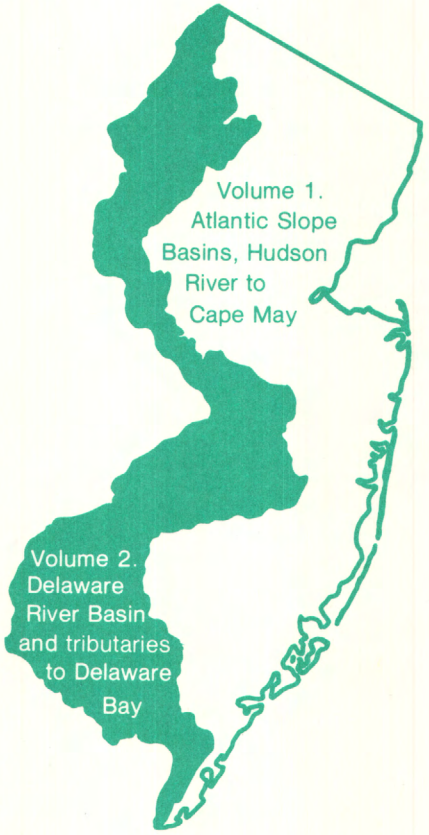
Water Resources Data New Jersey Water Year 1985

Volume 2. Delaware River Basin and tributaries to Delaware Bay



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-85-2
Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies

CALENDAR FOR WATER YEAR 1985

1984

OCTOBER

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United States Department of the Interior

GEOLOGICAL SURVEY

Water Resources Division
Mountain View Office Park
810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

I am pleased to announce the release of our Annual Report, "Water Resources Data for New Jersey, Water Year 1985". This report was prepared by the U.S. Geological Survey, in cooperation with the State of New Jersey and several local and federal government agencies.

Once again this year, the report is issued in two volumes:

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

The report contains records of stream discharge and water-quality measurements, elevations of lakes and reservoirs, major water-supply diversions, and tidal elevations. Also included are records of sediment concentrations and records of ground-water quality and ground-water levels. Special sections are devoted to low-flow and crest-stage data and summaries of tidal crest elevations in the New Jersey estuaries and intracoastal waterways.

This year the summary of hydrologic conditions has been expanded to include the results of several projects recently completed by the New Jersey District. Also included are listings of current project titles and reports recently published by the district.

Copies of this report in paper or microfiche are for sale through the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. When ordering, refer to U.S. Geological Survey Water-Data Report NJ-85-1 (for volume 1) and NJ-85-2 (for volume 2). For further information on this report, or to change or remove your address from our mailing list, please contact me at the above address or telephone [609] 771-3900.

Sincerely,

William R. Bauersfeld

William R. Bauersfeld, Chief
Hydrologic Data Assessment Program

Water Resources Data New Jersey Water Year 1985

Volume 2. Delaware River Basin and tributaries to Delaware Bay

by W.R. Bauersfeld, E.W. Moshinsky, E.A. Pustay, and W.D. Jones

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-85-2
Prepared in cooperation with the New Jersey
Department of Environmental Protection
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in New Jersey write to

District Chief, Water Resources Division
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810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

1986

PREFACE

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

Hydrologic data for New Jersey are contained in 2 volumes:

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

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. The following individuals contributed significantly to the completion of the report.

Eugene Dorr
Mark A. Hardy
Eric Jacobson
Robert D. Schopp

I.C. Heerwagen and D.C. Gilliom word processed the text of the report, and G.L. Simpson drafted the illustrations.

The data were collected, computed, and processed by the following personnel:

J.B. Campbell	R.S. Cole	C.E. Gurney	M.D. Philips	R. Rossman
J.P. Campbell	M.J. DeLuca	J.T. Fisher	R.G. Reiser	F.L. Schaefer
G.L. Centinaro	J.F. Dudek	J.E. May	E. Rodgers	A.J. Velnich

This report was prepared in cooperation with the State of New Jersey and with other agencies under the general supervision of Mark A. Ayers, Associate District Chief for Hydrologic Data Assessment and Information Management; Donald E. Vaupel, District Chief, New Jersey; and Stanley P. Sauer, Regional Hydrologist, Northeastern Region.

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13. Type of Report & Period Covered Annual - Oct. 1, 1984 to Sept. 30, 1985

14.

15. Supplementary Notes

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

16. Abstract (Limit: 200 words)

Water Resources data for the 1985 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 3 stations; stage and contents for 18 lakes and reservoirs; water quality for 30 surface-water sites and 96 wells; and water levels for 23 observation wells. Also included are data for 28 crest-stage partial-record stations, 8 tidal crest-stage gages and 8 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. Document Analysis a. 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

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement: No restriction on distribution. This report may be purchased from: National Technical Information, Service, Springfield, VA 22161	19. Security Class (This Report) Unclassified	21. No. of Pages 198
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WATER RESOURCES DATA - NEW JERSEY, 1985

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - New Jersey."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 22 gaging stations; tide summaries at 3 gaging stations; stage and content at 18 lakes and reservoirs; water quality at 30 surface-water stations and 96 wells; and water levels at 23 observation wells. Records included for ground-water levels are only a part of those obtained during the year. Also included are data for 28 crest-stage partial-record stations and stage only at 8 tidal crest-stage gages. Locations of these sites are shown on figures 7, 8, 9, and 10. Additional water data were collected at various sites not involved in the systematic data-collection program. Discharge measurements were made at 8 low-flow partial-record stations. Miscellaneous data were collected at 14 measuring sites. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

This series of annual reports for New Jersey began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1977 water year, these data were published in two volumes.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Jersey were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Part 1B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NJ-85-2." For archiving and general distribution, the reports for 1971-74 water years also are 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) 771-3900.

COOPERATION

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

New Jersey Department of Environmental Protection, Richard T. Dewling, Commissioner.
  Division of Water Resources, George McCann, Acting Director.
New Jersey Water Supply Authority, Rocco Ricci, Executive Director.
North Jersey District Water Supply Commission, Dean C. Noll, Chief Engineer.
Passaic Valley Water Commission, W.I. Inhoffer, General Superintendent and Chief Engineer.
County of Bergen, Edward R. Ranuska, director of Public Works and County Engineer.
County of Camden, Barton Harrison, Chairman 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 U.S. Army Corps of Engineers, in collecting records for 25 surface water stations, and by the U.S. Army Armament Research and Development Center for the collection of records at 3 surface-water stations and two water-quality monitoring 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 Service.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark, New Brunswick and Spotswood; American Cyanamid Co.; Commonwealth Water Co.; Elizabethown Water Co.; Ewing-Lawrence Sewerage Authority; Hackensack Water Co.; Johns-Manville Products Corp.; Monmouth Consolidated Water Co.; and Jersey Central Power and Light Co.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Water year 1985 was a very dry year. Precipitation ranged from 36.9 inches (68 percent of normal) in the north to 30.6 inches (57 percent of normal) in the south. Streamflow was at its lowest since the drought year of 1966 in the northern and central parts of the State. Flow in the southern and coastal regions was at its lowest since 1981. New Jersey reservoir content decreased to 49.7 billion gallons (66 percent of capacity) by the end of April, when the reservoirs normally would be spilling. Many communities declared drought emergencies, and restrictions were made on water use.

The 1985 water year began with streamflow about normal throughout the State. However, streamflow decreased steadily until, by the end of January, runoff was deficient by 3.05 inches in the north and by 2.08 inches in the south. Warming trends and some small storms in February slowed the decrease, but below-normal precipitation in March and April resulted in a runoff deficiency of more than 9 inches by the end of April. The monthly streamflow for April was the lowest on record, as reflected by the index stations. Drought warnings were issued, and by late spring, restrictions on water use were put into effect. The decreasing streamflow trend was finally halted when a series of storms on May 3, 18, and 22, resulted in above-normal precipitation for the month. During June, July, and August, streamflow was at or slightly above normal in the north and about 80 percent of normal in the south. September precipitation was only about one-half inch for the first 26 days, except for some localized storms. On September 27, Hurricane Gloria moved up the coast of New Jersey, the eye passed about 60 miles off the coast. Heavy precipitation was recorded on the fringes of the storm; 5.3 inches were reported in Lambertville and in Moorestown on the 27th. Most inland communities had more than 5 inches of precipitation for the period Sept. 27-28. Coastal areas recorded less than 2 inches of rainfall for the storm. Final September precipitation was 180 percent of normal inland, but was only about normal along the coast. Excessive streamflow from the storm Gloria caused a September mean flow of about 120 percent of normal Statewide.

Streamflow at the index station for northern New Jersey (South Branch Raritan River near High Bridge) averaged 84.7 ft^3/s for the water year; this flow is 69 percent of the 67-year average. Streamflow at the index station for southern New Jersey (Great Egg Harbor River at Folsom) averaged 60.4 ft^3/s for the water year; this flow is 70 percent of the 60-year average. The observed annual mean discharge of the Delaware River at Trenton was 6,365 ft^3/s, which is 54 percent of normal. The Delaware River is highly regulated by reservoirs and diversions. The natural flow at Trenton (adjusted for upstream storage and diversions) was 85 percent of normal for the year. Figures 1 and 2 compare the monthly and annual discharges with past records at these index gaging stations.

Storage in the 13 major water-supply reservoirs in New Jersey increased from 63.5 billion gallons (84 percent of capacity) on October 1, 1984, to 63.6 billion gallons (84 percent of capacity) on September 30, 1985. Storage in Wanaque Reservoir decreased from 24.3 billion gallons (87 percent of capacity) on October 1, 1984, to 23.5 billion gallons (84 percent of capacity) on September 30, 1985. Pumped storage in Round Valley Reservoir, the largest capacity in the State, increased from 47.4 billion gallons (86 percent of capacity) on October 1, 1984, to 48.4 billion gallons (88 percent of capacity) on September 30, 1985.

Water Quality

Low precipitation during the year reduced the ability of streams to dilute concentrations of dissolved substances, resulting in increased concentrations of dissolved solids in many streams for most of the year. Specific conductance, which is directly related to dissolved-solids concentration, has been monitored continuously at selected sites in the state for several years. Figure 3 compares specific conductance at two sites monitoring drainage from large areas of north (Passaic River at Little Falls) and central (Delaware River at Trenton) New Jersey for 1985, 1984 (a year having above-normal precipitation), and the average for the last 4 years. The high values of specific conductance were noticeable during most of 1985. Such periods are often accompanied by higher concentrations of undesirable substances, such as trace elements, organic compounds, nutrients, bacteria, and nuisance aquatic organisms.

The occurrence and distribution of toxic materials in aquatic environments is a topic of national concern. Because of low solubility in water, many of these materials are commonly present in or on inorganic and organic stream-bottom materials in higher concentrations than present in the water itself. As a result, analysis of stream-bottom samples may be a better indication of the presence of toxic materials in aquatic systems than indicated by an analysis of the water.

A number of toxic materials seem to be widespread at low to moderate concentrations throughout New Jersey. The organochlorine compounds chlordane, DDT (and its decomposition products DDD and DDE), and PCB's are commonly detected in stream bottoms of the State. Chlordane is a widely used

pesticide; DDT was a common pesticide, but the production and use of DDT in the United States has been banned since 1972. PCB's have been used in many industrial and mechanical items, but their use has been restricted to environmentally closed systems (for example, electrical capacitors and transformers) since 1971. All of these compounds are persistent and are still found in the aquatic environment. Common sources include industrial and municipal effluents, landfills and other soil disposal sites, and incineration of material containing PCB's (Natural Resources Council, 1979).

Samples of bottom materials from New Jersey streams have been analyzed for toxic substances for many years. Figure 4 shows the occurrence of chlordane, DDT, DDD, DDE and PCB's, in New Jersey stream-bottom materials for 1976-85. Only those sites were included for which water-quality data are presented in either volume of this report. At some sites, more than one sample was collected during a particular water year. The locations of water-quality sites selected are shown in figure 7. Figure 4 includes the percentage of samples collected in which at least one compound exceeded a concentration of 20 micrograms per kilogram--a level selected to include the highest 15 to 20 percent of values nationwide (J.S. Cragwall Jr., written commun., 1977).

A current study in the Atlantic City area has focused on the effects of large ground-water withdrawals on the quality of water from the Atlantic City 800-foot sand of the Kirkwood Formation (Paulachok and others, 1985). This pumping has created an extensive cone of depression and has heightened the potential for contamination by intruding seawater. Water from 70 wells onshore and from two marine observation wells located 1.9 and 5.3 miles offshore of Atlantic City were sampled to determine concentrations of major ions, nutrients, selected trace metals, and volatile organic compounds. Samples from the offshore wells also were analyzed for stable isotopes and dissolved gases. Increases in specific conductance and pH from north to south and from west to east are thought to be caused by an increase in the amount of carbonate in the sediments underlying present-day coastal areas. These increases are accompanied by changes from a calcium bicarbonate sulfate-type water to a sodium bicarbonate type. The changes in water type are probably caused chiefly by the exchange of sodium for calcium by the fine-grained sediments, which were deposited in an increasingly marine environment. Water collected from the well 5.3 miles offshore had a chloride concentration of 77 milligrams per liter and is predominantly a sodium bicarbonate chloride type, probably because of the proximity of the well to the freshwater-saltwater interface. Preliminary results of the study, however, indicate that a large body of freshwater is present in the 800-foot sand throughout the study area, and it is of a quality generally suitable for most uses.

A second study is evaluating the effects of acid precipitation on surface and ground waters in McDonalds Branch basin in the New Jersey Pinelands (Lord and others, 1986). These waters may be especially susceptible to acid precipitation because of their low pH, low ionic strength, and low buffering capacity. The study is investigating the hydrologic and geochemical processes in the watersheds, including major-ion chemistry, trace-metal mobilization, the sulfate-adsorption capacity of soils, and the contribution of organic matter to acidity. Precipitation; throughfall; surface, ground, and soil waters; soils (Spodosols, Entisols); and geologic materials (Cohansey Sand) in the basin have been analyzed since 1984.

Results indicate that clay lenses within the Cohansey Sand may exert a strong control over both the hydrology and the chemistry in the watershed by altering flow paths and residence time of water in the soil and shallow ground water. These clays contain weatherable minerals, have a large cation exchange capacity, and are a source of aluminum to surface, ground, and soil waters. The sulfate-adsorption capacity has been experimentally determined for four predominant soil series in the watershed. This capacity is relatively small, and the soils appear to be saturated with sulfate. These conditions may increase sulfate mobility through the soils into ground and surface waters. Sulfate is the principal anion in waters of the basin. Hydrogen ion and aluminum commonly are major cations, especially in the soil solution. These preliminary results suggest that atmospherically deposited sulfate is being transported to ground and surface water.

A recently published study (Fusillo, and others, 1984) focused on volatile organic compounds in ground water in the Camden, N.J. area. Samples were collected from 315 wells in the Potomac-Raritan-Magothy aquifer system in southwestern New Jersey and from a small adjacent area in Pennsylvania during 1980-82. Volatile organic compounds were detected in all three aquifer units of the Potomac-Raritan-Magothy aquifer system in the study area. Most of the contamination seems to be confined to the outcrop area at present. Low levels of contamination, however, were found downdip of the outcrop area in the upper and middle aquifers.

Trichloroethylene, tetrachloroethylene, and benzene were the most frequently detected compounds. Differences in the areal distributions of light chlorinated hydrocarbons, such as trichloroethylene, and aromatic hydrocarbons, such as benzene, were noted and are probably caused by differences in the uses of the compounds and the distribution patterns of contamination sources.

The distribution patterns of volatile organic compounds differed greatly among the three aquifer units. The upper aquifer, which crops out mostly in less-developed areas, had the lowest percentage of wells with detectable concentrations of volatile organic compounds detected (10 percent of wells sampled). Most of the detected concentrations were less than 10 µg/L. In the middle aquifer, which crops out beneath much of the urban and industrial area adjacent to the Delaware River, detectable levels of volatile organic compounds were found in 22 percent of the wells sampled; and several wells contained concentrations above 100 µg/L. The lower aquifer, which is confined beneath much of the outcrop area of the aquifer system, had the highest percentage of wells (28 percent) with detectable levels. This is probably the result of (1) vertical leakage of contamination from the middle aquifer and (2) a disproportionately high number of wells tapping the lower aquifer in the most heavily developed areas of the outcrop.

Ground-Water levels

Changes in ground-water levels that occurred during the 1985 water year were determined from a statewide network of observation wells. Less-than-average precipitation during 1985 resulted in decreased recharge to the water-table aquifers. This decrease in recharge resulted in declines of water levels in water-table aquifers in many areas of the state. Increasing withdrawals of ground water, rather than below-normal precipitation, were the principal cause of declines of water levels for the artesian aquifers.

Monthly water levels for two water-table observation wells in 1985 are compared with long-term averages in figure 5. The wells are the Bird well in Hunterdon County and the Crammer well in Ocean County. For further comparison, multiyear hydrographs are provided for wells included in these reports. The hydrographs are shown with the 1985 water-level data.

The water-table aquifers in the Coastal Plain were at or slightly below normal levels at the beginning of 1985 water year. The normal seasonal rise in water levels that occurs during late fall and spring did not occur in many water-table wells. Three wells in the Coastal Plain tapping the Kirkwood-Cohansey aquifer system, recorded declines of more than 6 feet during the water year. By year end, water levels in the Butler Place 2 well (NJ-WRD well no. 5-684) in Burlington County and the Crammer well (NJ-WRD well no. 29-486) in Ocean County were at their lowest levels since 1966 and 1952, respectively. North of the Fall Line, water levels in water-table aquifers varied from near normal to moderately below normal.

Coastal Plain artesian water levels rose seasonally from October through March or April, then declined through September. During the year, there was a net decline of water levels in many areas continuing a long-term downward trend. New lows of record were recorded in 19 Coastal Plain artesian wells. Most of these tap the Potomac-Raritan-Magothy aquifer system which is the most heavily pumped aquifer system in the State. Other aquifers where record lows were recorded include the Wenonah-Mount Laurel aquifer, the Atlantic City 800-foot sand of the Kirkwood Formation, the Piney Point aquifer, and the Englishtown aquifer.

The results of a study of the hydrogeologic framework of the New Jersey Coastal Plain are presented in a recently published report (Zapecza, 1984). The occurrence and configuration of 15 regional hydrogeologic units, based primarily on the interpretation of borehole geophysical logs for over 300 sites, are defined. The report contains 24 plates, which include structure-contour and thickness maps of each aquifer, a thickness map for each confining bed, and a map showing the configuration of the bedrock surface under the Coastal Plain sediments. These maps, together with 14 hydrogeologic sections show the geometry, lateral extent, and vertical and horizontal relationships of the 15 hydrogeologic units.

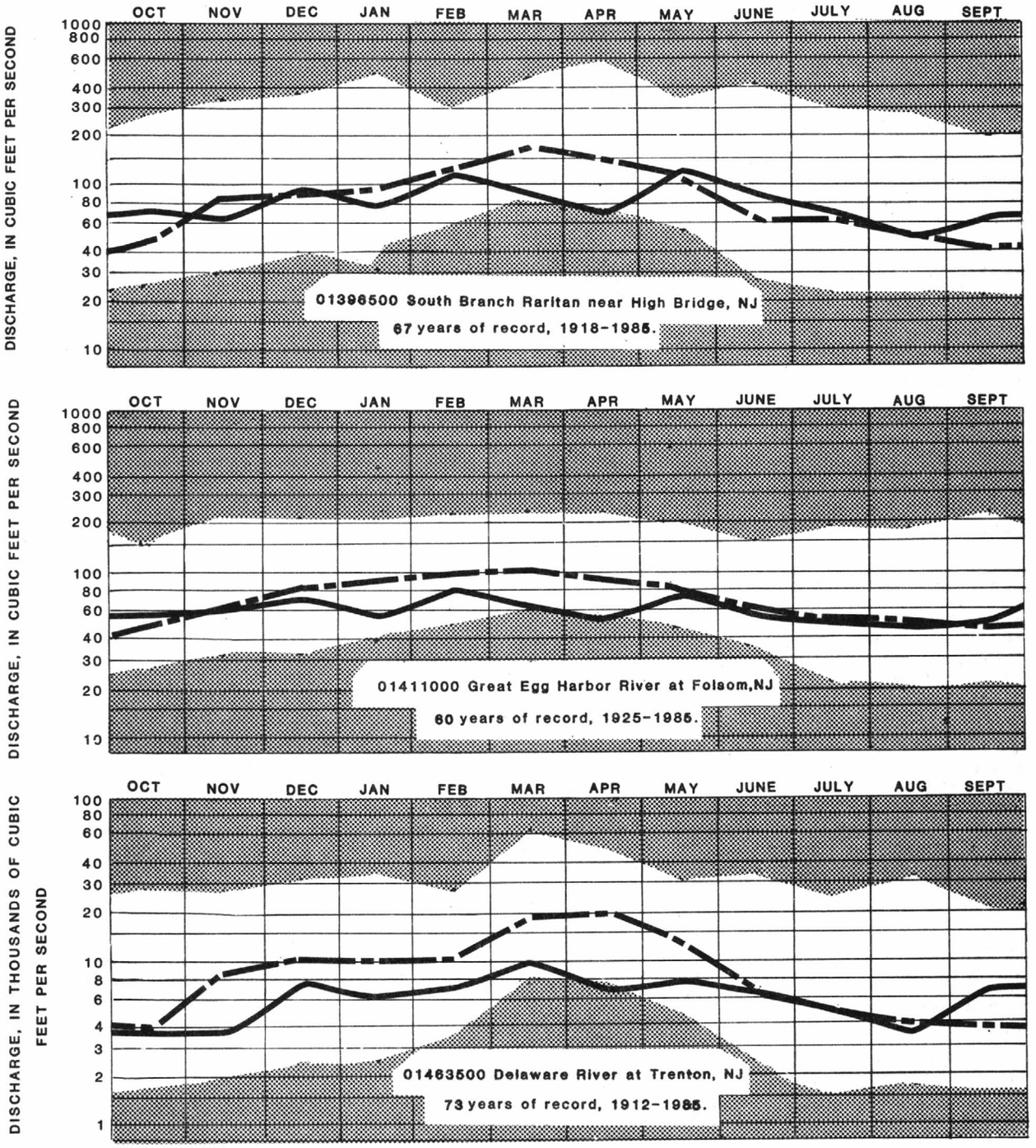
Potentiometric maps were generated from 1983 synoptic water-level measurements of over 1000 wells screened in the major aquifers of the New Jersey Coastal Plain (Eckel and Walker, 1986). Changes in water levels in these aquifers during the 5-year period, 1978-1983, were determined by comparing the 1983 water-level measurements with the 1978 water-level measurements.

The Potomac-Raritan-Magothy aquifer system is divided into the lower, middle, and upper aquifers. The potentiometric surfaces in these aquifers indicate large cones of depression centered in the Camden and Middlesex-Monmouth County areas. The lowest measured water levels were 96 feet below sea level in Camden County and 91 feet below sea level in the Middlesex-Monmouth County area. During the 5-year period of study, measured water levels declined as much as 23 feet in these areas.

Potentiometric surfaces for both the Englishtown aquifer system and the Wenonah-Mount Laurel aquifer indicate deep cones of depression in coastal Monmouth and Ocean Counties. The lowest measured water level in the Englishtown aquifer system was 249 feet below sea level. The lowest measured water level in the Wenonah-Mount Laurel aquifer was 196 feet below sea level. During the 5-year period, measured water levels declined as much as 29 feet in the Wenonah-Mount Laurel aquifer.

Measured water levels in the Piney Point aquifer were as low as 75 feet below sea level along the coast at Seaside Park, Ocean County and as low as 35 feet below sea level in southern Cumberland County. Potentiometric surfaces of the Atlantic City 800-foot sand of the Kirkwood Formation define an elongated cone of depression along the Atlantic Coast. Water levels in the center of the cone, near Margate and Ventnor, Atlantic County, were as low as 76 feet below sea level. In the confined Cohansey aquifer at Cape May, Cape May County, water levels were as low as 33 feet below sea level.

In 1985, as part of a study of the ground-water resources of the Atlantic City region, two observation wells were drilled offshore of Atlantic City (Paulachok and others, 1985). The wells, both screened in the Atlantic City 800-foot sand of the Kirkwood Formation, are located at sites 1.9 and 5.3 miles southeast of Atlantic City. Three differential pressure transducers and three conductivity electrodes were permanently installed in each well. In August 1985, the measured head in the well located 1.9 miles offshore was 80 feet below sea level. In September 1985, the measured head in the well located 5.3 miles offshore was 68 feet below sea level. These measurements suggest that the cone of depression for the Atlantic City 800-foot sand extends at least 5.3 miles offshore.



Unshaded area.--Indicates range between highest and lowest mean recorded for the month, prior to 1985 water year.

Broken line.--Indicates normal (median of the monthly means) for the standard reference period, 1951-1980.

Solid line.--Indicates observed monthly mean flow for the 1985 water year.

Figure 1.--Monthly streamflow at key gaging stations.

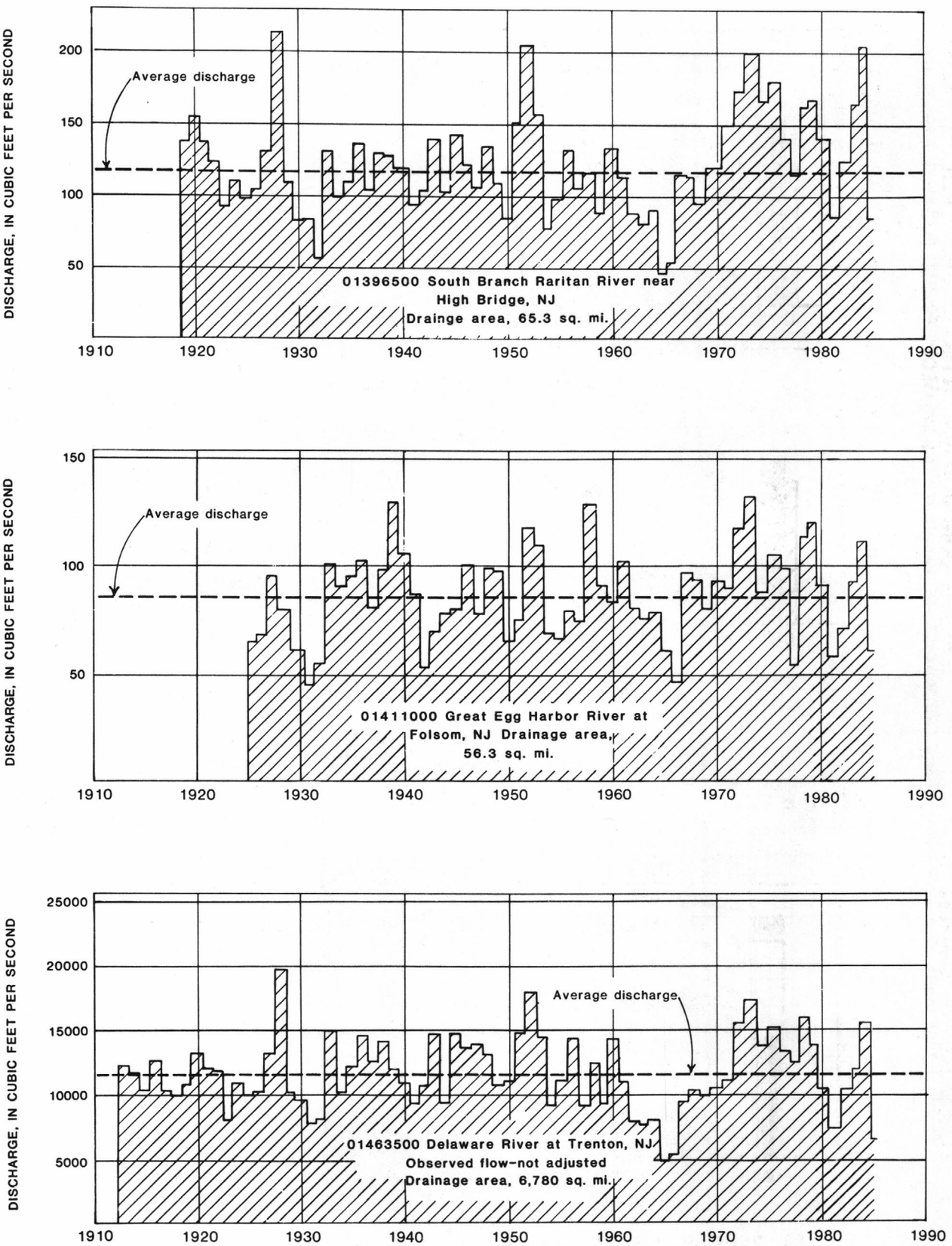


Figure 2.--Annual mean discharge at key gaging stations.

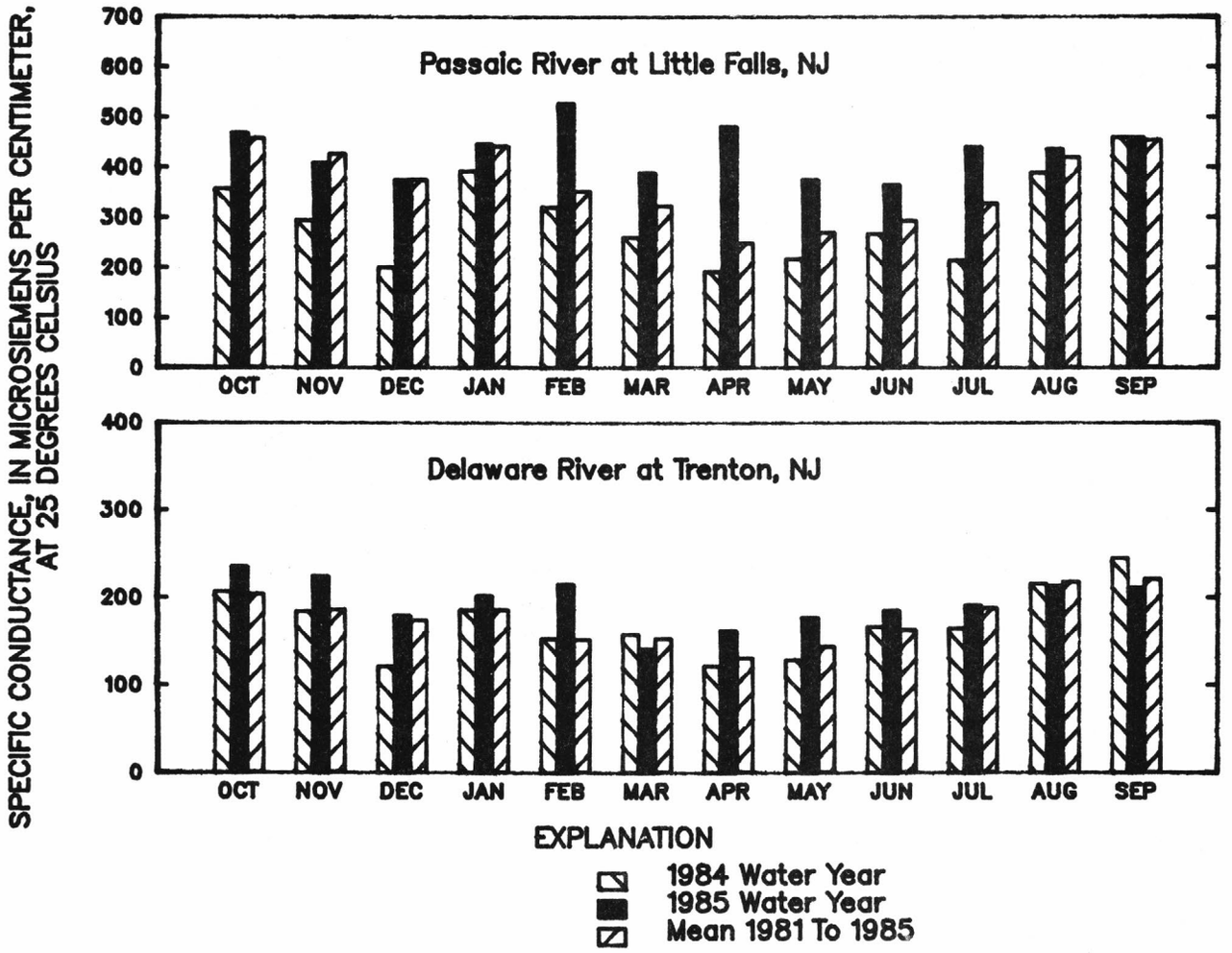


Figure 3.--Monthly mean specific conductance at Passaic River at Little Falls and Delaware River at Trenton,N.J.

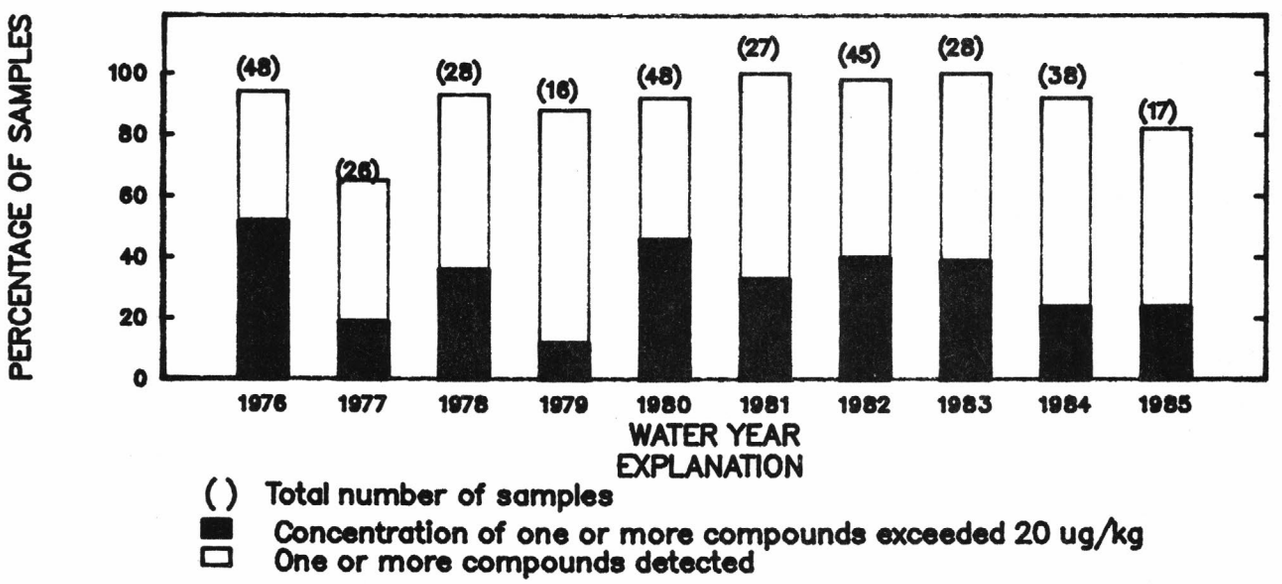
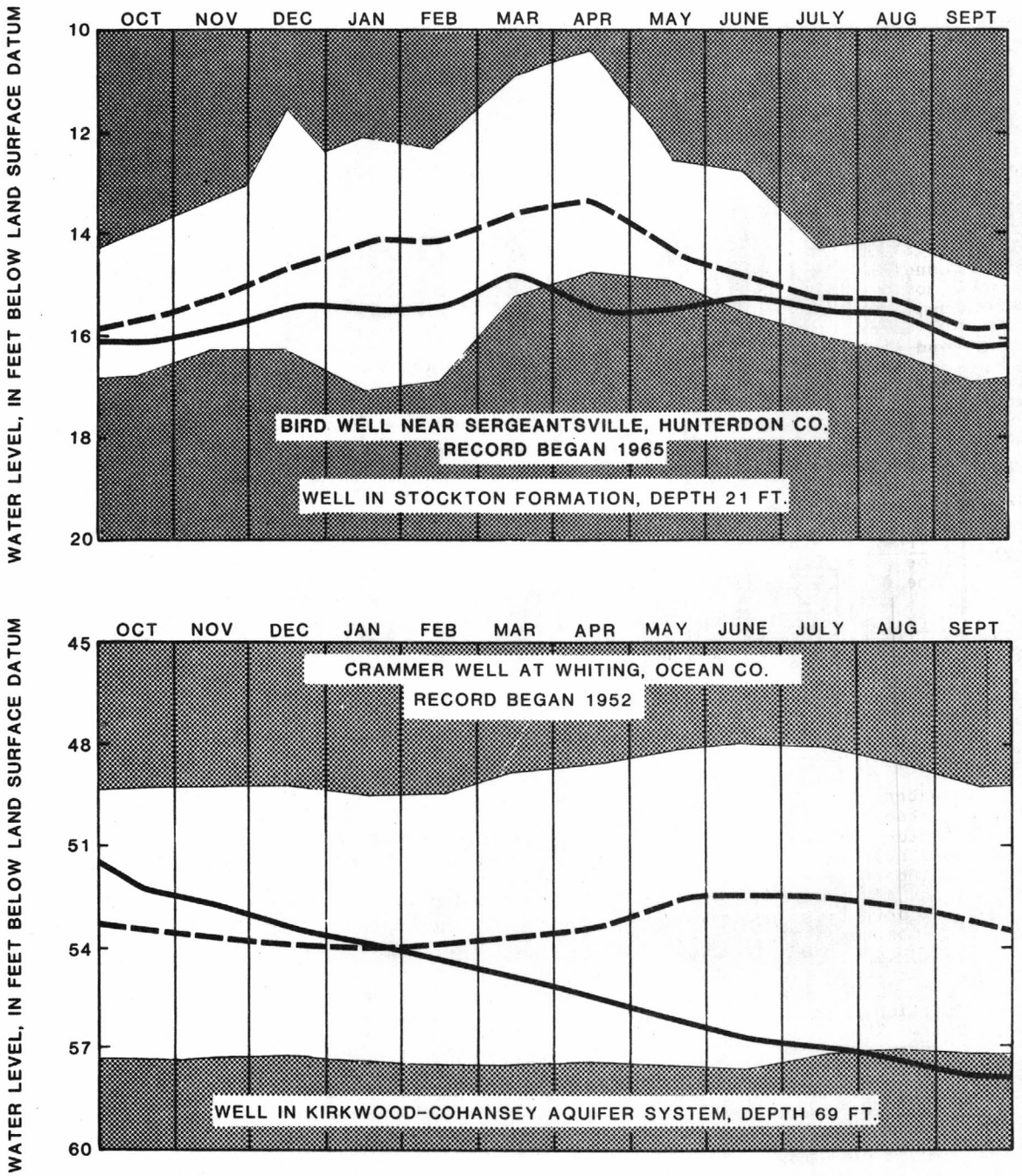


Figure 4.--Organochlorine compounds in bottom materials.



Unshaded area.--Indicates range between highest and lowest recorded monthly minimum water levels, prior to the current year.

Dashed line.--Indicates average of the monthly minimum water levels, prior to current year.

Solid line.--Indicates monthly minimum water level for the current year.

Figure 5.--Monthly ground-water levels at key water-table observation wells.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

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

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.

Tritium Network is a network of stations which has been established to provide baseline information or the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1985 water year that began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 7, 8, 9, and 10. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations 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 eight-digit number for each station, such as 01396500, which appears just to the left of the station name,

includes the two-digit Part number "01" plus the 6-digit downstream-order number "396500". The Part number designates the major drainage basin; for example, Part "01" covers the North Atlantic slope basins.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

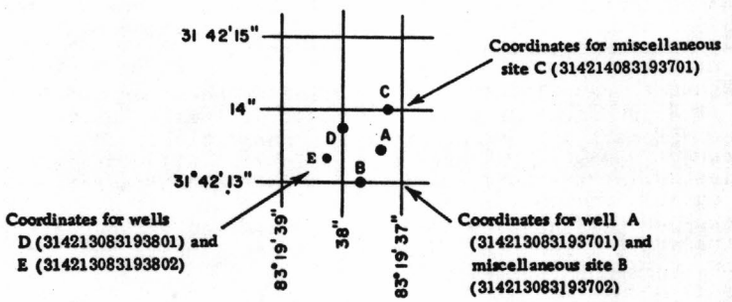


Figure 6.-- System for numbering wells and miscellaneous sites (latitude and longitude)

Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and crest-stage partial-record stations for which data are given in this report are shown in figures 7 and 8.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting;

(2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. 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 determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

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

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

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

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers or the Delaware River Basin Commission.

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

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

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

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

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

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

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

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

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 annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

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

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft°/s; to the nearest tenth between 1.0 and 10 ft°/s; to whole numbers between 10 and 1,000 ft°/s; and to 3 significant figures for more than 1,000 ft°/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the New Jersey District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

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

Classification of records

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

A careful distinction needs to be made between "continuing records", as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 7.

Arrangement of Records

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

On-site Measurements and Sample Collection

Water-quality data must represent the in-situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made onsite when the samples are collected. In addition, specific procedures must be used in collecting, treating, and shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. These references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey, New Jersey District office.

In streams, concentrations of various constituents may vary within the cross section depending on variables such as flow rate, the sources of the constituents, and mixing. Generally, constituents in solid phases are more variable in the cross section than are dissolved constituents. In many cases, samples must integrate several parts of the stream cross section to be representative, especially if loads will be calculated. One sample may be representative of the cross section when the distribution of constituents is homogeneous. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from several verticals.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. In some instances, apparent inconsistencies may exist in the data. For example, the orthophosphate-phosphorus concentration may exceed total phosphorus concentration. However, the difference in the inconsistent values normally is smaller than the precision of the analytical techniques. Inconsistencies between pH and carbonate and bicarbonate concentrations are commonly caused by intake or loss of carbon dioxide by the sample before it can be analyzed.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Geological Survey, New Jersey District Office whose address is given on the back of the title page of this report.

Water temperature

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

At stations where recording instruments are used, maximum, minimum and mean temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the New Jersey District Office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspenced-sediment loads for other periods of similar discharge.

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

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

Laboratory Measurments

Samples for biochemical-oxygen demand and for fecal coliform and fecal streptococcal bacteria are analyzed at the District laboratory or at the New Jersey Department of Health, Division of Laboratories and Epidemiology. Samples for nutrients are analyzed at the New Jersey Department of Health or at the Geological Survey Laboratory in Arvada, Colorado. Sediment samples are analyzed in the Geological Survey Laboratory in Harrisburg, Pennsylvania. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceeding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

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

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

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

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, temperature recorder, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

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

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

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

The surface-water-quality records for partial-record stations and miscellaneous sampling sites which are not at a surface-water daily record station are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

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

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in New Jersey are shown in figure 9.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the NJ-WRD well number, a hyphenated 6 digit identification number assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. 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 NJ-WRD well numbers are being used now in the ground-water level descriptions, wells sampled for water quality analyses, and on the corresponding location maps in these reports.

Water-level records are obtained from direct measurments with a steel tape, from the punched tape of a water-level recorder, or from water-level extremes recorder. Beginning in the 1977 water year, water-level recorders were removed from some wells and replaced by water-level extremes recorders. The extremes are read from these recorders at about three month intervals, but the actual dates of occurrence of these extremes (highest and lowest water levels) are unknown. In these reports, the water-level extremes are given together with the manually measured water levels. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The elevation of the land-surface datum 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 water-level recorders 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 of 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. All measurements published herein are reported to a hundredth of a foot.

Data Presentation

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

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

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

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

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

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

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

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

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum. For wells equipped with recorders, only abbreviated tables are published. Water-level mean values are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report consist of only one set of measurements for the water year. Because ground-water movement is normally slow compared to surface water, frequent measurements are not necessary for monitoring purposes. More frequent measurements may be necessary for studying ground-water problems, trends, or processes.

Data Collection and Computation

The records of ground-water quality in this report were obtained from water-quality monitoring studies in specific areas. Consequently, chemical analyses are presented for some counties but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

In ground-water observation wells, water in the casing may not be representative of aquifer water quality. To collect samples representative of aquifer water, samples are collected only after at least three casing volumes of water have been pumped from the well and measurements of temperature, specific conductance, and pH have stabilized during the pumping.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County and are identified by NJ-WRD well number. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

The Geological Survey is currently involved in a number of hydrologic investigations in the State of New Jersey. The following is a list of these investigations. Results are published at the conclusion of short-term projects or periodically in the case of long-term projects. Hydrologic data from these projects are entered into the Watstore data base. Subsequent sections contain information on recent publications and on Watstore.

Assessment of ground-water resources in the vicinity of ground-water contamination sites in Greenwich Township, New Jersey. *

Assessment of the water resources of Logan Township, Gloucester County, New Jersey.

Atmospheric deposition effects on water resources in the New Jersey Pinelands. *

Effects of estimated future withdrawals on water levels in the northeastern Coastal Plain aquifers of New Jersey. *

Evaluation of field sampling techniques and analytical methods for organic compounds in ground water.

Flood characteristics of New Jersey streams. *

Flood insurance studies for Federal Emergency Management Administration.

Geochemical effects on the corrosivity of ground water in the Kirkwood-Cohansey aquifer in the New Jersey Coastal Plain. *

Geohydrology at Picatinny Arsenal in Morris County, New Jersey.

Geohydrology in the vicinity of a fusion test reactor, Plainsboro Township, Middlesex County, New Jersey.

Geophysical characteristics of aquifers in New Jersey. *

Ground-water quality and its relationship to geohydrology and land use in the outcrop area of the Potomac-Raritan-Magothy aquifer system, Mercer and Middlesex Counties, New Jersey.

Ground-water data collection network. *

Ground-water withdrawals and use in South River area of New Jersey. *

Ground-water resources of northern Mercer County and southeastern Somerset County, New Jersey. *

Hydrologic processes with special emphasis on ground-water quality near Atlantic City, New Jersey. *

Hydrologic processes with special emphasis on ground-water quality near Camden, New Jersey. *

Hydrologic processes with special emphasis on ground-water quality near South River, N.J. *

Investigation of naturally occurring radioactive substances in ground water of the Triassic Formations in New Jersey. *

Land subsidence related to ground-water withdrawals in the Coastal Plain of New Jersey. *

Lead contamination of ground water in Ocean County, New Jersey. *

New Jersey water-use data system. *

Quality of water data collection network. *

Regionalization of low flows for New Jersey Streams. *

Simulation of multilayer Coastal Plain aquifer system of New Jersey.

Surface-water data collection network. *

Water-use data system for the Delaware River Basin.

*In cooperation with New Jersey Department of Environmental Protection, Division of Water Resources.

WATER-RELATED REPORTS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY DURING 1984-85

Duran, P.B., 1985, Distribution of bottom sediments and effects of proposed dredging in the ship channel of the Delaware River between northeast Philadelphia, Pennsylvania, and Wilmington, Delaware: U.S. Geological Survey Hydrologic Atlas 697, 1 p.

Fusillo, T.V., Hochreiter, J.J., Jr., and Lord, D.G., 1984, Water-quality data for the Potomac-Raritan-Magothy aquifer system in southwestern New Jersey, 1923-83: U.S. Geological Survey Open-File Report 84-737, 127 p.

Harbaugh, A.W., and Tilley, C.L., 1984, Steady-state computer model of the water-table aquifer in the Mullica River Basin, the Pine Barrens, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 84-4295, 38 p.

Harriman, D.A., and Voronin, L.M., 1984, Water-quality data for aquifers in east-central New Jersey, 1981-82: U.S. Geological Survey Open-File Report 84-821, 39 p.

Harriman, D.A., and Sargent, B.P., 1985, Ground-water quality in east central New Jersey and a plan for sampling networks: U.S. Geological Survey Water-Resources Investigations Report 85-4243, 114 p.

Hochreiter, J.J., Jr., and Kozinski, Jane, 1985, Quality of water and bed material in streams of Logan Township, Gloucester County, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 85-4300, 47 p.

Knobel, L.L., 1985, Ground-water-quality data for the Atlantic Coastal Plain: New Jersey, Delaware, Maryland, Virginia and North Carolina: U.S. Geological Survey Open-File Report 85-154, 84 p.

Koszalka, E.J., Miller, J.E., Jr., and Duran, P.B., 1985, Preliminary evaluation of chemical migration to ground water and the Niagra River from selected waste disposal sites: EPA-905/4-85-001, 425 p.

Leahy, P.P., 1985, Management of ground water and evolving hydrogeologic studies in New Jersey: A heavily urbanized and industrialized state in the northeastern United States: U.S. Geological Survey Water-Resources Investigations Report 85-4277, 27 p.

Lord, D.G., and Kish, G.R., 1985, Acidic deposition in New Jersey, Chapter III, Ground water processes in acidic deposition in New Jersey: a report to the Governor and Legislature of New Jersey by the panel on acidic deposition in New Jersey under the auspices of the Governor's Science Advisory Committee, 193 p.

May, J.E., 1985, Feasibility of artificial recharge to the 800-foot sand of the Kirkwood formation in the Coastal Plain near Atlantic City, New Jersey: U.S. Geological Survey Water-Resources Investigations Report 85-4063, 24 p.

Meisler, Harold, Leahy, P.P., and Knobel, L.L., 1984, Effect of eustatic sea-level changes on saltwater-freshwater in the northern Atlantic Coastal Plain: U.S. Geological Survey Water-Supply Paper 2255, 28 p.

Schopp, R.D., and Ulery, R.L., 1984, Cost-effectiveness of the stream-gaging program in New Jersey: U.S. Geological Survey Water-Resources Investigations Report 84-4108, 97 p.

Velnich, A.J., 1984, Drainage areas in New Jersey: Atlantic coastal basins, South Amboy to Cape May: U.S. Geological Survey Open-File Report 84-150, 33 p.

Vowinkel, E.F., 1984, Ground-water withdrawals from the Coastal Plain of New Jersey, 1956-80: U.S. Geological Survey Open-File Report 84-226, 32 p.

Zapecza, O.S., 1984, Hydrogeologic framework of the New Jersey Coastal Plain: U.S. Geological Survey Open-File Report 84-730, 61 p.

ACCESS TO WATSTORE DATA

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

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

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

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) 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 an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measurement 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 unit codes and geologic names of the formations in which the sampled wells are finished. The aquifer unit codes also appear in the ground-water quality tables.

112SFDF	Stratified Drift
112CPMY	Cape May Formation, Undifferentiated
112ESRNS	Cape May Formation, Estuarine Sand Facies
121CNSY	Cohansey Sand
121CKKD	Kirkwood-Cohansey Aquifer System
122KRKDU	Rio Grande Water-Bearing Zone of the Kirkwood Formation
122KRKDL	Atlantic City 800-Foot Sand of the Kirkwood Formation
124PNPN	Piney Point Aquifer
125VNCN	Vincentown Formation
211MLRW	Wenonah-Mount Laurel Aquifer
211EGLS	Englishtown Aquifer
211MRPA	Potomac-Raritan-Magothy Aquifer System, Undifferentiated
211MRPAU	Upper Aquifer, Potomac-Raritan-Magothy Aquifer System
211MRPAM	Middle Aquifer, Potomac-Raritan-Magothy Aquifer System
211MRPAL	Lower Aquifer, Potomac-Raritan-Magothy Aquifer System
211ODBG	Old Bridge Aquifer, Potomac-Raritan-Magothy Aquifer System (Mercer, Middlesex, Monmouth Counties)
211FRNG	Farrington Aquifer, Potomac-Raritan-Magothy Aquifer System (Mercer, Middlesex, Monmouth Counties)
231BRCK	Brunswick Formation
231SCKN	Stockton Formation

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. 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 that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Fecal streptococcal bacteria are bacteria found also in 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 plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial 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 sediment mixture 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, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

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

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

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

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

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

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 a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

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

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green 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 one or more times daily.
3. When sediment discharge records include 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, an artificial structure, or a uniform cross section over a long reach of the channel.

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

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 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 or 0.02832 cubic meters per second.

Cubic feet per second per square mile [$(ft^3/s)/mi^2$] 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.

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

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

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

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

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCo).

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

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

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 eight-digit number.

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

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

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 substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

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

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

National Geodetic Vertical Datum of 1929 (NGVD of 1929) 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.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information or the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

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

NJ-WRD well number is a hyphenated, 6-digit identification number which the U.S. Geological Survey assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. 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. Each well added to GWSI is assigned the next higher sequence number for the county in which the well is located. These NJ-WRD well numbers are being used now in the ground-water level descriptions, wells sampled for water-quality analyses, and on the corresponding location maps in these reports.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. 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 milliliter (mL) or liter (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.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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

Particle size is the diameter, in millimeters (mm), of a particle determined by either 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 native water (the river water at the time and point of sampling).

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

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

The partial-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter 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 living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

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

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

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

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

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

Polychlorinated biphenyls (PCB's) 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/(m^2.time)] for periphyton and macrophytes and [mg C/(m^3.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mgO /(m^2.time)] for periphyton and macrophytes and [mgO /(m^3.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.

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.

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

Return period is the average time interval between occurrences of a hydrological event of a given or greater mangitude, usually expressed in years. May also be called recurrence interval.

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.

Screened interval is the length of well screen through which water enters a well, in feet below land surface.

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

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

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 mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (MA7CD10) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

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

Substrate is the physical surface upon which an organism lives.

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

Artifical substrate is a device which is purposely placed in a stream or lake for colonization or organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate 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 the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

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

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um 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 are 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 filer or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

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

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

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

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

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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

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

Tons per day (7/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

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

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

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

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1985, is called the "1985 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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

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

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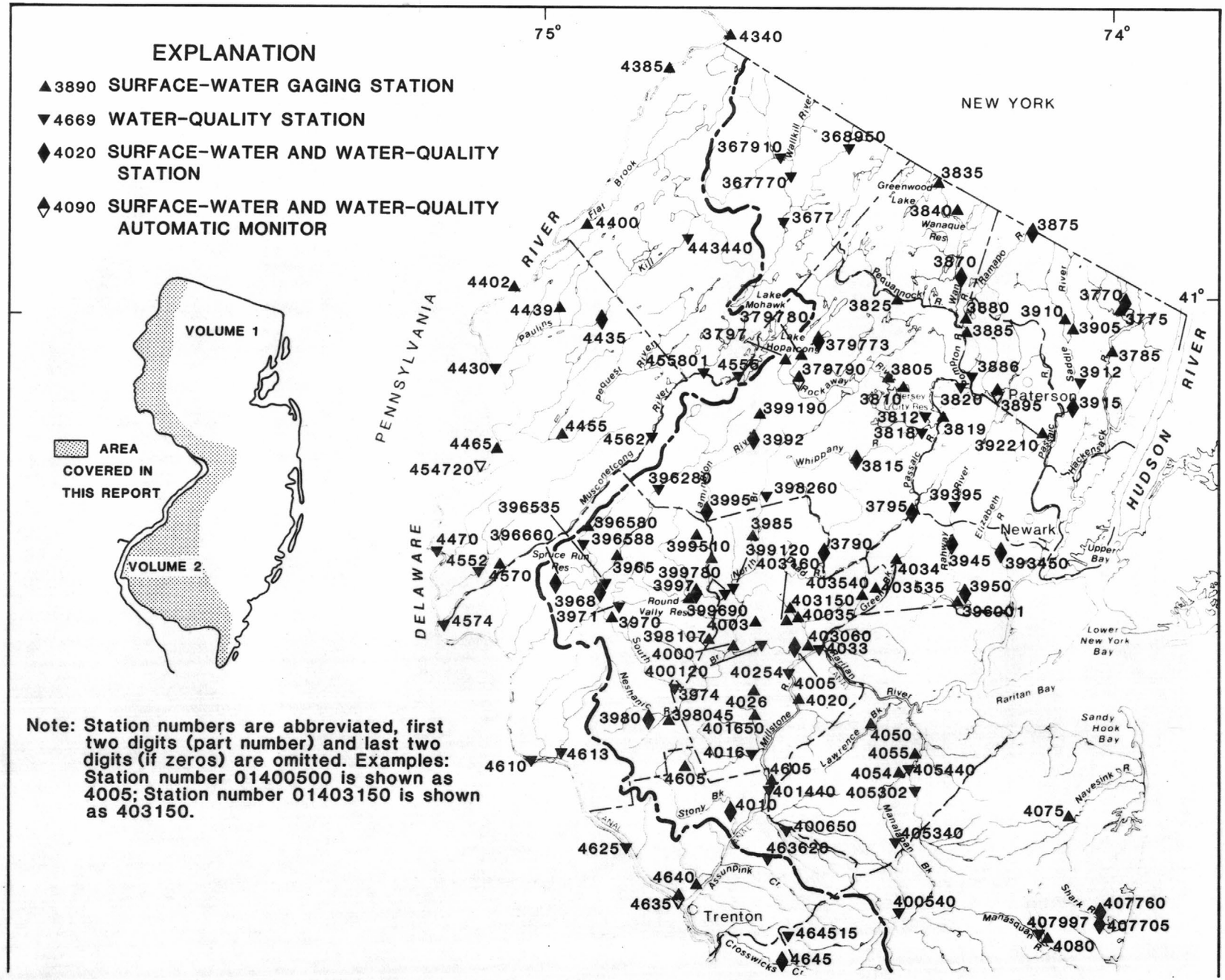
EXPLANATION
▲3890 SURFACE-WATER GAGING STATION
▼4669 WATER-QUALITY STATION
♦4020 SURFACE-WATER AND WATER-QUALITY STATION
♦4090 SURFACE-WATER AND WATER-QUALITY AUTOMATIC MONITOR
VOLUME 1
VOLUME 2
AREA COVERED IN THIS REPORT
Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01400500 is shown as 4005; Station number 01403150 is shown as 403150.
75°
74°
41°
NEW YORK
PENNSYLVANIA
DELAWARE
HUDSON RIVER
Delaware River
Wallkill River
Flat Brook
Kill
Paulins Kill
Lake Mohawk
Lake Hopatcong
Pequest River
Musconetcong River
Rockaway River
Whippany River
Passaic River
Hackensack River
Saddle River
Ramapo River
Wanaque R
Wanaque Res
Greenwood Lake
Pequannock R
Wanaque R
Pompton R
Jersey City Res
Spruce Run Res
Round Valley Res
South Br
Neshanic R
Raritan R
Millstone R
Lawrence Bk
Stony Bk
Assunpink Cr
Crosswicks Cr
Manalapan Bk
Manasquan R
Shark R
Navesink R
Elizabeth R
Rahway R
Newark
Paterson
Trenton
Raritan Bay
Sandy Hook Bay
Upper Bay
Lower New York Bay
4340
4385
367910
368950
367770
3835
3677
3840
3875
443440
4400
3870
4402
4439
379780
3825
3880
3910
3770
3775
4435
3797
379773
3885
3905
3785
4430
455801
4556
379790
3805
3886
3912
399190
3810
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3895
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4455
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3812
3819
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3992
3818
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396001
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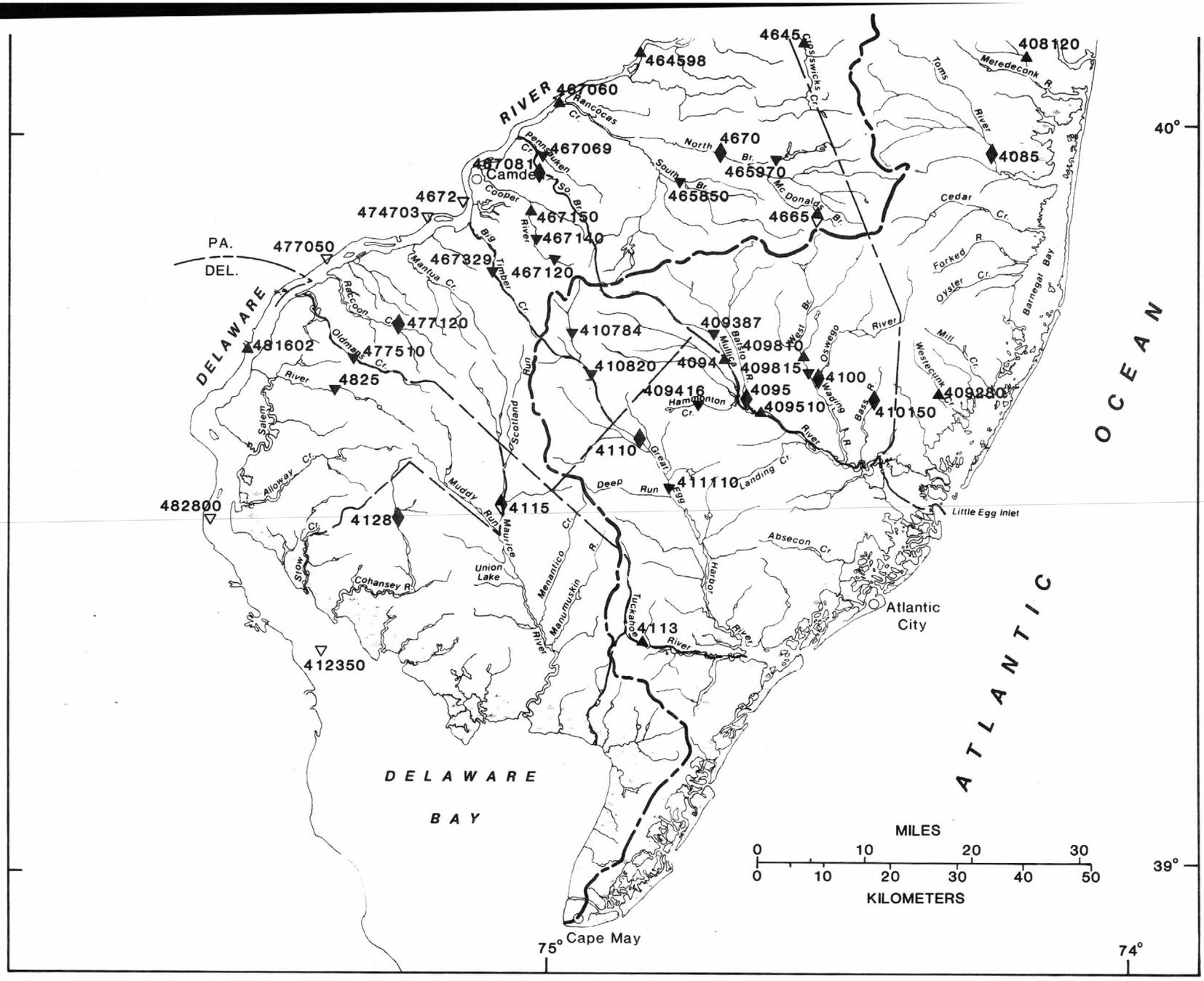
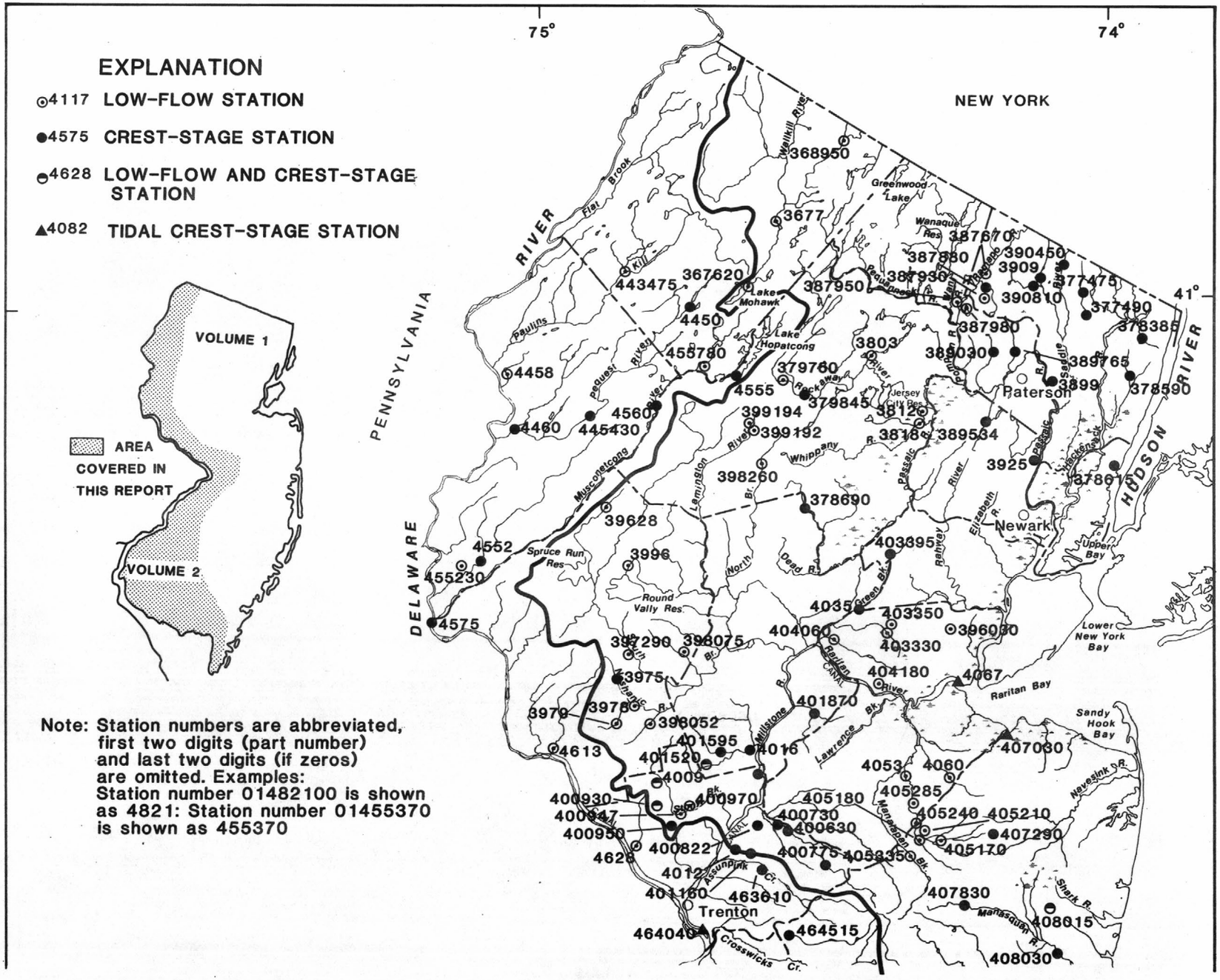


Figure 7.--Location of surface-water gaging stations and water-quality stations.

