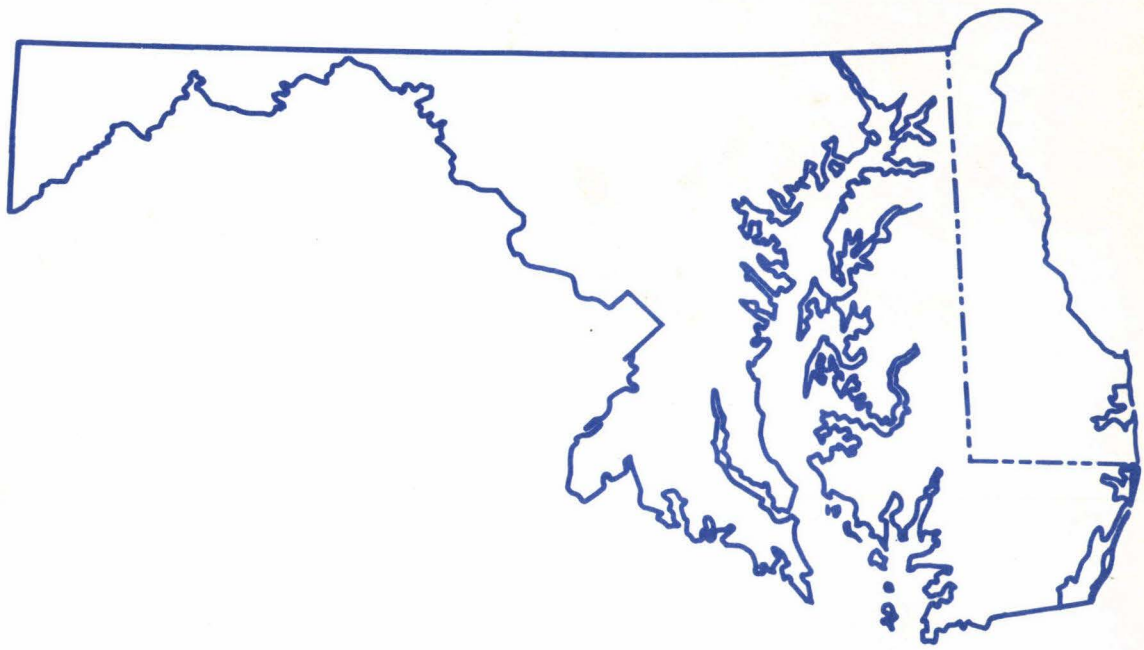
Water Resources Data Maryland and Delaware Water Year 1986



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MD-DE-86-1
Prepared in cooperation with the States of Maryland and Delaware and with other agencies

CALENDAR FOR WATER YEAR 1986

1985

OCTOBER

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1986

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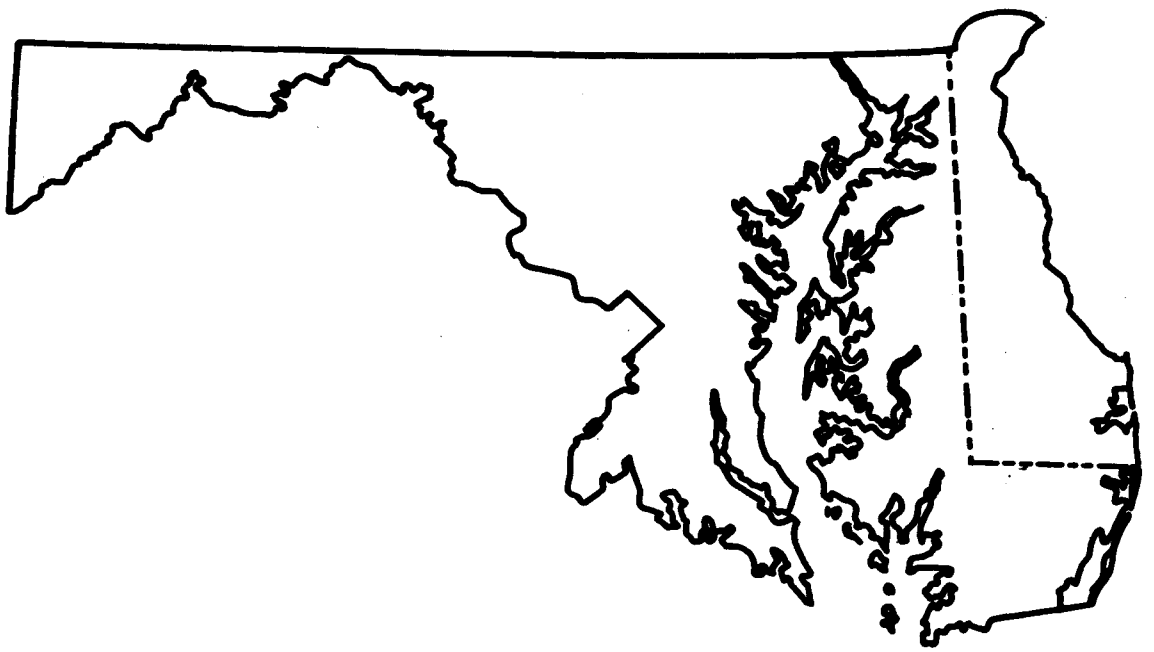
Water Resources Data Maryland and Delaware Water Year 1986

by Robert W. James, Jr., Robert H. Simmons, and Bernard F. Strain



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MD-DE-86-1
Prepared in cooperation with the States of Maryland and Delaware and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
208 Carroll Building
8600 La Salle Road
Towson, Maryland 21204

1986

PREFACE

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

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

J. E. Auvil	S. M. Helinsky	J. J. Manning
F. A. Danner	J. F. Hornlein	M. S. Martin
D. F. Gillen	M. N. Lys	M. J. Smigaj
J. L. Griffith	L. B. Maclin	A. J. Tallman

This report was prepared under the general supervision of H. J. Freiberger, District Chief, Mid-Atlantic District, and S. P. Sauer, Regional Hydrologist, Northeastern Region, and in cooperation with the States of Maryland and Delaware and with other agencies.

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15. Supplementary Notes

Prepared in cooperation with the States of Maryland and Delaware and with other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1986 water year for Maryland and Delaware consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 96 gaging stations; stage and contents at 1 reservoir; water quality at 23 gaging stations and 228 wells; and water levels at 24 observation wells. Also included are data for 12 crest-stage, 11 low-flow, and 6 tidal crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Maryland and Delaware.

17. Document Analysis a. Descriptors

*Maryland, *Delaware, *District of Columbia, *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

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[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation and contents]

GROUND-WATER LEVELS

QUALITY OF GROUND WATER

QUALITY OF GROUND WATER--Continued

QUALITY OF GROUND WATER--Continued Page

QUALITY OF GROUND WATER--Continued Page

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 Maryland and Delaware 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 - Maryland and Delaware."

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 96 gaging stations; stage and contents at 1 reservoir; water quality at 23 gaging stations and 228 wells; and water levels at 25 observation wells. Also included are data for 12 crest-stage , 11 low-flow, and 6 tidal crest-gage partial-record stations. Locations of these sites are shown on figures 3 and 4. Additional water data were collected at various sites not involved in the systematic data-collection program. 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 Maryland and Delaware.

This series of annual reports for Maryland and Delaware 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.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Maryland and Delaware 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, Parts 6A and 6B." 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 Books and Open-File Reports Section, Federal Center, Bldg. 41, Box 25425, Denver, CO 80225.

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 MD-DE-86-1." 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 (301) 828-1535.

COOPERATION

The U.S. Geological Survey and agencies of the State of Maryland have had cooperative agreements for the collection of water-resource records from 1896 to 1909 and since 1924. Similar cooperative agreements have been had between the Survey and agencies of the State of Delaware since 1943. Organizations that assisted in collecting the data in this report through cooperative agreements with the Survey are:

Maryland Geological Survey, K. N. Weaver, director.

Delaware Geological Survey, R. R. Jordan, State geologist.

Maryland State Highway Adminstration, M. S. Caltrider, adminstrator.

Maryland Department of Health and Mental Hygiene, Environmental Health Adminstration, William Eichbaum, assistant secretary.

District of Columbia Department of Public Works, William B. Johnson, director.

Assistance with funds or services was given by the U.S. Army Corps of Engineers for collecting records at 20 gaging stations and 4 water-quality stations throughout Maryland and Delaware, and by the National Park Service for collecting records at 1 gaging station on Rock Creek in Washington, D. C.

The following organizations aided in collecting records:

Delaware: State Department of Natural Resources and Environmental Control, and New Castle County.

Maryland: Maryland Water Resources Administration, Washington Suburban Sanitary Commission, Upper Potomac River Commission, Baltimore County.

Organizations that provided data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow at the start of the 1986 water year was in the normal range throughout the bi-state area. While flows throughout most of the bi-state area remained in the normal range until spring, flows in western Maryland moved into the excessive range (upper 25 percent of record) during November. Heavy rainfall associated with the effect of Hurricane Juan and a stalled low-pressure system during the period November 4-7, 1985, produced monthly rainfall totals of up to 9 inches above normal. River and small-stream flooding along the Potomac River and tidal flooding along the Chesapeake Bay counties of southern Maryland caused one death and an estimated $19 million in damages. Tides were reported to be the highest since the hurricane of 1933. Flows remained in the excessive range along the Potomac River until March, when below-normal precipitation (1.5 to 3.5 inches deficient) dropped flows into the normal range. Deficient precipitation continued throughout the remainder of the year and flows throughout most of the bi-state area were in the deficient range (lower 25 percent of record) from April thru September. Only on the Allegheny Plateau of western Maryland did flows remain in the normal range with the help of a 7.5 inch rainfall in July. During the summer drought conditions were declared in all counties in Maryland and Delaware except for Garrett County in western Maryland. Crop damages as a result of the drought ran into the millions of dollars. Only light restrictions were placed on watering lawns and washing cars. By the end of September, precipitation of about 11 inches was needed to end the drought.

During the 1986 water year, two of the four index stations used--Potomac River near Washington, D.C., in central Maryland, and Choptank River at Greensboro on the Eastern Shore--were in the normal range. North Branch Potomac River at Paw Paw, W. Va., in western Maryland, had excessive runoff for the year (133 percent of normal; reference period 1951-80). Seneca Creek at Dawsonville, in central Maryland, had deficient runoff for the year (69 percent of normal; reference period 1951-80). Several new extremes were set throught the year. At the Potomac River near Washington D.C., index site, a record monthly mean and a maximum daily discharge for the month of November were recorded. The new monthly mean was double that of the old record set back in 1932. At the Potomac River at Paw Paw, W. Va., index site, a record monthly mean discharge was established; the new figure almost triples the old figure set in 1972 (period of record 1938-86). The Seneca Creek index site set a new monthly mean discharge low for the month of June. The Choptank River index site set new monthly mean discharge lows in both June and September. All the new lows are caused by deficient rainfall.

Monthly and annual mean discharges are compared with the long-term averages (reference period 1951-80) for two representative gaging stations in figure 1. Data for the station, Potomac River at Point of Rocks in central Maryland, reflects runoff conditions in the Potomac River basin, excluding the Coastal Plain. Data for the station, Choptank River at Greensboro on the Eastern Shore of Maryland, reflects runoff from a 113 mi^2 area, of which 21.6 mi^2 is in Delaware in the central part of the Delmarva peninsula.

Average freshwater inflow to the Chesapeake Bay was estimated to be 76,500 ft^3/s, based on flows of the James, Potomac, and Susquehanna Rivers. This is 100 percent of the long-term average during the reference period 1951-86. Inflow to the Bay during November set a new record high for the reference period. Heavy rains in the James and Potomac River basins were the major factor contributing to the new high.

The combined storage in the three major water-supply reservoirs in the Baltimore City Municipal System (combined usable capacity of 85,340,000,000 gal) decreased from 75 percent of capacity in September 1985, to 57 percent of capacity at the end of September 1986. For the month of September, the combined storage of 48,660,000 gal is the second lowest on record since 1956. Combined storage was lower only for September 1966, with a combined storage of 44,143,000 gal.

Water levels throughout Maryland and Delaware were at normal levels at the beginning of the 1986 water year, as reflected by the States' network of observation wells. Deficient rainfall throughout the year resulted in drought conditions and many new record low water levels. These new record lows were set during the months of August and September throughout most of Maryland and and Delaware. Only the far western part of Maryland in Garrett County on the Appalachian Plateau had normal to above normal ground-water levels during the 1986 water year.

Water levels have dropped increasingly in areas where ground water is the major water supply. These areas are mostly in the Coastal Plain. As population growth increases, so does water needs, and, with the additional pressure of a drought, most Coastal Plain aquifer water-levels have declined. Areas that recorded new lows are Annapolis, Elkton, Glen Bernie, Lexington Park, St. Charles, Solomons Island, and Waldorf. Water levels remained at below normal levels at the end of the 1986 water year except in the far western part of Maryland where levels were above normal.

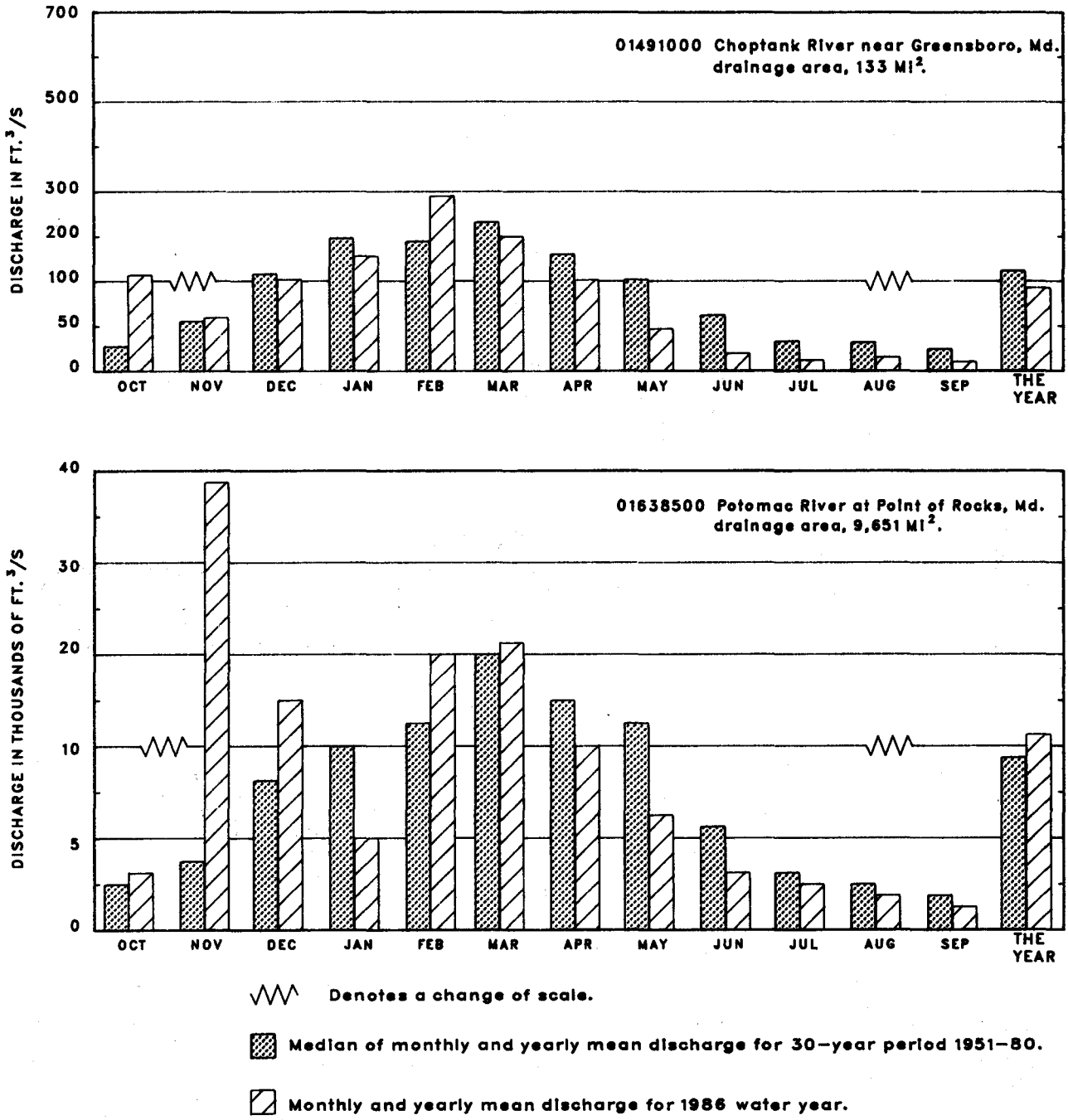

FIGURE 1. COMPARISON OF DISCHARGE AT TWO LONG–TERM REPRESENTATIVE GAGING STATIONS DURING THE 1986 WATER YEAR WITH MEDIAN DISCHARGE FOR INDICATED PERIOD.

SPECIAL NETWORKS AND PROGRAMS

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.

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 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.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1986 water year that began October 1, 1985, and ended September 30, 1986. 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 3 and 4. 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. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Maryland and Delaware, for surface-water stations where only miscellaneous measurements are made.

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 01477800, which appears just to the left of the station name, includes the two-digit Part number "01" plus the six-digit downstream-order number "477800." The Part number designates the major river basin; for example, Part "01" is the North Atlantic slope basin.

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 2 below.)

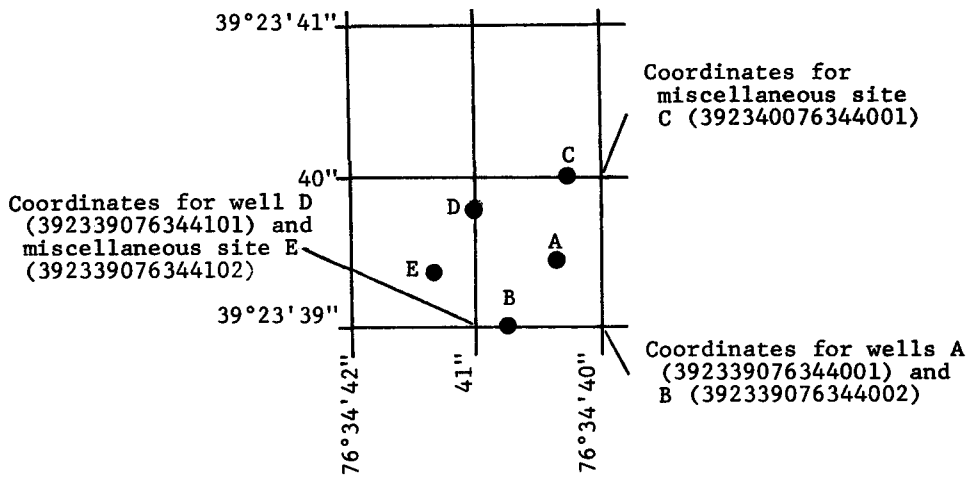

Figure 2. System for numbering wells and miscellaneous sites (latitude and longitude)

A second well-numbering system used in Maryland utilizes the county prefix and a 5-minute grid. The first 2 letters of the identification number are the county prefix; for example, for Charles County the prefix is CH. Each county is divided by 5-minute quadrangles of latitude and longitude. Each quadrangle is identified by 2 uppercase letters; the first designates north to south and the second west to east. The wells are numbered serially within each quadrangle. A similar system used in Delaware divides the state, rather than the counties, by 5-minute quadrangles of latitude and longitude which are designated as explained above. Each 5-minute quadrangle is further subdivided by 1-minute quadrangles. Each of the 1-minute quadrangles from north to south is designated by a number from 1 to 5, and west to east by a number from 1 to 5. Thus ID 55-1 is the first well inventoried in the southeast 1-minute quadrangle of Delaware.

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 3 and 4.

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.

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^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/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 Maryland and Delaware offices of the Mid-Atlantic District. 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 once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

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 3.

Arrangement of Records

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

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in 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. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey Maryland and Delaware offices.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

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 Maryland 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, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Maryland and Delaware Offices.

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 suspended-sediment loads for other periods of similar discharge.

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

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. 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 preceding 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, and so forth, 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 record, 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 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 Maryland and Delaware are shown in figure 4.

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 local well number, an alphanumeric number, derived from the county location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. 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. If known, 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 recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error 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. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. 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)" a landline location designation" the hydrologic-unit number" the distance and direction from a geographic point of reference" and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) 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 (or below) 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 published 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 and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows 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 differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies.in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented 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.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

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 well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. 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.

ACCESS TO WATSTORE DATA

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

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer 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 measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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

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

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

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. 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.

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/m^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).

Cubic-foot-per-second 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 2,445 cubic meters.

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

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

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 specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise 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 ($CaCO_3$).

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.

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 (ug/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, ug/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 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).

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 sedimentaiton 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 particle-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 (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

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

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

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

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

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 [mg O_2/(m^2.time)] for periphyton and macrophytes and [mg O_2/(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 magnitude, usually expressed in years. May also be called recurrence interval.

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

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

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 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 ($7\ Q_{10}$) 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 about 65 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.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and 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 filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 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	Hexagenia
Species	Hexagenia 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 (T/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 abbreviaton for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open- File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation,* by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

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

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.

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

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

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

3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing,* by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. *Discharge ratings at gaging stations,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. *Computation of continuous records of streamflow,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge,* by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

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

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J. E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

3-C1. *Fluvial sediment concepts* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

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

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

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

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

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

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

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sedments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels* by R. W. Schaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

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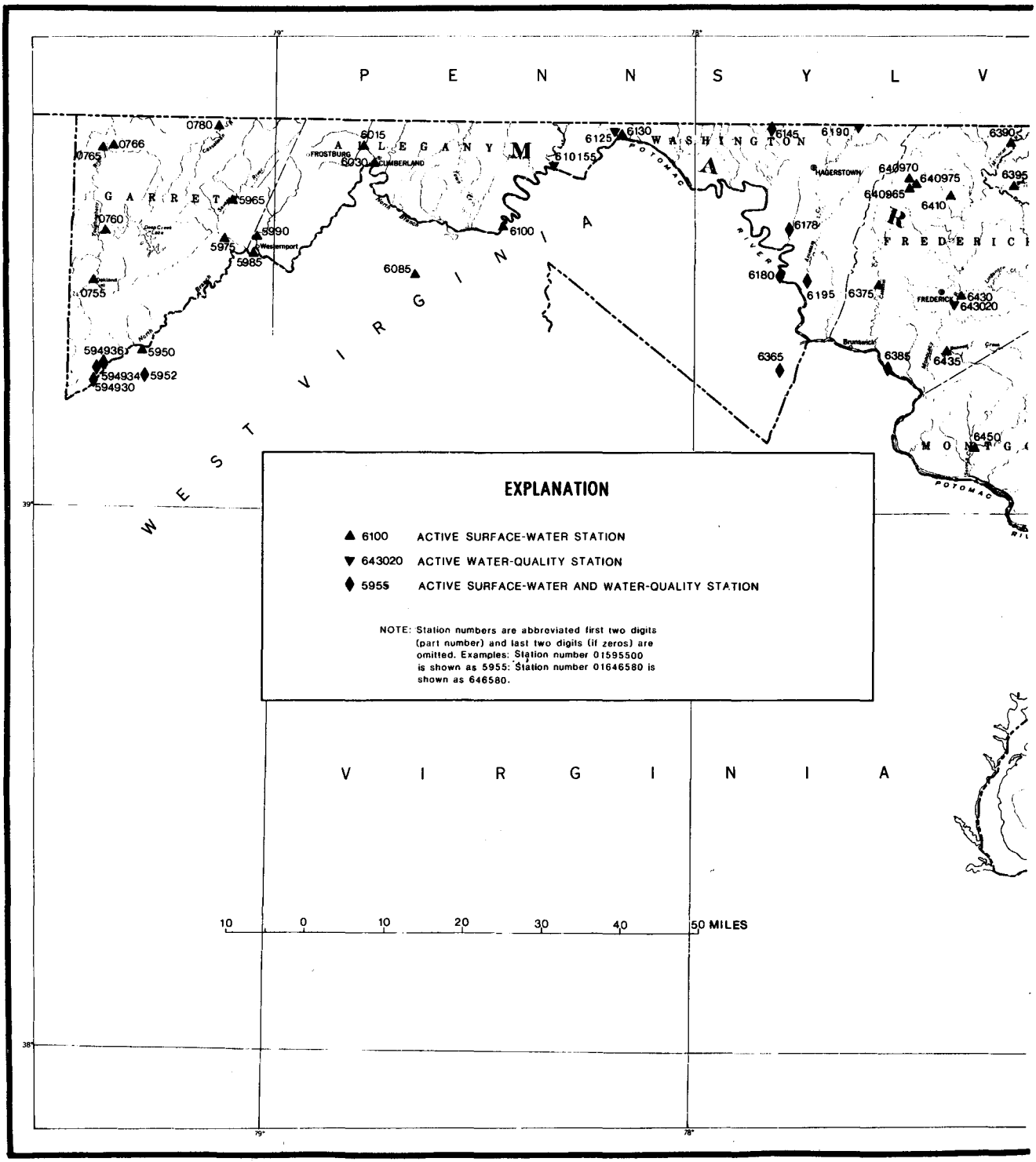
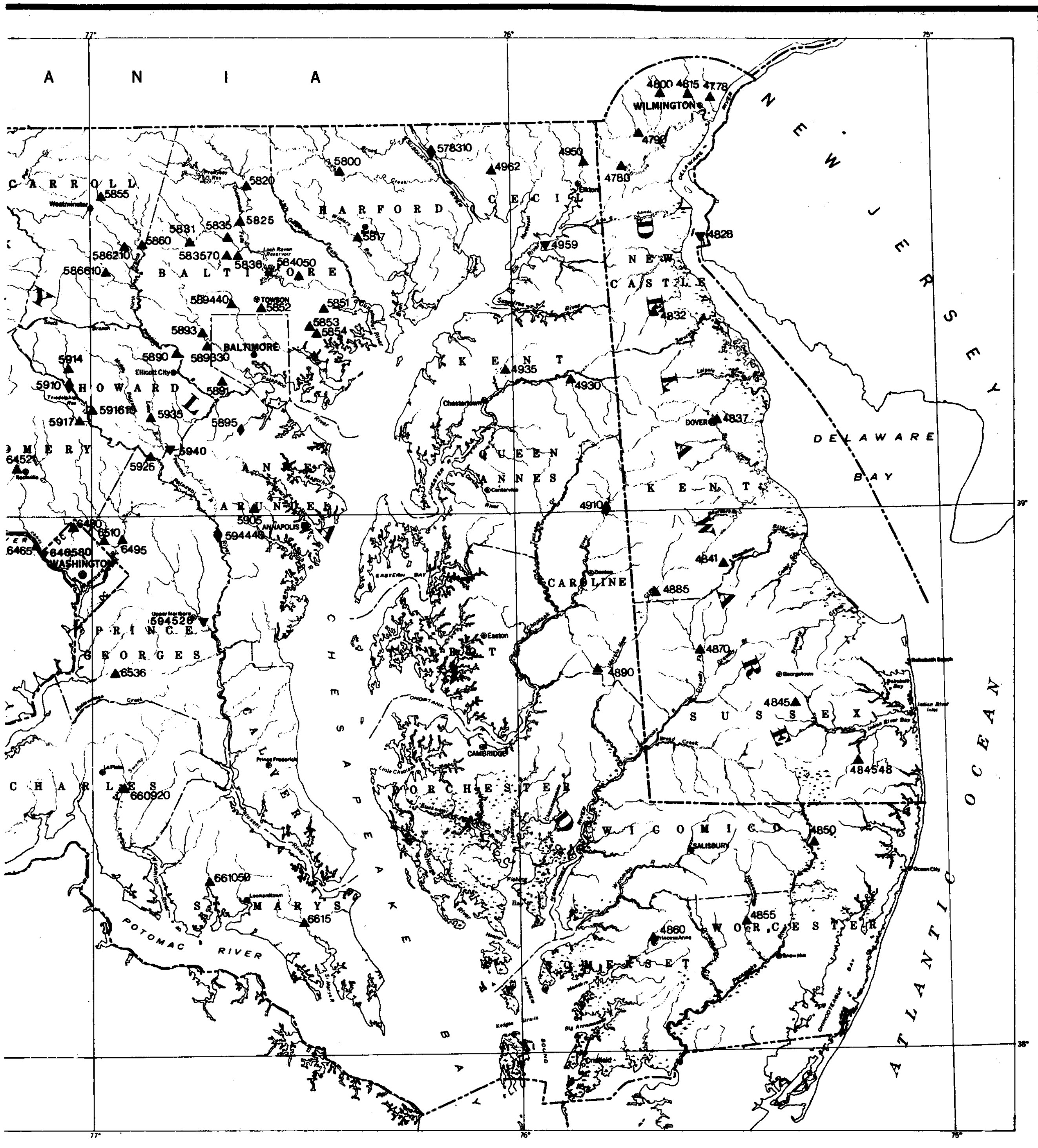


