	--	--	--	--
NOV 29...	0	.00	.01	.00	.83	.83	.84	.01	9.7
DEC 15...	0	--	--	--	--	--	--	--	--
JAN 13...	0	.00	.04	--	--	--	--	.00	--
MAR 21...	--	--	.04	.02	.22	.24	.28	.00	9.6
MAY 09...	--	--	.01	.00	.23	.23	.24	.01	7.0
JUL 06...	5	.06	.05	.02	1.7	1.7	1.7	.00	4.3
SEP 20...	2	.01	.00	--	--	--	--	.00	--

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
NOV 29...	1320	--	550	0	0	80	0	<10	0	1
MAY 09...	1245	300	300	0	0	40	0	10	0	0

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)
NOV 29...	2	560	320	6	40	<.5	3	0	0
MAY 09...	3	240	210	--	10	<.5	0	0	0

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
NOV 29...	60	3.8	.5	7.6	<.4	7.1	<.4	.42	.02
MAY 09...	30	--	--	--	--	--	--	--	--

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)
NOV 29...	1320	.00	.0	0	.00	.00	.0	.0	3	.00
MAY 09...	1245	.00	--	--	--	--	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)
NOV 29...	6.4	.00	2.1	.00	1.3	.00	.00	.0	.00	.00
MAY 09...	--	--	--	--	--	--	--	--	--	--

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
NOV 29...	.0	.00	.00	.0	.00	.0	.00	.0	.00	.00
MAY 09...	--	--	--	--	--	--	--	--	--	--

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
NOV 29...	.00	.00	.00	0	0	.00	.00	.00	.00
MAY 09...	--	--	--	--	--	--	--	--	--

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.5	10.5	11.0	---	---	---	2.0	2.0	2.0
2	---	---	---	12.0	11.5	11.5	7.5	7.0	---	2.5	2.0	2.0
3	---	---	---	12.5	12.0	12.0	7.0	6.5	7.0	2.0	1.5	2.0
4	14.5	13.0	---	---	---	---	7.0	6.0	6.5	2.0	1.5	1.5
5	14.0	12.5	13.0	---	---	---	6.5	6.0	6.5	2.5	2.0	2.0
6	13.5	12.5	13.0	---	---	---	6.5	4.5	6.0	3.0	2.5	2.5
7	13.0	12.0	12.5	---	---	---	5.0	4.0	4.0	3.5	3.0	3.0
8	12.5	12.0	12.5	---	---	---	4.0	3.0	3.5	4.5	3.5	4.0
9	13.0	12.5	13.0	---	---	---	4.0	3.0	3.5	5.0	3.0	4.5
10	13.0	12.0	12.5	---	---	---	3.5	2.5	3.0	2.5	1.5	2.0
11	12.5	11.5	12.0	---	---	---	2.5	2.0	2.5	2.0	1.5	1.5
12	12.5	12.0	12.0	---	---	---	2.5	2.0	2.5	2.0	1.5	2.0
13	12.0	12.0	12.0	---	---	---	3.0	2.0	2.5	2.5	2.0	2.0
14	12.0	11.5	12.0	---	---	---	4.0	2.5	3.5	2.0	1.5	2.0
15	12.0	11.5	11.5	---	---	---	4.0	2.5	3.0	1.5	1.0	1.5
16	12.0	11.5	---	---	---	---	4.0	3.5	3.5	1.5	1.0	1.0
17	---	---	---	---	---	---	4.0	2.5	3.5	2.0	1.5	1.5
18	---	---	---	---	---	---	4.5	3.5	4.0	1.5	0.0	0.0
19	---	---	---	---	---	---	4.5	4.5	4.5	1.0	0.0	1.0
20	---	---	---	---	---	---	5.0	4.5	4.5	1.0	0.5	0.5
21	---	---	---	---	---	---	6.0	5.0	5.5	1.0	0.5	1.0
22	---	---	---	---	---	---	6.0	4.5	5.0	1.0	0.5	1.0
23	---	---	---	---	---	---	4.5	3.5	4.0	1.0	1.0	1.0
24	---	---	---	---	---	---	4.5	4.0	4.0	1.5	1.0	1.0
25	---	---	---	---	---	---	5.5	4.5	5.0	2.0	0.0	1.0
26	---	---	---	---	---	---	5.0	3.0	4.0	0.0	0.0	0.0
27	---	---	---	---	---	---	3.0	2.0	2.5	0.5	0.0	0.0
28	12.5	12.0	---	---	---	---	1.5	1.5	1.5	0.5	0.0	0.5
29	12.0	12.0	12.0	---	---	---	1.5	1.5	1.5	1.0	0.5	1.0
30	11.5	11.0	11.5	---	---	---	2.0	1.5	2.0	1.0	0.5	1.0
31	11.0	10.5	11.0	---	---	---	2.0	2.0	2.0	1.0	1.0	1.0
MONTH	---	---	---	---	---	---	7.5	1.5	4.0	5.0	0.0	1.5

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	1.0	1.0	3.0	3.0	3.0	10.0	8.0	9.0	9.5	9.5	9.5
2	1.0	1.0	1.0	3.0	2.5	3.0	10.0	9.5	10.0	10.0	9.0	9.5
3	1.0	0.5	1.0	3.0	2.5	3.0	9.0	8.0	8.5	10.0	9.0	9.5
4	1.0	1.0	1.0	3.0	3.0	3.0	8.5	7.5	8.0	9.5	9.5	9.5
5	1.0	0.5	1.0	3.0	3.0	3.0	10.0	8.5	9.0	9.5	9.0	9.0
6	1.0	0.5	1.0	3.5	3.0	3.0	9.0	8.5	9.0	9.0	9.0	9.0
7	1.0	0.5	1.0	3.5	3.0	3.5	9.0	8.5	9.0	9.5	9.0	9.5
8	1.5	1.0	1.0	3.5	3.5	3.5	9.5	8.5	9.0	9.5	9.0	9.5
9	1.5	1.0	1.0	4.0	3.5	4.0	9.0	8.0	8.5	10.5	9.5	10.0
10	1.5	1.0	1.0	4.0	4.0	4.0	9.0	8.0	9.0	11.0	10.5	11.0
11	1.5	1.0	1.0	4.5	3.5	4.0	9.5	8.5	9.0	11.5	10.5	11.0
12	1.5	1.0	1.5	4.5	4.0	4.0	10.0	9.0	9.5	11.5	11.0	11.5
13	1.5	1.0	1.5	4.0	3.5	4.0	10.5	10.0	10.5	12.0	11.5	12.0
14	2.0	1.5	1.5	3.5	2.5	3.5	10.5	10.0	10.0	12.0	12.0	12.0
15	1.5	1.5	1.5	3.0	2.5	2.5	9.5	9.0	9.5	12.0	11.5	12.0
16	2.0	1.5	1.5	2.5	2.5	2.5	9.0	8.5	9.0	11.5	11.5	11.5
17	2.0	2.0	2.0	3.0	2.5	2.5	8.5	8.0	8.5	12.0	11.5	11.5
18	2.5	2.0	2.0	3.0	2.5	3.0	9.0	8.0	8.5	12.5	11.5	12.0
19	2.5	2.0	2.0	4.0	3.0	3.5	9.5	8.5	8.5	13.0	12.0	12.5
20	2.5	2.0	2.0	4.5	4.0	4.5	9.0	8.5	9.0	14.0	12.5	13.5
21	2.5	2.0	2.0	6.0	4.5	5.5	9.0	9.0	9.0	14.5	14.0	14.0
22	2.5	2.0	2.0	6.5	6.0	6.0	9.5	8.5	9.0	14.5	13.5	14.0
23	2.5	2.0	2.5	7.5	6.5	7.0	9.5	8.5	9.0	14.0	13.5	14.0
24	2.5	2.0	2.5	8.0	7.5	7.5	9.5	9.0	9.5	15.0	13.5	14.5
25	3.0	2.5	3.0	7.5	7.0	7.0	10.0	9.0	9.5	15.0	15.0	15.0
26	3.0	2.5	3.0	7.0	6.5	6.5	9.5	9.0	9.5	15.5	15.0	15.0
27	3.0	2.5	3.0	8.0	7.0	7.5	9.5	8.5	9.0	15.0	14.5	15.0
28	3.0	2.5	2.5	9.0	8.0	8.5	9.5	8.5	9.0	15.0	14.5	15.0
29	---	---	---	9.5	8.5	9.0	10.0	9.0	9.5	15.5	15.0	15.5
30	---	---	---	9.0	8.0	8.5	10.5	9.5	10.0	16.0	15.5	15.5
31	---	---	---	8.0	7.5	8.0	---	---	---	16.5	15.5	16.0
MONTH	3.0	0.5	1.5	9.5	2.5	5.0	10.5	7.5	9.0	16.5	9.0	12.0

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	16.5	17.0	17.5	16.5	16.5	17.5	17.0	17.5	19.5	18.5	19.0
2	17.5	16.5	17.0	16.5	16.0	16.0	17.5	17.5	17.5	18.5	18.0	18.0
3	17.5	17.0	17.0	17.0	16.0	16.0	18.0	17.5	17.5	18.0	17.0	17.5
4	17.5	16.5	17.0	17.0	16.0	16.5	18.5	18.0	18.0	18.0	17.0	17.5
5	16.0	15.5	16.0	16.5	15.5	16.0	19.0	18.5	18.5	16.5	16.0	16.5
6	16.0	15.0	15.5	16.5	16.0	16.5	19.0	19.0	19.0	16.5	16.0	16.0
7	16.0	15.5	15.5	17.5	16.0	17.0	20.0	19.0	19.5	17.5	16.5	16.5
8	16.5	16.0	16.5	18.0	16.5	17.5	20.0	19.5	19.5	16.5	16.0	16.5
9	18.0	16.5	17.0	18.5	17.5	18.0	20.0	19.0	19.5	16.5	15.0	16.0
10	17.0	16.0	16.5	18.5	18.0	18.5	19.0	18.5	19.0	15.5	15.0	15.0
11	16.5	16.0	16.5	19.0	18.0	18.5	19.5	18.5	19.0	16.0	15.0	15.5
12	16.5	16.0	16.5	18.0	16.5	17.0	20.5	19.5	20.0	16.0	15.5	16.0
13	16.5	16.0	16.0	17.5	16.0	16.5	21.0	20.0	20.5	16.0	15.0	15.5
14	16.0	15.0	15.5	16.5	16.0	16.0	21.0	20.0	20.0	15.0	14.0	14.5
15	15.0	14.0	14.5	16.5	16.0	16.5	20.5	19.5	20.0	14.5	14.0	14.5
16	14.5	14.0	14.5	16.5	16.5	16.5	20.0	18.5	19.5	15.0	14.0	14.5
17	14.0	14.0	14.0	17.5	17.0	17.0	19.0	18.5	19.0	15.5	14.5	14.5
18	15.0	14.0	14.5	18.0	17.0	17.5	19.0	18.0	18.5	15.0	14.5	15.0
19	16.0	15.0	15.5	18.0	17.5	18.0	18.5	17.5	18.0	15.0	14.5	15.0
20	16.5	16.0	16.0	18.5	18.0	18.0	18.5	16.5	17.5	15.0	14.5	14.5
21	16.5	16.0	16.5	18.5	18.0	18.5	---	---	---	15.0	14.0	14.5
22	17.5	16.5	17.0	19.0	18.0	18.5	---	---	---	15.0	14.5	14.5
23	17.0	16.5	17.0	19.0	18.5	19.0	18.0	17.0	---	15.5	14.0	14.5
24	16.5	16.5	16.5	19.5	18.5	19.0	18.0	16.5	17.0	14.5	13.5	14.0
25	17.0	16.0	16.5	18.5	18.0	18.5	16.5	16.5	16.5	14.5	13.5	13.5
26	16.5	16.0	16.0	18.5	17.5	18.0	17.0	16.0	16.5	14.0	12.5	13.5
27	17.0	16.0	16.5	18.5	17.5	18.0	16.5	16.0	16.0	13.5	12.5	12.5
28	18.0	17.0	17.5	18.0	18.0	18.0	20.0	16.0	18.5	13.5	12.5	12.5
29	18.5	17.0	17.5	18.0	17.0	17.5	20.5	19.5	20.0	13.0	12.0	12.0
30	18.0	17.0	17.5	18.5	17.0	17.5	20.0	19.5	19.5	13.0	11.5	12.0
31	---	---	---	17.0	17.0	17.0	19.5	19.0	19.5	---	---	---
MONTH	18.5	14.0	16.0	19.5	15.5	17.5	21.0	16.0	18.5	19.5	11.5	15.0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	41	37	39	---	---	---	91	90	91
2	---	---	---	38	33	35	108	105	107	88	87	88
3	---	---	---	34	32	33	106	100	103	92	90	91
4	42	40	---	---	---	---	101	97	100	91	89	90
5	40	39	39	---	---	---	98	94	96	89	88	89
6	39	36	38	---	---	---	97	95	95	88	87	88
7	38	35	36	---	---	---	101	95	99	88	87	87
8	44	35	40	---	---	---	97	94	96	87	85	86
9	54	42	46	---	---	---	94	90	91	94	83	90
10	56	55	56	---	---	---	93	89	91	94	93	94
11	56	55	56	---	---	---	91	87	90	94	94	94
12	59	56	57	---	---	---	90	87	---	94	90	92
13	58	58	58	---	---	---	---	---	---	86	84	85
14	58	55	56	---	---	---	---	---	---	88	84	86
15	60	56	59	---	---	---	91	73	---	92	87	91
16	60	56	---	---	---	---	100	92	97	91	89	90
17	---	---	---	---	---	---	99	95	97	90	75	77
18	---	---	---	---	---	---	94	92	93	88	84	87
19	---	---	---	---	---	---	100	94	97	88	86	87
20	---	---	---	---	---	---	101	97	99	85	82	83
21	---	---	---	---	---	---	100	92	95	82	81	81
22	---	---	---	---	---	---	102	99	101	81	80	80
23	---	---	---	---	---	---	101	97	100	80	79	80
24	---	---	---	---	---	---	98	95	96	79	77	78
25	---	---	---	---	---	---	96	92	95	82	75	77
26	---	---	---	---	---	---	96	95	96	81	70	79
27	---	---	---	---	---	---	94	91	93	78	58	65
28	41	38	---	---	---	---	91	90	91	72	66	70
29	41	41	41	---	---	---	91	90	90	72	71	72
30	41	41	41	---	---	---	90	89	90	72	71	72
31	41	41	41	---	---	---	91	89	90	72	71	72
MONTH	---	---	---	---	---	---	108	73	96	94	58	84

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	73	72	72	67	66	67	66	63	65	60	56	59
2	72	71	72	66	66	66	65	63	64	60	54	58
3	73	71	72	66	64	65	65	62	64	58	56	58
4	73	70	72	66	65	65	63	59	61	60	57	58
5	74	70	73	66	65	65	62	59	61	62	59	61
6	72	70	71	66	65	65	63	60	62	62	59	61
7	71	70	71	64	63	64	62	60	61	61	55	59
8	71	69	71	66	64	64	62	58	61	59	58	59
9	71	69	71	64	63	64	62	60	61	65	59	63
10	70	69	70	66	63	64	61	57	60	67	64	66
11	70	69	70	68	66	67	61	55	58	67	65	66
12	70	69	70	69	66	68	60	55	58	67	63	65
13	69	69	69	70	68	69	60	58	59	64	61	63
14	68	67	68	77	69	73	60	58	59	65	61	64
15	68	67	68	79	76	78	59	57	58	65	63	64
16	68	67	68	76	70	73	58	56	58	63	62	63
17	67	67	67	70	67	68	58	54	57	63	59	62
18	67	67	67	67	66	66	58	54	57	62	59	61
19	68	67	67	65	64	64	62	56	59	60	57	59
20	67	67	67	65	63	64	63	61	61	59	56	58
21	67	67	67	64	62	63	63	59	62	58	55	57
22	67	67	67	64	63	64	65	62	64	57	53	56
23	67	67	67	64	63	63	64	59	62	55	52	53
24	67	67	67	64	62	63	62	58	61	68	53	60
25	67	66	66	64	63	64	61	58	60	68	61	65
26	67	66	66	75	63	66	61	57	60	61	56	58
27	67	66	66	78	73	75	61	60	60	57	55	56
28	67	66	67	78	74	76	61	57	60	55	52	54
29	---	---	---	74	71	72	61	57	60	53	51	52
30	---	---	---	71	66	68	61	56	59	52	51	52
31	---	---	---	67	64	66	---	---	---	51	49	51
MONTH	74	66	69	79	62	67	66	54	60	68	49	59

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	51	49	51	46	45	46	37	34	36	44	44	44
2	51	50	51	45	44	45	37	34	36	44	42	44
3	56	49	52	51	44	45	34	29	31	44	41	42
4	56	54	54	57	53	55	40	32	35	41	40	41
5	54	50	52	55	51	53	42	39	40	40	38	39
6	51	49	50	53	50	51	39	35	37	39	37	38
7	50	47	49	50	49	49	43	36	39	39	37	37
8	49	45	47	49	48	49	41	38	40	37	36	37
9	50	48	49	48	47	48	38	37	38	36	36	36
10	52	49	50	48	47	47	37	34	37	36	34	35
11	51	48	50	47	45	46	44	37	41	36	34	35
12	51	48	50	45	45	45	49	43	47	34	31	33
13	51	49	50	45	44	44	49	46	47	31	26	29
14	51	48	50	44	44	44	46	43	44	31	25	27
15	51	49	50	44	42	44	43	38	40	26	25	25
16	50	45	50	44	44	44	38	37	37	32	26	31
17	50	47	49	46	44	45	37	35	35	33	31	32
18	48	47	48	45	45	45	35	32	34	33	32	32
19	52	46	49	45	45	45	34	31	32	34	33	33
20	52	50	51	45	43	44	34	34	34	33	33	33
21	54	49	50	44	42	43	---	---	---	34	32	33
22	57	55	56	42	41	41	---	---	---	34	33	34
23	57	54	55	41	39	41	34	33	---	34	31	33
24	54	51	53	40	39	40	34	33	33	32	30	31
25	52	49	51	39	38	38	33	31	33	33	31	32
26	50	48	49	38	36	37	33	31	32	32	29	31
27	49	47	48	37	36	36	33	32	33	31	29	31
28	48	47	48	36	35	36	59	31	47	32	30	31
29	48	46	47	36	35	36	51	48	49	30	27	29
30	47	46	46	35	34	35	47	44	46	30	27	29
31	---	---	---	35	34	35	44	43	44	---	---	---
MONTH	57	45	50	57	34	44	59	29	38	44	25	34

01466800 BISPHAMS MILL CREEK NEAR PRESIDENTIAL LAKES, NJ

LOCATION.--Lat 39°55'25", long 74°35'31", Burlington County, Hydrologic Unit 02040202, at bridge on unnamed road, 1.2 mi (1.9 km) downstream of outflow of Presidential Lakes, 1.2 mi (1.9 km) northwest of Presidential Lakes, 1.8 mi (2.9 km) south of Browns Mills Junction, and 1.9 mi (3.1 km) northeast of Ong.

DRAINAGE AREA.--13.7 mi² (35.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
JAN 05...	1010	78	4.0	3.0	1	12.0	.3	11	2	0	0

DATE	ALKALINITY (MG/L AS CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 05...	0	41	0	.03	.00	.01	.20	.21	.24	.00	9.5

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

LOCATION.--Lat 39°57'23", long 74°37'39", Burlington County, Hydrologic Unit 02040202, at bridge on Springfield Road in New Lisbon, 0.1 mi (0.2 km) south of intersection of Springfield Road and Penn Central Railroad, 0.6 mi (1.0 km) downstream of North Branch Rancocas Creek, and 1.8 mi (2.9 km) northeast of Magnolia.

DRAINAGE AREA.--80.7 mi² (209.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1953, 1957-58, 1966, 1968-69, 1972, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
03...	1220	57	4.1	16.5	3	8.4	.6	2	34	6	1.3
NOV											
10...	1105	72	3.7	14.5	0	6.6	1.5	240	9	8	2.0
JAN											
30...	0940	67	4.1	.0	4	13.2	.4	<2	4	5	1.0
MAR											
22...	1015	56	4.1	8.0	2	10.1	.6	4	<2	4	.9
MAY											
17...	1120	56	4.1	13.0	3	8.6	1.3	240	110	5	1.3
JUN											
22...	1145	45	4.3	21.0	3	7.0	1.2	540	920	4	.9

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
03...	.6	3.0	.8	0	0	0	.0	9.2	5.2	4.8	28
NOV											
10...	.8	2.9	.7	0	0	0	--	13	5.1	--	42
JAN											
30...	.5	2.2	.4	0	0	0	--	8.6	4.2	--	29
MAR											
22...	.4	2.1	.7	0	0	0	--	9.1	3.5	--	33
MAY											
17...	.5	2.7	.6	0	0	0	--	8.5	3.8	--	30
JUN											
22...	.5	2.4	.8	0	0	0	--	5.5	3.7	--	32

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
03...	0	.07	.00	.02	.00	.02	.09	.02	.00	9.6
NOV										
10...	3	.00	.00	.00	.75	.75	.75	.02	.01	10
JAN										
30...	0	.04	.00	.00	.17	.17	.21	.01	.00	9.2
MAR										
22...	1	.07	.00	.00	.20	.20	.27	.01	.00	7.6
MAY										
17...	7	.02	.01	.00	.46	.46	.49	.02	.01	7.0
JUN										
22...	5	.07	.01	.06	.46	.52	.60	.04	.01	6.2

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
03...	1220	240	0	3	0	0	0	2

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
03...	250	5	40	<.5	1	0	20	2

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ

LOCATION.--Lat 39°58'10", long 74°41'05", Burlington County, Hydrologic Unit 02040202, on right bank at downstream side of highway bridge at Pemberton, 12 mi (19 km) upstream from confluence with South Branch.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1921 to current year.
CHEMICAL ANALYSES: Water years 1923-24, 1958, 1962-69, 1975 to current year.
SEDIMENT ANALYSES: July to September 1978.

REVISED DISCHARGE RECORDS.--WSP 1302: 1922-23. WSP 1382: 1933.

GAGE.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft (9.507 m) National Geodetic Vertical Datum of 1929. Prior to June 9, 1923, nonrecording gage and June 9, 1923 to Aug. 9, 1951, water-stage recorder at site 600 ft (183 m) downstream at datum 6.54 ft (1.993 m) lower.

REMARKS.--Discharge records good except those for periods when the gate was open, which are fair. Flow regulated occasionally by operation of gate in dam and by ponds above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--57 years, 171 ft³/s (4.843 m³/s), 20.92 in/yr (531 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 9	1545	929	26.3	2.90	0.884	Mar. 27	1415	649	18.4	2.50	0.762
Dec. 22	0015	642	18.2	2.49	0.759	May 26	0015	846	24.0	2.78	0.847
Jan. 19	0645	881	25.0	2.83	0.863	July 5	1015	635	18.0	2.48	0.756
Jan. 27	0530	*1110	31.4	3.14	0.957	Aug. 29	2015	860	24.4	2.65	0.808
Mar. 16	0015	656	18.6	2.51	0.765	Sept. 1	2400	712	20.2	2.42	0.738

Minimum daily discharge, 80 ft³/s (2.27 m³/s) Oct. 6, 8.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft³/s (49.0 m³/s) Aug. 31, 1939, gage height, 4.23 ft (1.289 m), from high-water mark at former site, present datum; minimum daily, 9.0 ft³/s (0.25 m³/s) Sept. 29, 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	131	461	320	363	155	320	159	313	127	165	641
2	131	122	559	274	327	155	300	155	267	114	160	689
3	110	131	559	267	293	150	280	145	236	180	191	533
4	94	150	415	248	274	155	254	145	242	552	205	355
5	83	140	560	236	254	155	242	159	242	600	280	285
6	80	131	531	224	242	145	242	180	230	467	370	245
7	83	307	481	224	236	140	213	185	230	397	355	250
8	80	727	397	242	230	136	224	170	236	313	385	335
9	110	901	348	404	218	136	224	236	236	254	581	240
10	191	789	313	397	202	150	218	320	218	218	600	220
11	196	600	293	307	185	170	213	293	196	170	600	200
12	196	524	274	274	191	202	202	224	175	155	580	180
13	218	390	254	280	185	341	196	191	159	127	540	170
14	267	327	261	454	191	510	191	213	155	131	502	165
15	280	287	377	467	202	580	191	267	140	140	425	160
16	236	248	404	390	191	621	175	287	127	155	375	160
17	207	248	377	355	185	566	164	377	118	196	320	150
18	180	327	426	713	180	489	180	370	140	207	285	140
19	165	377	600	839	180	467	280	293	159	202	255	180
20	155	334	573	691	175	433	196	248	159	175	210	200
21	130	274	594	524	170	411	230	213	145	155	180	190
22	130	242	621	454	164	397	254	191	159	145	157	180
23	101	261	531	440	164	370	242	175	196	140	152	170
24	114	384	447	426	159	334	236	390	191	127	139	160
25	118	363	418	489	159	313	224	761	164	114	113	150
26	140	433	355	839	159	418	207	810	155	114	126	140
27	114	489	313	1060	159	628	180	663	150	110	107	130
28	122	474	280	761	155	573	180	552	155	118	415	120
29	122	363	254	552	---	467	191	474	145	118	791	113
30	114	404	242	433	---	390	175	397	131	105	755	112
31	122	---	274	397	---	363	---	327	---	114	617	---
TOTAL	4507	10878	12792	13981	5793	10520	6624	9570	5569	6240	10936	6963
MEAN	145	363	413	451	207	339	221	309	186	201	353	232
MAX	280	901	621	1060	363	628	320	810	313	600	791	689
MIN	80	122	242	224	155	136	164	145	118	105	107	112
CFSM	1.31	3.27	3.72	4.06	1.87	3.05	1.99	2.78	1.68	1.81	3.18	2.09
IN.	1.51	3.65	4.29	4.69	1.94	3.53	2.22	3.21	1.87	2.09	3.67	2.33

CAL YR 1977 TOTAL 58947 MEAN 161 MAX 901 MIN 33 CFSM 1.45 IN 19.76
WTR YR 1978 TOTAL 104373 MEAN 286 MAX 1060 MIN 80 CFSM 2.58 IN 34.98

NOTE.--Gate open Aug. 3 to Sept. 29.