WATER RESOURCES DATA–NEW JERSEY, 1985



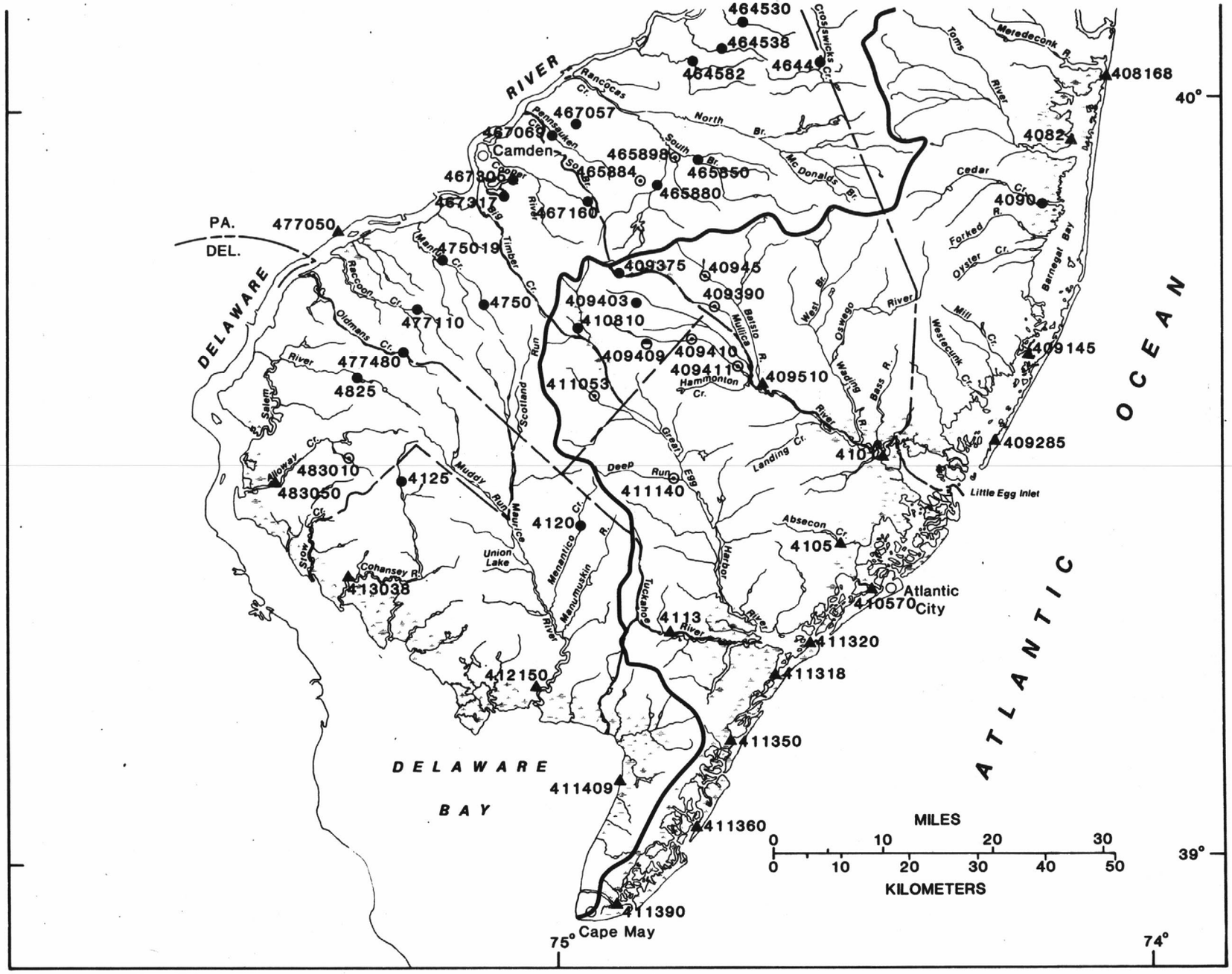
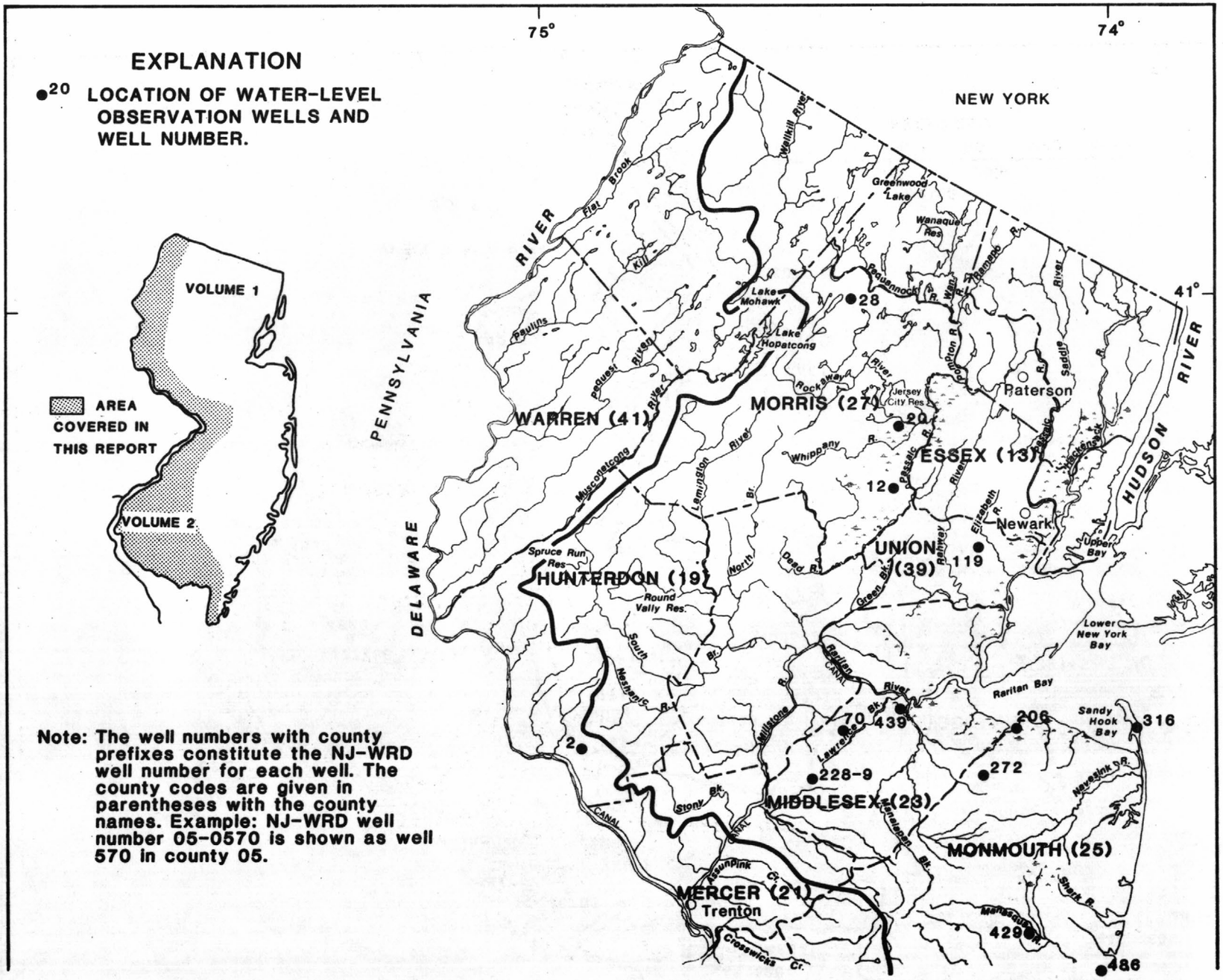


Figure 8.--Location of low-flow and crest-stage partial record stations.



Note: The well numbers with county prefixes constitute the NJ-WRD well number for each well. The county codes are given in parentheses with the county names. Example: NJ-WRD well number 05-0570 is shown as well 570 in county 05.

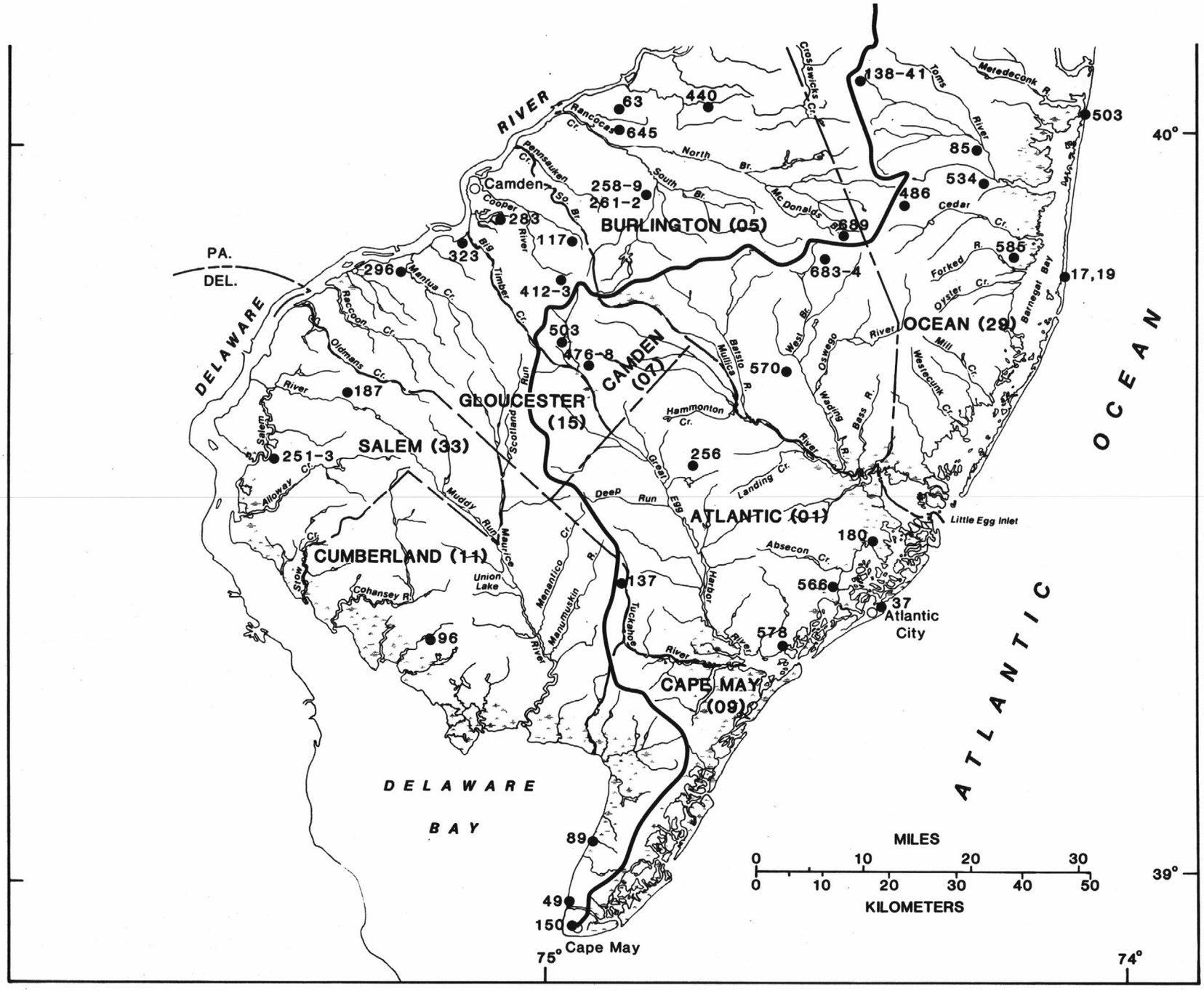
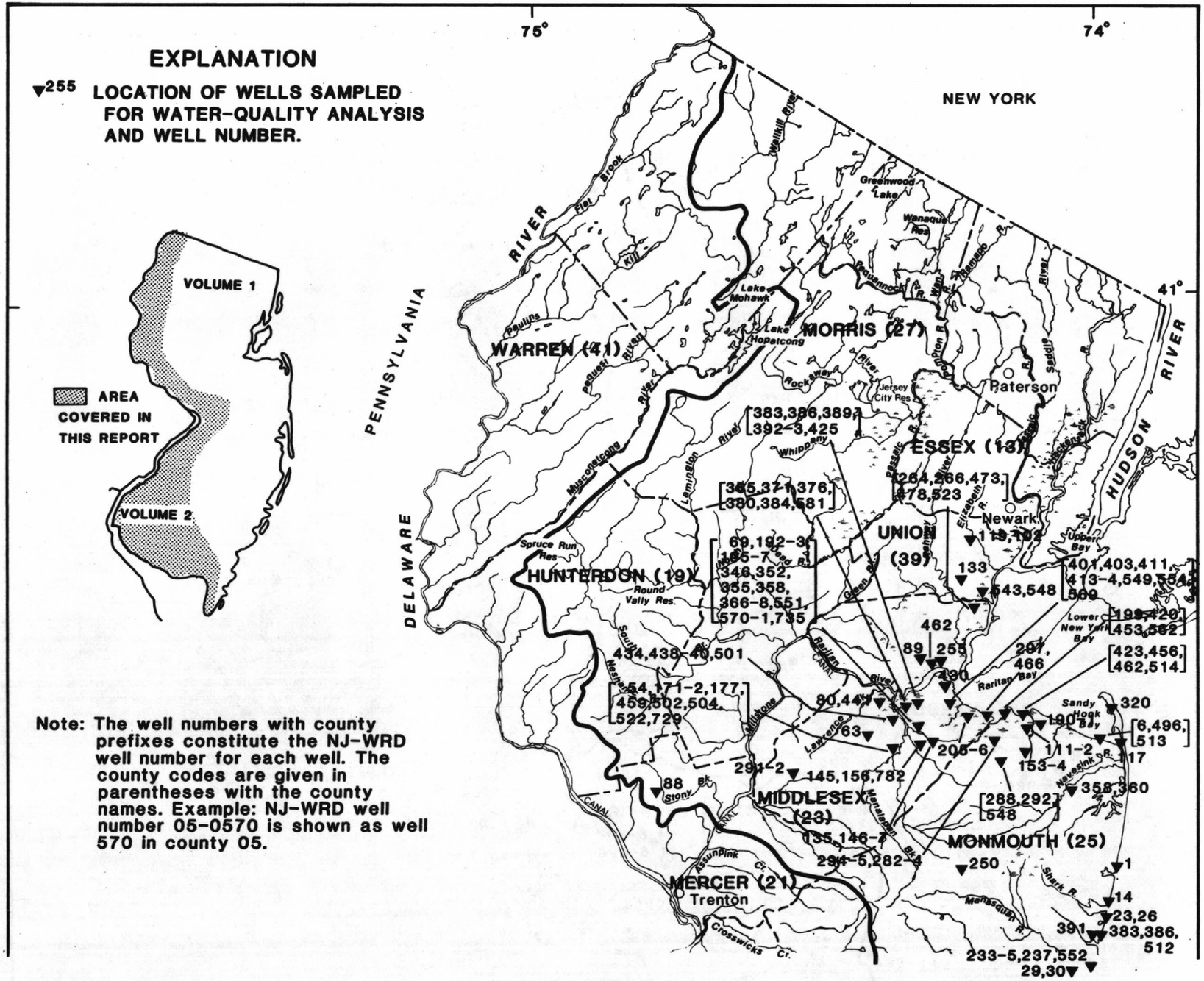


Figure 9.--Location of ground-water level observation wells.



Note: The well numbers with county prefixes constitute the NJ-WRD well number for each well. The county codes are given in parentheses with the county names. Example: NJ-WRD well number 05-0570 is shown as well 570 in county 05.

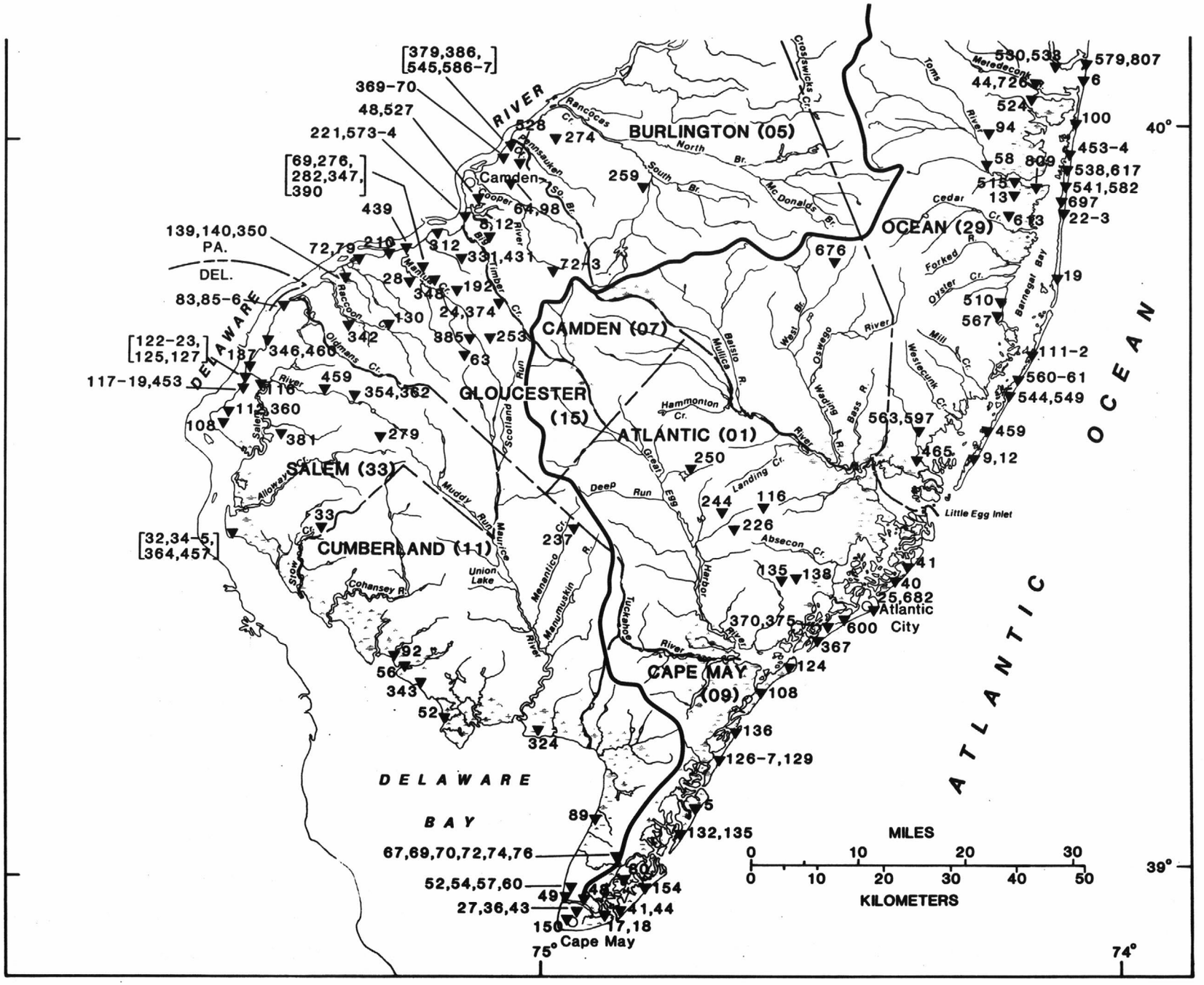


Figure 10.--Location of ground-water quality stations.

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ
(National stream quality accounting network station)

LOCATION.--Lat 39°29'42", long 75°04'38", Salem County, Hydrologic Unit 02040206, on right bank just upstream from bridge on Almond Road (State Route 540) at Norma, and 0.8 mi downstream from Blackwater Branch.

DRAINAGE AREA.--112 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1932 to current year. Monthly discharge only for December 1933, published in WSP 1302.

REVISED RECORDS.--WSP 1382: 1933. WDR NJ-79-1: 1967(P). WDR NJ-82-2: Drainage area.

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

REMARKS.--No estimated daily discharges. Records good. Occasional regulation by ponds above station. Several measurments of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--53 years, 167 ft³/s, 20.25 in/yr.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 380 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 28	0200	*554	*3.76	No other peak greater than base discharge.			

Minimum discharge, 53 ft³/s, Apr. 19, gage height, 2.42 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	121	116	105	101	116	114	77	129	81	160	75
2	163	116	116	104	136	117	121	74	121	77	200	74
3	168	111	118	105	148	112	122	143	112	71	213	72
4	170	108	120	112	149	107	118	175	105	68	206	71
5	164	127	118	118	147	111	109	171	115	62	161	68
6	146	132	152	120	145	114	106	168	129	64	108	66
7	128	128	158	122	139	111	102	172	124	66	98	60
8	118	124	156	121	129	110	102	154	126	73	148	63
9	112	121	151	112	118	111	100	130	130	106	189	72
10	108	117	143	103	112	109	98	111	124	110	205	77
11	106	117	133	102	109	106	95	100	114	150	136	83
12	104	126	124	101	140	113	93	94	108	125	122	85
13	105	127	120	100	193	116	89	90	106	105	88	78
14	103	125	121	100	205	114	89	87	99	96	88	67
15	101	124	123	100	214	111	90	82	94	86	86	68
16	100	126	127	98	213	107	91	80	91	96	79	65
17	97	127	125	95	199	105	90	89	106	88	72	62
18	95	121	118	95	178	102	87	183	106	83	73	61
19	89	129	115	95	156	99	65	171	102	80	80	60
20	83	127	114	95	140	98	64	152	96	75	80	59
21	89	121	115	95	132	98	74	142	92	66	82	59
22	92	119	119	92	132	95	78	172	88	70	104	59
23	96	117	118	91	126	99	78	193	84	73	86	60
24	104	113	114	90	124	106	79	314	78	71	82	61
25	114	108	114	90	124	118	88	278	73	69	86	61
26	116	103	112	94	130	121	88	227	67	75	99	69
27	119	101	111	95	138	114	85	153	61	83	109	275
28	118	100	109	93	147	108	81	124	66	91	94	462
29	139	113	109	93	---	105	79	136	73	99	77	411
30	128	116	107	92	---	101	78	134	77	99	76	403
31	124	---	107	92	---	100	---	135	---	102	77	---
TOTAL	3632	3565	3803	3120	4124	3354	2753	4511	2996	2660	3564	3306
MEAN	117	119	123	101	147	108	91.8	146	99.9	85.8	115	110
MAX	170	132	158	122	214	121	122	314	130	150	213	462
MIN	83	100	107	90	101	95	64	74	61	62	72	59
CFSM	1.04	1.06	1.10	.90	1.31	.96	.82	1.30	.89	.77	1.03	.98
IN.	1.21	1.18	1.26	1.04	1.37	1.11	.91	1.50	.00	.88	1.18	1.10

CAL YR 1984 TOTAL 81564 MEAN 223 MAX 790 MIN 83 CFSM 1.99 IN. 27.09
WTR YR 1985 TOTAL 41388 MEAN 113 MAX 462 MIN 59 CFSM 1.01 IN. 13.75

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923, 1953, 1960-62, 1965 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1980 to current year.
WATER TEMPERATURE: October 1966 to January 1968 (once daily), January 1980 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to January 1968.

INSTRUMENTATION.--Water-quality monitor since January 1980.

REMARKS.--Missing continuous water-quality records are the result of malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 151 microsiemens, Jan. 25, 1984; 52 microsiemens, June 16, 1982.
WATER TEMPERATURE: Maximum, 28°C, July 21, 1980; minimum 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 117 microsiemens, Feb. 1; minimum, 55 microsiemens, May 24, 25.
WATER TEMPERATURE: Maximum, 26.0°C, July 14, Aug. 15; minimum, 0.0°C, Jan. 21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
21...	1200	119	73	6.5	4.0	1.5	11.8	88	.4	K4	84
JAN											
09...	1345	111	78	6.4	2.5	--	13.0	94	.6	<4	K44
FEB											
28...	1235	146	69	6.4	8.0	1.5	11.0	92	2.4	K10	180
MAY											
23...	1045	184	63	6.4	19.0	1.5	6.9	75	13	K76	--
JUL											
30...	1010	100	69	6.4	22.0	1.6	7.4	85	1.5	K12	3500

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 FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV											
21...	17	3.4	2.0	5.0	1.7	6	7.9	9.6	<.10	6.2	40
JAN											
09...	--	--	--	--	--	6	--	--	--	--	--
FEB											
28...	17	3.5	2.0	4.7	1.7	6	8.8	8.5	.10	4.3	37
MAY											
23...	17	3.5	2.0	5.0	1.4	8	8.7	8.4	<.10	4.5	39
JUL											
30...	17	3.5	2.1	5.0	1.6	9	8.1	8.2	<.10	3.8	38

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
21...	13	4.2	68	1.5	<.010	.40	.020	<.010	<.010	--
JAN										
09...	1	.30	67	2.0	.020	.80	.040	<.010	<.010	3.7
FEB										
28...	2	.79	83	--	--	.90	.030	.040	--	4.2
MAY										
23...	4	2.0	80	.79	.030	.30	<.010	<.010	.010	--
JUL										
30...	2	.54	89	1.0	.030	.40	<.010	.040	.010	5.3

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV											
21...	1200	30	61	52	<.5	<1	1	<3	1	120	4
MAY											
23...	1045	120	60	55	<.5	<1	10	<3	4	180	2

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
NOV										
21...	<4	18	.1	<10	3	<1	<1	21	<6	13
MAY										
23...	<4	26	.3	<10	2	<1	<1	23	8	13

01411500 MAURICE RIVER AT NORMA, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	105	72	81	75	74	75	74	73	73	75	73	74
2	74	71	73	81	73	75	74	72	73	75	73	74
3	90	72	77	76	71	74	74	72	73	75	73	74
4	74	72	73	75	74	74	74	72	73	75	72	74
5	75	73	74	75	71	74	74	72	73	84	73	77
6	75	72	74	74	72	73	74	69	71	82	74	77
7	76	73	75	75	73	74	72	71	72	79	75	77
8	98	73	79	75	73	75	73	71	72	78	76	77
9	89	73	79	75	72	74	72	70	71	79	76	77
10	76	74	75	75	72	74	72	71	71	78	76	77
11	77	75	76	75	73	74	72	69	71	78	76	77
12	77	75	76	75	71	73	71	70	71	78	77	77
13	76	72	74	74	72	73	71	70	71	78	77	78
14	77	74	75	76	73	75	72	70	71	78	76	77
15	77	75	76	76	75	75	72	71	71	79	77	78
16	76	75	76	75	74	74	72	70	71	78	76	77
17	77	75	76	78	74	76	73	72	73	79	77	78
18	78	77	77	79	77	78	75	74	74	79	78	78
19	80	77	78	77	74	76	77	75	76	82	78	80
20	79	77	78	78	74	77	76	75	76	80	77	78
21	78	75	77	75	73	74	75	73	75	78	77	77
22	78	76	77	77	74	75	77	74	76	79	77	78
23	90	76	79	76	73	74	76	75	76	80	78	79
24	76	75	76	75	74	74	77	75	76	80	79	79
25	76	74	75	76	73	74	76	74	75	79	77	78
26	76	74	75	75	73	74	76	74	75	79	77	78
27	89	74	76	74	72	73	75	72	74	78	77	78
28	77	73	75	75	73	74	75	72	74	80	77	78
29	88	71	75	75	73	74	76	74	75	89	77	81
30	77	74	75	75	73	74	76	74	75	80	78	79
31	75	73	74	---	---	---	75	73	75	79	78	78
MONTH	105	71	76	81	71	74	77	69	73	89	72	77

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	117	78	89	68	66	67	70	69	70	78	75	76
2	114	79	90	68	66	67	71	69	70	74	72	73
3	86	79	82	69	67	68	71	65	70	74	67	70
4	85	77	81	69	67	68	70	68	69	69	67	68
5	81	77	79	69	68	68	72	69	71	70	68	69
6	92	77	86	70	68	69	72	71	72	71	68	70
7	102	87	95	70	68	69	71	70	71	70	67	69
8	91	87	89	70	68	69	71	70	71	74	70	72
9	89	86	88	71	69	70	73	72	72	76	72	74
10	87	86	87	71	68	70	72	71	72	75	73	74
11	87	84	86	71	68	70	73	72	73	76	72	74
12	86	78	83	71	69	70	73	71	72	76	74	75
13	81	77	79	71	69	70	73	72	72	76	73	74
14	77	75	76	71	68	69	73	72	72	74	72	73
15	75	73	74	70	68	69	73	71	72	74	72	73
16	76	74	75	71	69	70	72	71	72	75	73	74
17	76	74	75	70	69	69	72	70	71	74	70	72
18	76	74	75	71	69	70	73	71	72	68	59	62
19	76	74	75	71	69	70	77	73	74	67	64	65
20	75	74	75	72	69	71	77	72	75	68	66	68
21	74	72	73	71	70	70	74	72	73	69	67	68
22	74	72	73	71	69	70	75	71	73	66	62	63
23	73	71	72	70	69	69	76	72	74	65	59	62
24	70	66	67	71	68	70	74	73	74	58	55	56
25	68	67	67	71	68	70	75	73	74	60	55	58
26	68	66	67	72	69	70	77	74	76	63	59	61
27	67	64	66	72	69	71	76	74	75	68	62	64
28	68	65	67	73	71	72	76	72	75	66	64	64
29	---	---	---	73	71	72	76	72	74	64	62	63
30	---	---	---	72	71	71	77	74	76	63	62	62
31	---	---	---	73	70	71	---	---	---	63	61	62
MONTH	117	64	78	73	66	70	77	65	73	78	55	68

01411500 MAURICE RIVER AT NORMA, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	65	62	64	72	71	72	72	67	69	74	72	73
2	66	63	65	74	71	72	70	66	68	77	73	75
3	67	65	66	72	70	71	68	65	67	76	73	74
4	68	64	66	72	71	72	69	68	69	77	74	75
5	69	63	65	73	72	72	72	69	70	75	72	74
6	66	63	64	73	71	72	74	70	72	73	72	73
7	65	63	65	73	70	71	73	71	72	73	72	73
8	65	62	64	73	67	71	73	64	67	74	72	73
9	63	61	62	72	70	71	67	64	66	74	71	73
10	65	63	64	72	69	71	69	63	65	72	70	71
11	66	64	65	70	68	69	69	67	68	74	70	71
12	66	64	65	73	69	71	69	67	68	70	68	69
13	66	64	65	74	71	72	73	69	71	71	69	69
14	67	65	66	76	72	74	74	70	71	72	70	71
15	68	66	67	75	73	74	73	71	72	70	69	70
16	69	67	68	74	72	73	77	72	74	70	69	69
17	67	65	66	76	73	74	77	73	75	70	69	70
18	69	67	68	76	73	74	76	72	74	71	69	70
19	69	68	68	76	74	74	74	72	73	71	70	71
20	69	68	68	80	73	75	74	71	73	72	70	71
21	69	68	69	79	75	77	73	71	72	72	70	71
22	70	68	69	79	75	76	74	69	71	73	71	72
23	71	69	70	76	73	74	74	71	73	74	71	72
24	71	69	71	78	74	75	73	70	72	73	72	73
25	72	70	71	80	74	76	73	71	72	73	71	72
26	76	72	74	79	73	75	74	71	72	73	61	70
27	76	73	74	74	70	72	73	69	71	71	60	66
28	73	71	72	72	70	71	73	71	72	63	60	62
29	73	70	71	73	70	71	75	72	74	65	62	64
30	72	70	71	72	70	71	75	72	73	65	62	63
31	---	---	---	73	67	71	75	72	73	---	---	---
MONTH	76	61	67	80	67	73	77	63	71	77	60	71

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

01411500 MAURICE RIVER AT NORMA, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	3.5	3.5	8.5	6.5	7.5	13.0	10.5	12.0	20.0	16.5	18.5
2	3.5	3.0	3.0	10.0	8.0	9.0	11.5	9.5	10.5	19.0	15.5	17.0
3	3.0	2.0	2.5	9.5	8.0	9.0	9.5	8.0	9.0	15.0	12.5	13.5
4	3.0	1.5	2.0	8.5	7.5	8.0	10.5	8.0	9.5	15.5	11.5	13.5
5	2.5	1.5	2.0	11.0	8.0	9.5	14.5	9.5	12.0	17.0	13.5	15.5
6	2.5	2.5	2.5	9.0	7.0	8.0	15.5	13.0	14.0	18.0	15.5	17.0
7	3.0	2.0	2.5	7.5	5.5	6.5	14.5	12.5	13.5	18.5	17.0	17.5
8	2.5	1.0	1.5	8.5	7.0	8.0	12.5	11.0	12.0	19.0	16.0	17.0
9	3.0	1.0	2.0	10.0	7.5	8.5	11.0	9.0	10.0	18.5	15.5	17.0
10	4.0	2.0	3.0	10.0	7.5	9.0	10.5	7.5	9.0	20.0	16.0	18.0
11	5.0	2.5	3.5	10.0	8.0	9.0	10.5	8.5	9.5	22.0	18.0	20.0
12	5.5	3.5	4.5	10.5	9.0	10.0	13.5	9.0	11.5	22.0	19.5	21.0
13	4.0	2.5	3.0	10.5	8.0	9.5	14.5	11.5	13.0	23.0	19.5	21.5
14	4.0	2.5	3.0	11.5	10.0	10.5	15.0	12.0	13.5	23.5	20.5	22.0
15	4.0	2.0	3.0	11.0	9.0	10.0	14.5	13.5	14.0	21.5	19.5	20.5
16	3.5	1.5	2.5	9.5	7.5	8.5	17.0	14.0	15.5	20.0	18.0	19.0
17	4.0	2.0	3.0	10.5	8.0	9.0	16.5	14.0	15.0	19.0	17.5	18.5
18	4.5	2.0	3.5	9.0	7.0	8.0	16.5	12.5	14.5	19.0	16.5	17.5
19	5.5	3.5	4.5	8.0	5.5	6.5	19.0	14.5	17.0	18.5	16.0	17.5
20	5.5	3.0	4.5	9.5	7.0	8.0	19.5	16.5	18.0	20.5	16.5	18.5
21	5.5	3.0	4.5	9.0	7.5	8.5	20.5	17.0	19.0	20.5	18.5	19.5
22	7.0	5.0	6.0	8.5	7.0	8.0	21.5	18.0	20.0	21.0	18.5	19.5
23	8.5	6.0	7.0	8.0	7.5	8.0	21.5	18.5	20.0	20.0	17.5	18.5
24	9.5	6.5	8.0	8.0	7.5	8.0	19.0	15.5	16.5	18.0	17.0	17.5
25	11.5	9.5	10.5	9.5	7.0	8.0	16.5	15.0	16.0	19.0	16.5	18.0
26	11.0	10.0	10.5	9.5	6.5	8.0	19.0	14.5	17.0	20.5	17.5	19.0
27	11.5	9.5	10.5	11.5	7.0	9.5	20.0	16.5	18.0	22.0	19.0	20.5
28	9.0	7.5	8.0	14.0	10.0	12.0	18.5	16.0	17.5	22.5	20.0	21.5
29	---	---	---	15.5	13.0	14.0	18.5	15.5	17.0	21.5	19.0	20.0
30	---	---	---	14.5	13.5	14.0	19.0	15.0	17.0	21.0	17.5	19.0
31	---	---	---	13.5	11.0	12.0	---	---	---	20.0	18.0	19.0
MONTH	11.5	1.0	4.5	15.5	5.5	9.0	21.5	7.5	14.5	23.5	11.5	18.5

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

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 south of Seeley, 2.6 mi east of Shiloh, 4.1 mi north of Bridgeton, and 22.5 mi upstream from mouth.

DRAINAGE AREA.--28.0 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 26.9 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 21 to Sept. 30. Records fair except for period of no gage-height record, Aug. 21 to Sept. 30, which are poor. Flow diverted above gage during summer months for irrigation. Several measurements of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--8 years, 38.2 ft³/s, 18.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, June 21, 1983, includes discharge from dam break at Seeley Lake 1.3 mi upstream, gage height, 8.50 ft, from rating curve extended above 600 ft³/s on basis of step-backwater computation of peak flow; minimum, 13 ft³/s, Sept. 13, 1981, gage height, 2.71 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 31	2130	543	5.65	Sept. 27	unknown	*564	a*5.69
Aug. 8	1545	328	5.17				

a From maximum indicator.

Minimum daily discharge, 15 ft³/s, Sept. 7, 19, 21, 22, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	30	32	26	35	25	37	21	21	21	273	17
2	65	30	30	27	82	26	30	23	22	21	48	16
3	39	29	34	29	70	25	25	62	23	21	23	16
4	32	29	33	31	37	25	24	50	23	21	23	16
5	29	37	32	34	28	29	23	34	28	21	23	16
6	28	34	56	31	29	27	22	31	24	21	23	16
7	28	30	42	28	27	26	20	30	21	21	23	15
8	28	29	33	27	24	27	20	29	23	21	169	17
9	28	30	31	25	24	27	20	27	21	22	64	22
10	28	31	31	24	24	25	20	28	21	21	26	21
11	28	34	31	25	24	25	20	28	22	21	26	22
12	27	34	29	25	99	30	20	28	23	21	26	18
13	28	31	29	25	154	28	20	28	22	21	26	16
14	27	29	29	26	45	26	20	27	23	21	26	16
15	27	29	29	27	32	25	22	26	23	21	26	16
16	27	30	28	25	29	25	23	27	23	25	26	16
17	27	29	29	26	27	25	21	45	22	29	26	16
18	27	29	28	26	26	24	20	74	22	22	26	16
19	28	39	28	26	27	24	20	33	23	21	26	15
20	28	34	29	25	28	24	20	23	22	21	26	16
21	28	31	28	24	27	24	20	21	22	21	27	15
22	30	30	31	24	27	24	20	24	21	21	31	15
23	32	30	28	24	28	30	20	26	21	21	26	16
24	34	30	26	24	26	30	20	29	21	21	23	15
25	34	30	26	25	25	30	27	24	21	20	27	16
26	32	30	24	26	26	25	25	21	21	22	29	22
27	31	29	25	24	26	24	22	21	21	23	23	510
28	30	30	26	24	25	24	21	21	21	23	19	180
29	36	41	26	24	---	24	21	23	21	22	18	60
30	32	34	26	24	---	25	22	21	21	22	17	32
31	30	---	25	24	---	25	---	21	---	84	19	---
TOTAL	979	942	934	805	1081	803	665	926	663	734	1214	1220
MEAN	31.6	31.4	30.1	26.0	38.6	25.9	22.2	29.9	22.1	23.7	39.2	40.7
MAX	65	41	56	34	154	30	37	74	28	84	273	510
MIN	27	29	24	24	24	24	20	21	21	20	17	15
CFSM	1.13	1.12	1.07	.93	1.38	.92	.79	1.07	.79	.85	1.40	1.45
IN.	1.30	1.25	1.24	1.07	1.44	1.07	.88	1.23	.88	.98	1.61	1.62

CAL YR 1984 TOTAL 15554 MEAN 42.5 MAX 241 MIN 21 CFSM 1.52 IN. 20.66
WTR YR 1985 TOTAL 10966 MEAN 30.0 MAX 510 MIN 15 CFSM 1.07 IN. 14.57

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER-QUALITY RECORDS

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 17...	0950	28	225	6.4	14.0	9.0	86	<1.1	170	240
FEB 04...	1220	35	176	6.5	2.0	12.6	--	5.0	790	>2400
MAR 28...	1130	24	190	6.4	12.0	11.8	--	2.6	<20	6
JUN 12...	1340	21	204	6.4	21.5	8.0	92	3.3	16000	>2400
JUL 17...	1140	27	190	6.0	23.5	8.1	95	E1.6	2200	>2400
AUG 19...	1220	26	193	6.6	22.0	8.7	100	E1.2	230	1600

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 17...	60	12	7.4	12	4.7	14	24	28	<.10
FEB 04...	51	10	6.4	9.4	6.1	9.0	23	23	.10
MAR 28...	57	11	7.2	12	3.4	10	24	26	<.10
JUN 12...	53	10	6.8	12	3.6	14	20	25	<.10
JUL 17...	56	11	6.9	9.1	4.0	16	22	22	<.10
AUG 19...	54	11	6.5	12	4.8	14	21	26	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	7.5	100	E.013	4.4	.070	E.05	--	.100	1.9
FEB 04...	6.6	90	.027	4.1	.330	1.9	5.9	.280	5.3
MAR 28...	6.7	96	.018	4.8	.090	E.05	--	.040	2.3
JUN 12...	6.8	93	.034	3.5	.200	1.1	4.6	.150	4.3
JUL 17...	5.3	90	.031	2.6	.270	.83	3.4	.100	4.1
AUG 19...	7.0	97	.028	3.5	.160	.50	4.0	.060	2.8

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	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, TOTAL RECOVERABLE (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)
OCT 17...	0950	--	<.1	--	--	<1	--	--	--	<1	--
JUN 12...	1340	<.5	--	<10	1	--	<10	30	<1	--	10

DATE	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, TOTAL RECOVERABLE (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...	1	<10	--	2	--	1200	--	<10	--	31	--
JUN 12...	--	--	4	--	1800	--	15	--	160	--	<.1

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 17...	<.01	--	<10	--	<1	--	4	--	<1	<1.0	<.1
JUN 12...	--	5	--	<1	--	90	--	<1	--	--	--

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)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, 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)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 17...	<1.0	6.3	15	11	<.1	.7	<.1	<.1	<.1	<.1	<.1
JUN 12...	--	--	--	--	--	--	--	--	--	--	--

DATE	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)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 17...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<10	<.1
JUN 12...	--	--	--	--	--	--	--	--	--	--

01434000 DELAWARE RIVER AT PORT JERVIS, NY

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

DRAINAGE AREA.--3,070 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 1031: 1905-36. WDR NY-71-1: 1970. WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft above National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft upstream at present datum; operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Estimated daily discharges: Jan. 9 to Feb. 20. Records good except those for estimated daily discharges, which are fair. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi^2 of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi^2 of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft^3/s Aug. 19, 1955, gage height, 23.91 ft, from floodmarks in gage house, from rating curve extended above 89,000 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 26.6 ft Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft^3/s Sept. 23, 1908, gage height, 0.6 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft^3/s Oct. 10, 1903, gage height, 23.1 ft, from rating curve extended above 70,000 ft^3/s by velocity-area studies; stage on Mar. 8, 1904 was 25.5 ft, ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 67,700 ft^3/s Sept. 28, gage height, 12.61 ft; minimum, 555 ft^3/s Aug. 23, gage height, 1.50 ft; minimum daily, 853 ft^3/s Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	1920	4660	4950	1430	5180	3120	1770	2480	1520	1990	1490
2	1190	1070	3990	4620	1290	4300	4420	1780	3170	1230	2460	1400
3	912	1900	3680	4450	1090	3680	4350	3450	3340	1280	1990	1130
4	1940	1590	3790	3900	1360	3310	4000	4630	2780	1220	1250	1030
5	1660	1710	3820	3490	1760	3030	3780	3520	2790	1180	1130	1070
6	1640	1810	4600	3030	1590	4030	3580	2940	3040	1340	1700	1090
7	1730	1900	3220	3140	1340	3810	3370	2870	2830	1380	1750	1110
8	1530	1940	2310	3230	1270	3680	3940	2820	2500	1930	1660	1130
9	1540	1800	2070	2440	1620	3710	4500	2500	1490	1580	1660	1320
10	1600	1730	2180	1660	1550	3440	3930	2190	1590	1360	1610	3420
11	1650	1690	2140	1670	1650	3720	3490	1890	1960	1470	1270	2900
12	1660	1680	2250	2030	1900	7330	3310	1740	1860	1540	1190	1910
13	1710	1860	2450	1840	2110	16300	2960	1670	1680	1930	1370	1350
14	1790	1610	2740	2190	2530	11900	2660	1660	1380	2360	1390	1060
15	1800	1760	3190	2200	2510	9220	2700	1460	1340	2040	1420	874
16	1980	1540	3160	1920	2330	6980	2700	1290	1610	2610	1560	853
17	1800	1560	2990	1860	1920	5590	2600	1220	1910	2870	1400	1310
18	1960	1680	2910	1590	1510	5420	2480	1650	1660	2120	1100	1310
19	2000	1730	2720	1540	1390	4690	2310	2930	1530	1750	1130	1250
20	1720	1870	2970	1340	1480	4070	2420	2900	1240	1260	1230	1180
21	1860	1620	3420	1700	1400	4320	2530	2320	1150	1050	1240	1160
22	1720	1710	3720	3300	1340	4060	2410	1920	1150	2450	1220	1060
23	2040	1660	6640	1890	1750	3640	2310	1670	950	3040	1160	1150
24	2220	1620	5600	2070	4200	3170	2260	1530	1300	2460	1310	1200
25	1670	1610	4490	1970	9070	3340	2330	1380	1780	2230	1030	1170
26	1620	1710	3800	2330	10700	3160	2310	1260	1690	3330	1520	1210
27	1730	1640	3340	1890	7740	2510	2220	1210	1670	2170	1600	16900
28	1640	1680	3370	1610	6060	2420	1970	1530	1410	1600	1310	48100
29	1710	2200	4310	1810	---	2430	1840	3600	1430	1430	1200	18600
30	1630	6500	6280	1520	---	2470	1810	3530	1650	1330	1170	11200
31	1480	---	6040	1470	---	2340	---	2720	---	1610	1340	---
TOTAL	52712	56300	112850	74650	75890	147250	88610	69550	56360	56670	44360	129937
MEAN	1700	1877	3640	2408	2710	4750	2954	2244	1879	1828	1431	4331
MAX	2220	6500	6640	4950	10700	16300	4500	4630	3340	3330	2460	48100
MIN	912	1070	2070	1340	1090	2340	1810	1210	950	1050	1030	853

CAL YR 1984 TOTAL 1957462 MEAN 5348 MAX 75300 MIN 912
WTR YR 1985 TOTAL 965139 MEAN 2644 MAX 48100 MIN 853

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: OC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
Bacteria--1973-76 (d).
Phytoplankton--1974 (b), 1975-76 (c).
Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

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

INSTRUMENTATION.--Water-temperature digital recorder since January 1973, provides one-hour-interval punches.

REMARKS.--Interruptions of record were due to malfunctions of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-81, 1983-84), 30.0°C July 13, 1981; minimum (water years 1958-60, 1973, 1975-85), 0.0°C on many days during winter periods, except 1984.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, 0.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	2.0	1.0	1.5	8.5	7.0	7.5	18.0	15.5	17.0
2	.0	.0	.0	3.5	2.0	3.0	7.0	6.0	6.5	17.0	15.0	16.0
3	.0	.0	.0	3.5	2.5	3.0	6.0	5.0	5.5	15.0	12.0	13.0
4	.0	.0	.0	2.5	1.0	1.5	7.0	4.5	5.5	15.0	11.5	13.0
5	.0	.0	.0	2.5	1.0	1.5	10.0	6.0	7.5	15.5	12.5	14.0
6	.0	.0	.0	2.0	1.0	1.5	11.5	8.5	10.0	16.0	13.5	14.5
7	.0	.0	.0	2.0	1.0	1.5	11.0	9.5	10.0	16.5	14.0	15.0
8	.0	.0	.0	3.5	1.5	2.0	10.5	8.5	9.5	16.5	13.5	15.0
9	.0	.0	.0	4.5	2.0	3.0	9.0	7.0	7.5	16.5	12.5	14.5
10	.0	.0	.0	4.5	2.5	3.5	8.0	6.0	7.0	18.5	13.5	16.5
11	.0	.0	.0	5.0	3.0	4.0	8.0	6.5	7.0	20.5	16.5	18.5
12	.0	.0	.0	6.0	4.0	5.0	10.0	6.0	7.5	21.5	18.5	20.0
13	.0	.0	.0	4.5	3.5	4.0	11.5	8.0	9.5	23.5	20.0	22.0
14	.0	.0	.0	4.5	4.0	4.0	11.0	9.0	10.0	24.0	20.5	22.0
15	.0	.0	.0	4.5	3.5	4.0	11.5	9.5	10.5	22.5	20.0	21.5
16	.0	.0	.0	4.5	3.0	3.5	13.5	10.5	11.5	21.0	18.5	20.0
17	.0	.0	.0	5.0	3.5	4.0	13.0	10.0	11.5	20.0	18.0	19.0
18	.0	.0	.0	4.0	2.5	3.5	13.5	9.5	11.5	19.5	17.0	18.5
19	.5	.0	.0	4.0	2.5	3.0	14.5	11.0	13.0	18.5	16.5	17.5
20	.5	.0	.0	5.5	3.5	4.0	15.5	12.5	14.0	19.5	15.5	17.5
21	.5	.0	.5	5.5	4.0	4.5	18.0	14.0	16.0	20.5	17.0	19.0
22	.5	.0	.5	5.5	4.0	4.5	20.0	15.5	18.0	21.5	17.5	20.0
23	1.0	.5	.5	6.0	4.5	5.0	19.0	16.5	18.0	20.5	18.0	19.0
24	1.0	.0	.5	6.0	5.0	5.5	17.5	15.5	16.0	21.5	17.5	19.5
25	.5	.0	.0	6.5	4.5	5.5	16.0	14.0	15.0	22.0	18.5	20.5
26	.5	.0	.0	7.0	4.5	5.5	17.0	13.5	15.5	22.5	20.0	21.5
27	2.0	.5	1.5	8.0	4.5	6.5	17.5	14.5	16.0	---	---	---
28	1.5	.5	1.0	10.5	6.5	8.5	16.5	14.5	15.5	---	---	---
29	---	---	---	12.0	8.5	10.5	16.0	12.5	14.5	---	---	---
30	---	---	---	12.5	10.0	11.0	17.5	13.5	15.5	---	---	---
31	---	---	---	11.0	8.0	9.5	---	---	---	---	---	---
MONTH	2.0	.0	.0	12.5	1.0	4.5	20.0	4.5	11.5	24.0	11.5	18.0

01437500 NEVERSINK RIVER AT GODEFFROY, NY

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

DRAINAGE AREA.--307 mi^2.

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

REVISED RECORDS.--WSP 1502: 1951(M). WDR NY-82-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Dec. 8-10, 27, Jan. 5 to Feb. 15, and Feb. 20-25. Records fair except those for estimated daily discharges, 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 92.5 mi^2 of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft^3/s Aug. 19, 1955, gage height, 12.49 ft, from rating curve extended above 11,000 ft^3/s on basis of slope-area measurement of peak flow; minimum, practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,510 ft^3/s Sept. 27, gage height, 6.99 ft; minimum discharge, 33 ft^3/s Nov. 23, gage height, 2.92 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	101	270	347	110	474	297	148	459	166	409	134
2	111	100	215	359	110	435	350	154	388	129	264	105
3	95	79	211	339	100	388	309	656	293	119	198	90
4	88	72	287	300	100	351	289	715	257	114	166	80
5	83	97	230	270	100	390	272	487	240	129	138	77
6	83	185	226	230	100	460	265	436	252	139	125	126
7	82	146	194	200	100	371	265	421	218	157	114	128
8	82	135	150	170	100	386	314	371	225	131	151	125
9	81	123	150	140	100	446	354	322	243	125	159	305
10	81	137	160	130	100	414	311	289	214	123	139	788
11	79	134	168	130	100	392	284	267	183	128	119	387
12	76	117	181	130	110	1220	277	248	169	120	99	256
13	81	107	200	150	200	1290	263	229	159	172	81	196
14	77	96	216	180	270	940	259	210	154	155	68	171
15	79	85	206	170	260	797	256	185	141	216	77	153
16	80	81	195	160	225	679	253	175	174	246	70	158
17	77	78	186	160	201	605	243	177	206	186	65	130
18	78	75	181	150	188	534	217	487	178	131	60	120
19	79	73	175	150	180	456	217	453	189	117	58	110
20	88	68	200	140	170	430	243	328	155	128	55	105
21	82	58	204	140	160	396	228	277	142	124	55	99
22	93	58	332	130	180	357	211	248	127	609	56	93
23	144	61	519	130	310	343	197	221	147	369	55	90
24	130	69	379	130	630	325	191	202	163	227	53	91
25	109	65	341	140	920	301	192	187	179	155	72	93
26	120	63	287	130	752	274	199	172	149	208	106	88
27	136	62	260	130	646	253	188	169	136	284	97	1860
28	119	62	288	120	544	242	175	351	136	195	72	2180
29	115	422	390	120	---	241	168	767	179	155	62	1070
30	113	462	450	110	---	234	160	417	179	140	65	745
31	105	---	383	110	---	237	---	295	---	136	194	---
TOTAL	2943	3471	7834	5395	7066	14661	7447	10064	6034	5533	3502	10153
MEAN	94.9	116	253	174	252	473	248	325	201	178	113	338
MAX	144	462	519	359	920	1290	354	767	459	609	409	2180
MIN	76	58	150	110	100	234	160	148	127	114	53	77

CAL YR 1984 TOTAL 185220 MEAN 506 MAX 6810 MIN 58
WTR YR 1985 TOTAL 84103 MEAN 230 MAX 2180 MIN 53

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Pike County, PA, Hydrologic Unit 02040104, on right bank 1,500 ft upstream from toll bridge (on U.S. Route 206) between Montague, NJ and Milford, PA, 0.8 mi downstream from Sawkill Creek, and at river mile 246.3.

DRAINAGE AREA.--3,480 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR-NJ-81-2: 1980.

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

REMARKS.--Estimated daily discharges: Jan. 9 to Feb. 25. Records excellent except those for period of ice effect, Jan. 9 to Feb. 25, and those from May 28 to Sept. 28, 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). Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--46 years, 5,787 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s, Aug. 19, 1955, gage height, 35.15 ft, from rating curve extended above 90,000 ft³/s on basis of flood-routing study; minimum, 382 ft³/s, Aug. 24, 1954, gage height, 3.83 ft, minimum daily, 412 ft³/s, Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft, from floodmark, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66,300 ft³/s, Sept. 28, gage height, 18.04 ft; minimum discharge, 691 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1720	1970	5180	5470	1600	5910	3370	1940	3120	1720	2140	1750
2	1480	1240	4270	5050	1500	5150	4900	1940	3760	1400	2870	1580
3	1120	1830	3970	4920	1400	4290	4930	4160	3660	1390	2650	1340
4	1900	1680	4090	4340	1500	3820	4500	6100	3390	1380	1530	1180
5	1910	1810	4050	3910	1950	3590	4250	4510	3090	1140	1240	1200
6	1700	1950	4870	3330	1750	4450	4110	3660	3470	1690	1860	1230
7	1860	2060	3740	3270	1550	4490	3790	3510	3230	1550	1890	1300
8	1710	2070	2520	3450	1450	4270	4280	3390	3050	1910	1990	1220
9	1690	1950	2260	2700	1750	4350	4970	3010	1890	1970	1890	1370
10	1760	1920	2350	2000	1650	4030	4590	2680	1760	1440	1860	4210
11	1780	1820	2350	1800	1750	4090	3980	2290	2260	1650	1420	3720
12	1860	1920	2410	2400	2100	6990	3760	2100	2110	1760	1380	2450
13	1800	1940	2660	2000	2400	16500	3430	1980	2040	2050	1560	1720
14	1890	1690	2880	2300	2900	12900	3050	1960	1510	2520	1560	1360
15	1870	1870	3370	2400	2900	10300	3040	1730	1670	2280	1570	1130
16	2040	1720	3350	2200	2700	8210	3080	1570	1880	2890	1760	1010
17	1920	1640	3190	2100	2300	6540	2940	1520	2080	3280	1570	1510
18	2050	1760	3100	1900	1900	6140	2850	2060	1950	2420	1240	1540
19	2080	1770	2890	1900	1700	5590	2620	3440	1900	1990	1180	1450
20	1910	1920	3080	1600	1750	4580	2720	3540	1450	1520	1330	1380
21	1940	1780	3660	1750	1650	4970	2840	2880	1400	1240	1350	1370
22	1800	1710	3960	3200	1550	4560	2710	2450	1350	2560	1280	1220
23	2100	1720	7050	2200	1950	4290	2580	2100	1080	3820	1120	1280
24	2380	1710	6260	2000	4400	3630	2480	1910	1460	3020	1480	1380
25	1870	1660	5000	2000	9600	3620	2570	1740	1920	2520	1070	1320
26	1640	1770	4260	2400	11400	3750	2560	1600	1920	3700	1490	1330
27	1990	1740	3710	2000	8790	2890	2480	1530	1850	2860	1830	12600
28	1800	1750	3620	1700	7030	2770	2210	1900	1510	1900	1500	50700
29	1820	2230	4660	1900	---	2750	2040	4410	1490	1660	1380	20700
30	1790	6680	6760	1700	---	2800	2020	4290	1890	1420	1310	12200
31	1620	---	6560	1650	---	2650	---	3300	---	1840	1540	---
TOTAL	56800	59280	122080	81540	84870	164870	99650	85200	65140	64490	49840	137750
MEAN	1832	1976	3938	2630	3031	5318	3322	2748	2171	2080	1608	4592
MAX	2380	6680	7050	5470	11400	16500	4970	6100	3760	3820	2870	50700
MIN	1120	1240	2260	1600	1400	2650	2020	1520	1080	1140	1070	1010

CAL YR 1984 TOTAL 2254130 MEAN 6159 MAX 82700 MIN 1120
WTR YR 1985 TOTAL 1071510 MEAN 2936 MAX 50700 MIN 1010

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 upstream from Flatbrookville, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--64.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1923 to current year.

REVISED RECORDS.--WSP 1432: 1924(M), 1928(M), 1929, 1930(M), 1932, 1933(M), 1936, 1938(M), 1939-40, 1949(M), 1952-53(M). WDR-NJ-80-2: 1970(M). WDR NJ-82-2: Drainage area.

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

REMARKS.--Estimated daily discharges: Nov. 21 to Jan. 8 and Jan. 21 to Feb. 11. Records fair except those for period of no gage-height record, Nov. 21 to Jan. 8 and period of ice effect, Jan. 21 to Feb. 11, which are poor. Flow occasionally regulated by ponds above station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--62 years, 109 ft³/s, 23.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft³/s, Aug. 19, 1955, gage height, 12.58 ft, from high-water mark in gage house, from rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s, Sept. 25, 26, 1964, Sept. 11, 1966, but may have been lower during period of ice effect, Feb. 2 to 11, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	2215	779	3.98	Sept. 28	0130	*1,040	*4.47

Minimum discharge, 12 ft³/s, Oct. 17, 18, 19 and Nov. 18, 19, 20, gage height, 1.86 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	48	91	35	86	112	38	382	63	126	37
2	25	16	36	94	37	82	107	48	206	51	69	28
3	22	16	50	88	35	74	88	435	120	45	48	23
4	18	16	72	79	30	69	80	475	100	43	38	20
5	16	20	42	67	41	105	73	231	122	41	33	18
6	16	27	44	76	42	156	75	169	198	38	29	16
7	15	22	46	70	40	108	84	150	116	55	27	16
8	16	20	42	64	37	106	95	123	102	47	43	17
9	15	18	42	47	35	116	99	104	114	40	55	20
10	15	17	42	58	37	97	87	93	93	38	38	38
11	15	17	42	51	38	87	79	86	77	35	30	54
12	14	16	42	51	48	101	75	78	78	31	29	33
13	14	16	41	52	151	124	71	74	80	69	27	25
14	14	15	39	50	135	102	69	66	68	50	24	22
15	14	15	38	49	94	90	68	58	61	48	22	19
16	14	20	37	41	75	81	69	54	204	46	23	17
17	13	23	36	49	67	78	66	60	197	37	23	16
18	13	14	35	49	58	74	66	134	127	30	21	16
19	13	13	37	47	56	68	62	115	100	28	20	16
20	14	13	43	42	56	67	65	80	78	26	20	16
21	14	15	200	38	51	65	61	67	70	24	20	15
22	14	16	145	41	51	59	56	83	62	92	19	15
23	29	16	108	40	93	64	53	64	57	61	18	14
24	29	15	95	39	209	76	50	56	58	40	17	14
25	23	15	86	41	187	67	49	51	82	33	19	15
26	19	15	76	40	136	60	56	47	59	39	27	14
27	18	15	73	36	115	58	51	46	52	114	30	351
28	19	15	100	36	96	55	46	65	50	65	26	625
29	17	35	142	37	---	55	46	188	54	43	22	181
30	20	67	108	35	---	54	40	95	67	36	21	114
31	17	---	93	34	---	57	---	70	---	35	50	---
TOTAL	531	574	2080	1632	2085	2541	2098	3503	3234	1443	1014	1825
MEAN	17.1	19.1	67.1	52.6	74.5	82.0	69.9	113	108	46.5	32.7	60.8
MAX	29	67	200	94	209	156	112	475	382	114	126	625
MIN	13	13	35	34	30	54	40	38	50	24	17	14
CFSM	.27	.30	1.05	.82	1.16	1.28	1.09	1.77	1.69	.73	.51	.95
IN.	.31	.33	1.21	.95	1.21	1.48	1.22	2.04	1.88	.84	.59	1.06

CAL YR 1984 TOTAL 48229 MEAN 132 MAX 1960 MIN 13 CFSM 2.06 IN. 28.03
WTR YR 1985 TOTAL 22560 MEAN 61.8 MAX 625 MIN 13 CFSM .97 IN. 13.11

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

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

DRAINAGE AREA.--3,850 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 293.64 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-19, Jan. 9 to Feb. 23, and Aug. 14 to Sept. 3. Records fair except those for periods of no gage-height record Oct. 1-19 and Aug. 14 to Sept. 3, and those for period of ice effect, Jan. 9 to Feb. 23, which are poor. 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). Several measurements of water temperature were made during the year. Gage-height telemeter at station.