Figure 3. Location of surface-water and water-quality stations in Maryland and Delaware.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Ellicott City
HOWARD
ANNE ARUNDEL
ANNAPOLIS
WASHINGTON
PRINCE GEORGES
Upper Marlboro
CHARLES
La Plata
CALVERT
Prince Frederick
ST. MARYS
Leonardtown
POTOMAC RIVER
KENT
Chestertown
QUEEN ANNES
Centreville
EASTERN BAY
TALBOT
Easton
CAROLINE
Denton
DORCHESTER
CAMBRIDGE
CHOPTANK
Fishing Bay
WICOMICO
SALISBURY
SOMERSET
Princess Anne
Crisfield
WORCESTER
Snow Hill
Ocean City
CHESAPEAKE BAY
WILMINGTON
NEW CASTLE
DOVER
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SUSSEX
Georgetown
Rehoboth Beach
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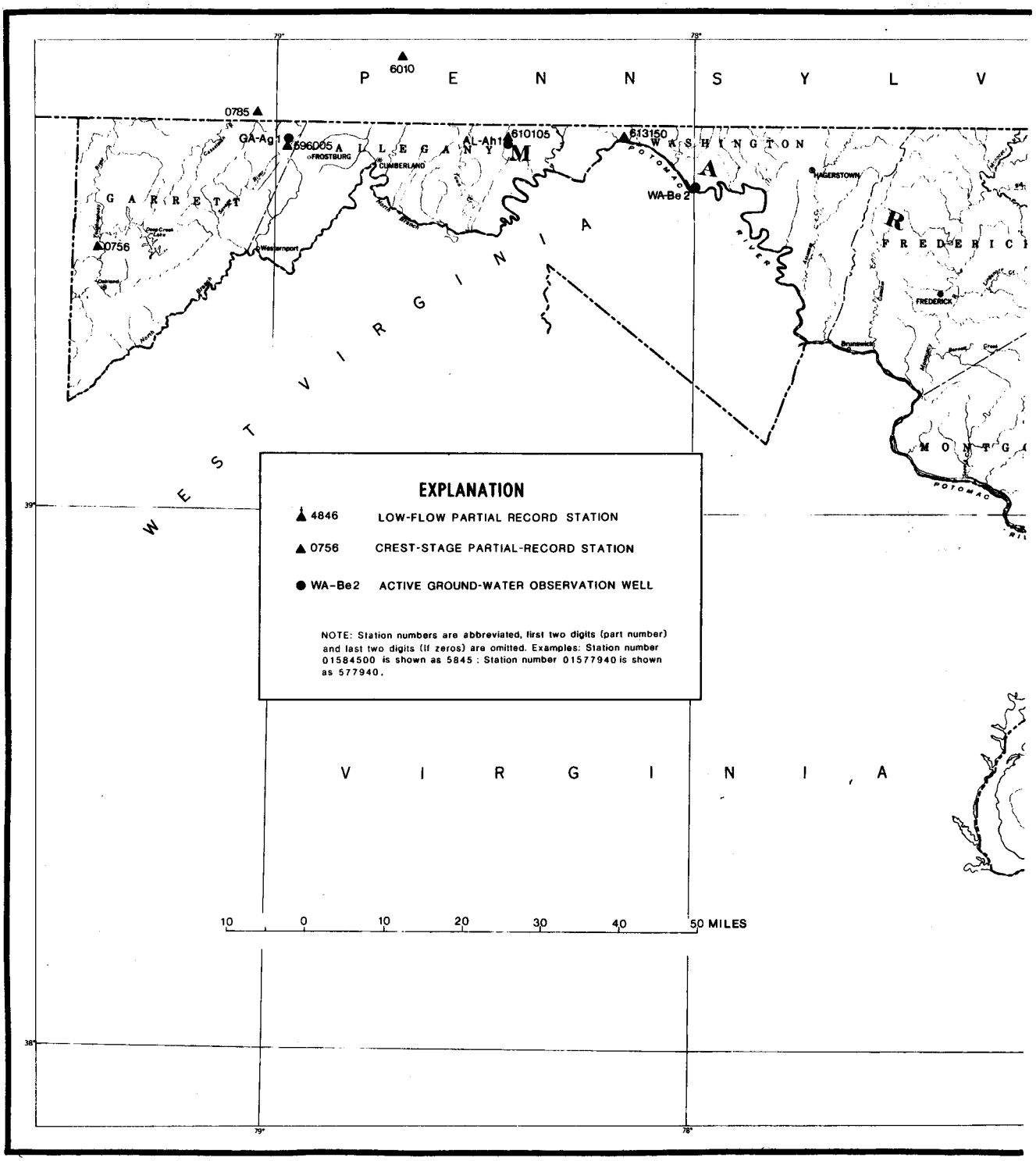
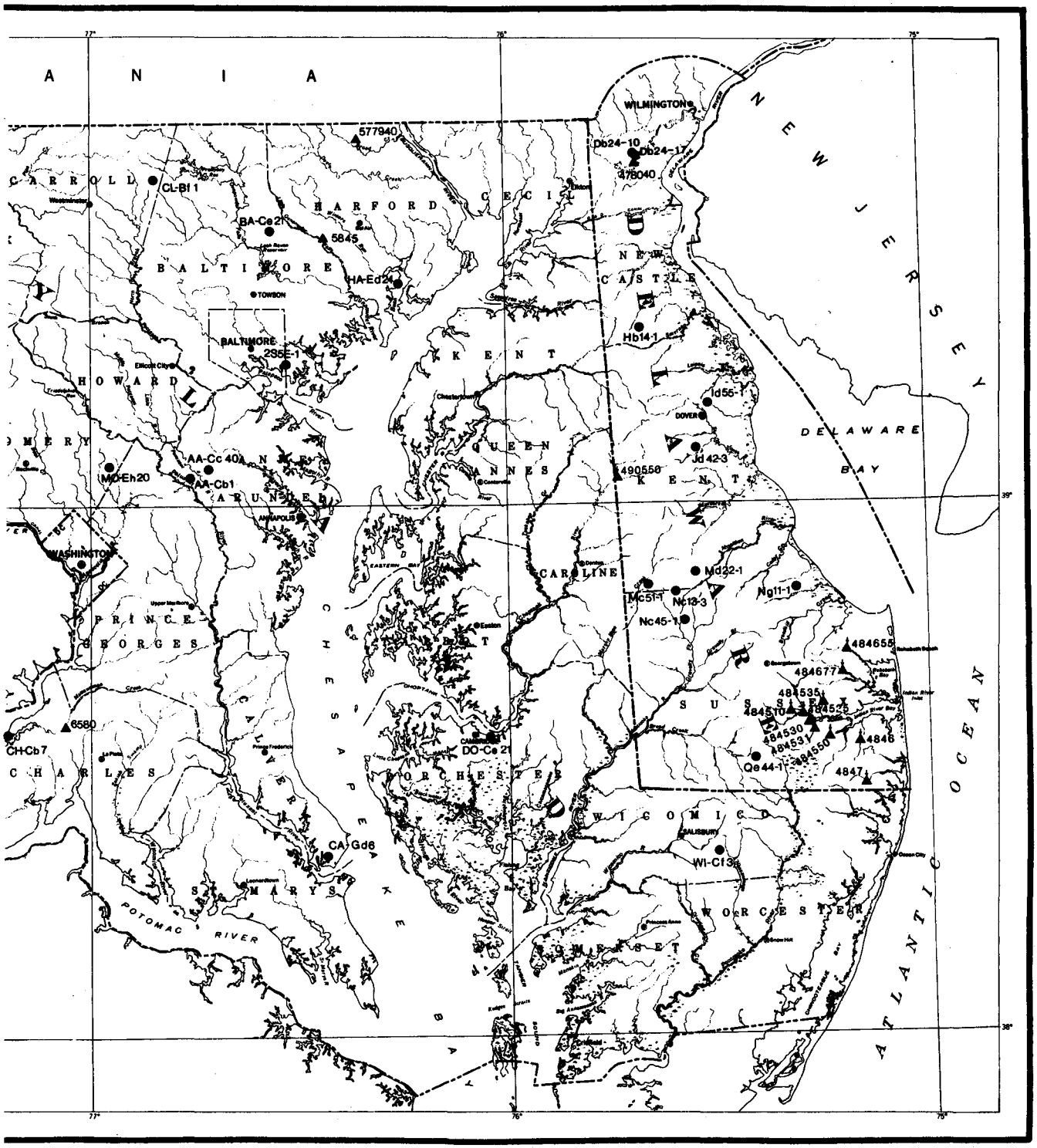


Figure 4. Location of Low-flow and crest-gage partial-record stations and ground-water observation wells in Maryland and Delaware.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BALTIMORE
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NEW CASTLE
TOWSON
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285E-1
Hb14-1
PKENT
HOWARD
Id55-1
DOVER
DELAWARE
BAY
AA-Cc40
MO-Eh20
AA-Cb1
QUEEN ANNES
Jd42-3
490550
KENT
ANNAPOLIS
WASHINGTON
CAROLINE
Md22-1
Mc51-1
Nc13-3
Ng11-1
Nc45-1
PRINCE GEORGES
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CH-Cb7
CHARLES
DO-Ce2
DORCHESTER
WICOMICO
CA-Gd6
WI-Cf3
ST MARYS
POTOMAC RIVER
WORCESTER
SOMERSET
BAY
ATLANTIC OCEAN

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SURFACE-WATER RECORDS

REMARK CODES.--The following remark codes may appear with the water-quality data in this section.

PRINTED OUTPUT	REMARK
E	Estimated
>	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 egual to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

NORTH ATLANTIC SLOPE BASINS

DELAWARE RIVER BASIN

01477800 SHELLPOT CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°45'39", long 75°31'10", New Castle County, Hydrologic Unit 02040205, on right bank 100 ft east of intersection of 44th and Pine Streets in Clifton Park, 700 ft downstream from bridge on North Market Street in Wilmington, 0.2 mi downstream from Matson Run, and 2.3 mi upstream from mouth.
DRAINAGE AREA.--7.46 mi².
PERIOD OF RECORD.--December 1945 to current year.
REVISED RECORDS.--WSP 1382: 1948(m).
GAGE.--Water-stage recorder and concrete control. Datum of gage is 15.16 ft above National Geodetic Vertical Datum of 1929.
REMARKS.--Estimated daily discharges: Jan. 7, 8, Jan. 28 to Feb. 2, Feb. 12-14, Apr. 1-15, May 6 to July 3, and Aug. 18 to Sept. 6. Records good except those for periods of backwater from rocks on control, Apr. 1-15 and Aug. 18 to Sept. 6, which are fair to poor, and those for period of no gage-height record, May 6 to July 3, which are poor. Occasional regulation at low flow from unknown source upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.
AVERAGE DISCHARGE.--40 years (water years 1947-86), 9.57 ft³/s, 17.42 in/yr.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,850 ft³/s, Sept. 13, 1971, gage height, 11.91 ft, from rating curve extended above 200 ft³/s on basis of culvert and flow-over-road measurements at gage heights 9.10 ft and 11.91 ft; minimum daily discharge, 0.09 ft³/s, Oct. 2, 4, 1968.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1940, that of Sept. 13, 1971. Flood of Aug. 1, 1945, reached a stage of about 8.5 ft, from floodmarks.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 19	2225	843	4.11	Apr. 16	1625	570	3.64
Jan. 25	2055	*1,010	*4.43	Sept. 23	1850	819	4.06

Minimum daily discharge, 0.22 ft³/s, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.85	25	1.7	3.2	3.4	2.0	2.2	.90	12	.52	.33
2	1.3	.86	14	1.5	5.0	3.3	2.1	2.1	.90	7.0	5.5	1.4
3	28	.99	4.5	19	5.7	3.2	1.8	1.9	.85	.90	4.0	.66
4	5.5	2.1	3.3	3.4	48	3.3	1.7	1.9	.85	.72	.80	.45
5	33	30	2.8	8.5	35	3.1	1.7	1.9	.85	.70	.66	.83
6	3.4	2.9	3.1	2.6	11	2.6	7.5	1.9	.85	.67	.53	.96
7	1.9	1.5	2.6	1.9	6.1	2.3	4.2	1.8	.85	.63	.55	.39
8	1.5	1.1	2.3	1.6	4.9	2.1	2.3	1.5	1.0	.68	.54	.32
9	1.3	1.0	2.2	1.7	5.3	2.2	2.1	1.4	1.0	.53	.48	.29
10	1.2	1.0	2.0	1.8	7.3	2.3	2.0	1.4	1.0	.52	.49	.28
11	1.2	1.0	2.0	1.7	6.6	3.4	2.0	1.4	27	.51	.49	.28
12	1.1	1.1	2.0	2.0	4.4	2.1	1.9	1.4	12	.56	.46	.28
13	1.1	1.1	25	2.1	4.2	9.3	1.8	1.4	5.0	2.7	.48	.27
14	1.1	1.4	7.3	1.6	3.7	40	1.8	1.5	3.0	1.9	.48	.27
15	1.1	1.1	2.9	1.4	3.6	24	7.6	1.5	1.1	.56	.49	.26
16	1.0	26	2.5	1.5	3.8	20	135	1.4	1.0	.86	.52	.22
17	.99	26	2.3	1.6	6.5	5.2	65	1.4	.90	1.4	44	.24
18	.87	2.8	2.1	1.8	104	3.8	19	1.4	.85	7.1	2.4	.41
19	.90	1.8	1.9	86	32	3.6	5.8	1.4	.80	5.3	.77	.37
20	.90	1.6	2.0	42	22	3.1	4.3	5.0	.80	2.6	.41	.28
21	.87	1.4	1.9	7.4	20	2.7	6.0	3.0	.75	2.9	20	.34
22	1.7	33	1.9	3.9	11	2.5	8.5	3.5	.70	.93	2.0	.48
23	1.1	6.8	2.0	3.1	16	2.5	9.4	4.0	.70	.68	.51	44
24	7.7	2.6	1.9	2.5	8.0	2.4	4.6	2.5	.70	.60	.38	14
25	2.7	2.0	1.8	130	6.2	2.3	3.2	1.4	.65	.46	.32	1.4
26	1.1	3.9	1.7	202	4.6	2.2	3.0	1.3	.60	18	.33	2.5
27	.87	8.2	1.7	40	4.4	2.3	2.8	1.2	.60	19	.50	35
28	.84	83	1.9	9.5	3.7	2.1	2.6	1.1	.60	1.1	6.1	2.2
29	.83	49	1.7	5.0	---	2.0	2.7	1.1	.60	.84	.78	.82
30	.92	56	1.6	3.9	---	1.9	2.3	1.0	.60	.71	.38	.54
31	.92	---	1.5	3.4	---	1.9	---	1.0	---	.69	.37	---
TOTAL	108.21	352.10	131.4	596.1	396.2	167.1	316.7	56.9	68.00	93.75	96.24	110.07
MEAN	3.49	11.7	4.24	19.2	14.2	5.39	10.6	1.84	2.27	3.02	3.10	3.67
MAX	33	83	25	202	104	40	135	5.0	27	19	44	44
MIN	.83	.85	1.5	1.4	3.2	1.9	1.7	1.0	.60	.46	.32	.22
CFSM	.47	1.57	.57	2.57	1.90	.72	1.42	.25	.30	.41	.42	.49
IN.	.54	1.76	.66	2.97	1.98	.83	1.58	.28	.34	.47	.48	.55

CAL YR 1985 TOTAL 2630.75 MEAN 7.21 MAX 383 MIN .40 CFSM .97 IN 13.12
WTR YR 1986 TOTAL 2492.77 MEAN 6.83 MAX 202 MIN .22 CFSM .92 IN 12.43

01478000 CHRISTINA RIVER AT COOCHS BRIDGE, DE

LOCATION.--Lat 39°38'14", long 75°43'43", New Castle County, Hydrologic Unit 02040205, on right bank 60 ft downstream from highway bridge, 0.5 mi southeast of Coochs Bridge, 3.3 mi south of Newark, 3.6 mi upstream from Belltown Run, and 22.6 mi upstream from mouth.

DRAINAGE AREA.--20.5 mi².

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

REVISED RECORDS.--WDR MD-DE-79-1: 1943-70(P).

GAGE.--Water-stage recorder. Datum of gage is 25.54 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 14, 1944, nonrecording gage on upstream side of bridge at same datum. Sept. 14, 1944, to May 13, 1969, recording gage at site on left bank at downstream side of highway bridge at same datum. May 26, 1969, to Dec. 5, 1973, recording gage on left bank 82 ft downstream from highway bridge at same datum.

REMARKS.--No estimated daily discharges. Records good. Low and medium flow regulated by mill upstream from station. Gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--43 years, 28.3 ft³/s, 18.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,330 ft³/s, May 1, 1947, gage height, 12.41 ft; minimum daily discharge, 0.2 ft³/s, Aug. 7, 14, 18, 21, 27, 28, 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)
Nov. 29	0200	*700	*9.00	No peak greater than base discharge.			

Minimum daily discharge, 0.55 ft³/s, Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	6.1	71	7.6	14	16	11	11	5.8	3.0	3.0	2.4
2	3.3	20	31	7.6	19	15	11	10	5.1	13	27	5.3
3	61	27	16	24	20	15	10	9.6	4.5	5.4	27	4.3
4	25	36	12	14	93	16	11	9.4	4.6	3.2	6.1	3.2
5	19	101	12	20	83	15	11	9.4	4.8	3.0	3.8	3.0
6	8.8	44	12	12	37	14	19	9.1	4.7	2.9	3.8	2.8
7	6.7	21	11	9.2	25	14	15	8.9	4.6	2.8	3.3	2.6
8	8.2	14	11	7.6	20	11	12	8.2	5.0	2.6	3.4	2.6
9	5.6	14	10	7.8	20	13	11	7.8	4.9	2.5	3.2	2.5
10	5.1	15	9.7	8.2	23	14	11	7.4	4.2	2.5	2.8	2.5
11	5.3	18	9.5	7.9	25	16	10	7.7	27	2.4	2.9	2.3
12	4.8	21	9.5	7.7	19	13	10	7.5	61	2.3	2.5	2.5
13	4.9	30	48	7.9	15	22	10	7.4	21	6.4	2.4	2.3
14	5.5	31	29	6.8	14	57	10	9.7	7.0	7.9	2.5	2.0
15	5.7	32	13	6.6	16	74	14	7.9	5.9	2.9	2.4	1.9
16	7.7	55	11	6.2	14	54	82	6.7	5.5	3.1	2.6	1.1
17	3.5	104	9.8	7.0	20	24	119	15	6.0	5.3	2.8	.55
18	9.8	23	9.4	7.7	229	20	55	7.0	4.6	6.7	2.7	.59
19	6.7	16	8.4	56	90	19	23	7.3	4.4	33	20	.70
20	9.3	14	8.4	103	57	15	18	16	4.3	7.9	28	.82
21	14	16	8.9	20	39	14	19	12	4.2	11	47	.94
22	20	86	8.3	13	33	14	20	15	3.8	4.3	15	1.2
23	15	46	9.2	12	35	14	21	8.3	3.9	3.5	5.1	4.6
24	33	13	9.3	10	28	13	16	7.3	3.9	3.1	3.8	9.8
25	32	9.6	9.4	44	23	12	14	6.8	3.6	3.0	3.0	2.5
26	16	11	7.3	371	19	12	13	6.5	3.4	3.5	2.9	1.9
27	13	34	7.8	91	19	13	12	6.2	3.4	17	3.3	12
28	11	112	8.1	28	17	12	12	8.8	3.4	5.0	12	4.1
29	14	221	8.0	18	---	11	11	6.7	3.5	7.4	5.5	2.3
30	14	92	7.4	16	---	11	11	5.9	3.2	9.5	2.5	1.8
31	17	---	7.2	15	---	11	---	4.4	---	3.6	1.7	---
TOTAL	408.8	1282.7	442.6	972.8	1066	594	622	270.9	231.2	189.7	254.0	87.10
MEAN	13.2	42.8	14.3	31.4	38.1	19.2	20.7	8.74	7.71	6.12	8.19	2.90
MAX	61	221	71	371	229	74	119	16	61	33	47	12
MIN	3.3	6.1	7.2	6.2	14	11	10	4.4	3.2	2.3	1.7	.55
CFSM	.64	2.09	.70	1.53	1.86	.94	1.01	.43	.38	.30	.40	.14
IN.	.74	2.33	.80	1.77	1.93	1.08	1.13	.49	.42	.34	.46	.16

CAL YR 1985 TOTAL 7297.10 MEAN 20.0 MAX 842 MIN 1.5 CFSM .98 IN 13.24
WTR YR 1986 TOTAL 6421.80 MEAN 17.6 MAX 371 MIN .55 CFSM .86 IN 11.65

01479000 WHITE CLAY CREEK NEAR NEWARK, DE

LOCATION.--Lat 39°41'47", long 75°40'33", New Castle County Hydrologic Unit 02040205, on left bank 35 ft downstream from bridge on private road at Delaware Park Race Track, 0.4 mi downstream from the Baltimore and Ohio Railroad bridge, 1.1 mi downstream from Pike Creek, 3.8 mi east of Newark, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--89.1 mi².

PERIOD OF RECORD.--October 1931 to September 1936, June 1943 to September 1957, October 1959 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1051: 1933(M). WSP 1382: 1932, 1934. WDR MD-DE-83-1: 1978-82(P).

GAGE.--Water-stage recorder. Datum of gage is 9.00 ft above National Geodetic Vertical Datum of 1929. Nov. 17, 1931, to Sept. 30, 1936, June 4, 1943, to Sept. 30, 1957, and Oct. 1, 1959, to Apr. 7, 1976, at site 0.5 mi upstream at datum 2.6 ft higher.

REMARKS.--Estimated daily discharges: Dec. 19-30, Jan. 8-13, Jan. 29 to Feb. 3, Feb. 13-16, and Mar. 8. Records good except those for estimated daily discharges (ice effect), which are fair. Slight diurnal fluctuation at low flow caused by mills upstream from station. Records do not include a negligible diversion upstream from station by E. I. du Pont de Nemours & Co. Gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some periods have been collected at this location.

AVERAGE DISCHARGE.--46 years (water years 1932-36, 1944-57, 1960-86, 114 ft³/s, 17.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,080 ft³/s, June 22, 1972, gage height, 17.74 ft, at previous site and datum, from rating curve extended above 6,700 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum discharge, 4.7 ft³/s, Sept. 11, 1966; minimum daily discharge, 5.0 ft³/s, Sept. 10, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23 ft, previous site and datum, in July 1937 (probably affected by backwater from railroad bridge which has since been raised and widened), from information by Baltimore & Ohio Railroad.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	0800	*1,310	*10.10	No peak greater than base discharge.			

Minimum daily discharge, 16 ft³/s, Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	37	246	61	90	113	80	75	43	27	25	22
2	50	37	138	57	96	110	80	73	41	55	130	32
3	171	38	99	94	110	108	77	70	39	44	75	29
4	118	40	82	73	227	111	77	70	39	30	37	26
5	105	150	76	83	357	110	79	70	40	29	30	25
6	70	69	76	65	207	108	101	69	39	28	29	29
7	56	52	76	59	147	104	99	67	39	26	27	24
8	50	45	71	60	128	92	86	64	47	25	27	22
9	47	42	66	60	123	100	79	61	39	23	26	20
10	47	41	64	58	124	103	76	61	34	25	24	19
11	45	40	63	58	126	114	76	61	131	23	22	20
12	43	40	63	56	117	104	77	60	248	24	20	19
13	42	41	120	54	106	117	75	58	93	45	20	20
14	42	40	126	50	106	184	75	58	56	32	19	18
15	42	41	76	53	108	313	79	59	49	24	18	17
16	41	63	68	53	100	180	390	60	45	22	20	17
17	39	153	66	59	111	125	468	64	44	27	22	16
18	38	68	62	59	443	111	230	58	41	44	20	16
19	40	55	58	144	406	108	129	54	39	67	47	17
20	42	52	60	281	335	102	110	71	40	40	52	21
21	39	49	62	115	230	93	109	68	37	44	145	22
22	43	134	64	76	215	92	116	83	35	30	69	19
23	39	145	64	68	176	93	121	62	34	25	36	79
24	49	77	64	62	159	91	105	56	34	23	28	48
25	56	67	61	135	143	87	92	53	33	22	23	40
26	42	69	56	974	128	87	88	52	32	32	21	27
27	40	102	58	325	125	87	87	49	32	151	24	64
28	38	228	58	166	118	86	82	49	32	42	44	45
29	36	522	56	110	---	85	81	47	32	34	33	30
30	36	217	62	100	---	84	79	45	28	38	24	25
31	36	---	69	96	---	82	---	44	---	28	23	---
TOTAL	1636	2754	2430	3764	4861	3484	3503	1891	1515	1129	1160	828
MEAN	52.8	91.8	78.4	121	174	112	117	61.0	50.5	36.4	37.4	27.6
MAX	171	522	246	974	443	313	468	83	248	151	145	79
MIN	36	37	56	50	90	82	75	44	28	22	18	16
CFSM	.59	1.03	.88	1.36	1.95	1.26	1.31	.69	.57	.41	.42	.31
IN.	.68	1.15	1.01	1.57	2.03	1.45	1.46	.79	.63	.47	.48	.35

CAL YR 1985 TOTAL 29421 MEAN 80.6 MAX 1960 MIN 22 CFSM .91 IN 12.28
WTR YR 1986 TOTAL 28955 MEAN 79.3 MAX 974 MIN 16 CFSM .89 IN 12.09

01480000 RED CLAY CREEK AT WOODDALE, DE

LOCATION.--Lat 39°45'52", long 75°38'08", New Castle County, Hydrologic Unit 02040205, on right bank 12 ft upstream from bridge on State Highway 48, 0.3 mi south of Wooddale, 2.3 mi north of Marshallton, and 4.9 mi upstream from mouth.

DRAINAGE AREA.--47.0 mi².

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

REVISED RECORDS.--WSP 1141: 1948. WSP 1272: 1951(m). WSP 1432: 1944(M), 1945, 1946(M), 1948, 1949(M). WSP 2102: 1960(M), 1964(M), 1966-67(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 81.46 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1950, nonrecording gage at site 10 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow caused by mills upstream from station. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--43 years, 63.9 ft³/s, 18.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,010 ft³/s, July 21, 1975, gage height, 10.32 ft, from rating curve extended above 3,900 ft³/s on basis of contracted-opening measurement at gage height 9.93 ft; minimum discharge, 2.9 ft³/s, Sept. 4, 1966; minimum daily discharge, 4.5 ft³/s, Sept. 4, 1966.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 16	1900	*933	*4.46	No peak greater than base discharge.			

Minimum discharge, 4.2 ft³/s, Sept. 21, gage height, 2.12 ft; minimum daily discharge, 9.0 ft³/s, Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	24	116	33	51	62	48	52	30	19	18	12
2	27	23	76	32	58	60	49	51	30	28	26	16
3	91	24	52	59	63	60	47	48	28	24	40	17
4	63	23	45	47	101	62	48	47	28	20	21	15
5	67	81	41	53	165	62	49	47	28	19	18	16
6	45	41	44	43	93	61	69	47	28	19	17	18
7	35	32	41	37	73	57	62	47	28	18	18	14
8	30	29	39	32	63	49	55	45	28	17	18	12
9	29	27	38	34	60	53	51	44	26	17	17	12
10	29	26	36	34	60	54	48	42	24	18	14	13
11	29	26	36	33	65	61	48	41	56	16	14	11
12	26	27	39	33	58	55	48	41	74	18	13	11
13	26	27	66	32	53	63	46	40	45	18	13	11
14	26	27	71	30	53	94	47	40	32	20	13	10
15	26	27	47	29	54	173	48	41	30	16	12	9.6
16	26	33	43	33	51	102	293	42	28	15	12	9.4
17	24	110	42	39	54	74	242	42	30	20	12	9.0
18	24	41	40	32	205	67	132	38	26	24	12	9.3
19	25	34	34	62	191	64	82	36	25	28	12	11
20	25	32	35	230	172	61	72	48	25	23	12	14
21	24	30	36	74	126	57	73	52	23	24	63	9.2
22	25	75	37	53	109	55	77	62	23	19	33	9.8
23	25	71	37	48	94	54	84	45	23	17	19	22
24	28	41	37	43	85	54	72	40	23	17	15	49
25	35	35	38	74	78	52	64	38	22	16	13	22
26	27	35	32	437	70	52	60	36	21	29	17	17
27	25	45	34	156	69	53	59	35	21	57	13	32
28	24	96	34	78	65	51	57	36	21	22	19	26
29	24	208	32	61	---	50	56	34	20	19	17	18
30	23	99	31	58	---	50	54	32	19	26	15	18
31	24	---	33	53	---	49	---	31	---	19	11	---
TOTAL	985	1449	1362	2092	2439	1971	2240	1320	865	662	567	473.3
MEAN	31.8	48.3	43.9	67.5	87.1	63.6	74.7	42.6	28.8	21.4	18.3	15.8
MAX	91	208	116	437	205	173	293	62	74	57	63	49
MIN	23	23	31	29	51	49	46	31	19	15	11	9.0
CFSM	.68	1.03	.93	1.44	1.85	1.35	1.59	.91	.61	.46	.39	.34
IN.	.78	1.15	1.08	1.66	1.93	1.56	1.77	1.04	.68	.52	.45	.37

CAL YR 1985 TOTAL 15058.0 MEAN 41.3 MAX 931 MIN 15 CFSM .88 IN 11.92
WTR YR 1986 TOTAL 16425.3 MEAN 45.0 MAX 437 MIN 9.0 CFSM .96 IN 13.00

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°46'09", long 75°34'25", New Castle County, Hydrologic Unit 02040205, on right bank in Rockford Park, 0.2 mi downstream from Rising Sun Bridge, in Wilmington, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--314 mi².

PERIOD OF RECORD.--October 1946 to current year. Prior to December 1946 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1948, 1950.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 68.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow caused by mills upstream from station. Flow regulated since November 1973 by Marsh Creek Reservoir, capacity 7,230,000,000 gal, about 27 mi upstream. No diversion just upstream from station by plant of E. I. du Pont de Nemours & Co. since June 13, 1960. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--40 years, 480 ft³/s, 20.76 in/yr, adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,000 ft³/s, June 23, 1972, gage height, 15.49 ft, from rating curve extended above 18,000 ft³/s; minimum discharge, about 30 ft³/s, Dec. 26, 1948, during period of ice effect; minimum daily discharge, 56 ft³/s, Aug. 23, 24, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 17	0215	*3,470	*6.36	No peak greater than base discharge.			

Minimum discharge, 45 ft³/s, Sept. 26, gage height, 2.37 ft; minimum daily discharge, 81 ft³/s, Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	162	1630	244	482	547	372	431	200	128	123	112
2	243	161	905	221	520	529	374	399	192	183	131	122
3	607	161	662	319	617	511	353	365	183	194	207	138
4	651	163	503	337	623	515	350	353	179	146	146	129
5	511	596	462	318	1040	519	361	349	181	139	126	127
6	366	468	457	291	1140	504	448	340	180	128	119	125
7	289	282	449	248	701	495	472	345	180	122	158	114
8	255	221	415	199	597	578	405	326	180	116	136	106
9	213	202	394	229	556	643	366	304	172	109	126	102
10	204	193	605	237	533	628	346	298	159	114	114	96
11	196	191	604	228	546	518	338	297	215	111	131	97
12	189	185	391	218	504	506	345	286	260	116	141	98
13	186	186	389	223	406	505	331	279	357	128	118	95
14	186	187	517	203	375	811	330	273	223	131	106	88
15	184	200	356	196	470	1720	335	276	190	105	98	86
16	178	248	306	198	409	870	1240	283	178	100	99	86
17	171	944	298	216	424	626	2350	301	177	113	128	84
18	166	494	284	224	956	553	1240	278	167	143	419	81
19	166	345	230	363	1580	517	985	253	154	185	153	89
20	162	307	228	1160	1610	520	648	275	154	155	197	98
21	161	280	267	587	1220	455	587	336	153	190	415	93
22	157	392	250	423	1510	438	586	698	149	141	370	86
23	158	826	300	371	901	433	631	422	142	123	184	114
24	165	427	300	332	809	424	613	353	147	168	143	178
25	214	344	312	486	720	399	531	321	150	128	129	145
26	180	320	251	2840	644	397	498	264	141	143	124	111
27	170	475	263	1540	618	464	490	250	140	694	122	200
28	167	856	268	767	580	462	482	228	140	261	136	225
29	159	1840	237	518	---	413	468	223	137	160	155	143
30	156	811	229	561	---	390	452	211	129	165	125	117
31	160	---	219	508	---	378	---	207	---	154	117	---
TOTAL	7281	12467	12981	14805	21091	17268	17327	9824	5309	4993	4996	3485
MEAN	235	416	419	478	753	557	578	317	177	161	161	116
MAX	651	1840	1630	2840	1610	1720	2350	698	357	694	419	225
MIN	156	161	219	196	375	378	330	207	129	100	98	81
(†)	-11.4	+2.5	-22.8	+7.3	+17.5	-1.1	+2.2	-2.9	-4.4	-4.1	-1.5	-6.2
MEAN‡	224	419	396	485	771	556	580	314	173	157	159	110
CFSM‡	0.71	1.33	1.26	1.54	2.46	1.77	1.85	1.00	0.55	0.50	0.51	0.35
IN‡	0.82	1.49	1.45	1.78	2.56	2.04	2.06	1.15	0.61	0.58	0.59	0.39

CAL YR 1985 TOTAL 108885 MEAN 298 MAX 4750 MIN 94 MEAN‡ 299 CFSM‡ 0.95 IN‡ 12.92
WTR YR 1986 TOTAL 131827 MEAN 361 MAX 2840 MIN 81 MEAN‡ 359 CFSM‡ 1.14 IN‡ 15.52

† Change in contents in Marsh Creek Reservoir, equivalent in cubic feet per second, provided by Pennsylvania Department of Environmental Resources.
‡ Adjusted for change in reservoir contents.