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
03...	1145	110	57	4.2	18.0	4	8.0	.9	11	79	9	2.1
NOV												
10...	1010	768	65	4.1	14.5	4	7.3	1.8	240	70	13	3.6
JAN												
30...	1040	418	62	4.2	.0	3	13.4	.4	8	17	7	1.7
MAR												
22...	1120	397	56	4.2	8.0	3	10.8	.7	5	12	7	1.7
MAY												
11...	1020	300	52	4.4	13.5	2	9.6	2.6	79	33	9	2.1
JUN												
26...	0930	159	43	4.6	20.0	5	7.4	--	79	240	6	1.4
JUL												
24...	0830	127	41	4.6	25.0	3	6.3	1.1	79	>2400	6	1.5
AUG												
10...	1135	105	40	4.4	24.5	3	6.4	1.5	330	920	6	1.7

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT												
03...	.9	3.0	1.0	0	0	0	11	5.0	30	0	--	--
NOV												
10...	.9	2.7	1.0	0	0	0	13	5.4	50	6	--	--
JAN												
30...	.6	2.3	.5	0	0	0	9.9	4.6	34	0	--	--
MAR												
22...	.6	2.5	.9	0	0	0	10	3.8	42	2	--	--
MAY												
11...	.8	2.7	.9	0	0	0	11	4.5	37	7	--	--
JUN												
26...	.7	2.6	.7	0	0	0	6.1	4.5	41	6	--	--
JUL												
24...	.6	2.4	.8	0	0	0	6.1	4.2	35	9	14	4.8
AUG												
10...	.5	2.4	.8	--	0	--	6.9	4.1	39	10	19	5.4

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
03...	.14	.00	.03	.16	.19	490	.33	.03	.00	9.2	4.2
NOV											
10...	.04	.00	.00	.52	.52	--	.56	.04	.01	16	--
JAN											
30...	.08	.00	.00	.28	.28	--	.36	.01	.00	6.2	--
MAR											
22...	.12	.00	.03	.25	.28	--	.40	.02	.00	8.1	--
MAY											
11...	.04	.01	.01	.30	.31	--	.36	.02	.01	5.9	--
JUN											
26...	.00	.01	.09	.50	.59	--	.60	.05	.02	5.2	--
JUL											
24...	--	--	--	--	--	--	--	--	--	14	--
AUG											
10...	--	--	--	--	--	--	--	--	--	18	--

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
OCT												
03...	1145	2	<10	10	<10	990	9000	1200	100	.0	<10	1140

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT												
03...	16	.0	32	13	2.4	18	1.1	.0	.0	.0	.0	0

01467003 NORTH BRANCH RANCOCAS CREEK AT EWANVILLE, NJ

LOCATION.--Lat 39°58'55", long 74°44'11", Burlington County, Hydrologic Unit 02040202, at bridge on U.S. Route 206 in Ewanville, 0.2 mi (0.3 km) upstream from Powells Run, 0.7 mi (1.1 km) east of Smithville, and 0.8 mi (1.3 km) north of intersection of U.S. Route 206 with State Route 38.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	1325	82	5.9	14.0	4	9.2	2.1	110	49	17	4.9
NOV											
10...	0910	62	4.6	14.5	5	7.2	.0	240	79	13	3.4
JAN											
30...	1315	59	4.7	.0	3	13.5	.8	20	20	12	3.5
MAR											
22...	1320	61	5.0	8.5	4	11.0	1.4	2	13	13	3.5
MAY											
11...	1320	68	5.5	14.5	2	10.6	3.1	170	130	15	4.1
JUN											
26...	1315	59	5.7	20.0	4	7.8	--	230	170	12	3.3

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
12...	1.2	6.7	1.2	5	0	4	.0	18	7.0	5.4	52
NOV											
10...	1.1	3.5	1.2	0	0	0	--	15	6.1	--	62
JAN											
30...	.8	3.3	.8	1	0	1	--	12	11	--	42
MAR											
22...	1.0	3.8	1.3	2	0	2	--	14	6.8	--	50
MAY											
11...	1.1	5.0	1.1	4	0	3	--	15	7.0	--	57
JUN											
26...	.9	4.4	1.0	5	0	4	--	10	7.2	--	52

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
12...	31	.12	.00	.10	.29	.39	.51	.06	.03	7.1
NOV										
10...	10	.06	.00	.02	.63	.65	.71	.08	.04	12
JAN										
30...	0	.14	.00	.10	.28	.38	.52	.03	.01	6.8
MAR										
22...	8	.20	.00	.16	.29	.45	.65	.03	.01	8.3
MAY										
11...	6	.17	.00	.09	.29	.38	.55	.06	.01	6.0
JUN										
26...	2	.00	.03	.17	.47	.64	.67	.09	.05	7.2

01467003 NORTH BRANCH RANCOCAS CREEK AT EWANVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 12...	1325	140	2	50	0	0	0	35

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 12...	270	12	40	<.5	6	0	70	0

01467006 NORTH BRANCH RANCOCAS CREEK AT PINE STREET AT MOUNT HOLLY, NJ

LOCATION.--Lat 39°59'22", long 74°47'06", Burlington County, Hydrologic Unit 02040202, at bridge on Pine Street in Mount Holly, 0.1 mi (0.2 km) north of Saint Andrews Cemetery in Mount Holly, and 0.3 mi (0.5 km) downstream from Mill Dam.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	0950	89	6.1	12.5	5	9.6	1.4	170	50	19	5.3
NOV											
10...	0815	61	5.1	14.5	0	7.8	2.1	330	490	15	3.9
JAN											
12...	1145	79	5.5	.0	4	13.8	1.9	170	23	18	4.8
MAR											
23...	1140	71	5.2	8.5	3	11.2	1.6	25	17	13	3.5
MAY											
10...	1340	77	5.9	14.0	10	10.2	3.6	>2400	1600	19	5.5
JUN											
27...	1115	79	6.1	21.0	4	8.0	2.6	920	540	15	4.1
JUL											
24...	1020	66	6.2	25.5	3	6.8	1.5	130	79	13	3.7
AUG											
10...	0950	75	5.8	24.0	5	7.3	2.4	240	170	14	4.0

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
12...	1.3	7.1	1.4	5	0	4	.0	19	8.5	6.2	60
NOV											
10...	1.2	4.2	1.5	1	0	1	--	16	6.7	--	64
JAN											
12...	1.4	6.0	1.1	2	0	2	--	16	8.5	--	58
MAR											
23...	1.1	5.5	1.2	2	0	2	--	15	8.4	--	48
MAY											
10...	1.3	5.0	1.3	5	0	4	.0	17	8.0	4.4	60
JUN											
27...	1.1	7.1	1.3	6	0	5	--	13	10	--	108
JUL											
24...	.9	4.8	1.4	4	0	3	--	11	7.0	--	54
AUG											
10...	1.0	6.5	1.4	5	0	4	--	13	10	--	66

01467006 NORTH BRANCH RANCOCAS CREEK AT PINE STREET AT MOUNT HOLLY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	12	--	.15	.00	.16	.40	.56	.71	.09	.04	6.9
NOV											
10...	16	--	.07	.00	.04	.62	.66	.73	.12	.02	7.2
JAN											
12...	7	--	.30	.00	.13	.38	.51	.81	.05	.01	8.1
MAR											
23...	2	--	.23	.00	.10	.39	.49	.72	.04	.00	6.4
MAY											
10...	49	--	.21	.00	.11	.84	.95	1.2	.26	.04	5.8
JUN											
27...	22	--	.27	.01	.25	.16	.41	.69	.14	.07	10
JUL											
24...	12	15	--	--	.40	.00	.40	1.4	--	--	13
AUG											
10...	4	19	--	--	.30	1.2	1.5	--	--	--	9.7

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
12...	0950	130	2	50	0	0	0	35
MAY								
10...	1340	160	--	60	--	0	2	11

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
12...	180	14	40	<.5	5	0	60	0
MAY								
10...	190	--	60	--	9	--	70	1

01467008 RANCOCAS CREEK AT CENTERTON, NJ

LOCATION.--Lat 39°59'47", long 74°52'05", Burlington County, Hydrologic Unit 02040202, at bridge on Interstate Route 295 at Centerton, and 0.4 mi (0.6 km) downstream from confluence of North and South Branches.

DRAINAGE AREA.--312 mi² (808 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July to September 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT 12...	0820	132	6.3	13.0	8	7.2	1.3	2800	2200	35	10	2.5
NOV 08...	1410	101	6.3	14.0	30	6.7	3.9	>24000	2400	30	8.4	2.2
JAN 12...	0815	112	6.3	.0	7	13.0	1.7	540	33	34	10	2.3
MAR 23...	1400	97	5.8	10.0	5	9.6	1.3	110	49	--	--	--
MAY 18...	1230	100	6.4	15.0	6	7.8	2.1	170	350	28	7.7	2.1
JUN 29...	1100	118	6.6	24.5	8	5.0	3.9	1600	280	26	7.5	1.8
JUL 20...	1000	103	6.3	24.0	7	4.4	2.2	1400	>24000	24	6.7	1.8
AUG 08...	0940	85	6.1	24.5	10	4.7	2.7	1300	2200	24	6.7	1.7
SEP 26...	1000	115	6.5	16.5	--	7.9	2.9	230	110	30	8.3	2.3

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 12...	7.0	3.2	10	0	8	--	.0	28	10	--	7.2	81
NOV 08...	4.3	4.0	12	0	10	--	--	20	8.3	--	--	63
JAN 12...	6.3	1.9	6	0	5	--	--	23	9.8	--	--	76
MAR 23...	6.0	--	7	0	6	--	--	20	8.4	--	--	62
MAY 18...	5.7	1.8	10	0	8	--	.0	21	8.4	--	5.2	78
JUN 29...	8.3	2.1	--	--	--	--	--	19	12	--	--	99
JUL 20...	7.2	2.1	10	0	8	--	--	17	10	--	--	84
AUG 08...	4.3	2.3	9	0	7	--	--	17	6.9	--	--	69
SEP 26...	7.5	2.3	11	0	16	.0	--	19	11	.1	7.1	83

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	21	--	.50	.01	.16	.73	.89	1.4	.27	.08	7.2
NOV											
08...	45	--	.33	.01	.02	1.1	1.1	1.4	.14	.08	--
JAN											
12...	8	--	.55	.01	.31	.29	.60	1.2	.12	.02	9.0
MAR											
23...	16	--	.47	.01	.26	.53	.79	1.3	.16	.04	7.5
MAY											
18...	15	--	.43	.01	.23	.53	.76	1.2	.20	.09	5.6
JUN											
29...	49	--	.59	.01	.22	1.1	1.3	1.9	.34	.16	8.9
JUL											
20...	33	32	--	--	.40	1.9	2.3	3.3	--	--	7.4
AUG											
08...	23	30	--	--	.50	2.8	3.3	--	--	--	15
SEP											
26...	--	31	.59	.01	.30	2.3	2.6	3.2	.35	.18	8.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT									
12...	0820	80	3	--	30	0	--	0	0
MAY									
18...	1230	90	--	--	7	0	--	0	2
SEP									
26...	1000	50	2	0	--	--	10	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT									
12...	37	170	14	80	<.5	11	0	40	0
MAY									
18...	10	270	--	70	<.5	2	0	110	1
SEP									
26...	6	--	--	80	<.5	4	0	50	1

01467019 MILL CREEK NEAR WILLINGBORO, NJ

LOCATION.--Lat 40°01'53", long 74°51'14", Burlington County, Hydrologic Unit 02040202, on left upstream wingwalll of bridge on Springside Avenue, 2.2 mi (3.5 km) upstream from South Branch Mill Creek, 0.2 mi (0.3 km) east of Willingboro, and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA.--4.12 mi² (10.7 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1975 to September 1978.
CHEMICAL ANALYSES: Water year 1976 to 1977.
SEDIMENT ANALYSES: Water year 1976 to 1977.

GAGE.--Water-stage recorder. Datum of gage is 21.65 ft (6.598 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records fair. Site was sampled as part of an urban runoff project.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 125 ft³/s (3.54 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0500	212	6.00	7.69	2.344	May 24	1130	218	6.17	7.74	2.359
Dec. 1	0600	162	4.59	7.22	2.201	June 19	2015	202	5.72	7.60	2.316
Dec. 21	1200	155	4.39	7.15	2.179	July 3	2230	272	7.70	8.15	2.484
Jan. 9	0800	130	3.68	6.87	2.094	Aug. 7	0315	262	7.42	8.08	2.463
Jan. 18	0345	189	5.35	7.49	2.283	Aug. 11	1800	350	9.91	8.68	2.646
Jan. 26	0745	440	12.5	9.20	2.804	Aug. 31	2245	*492	13.9	9.46	2.883
Mar. 14	1945	154	4.36	7.14	2.176						

Minimum discharge, 1.7 ft³/s (0.048 m³/s) July 24, 27, gage height, 2.88 ft (0.878 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft³/s (13.9 m³/s) Aug. 31, 1978, gage height, 9.46 ft (2.883 m); minimum daily, 0.18 ft³/s (0.005 m³/s) July 28, 29, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.6	68	4.9	4.1	3.1	3.9	2.4	2.5	2.4	5.8	91
2	2.8	3.8	8.4	4.0	3.8	3.0	3.4	2.4	2.3	2.2	3.2	6.3
3	2.5	5.1	6.2	3.7	3.5	3.0	3.3	2.3	2.3	58	17	4.3
4	2.4	6.1	5.5	3.5	3.3	3.4	3.8	2.8	2.3	52	7.4	3.8
5	2.3	4.6	27	3.6	3.1	3.8	5.0	4.8	2.2	5.0	31	3.3
6	2.5	4.3	19	4.2	3.3	3.6	3.6	3.3	2.1	3.5	8.1	3.2
7	2.4	88	6.0	5.6	3.6	4.1	4.7	3.0	2.3	2.9	73	2.9
8	2.3	99	4.9	9.1	3.6	3.8	3.6	3.0	2.8	2.6	4.5	2.8
9	26	8.5	6.4	62	3.6	3.6	3.2	29	2.6	2.5	3.4	2.9
10	6.8	6.6	5.1	8.6	3.5	4.0	3.0	9.1	2.1	2.5	3.6	2.6
11	3.6	6.0	5.3	7.0	3.4	10	3.2	3.8	2.0	2.5	90	2.6
12	3.2	5.0	5.3	5.0	3.3	27	3.4	3.2	1.9	2.2	27	2.7
13	2.8	4.7	4.8	4.6	3.2	29	3.0	3.2	2.3	2.1	7.1	2.9
14	4.0	4.4	19	39	3.6	52	2.8	27	2.0	5.5	4.2	2.6
15	20	4.4	23	9.0	3.5	24	2.7	6.2	1.9	8.8	3.5	2.6
16	4.8	4.3	6.4	5.0	3.4	9.3	2.7	9.3	1.8	6.2	3.2	2.6
17	5.6	16	5.4	4.8	3.3	12	2.7	8.1	1.9	11	2.9	2.5
18	3.9	13	67	83	3.5	9.3	2.7	8.7	1.9	3.6	2.7	2.5
19	3.5	5.6	28	10	3.4	10	7.8	4.3	52	2.6	2.5	2.7
20	5.8	4.9	7.5	6.0	3.3	6.8	10	3.3	19	2.3	2.5	2.6
21	4.1	4.8	65	5.0	3.2	6.4	4.6	2.9	11	2.1	2.4	2.5
22	3.5	5.3	9.3	4.3	3.3	6.0	3.5	2.5	33	2.0	2.4	2.5
23	3.2	37	6.0	4.0	3.2	4.9	3.1	2.3	4.0	1.9	2.3	2.6
24	3.1	8.7	5.4	3.8	3.2	4.5	3.0	91	2.9	1.8	2.3	2.5
25	3.1	6.7	7.8	38	3.2	4.0	2.9	9.7	2.5	1.8	2.3	2.4
26	3.9	49	5.2	189	3.7	22	2.7	4.7	2.8	1.8	2.3	2.3
27	6.6	6.7	4.2	66	3.6	57	2.7	3.8	5.8	1.8	2.3	2.4
28	4.8	5.7	3.7	35	3.4	8.1	2.7	3.6	2.7	3.3	24	2.4
29	3.9	6.0	3.6	18	---	5.3	2.5	3.4	4.3	2.0	4.2	2.4
30	3.8	10	3.6	5.0	---	4.4	2.4	3.1	4.1	1.8	3.0	2.3
31	3.6	---	6.4	4.5	---	4.1	---	2.7	---	5.5	90	---
TOTAL	153.3	437.8	448.4	655.2	96.1	351.5	108.6	268.9	183.3	206.2	440.1	173.7
MEAN	4.95	14.6	14.5	21.1	3.43	11.3	3.62	8.67	6.11	6.65	14.2	5.79
MAX	26	99	68	189	4.1	57	10	91	52	58	90	91
MIN	2.3	3.6	3.6	3.5	3.1	3.0	2.4	2.3	1.8	1.8	2.3	2.3
CFSM	1.20	3.54	3.52	5.12	.83	2.74	.88	2.10	1.48	1.61	3.45	1.41
IN.	1.38	3.95	4.05	5.91	.87	3.17	.98	2.43	1.65	1.86	3.97	1.57

CAL YR 1977 TOTAL 2167.04 MEAN 5.94 MAX 99 MIN .18 CFSM 1.44 IN 19.56
WTR YR 1978 TOTAL 3523.10 MEAN 9.65 MAX 189 MIN 1.8 CFSM 2.34 IN 31.80

01467060 DELAWARE RIVER AT PALMYRA, NJ

LOCATION.--Lat 40°01'05", long 75°02'16", Philadelphia County, PA, Hydrologic Unit 02040202, on right bank opposite Palmyra, 0.5 mi (0.8 km) upstream from Tacony-Palmyra Bridge, 3.5 mi (5.6 km) downstream from Rancocas Creek, and at river mile 107.45 (172.89 km).

DRAINAGE AREA.--7,850 mi² (20,330 km²).

PERIOD OF RECORD.--
TIDE ELEVATIONS: December 1962 to current year. Tidal volumes published from December 1962 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is -10.00 ft (-3.048 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--Records good. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 7.74 ft (2.359 m) Jan. 26; minimum recorded, -5.10 ft (-1.554 m) Dec. 10.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.11 ft (2.472 m) June 30, 1973; minimum, -8.6 ft (-2.6 m) Dec. 31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since 1899, 8.9 ft (2.7 m) Aug. 24, 1933, from profile furnished by Corps of Engineers, U.S. Army.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.24	a6.7	7.22	7.74	5.80	6.88	a6.7	6.11	5.82	5.93	a.61	6.01
high tide	Date	14	a8	21	26	8	27	a28	21	21	18	a17	14
Minimum	Elevation	-3.24	--	a-5.1	-3.28	-3.30	-3.30	-3.14	-2.60	-3.03	-3.07	--	-2.67
low tide	Date	18	--	10	11	23	7	2	11	15	24	21	13
Mean high tide		4.73	--	4.73	4.42	4.37	4.63	--	5.16	--	4.75	--	4.87
Mean water level		1.53	--	1.6	1.29	1.20	1.46	--	1.86	--	1.44	--	1.66
Mean low tide		-1.95	--	-1.7	-2.11	-2.24	-1.91	--	-1.75	--	-2.26	--	-1.93

a- Estimated by comparison with Delaware River at Burlington, NJ (sta 01464598) and Delaware River at Delaware Memorial Bridge, Wilmington, DE (sta 01482100).
NOTE.--Missing or doubtful record on Nov. 1 to Dec. 2, 7-14, Apr. 5 to May 4, June 2-15, Aug. 1 to Sept. 5.

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ

LOCATION.--Lat 39°57'07", long 74°58'10", Burlington County, Hydrologic Unit 02040202, at bridge on Kings Highway, 200 ft (61 m) downstream from outlet of Strawbridge Lake, 0.6 mi (1.0 km) northwest of Moorestown Mall, 0.8 mi (1.3 km) southeast of Lenola, and 1.8 mi (2.9 km) southwest of Moorestown.

DRAINAGE AREA.--12.8 mi² (33.2 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water year 1978.
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
04...	0915	4.4	316	7.1	15.0	6	6.5	2.9	170	240	90	25
NOV												
30...	0915	41	231	6.6	5.0	15	--	1.9	17	110	79	22
FEB												
16...	0945	21	606	6.6	2.0	20	11.0	1.6	<20	<20	88	24
APR												
05...	0930	29	317	6.5	11.5	20	8.6	2.0	14	350	80	21
MAY												
08...	0920	18	314	6.5	13.0	10	9.4	3.1	49	11	81	22
JUN												
21...	0900	3.5	310	6.8	24.0	3	6.6	5.7	2400	>2400	80	21
JUL												
19...	1015	3.6	310	6.7	24.5	3	6.8	4.7	1300	49	79	21
AUG												
15...	0905	18	221	6.5	25.0	7	5.2	1.8	490	140	66	18

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
04...	6.6	15	7.0	23	0	19	.0	72	27	14	183	33
NOV												
30...	5.8	13	4.3	16	0	13	--	58	23	--	146	13
FEB												
16...	6.8	75	4.5	27	0	22	--	67	120	--	313	13
APR												
05...	6.6	20	4.0	17	0	14	--	70	39	--	205	19
MAY												
08...	6.4	20	4.5	17	0	14	--	63	36	--	195	13
JUN												
21...	6.7	18	5.6	22	0	18	--	64	35	--	204	2
JUL												
19...	6.5	17	5.9	22	0	18	--	63	29	--	121	1
AUG												
15...	5.0	10	4.8	20	0	16	--	44	17	--	157	23

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 04...	0915	20	3	30	0	0	5	13

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 04...	20	6	220	<.5	22	0	30	5

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ

LOCATION.--Lat 39°56'30", long 75°00'05", Camden County, Hydrologic Unit 02040202, on left bank on downstream wingwall of bridge on Mill Road in Cherry Hill, 1.1 mi (1.8 km) south of Maple Shade and 3.8 mi (6.1 km) upstream from confluence with the North Branch.

DRAINAGE AREA.--9.16 mi² (23.72 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1967 to September 1976, October 1977 to September 1978.
CHEMICAL ANALYSES: November 1975 to current year.
SEDIMENT ANALYSES: Water years 1970-73, July to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 8.12 ft (2.475 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records fair.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--10 years, (1968-76, 1978) 18.8 ft³/s (0.532 m³/s), 27.86 in/yr (708 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0200	487	13.8	8.47	2.582	July 3	2045	390	11.0	7.13	2.173
Jan. 9	1015	396	11.2	7.09	2.161	Aug. 5	2315	492	13.9	7.86	2.396
Jan. 18	0530	362	10.3	6.79	2.070	Aug. 12	2230	383	10.8	6.98	2.128
Jan. 26	1115	645	18.3	8.90	2.713	Aug. 28	1400	*868	24.6	10.19	3.106
May 24	0915	478	13.5	7.84	2.390						

Minimum discharge, 5.4 ft³/s (0.153 m³/s) July 24, gage height, 1.71 ft (0.521 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 868 ft³/s (24.6 m³/s) Aug. 28, 1978, gage height, 10.19 ft (3.106 m); maximum gage height, 11.34 ft (3.456 m) Aug. 28, 1971; minimum, 2.6 ft³/s (0.073 m³/s) Oct. 6, 9, 10, 11, 1970, gage height, 1.71 ft (0.521 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	6.9	145	17	13	11	12	8.8	10	6.6	23	107
2	7.4	7.1	29	17	12	9.9	11	9.0	9.7	6.4	8.0	35
3	7.0	16	18	15	12	10	11	9.0	9.2	105	45	14
4	6.4	12	15	14	11	11	11	12	9.5	80	31	12
5	5.9	8.3	24	14	11	10	14	17	13	11	244	12
6	5.9	8.6	79	15	11	10	11	9.7	9.5	9.0	159	11
7	4.9	211	22	17	12	9.9	14	9.2	9.2	8.2	130	11
8	4.9	282	22	25	12	9.7	13	11	16	7.4	17	10
9	58	26	16	224	12	11	10	94	16	7.4	13	10
10	15	19	13	22	13	16	10	25	9.0	7.4	83	14
11	10	15	12	15	13	35	11	13	10	7.4	56	49
12	9.0	11	13	13	12	39	12	11	8.0	7.4	125	86
13	15	10	30	19	13	35	12	10	13	6.6	90	107
14	27	9.0	64	118	13	65	8.6	116	8.6	10	20	30
15	20	8.5	40	27	13	38	9.2	26	8.4	10	14	16
16	15	35	18	17	13	30	9.0	35	8.6	7.4	13	14
17	14	40	115	28	13	34	9.0	36	8.2	10	12	11
18	11	14	100	192	12	24	9.7	37	8.6	7.6	11	12
19	10	9.0	30	25	12	22	42	16	13	7.0	10	14
20	9.0	8.3	120	20	12	18	33	13	7.8	6.4	9.7	13
21	8.0	11	141	18	11	16	13	11	20	6.2	9.7	12
22	7.4	79	29	16	11	17	11	11	20	6.4	9.7	11
23	7.6	35	21	15	11	14	10	10	9.5	6.2	9.4	10
24	7.4	23	19	15	11	13	9.9	272	8.4	6.0	9.2	10
25	10	18	29	110	13	11	9.5	34	7.4	6.2	9.2	10
26	30	94	19	422	13	71	9.2	17	7.0	6.6	9.2	10
27	20	22	15	30	12	144	9.4	14	10	7.2	8.8	11
28	10	16	14	18	11	24	9.2	13	7.0	12	410	11
29	7.8	15	14	15	---	16	8.8	13	12	6.2	77	10
30	7.1	26	15	14	---	13	9.0	11	10	5.9	15	10
31	6.9	---	24	13	---	12	---	11	---	39	123	---
TOTAL	385.4	1095.7	1265	1540	338	799.5	371.5	934.7	316.6	436.1	1803.9	693
MEAN	12.4	36.5	40.8	49.7	12.1	25.8	12.4	30.2	10.6	14.1	58.2	23.1
MAX	58	282	145	422	13	144	42	272	20	105	410	107
MIN	4.9	6.9	12	13	11	9.7	8.6	8.8	7.0	5.9	8.0	10
CFSM	1.35	3.99	4.45	5.43	1.32	2.82	1.35	3.30	1.16	1.54	6.35	2.52
IN.	1.56	4.45	5.14	6.25	1.37	3.25	1.51	3.80	1.29	1.77	7.33	2.81

CAL YR 1977 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1978 TOTAL 9979.4 MEAN 27.3 MAX 422 MIN 4.9 CFSM 2.98 IN 40.52

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
04...	1025	3.9	337	7.4	14.5	5	5.8	7.0	3500	350	85	23
NOV												
30...	1010	23	232	7.1	7.0	15	10.6	4.0	2400	330	73	20
FEB												
16...	1100	12	531	7.1	3.0	15	11.6	7.2	2300	<200	94	25
APR												
05...	1050	15	309	7.2	13.0	15	9.0	5.0	920	>2400	80	21
MAY												
08...	1040	8.8	325	7.0	13.0	9	8.0	5.2	>2400	540	85	23
JUN												
21...	1005	7.2	356	7.1	21.0	5	5.2	8.1	13000	130	78	20
JUL												
19...	1130	6.6	355	7.0	22.5	5	5.8	7.6	35000	4900	83	22
AUG												
15...	1020	14	293	6.8	22.5	3	6.3	2.0	1100	7900	85	23

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
04...	6.6	21	9.0	81	0	66	.0	51	24	15	182	14
NOV												
30...	5.6	14	4.3	34	0	28	--	50	20	--	135	22
FEB												
16...	7.6	60	6.5	54	0	44	--	58	94	--	278	14
APR												
05...	6.8	19	5.7	41	0	34	--	55	30	--	200	17
MAY												
08...	6.8	20	7.0	59	0	48	--	55	25	--	193	17
JUN												
21...	6.8	21	6.8	70	0	57	--	54	26	--	202	17
JUL												
19...	6.9	21	11	63	0	52	--	59	24	--	211	14
AUG												
15...	6.6	15	5.8	49	0	40	--	54	20	--	208	20

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
04...	--	--	1.0	.10	2.8	.80	3.6	4.7	.65	.19	6.9
NOV											
30...	--	--	1.5	.03	.73	.77	1.5	3.0	.41	.01	8.2
FEB											
16...	--	--	--	--	--	--	--	--	--	--	7.3
APR											
05...	--	--	2.2	.05	1.3	1.0	2.3	4.5	.54	.08	6.1
MAY											
08...	--	--	2.5	.11	2.9	.50	3.4	6.0	.76	.21	7.3
JUN											
21...	--	--	2.3	.25	3.5	.60	4.1	6.6	.91	.46	7.9
JUL											
19...	30	.53	--	--	--	--	--	--	--	--	6.4
AUG											
15...	20	.76	--	--	1.1	.40	1.5	3.5	--	--	5.8

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 04...	1025	30	0	240	0	0	2	150

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 04...	20	5	120	<.5	6	0	40	4

01467120 COOPER RIVER AT NORCROSS ROAD AT LINDENWOLD, NJ

LOCATION.--Lat 39°49'43", long 74°58'55", Camden County, Hydrologic Unit 02040202, at bridge on Norcross Road in Lindenwold, 50 ft (15 m) downstream from outflow of Linden Lake, 1.1 mi (1.8 km) southwest of Gibbstown, and 1.7 mi (2.8 km) south of Glendale.

DRAINAGE AREA.--1.13 mi² (2.93 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	1200	94	7.2	13.5	5	9.8	1.1	49	21	27	8.8
NOV											
07...	1110	80	7.2	15.0	8	9.0	2.9	920	240	25	8.1
FEB											
23...	1115	89	6.8	1.0	3	10.5	.3	2	<2	21	6.4
MAR											
29...	1200	73	6.8	12.0	10	10.4	2.2	170	17	17	5.2
MAY											
02...	1130	79	7.5	14.5	6	9.7	--	33	<2	21	6.6
JUN											
07...	1135	77	7.2	22.5	4	8.6	3.0	350	220	22	6.7

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT										
12...	1.3	5.0	2.1	12	0	10	17	7.7	4.7	69
NOV										
07...	1.2	4.0	2.2	18	0	15	12	7.3	--	53
FEB										
23...	1.2	6.7	1.4	13	0	11	13	10	--	47
MAR										
29...	1.0	5.3	1.4	10	0	8	14	8.9	--	61
MAY										
02...	1.1	5.4	1.3	12	0	10	12	7.8	--	58
JUN										
07...	1.2	4.9	1.1	15	0	12	7.6	9.5	--	55

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
12...	8	.00	.01	.04	.44	.48	.49	.02	.01	9.0
NOV										
07...	8	.02	.00	.01	.26	.27	.29	.05	.01	7.9
FEB										
23...	2	.23	.00	.24	.10	.34	.57	.02	.01	3.2
MAR										
29...	9	.10	.00	.02	.20	.22	.32	.03	.00	11
MAY										
02...	1	.00	.00	.02	.26	.28	.28	.03	.01	6.3
JUN										
07...	0	.02	.00	.04	.60	.64	.66	.05	.01	9.2

01467120 COOPER RIVER AT NORCROSS ROAD AT LINDENWOLD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 12...	1200	0	1	0	0	0	1	1

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 12...	140	2	20	.5	5	0	20	<0

01467130 COOPER RIVER AT KIRKWOOD, NJ

LOCATION.--Lat 39°50'11", long 75°00'06", Camden County, Hydrologic Unit 02040202, at outlet of Kirkwood Lake in Kirkwood, 100 ft (30 m) east of tracks of Pennsylvania-Reading Seashore Lines, and 1.0 mi (1.6 km) north of Laurel Springs.