AVERAGE DISCHARGE.--21 years, 6,329 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s, June 30, 1973, gage height, 23.82 ft; minimum daily, 580 ft³/s, July 7, 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 74,400 ft³/s, Sept. 28, gage height, 17.93 ft; minimum, 948 ft³/s, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1840	1900	6510	6610	1790	6870	3390	2260	4900	2340	2440	1810
2	1820	1990	4760	5850	1780	6200	4930	2270	4990	2100	3080	1830
3	1460	1480	4440	5730	1700	5240	5750	4270	5060	1790	3240	1610
4	1510	2070	4360	5230	1580	4560	5260	8500	4950	1840	2270	1200
5	2150	1900	4520	4700	1740	4410	4900	6880	4170	1470	1740	1180
6	1900	2050	4930	4030	2100	4630	4740	5460	4940	1780	1850	1230
7	1900	2210	4910	3650	1900	5620	4390	4910	4580	1810	2160	1240
8	1950	2260	3200	3990	1690	5050	4440	4560	4170	2060	2400	1240
9	1800	2190	2740	3370	1790	5130	5390	4150	3310	2550	2200	1300
10	1880	2100	2590	2510	1900	4870	5620	3700	2760	1890	2220	2460
11	1900	2040	2690	2210	1820	4540	4750	3220	3020	1940	1900	4260
12	2100	2050	2620	2440	2140	5470	4320	2910	2940	1990	1700	3060
13	1920	1980	2870	2580	2960	17800	4080	2700	2780	2230	1680	2080
14	2030	2090	3000	2470	3450	15600	3620	2600	2260	2560	1700	1540
15	2010	1910	3480	2830	3450	11800	3450	2380	2280	2970	1690	1260
16	2060	1980	3690	2390	3210	9710	3530	2150	2850	2880	1770	1080
17	1990	1740	3610	2350	2870	7510	3450	2060	3470	3450	1790	1210
18	2120	1810	3460	2180	2430	6730	3310	2860	3230	3210	1510	1460
19	2150	1900	3320	2270	2170	6650	3100	4000	2870	2480	1310	1390
20	2300	2010	3260	1860	2140	5240	3030	4820	2360	2010	1350	1330
21	2010	2050	3730	1720	2110	5590	3140	3990	2130	1590	1450	1300
22	2130	1740	4330	2460	2030	5210	3170	3650	1960	1780	1430	1120
23	2180	1900	6480	3120	2320	5000	3020	3020	1710	4240	1310	1180
24	2490	1840	7530	2350	4290	4230	2880	2670	1700	3690	1330	1280
25	2450	1820	6030	2310	8890	4030	2900	2430	2150	2900	1480	1300
26	1950	1800	5190	2480	13600	4480	2910	2200	2590	3130	1370	1240
27	2120	1910	4350	2340	10200	3430	2930	2060	2500	4250	1930	4090
28	2040	1840	4020	2020	8420	3170	2680	2070	2050	2690	1810	61300
29	1980	2140	4540	2000	---	3130	2460	4280	2060	2230	1550	31200
30	2050	4980	6850	2040	---	3150	2330	5670	2350	1920	1500	16100
31	1870	---	7360	1880	---	3070	---	4570	---	2040	1620	---
TOTAL	62060	61680	135370	93970	96470	188120	113870	113270	93090	75810	56780	153880
MEAN	2002	2056	4367	3031	3445	6068	3796	3654	3103	2445	1832	5129
MAX	2490	4980	7530	6610	13600	17800	5750	8500	5060	4250	3240	61300
MIN	1460	1480	2590	1720	1580	3070	2330	2060	1700	1470	1310	1080

CAL YR 1984 TOTAL 2594910 MEAN 7090 MAX 93200 MIN 1460
WTR YR 1985 TOTAL 1244370 MEAN 3409 MAX 61300 MIN 1080

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 upstream of Paulins Kill.

DRAINAGE AREA.--4,165 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 15...	1200	2300	--	8.2	14.5	10.7	106	--	<20	33
FEB 20...	1330	2520	96	7.7	1.0	15.2	106	E1.2	<20	<2
APR 23...	1030	3300	82	7.7	17.0	8.9	93	E1.4	<20	79
JUN 18...	1020	3980	84	7.6	19.5	8.6	96	E1.3	20	920
JUL 22...	1100	2640	92	7.6	28.0	--	--	E1.1	<20	>280
AUG 19...	1045	1560	93	7.9	23.5	7.9	94	E1.1	50	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)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 15...	30	8.8	1.9	4.1	.90	19	11	6.6	<.10
FEB 20...	31	9.3	1.8	5.6	.80	18	12	10	<.10
APR 23...	28	8.7	1.6	4.3	.70	16	11	6.9	<.10
JUN 18...	27	8.1	1.6	3.9	.60	17	9.8	6.9	<.10
JUL 22...	31	9.5	1.8	5.1	1.0	21	11	8.2	.10
AUG 19...	31	9.4	1.8	6.1	1.0	21	9.9	11	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 15...	1.0	46	.006	.27	.080	.23	.50	.040	--
FEB 20...	2.5	53	.008	.52	.060	.31	.83	.040	2.3
APR 23...	1.4	44	.005	.28	.150	.46	.74	.060	3.1
JUN 18...	1.9	43	.004	.11	.270	.40	.51	.040	2.9
JUL 22...	1.8	51	.004	.08	.140	.44	.52	.040	3.8
AUG 19...	1.6	53	.003	.07	.080	.40	.47	.050	2.7

01443440 PAULINS KILL AT BALESVILLE, NJ

LOCATION.--Lat 41°06'20", long 74°45'19", Sussex County, Hydrologic Unit 02040105, at bridge on unnamed road at Balesville, 2.2 mi downstream from Dry Brook, and 3.4 mi north of Newton.

DRAINAGE AREA.--67.1 mi².

WATER-QUALITY RECORDS

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT										
10...	1115	37	585	8.3	15.0	9.0	90	E2.0	330	240
JAN										
30...	1045	--	501	7.9	.0	14.1	97	<1.0	130	13
MAR										
26...	1030	63	414	8.1	4.0	12.7	98	E2.3	20	27
MAY										
28...	1130	53	420	7.3	19.0	9.2	102	E2.6	270	130
JUL										
15...	1030	66	339	7.7	21.0	7.6	87	E1.8	5400	1600
AUG										
13...	1045	58	396	8.2	19.0	8.2	90	E1.5	1100	>2400

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
10...	230	57	21	29	2.1	183	36	51	.10
JAN									
30...	200	49	18	27	2.2	146	32	48	.20
MAR									
26...	160	41	14	21	1.3	124	27	41	<.10
MAY									
28...	160	42	14	22	1.6	133	23	42	.10
JUL									
15...	140	36	12	21	2.6	121	22	38	<.10
AUG									
13...	160	41	14	22	2.2	127	20	39	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	3.3	310	.019	1.3	.140	.19	1.5	.120	2.5
JAN									
30...	7.6	270	.012	1.6	1.42	1.7	3.3	.160	3.5
MAR									
26...	3.5	220	.016	.92	.050	.68	1.6	.050	4.3
MAY									
28...	6.0	230	.034	1.1	.220	.80	1.9	.250	4.6
JUL									
15...	5.0	210	.033	.70	.160	.80	1.5	.220	7.8
AUG									
13...	5.7	220	.023	.67	.090	.75	1.4	.170	8.5

01443440 PAULINS KILL AT BALESVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	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, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 10...	1115	<.5	7.8	14	<10	1	<1	<10	30	<1	<1

DATE	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, TOTAL RECOVERABLE (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 10...	20	6	<10	1	5	180	11000	<1	30	40	23

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	<.1	<.01	3	<10	<1	<1	30	40	2	<1.0	<.1

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)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, 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)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
OCT 10...	<1.0	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1

DATE	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)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<10	<.1

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 upstream from bridge on State Highway 94 in Blairstown, 1,400 ft upstream from Blairs Creek, and 10 mi upstream from mouth. Water-quality samples collected at bridge 1,200 ft downstream from gage at high flows.

DRAINAGE AREA.--126 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.- 1921 to September 1976, October 1977 to current year.

REVISED 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, downstream). Datum of gage is 335.86 ft above 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 downstream at different datum. Aug. 1, 1931 to July 28, 1939, water-stage recorder at site 100 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Jan. 12 to Feb. 5. Records good except those for period of ice effect, Jan. 12 to Feb. 5, which are poor. Diurnal fluctuation caused by powerplant above station and flow regulated slightly by Swartswood Lake. Several measurements of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--63 years, (water years 1922-76, 1978-85) 194 ft³/s, 20.94 in/yr.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 28	0300	*1,370	*4.39	No other peak greater than base discharge.			

Minimum daily discharge, 34 ft³/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	48	118	160	58	176	162	60	169	71	160	84
2	67	46	101	162	63	169	162	76	158	65	136	66
3	58	47	73	158	61	158	140	510	128	61	97	56
4	52	45	86	152	58	147	133	649	135	59	79	48
5	46	60	83	150	70	191	122	372	157	55	69	45
6	43	73	99	144	67	239	122	307	222	54	60	42
7	41	62	101	141	65	187	138	294	167	63	54	42
8	40	55	98	136	61	196	154	250	152	58	93	66
9	41	50	152	131	63	215	153	208	166	54	95	74
10	40	50	144	122	65	195	126	191	140	50	78	88
11	40	50	134	110	62	179	116	176	114	47	67	108
12	40	49	105	94	75	200	112	155	103	44	94	85
13	39	46	102	88	206	236	106	141	97	125	81	70
14	37	43	103	90	187	207	100	132	86	110	63	61
15	36	42	84	95	176	217	102	115	78	107	58	56
16	34	44	78	85	156	194	100	105	183	104	54	52
17	35	42	53	77	137	182	101	118	246	87	51	51
18	36	43	52	78	126	169	88	270	194	69	47	50
19	38	43	71	80	127	259	88	244	159	58	43	50
20	39	41	75	66	134	299	96	181	131	52	42	48
21	39	39	77	59	132	232	89	186	124	47	40	47
22	51	38	147	85	132	189	86	194	107	71	39	47
23	98	38	170	81	193	179	81	160	95	83	37	47
24	85	39	161	77	281	180	76	141	98	61	35	48
25	69	50	156	76	274	159	74	124	127	51	36	50
26	60	162	146	75	233	138	78	111	103	80	71	51
27	57	152	145	68	211	120	75	109	87	286	77	595
28	53	139	141	69	194	114	69	118	79	210	60	1040
29	56	135	146	67	---	113	72	151	80	138	49	501
30	56	128	173	66	---	110	64	125	77	104	47	338
31	50	---	162	63	---	113	---	106	---	91	84	---
TOTAL	1539	1899	3536	3105	3667	5662	3185	6079	3962	2615	2096	4006
MEAN	49.6	63.3	114	100	131	183	106	196	132	84.4	67.6	134
MAX	98	162	173	162	281	299	162	649	246	286	160	1040
MIN	34	38	52	59	58	110	64	60	77	44	35	42
CFSM	.39	.50	.90	.79	1.04	1.45	.84	1.56	1.05	.67	.54	1.06
IN.	.45	.56	1.04	.92	1.08	1.67	.94	1.79	1.17	.77	.62	1.18

CAL YR 1984 TOTAL 98951 MEAN 270 MAX 2310 MIN 34 CFSM 2.14 IN. 29.21
WTR YR 1985 TOTAL 41351 MEAN 113 MAX 1040 MIN 34 CFSM .90 IN. 12.21

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1921, 1925, 1957-60, 1962-63, 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 10...	1330	39	492	8.6	15.5	10.8	109	E1.8	50	79
JAN 30...	1230	10	422	8.1	.0	15.0	103	<1.0	20	2
MAR 26...	1200	143	328	8.2	6.0	12.9	104	E2.4	20	<2
MAY 28...	1040	108	335	7.3	20.5	8.4	95	E1.9	490	920
JUL 15...	1215	119	--	8.0	23.0	8.0	95	E2.1	1100	920
AUG 13...	1245	79	338	8.4	23.5	9.0	107	E2.2	130	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)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 10...	200	47	20	22	1.6	165	25	40	.10
JAN 30...	170	42	16	20	1.6	132	26	37	.10
MAR 26...	130	33	12	15	1.1	105	21	29	<.10
MAY 28...	140	35	13	14	1.2	120	19	30	<.10
JUL 15...	160	38	15	18	1.7	133	20	32	<.10
AUG 13...	150	38	14	19	1.7	125	19	32	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	1.5	260	.008	.51	.050	.32	.83	.030	2.8
JAN 30...	5.7	230	.011	1.2	.260	.55	1.7	.060	3.1
MAR 26...	2.9	180	.010	.59	<.050	.48	1.1	.030	3.7
MAY 28...	4.2	190	.012	.46	.220	.61	1.1	.070	4.4
JUL 15...	2.5	210	.007	.20	.080	.52	.72	.140	5.0
AUG 13...	1.4	200	.006	.13	.090	.68	.81	.100	7.3

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 28...	1040	<.5	40	<1	<10	<20	1	10	4

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
MAY 28...	190	4	100	<.1	5	<1	70	6

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 upstream from bridge on Hainesburg-Mount Vernon Road, 1.4 mi downstream of Yards Creek Reservoir, 2.2 mi northeast of Hainesburg, 2.4 mi upstream from mouth, and 4.2 mi west of Blairstown.

DRAINAGE AREA.--5.34 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NJ-77-2: 1976. WDR NJ-79-2: 1977(m). WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.8 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Complete regulation by the Jersey Central Power and Light Co., at Yards Creek Reservoir 1.4 mi above station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 10.6 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 583 ft³/s, Feb. 24, 1977, gage height, 3.92 ft; no flow Sept. 12, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115 ft³/s, Mar. 8, gage height, 2.97 ft; minimum, 0.39 ft³/s, Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.2	1.5	2.6	1.6	2.3	11	2.6	3.8	2.1	2.2	1.3
2	1.5	1.3	1.4	2.8	1.7	3.1	12	4.2	2.8	2.2	2.1	1.3
3	1.3	1.2	3.2	2.6	1.5	3.0	12	13	2.7	2.4	2.1	1.3
4	1.3	.96	2.0	2.5	1.4	2.0	12	6.5	2.6	2.3	1.9	1.3
5	1.3	1.7	1.7	2.6	1.4	3.4	12	4.8	4.3	2.1	1.7	1.3
6	1.3	1.3	3.1	2.2	1.4	2.4	13	4.0	3.2	2.5	2.0	1.4
7	1.2	1.4	2.1	2.2	1.4	2.2	12	4.1	3.1	2.2	2.0	1.4
8	1.1	1.3	2.0	2.1	1.5	36	11	3.5	3.9	2.0	2.3	2.2
9	1.1	1.3	1.8	2.3	1.5	12	9.2	3.5	2.9	2.1	2.0	1.2
10	1.1	1.4	1.8	2.2	1.4	2.0	4.5	3.3	2.5	2.1	2.0	1.9
11	1.1	1.3	1.8	2.0	1.3	1.9	3.0	3.3	2.5	2.1	1.9	1.5
12	1.1	1.0	1.7	1.5	6.6	3.2	2.8	3.0	2.7	2.2	1.8	1.4
13	1.1	1.1	1.7	1.8	3.6	2.4	2.5	2.8	2.6	2.4	1.9	1.3
14	1.1	1.2	1.7	1.5	2.3	7.7	6.9	2.8	2.7	2.1	1.9	1.4
15	.95	1.3	1.8	1.7	2.1	16	14	2.8	2.6	2.1	1.9	1.4
16	1.0	1.2	1.7	1.8	2.0	19	4.5	2.9	4.6	2.1	1.7	1.1
17	1.1	1.1	1.5	1.3	1.9	15	3.9	5.2	2.6	2.0	1.2	1.2
18	1.1	1.1	1.1	1.7	1.8	14	3.6	7.4	2.8	2.0	1.2	1.2
19	1.2	.99	1.5	1.7	2.0	14	3.8	3.9	2.5	2.0	1.0	1.2
20	1.3	1.1	1.4	1.5	2.0	14	3.7	3.2	2.5	2.0	1.3	1.3
21	1.1	1.1	2.1	1.3	2.0	15	3.6	4.3	2.6	1.9	1.4	1.4
22	2.3	1.1	5.7	1.3	2.5	16	3.3	3.6	2.6	2.2	1.3	1.3
23	2.1	1.1	2.9	1.4	3.8	16	3.2	3.3	2.3	1.9	1.3	1.2
24	1.4	1.2	2.4	1.7	3.4	15	3.1	3.2	2.7	1.9	1.3	1.2
25	1.3	1.1	2.3	1.7	2.9	12	3.1	3.6	2.4	1.9	1.8	1.1
26	1.5	.94	1.9	1.6	2.7	11	2.2	3.0	2.3	2.5	1.6	1.3
27	1.4	1.1	2.5	1.4	2.7	11	1.7	2.8	2.4	2.4	1.4	19
28	1.4	1.2	2.3	1.3	2.4	11	1.6	3.3	2.9	2.0	1.3	4.0
29	1.6	2.5	3.8	1.4	---	11	1.8	2.9	3.5	1.9	1.2	2.6
30	1.2	1.6	3.2	1.5	---	12	2.5	2.7	2.6	1.9	2.2	2.0
31	1.2	---	2.4	1.5	---	12	---	2.9	---	2.3	1.8	---
TOTAL	40.15	37.39	68.0	56.7	62.8	317.6	183.5	122.4	86.2	65.8	52.7	62.7
MEAN	1.30	1.25	2.19	1.83	2.24	10.2	6.12	3.95	2.87	2.12	1.70	2.09
MAX	2.3	2.5	5.7	2.8	6.6	36	14	13	4.6	2.5	2.3	19
MIN	.95	.94	1.1	1.3	1.3	1.9	1.6	2.6	2.3	1.9	1.0	1.1

CAL YR 1984 TOTAL 4417.94 MEAN 12.1 MAX 134 MIN .94
WTR YR 1985 TOTAL 1155.94 MEAN 3.17 MAX 36 MIN .94

01445500 PEQUEST RIVER AT PEQUEST, NJ

LOCATION.--Lat 40°49'50", long 74°58'43", Warren County, Hydrologic Unit 02040105, on right bank at Pequest, 100 ft upstream from CONRAIL (formerly Lehigh and Hudson River Railway) bridge, and 300 ft downstream from Furnace Brook.

DRAINAGE AREA.--106 mi².

WATER-DISCHARGE RECORDS

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

REVISED 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 above National Geodetic Vertical Datum of 1929. Prior to June 22, 1926, nonrecording gage at site 10 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--64 years, 155 ft³/s, 19.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s, Jan. 25, 1979, gage height, 5.97 ft, from floodmark; minimum, 12 ft³/s, Aug. 17, 18, 19, 20, 21, 22, Dec. 10, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 27	2045	*881	*3.66	No other peak greater than base discharge.			

Minimum discharge, 31 ft³/s, Sept. 22, 23, gage height, 1.25 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	60	76	119	54	130	105	52	311	94	116	63
2	71	65	67	128	56	125	103	72	211	87	92	53
3	63	77	69	134	53	115	95	439	150	88	77	50
4	55	72	93	118	45	109	91	403	186	88	68	47
5	52	91	78	114	62	138	85	298	223	79	63	44
6	49	94	104	103	63	138	94	227	288	79	58	43
7	48	75	115	106	61	116	103	229	196	99	55	41
8	47	68	85	102	57	117	95	196	171	87	83	40
9	48	65	79	67	53	118	91	157	170	77	97	46
10	48	64	79	75	56	110	84	143	147	72	75	58
11	47	62	80	79	56	109	80	130	127	70	65	57
12	46	57	80	77	85	137	79	119	121	68	60	48
13	44	53	79	81	264	153	74	107	119	130	59	43
14	42	49	75	76	202	132	70	102	107	141	55	41
15	42	48	75	79	156	120	71	98	99	104	55	38
16	44	47	76	54	133	110	73	92	257	112	50	37
17	46	46	73	72	121	109	75	108	378	93	48	37
18	45	45	71	73	118	102	70	367	248	80	45	38
19	45	46	72	72	123	98	67	325	200	70	45	34
20	45	44	83	55	130	99	73	226	158	63	43	34
21	43	45	80	57	122	99	71	175	135	58	42	33
22	48	51	199	63	122	93	67	254	122	76	42	32
23	104	50	148	61	184	97	66	233	111	69	44	32
24	88	50	115	60	220	98	64	195	116	63	42	33
25	74	49	107	63	203	93	67	169	211	58	51	33
26	67	50	95	61	172	86	65	147	130	110	78	34
27	68	49	90	54	160	83	61	136	109	227	72	506
28	64	49	93	55	143	81	57	146	105	162	59	609
29	71	83	128	56	---	82	57	167	107	106	51	360
30	71	93	156	54	---	80	54	140	99	85	56	208
31	67	---	126	52	---	80	---	121	---	81	78	---
TOTAL	1743	1797	2946	2420	3274	3357	2307	5773	5112	2876	1924	2772
MEAN	56.2	59.9	95.0	78.1	117	108	76.9	186	170	92.8	62.1	92.4
MAX	104	94	199	134	264	153	105	439	378	227	116	609
MIN	42	44	67	52	45	80	54	52	99	58	42	32
CFSM	.53	.57	.90	.74	1.10	1.02	.73	1.75	1.60	.88	.59	.87
IN.	.61	.63	1.03	.85	1.15	1.18	.81	2.03	1.79	1.01	.68	.97

CAL YR 1984 TOTAL 82177 MEAN 225 MAX 1180 MIN 42 CFSM 2.12 IN. 28.84
WTR YR 1985 TOTAL 36301 MEAN 99.5 MAX 609 MIN 32 CFSM .94 IN. 12.74

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 downstream from Pequest River, and at mile 197.7.

DRAINAGE AREA.--4,535 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1922 to current year.

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

GAGE.--Water-stage recorder. Datum of gage 226.43 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1929, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversions from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River basin, diversions). National Weather Service gage-height telemeter at station.

AVERAGE DISCHARGE.--63 years, 7,859 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 273,000 ft³/s, Aug. 19, 1955, gage height, 30.21 ft, from high-water mark in gage house, from rating curve extended above 170,000 ft³/s, on basis of flood-routing study; minimum, 609 ft³/s, Sept. 28, 29, 1943, gage height, 2.11 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 28.6 ft, from floodmark, discharge, 220,000 ft³/s, from rating curve extended above 170,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 71,200 ft³/s, Sept. 28, gage height, 15.03 ft; minimum, 1,100 ft³/s, Aug. 24, gage height, 2.70 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	2070	7620	8080	2090	8310	4340	2720	5640	2670	2840	2020
2	2270	2440	5470	7160	2180	7440	5560	2820	5880	2480	3290	2130
3	1910	1690	5070	6980	2120	6320	6650	6450	5560	2160	3400	1960
4	1470	2280	5130	6430	1790	5570	6200	11800	5570	2130	2770	1690
5	2310	2350	5150	5890	1720	5530	5750	9610	4830	2030	2060	1480
6	2220	2540	5510	5180	2490	5720	5560	7440	5990	1820	1770	1470
7	2090	2560	5990	4660	2450	6670	5350	6630	5420	2410	2250	1480
8	2220	2600	4120	4930	2050	5990	5370	5970	4850	2340	2590	1590
9	2050	2560	3350	4100	1980	6120	6180	5360	4390	2690	2540	1550
10	2040	2450	3130	3100	2180	5870	6490	4730	3460	2400	2410	1990
11	2110	2400	3230	2840	2040	5500	5610	4220	3330	2060	2280	4510
12	2150	2300	3160	2840	2580	6380	5160	3790	3400	2160	1860	3580
13	2190	2330	3320	3200	4210	16900	4850	3540	3220	2620	1790	2580
14	2160	2380	3520	2960	4100	18200	4400	3320	2920	2950	1910	1980
15	2240	2100	3910	3400	4120	14100	4170	3130	2600	3280	1900	1610
16	2240	2250	4270	2720	3900	11600	4230	2830	3580	3040	1900	1360
17	2440	2050	4140	2640	3590	9060	4160	2790	4750	3500	2040	1240
18	2300	2000	3970	2610	3150	7980	3970	4150	4220	3490	1860	1670
19	2450	2150	3860	2850	2860	7840	3780	5090	3620	2760	1550	1710
20	2520	2190	3800	2210	2760	6560	3680	5610	3160	2380	1480	1620
21	2280	2310	4200	1820	2740	6500	3780	4860	2730	1920	1610	1550
22	2460	2100	5860	2210	2740	6170	3790	4720	2540	1960	1640	1540
23	2740	2090	7140	3950	3090	5930	3610	3950	2400	3800	1560	1370
24	2830	2080	9080	3130	4680	5310	3490	3470	2130	3850	1360	1460
25	2930	2050	7330	2800	9010	4960	3420	3150	2660	3100	1910	1550
26	2400	2100	6230	2710	15300	5210	3440	2870	2910	3170	1600	1490
27	2240	2280	5440	2700	12600	4380	3400	2720	2770	4870	2050	9020
28	2430	2220	4980	2460	10300	3960	3220	2730	2670	3610	2150	54900
29	2370	2620	5440	2290	---	3890	2960	4080	2410	2740	1820	36700
30	2370	4320	7860	2430	---	3870	2800	6180	2440	2370	1760	20100
31	2280	---	8850	2270	---	3870	---	5180	---	2170	1870	---
TOTAL	70810	69860	160130	113550	114820	221710	135370	145910	112050	84930	63820	168900
MEAN	2284	2329	5165	3663	4101	7152	4512	4707	3735	2740	2059	5630
MAX	2930	4320	9080	8080	15300	18200	6650	11800	5990	4870	3400	54900
MIN	1470	1690	3130	1820	1720	3870	2800	2720	2130	1820	1360	1240

CAL YR 1984 TOTAL 3198350 MEAN 8739 MAX 104000 MIN 1470
WTR YR 1985 TOTAL 1461860 MEAN 4005 MAX 54900 MIN 1240

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 upstream from Lehigh River, and 0.2 mi downstream from U.S. Route 22 toll bridge in Easton.

DRAINAGE AREA.--4,717 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	1045	2400	188	8.3	16.0	8.2	83	E1.5	80	49
FEB 20...	1100	3030	173	8.2	1.5	14.9	106	E1.3	<20	<2
APR 23...	1230	3920	112	7.7	18.0	8.8	94	E1.5	<20	240
JUN 11...	1230	3590	153	7.4	21.5	9.2	105	2.8	20	920
JUL 22...	1400	2050	123	7.9	28.5	--	--	E1.2	80	>2400
AUG 19...	1330	2340	150	8.0	24.5	8.6	104	E1.4	<20	1600

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	71	19	5.8	7.8	1.2	48	22	12	<.10
FEB 20...	60	16	4.8	8.8	1.2	39	22	13	<.10
APR 23...	40	11	3.0	5.9	.80	26	14	9.8	<.10
JUN 11...	53	14	4.3	6.7	.90	38	17	9.7	<.10
JUL 22...	52	14	4.1	6.7	1.2	38	17	10	<.10
AUG 19...	54	15	4.1	8.1	1.1	39	15	12	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	2.2	99	.009	.97	<.050	.50	1.5	.060	2.0
FEB 20...	2.4	92	.013	1.1	.110	.27	1.3	.040	2.7
APR 23...	1.2	61	.010	.39	.110	.54	.93	.060	3.2
JUN 11...	2.6	78	.012	.46	.100	.45	.91	.060	4.0
JUL 22...	2.2	78	.005	.34	.160	.44	.78	.060	3.5
AUG 19...	2.2	81	.007	.40	.110	.50	.90	.070	3.4

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
OCT 04...	1045	<.5	<10	2	<10	<20	<1	<10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (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)
OCT 04...	1	250	12	20	<.1	6	<1	20

01453000 LEHIGH RIVER AT BETHLEHEM, PA

LOCATION.--Lat 40°36'55", long 75°22'45", Lehigh County, PA, Hydrologic Unit 02040106, on left bank 110 ft upstream from New Street Bridge at Bethlehem, and 1,800 ft upstream from Monocacy Creek. Records include flow of Monocacy Creek.

DRAINAGE AREA.--1,279 mi², includes that of Monocacy Creek. At site used prior to October 1, 1928, 1,229 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--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: 1903-5, 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 National Geodetic Vertical Datum of 1929. Prior to October 1928, nonrecording gage at New Street Bridge 120 ft downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft downstream at datum 2.49 ft lower. Oct. 1, 1963, to Dec. 14, 1975, water-stage recorder at site 40 ft downstream at same datum.

REMARKS.--Water-discharge records good. Flow regulated by Wild Creek Reservoir (station 01449700) since January 1941, Penn Forest Reservoir (station 01449400) since October 1958, Francis E. Walter Reservoir (station 01447780) since February 1961, and Beltzville Lake (station 01449790) since February 1971. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--78 years (water years 1902-04, 1909-85), 2,337 ft³/s, 24.80 in/yr, adjusted for diversion 1902-04, 1909-42 and, for recirculated water, October 1, 1959 to September 30, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,000 ft³/s May 23, 1942, gage height, about 25.9 ft, from floodmark, present site and datum, from rating curve extended above 48,000 ft³/s; minimum, 125 ft³/s June 28, 1965, gage height, 0.94 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of February 28, 1902, reached a stage of 24.9 ft, from floodmark, present site and datum, discharge, about 88,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,700 ft³/s, Sept. 27, gage height, 12.78 ft; minimum, 318 ft³/s Sept. 17, gage height, 0.98 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	784	797	1270	2470	880	2340	1710	967	1250	1170	1450	878
2	959	792	1270	2260	935	2040	1930	1160	1170	1050	1410	833
3	918	759	1300	2050	872	1790	2090	3870	1000	1080	1320	820
4	779	715	1340	2200	807	1680	1840	5250	893	886	1270	720
5	726	898	1200	2050	812	1940	1520	4470	1110	835	1260	455
6	710	996	1380	1610	936	1740	1470	4050	1330	940	944	410
7	699	968	1350	1510	966	1520	1470	3340	1140	1330	602	722
8	702	998	1200	1470	817	1530	1860	2820	1020	1280	941	807
9	711	840	1120	1320	780	1490	1810	2470	1190	1310	733	818
10	716	802	1100	1230	780	1430	1510	2050	940	1350	806	835
11	671	802	1090	1300	827	1410	1480	1920	852	1270	884	792
12	656	798	1110	1240	1560	1700	1420	1780	847	1150	920	488
13	658	769	1100	1320	3480	2500	1390	1890	799	1430	770	421
14	647	759	1090	1280	2880	2470	1380	1400	846	1670	580	379
15	653	703	1170	1310	2430	2190	1380	1220	1060	2410	496	340
16	640	700	1200	1050	1850	1830	1350	1160	1840	3380	480	356
17	646	697	1170	1180	1680	1730	1300	1290	2520	2840	485	348
18	649	672	1110	1200	1570	1670	1290	1450	3030	1470	760	712
19	648	691	1060	1250	1470	1440	1270	1330	2720	1150	798	768
20	701	665	1130	1020	1350	1380	1290	1220	1660	1020	716	871
21	973	658	1200	1020	1350	1400	1340	1140	1350	693	555	893
22	988	646	2050	1220	1390	1360	1270	1100	1270	810	546	899
23	1650	631	2140	1250	1530	1350	1200	1040	1290	737	528	908
24	1050	625	2270	1110	2140	1360	1200	1020	1310	809	538	820
25	919	626	1980	1080	3230	1360	1230	926	1280	985	932	625
26	901	623	1540	1060	3590	1490	1270	883	1140	1260	956	628
27	859	615	1440	991	3190	1370	1240	851	1070	1920	777	16500
28	847	609	1440	997	2710	1270	1210	847	1050	1140	529	14700
29	971	976	1680	986	---	1290	1090	906	1110	993	458	13100
30	863	1370	2290	885	---	1330	1040	967	1210	950	516	11300
31	811	---	2390	865	---	1350	---	877	---	1140	819	---
TOTAL	25105	23200	44180	41784	46812	50750	42850	55664	39297	40458	24779	73146
MEAN	810	773	1425	1348	1672	1637	1428	1796	1310	1305	799	2438
MAX	1650	1370	2390	2470	3590	2500	2090	5250	3030	3380	1450	16500
MIN	640	609	1060	865	780	1270	1040	847	799	693	458	340

CAL YR 1984 TOTAL 1034498 MEAN 2826 MAX 23800 MIN 609
WTR YR 1985 TOTAL 508025 MEAN 1392 MAX 16500 MIN 340

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ

LOCATION.--Lat 40°42'57", long 75°04'20", Warren County, Hydrologic Unit 02040105, at bridge on Edison Road, 0.4 mi southeast of New Village, and 4.3 mi upstream from Merrill Creek.

DRAINAGE AREA.--33.3 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1962 and January 1979 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	1200	18	216	8.2	12.5	10.7	101	E1.8	2400	>2400
JAN 29...	1145	--	237	7.9	.0	13.1	90	3.0	20	2
MAR 27...	1030	15	200	8.8	9.0	16.2	141	E2.2	20	11
JUN 11...	1030	15	212	6.7	18.0	8.8	94	3.6	3500	>2400
JUL 17...	1030	18	172	8.0	22.0	8.9	103	E2.1	790	920
AUG 07...	1045	14	221	8.0	21.0	10.2	116	E1.7	1700	1600

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	96	22	10	9.9	2.0	72	20	15	<.10
JAN 29...	84	19	8.8	12	1.8	56	19	17	<.10
MAR 27...	73	17	7.4	11	1.6	50	18	16	<.10
JUN 11...	74	17	7.6	11	1.5	54	18	14	<.10
JUL 17...	68	16	6.8	8.9	2.3	52	19	14	<.10
AUG 07...	87	20	9.1	11	2.4	66	18	17	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	13	140	.068	2.3	.180	.59	2.9	.220	2.4
JAN 29...	15	130	.009	2.1	1.39	1.6	3.7	.370	3.0
MAR 27...	10	110	.040	1.6	.340	.64	2.3	.340	--
JUN 11...	14	120	.106	1.9	.210	.73	2.6	.280	4.4
JUL 17...	12	110	.040	1.4	.080	.47	1.8	.250	5.8
AUG 07...	10	130	.023	1.8	.100	.62	2.4	.240	4.0

01455200 POHATCONG CREEK AT NEW VILLAGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 04...	1200	<.5	<10	<1	<10	30	1	20	3
JUN 11...	1030	<.5	<10	<1	<10	30	1	20	8

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
OCT 04...	450	4	40	<.1	4	<1	20	<1
JUN 11...	440	10	40	.1	10	<1	60	9

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 downstream from Lake Hopatcong dam in Landing.

DRAINAGE AREA.--25.3 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 24...	1300	20	233	7.8	2.0	14.2	108	E.1	<20	<2
MAR 19...	1030	18	213	7.7	3.5	12.5	97	E2.0	<20	2
MAY 22...	1100	5.5	227	6.4	19.0	9.4	105	E1.8	<20	540
JUL 08...	1030	23	223	7.6	23.5	7.8	95	E1.8	<20	920
AUG 12...	1245	17	203	8.2	26.5	7.8	100	E1.4	20	920

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 24...	53	14	4.3	23	1.0	27	17	41	<.10
MAR 19...	50	13	4.2	23	1.1	26	17	43	<.10
MAY 22...	50	13	4.2	20	1.0	25	16	38	<.10
JUL 08...	49	13	4.0	22	.80	28	17	40	<.10
AUG 12...	51	13	4.5	23	.70	27	15	42	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 24...	5.0	120	.005	.15	.050	.50	.65	.030	3.1
MAR 19...	1.8	120	.003	.06	.070	.35	.41	.020	3.1
MAY 22...	1.4	110	.005	.10	.130	.54	.64	.040	3.4
JUL 08...	1.1	110	.004	.06	.130	.50	.56	.040	4.2
AUG 12...	2.1	120	.003	.05	.070	.63	.68	.030	4.2

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 southeast of Cage Hill, 0.4 mi south of Jefferson Lake, and 0.9 mi downstream from Lubbers Run.

DRAINAGE AREA.--60.1 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 24...	1145	--	303	8.0	1.0	13.7	101	E1.7	<20	2
MAR 19...	1215	62	273	7.5	4.5	11.7	93	2.3	<20	<2
MAY 22...	1145	145	199	6.8	17.5	9.1	97	2.6	70	170
JUL 08...	1200	69	262	7.9	21.0	8.0	93	2.6	170	920
AUG 12...	1145	33	--	7.8	23.5	7.3	88	E1.8	490	>2400

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 24...	89	22	8.3	23	1.4	55	19	43	<.10
MAR 19...	77	19	7.2	20	1.1	47	18	40	<.10
MAY 22...	64	16	5.9	14	.90	43	14	24	.10
JUL 08...	84	21	7.7	19	1.2	59	13	34	<.10
AUG 12...	94	23	8.9	22	1.4	64	15	41	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 24...	6.8	160	.027	.36	.810	2.0	2.4	.200	3.7
MAR 19...	4.2	140	.018	.22	.460	.97	1.2	.130	3.5
MAY 22...	6.7	110	.033	.19	.240	.72	.91	.060	5.4
JUL 08...	5.5	140	.082	.40	.310	1.0	1.4	.170	5.6
AUG 12...	6.7	160	.172	.88	.320	1.2	2.1	.220	4.9

01455801 MUSCONETCONG RIVER AT LOCKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 22...	1145	<.5	50	2	<10	30	<1	10	3

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
MAY 22...	360	15	60	<.1	1	<1	20	14

01456200 MUSCONETCONG RIVER AT BEATTYSTOWN, NJ

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

DRAINAGE AREA.--90.3 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 24...	1000	E150	348	8.2	.5	14.1	101	E1.0	80	27
MAR 19...	1330	E81	301	8.7	6.5	14.3	118	E1.2	<20	2
MAY 22...	1345	E163	222	7.7	20.0	9.2	102	E1.5	130	540
JUL 08...	1330	E93	305	8.1	21.5	9.5	111	E1.4	330	920
AUG 12...	1030	E55	304	8.2	21.0	8.8	100	E1.2	490	920

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 24...	120	27	12	22	1.4	86	20	41	<.10
MAR 19...	98	23	9.9	19	1.2	70	18	36	<.10
MAY 22...	79	19	7.7	13	1.0	56	16	23	.10
JUL 08...	100	24	10	19	1.4	82	16	35	<.10
AUG 12...	130	29	13	20	1.4	99	16	35	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 24...	7.9	180	.020	.91	.550	.99	1.9	.200	3.0
MAR 19...	4.5	150	.032	.77	.130	.65	1.4	.210	3.2
MAY 22...	7.2	120	.044	.65	.140	1.7	2.4	.180	4.6
JUL 08...	5.8	160	.029	.78	.170	.65	1.4	.230	4.7
AUG 12...	7.7	180	.042	.94	.170	.70	1.6	.250	4.2

01456200 MUSCONETCONG RIVER AT BEATTYSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 22...	1345	<.5	20	1	<10	30	<1	10	3

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
MAY 22...	450	3	60	<.1	1	<1	<10	4

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 bridge on Limekiln Road (Person Road), 1.5 mi upstream from Bloomsbury, and 9.5 mi upstream from mouth.

DRAINAGE AREA.--141 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to March 1907, July 1921 to current year.

REVISED RECORDS.--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). WDR NJ-82-2: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 20-28 and Feb. 10. Records good except those for period of ice effect, Jan. 20-28, which are fair. Flow regulated by Lake Hopatcong (see Delaware River basin, reservoirs in). Diurnal fluctuation caused by small powerplants above station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--67 years (water years 1904-06, 1922-85), 235 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft³/s, Jan. 25, 1979, gage height, 8.50 ft, from floodmark, from rating curve extended above 1,800 ft³/s on basis of slope-area measurement at gage height 6.95 ft; minimum, 8.1 ft³/s, Aug. 2, 1955; minimum daily 27 ft³/s, Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 27	0215	1,430	4.27	Sept. 27	1245	*2,140	*5.10

Minimum discharge, 58 ft³/s, Sept. 22, 23, 25, 26, gage height, 1.22 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	102	118	181	95	193	142	75	223	143	188	114
2	140	102	99	208	100	186	137	91	242	131	176	95
3	133	173	106	214	99	178	124	487	167	139	152	85
4	114	193	139	196	87	172	123	477	159	130	134	79
5	104	220	121	192	99	204	119	337	203	119	122	76
6	100	247	151	183	99	203	119	261	249	121	110	73
7	98	251	150	178	99	164	123	234	216	142	103	69
8	98	248	121	176	96	151	120	223	181	163	134	68
9	99	240	108	156	100	158	114	185	164	139	123	77
10	99	240	110	174	95	155	111	162	150	124	116	93
11	100	240	117	153	90	148	104	149	132	113	105	103
12	98	241	116	170	316	186	102	141	127	103	101	81
13	96	232	112	154	410	197	101	136	129	117	91	74
14	96	226	109	151	263	184	99	128	120	136	87	68
15	94	223	109	154	210	168	99	117	110	177	83	65
16	93	167	107	131	183	154	98	107	378	154	78	64
17	93	110	105	144	169	150	99	138	420	158	75	61
18	94	100	102	150	161	145	97	425	318	132	74	60
19	94	100	104	144	160	138	94	535	250	112	74	62
20	98	96	116	110	164	134	99	354	201	99	71	62
21	101	92	114	120	157	139	101	264	171	90	70	61
22	117	90	197	127	160	135	97	276	152	118	68	60
23	246	90	194	124	212	131	92	236	140	124	66	60
24	180	90	158	121	259	135	92	195	170	112	63	61
25	131	90	147	128	256	130	89	168	266	97	88	60
26	120	85	141	120	228	124	86	149	292	265	143	61
27	114	82	142	110	212	117	83	139	200	668	129	1170
28	110	81	152	114	205	114	80	139	168	312	107	836
29	124	140	172	97	---	115	79	158	162	240	86	500
30	117	150	199	95	---	114	76	156	156	197	87	354
31	109	---	184	91	---	113	---	133	---	179	132	---
TOTAL	3516	4741	4120	4566	4784	4735	3099	6775	6016	5054	3236	4752
MEAN	113	158	133	147	171	153	103	219	201	163	104	158
MAX	246	251	199	214	410	204	142	535	420	668	188	1170
MIN	93	81	99	91	87	113	76	75	110	90	63	60

CAL YR 1984 TOTAL 122911 MEAN 336 MAX 2520 MIN 81
WTR YR 1985 TOTAL 55394 MEAN 152 MAX 1170 MIN 60

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 north of Mount Joy, and 0.2 mi upstream from mouth.

DRAINAGE AREA.--156 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1976 to current year.

REMARKS.--Water-quality samples do not include Riegelsville Paper Company bypass.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	1345	E140	--	8.4	12.0	11.0	102	E1.8	490	49
JAN 29...	1330	E131	330	8.5	.0	13.8	95	2.8	170	11
MAR 27...	1330	E138	311	9.2	10.0	13.5	121	E2.4	<20	2
JUN 11...	1340	E154	320	7.8	19.0	9.8	107	3.9	1100	1600
JUL 17...	1330	E183	284	8.2	23.0	8.7	101	E1.7	170	920
AUG 07...	1345	E124	291	8.2	21.5	9.4	107	<1.2	490	220

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	150	33	16	13	1.6	113	22	23	<.10
JAN 29...	140	30	15	15	1.5	101	22	27	<.10
MAR 27...	130	29	14	15	1.4	96	23	27	<.10
JUN 11...	120	27	13	13	1.4	94	18	23	.10
JUL 17...	120	27	13	13	1.6	98	20	26	<.10
AUG 07...	140	30	15	13	1.7	105	19	26	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	7.5	180	.021	2.0	.080	.71	2.7	.100	2.6
JAN 29...	6.9	180	.011	2.1	.220	1.2	3.2	.060	2.8
MAR 27...	2.7	170	.026	1.5	.060	.86	2.4	.090	3.2
JUN 11...	8.2	160	.036	1.6	.210	1.2	2.8	.120	4.2
JUL 17...	4.9	160	.025	1.4	.150	.71	2.1	.120	4.1
AUG 07...	5.5	170	.050	1.7	.230	.92	2.6	.080	3.7

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 04...	1345	<.5	<30	1	<10	20	<1	<10	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS TOTAL (UG/L)
OCT 04...	320	<1	30	<.1	3	<1	20	2

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 upstream from new bridge on State Highway 27.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1947 to current year.

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

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 21. Records fair except those for period of no gage-height record, Dec. 27 to Jan. 21, which are poor. The canal diverts water from the Delaware River at Raven Rock and discharges into Raritan River at New Brunswick. There was no diversion from the Delaware River during the year (see Delaware River basin, diversions). All flow for the year was from the Millstone River. Some water may be wasted to the Millstone River 500 ft above station. On days of zero flow reverse flow may have occurred due to pumping out of the gage pool to the upstream end of the lock for water supply. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 73.2 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 174 ft³/s Apr. 6, 1957; no flow many days in many years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 76 ft³/s, Dec. 6; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	16	72	31	38	33	34	.00	42	.10	22	6.8
2	33	13	72	9.4	38	33	35	.00	48	.00	25	8.6
3	53	3.0	72	.00	39	34	33	8.2	47	.00	8.0	9.3
4	28	.00	72	18	39	34	33	9.7	46	.00	5.3	6.1
5	5.6	35	71	18	39	34	32	2.6	46	1.2	4.6	6.8
6	4.6	72	76	17	39	34	32	12	47	.00	.00	5.4
7	.00	71	75	17	39	34	32	23	46	.00	.00	2.7
8	.00	70	72	20	37	34	35	28	43	.00	19	.20
9	.00	52	70	.00	38	35	40	35	40	.00	21	4.2
10	.00	34	70	24	37	38	40	40	29	.00	18	6.2
11	.00	21	69	39	37	39	40	41	33	.00	9.5	.20
12	.00	25	69	33	35	46	40	35	31	.00	.00	.00
13	.00	34	68	32	25	45	39	26	25	.00	.00	.00
14	.00	35	59	32	32	44	39	17	14	.00	.00	.00
15	.00	34	49	32	36	45	39	21	8.5	.00	.00	.00
16	.00	34	47	40	36	55	38	25	20	.00	.00	.00
17	.00	21	54	38	37	48	38	25	35	2.0	.00	.00
18	.00	15	42	40	37	45	46	35	43	.00	.00	.00
19	.00	19	23	45	36	45	60	46	42	.00	.00	.00
20	.00	23	32	29	35	44	61	43	40	.00	.00	.00
21	.00	23	29	40	36	44	63	36	34	.00	5.2	.00
22	.00	23	27	42	38	45	64	47	25	.00	4.2	.00
23	.00	22	27	42	34	36	61	47	9.2	.00	3.2	.00
24	3.1	22	25	42	35	33	37	46	8.4	.00	.80	.00
25	8.3	21	28	42	35	34	6.1	35	17	.00	1.3	.00
26	6.2	9.1	25	41	33	38	4.0	31	27	16	10	.00
27	.00	9.1	30	42	32	38	1.6	33	26	25	22	.00
28	.00	30	30	41	34	38	.00	33	17	22	22	.00
29	7.3	58	32	40	---	37	.10	32	6.3	12	6.8	.00
30	32	73	32	38	---	37	.00	22	.60	5.3	7.0	.00
31	20	---	31	38	---	38	---	23	---	4.2	6.1	---
TOTAL	201.10	917.20	1550	962.40	1006	1217	1022.80	857.50	896.00	87.80	221.00	56.50
MEAN	6.49	30.6	50.0	31.0	35.9	39.3	34.1	27.7	29.9	2.83	7.13	1.88
MAX	53	73	76	45	39	55	64	47	48	25	25	9.3
MIN	.00	.00	23	.00	25	33	.00	.00	.60	.00	.00	.00

CAL YR 1984 TOTAL 16518.10 MEAN 45.1 MAX 88 MIN .00
WTR YR 1985 TOTAL 8995.30 MEAN 24.6 MAX 76 MIN .00

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 upstream of Lockatong Creek.

DRAINAGE AREA.--6,598 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 07...	1030	4320	250	8.0	2.0	13.4	97	<.9	20	<2
APR 17...	1030	6000	164	8.0	13.0	11.0	104	E2.0	<20	<2
JUN 18...	1415	8640	173	8.5	21.0	8.2	94	3.3	490	1600
JUL 24...	1045	4710	177	8.0	25.5	8.1	99	E2.2	70	220
AUG 15...	1300	2940	207	8.2	28.0	8.2	105	3.9	20	540

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 07...	83	21	7.5	14	1.5	48	26	21	<.10
APR 17...	54	14	4.7	7.8	1.2	33	20	13	<.10
JUN 18...	58	15	5.0	7.0	1.4	40	20	12	<.10
JUL 24...	69	18	5.9	9.0	1.7	47	20	14	.20
AUG 15...	79	20	7.0	12	1.7	54	23	16	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	2.7	120	.026	1.5	.070	1.1	2.6	.120	2.5
APR 17...	1.5	82	.048	.92	.500	1.0	1.9	.110	2.9
JUN 18...	3.6	88	.032	.82	.220	.77	1.6	.180	3.6
JUL 24...	2.7	100	.045	.87	.160	.66	1.5	.160	4.5
AUG 15...	2.4	110	.024	.95	.160	.56	1.5	.130	2.9

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 upstream from mouth.

DRAINAGE AREA.--26.6 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 07...	1200	E6.7	270	7.8	.0	13.4	92	E.1	<20	<2
APR 17...	1215	E5.2	488	9.0	15.0	11.6	115	E1.3	<20	240
JUN 13...	1120	E7.3	335	7.3	17.5	10.2	108	<.9	<20	920
JUL 24...	1230	E1.6	206	8.1	21.0	10.4	116	E1.1	130	920
AUG 15...	1145	E1.3	250	8.7	24.5	10.5	126	E1.9	130	540

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 07...	56	13	5.7	29	1.7	27	26	41	<.10
APR 17...	59	14	5.9	68	2.3	34	45	97	<.10
JUN 13...	51	12	5.0	43	1.9	36	31	46	<.10
JUL 24...	55	13	5.4	23	2.4	48	24	21	.10
AUG 15...	63	15	6.3	28	2.4	54	24	27	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 07...	9.4	140	.004	2.0	.060	.31	2.3	.030	1.7
APR 17...	7.5	260	.005	1.1	.290	.50	1.6	.050	2.9
JUN 13...	10	170	.004	2.1	.120	.35	2.4	.090	3.4
JUL 24...	8.0	130	.008	1.6	.290	.68	2.3	.080	2.3
AUG 15...	2.5	140	.013	1.1	.140	.44	1.6	.060	1.5

01461300 WICKECHEOKE CREEK AT STOCKTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 13...	1120	<.5	<10	<1	<10	120	<1	20	3

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
JUN 13...	160	3	10	<.1	4	<1	30	4

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 upstream of Jacobs Creek.

DRAINAGE AREA.--6,735 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB										
07...	1330	3850	234	8.7	1.5	15.8	114	--	<20	<2
APR										
17...	1330	6260	157	8.4	14.0	11.4	110	E1.9	<20	<2
JUN										
13...	1220	5040	192	7.5	18.0	8.8	94	E1.8	70	350
JUL										
24...	1415	5670	199	8.6	26.5	9.8	122	E3.2	70	130
AUG										
15...	1030	2940	201	8.6	28.5	8.0	104	E1.5	20	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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB									
07...	84	21	7.6	15	1.6	49	27	23	<.10
APR									
17...	54	14	4.7	8.1	1.3	32	19	13	.10
JUN									
13...	67	17	6.0	9.8	1.1	46	20	13	<.10
JUL									
24...	74	19	6.5	10	1.7	51	22	15	.10
AUG									
15...	79	20	7.0	10	1.6	53	22	16	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
07...	2.1	130	.027	1.6	.690	.84	2.5	.110	2.7
APR									
17...	2.0	81	.033	.86	.210	.45	1.3	.090	3.0
JUN									
13...	3.1	98	.021	.90	.120	.47	1.4	.110	--
JUL									
24...	2.8	110	.027	.91	.150	.64	1.6	.140	4.3
AUG									
15...	2.2	110	.015	.88	.100	.54	1.4	.150	3.0

01462500 DELAWARE RIVER AT WASHINGTON CROSSING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 13...	1220	<.5	<10	<1	<10	100	<1	10	3

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
JUN 13...	190	9	30	<.1	10	<1	30	2

01463500 DELAWARE RIVER AT TRENTON, NJ
(National stream quality accounting network and Radiochemical program station)

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, on left bank 450 ft upstream from Calhoun Street Bridge at Trenton, 0.5 mi upstream from Assunpink Creek, and at mile 134.5.
DRAINAGE AREA.--6,780 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--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.
REVISED 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 higher. Feb. 24, 1913 to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 500 ft downstream.
REMARKS.--Estimated daily discharges: Jan. 21 to Feb. 1, and Feb. 9-11. Records good except those for periods of ice effect, Jan. 21 to Feb. 1, and Feb. 9-11, which are fair. 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). U.S. Army Corps of Engineers satellite telemeter at station.
AVERAGE DISCHARGE.--73 years, 11,667 ft³/s, unadjusted.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 329,000 ft³/s, Aug. 20, 1955, elevation, 28.60 ft, from high-water mark in gage house, from rating curve extended above 230,000 ft³/s; minimum, 1,180 ft³/s Oct. 31, 1963, elevation, 7.26 ft. Flow in Delaware and Raritan Canal not included.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft above National Geodetic Vertical Datum of 1929, discharge estimated, 295,000 ft³/s. Maximum elevation since 1903, 30.6 ft above National Geodetic Vertical Datum of 1929, Mar. 8, 1904, from floodmark (ice jam).
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Elevation (ft)	Date	Time	Discharge (ft³/s)	Elevation (ft)
Sept. 28	2130	*87,200	*16.68	No other peak greater than base discharge.			

Minimum discharge, 2,050 ft³/s, Sept. 18, gage height, 7.67 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3380	3790	7230	12100	3830	12900	6530	4280	7890	4270	5800	3390
2	3630	3530	8620	11600	3900	11200	7550	4260	8490	4440	5720	3570
3	3900	3880	7050	11200	3780	10200	8950	10100	7920	4210	5930	3620
4	3530	3550	7330	10500	3560	9050	9610	19700	7750	3960	5650	3410
5	2970	4300	7110	9860	3180	8580	8890	18400	7650	3640	4820	3080
6	3440	4470	8090	9000	3180	8850	8300	14600	8050	3440	4080	2500
7	3510	4320	9140	8020	3920	8720	8220	12400	8510	3460	3470	2360
8	3310	4250	8150	7570	4090	9320	7930	10800	7490	4310	3980	2690
9	3490	4270	6050	7380	3470	8870	8420	9610	7040	4200	4530	3030
10	3380	4220	5280	6220	3140	8770	8970	8640	6300	4620	4000	3040
11	3320	4330	5040	5410	3060	8290	8810	7690	5200	4330	3910	3600
12	3310	4040	5100	5340	5380	8280	7950	7060	4980	3780	3920	5880
13	3310	3740	5040	5220	12800	12000	7440	6570	4960	3920	3430	4670
14	3370	3690	5090	5420	10600	23300	7100	6310	4660	4800	3280	3640
15	3300	3700	5270	5070	8820	18500	6630	5490	4380	5650	3090	2980
16	3390	3430	5770	5830	7870	15400	6410	5010	5050	6720	2960	2550
17	3360	3450	6070	4600	7070	13200	6340	4740	8680	7180	2890	2290
18	3540	3270	5890	4570	6560	11200	6140	8220	8780	6760	3070	2100
19	3440	3210	5640	4490	6010	10300	5960	8240	8620	5430	3180	2710
20	3620	3280	5640	4800	5580	9930	5730	8030	7190	4430	2950	2970
21	3720	3260	5670	4170	5270	8600	5720	8010	5790	3880	2830	2990
22	3760	3390	7540	3110	5200	8860	5830	7640	4920	3330	2710	2950
23	5420	3260	10200	3240	5770	8420	5690	7000	4580	3280	2700	2970
24	5440	3110	11400	4990	7220	8310	5380	6050	4490	4960	2600	2790
25	4650	3170	11900	5530	10100	7610	5280	5420	4570	5140	2590	2810
26	4550	3170	9780	4550	16700	7240	5250	4930	4730	5070	4160	2750
27	4010	3140	8740	4390	19000	7790	5240	4550	4790	7870	3500	22900
28	3730	3270	7910	4200	15200	6500	5140	4330	4590	8020	3510	65400
29	4440	3570	7970	4040	---	6070	4920	4330	4470	5650	3390	62500
30	4360	4380	9490	3860	---	6040	4520	6230	4160	4630	2940	38000
31	4030	---	11900	3820	---	6110	---	7690	---	4340	2980	---
TOTAL	116610	110440	231100	190100	194260	308410	204850	246330	186680	149720	114570	270140
MEAN	3762	3681	7455	6132	6938	9949	6828	7946	6223	4830	3696	9005
MAX	5440	4470	11900	12100	19000	23300	9610	19700	8780	8020	5930	65400
MIN	2970	3110	5040	3110	3060	6040	4520	4260	4160	3280	2590	2100

CAL YR 1984 TOTAL 4987350 MEAN 13630 MAX 130000 MIN 2970
WTR YR 1985 TOTAL 2323210 MEAN 6365 MAX 65400 MIN 2100

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1945 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1968 to September 1978, May 1979 to current year.
pH: June 1968 to September 1978, May to September 1978, February 1980 to August 1982, April 1983 to current year.
WATER TEMPERATURE: October 1944 to September 1978, May 1979 to current year.
DISSOLVED OXYGEN: October 1962 to September 1978, May 1979 to current year.
SUSPENDED-SEDIMENT DISCHARGE: Water years 1949 to 1981.