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, Hydrologic Unit 02040205, water-quality recorder located on platform about 0.4 mi downstream from Reedy Island near Port Penn.

DRAINAGE AREA.--11,200 mi², approximately.

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: February 1970 to current year.
WATER TEMPERATURE: February 1970 to current year.
DISSOLVED OXYGEN: February 1970 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1970.

REMARKS.--Interruptions in record due to instrument malfunctions and pump failures.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 35,600 microsiemens, Nov. 15, 1978; minimum, 100 microsiemens on several days during August 1969, April 1970, February 1974, January, February, and March 1979.
pH: Maximum, 8.9 units, Mar. 4, 1980; minimum, 5.4, units Dec. 31, 1972.
WATER TEMPERATURE: Maximum, 31.5°C, July 21, 1977, July 19, 1982; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Dec. 16, 19, 1976; minimum, 0.3 mg/L, Sept. 16, 17, 1971.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12400	4480	7240	18300	10300	13800	9330	1600	5030	8000	2920	4540
2	10700	4480	6670	18000	11300	14300	8530	2360	4490	9920	3000	5800
3	---	---	---	18900	12300	15200	2240	841	1630	10200	3240	6150
4	---	---	---	18400	12500	15400	6330	1320	3200	9640	3400	5410
5	---	---	---	19800	11200	16100	7770	1520	3870	11000	3400	5990
6	---	---	---	16900	11100	13700	9960	1840	4940	10000	2880	4790
7	---	---	---	18100	10100	13600	12800	3120	7920	---	---	---
8	---	---	---	18100	10500	13000	14400	3800	7950	---	---	---
9	---	---	---	17700	10100	12900	13300	3400	6760	---	---	---
10	16200	6010	10600	15700	9730	12100	13200	3680	6660	---	---	---
11	17400	6210	9930	16500	9210	11500	12800	3760	6520	12100	2480	5650
12	17800	7810	11500	18500	9610	12600	13200	4000	7050	12700	3800	7360
13	17900	7850	12700	18700	9490	12800	12700	4120	7120	11700	4320	6500
14	17700	8290	11700	17100	9490	12000	9680	3240	6450	11600	3920	6270
15	18300	8530	12300	16500	9450	11800	9480	3440	4890	11800	4560	7130
16	17100	8490	11800	17600	9490	12400	7680	3120	4100	10600	4040	6190
17	16100	8290	10800	15700	7850	11800	6800	2520	3780	10400	4000	6400
18	15600	8250	10700	12400	7050	8590	4920	2040	2910	10400	4040	6950
19	13400	8170	9990	9930	5410	7060	8440	1800	4090	12800	5120	8340
20	---	---	---	8850	4360	6190	9440	1760	5210	14600	5880	9520
21	---	---	---	7810	3640	5160	11200	3160	7030	10400	4320	6960
22	15000	8290	11500	---	---	---	12800	4160	8160	13200	4560	7840
23	14500	8450	10900	---	---	---	12600	2760	7490	12100	3680	7160
24	15200	8410	11100	---	---	---	14500	4080	8580	12800	4680	7630
25	13500	8330	10700	---	---	---	13900	5160	8550	14600	5040	8730
26	13900	8200	10400	---	---	---	11700	4440	7360	12600	3560	7580
27	---	---	---	11800	3880	6310	12700	3800	7160	10200	2800	5200
28	---	---	---	11700	3640	6320	8960	2720	5210	---	---	---
29	---	---	---	10300	2200	5390	11500	3040	5800	---	---	---
30	16700	8610	11600	9130	2240	4810	10900	3640	6210	---	---	---
31	17500	9850	12300	---	---	---	11000	3600	6450	---	---	---
MONTH	---	---	---	---	---	---	14500	841	5890	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	7040	1520	2790	3640	680	1270	6120	1440	2590
2	---	---	---	7080	1520	3300	3880	680	1350	5640	1200	2250
3	7480	1200	2790	9440	1680	4490	3880	720	1590	6920	1040	2790
4	8520	1400	3350	9840	1920	4340	4200	760	1590	10700	1440	4880
5	9360	1640	3680	10100	2120	4720	4320	800	1790	10600	2360	5730
6	8120	1560	3080	11300	2280	5670	6840	1000	2610	11200	2560	5220
7	9200	1720	4380	---	---	---	6120	1160	2810	11700	3120	6210
8	9480	1880	4480	---	---	---	6160	1200	2840	12000	3800	6380
9	7320	1720	3400	---	---	---	6720	1600	3300	12500	4880	8040
10	6440	1600	2780	---	---	---	6600	1480	3140	14700	4560	8330
11	6520	1800	2990	10700	2680	5410	8200	1520	3730	13700	4840	7960
12	7440	1880	3800	8960	2400	4160	9120	2040	4480	13000	4520	8170
13	6160	1640	2990	7800	2480	4520	9680	2080	4420	---	---	---
14	9800	1520	4200	9920	2320	4740	9280	2320	4600	---	---	---
15	8280	2200	4240	8880	1640	3780	9080	2600	5010	---	---	---
16	9360	2360	5490	2720	440	1410	11100	3080	5840	---	---	---
17	10700	3080	6860	680	320	465	9360	2480	4750	---	---	---
18	12700	4120	7900	400	160	278	9400	2760	5610	---	---	---
19	13200	4640	8740	1560	160	649	12000	1560	6940	---	---	---
20	14000	4720	9140	2160	120	502	11200	3080	7090	11200	4920	7010
21	12500	4000	8530	6440	160	2540	9240	2680	5150	---	---	---
22	11100	2840	6480	8520	1400	4570	8040	1640	3760	---	---	---
23	12600	2880	6420	9760	2080	4860	7240	1280	2740	---	---	---
24	11000	2280	4900	7640	1360	3650	8920	1320	3470	---	---	---
25	7760	1800	3680	6640	1240	2790	10100	1480	3920	---	---	---
26	8600	1680	3640	5360	1200	2330	10900	1680	4450	---	---	---
27	8760	1640	3450	5280	1080	2090	9000	1720	3600	---	---	---
28	7720	1600	3280	4120	880	1740	8160	1760	3360	---	---	---
29	---	---	---	5920	840	1870	7760	1600	3060	---	---	---
30	---	---	---	3520	800	1430	4920	1400	2310	---	---	---
31	---	---	---	3400	720	1250	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	12000	680	3690	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	14800	6680	9950	20500	12000	16200	22800	11600	16600
2	---	---	---	15600	7000	10700	20700	11100	15400	22600	11600	17000
3	---	---	---	16300	6920	10300	20000	10300	14700	21000	11800	15800
4	---	---	---	17000	7120	11400	18600	9280	13000	22300	12800	16700
5	---	---	---	17100	7440	10900	20100	8880	13400	22800	13200	17200
6	13600	4920	7670	16000	6640	9970	19800	9920	13400	21500	12700	16500
7	12900	5080	7720	17500	6800	11300	18300	9440	12600	---	---	---
8	13600	5280	8100	---	---	---	17600	9040	12500	---	---	---
9	12800	4520	6990	---	---	---	17600	8800	12300	21100	13000	16400
10	11800	4360	6980	---	---	---	17300	8520	12100	21100	13600	16500
11	12800	4120	7290	---	---	---	16200	8680	11800	---	---	---
12	10800	3840	6020	---	---	---	17000	8120	11400	---	---	---
13	13400	4000	8160	---	---	---	---	---	---	---	---	---
14	12000	4040	6960	---	---	---	---	---	---	---	---	---
15	11100	3680	6880	---	---	---	---	---	---	---	---	---
16	11200	3720	6450	---	---	---	---	---	---	---	---	---
17	10400	2800	5230	---	---	---	---	---	---	---	---	---
18	12600	2800	6100	---	---	---	---	---	---	---	---	---
19	13600	3400	6500	---	---	---	---	---	---	18600	11700	14300
20	12800	3840	6330	---	---	---	---	---	---	18900	12000	14500
21	14000	4160	7040	---	---	---	19500	10500	13700	18200	12200	14800
22	15300	4600	8250	---	---	---	---	---	---	19000	12400	15300
23	15000	5400	8270	---	---	---	---	---	---	18000	12300	15100
24	14500	5240	8000	---	---	---	---	---	---	17900	11000	13500
25	12000	4880	7310	---	---	---	---	---	---	18600	11100	14400
26	12800	5160	7920	---	---	---	17500	8640	12900	19000	11500	14700
27	13700	5440	7970	---	---	---	16800	9360	12800	19900	11400	14800
28	12500	5280	8090	---	---	---	18800	8520	12500	18500	11800	15100
29	13500	5480	8970	17500	9640	13100	20200	11200	15400	19300	12200	15100
30	14300	6560	9340	18900	10000	13900	20800	11000	16000	18600	10500	14000
31	---	---	---	19300	10500	15100	21700	11600	16700	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.4	7.2	7.3	7.8	7.7	7.7	7.7	7.4	7.5	7.8	7.6	7.7
2	7.4	7.1	7.3	7.8	7.7	7.7	7.6	7.5	7.5	7.8	7.7	7.7
3	---	---	---	7.8	7.7	7.8	7.7	7.4	7.6	7.8	7.6	7.7
4	---	---	---	7.8	7.8	7.8	7.7	7.5	7.6	7.8	7.6	7.7
5	---	---	---	7.8	7.8	7.8	7.7	7.5	7.6	7.8	7.6	7.7
6	---	---	---	7.8	7.7	7.8	7.7	7.5	7.6	7.8	7.6	7.7
7	---	---	---	7.8	7.7	7.7	7.8	7.6	7.7	---	---	---
8	---	---	---	7.8	7.7	7.7	7.9	7.6	7.7	---	---	---
9	---	---	---	7.8	7.6	7.7	7.8	7.5	7.6	---	---	---
10	7.4	7.2	7.3	7.7	7.6	7.7	7.8	7.5	7.6	---	---	---
11	7.5	7.2	7.3	7.7	7.6	7.6	7.7	7.4	7.6	7.9	7.7	7.8
12	7.5	7.3	7.4	7.8	7.6	7.7	7.7	7.4	7.6	7.9	7.7	7.8
13	7.5	7.3	7.4	7.7	7.6	7.6	7.7	7.5	7.6	7.9	7.7	7.8
14	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6	7.9	7.7	7.8
15	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.6	7.6	7.9	7.8	7.8
16	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6	7.9	7.7	7.8
17	7.5	7.3	7.4	7.7	7.5	7.6	7.6	7.5	7.6	7.9	7.7	7.8
18	7.5	7.3	7.4	7.6	7.5	7.5	7.6	7.5	7.6	7.8	7.6	7.8
19	7.4	7.3	7.4	7.5	7.4	7.4	7.8	7.6	7.7	7.9	7.7	7.8
20	---	---	---	7.5	7.3	7.4	7.8	7.6	7.7	7.9	7.7	7.8
21	---	---	---	7.5	7.3	7.4	7.9	7.6	7.8	7.8	7.7	7.8
22	7.6	7.4	7.5	---	---	---	7.9	7.7	7.8	7.9	7.7	7.8
23	7.6	7.4	7.5	---	---	---	7.9	7.7	7.8	7.8	7.7	7.7
24	7.6	7.5	7.5	---	---	---	7.9	7.7	7.8	7.9	7.7	7.8
25	7.5	7.4	7.5	---	---	---	7.9	7.7	7.8	8.0	7.7	7.8
26	7.6	7.5	7.5	---	---	---	7.9	7.7	7.8	7.9	7.6	7.8
27	---	---	---	7.6	7.4	7.5	7.9	7.7	7.8	7.8	7.6	7.7
28	---	---	---	7.6	7.4	7.5	7.8	7.7	7.8	---	---	---
29	---	---	---	7.6	7.4	7.5	7.9	7.7	7.8	---	---	---
30	7.7	7.5	7.6	7.6	7.4	7.5	7.9	7.7	7.8	---	---	---
31	7.7	7.6	7.6	---	---	---	7.9	7.7	7.8	---	---	---
MONTH	---	---	---	---	---	---	7.9	7.4	7.7	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	7.7	7.4	7.5	7.3	7.1	7.1	7.3	7.1	7.1
2	---	---	---	7.7	7.5	7.5	7.3	7.1	7.1	7.2	7.1	7.2
3	7.7	7.5	7.6	7.8	7.5	7.6	7.3	7.1	7.2	7.5	7.2	7.3
4	7.8	7.5	7.6	7.8	7.4	7.6	7.4	7.1	7.2	7.7	7.3	7.4
5	7.8	7.5	7.6	7.8	7.4	7.6	7.3	7.1	7.2	7.6	7.3	7.4
6	7.7	7.5	7.6	7.9	7.4	7.6	7.6	7.2	7.3	7.7	7.3	7.4
7	7.8	7.6	7.7	---	---	---	7.5	7.1	7.2	7.7	7.3	7.4
8	7.8	7.6	7.7	---	---	---	7.4	7.1	7.2	7.7	7.4	7.5
9	7.7	7.5	7.6	---	---	---	7.5	7.2	7.3	7.8	7.4	7.6
10	7.6	7.4	7.5	---	---	---	7.6	7.2	7.3	7.9	7.4	7.6
11	7.7	7.5	7.6	7.9	7.6	7.7	7.8	7.2	7.4	7.9	7.4	7.6
12	7.8	7.6	7.6	7.9	7.6	7.7	7.8	7.2	7.4	7.8	7.4	7.6
13	7.7	7.5	7.6	7.8	7.6	7.7	7.8	7.2	7.4	---	---	---
14	7.9	7.6	7.7	7.8	7.6	7.7	7.8	7.2	7.4	---	---	---
15	7.8	7.1	7.6	7.8	7.5	7.6	7.7	7.2	7.4	---	---	---
16	7.8	7.6	7.7	7.5	7.3	7.4	7.8	7.3	7.5	---	---	---
17	7.8	7.6	7.7	7.4	7.3	7.3	7.6	7.3	7.4	---	---	---
18	7.9	7.6	7.7	7.4	7.3	7.3	7.7	7.4	7.5	---	---	---
19	7.9	7.6	7.7	7.5	7.3	7.4	7.9	7.4	7.6	---	---	---
20	7.9	7.6	7.7	7.6	7.4	7.5	7.8	7.4	7.6	7.6	7.5	7.6
21	7.8	7.5	7.7	7.8	7.5	7.6	7.6	7.3	7.4	---	---	---
22	7.8	7.5	7.6	7.9	7.4	7.6	7.4	7.2	7.3	---	---	---
23	7.8	7.4	7.6	7.9	7.4	7.6	7.5	7.3	7.4	---	---	---
24	7.8	7.4	7.5	7.7	7.3	7.5	7.6	7.3	7.4	---	---	---
25	7.6	7.4	7.5	7.6	7.2	7.4	7.7	7.3	7.4	---	---	---
26	7.7	7.4	7.5	7.5	7.2	7.3	7.7	7.2	7.4	---	---	---
27	7.7	7.5	7.5	7.5	7.2	7.3	7.5	7.2	7.3	---	---	---
28	7.7	7.4	7.5	7.4	7.2	7.2	7.4	7.1	7.2	---	---	---
29	---	---	---	7.5	7.1	7.2	7.4	7.1	7.2	---	---	---
30	---	---	---	7.3	7.1	7.2	7.2	7.1	7.2	---	---	---
31	---	---	---	7.3	7.1	7.1	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	7.9	7.1	7.3	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	7.5	7.4	7.4	7.5	7.3	7.4	7.8	7.6	7.7
2	---	---	---	7.5	7.4	7.4	7.6	7.3	7.4	7.7	7.6	7.6
3	---	---	---	7.6	7.4	7.4	7.4	7.3	7.4	7.6	7.5	7.6
4	---	---	---	7.6	7.4	7.5	7.6	7.3	7.4	7.7	7.5	7.6
5	---	---	---	7.6	7.4	7.4	7.5	7.3	7.4	7.7	7.5	7.6
6	7.4	7.3	7.4	7.5	7.4	7.4	7.5	7.3	7.4	7.6	7.4	7.5
7	7.4	7.3	7.4	7.6	7.4	7.4	7.5	7.3	7.4	---	---	---
8	7.4	7.3	7.3	---	---	---	7.4	7.3	7.4	---	---	---
9	7.4	7.2	7.3	---	---	---	7.4	7.3	7.4	7.6	7.4	7.5
10	7.4	7.3	7.3	---	---	---	7.5	7.3	7.4	7.6	7.5	7.5
11	7.4	7.3	7.4	---	---	---	7.4	7.3	7.4	---	---	---
12	7.5	7.3	7.4	---	---	---	7.5	7.3	7.4	---	---	---
13	7.5	7.3	7.4	---	---	---	---	---	---	---	---	---
14	7.4	7.3	7.3	---	---	---	---	---	---	---	---	---
15	7.4	7.3	7.4	---	---	---	---	---	---	---	---	---
16	7.4	7.2	7.3	---	---	---	---	---	---	---	---	---
17	7.5	7.3	7.4	---	---	---	---	---	---	---	---	---
18	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
19	7.5	7.3	7.4	---	---	---	---	---	---	7.7	7.6	7.6
20	7.5	7.3	7.4	---	---	---	---	---	---	7.7	7.6	7.6
21	7.5	7.3	7.4	---	---	---	7.5	7.4	7.4	7.7	7.5	7.6
22	7.5	7.3	7.4	---	---	---	---	---	---	7.7	7.6	7.6
23	7.5	7.3	7.4	---	---	---	---	---	---	7.6	7.6	7.6
24	7.4	7.3	7.3	---	---	---	---	---	---	7.6	7.5	7.6
25	7.4	7.3	7.4	---	---	---	---	---	---	7.7	7.5	7.6
26	7.4	7.3	7.4	---	---	---	7.7	7.4	7.5	7.6	7.5	7.6
27	7.5	7.3	7.4	---	---	---	7.6	7.5	7.5	7.7	7.5	7.6
28	7.4	7.3	7.4	---	---	---	7.7	7.5	7.6	7.7	7.5	7.6
29	7.4	7.3	7.4	7.4	7.3	7.3	7.8	7.6	7.7	7.7	7.5	7.6
30	7.5	7.3	7.4	7.4	7.3	7.4	7.9	7.6	7.7	7.6	7.5	7.6
31	---	---	---	7.6	7.3	7.4	7.8	7.6	7.7	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.8	6.0	6.5	8.2	7.9	8.1	10.3	9.8	10.1	13.1	12.8	12.9
2	---	---	---	8.3	7.9	8.2	11.4	8.5	10.3	13.1	12.7	13.0
3	---	---	---	8.7	8.1	8.5	11.6	9.3	10.6	13.1	12.7	12.9
4	---	---	---	9.1	8.6	8.9	11.0	10.6	10.8	13.2	12.7	12.9
5	---	---	---	8.8	8.5	8.7	11.0	10.6	10.9	13.6	13.0	13.3
6	---	---	---	8.8	8.5	8.7	11.2	10.8	11.0	13.7	13.0	13.4
7	---	---	---	8.9	8.4	8.6	11.1	10.7	11.0	---	---	---
8	---	---	---	8.8	8.4	8.6	11.0	10.8	10.9	---	---	---
9	---	---	---	9.1	8.4	8.6	10.9	10.6	10.7	---	---	---
10	6.7	6.0	6.4	9.6	8.4	8.7	10.8	10.5	10.7	---	---	---
11	7.1	6.1	6.5	9.8	8.3	8.6	10.8	10.6	10.7	13.8	13.3	13.5
12	7.3	6.6	7.0	8.7	8.2	8.4	10.9	10.5	10.7	13.7	13.4	13.5
13	7.3	6.8	7.1	8.4	8.0	8.3	10.7	10.3	10.5	14.0	13.6	13.7
14	7.1	6.5	6.8	8.4	8.0	8.1	10.8	10.5	10.7	14.2	13.7	14.0
15	6.8	6.3	6.6	8.5	7.8	8.1	11.2	10.6	10.9	14.1	13.7	13.9
16	6.7	6.2	6.5	8.9	8.0	8.5	11.2	10.8	11.0	14.1	13.7	13.9
17	6.6	6.1	6.4	8.8	8.4	8.6	11.9	11.0	11.4	14.2	13.8	14.0
18	6.8	6.2	6.5	8.6	8.2	8.5	12.2	11.6	11.8	14.1	13.2	13.7
19	6.9	6.3	6.6	8.4	8.0	8.2	12.6	11.7	12.1	13.8	13.3	13.6
20	---	---	---	8.5	7.8	8.1	12.8	12.5	12.7	13.9	13.4	13.6
21	---	---	---	8.2	7.7	7.9	13.0	12.5	12.8	13.8	13.3	13.6
22	8.1	7.5	7.8	---	---	---	13.3	12.7	13.1	13.7	12.8	13.4
23	8.1	7.6	7.9	---	---	---	13.4	12.0	12.8	13.3	12.8	13.0
24	8.2	7.8	8.0	---	---	---	12.5	12.0	12.3	13.0	12.5	12.7
25	8.1	7.7	7.9	---	---	---	12.3	11.8	12.0	13.3	12.1	12.8
26	8.0	7.6	7.8	---	---	---	12.4	11.7	12.0	13.3	12.8	13.1
27	---	---	---	9.3	8.7	9.0	12.7	11.9	12.4	13.4	12.7	13.0
28	---	---	---	9.7	9.0	9.4	12.9	12.3	12.5	---	---	---
29	---	---	---	9.8	9.3	9.6	13.0	12.3	12.6	---	---	---
30	8.0	7.6	7.8	10.1	9.5	9.9	13.1	12.4	12.9	---	---	---
31	8.0	7.6	7.9	---	---	---	13.2	12.6	13.0	---	---	---
MONTH	---	---	---	---	---	---	13.4	8.5	11.5	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	12.9	12.2	12.7	10.5	10.0	10.2	8.4	7.9	8.1
2	13.1	12.2	12.6	13.2	12.6	12.8	10.3	9.8	10.1	8.8	7.7	8.3
3	12.7	11.8	12.2	13.6	12.4	12.9	10.5	9.9	10.1	9.3	8.4	8.9
4	12.8	12.0	12.3	13.2	12.6	12.8	10.4	9.9	10.1	9.5	8.8	9.1
5	13.0	12.2	12.5	13.2	12.1	12.7	10.2	9.8	10.0	9.4	8.6	9.0
6	13.2	12.4	12.6	13.3	12.2	12.7	10.6	9.9	10.1	9.1	8.5	8.7
7	12.9	12.4	12.6	---	---	---	10.1	9.6	9.8	9.1	8.3	8.6
8	12.9	12.2	12.5	---	---	---	10.0	9.5	9.7	8.7	8.1	8.3
9	12.7	12.0	12.4	---	---	---	10.1	9.4	9.7	8.8	8.3	8.5
10	12.6	12.0	12.2	---	---	---	10.1	9.0	9.5	9.0	8.2	8.4
11	12.5	12.0	12.3	12.6	11.9	12.3	9.7	8.8	9.2	8.5	7.6	8.0
12	12.8	12.2	12.4	12.7	11.8	12.3	9.7	8.9	9.2	8.9	7.4	8.3
13	12.6	12.2	12.4	12.4	11.9	12.2	9.7	8.9	9.3	9.1	8.6	8.9
14	12.9	12.2	12.5	12.5	11.6	12.2	9.7	9.0	9.3	---	---	---
15	12.7	12.2	12.4	12.2	11.6	11.9	9.7	9.2	9.4	---	---	---
16	12.8	12.4	12.6	12.2	11.2	11.7	10.1	9.4	9.8	---	---	---
17	12.8	12.4	12.6	11.5	10.8	11.3	10.2	9.6	10.0	---	---	---
18	13.1	12.3	12.7	11.4	10.8	11.2	10.6	9.9	10.1	---	---	---
19	13.4	12.8	13.1	11.7	11.0	11.4	10.3	9.7	10.0	---	---	---
20	13.5	12.5	13.1	12.3	11.1	11.8	10.1	9.5	9.8	---	---	---
21	13.2	12.5	12.9	12.3	11.7	12.0	9.9	8.8	9.3	---	---	---
22	13.0	12.4	12.7	12.2	11.7	12.0	8.8	8.2	8.6	---	---	---
23	13.2	11.9	12.6	12.0	11.5	11.8	9.2	8.4	8.8	---	---	---
24	12.8	12.0	12.3	11.8	11.3	11.5	9.3	8.4	8.9	---	---	---
25	12.7	12.1	12.4	11.5	11.2	11.3	9.3	8.6	8.9	---	---	---
26	12.9	12.2	12.4	11.3	10.9	11.1	9.2	8.2	8.6	---	---	---
27	12.9	12.1	12.5	11.2	10.7	11.0	8.7	7.8	8.1	---	---	---
28	12.9	12.5	12.7	11.0	10.7	10.8	8.6	7.3	8.1	---	---	---
29	---	---	---	10.9	10.6	10.8	9.0	8.3	8.5	---	---	---
30	---	---	---	10.8	10.4	10.6	8.5	8.0	8.3	---	---	---
31	---	---	---	10.7	10.0	10.5	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	10.6	7.3	9.4	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	6.7	6.0	6.3	---	---	---	7.3	6.1	6.6
2	---	---	---	6.6	6.1	6.3	---	---	---	8.8	6.2	6.7
3	---	---	---	6.5	5.8	6.1	---	---	---	6.8	6.1	6.4
4	---	---	---	6.5	5.8	6.1	---	---	---	6.5	5.9	6.3
5	---	---	---	6.4	5.7	6.0	5.4	3.9	4.6	6.2	5.6	5.9
6	7.0	6.2	6.6	6.4	5.7	6.0	5.3	4.1	4.8	6.0	5.4	5.6
7	6.7	6.0	6.4	7.2	6.0	6.4	5.0	4.3	4.6	---	---	---
8	6.2	5.4	5.8	---	---	---	5.7	4.4	5.1	---	---	---
9	6.5	5.3	5.7	---	---	---	6.4	5.4	5.8	6.3	5.4	5.7
10	6.2	5.5	5.9	---	---	---	6.7	5.8	6.1	5.8	5.3	5.5
11	6.3	5.3	5.8	---	---	---	6.8	5.4	6.0	---	---	---
12	6.2	5.5	5.8	---	---	---	---	---	---	---	---	---
13	6.0	5.1	5.5	---	---	---	---	---	---	---	---	---
14	5.8	5.0	5.4	---	---	---	---	---	---	---	---	---
15	5.6	4.9	5.3	---	---	---	---	---	---	---	---	---
16	6.3	4.7	5.5	---	---	---	---	---	---	---	---	---
17	6.5	5.4	6.0	---	---	---	---	---	---	---	---	---
18	6.4	5.8	6.1	---	---	---	---	---	---	---	---	---
19	6.5	5.7	6.1	---	---	---	---	---	---	7.8	7.2	7.5
20	6.2	5.7	6.0	---	---	---	---	---	---	7.8	7.1	7.4
21	6.6	5.9	6.2	---	---	---	7.5	6.7	7.2	7.5	6.7	7.0
22	6.8	6.1	6.4	---	---	---	---	---	---	7.0	6.5	6.7
23	6.6	5.6	6.2	---	---	---	---	---	---	6.9	6.2	6.5
24	6.1	5.2	5.6	---	---	---	---	---	---	6.4	5.8	6.1
25	6.3	5.7	6.0	---	---	---	---	---	---	6.0	5.5	5.7
26	6.5	6.0	6.2	---	---	---	7.5	6.2	6.6	7.2	5.2	6.4
27	6.8	6.2	6.4	---	---	---	7.1	5.9	6.5	7.0	6.4	6.7
28	6.5	6.0	6.2	---	---	---	6.9	6.0	6.4	6.9	6.3	6.7
29	6.3	5.9	6.1	5.9	4.7	5.1	6.8	5.7	6.3	7.3	6.2	6.7
30	6.5	6.0	6.3	---	---	---	6.8	5.4	6.1	7.0	6.3	6.7
31	---	---	---	---	---	---	7.3	5.5	6.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01483200 BLACKBIRD CREEK AT BLACKBIRD, DE

LOCATION.--Lat 39°21'58", long 75°40'10", New Castle County, Hydrologic Unit 02040205, on left bank 15 ft downstream from highway culverts, 0.5 mi upstream from Barlow Branch, 0.6 mi southwest of Blackbird, 5.6 mi northwest of Smyrna, and 13.8 mi upstream from mouth.

DRAINAGE AREA.--3.85 mi².

PERIOD OF RECORD.--Annual maximum, water years 1952-56, and occasional low-flow measurements, water years 1952-53, 1955-56. October 1956 to current year.

GAGE.--Water-stage recorder. Concrete control since May 23, 1968. Datum of gage is 17.89 ft above National Geodetic Vertical Datum of 1929. Mar. 5, 1951, to Oct. 16, 1956, nonrecording gage and crest-stage gage at site 15 ft upstream at datum 1.0 ft higher. Oct. 17, 1956, to June 16, 1986, recording gage at same site on right bank at datum 1.0 ft higher.

REMARKS.--Estimated daily discharges: Apr. 14 to June 17. Records good except for period of estimated daily discharges (fragmentary or no gage-height record), which is poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--30 years, 4.71 ft³/s, 16.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 712 ft³/s, June 22, 1972, gage height, 5.04 ft, at previous datum, from rating curve extended above 200 ft³/s on basis of culvert measurement of peak flow; no flow at times during 1964, 1965, 1966, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 3	1415	*61	*2.28	No other peak greater than base discharge.			