DRAINAGE AREA.--5.14 mi² (13.31 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964 to current year.
CHEMICAL ANALYSES: Water years 1964, 1967, 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
12...	1255	--	304	7.6	14.5	7	11.3	12	240	130
NOV										
07...	1150	49	305	7.1	15.5	10	8.2	9.0	>2400	>2400
FEB										
23...	1210	8.6	313	7.6	3.0	7	10.9	15	<2	10
MAR										
29...	1245	13	183	7.1	12.0	10	9.6	5.7	22	70
MAY										
02...	1310	4.0	356	7.2	15.5	6	9.9	11	70	34
JUN										
07...	1250	4.9	302	8.1	23.0	4	11.6	25	212	540
JUL										
20...	1045	4.4	313	7.4	26.5	5	8.4	3.6	32	350
AUG										
30...	1100	--	289	6.9	26.0	1	6.3	5.4	240	79

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)
OCT									
12...	45	14	2.5	22	7.0	51	0	42	--
NOV									
07...	46	14	2.6	23	7.2	--	0	--	--
FEB									
23...	46	14	2.7	26	6.2	81	0	66	--
MAR									
29...	36	11	2.1	13	3.0	39	0	32	--
MAY									
02...	54	17	2.7	27	10	63	0	52	.0
JUN									
07...	49	15	2.9	25	6.5	56	0	46	--
JUL									
20...	49	15	2.7	22	6.2	71	0	58	--
AUG									
30...	46	14	2.7	19	6.1	51	0	42	--

01467130 COOPER RIVER AT KIRKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
OCT									
12...	24	44	6.3	148	14	--	--	.22	.05
NOV									
07...	20	43	--	125	16	--	--	.11	.01
FEB									
23...	23	41	--	146	10	--	--	.22	.01
MAR									
29...	21	22	--	104	27	--	--	.28	.01
MAY									
02...	26	49	4.9	161	9	--	--	.09	.02
JUN									
07...	21	46	--	163	8	--	--	.25	.10
JUL									
20...	16	38	--	155	21	92	1.1	--	--
AUG									
30...	21	37	--	125	17	18	--	--	--

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT									
12...	6.8	2.5	9.3	340	9.6	.27	.02	8.6	2.0
NOV									
07...	9.4	3.6	13	--	13	.39	.15	8.4	--
FEB									
23...	8.3	4.7	13	--	13	.36	.16	15	--
MAR									
29...	2.7	1.0	3.7	--	4.0	.08	.08	17	--
MAY									
02...	7.4	6.6	14	--	14	.30	.04	7.2	--
JUN									
07...	6.3	5.7	12	--	12	.40	.04	4.5	--
JUL									
20...	6.3	2.7	9.0	--	9.1	--	--	5.4	--
AUG									
30...	6.2	.60	6.8	--	--	--	--	12	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT										
12...	1255	0	0	4	220	0	<10	<10	0	1
MAY										
02...	1310	50	--	--	240	--	--	--	0	--

DATE	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT										
12...	<10	8	<10	20	2500	14	20	90	10	.5
MAY										
02...	--	--	--	280	--	--	--	--	--	--

01467130 COOPER RIVER AT KIRKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 12...	.0	9	<10	0	30	20	1	9	.5	8
MAY 02...	--	--	--	--	--	--	8	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 12...	3.7	1.3	1.8	.8	.0	.0	.0	.0	0
MAY 02...	--	--	--	--	--	--	--	--	--

01467140 COOPER RIVER AT LAWNSIDE, NJ

LOCATION.--Lat 39°52'14", long 75°00'59", Camden County, Hydrologic Unit 02040202, at bridge on Woodcrest Road in Lawnside, 0.2 mi (0.3 km) upstream from the New Jersey Turnpike, and 1.7 mi (2.7 km) upstream from Tindale Run.

DRAINAGE AREA.--12.8 mi² (33.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964-65, 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	1400	340	7.2	17.0	15	9.8	20	1700	130	60	18
NOV											
07...	1245	119	6.8	15.0	35	--	10	>24000	16000	31	8.5
FEB											
23...	1310	320	7.2	5.5	15	9.6	23	20	3500	55	16
MAR											
29...	1400	247	7.4	14.5	15	8.2	>9.0	33	350	52	15
MAY											
11...	1110	220	6.8	16.5	15	6.8	16	>2400	540	45	13
JUN											
27...	1145	259	6.9	23.0	70	3.2	12	9200	490	48	14
JUL											
20...	1230	334	7.1	25.0	10	2.7	8.2	9200	3500	55	16
AUG											
30...	1245	288	6.8	24.5	1	4.6	8.4	3500	<2	55	16

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
12...	3.7	24	9.2	76	0	62	.0	33	36	12	173
NOV											
07...	2.3	7.1	4.0	17	0	14	--	23	10	--	61
FEB											
23...	3.7	24	6.9	83	0	68	--	32	33	--	168
MAR											
29...	3.5	16	5.3	51	0	42	--	37	23	--	155
MAY											
11...	3.0	14	4.7	48	0	39	--	28	19	--	123
JUN											
27...	3.1	17	6.1	98	0	80	--	25	26	--	141
JUL											
20...	3.6	22	8.5	90	0	74	--	25	31	--	166
AUG											
30...	3.6	19	8.0	61	0	50	--	28	28	--	122

01467140 COOPER RIVER AT LAWNSIDE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	21	--	1.3	.19	8.2	2.8	11	13	2.0	.98	6.3
NOV											
07...	49	--	.43	.02	.36	1.0	1.4	1.9	.57	.19	9.2
FEB											
23...	24	--	.38	.03	8.0	6.0	14	14	1.7	.28	21
MAR											
29...	35	--	.96	.04	4.1	.00	4.1	5.1	1.5	.39	21
MAY											
11...	29	--	.76	.10	4.5	2.8	7.3	8.2	1.4	.66	9.1
JUN											
27...	--	--	.31	.12	5.6	6.4	12	12	1.6	.93	9.0
JUL											
20...	29	29	--	--	8.7	1.8	10	11	--	--	8.5
AUG											
30...	40	34	--	--	5.5	.90	6.4	7.5	--	--	11

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
12...	1400	0	3	210	0	0	0	40

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
12...	400	13	100	<.5	12	0	40	2

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'19", Camden County, Hydrologic Unit 02040202, on right bank of Wallworth Lake in Pennypacker Park, 200 ft (61 m) upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi (1.0 km) upstream from North Branch Cooper River, and 7.7 mi (12.4 km) upstream from mouth.

DRAINAGE AREA.--17.4 mi² (45.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964 to current year.
CHEMICAL ANALYSES: Water years 1968 to current year.
SEDIMENT ANALYSES: Water years 1968-73, July to September 1978.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1963 to current year.
WATER TEMPERATURES: March to September 1969.
SUSPENDED-SEDIMENT DISCHARGE: March 1968 to May 1970.

REVISED DISCHARGE RECORDS.--WRD-NJ 1969: 1967(M).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 9.29 ft (2.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records good. Occasional regulation at low flow from Kirkwood Lake, other small lakes and wastewater treatment plants.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--15 years, 35.0 ft³/s (0.992 m³/s), 27.32 in/yr (694 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0345	863	24.4	3.20	0.975	Aug. 5	1915	558	15.8	2.73	0.832
Jan. 18	0445	629	17.8	2.85	0.869	Aug. 28	1045	*1190	33.7	3.60	1.097
Jan. 26	0830	1130	32.0	3.53	1.076						

Minimum discharge, 9.5 ft³/s (0.269 m³/s) Aug. 29, gage height, 1.32 ft (0.402 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft³/s (93.5 m³/s) Aug. 28, 1971, gage height, 5.46 ft (1.664 m); minimum, 0.8 ft³/s (0.023 m³/s) Nov. 13, 1972, gage height, 1.07 ft (0.326 m) regulation from unknown source; minimum daily, 1.2 ft³/s (0.034 m³/s) June 27, 1964.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	274	34	27	24	34	27	27	18	50	54
2	18	18	47	34	26	24	31	26	26	16	27	27
3	17	27	34	31	25	25	31	26	26	148	58	24
4	16	25	29	27	24	26	34	32	27	193	47	23
5	16	22	83	27	23	24	36	47	39	34	193	22
6	15	18	95	29	26	24	32	32	29	25	104	22
7	16	354	34	31	25	24	41	29	27	23	95	22
8	15	491	27	41	26	24	34	27	41	21	31	22
9	134	47	37	365	25	26	31	188	34	21	26	22
10	43	37	29	54	26	45	31	66	25	23	27	20
11	23	32	24	32	24	83	31	36	23	24	32	22
12	19	26	24	27	24	83	36	34	23	21	79	62
13	21	25	25	36	24	70	31	31	25	19	32	134
14	39	24	87	259	26	109	27	134	23	24	26	26
15	45	23	148	66	25	91	27	91	21	37	27	27
16	25	23	39	34	25	66	27	100	20	23	31	27
17	27	87	31	50	25	70	27	79	21	34	26	27
18	25	47	259	391	25	50	29	104	22	26	20	21
19	21	32	216	66	25	45	83	43	23	22	18	29
20	21	26	47	43	25	43	83	36	22	19	18	23
21	18	26	221	43	25	39	37	32	37	18	18	21
22	18	32	75	34	24	39	31	31	41	18	18	20
23	17	143	39	32	23	34	29	31	25	18	18	21
24	17	43	34	29	24	32	29	407	21	18	19	20
25	17	39	45	225	26	31	39	121	19	18	20	21
26	25	165	32	743	27	130	32	43	19	18	16	18
27	50	39	27	109	26	255	32	34	26	18	16	21
28	27	31	27	43	27	75	31	32	21	26	533	22
29	24	34	26	36	---	41	27	34	19	19	45	21
30	20	45	27	31	---	36	26	32	21	17	34	20
31	19	---	45	31	---	34	---	29	---	41	70	---
TOTAL	825	1999	2187	3033	703	1722	1049	2014	773	1000	1774	861
MEAN	26.6	66.6	70.5	97.8	25.1	55.5	35.0	65.0	25.8	32.3	57.2	28.7
MAX	134	491	274	743	27	255	83	407	41	193	533	134
MIN	15	18	24	27	23	24	26	26	19	16	16	18
CFSM	1.53	3.83	4.05	5.62	1.44	3.19	2.01	3.74	1.48	1.86	3.29	1.65
IN.	1.76	4.27	4.68	6.48	1.50	3.68	2.24	4.31	1.65	2.14	3.79	1.84

CAL YR 1977 TOTAL 12705 MEAN 34.8 MAX 491 MIN 12 CFSM 2.00 IN 27.16
WTR YR 1978 TOTAL 17940 MEAN 49.2 MAX 743 MIN 15 CFSM 2.83 IN 38.35

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
04...	1245	15	357	7.7	15.5	20	6.4	6.3	490	350	63	18
NOV												
30...	1210	39	226	7.1	6.5	20	11.1	7.7	2400	490	60	17
FEB												
16...	1230	23	483	7.1	2.5	20	11.5	13	1300	540	60	17
APR												
05...	1310	34	278	7.3	14.0	20	8.2	9.3	130	790	56	15
MAY												
08...	1330	24	297	7.1	14.0	9	7.4	7.2	>2400	1600	56	16
JUN												
21...	1235	18	332	7.4	24.0	3	6.3	12	2400	33	60	17
JUL												
24...	1100	16	326	7.4	26.5	8	6.1	11	130	490	63	18
AUG												
15...	1300	26	300	7.1	26.5	8	6.3	6.0	490	1300	61	17

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
04...	4.5	25	9.2	77	0	63	.0	34	37	14	180	31
NOV												
30...	4.3	17	5.0	51	0	42	--	33	22	--	133	27
FEB												
16...	4.3	55	6.4	63	0	52	--	35	82	--	234	13
APR												
05...	4.4	20	6.2	63	0	52	--	34	29	--	161	21
MAY												
08...	4.0	21	6.8	67	0	55	--	31	32	--	156	18
JUN												
21...	4.3	23	8.1	81	0	66	--	29	35	--	181	24
JUL												
24...	4.3	23	8.2	78	0	64	--	26	33	--	162	29
AUG												
15...	4.5	20	7.0	71	0	58	--	27	27	--	167	33

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
04...	--	--	1.2	.18	7.4	5.6	13	14	1.2	.27	8.5
NOV											
30...	--	--	.78	.06	3.5	.80	4.3	5.1	.78	.39	9.1
FEB											
16...	--	--	--	--	--	--	--	--	--	--	10
APR											
05...	--	--	.80	.05	5.0	2.4	7.4	8.3	.86	.09	4.3
MAY											
08...	--	--	.78	.13	6.2	3.8	10	11	.77	.32	8.2
JUN											
21...	--	--	.33	.10	7.1	2.3	9.4	9.8	.70	.16	8.1
JUL											
24...	39	1.7	--	--	6.3	1.2	7.5	8.5	--	--	17
AUG											
15...	36	2.5	--	--	4.4	.90	5.3	6.5	--	--	9.2

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 04...	1245	10	5	230	0	0	1	18

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 04...	190	13	90	<.5	8	0	30	6

01467181 NORTH BRANCH COOPER RIVER AT ERLTON, NJ

LOCATION.--Lat 39°54'31", long 75°01'32", Camden County, Hydrologic Unit 02040202, at bridge on Cooper River Drive in Erlton, 600 ft (183 m) upstream from mouth, 2.3 mi (3.7 km) south of Cherry Hill Mall, and 1.2 mi (1.9 km) southeast of Garden State Park.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
04...	1140	394	7.4	15.5	6	6.9	--	540	14	78	22
NOV											
30...	1120	233	7.1	7.5	15	10.6	3.1	14	23	71	20
FEB											
16...	1145	392	7.5	3.0	2	11.8	9.0	<20	79	71	19
APR											
05...	1155	275	7.3	14.5	15	9.0	5.2	50	540	63	17
MAY											
08...	1150	276	7.1	12.0	10	8.4	8.0	>2400	350	71	20
JUN											
21...	1115	346	7.2	20.0	8	6.2	14	1100	33	76	21
JUL											
19...	1245	331	7.1	23.0	10	5.2	>8.9	330	490	69	19
AUG											
15...	1205	308	6.9	23.5	7	5.5	5.1	170	490	73	20

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
04...	5.6	26	15	93	0	76	.0	50	31	20	209
NOV											
30...	5.1	12	5.2	41	0	34	--	44	19	--	134
FEB											
16...	5.6	32	12	70	0	57	--	46	50	--	205
APR											
05...	5.1	16	9.0	50	0	41	--	46	25	--	173
MAY											
08...	5.2	17	6.1	51	0	42	.0	44	25	16	166
JUN											
21...	5.7	24	8.1	78	0	64	--	50	31	--	204
JUL											
19...	5.3	22	9.0	72	0	59	--	43	26	--	195
AUG											
15...	5.6	18	6.6	51	0	42	--	44	24	--	223

01467181 NORTH BRANCH COOPER RIVER AT ERLTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
04...	23	--	.70	.19	5.6	6.4	12	13	1.5	1.1	7.8
NOV											
30...	21	--	1.1	.04	1.2	.70	1.9	3.0	.46	.25	10
FEB											
16...	34	--	--	--	--	--	--	--	--	--	13
APR											
05...	15	--	1.2	.04	2.8	.80	3.6	4.8	.78	.38	4.3
MAY											
08...	20	--	1.0	.09	2.8	1.2	4.0	5.1	.98	.21	5.3
JUN											
21...	21	--	.92	.18	4.4	2.5	6.9	8.0	1.2	.56	8.4
JUL											
19...	21	70	--	--	--	--	--	--	--	--	7.0
AUG											
15...	22	26	--	--	3.4	.70	4.1	5.6	--	--	7.0

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
04...	1140	30	0	460	0	0	2	65
MAY								
08...	1150	30	--	20	--	0	0	19

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
04...	170	13	130	<.5	44	0	30	2
MAY								
08...	150	--	120	--	16	--	30	0

01467190 COOPER RIVER AT CAMDEN, NJ

LOCATION.--Lat 39°55'35", long 75°05'03", Camden County, Hydrologic Unit 02040202, at bridge on U.S. Routes 130 and 30 in Camden, 3.4 mi (5.5 km) upstream from mouth, 3.5 mi (5.6 km) northwest of Haddonfield, and 3.7 mi (6.0 km) downstream from North Branch Cooper River.

DRAINAGE AREA.--35.2 mi² (91.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1970-71, 1976 to current year.
SEDIMENT ANALYSES: July And August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
06...	1000	329	7.8	16.0	20	3.8	7.7	920	240	68	19	4.9
NOV												
30...	1325	288	7.2	5.0	15	9.3	7.5	>2400	1600	78	22	5.6
FEB												
22...	0945	428	6.9	2.0	15	7.4	11	700	490	70	19	5.5
APR												
06...	0930	332	7.3	11.5	30	5.0	2.8	21	15	63	17	5.0
MAY												
22...	0930	238	6.9	19.5	20	5.4	4.4	E180	49	58	16	4.4
JUN												
21...	1415	333	7.7	25.0	9	10.4	9.6	790	350	68	19	5.1
JUL												
24...	1230	323	7.9	26.5	5	5.6	8.0	2400	20	70	20	4.9
AUG												
29...	1230	124	6.4	23.0	80	2.6	5.6	>24000	9200	30	8.4	2.3

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)
OCT												
06...	21	7.6	8	0	7	.0	39	24	13	165	26	--
NOV												
30...	18	5.5	68	0	56	--	40	23	--	161	23	--
FEB												
22...	36	8.2	81	0	66	--	42	57	--	210	9	--
APR												
06...	20	6.5	59	0	48	--	40	28	--	161	38	--
MAY												
22...	15	4.3	54	0	44	--	32	21	--	138	18	--
JUN												
21...	22	7.1	85	0	70	--	35	31	--	188	15	--
JUL												
24...	23	8.0	83	0	68	--	30	30	--	179	29	47
AUG												
29...	5.5	3.9	12	0	10	--	20	6.8	--	71	78	119

01467190 COOPER RIVER AT CAMDEN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
06...	.61	.10	6.5	1.6	8.1	480	8.8	.35	.10	8.4	2.9
NOV											
30...	.93	.05	4.3	.60	4.9	--	5.9	.80	.20	9.8	--
FEB											
22...	.69	.03	6.3	3.6	9.9	--	11	1.2	.22	12	--
APR											
06...	.85	.06	4.6	1.5	6.1	--	7.0	.46	.18	9.2	--
MAY											
22...	.54	.07	3.3	.90	4.2	--	4.8	.44	.19	6.2	--
JUN											
21...	.48	.13	6.2	2.9	9.1	--	9.7	.26	.08	8.3	--
JUL											
24...	--	--	4.6	2.2	6.8	--	7.8	--	--	15	--
AUG											
29...	--	--	1.4	2.0	3.4	--	4.4	--	--	6.1	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT										
06...	1000	0	1	4	200	0	<10	<10	0	0

DATE	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT										
06...	<10	9	20	150	1700	12	50	90	60	<.5

DATE	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT										
06...	.0	8	<10	0	0	50	0	30	.0	33

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT									
06...	8.2	1.9	.6	1.6	.0	.0	.0	.0	0

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD, NJ

LOCATION.--Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, at bridge on Blackwood-Clementon Road at Blackwood, 1,000 ft (305 m) upstream from Bull Run, and 2.0 mi (3.2 km) northeast of Fairview.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT												
17...	1100	141	7.3	10.5	2	9.4	2.6	5	220	21	6.3	1.3
NOV												
09...	1030	112	7.1	15.0	15	7.3	2.8	1600	170	38	11	2.6
FEB												
15...	1100	140	7.5	1.5	5	12.4	2.9	<20	2	39	11	2.8
MAR												
30...	1200	131	7.5	13.0	7	10.2	1.8	13	79	36	10	2.6
MAY												
10...	0850	105	6.8	8.5	20	14.5	3.3	1600	1600	46	13	3.2
JUN												
22...	1030	118	7.2	22.5	2	6.0	2.5	>2400	1600	34	9.5	2.5

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT											
17...	9.6	3.6	45	0	37	.0	16	8.6	4.3	57	9
NOV											
09...	5.5	3.0	24	0	20	--	18	8.9	--	78	21
FEB											
15...	9.0	2.4	27	0	22	--	17	14	--	84	9
MAR											
30...	6.5	2.5	27	0	22	--	15	9.3	--	83	17
MAY											
10...	14	4.5	24	0	20	.0	--	--	--	--	50
JUN											
22...	6.6	2.6	29	0	24	--	12	11	--	80	12

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
17...	.39	.01	.05	.29	.34	5400	.74	.04	.02	9.1	58
NOV											
09...	.40	.01	.15	.43	.58	--	.99	.22	.12	11	--
FEB											
15...	--	--	--	--	--	--	--	--	--	2.0	--
MAR											
30...	1.3	.02	.21	.37	.58	--	1.9	.16	.04	5.8	--
MAY											
10...	.07	.08	2.4	1.7	4.1	--	4.3	.55	.12	15	--
JUN											
22...	1.1	.06	.20	.65	.85	--	2.1	.25	.13	5.7	--

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT										
17...	1100	220	1	9	40	0	<10	<10	0	0
MAY										
10...	0850	200	--	--	--	0	--	--	0	2

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT										
17...	<10	35	20	1000	8700	17	140	30	80	<.5
MAY										
10...	--	49	--	--	--	--	--	100	--	--

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
17...	.3	9	<10	0	50	160	0	45	.0	0
MAY										
10...	--	10	--	--	120	--	65	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
17...	91	49	18	7.0	.0	.0	.0	.0	0
MAY									
10...	--	--	--	--	--	--	--	--	--

01467348 NORTH BRANCH BIG TIMBER CREEK AT BERLIN ROAD AT CLEMENTON, NJ

LOCATION.--Lat 39°48'19", long 74°59'21", Camden County, Hydrologic Unit 02040202, at bridge on Berlin Road in Clementon, 0.1 mi (0.1 km) downstream from outflow of Clementon Lake, and 1.3 mi (2.1 km) northwest of Sharps Corner.

DRAINAGE AREA.--2.97 mi² (7.69 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	1110	72	7.0	14.5	9	10.1	1.1	130	23	51	14
NOV											
07...	1020	65	7.0	16.0	5	9.8	2.6	350	540	18	4.4
FEB											
23...	0945	83	6.3	2.5	2	13.1	.6	4	79	--	--
MAR											
29...	1100	80	6.9	11.0	5	11.0	1.8	220	260	19	4.6
MAY											
02...	1000	108	6.5	12.5	6	10.2	2.4	253	70	26	7.0
JUN											
07...	1030	84	7.1	23.0	3	8.5	2.4	49	240	20	5.0

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
12...	3.8	12	4.8	9	0	7	.0	21	15	7.7	110
NOV											
07...	1.8	3.6	2.1	10	0	8	--	13	5.9	--	36
FEB											
23...	--	--	--	7	0	6	--	15	6.8	--	52
MAR											
29...	1.8	5.0	1.7	11	0	9	--	15	7.8	--	57
MAY											
02...	2.0	7.0	2.2	15	0	12	--	20	11	--	76
JUN											
07...	1.9	4.5	1.8	12	0	10	--	12	6.8	--	50

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
12...	21	1.3	.09	.65	.65	1.3	2.7	.31	.13	6.4
NOV										
07...	10	.15	.01	.04	.07	.11	.27	.04	.01	9.8
FEB										
23...	3	.95	.01	.13	.20	.33	1.3	.02	.00	1.7
MAR										
29...	4	.60	.01	.07	.11	.18	.79	.02	.00	5.6
MAY										
02...	1	.22	.01	.09	.30	.39	.62	.04	.00	6.9
JUN										
07...	2	.28	.01	.08	.47	.55	.84	.05	.01	8.5

01467348 NORTH BRANCH BIG TIMBER CREEK AT BERLIN ROAD AT CLEMENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 12...	1110	20	3	30	0	0	0	36

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 12...	140	8	80	<.5	5	0	30	1

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ

LOCATION.--Lat 39°50'04", long 75°04'02", Camden County, Hydrologic Unit 02040202, at bridge on State Route 168 in Glendora, 0.5 mi (0.8 km) downstream from Otter Brook, 1.0 mi (1.6 km) southeast of Clements Bridge, and 1.6 mi (2.6 km) north of Mechanicsville.

DRAINAGE AREA.--18.8 mi² (48.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
17...	0935	212	6.9	9.5	2	5.6	6.9	80	2200	41	12
NOV											
09...	0930	141	7.0	15.0	15	4.4	4.8	1300	200	44	13
FEB											
15...	0945	237	7.1	.5	10	9.4	3.3	<20	2	53	16
MAR											
30...	1015	174	7.3	9.0	15	8.2	6.1	920	920	46	14
MAY											
09...	0930	126	6.8	14.0	35	6.7	7.2	5400	9200	29	8.9
JUN											
22...	0915	159	6.8	21.0	10	4.4	6.6	2400	2400	40	12
JUL											
24...	0915	220	6.9	26.0	5	1.2	4.8	490	790	52	16
AUG											
29...	1030	179	6.6	24.0	10	2.4	4.0	3500	5400	44	13

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
17...	2.6	6.6	2.8	45	0	37	.0	16	9.3	6.0	77
NOV											
09...	2.7	8.2	3.6	17	0	14	--	25	10	--	95
FEB											
15...	3.2	20	4.2	59	0	48	--	28	24	--	133
MAR											
30...	2.6	11	3.7	46	0	38	--	24	12	--	110
MAY											
09...	1.7	8.6	2.8	32	0	26	--	16	8.3	--	79
JUN											
22...	2.4	10	4.1	39	0	32	--	21	12	--	103
JUL											
24...	2.9	14	4.6	68	0	56	--	19	16	--	126
AUG											
29...	2.8	10	3.8	39	0	32	--	22	11	--	83

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	5	--	1.2	.03	.09	.33	.42	1.6	.15	.08	7.1
NOV 09...	22	--	.51	.04	.59	.61	1.2	1.8	.48	.28	15
FEB 15...	11	--	--	--	--	--	--	--	--	--	7.0
MAR 30...	25	--	.87	.05	1.3	.60	1.9	2.8	.55	.33	9.5
MAY 09...	38	--	.60	.06	1.0	.80	1.8	2.5	.51	.17	11
JUN 22...	32	--	.75	.18	1.0	.80	1.8	2.7	.67	.46	4.8
JUL 24...	17	12	--	--	2.0	1.4	3.4	4.4	--	--	10
AUG 29...	21	103	--	--	.80	2.2	3.0	4.0	--	--	4.6

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS, (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 17...	0935	30	1	40	0	0	0	37

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 17..	120	17	20	<.5	9	0	10	0

01467369 ALMONESSON CREEK AT RUNNEMEDE, NJ

LOCATION.--Lat 39°50'44", long 75°05'43", Gloucester County, Hydrologic Unit 02040202, at bridge on State Route 42 in Runnemede, 200 ft (61 m) upstream from mouth, 0.7 mi (1.1 km) south of State Route 42 overpass and NJ Turnpike, and 0.7 mi (1.1 km) northwest of Clements Bridge.

DRAINAGE AREA.--3.79 mi² (9.82 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
12...	0945	193	7.2	13.5	3	4.0	3.5	1300	1600	19	4.6
NOV											
07...	0920	201	7.1	15.5	10	5.3	3.5	9200	5400	51	14
FEB											
22...	1145	245	7.2	.5	10	10.4	5.1	33	11	53	15
MAR											
29...	0930	181	7.0	11.0	20	8.0	4.5	230	80	44	12
MAY											
11...	0900	155	6.7	14.5	15	6.0	5.9	9200	280	40	11
JUN											
07...	0900	205	6.9	20.0	8	5.3	5.6	630	3500	54	15
JUL											
20...	0900	212	6.8	24.0	6	4.2	5.3	1300	24000	54	14
AUG											
30...	0915	185	6.7	25.0	1	1.1	2.9	2400	2400	49	14

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
12...	1.8	4.8	2.0	37	0	30	.0	13	6.5	2.0	42
NOV											
07...	3.9	14	4.2	41	0	34	--	34	16	--	101
FEB											
22...	3.7	20	4.2	59	0	48	--	26	24	--	129
MAR											
29...	3.3	12	3.5	32	0	26	--	24	17	--	114
MAY											
11...	3.1	10	3.0	32	0	26	.0	19	14	5.5	94
JUN											
07...	4.1	14	4.4	46	0	38	--	22	19	--	121
JUL											
20...	4.5	13	4.4	49	0	40	--	18	19	--	133
AUG											
30...	3.4	11	4.3	46	0	38	--	19	14	--	120

01467369 ALMONESSON CREEK AT RUNNEMEDE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	8	--	.17	.00	.04	.27	.31	.48	.02	.00	6.1
NOV											
07...	18	--	.87	.06	1.5	.80	2.3	3.2	.33	.11	8.3
FEB											
22...	11	--	1.5	.03	2.8	.80	3.6	5.1	.49	.12	8.0
MAR											
29...	49	--	.97	.03	1.1	.70	1.8	2.8	.39	.04	9.3
MAY											
11...	40	--	1.1	.05	.91	.79	1.7	2.8	.40	.14	7.0
JUN											
07...	9	--	1.2	.13	1.3	1.0	2.3	3.6	.36	.14	5.6
JUL											
20...	35	30	--	--	.60	1.5	2.1	3.1	--	--	7.4
AUG											
30...	30	28	--	--	1.4	.10	1.5	--	--	--	7.1

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
12...	0945	50	2	150	0	0	0	36
MAY								
11...	0900	20	--	9	--	0	3	10

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
12...	90	10	20	<.5	7	0	20	0
MAY								
11...	70	--	100	--	2	--	30	0

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia, PA, Hydrologic Unit 02040203, on right bank 150 ft (46 m) upstream from Fairmount Dam, 1,500 ft (457 m) upstream from Spring Garden Street Bridge, in Philadelphia, and 8.7 mi (14.0 km) upstream from mouth.