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

REMARKS.--Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism. Unpublished records of suspended sediment discharge for the period October 1, 1981 to March 31, 1982 are available in files of the district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 400 microsiemens, Jan. 24, 1959; minimum, 50 microsiemens, Mar. 19, 1945.
pH: Maximum, 10.3, August 9, 10, 1983; minimum, 5.3, June 22, 1972.
WATER TEMPERATURE: Maximum, 34.0°C, June 18, 1957; minimum 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 18.4 mg/L, January 10, 1980; minimum, 4.0 mg/L, Nov. 9, 1972.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 377 microsiemens, Feb. 12; minimum, 82 microsiemens, Sept. 30.
pH: Maximum, 9.8 Apr. 18, 19; minimum, 6.8, Sept. 29.
WATER TEMPERATURE: Maximum, 31.0°C, Aug. 14, 15; minimum 0.0°C on many days during the winter months.
DISSOLVED OXYGEN: Maximum, 17.4 mg/L, Feb. 10; minimum, 5.4 mg/L, Aug. 17, 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
14...	1230	3710	218	8.6	8.0	--	13.9	116	1.5	K8	K4
27...	1330	3110	235	8.9	6.0	--	--	--	--	--	--
FEB											
12...	1300	3780	220	8.0	--	5.5	13.9	104	3.5	K48	3900
JUN											
25...	1100	4620	192	8.4	24.0	3.0	9.7	115	1.8	110	K50
SEP											
05...	1115	3230	239	8.2	27.0	2.0	9.2	116	1.4	80	7900

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 FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV											
14...	84	21	7.6	12	1.5	49	25	17	<.10	1.8	120
27...	88	22	8.0	10	1.4	57	25	15	.10	.5	120
FEB											
12...	76	19	7.0	16	1.5	51	26	25	<.10	1.3	130
JUN											
25...	71	18	6.4	9.2	1.2	49	23	15	<.10	2.1	100
SEP											
05...	77	19	7.2	10	1.5	55	24	16	<.10	2.5	110

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
14...	14	140	48	1.4	.050	.10	.100	.070	.080	--
27...	--	--	--	--	--	--	--	--	--	--
FEB										
12...	9	92	79	1.6	.220	.80	.150	.080	.100	2.5
JUN										
25...	10	125	93	.82	<.010	.50	.140	.100	.070	--
SEP										
05...	7	61	96	1.0	.060	.60	.150	.130	.100	--

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV										
14...	1230	40	<1	30	<.5	<1	2	<3	2	28
FEB										
12...	1300	80	<1	33	<.5	<1	<1	<3	10	30
JUN										
25...	1100	50	<1	29	<.5	<1	<1	<3	2	35
SEP										
05...	1115	30	1	31	<.5	<1	<1	<3	3	16

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)
NOV										
14...	4	7	4	<.1	<10	1	<1	<1	79	<6
FEB										
12...	1	10	22	1.0	<10	2	<1	<1	80	<6
JUN										
25...	5	10	4	.3	<10	3	<1	<1	75	<6
SEP										
05...	1	<4	9	.2	<10	3	<1	<1	89	<6

DATE	ZINC, DISSOLVED (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									
14...	6	<2.9	<.4	<1.7	<.4	<1.4	<.4	.05	.15
FEB									
12...	38	--	--	--	--	--	--	--	--
JUN									
25...	17	<2.6	<.5	<1.4	<.6	<1.2	<.5	.06	.20
SEP									
05...	4	--	--	--	--	--	--	--	--

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	251	239	244	233	228	230	253	244	249	154	142	146
2	250	245	248	230	226	228	241	150	183	145	142	144
3	249	246	247	234	229	232	155	149	151	156	144	151
4	250	245	248	236	219	226	162	155	159	165	156	159
5	249	244	247	236	204	221	166	161	164	167	164	165
6	261	249	254	238	224	229	186	161	168	171	167	169
7	264	247	257	237	226	233	179	159	171	176	169	172
8	247	233	239	234	227	230	185	179	182	183	177	180
9	240	235	238	232	227	230	177	172	174	185	182	184
10	239	234	237	227	221	225	188	174	181	187	180	183
11	240	236	238	221	205	212	191	186	188	191	187	188
12	244	240	242	214	207	211	201	192	197	212	193	206
13	247	243	245	220	213	216	204	200	202	229	213	221
14	245	239	242	224	220	222	207	204	206	234	228	231
15	241	234	238	224	219	221	204	197	201	227	212	218
16	240	233	236	221	216	219	197	194	195	216	187	206
17	237	230	234	226	218	220	193	182	188	209	187	201
18	236	228	233	227	221	223	182	176	178	215	194	204
19	229	223	226	224	220	222	179	176	177	230	215	222
20	230	224	226	230	225	227	178	177	177	247	231	238
21	230	228	229	231	226	229	186	178	182	247	239	245
22	230	223	228	232	226	229	192	186	188	245	240	243
23	238	222	230	230	221	225	189	183	185	244	238	240
24	233	216	225	226	218	222	183	157	175	254	241	249
25	232	213	220	226	222	224	156	145	148	238	209	222
26	222	215	220	225	219	222	148	146	147	216	207	210
27	221	215	218	224	217	220	155	147	150	218	214	216
28	230	218	224	224	220	222	168	155	159	215	208	211
29	234	226	232	231	219	226	192	169	177	210	202	206
30	225	218	220	243	230	233	196	187	193	207	202	205
31	232	224	227	---	---	---	186	156	165	217	208	212
MONTH	264	213	235	243	204	224	253	145	179	254	142	202

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	228	215	219	118	114	116	177	168	170	178	174	175
2	243	223	234	125	119	122	170	166	167	184	178	181
3	249	230	237	128	125	127	168	157	163	187	170	178
4	262	250	256	136	128	132	157	144	148	191	162	179
5	265	261	263	143	137	139	143	140	141	161	139	146
6	264	259	262	151	144	148	146	142	144	141	138	139
7	265	257	261	154	152	153	151	144	147	146	138	141
8	264	253	259	154	147	151	152	150	151	148	146	147
9	260	248	254	154	147	150	154	150	152	153	148	151
10	253	243	248	155	151	153	153	142	148	156	152	154
11	251	236	244	153	147	150	142	139	141	163	157	160
12	377	179	254	154	150	152	147	139	142	173	163	166
13	238	168	194	162	155	160	152	147	149	174	171	172
14	262	225	246	158	113	127	157	152	154	175	172	174
15	222	201	213	114	110	112	158	155	157	176	172	174
16	204	198	202	113	110	111	165	159	161	178	173	176
17	198	190	194	117	113	115	165	162	163	189	178	184
18	192	190	191	128	118	123	167	163	165	190	168	180
19	190	186	188	132	128	130	172	167	169	205	173	196
20	192	187	189	132	129	131	172	170	171	205	189	198
21	197	191	194	145	129	134	177	172	174	188	169	176
22	209	195	203	149	146	147	181	177	179	175	170	172
23	216	208	213	147	142	145	180	172	176	183	174	179
24	211	203	208	149	143	145	172	169	170	188	180	185
25	204	184	198	151	146	148	175	169	173	201	186	191
26	182	126	154	153	150	151	180	176	178	206	201	203
27	125	110	115	158	152	154	185	179	183	208	202	204
28	114	112	113	157	151	153	183	177	181	209	204	208
29	---	---	---	161	153	156	182	176	179	209	206	207
30	---	---	---	166	160	163	181	176	179	209	205	207
31	---	---	---	171	167	169	---	---	---	204	169	186
MONTH	377	110	215	171	110	141	185	139	163	209	138	177

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	169	161	164	216	213	214	197	169	186	228	215	223
2	182	160	171	218	211	215	226	190	211	244	229	240
3	180	166	172	210	202	205	210	194	202	249	238	245
4	166	161	164	203	199	201	195	182	190	237	226	231
5	162	157	159	209	202	206	182	171	177	227	220	223
6	179	160	167	212	208	211	183	171	176	224	220	222
7	182	176	179	214	210	212	187	183	185	228	223	225
8	179	168	174	225	212	219	197	108	179	232	225	229
9	169	165	167	224	221	223	198	193	195	240	227	231
10	175	168	172	221	204	212	213	197	208	260	242	252
11	182	175	179	203	197	201	210	152	199	260	239	251
12	188	181	184	198	194	196	218	175	210	238	208	228
13	190	187	189	200	195	197	221	217	219	206	184	192
14	193	187	191	205	199	201	222	217	220	184	180	182
15	196	191	193	203	192	200	220	213	216	185	182	183
16	206	185	196	192	180	187	215	212	213	198	184	191
17	213	206	208	181	159	170	216	211	214	209	198	203
18	206	187	190	157	148	151	224	216	220	224	210	219
19	186	178	180	151	147	149	228	223	226	247	224	236
20	177	166	170	155	152	154	236	223	230	262	249	257
21	175	167	171	173	156	165	247	237	242	268	263	266
22	183	174	178	182	175	179	249	240	244	268	248	258
23	194	184	189	188	183	186	242	232	238	247	229	238
24	204	195	199	208	190	200	232	226	229	227	218	223
25	210	202	205	204	173	186	225	190	214	222	218	220
26	214	209	212	178	156	173	230	189	216	219	101	207
27	214	209	212	193	174	186	239	230	236	184	111	147
28	211	202	206	189	168	181	244	233	240	153	98	130
29	206	202	204	174	166	169	231	223	227	95	84	87
30	211	205	206	189	175	183	224	213	220	88	82	85
31	---	---	---	193	181	191	215	213	214	---	---	---
MONTH	214	157	185	225	147	191	249	108	213	268	82	211

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	3.5	2.5	3.5	11.5	10.0	11.0	21.5	17.5	19.5
2	.0	.0	.0	5.5	3.5	4.5	10.0	9.0	9.5	19.5	16.5	18.0
3	.5	.0	.0	6.0	4.5	5.0	9.0	8.0	8.5	16.5	13.0	14.5
4	.0	.0	.0	5.0	4.5	4.5	9.0	7.5	8.5	14.5	13.0	14.0
5	.0	.0	.0	7.0	4.5	6.0	11.5	8.5	10.0	15.5	13.5	14.5
6	.0	.0	.0	6.0	4.5	5.5	13.0	11.0	12.0	15.5	15.0	15.5
7	.0	.0	.0	5.0	4.0	4.5	12.5	11.0	11.5	16.5	15.5	16.0
8	.0	.0	.0	5.5	4.5	5.0	12.0	10.5	11.5	17.0	15.5	16.0
9	.0	.0	.0	7.0	5.0	6.0	10.5	9.0	10.0	17.5	15.5	16.5
10	.0	.0	.0	7.5	5.5	6.5	10.5	8.5	9.5	19.0	16.5	17.5
11	.0	.0	.0	7.0	6.0	6.5	9.5	9.0	9.5	21.0	18.5	19.5
12	1.0	.0	.5	7.5	6.5	7.0	11.5	8.5	10.0	22.5	20.0	21.5
13	2.0	.5	1.5	8.5	6.5	7.5	13.0	11.0	11.5	24.0	21.0	22.0
14	2.5	1.5	2.0	8.0	7.0	7.5	13.5	11.5	12.5	25.0	22.0	23.5
15	2.0	1.0	1.5	7.0	6.0	6.0	13.0	12.5	12.5	23.5	21.0	22.0
16	2.0	1.0	1.5	6.5	5.0	6.0	14.0	12.5	13.5	22.5	20.0	21.0
17	2.5	1.0	1.5	7.0	5.5	6.0	14.5	12.0	13.0	21.5	20.0	20.5
18	3.0	1.0	2.0	6.5	5.0	6.0	15.5	12.5	14.0	20.0	17.5	18.5
19	4.0	2.0	3.0	6.5	4.5	5.5	18.0	14.5	16.0	19.0	17.0	18.0
20	4.5	2.5	3.5	6.5	6.0	6.0	18.5	16.5	17.0	20.5	17.5	19.0
21	4.5	2.5	3.5	7.0	5.5	6.5	20.0	16.5	18.0	21.0	19.5	20.0
22	5.0	3.5	4.0	7.0	6.0	6.5	21.5	18.0	19.5	21.5	19.5	20.5
23	7.5	4.5	6.0	7.0	6.5	6.5	21.5	18.5	19.5	20.5	19.0	19.5
24	8.0	6.0	7.0	7.5	7.0	7.0	18.5	16.0	17.5	20.5	18.0	19.5
25	8.5	7.5	8.0	8.5	6.5	7.5	16.5	15.5	16.0	23.0	19.0	21.0
26	7.5	5.0	6.0	9.0	6.5	8.0	19.5	15.5	17.5	24.5	20.0	22.0
27	5.0	3.5	4.0	10.5	7.5	9.0	20.5	17.5	19.0	25.5	21.5	23.5
28	4.0	2.5	3.0	12.0	9.5	11.0	19.0	16.5	18.0	25.0	22.5	23.5
29	---	---	---	14.0	11.0	12.5	19.5	15.5	17.5	23.5	21.0	22.0
30	---	---	---	13.5	12.5	13.0	20.5	16.5	18.5	23.5	20.5	22.0
31	---	---	---	12.5	10.5	11.5	---	---	---	22.0	21.0	21.5
MONTH	8.5	.0	2.0	14.0	2.5	7.0	21.5	7.5	14.0	25.5	13.0	19.5

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

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.7	8.0	8.4	8.5	7.8	8.0	8.9	7.8	8.2	7.9	7.8	7.8
2	8.9	8.0	8.4	8.4	7.7	8.0	8.2	7.7	7.9	7.9	7.8	7.8
3	9.1	8.0	8.5	8.7	7.8	8.1	7.8	7.6	7.6	7.9	7.8	7.9
4	9.2	8.1	8.6	8.8	7.8	8.2	8.1	7.5	7.8	8.1	7.9	8.0
5	9.4	8.1	8.8	8.3	7.4	7.9	8.3	7.7	7.9	8.4	7.9	8.1
6	9.4	8.3	8.8	8.3	7.7	7.9	7.9	7.6	7.7	8.5	7.9	8.1
7	9.5	8.3	8.9	8.7	7.6	8.0	7.9	7.6	7.7	8.6	8.0	8.2
8	9.5	8.3	9.0	8.8	7.8	8.2	8.2	7.7	7.9	8.7	8.0	8.3
9	9.5	8.3	8.9	8.8	7.8	8.2	8.5	7.7	8.0	8.7	8.0	8.2
10	9.4	8.2	8.8	8.9	7.8	8.2	8.5	7.8	8.0	8.7	8.1	8.3
11	9.4	8.2	8.8	8.2	7.7	7.9	8.7	7.8	8.1	8.8	8.1	8.3
12	9.3	8.1	8.7	8.6	7.7	8.0	8.8	7.8	8.2	8.9	8.1	8.4
13	9.4	8.2	8.8	8.7	7.7	8.1	8.9	7.9	8.2	9.0	8.1	8.5
14	9.3	8.3	8.8	8.9	7.8	8.3	8.2	7.8	7.9	8.9	8.2	8.4
15	9.3	8.3	8.8	9.0	7.8	8.3	8.7	7.8	8.1	9.1	8.2	8.5
16	9.3	8.3	8.8	9.0	7.9	8.4	8.6	7.9	8.1	9.0	8.2	8.6
17	9.2	8.2	8.7	9.0	7.8	8.4	9.0	7.8	8.2	9.0	8.3	8.5
18	9.1	8.1	8.5	8.9	7.8	8.3	9.1	7.9	8.3	9.2	8.2	8.6
19	9.2	8.0	8.5	8.9	7.7	8.2	8.2	7.8	8.0	9.3	8.3	8.7
20	9.0	8.0	8.4	9.0	7.7	8.4	9.1	7.8	8.2	9.2	8.2	8.6
21	8.9	7.9	8.3	9.1	7.9	8.5	9.0	7.9	8.2	8.7	8.1	8.4
22	8.7	7.8	8.2	9.1	8.0	8.5	9.0	7.9	8.3	8.9	8.2	8.5
23	8.3	7.8	8.0	9.1	7.9	8.4	8.4	7.9	8.1	8.8	8.3	8.5
24	7.8	7.7	7.7	9.2	7.9	8.5	8.2	7.9	8.0	8.5	8.1	8.3
25	8.2	7.6	7.8	9.3	8.0	8.6	8.1	7.8	7.9	8.2	8.0	8.1
26	8.3	7.7	7.9	9.3	8.0	8.7	8.3	7.8	8.0	8.3	7.9	8.1
27	8.4	7.7	7.9	9.4	8.1	8.7	8.0	7.8	7.9	8.2	7.8	8.0
28	8.6	7.7	8.0	9.4	8.1	8.7	8.4	7.8	8.0	8.3	7.9	8.0
29	8.4	7.7	8.0	9.1	7.9	8.4	8.8	7.9	8.2	8.5	8.0	8.2
30	8.6	7.7	8.0	9.2	7.8	8.4	8.4	8.0	8.1	8.6	8.1	8.3
31	8.8	7.8	8.1	---	---	---	8.0	7.8	8.0	8.3	8.1	8.2
MONTH	9.5	7.6	8.5	9.4	7.4	8.3	9.1	7.5	8.0	9.3	7.8	8.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.4	8.1	8.2	7.8	7.7	7.7	9.0	7.6	8.2	8.6	7.4	7.8
2	8.5	8.1	8.2	8.0	7.7	7.9	9.0	7.9	8.4	7.8	7.4	7.5
3	8.7	8.1	8.4	8.2	7.8	7.9	8.5	7.9	8.2	7.4	7.2	7.3
4	9.0	8.3	8.7	7.9	7.8	7.8	8.8	7.8	8.2	7.4	7.2	7.3
5	8.9	8.5	8.7	8.3	7.8	8.0	9.1	7.9	8.4	7.2	7.1	7.1
6	8.8	8.3	8.5	8.4	7.9	8.1	9.2	7.9	8.4	7.1	7.0	7.0
7	8.8	8.3	8.6	8.4	7.9	8.1	9.3	7.9	8.5	7.1	6.9	7.0
8	8.8	8.3	8.6	8.3	7.9	8.1	9.3	7.9	8.6	7.1	7.1	7.1
9	8.8	8.3	8.6	8.6	7.9	8.2	9.2	7.9	8.5	7.1	7.0	7.1
10	8.8	8.3	8.6	8.7	7.9	8.2	9.3	7.9	8.6	7.1	7.0	7.1
11	8.8	8.2	8.5	8.7	8.0	8.2	9.0	7.9	8.4	7.3	7.1	7.2
12	8.4	7.7	8.1	8.5	8.0	8.1	9.6	7.7	8.7	7.4	7.1	7.2
13	7.9	7.8	7.8	8.7	8.0	8.3	9.7	7.9	8.9	7.6	7.2	7.4
14	7.9	7.8	7.9	8.2	7.6	7.8	9.7	8.0	8.8	8.9	7.3	7.9
15	7.9	7.8	7.9	7.6	7.4	7.5	9.2	7.9	8.4	9.3	7.5	8.3
16	8.2	7.9	8.0	7.7	7.5	7.6	9.5	7.7	8.6	9.2	7.5	8.3
17	8.3	7.9	8.1	7.9	7.6	7.7	9.7	7.7	8.8	8.8	7.5	8.0
18	8.5	7.9	8.1	8.0	7.6	7.8	9.8	7.8	8.8	7.6	7.2	7.4
19	8.7	7.9	8.2	8.1	7.6	7.8	9.8	7.7	8.8	7.8	7.2	7.5
20	8.8	8.0	8.3	8.0	7.7	7.8	9.6	7.6	8.5	8.1	7.5	7.8
21	8.9	8.0	8.4	8.4	7.7	7.9	9.5	7.6	8.4	7.8	7.4	7.6
22	9.1	8.0	8.4	8.3	7.8	8.0	9.4	7.6	8.3	---	---	---
23	9.3	8.0	8.6	8.3	7.8	7.9	9.1	7.5	8.1	---	---	---
24	9.2	8.1	8.5	8.2	7.7	7.9	7.9	7.5	7.7	---	---	---
25	8.7	8.1	8.3	8.7	7.7	8.1	8.1	7.6	7.8	---	---	---
26	8.1	7.8	7.9	8.9	7.9	8.4	8.4	7.6	7.9	---	---	---
27	7.7	7.6	7.7	9.0	8.0	8.4	8.3	7.6	7.9	---	---	---
28	7.7	7.6	7.7	9.3	8.0	8.6	7.9	7.5	7.7	---	---	---
29	---	---	---	9.4	7.9	8.6	7.9	7.4	7.6	---	---	---
30	---	---	---	9.2	7.9	8.4	8.4	7.5	7.8	---	---	---
31	---	---	---	8.4	7.7	8.0	---	---	---	---	---	---
MONTH	9.3	7.6	8.3	9.4	7.4	8.0	9.8	7.4	8.3	9.3	6.9	7.5

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	8.9	7.7	8.3	7.6	7.2	7.4	7.8	7.3	7.5
2	---	---	---	9.0	7.6	8.3	7.9	7.3	7.5	7.9	7.3	7.5
3	---	---	---	9.1	7.5	8.4	7.9	7.4	7.6	7.9	7.3	7.6
4	---	---	---	9.2	7.6	8.5	8.0	7.4	7.6	8.0	7.3	7.6
5	---	---	---	8.9	7.4	8.2	7.9	7.3	7.5	8.2	7.3	7.6
6	7.6	7.4	7.5	8.9	7.4	8.1	8.1	7.3	7.6	8.3	7.2	7.6
7	7.8	7.5	7.7	8.9	7.5	8.1	8.3	7.3	7.6	8.4	7.2	7.6
8	7.8	7.6	7.7	8.2	7.3	7.7	8.0	7.0	7.5	7.9	7.2	7.5
9	7.9	7.6	7.8	8.5	7.3	7.8	8.4	7.4	7.7	7.7	7.2	7.4
10	8.2	7.6	7.9	8.2	7.4	7.8	8.5	7.3	7.7	7.9	7.2	7.4
11	8.4	7.7	7.9	8.6	7.4	7.9	8.9	7.3	8.0	7.9	7.3	7.5
12	8.8	7.6	8.1	8.5	7.4	7.8	9.0	7.5	8.1	7.7	7.3	7.5
13	8.8	7.7	8.2	8.5	7.4	7.8	9.1	7.6	8.3	7.6	7.3	7.4
14	8.9	7.7	8.3	8.4	7.3	7.7	9.1	7.6	8.3	8.0	7.2	7.5
15	9.3	7.7	8.4	7.7	7.2	7.4	9.0	7.6	8.3	8.1	7.2	7.5
16	9.2	7.7	8.3	7.5	7.2	7.3	8.8	7.5	8.2	8.4	7.2	7.6
17	8.0	7.4	7.6	7.5	7.2	7.3	8.8	7.3	8.0	8.5	7.3	7.7
18	7.6	7.3	7.5	7.4	7.1	7.2	7.8	7.2	7.5	8.6	7.4	7.9
19	7.7	7.4	7.6	7.7	7.1	7.3	7.7	7.1	7.3	8.6	7.4	7.9
20	8.0	7.4	7.7	7.9	7.1	7.4	8.1	7.1	7.4	8.6	7.5	8.0
21	8.8	7.5	8.0	8.0	7.1	7.4	7.7	7.2	7.3	8.6	7.5	8.0
22	9.1	7.6	8.3	8.3	7.1	7.5	7.9	7.1	7.4	8.5	7.5	7.9
23	9.1	7.7	8.4	8.6	7.2	7.8	8.1	7.2	7.5	7.8	7.4	7.6
24	9.2	7.7	8.5	9.2	7.4	8.3	8.4	7.2	7.6	8.3	7.4	7.7
25	9.3	7.7	8.5	9.2	7.7	8.4	7.4	7.1	7.2	8.4	7.5	7.8
26	8.6	7.8	8.2	8.2	7.3	7.6	7.4	7.0	7.2	8.2	7.2	7.8
27	8.9	7.8	8.3	7.6	7.2	7.3	7.8	7.1	7.3	7.4	7.1	7.3
28	8.8	7.7	8.2	7.2	7.1	7.2	7.9	7.2	7.4	7.3	6.9	7.2
29	8.8	7.7	8.2	7.6	7.2	7.3	8.1	7.2	7.5	6.9	6.8	6.9
30	9.0	7.7	8.2	8.2	7.3	7.6	7.9	7.2	7.4	7.1	6.9	7.0
31	---	---	---	8.1	7.3	7.5	7.6	7.2	7.3	---	---	---
MONTH	9.3	7.3	8.0	9.2	7.1	7.8	9.1	7.0	7.6	8.6	6.8	7.6

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.4	7.4	8.1	13.3	10.7	11.5	12.4	12.0	12.2
2	12.4	9.5	10.8	9.7	7.3	8.3	12.3	10.6	11.4	12.3	11.8	12.0
3	14.3	10.1	11.8	11.6	8.5	10.0	11.6	11.1	11.4	12.3	12.0	12.1
4	14.6	10.7	12.4	11.8	9.1	10.2	12.4	10.9	11.6	12.7	12.1	12.3
5	15.0	10.6	12.6	10.9	8.6	9.4	12.9	11.4	12.0	13.4	12.2	12.8
6	15.7	10.5	12.6	10.9	8.5	9.4	12.3	11.7	11.9	14.1	13.0	13.4
7	15.2	10.4	12.6	12.3	9.2	10.5	12.6	11.8	12.2	14.3	13.1	13.6
8	14.7	10.0	12.1	13.1	10.3	11.5	13.3	12.3	12.7	14.3	13.1	13.6
9	13.9	9.7	11.6	13.6	10.8	11.9	13.9	12.6	13.1	15.0	13.6	14.2
10	13.5	9.3	11.2	13.7	10.6	11.8	13.9	12.6	13.0	15.5	14.0	14.7
11	13.4	9.3	10.9	11.5	10.1	10.7	14.0	12.2	12.9	15.7	14.3	14.9
12	13.3	9.1	10.8	12.9	10.0	11.3	13.9	11.9	12.6	15.8	14.6	15.0
13	12.5	9.0	10.5	13.7	11.0	12.1	14.1	11.8	12.6	15.8	14.2	14.9
14	12.4	8.6	10.2	14.9	11.8	13.2	12.2	11.1	11.7	15.3	14.0	14.6
15	12.3	8.8	10.3	15.6	12.4	13.6	13.0	10.8	11.6	15.2	13.8	14.4
16	12.3	9.0	10.4	14.9	12.2	13.4	12.7	11.0	11.5	15.7	14.0	14.8
17	12.1	9.1	10.3	15.5	12.3	13.6	13.2	10.8	11.7	15.5	14.2	14.7
18	11.1	8.5	9.6	15.6	12.4	13.7	13.2	10.9	11.7	15.9	14.1	14.9
19	11.9	8.1	10.6	15.8	12.3	13.7	11.5	10.6	11.0	15.8	14.0	14.7
20	11.1	8.2	9.3	---	---	---	13.3	10.6	11.6	15.8	13.9	14.7
21	10.9	8.0	9.1	---	---	---	13.1	11.2	11.8	16.3	14.6	15.4
22	10.3	7.8	8.9	---	---	---	13.2	11.1	11.8	16.5	14.9	15.5
23	9.4	7.7	8.3	---	---	---	12.4	11.3	11.7	16.1	14.8	15.3
24	8.2	7.4	7.7	---	---	---	12.6	11.8	12.1	15.2	14.2	14.7
25	9.9	7.6	8.6	---	---	---	12.8	11.9	12.3	14.7	13.8	14.2
26	9.5	7.9	8.6	---	---	---	13.7	12.6	13.0	15.2	13.8	14.5
27	10.4	7.8	8.7	---	---	---	13.4	12.9	13.0	15.4	14.0	14.5
28	10.7	7.9	8.9	---	---	---	13.9	12.8	13.2	15.5	14.0	14.6
29	10.0	7.8	8.6	---	---	---	14.1	12.7	13.2	15.7	14.1	14.7
30	10.7	7.6	8.8	14.8	10.5	12.2	13.3	12.5	12.8	15.8	14.1	14.8
31	10.5	7.8	9.0	---	---	---	13.0	12.4	12.7	14.5	13.6	14.0
MONTH	15.7	7.4	10.2	15.8	7.3	11.4	14.1	10.6	12.2	16.5	11.8	14.2

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.9	13.3	13.8	13.2	12.8	13.0	12.2	9.6	10.8	10.0	6.7	8.2
2	15.0	13.1	13.8	13.1	12.6	12.8	12.5	10.1	11.2	8.5	6.3	7.3
3	16.6	13.5	14.8	13.3	12.4	12.8	11.9	10.6	11.2	8.6	7.1	8.0
4	16.6	14.2	15.1	12.5	12.1	12.3	12.7	10.6	11.6	8.7	8.2	8.5
5	16.3	13.8	14.8	12.8	12.0	12.3	13.1	10.7	11.7	8.9	8.6	8.8
6	15.6	13.5	14.4	13.4	11.9	12.6	12.5	10.0	11.1	8.5	8.0	8.3
7	15.8	13.6	14.6	13.7	12.4	13.0	12.9	10.0	11.2	8.0	7.5	7.8
8	16.2	13.8	14.9	13.4	12.5	12.8	12.8	9.8	11.3	8.0	7.4	7.7
9	16.7	14.2	15.4	13.6	12.3	12.8	13.1	10.1	11.6	8.2	7.5	7.8
10	17.4	14.5	15.7	13.6	12.1	12.8	14.0	10.7	12.2	8.3	7.5	7.8
11	17.1	14.6	15.6	13.4	11.9	12.6	13.1	10.8	11.9	8.4	7.1	7.6
12	14.7	13.0	13.7	12.4	11.5	11.8	14.7	10.8	12.6	8.6	6.6	7.5
13	13.6	13.0	13.4	12.9	11.3	12.0	14.9	10.6	12.6	9.5	6.3	7.7
14	13.5	13.0	13.3	11.7	11.2	11.4	14.4	10.3	12.0	10.7	6.7	8.5
15	13.9	13.3	13.6	12.2	11.4	11.8	12.3	9.6	10.8	11.0	6.8	8.8
16	14.1	13.2	13.6	12.7	12.0	12.3	13.2	9.1	10.9	10.8	6.9	8.5
17	14.3	13.3	13.7	12.8	12.0	12.4	13.7	8.6	11.0	9.8	6.7	8.0
18	14.8	13.4	14.0	12.9	11.9	12.4	13.9	8.6	11.0	7.5	7.0	7.3
19	14.5	13.0	13.7	13.2	12.2	12.5	13.6	8.1	10.4	8.6	7.2	7.9
20	14.9	12.7	13.6	12.8	12.0	12.3	12.4	7.4	9.7	9.3	7.6	8.3
21	15.1	12.6	13.7	13.3	12.0	12.6	12.1	7.1	9.3	8.6	7.5	7.9
22	15.2	12.5	13.6	13.2	12.1	12.6	11.3	6.6	8.8	8.1	7.2	7.6
23	15.5	12.0	13.4	12.9	11.8	12.3	10.4	6.2	8.1	8.2	6.1	7.5
24	14.4	11.6	12.7	12.5	11.5	11.9	8.4	6.4	7.4	9.4	7.4	8.3
25	12.8	11.1	11.8	13.4	11.5	12.3	9.1	6.9	7.9	10.3	7.5	8.7
26	12.0	11.3	11.7	13.7	11.7	12.6	9.9	7.3	8.5	11.0	7.3	9.0
27	12.9	11.9	12.5	13.5	11.5	12.4	9.6	7.0	8.2	12.0	7.2	9.5
28	13.1	12.7	12.9	13.7	11.0	12.2	8.6	6.8	7.6	11.0	7.2	8.8
29	---	---	---	13.8	10.4	11.9	9.5	6.9	8.2	10.8	7.0	8.6
30	---	---	---	12.7	9.8	10.9	9.9	7.4	8.6	10.7	7.4	9.0
31	---	---	---	11.2	9.6	10.3	---	---	---	8.7	7.3	8.0
MONTH	17.4	11.1	13.9	13.8	9.6	12.3	14.9	6.2	10.3	12.0	6.1	8.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.3	7.0	7.2	11.3	7.7	9.3	8.0	6.5	7.0	8.8	6.4	7.4
2	7.5	6.9	7.3	11.9	7.4	9.5	8.6	6.5	7.4	8.8	6.6	7.5
3	8.2	7.1	7.6	12.4	7.4	9.7	8.7	6.8	7.6	9.0	6.6	7.6
4	8.7	7.1	7.8	12.7	7.3	9.8	8.8	6.8	7.7	9.0	6.3	7.5
5	7.6	7.2	7.4	11.1	6.8	8.7	9.0	6.7	7.7	9.2	6.1	7.5
6	8.1	7.2	7.6	10.8	6.8	8.6	9.2	6.7	7.8	9.3	5.8	7.3
7	8.4	7.3	7.8	10.4	6.6	8.4	9.4	6.5	7.7	9.6	5.7	7.4
8	8.4	7.5	7.8	9.6	6.4	7.8	9.1	6.4	7.5	8.5	5.7	7.0
9	8.8	7.6	8.1	10.4	6.9	8.5	9.1	6.5	7.7	8.3	5.7	6.8
10	9.3	7.5	8.3	9.1	7.0	8.1	9.5	6.3	7.7	8.6	5.6	6.8
11	9.6	7.5	8.3	9.9	6.8	8.3	10.1	6.3	8.0	8.6	5.8	7.1
12	9.9	7.4	8.6	9.7	6.8	8.2	10.7	6.1	8.2	8.4	6.5	7.3
13	9.9	7.4	8.7	9.8	7.0	8.2	11.0	6.4	8.5	8.8	6.8	7.7
14	10.7	7.7	9.2	9.3	6.6	7.8	11.0	6.2	8.4	9.6	7.3	8.3
15	11.8	8.0	9.6	8.2	6.3	7.1	10.1	6.1	8.0	9.9	7.4	8.5
16	10.7	7.4	8.8	7.9	6.2	6.9	9.1	5.7	7.4	10.5	7.4	8.7
17	8.0	7.0	7.4	8.3	6.3	7.2	10.0	5.4	7.5	10.7	7.4	8.8
18	7.7	6.9	7.2	8.3	6.6	7.3	7.8	5.8	6.7	11.3	7.4	9.1
19	8.1	7.1	7.6	9.1	6.6	7.7	8.3	5.4	6.7	11.0	7.3	8.9
20	9.2	7.2	8.1	9.4	6.4	7.7	9.2	5.8	7.2	11.0	7.3	8.8
21	10.4	7.5	8.9	9.4	6.3	7.8	8.6	5.8	6.7	10.8	7.2	8.7
22	11.3	7.8	9.4	9.9	6.0	7.8	9.2	6.0	7.4	10.4	7.3	8.6
23	11.6	7.7	9.5	10.3	6.3	8.2	9.5	6.2	7.7	8.9	7.2	7.8
24	12.0	7.6	9.5	12.4	6.9	9.3	10.1	6.4	8.0	10.1	6.8	8.2
25	11.9	7.4	9.5	11.5	7.2	9.1	8.0	6.3	7.0	10.5	7.3	8.7
26	10.4	7.8	9.1	9.0	6.6	7.6	8.2	6.4	7.0	9.8	7.4	8.5
27	10.7	8.1	9.3	8.0	6.2	6.9	9.0	6.3	7.4	8.0	6.5	7.1
28	10.4	7.7	9.0	6.9	6.0	6.4	9.1	6.5	7.6	8.6	7.3	8.0
29	10.5	7.7	9.0	8.6	6.5	7.4	9.4	6.5	7.7	8.9	7.5	8.3
30	10.7	7.6	9.0	9.7	6.7	8.1	8.6	6.3	7.3	---	---	---
31	---	---	---	9.1	6.6	7.5	7.8	5.9	6.6	---	---	---
MONTH	12.0	6.9	8.4	12.7	6.0	8.1	11.0	5.4	7.5	11.3	5.6	7.9

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 upstream from bridge on Quaker Bridge Road, 1.9 south of Clarksville, 2.0 mi upstream from Shipetaukin Creek, and 7.6 mi upstream of mouth.

DRAINAGE AREA.--34.3 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1965, 1967, and 1979 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 17...	1415	16	132	7.8	16.5	10.4	106	3.1	20	13
FEB 19...	1300	49	--	6.5	4.0	10.4	--	E3.6	50	40
MAR 19...	1400	17	132	6.9	8.0	13.6	114	3.3	<20	2
MAY 20...	1350	10	135	6.5	22.0	9.0	103	3.4	50	33
JUL 22...	1430	5.6	134	6.1	27.0	8.7	110	4.4	460	>2400
AUG 21...	1320	9.2	131	6.0	23.0	6.8	80	E2.3	1300	>2400

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 17...	42	8.8	4.8	5.0	2.8	17	18	14	.10
FEB 19...	36	7.8	4.1	9.7	4.3	7.0	21	19	.10
MAR 19...	35	7.6	4.0	7.5	2.9	9.0	20	16	<.10
MAY 20...	42	9.2	4.7	7.0	2.6	13	--	--	.10
JUL 22...	43	9.8	4.4	6.0	2.9	18	19	13	.20
AUG 21...	41	9.0	4.6	5.9	2.9	18	18	13	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 17...	4.7	68	.020	1.2	.070	.40	1.6	.050	3.5
FEB 19...	5.4	76	.022	1.4	.280	1.2	2.6	.130	4.4
MAR 19...	4.2	68	.013	1.1	.100	.65	1.8	.040	4.0
MAY 20...	--	--	.018	.60	.240	.85	1.5	.050	4.4
JUL 22...	3.5	70	.007	.34	.150	.73	1.1	.070	7.1
AUG 21...	4.0	68	.007	.23	.120	.77	1.0	.060	4.8

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 17...	1415	<.5	20	1	<10	<20	<1	10	2
MAY 20...	1350	<.5	50	1	<10	20	<1	10	5

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
OCT 17...	940	2	90	<.1	5	<1	20	2
MAY 20...	840	4	170	<.1	5	<1	30	3

01464000 ASSUNPINK CREEK AT TRENTON, NJ

LOCATION.--Lat 40°13'27", long 74°44'58", Mercer County, Hydrologic Unit 02040105, on left bank 20 ft upstream from Chambers Street Bridge in Trenton, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--90.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1923 to current year.

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder. Concrete control since July 10, 1932. Datum of gage is 24.76 ft above National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Estimated daily discharges: Dec. 22-28. 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 above station (records given herein). In addition there is an average inflow of about 2.0 ft³/s from industrial use of water that originates outside the basin. Some diversion for irrigation in headwater area during summer months. Flow regulated by several flood-control reservoirs upstream of gage since mid-1970's. Several measurements of water temperature were made during the year. National Weather Service gage-height telemeter at station.

AVERAGE DISCHARGE.--62 years, 129 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,450 ft³/s, July 21, 1975, gage height, 14.61 ft, from high-water mark in gage house; minimum, 1.0 ft³/s, Aug. 21, Oct.22, 1931, gage height, 0.25 ft; minimum daily, 4.0 ft³/s, July 21, Aug. 8, Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 12	1815	1,350	7.13	Sept. 27	1415	*1,400	*7.25
May 3	0915	942	5.98				

Minimum discharge, 18 ft³/s, July 21, 24, 25, Sept. 22, 23, 25; minimum gage height, 2.39 ft, July 25, Sept. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	60	52	65	101	82	210	44	315	50	89	43
2	113	60	47	82	121	80	112	47	111	47	70	38
3	75	58	75	78	78	75	95	510	84	43	65	37
4	67	57	72	69	67	75	87	208	74	39	61	36
5	65	222	57	82	63	91	79	142	77	47	54	35
6	63	91	264	71	63	77	75	123	70	41	47	34
7	59	78	116	72	61	72	68	106	59	36	42	32
8	59	74	77	77	58	80	66	87	60	35	317	31
9	60	72	65	70	57	77	65	76	56	35	103	35
10	59	69	63	67	56	72	63	70	51	33	75	42
11	58	99	60	66	59	71	62	65	47	33	62	38
12	57	95	59	66	526	120	61	59	52	30	55	35
13	55	76	56	64	535	94	59	57	46	31	47	34
14	53	72	56	63	347	84	56	52	41	27	43	31
15	52	70	61	59	271	79	57	48	39	28	40	28
16	52	68	56	55	199	73	59	46	168	67	37	28
17	51	67	56	56	177	70	57	61	90	40	33	28
18	51	65	54	57	147	67	55	129	74	30	30	27
19	51	71	63	57	121	64	54	59	63	27	31	27
20	51	65	63	54	114	64	54	51	56	25	31	27
21	48	63	70	51	100	63	55	77	52	23	46	26
22	52	59	121	52	89	63	53	139	46	34	40	23
23	63	58	111	53	96	82	52	74	42	27	34	25
24	74	44	94	54	101	82	50	68	68	24	31	26
25	63	41	97	56	100	89	50	59	72	23	168	25
26	59	42	91	54	98	75	51	51	65	191	235	69
27	58	42	90	52	92	70	48	46	68	109	128	824
28	56	44	119	53	85	68	45	69	65	55	88	394
29	78	105	82	52	---	68	45	60	62	58	71	278
30	65	61	70	52	---	73	45	47	54	48	59	230
31	62	---	64	53	---	78	---	46	---	57	50	---
TOTAL	1938	2148	2481	1912	3982	2378	1988	2776	2227	1393	2282	2586
MEAN	62.5	71.6	80.0	61.7	142	76.7	66.3	89.5	74.2	44.9	73.6	86.2
MAX	113	222	264	82	535	120	210	510	315	191	317	824
MIN	48	41	47	51	56	63	45	44	39	23	30	23
(†)	12.2	12.1	12.1	12.3	13.5	12.6	12.3	12.8	11.7	10.8	11.1	11.0

CAL YR 1984 TOTAL 70723 MEAN 193 MAX 1600 MIN 41 † 16.5
WTR YR 1985 TOTAL 28091 MEAN 77.0 MAX 824 MIN 23 † 12.0

† Inflow from outside the basin, 2.4 mi upstream of station through plant of Ewing-Lawrence Sewerage Authority, in cubic feet per second.

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 in Extonville, 0.5 mi upstream from Pleasant Run, and 0.7 mi downstream from Mercer-Monmouth County line.

DRAINAGE AREA.--81.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1940 to October 1951, October 1952 to current year.

REVISED RECORDS.--WDR NJ-79-2: 1971(M). WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 24.94 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated occasionally by lakes above station. Several measurements of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--44 years (water years 1941-51, 1953-85), 135 ft³/s, 22.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,860 ft³/s, Sept. 1, 1978, gage height, 14.18 ft; minimum, 13.1 ft³/s, Feb. 14, 1942 (result of freezeup); minimum daily, 16 ft³/s, Aug. 30 to Sept. 3, Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 28	1400	*754	*6.80	No other peak greater than base discharge.			

Minimum discharge, 29 ft³/s, July 24, 25, gage height, 2.34 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	87	102	98	84	82	125	47	118	39	586	41
2	134	83	92	99	236	85	121	47	103	37	232	39
3	102	77	91	106	242	84	97	188	63	34	102	37
4	79	73	120	101	131	79	90	305	52	33	71	37
5	68	161	102	111	115	93	85	141	49	35	57	35
6	61	199	225	115	97	95	77	105	57	35	49	33
7	56	113	232	105	91	82	72	108	49	33	45	32
8	54	97	132	102	86	92	68	96	48	33	91	32
9	53	88	109	90	89	103	64	72	63	32	105	35
10	56	84	100	93	85	92	62	61	53	33	73	64
11	55	93	97	80	77	83	62	55	45	50	61	53
12	53	201	91	86	224	108	64	50	40	39	73	44
13	51	123	87	81	587	135	63	49	38	33	66	38
14	58	101	85	81	355	103	61	46	37	30	49	35
15	58	90	89	81	165	91	63	41	33	30	47	33
16	53	86	91	76	131	82	67	40	79	42	42	32
17	50	80	86	74	114	77	64	41	128	141	38	32
18	50	76	84	77	106	74	60	51	102	86	36	32
19	52	84	85	78	103	67	60	46	119	60	38	32
20	52	84	102	71	101	67	60	40	71	50	50	32
21	54	78	96	63	96	68	62	38	54	42	62	32
22	51	75	129	95	95	65	63	41	46	39	89	30
23	143	73	118	102	103	80	61	42	41	39	59	31
24	154	73	99	102	109	97	58	58	40	32	50	39
25	121	71	102	93	109	109	58	49	80	29	67	45
26	98	69	96	85	101	97	60	44	59	74	97	40
27	91	69	95	80	97	83	55	38	44	169	69	290
28	86	70	127	80	88	77	52	38	43	139	56	633
29	121	115	122	77	---	75	50	102	43	83	49	273
30	128	136	108	77	---	73	47	68	41	59	45	131
31	99	---	98	77	---	71	---	53	---	109	42	---
TOTAL	2411	2909	3392	2736	4017	2669	2051	2200	1838	1719	2596	2292
MEAN	77.8	97.0	109	88.3	143	86.1	68.4	71.0	61.3	55.5	83.7	76.4
MAX	154	201	232	115	587	135	125	305	128	169	586	633
MIN	50	69	84	63	77	65	47	38	33	29	36	30
CFSM	.95	1.19	1.34	1.08	1.75	1.06	.84	.87	.75	.68	1.03	.94
IN.	1.10	1.33	1.55	1.25	1.83	1.22	.94	1.00	.84	.78	1.18	1.05

CAL YR 1984 TOTAL 63250 MEAN 173 MAX 2720 MIN 43 CFSM 2.12 IN. 28.87
WTR YR 1985 TOTAL 30830 MEAN 84.5 MAX 633 MIN 29 CFSM 1.04 IN. 14.07

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1966 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to June 1970.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN										
16...	1230	57	194	--	.0	12.9	86	4.2	<20	20
APR										
01...	1045	125	198	7.2	9.0	10.0	87	4.8	490	330
MAY										
15...	1200	40	180	7.3	18.5	6.8	72	6.0	90	70
JUL										
10...	1100	33	218	7.2	22.0	5.4	62	3.0	330	790
AUG										
07...	1230	45	162	7.1	21.5	6.6	75	8.4	2100	1300

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN									
16...	55	17	3.0	11	2.5	21	26	20	.20
APR									
01...	55	17	3.0	11	2.7	23	24	21	.20
MAY									
15...	54	17	2.7	9.1	3.1	28	22	13	.30
JUL									
10...	61	20	2.8	13	4.0	34	24	19	.30
AUG									
07...	48	15	2.6	8.8	3.6	22	20	14	.30

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN									
16...	9.9	100	.015	.84	1.21	1.8	2.6	.250	--
APR									
01...	9.0	100	.040	.93	.490	1.1	2.0	.260	3.8
MAY									
15...	10	94	.097	1.3	.340	.98	2.3	.210	5.0
JUL									
10...	10	110	.175	1.9	.660	1.1	3.0	.170	4.6
AUG									
07...	10	87	.097	1.2	.300	.95	2.1	.240	6.5

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 downstream from Conines Millpond dam.

DRAINAGE AREA.--17.4 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 16...	1000	12	180	7.1	.0	13.5	90	3.6	40	50
APR 01...	0900	18	158	7.1	9.5	10.8	95	4.2	260	330
MAY 15...	0945	--	180	7.1	18.0	6.3	66	6.6	490	80
JUL 10...	0930	4.4	176	7.2	22.5	4.2	49	4.0	1100	230
AUG 07...	1030	7.7	140	7.1	23.0	6.6	77	7.8	330	1300

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 16...	54	13	5.2	7.5	3.0	16	25	20	.20
APR 01...	49	12	4.6	6.6	2.8	15	23	16	.20
MAY 15...	52	13	4.8	8.4	3.7	20	28	15	.30
JUL 10...	51	13	4.6	8.1	4.2	26	21	16	.30
AUG 07...	39	9.7	3.5	6.0	5.1	21	19	11	.30

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 16...	8.6	92	.021	1.0	1.02	1.3	2.4	.230	2.8
APR 01...	4.0	78	.017	.52	.500	.99	1.5	.210	2.8
MAY 15...	7.0	92	.059	.54	1.69	2.5	3.0	.510	5.4
JUL 10...	7.9	91	.127	.65	1.65	2.3	2.9	.450	5.8
AUG 07...	8.5	76	.033	.37	.850	1.5	1.9	.350	6.2

01464515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 15...	0945	<.5	20	1	<10	50	1	<10	8

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
MAY 15...	1500	6	140	<.1	5	<1	30	20

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 downstream from Burlington-Bristol Bridge, 1.4 mi downstream from Assiscunk Creek, and at mile 117.54.

DRAINAGE AREA.--7,160 mi².

TIDE ELEVATION DATA

PERIOD OF RECORD.--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, U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR NJ-76-1: 1973(m).

GAGE.--Water-stage recorder. Datum of gage is -12.90 ft below National Geodetic Vertical Datum of 1929. Prior to May 20, 1971, water-stage recorder at site 0.7 mi upstream at same datum. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--No gage-height or doubtful record: Jan. 21-20, Feb. 8-10, and Sept. 14-30. Summaries for months with short periods of no gage-height record have been estimated with little or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.74 ft, Oct. 25, 1980; minimum, -6.60 ft, Feb. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 10.8 ft, Aug. 20, 1955, from high-water mark at site 1.4 mi upstream; minimum, -9.1 ft, Dec. 31, 1962, at present site.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 7.06 ft, Feb. 12; minimum recorded, -4.31 ft, Mar. 6.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.36	6.02	6.29	6.15	7.06	5.76	6.18	6.86	6.39	6.33	6.29	--
high tide	Date	15	10	22	19	12	12	6	4	27	2	1	--
Minimum	Elevation	-2.97	-3.74	-3.75	-4.19	--	-4.31	-3.67	-3.50	-3.30	-3.20	-3.45	--
low tide	Date	4	21	7	20	--	6	10	2	26	27	16	--
Mean high tide		5.22	4.71	4.59	--	4.54	4.59	4.88	5.26	5.23	5.24	5.24	--
Mean water level		1.71	1.25	1.17	--	1.19	1.07	1.27	1.59	1.48	1.52	1.53	--
Mean low tide		-2.09	-2.45	-2.49	--	-2.52	-2.69	-2.60	-2.36	-2.57	-2.48	-2.48	--

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 southeast of Lumberton, and 3.1 mi upstream from Southwest Branch.

DRAINAGE AREA.--64.5 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1925, 1959-62, 1975 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 28...	0900	48	92	6.5	.5	13.3	92	1.2	6	15
MAR 26...	0800	56	89	6.3	5.5	11.8	93	1.8	49	26
MAY 16...	0800	23	85	6.3	19.5	6.1	67	1.9	110	330
JUL 09...	0800	13	84	6.6	22.5	5.7	66	1.0	80	1300
AUG 22...	0900	26	73	6.3	21.5	7.0	80	1.1	540	>2400

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 28...	23	6.5	1.6	4.6	1.7	7.0	15	8.7	<.10
MAR 26...	23	6.6	1.7	4.8	1.5	6.0	18	8.2	<.10
MAY 16...	20	6.0	1.2	5.2	1.9	8.0	14	9.2	<.10
JUL 09...	20	5.9	1.3	5.2	2.0	7.0	14	7.4	<.10
AUG 22...	16	4.5	1.2	4.9	1.7	4.0	14	7.5	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 28...	7.9	50	.014	.53	.320	.96	1.5	.130	6.2
MAR 26...	4.4	49	.010	.42	<.050	.55	.97	.090	6.5
MAY 16...	4.6	47	.010	.50	.310	1.3	1.8	--	16
JUL 09...	4.5	44	.011	.65	.200	1.1	1.8	.380	--
AUG 22...	3.4	40	.006	.37	.120	.81	1.2	.200	5.5

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 16...	0800	<.5	190	2	<10	<20	1	10	1

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
MAY 16...	2900	6	30	<.1	<1	<1	60	1

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 north of Browns Mills Junction, and 2.0 mi northwest of outflow of Country Lake.

DRAINAGE AREA.--27.4 mi².

WATER-QUALITY RECORDS

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 10...	1130	--	48	6.1	15.0	9.4	92	.4	2	<2
JAN 30...	1100	16	56	5.5	3.0	12.0	88	1.7	<2	7
MAR 26...	1000	34	51	5.6	8.0	11.8	99	.9	<2	2
MAY 16...	0915	19	53	5.7	21.0	7.6	86	1.3	<2	79
JUL 15...	0930	18	42	5.9	24.5	6.6	79	2.5	2	430
AUG 22...	0945	19	45	6.3	24.0	7.3	87	.8	49	540

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 10...	10	2.3	1.1	3.1	.90	3.0	8.5	5.3	<.10
JAN 30...	12	2.6	1.3	3.3	1.0	2.0	12	5.8	<.10
MAR 26...	11	2.4	1.2	3.3	.80	2.0	11	5.6	<.10
MAY 16...	11	2.6	1.2	3.5	1.1	3.0	12	6.0	<.10
JUL 15...	8	1.8	.91	2.8	1.0	3.0	7.2	5.0	<.10
AUG 22...	9	1.9	.92	3.1	1.0	2.0	7.1	5.2	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	4.1	27	.004	.09	.050	.22	.31	.040	4.6
JAN 30...	4.9	32	.004	.14	.200	.48	.62	.020	2.9
MAR 26...	2.5	28	.005	.09	<.050	.35	.44	.030	3.7
MAY 16...	2.2	31	.004	<.05	.140	.54	--	.040	6.1
JUL 15...	1.9	22	.005	<.05	.170	.65	--	.060	7.6
AUG 22...	4.3	25	.003	<.05	.170	.58	--	.050	4.9

01465970 NORTH BRANCH RANCOCAS CREEK AT BROWNS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 10...	1130	<.5	90	1	<10	20	<1	<10	2
MAY 16...	0915	<.5	160	1	<10	<20	1	20	3

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
OCT 10...	2400	18	100	<.1	6	<1	30	2
MAY 16...	1800	12	40	<.1	2	<1	60	14

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 upstream from Butterworth Road Bridge, 3.4 mi upstream from confluence with Cooper Branch, and 7.0 mi southeast of Browns Mills.

DRAINAGE AREA.--2.35 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1962, published as "McDonald Branch in Lebanon State Forest".

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 117.73 ft above National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--No estimated daily discharges. Records fair except those below 1.0 ft³/s, which are poor. Gage-height record is collected above concrete control and discharge record, which includes leakage around control, is at site 785 ft downstream. Several measurements of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--32 years, 2.29 ft³/s, 13.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35 ft³/s, Aug. 25, 1958, gage height, 2.33 ft; minimum daily, 0.71 ft³/s, Sept. 21, 22, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7.0 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 27	1100	*3.2	*1.47	No peak greater than base discharge.			

Minimum daily discharge, 0.71 ft³/s, Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	1.4	1.5	1.3	1.4	1.5	1.2	1.3	1.1	.96	.88
2	1.7	1.5	1.4	1.5	1.5	1.5	1.4	1.2	1.2	1.1	.91	.86
3	1.7	1.4	1.4	1.5	1.4	1.4	1.3	1.7	1.2	1.1	.90	.86
4	1.6	1.4	1.4	1.5	1.4	1.4	1.3	1.4	1.2	1.1	.90	.84
5	1.6	1.6	1.4	1.5	1.3	1.5	1.3	1.4	1.4	1.1	.89	.83
6	1.6	1.5	1.6	1.5	1.3	1.4	1.3	1.3	1.3	1.1	.89	.80
7	1.5	1.5	1.2	1.5	1.3	1.4	1.3	1.2	1.2	1.1	.91	.79
8	1.5	1.4	1.2	1.5	1.3	1.4	1.3	1.2	1.3	1.0	1.1	.81
9	1.5	1.4	1.2	1.4	1.2	1.4	1.2	1.2	1.3	1.1	1.0	.93
10	1.6	1.5	1.3	1.4	1.2	1.4	1.2	1.2	1.2	1.0	.94	.95
11	1.6	1.5	1.4	1.4	1.2	1.4	1.2	1.2	1.2	1.0	.91	.89
12	1.6	1.5	1.5	1.4	1.6	1.5	1.2	1.2	1.2	.99	.91	.86
13	1.6	1.5	1.5	1.4	1.5	1.4	1.2	1.2	1.2	.98	.89	.84
14	1.6	1.4	1.5	1.4	1.5	1.4	1.2	1.1	1.1	.98	.89	.81
15	1.5	1.4	1.5	1.4	1.5	1.4	1.3	1.1	1.1	.98	.88	.79
16	1.5	1.4	1.5	1.3	1.4	1.4	1.3	1.1	1.3	1.4	.88	.78
17	1.5	1.4	1.5	1.3	1.4	1.4	1.2	1.2	1.3	1.2	.87	.76
18	1.5	1.4	1.5	1.3	1.4	1.4	1.2	1.2	1.2	1.1	.88	.74
19	1.5	1.5	1.5	1.3	1.4	1.3	1.2	1.1	1.2	.99	.91	.73
20	1.4	1.4	1.5	1.3	1.4	1.3	1.2	1.1	1.2	.97	.90	.72
21	1.4	1.4	1.5	1.2	1.4	1.3	1.2	1.3	1.1	.95	.94	.71
22	1.4	1.4	1.5	1.2	1.4	1.3	1.2	1.5	1.1	1.0	.93	.71
23	1.7	1.4	1.5	1.2	1.5	1.4	1.2	1.4	1.1	.96	.88	.73
24	1.6	1.4	1.5	1.2	1.5	1.4	1.2	1.4	1.1	.93	.87	.83
25	1.6	1.4	1.5	1.2	1.5	1.4	1.2	1.2	1.1	.93	.94	.82
26	1.5	1.4	1.5	1.2	1.5	1.3	1.2	1.2	1.1	1.1	.91	.78
27	1.5	1.4	1.5	1.2	1.5	1.3	1.2	1.2	1.1	1.1	.88	1.9
28	1.5	1.4	1.5	1.2	1.4	1.3	1.2	1.2	1.1	1.0	.87	1.4
29	1.6	1.5	1.5	1.2	---	1.3	1.2	1.2	1.1	.97	.86	1.2
30	1.5	1.4	1.5	1.2	---	1.3	1.2	1.2	1.1	.94	.89	1.1
31	1.5	---	1.5	1.2	---	1.3	---	1.2	---	.95	.93	---
TOTAL	48.1	43.2	44.9	41.5	39.2	42.7	37.3	38.5	35.6	32.22	28.22	26.65
MEAN	1.55	1.44	1.45	1.34	1.40	1.38	1.24	1.24	1.19	1.04	.91	.89
MAX	1.7	1.6	1.6	1.5	1.6	1.5	1.5	1.7	1.4	1.4	1.1	1.9
MIN	1.4	1.4	1.2	1.2	1.2	1.3	1.2	1.1	1.1	.93	.86	.71
CFSM	.66	.61	.62	.57	.60	.59	.53	.53	.51	.44	.39	.38
IN.	.76	.68	.71	.66	.62	.68	.59	.61	.56	.51	.45	.42

CAL YR 1984 TOTAL 1094.1 MEAN 2.99 MAX 16 MIN 1.2 CFSM 1.27 IN. 17.32
WTR YR 1985 TOTAL 458.09 MEAN 1.26 MAX 1.9 MIN .71 CFSM .54 IN. 7.25

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1968 to current year.
pH: October 1984 to current year.
WATER TEMPERATURE: October 1960 to current year.
DISSOLVED OXYGEN: August 1984 to current year.

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor since October 1968.

REMARKS.--Water-quality samples were collected at the weir. Interruptions in the daily record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 182 microsiemens, June 16, 1969; minimum, 19 microsiemens, Aug. 25, 1979.
pH: Maximum, 4.8, Aug. 22, 28-30, 1985; minimum recorded, 3.8, July 5-9, 1984 but may have been lower during instrument malfunction July 10 to August 16.
WATER TEMPERATURE: Maximum, 22.0°C, Aug. 1, 1970; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 72 microsiemens, Sept. 28; minimum, 20 microsiemens, Aug. 15.
pH: Maximum, 4.8, Aug. 22, 28-30; minimum, 4.3, Oct. 3, 4, 11, Jan. 10 and Feb. 26.
WATER TEMPERATURE: Maximum, 17.5°C, Aug. 15; minimum, 5.0°C on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 30...	1130	1.5	30	4.4	13.0	.80	2.7	25	.5	K4	84
NOV 23...	1200	1.4	30	4.5	8.0	1.0	4.0	33	1.0	<4	K28
DEC 21...	1015	1.5	33	4.4	8.5	.50	4.3	36	1.1	<4	K36
JAN 24...	1215	1.2	29	4.5	6.0	1.0	5.2	42	.4	<4	K76
FEB 26...	1330	1.5	35	4.4	8.0	.50	5.0	42	.4	<4	K28
MAR 26...	1300	1.3	29	4.5	8.5	.50	4.2	36	.2	<4	92
APR 26...	1010	1.2	25	4.6	11.5	1.0	3.2	30	1.4	<4	K72
MAY 29...	1125	1.2	29	4.4	13.0	.60	3.1	30	.4	K12	K400
JUN 25...	1230	1.1	30	4.4	14.0	6.0	3.1	30	1.0	K4	--
JUL 22...	1245	1.1	28	4.5	16.0	1.0	3.9	40	.6	K44	140
AUG 19...	1430	.91	23	4.5	16.0	.40	3.3	34	.4	K16	400

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 FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 30...	2	.31	.30	1.7	.20	<1	3.5	3.5	<.10	4.1	--
NOV 23...	2	.29	.32	1.7	.30	<1	2.8	3.3	<.10	4.3	14
DEC 21...	2	.31	.33	1.7	.20	<1	3.5	3.3	<.10	4.2	--
JAN 24...	2	.28	.29	1.7	.30	<1	2.8	3.4	<.10	4.2	14
FEB 26...	3	.50	.50	2.1	.40	<1	6.3	3.6	<.10	4.3	--
MAR 26...	3	.41	.43	1.8	.30	<1	3.8	3.6	<.10	3.9	15
APR 26...	2	.34	.29	1.7	.30	<1	2.7	3.4	<.10	4.0	13
MAY 29...	2	.39	.37	1.8	.20	<1	3.5	3.2	<.10	3.9	--
JUN 25...	2	.37	.37	1.7	.10	<1	2.8	3.5	<.10	3.9	--
JUL 22...	2	.34	.36	1.7	.20	<1	3.2	3.6	<.10	3.8	--
AUG 19...	2	.28	.35	1.7	.20	<1	2.7	3.5	<.10	4.0	14

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
30...	6	.02	86	--	--	--	--	--	--	--
NOV										
23...	4	.02	87	<.10	<.010	.50	<.010	<.010	<.010	--
DEC										
21...	1	.00	50	--	--	--	--	--	--	--
JAN										
24...	10	.03	32	<.10	<.010	.10	<.010	<.010	<.010	1.9
FEB										
26...	5	.02	88	<.10	.020	<.20	<.010	.010	<.010	2.0
MAR										
26...	7	.02	64	<.10	.020	.20	<.010	<.010	<.010	2.4
APR										
26...	9	.03	50	<.10	<.010	.60	<.010	<.010	<.010	2.7
MAY										
29...	5	.02	59	<.10	.020	.50	<.010	<.010	<.010	2.6
JUN										
25...	5	.01	63	<.10	<.010	<.10	.020	<.010	<.010	2.8
JUL										
22...	5	.01	72	<.10	--	.20	<.010	<.010	<.010	2.4
AUG										
19...	3	.00	82	.12	.010	<.10	.030	.030	<.010	3.4

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT										
30...	1130	80	<1	10	<.5	<1	<1	<3	1	150
NOV										
23...	1200	10	<1	10	<.5	<1	<1	<3	<1	60
DEC										
21...	1015	<10	<1	11	<.5	<1	1	<3	2	64
JAN										
24...	1215	110	<1	8	<.5	<1	<1	<3	1	43
APR										
26...	1010	50	<1	14	<.5	<1	<1	<3	2	58
JUL										
22...	1245	50	<1	9	<.5	<1	<1	<3	5	130

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)
OCT										
30...	2	<4	8	<.1	<10	1	<1	<1	4	<6
NOV										
23...	3	<4	6	<.1	<10	<1	<1	<1	4	<6
DEC										
21...	2	<4	7	.2	<10	1	<1	<1	4	<6
JAN										
24...	3	18	5	.2	<10	<1	<1	<1	4	<6
APR										
26...	2	<4	5	.2	<10	3	<1	<1	4	<6
JUL										
22...	2	<4	5	.1	<10	4	<1	<1	4	<6

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	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)
OCT									
30...	6	--	--	--	--	--	--	--	--
NOV									
23...	16	--	--	--	--	--	--	--	--
DEC									
21...	6	--	--	--	--	--	--	--	--
JAN									
24...	22	<.5	<.4	.7	<.4	.6	<.4	.16	.05
APR									
26...	9	--	--	--	--	--	--	--	--
JUL									
22...	12	--	--	--	--	--	--	--	--

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	32	27	29	30	28	29	31	30	31	32	31	31
2	34	31	33	29	28	29	31	30	31	32	31	31
3	34	32	33	29	28	28	32	30	31	32	31	31
4	33	31	32	29	28	28	32	31	31	32	31	31
5	32	30	31	32	28	31	32	30	31	32	31	31
6	30	29	30	31	30	30	41	34	40	32	31	31
7	30	28	29	30	29	30	40	38	39	32	31	31
8	28	27	27	30	29	29	39	37	38	31	31	31
9	27	26	27	30	29	29	37	35	36	32	31	31
10	27	26	27	29	28	29	36	35	35	31	30	31
11	27	26	27	30	28	29	35	34	34	31	30	30
12	27	26	27	30	29	30	34	33	34	31	30	30
13	27	26	27	30	29	29	34	33	33	30	29	29
14	27	26	27	30	29	29	33	32	33	29	29	29
15	27	26	26	29	28	29	33	32	33	30	28	29
16	27	26	26	29	28	29	33	32	33	30	28	29
17	27	26	26	29	28	29	33	32	32	29	28	29
18	27	26	26	29	28	29	32	32	32	29	28	29
19	26	26	26	30	28	29	33	31	32	28	27	28
20	26	25	26	30	29	29	33	32	33	28	27	28
21	26	25	26	30	28	29	33	32	33	---	---	---
22	26	25	26	29	28	29	34	33	33	---	---	---
23	33	28	31	30	28	29	34	32	33	---	---	---
24	31	30	30	30	29	30	33	32	32	---	---	---
25	31	29	30	30	29	30	33	32	32	30	29	29
26	30	28	29	30	29	30	33	32	32	30	29	29
27	29	28	28	30	29	30	32	31	32	30	29	29
28	28	27	28	30	29	30	32	31	32	30	29	29
29	29	27	29	33	30	32	32	31	32	28	28	28
30	30	28	29	32	31	32	32	31	31	28	27	28
31	30	29	29	---	---	---	32	31	31	29	27	28
MONTH	34	25	28	33	28	29	41	30	33	32	27	30

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	32	28	30	35	34	34	30	28	30	25	24	24
2	36	33	35	34	33	34	30	28	29	26	24	24
3	35	33	34	34	33	33	29	28	28	42	26	38
4	33	32	33	33	32	33	29	28	28	39	34	36
5	33	31	32	33	32	33	29	27	28	34	32	33
6	31	30	30	33	32	33	28	27	28	33	31	32
7	31	30	30	33	31	32	28	27	27	32	30	31
8	31	29	30	32	31	32	28	27	27	31	29	30
9	30	29	30	32	31	31	28	27	27	30	29	30
10	29	29	29	32	31	31	28	26	27	29	28	29
11	29	28	29	31	30	31	27	26	27	29	28	29
12	48	28	37	33	30	32	28	26	27	29	27	28
13	45	40	42	33	31	32	27	26	26	28	26	27
14	40	39	39	33	31	32	26	25	26	27	26	26
15	39	38	38	32	31	31	27	26	26	27	26	26
16	38	36	37	32	30	31	26	25	26	26	25	26
17	37	35	36	31	30	30	26	25	26	26	25	26
18	35	34	34	31	30	30	26	25	26	26	25	26
19	34	33	34	31	30	30	26	25	25	26	25	25
20	34	32	33	30	29	30	26	25	25	26	24	25
21	33	32	32	30	29	30	26	25	25	35	25	28
22	32	30	31	30	29	29	26	25	25	35	32	34
23	32	31	31	30	29	29	25	24	25	31	30	30
24	33	31	32	30	29	29	25	24	25	30	29	30
25	34	32	33	30	29	30	25	24	25	30	29	30
26	35	33	35	30	28	28	25	24	25	30	28	29
27	36	35	35	29	27	28	25	24	24	29	28	28
28	36	34	35	28	27	28	25	24	24	28	27	28
29	---	---	---	28	27	28	25	24	24	29	27	28
30	---	---	---	28	27	27	25	23	24	29	28	28
31	---	---	---	29	27	27	---	---	---	29	27	28
MONTH	48	28	33	35	27	31	30	23	26	42	24	29

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	29	27	28	27	26	26	25	24	25	25	24	25
2	29	27	28	27	26	26	25	24	25	---	---	---
3	28	27	27	27	26	26	25	24	25	---	---	---
4	28	26	27	27	25	26	25	24	25	---	---	---
5	31	26	28	27	25	26	27	24	25	---	---	---
6	30	29	30	26	25	26	26	23	24	---	---	---
7	29	28	28	26	25	26	24	23	24	---	---	---
8	29	27	28	26	25	26	29	23	26	---	---	---
9	29	28	28	26	25	26	28	26	27	---	---	---
10	28	27	28	26	25	25	26	25	26	---	---	---
11	28	27	27	26	25	25	25	24	25	---	---	---
12	28	27	27	26	25	25	25	23	24	---	---	---
13	28	27	27	26	25	25	24	23	24	---	---	---
14	27	26	27	26	25	25	25	22	24	---	---	---
15	27	26	27	26	25	25	23	20	22	---	---	---
16	31	26	28	33	29	31	23	22	22	---	---	---
17	32	30	31	34	31	33	23	21	22	---	---	---
18	30	29	29	31	29	30	23	22	22	---	---	---
19	29	28	29	29	27	28	26	22	23	---	---	---
20	29	27	28	28	27	28	25	24	24	---	---	---
21	28	27	28	27	26	27	25	24	25	---	---	---
22	28	27	27	28	26	27	25	24	24	---	---	---
23	27	26	27	27	26	27	25	24	24	---	---	---
24	27	26	26	27	26	26	25	24	24	---	---	---
25	28	26	27	26	25	26	25	24	25	---	---	---
26	28	27	27	28	26	27	25	24	25	---	---	---
27	28	26	27	27	26	27	25	24	24	---	---	---
28	27	26	27	27	26	27	25	23	24	72	62	66
29	27	26	27	26	25	26	25	22	24	62	59	60
30	27	26	27	26	24	25	25	23	24	59	55	57
31	---	---	---	26	24	25	25	24	25	---	---	---
MONTH	32	26	28	34	24	27	29	20	24	72	24	52