Minimum daily discharge, 0.17 ft³/s, Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.5	11	3.1	4.7	6.1	3.7	2.9	.90	.45	.50	.29
2	2.0	1.6	6.6	2.7	6.6	5.9	3.7	2.6	.80	.34	.44	.41
3	34	1.7	4.5	5.3	6.7	5.8	3.4	2.7	.80	.42	.44	.57
4	12	2.7	3.8	5.4	10	5.8	3.5	2.8	.70	.50	.52	.46
5	4.5	3.3	3.7	4.2	13	5.5	3.7	2.9	.70	.48	.46	.38
6	3.0	3.1	3.7	3.6	8.2	5.3	8.3	2.7	.70	.52	.40	.53
7	2.5	2.4	3.4	3.0	6.9	5.0	6.9	2.3	.80	.53	.54	.37
8	2.3	2.1	3.2	2.4	5.8	4.2	4.8	2.0	.80	.51	.54	.35
9	2.2	1.9	3.1	2.3	6.0	4.6	4.1	1.8	.80	.48	.46	.35
10	2.1	1.7	3.0	2.7	6.3	5.2	3.7	1.8	.90	.44	.39	.28
11	1.9	1.8	3.2	2.8	6.7	5.0	3.7	1.8	1.0	.44	.33	.21
12	1.7	1.9	3.4	2.7	5.8	4.4	3.6	2.0	1.2	.41	.33	.21
13	1.8	2.0	5.3	2.9	4.8	5.7	3.4	2.0	2.0	.43	.32	.26
14	2.0	2.2	6.0	2.5	4.5	9.6	3.5	1.8	1.8	.41	.31	.29
15	2.2	1.7	3.8	2.2	4.9	12	3.5	2.0	1.5	.39	.29	.29
16	2.5	2.7	3.6	2.0	4.8	11	6.2	2.3	1.3	.38	.28	.28
17	1.9	6.7	3.5	2.3	5.6	7.4	7.4	2.3	1.0	.34	.28	.28
18	1.7	3.6	3.4	3.1	20	5.9	8.6	1.8	.65	.30	.28	.20
19	1.8	2.0	2.7	4.6	23	5.7	6.2	1.6	.66	.25	.33	.17
20	1.9	2.1	2.5	8.2	11	5.3	5.5	1.8	.67	.23	.31	.21
21	2.2	2.1	2.9	4.5	10	4.5	4.9	3.3	.71	.24	1.2	.24
22	2.4	5.2	3.1	3.4	14	4.4	4.8	3.8	.73	.27	3.2	.24
23	2.2	6.7	3.4	3.2	11	4.4	4.6	2.6	.72	.28	.78	.19
24	2.0	3.2	3.7	2.8	10	4.4	4.1	1.6	.64	.23	.44	.20
25	2.0	2.5	3.6	4.0	8.5	4.2	3.8	1.4	.68	.52	.34	.28
26	1.6	2.6	2.7	36	7.6	4.1	3.8	1.2	.70	1.1	.32	.33
27	1.7	2.5	2.4	23	7.2	4.1	3.6	1.4	.69	.57	.29	.35
28	1.5	4.1	2.8	9.6	6.5	4.0	3.3	1.6	.63	.50	.47	.37
29	1.5	12	3.0	5.6	---	3.8	3.3	1.4	.57	2.3	.53	.33
30	1.5	8.7	2.8	5.2	---	3.7	3.1	1.2	.46	2.0	.37	.31
31	1.7	---	2.7	4.9	---	6.5	---	1.0	---	.57	.31	---
TOTAL	106.4	98.3	116.5	170.2	240.1	173.5	136.7	64.4	26.21	16.83	16.00	9.23
MEAN	3.43	3.28	3.76	5.49	8.58	5.60	4.56	2.08	.87	.54	.52	.31
MAX	34	12	11	36	23	12	8.6	3.8	2.0	2.3	3.2	.57
MIN	1.5	1.5	2.4	2.0	4.5	3.7	3.1	1.0	.46	.23	.28	.17
CFSM	.89	.85	.98	1.43	2.23	1.46	1.18	.54	.23	.14	.14	.08
IN.	1.03	.95	1.13	1.64	2.32	1.68	1.32	.62	.25	.16	.15	.09

CAL YR 1985 TOTAL 1246.75 MEAN 3.42 MAX 165 MIN .25 CFSM .89 IN 12.04
WTR YR 1986 TOTAL 1174.37 MEAN 3.22 MAX 36 MIN .17 CFSM .84 IN 11.34

01483700 ST. JONES RIVER AT DOVER, DE

LOCATION.--Lat 39°09'49", long 75°31'10", Kent County, Hydrologic Unit 02040207, on left bank 150 ft upstream from Division Street Bridge in Dover, 1,950 ft downstream from Silver Lake, and 12.5 mi upstream from mouth.

DRAINAGE AREA.--31.9 mi².

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 0.00 ft above National Geodetic Vertical Datum of 1929. Prior to June 1973, at datum 0.50 ft higher.

REMARKS.--Estimated daily discharges: Nov. 1-6, 30, Dec. 1, 13, May 9, 10, 12, 13, 27, June 12, 13, 22, 23, July 18-23, Aug. 15-20, and Sept. 5. Records good except those for estimated daily discharges, (periods of backwater from storm tides), which are fair. Flow affected by Silver Lake. Flow occasionally affected by tide and wind effect. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--28 years, 36.8 ft³/s, 15.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s, Sept. 13, 1960, gage height, 9.45 ft, from flood-mark; no flow at times in 1959, 1961, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 271 ft³/s, Jan. 27, gage height, 4.19 ft; minimum daily discharge, 1.3 ft³/s, July 11, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	13	77	18	42	49	23	17	6.1	2.0	2.0	2.2
2	29	13	73	18	45	44	23	16	5.4	6.8	4.7	3.6
3	75	13	53	27	56	42	21	13	3.1	6.0	20	3.6
4	141	13	40	35	74	41	22	11	3.4	3.6	8.0	3.2
5	118	20	31	31	99	40	22	12	4.0	3.4	4.5	2.8
6	70	17	29	24	104	38	33	12	4.2	3.1	3.3	3.2
7	46	15	25	21	94	38	41	12	5.2	2.6	3.6	2.6
8	32	15	24	16	74	28	35	10	6.0	2.5	3.0	2.4
9	26	13	22	15	65	29	28	8.8	5.7	2.1	2.7	2.1
10	23	13	22	15	65	32	23	9.3	4.2	2.1	2.1	1.9
11	21	13	22	17	71	34	22	8.9	3.9	1.3	1.8	1.9
12	18	13	22	17	61	29	21	8.8	5.4	1.7	1.6	2.1
13	18	14	28	18	51	50	20	8.8	8.8	1.9	1.6	2.8
14	18	14	35	16	43	86	20	8.7	6.4	1.8	1.5	3.3
15	19	14	32	14	43	107	21	8.9	4.8	1.3	1.4	2.8
16	18	14	26	13	41	106	35	9.8	4.1	1.3	1.5	4.1
17	18	27	23	13	43	80	44	10	4.4	1.9	1.6	2.6
18	16	28	22	17	72	57	56	8.7	2.8	2.3	2.2	2.2
19	16	22	18	27	141	47	51	7.1	2.1	3.8	1.7	2.6
20	16	18	18	35	146	45	33	14	3.8	4.1	2.1	2.7
21	17	16	18	36	102	38	30	16	5.2	5.1	22	3.0
22	19	31	18	27	77	33	29	43	3.1	3.3	15	3.0
23	19	41	19	22	75	31	29	35	3.0	3.0	6.9	3.0
24	18	40	24	19	80	31	27	16	6.3	2.5	4.5	24
25	18	28	26	22	79	28	24	11	4.7	4.3	2.1	16
26	16	21	20	142	68	28	22	8.6	3.1	6.2	1.9	6.4
27	15	20	16	254	62	29	20	7.8	2.6	4.8	2.1	4.4
28	14	24	16	179	54	26	19	8.2	2.9	3.4	6.1	3.7
29	13	45	18	103	---	25	19	7.4	3.3	3.1	4.2	3.1
30	13	69	17	69	---	25	19	6.6	2.9	5.0	3.0	2.9
31	13	---	17	47	---	24	---	6.6	---	2.9	2.5	---
TOTAL	958	657	851	1327	2027	1340	832	381.0	130.9	99.2	141.2	124.2
MEAN	30.9	21.9	27.5	42.8	72.4	43.2	27.7	12.3	4.36	3.20	4.55	4.14
MAX	141	69	77	254	146	107	56	43	8.8	6.8	22	24
MIN	13	13	16	13	41	24	19	6.6	2.1	1.3	1.4	1.9
CFSM	.97	.69	.86	1.34	2.27	1.35	.87	.39	.14	.10	.14	.13
IN.	1.12	.77	.99	1.55	2.36	1.56	.97	.44	.15	.12	.16	.14

CAL YR 1985 TOTAL 8358.7 MEAN 22.9 MAX 519 MIN 2.8 CFSM .72 IN 9.75
WTR YR 1986 TOTAL 8868.5 MEAN 24.3 MAX 254 MIN 1.3 CFSM .76 IN 10.34

01484100 BEAVERDAM BRANCH AT HOUSTON, DE

LOCATION.--Lat 38°54'20", long 75°30'49", Kent County, Hydrologic Unit 02040207, on left bank 15 ft upstream from culverts on State Highway 384, 0.8 mi south of Houston, and 1.2 mi upstream from Blairs Pond and mouth.

DRAINAGE AREA.--2.83 mi².

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

REVISED RECORDS.--WDR MD-DE-84-1: 1981, 1983 (M).

GAGE.--Water-stage recorder and concrete control; timber control prior to Nov. 8, 1979. Datum of gage is 35.67 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 12 to Sept. 5. Records good except those for estimated daily discharges (missing record), which are fair. Diversion for irrigation of about 150 acres upstream from station during some years. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--28 years, 3.64 ft³/s, 17.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 176 ft³/s, Sept. 12, 1960, gage height, 5.55 ft, from rating curve extended above 75 ft³/s; no flow July 28, 1977 (result of pumpage for irrigation).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	1145	*18	*3.00	No peak greater than base discharge.			

Minimum daily discharge, 0.32 ft³/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.6	6.0	2.4	3.5	4.7	3.4	2.5	1.1	1.0	.66	.55
2	2.1	1.6	3.7	2.2	4.3	4.7	3.4	2.4	1.3	1.1	.42	.53
3	3.6	1.6	3.0	2.7	4.1	4.7	3.3	2.3	1.2	1.1	1.1	.53
4	2.9	1.6	2.8	2.4	7.5	4.4	3.3	2.3	1.2	.96	.87	.53
5	2.5	1.7	2.8	2.3	7.1	4.4	3.3	2.3	1.3	.90	.79	.57
6	2.3	1.6	2.9	2.2	5.1	4.4	3.8	2.2	1.4	.88	.72	.59
7	2.2	1.6	2.8	2.1	8.6	4.3	3.6	2.2	1.4	.87	.76	.55
8	2.2	1.5	2.8	2.0	5.9	3.9	3.4	2.2	1.4	.63	.69	.55
9	2.0	1.4	2.7	2.0	5.3	4.1	3.3	2.1	1.3	.60	.66	.52
10	2.0	1.4	2.7	2.1	5.0	4.2	3.2	2.0	1.3	.65	.60	.50
11	2.0	1.4	2.7	2.1	5.2	4.1	3.2	2.1	1.3	.49	.59	.46
12	1.9	1.4	2.7	2.1	4.8	3.9	3.1	2.0	1.4	.58	.61	.45
13	1.9	1.4	3.0	2.1	4.5	6.7	3.0	1.9	1.5	.68	.52	.42
14	1.9	1.4	2.8	1.9	4.4	11	3.0	1.9	1.3	2.3	.52	.40
15	1.9	1.4	2.7	1.8	4.5	9.3	3.1	1.9	1.3	1.0	.50	.41
16	1.8	1.4	2.7	1.8	4.2	6.6	3.8	1.9	1.2	1.2	.48	.39
17	1.8	1.7	2.6	1.9	5.2	5.5	3.4	1.8	1.2	1.5	.45	.37
18	1.8	1.4	2.6	1.9	7.7	5.2	3.6	1.8	1.1	1.1	.52	.38
19	1.8	1.4	2.4	2.2	7.2	5.2	3.1	1.8	1.0	1.0	.50	.42
20	1.8	1.4	2.4	2.2	5.8	4.6	2.8	1.9	1.1	1.0	.60	.42
21	2.1	1.4	2.5	2.0	5.4	4.3	2.9	1.9	1.1	.98	1.3	.39
22	2.0	2.3	2.4	1.9	5.1	4.2	2.8	2.2	1.0	1.0	.70	.37
23	1.8	2.0	2.5	1.9	6.9	4.2	2.8	1.9	1.0	.95	.55	.35
24	1.8	1.7	2.5	1.8	6.0	4.1	2.7	1.8	1.7	.91	.50	.34
25	1.8	1.6	2.4	2.0	5.7	3.9	2.7	1.6	1.2	.92	.50	.35
26	1.7	1.6	2.2	11	5.4	3.9	2.7	1.5	1.1	.96	.50	.33
27	1.7	1.6	2.3	7.9	5.3	4.0	2.6	1.7	1.0	.97	.50	.40
28	1.7	1.8	2.3	4.6	5.0	3.9	2.5	1.7	1.0	.89	1.0	.38
29	1.7	3.3	2.3	3.9	---	3.6	2.5	1.6	1.2	.81	.80	.35
30	1.7	4.8	2.2	3.8	---	3.6	2.5	1.4	1.0	.75	.60	.32
31	1.7	---	2.3	3.7	---	3.5	---	1.1	---	.72	.55	---
TOTAL	62.2	52.0	84.7	86.9	154.7	149.1	92.8	59.9	36.6	29.40	20.06	13.12
MEAN	2.01	1.73	2.73	2.80	5.53	4.81	3.09	1.93	1.22	.95	.65	.44
MAX	3.6	4.8	6.0	11	8.6	11	3.8	2.5	1.7	2.3	1.3	.59
MIN	1.7	1.4	2.2	1.8	3.5	3.5	2.5	1.1	1.0	.49	.42	.32
CFSM	.71	.61	.97	.99	1.95	1.70	1.09	.68	.43	.34	.23	.16
IN.	.82	.68	1.11	1.14	2.03	1.96	1.22	.79	.48	.39	.26	.17

CAL YR 1985 TOTAL 689.69 MEAN 1.89 MAX 23 MIN .41 CFSM .67 IN 9.06
WTR YR 1986 TOTAL 841.48 MEAN 2.31 MAX 11 MIN .32 CFSM .82 IN 11.06

01484500 STOCKLEY BRANCH AT STOCKLEY, DE

LOCATION.--Lat 38°38'19", long 75°20'31", Sussex County, Hydrologic Unit 02060010, on left bank at highway bridge in Stockley, 1.6 mi upstream from mouth, and 4.4 mi southeast of Georgetown.

DRAINAGE AREA.--5.24 mi².

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.54 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 16, 1950, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--43 years, 6.91 ft³/s, 17.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 217 ft³/s, Feb. 26, 1979, gage height, 5.01 ft, from rating curve extended above 130 ft³/s; minimum discharge observed, 0.13 ft³/s, Sept. 1-11, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 45 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	1100	*34	*2.80	No peak greater than base discharge.			

Minimum discharge, 0.50 ft³/s, Sept. 23, gage height, 1.74 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	4.8	19	4.7	8.7	9.4	5.6	4.2	2.2	1.8	.95	1.1
2	7.6	4.8	13	4.3	10	9.2	5.8	3.9	2.0	1.9	.97	1.1
3	18	4.7	10	5.5	10	8.8	5.6	3.8	2.0	1.9	1.3	1.1
4	16	4.7	8.9	5.3	16	8.8	5.5	3.8	2.0	1.7	1.2	1.1
5	13	5.0	8.8	5.3	17	8.6	5.6	3.8	2.0	1.7	1.1	1.0
6	11	4.9	8.5	4.9	13	8.4	6.2	3.7	1.9	1.7	1.0	1.4
7	9.2	4.6	7.8	4.6	17	8.2	6.0	3.7	2.0	1.6	1.8	1.1
8	8.3	4.4	7.4	4.4	15	7.5	5.9	3.5	2.1	1.6	1.2	1.0
9	7.8	4.2	7.2	4.4	13	7.6	5.6	3.4	2.0	1.6	1.1	.96
10	7.5	4.0	6.8	4.6	12	7.6	5.4	3.4	1.9	1.5	1.1	.94
11	7.3	4.0	6.8	4.5	16	7.5	5.4	3.1	1.8	1.3	1.0	.93
12	6.7	4.0	6.9	4.3	14	7.1	5.3	3.0	3.2	1.5	1.0	.85
13	6.2	4.0	7.1	4.3	11	9.1	5.1	2.8	4.7	1.5	1.0	.86
14	6.2	4.2	6.9	4.1	10	8.9	5.1	2.8	2.7	1.4	.97	.85
15	5.7	4.1	6.2	4.0	10	9.1	5.2	3.1	2.3	1.2	.90	.85
16	5.4	4.0	6.2	3.9	9.5	8.5	6.8	3.0	2.2	1.2	.89	.79
17	5.0	4.6	6.0	4.1	9.7	8.0	5.7	2.8	2.0	1.4	.89	.77
18	4.9	4.0	5.8	4.3	11	7.7	6.1	2.7	1.9	1.3	1.1	.77
19	4.8	3.8	5.6	5.7	13	7.7	5.5	2.6	1.8	1.3	.92	.79
20	4.8	3.8	5.5	5.5	12	7.5	5.4	3.1	2.2	1.3	1.1	.74
21	6.4	3.9	5.6	4.7	11	7.0	5.5	3.9	2.2	1.3	2.5	.72
22	6.4	6.0	5.3	4.6	11	6.8	5.7	3.7	2.0	1.2	1.3	.70
23	6.0	5.4	5.4	4.3	15	6.8	5.5	3.0	2.0	1.2	1.1	.69
24	5.8	4.7	5.4	4.3	12	6.7	5.1	2.7	3.1	1.1	.98	.68
25	5.5	4.4	5.1	4.6	12	6.5	4.8	2.5	2.4	1.0	.92	.68
26	5.4	4.3	4.8	23	11	6.5	4.8	2.5	2.1	1.0	.88	.65
27	5.2	4.3	4.7	19	11	6.5	4.6	2.5	1.9	1.0	1.0	.81
28	5.1	4.4	4.8	13	10	6.3	4.6	2.5	2.0	1.0	1.9	.74
29	4.9	6.9	4.7	10	---	6.2	4.6	2.5	2.0	1.0	1.3	.63
30	4.8	11	4.6	9.7	---	6.2	4.5	2.3	2.0	1.1	1.2	.61
31	4.8	---	4.6	8.8	---	6.0	---	2.3	---	.97	1.1	---
TOTAL	223.8	141.9	215.4	198.7	340.9	236.7	162.5	96.6	66.6	42.27	35.67	25.91
MEAN	7.22	4.73	6.95	6.41	12.2	7.64	5.42	3.12	2.22	1.36	1.15	.86
MAX	18	11	19	23	17	9.4	6.8	4.2	4.7	1.9	2.5	1.4
MIN	4.8	3.8	4.6	3.9	8.7	6.0	4.5	2.3	1.8	.97	.88	.61
CFSM	1.38	.90	1.33	1.22	2.33	1.46	1.03	.60	.42	.26	.22	.16
IN.	1.59	1.01	1.53	1.41	2.42	1.68	1.15	.69	.47	.30	.25	.18

CAL YR 1985 TOTAL 1664.14 MEAN 4.56 MAX 67 MIN .87 CFSM .87 IN 11.81
WTR YR 1986 TOTAL 1786.95 MEAN 4.90 MAX 23 MIN .61 CFSM .94 IN 12.68

01484548 VINES CREEK AT OMAR, DE

LOCATION.--Lat 38°31'44", long 75°12'09", Sussex County, Hydrologic Unit 02060010, on right bank at downstream side of highway bridge, 0.1 mi northwest of Omar, 3.0 mi southeast of Dagsboro, and 6.2 mi upstream from the confluence with Indian River at Indian River Bay.

DRAINAGE AREA.--13.6 mi².

PERIOD OF RECORD.--August 1985 to current year.

GAGE.--Water-stage recorder and timber control. Elevation of gage is 4.50 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 1-7, 1985, and Nov. 22, 1985 to Jan. 15, 1986. Records fair except those for estimated daily discharges (doubtful or no gage-height record), which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 543 ft³/s, Aug. 19, 1985, gage height, 6.11 ft; minimum daily discharge, 0.17 ft³/s, Aug. 6, 11, 1986.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 19, 1985	1115	*543	*6.11	Aug. 25, 1985	2100	168	4.41
Aug. 20, 1985	2045	413	5.66	Sept. 27, 1985	1200	192	4.58
Jan. 26, 1986	1230	*149	*4.26	No other peak greater than base discharge.			

August to September 1985: Minimum daily discharge, 1.1 ft³/s, Aug. 4-7.

Water year 1986: Minimum daily discharge, 0.17 ft³/s, Aug. 6, 11.

DISCHARGE IN CUBIC FEET PER SECOND, AUGUST 1985 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											1.3	28
2											1.2	19
3											1.2	15
4											1.1	12
5											1.1	8.9
6											1.1	7.0
7											1.1	5.8
8											36	5.2
9											8.5	4.8
10											3.7	4.5
11											3.0	4.3
12											2.6	4.0
13											2.3	3.7
14											2.1	3.6
15											1.9	3.4
16											1.7	3.3
17											1.6	3.2
18											4.9	3.1
19											298	3.0
20											186	2.8
21											176	2.7
22											56	2.8
23											34	3.3
24											22	4.0
25											70	3.6
26											97	5.8
27											47	125
28											32	75
29											22	41
30											21	30
31											43	---
TOTAL											1180.4	437.8
MEAN											38.1	14.6
MAX											298	125
MIN											1.1	2.7
CFSM											2.80	1.07
IN.											3.23	1.20

01484548 VINES CREEK AT OMAR, DE--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	4.0	50	8.2	38	21	5.0	4.4	1.7	.53	.25	1.2
2	19	3.9	34	9.0	44	20	4.8	4.2	1.6	.62	.24	1.1
3	26	3.8	25	10	44 45	18	4.7	3.9	1.4	.62	.52	1.1
4	32	4.0	20	16	59	18	4.5	3.8	1.4	.46	.35	.97
5	28	5.3	17	18	68	17	4.5	3.7	1.4	.37	.21	.97
6	21	5.8	17	17	54	16	5.5	3.6	1.4	.34	.17	.98
7	16	5.5	16	15	67	14	5.8	3.4	1.3	.32	1.0	.85
8	13	4.9	15	13	66	12	5.6	3.3	1.3	.29	.41	.97
9	12	4.3	14	11	53	12	5.4	3.1	1.2	.30	.27	.92
10	10	4.0	13	9.5	47	12	5.0	3.0	1.1	.32	.20	.73
11	8.8	4.0	13	8.8	56	11	4.8	3.0	1.0	.34	.17	.65
12	7.5	3.8	13	8.4	54	9.2	4.7	2.8	1.1	.41	.29	.59
13	6.7	4.1	15	8.0	43	12	4.5	2.8	1.6	.82	.63	.53
14	6.2	4.0	17	7.0	37	13	4.5	2.7	1.3	.55	.40	.46
15	5.7	3.7	16	6.6	34	15	4.4	2.7	1.1	.48	.34	.40
16	5.3	3.7	14	6.5	31	16	7.8	2.7	.94	.57	.29	.50
17	4.6	6.8	13	6.7	31	14	6.8	2.5	.84	1.0	.58	.52
18	4.3	5.8	12	7.1	35	12	9.4	2.5	.67	.93	7.1	.53
19	4.2	5.6	11	15	38	11	7.9	2.4	.71	1.2	2.1	.64
20	4.2	5.1	10	22	38	11	6.9	3.0	1.9	1.1	1.6	.70
21	5.9	6.2	9.6	18	35	8.4	6.6	3.0	1.6	.73	3.2	.85
22	10	12	9.0	15	31	7.5	6.8	3.0	1.0	.47	2.2	.93
23	11	11	9.5	13	39	7.1	7.0	2.8	.81	.37	1.7	.85
24	9.5	9.5	9.8	12	36	6.7	6.5	2.5	1.5	.34	1.4	.89
25	8.3	8.0	10	12	33	6.3	5.8	2.4	1.3	.29	1.1	.97
26	6.8	7.5	9.8	110	28	6.2	5.5	2.2	.90	.31	.97	.97
27	5.4	7.0	9.5	113	26	5.9	5.1	2.1	.67	.69	1.7	1.4
28	4.8	6.5	9.0	70	23	5.7	4.9	2.0	.61	.67	3.1	1.2
29	4.3	6.0	8.5	55	---	5.5	4.7	2.0	.65	.40	2.1	1.1
30	4.1	30	8.0	47	---	5.2	4.7	1.8	.62	.36	1.6	1.0
31	4.0	---	7.8	41	---	5.1	---	1.7	---	.28	1.3	---
TOTAL	331.6	195.8	455.5	728.8	1188	353.8	170.1	89.0	34.62	16.48	37.49	25.47
MEAN	10.7	6.53	14.7	23.5	42.4	11.4	5.67	2.87	1.15	.53	1.21	.85
MAX	32	30	50	113	68	21	9.4	4.4	1.9	1.2	7.1	1.4
MIN	4.0	3.7	7.8	6.5	23	5.1	4.4	1.7	.61	.28	.17	.40
CFSM	.79	.48	1.08	1.73	3.12	.84	.42	.21	.09	.04	.09	.06
IN.	.91	.54	1.25	1.99	3.25	.97	.47	.24	.09	.05	.10	.07

WTR YR 1986 TOTAL 3626.66 MEAN 9.94 MAX 113 MIN .17 CFSM .73 IN 9.92

01485000 POCOMOKE RIVER NEAR WILLARDS, MD

LOCATION.--Lat 38°23'20", long 75°19'30", Worcester County, Hydrologic Unit 02060009, on left bank 30 ft downstream from bridge on State Highway 346, 0.6 mi upstream from Burnt Mill Branch, 1.3 mi east of Willards, 1.3 mi west of Whaleysville, and 50.3 mi upstream from mouth.

DRAINAGE AREA.--60.5 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 13.95 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--36 years (water years 1951-86), 71.1 ft³/s, 15.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,870 ft³/s, Feb. 26, 1979, gage height, 13.88 ft, from rating curve extended above 1,600 ft³/s; minimum discharge, 2.2 ft³/s, Aug. 18, 19, 1957, gage height, 1.91 ft.

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)
Dec. 1	0800	*754	*10.27	Jan. 26	1400	597	9.41

Minimum daily discharge, 4.4 ft³/s, Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	30	736	49	121	79	35	27	11	8.1	6.7	8.0
2	97	29	570	48	148	75	34	26	11	7.8	6.3	7.9
3	95	28	364	56	159	71	33	24	11	7.9	5.8	7.9
4	129	29	244	73	229	68	32	23	11	7.6	6.3	7.5
5	117	37	173	72	289	66	32	23	11	7.2	5.5	7.3
6	91	37	139	68	216	64	35	22	10	7.0	5.0	7.4
7	72	34	115	61	259	63	38	20	10	6.8	5.3	7.4
8	63	33	100	54	264	57	37	20	10	6.4	5.3	7.1
9	57	31	91	51	197	56	36	19	10	6.4	5.0	6.8
10	54	30	84	50	157	56	34	18	9.7	6.5	4.6	6.5
11	51	30	78 79	47	205	55	32	18	9.5	6.4	4.5	6.3
12	46	28	78	44	214	53	31	18	9.3	6.4	4.4	6.5
13	44	29	79	44	152	53	30	17	9.8	6.4	5.6	6.2
14	41	31	89	41	120	58	30	17	9.7	6.1	5.2	5.8
15	39	27	79	39	109	63	29	16	9.1	5.9	4.6	5.6
16	37	26	73	37	99	65	37	16	8.8	5.7	4.5	5.5
17	34	30	70	37	99	63	39	16	8.6	6.3	4.8	5.4
18	32	31	67	37	115	58	41	15	8.4	6.5	13	5.2
19	31	31	62	49	128	57	41	15	8.2	6.5	12	5.2
20	31	31	60	74	123	55	38	15	8.2	6.4	8.9	5.2
21	32	32	60	68	112	51	38	16	8.2	6.0	13	5.2
22	43	49	57	62	101	49	38	16	8.1	5.6	13	5.1
23	50	80	56	57	116	47	38	16	8.0	5.4	11	5.0
24	47	67	58	53	115	45	37	15	9.9	5.0	9.2	5.1
25	44	58	57	52	106	43	35	14	9.7	4.7	8.4	5.0
26	39	53	53	402	98	42	33	13	8.7	5.8	7.7	4.9
27	36	51	50	519	92	41	31	13	8.0	6.9	8.1	4.7
28	34	46	50	356 355	86	39	30	13	7.7	6.2	10	5.0
29	32	53	48	236	---	38	29	13	8.3	5.5	11	4.7
30	31	221	47	173	---	37	28	12	8.5	5.0	9.3	4.6
31	30	---	46	137	---	36	---	12	---	4.6	8.5	---
TOTAL	1705	1322	3933	3146	4229	1703	1031	538	279.4	195.0	232.5	180.0
MEAN	55.0	44.1	127	101	151	54.9	34.4	17.4	9.31	6.29	7.50	6.00
MAX	129	221	736	519	289	79	41	27	11	8.1	13	8.0
MIN	30	26	46	37	86	36	28	12	7.7	4.6	4.4	4.6
CFSM	.91	.73	2.10	1.67	2.50	.91	.57	.29	.15	.10	.12	.10
IN.	1.05	.81	2.42	1.93	2.60	1.05	.63	.33	.17	.12	.14	.11

CAL YR 1985 TOTAL 19968.9 MEAN 54.7 MAX 736 MIN 5.5 CFSM .90 IN 12.28
WTR YR 1986 TOTAL 18493.9 MEAN 50.7 MAX 736 MIN 4.4 CFSM .84 IN 11.37

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD

LOCATION.--Lat 38°13'44", long 75°28'19", Worcester County, Hydrologic Unit 02060009, on right bank 15 ft downstream from bridge on State Highway 12, 0.5 mi upstream from Furnace Branch, 0.6 mi downstream from Millville Creek, 5.5 mi northwest of Snow Hill, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--44.9 mi².