DRAINAGE AREA.--1,893 mi² (4,903 km²).

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: September 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 241, 261, 281, 301, 381, have been found to be unreliable and should not be used.
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1945 to current year.
DISSOLVED OXYGEN: January 1966 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Water-quality recorder located at Belmont raw-water pumping station on west side of river near Columbia Bridge. Datum of gage is 5.74 ft (1.750 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956 to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft (12 m) upstream from Fairmount Dam at same datum.

REMARKS.--Records good. Some regulation by reservoirs above station. Records of daily discharge do not include diversion above station by city of Philadelphia for municipal water supply. Refer to U.S. Geological Survey Water Resources Data Report PA-78-1 for water-quality data.

AVERAGE DISCHARGE.--47 years, 2,950 ft³/s (83.54 m³/s), 21.16 in/yr (537 mm/yr), adjusted for diversion.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft³/s (510 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0945	27600	782	9.52	2.902	Jan. 26	1745	*64000	1810	12.33	3.758
Dec. 1	1300	19600	555	8.70	2.652	Mar. 14	2400	26800	759	9.44	2.877
Dec. 18	2200	35100	994	10.21	3.112	Mar. 27	1615	44600	1260	10.98	3.347
Dec. 21	1645	26900	762	9.45	2.880	May 15	1245	18900	535	8.62	2.627
Jan. 9	1600	28300	801	9.59	2.923	May 18	0730	19000	538	8.63	2.630

Minimum discharge, 517 ft³/s (14.6 m³/s) July 25, gage height, 5.87 ft (1.789 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 23, 1972, gage height, 14.65 ft (4.465 m); no flow over dam at times; minimum daily, 0.6 ft³/s (0.02 m³/s) Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4, 1896, reached a stage of 17.0 ft (5.18 m), discharge, 135,000 ft³/s (3,820 m³/s), from rating curve extended above 46,000 ft³/s (1,300 m³/s). Flood of Mar. 1, 1902, reached a stage of 14.8 ft (4.511 m), discharge, 98,000 ft³/s (2,780 m³/s).

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	1300	13500	3920	6790	1690	8330	1730	3110	914	1850	2520
2	1150	1260	12500	3660	5950	1630	7020	1650	2760	914	1420	2110
3	1900	1250	8660	3340	4630	1640	5920	1570	2470	3260	1140	1310
4	1520	1530	6710	2890	3850	1520	5430	1570	3210	9530	1010	1070
5	1250	1850	5640	2770	3400	1370	5720	1850	2950	3690	1210	977
6	1100	1630	7630	2750	3350	1420	5020	1980	2290	2110	1460	852
7	1030	7410	6510	2700	3220	1410	4600	1890	2290	1530	3470	792
8	1000	21600	5020	2840	3540	1440	4390	1730	2380	1280	5190	706
9	1600	12500	4390	19200	3170	1440	3880	2950	2710	1170	6530	763
10	3540	8090	3920	18700	2860	1430	3470	4130	2760	1070	3910	763
11	3920	8560	3280	10400	2660	1540	3370	2520	2470	1170	3310	706
12	2720	8960	2890	7720	2600	2190	3470	2020	1980	1070	3630	734
13	2110	6670	2790	6240	2520	4070	3160	1850	2330	883	8580	914
14	1880	5240	3260	9280	2540	10800	2800	6440	2380	852	3210	852
15	3240	4280	9400	7020	2420	23800	2610	17400	1940	914	2110	763
16	4810	3700	7470	4960	2230	20000	2380	12700	1610	1730	1690	852
17	7460	3430	6030	4360	2160	11400	2290	14300	1530	1890	1420	852
18	8610	4870	14800	8830	2120	8480	2200	16300	1530	1460	1210	822
19	6240	3630	20700	6950	2090	7840	2560	11700	1420	1100	1040	822
20	5320	2870	12300	4930	1940	10600	5250	9110	1310	914	946	1100
21	4210	2510	19100	4400	1830	10200	4660	7210	1380	822	883	1210
22	3410	2440	17800	4180	1870	12200	3420	5890	2520	734	792	946
23	2900	4040	12600	3570	1770	10600	2850	4910	1980	651	734	883
24	2490	4220	9610	3200	1730	9700	2560	9480	1530	625	706	1010
25	2180	3260	8990	6080	1800	8690	2470	12700	1310	625	651	852
26	1970	9460	9180	46400	1870	10600	2290	7170	1170	678	678	734
27	2140	6410	6700	36400	1850	39000	2200	5400	1210	792	763	706
28	2060	4720	5730	14700	1680	28400	2110	4700	1210	1380	5310	678
29	1750	4100	4970	10700	---	17800	1940	4190	1100	852	3580	651
30	1530	4460	4550	8310	---	12800	1810	3810	977	734	2330	598
31	1400	---	4230	7530	---	10100	---	3420	---	977	1570	---
TOTAL	87560	156250	260860	278930	78440	285800	110180	184270	59817	46321	72333	28548
MEAN	2825	5208	8415	8998	2801	9219	3673	5944	1994	1494	2333	952
MAX	8610	21600	20700	46400	6790	39000	8330	17400	3210	9530	8580	2520
MIN	1000	1250	2790	2700	1680	1370	1810	1570	977	625	651	598
(†)	266	262	275	283	288	280	261	271	292	304	300	259
MEAN‡	3091	5470	8690	9281	3089	9499	3934	6215	2286	1798	2633	1211
CFSM‡	1.63	2.89	4.59	4.90	1.63	5.02	2.08	3.28	1.21	.95	1.39	.64
IN‡	1.88	3.22	5.65	5.65	1.70	5.79	2.32	3.79	1.35	1.10	1.60	.71

CAL YR 1977 TOTAL 1171246 MEAN 3209 MAX 27300 MIN 315 MEAN‡ 3500 CFSM‡ 1.85 IN‡ 25.10
WTR YR 1978 TOTAL 1649309 MEAN 4519 MAX 46400 MIN 598 MEAN‡ 4797 CFSM‡ 2.53 IN‡ 34.41

† Diversion, equivalent in cubic feet per second, for municipal water supply, furnished by City of Philadelphia.
‡ Adjusted for diversion.

01475000 MANTUA CREEK AT PITMAN, NJ

LOCATION.--Lat 39°44'14", long 75°06'53", Gloucester County, Hydrologic Unit 02040202 at bridge on Delsea Drive in Pitman, 0.9 mi (1.5 km) east of Pitman, and 2.0 mi (3.2 km) upstream from Porch Branch.

DRAINAGE AREA.--6.05 mi² (15.67 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1940 to current year.
CHEMICAL ANALYSES: Water years 1958-59, 1962, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
17...	1235	9.2	113	7.3	11.5	1	10.4	1.3	4	70	33	7.6
NOV												
09...	1140	15	78	6.9	15.5	15	9.2	2.3	920	>2400	25	5.8
FEB												
15...	1155	8.0	123	7.1	2.0	5	13.2	.6	5	13	36	8.2
MAR												
30...	1310	8.3	95	7.2	11.0	6	10.2	1.1	49	79	30	7.0
MAY												
10...	1050	13	93	7.0	14.5	25	9.6	1.6	220	350	57	15
JUN												
22...	1135	10	98	7.2	22.0	2	8.7	2.2	1600	920	31	6.8

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
17...	3.5	4.0	2.6	12	0	10	--	17	7.5	--	63	9
NOV												
09...	2.6	3.2	2.9	13	0	11	--	16	6.7	--	63	17
FEB												
15...	3.8	5.2	2.1	17	0	14	--	19	10	--	75	4
MAR												
30...	3.0	3.5	2.3	13	0	11	--	17	6.3	--	70	11
MAY												
10...	4.7	11	5.0	11	0	9	.0	42	21	13	152	31
JUN												
22...	3.4	3.8	2.0	20	0	16	--	14	8.8	--	75	0

01475000 MANTUA CREEK AT PITMAN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT											
17...	.94	.01	.07	.26	.33	870	1.3	.02	.01	8.0	7.9
NOV											
09...	.71	.01	.01	.59	.60	--	1.3	.05	.01	--	--
FEB											
15...	--	--	--	--	--	--	--	--	--	1.0	--
MAR											
30...	1.5	.01	.03	.32	.35	--	1.9	.03	.01	4.4	--
MAY											
10...	1.3	.05	.18	.55	.73	--	2.0	.28	.00	6.3	--
JUN											
22...	.94	.01	.03	.47	.50	--	1.5	.02	.01	6.3	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT										
17...	1235	--	10	--	<10	<10	--	<10	20	--
MAY										
10...	1050	30	--	50	--	--	0	--	--	1500

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
17...	2400	970	60	.0	<10	70	29	.0	58
MAY									
10...	--	--	--	--	--	--	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
17...	17	7.7	16	2.1	.0	.0	.6	.0	0
MAY									
10...	--	--	--	--	--	--	--	--	--

01475030 MONONGAHELA BROOK AT WENONAH, NJ

LOCATION.--Lat 39°47'09", long 75°08'24", Gloucester County, Hydrologic Unit 02040202, at bridge on Glassboro Road in Wenonah, 0.6 mi (1.0 km) southeast of Wenonah Municipal Building, 0.8 mi (1.3 km) upstream from mouth, and 1.3 mi (2.1 km) north of Sewell.

DRAINAGE AREA.--3.11 mi² (8.05 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
18...	0940	206	6.7	9.0	5	10.0	1.5	280	9	54	16
NOV											
09...	1230	255	6.0	15.5	15	8.2	8.7	>2400	>2400	68	18
FEB											
15...	1245	274	6.9	3.5	15	10.4	>8.6	<2	4	66	15
MAR											
28...	1400	225	6.6	12.5	25	9.0	7.6	540	920	60	16
MAY											
10...	1215	215	6.2	15.5	3	7.6	5.3	350	920	31	7.2
JUN											
22...	1245	215	6.5	17.5	7	6.5	1.0	>2400	540	49	12

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
18...	3.4	15	3.4	11	0	9	.0	30	16	10	121
NOV											
09...	5.5	10	8.4	9	0	7	--	69	19	--	158
FEB											
15...	6.9	17	6.1	34	0	28	--	28	38	--	169
MAR											
28...	4.9	13	6.0	17	0	14	--	43	25	--	130
MAY											
10...	3.1	3.4	1.9	12	0	10	--	17	7.1	--	67
JUN											
22...	4.7	13	5.5	15	0	12	--	31	31	--	141

01475030 MONONGAHELA BROOK AT WENONAH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	13	.87	.01	.11	.35	.46	1.3	.14	.06	9.0
NOV 09...	50	1.9	.05	.55	.65	1.2	3.1	.23	.01	12
FEB 15...	0	--	--	--	--	--	--	--	--	1.9
MAR 28...	22	1.9	.07	.43	.77	1.2	3.2	.13	.00	6.7
MAY 10...	4	1.2	.01	.01	.37	.38	1.6	.02	.00	--
JUN 22...	26	1.8	.04	.40	.70	1.1	2.9	.30	.02	4.2

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 18...	0940	50	2	60	0	0	2	2

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 18...	500	7	80	<.5	14	0	20	0

01475045 MANTUA CREEK AT MANTUA, NJ

LOCATION.--Lat 39°47'42", long 75°10'21", Gloucester County, Hydrologic Unit 02040202, at bridge on State Route 45 in Mantua, 0.9 mi (1.4 km) downstream from Chestnut Branch, 1.3 mi (2.1 km) east of Gates of Heaven Memorial Park, and 2.4 mi (3.9 km) northwest of Barnsboro.

DRAINAGE AREA.--41.5 mi² (107.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 18...	1140	221	7.5	9.0	5	7.3	11.0	2.1	33	27	47	12
DEC 01...	1000	119	6.9	7.5	30	--	10.5	2.7	1700	>2400	41	12
FEB 02...	1230	181	7.2	.5	7	--	12.3	3.9	16000	170	49	14
MAR 28...	1245	150	7.3	12.5	25	--	10.0	2.7	1300	790	44	13
MAY 10...	1330	137	7.0	16.5	15	--	7.6	2.3	2400	350	45	13
JUN 27...	0945	152	7.0	21.5	22	--	4.4	4.6	16000	16000	43	12
JUL 25...	1230	220	7.0	23.0	5	--	5.4	2.3	790	16000	56	16
AUG 14...	1315	190	7.0	24.5	1	--	5.9	2.9	490	2400	38	8.2

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
OCT 18...	4.2	9.5	5.2	44	0	36	.0	34	22	15	123	14
DEC 01...	2.6	6.8	3.3	22	0	18	--	23	8.0	--	71	58
FEB 02...	3.5	12	2.8	37	0	30	--	30	16	--	112	9
MAR 28...	2.9	9.1	3.2	22	0	18	--	27	12	--	87	44
MAY 10...	3.1	6.8	2.6	24	0	20	--	25	9.1	--	96	34
JUN 27...	3.1	11	2.9	37	0	30	--	19	15	--	98	43
JUL 25...	3.8	16	3.5	49	0	40	--	24	18	--	126	28
AUG 14...	4.2	12	3.2	49	0	40	--	20	14	--	134	0

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)
OCT 18...	--	1.5	.02	.61	.28	.89	1100	2.4	.10	.01	8.2	7.3
DEC 01...	--	.84	.02	.08	.25	.33	--	1.2	.32	.09	11	--
FEB 02...	--	--	--	--	--	--	--	--	--	--	1.6	--
MAR 28...	--	1.1	.02	.13	.79	.92	--	2.0	.21	.03	7.8	--
MAY 10...	--	.84	.02	.14	.49	.63	--	1.5	.22	.06	9.2	--
JUN 27...	--	.59	.02	.12	.75	.87	--	1.5	.20	.04	8.6	--
JUL 25...	27	--	--	.10	1.4	1.5	--	2.5	--	--	7.6	--
AUG 14...	25	--	--	<.10	--	.80	--	--	--	--	4.8	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT 18...	1140	70	3	13	10	0	<10	<10	0	5

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT 18...	<10	2	<10	1300	2900	2	<10	110	40	<.5

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 18...	.1	27	<10	0	70	30	0	24	.0	46

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 18...	14	18	2.5	4.7	.0	.0	.0	.0	0

01477100 RACCOON CREEK NEAR MULLICA HILL, NJ

LOCATION.--Lat 39°42'31", long 75°12'05", Gloucester County, Hydrologic Unit 02040202, at bridge on Cedar Grove-Richwood Grove Road, 0.6 mi (1.0 km) upstream from Miery Run, 1.0 mi (1.6 km) downstream from outflow of Ewan Lake, 2.5 mi (4.0 km) southeast of Mullica Hill, and 4.0 mi (6.4 km) southwest of Pitman.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1953-59, 1959-63, 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
13...	1050	174	7.6	13.0	1	9.7	.4	<2	79	55	15
NOV											
02...	1335	155	7.2	15.0	1	8.4	1.8	22	240	63	18
FEB											
02...	1110	128	6.9	2.0	4	12.6	.3	17	130	42	11
MAR											
28...	1140	117	6.6	10.0	10	11.0	1.3	33	350	41	11
MAY											
04...	1315	153	7.4	14.5	4	10.2	2.5	79	79	--	--
JUN											
06...	1140	130	7.0	21.0	2	8.3	.8	540	79	46	12
JUL											
25...	0930	142	7.9	25.0	0	6.2	.5	79	1600	52	14
AUG											
14...	1145	139	6.8	24.0	3	7.1	1.0	33	240	46	12

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
13...	4.2	3.8	3.7	20	0	16	.0	31	9.5	6.4	104
NOV											
02...	4.3	3.2	3.7	29	0	24	--	30	9.4	--	97
FEB											
02...	3.6	2.8	2.6	10	0	8	--	29	8.5	--	98
MAR											
28...	3.3	2.9	3.2	9	0	7	--	28	7.1	--	67
MAY											
04...	--	--	--	20	0	16	--	30	9.7	--	--
JUN											
06...	3.9	3.1	2.9	13	0	11	--	27	9.0	--	82
JUL											
25...	4.1	3.3	2.9	20	0	16	--	23	9.1	--	101
AUG											
14...	3.8	3.0	3.0	17	0	14	--	24	8.2	--	118

01477100 RACCOON CREEK NEAR MULLICA HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 13...	4	--	1.1	.01	.04	.29	.33	1.4	.03	.01	6.7
NOV 02...	0	--	.99	.01	.00	.32	.32	1.3	.03	.00	8.1
FEB 02...	8	--	--	--	--	--	--	--	--	--	2.0
MAR 28...	5	--	2.0	.01	.13	.48	.61	2.6	.04	.01	5.6
MAY 04...	22	--	1.8	.01	.10	.65	.75	2.6	.03	.01	12
JUN 06...	9	--	1.6	.01	.06	.33	.39	2.0	.03	.00	5.9
JUL 25...	2	3	--	--	.10	.30	.40	1.6	--	--	4.1
AUG 14...	6	28	--	--	<1.0	--	.40	1.5	--	--	4.1

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 13...	1050	80	3	30	0	0	0	31
MAY 04...	1315	--	--	--	--	--	--	--

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 13...	140	8	40	<.5	4	0	10	0
MAY 04...	--	--	--	--	--	--	--	0

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'28", long 75°15'33", Gloucester County, Hydrologic Unit 02040202, on right bank 25 ft (8 m) downstream from county bridge No. 5-F-3 on Harrisonville-Gibbstown Road, 1.8 mi (2.9 km) west of Mullica Hill, and 2.8 mi (4.5 km) east of Swedesboro.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1966 to current year.
CHEMCIAL ANALYSES: Water years 1965 to current year.
SEDIMENT ANALYSES: Water years 1966-69, 1971-73, July to September 1978.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: May 1966 to current year.
WATER TEMPERATURES: May 1966 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 28, 1969, at datum 7.96 ft (2.426 m) higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft (1.817 m) higher.

REMARKS.--Discharge records fair.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--12 years, 48.3 ft³/s (1.214 m³/s), 19.48 in/yr (495 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0545	552	15.6	12.09	3.685	Jan. 9	-	800	22.7	Unknown	
Dec. 18	2315	443	12.5	11.54	3.517	Jan. 18	-	900	25.5	Unknown	
Mar. 27	1500	344	9.74	10.72	3.267	Jan. 26	Unknown	*1520	43.0	14.62	4.456

Minimum daily discharge, 14 ft³/s (0.396 m³/s) several days in October and September.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft³/s (100 m³/s) Aug. 10, 1967, elevation, 17.44 ft (5.316 m), present datum; minimum daily, 2.9 ft³/s (0.082 m³/s) July 14, Aug. 27, 28, Sept. 10, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	15	150	52	48	33	51	26	32	16	41	33
2	17	16	55	43	46	32	53	23	29	16	29	26
3	15	19	35	38	44	33	48	23	28	94	38	22
4	15	23	30	32	41	34	47	25	31	172	33	20
5	14	19	47	30	39	32	47	48	31	53	120	19
6	14	18	61	33	44	32	50	39	31	38	91	18
7	14	159	35	35	55	30	53	35	27	32	70	18
8	14	348	28	50	42	30	44	33	30	29	52	18
9	49	61	33	380	42	32	39	153	28	27	34	18
10	37	37	29	100	44	41	38	115	24	29	51	17
11	20	31	25	50	42	123	38	55	23	57	54	17
12	17	26	24	37	39	192	39	44	22	32	38	16
13	15	25	25	45	38	149	36	39	23	27	34	18
14	17	24	50	200	40	149	34	72	22	28	31	17
15	20	23	139	100	38	139	33	62	20	30	28	17
16	17	23	52	62	37	80	33	70	19	28	26	17
17	23	57	37	100	37	80	33	98	20	32	25	16
18	18	47	186	510	37	77	33	77	21	30	24	16
19	16	29	225	150	36	74	56	56	21	26	23	23
20	16	26	72	95	35	66	79	47	19	23	23	20
21	15	24	162	85	34	57	52	41	21	22	23	18
22	15	25	84	65	34	56	42	35	34	21	23	17
23	14	53	50	50	33	50	38	33	24	21	24	17
24	14	41	43	42	32	46	35	127	20	20	23	16
25	14	33	59	200	33	42	34	91	19	20	25	16
26	15	66	47	800	36	101	32	53	18	19	23	14
27	20	35	39	170	36	277	33	45	32	19	20	14
28	19	29	33	80	33	117	33	43	26	20	23	14
29	17	28	31	60	---	70	31	41	20	20	22	14
30	16	34	30	56	---	57	29	37	18	19	24	14
31	15	---	60	51	---	53	---	34	---	26	28	---
TOTAL	558	1394	1976	3801	1095	2384	1243	1720	733	1046	1123	540
MEAN	18.0	46.5	63.7	123	39.1	76.9	41.4	55.5	24.4	33.7	36.2	18.0
MAX	49	348	225	800	55	277	79	153	34	172	120	33
MIN	14	15	24	30	32	30	29	23	18	16	20	14
CFSM	.60	1.56	2.13	4.11	1.31	2.57	1.39	1.86	.82	1.13	1.21	.60
IN.	.69	1.73	2.46	4.73	1.36	2.97	1.55	2.14	.91	1.30	1.40	.67

CAL YR 1977 TOTAL 10238.0 MEAN 28.0 MAX 348 MIN 8.5 CFSM .94 IN 12.74
WTR YR 1978 TOTAL 17613.0 MEAN 48.3 MAX 800 MIN 14 CFSM 1.62 IN 21.91

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
13...	0940	17	217	7.6	12.0	5	9.7	.6	220	220	71	22
NOV												
29...	0945	26	138	7.0	4.5	6	--	.5	920	540	69	21
FEB												
02...	1000	46	159	7.1	1.5	6	13.6	.4	1600	49	52	14
MAR												
28...	0940	116	126	6.7	8.5	15	11.0	1.5	49	240	44	13
MAY												
03...	1330	23	177	7.6	16.5	5	11.2	--	80	20	77	25
JUN												
06...	1000	32	164	7.2	18.0	6	8.6	1.5	790	170	61	18
JUL												
25...	1040	21	180	7.2	21.5	2	6.5	.9	330	490	68	21
AUG												
14...	0945	32	171	6.9	22.5	2	8.0	1.1	230	490	61	18
SEP												
27...	1135	14	195	7.1	13.5	--	10.0	.7	330	230	71	21

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT												
13...	3.8	5.7	3.9	41	0	34	.0	29	12	--	11	127
NOV												
29...	4.0	5.2	3.6	41	0	34	--	38	11	--	--	120
FEB												
02...	4.2	4.8	3.1	23	0	19	--	29	11	--	--	98
MAR												
28...	2.8	3.2	3.3	9	0	7	--	29	7.1	--	--	78
MAY												
03...	3.6	6.0	2.8	24	0	20	--	29	10	--	--	108
JUN												
06...	3.9	4.6	3.2	32	0	26	--	29	11	--	--	102
JUL												
25...	3.8	4.6	3.6	39	0	32	--	22	11	--	--	112
AUG												
14...	3.8	4.4	3.3	34	0	28	--	24	10	--	--	128
SEP												
27...	4.5	6.3	3.6	44	0	35	--	24	14	.1	10	120

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
13...	24	--	--	1.3	.01	.04	.18	.22	1.5	.07	.01	5.6
NOV												
29...	8	--	--	1.6	.01	.12	.47	.59	2.2	.07	.04	13
FEB												
02...	11	--	--	--	--	--	--	--	--	--	--	1.2
MAR												
28...	22	--	--	1.6	.01	.13	.58	.71	2.3	.13	.03	6.3
MAY												
03...	2	--	--	1.6	.01	.01	.23	.24	1.8	.08	.05	5.7
JUN												
06...	17	--	--	1.4	.02	.09	.44	.53	1.9	.15	.06	6.1
JUL												
25...	6	11	.62	--	--	.10	.30	.40	1.6	--	--	6.3
AUG												
14...	1	22	1.9	--	--	<1.0	--	1.1	2.2	--	--	4.2
SEP												
27...	--	8	.30	--	--	.30	--	--	--	--	--	2.6

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 13...	0940	30	2	40	0	0	0	34

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 13...	70	9	60	<.5	6	0	10	0

01477510 OLDMANS CREEK AT PORCHES MILL, NJ

LOCATION.--Lat 39°41'57", long 75°20'01", Salem County, Hydrologic Unit 02040206, at bridge on Kings Highway in Porches Mill, 150 ft (46 m) downstream of tributary from outflow of lake at Porches Mill, 1.0 mi (1.6 km) north of Seven Stars, and 2.1 mi (3.3 km) southeast of Auburn.

DRAINAGE AREA.--21.0 mi² (54.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
13...	1200	237	7.6	12.0	4	9.5	.8	130	1600	86	26
NOV											
02...	1245	220	7.6	15.0	1	8.5	.8	79	110	90	27
FEB											
01...	1400	155	7.0	1.0	35	12.6	.8	130	170	57	16
MAR											
22...	1345	152	7.4	12.5	9	10.2	2.5	<20	1600	59	17
MAY											
04...	1200	181	7.5	14.0	5	10.6	3.0	240	33	--	--
JUN											
06...	1300	182	7.4	21.5	3	8.4	1.5	490	79	70	20
JUL											
18...	1250	212	7.2	23.0	2	6.0	1.2	90	270	73	21
AUG											
10...	1250	182	7.0	24.0	4	6.6	2.1	790	1300	66	19

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
13...	5.2	4.6	4.1	50	0	41	.0	30	15	12	143
NOV											
02...	5.4	4.3	4.2	61	0	50	--	33	16	--	141
FEB											
01...	4.1	3.4	3.0	20	0	16	--	29	11	--	88
MAR											
22...	3.9	3.4	3.3	22	0	18	--	29	9.7	--	97
MAY											
04...	--	--	--	32	0	26	--	30	14	--	--
JUN											
06...	4.9	3.6	3.0	34	0	28	--	28	13	--	123
JUL											
18...	4.9	3.8	3.6	--	0	--	--	26	13	--	136
AUG											
10...	4.4	3.4	3.7	39	0	32	--	24	12	--	124

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
13...	5	--	1.3	.01	.06	.34	.40	1.7	.04	.02	8.3
NOV											
02...	0	--	1.2	.01	.01	.29	.30	1.5	.07	.04	9.0
FEB											
01...	108	--	2.8	.01	.08	.84	.92	3.7	.32	.04	6.8
MAR											
22...	13	--	2.4	.01	.08	.35	.43	2.8	.09	.01	3.9
MAY											
04...	18	--	2.1	.01	.07	.53	.60	2.7	.06	.01	11
JUN											
06...	8	--	1.8	.02	.06	.50	.56	2.4	.11	.04	5.0
JUL											
18...	0	15	--	--	.10	.30	.40	1.9	--	--	4.3
AUG											
10...	4	31	--	--	.30	1.2	1.5	2.9	--	--	22

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT								
13...	1200	50	2	30	0	0	0	38

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
13...	60	17	60	<.5	10	0	20	2

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, AT WILMINGTON, DE

LOCATION.--Lat 39°41'21", long 75°31'19", New Castle County, Hydrologic Unit 02040205, on pier of right tower of downstream bridge of dual bridges at Wilmington, 2.0 mi (3.2 km) downstream from Christina River and at river mile 68.70 (110.54 km).

DRAINAGE AREA.--11,030 mi² (28,570 km²).

PERIOD OF DAILY RECORD.--
TIDE ELEVATIONS: July 1967 to current year. Tidal volumes published from July 1967 to September 1973.
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1956 to current year.
DISSOLVED OXYGEN: November 1962 to current year.

GAGE.--Water-stage recorder and water-quality monitor. Datum of gage is -10.00 ft (-3.048 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum 1929 for publication.

REMARKS.--Records of tide elevations good. Refer to U.S. Geological Survey Water Resources Data Report PA-78-1 for water-quality data.