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	13.0	13.5	14.0	13.0	13.5	16.0	15.0	15.5	16.0	15.0	15.5
2	14.0	12.5	13.0	14.0	13.0	13.5	16.0	14.5	15.0	16.5	15.0	15.5
3	14.0	13.0	13.5	14.5	13.5	14.0	15.5	14.0	14.5	---	---	---
4	13.5	13.0	13.5	14.5	13.5	14.0	15.5	14.0	14.5	---	---	---
5	13.5	13.0	13.5	14.5	14.0	14.0	15.5	14.0	14.5	---	---	---
6	14.0	13.0	13.5	15.0	14.0	14.5	15.5	14.0	14.5	---	---	---
7	13.5	12.5	13.0	15.5	14.5	15.0	15.5	14.5	15.0	---	---	---
8	13.0	13.0	13.0	15.0	14.0	14.5	15.5	14.5	15.0	---	---	---
9	13.5	13.0	13.0	15.5	14.0	14.5	16.0	15.0	15.0	---	---	---
10	14.0	13.0	13.5	15.5	14.5	15.0	16.0	15.0	15.5	---	---	---
11	14.0	13.0	13.5	16.0	14.5	15.0	16.0	15.0	15.5	---	---	---
12	14.0	13.5	13.5	15.5	14.5	15.0	16.5	15.0	15.5	---	---	---
13	14.0	13.0	13.5	15.5	14.5	15.0	16.5	14.5	15.5	---	---	---
14	13.5	12.5	13.0	16.5	15.0	15.5	16.5	15.5	16.0	---	---	---
15	14.0	12.5	13.0	16.0	15.0	15.5	17.5	15.5	16.5	---	---	---
16	13.5	13.0	13.5	16.0	15.5	15.5	17.0	16.0	16.5	---	---	---
17	14.0	13.5	13.5	16.5	15.5	16.0	17.0	15.5	16.5	---	---	---
18	14.0	13.5	14.0	16.0	15.0	15.5	16.0	15.5	15.5	---	---	---
19	14.5	13.5	14.0	16.0	14.5	15.5	16.0	15.5	15.5	---	---	---
20	14.5	13.5	14.0	16.0	15.0	15.5	16.0	15.0	15.5	---	---	---
21	14.0	13.0	13.5	16.5	15.0	15.5	15.5	15.0	15.0	---	---	---
22	14.0	13.5	13.5	16.0	15.5	15.5	16.0	14.5	15.0	---	---	---
23	14.5	13.5	14.0	16.0	15.0	15.5	16.0	14.0	15.0	---	---	---
24	15.0	13.5	14.0	16.0	14.0	15.0	15.5	14.0	14.5	---	---	---
25	14.5	13.5	14.0	16.5	14.5	15.5	15.0	14.5	15.0	---	---	---
26	14.0	13.5	13.5	16.0	15.5	15.5	16.0	15.0	15.5	---	---	---
27	13.5	13.0	13.5	16.0	15.5	15.5	16.5	15.5	16.0	---	---	---
28	13.5	13.0	13.5	16.0	15.0	15.5	17.0	15.0	16.0	16.5	15.0	16.0
29	14.0	13.0	13.5	15.5	14.5	15.0	17.0	15.0	16.0	15.5	14.5	15.0
30	14.0	13.0	13.5	16.0	14.5	15.0	17.0	15.5	16.0	15.5	14.0	14.5
31	---	---	---	16.0	15.0	15.5	15.5	15.0	15.5	---	---	---
MONTH	15.0	12.5	13.5	16.5	13.0	15.0	17.5	14.0	15.5	16.5	14.0	15.5

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.5	4.4	4.4	4.5	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.4
2	4.4	4.4	4.4	4.5	4.4	4.5	4.5	4.5	4.5	4.4	4.4	4.4
3	4.4	4.3	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4
4	4.4	4.3	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4
5	4.4	4.4	4.4	4.5	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.4
6	4.4	4.4	4.4	4.5	4.4	4.5	4.5	4.4	4.4	4.4	4.4	4.4
7	4.4	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4
8	4.4	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4
9	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.5	4.4	4.4	4.4
10	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.4
11	4.6	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
12	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
13	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.4	4.5	4.5	4.5	4.5
14	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
15	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
16	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
17	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
18	4.6	4.5	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
19	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
20	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
21	4.6	4.5	4.6	4.5	4.5	4.5	4.5	4.4	4.5	---	---	---
22	4.6	4.5	4.6	4.5	4.5	4.5	4.5	4.5	4.5	---	---	---
23	4.5	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	---	---	---
24	4.5	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	---	---	---
25	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.5	4.5	4.5	4.5
26	4.5	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.5	4.5	4.5
27	4.5	4.4	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5
28	4.5	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.4	4.5	4.5	4.5
29	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.4	4.5	4.5	4.5
30	4.4	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.6	4.5	4.6
31	4.4	4.4	4.4	---	---	---	4.4	4.4	4.4	4.6	4.6	4.6
MONTH	4.6	4.3	4.5	4.5	4.4	4.5	4.5	4.4	4.5	4.6	4.3	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.6	4.5	4.5	4.5	4.4	4.4	4.6	4.5	4.6	4.6	4.5	4.6
2	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.6
3	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.5	4.6	4.5	4.4	4.4
4	4.6	4.5	4.5	4.5	4.5	4.5	4.6	4.5	4.6	4.5	4.4	4.4
5	4.6	4.5	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.4
6	4.6	4.6	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.5
7	4.6	4.5	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.5
8	4.6	4.5	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5
9	4.6	4.5	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5
10	4.6	4.6	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5
11	4.6	4.6	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.5
12	4.6	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5
13	4.5	4.4	4.5	4.5	4.5	4.5	4.7	4.6	4.6	4.6	4.5	4.5
14	4.5	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.6
15	4.5	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.6
16	4.5	4.5	4.5	4.5	4.5	4.5	4.7	4.6	4.6	4.6	4.5	4.6
17	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.6
18	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.6
19	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.6
20	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.6
21	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.6
22	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.5	4.6	4.5	4.4	4.5
23	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5
24	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.5	4.6	4.5	4.5	4.5
25	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5
26	4.5	4.3	4.4	4.6	4.5	4.5	4.6	4.5	4.6	4.5	4.5	4.5
27	4.4	4.4	4.4	4.6	4.5	4.5	4.6	4.5	4.6	4.5	4.5	4.5
28	4.4	4.4	4.4	4.6	4.6	4.6	4.6	4.5	4.6	4.5	4.5	4.5
29	---	---	---	4.6	4.6	4.6	4.6	4.5	4.6	4.5	4.4	4.4
30	---	---	---	4.6	4.6	4.6	4.6	4.5	4.6	4.4	4.4	4.4
31	---	---	---	4.6	4.6	4.6	---	---	---	4.5	4.4	4.4
MONTH	4.6	4.3	4.5	4.6	4.4	4.5	4.7	4.5	4.6	4.6	4.4	4.5

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4.4	4.4	4.4	4.6	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7
2	4.5	4.4	4.4	4.6	4.5	4.6	4.6	4.6	4.6	---	---	---
3	4.5	4.4	4.5	4.6	4.5	4.6	4.6	4.6	4.6	---	---	---
4	4.5	4.4	4.5	4.6	4.5	4.5	4.6	4.6	4.6	---	---	---
5	4.5	4.4	4.4	4.6	4.5	4.5	4.6	4.6	4.6	---	---	---
6	4.4	4.4	4.4	4.6	4.5	4.5	4.6	4.6	4.6	---	---	---
7	4.5	4.4	4.4	4.6	4.5	4.5	4.6	4.6	4.6	---	---	---
8	4.5	4.4	4.4	4.6	4.5	4.6	4.6	4.5	4.5	---	---	---
9	4.5	4.4	4.4	4.5	4.5	4.5	4.6	4.5	4.6	---	---	---
10	4.5	4.4	4.5	4.6	4.5	4.5	4.6	4.5	4.6	---	---	---
11	4.5	4.4	4.5	4.6	4.5	4.5	4.6	4.6	4.6	---	---	---
12	4.5	4.5	4.5	4.6	4.5	4.5	4.6	4.5	4.6	---	---	---
13	4.5	4.5	4.5	4.6	4.5	4.5	4.6	4.5	4.6	---	---	---
14	4.5	4.5	4.5	4.6	4.5	4.5	4.6	4.6	4.6	---	---	---
15	4.5	4.5	4.5	4.5	4.5	4.5	4.7	4.6	4.6	---	---	---
16	4.5	4.4	4.5	4.4	4.4	4.4	4.6	4.6	4.6	---	---	---
17	4.5	4.4	4.5	4.4	4.4	4.4	4.6	4.5	4.6	---	---	---
18	4.5	4.5	4.5	4.5	4.4	4.4	4.6	4.5	4.6	---	---	---
19	4.5	4.5	4.5	4.5	4.5	4.5	4.7	4.5	4.6	---	---	---
20	4.5	4.5	4.5	4.5	4.4	4.5	4.7	4.7	4.7	---	---	---
21	4.5	4.5	4.5	4.5	4.5	4.5	4.7	4.7	4.7	---	---	---
22	4.5	4.5	4.5	4.6	4.5	4.6	4.8	4.7	4.7	---	---	---
23	4.6	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	---	---	---
24	4.6	4.5	4.6	4.6	4.6	4.6	4.7	4.7	4.7	---	---	---
25	4.6	4.4	4.6	4.6	4.6	4.6	4.7	4.7	4.7	---	---	---
26	4.6	4.6	4.6	4.6	4.5	4.6	4.7	4.7	4.7	---	---	---
27	4.6	4.6	4.6	4.6	4.5	4.6	4.7	4.7	4.7	---	---	---
28	4.6	4.6	4.6	4.6	4.6	4.6	4.8	4.7	4.7	4.5	4.5	4.5
29	4.6	4.6	4.6	4.6	4.6	4.6	4.8	4.7	4.7	4.6	4.5	4.5
30	4.6	4.5	4.6	4.6	4.6	4.6	4.8	4.7	4.7	4.6	4.5	4.6
31	---	---	---	4.6	4.6	4.6	4.7	4.7	4.7	---	---	---
MONTH	4.6	4.4	4.5	4.6	4.4	4.5	4.8	4.5	4.6	4.7	4.5	4.6

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	3.8	2.5	3.1	2.8	2.3	2.5	3.6	3.2	3.3	3.7	3.3	3.5
2	3.5	3.2	3.4	2.8	2.2	2.5	3.7	3.3	3.4	3.6	3.2	3.4
3	3.4	2.9	3.2	3.0	2.4	2.6	4.2	3.2	3.9	4.1	3.5	3.7
4	3.3	2.8	3.0	3.0	2.5	2.7	4.1	3.6	3.8	4.0	3.7	3.8
5	3.3	2.8	3.0	3.8	2.6	3.3	4.8	3.6	3.9	4.5	4.0	4.3
6	3.2	2.8	2.9	3.4	2.7	3.0	5.1	4.6	4.9	4.5	4.1	4.2
7	3.4	2.9	3.1	3.3	2.7	3.0	4.9	4.7	4.8	4.3	3.9	4.1
8	3.3	2.7	3.0	3.4	3.0	3.1	4.9	4.8	4.8	4.4	3.9	4.1
9	3.3	2.6	2.9	3.5	2.9	3.2	4.9	4.8	4.9	4.6	4.1	4.4
10	3.1	2.4	2.7	3.5	2.7	3.1	4.9	4.6	4.7	5.0	4.4	4.7
11	2.7	2.1	2.4	3.8	2.6	3.1	4.8	4.5	4.6	5.5	4.6	5.2
12	2.7	2.1	2.3	3.4	2.8	3.1	4.8	4.4	4.6	5.5	4.8	5.1
13	2.6	2.0	2.2	3.4	2.7	3.0	4.6	4.1	4.4	5.0	4.8	4.8
14	2.2	1.8	2.0	3.4	2.9	3.1	4.1	3.9	4.0	5.0	4.5	4.8
15	2.2	1.8	1.9	3.3	2.8	3.0	4.3	3.9	4.1	5.2	4.6	5.0
16	2.3	1.8	2.0	3.4	2.7	3.0	4.2	3.8	4.0	5.1	4.7	4.9
17	2.3	1.8	2.0	3.1	2.6	2.8	3.9	3.7	3.8	5.8	4.7	5.2
18	2.4	1.8	2.0	3.9	2.8	3.1	3.9	3.6	3.7	5.4	4.7	5.0
19	2.3	1.8	2.0	4.0	3.4	3.8	4.0	3.6	3.8	5.0	4.6	4.7
20	2.8	1.8	2.3	3.8	3.3	3.5	4.2	3.9	4.0	6.0	4.5	5.2
21	2.5	1.9	2.1	3.8	3.5	3.6	4.2	4.0	4.1	---	---	---
22	2.5	1.9	2.1	3.9	3.5	3.7	4.2	3.9	4.0	---	---	---
23	3.3	2.5	2.8	4.0	3.6	3.7	4.1	3.9	4.0	---	---	---
24	3.1	2.7	2.9	3.9	3.6	3.7	4.2	4.0	4.1	---	---	---
25	3.0	2.5	2.7	3.9	3.6	3.7	4.3	4.0	4.2	5.2	4.9	5.0
26	3.0	2.4	2.6	3.9	3.6	3.7	4.5	4.3	4.3	5.3	4.9	5.1
27	3.0	2.3	2.5	4.0	3.5	3.7	4.6	4.2	4.4	5.5	4.9	5.1
28	2.8	2.2	2.4	3.8	3.3	3.5	4.6	4.1	4.3	5.2	4.9	5.0
29	3.3	2.3	2.9	4.2	3.5	4.0	4.1	3.7	3.9	5.3	4.9	5.1
30	3.0	2.4	2.6	3.6	3.2	3.4	4.0	3.6	3.7	5.4	5.1	5.2
31	3.0	2.4	2.6	---	---	---	3.9	3.6	3.7	5.9	5.0	5.4
MONTH	3.8	1.8	2.6	4.2	2.2	3.2	5.1	3.2	4.1	6.0	3.2	4.7

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.9	5.3	5.6	4.8	4.4	4.6	4.0	3.1	3.5	3.9	1.7	2.5
2	6.3	5.8	6.1	4.8	4.3	4.6	3.9	3.1	3.4	3.5	2.1	2.8
3	6.2	5.9	6.0	4.6	4.3	4.4	3.8	3.1	3.3	3.8	2.9	3.4
4	6.0	5.8	5.9	4.5	4.2	4.3	3.9	3.0	3.4	4.1	3.1	3.4
5	5.9	5.6	5.8	4.7	4.2	4.4	3.8	2.8	3.2	4.1	2.7	3.3
6	6.0	5.4	5.7	4.6	4.2	4.4	3.7	2.6	3.0	3.7	2.5	2.9
7	5.9	5.4	5.5	4.8	4.2	4.4	3.5	2 6	3.0	3.8	2.4	2.9
8	5.8	5.4	5.5	4.8	4.1	4.5	3.5	2.7	3.0	3.9	2.4	2.9
9	5.7	5.2	5.4	4.5	4.0	4.2	3.7	2.9	3.3	4.2	2.5	3.1
10	5.4	5.1	5.2	4.4	3.9	4.1	4.0	3.0	3.4	3.5	1.6	2.5
11	5.5	4.9	5.2	4.4	3.8	4.1	3.9	3.0	3.4	3.1	1.1	2.1
12	6.8	4.8	5.8	4.6	4.0	4.3	4.1	3.0	3.4	3.2	1.2	2.0
13	6.6	6.1	6.3	4.4	3.7	4.1	4.2	2.9	3.4	4.2	1.6	2.4
14	6.4	6.1	6.2	4.2	3.6	3.8	4.1	2.8	3.3	4.0	2.0	2.7
15	6.3	6.0	6.1	4.2	3.5	3.8	3.6	2.7	3.1	4.1	2.1	2.8
16	6.3	5.8	6.0	4.2	3.6	3.8	4.0	2.5	3.0	4.2	2.0	2.7
17	6.0	5.6	5.8	4.2	3.5	3.8	3.9	2.5	3.0	3.3	1.9	2.5
18	5.8	5.5	5.7	4.2	3.5	3.8	3.9	2.5	3.0	4.3	2.3	3.1
19	5.8	5.3	5.5	4.4	3.7	4.0	3.6	2.2	2.7	4.4	2.3	3.0
20	5.7	5.3	5.4	4.4	3.7	4.0	4.0	2.3	2.9	4.4	1.1	2.5
21	5.7	5.2	5.4	4.4	3.7	4.0	4.0	2.2	2.8	4.1	2.1	2.9
22	5.5	5.0	5.2	4.4	3.7	4.0	3.7	2.2	2.7	3.9	2.6	3.1
23	5.3	5.0	5.1	4.6	3.9	4.2	4.2	2.2	2.9	3.3	2.6	3.0
24	5.2	4.7	4.9	4.2	3.7	4.0	3.0	2.3	2.6	4.3	2.8	3.4
25	5.2	4.7	4.9	4.7	3.9	4.3	3.4	2.3	2.7	4.0	2.6	3.1
26	5.0	4.5	4.7	4.2	3.5	3.9	3.6	2.1	2.8	3.9	2.5	3.0
27	4.8	4.5	4.6	4.0	3.2	3.6	3.4	2.0	2.5	4.0	2.2	2.9
28	4.8	4.5	4.6	3.8	3.0	3.3	3.6	2.2	2.5	3.8	2.1	2.8
29	---	---	---	3.6	2.7	3.2	3.6	2.1	2.7	3.8	2.4	3.0
30	---	---	---	3.3	2.6	2.9	3.7	1.3	2.5	3.6	2.2	2.8
31	---	---	---	3.1	2.7	2.9	---	---	---	3.3	2.1	2.5
MONTH	6.8	4.5	5.5	4.8	2.6	4.0	4.2	1.3	3.0	4.4	1.1	2.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	3.7	2.0	2.9	3.8	2.2	2.7						
2	3.7	2.1	2.7	3.7	2.1	2.6						
3	3.6	2.0	2.6	4.0	2.0	2.7						
4	3.5	2.1	2.7	3.7	1.9	2.6						
5	3.3	2.0	2.6	3.2	1.9	2.4						
6	3.7	2.4	3.0	3.2	1.6	2.3						
7	3.8	2.3	2.8	3.6	1.8	2.6						
8	3.4	2.2	2.8	3.7	1.8	2.4						
9	3.9	2.4	2.9	4.1	1.9	2.7						
10	3.7	2.2	2.8	3.6	1.8	2.5						
11	3.8	2.1	2.6	3.9	1.9	2.6						
12	3.2	2.0	2.5	3.4	1.7	2.3						
13	3.6	2.1	2.7	3.9	1.7	2.4						
14	3.4	2.1	2.6	3.9	1.5	2.4						
15	3.9	2.2	2.8	3.3	1.5	2.1						
16	4.0	2.3	3.1	3.4	2.5	2.9						
17	3.8	2.5	3.1	4.0	2.2	3.0						
18	3.5	2.4	2.8	3.8	2.1	2.6						
19	3.6	2.2	2.7	4.1	1.9	2.6						
20	3.6	2.1	2.6	4.1	1.5	2.5						
21	3.6	2.1	2.7	4.4	1.4	2.4						
22	3.7	2.1	2.7	---	---	---						
23	3.7	2.1	2.6	---	---	---						
24	3.7	2.0	2.7	---	---	---						
25	3.6	2.0	2.7	---	---	---						
26	3.2	2.0	2.4	---	---	---						
27	2.9	2.0	2.3	---	---	---						
28	3.4	2.0	2.5	---	---	---						
29	3.7	2.5	2.9	---	---	---						
30	3.6	2.3	2.9	---	---	---						
31	---	---	---	---	---	---						
MONTH	4.0	2.0	2.7	4.4	1.4	2.5						

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 bridge on Hanover Street at Pemberton, 12 mi upstream from confluence with South Branch Rancocas Creek.

DRAINAGE AREA.--118 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1302: 1922-23. WSP 1382: 1933. WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft above 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 downstream at datum 6.54 ft lower.

REMARKS.--Estimated daily discharges: Nov. 19-30 and Dec. 27 to Jan. 15. Records good except for periods of no gage-height record, Nov. 19-30 and Dec. 27 to Jan. 15, which are poor. Flow regulated occasionally by operation of gate in dam and by ponds above station. Several measurements of water temperature, other than those published, were made during the year. Gage-height telemeter at station.

AVERAGE DISCHARGE.--64 years, 171 ft³/s, 19.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft³/s, Aug. 31, 1939, gage height, 10.77 ft, from high-water mark, site and datum then in use; minimum daily, 9.0 ft³/s, Sept. 29, 1932.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 27	1145	*320	*2.03	No peak greater than base discharge.			

Minimum daily discharge, 41 ft³/s, Aug. 7, Sept. 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	130	132	105	100	111	140	62	72	64	57	44
2	130	115	120	108	157	110	133	60	74	60	52	46
3	110	101	123	110	173	104	116	142	73	55	49	47
4	103	95	130	118	155	101	113	178	72	54	47	44
5	112	131	121	125	136	108	109	136	72	55	47	43
6	108	144	177	130	131	109	101	99	81	52	46	44
7	95	136	185	121	121	104	96	84	75	52	41	46
8	84	120	170	118	111	103	91	77	78	52	57	48
9	83	111	154	104	102	105	88	70	82	52	58	50
10	80	104	150	106	99	105	86	66	79	56	57	50
11	80	114	121	95	99	100	85	68	73	53	54	45
12	78	151	118	99	166	111	82	84	68	51	56	42
13	80	151	117	95	271	118	77	99	67	52	52	41
14	80	124	115	95	264	113	80	89	63	50	48	41
15	78	108	114	94	220	107	82	81	61	47	46	41
16	76	105	110	94	191	99	79	75	68	58	44	42
17	76	110	107	94	172	94	73	66	91	93	42	44
18	76	109	105	94	154	93	71	70	110	82	42	44
19	76	109	105	96	145	90	67	64	112	68	44	44
20	77	112	110	94	138	86	67	60	93	60	44	44
21	85	108	110	87	128	87	66	66	82	56	50	44
22	84	102	121	90	122	90	68	126	74	63	51	44
23	118	99	117	86	122	96	81	138	68	61	46	47
24	134	98	111	86	124	102	93	135	67	54	43	50
25	133	96	113	87	131	110	86	119	70	45	59	49
26	114	94	110	87	124	108	75	99	64	70	63	72
27	103	93	114	86	120	105	68	83	59	80	56	245
28	110	94	142	86	115	112	65	74	57	73	51	239
29	167	145	138	84	---	121	62	74	63	61	47	180
30	173	172	128	83	---	122	63	72	64	54	44	118
31	152	---	113	83	---	119	---	68	---	53	44	---
TOTAL	3146	3481	3901	3040	4091	3243	2563	2784	2232	1836	1537	1978
MEAN	101	116	126	98.1	146	105	85.4	89.8	74.4	59.2	49.6	65.9
MAX	173	172	185	130	271	122	140	178	112	93	63	245
MIN	76	93	105	83	99	86	62	60	57	45	41	41
CFSM	.86	.98	1.07	.83	1.24	.89	.72	.76	.63	.50	.42	.56
IN.	.99	1.10	1.23	.96	1.29	1.02	.81	.88	.70	.58	.48	.62

CAL YR 1984 TOTAL 83038 MEAN 227 MAX 1310 MIN 69 CFSM 1.92 IN. 26.18
WTR YR 1985 TOTAL 33832 MEAN 92.7 MAX 271 MIN 41 CFSM .79 IN. 10.67

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1958, 1962-69, 1975 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 28...	1015	86	54	5.1	1.5	13.5	96	.9	2	11
MAR 26...	0900	86	52	5.0	7.0	11.3	92	1.2	13	79
JUN 11...	0800	76	45	5.1	20.5	7.4	82	1.7	79	>2400
JUL 09...	0900	52	42	5.3	21.5	6.3	72	.6	11	220
AUG 22...	1015	52	43	5.8	21.0	6.8	77	.6	130	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)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 28...	9	2.0	.92	3.2	.90	2.0	9.8	6.0	<.10
MAR 26...	9	2.0	.92	3.2	.80	1.0	10	5.6	<.10
JUN 11...	7	1.6	.80	3.1	.80	2.0	7.3	4.6	<.10
JUL 09...	7	1.6	.76	3.0	.80	2.0	8.2	3.1	<.10
AUG 22...	--	--	--	--	--	--	--	--	--

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 28...	5.5	30	<.003	.14	.140	.38	.52	.040	3.4
MAR 26...	3.8	27	.005	.11	<.050	.39	.50	.030	4.7
JUN 11...	3.6	23	.008	.09	.150	.55	.64	.060	7.5
JUL 09...	3.7	22	.005	.12	.170	.58	.70	.060	8.1
AUG 22...	--	--	.004	.14	.120	.37	.51	.050	--

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 11...	0800	<.5	90	<1	<10	<20	1	<10	5

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
JUN 11...	2400	11	40	.2	8	<1	40	2

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 upstream from Tacony-Palmyra Bridge, 3.5 mi downstream from Rancocas Creek, and at mile 107.55.

DRAINAGE AREA.--7,850 mi².

TIDE ELEVATION DATA

PERIOD OF RECORD.--December 1962 to current year. Tidal volumes published from December 1962 to September 1970.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is -10.00 ft below National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--No gage-height or doubtful record: Oct. 4-5, Oct. 30 to Nov. 1, Jan. 20 to Feb. 4, Feb. 16 to Mar. 4 and June 18 to July 2. Some periods of low tide are affected by sluggish or plugged intake and the record is estimated with negligible loss in accuracy. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.23 ft, Oct. 25, 1980; minimum, -8.6 ft, Dec. 31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since 1899, 8.9 ft, Aug. 24, 1933, from profile provided by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 6.40 ft, Feb. 12; minimum recorded, -4.04 ft, Mar. 6.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	5.79	5.48	5.66	5.58	6.40	5.18	5.61	6.20	--	--	5.76	6.25
high tide	Date	15	10	22	19	12	12	6	4	--	--	1	28
Minimum	Elevation	-2.76	-3.47	-3.55	--	--	-4.04	-3.44	-3.21	--	-3.03	-3.15	-2.95
low tide	Date	4	21	7	--	--	6	10	2	--	27	16	15
Mean high tide		4.66	4.15	4.02	--	--	4.00	4.28	4.65	--	4.61	4.64	4.63
Mean water level		1.55	1.12	.99	--	--	.87	1.10	1.38	--	1.37	1.39	1.47
Mean low tide		-1.91	-2.25	-2.34	--	--	-2.57	-2.43	-2.23	--	-2.25	-2.27	-2.06

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 downstream from outlet of Strawbridge Lake, 0.6 mi northwest of Moorestown Mall, 0.8 mi southeast of Lenola, and 1.8 mi southwest of Moorestown.

DRAINAGE AREA.--12.8 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 30...	0800	3.0	520	6.6	3.0	10.7	78	3.8	20	70
MAR 25...	0815	8.1	340	6.7	7.0	10.3	85	3.0	110	220
JUN 18...	0800	3.9	240	6.9	23.0	7.2	85	6.4	170	1100
JUL 10...	0800	1.6	295	7.0	24.5	6.4	78	5.6	490	270
AUG 28...	0900	2.8	205	7.2	23.5	5.9	69	5.4	330	490

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 30...	95	26	7.2	43	6.1	8.0	74	72	.30
MAR 25...	76	21	5.6	26	4.8	9.0	55	49	.30
JUN 18...	58	16	4.5	15	4.8	12	41	28	.30
JUL 10...	77	21	5.9	17	6.6	18	56	28	.30
AUG 28...	54	15	4.0	13	3.7	19	30	22	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 30...	14	250	.023	.80	2.70	3.3	4.1	.220	2.5
MAR 25...	9.9	180	.019	.59	.880	1.3	1.9	.110	3.7
JUN 18...	7.3	120	.059	.53	.330	2.0	2.5	.390	7.0
JUL 10...	4.9	150	.062	.50	.870	2.0	2.5	.210	9.8
AUG 28...	6.6	110	.045	.40	.800	1.5	1.9	.260	--

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 south of Maple Shade and 3.8 mi upstream from confluence with the North Branch Pennsauken Creek.

DRAINAGE AREA.--8.98 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to September 1976, October 1977 to current year.

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 8.12 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: May 21 to June 3 and June 19 to July 8. Records fair except for periods of no gage-height record, May 21 to June 3 and June 19 to July 8, which are poor. Diurnal fluctuations from unknown source. Several measurements of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--17 years, (water years 1968-76, 1978-85) 18.4 ft³/s, 27.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 868 ft³/s, Aug. 28, 1978, gage height, 10.19 ft; maximum gage height, 11.34 ft, Aug. 28, 1971; minimum discharge, 2.6 ft³/s, Oct. 6, 9, 10, 11, 1970, gage height, 1.71 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 12	1515	333	6.53	Sept. 27	1145	*600	*8.67

Minimum daily discharge, 4.0 ft³/s, Aug. 7, Sept. 8, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	13	11	10	36	7.9	28	6.7	14	6.0	15	4.3
2	19	13	9.9	13	47	8.1	8.1	8.2	9.0	4.5	5.6	4.2
3	9.0	12	19	12	19	7.7	8.5	160	6.0	4.3	4.8	4.6
4	9.2	12	14	12	11	8.3	7.9	18	8.0	4.2	4.6	4.5
5	8.0	46	13	18	9.6	16	7.0	10	14	4.1	5.1	4.4
6	7.5	13	79	12	9.9	8.4	6.7	9.5	7.7	4.5	5.3	4.2
7	8.4	9.5	15	11	10	7.8	6.1	8.9	6.5	5.3	4.0	4.4
8	8.0	8.8	11	9.9	10	11	6.0	8.5	14	4.3	50	4.0
9	8.4	8.9	10	8.7	13	8.6	6.0	8.1	7.7	6.3	7.2	8.7
10	8.2	9.4	9.9	8.4	8.8	8.4	6.1	7.8	6.8	12	5.4	7.9
11	8.2	15	9.5	8.9	10	7.8	6.7	7.9	6.3	7.2	4.9	4.8
12	8.0	12	9.3	8.9	154	29	6.8	7.7	6.3	4.6	4.7	4.5
13	7.7	9.6	9.1	9.1	38	10	6.6	7.7	6.2	4.5	4.4	4.2
14	7.7	10	9.0	9.4	14	8.1	6.5	7.6	6.2	4.1	8.8	4.3
15	8.4	11	12	8.8	12	7.5	7.4	7.5	6.1	9.3	4.6	4.2
16	8.1	11	9.4	8.3	11	7.1	7.6	7.9	19	35	4.3	4.2
17	8.0	11	9.2	8.2	9.5	7.0	7.7	40	15	7.6	4.4	4.2
18	8.2	12	9.1	8.4	9.1	6.8	7.7	50	6.9	4.6	4.6	4.3
19	8.1	17	13	8.4	9.3	6.7	8.2	4.6	6.0	4.6	5.6	4.1
20	8.2	11	11	8.2	8.8	6.8	8.5	4.3	5.0	4.2	4.5	4.3
21	10	10	14	8.0	8.4	6.7	8.7	4.8	4.8	4.4	21	4.3
22	20	10	19	8.0	8.7	6.7	8.3	12	4.6	9.8	7.1	4.0
23	75	10	12	7.8	9.2	20	8.4	10	4.5	6.9	4.9	4.6
24	22	11	11	8.0	9.1	11	10	8.0	4.4	4.8	4.3	5.2
25	14	11	13	8.1	8.8	12	8.6	7.0	4.3	4.2	4.5	4.6
26	13	11	10	8.1	8.2	7.6	7.3	6.0	4.3	56	6.7	35
27	13	11	10	8.2	8.1	7.0	6.8	5.7	4.3	16	5.9	443
28	13	12	10	8.1	7.9	7.0	6.6	8.0	4.5	5.7	4.9	29
29	45	23	10	8.0	---	6.9	6.8	30	6.0	5.0	4.7	9.8
30	15	11	9.6	7.9	---	6.6	6.8	13	8.8	4.8	4.7	8.0
31	13	---	9.7	7.8	---	7.6	---	7.0	---	39	4.3	---
TOTAL	470.3	385.2	420.7	289.6	518.4	288.1	242.4	502.4	227.2	297.8	230.8	641.8
MEAN	15.2	12.8	13.6	9.34	18.5	9.29	8.08	16.2	7.57	9.61	7.45	21.4
MAX	75	46	79	18	154	29	28	160	19	56	50	443
MIN	7.5	8.8	9.0	7.8	7.9	6.6	6.0	4.3	4.3	4.1	4.0	4.0
CFSM	1.69	1.43	1.51	1.04	2.06	1.03	.90	1.80	.84	1.07	.83	2.38
IN.	1.95	1.60	1.74	1.20	2.15	1.19	1.00	2.08	.94	1.23	.96	2.66

CAL YR 1984 TOTAL 8054.1 MEAN 22.0 MAX 255 MIN 5.7 CFSM 2.45 IN. 33.36
WTR YR 1985 TOTAL 4514.7 MEAN 12.4 MAX 443 MIN 4.0 CFSM 1.38 IN. 18.70

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1975 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 30...	0930	9.5	420	7.2	2.0	13.4	95	11	500	<200
MAR 25...	0915	12	320	7.0	7.0	9.3	76	8.3	1700	200
JUN 18...	0915	6.3	310	7.2	20.5	4.6	52	10	4900	13000
JUL 10...	0845	4.1	420	7.4	22.0	4.5	52	7.9	13000	13000
AUG 28...	0930	4.3	409	7.4	21.0	5.1	57	6.1	4900	13000

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 30...	89	24	7.1	32	9.4	35	57	39	.30
MAR 25...	79	22	5.8	22	5.2	26	48	33	.10
JUN 18...	68	19	5.0	20	8.5	34	39	23	.20
JUL 10...	91	25	6.9	29	12	46	50	32	.20
AUG 28...	88	24	6.7	28	10	50	45	33	.30

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 30...	13	200	.195	2.3	4.60	7.2	9.5	1.65	5.2
MAR 25...	10	160	.127	1.7	1.73	2.8	4.5	.890	5.8
JUN 18...	9.1	140	.219	1.1	4.10	4.7	5.8	1.24	9.7
JUL 10...	12	190	.305	1.1	3.60	7.3	8.4	1.75	8.6
AUG 28...	12	190	.325	1.2	5.25	5.4	6.6	1.25	5.3

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 18...	0915	<.5	<10	2	<10	140	<1	10	7

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
JUN 18...	2200	6	80	<.1	8	<1	120	9

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 downstream from outflow of Linden Lake, 1.1 mi southwest of Gibbstown, and 1.7 mi south of Glendale.

DRAINAGE AREA.--1.13 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 22...	1030	E.86	98	6.2	2.0	11.2	81	2.7	8	5
MAR 18...	1000	E.78	99	6.8	7.0	11.3	93	2.7	2	7
MAY 15...	1015	E.67	75	7.2	22.0	7.5	85	2.7	<20	230
JUL 08...	0915	E.63	82	7.0	24.0	5.4	64	3.0	<20	790
AUG 27...	0930	E.75	74	7.0	24.0	6.6	78	4.8	70	110

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 22...	23	7.3	1.2	6.5	1.4	12	11	11	<.10
MAR 18...	21	6.7	1.1	6.2	1.5	12	12	9.8	<.10
MAY 15...	22	6.8	1.1	5.0	1.0	14	9.5	8.4	.10
JUL 08...	24	7.8	1.1	5.1	1.1	19	6.9	10	<.10
AUG 27...	22	7.2	.97	3.4	.80	15	7.3	6.9	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 22...	5.0	51	.005	.14	.300	.58	.72	.050	3.2
MAR 18...	1.1	46	.007	.05	.110	.63	.68	.060	5.6
MAY 15...	.4	41	.003	<.05	.180	.54	--	.040	7.1
JUL 08...	.8	44	.005	<.05	.160	.61	--	.060	7.3
AUG 27...	2.2	38	<.003	<.05	.110	.76	--	.070	6.4

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 upstream from the New Jersey Turnpike, and 1.7 mi upstream from Tindale Run.

DRAINAGE AREA.--12.7 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	0945	E17	300	7.3	15.0	6.2	61	11	500	1300
JAN 21...	1100	E15	426	7.2	.5	8.7	60	19	80	1700
MAR 25...	1000	E19	335	7.3	8.0	8.3	70	12	>24000	1700
MAY 20...	1130	E17	322	7.3	18.5	4.2	45	17	16000	5400
JUL 16...	0915	E31	288	7.3	24.0	3.6	43	11	11000	7000
AUG 08...	1015	E81	187	7.2	23.5	4.4	52	16	17000	54000

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	54	16	3.5	25	7.4	16	27	29	.20
JAN 21...	55	16	3.7	37	8.5	36	31	41	.20
MAR 25...	54	16	3.4	26	6.7	29	28	35	.20
MAY 20...	54	16	3.4	23	7.4	28	28	27	.30
JUL 16...	49	14	3.4	22	7.4	19	25	29	.20
AUG 08...	34	10	2.3	10	5.2	16	17	15	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	11	130	.179	1.2	6.30	15	16	1.52	5.8
JAN 21...	12	170	.071	.80	E14.1	16	17	2.65	12
MAR 25...	9.3	140	.076	.61	8.60	10	11	1.58	6.7
MAY 20...	11	130	.065	.52	9.25	10	11	2.21	8.7
JUL 16...	8.1	120	.148	.60	5.20	7.0	7.6	1.55	12
AUG 08...	5.2	74	.073	.62	2.55	4.1	4.7	1.80	15

01467140 COOPER RIVER AT LAWNSIDE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	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, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 04...	0945	<.5	5.6	8.2	<10	3	<1	<10	160	<1	<1
MAY 20...	1130	<.5	--	--	80	<1	--	<10	170	<1	--

DATE	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, TOTAL RECOVERABLE (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 04...	20	6	<10	9	6	2900	11000	7	20	100	22
MAY 20...	10	--	--	16	--	3800	--	11	--	70	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	<.1	<.01	7	<10	<1	<1	30	50	17	5	<1.0
MAY 20...	.1	--	6	--	<1	--	50	--	21	--	--

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)	ENDOSULFAN, 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 04...	<.1	5.0	2.2	1.1	1.6	<.1	.4	<.1	<.1	<.1	<.1
MAY 20...	--	--	--	--	--	--	--	--	--	--	--

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)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 04...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<10	<.1
MAY 20...	--	--	--	--	--	--	--	--	--	--	--

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 upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi upstream from North Branch Cooper River, and 7.7 mi upstream from mouth.

DRAINAGE AREA.--17.0 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD-NJ 1969: 1967(M). WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 9.29 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation at low flow from Kirkwood Lake, other small lakes and wastewater treatment plants. Several measurements of water temperature were made during the year. Gage-height telemeter at station.

AVERAGE DISCHARGE.--22 years, 35.9 ft³/s, 28.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft³/s, Aug. 28, 1971, gage height, 5.46 ft; minimum, 0.8 ft³/s, Nov. 13, 1972, gage height, 1.07 ft regulation from unknown source; minimum daily, 1.2 ft³/s, June 27,1964.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 27	1115	*849	*3.22	No other peak greater than base discharge.			

Minimum discharge, 12 ft³/s, Sept. 7, gage height, 1.40 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	27	23	24	71	21	62	16	34	16	22	14
2	52	26	30	29	108	22	25	16	22	15	16	14
3	28	24	41	28	47	21	22	226	20	15	15	16
4	24	24	30	28	30	21	22	48	19	15	14	16
5	23	87	26	39	25	33	21	24	38	14	14	16
6	21	31	132	28	26	24	21	22	24	15	14	15
7	21	24	34	26	26	23	21	20	21	16	14	15
8	22	23	25	24	24	25	21	19	30	17	61	19
9	23	23	24	23	23	23	21	19	23	19	20	19
10	22	22	24	23	23	22	20	20	20	25	16	19
11	22	33	24	24	26	22	20	20	18	20	15	18
12	22	28	23	24	195	48	20	20	18	15	15	15
13	21	26	24	24	83	23	19	18	17	15	15	15
14	21	30	24	24	32	20	19	18	16	14	25	15
15	22	28	26	24	26	19	19	16	16	18	15	15
16	22	23	24	22	24	19	19	17	29	59	14	15
17	22	20	24	23	24	19	18	62	34	23	13	14
18	22	21	24	23	24	19	17	91	22	16	15	14
19	22	35	31	24	24	19	17	28	18	15	17	15
20	23	24	25	23	23	19	17	23	17	15	15	14
21	23	22	32	21	24	19	17	26	17	15	46	14
22	41	21	40	21	24	19	18	36	16	31	21	13
23	140	21	26	23	24	40	17	31	15	16	17	14
24	48	21	25	23	24	27	18	25	16	14	15	16
25	30	21	28	23	23	28	20	21	15	14	52	15
26	25	22	24	23	23	21	18	20	15	103	29	60
27	24	22	24	23	21	20	17	19	15	34	18	693
28	24	22	24	23	21	20	16	27	15	19	16	96
29	125	53	24	23	---	21	20	75	17	17	15	25
30	36	26	24	22	---	21	18	24	20	16	15	21
31	27	---	24	23	---	22	---	21	---	22	15	---
TOTAL	1100	830	933	755	1068	720	620	1068	617	678	624	1280
MEAN	35.5	27.7	30.1	24.4	38.1	23.2	20.7	34.5	20.6	21.9	20.1	42.7
MAX	140	87	132	39	195	48	62	226	38	103	61	693
MIN	21	20	23	21	21	19	16	16	15	14	13	13
CFSM	2.09	1.63	1.77	1.44	2.24	1.36	1.22	2.03	1.21	1.29	1.18	2.51
IN.	2.41	1.82	2.04	1.65	2.34	1.58	1.36	2.34	1.35	1.48	1.37	2.80

CAL YR 1984 TOTAL 16235 MEAN 44.4 MAX 422 MIN 20 CFSM 2.61 IN. 35.53
WTR YR 1985 TOTAL 10293 MEAN 28.2 MAX 693 MIN 13 CFSM 1.66 IN. 22.52

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ

LOCATION.--Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, at bridge on Blackwood-Clementon Road at Blackwood Terrace, 1,000 ft upstream from Bull Run, and 2.0 mi northeast of Fairview.

DRAINAGE AREA.--19.1 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 22...	0840	--	205	7.1	.0	14.7	100	4.5	20	3500
MAR 18...	0830	39	154	7.2	5.0	11.7	92	2.4	330	1300
MAY 15...	0800	30	146	7.1	18.5	7.9	83	3.0	3500	1100
JUL 08...	0800	14	134	7.1	21.5	6.1	69	2.1	170	790
AUG 27...	0900	39	134	7.1	23.0	6.6	77	2.4	330	5400

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 22...	46	13	3.4	14	3.5	--	17	24	.10
MAR 18...	42	12	2.9	9.0	2.4	23	16	14	<.10
MAY 15...	41	12	2.8	8.2	2.5	25	16	14	<.10
JUL 08...	39	11	2.9	7.9	2.5	26	12	13	<.10
AUG 27...	36	10	2.6	8.0	2.6	24	11	13	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 22...	8.1	--	.010	1.7	1.11	1.9	3.6	.080	3.8
MAR 18...	5.2	75	.023	1.4	.140	.56	2.0	.080	3.7
MAY 15...	5.2	76	.039	1.3	.210	.86	2.2	.150	4.0
JUL 08...	4.6	69	.024	.92	.210	.52	1.4	.140	4.3
AUG 27...	5.1	67	.017	.79	.170	.70	1.5	.170	4.6

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD TERRACE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 15...	0800	<.5	50	1	<10	50	1	<10	5

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
MAY 15...	1800	9	70	<.1	6	<1	30	5

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA
(National stream-quality accounting network station)

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia County, Hydrologic Unit 02040203, on right bank 150 ft upstream from Fairmount Dam, 1,500 ft upstream from Spring Garden Street Bridge, in Philadelphia, and 8.7 mi upstream from mouth. Water-quality sampling site 1.6 mi upstream.

DRAINAGE AREA.--1,893 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--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, 301, 381 have been found to be unreliable and should not be used.

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. Datum of gage is 5.74 ft National Geodetic Vertical Datum of 1929. Prior to November 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. November 26, 1956, to October 6, 1966, water-stage recorder at site on left bank 40 ft upstream from Fairmount Dam at same datum.

REMARKS.--Water-discharge records good. Flow regulated by Still Creek Reservoir (sta 01469200) since February 1933, Blue Marsh Reservoir (sta 01470870) since April 1979, Green Lane Reservoir (sta 01472200) since December 1956 and to some extent by Lake Ontelaunee, capacity 518,600,000 ft³. Records of discharge do not include diversion above station by City of Philadelphia for municipal water supply.

AVERAGE DISCHARGE.--54 years, 2,947 ft³/s, 21.14 in/yr, adjusted for diversion from October 1931 to September 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s June 23, 1972, gage height, 14.65 ft; no flow over dam at times; minimum daily, 0.6 ft³/s Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 4, 1869, reached a stage of 17.0 ft, discharge, 135,000 ft³/s, from rating extended above 46,000 ft³/s. Flood of March 1, 1902, reached a stage of 14.8 ft, discharge, 98,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,600 ft³/s, Sept. 27, gage height, 10.69 ft; minimum, 299 ft³/s July 22, gage height 5.65 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	1250	4070	2180	1120	2350	1980	717	1020	1150	3310	724
2	1420	1120	2930	2320	1490	2160	2070	804	1130	906	2500	668
3	1470	1040	2550	3650	1340	1950	1880	7760	1040	855	1520	591
4	1150	956	2870	2920	1130	1850	1710	7490	979	892	1120	532
5	901	2100	2770	2890	959	1980	1600	4300	1020	976	997	604
6	839	2220	4010	2840	870	2140	1560	3340	1200	892	840	582
7	784	1700	4850	2620	820e	1830	1600	2920	1340	1050	760	624
8	774	1290	3260	2580	780e	1630	1530	2460	1080	1230	2330	664
9	784	1120	2590	2340	776	1660	1460	2030	1080	1080	1480	865
10	729	1010	2360	1980	820	1610	1410	1820	1000	1060	1220	965
11	800	1040	2220	1920	952	1500	1350	1710	854	915	924	872
12	742	1020	2090	1910	7060	1650	1280	1590	793	725	772	717
13	694	994	1970	1920	15000	2340	1230	1580	734	708	719	626
14	703	903	1840	1850	7130	2120	1170	1640	638	600	1240	632
15	748	897	1830	1770	4720	1830	1180	1430	554	686	799	647
16	680	853	1830	1340	3570	1690	1160	1250	1030	1050	589	649
17	697	820	1790	1200	2600	1630	1130	1570	2160	898	489	658
18	696	818	1710	1310	2370	1590	1120	3010	1960	659	562	599
19	718	897	1630	1470	2280	1510	1020	2210	1610	547	610	616
20	761	916	1660	1250	2300	1410	978	1610	1470	431	588	749
21	764	882	1740	674	2270	1330	982	1330	1480	406	663	832
22	822	822	2470	640e	2050	1290	1010	1300	1220	614	656	820
23	1500	787	3570	620e	2370	1410	930	1350	1070	531	509	887
24	2750	722	3130	1130	3160	1600	903	1360	1060	475	433	892
25	1950	746	3000	1100	3350	1690	905	1270	980	493	1030	737
26	1460	775	2920	1000	3300	1650	859	1110	931	894	1810	841
27	1190	742	2510	967	3140	1540	804	1010	875	1540	1310	20900
28	1130	727	2190	930e	2780	1330	783	1020	817	1790	972	19600
29	2610	1700	2340	900e	---	1290	768	1030	929	1310	776	5390
30	2180	6680	2410	890e	---	1300	736	957	1180	899	673	3060
31	1520	---	2320	880e	---	1340	---	856	---	1250	638	---
TOTAL	35116	37547	79430	51991	80507	52200	37098	63834	33234	27512	32839	67543
MEAN	1133	1252	2562	1677	2875	1684	1237	2059	1108	887	1059	2251
MAX	2750	6680	4850	3650	15000	2350	2070	7760	2160	1790	3310	20900
MIN	680	722	1630	620	776	1290	736	717	554	406	433	532
‡	248	210	212	234	269	228	233	248	233	262	250	225

CAL YR 1984 TOTAL 1460800 MEAN 3991 MAX 43500 MIN 680
WTR YR 1985 TOTAL 598851 MEAN 1641 MAX 20900 MIN 406

e Ice effected days.
‡ Diversion, equivalent in cubic feet per second, for municipal water supply, provided by City of Philadelphia.

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 downstream from County Bridge No. 5-F-3 on Harrisonville-Gibbstown Road, 1.8 mi west of Mullica Hill, and 2.8 mi east of Swedesboro.

DRAINAGE AREA.--26.9 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 28, 1969, at datum 7.96 ft higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft higher.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature, other than those published, were made during the year.

AVERAGE DISCHARGE.--19 years, 41.7 ft³/s, 21.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft³/s, Aug. 10, 1967, elevation, 17.44 ft, present datum; minimum daily, 2.9 ft³/s, July 14, Aug. 27, 28, Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Elevation (ft)	Date	Time	Discharge (ft³/s)	Elevation (ft)
Feb. 12	1930	574	12.01	Sept. 27	1715	737	12.61
Aug. 1	0130	*890	*13.10				

Minimum discharge, 11 ft³/s, July 21, 22, 24, 25, gage height, 6.71 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	25	26	24	33	24	37	14	19	16	510	16
2	53	24	24	25	71	25	31	13	17	15	55	16
3	30	24	29	26	80	24	31	83	17	15	29	16
4	24	23	29	29	67	24	29	37	18	14	25	16
5	23	38	27	31	47	28	29	25	19	14	23	15
6	22	30	75	30	36	25	23	21	18	15	22	15
7	22	27	43	29	34	23	21	20	16	27	21	14
8	22	25	33	27	32	26	21	18	21	29	34	16
9	21	25	30	25	30	25	21	16	20	93	30	22
10	21	23	29	23	28	23	21	16	17	27	27	20
11	21	25	29	24	29	22	21	16	16	21	21	21
12	22	26	28	25	265	32	21	15	15	16	19	16
13	21	25	27	24	190	29	19	14	16	15	17	16
14	21	24	25	24	53	24	20	14	15	14	17	16
15	20	23	26	24	40	23	20	13	14	13	17	16
16	20	24	26	22	35	22	20	13	19	29	16	16
17	20	24	25	23	31	22	19	24	39	25	16	16
18	20	24	25	24	30	22	20	52	22	15	17	16
19	20	30	25	24	30	21	19	24	19	13	20	15
20	19	28	27	23	28	21	19	18	17	12	19	15
21	20	25	26	21	27	21	19	23	16	12	26	14
22	19	23	30	22	27	21	18	102	16	14	30	14
23	41	23	27	22	27	31	18	40	16	13	24	15
24	31	23	26	23	27	30	18	36	16	12	21	16
25	27	23	26	24	26	31	19	25	15	11	26	15
26	23	23	24	23	25	25	19	21	15	82	28	22
27	22	23	25	22	25	23	17	19	15	57	20	496
28	23	23	24	23	24	22	17	19	15	29	18	204
29	80	38	24	22	---	22	16	32	17	19	17	39
30	38	29	23	22	---	22	16	22	16	17	16	26
31	28	---	23	23	---	22	---	19	---	90	18	---
TOTAL	843	770	886	753	1397	755	639	824	531	794	1199	1190
MEAN	27.2	25.7	28.6	24.3	49.9	24.4	21.3	26.6	17.7	25.6	38.7	39.7
MAX	80	38	75	31	265	32	37	102	39	93	510	496
MIN	19	23	23	21	24	21	16	13	14	11	16	14
CFSM	1.01	.96	1.06	.90	1.86	.91	.79	.99	.66	.95	1.44	1.48
IN.	1.17	1.06	1.23	1.04	1.93	1.04	.88	1.14	.73	1.10	1.66	1.65

CAL YR 1984 TOTAL 18115 MEAN 49.5 MAX 612 MIN 18 CFSM 1.84 IN. 25.05
WTR YR 1985 TOTAL 10581 MEAN 29.0 MAX 510 MIN 11 CFSM 1.08 IN. 14.63

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1966 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

COOPERATION.--Field data and samples for laboratory analyses provided 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 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 09...	0930	22	190	7.2	14.0	9.6	92	E.7	130	540
JAN 24...	0930	35	--	6.9	.0	11.4	78	E.1	50	<2
APR 02...	1245	31	174	7.6	10.0	10.9	97	2.3	20	110
JUN 12...	0945	15	185	7.2	20.5	8.2	93	2.6	50	540
JUL 22...	0940	15	195	6.5	23.5	7.9	94	E1.8	490	>2400
AUG 19...	0940	21	176	6.9	20.5	8.2	91	E1.3	790	>2400

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	66	20	3.9	4.9	3.5	30	25	14	.20
JAN 24...	69	21	3.9	5.9	3.1	29	27	15	.20
APR 02...	59	18	3.3	5.8	2.7	23	29	14	.20
JUN 12...	65	19	4.3	5.4	3.3	33	22	13	.20
JUL 22...	68	21	3.7	5.6	4.3	42	21	13	.10
AUG 19...	65	20	3.7	4.9	3.7	37	22	13	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	9.6	99	.016	1.6	.120	.79	2.4	.060	2.3
JAN 24...	11	100	.013	2.2	.100	.42	2.6	.080	1.6
APR 02...	7.5	94	.019	1.7	.190	.32	2.0	.110	3.2
JUN 12...	9.8	97	.021	1.7	.220	.52	2.2	.150	3.5
JUL 22...	11	100	.015	.91	.190	.52	1.4	.220	4.2
AUG 19...	10	100	.021	1.0	.160	.55	1.6	.200	3.6

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	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, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 09...	0930	--	.1	2.2	--	--	<1	--	--	--	<1
JUN 12...	0945	<.5	--	--	<10	1	--	<10	30	1	--

DATE	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, TOTAL RECOVERABLE (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 09...	--	8	<10	--	2	--	12000	--	10	--	110
JUN 12...	10	--	--	4	--	1500	--	1	--	60	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	--	<.01	--	<10	--	<1	--	30	--	<1	<1.0
JUN 12...	.1	--	3	--	<1	--	70	--	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)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, 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 09...	<.1	<1.0	1.3	1.6	2.7	<.1	.3	<.1	<.1	<.1	<.1
JUN 12...	--	--	--	--	--	--	--	--	--	--	--

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)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<10	<.1
JUN 12...	--	--	--	--	--	--	--	--	--	--	--

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 downstream of tributary from outflow of lake at Porches Mill, 1.0 mi north of Seven Stars, and 2.1 mi southeast of Auburn.

DRAINAGE AREA.--21.0 mi².

WATER-QUALITY RECORDS

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 09...	1040	E14	210	6.9	14.0	9.1	87	E1.1	170	540
JAN 24...	1050	E16	--	6.7	.5	10.4	72	E.7	<20	14
APR 02...	1045	E21	187	7.6	10.0	10.1	90	E1.9	1100	79
JUN 12...	1130	E9.9	180	6.5	23.5	8.4	101	3.5	140	920
JUL 22...	1050	E9.2	205	6.4	25.0	7.4	91	E1.8	330	>2400
AUG 19...	1030	E13	155	6.7	21.0	7.0	79	E1.3	220	1600

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	79	23	5.3	4.6	3.7	31	27	17	.20
JAN 24...	76	22	5.1	5.2	3.2	25	26	17	.20
APR 02...	70	20	4.8	4.5	2.8	25	30	15	.20
JUN 12...	71	21	4.6	4.5	3.1	33	21	17	.20
JUL 22...	73	21	5.1	4.6	3.8	40	22	15	<.10
AUG 19...	57	17	3.6	3.6	4.5	34	16	14	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	11	110	.014	2.3	.150	.62	2.9	.100	2.7
JAN 24...	12	110	.017	3.4	.130	.25	3.7	.080	1.7
APR 02...	7.9	100	.028	2.4	.130	.50	2.9	.110	3.7
JUN 12...	10	100	.025	1.4	.270	.65	2.0	.160	5.6
JUL 22...	9.0	100	.018	.93	.190	.52	1.5	.150	5.0
AUG 19...	10	89	.017	.77	.190	.89	1.7	.130	5.4

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SULFIDE TOTAL (MG/L AS S)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT 09...	1040	<.5	<10	1	<10	<20	<1	<10	1
JUN 12...	1130	<.5	<10	<1	<10	20	1	<10	4

DATE	IRON, TOTAL RECOVERABLE (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 TOTAL (UG/L)
OCT 09...	2000	17	100	<.1	13	<1	30	--
JUN 12...	2100	2	140	.1	6	<1	120	4

01481602 DELAWARE RIVER BELOW CHRISTINA RIVER AT WILMINGTON, DE

LOCATION.--Lat 39°43'00", long 75°31'03", New Castle County, DE, Hydrologic Unit 02040206, on right bank, 1,000 ft from mouth of Christina River at the Wilmington Marine Terminal at Wilmington, 2.0 mi upstream of Delaware Memorial Bridge, and at mile 69.70.

DRAINAGE AREA.--11,030 mi².

TIDE ELEVATION DATA

PERIOD OF RECORD.--December 1982 to current year. July 1967 to May 1983 published as Delaware River at Delaware Memorial Bridge, at Wilmington, DE (sta. 01482100). Tidal volumes published from July 1967 to September 1973.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is -18.05 ft below National Geodetic Vertical Datum of 1929. Prior to Dec. 1982, water-stage recorder at Delaware River at Delaware Memorial Bridge, 2.0 mi downstream at datum 8.05 ft higher. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum 1929 for publication.

REMARKS.--No gage-height or doubtful record: Dec. 4 to Jan. 1 and Jan. 21 to Feb. 14. 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 PERIOD OF RECORD.--Maximum elevation, 7.88 ft, Oct. 25, 1980; minimum, -5.86 ft, Apr. 4, 1975.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 8.4 ft, Nov. 23, 1950, provided by U.S. Army Corps of Engineers; minimum, -9.1 ft, Dec. 31, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5.4 ft, Feb. 12, estimated by comparison with Delaware River at Palmyra, NJ (01467060) and Delaware River at Chester, PA, (01477050), maximum recorded, 5.09 ft, May 3; minimum recorded, -4.06 ft, Mar. 6.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.94	4.62	--	4.72	a5.4	4.30	4.74	5.09	4.99	4.89	4.79	4.79
high tide	Date	15	11	--	19	12	12	6	3	27	1,31	19	27
Minimum	Elevation	-2.29	-2.93	--	-4.05	--	-4.06	-3.04	-2.61	-2.66	-2.60	-2.60	-2.80
low tide	Date	23	21	--	20	--	6	9	6	14	27	16	28
Mean high tide		3.84	3.31	--	--	--	3.04	3.38	3.65	3.69	3.78	3.80	3.72
Mean water level		1.32	.88	--	--	--	.54	.81	1.12	1.02	1.15	1.13	1.11
Mean low tide		-1.41	-1.73	--	--	--	-2.16	-1.94	-1.65	-1.88	-1.75	-1.74	-1.67

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 upstream from small brook, and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 09...	1200	21	240	7.3	16.5	10.2	103	3.2	230	33
JAN 24...	1140	--	--	6.6	1.5	13.4	96	E1.3	20	6
MAR 28...	1020	5.0	207	7.0	12.0	11.8	110	6.5	<20	<2
JUN 12...	1250	5.0	215	7.1	25.0	7.8	96	4.0	2200	920
JUL 17...	1020	21	--	7.0	25.5	9.3	113	5.2	460	920
AUG 19...	1130	14	194	7.0	24.0	8.2	98	2.7	<20	280

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 LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 09...	78	17	8.7	6.7	5.4	26	34	20	.10
JAN 24...	99	20	12	8.0	4.3	25	42	24	<.10
MAR 28...	83	18	9.3	7.4	3.6	19	39	21	.20
JUN 12...	76	17	8.2	6.7	5.1	31	31	18	.10
JUL 17...	76	17	8.2	6.3	5.1	17	27	20	.20
AUG 19...	72	16	7.7	6.1	5.5	37	25	18	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 09...	5.8	110	.049	2.4	.120	1.4	3.9	.140	5.5
JAN 24...	8.5	130	.032	5.2	.270	.34	5.5	.060	2.7
MAR 28...	7.0	120	.033	3.4	.070	1.0	4.5	1.39	4.1
JUN 12...	6.8	110	.093	1.3	.440	1.4	2.7	.260	8.0
JUL 17...	3.5	97	.026	.20	.190	1.5	1.7	.260	8.0
AUG 19...	4.8	110	.049	.47	.480	1.0	1.5	.340	8.2

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	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)
OCT 09...	1200	<.1	1.2	<1	<1	1	<10	<1	1700	<10

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, 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)
OCT 09...	71	<.01	<10	<1	5	7	<1.0	<.1	<1.0	<.1

DATE	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)	ENDOSULFAN, 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)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1

DATE	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)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 09...	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<10	<.1

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 east of Downsville, NY. DRAINAGE AREA, 371 mi². PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

REMARKS.--Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190 mil gal between minimum operating level, elevation, 1,152.0 ft, and crest of spillway, elevation, 1,280.0 ft. Capacity, at crest of spillway 149,700 mil gal; at minimum operating level, 9,609 mil gal; at still of diversion tunnel, elevation, 1,143.0 ft, 6,098 mil gal; in dead storage below release outlet, elevation, 1,126.50 ft, 1,898 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see 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.

COOPERATION.--Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 154,027 mil gal, Apr. 5, 1960, elevation, 1,282.27 ft; minimum observed (after first filling), 9,575 mil gal, Dec. 26, 1964, elevation, 1,151.92 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 110,929 mil gal, Oct. 1, elevation, 1,257.13 ft; minimum, 59,620 mil gal, Sept. 17, elevation, 1,217.82 ft.

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 southeast of Stilesville, NY. DRAINAGE AREA, 454 mi². 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).

REMARKS.--Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 30, 1963, usable capacity 95,706 mil gal between minimum operating level, elevation, 1,040.0 ft and crest of spillway, elevation, 1,150.0 ft. Capacity, at crest of spillway, 98,618 mil gal; at minimum operating level, 2,912 mil gal; at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft, 1,892 mil gal; in dead storage below release outlet elevation, 1,020.5 ft, 328 mil gal. Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see 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.

COOPERATION.--Records provided by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 108,116 mil gal, Mar. 15, 1977, elevation, 1,155.85 ft; minimum observed (after first filling), 11,901 mil gal, Nov. 7, 1968, elevation, 1,066.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 68,995 mil gal, June 19, elevation, 1,129.01 ft; minimum, 26,758 mil gal, Nov. 29, elevation, 1,089.31 ft.

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 north of Prompton, PA, 0.4 mi upstream from highway bridge and 0.5 mi upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi². 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).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated bedrock spillway at elevation 1,205.00 ft; storage began July 1960. Capacity at elevation 1,205.00 ft is 51,700 acre-ft. Ordinary minimum (conservation) pool elevation, 1,125.00 ft, capacity, 3,420 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,170 acre-ft, June 29, 1973, elevation, 1,138.40 ft; minimum (after first filling), 2,920 acre-ft, Sept. 27, 1964, elevation, 1,123.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content, 4,490 acre-ft, Sept. 28 elevation, 1,128.52 ft; minimum, 3,030 acre-ft, Oct. 15-16 elevation, 1,123.34 ft.

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 upstream from unnamed tributary, 2.4 mi north of Honesdale, PA, and 2.9 mi upstream from mouth. DRAINAGE AREA, 64.5 mi². 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).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,053.00 ft; storage began in October 1959. Capacity at elevation 1,053.00 ft is 24,500 acre-ft. Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 6,520 acre-ft, June 19, 1973, elevation 1,017.40 ft; no storage many times.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,520 acre-ft, Sept. 28 elevation, 1,003.10 ft; 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, PA, 1.2 mi south of Hawley and 1.5 mi upstream from mouth. DRAINAGE AREA, 228 mi². 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.).

REMARKS.--Reservoir formed by concrete gravity-type and earthfill dam with concrete spillway at elevation 1,176.00 ft in two sections. Spillway equipped with roller gate, 14 ft high 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, top of gates, is 209,300 acre-ft of which 108,900 acre-ft (new minimum pool) is controlled storage above elevation 1,170.00 ft, minimum pool. Reservoir is used for generation of hydrolelectric power. Figures given herein represent usable contents. Records prior to 1985 water year included 98,900 acre-ft more visable contents.

COOPERATION.--Records provided by Pennsylvania Power and Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 129,300 acre-ft (new minimum pool), Aug. 19-21, 1955, elevation, 1,193.45 ft; minimum (after first filling), 12,280 acre-ft (old minimum pool), Mar. 28, 1958, elevation, 1,162.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 94,450 acre-ft, June 1, 2 elevation, 1,187.5 ft; minimum, 23,820 acre-ft, Nov. 4, Dec. 6-8, 10 elevation, 1,174.6 ft.

RESERVOIRS 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 northwest of Fowlersville, NY. DRAINAGE AREA, 118 mi² excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft³ between elevations 1,010.0 ft, minimum operating pool, and 1,071.2 ft, top of flashboards. Capacity below elevation 1,010.0 ft, minimum operating pool, about 212.7 mil ft³. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft. Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir.

COOPERATION.--Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,461.6 mil ft³, Mar. 14, 1977, elevation, 1,071.8 ft; minimum (after first filling), -141.4 mil ft³, Dec. 2, 1938, elevation, 987.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,355 mil ft³, Mar. 11, elevation, 1,069.2 ft; minimum, 935.5 mil ft³, Feb. 18, elevation, 1,057.8 ft.

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 southeast of village of Black Lake, NY. DRAINAGE AREA, 23.2 mi². 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.