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

REVISED RECORDS.--WSP 1332: 1953.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.29 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--36 years (water years 1951-86), 53.8 ft³/s, 16.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft³/s, Feb. 26, 1979, gage height, 7.95 ft, from rating curve extended above 1,300 ft³/s; minimum discharge, 0.80 ft³/s, Sept. 8, 9, 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 2	1100	*434	*6.26	Jan. 28	0100	427	6.24

Minimum discharge, 1.4 ft³/s, July 29, gage height, 1.44 ft; minimum daily discharge, 1.5 ft³/s, July 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	18	228	28	104	59	17	15	3.3	2.3	1.7	3.9
2	115	17	412	27	103	53	17	14	4.1	2.2	1.6	3.8
3	81	17	325	37	117	47	17	12	5.2	2.3	6.0	4.2
4	83	18	217	51	143	44	16	11	3.8	2.4	9.4	3.9
5	82	21	147	62	196	40	16	11	3.4	2.2	5.0	4.1
6	78	25	113	64	217	37	18	9.3	3.1	2.0	3.0	23
7	68	27	89	56	198	35	19	8.6	3.1	1.9	2.3	14
8	55	28	75	43	196	32	19	7.8	3.1	1.8	2.1	8.7
9	43	25	65	34	187	30	18	7.1	2.8	1.9	1.9	7.7
10	33	23	57	29	148	30	17	6.9	2.5	2.0	1.9	5.8
11	27	21	51	28	138	29	16	6.7	2.4	2.0	1.8	4.9
12	24	19	49	27	166	27	15	6.5	2.3	1.9	2.2	4.3
13	23	20	51	27	165	26	15	6.1	2.2	1.8	9.2	3.8
14	21	21	57	25	122	27	16	5.9	2.2	1.9	7.9	3.3
15	20	22	58	23	97	30	17	6.4	2.2	1.8	4.4	3.1
16	19	21	56	21	79	31	26	6.5	2.1	1.7	3.0	2.9
17	18	24	50	21	79	30	25	6.1	2.0	4.9	2.9	2.7
18	17	21	44	23	86	28	26	5.5	1.9	2.2	17	2.5
19	16	20	38	37	97	27	25	4.9	1.9	2.2	12	2.4
20	16	20	32	55	127	26	23	5.7	1.9	2.3	8.7	2.3
21	22	25	30	64	137	24	22	6.4	1.9	2.1	17	2.3
22	35	51	29	64	119	23	22	7.4	1.9	1.8	13	2.4
23	40	68	28	54	113	22	23	8.0	1.9	1.8	8.0	2.3
24	41	78	31	43	108	22	23	6.3	1.9	1.7	5.7	2.3
25	40	77	34	38	100	21	22	5.3	2.1	1.7	4.4	2.3
26	35	67	29	119	86	20	20	4.7	2.0	1.7	3.5	2.1
27	28	55	26	333	75	20	19	4.4	2.0	1.6	3.6	2.0
28	24	46	25	391	67	19	18	4.1	1.9	1.5	8.3	2.1
29	21	41	26	266	---	19	17	3.9	2.2	1.5	9.9	2.0
30	20	67	24	176	---	18	16	3.4	2.3	1.8	6.2	1.9
31	18	---	24	126	---	18	---	3.2	---	1.7	4.6	---
TOTAL	1354	1003	2520	2392	3570	914	580	220.1	75.6	62.6	188.2	133.0
MEAN	43.7	33.4	81.3	77.2	128	29.5	19.3	7.10	2.52	2.02	6.07	4.43
MAX	191	78	412	391	217	59	26	15	5.2	4.9	17	23
MIN	16	17	24	21	67	18	15	3.2	1.9	1.5	1.6	1.9
CFSM	.97	.74	1.81	1.72	2.85	.66	.43	.16	.06	.05	.14	.10
IN.	1.12	.83	2.09	1.98	2.96	.76	.48	.18	.06	.05	.16	.11

CAL YR 1985 TOTAL 13913.9 MEAN 38.1 MAX 558 MIN 2.5 CFSM .85 IN 11.53
WTR YR 1986 TOTAL 13012.5 MEAN 35.7 MAX 412 MIN 1.5 CFSM .80 IN 10.78

01486000 MANOKIN BRANCH NEAR PRINCESS ANNE, MD

LOCATION.--Lat 38°12'50", long 75°40'18", Somerset County, Hydrologic Unit 02060009, on right bank 45 ft downstream from farm bridge, 1.4 mi northeast of Princess Anne, and 1.6 mi upstream from confluence with Loretto Branch.

DRAINAGE AREA.--4.80 mi².

PERIOD OF RECORD.--April 1951 to September 1971, October 1974 to current year.

REVISED RECORDS.--WDR MD-DE-75-1: Drainage area. WDR MD-DE-85-1: 1983-84 (P).

GAGE.--Water-stage recorder. Datum of gage is 7.03 ft above National Geodetic Vertical Datum of 1929. Artificial control since Apr. 30, 1975. Nov. 26, 1968, to Sept. 30, 1971, water-stage recorder above and nonrecording gage below gage height 1.4 ft. Prior to Nov. 26, 1968, recording gage at datum 1.0 ft higher.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--32 years (water years 1952-71, 1975-86), 4.59 ft³/s, 12.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 547 ft³/s, Aug. 20, 1969, gage height, 5.44 ft, from rating curve extended above 27 ft³/s on basis of channel-conveyance study; maximum gage height, 7.08 ft, Aug. 19, 1985; no flow at times in 1954, 1963, 1964, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	0845	66	3.29	Sept. 6	0215	*80	*3.48

Minimum discharge, 0.24 ft³/s, Aug. 11, gage height, 1.93 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	2.5	33	3.1	8.6	6.3	2.3	1.8	.90	.45	.28	1.3
2	4.7	2.3	20	3.1	14	5.8	2.3	1.7	.89	.48	.27	1.3
3	5.0	2.3	12	5.5	13	5.5	2.2	1.6	.85	.45	.49	1.2
4	7.4	2.5	9.5	6.1	25	5.3	2.2	1.5	.80	.40	.55	1.1
5	6.5	3.3	8.0	5.6	21	5.0	2.1	1.5	.76	.39	.34	2.2
6	4.9	4.1	7.2	4.8	15	4.8	2.3	1.5	.74	.38	.30	37
7	4.0	3.8	6.2	4.2	21	4.5	2.5	1.5	.75	.37	.29	10
8	3.5	3.1	5.6	3.6	16	3.7	2.5	1.4	.74	.35	.28	6.3
9	3.2	2.6	5.1	3.4	12	3.8	2.3	1.3	.68	.38	.27	5.3
10	3.1	2.5	4.7	3.4	10	3.8	2.2	1.3	.62	.40	.26	4.4
11	2.9	2.3	4.6	3.3	22	3.8	2.1	1.3	.62	.36	.25	3.8
12	2.7	2.3	4.6	3.2	16	3.5	2.0	1.3	.61	.34	.31	3.3
13	2.6	2.3	5.6	3.2	11	3.6	1.9	1.2	.57	.37	3.0	3.0
14	2.6	2.3	6.1	2.8	9.0	3.8	1.9	1.1	.56	.48	1.4	2.6
15	2.5	2.1	5.0	2.6	8.4	4.1	2.1	1.2	.55	.41	.77	2.3
16	2.4	2.0	4.6	2.5	7.8	4.5	2.7	1.2	.54	.43	.56	2.1
17	2.3	2.4	4.4	2.6	9.3	4.1	3.1	1.1	.52	.57	.79	1.9
18	2.2	2.4	4.1	2.8	11	3.7	2.9	1.1	.50	.50	2.2	1.8
19	2.2	2.3	3.7	4.2	12	3.8	2.7	1.0	.49	.78	2.3	1.7
20	2.4	2.3	3.5	6.3	20	3.5	2.5	1.0	.51	.49	1.6	1.6
21	3.1	3.0	3.4	4.9	13	3.0	2.6	1.0	.50	.41	7.0	1.5
22	5.1	9.8	3.2	4.3	11	2.8	2.7	1.1	.47	.33	3.9	1.5
23	4.9	9.5	3.4	3.9	14	2.8	2.7	1.1	.49	.32	2.7	1.5
24	4.2	6.8	3.6	3.5	11	2.7	2.5	1.0	.51	.31	2.1	1.5
25	3.7	5.5	3.4	3.7	9.7	2.6	2.3	1.0	.48	.55	1.6	1.4
26	3.1	4.9	2.9	42	8.6	2.6	2.1	.99	.45	.39	1.4	1.3
27	2.8	4.6	2.8	36	8.2	2.6	2.0	.99	.45	.31	1.3	1.3
28	2.7	4.2	2.8	19	7.1	2.5	1.9	.99	.55	.29	1.5	1.2
29	2.5	4.0	2.8	13	---	2.4	1.9	.98	.68	.33	1.6	1.2
30	2.5	23	2.7	11	---	2.4	1.8	.95	.50	.56	1.5	1.1
31	2.5	---	2.6	9.0	---	2.4	---	.92	---	.32	1.4	---
TOTAL	109.9	127.0	191.1	226.6	364.7	115.7	69.3	37.62	18.28	12.90	42.51	107.7
MEAN	3.55	4.23	6.16	7.31	13.0	3.73	2.31	1.21	.61	.42	1.37	3.59
MAX	7.4	23	33	42	25	6.3	3.1	1.8	.90	.78	7.0	37
MIN	2.2	2.0	2.6	2.5	7.1	2.4	1.8	.92	.45	.29	.25	1.1
CFSM	.74	.88	1.28	1.52	2.71	.78	.48	.25	.13	.09	.29	.75
IN.	.85	.98	1.48	1.76	2.83	.90	.54	.29	.14	.10	.33	.83

CAL YR 1985 TOTAL 1459.58 MEAN 4.00 MAX 168 MIN .33 CFSM .83 IN 11.31
WTR YR 1986 TOTAL 1423.31 MEAN 3.90 MAX 42 MIN .25 CFSM .81 IN 11.03

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE

LOCATION.--Lat 38°43'42", long 75°33'44", Sussex County, Hydrologic Unit 02060008, on left bank at downstream side of highway bridge, 800 ft downstream from Gum Branch, 2.5 mi southeast of Bridgeville, and 50.5 mi upstream from mouth.

DRAINAGE AREA.--75.4 mi².

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as Gravelly Fork near Bridgeville.

REVISED RECORDS.--WSP 1111: 1947. WSP 1232: 1945-49.

GAGE.--Water-stage recorder. Datum of gage is 13.64 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service). Prior to Apr. 19, 1947, nonrecording gage, and Apr. 19, 1947, to Dec. 18, 1969, recording gage at present site and datum. Timber control Sept. 3, 1947, to Dec. 18, 1969. Feb. 18, 1970, to Oct. 1, 1973, recording gage at site 300 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--43 years, 90.8 ft³/s, 16.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,020 ft³/s, Feb. 26, 1979, gage height, 10.31 ft; minimum discharge observed, 6.3 ft³/s, Sept. 29, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 11.0 ft in September 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 360 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	1900	*269	*5.93	No peak greater than base discharge.			

Minimum daily discharge, 15 ft³/s, Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	36	158	54	97	116	79	61	31	20	23	19
2	46	36	125	50	101	113	79	57	30	23	22	20
3	55	35	103	59	109	109	76	56	29	45	23	19
4	56	36	92	57	130	106	74	58	29	34	24	19
5	52	39	89	54	170	104	75	57	29	30	21	19
6	49	40	89	52	142	102	80	58	28	26	16	19
7	46	38	85	50	174	100	79	59	26	26	28	18
8	45	38	82	47	169	93	77	57	28	23	24	18
9	44	37	80	46	143	91	76	53	28	24	23	18
10	44	37	79	48	133	91	72	53	24	22	21	18
11	44	37	79	47	137	90	71	53	24	24	20	18
12	42	37	80	46	130	86	69	52	31	22	20	18
13	41	38	81	46	122	103	67	51	53	25	21	16
14	41	39	80	44	116	130	66	50	40	30	18	15
15	40	39	75	42	117	145	66	51	36	29	18	15
16	40	39	74	41	110	136	78	50	34	23	16	16
17	38	44	73	42	109	124	73	48	31	40	18	16
18	37	40	71	43	132	115	75	47	28	38	20	16
19	37	40	68	48	149	113	69	45	28	30	19	17
20	37	40	66	49	142	112	67	47	28	26	21	16
21	43	40	67	44	134	103	71	48	30	27	31	16
22	44	51	65	42	129	97	71	48	30	24	28	16
23	40	52	65	41	141	95	71	42	25	24	24	17
24	39	47	64	39	144	93	67	40	27	22	22	16
25	38	44	62	40	140	88	65	38	29	24	20	16
26	37	43	57	169	135	87	64	36	26	27	20	17
27	36	43	57	213	131	87	63	35	23	28	20	17
28	35	44	56	149	124	85	62	34	24	26	23	18
29	35	95	55	119	---	82	63	33	25	23	22	18
30	35	94	53	109	---	81	62	30	24	29	21	18
31	35	---	52	100	---	81	---	31	---	25	20	---
TOTAL	1300	1318	2382	2030	3710	3158	2127	1478	878	839	667	519
MEAN	41.9	43.9	76.8	65.5	133	102	70.9	47.7	29.3	27.1	21.5	17.3
MAX	56	95	158	213	174	145	80	61	53	45	31	20
MIN	35	35	52	39	97	81	62	30	23	20	16	15
CFSM	.56	.58	1.02	.87	1.76	1.35	.94	.63	.39	.36	.29	.23
IN.	.64	.65	1.18	1.00	1.83	1.56	1.05	.73	.43	.41	.33	.26

CAL YR 1985 TOTAL 17976 MEAN 49.2 MAX 253 MIN 18 CFSM .65 IN 8.87
WTR YR 1986 TOTAL 20406 MEAN 55.9 MAX 213 MIN 15 CFSM .74 IN 10.07

01488500 MARSHYHOPE CREEK NEAR ADAMSVILLE, DE

LOCATION.--Lat 38°50'59", long 75°40'24", Kent County, Hydrologic Unit 02060008, on left bank 45 ft upstream from highway bridge, 1.4 mi upstream from Cattail Branch, 1.6 mi northeast of Adamsville, 4.9 mi northwest of Greenwood, and 33 mi upstream from mouth.

DRAINAGE AREA.--43.9 mi².

PERIOD OF RECORD.--April 1943 to March 1969, October 1971 to current year.

REVISED RECORDS.--WSP 1141: 1948(P). WSP 1432: 1946(M), 1948, 1952.

GAGE.--Water-stage recorder. Datum of gage is 26.21 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 24, 1953, nonrecording gage and crest-stage gage, and Nov. 24, 1953, to March 1969, recording gage at site on old channel about 240 ft southeast of present site at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--40 years (water years 1944-68, 1972-86), 54.4 ft³/s, 16.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s, July 13, 1975, gage height, 13.19 ft, from rating curve extended above 3,300 ft³/s; maximum gage height, 13.98 ft, Aug. 5, 1967, present datum; minimum discharge, 1.0 ft³/s, Sept. 9, 10, 1964, Aug. 20, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.5 ft, present datum, in September 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	1245	732	5.94	Mar. 14	0300	*1,090	*7.12

Minimum discharge, 5.0 ft³/s, Sept. 23, 27, gage height, 2.05 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	23	145	29	76	83	49	30	15	9.9	8.7	6.4
2	42	22	98	27	92	79	48	29	14	10	8.5	6.8
3	76	22	74	31	104	73	46	27	14	10	9.0	6.5
4	101	23	61	36	169	70	44	26	13	9.4	8.3	6.6
5	70	23	57	35	195	67	43	26	13	8.8	7.9	6.6
6	56	23	55	34	141	65	45	26	13	8.4	7.3	6.9
7	48	22	51	32	221	63	47	26	13	8.2	8.3	6.8
8	44	21	48	30	151	57	46	25	12	7.9	7.7	6.9
9	39	20	47	28	125	55	44	23	12	8.6	7.4	6.7
10	37	20	44	29	115	54	41	23	12	8.3	7.2	6.6
11	36	20	43	28	115	55	40	23	11	8.1	7.2	6.5
12	34	19	43	27	104	51	38	22	12	7.6	6.9	6.5
13	33	20	44	28	92	126	37	22	13	8.7	7.2	6.2
14	32	20	47	27	82	623	35	21	13	14	6.8	6.2
15	31	19	44	25	81	319	35	21	12	15	6.7	6.1
16	30	18	42	24	73	193	39	21	12	12	6.9	5.9
17	28	20	41	24	77	144	40	21	11	42	7.1	5.8
18	27	20	39	25	162	118	40	20	11	29	7.0	5.7
19	26	19	36	27	182	107	40	19	9.8	16	6.7	5.9
20	27	19	35	31	131	97	38	20	10	12	7.4	6.0
21	28	19	36	32	116	84	39	20	10	11	8.5	5.9
22	28	22	35	29	104	76	39	19	10	10	8.2	5.8
23	28	30	35	28	131	72	38	19	9.3	9.3	7.9	5.6
24	27	28	35	27	127	67	36	18	11	9.1	7.3	5.6
25	27	27	34	28	120	62	35	18	12	9.8	6.7	5.7
26	26	25	32	361	113	61	35	17	12	9.7	6.5	5.8
27	25	26	31	269	101	60	33	16	10	11	6.5	5.5
28	24	26	31	150	91	57	32	16	9.6	9.9	7.3	5.5
29	23	52	30	109	---	53	32	16	9.3	8.9	7.3	5.9
30	23	68	29	93	---	52	31	15	9.5	8.2	6.9	5.8
31	23	---	28	82	---	51	---	14	---	8.3	6.6	---
TOTAL	1147	736	1450	1785	3391	3194	1185	659	348.5	359.1	229.9	184.7
MEAN	37.0	24.5	46.8	57.6	121	103	39.5	21.3	11.6	11.6	7.42	6.16
MAX	101	68	145	361	221	623	49	30	15	42	9.0	6.9
MIN	23	18	28	24	73	51	31	14	9.3	7.6	6.5	5.5
CFSM	.84	.56	1.07	1.31	2.76	2.35	.90	.49	.26	.26	.17	.14
IN.	.97	.62	1.23	1.51	2.87	2.71	1.00	.56	.30	.30	.19	.16

CAL YR 1985 TOTAL 10927.8 MEAN 29.9 MAX 732 MIN 9.1 CFSM .68 IN 9.26
WTR YR 1986 TOTAL 14669.2 MEAN 40.2 MAX 623 MIN 5.5 CFSM .92 IN 12.43

01489000 FAULKNER BRANCH AT FEDERALSBURG, MD

LOCATION.--Lat 38°42'44", long 75°47'34", Caroline County, Hydrologic Unit 02060008, on right bank 25 ft downstream from bridge on Laurel Grove Road, 0.9 mi upstream from mouth, and 1.6 mi northwest of Federalsburg.

DRAINAGE AREA.--7.10 mi².

PERIOD OF RECORD.--July 1950 to current year.

REVISED RECORDS.--WSP 1552: 1952. WSP 2103: 1960(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 16.70 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Diversion for irrigation of about 100 acres upstream from station during some years. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--36 years, 9.05 ft³/s, 17.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s, July 13, 1975, gage height, 5.98 ft, from rating curve extended above 400 ft³/s on basis of contracted-opening measurement of peak flow; no flow at times during many years (result of pumpage for irrigation).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1935 is believed to have been higher than that of July 13, 1975, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	0830	*185	*3.31	Mar. 14	0100	67	2.40

Minimum discharge, 0.24 ft³/s, July 23-25, 28, 29, Aug. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	3.9	24	6.1	14	15	9.7	5.0	1.6	.66	.57	2.0
2	8.0	3.7	18	5.6	16	14	9.5	4.9	.93	1.2	.53	2.1
3	11	3.5	15	6.7	16	14	8.2	4.2	1.1	4.6	.93	2.1
4	12	3.5	14	6.3	29	14	8.7	3.5	1.4	2.2	1.0	2.0
5	10	4.0	13	6.3	27	13	8.9	4.4	.90	1.6	.29	1.9
6	9.3	4.0	13	5.9	21	13	9.3	4.2	1.2	.76	.87	1.9
7	8.3	3.7	12	5.4	36	12	9.0	3.9	1.4	.65	4.8	1.4
8	7.6	3.5	11	5.0	24	11	8.8	3.2	.86	.58	2.2	1.4
9	7.2	3.4	10	5.1	21	11	8.5	2.8	1.2	.60	1.8	1.3
10	7.1	3.4	9.9	5.3	20	12	8.0	2.7	1.4	.60	1.7	1.5
11	6.9	3.4	9.9	5.1	21	12	7.9	3.7	1.6	.57	1.1	1.7
12	6.4	3.4	9.8	5.0	18	11	7.3	3.3	1.7	.56	.47	1.7
13	6.2	3.7	9.8	5.2	17	15	7.1	2.4	1.6	.60	1.1	1.3
14	6.2	3.4	9.4	4.5	16	40	6.6	2.6	1.6	.67	.81	1.3
15	5.9	3.2	8.6	4.3	15	32	7.0	3.6	1.7	.60	.33	1.3
16	5.6	3.3	8.5	4.2	14	25	7.8	3.5	2.2	.50	.32	1.2
17	5.3	4.0	8.5	4.3	15	21	7.3	2.5	1.7	.62	.41	1.2
18	4.9	3.5	7.9	4.4	21	18	7.1	2.3	.76	1.3	1.7	1.2
19	5.0	3.4	7.2	5.7	23	18	6.7	2.7	.68	1.4	1.6	1.2
20	5.1	3.4	7.2	7.9	20	16	6.7	4.0	.88	1.3	1.8	1.2
21	5.5	3.4	7.3	6.9	18	14	7.0	3.8	1.4	1.4	3.7	1.2
22	5.7	5.0	7.1	6.5	17	14	6.8	3.6	1.5	1.2	2.9	1.2
23	5.4	4.9	7.2	6.3	21	13	6.3	3.3	1.1	.32	2.2	1.0
24	4.8	4.3	7.1	5.9	20	12	5.6	3.3	.72	.28	2.0	1.0
25	4.6	4.2	6.8	6.2	19	12	6.0	2.7	.66	.34	1.9	1.1
26	4.4	4.2	6.3	66	18	12	5.7	2.1	.65	.45	1.9	1.2
27	4.2	4.2	6.3	38	18	12	5.5	2.8	.72	.62	1.9	1.2
28	4.4	5.0	6.3	23	16	11	5.4	2.1	.67	.75	2.3	1.2
29	3.7	15	6.2	19	---	10	4.9	1.9	.67	.35	2.1	1.2
30	4.1	22	5.9	17	---	9.9	4.6	1.5	.72	.63	2.0	1.2
31	4.0	---	5.9	15	---	9.8	---	1.5	---	1.1	2.0	---
TOTAL	197.7	143.5	299.1	318.1	551	466.7	217.9	98.0	35.22	29.01	49.23	42.4
MEAN	6.38	4.78	9.65	10.3	19.7	15.1	7.26	3.16	1.17	.94	1.59	1.41
MAX	12	22	24	66	36	40	9.7	5.0	2.2	4.6	4.8	2.1
MIN	3.7	3.2	5.9	4.2	14	9.8	4.6	1.5	.65	.28	.29	1.0
CFSM	.90	.67	1.36	1.45	2.78	2.13	1.02	.45	.17	.13	.22	.20
IN.	1.04	.75	1.57	1.67	2.89	2.44	1.14	.51	.18	.15	.26	.22

CAL YR 1985 TOTAL 2373.80 MEAN 6.50 MAX 178 MIN 1.1 CFSM .92 IN 12.44
WTR YR 1986 TOTAL 2447.86 MEAN 6.71 MAX 66 MIN .28 CFSM .95 IN 12.82

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD

LOCATION.--Lat 38°59'50", long 75°47'09", Caroline County, Hydrologic Unit 02060005, on left bank at highway bridge, 0.1 mi upstream from Gravelly Branch, 2.0 mi northeast of Greensboro, and 60 mi upstream from mouth.

DRAINAGE AREA.--113 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1622: 1948. WDR MD-DE-79-1: 1961(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.51 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. Diversions for irrigation of about 500 acres upstream from station.

AVERAGE DISCHARGE.--38 years, 130 ft³/s, 15.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,970 ft³/s, Aug. 4, 1967, gage height, 14.47 ft, from rating curve extended above 3,600 ft³/s; minimum discharge, 1.2 ft³/s, Aug. 29, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1935 is believed to have been higher than that of Aug. 4, 1967, from information by local residents.

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)
Jan. 27	1115	*1,090	*6.75	No other peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s, Aug. 16, gage height, 1.53 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	51	184	64	198	205	104	76	24	16	8.4	13
2	132	50	226	63	188	189	100	72	26	19	6.5	13
3	191	49	200	69	212	178	96	67	24	23	16	16
4	402	48	166	88	253	170	92	60	21	19	26	15
5	348	50	138	92	433	164	91	59	20	15	22	14
6	233	52	126	87	453	157	106	58	18	10	13	14
7	182	52	119	81	336	150	126	56	21	8.7	14	13
8	146	50	110	72	323	136	121	52	22	8.3	16	12
9	122	47	103	67	285	127	114	50	23	7.0	15	12
10	107	45	97	68	272	129	93	46	19	8.1	13	12
11	98	45	92	67	269	127	94	44	17	8.6	11	11
12	91	45	91	65	252	123	91	46	18	5.2	10	11
13	85	45	94	64	219	135	85	43	33	5.8	7.0	8.6
14	80	45	105	61	191	304	83	44	30	9.3	6.1	8.2
15	77	46	109	55	180	616	81	41	25	8.9	4.1	7.3
16	78	45	101	54	172	574	90	44	22	4.7	3.3	6.2
17	77	54	95	55	164	408	111	42	19	15	6.9	5.5
18	71	57	90	57	225	287	130	39	15	16	20	3.3
19	67	53	83	66	620	235	145	37	13	15	20	7.6
20	64	52	78	104	565	214	128	41	12	16	26	8.5
21	68	51	78	118	373	191	116	53	15	17	32	8.8
22	74	56	79	102	294	168	114	54	16	16	35	9.0
23	72	79	78	88	275	154	111	51	14	15	26	8.6
24	69	90	79	80	308	145	108	45	17	11	20	9.2
25	67	81	79	77	308	136	100	42	23	8.4	16	12
26	63	72	73	336	284	129	93	37	17	11	13	11
27	60	69	66	985	254	125	89	33	13	12	13	10
28	57	69	67	735	229	123	85	31	13	11	15	10
29	55	93	66	409	---	116	82	29	16	9.8	18	9.2
30	53	134	65	284	---	112	80	28	19	13	15	9.4
31	52	---	63	221	---	109	---	27	---	12	14	---
TOTAL	3521	1775	3200	4834	8135	6136	3059	1447	585	374.8	481.3	308.4
MEAN	114	59.2	103	156	291	198	102	46.7	19.5	12.1	15.5	10.3
MAX	402	134	226	985	620	616	145	76	33	23	35	16
MIN	52	45	63	54	164	109	80	27	12	4.7	3.3	3.3
CFSM	1.01	.52	.91	1.38	2.58	1.75	.90	.41	.17	.11	.14	.09
IN.	1.16	.58	1.05	1.59	2.68	2.02	1.01	.48	.19	.12	.16	.10

CAL YR 1985 TOTAL 25390.8 MEAN 69.6 MAX 1180 MIN 7.1 CFSM .62 IN 8.36
WTR YR 1986 TOTAL 33856.5 MEAN 92.8 MAX 985 MIN 3.3 CFSM .82 IN 11.15

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1981, October 1984 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1980 to current year.