EXTREMES FOR CURRENT YEAR.--
TIDE ELEVATIONS: Maximum, 6.20 ft (1.890 m) Dec. 21; minimum, -4.78 ft (-1.457 m) Jan. 11.

EXTREMES FOR PERIOD OF RECORD.--
TIDE ELEVATIONS: Maximum, 7.45 ft (2.271 m) Dec. 2, 1974; minimum, -5.86 ft (-1.786 m) Apr. 4, 1975.
SPECIFIC CONDUCTANCE: Maximum, 12,700 micromhos Nov. 13, 1966; minimum, 100 micromhos on many days.
pH: Maximum, 9.3 Nov. 10, 11, 13, 1970; minimum, 4.2 Nov. 6, 1969.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 9, 1968; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.5 mg/L Dec. 29, 1969; minimum, 0.0 mg/L on many days during summer months.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 8.4 ft (2.56 m) Nov. 23, 1950, furnished by Corps of Engineers, U.S. Army; minimum, -9.1 ft (-2.77 m) Dec. 31, 1962.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	5.92	5.86	6.20	5.76	5.30	5.61	5.96	5.42	5.38	5.42	5.43	5.52
high tide	Date	14	8	21	8	8	27	28	24	22	17	16	13
Minimum	Elevation	-3.54	-3.30	-4.76	-4.78	-4.19	-3.57	-3.18	-2.33	-2.71	-2.36	-2.55	-2.12
low tide	Date	17	19	10	11	7	7	2	23	14	24	20	17
Mean high tide		3.96	3.99	3.89	3.49	3.77	3.79	4.20	4.45	4.17	4.22	4.29	4.34
Mean water level		1.25	1.23	1.16	0.73	0.96	1.07	1.31	1.54	1.17	1.36	1.45	1.67
Mean low tide		-1.57	-1.59	-1.66	-2.11	-1.97	-1.75	-1.69	-1.48	-1.91	-1.60	-1.50	-1.28

NOTE.--No gage-height record Nov. 20 to Dec. 2, Dec. 10 to June 28.

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, on right end of Memorial Lake Dam at Woodstown, 0.2 mi (0.3 km) upstream from small brook, and 0.3 mi (0.5 km) downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi² (37.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: March to September 1940, December 1941 to current year. Prior to October 1952, published as "Salem Creek at Woodstown".
CHEMICAL ANALYSES: Water years 1973 to current year.
SEDIMENT ANALYSES: July to September 1978.

REVISED DISCHARGE RECORDS.--WSP 1432: 1951(M). WSP 1702: 1959.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 19.49 ft (5.941 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977 at datum 10.00 ft (3.048 m) higher.

REMARKS.--Discharge records fair.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--36 years (1942-78), 19.1 ft³/s (0.541 m³/s), 17.77 yr (451 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.91 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Nov. 8	0400	739	20.9	12.26	3.737	Jan. 18	0300	760	21.5	12.28	3.743
Dec. 18	1700	527	14.9	12.04	3.670	Jan. 26	0600	*1110	31.4	12.60	3.840
Jan. 9	0500	544	15.4	12.06	3.676						

Minimum discharge, 2.9 ft³/s (0.08 m³/s) June 20, 21.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s (623 m³/s) Sept. 1, 1940 (gage height, 17.98 ft or 5.480 m, present datum, from floodmark in gage house) from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of slope-area measurement of peak flow at site 0.5 mi (0.8 km) downstream; no flow for short periods during many years just after waste gate was closed and water was below spillway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	7.4	127	25	16	13	20	11	11	8.5	11	22
2	6.4	6.4	38	20	16	13	18	11	9.6	8.5	9.6	11
3	6.4	9.6	22	18	14	13	18	9.6	9.6	50	9.6	6.4
4	6.4	20	18	16	14	13	20	11	11	104	14	6.4
5	6.4	13	29	16	13	13	20	29	9.6	29	41	7.4
6	7.4	9.6	47	16	16	11	18	22	9.6	16	25	7.4
7	7.4	122	22	18	16	11	22	16	8.5	13	16	8.5
8	7.4	303	16	27	16	11	20	16	9.6	11	11	7.4
9	25	41	22	274	16	13	18	99	9.6	9.6	12	7.4
10	32	22	18	44	16	16	16	50	7.4	11	13	6.4
11	13	16	13	22	14	122	16	25	7.4	18	33	5.4
12	8.5	13	11	18	14	127	18	18	7.4	11	15	5.4
13	7.4	11	13	22	14	85	16	16	7.4	8.5	11	5.4
14	8.5	9.6	41	155	16	85	14	47	7.4	7.4	10	4.5
15	11	9.6	113	57	14	69	13	41	7.4	9.6	8.5	4.5
16	11	9.6	35	27	14	44	13	38	7.4	9.6	7.0	5.4
17	13	54	25	47	14	47	13	57	7.4	11	6.4	4.5
18	11	38	222	388	13	54	13	47	6.4	11	6.4	4.5
19	9.6	20	127	61	13	44	22	35	4.5	8.5	6.4	11
20	8.5	14	47	41	13	35	47	29	3.7	8.5	6.4	11
21	8.5	13	118	41	13	27	27	27	3.7	8.5	6.4	8.5
22	7.4	14	50	29	13	27	18	18	8.5	8.5	6.4	7.4
23	6.4	50	29	22	11	22	14	16	14	8.5	6.4	7.4
24	7.4	32	25	20	11	20	14	90	11	7.4	6.4	7.4
25	7.4	22	32	326	11	18	14	61	8.5	7.4	5.4	7.4
26	9.6	61	25	648	14	85	13	27	7.4	6.4	5.4	6.4
27	14	25	18	69	14	198	13	18	11	6.4	5.4	7.4
28	14	18	16	35	13	61	13	16	16	7.4	7.4	7.4
29	9.6	16	14	25	---	32	13	16	14	7.4	7.4	7.4
30	8.5	25	16	20	---	25	13	14	13	6.4	7.4	7.4
31	8.5	---	29	18	---	20	---	13	---	8.5	7.4	---
TOTAL	314.0	1024.8	1378	2565	392	1374	527	943.6	269.0	446.5	343.7	226.0
MEAN	10.1	34.2	44.5	82.7	14.0	44.3	17.6	30.4	8.97	14.4	11.1	7.53
MAX	32	303	222	648	16	198	47	99	16	104	41	22
MIN	6.4	6.4	11	16	11	11	13	9.6	3.7	6.4	5.4	4.5
CFSM	.69	2.34	3.05	5.66	.96	3.03	1.21	2.08	.61	.99	.76	.52
IN.	.80	2.61	3.51	6.54	1.00	3.50	1.34	2.40	.69	1.14	.88	.58

CAL YR 1977 TOTAL 5577.4 MEAN 15.3 MAX 303 MIN 2.9 CFSM 1.05 IN 14.21
WTR YR 1978 TOTAL 9803.6 MEAN 26.9 MAX 648 MIN 3.7 CFSM 1.84 IN 24.98

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
05...	1140	6.4	250	8.0	17.0	5	9.6	4.2	20	240	92	21
NOV												
02...	1045	7.4	228	7.4	14.5	3	9.0	4.7	110	240	84	18
FEB												
01...	1200	14	163	7.3	2.5	15	13.0	1.2	33	49	58	13
MAR												
22...	1110	29	177	7.3	11.0	30	10.5	3.5	17	920	61	14
MAY												
03...	1145	9.6	205	7.7	16.0	7	10.2	--	23	2	85	20
JUN												
05...	1120	9.6	211	7.5	24.0	7	8.0	4.4	170	49	78	17
JUL												
18...	0930	11	212	7.3	24.5	3	5.7	3.0	20	210	77	17
AUG												
10...	0945	8.5	208	7.4	27.5	2	7.0	5.8	20	13	70	15

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE DIS-SOLVED (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
05...	9.5	7.0	6.4	56	0	46	.2	30	17	.4	130	2
NOV												
02...	9.6	6.6	6.6	44	0	36	--	41	19	--	127	24
FEB												
01...	6.1	4.5	3.2	17	0	14	--	29	12	--	92	16
MAR												
22...	6.4	5.3	4.2	22	0	18	--	32	13	--	106	47
MAY												
03...	8.4	6.0	3.0	24	0	20	.0	40	15	4.8	133	12
JUN												
05...	8.7	6.0	4.3	37	0	30	--	35	17	--	135	27
JUL												
18...	8.5	5.7	4.8	--	0	--	--	31	15	--	161	4
AUG												
10...	7.8	5.0	5.1	44	0	36	--	27	16	--	171	4

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
05...	--	--	.53	.06	.25	1.1	1.3	650	1.9	.11	.01	6.3
NOV												
02...	--	--	.95	.03	.13	.84	.97	--	2.0	.10	.01	6.5
FEB												
01...	--	--	3.1	.01	.21	.43	.64	--	3.7	.07	.01	1.6
MAR												
22...	--	--	2.7	.03	.44	.86	1.3	--	4.0	.17	.05	6.1
MAY												
03...	--	--	2.4	.03	.09	.75	.84	--	3.2	.11	.01	6.2
JUN												
05...	--	--	2.2	.06	.14	.96	1.1	--	3.4	.12	.01	5.4
JUL												
18...	21	.62	--	--	.50	.30	.80	--	2.0	--	--	5.2
AUG												
10...	21	.48	--	--	.30	1.2	1.5	--	--	--	--	4.1

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
OCT										
05...	1140	0	1	2	80	0	<10	<10	0	0
MAY										
03...	1145	20	--	--	10	--	--	--	0	0

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT										
05...	<10	5	<10	10	1700	2	15	60	10	<.5
MAY										
03...	--	3	--	250	--	--	--	100	--	--

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT										
05...	.0	4	<10	0	20	30	3	78	.0	0
MAY										
03...	--	5	--	--	20	--	0	--	--	--

DATE	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT									
05...	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY									
03...	--	--	--	--	--	--	--	--	--

01482537 SALEM RIVER AT COURSES LANDING, NJ

LOCATION.--Lat 39°39'38", long 75°24'34", Salem County, Hydrologic Unit 02040206, at bridge on Pointers-Auburn Road at Courses Landing, 1.6 mi (2.6 km) north of Halltown, 2.0 mi (3.2 km) northeast of Slapes Corner, and 2.1 mi (3.4 km) downstream of Major Run.

DRAINAGE AREA.--35.8 mi² (92.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.
SEDIMENT ANALYSES: July and August 1978.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 05...	1310	299	7.7	15.0	1	5.4	3.2	>24000	920	110	32
NOV 02...	1145	298	7.4	14.5	20	6.0	3.2	350	920	95	27
FEB 01...	1300	202	7.1	1.0	10	10.4	1.1	2200	490	69	19
MAR 22...	1220	196	7.7	10.5	35	8.2	5.8	50	>2400	67	18
MAY 04...	1000	245	7.2	15.5	20	8.0	8.3	110	15	--	--
JUN 05...	1230	238	7.4	22.0	10	8.0	6.7	460	130	83	22
JUL 18...	1055	244	7.1	22.0	9	3.2	3.2	1100	23	83	23
AUG 10...	1120	238	7.2	26.0	10	4.9	6.4	1400	490	75	20

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 05...	6.5	16	5.2	90	0	74	.0	25	20	9.5	159
NOV 02...	6.7	16	6.6	82	0	67	--	31	25	--	179
FEB 01...	5.2	7.7	3.5	37	0	30	--	30	14	--	108
MAR 22...	5.3	8.0	4.3	44	0	36	--	31	14	--	117
MAY 04...	--	--	--	51	0	42	--	34	21	--	--
JUN 05...	6.7	10	4.4	55	0	45	--	31	19	--	152
JUL 18...	6.3	10	4.6	--	0	--	--	27	18	--	169
AUG 10...	6.0	9.5	5.3	61	0	50	--	24	18	--	172

01482537 SALEM RIVER AT COURSES LANDING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
05...	31	--	1.6	.08	.50	.80	1.3	3.0	.33	.08	7.1
NOV											
02...	46	--	1.3	.06	.78	1.0	1.8	3.2	.38	.16	12
FEB											
01...	12	--	2.8	.02	.39	.49	.88	3.7	.15	.07	2.8
MAR											
22...	55	--	2.4	.03	.61	.79	1.4	3.8	.28	.02	6.4
MAY											
04...	47	--	2.2	.04	.09	.32	.41	2.6	.30	.07	9.8
JUN											
05...	30	--	2.0	.09	.17	1.2	1.4	3.5	.34	.09	6.0
JUL											
18...	14	36	--	--	.30	.50	.80	2.5	--	--	7.5
AUG											
10...	22	53	--	--	.30	1.5	1.8	3.1	--	--	6.5

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT								
05...	1310	0	1	110	0	0	0	6
MAY								
04...	1000	--	--	--	--	--	--	--

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT								
05...	20	2	150	<.5	5	0	20	5
MAY								
04...	--	--	--	--	--	--	--	0

01482925 ALLOWAY CREEK AT INLET OF ALLOWAY LAKE NEAR ALLOWAY, NJ

LOCATION.--Lat 39°34'39", long 75°20'47", Salem County, Hydrologic Unit 02040206, at bridge on Alloway-Woodstown Road, 1.4 mi (2.3 km) northeast of Alloway, 1.4 mi (2.3 km) northwest of outflow of Sycamore Lake, 1.7 mi (2.7 km) upstream from outflow of Alloway Lake, and 2.5 mi (4.0 km) southeast of Porterstown.

DRAINAGE AREA.--19.4 mi² (50.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
05...	1010	198	7.4	13.5	1	8.0	.8	790	170	69	12
NOV											
02...	0945	195	6.7	12.0	1	4.8	1.6	1100	490	63	11
FEB											
01...	1045	126	5.9	.0	10	10.6	.2	20	270	37	7.2
MAR											
22...	0930	121	6.3	7.5	4	9.7	2.3	20	33	39	7.4
MAY											
03...	1000	160	6.6	12.0	2	9.2	--	140	20	58	11
JUN											
05...	0945	157	6.7	18.0	4	6.3	1.2	790	130	55	10

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE DISSOLVED (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
05...	9.4	5.7	4.3	23	0	19	.2	22	17	5.1	105
NOV											
02...	8.7	5.6	4.7	6	0	5	--	29	19	--	110
FEB											
01...	4.7	3.5	3.1	6	0	5	--	23	9.2	--	80
MAR											
22...	4.9	3.7	3.6	6	0	5	--	25	9.6	--	59
MAY											
03...	7.3	5.1	3.0	13	0	11	--	25	14	--	94
JUN											
05...	7.2	4.8	3.8	17	0	14	--	24	15	--	108

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
05...	3	3.0	.01	.03	.30	.33	3.3	.06	.03	5.9
NOV										
02...	4	1.6	.02	.01	.43	.44	2.0	.03	.01	8.4
FEB										
01...	4	.40	.00	.03	.24	.27	.67	.07	.02	1.4
MAR										
22...	3	2.2	.02	.06	.54	.60	2.8	.04	.01	4.4
MAY										
03...	0	3.0	.01	.01	.38	.39	3.4	.02	.00	4.7
JUN										
05...	14	2.6	.03	.10	.64	.74	3.3	.06	.03	5.8

01482925 ALLOWAY CREEK AT INLET OF ALLOWAY LAKE NEAR ALLOWAY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	--	--	.95	.05	1.8	.90	2.7	3.7	.30	.02	8.9
NOV 30...	--	--	1.2	.01	.54	.44	.98	2.2	.08	.01	9.0
FEB 16...	--	--	--	--	--	--	--	--	--	--	1.9
APR 05...	--	--	.89	.01	.94	.46	1.4	2.3	.16	.02	6.0
MAY 08...	--	--	.67	.02	.93	.57	1.5	2.2	.17	.01	10
JUN 21...	--	--	.67	.05	1.1	.80	1.9	2.6	.11	.02	8.5
JUL 19...	16	.16	--	--	--	--	--	--	--	--	8.2
AUG 15...	10	.49	--	--	.60	.50	1.1	--	--	--	9.5

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 05...	1010	0	0	10	0	0	0	4

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 05...	50	0	40	<.5	4	0	10	6

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, NY, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, NY. DRAINAGE AREA, 371 mi² (961 km²). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 15, 1954. Usable capacity 140,190 mil gal (530.6 hm³) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm³); at minimum operating level, 9,609 mil gal (36.37 hm³); at still of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm³); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm³). Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see Delaware River Basin, diversions), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply and Department of Water Resources, City of New York.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 152,866 mil gal (578.6 hm³) Jan. 10, elevation, 1,281.65 ft (390.647 m); minimum observed, 112,368 mil gal (425.3 hm³) Sept. 30, elevation, 1,258.05 ft (384.454 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm³) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm³) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, NY, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, NY. DRAINAGE AREA, 454 mi² (1,176 km²). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD-NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 30, 1963, usable capacity 95,706 mil gal (362.2 hm³) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm³); at minimum operating level, 2,912 mil gal (11.02 hm³); at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm³); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm³). Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see Delaware River Basin, diversion); is released in Delaware River for downstream low flow augmentation as directed by Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to Jan. 29. 1964. Records furnished by Board of Water Supply, City of New York.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 105,362 mil gal (398.8 hm³) Jan. 10, elevation, 1,154.19 ft (351.797 m); minimum observed, 69,071 mil gal (261.4 hm³) Sept. 30, elevation, 1,129.07 ft (344.141 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 108,116 mil gal (409.2 hm³) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm³) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

01428900 PROMPTON RESERVOIR.--Lat 41°35'18", long 75°19'39", Wayne County, PA, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi (0.5 km) north of Prompton, 0.4 mi (0.6 km) upstream from highway bridge and 0.5 mi (0.8 km) upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi² (154 km²). PERIOD OF RECORD, December 1960 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungaged bedrock spillway at elevation 1,205.00 ft (367.284 m); storage began July 1960. Capacity at elevation 1,205.00 ft (367.284 m) is 51,700 acre-ft (63.7 hm³). Ordinary minimum (conservation) pool elevation, 1,125.00 ft (342.900 m) capacity, 3,420 acre-ft (4.22 hm³). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 5,330 acre-ft (6.57 hm³) Mar. 28, elevation, 1,131.20 ft (344.79 m); minimum, 3,420 acre-ft (4.22 hm³) July 2, 3, 9-31, elevation, 1,125.00 ft (342.900 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,170 acre-ft (10.1 hm³) June 29, 1973, elevation, 1,138.40 ft (346.984 m); minimum (after first filling), 2,920 acre-ft (3.60 hm³) Sept. 27, 1964, elevation, 1,123.20 ft (342.351 m).

01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15,55", Wayne County, PA, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.45 mi (0.72 km) upstream from unnamed tributary, 2.4 mi (3.9 km) north of Honesdale, and 2.9 mi (4.7 km) upstream from mouth. DRAINAGE AREA, 64.5 mi² (167.1 km²). PERIOD OF RECORD, October 1959 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,053.00 ft (320.954 m); storage began in October 1959. Capacity at elevation 1,053.00 ft (320.954 m) is 24,500 acre-ft (30.2 hm³). Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 2,360 acre-ft (2.91 hm³) Jan. 27, elevation, 1,002.28 ft (305.495 m); no storage many times.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 6,520 acre-ft (8.04 hm³) June 19, 1973, elevation 1,017.40 ft (310,104 m); no storage many times.

01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, PA, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek at Wilsonville, 1.2 mi (1.9 km) south of Hawley and 1.5 mi (2.4 km) upstream from mouth. DRAINAGE AREA, 228 mi² (591 km²). PERIOD OF RECORD, January 1926 to current year. GAGE, vertical staff. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pennsylvania Power and Light Co.).

Reservoir formed by concrete gravity-type and earthfill dam with concrete spillway at elevation 1,176.00 ft (358.445 m) in twc sections. Spillway equipped with roller gate, 14 ft high (4.267 m) on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation in January 1926. Total capacity at elevation 1,190.00 ft (362.712 m), top of gates, is 209,300 acre-ft (258 hm³) of which 157,800 acre-ft (195 hm³) is controlled storage above elevation 1,160.00 ft (353.568 m), minimum pool. Reservoir is used for generation of hydrolelectric power. Figures given herein represent usable contents. Records furnished by Pennsylvania Power and Light Co.

EXTREMES FOR CURRENT YEAR: Maximum contents, 139,360 acre-ft (171.8 hm³) May 30, June 5, elevation, 1,186.80 ft (361.737 m); minimum, 60,240 acre-ft (74.3 hm³) Mar. 14, elevation, 1,172.20 ft (357.287 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 178,200 acre-ft (220 hm³) Aug. 19-21, 1955, elevation, 1,193.45 ft (363.764 m); minimum (after first filling), 12,280 acre-ft (15.1 hm³) Mar. 28, 1958, elevation, 1,162.60 ft (354.360 m).

RESERVOIR IN DELAWARE RIVER BASIN--Continued

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, NY. DRAINAGE AREA, 118 mi² (306 km²) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft (308 m).

Reservoir is formed by an earthfill dam; storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft³ (40.7 hm³) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft³ (6.02 hm³). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,403.7 mil ft³ (39.8 hm³) May 19, elevation, 1,070.4 ft (326.26 m); minimum, 645.4 mil ft³ (18.3 hm³) Mar. 13, elevation, 1,048.3 ft (319.52 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft³ (41.4 hm³) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), 141.4 mil ft³ (4.00 hm³) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, NY. DRAINAGE AREA, 23.2 mi² (60.1 km²). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959(M). Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926; storage began Jan. 13, 1926. Usable capacity, 1,098.2 mil ft³ (31.1 hm³) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and operating pool, about 26.8 mil ft³ (0.759 hm³). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 885.9 mil ft³ (25.1 hm³) Feb. 6, elevation, 1,213.6 ft (369.91 m); minimum observed, 74.4 mil ft³ (2.11 hm³) Aug. 2, elevation, 1,175.5 ft (358.29 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft³ (33.2 hm³) July 20, 1945, elevation, 1,222.0 ft (372.47 m). minimum observed (after first filling), 26.8 mil ft³ (0.759 hm³) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, NY. DRAINAGE AREA, 6.46 mi² (16.7 km²) excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WRD-NY 1975: 1974(m). Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft (318.0 m).

Reservoir is formed by a concrete gravity-type dam; storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft³ (3.85 hm³) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft³ (0.185 hm³). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 138.6 mil ft³ (3.93 hm³) Mar. 31, elevation, 1,072.3 ft (326.84 m); minimum observed, 73.5 mil ft³ (2.08 hm³) Feb. 15, elevation, 1,063.4 ft (324.12 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft³ (4.12 hm³) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about 6.54 mil ft³ (0.185 hm³) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, NY, Hydrologic Unit 02040104, at a gate-house at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, NY. DRAINAGE AREA, 91.8 mi² (238 km²). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 hm³) between minimum operating level, elevation, 1,319.0 ft (402 m) and crest of spillway, elevation, 1,440.0 ft (438.9 m). Capacity at crest of spillway, 37,146 mil gal (140.6 hm³); at minimum operating level, 2,205 mil gal (8.35 hm³); dead storage below diversion sill and outlet sill at elevation 1,314.0 ft (400.5 m), 1,680 mil gal (6.36 hm³). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see Delaware River Basin, diversions); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Board of Water Supply, and Department of Water Resources, City of New York.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,514 mil gal (142.0 hm³) May 18, 19, elevation, 1,440.74 ft (439.138 m); minimum observed, 16,504 mil gal (62.47 hm³) Sept. 30, elevation, 1,388.38 ft (423.178 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm³) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 hm³) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, PA, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft (670 m) downstream from Bear Creek and 5 mi (8 km) northwest of White Haven. DRAINAGE AREA, 289 mi² (749 km²). PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft (441.96 m); storage began Feb. 17, 1961; water in reservoir first reached conservation pool elevation in June 1961. Total capacity at elevation 1,450.0 ft (441.96 m) is 110,700 acre-ft (136 hm³) of which 108,700 acre-ft (134 hm³) is controlled storage above elevation 1,300.0 ft or 396.24 m (conservation pool). Dead storage is 2,000 acre-ft (2.47 hm³). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow regulated by three gates and low flow by-pass system. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 22,470 acre-ft (27.7 hm³) Mar. 29, elevation, 1,371.75 ft (418.109 m); minimum, 1,390 acre-ft (1.71 hm³) Dec. 4, elevation, 1,293.70 ft (394.320 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 42,600 acre-ft (52.5 hm³) June 26, 1972, elevation, 1,398.20 ft (426.171 m); minimum (after establishment of conservation pool), 1,390 acre-ft (1.71 hm³) Dec. 4, 1977, elevation, 1,293.70 ft (394.320 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, PA, Hydrologic Unit 02040106, at dam on Wild Creek near Hatchery, PA, 0.7 mi (1.1 km) upstream from Hatchery, 2.6 mi (4.2 km) upstream from Wild Creek Dam, 4.4 mi (7.1 km) upstream from mouth, and 10 mi (16 km) northeast of Palmerton. DRAINAGE AREA, 16.5 mi² (42.7 km²). PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Bethlehem).

Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation 1,000.00 ft (304,800 m); storage began in October 1958. Capacity at elevation 1,000.00 ft (304.800 m) is 19,980 acre-ft (24.6 hm³). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by city of Bethlehem. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin into Wild Creek basin.

EXTREMES FOR CURRENT YEAR: Maximum contents, 20,520 acre-ft (25.3 hm³) Mar. 28, elevation, 1,000.92 ft (305.080 m); minimum, 14,890 acre-ft (18.4 hm³) Oct. 1, elevation, 988.05 ft (301.158 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 20,520 acre-ft (25.3 hm³) Mar. 28, 1978, elevation, 1,000.92 ft (305.080 m); minimum, 176 acre-ft (0.217 hm³) Oct. 6, 1965, elevation, 902.40 ft (275.052 m).

01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, PA, Hydrologic Unit 02040106, at dam on Wild Creek near Hatchery, PA, 1.6 mi (2.6 km) upstream from mouth, 2.4 mi (3.9 km) south of Hatchery, and 7.5 mi (12 km) northeast of Palmerton. DRAINAGE AREA, 22.2 mi² (57.5 km²). PERIOD OF RECORD, January 1941 to current year. Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Bethlehem).

Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 820.00 ft (249.936 m); storage began January 27, 1941; water in reservoir first reached minimum pool elevation in February 1941. Total capacity at elevation 820.00 ft (249.936 m) is 12,500 acre-ft (15.4 hm³) of which 12,000 acre-ft (15 hm³) is controlled storage. Reservoir is used for municipal water supply. Figures given herein represent usable contents. Regulation is accomplished by valves on pipe through dam. Records furnished by city of Bethlehem. Since October 1969 the basin upstream has received diversion from Tunkhannock Creek basin.

EXTREMES FOR CURRENT YEAR: Maximum contents, 12,350 acre-ft (15.2 hm³) Mar. 28, elevation, 821.18 ft (250.296 m); minimum, 11,540 acre-ft (14.2 hm³) Sept. 30, elevation, 818.02 ft (249.332 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 12,880 acre-ft (15.9 hm³) May 23, 1942, elevation, 822.93 ft (250.829 m); minimum (after first filling), 2,680 acre-ft (3.30 hm³) Nov. 15, 1966, elevation, 774.10 ft (235.946 m).

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, PA, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.45 mi (0.72 km) upstream from gaging station on Pohopoco Creek, 0.55 mi (0.88 km) upstream from Sawmill Run and 2.3 mi (3.7 km) northeast of Parryville. DRAINAGE AREA, 96.3 mi² (249.4 km²). PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, partially lined spillway at elevation 651.00 ft (198.425 m); storage began Feb. 8, 1971. Capacity at elevation 651.00 ft (198.425 m) is 68,300 acre-ft (84.2 hm³). Ordinary minimum (conservation) pool elevation, 628.00 ft (191.414 m), capacity, 41,250 acre-ft (50.9 hm³). Dead storage is 1,390 acre-ft (1.71 hr³). Reservoir is used for recreation, flood control, low flow augmentation and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system and two flood-control gates. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents 48,630 acre-ft (60.0 hm³) Mar. 31, elevation, 635.30 ft (193.639 m); minimum, 37,210 acre-ft (45.9 hm³) Feb. 21-25, elevation, 623.60 ft (190.073 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents 49,730 acre-ft (61.3 hm³) Jan. 29, 1976, elevation, 636.30 ft (193.944 m); minimum, 136 acre-ft (0.168 hm³) Feb. 8, 1971, elevation, 516.20 ft (157.338 m).

01455400 LAKE HOPATCONG.--Lat 40°55'00", long 74°39'50", Morris County, Hydrologic Unit 02040105, in gatehouse of Lake Hopatcong Dam on Musconetcong River at Landing. DRAINAGE AREA, 25.6 mi² (66.3 km²). PERIOD OF RECORD, February 1887 to current year. Monthend contents only prior to October 1950, published in WSP 1302. GAGE, water-stage recorder. Prior to June 24, 1928, daily readings obtained by measuring from high-water mark to water surface converted to gage height, present datum. Datum of gage is 914.57 ft (278.761 m).