REMARKS.--Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable capacity, 1,098.2 mil ft³ between elevations 1,165.0 ft, minimum operating pool, and operating pool, about 26.8 mil ft³. Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft.

COOPERATION.--Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,171.2 mil ft³, July 20, 1945, elevation, 1,222.0 ft. minimum observed (after first filling), -26.8 mil ft³, Nov. 15, 1928, elevation, 1,144.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 648.6 mil ft³, Aug. 12, elevation, 1,206.5 ft; minimum observed, 142.0 mil ft³, Nov. 26, elevation, 1,180.6 ft.

REVISIONS.--Monthend elevation, contents, and change in contents have been revised as shown on the first page of reservoir tables. They supersede figures published in WDR NJ-84-2 and WDR NY-84-1.

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 northwest of Fowlersville, NY. DRAINAGE AREA, 6.46 mi² excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WRD NY-75-1: 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.

REMARKS.--Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft³ between elevations 1,043.3 ft, minimum operating pool, and 1,072.0 ft, top of permanent flashboards. Capacity below elevation 1,043.3 ft, minimum operating pool, about 6.54 mil ft³. Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft.

COOPERATION.--Records provided by Orange and Rockland Utilities, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 145.44 mil ft³, July 30, 31, 1945, elevation, 1,073.1 ft; minimum observed (after first filling), about -6.54 mil ft³, Mar. 16, 1963, elevation, 1,038.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 112.64 mil ft³, Mar. 11, elevation, 1,069.1 ft, minimum observed, 41.5 mil ft³, Feb. 18, elevation, 1,057.4 ft.

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 southwest of Neversink, NY. DRAINAGE AREA, 91.8 mi². PERIOD OF RECORD, June 1953 to current year. 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).

REMARKS.--Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal between minimum operating level, elevation, 1,319.0 ft and crest of spillway, elevation, 1,440.0 ft. Capacity at crest of spillway, 37,146 mil gal; at minimum operating level, 2,205 mil gal; dead storage belowand outlet sill at elevation 1,314.0 ft, 1,680 mil gal. Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see 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.

COOPERATION.--Records provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,978 mil gal, Apr. 25, 1961, elevation, 1,441.67 ft; minimum observed (after first filling), 1,985 mil gal, Nov. 25, 1964, elevation, 1,316.98 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 23,454 mil gal, Sept. 30, elevation, 1,408.51 ft; minimum observed, 13,978 mil gal, Dec. 19, elevation, 1,379.81 ft.

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 downstream from Bear Creek and 5 mi northwest of White Haven, PA. DRAINAGE AREA, 289 mi². 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).

REMARKS.--Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft; storage began Feb. 17, 1961; water in reservoir first reached conservation pool elevation in June 1961. Total capacity at elevation 1,450.0 ft is 110,700 acre-ft of which 108,700 acre-ft is controlled storage above elevation 1,300.0 ft or (conservation pool). Dead storage is 2,000 acre-ft. 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.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 62,100 acre-ft, Sept. 28, 1985, elevation, 1,417.08 ft; minimum (after establishment of conservation pool), 981 acre-ft, July 6, 1982, elevation, 1,287.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 62,100 acre-ft, Sept. 28, elevation, 1,417.08 ft; minimum, 1,340 acre-ft, Feb. 18, elevation, 1,293.00 ft.

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 upstream from Hatchery, 2.6 mi upstream from Wild Creek Dam, 4.4 mi upstream from mouth, and 10 mi northeast of Palmerton, PA. DRAINAGE AREA, 16.5 mi². 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).

REMARKS.--Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation 1,000.00 ft; storage began in October 1958. Capacity at elevation 1,000.00 ft is 19,980 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin into Wild Creek basin.

COOPERATION.--Records provided by city of Bethlehem.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 20,800 acre-ft, Apr. 16, 1983, elevation, 1,001.69 ft, correction; minimum, 176 acre-ft, Oct. 6, 1965, elevation, 902.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,560 acre-ft, Oct. 1, elevation, 996.85 ft; minimum, 9,550 acre-ft, Sept. 26, elevation, 972.27 ft.

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 upstream from mouth, 2.4 mi south of Hatchery, and 7.5 mi northeast of Palmerton, PA. DRAINAGE AREA, 22.2 mi². PERIOD OF RECORD, January 1941 to current year. Gage nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Bethlehem).

REMARKS.--Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 820.00 ft; storage began January 27, 1941; water in reservoir first reached minimum pool elevation in February 1941. Total capacity at elevation 820.00 ft is 12,500 acre-ft of which 12,000 acre-ft 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. Since October 1969 the basin upstream has received diversion from Tunkhannock Creek basin.

COOPERATION.--Records provided by City of Bethlehem.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 12,880 acre-ft, May 23, 1942, elevation, 822.93 ft; minimum (after first filling), 2,680 acre-ft, Nov. 15, 1966, elevation, 774.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,160 acre-ft, Oct. 8, elevation, 816.67 ft; minimum, 10,070 acre-ft, May 24, elevation, 812.69 ft.

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 upstream from gaging station on Pohopoco Creek, 0.55 mi upstream from Sawmill Run and 2.3 mi northeast of Parryville, PA. DRAINAGE AREA, 96.3 mi². 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).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated, partially lined spillway at elevation 651.00 ft; storage began Feb. 8, 1971. Capacity at elevation 651.00 ft is 68,300 acre-ft. Ordinary minimum (conservation) pool elevation, 628.00 ft, capacity, 41,250 acre-ft. Dead storage is 1,390 acre-ft. 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.

COOPERATION.--Records provided by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 49,730 acre-ft, Jan. 29, 1976, elevation, 636.30 ft; minimum, 15,110 acre-ft, March 31, 1983 elevation, 588.79

EXTREMES FOR CURRENT YEAR.--Maximum contents 43,500 acre-ft, Sept. 28, elevation, 630.30 ft; minimum, 39,850 acre-ft, Nov. 28, elevation, 626.56 ft.

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, 25.3 mi². PERIOD OF RECORD, February 1887 to current year. Monthend contents only prior to October 1950, published in WSP 1302. REVISED RECORDS, WDR NJ-82-2: Drainage area; WDR NJ-83-2: Corrections 1981 (m/m). GAGE, max-min recorder and staff gage. 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by concrete spillway and earthfill dam completed about 1828. Crest of spillway was lowered 0.11 ft in 1925. Usable capacity, 7,459,000,000 gal between (gage height -2.6 ft, sills of gates and 9.00 ft, crest of spillway). Flow regulated by four gates (3 by 5 ft, also by one 24-inch pipe with gate valve to recreation fountain 250 ft downstream from dam. Dead storage, about 8,117,000,000 gal. Figures given herein represent usable capacity. Lake used for recreation. CORRECTIONS.--Once-daily staff readings furnished by New Jersey Department of Environmental Protection.

COOPERATION.--Records provided by New Jersey Department of Environmental Protection.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,777,000,000 gal, August 19, 1955 correction, gage height, 10.55 ft; minimum, 1,525,000,000 gal, Dec. 29, 1960, gage height, 0.65 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 7,795,000,000 gal, Sept. 30, gage height, 9.40 ft; minimum, 5,412,000,000 gal, Nov. 26-28, gage height, 6.46 ft.

01459350 NOCKAMIXON RESERVOIR.--Lat 40°28'13", long 75°11'10", Bucks County, PA, Hydrologic Unit 02040105, at dam on Tohickon Creek, 6.2 mi upstream from gaging station on Tohickon Creek, 2.9 mi upstream from Mink Run and 1.3 mi east of Ottsville. DRAINAGE AREA, 73.3 mi². PERIOD OF RECORD, December 1973 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pennsylvania Department of Environmental Resources).

REMARKS.--Reservoir formed by earthfill dam with concrete spillway at elevation 395.0 ft. Storage began Decmeber 1973. Total capacity 66,500 acre-ft at elevation 410 ft. Reservoir is used primarily for recreation, but can be used for water supply and flood control.

COOPERATION.--Records provided by Pennsylvania Department of Environmental Resources.

EXTRMES FOR PERIOD OF RECORD.--Maximum contents, 44,380 acre-ft, Jan. 20, 1979, elevation 397.85 ft; minimum (after first filling) 15,900 acre-ft, around Dec. 31, 1975, elevation 372.78 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 44,000 acre-ft, Sept. 27, elevation 397.60 ft; minimum, 38,450 acre-ft, Nov. 12, elevation 393.75 ft.

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 upstream from mouth and 2.3 mi north of Hometown, PA. DRAINAGE AREA, 7.19 mi², revised. 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.).

REMARKS.--Reservoir formed by earth fill dam, with ungated concrete spillway at elevation 1,182.00 ft; storage began in February 1933. Capacity at elevation, 1,182.00 ft is 8,290 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam.

COOPERATION.--Records provided by Panther Valley Water Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 8,570 acre-ft, Oct. 15, 1955, elevation, 1,182.92 ft, but may have been greater during 1950 and 1951 water years; minimum (after initial filling), 588 acre-ft, Dec. 8, 1944, elevation, 1,136.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 7,630 acre-ft, Oct. 1, elevation, 1,179.75 ft; minimum, 6,530 acre-ft, Sept. 30, elevation, 1,175.75 ft.

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01470870 BLUE MARSH LAKE.--Lat 40°22'45", long 76°01'59", Berks County, PA, Hydrologic Unit 02040203, at dam on Tulpehocken Creek, 0.8 mi upstream from gaging station on Tulpehocken Creek, 1.0 mi northeast of Blue Marsh, PA, 1.9 mi upstream from Reber's Bridge, and 5.1 mi southeast of Bernville, PA. DRAINAGE AREA, 175 mi². PERIOD OF RECORD, April 1979 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 307.00 ft. Storage began April 23, 1979. Capacity at elevation, 307.00 ft is 50,000 acre-ft. Dead storage is 3,000 acre-ft. Reservoir is used for flood control, water supply, and recreation. Figures herein represent total contents.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 39,480 acre-ft, Apr. 17, 1983, elevation, 301.65 ft; minimum (after first filling), 16,570 acre-ft, Sept. 26, 1985 elevation, 283.88 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 24,740 acre-ft, Nov. 29, elevation, 291.56 ft; minimum, 16,570 acre-ft, Sept. 26, elevation, 283.88 ft.

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, PA, Hydrologic Unit 02040203, at dam on Perkiomen Creek, 0.4 mi west of Green Lane, PA and 2.1 mi upstream from Unami Creek. DRAINAGE AREA, 70.9 mi². 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.).

REMARKS.--Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation 286.00 ft; storage began December 21, 1956. Capacity at spillway level, elevation 286.00 ft, 13,430 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam.

COOPERATION.--Records provided by Philadelphia Suburban Water Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,030 acre-ft, June 23, 1972, elevation, 290.05 ft; minimum (after first filling), 1,270 acre-ft, Aug. 25, 1957, elevation, 251.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,920 acre-ft, Feb. 13, elevation, 286.55 ft; minimum, 11,520 acre-ft, Sept. 26, elevation, 283.69 ft.

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

Date	Elevation (feet)†	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01433100 TORONTO RESERVOIR		
Sept. 30...	1,196.0	422	-
Oct. 31...	1,196.4	436R	+ 5.2R
Nov. 30...	1,185.0	211	- 86.8R
Dec. 31...	1,193.5	368	+ 58.6
CAL YR 1983	-	-	+ 3.6
Jan. 31...	1,196.5	434	+ 24.6
Feb. 28...	1,210.0R	781R	+138. R
Mar. 31...	1,206.1	674	- 39.9R
Apr. 30...	1,217.3	1,005	+128
May 31...	1,221.7	1,160	+ 57.9
June 30...	1,216.6	981	- 69.1
July 31...	1,215.7	952	- 10.8
Aug. 31...	1,207.5	712	- 89.6
Sept. 30...	1,196.8	440	-105
WTR YR 1984	-	-	+ 0.6

R Revised

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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 RESERVOIR			01428900 PROMPTON RESERVOIR		
Sept. 30...	1,257.13	110,929	-	1,116.29	53,454	-	1,123.43	3,060	-
Oct. 31...	1,248.03	97,290	-681	1,110.63	36,806	-831	1,123.85	3,180	+2.0
Nov. 30...	1,237.58	82,976	-738	1,091.36	28,448	-431	1,125.28	3,580	+6.7
Dec. 31...	1,238.96	84,784	+90.2	1,111.20	47,723	+962	1,126.20	3,840	+4.2
CAL YR 1984	-	-	-17.8	-	-	31.9	-	-	+0.2
Jan. 31...	1,232.66	76,735	-402	1,114.84	51,771	+202	1,124.53	3,370	-7.6
Feb. 29...	1,231.11	74,834	-105	1,115.86	52,953	+65.3	1,126.20	3,840	+8.5
Mar. 31...	1,242.64	89,733	+744	1,122.45	60,774	+390	1,125.45	3,630	-3.4
Apr. 30...	1,249.18	98,954	+476	1,123.79	62,411	+84.4	1,125.21	3,560	-1.2
May 31...	1,245.23	93,319	-281	1,126.86	66,257	+192	1,125.17	3,550	-0.2
June 30...	1,239.17	85,062	-426	1,128.84	68,015	+90.7	1,124.24	3,290	-4.4
July 31...	1,232.10	76,045	-450	1,125.77	64,869	-157	1,124.94	3,480	+3.1
Aug. 31...	1,221.50	63,658	-618	1,124.99	63,876	-49.6	1,124.14	3,260	-3.6
Sept. 30...	1,222.18	64,418	+39.2	1,125.20	64,143	+13.8	1,126.80	3,920	+11.1
WTR YR 1985	-	-	-197	-	-	+45.3	-	-	+1.2

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

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 BRIDGE RESERVOIR		
Sept. 30...	976.01	0	-	1,178.9	46,220	-	1,063.1	1,121	-
Oct. 31...	976.00	0	0	1,174.8	24,860	-347	1,063.1	1,121	+7.1
Nov. 30...	975.99	0	0	1,175.1	26,430	+26.4	1,063.6	1,139	7.1
Dec. 31...	979.77	+43	+ .7	1,176.1	31,730	+86.2	1,066.0	1,229	+33.6
CAL YR 1984	-	-	+0.1	-	-	-39.5	-	-	+2.5
Jan. 31...	976.37	-43	-0.7	1,175.7	29,610	-34.5	1,-61.3	1,056	-64.7
Feb. 29...	unknown	-	-	1,178.4	44,060	+260	1,062.7	1,106	-64.7
Mar. 31...	977.57	0	-	1,179.4	49,460	+87.8	1,063.3	1,128	+8.2
Apr. 30...	976.60	0	0	1,182.8	68,000	+311	1,062.7	1,106	-8.4
May 31...	976.68	0	0	1,187.2	92,740	+402	1,0665.5	1,249	+53.2
June 30...	976.25	0	0	1,185.8	84,780	-134	1,0662.2	1,237	-4.5
July 31...	976.35	0	0	1,184.6	77,060	-125	1,066.6	1,252	+5.8
Aug. 31...	975.91	0	0	1,181.0	58,100	-308	1,062.0	1,081	-64.1
Sept. 30...	978.85	+17	+.3	1,182.8	68,000	+166	1,067.8	1,299	+84.3
WTR YR 1985	-	-	+.02	-	-	30.1	-	-	+5.7

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			01435900 NEVERSINK RESERVOIR		
Sept. 30...	1,196.8	440	-	1,064.6	81.1	-	1,401.50	20,873	-
Oct. 31...	1,184.0	195	-91.6	1,065.0	83.7	+1.0	1,388.83	16,644	-211
Nov. 30...	1,181.3	153	-16.4	1,063.6	74.8	-3.4	1,382.14	14,638	-103
Dec. 31...	1,186.0	228	+28.2	1,065.9	89.6	+5.5	1,381.80	14,540	-4.9
CAL YR 1984	-	-	-4.4	-	-	+.3	-	-	-33.6
Jan. 31...	1,189.2	284	+20.9	1,061.5	62.2	-10.2	1,383.79	15,117	+28.8
Feb. 29...	1,189.3	286	+0.7	1,062.2	66.3	+1.7	1,389.97	17,002	+104
Mar. 31...	1,198.9	490	+76.1	1,063.2	72.3	+2.3	1,400.65	20,572	+178
Apr. 30...	1,201.2	546	+21.9	1,062.5	68.1	-1.6	1,403.09	21,443	+44.9
May 31...	1,203.4	603	+21.0	1,066.7	95.1	+10.1	1,404.50	21,957	+25.7
June 30...	1,204.8	639	+14.1	1,066.0	90.3	-1.9	1,402.17	21,111	-43.6
July 31...	1,205.7	663	+8.9	1,066.4	93.0	+1.0	1,404.80	22,067	+47.7
Aug. 31...	1,202.3	574	-33.2	1,063.1	71.7	-8.0	1,404.78	22,060	-.4
Sept. 30...	1,201.6	556	-6.9	1,067.8	102.9	+12.1	1,408.72	23,534	+76.0
WTR YR 1985	-	-	+3.7	-	-	+.7	-	-	+11.3

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...	1,300.00	2,000	-	997.03	18,640	-	815.92	10,960	-
Oct. 31...	1,300.67	2,070	+1.1	994.00	17,310	-21.6	814.13	10,460	-8.1
Nov. 30...	1,305.36	2,550	+8.1	989.40	15,410	-31.9	815.13	10,740	+4.7
Dec. 31...	1,303.89	2,390	-2.6	985.92	14,070	+21.8	816.52	11,120	+6.2
CAL YR 1984	-	-	-.4	-	-	-6.8	-	-	-1.0
Jan. 31...	1,299.99	2,000	-6.3	984.02	13,370	-11.4	815.13	10,740	-6.2
Feb. 29...	1,299.89	1,990	-.2	982.29	12,770	-10.8	815.66	10,880	+2.5
Mar. 31...	1,301.56	2,160	+2.8	984.04	13,380	+9.9	815.46	10,830	-.8
Apr. 30...	1,298.62	1,850	-5.2	983.71	13,270	-1.8	815.0	10,720	-1.8
May 31...	1,391.67	36,900	+570	986.75	14,390	+18.2	813.26	10,220	-8.1
June 30...	1,391.40	36,680	-3.7	985.23	13,810	-9.7	813.15	10,190	-.5
July 31...	1,392.86	37,850	+19.0	981.69	12,560	-20.3	813.37	10,250	+1.0
Aug. 31...	1,389.54	35,190	-43.2	977.08	11,010	-25.2	813.40	10,260	+.2
Sept. 30...	1,397.83	42,250	+119	974.96	10,330	-11.4	814.46	10,550	+4.9
WTR YR 1985	-	-	+55.6	-	-	-11.5	-	-	-.6

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)†	Contents (acre-feet)	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)
	01449790 BELTZVILLE LAKE			01455400 LAKE HOPATCONG			01459350 NOCKAMIXON RESERVOIR		
Sept. 30...	627.69	40,960	-	8.20	6,799	-	394.65	39,710	-
Oct. 31...	627.49	40,770	-3.1	8.16	6,767	-1.6	395.20	40,480	+12.5
Nov. 30...	626.72	40,030	-12.4	6.58	5,505	-65.1	394.10	38,940	-25.9
Dec. 31...	628.10	41,340	+21.3	7.06	5,881	+18.8	395.10	40,340	+22.8
CAL YR 1984	-	-	+.2	-	-	+1.1	-	-	+.1
Jan. 31...	628.00	41,250	-1.5	6.50	5,443	-21.9	395.10	40,340	0
Feb. 29...	628.05	41,300	+.9	6.96	5,803	+19.9	395.05	40,270	-1.3
Mar. 31...	628.08	41,330	+.5	7.34	6,104	+15.0	395.05	40,270	0
Apr. 30...	628.00	41,250	-1.3	7.36	6,120	+.8	394.90	40,060	-3.5
May 31...	628.14	41,380	+2.1	8.82	7,310	+59.4	394.90	40,060	0
June 30...	628.23	41,470	+1.5	9.18	7,610	+15.5	394.80	39,920	-2.4
July 31...	628.12	41,360	-1.8	9.30	7,711	+5.0	394.80	39,920	0
Aug. 31...	628.18	41,420	+1.0	9.10	7,543	-8.4	394.80	39,920	0
Sept. 30...	628.03	41,280	-2.4	9.36	7,761	+11.2	395.00	40,200	+4.7
WTR YR 1985	-	-	+.4	-	-	+4.1	-	-	+.7

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)
	01469200 STILL CREEK RESERVOIR			01470870 BLUE MARSH LAKE			01472200 GREEN LAKE RESERVOIR		
Sept. 30...	1,180.24	7,770	-	290.08	22,990	-	285.85	13,300	-
Oct. 31...	1,178.75	7,360	-6.7	290.00	22,900	-1.5	285.97	13,410	+1.8
Nov. 30...	1,177.75	7,080	-4.7	291.10	24,180	+21.5	285.95	13,390	-.3
Dec. 31...	1,176.50	6,740	-5.5	290.24	23,180	-16.3	286.00	13,430	+.7
CAL YR 1984	-	-	-2.1	-	-	+6.9	-	-	0
Jan. 31...	1,176.25	6,670	-1.1	285.15	17,770	-87.9	286.86	13,310	-2.0
Feb. 29...	1,177.75	7,080	+7.4	284.95	17,580	-3.4	286.03	13,460	+2.7
Mar. 31...	1,178.50	7,290	+3.4	285.33	17,950	+6.0	285.95	13,390	-1.1
Apr. 30...	1,178.75	7,360	+1.2	289.91	22,800	+81.5	285.73	13,190	-3.4
May 31...	1,179.25	7,500	+2.3	290.55	23,540	+12.0	285.88	13,330	+2.3
June 30...	1,178.00	7,150	-5.9	290.22	23,150	-6.6	285.55	13,030	-5.0
July 31...	1,177.25	6,940	-3.4	290.34	23,270	+2.0	284.85	12,420	-9.9
Aug. 31...	1,176.25	6,670	-4.4	290.16	23,080	-3.1	285.35	12,850	+7.0
Sept. 30...	1,175.75	6,530	-2.4	287.94	20,610	-41.5	286.07	13,490	+10.8
WTR YR 1985	-	-	-1.7	-	-	-3.3	-	-	+.3

‡ Elevation at 0900 hours on first day of following month.
† Elevation or gage height at 2400 hours.
# 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 provided by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS.--WRD NY-71: 1970. WRD NY-72: 1970. WDR NJ-81-2: 1980.

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 provided by Board of Water Supply, City of New York.
REVISED RECORDS.--WDR NJ-81-2: 1980. WDR NY-81-1: 1980.

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.
REVISED RECORDS.--WDR NJ-82-2: 1976, 1977.

01436520 Village of Woodridge, NY, diverts water from East Pond Reservoir, tributary to Neversink River, for municipal supply outside of basin. Records provided by village of Woodridge.

01437360 Diversion from Bear Swamp Reservoir, NY, tributary to Neversink River, by the New York State Training School, Otisville, NY, for water supply outside of basin. Records provided 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 provided 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 provided 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). Canal closed for dredging during the entire year.
REVISED RECORDS.--WDR NJ-82-2: 1981.

WITHDRAWALS BY CITY OF NEW YORK

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	01415200 PEPACTON RESERVOIR	01423900 CANNONSVILLE RESERVOIR	01435800 NEVERSINK RESERVOIR
October	698	185	193
November	678	229	149
December	697	50.3	180
CAL YR 1984	533	184	212
January	696	112	75.9
February	585	316	0
March	55.0	701	89.2
April	129	597	148
May	658	122	104
June	696	51.7	107
July	693	70.3	107
August	696	30.8	104
September	255	479	101
WTR YR 1985	545	244	114

DIVERSIONS AND WITHDRAWALS--Continued

MISCELLANEOUS WITHDRAWALS FROM BASIN, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

	a01436520 EAST POND RESERVOIR	*01437360 BEAR SWAMP RESERVOIR	01447750 BEAR CREEK	‡01448830 HAZLE CREEK	01460500 DELAWARE & RARITAN CANAL
October	DATA NOT AVAILABLE	DATA NOT AVAILABLE	0	DATA NOT AVAILABLE	0
November			0		0
December			0		0
CAL YR 1984			.1		17.1
January			0		0
February			0		0
March			0		0
April			0		0
May			0		0
June			0		0
July			0		0
August			0		0
September			0		0
WTR YR 1985			0		0

a Village of Woodridge has estimated that virtually all the withdrawal from East Pond Reservoir was returned to the Neversink River.
* Data not available this year but, from past records, monthly withdrawal is approximately 0.5 ft^3/s.
‡ Data not available this year but, from past records, monthly withdrawal is approximately 4 ft^3/s.

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 provided by the Borough of Morrisville, PA.

01463490 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 provided by the City of Trenton.
REVISED RECORDS.--WDR NJ-82-2: Station number.

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 provided 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 lossesmission. Records provided by the Delaware River Basin Commission.

WITHDRAWALS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Month	01463480 BOROUGH OF MORRISVILLE	01463490 CITY OF TRENTON	CITY OF PHILADELPHIA		
			01467030 DELAWARE RIVER TORRESDALE	01474500 SCHUYLKILL RIVER BELMONT	01474500 SCHUYLKILL RIVER QUEEN LANE
October	6.29	49.3	278	94.7	153
November	5.91	46.7	304	90.8	119
December	6.12	45.2	304	88.2	124
CAL YR 1984	6.27	49.0	287	108	146
January	6.46	47.8	314	94.1	140
February	6.50	47.5	297	101	169
March	6.30	43.4	314	99.2	129
April	6.42	45.2	308	87.3	146
May	6.24	46.1	286	80.1	167
June	6.31	46.0	310	90.5	142
July	6.15	49.9	324	101	161
August	6.20	49.7	336	98.1	152
September	6.09	49.3	342	77.7	148
WTR YR 1984	6.24	47.2	310	91.9	146

DIVERSIONS AND WITHDRAWALS--Continued

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 provided by the Delaware River Basin Commission.

01578420 Water diverted from West Branch Octoraro Creek (Susquehanna River basin) at the McCray Plant of the Coatsville Water Authority (formerly Octoraro Water Co.) for municipal use. After use the water is released into the Delaware River basin. Records provided by the Delaware River Basin Commission.

01578450 Water divered 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 provided by the Delaware River Basin Commission.

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

Month	01367630 MORRIS LAKE	OCTORARO CREEK	
		01578420 COATSVILLE WATER AUTHORITY	01578450 CHESTER WATER AUTHORITY
October	1.19	1.98	41.4
November	1.19	1.87	41.5
December	1.11	2.07	40.4
CAL YR 1984	1.4	1.9	41.2
January	1.26	1.85	40.2
February	1.46	2.07	40.2
March	1.59	2.05	38.0
April	1.31	1.91	39.5
May	1.33	1.77	42.1
June	1.39	1.96	44.3
July	1.20	2.01	46.5
August	1.25	2.02	45.9
September	1.21	1.98	44.6
WTR YR 1985	1.3	2.1	42.0

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 annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial record stations.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower stages 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-STATE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Maurice River basin					
01412000	Menantico Creek near Millville, NJ	Lat 39°25'12", long 74°58'00", Cumberland county, on lef bank at upstream side of Mays Landing Road (State Route 552), 0.9 mi downstream of Menantico Lake, 4.0 mi northeast of Millville, and 7.0 mi upstream from mouth. Datum of gage is 36.63 ft above National Geodetic Vertical Datum of 1929.	23.2	1931-57‡, 1978-84‡, 1985	9-28-85	2.72	145
		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 upstream from county bridge, Highway 31, at Seeley, 450 ft upstream from mouth and 4.1 mi northwest of Bridgeton. Datum of gage is 42.23 ft above National Geodetic Vertical Datum of 1929.	2.58	1952-67‡, 1968-85	9-27-85	4.70	243
		Delaware River basin					
*01445000	Pequest River at Huntsville, NJ	Lat 40°58'52", long 74°46'36", Sussex County, on right bank, 20 ft upstream from highway bridge in Huntsville, and 0.4 mi downstream from East Branch. Datum of gage is 553.81 ft above National Geodetic Vertical Datum of 1929.	31.0	1940-62‡, 1963-85	9-27-85	3.52	204
01445430	Pequest River at Townsbury, NJ	Lat 40°51'06", long 74°56'02", Warren County, upstream of highway bridge in Townsbury, 2.8 mi northeast of Pequest and 8.7 mi west of Hackettstown. Altitude of gage is 480 ft, from topographic map.	92.5	1977-80‡, 1981-85	2-13-85 9-27-85	3.65 3.64	c 1,010
*01446000	Beaver Brook near Belvidere, NJ	Lat 40°50'40", long 75°02'48, Warren County, on right bank, 2,000 ft upstream from mouth, and 2 mi east Belvidere. Datum of gage is 303.36 ft National Geodetic Vertical Datum of 1929.	36.7	1922-61‡, 1963-85	9-27-85	3.16	275

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STATE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Delaware River basin--Continued					
*0145520	Pohatcong Creek at New Village, NJ	Lat 40°42'57", long 75°04'20", Warren County, at bridge on Edison Road, 0.4 mi southeast of New Village, and 4.3 mi upstream from Merrill Creek. Datum of gage is 308.32 ft above National Geodetic Vertical Datum of 1929.	33.3	1960-69‡, 1970-85	9-27-85	5.24	1,120
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 downstream from Lake Hopatcong Dam in Landing. Datum of gage is 904.99 ft above National Geodetic Vertical Datum of 1929.	25.3	1929-75‡, 1976-85	9-27-85	3.54	244
01456000	Musconetcong River near Hackettstown, NJ	Lat 40°53'17", long 74°47'53", Warren County, on right bank 75 ft upstream from Saxton Falls Dam, 0.5 mi upstream from Erie-Lackawanna Railway bridge, and 3.0 mi northeast of Hackettstown. Datum of gage is 630.93 ft above National Geodetic Vertical Datum of 1929.	68.9	1921-73‡, 1974-85	9-27-85	2.59	832
01457500	Delaware River at Riegelsville, NJ	Lat 40°35'36", long 75°11'17", Warren County, just upstream of suspension bridge at Riegelsville, 600 ft 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 National Geodetic Vertical Datum of 1929.	6,328	1906-71‡, 1972-85	9-28-86	18.19	82,600
01463610	Assunpink Creek at Edinburg, NJ	Lat 40°15'28", long 74°37'05", Mercer County, on left bank, downstream side of bridge on Old Trenton Road (Route 535), 0.1 mi west of Edinburg, 0.1 mi upstream from Bridegroom Run and 3.0 mi north of Robbinsville. Datum of gage is 63.46 ft above National Geodetic Vertical Datum of 1929.	25.0	1979-85 (discontinued)	9-27-85	5.55	f
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 downstream from Oakford Lake Dam. Datum of gage is 43.46 ft above National Geodetic Vertical Datum of 1929.	41.2	1968-85	9-27-85	b19.34	651
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 downstream from Conines Millpond dam. Datum of gage is 50.98 ft above National Geodetic Vertical Datum of 1929.	17.4	1968-85	8-01-85	b4.71	460
01464530	Blacks Creek at Mansfield Square, NJ	Lat 40°07'02", long 74°41'58", Burlington County, at bridge on Mansfield Square-Crosswicks Road, 0.4 mi east of Mansfield Square, and 3.4 mi upstream from mouth. Datum of gage is 12.44 ft above National Geodetic Vertical Datum of 1929.	19.7	1978-85	2-13-85	b7.61	648

ANNUAL MAXIMUM DISCHARGE AT CREST-STATE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Delaware River basin--Continued					
01464538	Crafts Creek at Columbus, NJ	Lat 40°04'44", long 74°43'07", Burlington County, at bridge on Columbus-Mansfield road, 0.4 mi north of Columbus, and 6.0 mi northeast of Mount Holly. Datum of gage is 33.71 ft above National Geodetic Vertical Datum of 1929.	5.38	1978-85	2-13-85	b6.54	180
01464582	Assiscunk Creek near Columbus, NJ	Lat 40°03'13", long 74°44'34", Burlington County, at bridge on Petticoat Bridge Road, 1.7 mi southwest of Columbus, 4.0 mi northeast of Mount Holly, and 0.1 mi downstream from Assiscunk Branch.	10.9	1978-85	2-13-85	b6.11	315
01465850	South Branch Rancocas Creek at Vincentown, NJ	Lat 39°56'22", long 74°45'50", Burlington County, on left bank 150 ft downstream from highway bridge on Lumberton-Vincentown road, 0.8 mi west of Vincentown, 2.9 mi southeast of Lumberton, and 3.1 mi upstream from Southwest Branch. Datum of gage is 13.17 ft above National Geodetic Vertical Datum of 1929.	64.5	1962-75‡, 1976-85	9-27-85	3.97	229
#01465880	Southwest Branch Rancocas Creek at Medford, NJ	Lat 39°53'43", long 74°49'26", Burlington County, at bridge on Argonne Highway (State Route 541), 0.6 mi south of intersection of Argonne Highway and State Highway 70 at Medford, and 5.3 mi upstream from mouth.	47.2	1983-85	9-27-85	9.46	700
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 northwest of Cinnaminson, 1.7 mi upstream from mouth, and 2.1 mi east of Palmyra. Datum of gage is 11.36 ft above National Geodetic Vertical Datum of 1929.	5.77	1975-85	9-27-85	b4.43	530
01467069	North Branch Pennsauken Creek near Moorestown, NJ	Lat 39°57'07", revised, long 74°58'10", Burlington County, at bridge on State Route 41 (Kings Highway), and 1.7 mi southwest of Moorestown. Datum of gage is 5.9 ft above National Geodetic Vertical Datum of 1929.	12.8	1975-85	9-27-85	5.49	790
#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 west of Marlton. Datum of gage is 36.36 ft above National Geodetic Vertical Datum of 1929.	5.34	1964-85	9-27-85	b3.22	341
#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 east of Cuthbert Avenue. Datum of gage is 18.74 ft above National Geodetic Vertical Datum of 1929.	1.33	1964-85	9-27-85	4.25	203
01467317	South Branch Newton Creek at Haddon Heights, NJ	Lat 39°52'45", long 75°04'26", Camden County, at bridge on Haddon Heights Park in Haddon Heights, and 2.6 mi south of Collingswood. Datum of gage is 23.34 ft above National Geodetic Vertical Datum of 1929.	0.63	1964-85	9-27-85	3.15	87

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STATE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Delaware River basin--Continued					
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 upstream from confluence with the South Branch. Datum of gage is 26.89 ft above National Geodetic Vertical Datum of 1929.	7.17	1975-85	9-27-85	1.99	412
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 east of Pitman, and 2.0 mi upstream from Porch Branch. Datum of gage is 68.51 ft above National Geodetic Vertical Datum of 1929.	6.05	1940-76‡, 1977-85	9-27-85	1.44	57
01475019	Mantua Creek at Salina, NJ	Lat 39°46'13", long 75°07'59", Gloucester County, at bridge on Salina-Sewell Road, 0.2 mi downstream of Bees Branch, and 0.5 mi west of Salina. Datum of gage is 11.67 ft above National Geodetic Vertical Datum of 1929.	14.1	1975-85	9-27-86	5.65	385
01477110	Raccoon Creek at Mullica Hill, NJ	Lat 39°44'10", long 75°13'30", Gloucester County, at bridge on State Routes 45 and 77 in Mullica Hill, 1,200 ft downstream of Mullica Hill Pond, and 5.5 mi west of Pitman. Datum of gage is 21.91 ft above National Geodetic Vertical Datum of 1929.	15.6	1978-85	9-27-85	b3.38	550
01477480	Oldmans Creek near Harrisonville, NJ	Lat 39°41'20", revised, long 75°18'38", Salem County, at bridge on Harrisonville Station Road, 2.4 mi west of Harrisonville, and 2.8 mi north of Woodstown. Datum of gage is 16.58 ft above National Geodetic Vertical Datum of 1929.	13.8	1975-85	2-12-85	5.19	303
01482500	Salem River at Woodstown, NJ	Lat 39°38'36", long 75°19'52", Salem County on right side of Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge. Datum of gage is 29.49 ft above National Geodetic Vertical Datum of 1929.	14.6	1940‡, 1942-84‡, 1985	2-12-85	13.1	2,120

\# Also a low-flow partial-record station.
‡ Operated as a continuous-record gaging station.
< Gage height is less than following figure.
† Discharge not determined.
b Downstream side of bridge.
c Stage-discharge relationship ice affected, discharge not determined
e Peak did not reach bottom of gage.
f Peak discharge for the period was less than the minimum recordable discharge.
g Former low flow site.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made at 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 groundwater 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 1985

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Delaware River basin				
01443475	Trout Brook near Middleville, NJ	Lat 41°03'03", long 74°51'23", Sussex County, Hydrologic Unit 02040105, at bridge on County Highway 612, 0.4 mi upstream from mouth, 0.5 mi southeast of Middleville, and 5.1 mi west of Newton.	24.0	1979-85	4-27-85 8-12-85 9-17-85	16 11 5.8
01445800	Honey Run near Ramseyburg, NJ	Lat 40°53'44", long 75°01'04", Warren County, Hydrologic Unit 02040105, at bridge on Hope-Delaware Road, 2.3 mi northeast of Ramseyburg, 2.8 mi southwest of Hope, and 3.1 mi upstream from mouth.	2.21	1981-85	4-27-85 8-12-85 9-17-85	0.93 0.40 0.14
01455230	Merrill Creek at Coopersville, NJ	Lat 40°42'25", long 75°06'54", Warren County, Hydrologic Unit 02040105, at bridge on Lows Hollow Road at Coopersville, 0.9 mi north of Stewartsville, 2.1 mi upstream from mouth, and 3.3 mi east of Phillipsburg.	3.85	1981-85	4-27-85 8-12-85 9-17-85	3.0 2.7 1.9
01455780	Lubbers Run at Lockwood, NJ	Lat 40°55'36", long 74°43'09", Sussex County, Hydrologic Unit 02040105, at bridge on U.S. Route 206 at Lockwood, 1.0 mi upstream from mouth, and 1.5 mi northwest of Stanhope.	16.3	1982-85	4-27-85 8-12-85 9-17-85	5.8 8.6 5.9
01461300	Wickecheoke Creek at Stockton, NJ	Lat 40°24'41", long 74°59'13", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, at Prallsville, 0.2 mi upstream of mouth and 0.6 mi northwest of Stockton.	26.6	1958-62, 1964, 1977-83, 1985	11-13-84	3.5
01462800	Jacobs Creek at Somerset, NJ	Lat 40°16'42", long 74°51'14", Mercer County, Hydrologic Unit 02040105, at bridge on State Route 29, 400 ft upstream from mouth, 0.3 mi north of Somerset and 1.4 mi south of Washington Crossing Road.	13.3	1958-62, 1964, 1985	11-15-84 7-19-85	1.4 0.68
01465884	Sharps Run at Route 541 at Medford, NJ	Lat 39°54'18", long 74°49'30", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 541 (Argonne Highway) in Medford, 0.7 mi upstream from mouth, 1.2 mi northeast of Oliphants Mills, and 2.6 mi northwest of Medford Lakes.	4.41	1982-85	4-27-85 8-13-85 9-17-85	1.14 0.32 0.23
01465898	Little Creek near Lumberton, NJ	Lat 39°56'16", long 74°47'38", Burlington County, Hydrologic Unit 02040202, at bridge on Eayrestown Road, 0.6 mi upstream from mouth, 1.9 mi southeast of Lumberton, and 3.0 mi northeast of Medford.	19.2	1982-85	4-27-85 8-13-85 9-17-85	7.9 1.8 1.3

* Also a crest-stage partial-record station.

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 1985

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Delaware River basin				
01446400 Pequest River	Delaware River	Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at bridge on State Route 519, in Belvidere, 1,400 ft upstream of mouth.	157	1950,53, 1955,74, 1977-82, 1984	11-20-84 3-27-85 5-14-85 7-25-85	*59 *116 *159 *78
01457400 Musconetcong River	Delaware River	Lat 40°35'32", long 75°11'11", Warren County, Hydrologic Unit 02040105, at bridge on State Highway 13 at Riegelsville, 0.2 mi north of Mount Joy, and 0.2 mi upstream from mouth.	156	1973, 1977-81, 1982	11-7-84	*239
01462733 Jacobs Creek	Delaware River	Lat 40°19'53", long 74°50'11", Mercer County, Hydrologic Unit 02040105, at bridge on Pennington-Harbourton Road, 500 ft upstream of unnamed tributary, 0.8 mi east of State Route 579 at Ackors Corner and 2.2 mi upstream of Woolsey Brook.	-	-	11-15-84 7-19-85	*0.22 *0.06
01462737 Jacobs Creek	Delaware River	Lat 40°19'07",long 74°50'18", Mercer County, Hydrologic Unit 02040105, at bridge on Pennington-Titusville Road, 0.8 mi east of Bear Tavern Road (State Route 579)1.3 mi upstream of Woolsey Brook and 2.6 mi west of Pennington.	-	-	11-15-84 7-19-85	*0.36 *0.08
01462740 Jacobs Creek	Delaware River	Lat 40°18'07", long 74°50'00", Mercer County, Hydrologic Unit 02040105, just upstream of Woolsey Brook, 0.4 mi downstream of Pennington Road (State Route 546) and on right side of Jacobs Creek Road 0.5 mi south of Pennington Road and 1.0 mi southeast of Bear Tavern.	-	-	11-15-84 7-19-85	*0.06 *0.01
01462742 Woolsey Brook	Jacobs Creek	Lat 40°19'11", long 74°48'09", Mercer County, Hydrologic Unit 02040105, at bridge on Dublin Road, 0.5 mi upstream of confluence with unnamed tributary and 0.8 mi southwest of Pennington.	-	-	11-15-84 7-19-85	*0.06 *0.01
01462744 Woolsey Brook tributary No. 1	Woolsey Brook	Lat 40°18'47", long 74°48'08", Mercer County, Hydrologic Unit 02040105, at bridge on Dublin Road, 0.3 mi north of Pennington Road (State Route 546) 0.45 mi upstream from Woolsey Brook and 1.2 mi south of Pennington.	-	-	11-15-84 7-19-85	*0.06 *0.002
01462747 Woolsey Brook	Jacobs Creek	Lat 40°18'51", long 74°48'53", Mercer County, Hydrologic Unit 02040105, at bridge on Scotch Road, 0.5 mi north of State Route 546 at Harts Corner and 1.3 mi from mouth.	-	-	11-15-84 7-19-85	*0.14 *0
01462750 Woolsey Brook	Jacobs Creek	Lat 40°18'27", long 74°49'36", Mercer County, Hydrologic Unit 02040105, at bridge on Pennington Road (State Route 546), downstream of unnamed pond, 0.5 mi upstream of mouth, 1.2 mi east of Bear Tavern Road (State Route 579) at Bear Tavern.	-	-	11-15-84 7-19-85	*0.18 *0.01

DISCHARGE MEASUREMENT AT MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Delaware River basin--Continued				
01462755 Woolsey Brook tributary No. 3	Woolsey Brook	Lat 40°18'08", long 74°49'54", Mercer County, Hydrologic Unit 02040105, at bridge on Jacobs Creek Road, 250 ft upstream of mouth, 300 ft upstream of confluence of Jacobs Creek and Woolsey Brook, and 1.0 mi southeast of Bear Tavern.	-	-	11-15-84 7-19-85	*0.02 *0
01462760 Jacobs Creek	Delaware River	Lat 40°17'31", long 74°50'28", Mercer County, Hydrologic Unit 02030105, at bridge on Bear Tavern Road, 1.3 mi upstream from mouth and 1.4 mi southeast of Washington Crossing	10.0	1957, 1971	11-15-84 7-19-85	*0.85 *0.23
01462765 Ewing Creek	Jacobs Creek	Lat 40°17'13", long 74°48'45", Mercer County, Hydrologic Unit 02040105, at bridge on Scotch Road, 300 ft south of Interstate 95 exit, 3,800 ft downstream of small unnamed pond and 1.5 mi from West Trenton.	-	-	11-15-84 7-19-85	*0.10 *0.06
01462770 Ewing Creek	Jacobs Creek	Lat 40°17'19", long 74°49'42", Mercer County, Hydrologic Unit 02040105, at bridge on Nursery Road, 0.6 mi from Bear Tavern Road (State Route 579), 0.8 mi upstream from mouth and 1.6 mi north of West Trenton.	-	-	11-15-84 7-19-85	*0.39 *0.13
01462775 Ewing Creek	Jacobs Creek	Lat 40°17'24", long 74°50'30", Mercer County, Hydrologic Unit 02040105, at bridge on Jacobs Creek Road, 200 ft north of southern intersection of Jacobs Creek Road and Bear Tavern Road, 300 ft upstream of mouth and 1.2 mi northeast of Somerset.	-	-	11-15-84 7-19-85	*0.49 *0.15

* Base flow.
† Peak flow.
a Not previously published
b Revised.
c Previously published as Passaic River, but actually Canoe Brook.
d Discharge records published in reports of the New Jersey Department of Environmental Protection.
e Discharge records on file in U.S. Geological Survey Office, West Trenton, New Jersey.
f Estimated
g Operated as continuous-recording gaging station.

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	Elevation NGVD* (ft)
01411409	Delaware Bay at Reeds Beach, NJ	Lat 39°06'32", long 074°53'39", Cape May County, at boat ramp in Cooks Beach, 0.2 mi south of Reeds Beach, 4.8 mi northwest of Cape May Court House, and 5.8 mi north of Villas.	1979-85 (discontinued)	9-27-85	7.85
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 south of Port Norris.	1965-85 (discontinued)	9-27-85	7.36
01413038	Cohansey River at Greenwich, NJ	Lat 39°23"02", long 75°20'58", Cumberland County, at Greenwich Pier, 0.7 mi southwest of Greenwich, and 5.8 mi southwest of Shiloh.	1979-85	9-27-85	5.58
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 downstream from toll bridge on U.S. Route 1, 2.0 mi downstream from Assunpink Creek, and at mile 131.80.	1921-46‡, 1951-54‡, 1957-85‡a	b	b
01477050	Delaware River at Chester, PA	Lat 39°49'52", long 75°19'58", Gloucester County, on left bank on floodgate at mouth of Repaupo Creek 2.2 mi northeast of Bridgeport, 5.5 mi north of Swedesboro, and at mile 84.00 mi, prior to October 1980 located at Reynolds Aluminum Company pier in Chester, PA at mile 82.30 mi.	1972-77‡, 1979-85 (discontinued)	2-12-85	5.57
01483050	Alloway Creek at Hancocks Bridge, NJ	Lat 39°30'31" long 75°27'39", Salem County, on left bank at downstream side of Mill Street bridge in Hancocks Bridge, 0.4 mi downstream from Lower Alloway Creek, and 4.0 mi south of Salem.	1980-85 (discontinued)	9-27-85	4.85

* National Geodetic Vertical Datum of 1929.
‡ Operated as a continuous-record gaging station.
a Operated by National Ocean Survey since March 1975.
b Not available

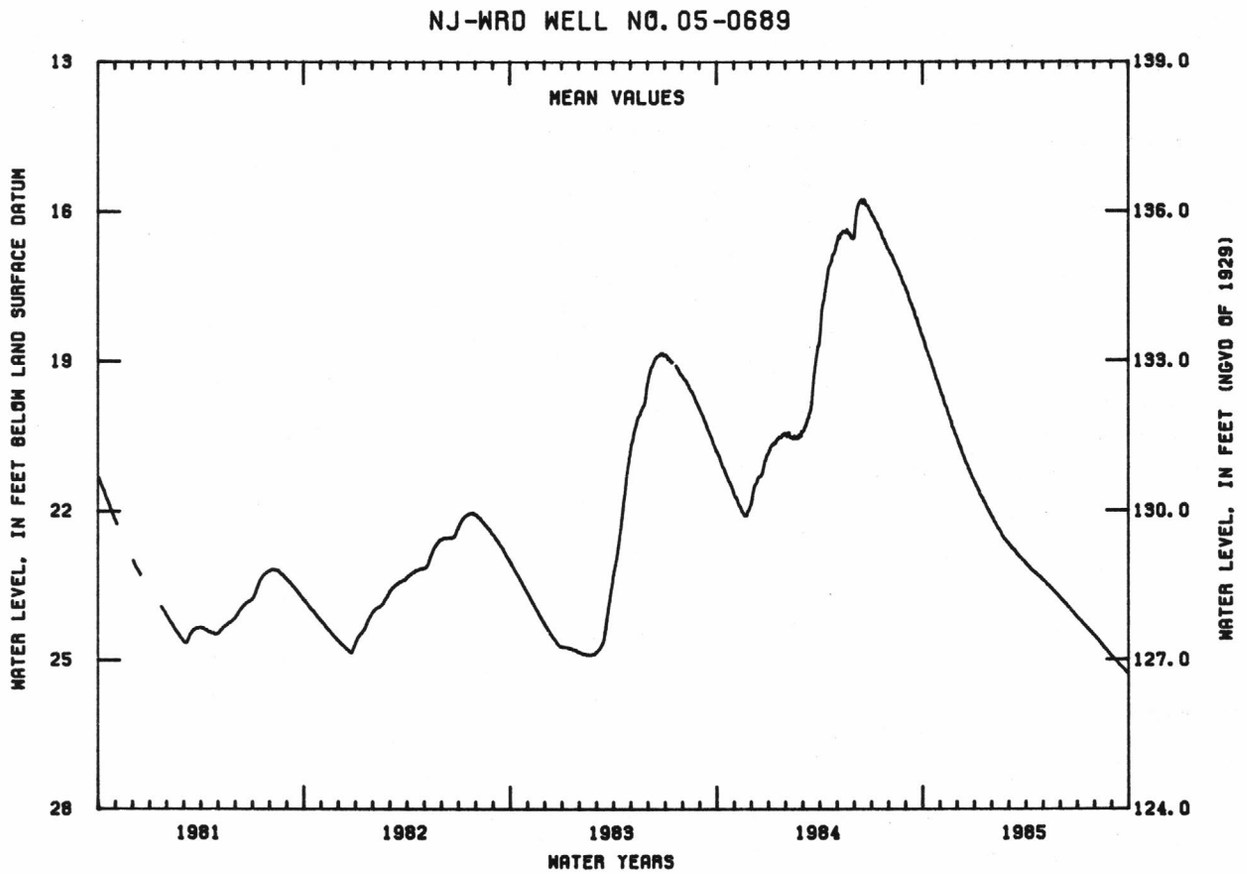
BURLINGTON COUNTY

395150074284201. Local I.D., Lebanon State Forest 23-D Obs. NJ-WRD Well Number, 05-0689.
LOCATION.--Lat 39°51'52", long 74°28'48", Hydrologic Unit 02040202, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in, depth 33 ft, open-end cement casing.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 152.02 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of 8 inch casing, 0.70 ft above land-surface datum.
PERIOD OF RECORD.--September 1955 to April 1975, January 1979 to current year. Records for 1955 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.37 ft below land-surface datum, Sept. 11, 1958; lowest, 25.80 ft below land-surface datum, Feb. 19-20, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.70	19.71	20.72	21.53	22.23	22.70	23.10	23.42	23.79	24.18	24.57	24.98
10	18.87	19.90	20.86	21.68	22.34	22.78	23.17	23.49	23.85	24.24	24.63	25.04
15	19.01	20.08	21.01	21.77	22.42	22.84	23.22	23.54	23.92	24.30	24.71	25.11
20	19.19	20.24	21.14	21.88	22.54	22.91	23.27	23.60	23.98	24.36	24.77	25.16
25	19.37	20.40	21.28	21.98	22.60	22.97	23.31	23.66	24.05	24.43	24.84	25.22
EOM	19.58	20.55	21.43	22.12	22.65	23.05	23.37	23.73	24.11	24.50	24.92	25.28
MEAN	19.06	20.09	21.02	21.79	22.41	22.85	23.22	23.55	23.93	24.31	24.72	25.11

WATER YEAR 1985 -- MEAN 22.67 HIGH 18.52 OCT 1 LOW 25.29 SEP 30



BURLINGTON COUNTY

395525074502601. Local I.D., Medford 4 Obs. NJ-WRD Well Number, 05-0262.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 1,145 ft, screened 1,125 to 1,145 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 72.32 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.40 ft above land-surface datum.
PERIOD OF RECORD.--January 1968 to July 1975, February 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.24 ft below land-surface datum, Mar. 13, 1968; lowest, 130.38 ft below land-surface datum, between July 12 and Sept. 30, 1983.

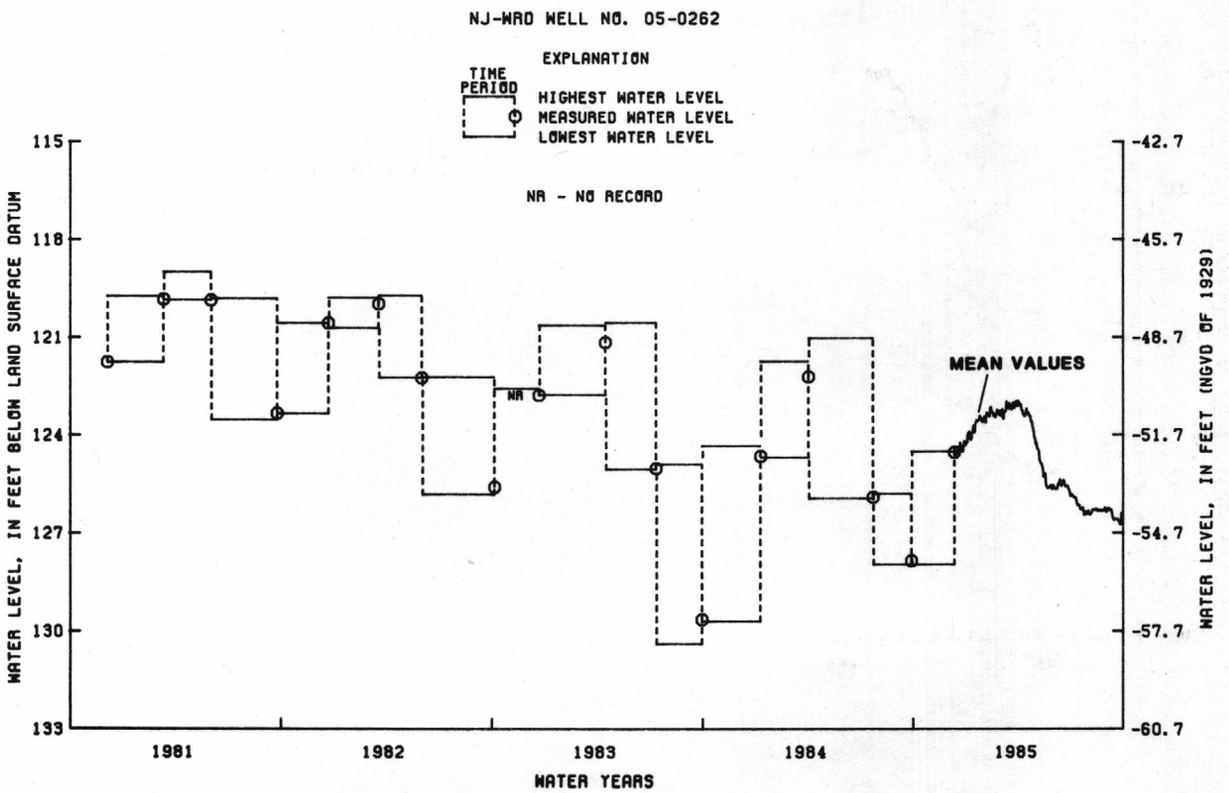
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1984 TO DEC. 12, 1984	124.50	127.96	DEC. 12, 1984	124.53

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	123.93	123.47	123.20	123.05	124.44	125.63	125.88	126.43	126.24
10			---	124.15	123.44	123.29	123.39	124.84	125.51	125.94	126.28	126.28
15			124.62	123.75	123.28	123.15	123.25	125.29	125.57	126.13	126.24	126.60
20			124.38	123.59	123.40	123.09	123.38	125.57	125.47	126.24	126.32	126.57
25			124.39	123.40	123.33	123.08	123.57	125.57	125.56	126.46	126.29	126.76
EOM			124.33	123.55	123.40	123.12	124.12	125.58	125.84	126.36	126.25	126.66
MEAN			124.42	123.78	123.36	123.17	123.39	125.11	125.56	126.15	126.31	126.49

WATER YEAR 1985 -- HIGH 122.87 MAR 12 LOW 127.96 BETWEEN SEP 28 AND DEC 12, 1984



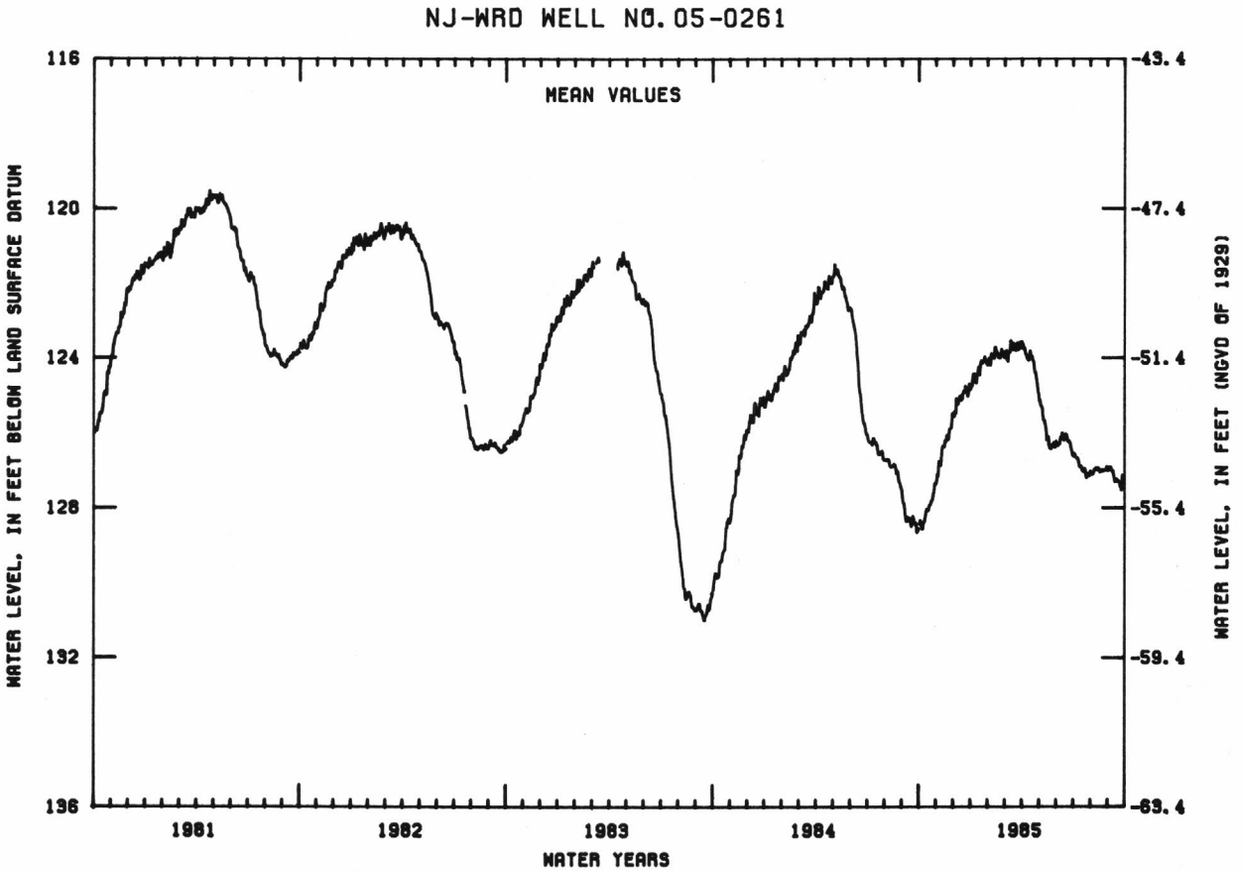
BURLINGTON COUNTY

395525074502505. Local I.D., Medford 5 Obs. NJ-WRD 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.--Middle aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 750 ft, screened 740 to 750 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 72.60 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.60 ft above land-surface datum.
PERIOD OF RECORD.--January 1968 to March 1975, March 1977 to current year. Records for 1968 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.46 ft below land-surface datum, Mar. 1, 1968; lowest, 131.05 ft below land-surface datum, Sept. 16, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	128.47	126.75	125.47	124.43	124.06	123.80	123.73	125.28	126.30	126.63	127.10	126.90
10	128.36	126.56	125.10	124.68	124.01	123.85	124.02	125.65	126.11	126.71	126.96	127.01
15	128.03	126.34	125.10	124.28	123.84	123.72	123.88	126.19	126.20	126.88	126.93	127.28
20	127.91	126.15	124.88	124.12	123.95	123.68	124.04	126.41	126.09	126.98	127.02	127.29
25	127.76	125.88	124.90	123.97	123.89	123.68	124.37	126.31	126.25	127.20	126.98	127.53
EOM	127.35	125.49	124.85	124.12	123.98	123.74	124.93	126.29	126.58	127.07	126.91	127.36
MEAN	128.03	126.34	125.05	124.32	123.93	123.76	124.08	125.92	126.22	126.89	127.00	127.20

WATER YEAR 1985 -- MEAN 125.73 HIGH 123.45 MAR 12 LOW 128.61 OCT 6



BURLINGTON COUNTY

395524074502501. Local I.D., Medford 1 Obs. NJ-WRD Well Number, 05-0258.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 410 ft, screened 400 to 410 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 70.77 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of coupling, 2.70 ft above land-surface datum.
PERIOD OF RECORD.--October 1963 to August 1975, February 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 85.22 ft below land-surface datum, Feb. 16-19, 1964; lowest, 138.42 ft below land-surface datum, between July 12 and Sept. 30, 1983.

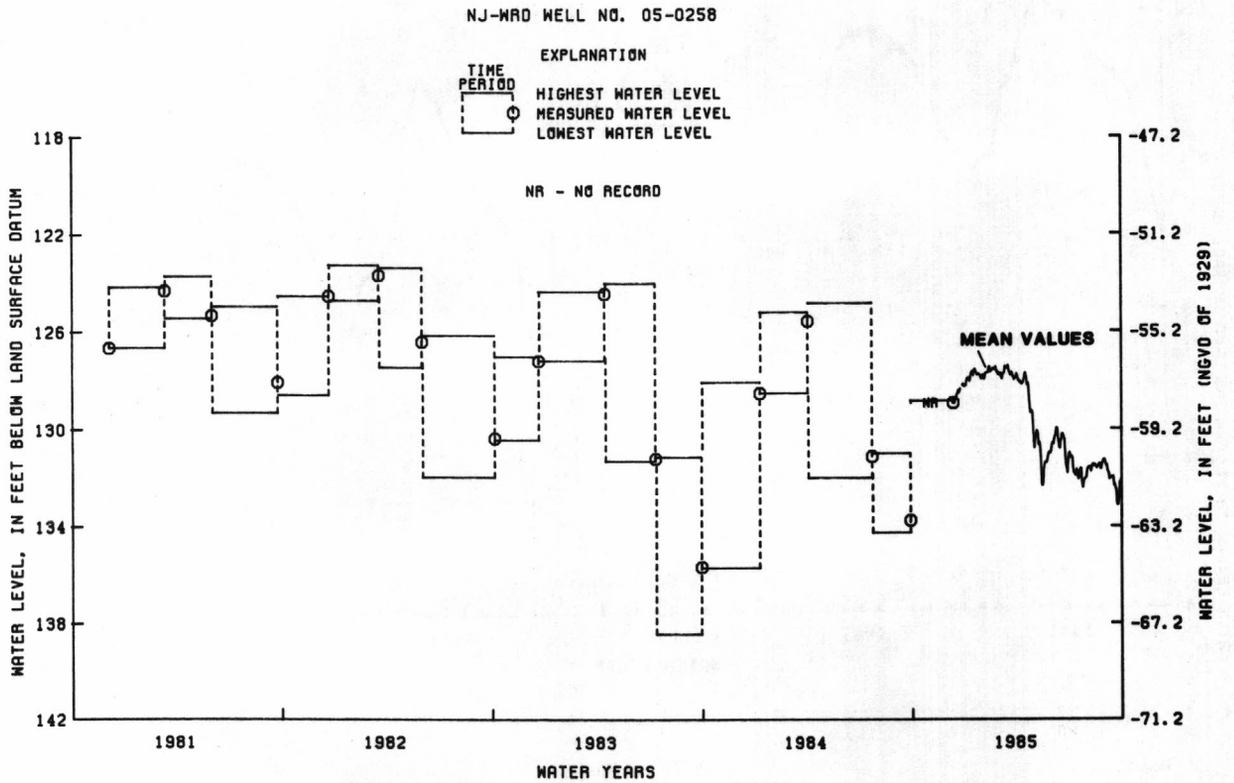
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1984 TO DEC. 12, 1984	128.84	---	DEC. 12, 1984	128.93

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	127.93	127.91	127.72	128.03	130.12	130.43	131.11	131.57	131.47
10			---	128.05	127.68	127.72	128.19	130.53	129.95	131.83	131.50	131.96
15			128.86	127.69	127.68	127.49	127.78	132.31	130.81	131.75	131.46	131.94
20			128.49	127.64	127.55	127.67	128.12	131.36	130.21	131.65	131.55	132.47
25			---	127.73	127.61	127.77	129.34	131.11	131.24	132.41	131.66	132.93
EOM			128.28	127.90	127.79	127.89	130.02	130.84	131.15	131.97	131.26	132.04
MEAN			---	127.85	127.66	127.73	128.36	131.02	130.61	131.73	131.51	132.12

WATER YEAR 1985 -- HIGH 127.33 MAR 12 LOW 133.24 SEP 23



BURLINGTON COUNTY

395524074502502. Local I.D., Medford 2 Obs. NJ-WRD Well Number, 05-0259.
LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Public Shooting Grounds, Medford Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 263 ft, screened 253 to 263 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 72.92 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.22 ft above land-surface datum.
REMARKS.--Water level affected by nearby pumping. Water-quality data for 1985 is published elsewhere in this report.
PERIOD OF RECORD.--October 1963 to August 1975, February 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.42 ft below land-surface datum, Apr. 27, 1973; lowest, 111.96 ft below land-surface datum, July 9, 1964.