REMARKS.--Water temperatures are measured daily in field by local observer at time of sampling.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1975-81): Maximum daily, 184 microsiemens, Sept. 23, 1976; minimum daily, 40 microsiemens, Jan. 31, 1980.
WATER TEMPERATURE (water years 1975-81, 1985): Maximum daily, 28.0°C, July 23, 1978and July 22, 1980; minimum daily, 0.0°C, on many days during winter periods.
SEDIMENT CONCENTRATION: Maximun daily mean, 77 mg/L, May 12, 1981; minimum daily mean, 1 mg/L, on many days during water years 1982-86.
SEDIMENT LOAD: Maximum daily, 363 tons, Apr. 16, 1983; minimum daily, 0.02 ton, Aug. 30, Sept. 7, 1982, July 25, 1986.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 52 mg/L, Jan. 27; minimum daily mean, 1 mg/L, on many days throughout the year.
SEDIMENT LOAD: Maximum daily, 137 tons, Jan. 27; minimum daily, 0.02 ton, July 25.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV											
04...	0840	50	148	6.70	14.0	13.5	--	--	8.2	--	--
18...	1045	57	154	7.00	16.0	13.0	779	5.5	8.3	77	93
DEC											
27...	1130	62	141	6.50	1.0	4.0	771	--	13.4	93	--
JAN											
30...	1045	267	110	6.70	-3.0	1.0	780	--	11.5	79	--
FEB											
03...	1030	206	130	6.60	6.0	6.0	774	6.0	11.1	88	K80
05...	1200	451	111	6.80	--	--	--	--	--	--	--
06...	1200	460	106	5.60	--	--	--	--	--	--	--
19...	1600	736	118	6.80	--	--	--	--	--	--	--
28...	0945	230	132	6.80	3.0	2.0	687	--	10.8	87	--
MAR											
28...	0945	123	127	6.40	13.0	12.0	--	--	9.2	--	--
28...	0950	125	127	6.40	13.0	12.0	--	--	9.2	--	--
APR											
18...	0950	128	132	6.40	14.0	10.0	779	--	9.8	85	--
30...	1000	81	131	7.10	21.0	17.0	779	--	7.7	78	--
MAY											
09...	1030	50	143	7.00	16.0	18.5	781	--	6.8	71	--
19...	1000	38	158	7.24	26.0	23.0	766	--	6.2	72	35
27...	1140	33	143	6.90	24.0	19.5	779	--	7.0	74	--
JUN											
05...	0855	22	151	6.85	25.0	20.0	776	--	6.8	73	--
16...	1130	22	167	7.20	28.0	25.0	766	--	6.2	75	--
30...	0830	19	155	6.50	23.5	24.0	773	--	6.0	70	--
JUL											
11...	1345	18	197	6.60	17.0	15.0	771	--	7.5	74	--
17...	1315	17	137	7.20	27.5	25.0	--	--	6.8	--	--
28...	0900	13	167	6.30	28.5	24.5	770	--	6.0	71	--
AUG											
19...	1200	17	183	7.20	26.0	24.0	--	--	7.3	--	--
26...	1200	14	178	7.00	25.0	20.0	777	--	8.7	94	--
SEP											
08...	1000	11	195	7.30	17.0	19.0	771	1.4	9.1	97	--
26...	1000	11	168	6.80	25.5	21.0	777	--	7.0	77	--

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

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3
NOV											
04...	--	--	--	--	--	--	--	--	--	28	23
18...	320	45	23	12	3.5	10	31	0.7	2.9	27	22
DEC											
27...	--	--	--	--	--	--	--	--	--	20	16
JAN											
30...	--	--	--	--	--	--	--	--	--	11	9
FEB											
03...	150	36	29	9.3	3.1	8.3	32	0.6	2.3	10	8
05...	--	--	--	--	--	--	--	--	--	12	10
06...	--	--	--	--	--	--	--	--	--	10	8
19...	--	--	--	--	--	--	--	--	--	11	9
28...	--	--	--	--	--	--	--	--	--	12	10
MAR											
28...	--	--	--	--	--	--	--	--	--	18	15
28...	--	--	--	--	--	--	--	--	--	18	15
APR											
18...	--	--	--	--	--	--	--	--	--	21	17
30...	--	--	--	--	--	--	--	--	--	23	19
MAY											
09...	--	--	--	--	--	--	--	--	--	29	24
19...	>100	--	--	--	--	--	--	--	--	24	20
27...	--	--	--	--	--	--	--	--	--	32	26
JUN											
05...	--	--	--	--	--	--	--	--	--	31	26
16...	--	--	--	--	--	--	--	--	--	32	26
30...	--	--	--	--	--	--	--	--	--	31	26
JUL											
11...	--	--	--	--	--	--	--	--	--	37	30
17...	--	--	--	--	--	--	--	--	--	30	25
28...	--	--	--	--	--	--	--	--	--	34	28
AUG											
19...	--	--	--	--	--	--	--	--	--	28	23
26...	--	--	--	--	--	--	--	--	--	33	27
SEP											
08...	E700	48	19	13	3.8	14	37	0.9	3.1	35	29
26...	--	--	--	--	--	--	--	--	--	37	30

DATE	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)
NOV											
04...	8.9	--	--	--	17	--	--	--	--	0.82	--
18...	4.3	19	18	<0.1	20	108	100	0.15	17	0.69	3.1
DEC											
27...	10	--	--	--	19	--	--	--	--	1.49	6.6
JAN											
30...	3.5	--	--	--	15	--	--	--	--	1.29	5.8
FEB											
03...	4.0	23	12	<0.1	20	97	90	0.13	54	1.49	6.6
05...	3.0	--	--	--	13	--	--	--	--	--	--
06...	40	--	--	--	--	--	--	--	--	1.19	--
19...	2.8	--	--	--	13	--	--	--	--	1.09	--
28...	3.0	--	--	--	17	--	--	--	--	1.40	--
MAR											
28...	11	--	--	--	16	--	--	--	--	1.19	--
28...	11	--	--	--	16	--	--	--	--	1.19	--
APR											
18...	13	--	--	--	16	--	--	--	--	1.08	--
30...	2.9	--	--	--	16	--	--	--	--	0.909	--
MAY											
09...	4.6	--	--	--	17	--	--	--	--	0.867	--
19...	2.2	--	--	--	17	--	--	--	--	0.976	--
27...	6.4	--	--	--	18	--	--	--	--	1.08	--
JUN											
05...	7.0	--	--	--	18	--	--	--	--	0.992	--
16...	3.2	--	--	--	1.6	--	--	--	--	0.87	--
30...	16	--	--	--	15	--	--	--	--	0.993	--
JUL											
11...	15	--	--	--	13	--	--	--	--	0.927	--
17...	3.0	--	--	--	12	--	--	--	--	0.97	--
28...	27	--	--	--	14	--	--	--	--	0.936	--
AUG											
19...	2.8	--	--	--	12	--	--	--	--	0.664	--
26...	5.2	--	--	--	14	--	--	--	--	1.01	--
SEP											
08...	2.8	16	25	<0.1	10	128	100	0.17	3.8	--	--
26...	9.3	--	--	--	10	--	--	--	--	0.967	--

E: Estimated.

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
NOV											
04...	0.01	0.03	--	0.83	--	0.04	0.05	--	0.26	0.4	0.3
18...	0.01	0.03	--	0.70	0.05	0.03	0.04	0.45	--	0.5	--
DEC											
27...	0.01	0.03	--	1.50	--	0.04	0.05	--	0.36	0.4	0.4
JAN											
30...	0.009	0.03	--	1.30	--	0.08	0.1	--	0.52	0.7	0.6
FEB											
03...	0.01	0.03	--	1.50	0.04	0.04	0.05	0.46	0.66	0.5	0.7
05...	--	--	--	1.20	--	0.08	0.1	--	0.52	0.8	0.6
06...	0.009	0.03	1.10	1.20	--	0.07	0.09	--	0.63	0.8	0.7
19...	0.013	0.04	--	1.10	--	0.20	0.26	--	0.8	1.1	1.0
28...	0.004	0.01	--	1.40	--	0.07	0.09	--	0.63	0.4	0.7
MAR											
28...	0.01	0.03	--	1.20	--	0.05	0.06	--	0.45	0.5	0.5
28...	0.009	0.03	--	1.20	--	0.05	0.06	--	0.35	0.5	0.4
APR											
18...	0.017	0.06	--	1.10	--	0.08	0.1	--	0.32	0.7	0.4
30...	0.011	0.04	--	0.92	--	0.07	0.09	--	0.33	0.6	0.4
MAY											
09...	0.013	0.04	--	0.88	--	0.09	0.12	--	0.51	0.6	0.6
19...	0.024	0.08	--	1.00	0.07	0.08	0.1	0.43	0.52	0.5	0.6
27...	0.022	0.07	--	1.10	--	0.08	0.1	--	0.32	0.6	0.4
JUN											
05...	0.008	0.03	--	1.00	--	0.05	0.06	--	0.45	0.6	0.5
16...	0.08	0.26	--	0.95	--	0.05	0.06	--	0.35	0.5	0.4
30...	0.007	0.02	--	1.00	--	0.04	0.05	--	0.26	0.4	0.3
JUL											
11...	0.003	0.01	0.90	0.93	--	<0.01	--	--	--	0.3	0.4
17...	0.01	0.03	--	0.98	--	0.04	0.05	--	0.36	0.5	0.4
28...	0.004	0.01	--	0.94	--	0.03	0.04	--	0.47	0.4	0.5
AUG											
19...	0.006	0.02	--	0.67	--	0.02	0.03	--	0.28	0.4	0.3
26...	0.09	0.3	1.10	1.10	--	0.01	0.01	--	0.39	<0.2	0.4
SEP											
08...	<0.01	--	--	1.00	<0.01	0.03	0.04	--	--	0.4	--
26...	0.003	0.01	--	0.97	--	0.03	0.04	--	0.47	0.4	0.5

DATE	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV											
04...	0.1	--	1.1	--	0.05	0.15	0.02	0.02	0.06	20	4.4
18...	--	--	--	--	0.07	0.21	0.01	0.02	0.06	20	--
DEC											
27...	0.0	--	1.9	--	0.03	0.09	0.01	0.01	0.03	20	2.8
JAN											
30...	0.1	--	1.9	--	0.06	0.18	0.03	0.019	0.06	430	10
FEB											
03...	--	--	--	--	0.04	0.12	0.01	0.012	0.04	140	5.6
05...	--	--	--	--	0.07	--	0.02	--	--	120	8.3
06...	--	1.9	--	8.4	0.07	--	0.03	0.022	0.07		
19...	--	--	--	--	0.08	--	0.01	0.018	0.05	140	13
28...	--	--	--	--	0.04	--	0.01	0.019	0.06	120	--
MAR											
28...	--	--	--	--	0.04	--	<0.01	0.003	0.01	20	4.3
28...	--	--	--	--	0.04	--	<0.01	0.002	0.01	20	4.0
APR											
18...	--	--	--	--	0.06	--	0.01	0.008	0.02	60	5.0
30...	--	--	--	--	0.07	--	0.01	0.004	0.01	40	5.3
MAY											
09...	--	--	--	--	0.06	--	0.03	0.019	0.06	20	7.4
19...	--	--	--	--	0.07	--	0.02	0.021	0.06	20	7.5
27...	--	--	--	--	0.09	--	0.03	0.03	0.09	20	4.7
JUN											
05...	--	--	--	--	0.09	--	0.04	0.031	0.09	20	5.4
16...	--	--	--	--	0.08	--	0.04	0.03	0.09	30	5.1
30...	--	--	--	--	0.05	--	0.03	0.023	0.07	20	3.3
JUL											
11...	--	1.2	--	5.3	0.91	--	0.02	--	--	20	4.0
17...	--	--	--	--	0.04	--	0.03	0.022	0.07	10	4.6
28...	--	--	--	--	0.04	--	0.03	0.023	0.07	20	2.4
AUG											
19...	--	--	--	--	0.04	--	0.01	0.013	0.04	20	10
26...	--	--	--	--	0.03	--	0.04	0.032	0.1	--	4.8
SEP											
08...	--	--	--	--	0.04	--	0.03	0.01	0.03	<10	3.4
26...	--	--	--	--	0.07	--	0.03	0.013	0.04	<10	3.4

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV										
04...	--	--	--	--	--	--	--	--	--	--
18...	<1	70	<0.5	<1	<1	<3	<1	840	<1	<4
FEB										
03...	<1	74	<0.5	<1	<1	<3	1	240	1	4
APR										
30...	--	--	--	--	--	--	--	--	--	--
JUN										
16...	--	--	--	--	--	--	--	--	--	--
JUL										
17...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	<1	75	<0.5	<1	<1	<3	6	150	<5	9

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
04...	--	--	--	--	--	--	--	1	--
18...	64	<0.1	<10	4	<1	<1	110	<6	12
FEB									
03...	46	0.1	<10	4	<1	<1	83	<6	25
APR									
30...	--	--	--	--	--	--	--	<1	--
JUN									
16...	--	--	--	--	--	--	--	<1	--
JUL									
17...	--	--	--	--	--	--	--	<1	--
SEP									
08...	7	<0.1	<10	2	<1	<1	130	<6	<3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
01...	1830	164	33	15	--
02...	1230	130	12	4.2	--
03...	1115	187	15	7.6	--
06...	1700	216	9	5.2	--
07...	0915	187	7	3.5	--
NOV					
04...	0955	48	7	0.91	--
18...	1045	57	14	2.2	65
27...	1055	69	5	0.93	--
DEC					
27...	1250	67	2	0.36	--
30...	1300	64	2	0.35	--
31...	1600	62	2	0.33	--
JAN					
30...	1100	285	22	17	--
30...	1335	274	12	8.9	--
FEB					
03...	1030	206	4	2.2	95
06...	0930	481	3	3.9	--
19...	0850	599	16	26	--
20...	0850	593	18	29	--
28...	0945	230	49	30	--
28...	1050	230	49	30	--
MAR					
28...	0950	125	2	0.68	--
28...	1130	123	2	0.66	--
28...	1135	123	8	2.7	--
APR					
18...	0950	128	8	2.8	--
18...	1015	128	8	2.8	--
18...	1100	128	6	2.1	--
18...	1105	128	8	2.8	--
30...	0955	81	3	0.66	--
30...	1000	81	3	0.66	--
30...	1115	81	8	1.7	--
30...	1120	81	7	1.5	--
MAY					
09...	1030	50	3	0.41	--
09...	1135	50	3	0.41	--
09...	1140	50	6	0.81	--
27...	1140	33	1	0.09	--
27...	1245	33	1	0.09	--
JUN					
05...	0855	22	1	0.06	--
05...	0955	22	1	0.06	--
16...	1130	22	4	0.24	--
26...	1150	17	3	0.14	--
JUL					
17...	1315	17	3	0.14	--
17...	1317	17	3	0.14	--

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	154	---	141	---	---	132	134	---	---	182	197
2	128	148	132	---	---	---	---	136	150	---	177	188
3	128	153	130	---	---	---	135	137	152	178	176	---
4	---	152	133	---	119	123	130	137	152	---	180	196
5	106	153	135	---	---	125	130	---	154	---	212	203
6	112	---	135	136	107	---	---	---	155	181	210	200
7	120	153	---	134	---	126	130	---	151	---	---	198
8	128	157	136	134	110	129	132	138	---	179	---	198
9	130	152	136	143	115	---	136	144	---	---	---	204
10	135	156	135	143	118	132	136	141	158	182	186	---
11	140	156	138	140	---	131	131	---	157	---	180	---
12	140	154	140	140	---	129	131	143	149	---	---	---
13	140	---	138	---	---	126	135	143	---	180	176	194
14	140	154	136	139	124	120	---	---	---	182	178	198
15	---	155	135	140	124	103	135	---	---	177	177	202
16	---	158	---	144	125	104	---	142	---	---	177	204
17	145	---	134	144	125	103	135	145	---	---	176	---
18	145	153	134	144	---	---	133	---	---	178	188	207
19	149	157	---	---	118	110	---	---	---	---	193	200
20	145	156	141	133	100	114	128	142	177	---	177	201
21	146	---	143	131	120	---	---	---	---	173	---	207
22	146	153	143	133	104	---	---	---	161	176	193	207
23	147	150	143	133	---	---	---	---	153	178	---	211
24	---	155	143	134	117	112	---	---	153	181	202	211
25	147	149	138	134	---	124	---	---	---	---	199	204
26	---	---	138	109	116	---	127	---	162	---	196	---
27	147	146	141	81	114	124	---	---	---	---	---	204
28	---	146	---	88	---	---	130	147	163	179	190	210
29	147	145	---	---	---	---	130	148	128	182	190	---
30	150	142	140	111	---	130	---	---	164	---	198	213
31	155	---	135	114	---	129	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	12.5	---	3.0	---	---	15.0	19.5	---	---	25.5	18.0
2	18.5	13.0	10.5	---	---	---	---	19.0	24.0	---	25.5	18.0
3	18.0	13.5	6.5	---	---	---	17.0	16.0	19.0	21.5	24.0	---
4	---	13.5	4.5	---	6.0	7.0	14.5	14.5	19.0	---	23.0	19.5
5	18.0	14.0	4.0	---	---	6.0	12.0	---	21.5	---	25.0	21.0
6	16.5	---	5.5	3.0	6.5	---	---	---	21.0	24.0	23.5	22.0
7	14.0	12.5	---	2.5	---	3.5	12.5	---	23.0	---	---	19.5
8	14.5	12.5	5.0	1.5	5.5	3.0	15.0	22.0	---	25.0	---	20.0
9	15.0	11.5	5.0	2.0	4.0	---	15.0	20.0	---	---	---	18.0
10	17.0	12.0	6.0	3.0	4.0	7.0	12.0	18.0	21.0	25.0	24.5	---
11	16.0	12.5	7.0	3.0	---	12.0	10.5	---	25.0	---	25.0	---
12	17.0	13.0	9.5	2.5	---	11.0	12.5	17.0	24.5	---	---	---
13	16.5	---	9.0	---	---	10.0	11.0	17.0	---	25.0	24.5	20.0
14	18.0	14.0	7.5	2.5	.5	10.0	---	---	---	25.0	24.5	19.0
15	---	15.5	3.0	1.5	2.0	13.5	12.0	---	---	25.0	25.5	19.0
16	---	13.0	.5	1.0	1.5	13.0	---	17.0	---	---	24.5	18.5
17	11.5	---	3.5	3.0	4.0	11.5	11.0	21.5	---	---	25.0	---
18	14.5	12.0	3.0	3.5	---	---	12.5	---	---	25.0	---	14.5
19	14.0	12.5	5.0	---	4.5	12.0	---	---	---	---	24.0	17.0
20	14.5	15.0	.5	7.0	5.0	13.0	16.0	22.0	25.0	---	23.0	17.0
21	15.0	---	.5	6.0	6.0	---	---	---	---	24.0	---	19.0
22	15.0	11.5	.5	5.0	5.0	---	---	---	25.5	24.0	22.5	18.5
23	16.0	9.5	.5	4.5	---	---	---	---	23.0	24.0	---	20.0
24	---	8.0	1.0	4.0	4.5	11.5	---	---	23.0	25.0	23.0	21.0
25	18.0	8.0	1.0	3.5	---	11.5	11.0	---	---	---	21.5	21.0
26	---	---	2.5	6.0	6.5	11.0	16.5	---	19.5	---	20.0	21.0
27	10.5	9.5	4.0	5.0	7.0	14.5	---	19.5	---	---	---	22.0
28	---	10.0	2.5	1.5	2.0	12.0	19.5	21.0	23.5	25.5	20.0	19.5
29	12.0	9.5	---	---	---	---	18.0	20.5	24.0	25.5	18.0	---
30	10.0	9.5	2.0	1.0	---	16.5	17.0	---	22.5	---	18.0	21.0
31	12.0	---	3.0	1.5	---	18.0	---	---	---	---	---	---

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12	5.8	1	.14	11	5.5	1	.17	10	.69	2	1.1
2	12	4.3	4	.54	9	5.5	1	.17	10	5.1	2	1.0
3	17	9.1	4	.53	11	5.9	1	.19	10	5.7	1	.48
4	28	30	6	.78	10	4.5	2	.48	10	6.8	1	.46
5	20	19	4	.54	8	3.0	3	.75	15	18	1	.44
6	10	6.3	4	.56	5	1.7	4	.94	15	18	2	.85
7	6	2.9	5	.70	4	1.3	5	1.1	12	11	2	.81
8	3	1.2	3	.41	3	.89	4	.78	11	9.6	1	.37
9	2	.66	4	.51	2	.56	3	.60	9	6.9	3	1.0
10	2	.58	4	.49	3	.79	5	.92	7	5.1	6	2.1
11	1	.26	4	.49	4	.99	2	.36	5	3.6	8	2.7
12	3	.74	2	.24	5	1.2	3	.53	5	3.4	4	1.3
13	3	.69	2	.24	4	1.0	2	.35	4	2.4	4	1.5
14	2	.43	3	.36	5	1.4	1	.16	4	2.1	13	11
15	2	.42	2	.25	3	.88	1	.15	5	2.4	21	35
16	2	.42	3	.36	2	.55	3	.49	3	1.4	17	27
17	3	.62	4	.58	1	.26	8	1.2	3	1.3	8	8.8
18	2	.38	4	.62	3	.73	6	.92	5	3.0	8	6.2
19	1	.18	4	.57	4	.90	8	1.4	15	28	8	5.1
20	2	.35	4	.56	5	1.1	10	2.8	15	24	7	4.0
21	1	.18	4	.55	4	.84	7	2.2	9	9.1	6	3.1
22	2	.40	5	.76	3	.59	7	1.9	9	7.1	4	1.8
23	1	.19	10	2.1	1	.21	9	2.1	8	5.9	3	1.2
24	1	.19	14	3.4	1	.21	8	1.7	7	5.8	1	.39
25	1	.18	6	1.3	1	.21	13	2.7	5	4.2	1	.37
26	1	.17	4	.78	1	.20	36	38	2	1.5	1	.35
27	1	.16	5	.93	2	.36	52	137	2	1.4	3	1.0
28	1	.15	4	.75	2	.36	33	66	2	1.2	3	1.0
29	1	.15	6	1.5	2	.36	23	25	---	---	3	.94
30	1	.14	13	4.7	2	.35	17	13	---	---	2	.60
31	1	.14	---	---	1	.17	11	6.5	---	---	3	.88
TOTAL	---	86.38	---	26.24	---	42.51	---	310.56	---	194.69	---	122.84
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3	.84	5	1.0	2	.13	2	.09	5	.11	5	.18
2	3	.81	5	.97	2	.14	3	.15	5	.09	2	.07
3	3	.78	2	.36	4	.26	3	.19	5	.24	3	.13
4	3	.75	1	.16	4	.23	2	.10	13	.91	4	.16
5	3	.74	2	.32	3	.16	2	.08	6	.33	3	.11
6	3	.86	2	.31	2	.10	1	.03	2	.07	3	.11
7	3	1.0	3	.45	2	.11	2	.05	2	.08	2	.07
8	3	.98	3	.42	2	.12	3	.07	2	.09	4	.13
9	4	1.4	5	.68	2	.12	3	.06	2	.08	3	.10
10	2	.50	5	.62	1	.05	3	.07	2	.07	2	.06
11	2	.51	4	.48	1	.05	3	.07	3	.09	2	.06
12	3	.74	4	.50	1	.06	3	.04	3	.08	2	.06
13	2	.46	2	.23	1	.09	4	.07	2	.04	2	.05
14	5	1.1	2	.24	2	.16	8	.20	2	.03	3	.07
15	7	1.5	3	.33	3	.20	6	.14	4	.04	2	.04
16	7	1.7	3	.36	4	.24	3	.04	3	.03	2	.03
17	8	2.4	5	.57	4	.21	3	.12	4	.07	4	.06
18	7	2.5	5	.53	3	.12	2	.09	5	.27	7	.06
19	7	2.7	4	.40	3	.11	2	.08	4	.22	3	.06
20	7	2.4	4	.44	3	.10	2	.09	2	.14	3	.07
21	7	2.2	4	.57	2	.08	1	.05	2	.17	4	.10
22	6	1.8	4	.58	2	.09	1	.04	3	.28	2	.05
23	6	1.8	4	.55	1	.04	1	.04	3	.21	2	.05
24	6	1.7	3	.36	1	.04	1	.03	3	.16	2	.05
25	5	1.4	3	.34	1	.06	1	.02	6	.26	2	.06
26	4	1.0	2	.20	2	.09	1	.03	5	.18	2	.06
27	3	.72	2	.18	2	.07	1	.03	4	.14	3	.08
28	3	.69	4	.33	1	.04	1	.03	2	.08	7	.19
29	4	.89	3	.23	1	.04	2	.05	4	.19	6	.15
30	6	1.3	2	.15	2	.10	3	.11	10	.41	5	.13
31	---	---	2	.15	---	---	4	.13	10	.38	---	---
TOTAL	---	38.17	---	13.01	---	3.41	---	2.39	---	5.54	---	2.60

TOTAL LOAD FOR YEAR: 848.34 TONS.

01493000 UNICORN BRANCH NEAR MILLINGTON, MD

LOCATION.--Lat 39°14'59", long 75°51'40", Queen Annes County, Hydrologic Unit 02060002, on right bank 20 ft upstream from bridge on State Highway 313, 0.9 mi upstream from mouth, and 1.4 mi southwest of Millington.

DRAINAGE AREA.--22.3 mi².

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1382: 1952(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.57 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation at low and medium flow by Unicorn Lake Dam upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--38 years, 24.7 ft³/s, 15.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft³/s, Sept. 12, 1960, gage height, 7.17 ft, from rating curve extended above 600 ft³/s; no flow for part of each day June 13, 14, 1965, caused by regulation at Unicorn Lake Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 3	2130	*193	*3.58	No other peak greater than base discharge.			

Minimum discharge, 3.2 ft³/s, June 20, Aug. 5, gage height, 1.79 ft; minimum daily discharge, 4.5 ft³/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	13	42	13	24	33	19	16	8.6	6.9	5.6	5.6
2	16	13	37	14	25	31	19	15	8.3	9.3	4.9	7.6
3	82	13	39	15	38	29	18	14	8.6	9.2	11	6.6
4	120	13	39	16	43	28	18	14	8.6	8.2	8.7	6.0
5	53	14	28	16	60	27	18	14	9.1	7.0	5.9	5.9
6	33	14	17	20	56	27	24	14	8.3	6.7	5.9	6.1
7	24	14	18	21	43	26	25	13	8.5	6.5	9.0	6.2
8	20	13	18	19	41	24	23	13	9.3	6.2	7.6	6.9
9	19	12	21	15	38	24	21	12	7.7	6.3	6.8	5.7
10	17	12	24	15	45	25	19	12	7.4	7.0	5.8	4.8
11	16	12	21	14	46	24	19	12	7.7	6.2	5.6	5.3
12	16	12	17	14	43	22	19	12	9.4	6.6	5.6	5.3
13	16	12	20	14	40	25	18	12	20	6.5	6.1	5.3
14	16	12	18	14	28	36	18	12	11	6.5	5.2	5.0
15	16	12	18	14	19	46	18	12	9.5	5.7	5.2	4.8
16	15	13	27	14	20	43	21	12	9.3	5.9	4.9	4.6
17	14	16	22	12	21	36	29	12	8.3	6.4	7.2	5.2
18	14	14	14	11	27	30	35	11	7.9	6.7	8.7	5.0
19	14	14	14	12	105	28	28	11	7.5	9.2	7.1	5.4
20	14	14	15	19	69	26	24	15	8.2	7.6	8.0	5.6
21	16	13	16	29	52	24	22	15	7.6	9.0	13	5.9
22	16	18	16	35	48	23	22	15	7.1	6.7	14	6.2
23	16	25	16	34	45	22	22	13	7.0	6.6	8.6	5.8
24	15	19	16	26	51	21	21	12	9.5	5.7	6.7	6.8
25	14	16	16	15	46	21	19	11	8.1	5.8	6.5	6.8
26	14	16	16	49	43	21	19	11	7.1	5.7	5.8	6.2
27	14	16	16	145	39	20	18	10	6.1	6.0	5.5	6.0
28	13	18	16	83	35	20	17	10	7.2	5.8	8.6	5.2
29	13	33	16	47	---	19	17	9.6	7.3	5.5	7.4	4.8
30	13	34	13	41	---	19	16	9.3	7.0	5.6	6.5	4.5
31	13	---	13	30	---	19	---	9.0	---	5.5	5.7	---
TOTAL	709	470	639	836	1190	819	626	382.9	257.2	208.5	223.1	171.1
MEAN	22.9	15.7	20.6	27.0	42.5	26.4	20.9	12.4	8.57	6.73	7.20	5.70
MAX	120	34	42	145	105	46	35	16	20	9.3	14	7.6
MIN	13	12	13	11	19	19	16	9.0	6.1	5.5	4.9	4.5
CFSM	1.03	.70	.92	1.21	1.91	1.18	.94	.56	.38	.30	.32	.26
IN.	1.18	.78	1.07	1.39	1.99	1.37	1.04	.64	.43	.35	.37	.29

CAL YR 1985 TOTAL 5632.72 MEAN 15.4 MAX 175 MIN .12 CFSM .69 IN 9.40
WTR YR 1986 TOTAL 6531.80 MEAN 17.9 MAX 145 MIN 4.5 CFSM .80 IN 10.90

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD

LOCATION.--Lat 39°16'48", long 76°00'54", Kent County, Hydrologic Unit 02060002, on right bank 200 ft upstream from highway bridge, 2.0 mi southwest of Kennedyville, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--12.7 mi².

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

REVISED RECORDS.--WSP 1552: 1952, 1953(P), 1954(M), 1955, 1956-57(M). WDR MD-DE-76-1: Drainage area. WDR MD-DE-79-1: 1961(M). WDR MD-DE-80-1: 1976(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good below 50 ft³/s and fair above. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--35 years, 10.6 ft³/s, 11.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft³/s, June 22, 1972, gage height, 13.07 ft, from rating curve extended above 640 ft³/s on basis of culvert and flow-over-road measurement of peak flow; minimum discharge, 0.60 ft³/s, Aug. 28, 29, 1966.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 18	2115	*103	*2.87	No peak greater than base discharge.			

Minimum daily discharge, 2.4 ft³/s, Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	4.6	17	5.0	5.9	7.0	5.2	4.9	4.2	2.9	2.7	2.8
2	4.7	4.7	9.1	4.8	8.1	6.9	5.5	4.5	4.1	5.2	3.0	4.0
3	42	4.6	6.3	8.5	8.2	6.9	5.2	4.2	4.1	4.6	4.3	3.4
4	25	5.0	5.8	7.3	18	7.1	5.2	4.2	4.2	3.3	3.1	3.2
5	7.7	9.1	5.9	6.6	23	7.0	5.5	4.5	4.2	3.2	2.9	3.1
6	5.7	6.8	5.9	5.7	11	6.7	9.9	4.5	3.8	3.1	2.9	3.1
7	4.7	5.6	5.6	4.7	8.9	6.4	9.0	4.5	3.4	3.0	4.4	2.9
8	4.5	4.9	5.8	4.1	7.1	4.6	6.9	4.4	3.5	3.0	3.2	3.1
9	4.7	4.6	6.2	4.3	7.4	6.0	6.1	4.2	3.3	3.0	3.1	3.0
10	4.2	4.8	6.1	5.0	7.9	6.7	5.9	4.2	3.1	3.0	2.9	2.8
11	4.2	4.6	6.0	5.1	8.2	6.6	6.3	4.3	3.1	2.6	2.9	2.8
12	4.2	4.6	6.3	5.1	6.8	5.9	5.9	4.2	5.0	2.7	2.8	2.7
13	4.3	4.8	9.6	5.3	5.6	6.8	5.9	3.8	8.9	3.0	2.8	2.6
14	4.6	4.8	9.4	4.3	5.4	11	5.9	3.8	3.9	4.0	2.8	2.6
15	4.9	4.6	5.7	3.8	6.2	12	6.2	4.0	3.4	2.9	2.7	2.6
16	5.5	5.2	5.9	3.5	6.0	12	8.2	4.2	3.3	2.8	2.8	2.6
17	4.6	9.0	6.0	4.1	7.1	7.3	11	4.0	3.2	3.0	3.0	2.5
18	4.2	5.9	5.0	5.3	48	6.4	10	3.7	3.1	3.0	3.2	2.4
19	4.6	5.0	4.0	7.7	72	6.8	6.6	3.5	3.1	3.6	3.1	2.5
20	4.9	5.2	3.8	11	20	6.3	5.9	4.4	3.4	3.7	6.1	2.7
21	6.9	4.9	4.4	6.2	17	5.5	6.3	4.6	3.3	4.8	13	2.7
22	7.1	11	4.5	5.2	20	5.7	6.4	30	3.1	3.0	17	2.7
23	6.2	12	5.3	5.1	13	5.9	6.5	6.7	3.0	2.9	4.1	2.7
24	5.9	6.3	6.0	4.5	11	5.9	6.1	5.0	3.9	2.8	3.0	3.1
25	6.2	5.6	5.8	8.0	9.7	5.5	5.7	4.9	3.6	2.8	2.8	3.0
26	5.3	5.5	4.0	62	8.0	5.7	5.5	4.5	3.1	2.8	2.7	2.8
27	4.9	5.5	3.9	51	8.0	5.9	5.6	4.2	3.1	2.8	2.7	2.9
28	5.0	8.5	4.6	12	7.1	5.8	5.5	4.4	3.1	2.8	4.9	3.0
29	4.7	35	5.0	6.1	---	5.5	5.3	4.2	3.1	2.8	3.7	3.0
30	4.4	15	4.6	6.1	---	5.5	5.3	4.2	3.0	2.7	3.0	2.9
31	4.6	---	4.6	5.7	---	5.5	---	4.2	---	2.7	2.8	---
TOTAL	215.6	217.7	188.1	283.1	384.6	208.8	194.5	161.2	110.6	98.5	124.4	86.2
MEAN	6.95	7.26	6.07	9.13	13.7	6.74	6.48	5.20	3.69	3.18	4.01	2.87
MAX	42	35	17	62	72	12	11	30	8.9	5.2	17	4.0
MIN	4.2	4.6	3.8	3.5	5.4	4.6	5.2	3.5	3.0	2.6	2.7	2.4
CFSM	.55	.57	.48	.72	1.08	.53	.51	.41	.29	.25	.32	.23
IN.	.63	.64	.55	.83	1.13	.61	.57	.47	.32	.29	.36	.25

CAL YR 1985 TOTAL 3179.4 MEAN 8.71 MAX 400 MIN 3.0 CFSM .69 IN 9.31
WTR YR 1986 TOTAL 2273.0 MEAN 6.23 MAX 72 MIN 2.4 CFSM .49 IN 6.66

01495000 BIG ELK CREEK AT ELK MILLS, MD

LOCATION.--Lat 39°39'26", long 75°49'20", Cecil County, Hydrologic Unit 02060002, on right bank 100 ft downstream from highway bridge at Elk Mills, 3.5 mi north of Elkton, and 7 mi upstream from confluence with Little Elk Creek.