Lake is formed by concrete spillway and earthfill dam completed about 1828. Crest of spillway was lowered 0.11 ft (0.034 m) in 1925. Usable capacity, 7,459,000,000 gal (28.23 hm³) between (gage height -2.6 ft or -0.792 m, sills of gates and 9.00 ft or 2.743 m, crest of spillway). Flow regulated by four gates (3 by 5 ft or 0.914 by 1.524 m), also by one 24-inch (0.610 m) pipe with gate valve to recreation fountain 250 ft (76.2 m) downstream from dam. Dead storage, about 8,117,000,000 gal (30.72 hm³). Figures given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,100,000,000 gal (30.66 hm³) May 18, gage height, 9.77 ft (2.978 m); minimum contents, 5,319,000,000 gal (20.13 hm³) Dec. 31, gage height, 6.34 ft (1.932 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,532,000,000 gal (32.29 hm³) June 24, 1972, gage height, 10.27 ft (3.130 m); minimum, 1,525,000,000 gal (5.77 hm³) Dec. 29, 1960, gage height, 0.65 ft (0.198 m).

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30". Schuylkill County, PA, Hydrologic Unit 02040106, at dam on Still Creek, 1 mi (1.6 km) upstream from mouth and 2.3 mi (3.7 km) north of Hometown, PA. DRAINAGE AREA, 8.5 mi² (22.0 km²). PERIOD OF RECORD, January 1933 to current year. Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Panther Valley Water Co.).

Reservoir formed by earth fill dam, with ungated concrete spillway at elevation 1,182.00 ft (360.274 m); storage began in February 1933. Capacity at elevation, 1,182.00 ft (360.274 m) is 8,290 acre-ft (10.2 hm³). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Panther Valley Water Co.

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,460 acre-ft (10.4 hm³) Mar. 27, elevation, 1,182.56 ft (360.444 m); minimum, 7,310 acre-ft (9.01 hm³) Sept. 30, elevation, 1,178.58 ft (359.231 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,570 acre-ft (10.6 hm³) Oct. 15, 1955, elevation, 1,182.92 ft (360.554 m), but may have been greater during 1950 and 1951 water years; minimum (after initial filling), 588 acre-ft (0.725 hm³) Dec. 8, 1944, elevation, 1,136.70 ft (346.466 m).

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, PA, Hydrologic Unit 02040203, at dam on Perkiomen Creek at Green Lane, PA, 0.4 mi (0.6 km) west of Green Lane and 2.1 mi (3.4 km) upstream from Unami Creek. DRAINAGE AREA, 70.9 mi² (183.6 km²). PERIOD OF RECORD, December 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Philadelphia Suburban Water Co.).

Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation 286.00 ft (87.173 m); storage began December 21, 1956. Capacity at spillway level, elevation 286.00 ft (87.173 m), 13,430 acre-ft (16.6 hm³). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Philadelphia Suburban Water Co.

EXTREMES FOR CURRENT YEAR: Maximum contents, 14,870 acre-ft (18.3 hm³) Jan. 25, elevation, 287.62 ft (87.667 m); minimum, 10,940 acre-ft (13.5 hm³) Oct. 19, elevation, 282.85 ft (86.216 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,030 acre-ft (21.0 hm³) June 23, 1972, elevation, 290.05 ft (88.407 m); minimum (after first filling), 1,270 acre-ft (1.57 hm³) Aug. 25, 1957, elevation, 251.60 ft (76.688 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01416900 PEPACTON RESERVOIR ‡			01424997 CANNONSVILLE RESERVIOR ‡			01428900 PROMPTON RESERVOIR †		
Sept. 30	1,263.67	121,384	-	1,136.85	79,435	-	1,128.74	4,540	-
Oct. 31	1,279.24	148,402	+1,350	1,150.80	99,905	+1,020	1,125.67	3,610	-15.1
Nov. 30	1,280.15	150,076	+86.3	1,151.36	100,807	+46.5	1,125.87	3,660	+.8
Dec. 31	1,280.09	149,966	-5.49	1,151.19	100,533	-13.7	1,125.58	3,580	-1.3
CAL YR 1977	-	-	+108	-	-	+8.44	-	-	0
Jan. 31	1,280.45	150,632	+33.2	1,151.68	101,322	+39.4	1,126.66	3,880	+4.9
Feb. 28	1,278.36	146,791	-212	1,150.50	99,422	-105	1,125.63	3,600	-5.0
Mar. 31	1,280.63	150,966	+208	1,152.43	102,529	+155	1,129.82	4,880	+20.8
Apr. 30	1,279.75	149,339	-83.9	1,150.85	99,985	-131	1,125.80	3,640	-20.8
May 31	1,279.72	149,284	-2.74	1,150.65	99,663	-16.1	1,125.90	3,670	+.5
June 30	1,277.10	144,504	-247	1,147.35	94,587	-262	1,125.05	3,430	-4.0
July 31	1,271.24	134,143	-517	1,137.30	80,056	-725	1,125.23	3,480	+.8
Aug. 31	1,265.14	123,805	-516	1,136.05	78,329	-86.2	1,125.52	3,570	+1.5
Sept. 30	1,257.75	111,898	-614	1,128.60	68,473	-508	1,125.35	3,520	-.8
WTR YR 1978	-	-	-40.2	-	-	-46.5	-	-	-1.4

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft³/s)
	01429400 GENERAL EDGAR JADWIN RESERVOIR †			01431700 LAKE WALLENPAUPACK †			01433000 SWINGING BRDIGE RESERVOIR †		
Sept. 30	977.21	0	-	1,174.10	70,120	-	1,067.2	1,276	-
Oct. 31	976.50	0	0	1,174.30	71,160	+16.9	1,067.5	1,218	-21.6
Nov. 30	977.29	0	0	1,180.00	101,600	+511.6	1,067.0	1,268	+19.3
Dec. 31	977.16	0	0	1,181.70	110,850	+150.4	1,063.2	1,124	-53.5
CAL YR 1977	-	-	0	-	-	+12.0	-	-	-0.3
Jan. 31	977.81	0	0	1,182.60	115,800	+80.5	1,068.5	1,327	-75.6
Feb. 28	975.90	0	0	1,174.20	70,640	-813.1	1,050.4	705	-257
Mar. 31	984.26	213	+3.5	1,181.80	111,400	+662.9	1,069.0	1,347	+240
Apr. 30	976.38	0	-3.6	1,182.70	116,350	+83.2	1,065.5	1,210	-52.7
May 31	976.97	0	0	1,186.70	138,790	+364.9	1,068.1	1,311	+37.6
June 30	975.37	0	0	1,184.80	128,080	-180.0	1,063.7	1,143	-64.9
July 31	975.96	0	0	1,181.90	111,950	-262.3	1,068.7	1,335	+71.7
Aug. 31	976.18	0	0	1,180.80	105,920	-98.1	1,067.0	1,268	-25.1
Sept. 30	974.68	0	0	1,178.90	95,660	-172.4	1,065.0	1,191	-29.6
WTR YR 1978	-	-	0	-	-	+35.3	-	-	-2.7

Date	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft³/s)
	01433100 TORONTO RESERVOIR †			01433200 CLIFF LAKE RESERVOIR †			01435900 NEVERSINK RESERVOIR ‡		
Sept. 30	1,195.2	404	-	1,067.8	103	-	1,392.86	17,928	-
Oct. 31	1,202.9	590	+69.1	1,066.6	94.4	-3.2	1,417.44	26,981	+452
Nov. 30	1,197.0	445	-55.8	1,070.1	120	+10.1	1,422.84	29,244	+117
Dec. 31	1,204.2	624	+66.7	1,065.4	85.4	-13.1	1,430.10	32,446	+160
CAL YR 1977	-	-	+13.1	-	-	-.3	-	-	+36.8
Jan. 31	1,212.8	862	+89.0	1,069.0	112	+9.9	1,432.10	33,365	+45.9
Feb. 28	1,206.0	671	-78.9	1,066.7	95.1	-6.9	1,415.41	26,156	-398
Mar. 31	1,187.4	252	-156	1,072.3	139	+16.2	1,412,35	24,938	-60.8
Apr. 30	1,188.4	270	+6.8	1,069.7	117	-8.2	1,429.08	31,983	+363
May 31	1,190.4	306	+13.7	1,071.4	131	+5.2	1,438.70	36,506	+226
June 30	1,184.4	202	-40.3	1,064.8	82.4	-18.8	1,433.94	34,224	-118
July 31	1,175.6	75.5	-47.1	1,068.7	110	+10.2	1,425.57	30,424	-190
Aug. 31	1,176.1	81.3	+2.2	1,066.9	96.5	-4.9	1,408.00	23,260	-358
Sept. 30	1,172.2	94.9	+5.2	1,064.9	83.0	-5.2	1,387.89	16,353	-356
WTR YR 1978	-	-	-9.8	-	-	-.6	-	-	-6.68

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01447780 FRANCIS E. WALTER LAKE ‡			01449400 PENN FOREST RESERVOIR †			01449700 WILD CREEK RESERVOIR †		
Sept. 30	1,311.66	3,300	-	988.16	14,930	-	818.23	11,600	-
Oct. 31	1,305.17	2,530	-12.5	993.76	17,210	+37.1	818.21	11,590	+.2
Nov. 30	1,300.63	2,060	-7.9	1,000.25	20,120	+48.9	820.28	12,080	+8.2
Dec. 31	1,300.88	2,090	+.5	1,000.33	20,170	+.8	820.38	12,110	+.5
CAL YR 1977	-	-	-.2	-	-	+.2	-	-	+.2
Jan. 31	1,314.65	3,700	+26.2	1,000.34	20,180	+.2	820.37	12,110	0
Feb. 28	1,300.38	2,040	-29.9	1,000.07	20,020	-2.9	819.16	11,830	-5.0
Mar. 31	1,343.10	9,660	+123.9	1,000.55	20,300	+4.6	820.69	12,210	+6.2
Apr. 30	1,300.78	2,080	-127.4	1,000.06	20,010	-4.9	820.01	12,000	-3.5
May 31	1,299.19	1,910	-2.8	1,000.20	20,090	+1.3	820.31	12,090	+1.5
June 30	1,300.17	2,020	+1.8	1,000.10	20,040	-.8	819.78	11,960	-2.2
July 31	1,299.13	1,900	-2.0	997.73	18,960	-17.6	819.39	11,880	-1.3
Aug. 31	1,299.29	1,920	+.3	996.49	18,400	-9.1	819.36	11,870	-.2
Sept. 30	1,298.44	1,830	-1.5	994.26	17,420	-16.5	818.02	11,540	-5.5
WTR YR 1978	-	-	-2.0	-	-	+3.4	-	-	-.1

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Gage Height (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01449790 BELTZVILLE LAKE†			01455400 LAKE HOPATCONG †			01469200 STILL CREEK RESERVOIR †		
Sept. 30	625.08	38,520	-	8.51	7,053	-	1,176.00	6,600	-
Oct. 31	627.29	40,580	+33.5	9.07	7,518	+23.2	1,178.42	7,270	+10.9
Nov. 30	629.36	42,560	+33.3	8.37	6,938	-29.9	1,182.12	8,320	+17.6
Dec. 31	627.30	40,580	-32.2	6.34	5,319	-80.8	1,182.08	8,310	-.2
CAL YR 1977	-	-	-1.9	-	-	-2.3	-	-	+.1
Jan. 31	628.90	42,100	+24.7	7.45	6,192	+43.6	1,182.17	8,340	+.5
Feb. 28	623.78	37,360	-85.3	7.34	6,104	-4.9	1,182.00	8,290	-.9
Mar. 31	634.89	48,180	+176.0	9.19	7,619	+75.6	1,182.38	8,400	+1.8
Apr. 30	627.85	41,110	-118.8	9.17	7,602	-.9	1,182.02	8,290	-1.8
May 31	628.04	41,290	+2.9	9.49	7,872	+13.5	1,182.08	8,310	+.3
June 30	627.87	41,130	-2.7	9.04	7,493	-19.5	1,181.75	8,210	-1.7
July 31	627.66	40,930	-3.3	8.89	7,368	-6.2	1,181.25	8,070	-2.3
Aug. 31	627.83	41,090	+2.6	8.94	7,409	+2.0	1,180.17	7,750	-5.2
Sept. 30	627.28	40,570	-8.7	8.75	7,252	-8.1	1,178.58	7,310	-7.4
WTR YR 1978	-	-	+2.8	-	-	+.8	-	-	+1.0

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01472200 GREEN LANE RESERVOIR †		
Sept. 30	285.15	12,680	-
Oct. 31	285.90	13,340	+10.7
Nov. 30	286.82	14,160	+13.8
Dec. 31	286.06	13,490	-10.9
CAL YR 1977	-	-	+.2
Jan. 31	286.15	13,560	+1.1
Feb. 28	286.06	13,490	-1.3
Mar. 31	286.19	13,600	+1.8
Apr. 30	285.99	13,420	-3.0
May 31	286.05	13,480	+1.0
June 30	285.95	13,390	-1.5
July 31	286.00	13,430	+.7
Aug. 31	286.07	13,490	+1.0
Sept. 30	285.65	13,120	-6.2
WTR YR 1978	-	-	+.6

‡ Elevation at 0900 hours on first day of following month.
† Elevation or gage height at 2400 hours.
a Observed.
e Estimated.
* Elevation at 0900 hours.

DIVERSIONS AND WITHDRAWALS

WITHDRAWALS FROM THE DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir, NY, on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply and Department of Water Resources, city of New York. REVISIONS (Water Years).--WRD-NY 1972: 1970.

01423900 Diversion from Cannonsville Reservoir, NY, on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Jan. 29, 1964. Records furnished by Board of Water Supply, city of New York.

01435800 Diversion from Neversink Reservoir, NY, on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Dec. 3, 1953. Records furnished by Board of Water Supply and Department of Water Resources, city of New York.

01436520 Village of Woodbridge, NY, diverts water from East Pond Reservoir, tributary to Neversink River, for municipal supply outside of basin. Records furnished by Delaware River Basin Commission.

01437360 Diversion from Bear Swamp Reservoir, NY, tributary to Neversink River by the Otisville, New York State Training School for water supply outside of basin. Records furnished by Delaware River Basin Commission.

01447750 Diversion from Bear Creek, PA, tributary to Lehigh River, by Bear Creek Gas and Water Company for water supply outside of basin. Records furnished by Delaware River Basin Commission.

01448830 Diversion from Hazle Creek Watershed by Hazelton Joint Sewerage Authority for municipal water supply. Waste effluent from the municipal water system is released to the Susquehanna River. Records furnished by Delaware River Basin Commission.

01460500 Diversion by Delaware and Raritan Canal from Delaware River at Raven Rock, for municipal and industrial use. Water is discharged into the Raritan River at New Brunswick. Records of discharge are collected on the Delaware and Raritan Canal at Kingston, (see station 01460500).

01467480 Diversion from Mud Run, PA, tributary to Schuylkill River, by Mohonony Township Authority for Municipal use outside of basin. Records furnished by Delaware River Basin Commission.

WITHDRAWALS BY CITY OF NEW YORK

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Month	PEPACTON RESERVOIR	CANNONSVILLE RESERVOIR	NEVERSINK RESERVOIR
October	654	420	149
November	742	83.9	251
December	750	.45	211
CAL YR 1977	650	209	251
January	571	0	406
February	440	0	528
March	749	.45	307
April	746	0	190
May	574	270	131
June	635	211	284
July	751	311	228
August	747	.45	373
September	735	.45	352
WTR YR 1978	676	109	282

MISCELLANEOUS WITHDRAWALS FROM BASIN

	EAST POND RESERVOIR	BEAR SWAMP RESERVOIR	BEAR CREEK	HAZLE CREEK	DELAWARE & RARITAN CANAL	MUD RUN
October	.5	.3	0	3.9	82.5	.8
November	.5	.3	0	3.9	91.9	.8
December	.5	.3	0	3.9	99.0	.8
CAL YR 1977	.5	.3	.5	3.9	88.9	.2
January	.5	.3	0	3.9	96.3	.8
February	.5	.3	0	3.9	87.9	.8
March	.5	.3	0	3.9	102	.8
April	.5	.3	0	3.9	105	.8
May	.5	.3	0	3.9	102	.8
June	.5	.3	0	3.9	87.9	.8
July	.5	.3	0	3.9	70.7	.8
August	.5	.3	0	3.9	71.8	.8
September	.5	.3	0	3.9	74.3	.8
WTR YR 1978	.5	.3	0	3.9	89.3	.8

DIVERSIONS AND WITHDRAWALS--Continued

DIVERSIONS WITHIN THE DELAWARE RIVER BASIN

01463480 Diversion from the Delaware River at the Morrisville Filtration Plant for municipal supply, by the Borough of Morrisville, PA. The water withdrawn at this site is returned to the basin after treatment, only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Borough of Morrisville, PA.

01463500 Diversion from the Delaware River just above the Trenton gaging station for municipal supply by the city of Trenton, NJ. The water being withdrawn is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records furnished by the city of Trenton.

01467030 Diversion from the Delaware River at the Torresdale Intake for municipal supply, by the city of Philadelphia, PA. The water being withdrawn at this intake is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Delaware River Basin Commission.

01474500 Diversion from the Schuylkill River at the Belmont and Queen Lanes Intakes for municipal supply, by the city of Philadelphia, PA. The water being withdrawn at these intakes is returned after treatment within the Delaware River basin only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Delaware River Basin Commission.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Month	WITHDRAWAL BOROUGH OF MORRISVILLE	WITHDRAWAL CITY OF TRENTON	WITHDRAWAL CITY OF PHILADELPHIA		
			SCHUYLKILL RIVER		DELAWARE RIVER
			BELMONT	QUEEN LANE	TORRESDALE
October	6.3	52.9	108	158	318
November	6.2	51.7	104	157	321
December	6.4	51.0	108	167	334
CAL YR 1977	6.6	53.5	122	173	354
January	6.4	51.6	111	171	338
February	6.4	52.0	112	175	352
March	7.4	49.7	110	170	341
April	7.5	48.6	101	160	340
May	7.3	48.7	108	163	327
June	7.7	56.1	119	172	366
July	7.7	53.7	122	181	375
August	7.8	54.8	122	177	382
September	7.6	50.9	109	150	357
WTR YR 1978	7.0	51.8	111	167	346

DIVERSIONS IMPORTED INTO BASIN

01367630 Water diverted from Morris Lake, tributary to the Wallkill River (Hudson River basin), by the Newton Water and Sewer Authority for municipal use. After use the water is released into the Paulins Kill (Delaware River basin). Records furnished by the Delaware River Basin Commission.

01578420 Water diverted from West Branch Octoraro Creek (Susquehanna River basin) at the McCray Plant of the Octoraro Water Co., for municipal use. After use the water is released into the Delaware River basin. Records furnished by the Delaware River Basin Commission.

01578450 Water diverted from Octoraro Lake (Susquehanna River basin) by Chester Water Authority for municipal use. After use the water is released into the Delaware River basin. Records furnished by the Delaware River Basin Commission.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Month	MORRIS LAKE	OCTORARO CREEK	
		OCTORARO WATER CO.	CHESTER WATER AUTHORITY
October	1.7	2.3	42.2
November	1.7	2.2	42.9
December	1.7	2.2	35.0
CAL YR 1977	1.5	2.1	45.6
January	1.7	1.9	44.2
February	1.7	2.2	46.9
March	1.9	2.2	45.2
April	1.9	2.5	43.3
May	1.2	2.3	44.7
June	1.2	2.0	44.2
July	1.2	2.2	44.6
August	1.4	2.2	49.5
September	1.2	2.2	45.3
WTR YR 1978	1.5	2.2	44.0

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made a low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1978

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Maurice River basin				
01411450	Still Run at Aura, NJ	Lat 39°40'23", long 75°07'50", Gloucester County, at bridge on Aura-Glassboro Road, 0.4 mi (0.6 km) east of Aura, 1.0 mi (1.6 km) upstream of Silver Lake, and 2.6 mi (4.2 km) southeast of Glassboro.	3.21 (8.31 km^2)	1966, 1976-78	9-14-78	1.3
01411456	Little Ease Run near Clayton, NJ	Lat 39°39'32", long 75°04'04", Gloucester County, at bridge on Academy Road, 0.9 mi (1.4 km) west of Fries Mill, 1.3 mi (2.1 km) east of Clayton, and 1.4 mi (2.3 km) downstream from Beaverdam Branch.	9.77 (25.30 km^2)	1966, 1976-78	9-13-78	1.8
01411462	Scotland Run at Franklinville, NJ	Lat 39°37'05", long 75°03'36", Gloucester County, at bridge on State Route 538, 0.9 mi (1.4 km) east of Franklinville, 2.7 mi (4.3 km) upstream of Malaga Lake, and 2.8 mi (4.5 km) southeast of Clayton.	14.8 (38.3 km^2)	1976-78	9-13-78	17
01411700	Muddy Run at Centerton, NJ	Lat 39°31'28", long 75°10'09", Salem County, 180 ft (55 m) downstram of unnamed right bank tributary, 200 ft (60 m) downstream of birdge on New Jersey Routes 540 and 553 in Centerton, and 4.7 mi (7.6 km) south of Elmer.	37.7 (97.6 km^2)	1976-78	9-14-78	22
01411850	Mill Creek near Millville, NJ	Lat 39°25'33", long 75°05'11", Cumberland County, at bridge on dirt road, 1.2 mi (1.9 km) upstream from mouth, 3.3 mi (5.3 km) northwest of Millville.	15.1 (39.1 km^2)	1973-78	9-13-78	9.8
01411950	Buckshutem Creek near Laurel Lake, NJ	Lat 39°20'51", long 75°03'47", Cumberland County, at bridge on State Route 555 (Dividing Creek Road), 1.3 mi (2.1 km) upstream of Gravelly Run, 1.8 mi (2.9 km) west of Laurel Lake, and 3.8 mi (5.2 km) southwest of Millville.	16.1 (41.7 km^2)	1976-78	9-13-78	2.4
01412120	Muskee Creek near Port Elizabeth, NJ	Lat 39°18'56", long 74°57'31", Cumberland County, at bridge on State Route 548, 1.3 mi (2.1 km) east of Port Elizabeth, 1.9 mi (3.1 km) upstream from mouth, and 2.8 mi (4.5 km) northeast of Mauricetown.	13.1 (33.9 km^2)	1969, 1976-78	9-13-78	12
		Cohansey River basin				
01412405	Cohansey River near Beals Mill, NJ	Lat 39°31'29", long 75°15'59", Cumberland County, at bridge on Beals Mill Road, 1,300 ft (4,000 m) downstream of Beals Mill and Bostwick Lake, and 1.6 mi (3.0 km) west of Deerfield Street.	9.44 (24.4 km^2)	1976-78	9-14-78	4.6

Discharge measurements made at low-flow partial-record stations during water year 1978--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Cohansey River basin--Continued				
01413010	Barrett Run near Bridgeton, NJ	Lat 39°26'58", long 75°15'42", Cumberland County, at bridge on Mary Elmer Drive, 1,800 ft (550 m) upstream from Mary Elmer Lake, and 2.1 mi (3.4 km) northwest of the intersection of State Routes 49 and 77 in Bridgeton.	7.02 (18.18 km^2)	1966, 1976-78	9-14-78	3.0
01413020	Indian Fields Branch at Bridgeton, NJ	Lat 39°26'04", long 75°13'08", Cumberland County, at bridge on Manheim Avenue in Bridgeton, 1,300 ft (4,000 m) upstream of East Lake.	4.64 (12.02 km^2)	1976-78	9-14-78	6.8
		Stow Creek basin				
01413080	Raccoon Ditch at Davis Mill, NJ	Lat 39°25'26", long 75°22'01", Cumberland County, at bridge on County Highway 90 at Davis Mill, 2.8 mi (4.5 km) upstream from mouth and 4.3 mi (6.9 km) southwest of Shiloh.	3.19 (8.26 km^2)	1976-78	9-14-78	3.9
		Delaware River basin				
01439830	Big Flat Brook at Tuttles Corner, NJ	Lat 41°12'00", long 74°48'56", Sussex County, at bridge on State Route 521, 0.7 mi (1.1 km) west of its intersection with U.S. Route 206 at Tuttles Corner, 1.2 mi (1.9 km) south of Layton, and 2.0 mi (3.2 km) above Little Flat Brook.	29.4 (76.1 km^2)	1964, 1970-1973, 1978	5-04-78 8-15-78	37 11
01443450	Paulins Kill near Newton, NJ	Lat 41°04'59", long 74°46'57", Sussex County, at bridge at inlet of Paulins Kill Lake, 2.4 mi (3.9 km) northwest of Newton.	69.0 (178.7 km^2)	1973-78	9-14-78	11
01443460	Paulins Kill at Paulins Kill, NJ	Lat 41°03'08", long 74°49'42", Sussex County, at bridge on Paulins Kill Lake Road, 300 ft (90 m) downstream from Paulins Kill Lake, 0.45 mi (0.72 km) southwest of Paulins Kill.	72.9 (188.8 km^2)	1973-78	9-14-78	24
*01445000	Pequest River at Huntsville, NJ	Lat 40°58'49", long 74°46'38", Sussex Coutny, on right bank 20 ft (6 m) upstream from highway bridge in Huntsville, 0.4 mi (0.6 km) downstream from East Branch.	31.4 (81.33 km^2)	1940-62‡, 1963-74, 1976-78	(a)	b1.8
*01445490	Furnace Brook at Oxford, NJ	Lat 40°48'15", long 74°59'42", Warren County, at bridge on State Route 31 in Oxford, 2.4 mi (3.9 km) above mouth, and 3.2 mi (5.1 km) north of Washington.	4.29 (11.11 km^2)	1965-69, 1971-72, 1978	12-19-77	13
01455370	Weldon Brook at Hurdtown, NJ	Lat 40°58'10", long 74°35'56", Morris County, at bridge on Union Turnpike at Hurdtown, 500 ft (150 m) downstream from Lake Shawnee Dam.	8.10 (20.98 km^2)	1973-78	9-14-78	.14
01460900	Lockatong Creek near Raven Rock, NJ	Lat 40°24'28", long 75°00'52", Hunterdon County, at bridge on State Route 29, 1.1 mi (1.8 km) east of Raven Rock, and 300 ft (90 m) upstream from mouth.	23.3 (60.3 km^2)	1944, 1958-64, 1978	8-22-78	4.9
01461300	Wickecheoke Creek at Stockton, NJ	Lat 40°24'04", long 74°59'13", Hunterdon County, at bridge on State Route 29 at Stockton and 900 ft (270 m) about mouth.	26.5 (68.6 km^2)	1944, 1958-64, 1978	8-16-78	8.8

* Also a crest-stage partial-record station.
‡ Operated as a continuous-record gaging station.
a Occurred during period June 20 to Oct. 15, 1978.
b Minimum recorded during year; computed from minimum gage reading and rating, discharge may have been lower at some time during year when gage was not operating.
c Not previously published.