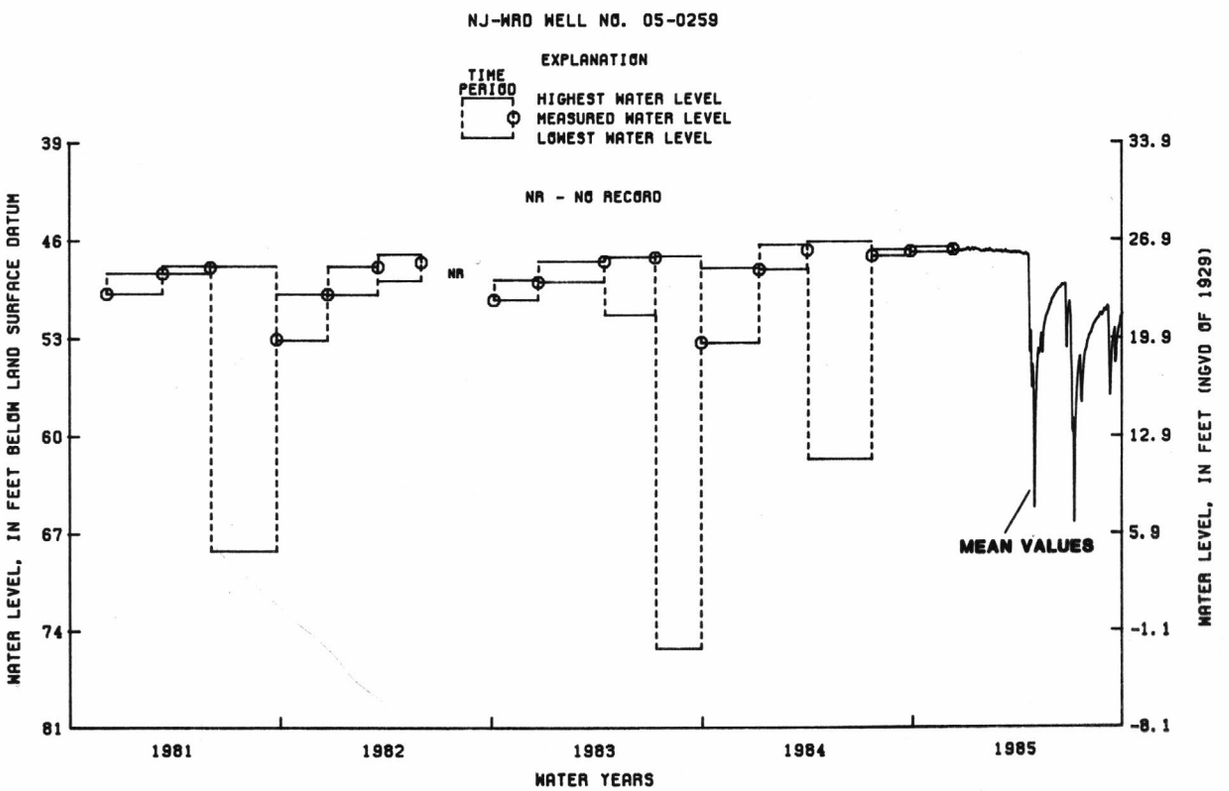
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1984 TO DEC. 11, 1984	46.49	46.89	DEC. 11, 1984	46.68

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	46.59	46.76	46.75	46.90	55.78	49.89	55.36	52.76	50.69
10			---	46.76	46.79	46.87	47.03	53.84	49.56	62.37	52.24	56.16
15			46.80	46.64	46.77	46.89	46.96	54.06	49.42	55.74	51.78	52.77
20			46.76	46.66	46.85	46.88	47.09	51.70	49.17	54.89	51.56	53.57
25			46.81	46.68	46.83	46.90	52.47	51.03	51.48	55.12	51.32	52.12
EOM			46.76	46.82	46.87	46.96	56.84	50.31	50.58	53.44	50.93	51.23
MEAN			46.75	46.69	46.78	46.87	49.18	53.50	49.95	55.97	51.86	52.71

WATER YEAR 1985 -- HIGH 46.49 BETWEEN SEP 28 AND DEC 11, 1984 AND JAN 5 LOW 68.30 JUL 9



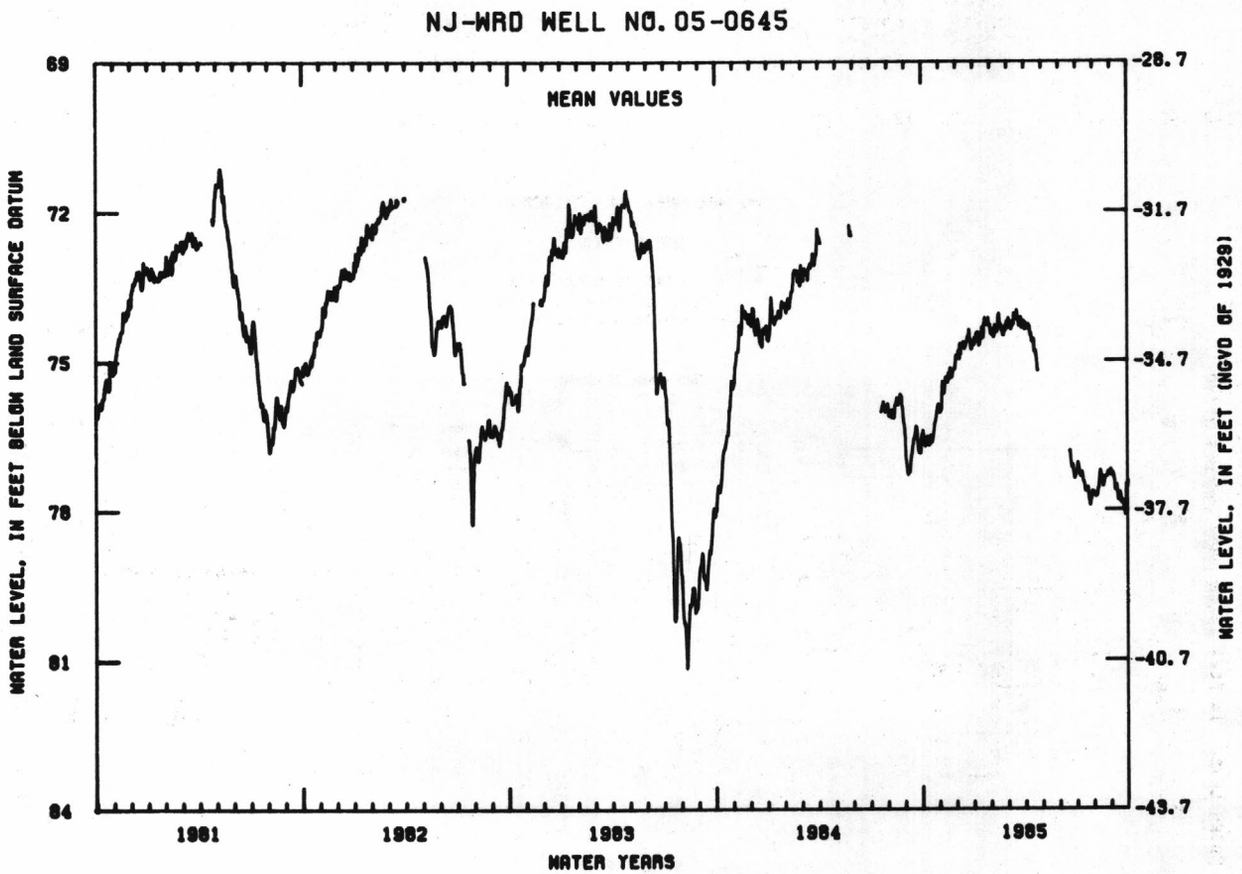
BURLINGTON COUNTY

400010074521601. Local I.D., Willingboro 2 Obs. NJ-WRD Well Number, 05-0645.
LOCATION.--Lat 40°00'10", long 74°52'16", Hydrologic Unit 02040202, near intersection of Bridge Street and Tiffany Lane, Willingboro.
Owner: Willingboro Municipal Utilities Authority.
AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 441 ft, screened 431 to 441 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 40.30 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.00 ft below land-surface datum.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Missing record from April to June, 1985 was due to recorder malfunction.
PERIOD OF RECORD.--March 1966 to September 1975, March 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.79 ft below land-surface datum, June 21, 1967; lowest, 81.29 ft below land-surface datum, Aug. 10, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.72	75.41	74.96	74.43	74.42	74.20	74.31		---	77.19	77.71	77.35
10	76.59	75.39	74.64	74.64	74.39	74.27	74.49		---	77.23	77.47	77.49
15	76.49	75.33	74.70	74.41	74.27	74.07	74.56		---	77.49	77.31	77.74
20	76.46	75.24	74.50	74.24	74.42	74.12	74.87		76.95	77.54	77.33	77.79
25	76.10	75.17	74.68	74.13	74.38	74.21	---		77.21	77.91	77.25	78.10
EOM	76.04	74.91	74.67	74.44	74.34	74.37	---		77.27	77.66	77.22	77.41
MEAN	76.41	75.37	74.68	74.40	74.34	74.21	---		---	77.48	77.42	77.65

WATER YEAR 1985 -- HIGH 73.80 MAR 17 LOW 78.25 SEP 25



BURLINGTON COUNTY

400213074510801. Local I.D., Willingboro 1 Obs. NJ-WRD Well Number, 05-0063.
LOCATION.--Lat 40°02'13", long 74°51'08", Hydrologic Unit 02040202, on the west side of Rancocas Road about 2 mi north of Rancocas.
Owner: Willingboro Municipal Utilities Authority.
AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 294 ft, screened 284 to 294 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 45.45 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 0.60 ft above land surface datum.
REMARKS.--Water level affected by nearby pumping. Missing record from June to September, 1985 was due to recorder malfunction.
PERIOD OF RECORD.--March 1966 to September 1975, February 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.25 ft below land-surface datum, Mar. 19, 1966; lowest, 68.47 ft below land-surface datum, between July 12 and Sept. 22, 1977.

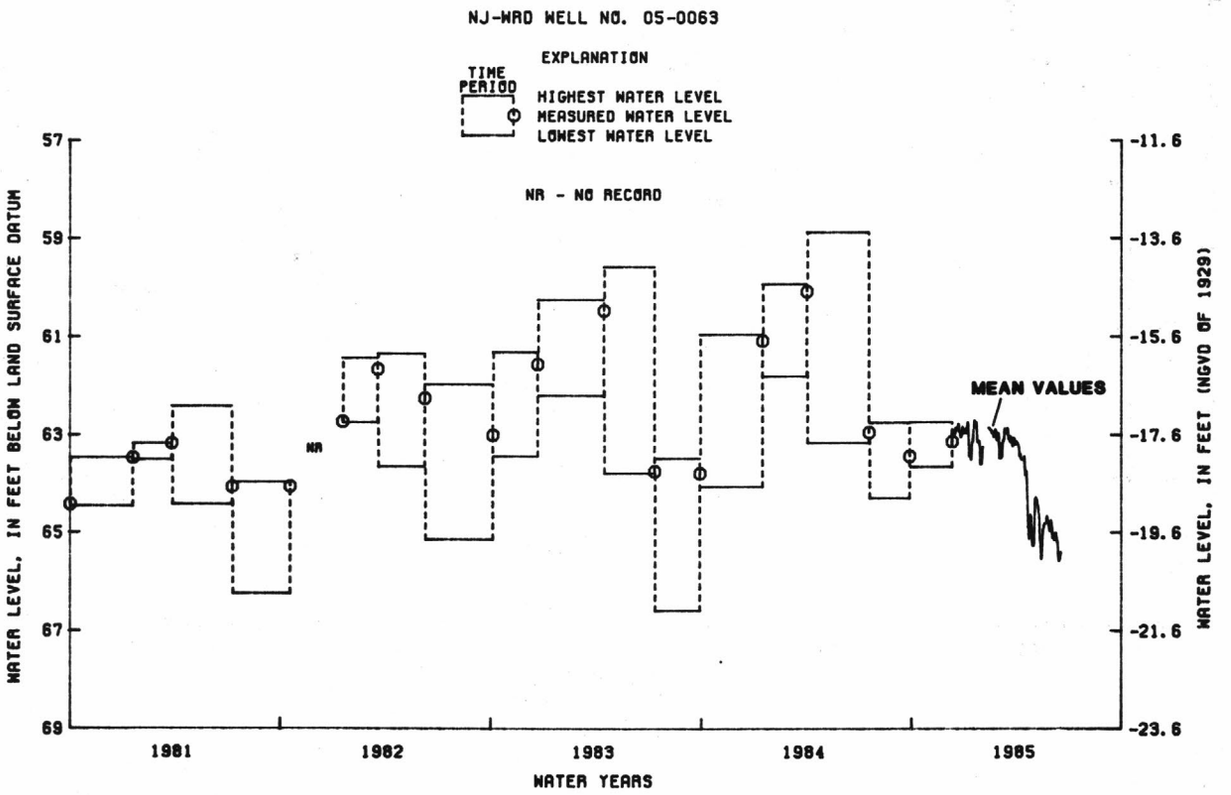
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1984 TO DEC. 11, 1984	62.73	63.65	DEC. 11, 1984	63.13

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	62.84	---	63.17	63.21	64.27	65.08			
10			---	63.44	---	63.12	63.50	64.55	65.07			
15			62.96	63.13	62.89	62.91	63.43	65.54	65.58			
20			62.84	62.73	62.97	63.01	64.10	64.83	---			
25			62.97	63.13	62.93	63.16	64.87	64.65	---			
EOM			62.96	63.60	63.07	63.20	65.27	64.85	---			
MEAN			62.91	63.07	62.97	63.10	63.94	64.82	---			

WATER YEAR 1985 -- HIGH 62.63 JAN 19 LOW 65.64 JUN 15

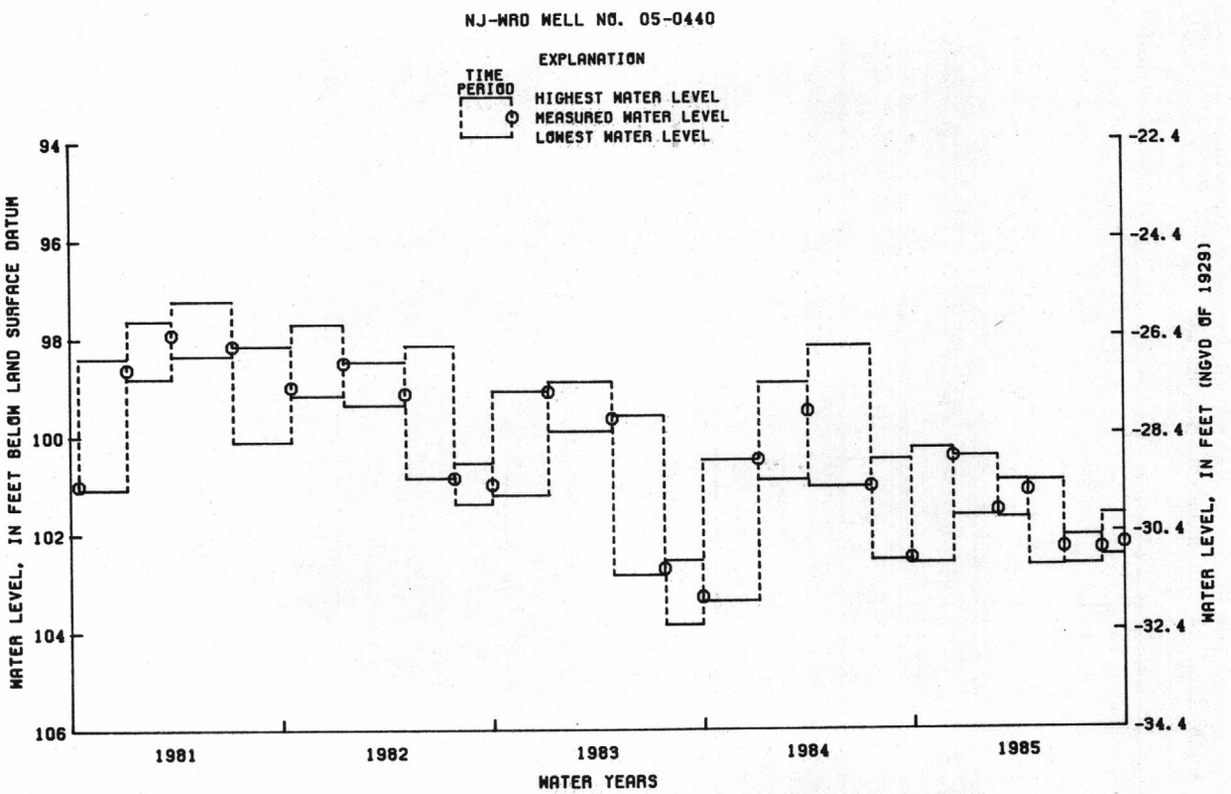


BURLINGTON COUNTY

400242074422301. Local I.D., Rhodia Corp. 1 Obs. NJ-WRD Well Number, 05-0440.
LOCATION.--Lat 40°02'42", long 74°42'23", Hydrologic Unit 02040201, on the lands of Rhodia Corporation near Jobstown.
Owner: Rhodia Corporation.
AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in, depth 615 ft, screened 603 to 613 ft.
INSTRUMENTATION.--Water-level extremes recorder, April 1977 to current year. Water-level recorder, December 1968 to March 1975.
DATUM.--Land-surface datum is 71.65 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.22 ft above land-surface datum.
PERIOD OF RECORD.--December 1968 to March 1975, April 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.55 ft below land-surface datum, Dec. 31, 1969; lowest, 104.13 ft below land-surface datum, between Apr. 28 and Aug. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1984 TO DEC. 10, 1984	100.27	102.63	DEC. 10, 1984	100.45
DEC. 10, 1984 TO FEB. 25, 1985	100.45	101.66	FEB. 25, 1985	101.55
FEB. 25, 1985 TO APR. 17, 1985	100.94	101.71	APR. 17, 1985	101.15
APR. 17, 1985 TO JUNE 18, 1985	100.95	102.69	JUNE 18, 1985	102.32
JUNE 18, 1985 TO AUG. 22, 1985	102.08	102.67	AUG. 22, 1985	102.34
AUG. 22, 1985 TO SEPT. 30, 1985	101.63	102.49	SEPT. 30, 1985	102.24



CAMDEN COUNTY

394922074563301. Local I.D., Elm Tree Farm 2 Obs. NJ-WRD Well Number, 07-0412.
LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft northeast of Thomas Road and about 2 mi northwest of Berlin.
Owner: New Jersey Water Company.
AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 1,092 ft, screened 1,082 to 1,092 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 148.68 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.80 ft above land-surface datum.
REMARKS.--Well was originally screened 1,217 to 1,227 ft; rehabilitated August 1969.
PERIOD OF RECORD.--January 1963 to June 1975, February 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 166.06 ft below land-surface datum, July 21, 1965; lowest, 228.51 ft below land-surface datum, between July 11 and Sept. 30, 1983.

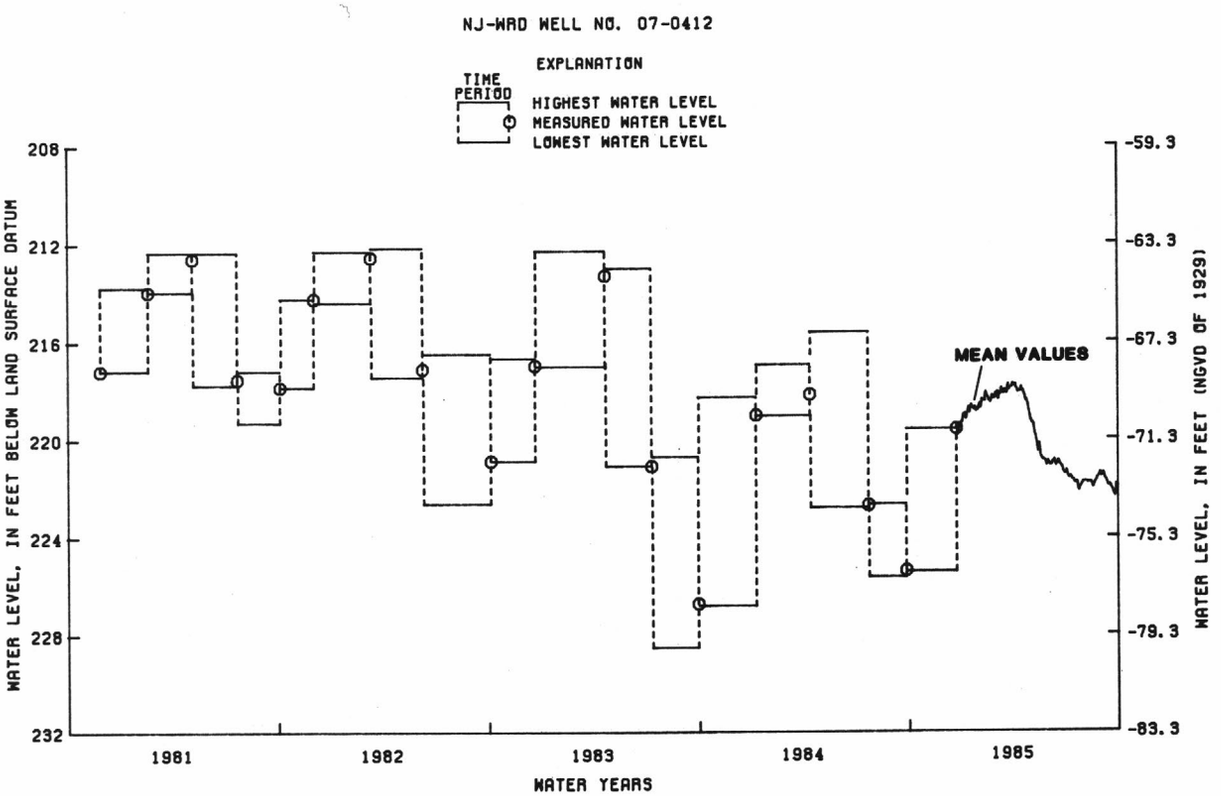
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1984 TO DEC. 24, 1984	219.58	225.42	DEC. 24, 1984	219.58

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	218.98	218.59	218.07	217.81	219.35	221.09	221.49	221.75	221.41
10			---	219.20	---	218.18	218.12	219.86	220.93	221.55	221.81	221.70
15			---	218.72	218.28	218.11	217.94	220.55	221.13	221.71	221.80	221.93
20			---	218.68	218.43	218.02	218.15	220.77	220.94	221.76	221.87	222.06
25			219.70	218.69	218.33	217.89	218.39	220.85	221.18	222.14	221.59	222.37
EOM			219.52	218.78	218.37	217.90	219.00	221.00	221.46	221.79	221.40	221.92
MEAN			---	218.90	218.40	218.08	218.16	220.26	221.07	221.73	221.74	221.87

WATER YEAR 1985 -- HIGH 217.71 APR 1 LOW 225.42 BETWEEN SEP 27 AND DEC 24, 1984



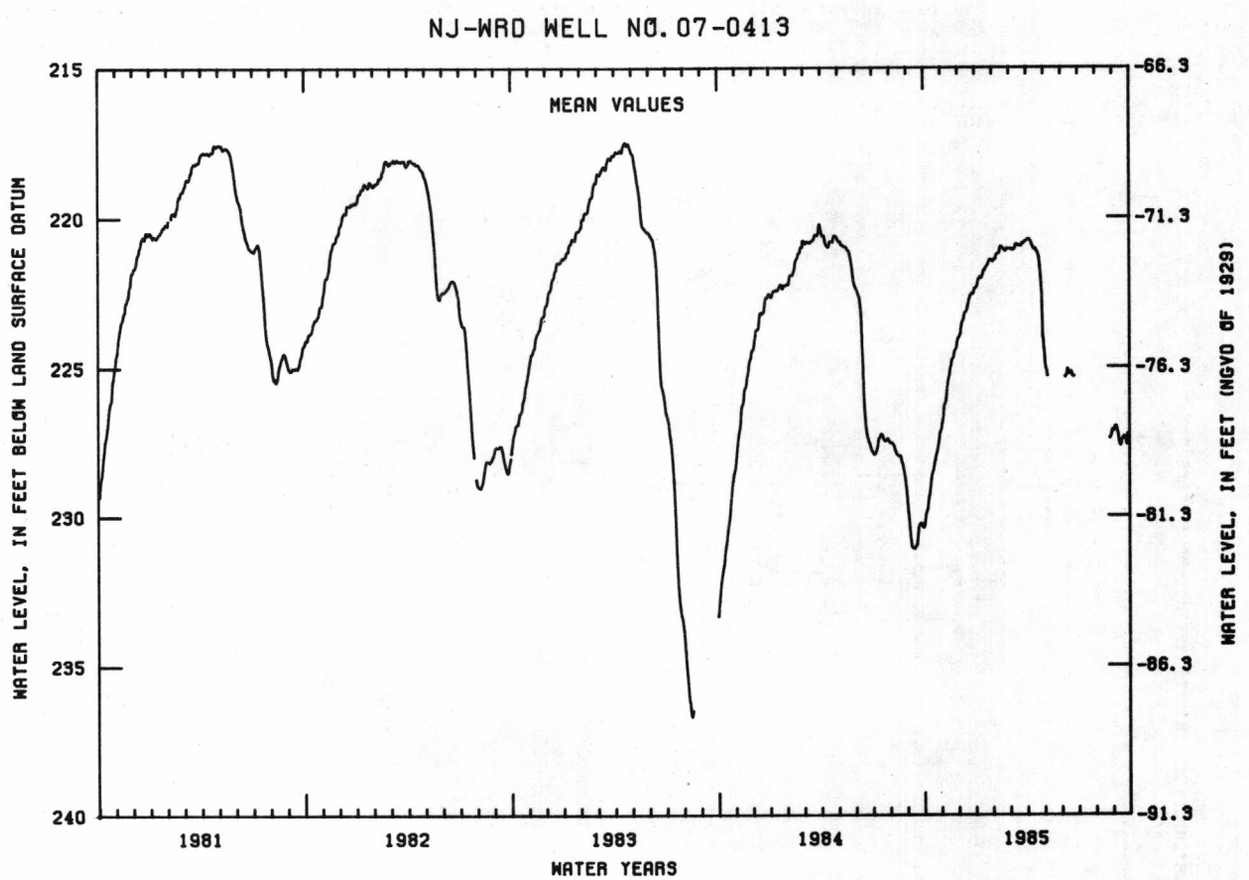
CAMDEN COUNTY

394922074563302. Local I.D., Elm Tree Farm 3 Obs. NJ-WRD Well Number, 07-0413.
LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft northeast of Thomas Road and about 2 mi northwest of Berlin.
Owner: New Jersey Water Company.
AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 717 ft, screened 706 to 717 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 148.73 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 0.60 ft above land-surface datum.
REMARKS.--Missing record from May to August ,1985 was due to recorder malfunction.
PERIOD OF RECORD.--December 1963 to April 1975, March 1977 to current year. Records for 1963 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 174.21 ft below land-surface datum, Feb. 6, 1964; lowest, 236.70 ft below land-surface datum, Aug. 15, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	229.87	226.46	223.88	222.09	221.40	221.04	220.74	225.04	---		---	226.97
10	229.34	225.95	223.40	222.03	221.20	221.06	220.90	---	225.27		---	227.26
15	228.62	225.27	223.13	221.76	220.98	220.91	221.06	---	225.24		---	227.60
20	228.18	224.73	222.75	221.64	221.08	220.94	221.17	---	225.22		---	227.33
25	227.76	224.44	222.53	221.44	221.03	220.85	221.73	---	---		---	227.61
EOM	227.10	224.07	222.37	221.49	221.05	220.80	224.01	---	---		227.09	227.34
MEAN	228.67	225.36	223.09	221.80	221.15	220.95	221.32	---	---		---	227.33

WATER YEAR 1985 -- HIGH 220.72 APR 3 LOW 230.39 OCT 1



CAMDEN COUNTY

395229074571201. Local I.D., Hutton Hill 1 Obs. NJ-WRD Well Number, 07-0117.
LOCATION.--Lat 39°52'29", long 74°57'12", Hydrologic Unit 02040202, about 800 ft northeast of intersection of Kresson and Cropwell Roads, Cherry Hill Township.
Owner: New Jersey Water Company.
AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 562 ft, screened 552 to 562 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 157.61 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 1.60 ft above land-surface datum.
REMARKS.--Missing record from May to June was due to recorder malfunction.
PERIOD OF RECORD.--August 1967 to April 1975, February 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 200.77 ft below land-surface datum, Mar. 23, 1968; lowest, 251.56 ft below land-surface datum, between July 23 and Sept. 27, 1984.

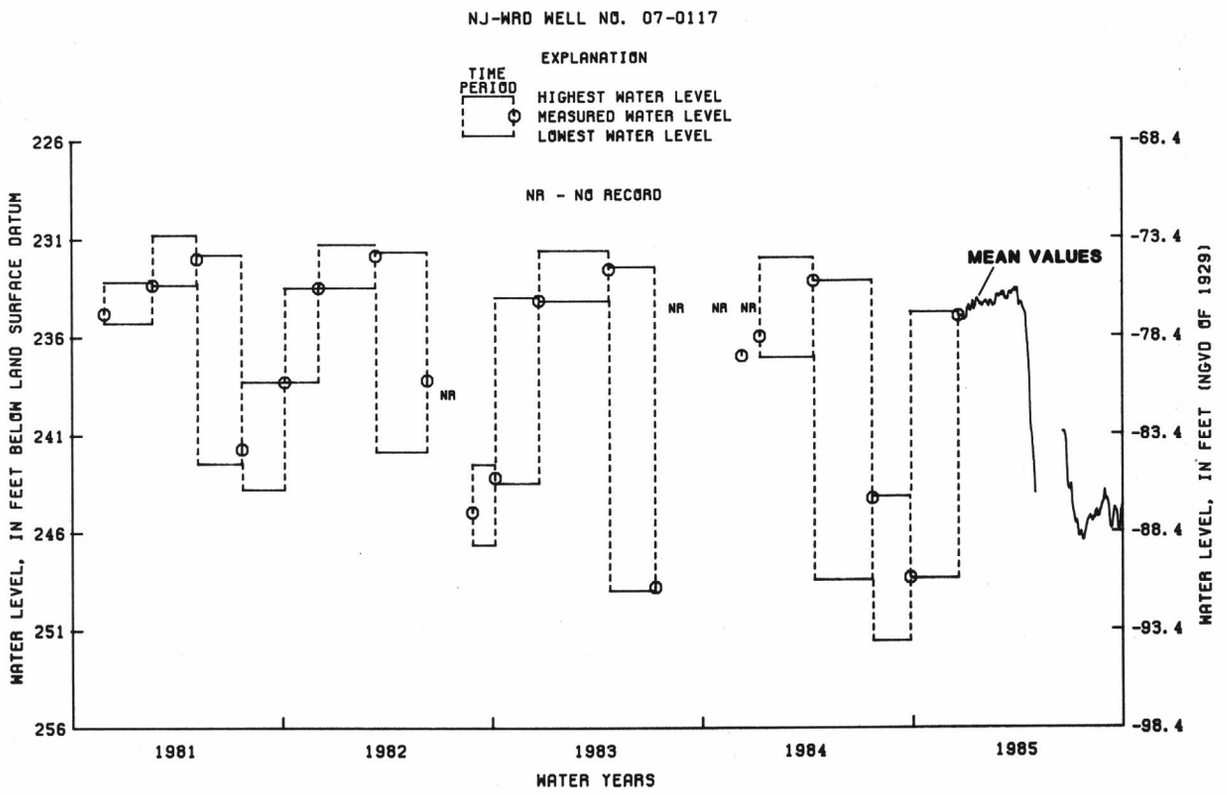
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1984 TO DEC. 20, 1984	234.76	248.35	DEC. 20, 1984	234.95

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	234.53	234.20	233.75	234.35	---	---	244.55	245.19	244.50
10			---	234.73	234.49	234.01	234.51	244.24	---	245.52	245.36	245.81
15			---	234.36	234.22	234.12	234.86	---	---	245.91	245.00	244.93
20			---	234.17	234.40	233.73	236.98	---	240.87	245.99	245.21	245.07
25			234.98	234.27	233.89	233.71	240.79	---	242.03	246.40	244.62	245.74
EOM			235.16	234.41	234.01	233.74	242.56	---	243.84	245.46	244.14	244.41
MEAN			---	234.48	234.24	233.85	236.72	---	---	245.50	244.99	245.12

WATER YEAR 1985 -- HIGH 233.49 APR 1 LOW 248.35 BETWEEN SEP 27 AND DEC 20, 1984



CAMDEN COUNTY

395246075043301. Local I.D., Egbert Station Obs. NJ-WRD Well Number, 07-0283.
LOCATION.--Lat 39°52'46", long 75°04'34", Hydrologic Unit 02040202, in Camden County Park, about 400 ft south of the corner of Dallas and Sylvan Avenues, Haddon Heights.
Owner: New Jersey Water Company.
AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 455 ft, screened 445 to 455 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, February 1977 to December 1984.
DATUM.--Land-surface datum is 23.66 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.00 ft above land-surface datum.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--July 1963 to August 1975, February 1977 to current year. Periodic manual measurements, September 1975 to January 1977. Records for 1963 to 1982 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 61.93 ft below land-surface datum, Apr. 8, 1964; lowest, 130.41 ft below land-surface datum, between July 12 and Sept. 29, 1983.

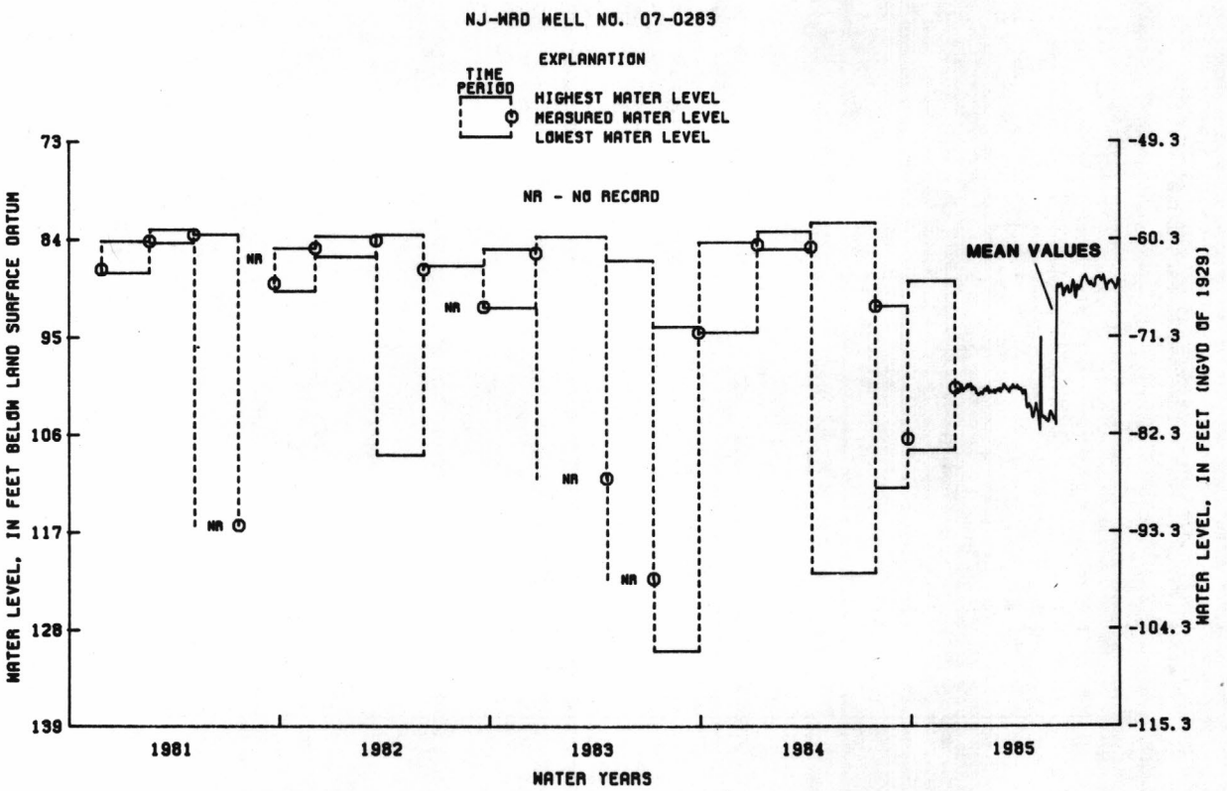
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1984 TO DEC. 18, 1984	88.75	107.85	DEC. 18, 1984	100.79

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	100.93	101.23	100.85	100.50	103.22	103.84	90.15	88.80	88.92
10			---	100.77	101.21	100.95	101.04	103.35	104.50	89.09	89.23	89.13
15			---	100.56	101.46	100.72	101.46	98.07	89.29	90.57	89.30	88.67
20			101.29	100.97	101.26	101.01	102.05	103.99	89.24	89.74	88.49	89.12
25			101.09	101.37	101.44	100.91	102.55	104.51	90.41	89.47	88.19	89.32
EOM			101.12	101.38	101.06	100.78	103.63	103.71	89.45	88.33	88.48	88.65
MEAN			---	100.96	101.17	100.88	101.68	103.52	95.06	89.41	88.72	88.96

WATER YEAR 1985 -- HIGH 87.72 SEP 2 LOW 107.85 BETWEEN SEP 26 AND DEC 18, 1984

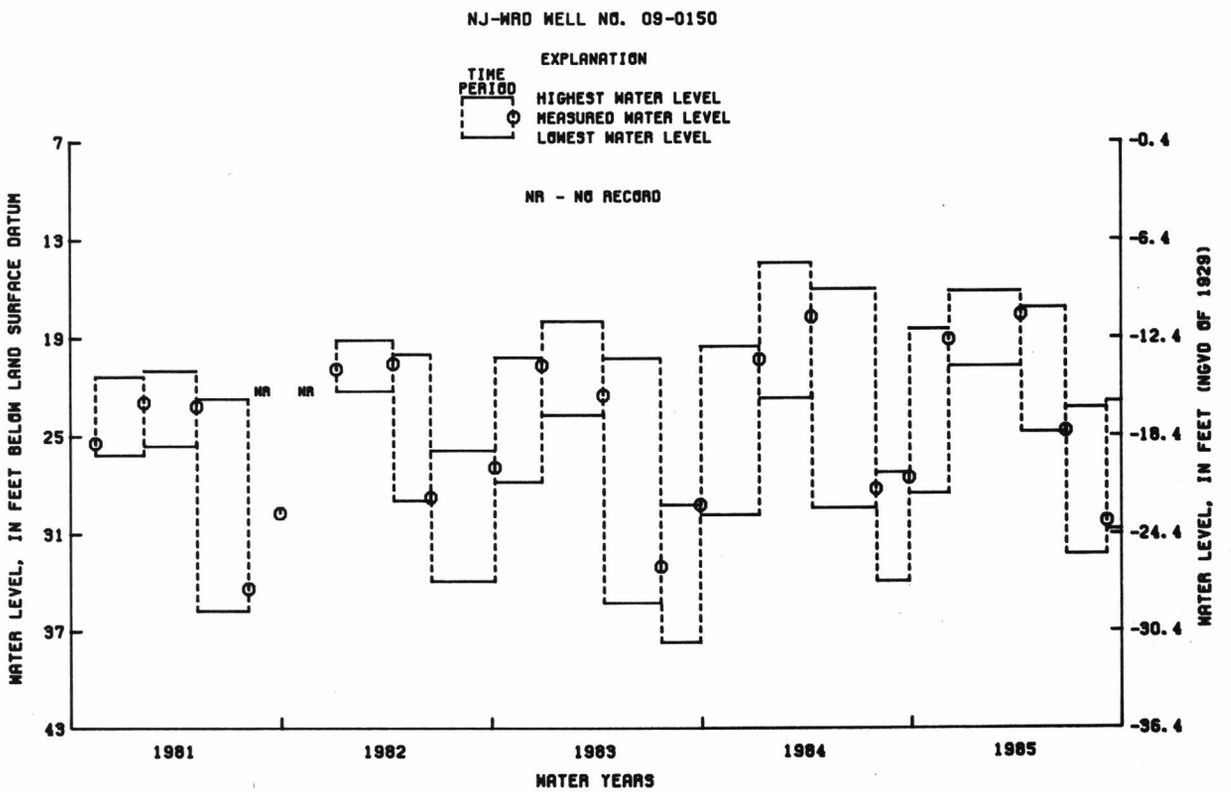


CAPE MAY COUNTY

385607074555201. Local I.D., West Cape May 1 Obs. NJ-WRD Well Number, 09-0150.
LOCATION.--Lat 38°56'07", long 74°55'56", Hydrologic Unit 02040206, on the north side of Sunset Boulevard, West Cape May.
Owner: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 293 ft, screened 283 to 293 ft.
INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, July 1957 to December 1972.
DATUM.--Land-surface datum is 6.60 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.88 ft above land-surface datum.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Water-quality data for 1985 is published elsewhere in this report.
PERIOD OF RECORD.--July 1957 to December 1972, May 1977 to current year. Periodic manual measurements, February 1973 to September 1976. Records for 1957 to 1982 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.38 ft below land-surface datum, between Jan. 10 and Apr. 10, 1984; lowest, 41.30 ft below land-surface datum, Sept. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1984 TO DEC. 5, 1984	18.45	28.53	DEC. 5, 1984	19.10
DEC. 5, 1984 TO APR. 8, 1985	16.14	20.75	APR. 8, 1985	17.58
APR. 8, 1985 TO JUNE 25, 1985	17.14	24.77	JUNE 25, 1985	24.69
JUNE 25, 1985 TO SEPT. 4, 1985	23.25	32.25	SEPT. 4, 1985	30.22
SEPT. 4, 1985 TO OCT. 1, 1985	22.88	30.72	OCT. 1, 1985	25.67

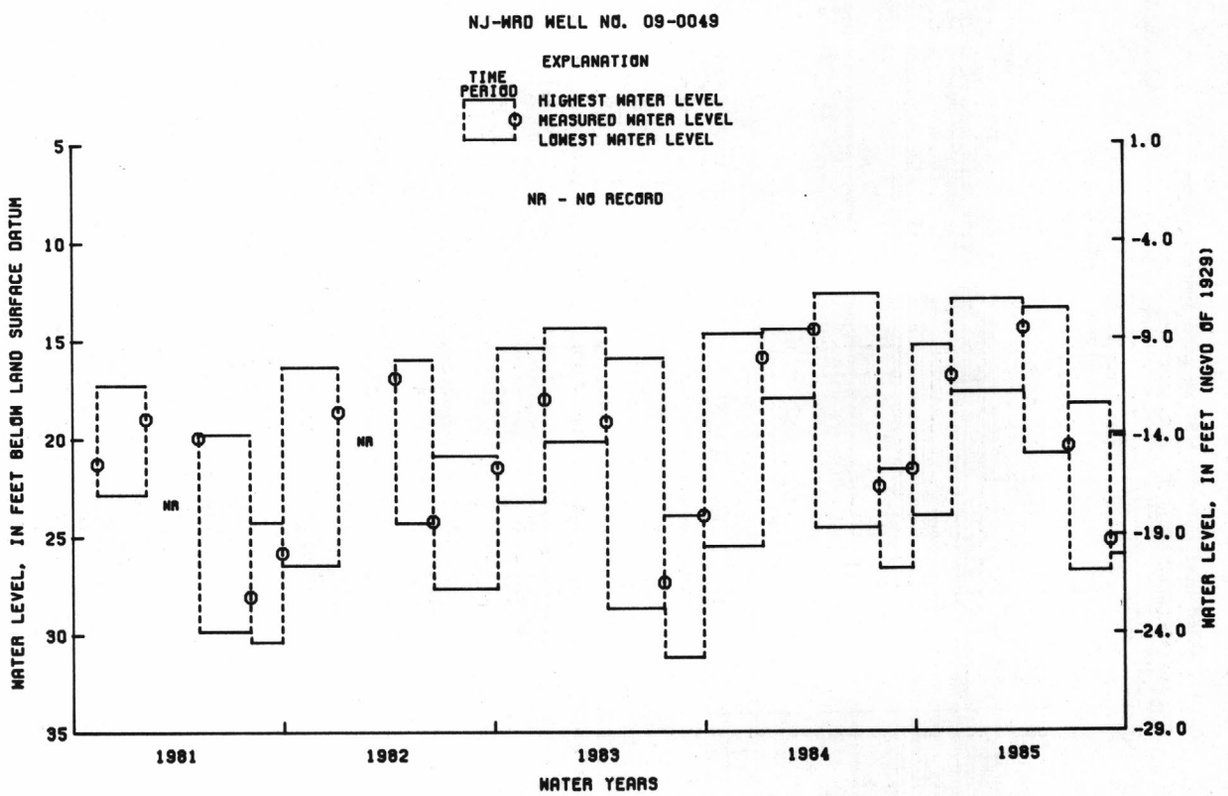


CAPE MAY COUNTY

385804074574201. Local I.D., Higbee Beach 3 Obs. NJ-WRD Well Number, 09-0049.
LOCATION.--Lat 38°58'04", long 74°57'42", Hydrologic Unit 02040206, on the north bank of the west end of the Cape May Canal, Lower Township.
OWNER: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 250 ft, screened 241 to 250 ft.
INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, June 1965 to September 1975.
DATUM.--Land-surface datum is 6.00 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Front edge of cutout in recorder housing, 2.93 ft above land-surface datum.
REMARKS.--Water level affected by tidal fluctuation. Water-quality data for 1985 is published elsewhere in this report.
PERIOD OF RECORD.--June 1965 to September 1975, May 1977 to current year. Records for 1975 to 1980 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.65 ft below land-surface datum, between Apr. 10 and July 31, 1984; lowest, 34.22 ft below land-surface datum, July 31, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1984 TO DEC. 5, 1984	15.30	24.02	DEC. 5, 1984	16.87
DEC. 5, 1984 TO APR. 8, 1985	12.96	17.71	APR. 8, 1985	14.45
APR. 8, 1985 TO JUNE 25, 1985	13.43	20.87	JUNE 25, 1985	20.47
JUNE 25, 1985 TO SEPT. 5, 1985	18.31	26.83	SEPT. 5, 1985	25.27
SEPT. 5, 1985 TO OCT. 1, 1985	19.82	26.02	OCT. 1, 1985	21.32

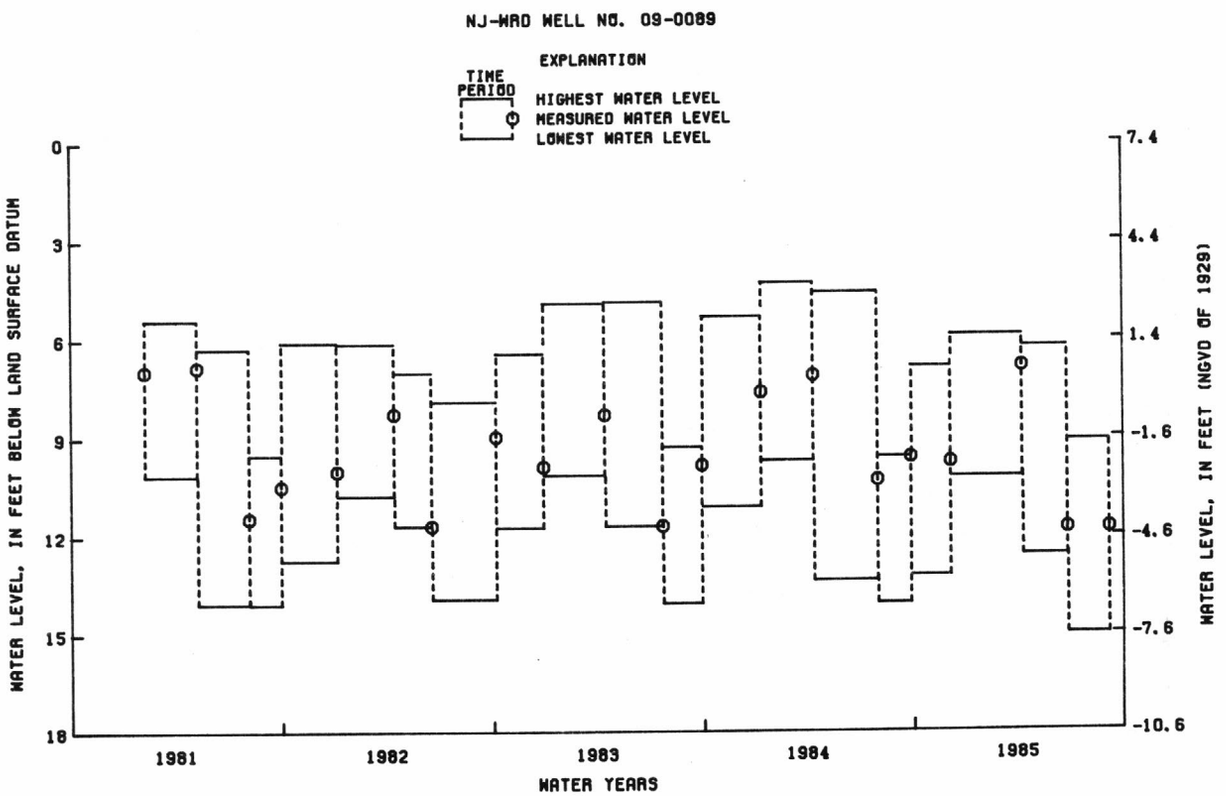


CAPE MAY COUNTY

390425074544601. Local I.D., Oyster Lab 4 Obs. NJ-WRD Well Number, 09-0089.
LOCATION.--Lat 39°04'25", long 74°54'46", Hydrologic Unit 02040206, at the Rutgers Oyster Laboratory near Green Creek, Middle Township.
Owner: U.S. Geological Survey.
AQUIFER.--Cohansey Sand of Miocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 210 ft, screened 195 to 210 ft.
INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, August 1957 to August 1975.
DATUM.--Land-surface datum is 7.37 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 3.90 ft above land-surface datum.
REMARKS.--Water level affected by tidal fluctuation. Water-quality data for 1985 is published elsewhere in this report.
PERIOD OF RECORD.--August 1957 to August 1975, May 1977 to current year. Periodic manual measurements, September 1975 to April 1977. Records for 1957 to 1982 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.07 ft below land-surface datum, Apr. 3, 1958; lowest, 15.02 ft below land-surface datum, between June 25 and Sept. 5, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL		
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE		WATER LEVEL
SEPT. 27, 1984 TO DEC. 5, 1984	6.85	13.23	DEC. 5, 1984		9.77
DEC. 5, 1984 TO APR. 8, 1985	5.89	10.22	APR. 8, 1985		6.85
APR. 8, 1985 TO JUNE 25, 1985	6.24	12.60	JUNE 25, 1985		11.79
JUNE 25, 1985 TO SEPT. 5, 1985	9.11	15.02	SEPT. 5, 1985		11.79
SEPT. 5, 1985 TO OCT. 1, 1985	---	---	OCT. 1, 1985		10.17



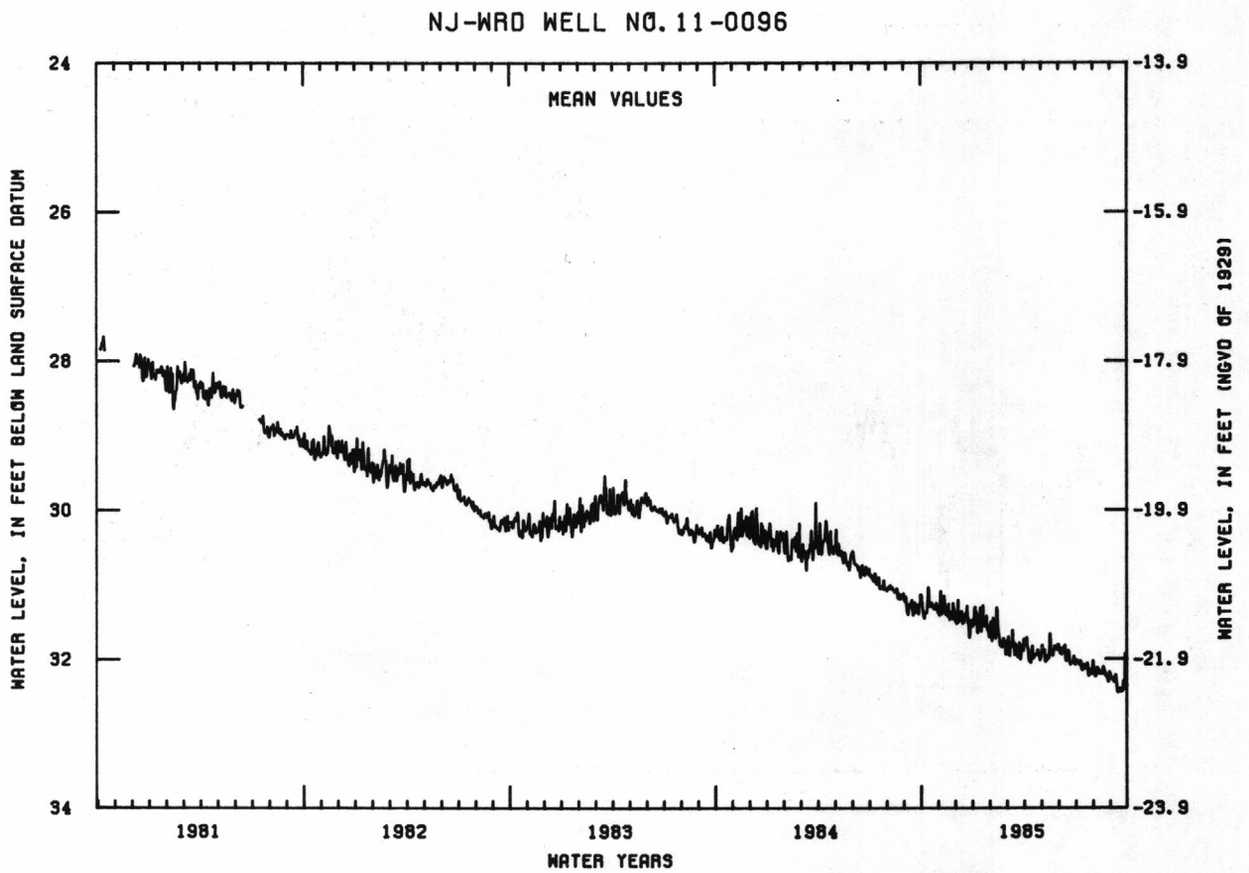
CUMBERLAND COUNTY

391828075120902. Local I.D., Jones Island 2 Obs. NJ-WRD Well Number, 11-0096.
LOCATION.--Lat 39°18'29", long 75°12'08", Hydrologic Unit 02040206, about 1.7 mi south of Cedarville at Jones Island, Lawrence Township.
Owner: Cumberland County.
AQUIFER.--Piney Point aquifer of Eocene age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in, depth 375 ft, screened 365 to 375 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 10.10 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 1.90 ft above land-surface datum.
REMARKS.--Water level affected by tidal fluctuation.
PERIOD OF RECORD.--March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.99 ft below land-surface datum, Mar. 22, 1977; lowest, 32.51 ft below land-surface datum, Sept. 19, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.38	31.09	31.51	31.30	31.62	31.70	31.75	31.90	31.85	32.04	32.24	32.28
10	31.39	31.24	31.37	31.65	31.73	31.83	32.03	32.01	31.91	32.03	32.14	32.21
15	31.09	31.36	31.51	31.42	31.62	31.85	31.87	31.99	32.03	32.11	32.17	32.44
20	31.25	31.41	31.40	31.46	31.78	31.83	31.94	31.95	31.98	32.10	32.14	32.44
25	31.34	31.44	31.57	31.42	31.82	31.86	31.87	31.82	32.06	32.22	32.21	32.40
EOM	31.38	31.43	31.57	31.63	31.94	31.89	32.00	31.80	32.07	32.13	32.19	32.35
MEAN	31.29	31.34	31.47	31.49	31.68	31.85	31.91	31.90	31.95	32.11	32.18	32.33

WATER YEAR 1985 -- MEAN 31.79 HIGH 30.92 OCT 14 LOW 32.51 SEP 19



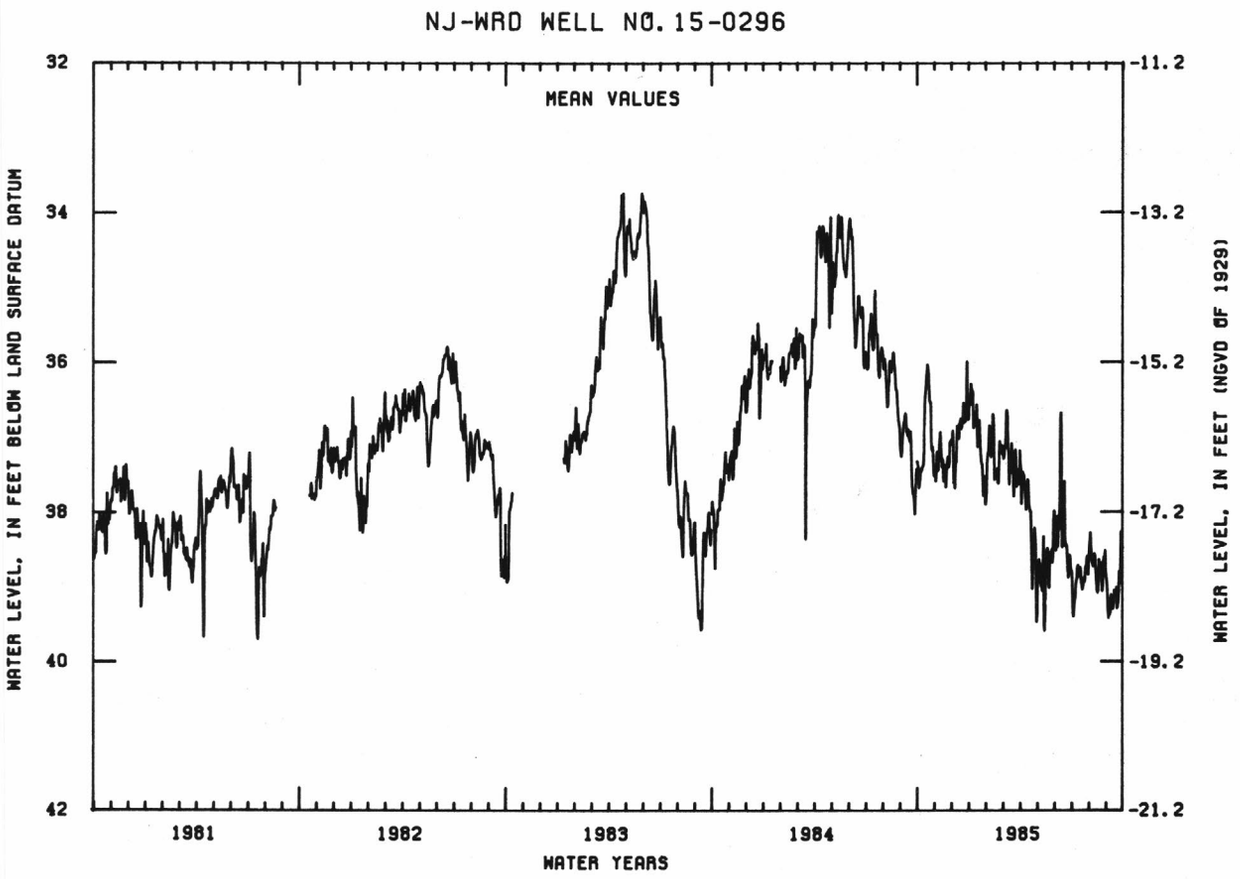
GLOUCESTER COUNTY

394942075131701. Local I.D., Shell Chemical 5 Obs. NJ-WRD 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.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 327 ft, screened 321 to 326 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 20.76 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.90 ft above land-surface datum.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.-June 1962 to current year. Records for 1962 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.75 ft below land-surface datum, Dec. 6, 1962; lowest, 40.63 ft below land-surface datum, July 21, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.63	37.19	37.61	36.35	37.07	37.14	37.70	38.63	38.06	39.40	38.49	39.42
10	37.39	37.03	37.14	36.84	37.17	36.73	37.65	38.98	38.23	38.91	38.69	39.10
15	36.44	37.29	36.82	36.87	37.57	37.48	37.56	39.59	38.47	38.84	38.94	39.04
20	36.10	37.56	36.79	36.96	37.41	37.47	37.98	38.48	38.33	38.99	38.73	39.29
25	36.54	37.30	36.79	37.51	37.19	37.35	38.40	38.55	38.77	38.91	39.06	38.96
EOM	37.52	37.10	36.77	37.82	37.22	37.58	38.83	38.10	38.73	38.84	38.79	38.47
MEAN	36.98	37.33	36.91	36.98	37.24	37.28	37.96	38.80	38.21	38.90	38.71	39.05

WATER YEAR 1985 -- MEAN 37.86 HIGH 35.64 DEC 28 LOW 39.87 MAY 15



GLOUCESTER COUNTY

395232075094201. Local I.D., Eagle Point 3 Obs. NJ-WRD Well Number, 15-0323.
LOCATION.--Lat 39°52'35", long 75°09'50", Hydrologic Unit 02040202, at the Coastal Eagle Point Oil Company, West Deptford Township.
Owner: Coastal Eagle Point Oil Company.
AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in, depth 276 ft, screened 255 to 275 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, April 1981 to December 1984.
DATUM.--Land-surface datum is 20.96 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 3.00 ft above land-surface datum.
REMARKS.--Water level affected by tidal fluctuation and nearby pumping. Missing data from March to April, 1985 was due to recorder malfunction.
PERIOD OF RECORD.--November 1949 to July 1975, April 1981 to current year. Periodic manual measurements, October 1976 to March 1981. Records for 1975 to 1981 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.70 ft below land-surface datum, Nov. 25, 1950; lowest, 87.30 ft below land-surface datum, June 28, 1963.