DRAINAGE AREA.--52.6 mi².

PERIOD OF RECORD.--April 1932 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1932-33, 1934(M), 1935, 1936(M), 1938, 1939-40(M), 1942(M), 1943-51, 1952-53(P).

GAGE.--Water-stage recorder. Datum of gage is 68.5 ft above National Geodetic Vertical Datum of 1929. Prior to May 17, 1946, nonrecording gage at bridge 100 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 19-21, 27, Jan. 8-9, and Mar. 8. Records good except those for estimated daily discharges (ice effect), which are fair. Slight diurnal fluctuation caused by mills upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--54 years, 69.0 ft³/s, 17.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s, July 5, 1937, gage height, 14.5 ft, from floodmarks, from rating curve extended above 1,700 ft³/s on basis of velocity-area and conveyance studies; minimum discharge, 4.5 ft³/s, Jan. 21, 1955, (result of freezeup); minimum daily discharge, 4.8 ft³/s, Sept. 8-10, 1966; minimum gage height observed, 2.09 ft, Sept. 19, 22-24, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1884 reached a stage of about 19 ft, from information by local residents; discharge, about 18,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	0900	*880	*4.75	No peak greater than base discharge.			

Minimum daily discharge, 11 ft³/s, Sept. 16, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	26	123	37	55	59	46	44	27	16	18	15
2	29	26	82	35	59	57	46	43	27	29	39	20
3	97	26	61	49	75	56	45	42	26	29	37	23
4	74	27	51	47	124	58	45	42	26	19	24	21
5	52	76	48	47	208	58	46	42	26	18	19	20
6	39	40	49	42	110	56	54	41	26	17	18	20
7	33	32	48	41	75	54	57	40	26	16	18	18
8	31	29	44	38	66	50	51	40	26	15	18	16
9	29	27	42	38	59	52	47	38	26	14	18	15
10	29	26	41	38	59	53	45	38	24	15	16	15
11	28	26	41	36	62	61	45	38	26	14	15	15
12	27	26	41	35	54	54	46	37	100	14	15	15
13	27	27	70	35	60	59	44	36	66	18	15	13
14	27	28	88	33	58	98	44	36	32	18	14	12
15	27	28	48	31	56	182	46	38	28	13	14	12
16	27	29	43	34	54	97	145	39	26	12	14	11
17	26	75	42	38	52	71	205	41	26	17	14	11
18	26	39	40	39	271	65	118	36	25	20	15	11
19	26	33	35	51	236	63	70	34	23	70	16	12
20	28	31	35	131	203	60	62	37	23	31	19	14
21	27	29	38	74	136	54	62	51	22	49	82	14
22	28	62	38	47	120	53	63	56	20	24	44	13
23	27	88	44	42	93	53	63	43	21	19	25	15
24	30	42	42	38	88	52	59	37	20	18	20	28
25	37	36	39	57	78	51	53	35	20	17	17	24
26	29	36	33	547	68	52	52	33	18	20	16	18
27	26	52	38	157	67	52	51	32	19	76	17	18
28	26	106	38	75	62	50	49	33	19	28	23	25
29	26	268	36	68	---	49	48	31	18	24	25	19
30	26	105	34	68	---	48	46	30	17	25	18	17
31	26	---	35	60	---	47	---	29	---	18	16	---
TOTAL	1021	1501	1487	2108	2708	1924	1853	1192	829	733	679	500
MEAN	32.9	50.0	48.0	68.0	96.7	62.1	61.8	38.5	27.6	23.6	21.9	16.7
MAX	97	268	123	547	271	182	205	56	100	76	82	28
MIN	26	26	33	31	52	47	44	29	17	12	14	11
CFSM	.63	.95	.91	1.29	1.84	1.18	1.18	.73	.53	.45	.42	.32
IN.	.72	1.06	1.05	1.49	1.92	1.36	1.31	.84	.59	.52	.48	.35

CAL YR 1985 TOTAL 18092 MEAN 49.6 MAX 1840 MIN 11 CFSM .94 IN 12.79
WTR YR 1986 TOTAL 16535 MEAN 45.3 MAX 547 MIN 11 CFSM .86 IN 11.69

01495900 ELK RIVER NEAR TOWN POINT, MD

LOCATION.--Lat 39°30'09", long 75°54'58", Cecil County, Hydrologic Unit 02060001, at site of Old Town Point Wharf, at the Corps of Engineers substation, on left bank of Elk River, 0.7 mi west of Port Herman, 1.1 mi northwest of Town Point, and 1.8 mi downstream from mouth of Back Creek.

PERIOD OF RECORD.--Water years 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1981 to November 1985.
WATER TEMPERATURE: October 1981 to November 1985.

INSTRUMENTATION.--Water-quality monitor since October 1981.

REMARKS.--Not operated Nov. 18, 1985 to Sept. 30, 1986, due to major improvements being made to Old Town Point Wharf.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water year 1982-85): Maximum, 19,900 microsiemens, Oct. 26, 1982; minimum, 117 microsiemiens, July 21-23, 28, 1984.
WATER TEMPERATURE (water year 1982-85): Maximum, 32.5°C, July 20, 1983; minimum, 0.0°C on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10900	7240	9500	10900	8080	9170						
2	9150	7640	8450	11500	8380	10500						
3	10400	7740	9020	14000	9160	11500						
4	9530	7250	8700	14300	13000	13600						
5	8730	6670	7680	14300	12600	13900						
6	7210	5650	6520	14100	12400	13300						
7	6460	4000	5090	13500	10600	12200						
8	5860	4590	5210	11700	11100	11400						
9	5530	4410	5030	11200	8820	9890						
10	5090	3550	4380	10200	6760	9440						
11	4450	3810	4220	9380	7820	8730						
12	4450	3880	4190	9380	8760	9050						
13	6390	3760	4740	9360	8060	9180						
14	5080	4230	4770	9080	7520	8520						
15	4960	4300	4730	8580	7660	8280		NO DATA NOV. 18 TO SEPT. 30				
16	4950	4070	4590	9180	8560	8740						
17	4960	3910	4570	9240	7360	8170						
18	5350	4110	5010	---	---	---						
19	4900	3480	4270	---	---	---						
20	4480	3620	4240	---	---	---						
21	5960	3860	4550	---	---	---						
22	6280	4560	5330	---	---	---						
23	7720	5540	6720	---	---	---						
24	8680	5680	7750	---	---	---						
25	8580	6800	8060	---	---	---						
26	8480	6460	7590	---	---	---						
27	8060	6180	7480	---	---	---						
28	7440	5700	7030	---	---	---						
29	7640	6540	7250	---	---	---						
30	7700	6180	7320	---	---	---						
31	8080	6160	7330	---	---	---						
MONTH	10900	3480	6170									

01495900 ELK RIVER NEAR TOWN POINT, MD--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.5	20.0	20.5	15.0	13.5	14.5						
2	20.5	20.0	20.5	14.5	13.5	14.0						
3	20.5	18.5	19.0	14.5	14.0	14.5						
4	20.5	19.0	20.0	14.5	14.0	14.5						
5	20.0	19.0	19.5	14.5	14.0	14.5						
6	19.0	18.0	18.5	14.5	13.5	14.0						
7	19.0	17.5	18.0	14.5	13.5	14.0						
8	19.5	17.5	18.0	14.0	13.0	13.5						
9	19.5	18.0	18.5	14.0	12.5	13.0						
10	19.5	18.0	18.5	14.5	13.0	13.5						
11	20.0	18.0	19.0	15.0	13.0	14.0						
12	17.5	16.0	17.0	14.0	13.5	13.5						
13	18.5	17.0	18.0	14.5	13.5	14.0						
14	19.0	17.5	18.0	15.0	13.5	14.5						
15	19.0	18.0	18.5	14.5	12.5	13.5	NO DATA NOV. 18 TO SEPT. 30					
16	19.0	17.5	18.5	13.0	11.5	12.0						
17	18.0	16.5	17.5	13.5	12.5	13.0						
18	18.0	16.5	17.0	---	---	---						
19	19.0	17.5	18.5	---	---	---						
20	18.5	17.0	17.5	---	---	---						
21	17.5	16.0	16.5	---	---	---						
22	17.5	16.5	17.0	---	---	---						
23	18.0	16.5	17.0	---	---	---						
24	17.5	17.0	17.0	---	---	---						
25	18.5	17.0	17.5	---	---	---						
26	18.5	15.5	16.5	---	---	---						
27	17.5	16.0	16.5	---	---	---						
28	16.5	14.5	15.5	---	---	---						
29	15.0	12.5	14.0	---	---	---						
30	15.0	13.5	14.5	---	---	---						
31	14.5	13.5	14.5	---	---	---						
MONTH	21.5	12.5	17.5									

01496200 PRINCIPIO CREEK NEAR PRINCIPIO FURNACE, MD

LOCATION.--Lat 39°37'34", long 76°02'27", Cecil County, Hydrologic Unit 02060002, on left bank, 55 ft downstream from bridge on Belvedere Road, 3.5 mi north of Principio Furnace, and 4.9 mi upstream from mouth.

DRAINAGE AREA.--9.03 mi².

PERIOD OF RECORD.--June 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 215 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-22, 26, 31, Jan. 8, 9, 14-16, 29, 31, Feb. 13, 14, 16, and Mar. 8. Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--19 years, 12.6 ft³/s, 18.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,060 ft³/s, Aug. 4, 1969, gage height, 9.26 ft, from rating curve extended above 600 ft³/s on basis of slope-area measurements at gage heights 8.89 ft and 9.26 ft; minimum discharge, 0.79 ft³/s, Sept. 16, 1986.

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)
Nov. 28	2330	*177	*3.63	No peak greater than base discharge.			

Minimum discharge, 0.79 ft³/s, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.4	16	5.4	7.1	8.9	6.8	6.0	3.4	1.8	1.6	1.2
2	4.4	4.4	15	5.2	8.8	8.6	6.8	5.7	3.3	2.7	1.7	1.6
3	13	4.7	8.9	7.1	8.2	8.6	6.5	5.6	3.2	2.2	2.7	1.5
4	12	4.8	8.0	6.5	31	9.0	6.8	5.6	3.3	1.8	1.8	1.4
5	7.7	9.3	7.6	7.1	27	8.8	6.7	5.6	3.3	1.7	1.6	1.3
6	5.7	6.7	7.8	5.9	15	8.6	8.9	5.4	3.1	1.7	1.5	1.3
7	5.0	5.1	7.4	5.3	11	7.8	8.1	5.3	3.1	1.6	1.5	1.2
8	4.7	4.6	6.9	5.3	9.1	7.6	7.3	5.0	3.1	1.5	1.5	1.1
9	4.6	4.6	6.4	5.3	8.9	7.7	6.7	4.9	3.0	1.6	1.4	1.0
10	4.6	4.6	6.3	5.3	9.1	8.0	6.5	4.9	2.8	1.7	1.2	1.0
11	4.4	4.4	6.4	5.2	9.7	9.0	6.6	4.9	2.7	1.6	1.2	1.0
12	4.2	4.5	6.3	5.2	8.8	7.8	6.5	4.7	8.7	1.6	1.2	.99
13	4.3	4.8	21	5.1	8.4	9.3	6.3	4.7	4.8	1.8	1.1	.92
14	4.4	4.6	12	5.0	8.4	30	6.3	4.7	3.3	1.8	1.1	.87
15	4.5	4.6	7.6	4.8	7.8	28	7.0	4.8	3.1	1.5	1.0	.86
16	4.4	5.7	7.2	5.2	7.8	19	22	5.0	3.0	1.5	1.0	.87
17	4.2	13	6.9	5.3	8.2	12	28	7.8	3.0	1.7	1.0	.89
18	4.2	5.6	6.3	5.2	66	10	16	4.7	2.6	3.6	1.2	.94
19	4.5	5.0	5.7	8.7	44	9.9	9.7	4.4	2.5	2.0	1.8	1.1
20	4.6	4.8	5.7	17	28	9.1	8.5	5.3	2.5	3.5	3.0	1.2
21	4.9	4.5	5.7	9.1	20	8.3	8.7	6.5	2.3	5.0	21	1.2
22	5.1	23	5.9	7.0	16	8.2	8.3	8.0	2.3	2.1	4.2	1.1
23	4.7	11	6.2	6.4	16	8.1	8.3	5.0	2.3	1.8	2.0	1.1
24	5.4	6.7	6.3	5.8	14	7.9	7.8	4.8	2.3	1.6	1.6	1.2
25	5.7	5.9	6.5	18	12	7.5	7.1	4.3	2.1	1.6	1.5	1.2
26	4.6	6.1	5.5	81	10	7.7	7.0	4.2	2.0	1.6	1.4	1.2
27	4.6	10	5.5	23	10	7.6	6.8	4.1	2.0	1.6	1.5	1.3
28	4.4	36	5.5	11	9.4	7.3	6.4	4.0	2.0	1.5	2.7	1.6
29	4.3	45	5.4	9.7	---	7.2	6.4	3.8	1.9	2.4	2.0	1.5
30	4.4	23	5.5	7.8	---	7.2	6.2	3.7	1.8	3.1	1.4	1.4
31	4.4	---	5.5	7.6	---	7.0	---	3.6	---	1.7	1.2	---
TOTAL	162.4	281.4	238.9	311.5	439.7	311.7	261.0	157.0	88.8	62.9	70.6	35.04
MEAN	5.24	9.38	7.71	10.0	15.7	10.1	8.70	5.06	2.96	2.03	2.28	1.17
MAX	13	45	21	81	66	30	28	8.0	8.7	5.0	21	1.6
MIN	4.2	4.4	5.4	4.8	7.1	7.0	6.2	3.6	1.8	1.5	1.0	.86
CFSM	.58	1.04	.85	1.11	1.74	1.12	.96	.56	.33	.23	.25	.13
IN.	.67	1.16	.98	1.28	1.81	1.28	1.08	.65	.37	.26	.29	.14

CAL YR 1985 TOTAL 2933.60 MEAN 8.04 MAX 514 MIN 1.2 CFSM .89 IN 12.08
WTR YR 1986 TOTAL 2420.94 MEAN 6.63 MAX 81 MIN .86 CFSM .73 IN 9.97

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD

LOCATION.--Lat 39°39'31", long 76°10'28", Harford County, Hydrologic Unit 02050306, at downstream side of Conowingo Dam, 1.0 mi southwest of Conowingo, and 9.9 mi upstream from mouth.

DRAINAGE AREA.--27,100 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Water-discharge records good. Flow regulated by Conowingo Reservoir beginning October 1928, usable capacity, 55,070,000,000 gal; dead storage, 45,290,000,000 gal. Records do not include a small infrequent diversion upstream from station to augment municipal supply of city of Baltimore. Records of diversion available from Baltimore Department of Public Works. Gage-height telemeter at station.

AVERAGE DISCHARGE.--19 years, 41,870 ft³/s, 20.98 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130,000 ft³/s, June 24, 1972, gage height, 36.83 ft; minimum discharge, 144 ft³/s, Mar. 2, 1969, gage height, 6.28 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 403,000 ft³/s, Mar.16, gage height, 26.17 ft; minimum discharge, 837 ft³/s, Sept.30, gage height, 7.41 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38800	16000	120000	11600	28300	62200	50500	38700	15300	18400	17500	7340
2	35600	970	122000	22300	13600	39800	44800	30000	26900	20600	8930	11700
3	31200	942	117000	25900	29200	47300	43200	26600	15600	13700	26200	14100
4	26100	13900	115000	23700	37300	44500	41500	18100	18600	7270	38200	12100
5	10200	15200	112000	28600	41600	43200	29000	37600	18600	13000	37000	9740
6	9470	24500	94300	23800	57400	41600	21400	24100	20000	9650	27200	5050
7	18600	21500	76800	21000	69200	43300	32700	26100	14500	18900	37700	5030
8	22800	29300	58800	14000	69900	34900	34500	27400	35500	18600	28800	10100
9	19000	22900	57800	16800	68100	16500	42500	19900	51000	11600	17800	5060
10	18000	8870	46400	13500	64800	31800	42400	12000	60300	12400	9750	10900
11	15300	18600	51300	7430	56300	34900	41200	6800	41900	13800	24100	9030
12	4440	24700	48000	4970	45800	55800	36800	22100	39900	5360	24300	9540
13	950	26000	46500	19200	40300	87000	27500	21600	35900	8330	18800	5110
14	15100	29200	49800	18000	46900	114000	32500	16100	45900	15600	18400	5140
15	12100	35100	51000	17500	19100	186000	33500	22100	55000	15100	22500	5250
16	11500	41700	65100	14100	15500	361000	51100	19500	64700	14400	10300	14500
17	13600	59000	58900	11800	28100	352000	70900	6740	55100	20200	14700	2880
18	12400	145000	53600	5990	39500	268000	148000	6540	48400	18400	22200	5590
19	2080	165000	48900	6530	52200	208000	194000	28000	37300	12000	13500	1390
20	921	139000	33100	23300	62000	180000	153000	15400	35400	15000	14200	2110
21	20100	105000	28500	35100	89800	143000	121000	23200	23300	26700	13700	1780
22	15600	85800	11900	60100	133000	121000	90600	39600	13100	33300	22400	13500
23	4960	67400	20800	93200	174000	106000	85600	54600	28700	31600	10100	7020
24	11200	52600	27300	101000	167000	103000	69700	62200	32700	32000	6930	8080
25	17400	62500	25200	83300	128000	84600	62500	51000	18000	27200	25000	10600
26	943	54100	29900	66000	109000	78500	52000	50600	20000	18400	17800	6780
27	4570	52000	29500	59800	86900	65600	39000	37100	22600	28200	20400	3770
28	10500	65100	17900	51600	77600	60800	47300	46600	10800	24500	17100	2200
29	13300	84300	14800	42600	---	47900	51700	26800	5020	24300	13300	14300
30	14500	131000	24200	31800	---	35100	36900	27500	17500	13900	6070	15800
31	11600	---	16900	34100	---	54100	---	15300	---	16600	5130	---
TOTAL	442834	1597182	1673200	988620	1850400	3151400	1827300	859880	927520	559010	590010	235490
MEAN	14280	53240	53970	31890	66090	101700	60910	27740	30920	18030	19030	7850
MAX	38800	165000	122000	101000	174000	361000	194000	62200	64700	33300	38200	15800
MIN	921	942	11900	4970	13600	16500	21400	6540	5020	5360	5130	1390
CFSM	.53	1.97	1.99	1.18	2.44	3.75	2.25	1.02	1.14	.67	.70	.29
IN.	.61	2.19	2.30	1.36	2.54	4.33	2.51	1.18	1.27	.77	.81	.32

CAL YR 1985 TOTAL 11121262 MEAN 30470 MAX 165000 MIN 821 CFSM 1.12 IN 15.27
WTR YR 1986 TOTAL 14702846 MEAN 40280 MAX 361000 MIN 921 CFSM 1.49 IN 20.18

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1979 to April 1981, July 1984 to current year.
WATER TEMPERATURE: June 1979 to April 1981, July 1984 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1979 to April 1981, July 1984 to current year.

REMARKS.--Water temperatures are measured daily in field by local observer at time of sampling.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 475 microsiemens, Nov. 13-15, 1980; minimum daily, 113 microsiemens, Mar. 17, 1986.
WATER TEMPERATURE (water years 1979-80, 1984-86): Maximum daily, 29.5°C, Aug. 8, 1980, Aug. 15, 1984; minimum daily, 1.0°C, Feb. 5, 6, 9, 1980.
SEDIMENT CONCENTRATION: Maximun daily mean, 207 mg/L, Mar. 17, 1986; minimum daily mean, 2 mg/L, on many days during winter periods.
SEDIMENT LOAD: Maximum daily, 197,000 tons, Mar. 16, 17, 1986; minimum daily, 4.4 tons, Feb. 10, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 462 microsiemens, Sept. 29; minimum daily, 113 microsiemens, Mar. 17.
WATER TEMPERATURE: Maximum daily, 29.0°C, Jul. 29-31, Aug. 2, 5; minimum daily, 2.0°C, on many days during winter periods.
SEDIMENT CONCENTRATION: Maximum daily mean, 207 mg/L, Mar. 17; minimum daily mean, 2 mg/L, Apr. 12.
SEDIMENT LOAD: Maximum daily, 197,000 tons, Mar. 16, 17; minimum daily, 41 tons, Nov. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT											
16...	1100	6650	223	7.40	20.5	19.0	769	--	6.4	68	--
NOV											
18...	1200	182000	230	7.50	16.0	12.0	--	--	12.6	--	--
20...	1100	156000	155	7.20	22.0	13.0	770	21	11.2	105	480
30...	1100	146000	175	7.50	7.0	8.0	770	--	11.8	99	--
DEC											
04...	1230	113000	167	7.40	4.0	5.5	778	--	12.4	97	--
19...	1200	72300	203	7.50	-3.0	2.0	780	--	13.0	92	--
JAN											
15...	1100	41400	277	7.50	-2.0	2.0	779	1.8	13.7	97	--
FEB											
25...	1240	149000	165	7.50	5.0	4.0	762	--	14.3	109	--
MAR											
11...	1100	71100	231	7.53	17.0	5.0	759	4.0	13.5	106	K7
14...	1130	143000	235	7.37	11.0	7.0	763	--	12.4	102	--
14...	1135	143000	235	7.37	11.0	7.0	763	--	12.4	102	--
17...	1112	364000	113	7.01	11.0	7.0	771	--	13.5	110	--
18...	1032	291000	116	7.10	8.0	6.0	774	--	13.2	104	--
19...	1015	225000	134	7.20	17.0	5.0	754	--	13.8	109	--
20...	0915	198000	125	7.40	6.0	6.5	766	--	13.2	107	--
APR											
18...	1100	154000	235	7.57	14.0	12.0	769	--	12.2	112	--
21...	1230	126000	137	7.26	18.0	13.0	753	--	11.7	112	--
28...	1130	73100	175	7.48	18.5	15.0	766	--	11.4	112	--
MAY											
12...	1100	39800	222	7.90	19.0	20.0	762	--	7.6	84	K1
JUN											
11...	1300	53400	250	7.40	33.0	27.0	761	--	7.4	93	--
25...	1300	50600	190	7.60	25.0	25.0	768	--	6.4	77	--
JUL											
09...	1130	11600	243	7.53	26.0	27.0	760	5.0	4.2	53	92
30...	1130	27600	261	7.75	26.0	29.0	761	--	4.3	56	--
AUG											
13...	1310	57400	197	7.30	26.0	26.0	767	--	6.3	77	--
27...	1130	30000	274	7.85	29.0	25.5	760	--	6.0	74	--
27...	1135	30000	274	7.85	29.0	25.5	760	--	6.0	74	--
SEP											
10...	1200	17200	296	7.69	25.0	24.0	772	5.6	6.8	80	<5
23...	1030	878	317	7.48	25.0	23.0	762	--	7.0	82	--

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

01578310 SUSQUEHANNA RIVER AT CONWINGO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT											
16...	--	--	--	--	--	--	--	--	--	51	42
NOV											
18...	--	--	--	--	--	--	--	--	--	49	41
20...	2200	54	29	15	4.0	4.6	15	0.3	1.8	30	24
30...	--	--	--	--	--	--	--	--	--	44	36
DEC											
04...	--	--	--	--	--	--	--	--	--	38	30
19...	--	--	--	--	--	--	--	--	--	40	33
JAN											
15...	K12	110	67	30	8.7	9.3	15	0.4	1.8	54	45
FEB											
25...	--	--	--	--	--	--	--	--	--	29	24
MAR											
11...	K1	86	53	23	7.0	7.2	15	0.3	1.6	40	33
14...	--	--	--	--	--	--	--	--	--	45	37
14...	--	--	--	--	--	--	--	--	--	45	37
17...	--	--	--	--	--	--	--	--	--	20	16
18...	--	--	--	--	--	--	--	--	--	20	16
19...	--	--	--	--	--	--	--	--	--	23	19
20...	--	--	--	--	--	--	--	--	--	27	22
APR											
18...	--	--	--	--	--	--	--	--	--	48	39
21...	--	--	--	--	--	--	--	--	--	24	20
28...	--	--	--	--	--	--	--	--	--	34	28
MAY											
12...	K7	--	--	--	--	--	--	--	--	48	40
JUN											
11...	--	--	--	--	--	--	--	--	--	60	49
25...	--	--	--	--	--	--	--	--	--	41	34
JUL											
09...	33	93	53	25	7.5	8.3	16	0.4	1.6	48	40
30...	--	--	--	--	--	--	--	--	--	50	41
AUG											
13...	--	--	--	--	--	--	--	--	--	63	52
27...	--	--	--	--	--	--	--	--	--	68	56
27...	--	--	--	--	--	--	--	--	--	68	56
SEP											
10...	270	85	25	27	4.3	29	41	1	5.5	73	60
23...	--	--	--	--	--	--	--	--	--	80	66

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

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
OCT											
16...	3.2	--	--	--	3.2	--	--	--	--	1.18	5.3
NOV											
18...	2.5	--	--	--	3.3	--	--	--	--	0.94	4.2
20...	3.0	26	7.4	<0.1	5.2	84	85	0.11	35400	1.19	5.3
30...	2.2	--	--	--	5.2	--	--	--	--	1.49	6.6
DEC											
04...	2.4	--	--	--	5.4	--	--	--	--	--	--
19...	2.0	--	--	--	5.1	--	--	--	--	1.39	6.2
JAN											
15...	2.7	51	13	0.1	5.7	148	150	0.2	16500	1.88	8.4
FEB											
25...	1.5	--	--	--	5.3	--	--	--	--	1.49	--
MAR											
11...	1.9	34	10	<0.1	4.7	119	110	0.16	22800	1.79	--
14...	3.1	--	--	--	4.1	--	--	--	--	1.68	--
14...	3.1	--	--	--	4.1	--	--	--	--	1.69	--
17...	3.1	--	--	--	4.6	--	--	--	--	--	--
18...	2.5	--	--	--	4.5	--	--	--	--	--	--
19...	2.3	--	--	--	4.7	--	--	--	--	--	--
20...	1.7	--	--	--	4.9	--	--	--	--	--	--
APR											
18...	2.1	--	--	--	2.7	--	--	--	--	1.28	--
21...	2.1	--	--	--	5.2	--	--	--	--	1.08	--
28...	1.8	--	--	--	4.4	--	--	--	--	1.18	--
MAY											
12...	1	--	--	--	0.4	--	--	--	--	0.92	--
JUN											
11...	3.8	--	--	--	1.6	--	--	--	--	0.48	--
25...	1.6	--	--	--	4.6	--	--	--	--	0.88	--
JUL											
09...	2.3	48	11	0.2	1.9	149	130	0.2	4670	0.49	--
30...	1.4	--	--	--	2.0	--	--	--	--	0.64	--
AUG											
13...	5.0	--	--	--	2.2	--	--	--	--	0.96	--
27...	1.5	--	--	--	1.1	--	--	--	--	0.94	--
27...	1.5	--	--	--	1.1	--	--	--	--	0.94	--
SEP											
10...	2.4	35	32	0.4	8.6	208	180	0.28	9680	4.73	--
23...	4.2	--	--	--	1.7	--	--	--	--	1.10	--

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
OCT											
16...	0.02	0.07	--	1.20	--	0.03	0.04	--	0.37	0.5	0.4
NOV											
18...	0.01	0.03	1.00	0.95	0.11	0.11	0.14	0.69	0.39	0.8	0.5
20...	0.01	0.03	--	1.20	0.09	0.07	0.09	0.61	0.73	0.7	0.8
30...	0.01	0.03	--	1.50	--	0.10	0.13	--	0.3	0.5	0.4
DEC											
04...	<0.01	--	--	1.40	--	0.09	0.12	--	0.41	0.5	0.5
19...	0.01	0.03	--	1.40	--	0.09	0.12	--	0.61	0.4	0.7
JAN											
15...	0.02	0.07	--	1.90	0.20	0.22	0.28	0.5	0.28	0.7	0.5
FEB											
25...	0.01	0.03	--	1.50	--	0.12	0.15	--	0.38	0.5	0.5
MAR											
11...	0.01	0.03	--	1.80	0.11	0.11	0.14	0.29	0.39	0.4	0.5
14...	0.02	0.07	--	1.70	--	0.09	0.12	--	0.41	0.2	0.5
14...	0.01	0.03	--	1.70	--	0.09	0.12	--	0.41	0.5	0.5
17...	<0.01	--	--	1.20	--	0.15	0.19	--	0.45	0.5	0.6
18...	<0.01	--	--	1.10	--	0.08	0.1	--	0.42	1.1	0.5
19...	<0.01	--	--	1.10	--	0.07	0.09	--	0.33	0.8	0.4
20...	<0.01	--	--	1.10	--	0.05	0.06	--	0.55	0.5	0.6
APR											
18...	0.02	0.07	--	1.30	--	0.07	0.09	--	0.43	0.6	0.5
21...	0.02	0.07	--	1.10	--	0.06	0.08	--	0.24	0.4	0.3
28...	0.02	0.07	--	1.20	--	0.02	0.03	--	0.28	0.4	0.3
MAY											
12...	0.02	0.07	--	0.94	0.09	0.11	0.14	0.41	0.29	0.5	0.4
JUN											
11...	0.02	0.07	--	0.50	--	0.13	0.17	--	0.27	0.7	0.4
25...	0.02	0.07	--	0.90	--	0.04	0.05	--	0.16	0.7	0.2
JUL											
09...	0.04	0.13	--	0.53	0.20	0.21	0.27	0.4	0.59	0.6	0.8
30...	0.03	0.1	--	0.67	--	0.12	0.15	--	0.28	0.5	0.4
AUG											
13...	0.04	0.13	--	1.00	--	0.04	0.05	--	0.46	1.6	0.5
27...	0.06	0.2	--	1.00	--	0.07	0.09	--	0.33	0.6	0.4
27...	0.06	0.2	--	1.00	--	0.08	0.1	--	0.42	0.5	0.5
SEP											
10...	0.27	0.89	--	5.00	0.71	0.72	0.93	0.89	0.0	1.6	0.7
23...	0.10	0.33	--	1.20	--	0.14	0.18	--	0.26	0.9	0.4