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. Informamtion on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Cohansey River basin					
01412500	West Branch Cohansey River at Seeley, NJ	Lat 39°29'06", long 75°15'33", Cumberland County, on right bank 15 ft (4.6 m) upstream from county bridge, Highway 31, at Seeley, 450 ft (137 m) upstream from mouth and 4.1 mi (6.6 km) northwest of Bridgeton. Datum of gage is 42.23 ft (12.872 m) National Geodetic Vertical Datum of 1929.	2.16 (6.60 km^2)	1952-67‡, 1968-78	1-25-78	5.57	327
		Delaware River basin					
*01445000	Pequest River at Huntsville, NJ	Lat 40°58'49", long 74°46'38", Sussex County, on right bank, 20 ft (6.1 km) upstream from highway bridge in Huntsville, and 0.4 mi (0.6 km) downstream from East Branch. Datum of gage is 553.81 ft (168.801 m) National Geodetic Vertical Datum of 1929.	31.4 (81.3 km^2)	1940-62‡, 1963-78	1-26-78	3.75	272
*01445490	Furnace Brook at Oxford, NJ	Lat 40°48'15", long 74°59'42", Warren County, at bridge on State Route 31 in Oxford, 2.4 mi (3.9 km) upstream from mouth, and 3.2 mi (5.1 km) north of Washington. Datum of gage is 468.14 ft (142.689 m) National Geodetic Vertical Datum of 1929.	4.29 (11.11 km^2)	1966-78	8-08-78	b2.70	100
*01446000	Beaver Brook near Belvidere, NJ	Lat 40°50'40", long 75°02'48, Warren County, on right bank, 2,000 ft (610 m) upstream from mouth, and 2 mi (3 km) east of Belvidere. Datum of gage is 303.36 ft (92.464 m) National Geodetic Vertical Datum of 1929.	36.2 (93.8 km^2)	1922-61‡, 1963-78	1-27-78	3.40	355
01455200	Pohatcong Creek at New Village, NJ	Lat 40°42'57", long 75°04'20", Warren COunty, at bridge on Edison Road, 0.4 mi (0.6 km) southeast of New Village, and 4.3 mi (6.9 km) upstream from Merrill Creek. Datum of gage is 308.32 ft (93.976 m) National Geodetic Vertical Datum of 1929.	33.4 (86.5 km^2)	1960-69‡, 1972-78	3-14-78	5.12	976
01455500	Musconetcong River at outlet of Lake Hopatcong, NJ	Lat 40°55'00", long 74°39'55", Morris County, on left bank just upstream of highway bridge 300 ft (91 m) downstream from Lake Hopatcong Dam in Landing. Datum of gage is 904.99 ft (275.841 m) National Geodetic Vertical Datum of 1929.	25.6 (66.3 km^2)	1929-75‡, 1976-78	3-14-78	3.17	183
01456000	Musconetcong River near Hackettstown, NJ	Lat 40°53'10", long 74°48'00", Warren County, on right bank 75 ft (23 m) upstream from Saxton Falls Dam, 0.5 mi (0.8 km) upstream from Erie-Lackawanna Railway bridge, and 3.0 mi (4.8 km) northeast of Hackettstown. Datum of gage is 630.93 ft (192.307 m) National Geodetic Vertical Datum of 1929.	70.0 (181.3 km^2)	1921-73‡, 1974-78	3-14-78	2.44	712

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Delaware River basin--Continued					
01457500	Delaware River at Riegelsville, NJ	Lat 40°35'36", long 75°11'17", Warren County, at suspension bridge at Riegelsville, 600 ft (183 m) upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931). Datum of gage is 125.12 ft (38.137 m) National Geodetic Vertical Datum of 1929.	6,328 (16,390 km²)	1906-71‡, 1972-78	1-10-78	19.62	94,400
01464400	Crosswicks Creek at New Egypt, NJ	Lat 40°04'03", long 74°31'57", Ocean County, at upstream side of bridge on State Route 528 in New Egypt, and 300 ft (91 m) downstream from Oakford Lake Dam. Datum of gage is 43.46 ft (13.247 m) National Geodetic Vertical Datum of 1929.	37.5 (97.1 km²)	1968-78	9-01-78	30.27	4,500
01464505	Crosswicks Creek at Groveville, NJ	Lat 40°10'26", long 74°40'48", Burlington County, at U.S. Highway 130 bridge, 0.3 mi (0.5 km) upstream from Doctors Creek, 0.5 mi (0.8 km) northwest of Groveville, and 0.6 mi (1.0 km) southwest of Yardville. Datum of gage is -2.15 ft (-0.655 m) National Geodetic Vertical Datum of 1929.	94.5 (244.8 km²)	1968-78	9-01-78	b14.88	†
01464515	Doctors Creek at Allentown, Nj	Lat 40°10'37", long 74°35'57", Monmouth County, at bridge on Breza Road in Allentown, and 0.8 mi (1.3 km) downstream from Conines Millpond dam. Datum of gage is National Geodetic Vertical Datum of 1929.	17.2 (44.6 km²)	1968-78	1-26-78	b58.52	†
01464520	Doctors Creek at Groveville, NJ	Lat 40°10'21", long 74°39'33", Mercer County, at bridge on Groveville-Allentown road at Groveville, 0.7 mi (1.1 km) southeast of Yardville, and 1.5 mi (2.4 km) upstream of mouth. Datum of gage is 14.23 ft (4.337 m) National Geodetic Vertical Datum of 1929.	25.3 (65.53 km²)	1968-78	1-26-78	b9.33	2,080
01465850	South Branch Rancocas Creek at Vincentown, NJ	Lat 39°56'22", long 74°45'50", Burlington County, on left bank 150 ft (46 m) downstream from highway bridge on Lumberton-Vincentown road, 0.8 mi (1.3 km) west of Vincentown, 2.9 mi (4.7 km) southeast of Lumberton, and 3.1 mi (5.0 km) upstream from Southwest Branch. Datum of gage is 13.17 ft (4.014 m) National Geodetic Vertical Datum of 1929.	53.3 (138.0 km²)	1962-75‡, 1976-78	8-28-78	7.98	1,320
01465882	Southwest Branch Rancocas Creek at Medford, NJ	Lat 39°54'16", long 74°48'47", Burlington County, at bridge on State Route 70, 0.6 mi (1.0 km) northeast of Medford and 4.2 mi (6.8 km) upstrem from mouth. Datum of gage is 20.72 ft (6.315 m) National Geodetic Vertical Datum of 1929.	47.9 (124.1 km² Revised)	1975-78	1-26-78	b7.13	4,400

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Delaware River basin--Continued					
01466000	Middle Branch Mount Misery Brook in Lebanon State, Forest, NJ	Lat 39°55'00", long 74°30'30", Burlington County, in Lebanon State Forest, 20 ft (6.1 m) upstream from bridge on North Branch Road, and 5.1 mi (8.2 km) southeast of Browns Mills. Datum of gage is 99.71 ft (30.392 m) National Geodetic Vertical Datum of 1929.	2.73 (7.07 km²)	1952-65‡, 1967-78	1-26-78	2.05	19
01467057	Pompeston Creek at Cinnaminson, NJ	Lat 40°00'11", long 74°59'00", Burlington County, at U.S. Route 130 bridge, 0.7 mi (1.1 km) northwest of Cinnaminson, 1.7 mi (2.7 km) upstream from mouth, and 2.1 mi (3.4 km) east of Palymra. Datum of gage is 11.36 ft (3.463 m) National Geodetic Vertical Datum of 1929.	5.75 (14.89 km²)	1975-78	1-26-78	b6.03	†
01467069	North Branch Pennsauken Creek near Moorestown, NJ	Lat 39°57'10", long 74°58'10", Burlington County, at bridge on Route 41 (Kings Highway) 1.7 mi (2.8 km) southwest of Moorestown. Datum of gage is 5.9 ft (1.80 m) National Geodetic Vertical Datum of 1929.	12.8 (33.2 km²)	1975-78	8-28-78	7.44	1,720
*01467130	Cooper River at Kirkwood, NJ	Lat 39°50'11", long 75°00'06", Camden County, 5 ft (1.5 m) upstream from dam at Kirkwood Lake in Kirkwood, and 1.0 mi (1.6 km) north of Laurel Springs. Datum of gage is 57.82 ft (17.624 m) National Geodetic Vertical Datum of 1929.	5.14 (13.3 km²)	1964-78	1-26-78	1.82	210
*01467160	North Branch Cooper River near Marlton, NJ	Lat 39°53'20", long 74°58'08", Camden County, at bridge on blacktop road to Springdale, 2.5 mi (4.0 km) west of Marlton. Datum of gage is 36.36 ft (11.083 m) National Geodetic Vertical Datum of 1929.	5.33 (13.80 km²)	1964-78	3-22-77 9-01-78	b3.03 b4.30	d188 330
*01467305	Newton Creek at Collingswood, NJ	Lat 39°54'30", long 75°03'13", Camden County, at bridge on Park Avenue in Collingswood, 0.3 mi (0.5 km) east of Cuthbert Avenue. Datum of gage is 18.74 ft (5.712 m) National Geodetic Vertical Datum of 1929.	1.32 (3.42 km²)	1964-78	7-09-64 7-11-65 9-01-78	3.62 3.69 6.40	d172 d176 307
01467317	South Branch Newton Creek at Haddon Heights, NJ	Lat 39°52'45", long 75°04'26", Camden County, at bridg on Haddon Heights Park in Haddon Heights, and 2.6 mi (4.2 km) south of Collingswood. Datum of gage is 23.34 ft (7.114 m) National Geodetic Vertical Datum of 1929.	.63 (1.63 km²)	1964-78	9-01-78	4.62	295
*01467330	South Branch Big Timber Creek at Blackwood, NJ	Lat 39°48'17", long 75°03'13", Camden County, at bridge on Lower Landing Roaod in Blackwood, and 3.0 mi (4.8 km) upstream from mouth. Datum of gage is 8.41 ft (2.563 m) National Geodetic Vertical Datum of 1929.	19.1 (49.5 km²)	1964-78	1-26-78	b5.41	820
01467351	North Branch Big Timber Creek at Laurel Road at Laurel Springs, NJ	Lat 39°49'07", long 75°00'56", Camden County, at bridge on Laurel Road in Laurel Springs, and 2.5 mi (4.0 km) upstream from confluence with the South Branch. Datum of gage is 26.89 ft (8.196 m) National Geodetic Vertical Datum of 1929.	7.16 (18.54 km²)	1976-78	5-24-78	1.72	†

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Delaware River basin--Continued					
01475000	Mantua Creek at Pitman, NJ	Lat 39°44'14", long 75°06'53", Gloucester County, on left abutment of Wadsworth Dam, 0.9 mi (1.4 km) east of Pitman, and 2.0 mi (3.2 km) upstream from Porch Branch. Datum of gage is 68.51 ft (20.882 m) National Geodetic Vertical Datum of 1929.	6.75 (17.48 km²)	1940-76‡, 1977-78	11-08-77	1.58	87
01475019	Mantua Creek at Salina, NJ	Lat 39°46'13", long 75°05'59", Gloucester County, at bridge on Salina-Sewell Road, 0.2 mi (0.3 km) downstream of Bees Branch, and 0.5 mi (0.8 km) west of Salina. Datum of gage is 11.67 ft (3.557 m) National Geodetic Vertical Datum of 1929.	14.2 (36.8 km²)	1975-78	1-26-78	7.04	640
01477160	Raccoon Creek at Mullica Hill, NJ	Lat 39°44'10", long 75°13'30", Gloucester County, at bridge State Routes 45 and 77 in Mullica Hill, 1,200 ft (370 m) downstream of Mullica Hill Pond and 5.5 mi (8.8 km) west of Pitman.	15.6 (40.4 km²)	1978	1-26-78	b1.75	†
01477480	Oldmans Creek near Harrisonville, NJ	Lat 39°41'40", long 75°18'38", Salem County, at bridge on Harrisonville Station Road, 2.4 mi (3.8 km) west of Harrisonville, and 2.8 mi (4.5 km) north of Woodstown. Datum of gage is 16.58 ft (5.054 m) National Geodetic Vertical Datum of 1929.	13.6 (35.2 km²)	1975-78	1-26-78	6.51	800

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Downstream side of bridge.
c Not previously published.
d Revised.

DISCHARGE MEASUREMENT AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Cohansey River basin				
01413022 Jackson Run	Indian Fields Branch	Lat 39°26'00", long 75°13'24", Cumberland County, 300 ft (91 m) downstream of Irving Avenue in Bridgeton, 300 ft (91 m) above mouth at East Lake.	1.76 (4.56 km^2)	1977	11-07-77@1050 11-07-77@1120 11-07-77@1335 11-07-77@1410	5.6 5.5 3.3 2.4
		Delaware River basin				
01444100 Paulins Kill	Delaware River	Lat 40°55'14", long 75°05'18", Warren County, at bridge on U.S. Route 46 at Columbia, 2.3 mi (3.7 km) southwest of Polkville, and 3.2 mi (5.2 km) southeast of Knowlton.	177 (458 km^2)	-	11-08-77 5-17-78 5-19-78 8-17-78	710 971 1550 *113
01446400 Pequest River	Delaware River	Lat 40°49'45", long 75°04'44", Warren County, at bridge on State Route 519, in Belvidere, 1400 ft (430 m) upstream of mouth.	158 (409 km^2)	1950,53, 1955,74, 1977	10-04-77 11-21-77 1-05-78 5-18-78 8-08-78	122 *185 *301 777 902
01455900 Deer Park Pond Outlet	Musconetcong River	Lat 40°54'14", long 74°46'58", Warren County, at bridge on medium-duty road, 500 ft (150 m) upstream of mouth, 0.6 mi (1.0 km) downstream of Deer Park Pond, 1.3 mi (2.1 km) northeast of Saxton Falls, and 1.7 mi (2.7 km) southwest of Waterloo.	1.18 (3.06 km^2)	1977	11-07-77@1220 11-07-77@1400	1.2 1.3
01456060 Musconetcong River Tributary	Musconetcong River	Lat 40°51'03", long 74°49'25", Warren County, at bridge on Willow Grove Street above State Fish Hatchery, in Hackettstown, and 700 ft (210 m) upstream of mouth.	1.60 (4.14 km^2)	1977	10-14-77 11-07-77@1100 11-07-77@1300	1.7 8.2 7.0
01456400 Musconetcong River Tributary No. 5	Musconetcong River	Lat 40°46'44", long 74°54'02", Hunterdon County, at bridge on on light-duty road at Penwell, 800 ft (240 m) above mouth, and 0.9 mi (1.5 km) souutheast of Port Murray.	1.89 (4.90 km^2)	1977	10-14-77 11-07-77@1000 11-07-77@1520	1.3 9.4 13
01456890 Musconetcong River Tributary No. 4	Musconetcong River	Lat 40°40'53", long 75°03'01", Warren County, at bridge on Bloomsbury Road, 800 ft (240 m) upstream of mouth, 1.6 mi (2.6 km) northwest of West Portal, and 2.7 mi (4.3 km) northeast of Bloomsbury.	1.13 (2.93 km^2)	1977	11-07-77 3-27-78	0.58 *2.4
01457400 Musconetcong River	Delaware River	Lat 40°35'32", long 75°11'20", Warren County, at bridge on State Highway 13 at Riegelsville, 0.2 mi (0.4 km) north of Mount Joy, and 0.2 mi (0.3 km) upstream from mouth.	156 (404 km^2)	1940-55, 1973,77	3-27-78 5-09-78	1170 322
01460320 Delaware and Raritan Canal Feeder	Delaware and Raritan Canal	Lat 40°24'16", long 74°58'43", Hunterdon County, at bridge on Bridge Street at Stockton.	-	1944	8-16-78	182
01461280 Wickecheoke Creek Tributary	Wickecheoke Creek	Lat 40°26'51", long 74°57'30", Hunterdon County, at site 0.4 mi (0.6 km) upstream of Pine Hill Road, 0.5 mi (0.8 km) upstream of mouth, 0.8 mi (1.3 km) west of Sergeantsville, and 3.1 mi (5.0 km) north of Stockton.	1.04 (2.69 km^2)	1977	11-07-77@0950 11-07-77@1050 11-07-77@1215	11 24 32

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		Delaware River basin--Continued				
01463625 Assunpink Creek	Delaware River	Lat 40°16'06", long 74°42'07", Mercer County, at bridge on Basin Road, midway between U.S. Route 1 and Penn Central railroad tracks, 0.5 mi (0.8 km) southeast of Bakersville, and 1.4 mi (2.3 km) southeast of Franklin Corner.	38.6 (100.0 km²)	1977	1-27-78 3-27-78 5-09-78	571 196 52
01483010 Deep Run	Alloway Creek	Lat 39°32'33", long 75°21'18", Salem County, at bridge on Telegraph Road, 0.8 mi (1.3 km) upstream of Elkinton Millpond, 1.3 mi (2.1 km) south of Alloway, and 2.5 mi (4.0 km) northwest of Pecks Corner.	5.30 (13.73 km²)	1977	11-07-77 11-08-77	18 34

* Base flow.
† Peak flow.
a Not previously published.

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above National Geodetic Vertical Datum of 1929 unless otherwise noted. Only the maximum stage is given. Information on some other high stages 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 STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Period of record	Annual maximum Date	Annual maximum Elevation NGVD* (feet)
01411395	Cape May Canal at North Cape May, NJ	Lat 38°58'02", long 74°57'25", Cape May County, on Cape May Canal on slip of Cape May, New Jersey to Lewes, Delaware, ferry, 0.5 mi (0.8 km) east of west end of Cape May Canal, and 0.8 mi (1.3 km) south of North Cape May.	1965-78	10-14-77	c6.54
01412150	Maurice River at Bivalve, NJ	Lat 39°13'42", long 75°02'12", Cumberland County, on right bank on bulkhead piling on the south side of Bivalve, and 1.3 mi (2.1 km) south of Port Norris.	1965-78	9-25-77 12-19-77	d6.61 5.97
01464040	Delaware River at Marine Terminal, Trenton, NJ	Lat 40°11'21", long 74°45'22", Mercer County, on left bank at downstream end of wharf at Marine Terminal, Trenton, 1.6 mi (2.6 km) downstream from toll bridge on U.S. Highway 1, 2.0 mi (3.2 km) downstream from Assunpink Creek, and at river mile 131.80 (212.07 km).	1921-46‡, 1951-54‡, 1957-78‡	1-26-78	c9.30
01482705	Delaware River at Oakwood Beach, NJ	Lat 39°33'18", long 75°31'11", Salem County, on left bank on bulkhead piling at Oakwood Beach, 1.3 mi (2.1 km) south of mouth of Salem River, 2.4 mi (3.9 km) east of Reedy Point, Delaware, and 3.0 mi (4.8 km) southwest of Salem.	1965-78	12-21-77	b7.66

* National Geodetic Vertical Datum of 1929 (NGVD).
‡ Operated as a continuous-record gaging station.
a Revised.
b Gage datum; not National Geodetic Vertical Datum of 1929 datum.
c Furnished by National Ocean Survey, adjusted to National Geodetic Vertical Datum of 1929.
d Adjusted to National Geodetic Vertical Datum of 1929.

BURLINGTON COUNTY

395525074502501. Local I.D., Medford 5 Obs. Unique Well Number, 05-0261.
LOCATION.--Lat 39°55'25", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 750 ft (229 m), screened 740 to 750 ft (226 to 229 m).
DATUM.--Altitude of land-surface datum is 72.6 ft (22.13 m). Measuring point: Top edge of recorder shelf, 3.6 ft (1.10 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--January 1968 to March 1975 and March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.46 ft (28.791 m) below land-surface datum, Mar. 1, 1968; lowest water level, 123.67 ft (37.695 m) below land-surface datum, Aug. 3, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 116.91 ft (35.634 m) below land-surface datum, Mar. 27; lowest water level, 121.48 ft (37.027 m) below land-surface datum, Aug. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	121.27	120.10	118.97	118.18	117.61	117.49		---	118.35	120.24	121.39	121.19
10	120.94	119.66	119.08	117.84	117.38	117.17		---	118.77	120.31	121.07	121.29
15	120.59	119.69	118.72	117.71	117.42	117.19		---	119.10	120.60	120.88	121.21
20	120.44	119.68	118.58	117.53	117.41	117.31		---	119.36	120.89	120.82	121.18
25	120.45	119.25	118.23	117.44	117.38	117.35		---	119.74	121.14	121.00	121.05
EOM	120.28	119.29	118.27	117.59	117.55	---		118.01	120.00	121.39	121.14	121.09
MEAN	120.71	119.66	118.72	117.79	117.44	117.26		117.96	119.08	120.69	121.06	121.16

WTR YR 1978 MEAN 119.35 HIGH 116.94 MAR 27 LOW 121.46 AUG 2

NOTE.--No record Mar. 31-May 25.

BURLINGTON COUNTY

400010074521601. Local I.D., Willingboro 2 Obs. Unique Well Number, 05-0645.
LOCATION.--Lat 40°00'10", long 74°52'16", Hydrologic Unit 02040202, at Bridge Street and Tiffany Lane, Willingboro.
Owner: Willingboro Municipal Utilities Authority.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 441 ft (134.4 m), screened 431 to 441 ft (131.4 to 134.4 m).
DATUM.--Altitude of land-surface datum is 40.3 ft (12.28 m). Measuring point: Top edge of recorder shelf, 2.0 ft (0.61 m) below land-surface datum.
REMARKS.--
PERIOD OF RECORD.--March 1966 to March 1975 and March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.79 ft (15.176 m) below land-surface datum, June 21, 1967; lowest water level, 79.00 ft (24.079 m) below land-surface datum, July 29, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 67.39 ft (20.540 m) below land-surface datum, Mar. 10; lowest water level, 74.61 ft (22.741 m) below land-surface datum, July 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		71.95	69.87	69.37	68.48	67.98	68.74	70.79	71.25	72.08	---	73.05
10		70.80	69.86	69.05	68.22	67.57	69.19	70.26	71.66	72.54	---	73.06
15		70.52	69.56	68.82	68.33	68.35	69.71	70.18	71.99	72.91	---	72.90
20		70.36	69.60	68.50	68.34	68.76	69.52	70.19	72.39	72.79	---	72.30
25		70.22	69.34	68.45	68.30	68.76	70.08	70.42	72.12	73.67	---	71.56
EOM		70.16	69.49	68.53	68.42	68.65	70.30	70.67	72.32	---	73.55	71.75
MEAN		70.66	69.68	68.85	68.33	68.32	69.48	70.47	71.85	72.93	73.53	72.55

WTR YR 1978 MEAN 70.33 HIGH 67.57 MAR 10 LOW 74.41 JUL 28

NOTE.--No record Oct. 1-Nov. 3.

CAMDEN COUNTY

394922074563302. Local I.D., NJ WC Elm Tree Farm 3 Obs. Unique Well Number, 07-0413.
LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft (60 m) northeast of Thomas Road and about 2 mi (3 km) northwest of Berlin.
Owner: New Jersey Water Company.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 717 ft (218.5 m), screened 706 to 717 ft (215.2 to 218.5 m).
DATUM.--Altitude of land-surface datum is 148.7 ft (45.32 m). Measuring point: Top edge of recorder shelf, 0.6 ft (0.18 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--December 1963 to April 1975 and March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 174.21 ft (53.099 m) below land-surface datum, Feb. 6, 1964; lowest water level, 225.40 ft (68.702 m) below land-surface datum, Aug. 3-4. 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 213.43 ft (65.053 m) below land-surface datum, Mar. 14; lowest water level, 220.53 ft (67.218 m) below land-surface datum, July 16-17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	219.16	217.21	215.79	214.99	214.36	214.19	213.88	214.84	216.43	220.36		
10	218.59	216.70	215.61	214.49	214.18	---	213.89	215.14	217.05	220.17		
15	218.17	216.54	215.47	214.52	214.10	213.70	214.03	215.04	217.57	220.45		
20	217.79	216.39	215.29	214.43	214.10	213.91	214.11	215.07	218.09	---		
25	217.62	216.23	215.08	214.33	214.08	213.99	214.38	215.27	219.09	---		
EOM	217.35	216.06	215.06	214.18	214.19	213.88	214.41	215.83	219.76	---		
MEAN	218.25	216.59	215.43	214.53	214.16	213.96	214.09	215.17	217.74	220.30		

WTR YR 1978 MEAN 215.86 HIGH 213.57 MAR 14 LOW 220.53 JUL 17

NOTE.--No record July 18-Sept. 30.

CUMBERLAND COUNTY

391828075120902. Local I.D., Jones Island 2 Obs. Unique Well Number, 11-0096.
LOCATION.--Lat 39°18'29", long 75°12'08", Hydrologic Unit 02040206, about 1.7 mi (2.7 km) south of Cedarville at Jones Island, Lawrence Township.
Owner: Cumberland County.
AQUIFER.--Piney Point of Eocene Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in (102 mm), depth 375 ft (114 m), screened 365 to 375 ft (111 to 114 m).
DATUM.--Altitude of land-surface datum is 10 ft (3.0 m). Measuring point: Top edge of recorder shelf, 1.9 ft (0.578 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.99 ft (6.093 m) below land-surface datum, Mar. 22, 1977; lowest water level, 24.85 ft (7.574 m) below land-surface datum Sept. 26, 1978.
EXTREMES FOR CURRENT YEAR.--Highest water level, 21.75 ft (6.629 m) below land-surface datum, Oct. 14; lowest water level, 24.85 ft (7.574 m) below land-surface datum Sept. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.31	22.42	22.28	22.79	22.94	23.06	23.17	23.21	23.56	23.85	24.26	24.45
10	22.21	22.12	22.68	22.70	22.75	22.80	23.23	23.38	23.76	23.94	24.22	24.56
15	22.07	22.34	22.44	22.64	22.87	23.06	23.37	23.25	23.90	24.00	24.28	24.52
20	22.23	22.54	22.26	22.46	22.88	23.28	23.04	23.44	23.80	24.11	24.27	24.60
25	22.45	22.25	22.39	22.60	22.84	23.27	23.34	23.42	23.86	24.13	24.33	24.71
EOM	22.38	22.47	22.60	22.92	23.01	23.20	23.25	23.50	23.90	24.17	24.41	24.78
MEAN	22.24	22.34	22.49	22.70	22.86	23.07	23.24	23.41	23.76	24.03	24.28	24.58

WTR YR 1978 MEAN 23.25 HIGH 21.98 OCT 14 LOW 24.79 SEP 29

GLOUCESTER COUNTY

394942075131701. Local I.D., Shell Chemical 5 Obs. Unique Well Number, 15-0296.
LOCATION.--Lat 39°49'42", long 75°13'17", Hydrologic Unit 02040202, near the intersection of Mantua Grove Road and Route 295, West Deptford Township.
Owner: Shell Chemical Company.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 327 ft (99.7 m), screened 322 to 327 ft (98.1 to 99.7 m).
DATUM.--Altitude of land-surface datum is 20.8 ft (6.34 m). Measuring point: Top edge of recorder shelf, 2.9 ft (0.88 m) above land-surface datum.
REMARKS.--Water levels in this well are affected by nearby pumping.
PERIOD OF RECORD.--June 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.75 ft (8.458 m) below land-surface datum, Dec. 6, 1962; lowest water level, 40.63 ft (12.384 m) below land-surface datum, July 21, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 33.37 ft (10.017 m) below land-surface datum, May 30; lowest water level, 38.16 ft (11.631 m) below land-surface datum, July 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.86	37.81	36.16	35.73	34.67	35.57	34.36	35.38	34.51	35.96	36.74	36.39
10	37.38	36.77	36.66	35.50	34.22	34.92	34.35	35.07	34.85	36.75	36.57	37.45
15	37.65	36.50	35.94	35.35	34.55	35.01	34.60	34.44	35.96	36.34	36.60	36.82
20	37.48	36.67	35.78	34.87	34.46	34.90	34.20	34.89	36.39	36.94	36.86	36.42
25	37.67	36.15	35.45	34.82	34.76	34.83	34.52	34.64	36.51	37.81	37.37	36.91
EOM	37.31	36.34	35.55	34.83	34.93	34.80	35.06	34.05	36.68	36.89	36.65	36.42
MEAN	37.55	36.81	36.02	35.25	34.56	34.95	34.49	34.81	35.60	36.85	36.81	36.86

WTR YR 1978 MEAN 35.89 HIGH 33.68 MAY 29 LOW 37.86 OCT 5

HUNTERDON COUNTY

402644074563601. Local I.D., Bird Obs. Unique Well Number, 19-0002.
LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, at U.S. Post Office, Sergeantsville.
Owner: Phillip Fleming.
AQUIFER.--Stockton Formation of Triassic Age.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in (914 mm), depth 21 ft (6.4 m), lined with stone.
DATUM.--Altitude of land-surface datum is 342 ft (104.2 m). Measuring point: Top edge of recorder shelf, 1.5 ft (0.46 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--June 1965 to July 1970 and May 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.91 ft (2.106 m) below land-surface datum, Mar. 28-29, 1978; lowest water level, 16.40 ft (4.999 m) below land-surface datum, Nov. 9, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 6.91 ft (2.106 m) below land-surface datum, Mar. 28-29; lowest water level, 15.51 ft (4.727 m) below land-surface datum, Aug. 28-29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.90	15.15	10.94	12.72	11.47	14.62	10.30	14.17	12.07	13.16	14.30	13.99
10	13.69	10.26	11.79	10.87	13.06	14.81	11.92	13.66	13.31	14.13	13.87	13.45
15	13.15	11.75	12.26	11.05	13.82	10.58	12.90	12.75	13.99	14.98	14.46	14.01
20	13.04	12.69	10.05	11.00	14.16	9.71	13.31	8.38	14.44	13.58	15.03	14.06
25	13.94	12.90	8.84	11.83	14.42	8.71	13.21	8.18	14.73	14.62	15.39	14.02
EOM	14.74	12.20	11.09	9.23	14.50	7.83	13.75	9.93	14.81	15.16	15.28	14.85
MEAN	13.62	12.70	10.76	11.12	13.16	11.37	12.19	11.41	13.61	14.40	14.73	14.08