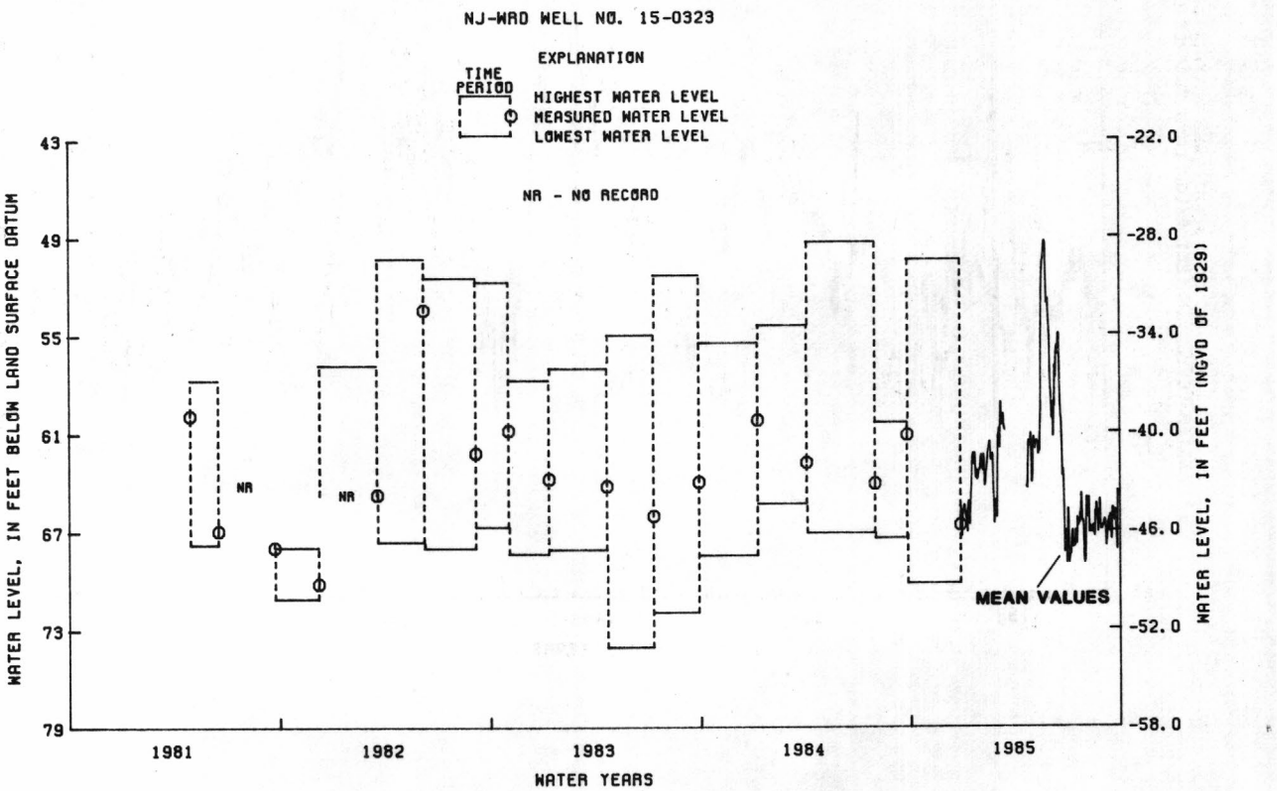
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1984 TO DEC. 28, 1984	50.39	70.21	DEC. 28, 1984	66.64

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	65.96	63.35	60.74	---	61.94	60.17	68.99	64.98	66.36
10			---	65.52	63.43	60.40	---	61.73	56.93	67.06	66.68	66.48
15			---	64.73	61.91	60.89	---	60.90	56.26	67.98	66.71	66.59
20			---	62.97	62.34	---	---	50.51	59.93	66.72	66.17	65.93
25			---	63.30	66.55	---	61.52	49.47	63.78	66.09	66.02	67.53
EOM			66.46	63.12	65.54	---	62.57	54.59	67.06	68.51	66.94	64.97
MEAN			---	64.44	63.30	---	---	56.97	60.11	67.15	66.50	66.40

WATER YEAR 1985 -- HIGH 48.33 MAY 25 LOW 71.07 AUG 1



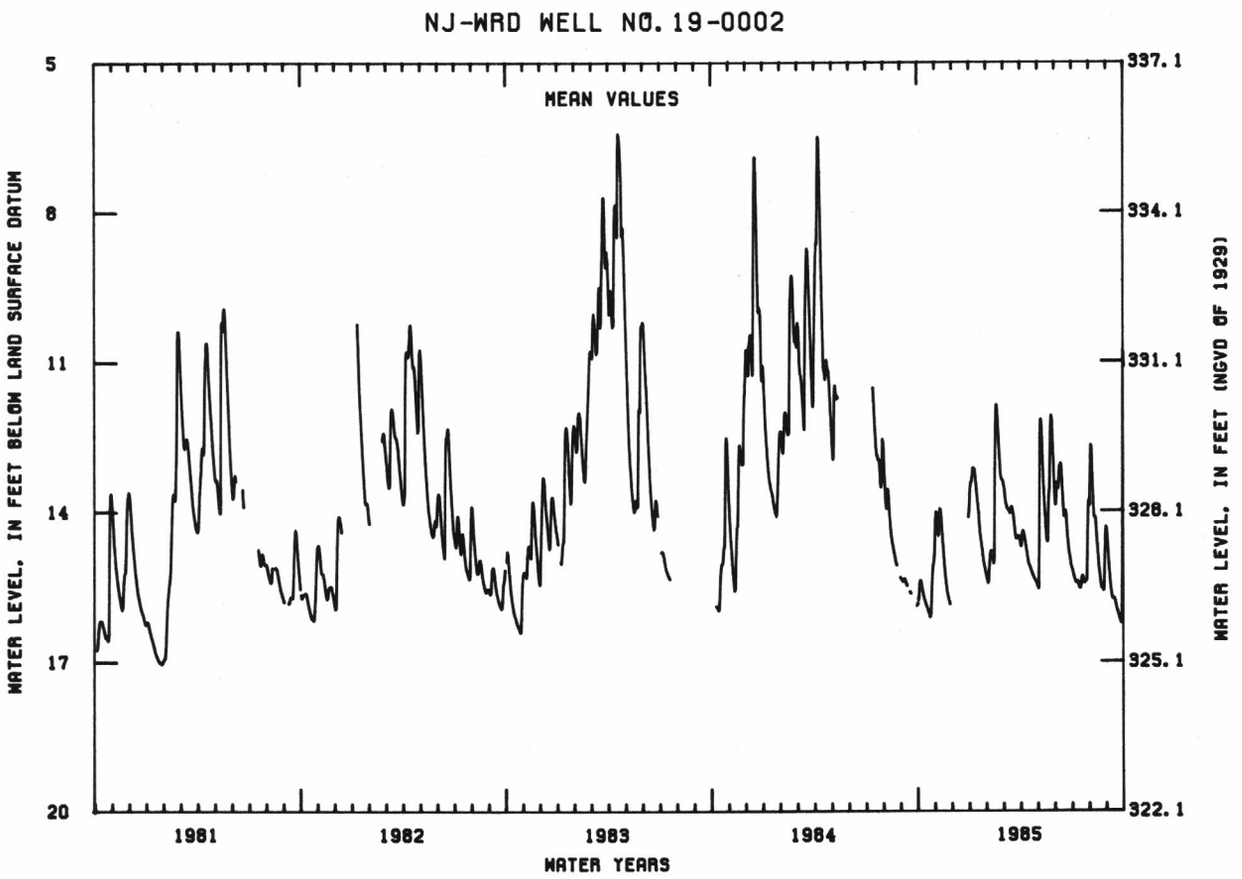
HUNTERDON COUNTY

402644074563601. Local I.D., Bird Obs. NJ-WRD Well Number, 19-0002.
LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, near U.S. Post Office, Sergeantsville.
Owner: Phillip Fleming.
AQUIFER.--Stockton Formation of Triassic age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 3 ft, depth 21 ft, lined with stone.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 342.08 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 1.50 ft above land-surface datum.
PERIOD OF RECORD.--June 1965 to July 1970, May 1977 to current year. Periodic manual measurements, September 1970 to September 1976. Records for 1965 to 1976 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.37 ft below land-surface datum, Apr. 18, 1983; lowest, 17.04 ft below land-surface datum, Jan. 26-28, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.38	14.49	---	13.13	14.86	13.86	14.42	12.16	13.55	15.37	13.30	15.31
10	15.68	14.11	---	13.40	14.96	14.00	14.74	13.29	13.04	15.40	14.11	15.75
15	15.88	14.92	---	13.99	11.94	13.91	15.08	14.37	13.96	15.53	14.83	15.82
20	16.05	15.54	---	14.60	12.59	14.29	15.23	13.65	14.13	15.34	15.44	16.05
25	15.46	15.82	---	15.06	13.36	14.52	15.37	12.17	14.83	15.40	15.59	16.23
EOM	14.13	---	13.54	15.40	13.45	14.69	15.50	13.78	15.14	13.89	14.47	11.11
MEAN	15.57	14.83	---	14.18	13.73	14.14	15.00	13.44	14.00	15.18	14.48	15.19

WATER YEAR 1985 -- MEAN 14.47 HIGH 10.69 SEP 28 LOW 16.25 SEP 26

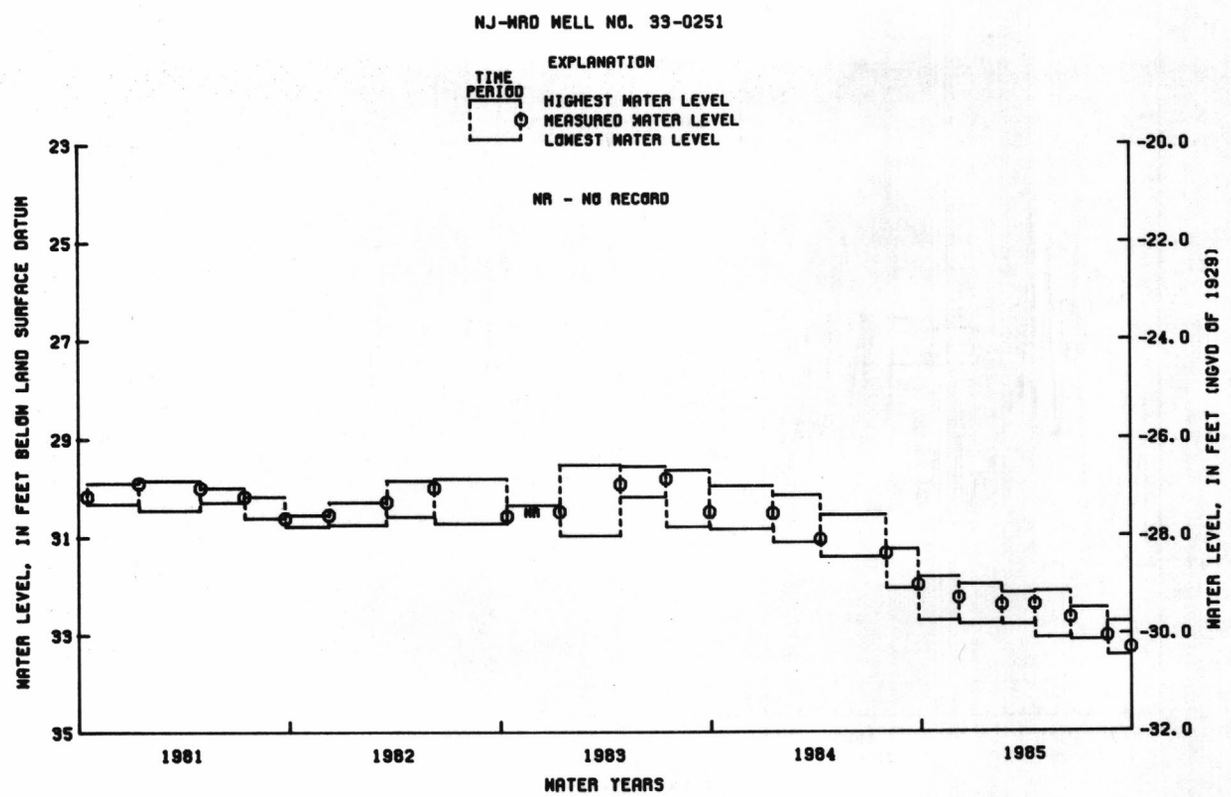


SALEM COUNTY

393348075275701. Local I.D., Salem 1 Obs. NJ-WRD Well Number, 33-0251.
LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem.
Owner: U.S. Geological Survey.
AQUIFER.--Middle aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 709 ft, screened 699 to 709 ft.
INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, December 1965 to August 1975.
DATUM.--Land-surface datum is 3.00 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.87 ft above land-surface datum.
PERIOD OF RECORD.--December 1965 to August 1975, May 1977 to current year. Records for 1965 to 1980 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.97 ft below land-surface datum, Dec. 13, 1965; lowest, 33.45 ft below land-surface datum, between Aug. 20 and Sept. 30, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1984 TO DEC. 6, 1984	31.83	32.73	DEC. 6, 1984	32.26
DEC. 6, 1984 TO FEB. 19, 1985	31.99	32.80	FEB. 19, 1985	32.41
FEB. 19, 1985 TO APR. 16, 1985	32.16	32.81	APR. 16, 1985	32.40
APR. 16, 1985 TO JUNE 17, 1985	32.13	33.08	JUNE 17, 1985	32.67
JUNE 17, 1985 TO AUG. 20, 1985	32.47	33.13	AUG. 20, 1985	33.05
AUG. 20, 1985 TO SEPT. 30, 1985	32.75	33.45	SEPT. 30, 1985	33.29

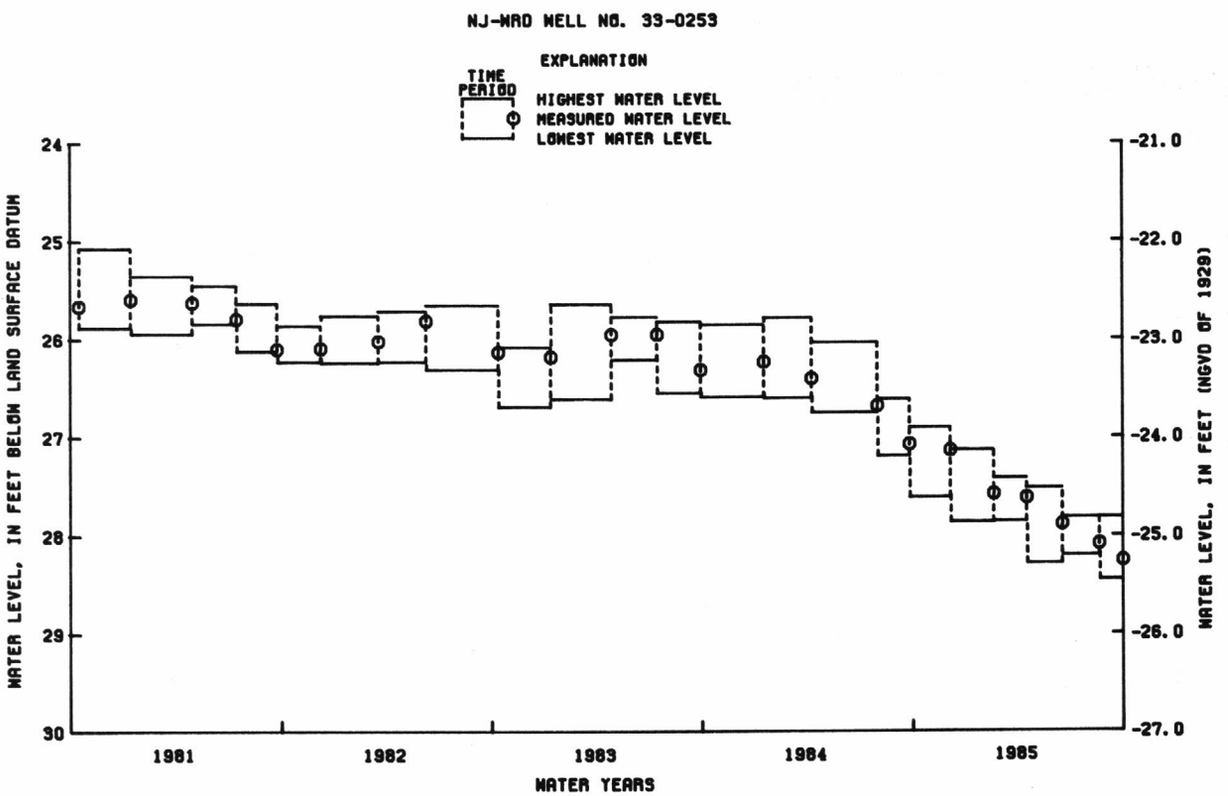


SALEM COUNTY

393348075275703. Local I.D., Salem 3 Obs. NJ-WRD Well Number, 33-0253.
LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem.
Owner: U.S. Geological Survey.
AQUIFER.--Upper aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 340 ft, screened 335 to 340 ft.
INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, November 1965 to August 1975.
DATUM.--Land-surface datum is 3.00 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.30 ft above land-surface datum.
PERIOD OF RECORD.--November 1965 to August 1975, May 1977 to current year. Records for 1965 to 1981 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.28 ft below land-surface datum, Feb. 13, 1966; lowest, 28.45 ft below land-surface datum, between Aug. 20 and Sept. 30, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1984 TO DEC. 6, 1984	26.90	27.61	DEC. 6, 1984	27.13
DEC. 6, 1984 TO FEB. 19, 1985	27.13	27.86	FEB. 19, 1985	27.57
FEB. 19, 1985 TO APR. 16, 1985	27.41	27.85	APR. 16, 1985	27.61
APR. 16, 1985 TO JUNE 17, 1985	27.51	28.28	JUNE 17, 1985	27.88
JUNE 17, 1985 TO AUG. 20, 1985	27.81	28.20	AUG. 20, 1985	28.08
AUG. 20, 1985 TO SEPT. 30, 1985	27.81	28.45	SEPT. 30, 1985	28.25

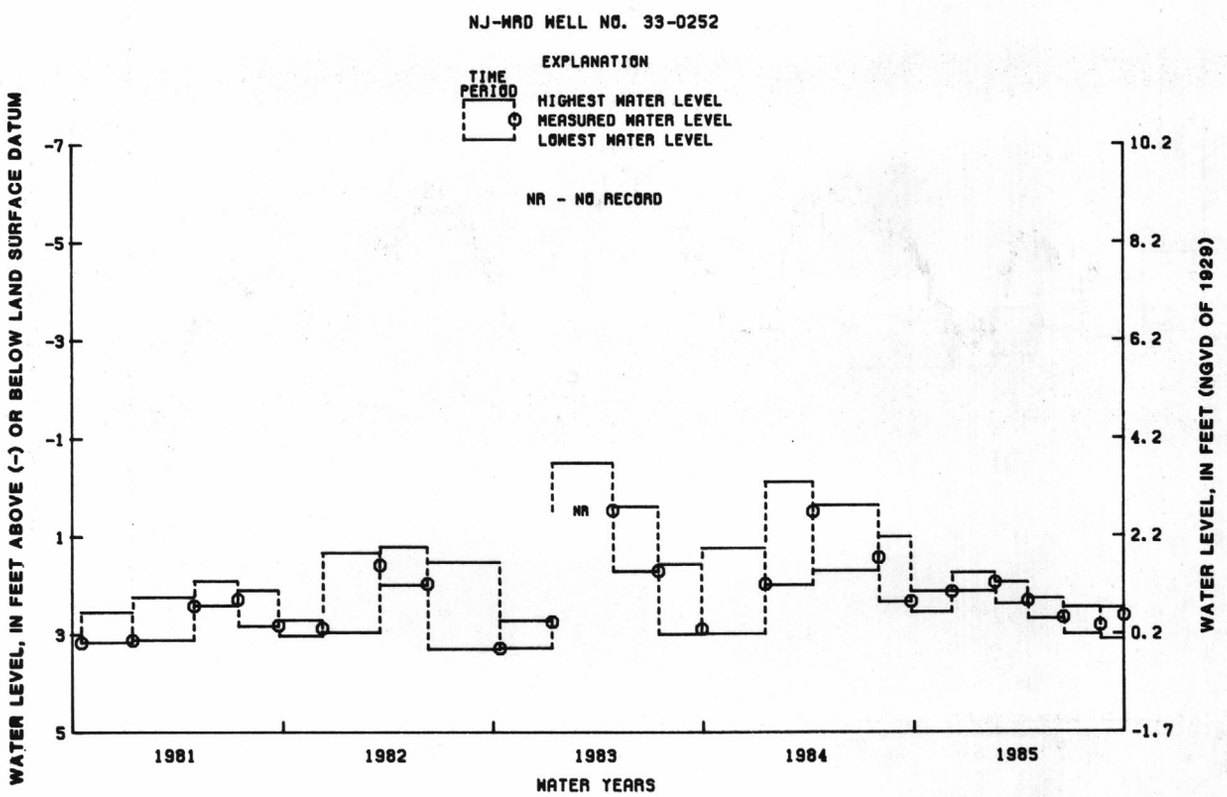


SALEM COUNTY

393348075275702. Local I.D., Salem 2 Obs. NJ-WRD Well Number, 33-0252.
LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem.
Owner: U.S. Geological Survey.
AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in, depth 96 ft, screened 91 to 96 ft.
INSTRUMENTATION.--Water-level extremes recorder, May 1977 to current year. Water-level recorder, November 1965 to July 1975.
DATUM.--Land-surface datum is 3.25 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.77 ft above land-surface datum.
PERIOD OF RECORD.--November 1965 to July 1975, May 1977 to current year. Records for 1965 to 1981 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land-surface datum, between Jan. 12 and Apr. 27, 1983; lowest, 6.45 ft below land-surface datum, Sept. 9, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

WATER-LEVEL EXTREMES			MEASURED WATER LEVEL	
PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1984 TO DEC. 6, 1984	2.12	2.55	DEC. 6, 1984	2.13
DEC. 6, 1984 TO FEB. 19, 1985	1.74	2.13	FEB. 19, 1985	1.94
FEB. 19, 1985 TO APR. 16, 1985	1.94	2.39	APR. 16, 1985	2.32
APR. 16, 1985 TO JUNE 17, 1985	2.27	2.69	JUNE 17, 1985	2.66
JUNE 17, 1985 TO AUG. 20, 1985	2.45	3.01	AUG. 20, 1985	2.82
AUG. 20, 1985 TO SEPT. 30, 1985	2.46	3.11	SEPT. 30, 1985	2.62



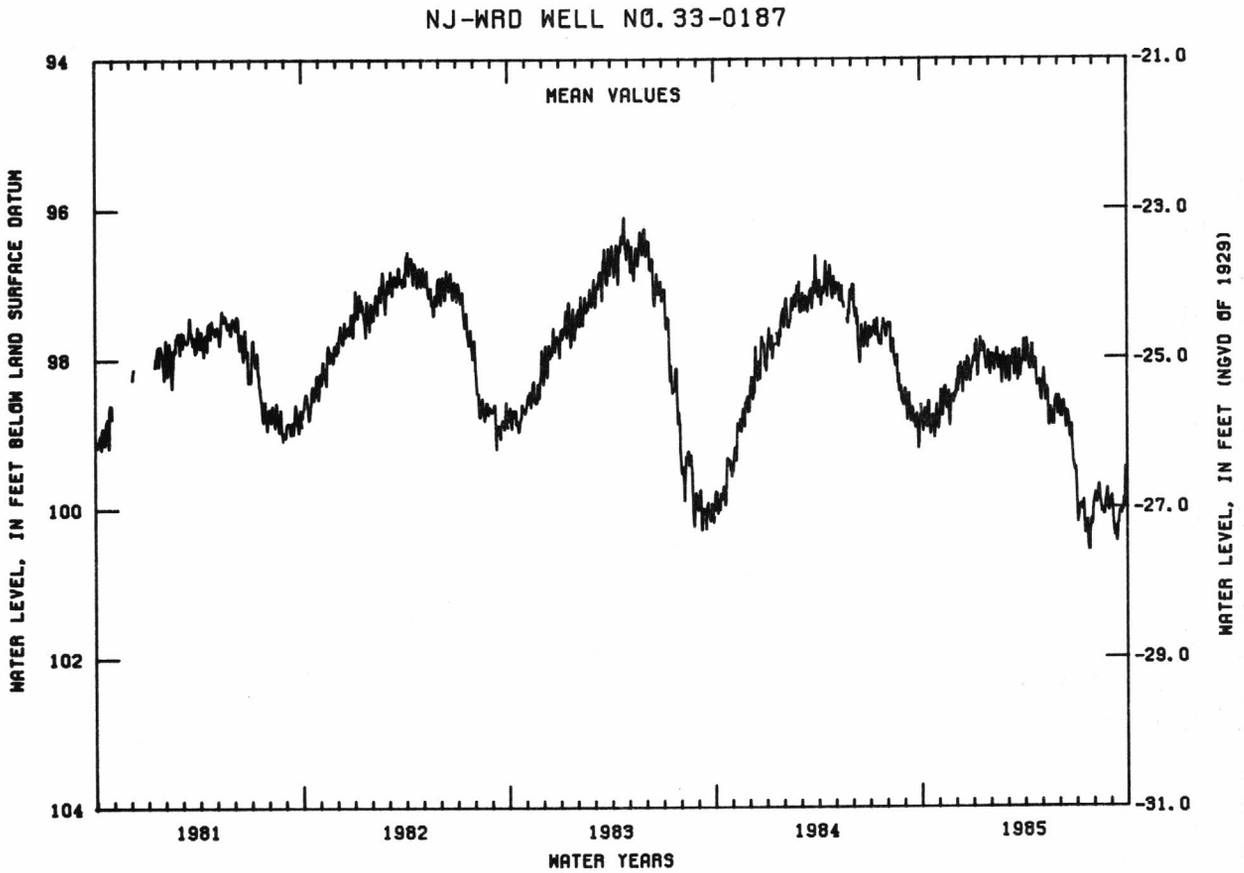
SALEM COUNTY

394037075191501. Local I.D., Point Airy Obs. NJ-WRD 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 north of Woodstown Borough boundary.
Owner: U.S. Geological Survey.
AQUIFER.--Lower aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in, depth 672 ft, screened 664 to 672 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land-surface datum is 72.97 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch casing, 1.80 ft above land-surface datum.
REMARKS.--Water level affected by nearby pumping.
PERIOD OF RECORD.--February 1959 to August 1975, March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft below land-surface datum, Mar. 6, 1959; lowest, 100.69 ft below land-surface datum, July 26, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	98.97	98.42	98.44	97.82	98.10	97.98	97.82	98.26	98.79	100.20	99.80	100.06
10	98.90	98.57	98.06	98.20	98.08	97.99	98.08	98.53	98.57	99.95	99.79	100.32
15	98.57	98.65	98.25	97.78	98.14	98.23	97.81	98.90	98.88	99.90	99.98	100.20
20	98.80	98.79	98.30	97.84	98.18	98.04	98.00	98.73	98.94	100.35	100.10	100.09
25	99.06	98.49	98.10	98.06	97.99	97.96	98.33	98.65	99.10	100.55	99.81	100.01
EOM	98.92	98.52	98.09	98.22	98.29	97.97	98.46	98.75	99.50	100.19	99.89	99.65
MEAN	98.82	98.60	98.22	97.97	98.07	98.07	98.06	98.60	98.88	100.12	99.92	100.04

WATER YEAR 1985 -- MEAN 98.78 HIGH 97.65 APR 6 LOW 100.69 JUL 26



WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

BURLINGTON COUNTY

NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SCREENED INTERVAL (FT)	AQUIFER UNIT	DATE OF SAMPLE	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (US/CM)
05-0259	USGS-MEDFORD 2 OBS	39 55 24	074 50 25	73	253-263	211EGLS	09-10-85	14.5	256
05-0274	CAMPBELL SOUP 1 OBS	39 58 38	074 59 05	40	241-262	211MRPAM	09-24-85	15.0	81

LOCAL IDENTIFIER	DATE OF SAMPLE	PH (STANDARD UNITS)	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 IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)
USGS-MEDFORD 2 OBS	09-10-85	8.3	120	39	5.5	3.0	7.1	146	--	120
CAMPBELL SOUP 1 OBS	09-24-85	6.4	21	5.1	1.9	3.7	1.6	--	--	10

LOCAL IDENTIFIER	DATE OF SAMPLE	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, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
USGS-MEDFORD 2 OBS	09-10-85	16	2.2	.10	15	160	<.010	<.10	.100	.20
CAMPBELL SOUP 1 OBS	09-24-85	2.0	7.7	<.10	8.0	37	<.010	3.9	.230	.40

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
USGS-MEDFORD 2 OBS	09-10-85	--	.170	<10	<1	<1	<1	1	290	3
CAMPBELL SOUP 1 OBS	09-24-85	4.3	.190	<10	<1	2	2	180	460	--

LOCAL IDENTIFIER	DATE OF SAMPLE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PHENOLS TOTAL (UG/L)
USGS-MEDFORD 2 OBS	09-10-85	18	<.1	<3	.90	4
CAMPBELL SOUP 1 OBS	09-24-85	120	<.1	190	.60	<1

Aquifer unit:
211EGLS - Englishtown aquifer
211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

CAMDEN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. LAND SURF. FT. NGVD	SCREENED INTERVAL (FT.)	AQUIFER UNIT
07-008	BELLMAWR B W D	BBWD 4	395146	750542	75	380 - 557	211MRPAL**
07-008	BELLMAWR B W D	BBWD 4	395146	750542	75	380 - 557	211MRPAL**
07-012	BELLMAWR B W D	BBWD 3	395221	750637	35	331 - 359	211MRPAL
07-012	BELLMAWR B W D	BBWD 3	395221	750637	35	331 - 359	211MRPAL
07-573	US GEOL SURVEY	COAST GUARD 2	395355	750738	11	89*	211MRPA
07-574	US GEOL SURVEY	COAST GUARD 3	395355	750738	11	34*	211MRPAU
07-221	US GEOL SURVEY	COAST GUARD 1	395356	750738	11	162 - 170	211MRPAL
07-048	CAMDEN CITY W D	CITY 6N	395527	750646	14	111 - 135	211MRPAM
07-064	CAMDEN CITY W D	CITY 17	395546	750533	34	230 - 265	211MRPAL
07-527	CAMDEN CITY W D	PARKSIDE 18	395550	750537	40	258 - 288	211MRPAL
07-098	NJ WATER CO	CAMDEN DIV 52	395715	750519	18	147 - 198	211MRPAL
07-528	CAMDEN CITY W D	PUCHACK 7	395835	750302	20	140 - 180	211MRPAL
07-369	CAMDEN CITY W D	DELAIR 2	395851	750355	5	109 - 144	211MRPAL
07-369	CAMDEN CITY W D	DELAIR 2	395851	750355	5	109 - 144	211MRPAL
07-369	CAMDEN CITY W D	DELAIR 2	395851	750355	5	109 - 144	211MRPAL
07-369	CAMDEN CITY W D	DELAIR 2	395851	750355	5	109 - 144	211MRPAL
07-369	CAMDEN CITY W D	DELAIR 2	395851	750355	5	109 - 144	211MRPAL
07-369	CAMDEN CITY W D	DELAIR 2	395851	750355	5	109 - 144	211MRPAL
07-370	CAMDEN CITY W D	DELAIR 3	395853	750348	8	87 - 129	211MRPAL
07-545	CAMDEN CITY W D	MORRIS 11	395900	750325	10	102 - 144	211MRPAL
07-545	CAMDEN CITY W D	MORRIS 11	395900	750325	10	102 - 144	211MRPAL
07-587	CAMDEN CITY W D	MORRIS 13	395905	750333	10	90 - 130	211MRPAL
07-586	CAMDEN CITY W D	MORRIS 12	395914	750324	10	86 - 117	211MRPAL
07-586	CAMDEN CITY W D	MORRIS 12	395914	750324	10	86 - 117	211MRPAL
07-379	CAMDEN CITY W D	MORRIS 10	395919	750302	16	75 - 115	211MRPAL
07-386	CAMDEN CITY W D	MORRIS 3A	395933	750229	10	73 - 103	211MRPAL

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CONDUCT ANCE (UC/CM)	PH (UNITS)	SODIUM DIS-SOLVED (MG/L AS NA)	CHLORIDE DIS-SOLVED (MG/L AS CL)
07-008	BELLMAWR B W D	BBWD 4	7/15/1985	16.5	204	7.9	13	3.0
07-008	BELLMAWR B W D	BBWD 4	9/12/1985	14.5	188	7.9	13	3.1
07-012	BELLMAWR B W D	BBWD 3	7/15/1985	16.5	370	7.7	17	12
07-012	BELLMAWR B W D	BBWD 3	9/12/1985	15.0	350	7.3	18	12
07-573	US GEOL SURVEY	COAST GUARD 2	11/29/1984	14.5	211	---	15	20
07-574	US GEOL SURVEY	COAST GUARD 3	11/28/1984	19.5	318	6.9	26	35
07-221	US GEOL SURVEY	COAST GUARD 1	11/28/1984	15.5	515	7.1	17	20
07-048	CAMDEN CITY W D	CITY 6N	12/ 4/1984	15.0	2,350	5.2	65	780
07-064	CAMDEN CITY W D	CITY 17	8/29/1985	15.0	212	5.8	40	45
07-527	CAMDEN CITY W D	PARKSIDE 18	8/29/1985	14.5	200	5.7	30	35
07-098	NJ WATER CO	CAMDEN DIV 52	8/ 7/1985	14.5	520	6.2	27	43
07-528	CAMDEN CITY W D	PUCHACK 7	8/ 6/1985	13.5	85	5.1	3.8	7.7
07-369	CAMDEN CITY W D	DELAIR 2	11/28/1984	14.5	250	6.9	15	22
07-369	CAMDEN CITY W D	DELAIR 2	1/16/1985	15.0	275	6.9	14	21
07-369	CAMDEN CITY W D	DELAIR 2	3/28/1985	16.0	269	7.0	15	26
07-369	CAMDEN CITY W D	DELAIR 2	5/23/1985	16.0	297	6.7	18	30
07-369	CAMDEN CITY W D	DELAIR 2	7/17/1985	16.0	322	7.1	18	34
07-369	CAMDEN CITY W D	DELAIR 2	9/11/1985	15.0	295	7.2	17	32
07-370	CAMDEN CITY W D	DELAIR 3	11/28/1984	14.0	195	6.8	11	15
07-545	CAMDEN CITY W D	MORRIS 11	11/28/1984	14.0	278	6.4	13	20
07-545	CAMDEN CITY W D	MORRIS 11	8/ 6/1985	14.5	282	6.6	12	19
07-587	CAMDEN CITY W D	MORRIS 13	11/28/1984	14.0	236	6.9	11	16
07-586	CAMDEN CITY W D	MORRIS 12	11/28/1984	13.5	222	6.9	11	16
07-586	CAMDEN CITY W D	MORRIS 12	7/17/1985	15.5	235	7.1	12	19
07-379	CAMDEN CITY W D	MORRIS 10	7/17/1985	15.0	398	7.0	12	22
07-386	CAMDEN CITY W D	MORRIS 3A	8/ 6/1985	14.5	775	6.4	25	35

* Total depth of well.

** Well screened in middle and lower aquifer, Potomac-Raritan-Magothy aquifer system

Aquifer unit:

211MRPA - Potomac-Raritan-Magothy aquifer system, undifferentiated
211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

CAPE MAY COUNTY

NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SCREENED INTERVAL (FT)	AQUIFER UNIT	DATE OF SAMPLE	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (US/CM)
09-0150	USGS-WEST CAPE MAY 1 OBS	38 56 07	074 55 56	7	283-293	121CNSY	09-04-85	15.5	2050
09-0048	USGS-CAPE MAY CANAL 5 OBS	38 57 48	074 55 33	17	242-252	121CNSY	09-05-85	15.0	292
09-0049	USGS-HIGBEE BEACH 3 OBS	38 58 04	074 57 42	6	241-250	121CNSY	09-05-85	16.0	278
09-0060	USGS-CAPE MAY AP T7 OBS	39 00 56	074 54 26	13	242-257	121CNSY	09-06-85	15.0	171
09-0089	USGS-OYSTER LAB 4 OBS	39 04 25	074 54 36	7	195-210	121CNSY	09-05-85	15.0	148

LOCAL IDENTIFIER	DATE OF SAMPLE	PH (STANDARD UNITS)	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 IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)
USGS-WEST CAPE MAY 1 OBS	09-04-85	7.8	120	20	17	370	18	395	--	324
USGS-CAPE MAY CANAL 5 OB	09-05-85	8.0	89	20	9.4	22	8.7	154	--	126
USGS-HIGBEE BEACH 3 OBS	09-05-85	7.8	24	4.6	3.0	49	8.0	149	--	122
USGS-CAPE MAY AP T7 OBS	09-06-85	7.9	66	20	4.0	6.3	2.4	93	--	76
USGS-OYSTER LAB 4 OBS	09-05-85	8.0	50	15	3.1	7.7	2.6	73	--	60

LOCAL IDENTIFIER	DATE OF SAMPLE	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, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
USGS-WEST CAPE MAY 1 OBS	09-04-85	35	470	.20	35	1200	<.010	<.10	.630	.60
USGS-CAPE MAY CANAL 5 OB	09-05-85	2.6	15	<.10	35	190	<.010	.64	.580	--
USGS-HIGBEE BEACH 3 OBS	09-05-85	3.5	15	.10	34	190	.040	.50	1.10	1.3
USGS-CAPE MAY AP T7 OBS	09-06-85	2.0	10	<.10	34	120	--	<.10	.160	.20
USGS-OYSTER LAB 4 OBS	09-05-85	4.9	8.7	<.10	20	99	<.010	<.10	.200	.20

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
USGS-WEST CAPE MAY 1 OBS	09-04-85	--	.120	10	<1	<1	1	1	530	5
USGS-CAPE MAY CANAL 5 OB	09-05-85	--	--	10	<1	<1	<1	1	50	2
USGS-HIGBEE BEACH 3 OBS	09-05-85	1.8	.190	20	<1	<1	<1	1	38	3
USGS-CAPE MAY AP T7 OBS	09-06-85	--	.130	10	<1	<1	1	<1	160	2
USGS-OYSTER LAB 4 OBS	09-05-85	--	.210	<10	<1	2	1	<1	700	5

LOCAL IDENTIFIER	DATE OF SAMPLE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PHENOLS TOTAL (UG/L)
USGS-WEST CAPE MAY 1 OBS	09-04-85	100	<.1	<10	2.6	13
USGS-CAPE MAY CANAL 5 OB	09-05-85	12	<.1	6	1.0	7
USGS-HIGBEE BEACH 3 OBS	09-05-85	11	<.1	51	1.2	5
USGS-CAPE MAY AP T7 OBS	09-06-85	42	<.1	<3	1.1	6
USGS-OYSTER LAB 4 OBS	09-05-85	36	<.1	<3	1.0	4

Aquifer unit:
121CNSY - Cohansey Sand

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

CAPE MAY COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. LAND SURF. FT. NGVD	SCREENED INTERVAL FT.	AQUIFER UNIT
09-150	US GEOL SURVEY	WCM 1	385607	745556	7	283 - 293	121CNSY
09-027	CAPE MAY CITY W D	CMCWD 1	385643	745533	7	277 - 306	121CNSY
09-027	CAPE MAY CITY W D	CMCWD 1	385643	745533	7	277 - 306	121CNSY
09-036	CAPE MAY CITY W D	CMCWD 2	385701	745528	10	174 - 282	121CNSY
09-036	CAPE MAY CITY W D	CMCWD 2	385701	745528	10	174 - 282	121CNSY
09-043	CAPE MAY CITY W D	CMCWD 3	385724	745521	15	276*	121CNSY
09-043	CAPE MAY CITY W D	CMCWD 3	385724	745521	15	276*	121CNSY
09-048	US GEOL SURVEY	CANAL 5	385748	745533	17	242 - 252	121CNSY
09-049	US GEOL SURVEY	HIGBEE BEACH 3	385804	745742	6	241 - 250	121CNSY
09-052	LOWER TWP MUA	LTMUA 1	385851	745715	18	241 - 262	121CNSY
09-054	LOWER TWP MUA	LTMUA 2	385905	745625	14	212 - 247	121CNSY
09-054	LOWER TWP MUA	LTMUA 2	385905	745625	14	212 - 247	121CNSY
09-057	LOWER TWP MUA	LTMUA 3	385919	745518	20	263 - 303	121CNSY
09-057	LOWER TWP MUA	LTMUA 3	385919	745518	20	263 - 303	121CNSY
09-060	US GEOL SURVEY	AIRPORT T7	390056	745426	13	242 - 257	121CNSY
09-067	WILDWOOD W D	RIO GRANDE 38	390135	745352	10	461 - 590	122KRKDU
09-069	WILDWOOD W D	RIO GRANDE 33	390136	745342	9	200 - 250	121CNSY
09-070	WILDWOOD W D	RIO GRANDE 36	390137	745352	10	48 - 63	112CPMY
09-072	WILDWOOD W D	RIO GRANDE 31	390138	745350	10	108 - 135	112ESRNS
09-072	WILDWOOD W D	RIO GRANDE 31	390138	745350	10	108 - 135	112ESRNS
09-074	WILDWOOD W D	RIO GRANDE 29	390139	745349	8	191 - 231	121CNSY
09-074	WILDWOOD W D	RIO GRANDE 29	390139	745349	8	191 - 231	121CNSY
09-076	WILDWOOD W D	RIO GRANDE 15	390141	745347	8	185 - 235	121CNSY
09-089	US GEOL SURVEY	OYSTER LAB 4	390425	745446	7	195 - 210	121CNSY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CONDUCT ANCE (US/CM)	PH (UNITS)	SODIUM DIS-SOLVED (MG/L AS NA)	CHLORIDE DIS-SOLVED (MG/L AS CL)
09-150	US GEOL SURVEY	WCM 1	9/ 4/1985	15.5	2,050	7.8	370	470
09-027	CAPE MAY CITY W D	CMCWD 1	10/23/1984	15.5	500	7.6	66	75
09-027	CAPE MAY CITY W D	CMCWD 1	8/ 9/1985	15.5	750	7.5	---	130
09-036	CAPE MAY CITY W D	CMCWD 2	10/23/1984	15.0	498	7.6	64	71
09-036	CAPE MAY CITY W D	CMCWD 2	8/ 9/1985	16.5	540	7.5	---	80
09-043	CAPE MAY CITY W D	CMCWD 3	10/23/1984	15.0	338	7.7	31	22
09-043	CAPE MAY CITY W D	CMCWD 3	8/ 9/1985	15.0	327	7.6	---	19
09-048	US GEOL SURVEY	CANAL 5	9/ 5/1985	15.0	292	8.0	22	15
09-049	US GEOL SURVEY	HIGBEE BEACH 3	9/ 5/1985	16.0	278	7.8	49	15
09-052	LOWER TWP MUA	LTMUA 1	8/ 8/1985	15.5	252	7.8	---	11
09-054	LOWER TWP MUA	LTMUA 2	10/22/1984	15.0	253	7.8	29	14
09-054	LOWER TWP MUA	LTMUA 2	8/ 8/1985	15.0	255	7.9	---	13
09-057	LOWER TWP MUA	LTMUA 3	10/22/1984	15.5	251	7.8	34	12
09-057	LOWER TWP MUA	LTMUA 3	8/ 8/1985	15.5	190	7.7	---	7.8
09-060	US GEOL SURVEY	AIRPORT T7	9/ 6/1985	15.0	171	7.9	6.3	10
09-067	WILDWOOD W D	RIO GRANDE 38	8/ 8/1985	16.0	515	8.1	---	73
09-069	WILDWOOD W D	RIO GRANDE 33	10/22/1984	15.0	168	7.5	7.4	12
09-070	WILDWOOD W D	RIO GRANDE 36	10/22/1984	14.0	247	6.1	17	29
09-072	WILDWOOD W D	RIO GRANDE 31	10/22/1984	14.0	182	7.6	7.8	12
09-072	WILDWOOD W D	RIO GRANDE 31	8/ 8/1985	13.0	195	7.7	---	11
09-074	WILDWOOD W D	RIO GRANDE 29	10/22/1984	15.0	175	7.4	7.8	12
09-074	WILDWOOD W D	RIO GRANDE 29	8/ 8/1985	14.0	173	7.5	---	12
09-076	WILDWOOD W D	RIO GRANDE 15	10/22/1984	14.5	164	7.5	7.7	12
09-089	US GEOL SURVEY	OYSTER LAB 4	9/ 5/1985	15.0	148	8.0	7.7	8.7

* Total depth of well.

Aquifer unit:

112CPMY - Cape May Formation, Undifferentiated
112ESRNS - Cape May Formation, Estuarine Sand Facies
121CNSY - Cohansey Sand
122KRKDU - Rio Grande water-bearing zone of the Kirkwood Formation

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

CUMBERLAND COUNTY

NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SCREENED INTERVAL (FT)	AQUIFER UNIT	DATE OF SAMPLE	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (US/CM)
11-0237	CUMBER CO-NAT AREA 1 OBS	39 29 20	074 57 00	88	76-81	121CKKD	11-15-84	14.0	74

LOCAL IDENTIFIER	DATE OF SAMPLE	PH (STANDARD UNITS)	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 IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)
CUMBER CO-NAT AREA 1 OBS	11-15-84	5.4	14	3.6	1.3	5.4	.90	2.0	--	2

LOCAL IDENTIFIER	DATE OF SAMPLE	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, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
CUMBER CO-NAT AREA 1 OBS	11-15-84	.4	7.9	<.10	8.4	29	<.010	4.1	.210	1.1

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
CUMBER CO-NAT AREA 1 OBS	11-15-84	--	<.010	50	<1	<1	<1	7	190	8

LOCAL IDENTIFIER	DATE OF SAMPLE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PHENOLS TOTAL (UG/L)
CUMBER CO-NAT AREA 1 OBS	11-15-84	11	<.1	28	.70	1

Aquifer unit:
121CKKD - Kirkwood-Cohansey aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

CUMBERLAND COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. LAND SURF. FT. NGVD	SCREENED INTERVAL (FT.)	AQUIFER UNIT
11-324	EAST PT W ASSOC	1	391138	750117	5	242- 262	121CKKD
11-052	FORTESCUE REALTY	FORTESCUE 4	391420	751023	8	283- 303	121CKKD
11-343	NEIL, A	1	391619	751405	5	459*	124PNPN
11-056	MONEY IS MARINA	POLLINO 1	391704	751415	4	350- 370	124PNPN
11-092	BAY PT ROD GUN	BAY POINT 2	391746	751510	5	397- 417	124PNPN

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CONDUCT ANCE (UC/CM)	PH (UNITS)	SODIUM DIS-SOLVED (MG/L AS NA)	CHLORIDE DIS-SOLVED (MG/L AS CL)
11-324	EAST PT W ASSOC	1	11/10/1984	---	182	---	9.8	1.8
11-052	FORTESCUE REALTY	FORTESCUE 4	11/10/1984	---	217	---	12	7.3
11-343	NEIL, A	1	11/10/1984	---	600	---	93	51
11-056	MONEY IS MARINA	POLLINO 1	11/10/1984	---	640	---	130	75
11-092	BAY PT ROD GUN	BAY POINT 2	11/10/1984	---	680	---	130	79

* Total depth of well.

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
124PNPN - Piney Point aquifer

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

GLOUCESTER COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. LAND SURF. FT. NGVD	SCREENED INTERVAL (FT.)	AQUIFER UNIT
15-063	GLASSBORO WD	GWD 4	394308	750702	150	549 - 599	211MRPAU
15-385	PITMAN WD	PWD P4	394345	750804	125	498 - 568	211MRPAU
15-130	SO JERSEY W C	SJWC 3	394408	751330	35	234 - 265	211MRPAU
15-253	WASHINGTON TWP MUA	6(FRIES MLS 1)	394437	750249	152	584 - 652	211MRPAU
15-342	DEL MONTE CORP	10	394438	751914	60	192 - 279	211MRPAU
15-350	PURELAND W CO	LANDTECT 1	394550	752313	20	234 - 284	211MRPAL
15-139	PURELAND W CO	TEST WELL 3	394608	752135	8	301 - 345	211MRPAL
15-140	PURELAND W CO	TEST WELL 4	394608	752135	8	132 - 184	211MRPAM
15-192	MANTUA TWP MUA	MTMUA 5	394641	751109	88	315 - 337	211MRPAU
15-028	E GREENWICH WD	EGWD 2	394755	751327	70	191 - 216	211MRPAU
15-276	W DEPTFORD TWP WD	WDTWD 4	394821	751026	60	242 - 288	211MRPAU
15-374	DEPTFORD TWP MUA	DTMUA 6	394843	750728	50	430 - 486	211MRPAM
15-374	DEPTFORD TWP MUA	DTMUA 6	394843	750728	50	430 - 486	211MRPAM
15-374	DEPTFORD TWP MUA	DTMUA 6	394843	750728	50	430 - 486	211MRPAM
15-348	GREENWICH TWP WD	GTWD 6	394910	751541	20	105 - 135	211MRPAU
15-282	W DEPTFORD TWP WD	5 KINGS HIWAY	394913	751105	55	388 - 450	211MRPAL
15-069	GREENWICH TWP WD	GTWD 3(NEW 4)	394920	751619	10	108 - 168	211MRPAM
15-210	PAULSBORO WD	6-1973	394921	751417	15	185 - 227	211MRPAM
15-347	GREENWICH TWP WD	GTWD 5 (2-A)	394932	751722	20	82 - 117	211MRPAM
15-072	E I DUPONT	REPAUNO 3	394936	751747	6	91 - 101	211MRPAM
15-079	E I DUPONT	REPAUNO 6	394944	751734	10	84 - 109	211MRPAM
15-331	WOODBURY WD	RAILROAD 5	394955	750908	35	405 - 457	211MRPAL
15-390	GLOU CO UTIL AUTH	GCSA 1-71	395020	751340	10	91 - 106	211MRPAU
15-431	WOODBURY WD	RED BANK 6	395034	750842	30	211 - 305	211MRPAM
15-439	ESSEX CHEM CO	ESSEX 2	395048	751401	10	215 - 235	211MRPAL
15-312	W DEPTFORD TWP WD	6 RED BANK AVE	395107	750946	20	322 - 372	211MRPAL
15-024	DEPTFORD TWP MUA	DTMUA 4	395115	750706	40	282 - 345	211MRPAM

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CONDUCT-ANCE (US/CM)	PH (UNITS)	SODIUM DIS-SOLVED (MG/L AS NA)	CHLORIDE DIS-SOLVED (MG/L AS CL)
15-063	GLASSBORO WD	GWD 4	7/24/1985	18.5	570	8.5	120	36
15-385	PITMAN WD	PWD P4	7/24/1985	17.5	575	8.4	120	44
15-130	SO JERSEY W C	SJWC 3	7/23/1985	16.0	1,000	8.3	190	160
15-253	WASHINGTON TWP MUA	6(FRIES MLS 1)	7/24/1985	19.0	305	7.4	64	22
15-342	DEL MONTE CORP	10	9/26/1985	15.5	293	7.2	39	13
15-350	PURELAND W CO	LANDTECT 1	10/31/1984	14.5	1,240	6.7	280	380
15-139	PURELAND W CO	TEST WELL 3	3/13/1985	14.5	3,050	7.3	490	800
15-140	PURELAND W CO	TEST WELL 4	3/14/1985	14.0	181	6.0	21	31
15-192	MANTUA TWP MUA	MTMUA 5	7/23/1985	16.0	510	8.3	95	44
15-028	E GREENWICH WD	EGWD 2	7/23/1985	14.5	465	7.9	83	45
15-276	W DEPTFORD TWP WD	WDTWD 4	7/18/1985	14.0	420	8.1	71	33
15-374	DEPTFORD TWP MUA	DTMUA 6	1/18/1985	16.0	272	7.8	52	17
15-374	DEPTFORD TWP MUA	DTMUA 6	5/22/1985	16.5	269	7.8	52	14
15-374	DEPTFORD TWP MUA	DTMUA 6	7/12/1985	17.0	280	8.1	53	15
15-348	GREENWICH TWP WD	GTWD 6	7/25/1985	14.0	157	4.2	7.3	10
15-282	W DEPTFORD TWP WD	5 KINGS HIWAY	7/18/1985	16.0	400	7.8	97	81
15-069	GREENWICH TWP WD	GTWD 3(NEW 4)	7/25/1985	14.0	167	5.1	10	14
15-210	PAULSBORO WD	6-1973	9/25/1985	14.5	243	5.6	25	31
15-347	GREENWICH TWP WD	GTWD 5 (2-A)	7/25/1985	17.0	225	5.8	17	22
15-072	E I DUPONT	REPAUNO 3	11/ 8/1984	13.5	392	5.4	44	87
15-079	E I DUPONT	REPAUNO 6	11/ 8/1984	13.5	535	5.7	69	96
15-331	WOODBURY WD	RAILROAD 5	7/22/1985	14.5	368	7.8	67	44
15-390	GLOU CO UTIL AUTH	GCSA 1-71	9/26/1985	14.0	---	6.6	140	90
15-431	WOODBURY WD	RED BANK 6	7/22/1985	14.5	350	7.5	29	---
15-439	ESSEX CHEM CO	ESSEX 2	11/ 8/1984	14.5	1,050	6.6	150	130
15-312	W DEPTFORD TWP WD	6 RED BANK AVE	7/18/1985	15.0	795	8.0	68	46
15-024	DEPTFORD TWP MUA	DTMUA 4	7/12/1985	15.5	242	8.2	31	6

Aquifer unit:

211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SALEM COUNTY

NJ-WRD WELL NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SCREENED INTERVAL (FT)	AQUIFER UNIT	DATE OF SAMPLE	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (US/CM)
33-0279	GARRISON OBS	39 36 22	075 15 27	125	425*	211MLRW	03-13-85	15.5	249
33-0116	PENNS GROVE 72 OBS	39 39 19	075 29 19	8	16*	112CPMY	03-07-85	11.5	350

LOCAL IDENTIFIER	DATE OF SAMPLE	PH (STANDARD UNITS)	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 IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)
GARRISON OBS	03-13-85	8.7	100	32	5.7	12	7.0	127	--	116
PENNS GROVE 72 OBS	03-07-85	5.4	--	--	--	--	--	17	--	14

LOCAL IDENTIFIER	DATE OF SAMPLE	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, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
GARRISON OBS	03-13-85	30	1.9	.20	9.1	160	<.010	<.10	.410	--
PENNS GROVE 72 OBS	03-07-85	--	--	--	--	--	<.010	1.4	<.010	.70

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
GARRISON OBS	03-13-85	--	<.010	10	7	<1	<1	<1	580	<1
PENNS GROVE 72 OBS	03-07-85	--	<.010	--	--	--	--	--	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PHENOLS TOTAL (UG/L)
GARRISON OBS	03-13-85	23	<.1	7	--	--
PENNS GROVE 72 OBS	03-07-85	--	--	--	1.8	<1

*Total depth of well

Aquifer unit:
211MLRW - Wenonah-Mount Laurel aquifer
122CPMY - Cape May Formation, Undifferentiated

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SALEM COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. LAND SURF. FT. NGVD	SCREENED INTERVAL (FT.)	AQUIFER UNIT
33-032	PSEG-SALEM GEN STA	PW 3	392740	753201	20	242 - 293	211MLRW
33-032	PSEG-SALEM GEN STA	PW 3	392740	753201	20	242 - 293	211MLRW
33-034	PSEG-SALEM GEN STA	PW 1	392742	753200	17	248 - 298	211MLRW
33-364	PSEG-SALEM GEN STA	PW 5	392743	753158	17	765 - 840	211MRPAM
33-035	PSEG-SALEM GEN STA	PW 2	392744	753206	20	230 - 281	211MLRW
33-035	PSEG-SALEM GEN STA	PW 2	392744	753206	20	230 - 281	211MLRW
33-033	L ALLOWAY BD ED	LACTES 1	392751	752441	14	340*	211MLRW
33-457	PSEG-SALEM GEN STA	6	392751	753207	20	1115 -1135	211MRPAM
33-381	MANNINGTN MILLS	MILLS 6	393453	752709	10	85 - 125	211MLRW
33-108	US ARMY	FINNS POINT	393641	753322	7	290 - 319	211MRPAM
33-108	US ARMY	FINNS POINT	393641	753322	7	290 - 319	211MRPAM
33-360	PENNSVILLE TWP WD	PTWD 5	393750	753131	10	101 - 117	211MRPAU
33-112	PENNSVILLE TWP WD	PTWD 4	393754	753147	10	117 - 137	211MRPAU
33-354	WOODSTOWN WD	WWD 2	393904	751946	45	670 - 705	211MRPAM
33-354	WOODSTOWN WD	WWD 2	393904	751946	45	670 - 705	211MRPAM
33-362	WOODSTOWN WD	WWD 3	393926	751927	60	692 - 712	211MRPAM
33-459	RICHMAN ICE CREAM	1A	393928	752147	25	414 - 457	211MRPAM
33-459	RICHMAN ICE CREAM	1A	393928	752147	25	414 - 457	211MRPAM
33-117	PENNSVILLE TWP WD	PTWD 3	393954	753013	7	87 - 102	211MRPAU
33-453	PENNSVILLE TWP WD	PTWD 6	393957	753017	10	99 - 114	211MRPAU

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CONDUCT ANCE (UC/CM)	PH (UNITS)	SODIUM DIS-SOLVED (MG/L AS NA)	CHLORIDE DIS-SOLVED (MG/L AS CL)
33-032	PSEG-SALEM GEN STA	PW 3	11/ 7/1984	---	790	---	64	140
33-032	PSEG-SALEM GEN STA	PW 3	9/13/1985	---	830	7.8	---	142
33-034	PSEG-SALEM GEN STA	PW 1	11/ 7/1984	---	585	---	30	88
33-364	PSEG-SALEM GEN STA	PW 5	9/13/1985	---	425	7.6	---	37
33-035	PSEG-SALEM GEN STA	PW 2	11/ 7/1984	15.5	1,540	---	66	430
33-035	PSEG-SALEM GEN STA	PW 2	9/13/1985	---	1,800	7.4	---	440
33-033	L ALLOWAY BD ED	LACTES 1	11/ 7/1984	---	480	---	83	42
33-457	PSEG-SALEM GEN STA	PSEG 6	9/13/1985	---	870	7.6	---	180
33-381	MANNINGTN MILLS	MILLS 6	9/19/1985	14.0	240	7.6	---	6.3
33-108	US ARMY	FINNS POINT	11/ 2/1984	---	575	7.6	110	110
33-108	US ARMY	FINNS POINT	9/19/1985	---	540	7.6	---	100
33-360	PENNSVILLE TWP WD	PTWD 5	9/19/1985	14.0	138	6.7	---	9.2
33-112	PENNSVILLE TWP WD	PTWD 4	9/19/1985	14.0	177	6.8	---	9.8
33-354	WOODSTOWN WD	WWD 2	11/ 8/1984	17.0	950	8.1	200	180
33-354	WOODSTOWN WD	WWD 2	9/13/1985	17	1,000	8.0	---	171
33-362	WOODSTOWN WD	WWD 3	11/ 8/1984	17.5	890	8.1	180	150
33-459	RICHMAN ICE CREAM	1A	11/ 8/1984	14.5	375	8.1	83	16
33-459	RICHMAN ICE CREAM	1A	9/13/1985	15.0	390	7.9	---	17
33-117	PENNSVILLE TWP WD	PTWD 3	9/19/1985	14.0	257	6.5	---	19
33-453	PENNSVILLE TWP WD	PTWD 6	9/19/1985	13.5	232	6.6	---	21

* Total depth of well.

Aquifer unit:

211MLRW - Wenonah-Mount Laurel aquifer
211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SALEM COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ELEV. LAND SURF. FT. NGVD	SCREENED INTERVAL (FT.)	AQUIFER UNIT
33-118	PENNSVILLE TWP WD	PTWD 1	393958	753045	8	213 - 238	211MRPAM
33-118	PENNSVILLE TWP WD	PTWD 1	393958	753045	8	213 - 238	211MRPAM
33-119	PENNSVILLE TWP WD	PTWD 2	394009	753043	7	210 - 230	211MRPAM
33-119	PENNSVILLE TWP WD	PTWD 2	394009	753043	7	210 - 230	211MRPAM
33-122	ATL CITY ELEC	DEEPWATER 3R	394045	753018	10	165 - 235	211MRPAM
33-122	ATL CITY ELEC	DEEPWATER 3R	394045	753018	10	165 - 235	211MRPAM
33-123	ATL CITY ELEC	DEEPWATER 2	394047	753027	10	235*	211MRPAM
33-123	ATL CITY ELEC	DEEPWATER 2	394047	753027	10	235*	211MRPAM
33-125	ATL CITY ELEC	DEEPWATER 5	394051	753030	10	149 - 219	211MRPAM
33-125	ATL CITY ELEC	DEEPWATER 5	394051	753030	10	149 - 219	211MRPAM
33-127	ATL CITY ELEC	DEEPWATER 6	394100	753030	10	158 - 188	211MRPAM
33-137	E I DUPONT	DRINKWATER 8	394112	753028	14	317 - 347	211MRPAL
33-460	PENNS GROVE WSC	PGWSC 1A	394247	752714	19	41 - 61	211MRPAU
33-460	PENNS GROVE WSC	PGWSC 1A	394247	752714	19	41 - 61	211MRPAU
33-346	PENNS GROVE WSC	LAYNE 1	394256	752718	19	317 - 357	211MRPAL
33-083	B F GOODRICH CO	9 (PW-1)	394547	752535	10	93 - 133	211MRPAM
33-083	B F GOODRICH CO	9 (PW-1)	394547	752535	10	93 - 133	211MRPAM
33-085	B F GOODRICH CO	6 (PW-2)	394556	752530	10	109 - 129	211MRPAM
33-085	B F GOODRICH CO	6 (PW-2)	394556	752530	10	109 - 129	211MRPAM
33-086	B F GOODRICH CO	4 (PW-3)	394557	752523	13	169 - 189	211MRPAL
33-086	B F GOODRICH CO	4 (PW-3)	394557	752523	13	169 - 189	211MRPAL

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CONDUCT ANCE (UC/CM)	PH (UNITS)	SODIUM DIS-SOLVED (MG/L AS NA)	CHLORIDE DIS-SOLVED (MG/L AS CL)
33-118	PENNSVILLE TWP WD	PTWD 1	11/ 2/1984	15.0	425	7.2	73	64
33-118	PENNSVILLE TWP WD	PTWD 1	9/19/1985	14.5	435	7.1	---	59
33-119	PENNSVILLE TWP WD	PTWD 2	11/ 2/1984	---	400	7.5	43	57
33-119	PENNSVILLE TWP WD	PTWD 2	9/19/1985	---	360	7.1	---	41
33-122	ATL CITY ELEC	DEEPWATER 3R	11/ 1/1984	14.0	392	7.1	68	50
33-122	ATL CITY ELEC	DEEPWATER 3R	9/11/1985	14.0	375	7.1	---	43
33-123	ATL CITY ELEC	DEEPWATER 2	11/ 1/1984	17.0	530	7.0	76	78
33-123	ATL CITY ELEC	DEEPWATER 2	9/11/1985	---	575	7.0	---	83
33-125	ATL CITY ELEC	DEEPWATER 5	11/ 1/1984	15.0	405	7.2	60	58
33-125	ATL CITY ELEC	DEEPWATER 5	9/11/1985	15.0	392	7.0	---	53
33-127	ATL CITY ELEC	DEEPWATER 6	9/11/1985	16.5	940	6.7	---	180
33-137	E I DUPONT	DRINKWATER 8	9/11/1985	15.0	535	7.7	---	73
33-460	PENNS GROVE WSC	PGWSC 1A	11/ 1/1984	13.5	206	5.2	9.6	13
33-460	PENNS GROVE WSC	PGWSC 1A	9/11/1985	---	202	5.3	---	14
33-346	PENNS GROVE WSC	LAYNE 1	11/ 1/1984	14.5	980	7.6	190	210
33-083	B F GOODRICH CO	9 (PW-1)	11/ 2/1984	13.0	126	6.2	8.1	13
33-083	B F GOODRICH CO	9 (PW-1)	9/11/1985	13.5	143	6.2	---	18
33-085	B F GOODRICH CO	6 (PW-2)	11/ 2/1984	14.0	182	6.1	11	18
33-085	B F GOODRICH CO	6 (PW-2)	9/11/1985	14.0	195	6.2	---	21
33-086	B F GOODRICH CO	4 (PW-3)	11/ 2/1984	14.0	1,180	7.2	210	310
33-086	B F GOODRICH CO	4 (PW-3)	9/11/1985	14.0	1,190	7.0	---	250

* Total depth of well.

Aquifer unit:

211MRPAU - Upper aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAM - Middle aquifer, Potomac-Raritan-Magothy aquifer system
211MRPAL - Lower aquifer, Potomac-Raritan-Magothy aquifer system

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October 1, 1978

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)
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

RIOR

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