WTR YR 1978 MEAN 12.76 HIGH 6.97 MAR 28 LOW 15.50 AUG 28

SALEM COUNTY

394037075191501. Local I.D., Point Airy Obs. Unique Well Number, 33-0187.
LOCATION.--Lat 39°40'37", long 75°19'14", Hydrologic Unit 02040206, at intersection of Point Airy and Woodstown-Swedesboro Roads, 1 mi (1.61 km) north of Woodstown Boro boundary.
Owner: U.S. Geological Survey.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 672 ft (204.8 m), screened 664 to 672 ft (202.4 to 204.8 m).
DATUM.--Altitude of land-surface datum is 73.0 ft (22.25 m). Measuring point: Top of 6 inch casing, 1.8 ft (0.55 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--February 1959 to August 1975 and March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft (23.942 m) below land-surface datum, Mar. 6, 1959; lowest water level, 100.52 ft (30.638 m) below land-surface datum, Aug. 6-7, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 96.00 ft (29.261 m) below land-surface datum, May 15; lowest water level, 99.28 ft (30.261 m) below land-surface datum, Oct. 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.12	98.97	97.59	97.12	96.79	96.35	96.29	96.40	96.22	96.51	97.13	97.42
10	98.90	98.21	97.87	96.87	96.48	96.21	96.23	96.24	96.70	96.86	97.03	97.71
15	98.94	98.26	97.44	96.54	96.52	96.27	96.40	96.03	96.89	97.00	97.11	97.74
20	98.79	98.36	97.28	96.55	96.31	96.33	96.11	96.23	96.83	97.33	97.35	97.85
25	99.09	98.11	97.12	96.27	96.30	96.47	96.26	96.24	96.80	97.59	97.59	97.73
EOM	99.07	97.88	97.26	96.49	96.30	96.43	96.24	96.15	96.88	97.58	97.59	97.81
MEAN	98.97	98.37	97.47	96.74	96.47	96.32	96.29	96.26	96.68	97.12	97.28	97.70

WTR YR 1978 MEAN 97.14 HIGH 96.03 MAY 15 LOW 99.21 OCT 7

WARREN COUNTY

405050075033201. Local I.D., Hoffmann LaRoche 4 Obs. Unique Well Number, 41-0013.
LOCATION.--Lat 40°50'50", long 75°03'32", Hydrologic Unit 02040105, 1 mi (1.6 km) northeast of Belvidere on Route 46.
Owner: Hoffmann LaRoche, Inc.
AQUIFER.--Glacial Till of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled well, diameter 8 in (203 mm), depth 128 ft (39.0 m).
DATUM.--Altitude of land-surface datum is 290 ft (88.4 m). Measuring point: Top edge of recorder shelf, 2.2 ft (0.67 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.10 ft (9.174 m) below land-surface datum, July 5, 1972; lowest water level, 46.59 ft (14.201 m) below land-surface datum, Sept. 18, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 36.30 ft (11.064 m) below land-surface datum, Apr. 6; lowest water level, 45.41 ft (13.841 m) below land-surface datum, Sept. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.91	43.75	42.39	38.71	37.56	42.20	36.35	---			44.52	44.38
10	44.95	43.69	41.86	39.05	38.32	42.76	---	---			44.08	44.68
15	44.85	43.20	41.86	38.33	39.28	43.10	---	---			43.45	44.94
20	44.23	43.15	41.22	38.61	40.21	42.18	---	---			43.39	45.07
25	43.62	43.04	39.79	39.37	41.04	40.50	---	40.62			43.68	45.25
EOM	43.61	42.88	38.54	37.85	41.52	37.66	---	---			44.06	45.41
MEAN	44.44	43.33	41.17	38.70	39.25	41.62	36.67	40.70			43.88	44.87

WTR YR 1978 MEAN 42.02 HIGH 36.32 APR 6 LOW 45.41 SEP 30

NOTE.--No record Apr. 7-May 22 and May 27-Aug. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

CAPE MAY COUNTY

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHLORIDE, DISSOLVED (MG/L AS CL)
TRAFFIC CIRCLE OBS	38 56 16	074 58 00	00	112CPMY	78-03-17	1140	12.0	--	--	68
CAPE MAY CITY WD 1	38 56 43	074 55 33	01	121CNSY	78-07-20	1130	15.0	790	7.5	140
HARBESON-WALKER REF CO 2	38 56 43	074 57 55	01	121CNSY	78-07-20	1215	15.5	841	7.6	190
HARBESON-WALKER REF CO 1	38 56 45	074 58 03	01	121CKKD	78-07-20	1220	16.0	1340	8.2	260
CAPE MAY CITY WD 2	38 57 01	074 55 28	01	121CNSY	78-07-20	1100	15.0	382	7.5	41
CAPE MAY CITY WD 3	38 57 24	074 55 21	01	121CNSY	78-07-20	1115	15.5	321	7.6	19
LOWER TWP WC 1	38 58 53	074 57 12	01	121CNSY	78-07-20	1515	15.0	249	8.0	13
LOWER TWP WC 2	38 59 05	074 56 25	01	121CNSY	78-07-20	1450	15.0	235	7.9	13
WILDWOOD WD RIO GRAND 38	39 01 35	074 53 52	01	122KRKD	78-08-17	0910	16.5	535	7.5	79
WILDWOOD WD RIO GRAND 36	39 01 37	074 53 52	01	112CPMY	78-08-17	0900	13.5	207	6.6	23
WILDWOOD WD RIO GRAND 31	39 01 38	074 53 50	01	112ESRNS	78-08-17	0915	14.0	194	7.6	13
WILDWOOD WD RIO GRAND 29	39 01 39	074 53 49	02	121CNSY	78-08-17	0920	14.5	161	7.5	10

LOCAL IDENTIFIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)
TRAFFIC CIRCLE OBS	78-03-17	9.12	--	20	--	--	15	20	--	--
CAPE MAY CITY WD 1	78-07-20	12.00	--	306	92	--	277	306	--	--
HARBESON-WALKER REF CO 2	78-07-20	10.00	270	268	200	--	235	265	--	--
HARBESON-WALKER REF CO 1	78-07-20	10.00	385	327	296	327	296	321	--	--
CAPE MAY CITY WD 2	78-07-20	12.00	322	282	--	--	174	282	120	700
CAPE MAY CITY WD 3	78-07-20	15.00	--	276	--	--	--	276	1440	750
LOWER TWP WC 1	78-07-20	18.00	285	262	200	--	241	262	15	750
LOWER TWP WC 2	78-07-20	12.00	--	247	--	--	212	247	5	550
WILDWOOD WD RIO GRAND 38	78-08-17	10.00	592	592	--	--	461	590	300	800
WILDWOOD WD RIO GRAND 36	78-08-17	9.00	63	63	--	--	48	63	120	350
WILDWOOD WD RIO GRAND 31	78-08-17	10.00	141	135	92	139	108	135	240	250
WILDWOOD WD RIO GRAND 29	78-08-17	8.00	258	244	--	--	191	231	240	400

Geologic unit (aquifer):
112CPMY - Cape May Formation, Undifferentiated
112ESRNS - Cape May Formation, Estuarine Sand Facies
121CNSY - Cohansey Sand
121CKKD - Cohansey Sand-Kirkwood Formation, Undifferentiated
122KRKD - Kirkwood Formation

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

CUMBERLAND COUNTY

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHLORIDE, DISSOLVED (MG/L AS CL)
MOORES BEACH FIRE DEPT	39 11 18	074 57 05	01	122KRKD	78-07-11	1100	--	177	--	2.9
THOMPSON BCH CIVIC ASSOC	39 11 33	074 59 29	01	122KRKD	78-07-11	1200	--	188	--	4.4
EAST POINT WATER ASSOC.	39 11 38	075 01 17	01	122KRKD	78-07-11	1400	--	185	--	2.0
LEONARD SANDERS	39 13 23	075 09 58	01	121CKKD	78-07-12	1230	14.5	132	6.7	2.8
HEISLERVILLE 1 OBS	39 13 50	075 00 20	01	112CPMY	78-06-07	1430	15.0	--	7.1	1.9
HEISLERVILLE 2 OBS	39 13 51	075 00 18	01	121CNSY	78-06-08	1030	14.5	187	6.5	25
NJDIA LEESBURG SP FARM 1	39 13 56	074 57 51	01	122KRKD	78-07-11	0940	15.0	174	7.4	3.1
PORT NORRIS OYSTER CO.	39 14 17	075 01 24	01	122KRKD	78-07-12	0930	--	149	--	2.8
FORTESQUE REALTY 4	39 14 20	075 10 23	02	122KRKD	78-07-12	1200	15.5	222	7.9	5.4
JOSEPH HETMANSKI	39 16 17	075 13 55	01	124PNPN	78-07-12	1500	--	975	--	220
M GANDYS BEACH	39 16 18	075 13 54	01	124PNPN	78-07-12	1340	15.5	2500	7.4	830
MONEY ISL MARINA 1	39 17 04	075 14 15	01	124PNPN	78-07-12	1430	--	680	--	75
BAY PT ROD & GUN CLUB 2	39 17 46	075 15 10	02	124PNPN	78-07-12	1615	--	740	--	79
JONES ISLAND #2	39 18 29	075 12 08	01	124PNPN	78-06-14	1115	15.0	224	7.5	3.6
JONES ISLAND #1	39 18 30	075 12 08	01	122KRKD	78-06-14	1330	--	194	--	2.6
SEA BREEZE TAVERN 2	39 19 26	075 19 21	01	124PNPN	78-07-13	1230	--	710	8.0	67
DAVID HOLDING	39 19 42	075 14 57	01	121CNSY	78-07-13	1130	--	123	7.3	8.4
BACK NECK ROAD WELL	39 19 59	075 21 52	01	112PLCC	78-06-08	1240	14.0	10700	6.8	3600

LOCAL IDENTIFIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)
MOORES BEACH FIRE DEPT	78-07-11	4.00	315	315	280	--	295	315	--	--
THOMPSON BCH CIVIC ASSOC	78-07-11	5.00	310	310	--	--	290	305	--	--
EAST POINT WATER ASSOC.	78-07-11	5.00	266	266	--	--	242	262	--	--
LEONARD SANDERS	78-07-12	5.00	--	210	--	--	--	--	--	--
HEISLERVILLE 1 OBS	78-06-07	6.00	45	41	30	43	36	41	150	2.0
HEISLERVILLE 2 OBS	78-06-08	6.00	145	135	120	--	125	135	165	3.0
NJDIA LEESBURG SP FARM 1	78-07-11	13.00	270	268	250	--	248	268	120	190
PORT NORRIS OYSTER CO.	78-07-12	6.00	275	235	--	--	215	235	--	--
FORTESQUE REALTY 4	78-07-12	8.00	--	303	--	--	283	303	10	200
JOSEPH HETMANSKI	78-07-12	5.00	--	440	--	--	--	--	--	--
M GANDYS BEACH	78-07-12	5.00	--	402	--	--	378	402	40	50
MONEY ISL MARINA 1	78-07-12	4.00	--	370	--	--	350	370	--	--
BAY PT ROD & GUN CLUB 2	78-07-12	5.00	417	417	330	--	397	417	--	--
JONES ISLAND #2	78-06-14	10.00	--	375	--	--	360	370	60	14
JONES ISLAND #1	78-06-14	10.00	--	171	--	--	166	171	100	2.0
SEA BREEZE TAVERN 2	78-07-13	4.00	354	354	260	--	281	354	10	20
DAVID HOLDING	78-07-13	8.00	--	160	--	--	120	160	--	--
BACK NECK ROAD WELL	78-06-08	8.00	--	72	--	--	68	72	60	3.0

Geologic unit (aquifer):
112CPMY - Cape May Formation, Undifferentiated
112PLCC - Pleistocene-Cohansey Sand, Undifferentiated
121CNSY - Cohansey Sand
121CKKD - Cohansey Sand-Kirkwood Formation, Undifferentiat
122KRKD - Kirkwood Formation
124PNPN - Piney Point Formation

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

CUMBERLAND COUNTY--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TIME	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)
HEISLERVILLE 1 OBS	39 13 50	075 00 20	01	112CPMY	78-06-07	1430	43	30	41	41
HEISLERVILLE 2 OBS	39 13 51	075 00 18	01	121CNSY	78-06-08	1030	--	120	135	135

LOCAL IDENTIFIER	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
HEISLERVILLE 1 OBS	78-06-07	36	6.00	150	45	2.0	--	7.1	15.0	50
HEISLERVILLE 2 OBS	78-06-08	125	6.00	165	145	3.0	187	6.5	14.5	20

LOCAL IDENTIFIER	DATE OF SAMPLE	TURBIDITY (JTU)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)
HEISLERVILLE 1 OBS	78-06-07	10	6	56	1	17	16	4.6	4.0	6.3
HEISLERVILLE 2 OBS	78-06-08	40	9	54	19	--	17	2.9	2.9	6.9

LOCAL IDENTIFIER	DATE OF SAMPLE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
HEISLERVILLE 1 OBS	78-06-07	5.5	16	.3	3.5	3.5	67	0	55	8.5
HEISLERVILLE 2 OBS	78-06-08	6.9	21	.4	--	2.0	43	0	35	22

LOCAL IDENTIFIER	DATE OF SAMPLE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
HEISLERVILLE 1 OBS	78-06-07	9.9	1.9	.2	.2	56	128	132	.17
HEISLERVILLE 2 OBS	78-06-08	1.1	25	.1	.1	45	155	130	.21

CUMBERLAND COUNTY--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)
HEISLERVILLE 1 OBS	78-06-07	.00	.01	.01	.20	.00	.20	.21	.90	.45
HEISLERVILLE 2 OBS	78-06-08	.02	.00	.02	.24	.06	.30	.32	1.4	.10

LOCAL IDENTIFIER	DATE OF SAMPLE	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
HEISLERVILLE 1 OBS	78-06-07	.39	3.9	1.0	1	<10	0	3	5000	3000
HEISLERVILLE 2 OBS	78-06-08	.07	5.4	2.0	1	<10	0	2	8700	400

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
HEISLERVILLE 1 OBS	78-06-07	2000	80	10	70	<.5	7	20
HEISLERVILLE 2 OBS	78-06-08	8300	140	0	140	<.5	5	250

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

GLOUCESTER COUNTY

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHLORIDE, DISSOLVED (MG/L AS CL)
CLAYTON BORO WD 3	39 39 12	075 05 22	01	211MGRR	78-08-24	1300	21.0	1190	8.0	140
CLAYTON BORO WD 4	39 40 13	075 05 58	01	211MGRR	78-08-24	1320	20.5	940	7.9	93
GLASSBORO WD 5	39 41 41	075 07 10	01	211MGRR	78-09-01	0905	19.0	670	8.2	55
OWENS ILLINOIS 1	39 41 47	075 07 14	01	211MGRR	78-08-24	1415	19.5	790	--	63
GLASSBORO BORO WD 3	39 42 05	075 07 53	01	211MGRR	78-09-01	0855	18.5	710	8.1	65
PITMAN BORO WD P1	39 44 05	075 07 45	01	211MGRR	78-08-24	1500	17.0	510	--	37
SO JERSEY WS CO 3	39 44 08	075 13 30	02	211MGRR	78-08-25	0930	15.5	970	--	150
SWEDESBORO BORO WD 2	39 44 38	075 18 33	01	211MGRR	78-09-01	1015	14.5	420	7.4	57
WOODBURY CTY WD-SEWEL 2A	39 46 28	075 08 13	03	211MGRR	78-08-25	1300	15.5	380	--	24
SEWELL WC 2	39 46 29	075 08 59	01	211MGRR	78-08-25	1035	15.0	400	--	28
MANTUA WC 3	39 47 32	075 10 36	01	211MGRR	78-08-25	1100	--	420	--	37
WENONAH BORO WD 1	39 47 43	075 09 02	01	211MGRR	78-08-25	1200	--	--	--	21
PENNS GROVE WC-BRIDGPT 2	39 47 55	075 21 08	02	211MGRR	78-09-01	1050	14.0	190	6.9	14
EI DUPONT REPAUNO 6	39 49 44	075 17 34	01	211MGRR	78-09-01	1230	14.0	470	5.9	96
EI DUPONT REPAUNO 5	39 49 45	075 17 17	01	211MGRR	78-09-01	1245	17.5	326	6.1	56
WOODBURY WD RAILROAD 5	39 49 50	075 09 09	01	211MGRR	78-08-25	1315	14.5	355	--	46
MOBIL OIL-GREENWICH 45	39 50 05	075 15 23	01	211MGRR	78-09-01	1415	15.5	2320	4.9	140
MOBIL OIL-GREENWICH 47	39 50 36	075 15 01	01	211MGRR	78-09-01	1425	14.5	522	6.3	120

LOCAL IDENTIFIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOTTOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)
CLAYTON BORO WD 3	78-08-24	133.00	1010	800	740	802	746	800	--	--
CLAYTON BORO WD 4	78-08-24	140.00	943	740	657	778	670	740	--	--
GLASSBORO WD 5	78-09-01	138.00	--	660	--	--	600	657	1440	1000
OWENS ILLINOIS 1	78-08-24	144.00	650	647	585	647	607	647	--	--
GLASSBORO BORO WD 3	78-09-01	150.00	--	615	544	--	562	612	12	600
PITMAN BORO WD P1	78-08-24	140.00	514	514	460	--	468	514	--	--
SO JERSEY WS CO 3	78-08-25	35.00	270	268	225	266	234	265	--	--
SWEDESBORO BORO WD 2	78-09-01	30.00	439	244	190	258	217	240	1440	350
WOODBURY CTY WD-SEWEL 2A	78-08-25	21.00	313	303	236	309	240	304	--	--
SEWELL WC 2	78-08-25	60.00	374	368	315	372	336	368	--	--
MANTUA WC 3	78-08-25	10.00	335	268	--	--	230	265	--	--
WENONAH BORO WD 1	78-08-25	80.00	321	320	265	--	286	320	--	--
PENNS GROVE WC-BRIDGPT 2	78-09-01	20.00	127	88	60	84	65	85	10	95
EI DUPONT REPAUNO 6	78-09-01	10.00	--	109	--	--	84	109	120	245
EI DUPONT REPAUNO 5	78-09-01	10.00	--	99	--	--	81	99	10	150
WOODBURY WD RAILROAD 5	78-08-25	35.00	--	457	--	--	405	457	--	--
MOBIL OIL-GREENWICH 45	78-09-01	3.00	--	118	--	--	95	118	--	--
MOBIL OIL-GREENWICH 47	78-09-01	20.00	247	245	217	242	220	240	--	--

Geologic unit (aquifer):
211MGRR - Magothy-Raritan Formations, Undifferentiated

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

SALEM COUNTY

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TIME	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
SALEM 1 OBS	39 33 48	075 27 57	01	211MGRR	78-06-06	1330	709	709	699	3.00

LOCAL IDENTIFIER	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	HARDNESS (MG/L AS CACO3)
SALEM 1 OBS	78-06-06	130	803	13	5000	6.9	16.0	70	25	540

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SALEM 1 OBS	78-06-06	420	160	35	1000	79	19	29	150	0

LOCAL IDENTIFIER	DATE OF SAMPLE	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	FLUORIDE, DISSOLVED (MG/L AS F)
SALEM 1 OBS	78-06-06	123	30	2.3	1900	.3	.3

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
SALEM 1 OBS	78-06-06	7.1	3910	3220	5.32

Geologic unit (aquifer):
211MGRR - Magothy-Raritan Formations, Undifferentiated

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

SALEM COUNTY--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)
SALEM 1 OBS	78-06-06	.02	.00	.02	1.4	.20	1.6	1.6	7.2	.08

LOCAL IDENTIFIER	DATE OF SAMPLE	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
SALEM 1 OBS	78-06-06	.00	5.6	1.7	0	0	10	2	10	7500

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
SALEM 1 OBS	78-06-06	7500	190	20	170	<.5	13	210

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
CALCIUM, TOTAL (MG/L AS CA)

CESIUM, SUSPENDED TOTAL (UG/L AS CS)
CESIUM, SUSPENDED (UG/L AS CS)

MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
MAGNESIUM, TOTAL (MG/L AS MG)

MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
MAGNESIUM, SUSPENDED (MG/L AS MG)

SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)

NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
NITROGEN, KJELDAHL, TOTAL (MG/L AS N)

NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)

NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)

NITROGEN, AMMONIA PLUS ORGANIC, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)

ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
ALUMINUM, TOTAL (UG/L AS AL)

ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
ALUMINUM, SUSPENDED (UG/L AS AL)

ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)

ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
ANTIMONY, SUSPENDED (UG/L AS SB)

ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
ARSENIC, SUSPENDED (UG/L AS AS)

BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
BARIUM, TOTAL (UG/L AS BA)

BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
BARIUM, SUSPENDED (UG/L AS BA)

BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)

BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
BERYLLIUM, TOTAL (UG/L AS BE)

BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
BERYLLIUM, SUSPENDED (UG/L AS BE)

BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
BISMUTH, SUSPENDED (UG/L AS BI)

BORON, TOTAL RECOVERABLE (UG/L AS B)
BORON, TOTAL (UG/L AS B)

BORON, SUSPENDED RECOVERABLE (UG/L AS B)
BORON, SUSPENDED (UG/L AS B)

BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)

CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
CADMIUM, TOTAL (UG/L AS CD)

CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
CADMIUM, SUSPENDED (UG/L AS CD)

CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
CHROMIUM, TOTAL (UG/L AS CR)

CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
CHROMIUM, SUSPENDED (UG/L AS CR)

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)

COBALT, TOTAL RECOVERABLE (UG/L AS CO)
COBALT, TOTAL (UG/L AS CO)

COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
COBALT, SUSPENDED (UG/L AS CO)

COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)

COPPER, TOTAL RECOVERABLE (UG/L AS CU)
COPPER, TOTAL (UG/L AS CU)

COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
COPPER, SUSPENDED (UG/L AS CU)

COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)

GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
GALLIUM, SUSPENDED (UG/L AS GA)

GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
GERMANIUM, SUSPENDED (UG/L AS GE)

IRON, TOTAL, RECOVERABLE (UG/L AS FE)
IRON, TOTAL (UG/L AS FE)

IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
IRON, SUSPENDED (UG/L AS FE)

IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)

LEAD, TOTAL RECOVERABLE (UG/L AS PB)
LEAD, TOTAL (UG/L AS PB)

LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
LEAD, SUSPENDED (UG/L AS PB)

LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
LITHIUM, TOTAL (UG/L AS LI)

LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
LITHIUM, SUSPENDED (UG/L AS LI)

MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MANGANESE, TOTAL (UG/L AS MN)

MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
MANGANESE, SUSPENDED (UG/L as MN)

MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)

MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
MERCURY, TOTAL (UG/L AS HG)

MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
MERCURY, SUSPENDED (UG/L AS HG)

MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
MOLYBDENUM, TOTAL (UG/L AS MO)

MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
MOLYBDENUM, SUSPENDED (UG/L AS MO)

MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/L AS MO)
MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/L AS MO)

NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
NICKEL, TOTAL (UG/L AS NI)

NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
NICKEL, SUSPENDED (UG/L AS NI)

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/L AS NI)
NICKEL, TOTAL IN BOTTOM MATERIAL (UG/L AS NI)

RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
RUBIDIUM, SUSPENDED (UG/L AS RB)

SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
SELENIUM, SUSPENDED (UG/L AS SE)

SILVER, TOTAL RECOVERABLE (UG/L AS AG)
SILVER, TOTAL (UG/L AS AG)

SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
SILVER, SUSPENDED (UG/L AS AG)

SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/L AS AG)
SILVER, TOTAL IN BOTTOM MATERIAL (UG/L AS AG)

STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
STRONTIUM, TOTAL (UG/L AS SR)

STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
STRONTIUM, SUSPENDED (UG/L AS SR)

STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

TIN, TOTAL RECOVERABLE (UG/L AS SN)
TIN, TOTAL (UG/L AS SN)

TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
TIN, SUSPENDED (UG/L AS SN)

TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
TITANIUM, SUSPENDED (UG/L AS TI)

VANADIUM, SUSPENDED TOTAL (UG/L AS V)
VANADIUM, SUSPENDED (UG/L AS V)

ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
ZINC, TOTAL (UG/L AS ZN)

ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
ZINC, SUSPENDED (UG/L AS ZN)

ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)

ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
ZIRCONIUM, SUSPENDED (UG/L AS ZR)

ALPHA, SUSPENDED TOTAL (PCI/L)
ALPHA, SUSPENDED (PCI/L)

ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/L AS U NATURAL)
GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/L AS U NATURAL)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS U NATURAL)
GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/L AS U NATURAL)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/G AS U NATURAL)
GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/G AS U NATURAL)

GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS U NATURAL)
GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/G AS U NATURAL)

BETA, SUSPENDED TOTAL (PCI/L)
BETA, SUSPENDED (PCI/L)

BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
BETA, SUSPENDED, COUNTING ERROR (PCI/L)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS CS-137)
GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS CS-137)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS CS-137)
GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS CS-137)

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS SR/YT-90)
GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS SR/YT-90)

GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G SR/YT-90)
GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS SR/YT-90)

CALCIUM 45, SUSPENDED TOTAL (PCI/L)
CALCIUM 45, SUSPENDED (PCI/L)

CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)

CESIUM 134, SUSPENDED TOTAL (PCI/L)
CESIUM 134, SUSPENDED (PCI/L)

CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
CESIUM 134, SUSPENDED (PCI/L)

CESIUM 137, SUSPENDED TOTAL (PCI/L)
CESIUM 137, SUSPENDED (PCI/L)

CESIUM 137, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
CESIUM 137, SUSPENDED, COUNTING ERROR (PCI/L)

IRON 59, SUSPENDED TOTAL (PCI/L)
IRON 59, SUSPENDED (PCI/L)

IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)

RADIUM 226, SUSPENDED TOTAL (PCI/L)
RADIUM 226, SUSPENDED (PCI/L)

RHODAMINE WT, SUSPENDED TOTAL (UG/L)
RHODAMINE WT, SUSPENDED (UG/L)

SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
SCANDIUM 46, SUSPENDED (PCI/L)

SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)

SELENIUM 75, SUSPENDED TOTAL (PCI/L)
SELENIUM 75, SUSPENDED (PCI/L)

SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)

SILVER 110, SUSPENDED TOTAL (PCI/L)
SILVER 110, SUSPENDED (PCI/L)

SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)

STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
STRONTIUM 90, SUSPENDED (PCI/L)

STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)

SULFUR 35, SUSPENDED TOTAL (PCI/L)
SULFUR 35, SUSPENDED (PCI/L)

SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)

TRITIUM, SUSPENDED TOTAL (PCI/L)
TRITIUM, SUSPENDED (PCI/L)

TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
TRITIUM, SUSPENDED (TRITIUM UNITS)

TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)

TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)

URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)

CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)

NEW TERMINOLOGY -- FIRST LINE
OLD TERMINOLOGY -- SECOND LINE

CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, ORGANIC, SUSPENDED (MG/L AS C)

CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
CARBON, INORGANIC, SUSPENDED (MG/L AS C)

PCB, SUSPENDED TOTAL (UG/L)
PCB, SUSPENDED (UG/L)

AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)

AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)

AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)

ALDRIN, SUSPENDED TOTAL (UG/L)
ALDRIN, SUSPENDED (UG/L)

CHLORDANE, SUSPENDED TOTAL (UG/L)
CHLORDANE, SUSPENDED (UG/L)

DDD, SUSPENDED TOTAL (UG/L)
DDD, SUSPENDED (UG/L)

DDE, SUSPENDED TOTAL (UG/L)
DDE, SUSPENDED (UG/L)

DDT, SUSPENDED TOTAL (UG/L)
DDT, SUSPENDED (UG/L)

DIAZINON, SUSPENDED TOTAL (UG/L)
DIAZINON, SUSPENDED (UG/L)

DIELDRIN, SUSPENDED TOTAL (UG/L)
DIELDRIN, SUSPENDED (UG/L)

ENDRIN, SUSPENDED TOTAL (UG/L)
ENDRIN, SUSPENDED (UG/L)

HEPTACHLOR, SUSPENDED TOTAL (UG/L)
HEPTACHLOR, SUSPENDED (UG/L)

HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

ISODRIN, SUSPENDED TOTAL (UG/L)
ISODRIN, SUSPENDED (UG/L)

LINDANE, SUSPENDED TOTAL (UG/L)
LINDANE, SUSPENDED (UG/L)

MALATHION, SUSPENDED TOTAL (UG/L)
MALATHION, SUSPENDED (UG/L)

METHYL PARATHION, SUSPENDED TOTAL (UG/L)
METHYL PARATHION, SUSPENDED (UG/L)

MIREX, SUSPENDED TOTAL (UG/L)
MIREX, SUSPENDED (UG/L)

PARATHION, SUSPENDED TOTAL (UG/L)
PARATHION, SUSPENDED (UG/L)

TOXAPHENE, SUSPENDED TOTAL (UG/L)
TOXAPHENE, SUSPENDED (UG/L)

2,4-D, SUSPENDED TOTAL (UG/L)
2,4-D, SUSPENDED (UG/L)

2,4,5-T, SUSPENDED TOTAL (UG/L)
2,4,5-T, SUSPENDED (UG/L)

SILVEX, SUSPENDED TOTAL (UG/L)
SILVEX, SUSPENDED (UG/L)

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CALENDAR FOR WATER YEAR 1978

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