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
16...	0.1	--	1.6	--	0.05	0.15	0.01	<0.01	--	30	4.9
NOV											
18...	0.3	1.8	1.5	8.0	0.05	0.15	0.02	<0.01	--	--	2.5
20...	--	--	--	--	0.09	0.28	0.01	0.01	0.03	40	5.0
30...	0.1	--	1.9	--	0.06	0.18	0.03	0.03	0.09	40	3.5
DEC											
04...	0.0	--	1.9	--	0.04	0.12	0.01	0.01	0.03	40	1.9
19...	0.0	--	2.1	--	0.03	0.09	0.02	0.02	0.06	40	1.9
JAN											
15...	--	--	--	--	0.03	0.09	0.02	0.013	0.04	<100	1.2
FEB											
25...	--	--	--	--	0.04	--	<0.01	0.01	0.03	70	5.3
MAR											
11...	--	--	--	--	0.03	--	--	--	--	30	1.9
14...	--	--	--	--	0.03	--	0.01	0.007	0.02	20	2.5
14...	--	--	--	--	--	--	0.005	0.007	0.02	30	2.7
17...	--	--	--	--	0.05	--	0.008	0.007	0.02	20	12
18...	--	--	--	--	0.05	--	0.011	0.002	0.01	30	5.1
19...	--	--	--	--	0.08	--	0.009	0.002	0.01	30	4.5
20...	--	--	--	--	0.04	--	0.006	0.003	0.01	30	4.4
APR											
18...	--	--	--	--	0.05	--	0.003	--	--	40	3.1
21...	--	--	--	--	0.04	--	0.007	0.004	0.01	40	3.3
28...	--	--	--	--	0.03	--	<0.001	0.002	0.01	50	23
MAY											
12...	--	--	--	--	0.03	--	0.005	0.005	0.02	80	3.3
JUN											
11...	--	--	--	--	0.06	--	0.007	0.004	0.01	70	5.5
25...	--	--	--	--	0.04	--	<0.005	0.004	0.01	20	3.7
JUL											
09...	--	--	--	--	0.04	--	0.006	0.004	0.01	30	3.3
30...	--	--	--	--	0.07	--	0.02	<0.01	--	30	3.1
AUG											
13...	--	--	--	--	0.05	--	0.009	0.006	0.02	20	5.1
27...	--	--	--	--	0.07	--	0.01	0.01	0.03	<10	14
27...	--	--	--	--	0.05	--	0.01	<0.01	--	30	13
SEP											
10...	--	--	--	--	0.26	--	0.142	0.137	0.42	<10	4.1
23...	--	--	--	--	0.07	--	0.009	0.005	0.02	20	6.4

SUSQUEHANNA RIVER BASIN

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV										
18...	--	--	--	--	--	--	--	--	--	--
20...	<1	28	<0.5	<1	<1	<3	2	62	<1	5
MAR										
11...	<1	36	<0.5	<1	4	<3	4	86	3	5
APR										
21...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
JUN										
25...	--	--	--	--	--	--	--	--	--	--
SEP										
10...	<1	20	<0.5	<1	<1	<3	5	33	<5	13

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
18...	--	--	--	--	--	--	--	<1	--
20...	51	<0.1	<10	5	<1	<1	75	<6	26
MAR									
11...	240	--	<10	6	<1	<1	120	<6	<3
APR									
21...	--	--	--	--	--	--	--	3	--
28...	--	--	--	--	--	--	--	<1	--
JUN									
25...	--	--	--	--	--	--	--	<1	--
SEP									
10...	93	<0.1	<10	8	<1	<1	78	<6	14

DATE	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)
MAR								
11...	<1.0	<0.7	1.3	<0.7	1.1	<0.7	0.02	<0.11

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
16...	1100	6650	13	233	--
NOV					
18...	1200	182000	25	12300	--
20...	1100	156000	46	19400	--
30...	1045	147000	13	5150	--
30...	1100	146000	16	6310	--
30...	1115	145000	13	5100	--
DEC					
04...	1215	111000	21	6310	--
04...	1230	113000	29	8850	--
19...	1200	72300	13	2540	--
JAN					
15...	1100	41400	1	112	78
24...	1145	122000	21	6890	--
24...	1155	122000	21	6890	--
24...	1200	122000	20	6570	--
FEB					
25...	1240	149000	31	12500	--
MAR					
11...	1100	71100	6	1150	92
14...	1130	143000	14	5400	--
14...	1135	143000	14	5400	--
17...	1109	364000	173	170000	--
17...	1111	364000	195	192000	--
17...	1112	364000	179	176000	--
18...	1029	291000	157	123000	--
18...	1031	291000	166	130000	--
18...	1032	291000	163	128000	--
19...	1001	225000	114	69300	--
19...	1015	225000	118	71700	--
19...	1020	225000	109	66200	--
MAR					
20...	0910	197000	69	36800	--
20...	0915	198000	66	35200	--
20...	0920	198000	68	36400	--
APR					
18...	1100	154000	20	8310	--
21...	1230	126000	37	12600	--
28...	1130	73100	13	2570	--
MAY					
12...	1100	39800	8	860	90
JUN					
11...	1300	53400	15	2160	--
25...	1300	50600	9	1230	--
JUL					
09...	1130	11600	13	407	--
30...	1130	27600	6	447	--
AUG					
13...	1310	57400	12	1860	--
18...	1100	52200	5	704	--
27...	1130	30000	8	648	--
27...	1135	30000	9	729	--
SEP					
10...	1200	17200	14	665	--
23...	1030	878	12	28	--

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	296	178	237	177	142	190	178	183	211	---	308
2	327	311	172	238	197	172	---	193	184	217	252	309
3	321	313	164	240	185	176	200	194	183	---	262	307
4	326	303	163	251	203	180	201	193	---	226	256	313
5	286	---	164	256	200	185	202	---	---	230	256	---
6	278	318	159	251	206	176	206	---	196	230	---	298
7	277	327	162	259	217	186	205	209	200	228	269	316
8	254	327	188	267	216	182	207	206	201	236	285	309
9	228	332	168	260	214	201	205	210	214	250	283	308
10	---	334	169	268	206	205	214	210	236	253	261	308
11	234	330	175	260	214	211	223	215	---	259	250	310
12	234	332	183	261	207	215	209	215	---	265	246	313
13	232	328	189	260	199	228	209	220	206	277	221	313
14	228	---	189	265	161	235	237	223	191	274	216	316
15	---	310	184	261	195	196	232	227	190	273	223	314
16	---	304	207	205	198	135	232	235	186	277	224	305
17	227	294	211	270	202	113	231	239	187	279	226	315
18	227	257	209	260	206	114	231	244	177	288	230	317
19	244	194	206	270	217	117	165	243	178	316	230	276
20	---	158	210	264	---	126	135	249	---	310	234	270
21	248	149	208	277	---	132	132	244	180	314	234	325
22	245	154	203	286	215	141	139	252	188	324	239	296
23	246	168	203	261	199	146	142	265	189	333	254	319
24	255	160	205	250	182	150	145	277	187	325	258	240
25	257	165	210	216	162	156	156	276	195	323	254	442
26	---	171	213	185	156	157	159	246	194	323	267	437
27	255	177	221	153	158	159	162	211	206	312	281	270
28	---	179	229	165	163	164	166	194	206	307	287	238
29	---	190	227	164	---	167	---	192	---	293	282	462
30	---	198	234	173	---	179	176	188	212	284	308	437
31	293	---	238	171	---	186	---	189	---	369	311	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	17.0	8.0	2.0	2.0	4.0	13.0	16.0	24.0	26.0	---	23.0
2	21.0	17.0	8.0	2.0	2.0	4.0	---	18.0	24.0	26.0	29.0	23.0
3	20.0	17.0	8.0	3.0	2.0	4.0	15.0	18.0	23.0	---	28.0	24.0
4	20.0	16.0	7.0	4.0	2.0	4.0	11.0	18.0	---	25.0	28.0	24.0
5	20.0	---	7.0	4.0	2.0	5.0	15.0	---	---	25.0	29.0	---
6	20.0	16.0	6.0	4.0	2.0	5.0	15.0	---	26.0	26.0	---	25.0
7	19.0	16.0	5.0	3.0	3.0	5.0	15.0	20.0	26.0	26.0	28.0	24.0
8	19.0	16.0	5.0	2.0	2.0	5.0	16.0	20.0	27.0	26.0	28.0	24.0
9	19.0	15.0	6.0	2.0	2.0	4.0	15.0	19.0	27.0	26.0	28.0	24.0
10	---	15.0	---	3.0	3.0	5.0	15.0	19.0	27.0	26.0	28.0	24.0
11	19.0	14.0	7.0	4.0	2.0	6.0	14.0	19.0	---	28.0	28.0	24.0
12	18.0	14.0	6.0	4.0	2.0	6.0	14.0	19.0	---	28.0	27.0	24.0
13	19.0	14.0	7.0	4.0	2.0	6.0	14.0	20.0	25.0	28.0	27.0	24.0
14	19.0	---	7.0	3.0	3.0	9.0	14.0	19.0	25.0	28.0	27.0	23.0
15	---	14.0	7.0	3.0	3.0	8.0	12.0	20.0	24.0	28.0	27.0	23.0
16	---	14.0	7.0	3.0	3.0	8.0	12.0	20.0	25.0	28.0	27.0	23.0
17	18.0	13.0	6.0	3.0	3.0	8.0	11.0	21.0	25.0	28.0	27.0	22.0
18	19.0	12.0	6.0	3.0	3.0	8.0	12.0	21.0	24.0	28.0	27.0	23.0
19	18.5	10.0	---	4.0	3.0	8.0	14.0	21.0	25.0	28.0	27.0	23.0
20	---	10.0	3.0	3.0	---	9.0	12.0	24.0	---	28.0	27.0	23.0
21	18.0	11.0	3.0	2.0	---	8.0	12.0	22.0	25.0	28.0	25.0	23.0
22	18.0	11.0	2.0	4.0	3.0	7.0	12.0	---	25.0	28.0	26.0	23.0
23	18.0	11.0	2.0	4.0	3.0	7.5	12.0	23.0	25.0	28.0	26.0	23.0
24	18.0	10.0	2.0	2.0	4.0	8.0	12.0	24.0	25.0	28.0	26.0	23.0
25	---	10.0	2.0	3.0	4.0	8.0	12.0	23.0	25.0	28.0	26.0	23.0
26	---	9.0	2.0	3.0	4.0	9.0	12.0	23.0	25.0	28.0	25.0	23.0
27	18.0	10.0	2.0	2.0	4.0	9.0	13.0	23.0	25.0	28.0	25.0	23.0
28	---	10.0	2.0	2.0	4.0	9.0	13.0	23.0	25.0	28.0	24.0	23.0
29	---	8.5	2.0	2.0	---	11.0	---	23.0	---	29.0	24.0	23.0
30	---	8.0	3.0	2.0	---	12.0	16.0	23.0	26.0	29.0	24.0	23.0
31	17.0	---	2.0	2.0	---	13.0	---	22.0	---	29.0	24.0	---

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15	1570	13	562	25	8100	4	125	13	993	10	1680
2	14	1350	16	42	22	7250	3	181	10	367	9	967
3	10	842	16	41	27	8530	5	350	9	710	6	766
4	13	916	17	638	20	6210	4	256	9	906	6	721
5	20	551	17	698	19	5750	4	309	5	562	6	700
6	27	690	16	1060	15	3820	5	321	4	620	3	337
7	14	703	19	1100	11	2280	4	227	7	1310	6	701
8	11	677	20	1580	29	4600	7	265	11	2080	11	1040
9	16	821	16	989	8	1250	3	136	25	4600	5	223
10	13	632	15	359	10	1250	8	292	13	2270	6	515
11	11	454	19	954	20	2770	8	160	11	1670	9	848
12	26	312	16	1070	6	778	7	94	12	1480	5	753
13	27	69	18	1260	12	1510	5	259	13	1410	8	1880
14	13	530	18	1420	9	1210	8	389	7	886	12	3690
15	14	457	17	1610	10	1380	3	142	6	309	27	13600
16	14	435	18	2030	10	1760	4	152	5	209	202	197000
17	15	551	18	2870	8	1270	6	191	6	455	207	197000
18	14	469	20	7830	8	1160	5	81	10	1070	186	135000
19	19	107	43	19200	10	1320	8	141	3	423	133	74700
20	18	45	45	16900	12	1070	8	503	5	837	57	27700
21	17	923	37	10500	6	462	3	284	8	1940	54	20800
22	14	590	27	6250	6	193	9	1460	25	8980	38	12400
23	20	268	16	2910	5	281	4	1010	51	24000	26	7440
24	20	605	13	1850	6	442	32	8730	46	20700	24	6670
25	13	611	14	2360	4	272	27	6070	39	13500	21	4800
26	20	51	12	1750	6	484	50	8910	34	10000	22	4660
27	21	259	10	1400	6	478	56	9040	20	4690	20	3540
28	16	454	9	1580	3	145	39	5430	12	2510	18	2950
29	15	539	12	2730	3	120	25	2880	---	---	13	1680
30	14	548	21	7430	3	196	23	1970	---	---	15	1420
31	12	376	---	---	4	183	16	1470	---	---	16	2340
TOTAL	---	17405	---	100973	---	66524	---	51828	---	109487	---	728521
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14	1910	6	627	11	454	6	298	6	283	11	218
2	13	1570	11	891	9	654	8	445	13	313	11	347
3	13	1520	14	1010	28	1180	8	296	9	637	13	495
4	17	1900	9	440	10	502	9	177	8	825	9	294
5	18	1410	9	914	10	502	11	386	14	1400	10	263
6	17	982	10	651	6	324	6	156	12	881	11	150
7	16	1410	10	705	6	235	6	306	9	916	9	122
8	13	1210	11	814	15	1440	8	402	9	700	5	136
9	35	4020	12	645	8	1100	13	407	9	433	10	137
10	15	1720	7	227	14	2280	8	268	8	211	14	412
11	12	1330	9	165	15	1700	6	224	5	325	11	268
12	2	199	11	656	15	1620	11	159	10	656	19	489
13	7	520	8	467	16	1550	9	202	10	508	26	359
14	11	965	9	391	13	1610	9	379	6	298	10	139
15	9	814	4	239	15	2230	6	245	11	668	10	142
16	12	1660	7	369	14	2450	7	272	13	362	6	235
17	9	1720	14	255	13	1930	5	273	8	318	11	86
18	14	5590	7	124	18	2350	10	497	4	240	10	151
19	46	24100	3	227	15	1510	13	421	7	255	12	45
20	48	19800	3	125	13	1240	12	486	7	268	66	376
21	32	10500	8	501	12	755	8	577	8	296	12	58
22	33	8070	5	535	13	460	8	719	11	665	15	547
23	25	5780	5	737	14	1080	9	768	10	273	35	663
24	17	3200	10	1680	8	706	17	1470	9	168	13	284
25	15	2530	8	1100	10	486	10	734	11	742	9	258
26	12	1680	11	1500	10	540	11	546	11	529	8	146
27	12	1260	12	1200	6	366	6	457	12	661	10	102
28	12	1530	8	1010	11	321	10	661	29	1340	13	77
29	10	1400	10	724	9	122	7	459	11	395	12	463
30	7	697	16	1190	6	283	8	300	9	148	13	555
31	---	---	12	496	---	---	6	269	10	139	---	---
TOTAL	---	110997	---	20615	---	31980	---	13259	---	15853	---	8017

TOTAL LOAD FOR YEAR: 1275459 TONS.

01580000 DEER CREEK AT ROCKS, MD

LOCATION.--Lat 39°37'49", long 76°24'13", Harford County, Hydrologic Unit 02050306, on right bank 0.3 mi upstream from bridge on Cherry Hill Road, 0.8 mi southeast of Rocks, 1.2 mi upstream from Stirrup Run, and 23.5 mi upstream from mouth.

DRAINAGE AREA.--94.4 mi².

PERIOD OF RECORD.--October 1926 to current year. Monthly discharge only for November and December 1926, published in WSP 1302.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1502: 1927-36 (maximum and minimum only 1927-29, maximum only 1930-32, 1936).

GAGE.--Water-stage recorder. Concrete control since Sept. 7, 1938. Datum of gage is 250.40 ft above National Geodetic Vertical Datum of 1929 (Baltimore City bench mark).

REMARKS.--Estimated daily discharges: Dec. 19-23, 26-31, Jan. 2, 7-13, 16-17, Jan. 28 to Feb. 1, Feb. 12-16, and Mar. 8. Records good except for estimated daily discharges (ice effect), which are fair. Some regulation at low flow by mills upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior years have been collected at this location.

AVERAGE DISCHARGE.--60 years, 124 ft³/s, 17.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s, Aug. 23, 1933, gage height, 17.7 ft, from floodmarks, from rating curve extended above 3,000 ft³/s, on basis of slope-area measurements at gage heights 13.3 ft and 17.7 ft; minimum discharge, 8 ft³/s, Dec. 16, 1930, Jan. 26, 1939, result of regulation; minimum daily discharge, 8.6 ft³/s, Sept. 11, 12, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1888, that of Aug. 23, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	1130	*943	*4.38	No peak greater than base discharge.			

Minimum discharge, 23 ft³/s, Sept. 17, 18, gage height, 1.86 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	47	178	71	90	122	98	101	69	41	27	30
2	60	47	172	70	93	118	97	99	67	52	42	42
3	107	47	132	71	104	114	95	94	65	50	57	41
4	107	55	116	71	169	116	96	94	65	43	38	38
5	83	364	108	70	216	115	97	94	65	42	33	36
6	69	176	108	67	159	111	106	92	65	39	32	36
7	62	113	105	65	132	106	111	91	65	38	33	33
8	57	91	98	65	113	100	100	89	65	36	39	32
9	54	78	93	65	106	99	96	86	61	36	34	30
10	54	69	88	65	101	100	94	86	58	39	30	29
11	52	64	86	65	107	118	94	86	57	36	31	29
12	50	62	85	65	100	103	95	85	69	36	29	28
13	50	61	135	60	90	122	92	84	74	44	27	26
14	50	61	141	60	90	205	90	85	61	44	26	25
15	49	62	103	57	95	336	97	87	58	38	25	25
16	49	65	95	55	90	197	373	88	56	33	29	25
17	47	98	92	60	90	166	334	98	59	37	68	24
18	46	75	86	72	248	148	262	86	54	35	45	24
19	47	67	85	83	290	145	176	83	52	33	38	25
20	48	65	80	123	291	136	152	93	51	46	45	26
21	52	62	75	84	243	123	144	98	50	66	64	25
22	62	113	75	74	223	118	139	108	48	42	51	25
23	61	139	80	70	189	117	133	90	48	38	40	25
24	60	91	82	65	174	115	125	87	49	36	35	26
25	59	81	89	97	162	109	117	82	49	35	32	29
26	51	79	80	506	146	108	113	79	45	35	31	30
27	49	112	75	215	143	108	111	77	45	34	31	27
28	49	158	70	130	131	105	107	78	45	33	41	26
29	47	265	70	110	---	103	106	75	45	32	38	27
30	48	172	70	95	---	103	103	73	42	30	33	26
31	48	---	70	90	---	100	---	72	---	28	31	---
TOTAL	1789	3039	3022	2916	4185	3986	3953	2720	1702	1207	1155	870
MEAN	57.7	101	97.5	94.1	149	129	132	87.7	56.7	38.9	37.3	29.0
MAX	107	364	178	506	291	336	373	108	74	66	68	42
MIN	46	47	70	55	90	99	90	72	42	28	25	24
CFSM	.61	1.07	1.03	1.00	1.58	1.37	1.40	.93	.60	.41	.40	.31
IN.	.70	1.20	1.19	1.15	1.65	1.57	1.56	1.07	.67	.48	.46	.34

CAL YR 1985 TOTAL 33760 MEAN 92.5 MAX 2890 MIN 30 CFSM .98 IN 13.30
WTR YR 1986 TOTAL 30544 MEAN 83.7 MAX 506 MIN 24 CFSM .89 IN 12.04

01581700 WINTERS RUN NEAR BENSON, MD

LOCATION.--Lat 39°31'12", long 76°22'24", Harford County, Hydrologic Unit 02060003, on left bank 30 ft downstream from bridge on U.S. Highway 1, 0.1 mi upstream from Heavenly Waters, 1.2 mi northeast of Benson, 1.8 mi southwest of Bel Air, and 10.5 mi upstream from mouth.

DRAINAGE AREA.--34.8 mi².

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 195 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 5-6, 22, 28-30, Dec. 13, 19-24, 26-29, Dec. 31 to Jan. 1, Jan. 8-13, 15-18, 25-26, 29-30, Feb. 4-5, 12-20, Mar. 8, 14-15, Apr. 16-18, Aug. 2, and Aug. 20-21. Records good below 100 ft³/s and fair above, except for periods with ice effect, Dec. 19-24, 26-29, Dec. 31 to Jan. 1, Jan. 8-13, 15-18, 29-30, Feb. 12-17, and Mar. 8, which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 52.3 ft³/s, 20.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,600 ft³/s, June 22, 1972, gage height, 11.60 ft; minimum discharge, 3.0 ft³/s, Jan. 10, 1982, result of freezeup; minimum daily discharge, 6.7 ft³/s, Aug. 28, 29, 1981.

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)
Nov. 5	1130	*595	*3.52	No peak greater than base discharge.			

Minimum discharge, 6.7 ft³/s, Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	22	72	29	38	42	37	40	20	11	7.5	10
2	26	22	63	29	42	39	35	39	19	19	70	20
3	80	23	48	31	40	39	32	38	18	13	37	14
4	53	31	40	31	100	39	32	38	19	11	14	14
5	41	260	40	29	85	39	33	39	19	11	12	14
6	31	100	40	28	59	39	41	39	17	10	11	13
7	25	48	41	26	47	36	39	37	18	9.2	11	11
8	23	39	38	28	42	36	35	34	17	8.9	11	11
9	23	33	36	28	40	36	34	32	15	8.2	11	10
10	23	29	34	28	37	39	32	32	13	9.6	9.2	9.7
11	21	30	33	28	41	45	32	32	13	8.4	9.2	11
12	19	26	33	28	38	39	32	32	40	8.5	9.2	9.9
13	19	26	70	27	36	44	31	30	26	8.3	8.9	9.1
14	20	26	58	27	34	100	32	32	18	8.0	8.5	8.6
15	20	26	41	26	36	150	39	32	16	7.4	8.2	8.7
16	22	29	37	25	34	75	200	33	15	7.8	8.4	8.6
17	19	47	36	26	34	54	130	32	17	13	29	8.4
18	19	34	33	30	140	49	100	29	13	9.8	26	8.5
19	20	31	32	60	140	49	69	28	13	8.8	16	9.4
20	22	28	32	71	120	45	60	40	14	28	70	9.8
21	30	27	32	42	78	39	56	57	13	35	130	9.2
22	39	110	32	33	68	39	55	38	12	12	43	9.0
23	32	66	32	32	59	39	54	33	12	11	19	9.0
24	29	41	34	29	56	40	55	30	12	10	13	8.9
25	29	35	36	65	51	39	51	26	11	9.7	11	9.3
26	25	33	30	280	48	39	46	26	11	9.7	11	10
27	24	34	30	90	49	39	45	25	11	9.2	11	9.7
28	23	90	30	48	44	37	45	26	11	10	17	9.7
29	22	170	30	44	---	37	45	22	11	9.0	14	10
30	22	90	30	42	---	38	43	22	11	8.8	11	9.2
31	22	---	29	40	---	37	---	21	---	7.7	10	---
TOTAL	850	1606	1202	1380	1636	1457	1570	1014	475	351.0	677.1	312.7
MEAN	27.4	53.5	38.8	44.5	58.4	47.0	52.3	32.7	15.8	11.3	21.8	10.4
MAX	80	260	72	280	140	150	200	57	40	35	130	20
MIN	19	22	29	25	34	36	31	21	11	7.4	7.5	8.4
CFSM	.79	1.54	1.12	1.28	1.68	1.35	1.50	.94	.45	.33	.63	.30
IN.	.91	1.72	1.28	1.48	1.75	1.56	1.68	1.08	.51	.38	.72	.33

CAL YR 1985 TOTAL 14928.0 MEAN 40.9 MAX 1800 MIN 10 CFSM 1.18 IN 15.96
WTR YR 1986 TOTAL 12530.8 MEAN 34.3 MAX 280 MIN 7.4 CFSM .99 IN 13.39

01582000 LITTLE FALLS AT BLUE MOUNT, MD

LOCATION.--Lat 39°36'16", long 76°37'16", Baltimore County, Hydrologic Unit 02060003, on left bank at downstream side of Pennsylvania Railroad bridge, 0.2 mi north of Blue Mount, 0.6 mi upstream from mouth, 0.9 mi downstream from First Mine Branch, and 1.2 mi south of White Hall.

DRAINAGE AREA.--52.9 mi².

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

REVISED RECORDS.--WSP 111: 1944(M), 1945-47(P). WDR MD-DE-85-1: 1984(P).

GAGE.--Water-stage recorder. Elevation of gage is 305 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-23, 26-27, 30-31, Jan. 8-17, Jan. 29 to Feb. 1, and Feb. 13-16. Records good except for estimated daily discharges (ice effect), which are fair. Slight diurnal fluctuation at low flow caused by mill upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 68.1 ft³/s, 17.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,280 ft³/s, June 22, 1972, gage height, 18.54 ft, from rating curve extended above 1,300 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 1.9 ft³/s, Aug. 29, 1966; minimum daily discharge, 4.5 ft³/s, Sept. 11, 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)
Apr. 16	0230	*460	*2.56	No peak greater than base discharge.			

Minimum discharge, 12 ft³/s, Aug. 10, 13, 14, 15, 16, Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	29	88	38	48	64	54	58	37	23	16	17
2	33	29	92	44	57	61	54	57	36	32	18	27
3	62	29	66	39	54	60	52	56	35	26	22	24
4	53	37	58	38	112	61	54	55	35	23	18	22
5	41	123	56	38	111	60	53	54	35	23	16	21
6	36	73	57	37	82	60	59	53	34	22	16	20
7	33	49	55	34	69	57	59	52	35	21	16	18
8	31	41	51	34	61	55	56	50	34	20	17	18
9	30	38	47	34	58	57	53	48	32	21	16	16
10	30	36	46	34	57	57	52	48	31	22	14	16
11	29	35	45	34	58	65	53	47	31	20	16	16
12	28	35	45	34	54	57	52	46	38	21	13	16
13	29	35	81	34	52	74	50	46	39	19	13	15
14	28	35	69	32	50	111	49	46	33	18	12	14
15	29	35	54	32	55	172	59	47	32	17	12	15
16	28	37	50	32	50	105	236	48	31	18	15	15
17	27	53	48	36	56	87	178	55	33	23	40	14
18	27	39	45	42	165	79	133	46	30	21	23	14
19	27	37	44	53	158	76	99	44	29	22	18	16
20	29	36	42	67	150	70	87	52	29	42	37	16
21	33	35	40	45	138	64	83	50	28	34	31	16
22	43	77	40	40	115	62	81	61	27	23	28	15
23	40	65	42	38	100	61	75	47	27	21	21	16
24	38	47	44	37	90	60	69	46	29	20	19	16
25	37	43	48	61	84	58	66	43	26	19	17	18
26	33	42	42	262	76	58	64	42	25	19	17	19
27	31	58	41	101	75	58	62	41	25	20	17	16
28	30	93	41	65	68	57	60	41	25	19	25	16
29	29	131	40	55	---	57	61	39	25	17	20	17
30	29	85	40	50	---	57	59	38	23	16	18	16
31	29	---	40	48	---	55	---	38	---	16	17	---
TOTAL	1035	1537	1597	1568	2303	2135	2222	1494	929	678	598	515
MEAN	33.4	51.2	51.5	50.6	82.3	68.9	74.1	48.2	31.0	21.9	19.3	17.2
MAX	62	131	92	262	165	172	236	61	39	42	40	27
MIN	27	29	40	32	48	55	49	38	23	16	12	14
CFSM	.63	.97	.97	.96	1.56	1.30	1.40	.91	.59	.41	.37	.33
IN.	.73	1.08	1.12	1.10	1.62	1.50	1.56	1.05	.65	.48	.42	.36

CAL YR 1985 TOTAL 17447 MEAN 47.8 MAX 1120 MIN 16 CFSM .90 IN 12.27
WTR YR 1986 TOTAL 16611 MEAN 45.5 MAX 262 MIN 12 CFSM .86 IN 11.68

01582500 GUNPOWDER FALLS AT GLENCOE, MD

LOCATION.--Lat 39°32'59", long 76°38'11", Baltimore County, Hydrologic Unit 02060003, on right downstream wingwall of bridge on Glencoe Road at intersection of Upper Glencoe Road and Lower Glencoe Road in Glencoe, and 0.7 mi upstream from Piney Creek.

DRAINAGE AREA.--160 mi².

PERIOD OF RECORD.--December 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 250 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 16, Jan. 30 to Feb. 1, and Feb. 12-13. Records good except for estimated daily discharges (ice effect), which are fair. Flow regulated by Prettyboy Reservoir, 12 mi upstream, for water supply of Baltimore City. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,310 ft³/s, Feb. 12, 1985, gage height, 13.16 ft, from floodmarks; minimum discharge, 35 ft³/s, Jan. 4, 1983, result of freezeup; minimum daily discharge, 42 ft³/s, Sept. 17, 18, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 684 ft³/s, Apr. 16, gage height, 3.42 ft; minimum daily discharge, 42 ft³/s, Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	74	139	122	100	127	155	164	95	448	257	46
2	66	74	140	118	107	123	154	171	93	387	274	113
3	99	74	112	114	109	122	147	153	88	280	267	208
4	95	83	102	79	169	122	144	141	84	275	258	205
5	80	196	96	74	194	122	147	136	83	273	255	204
6	71	134	97	72	146	121	165	136	82	270	254	204
7	67	103	95	76	128	117	177	139	82	269	253	201
8	64	94	90	328	117	119	172	135	82	268	254	200
9	86	88	87	385	112	114	161	129	80	268	253	197
10	249	85	84	406	109	115	152	125	75	270	251	158
11	249	85	83	464	113	129	140	125	75	267	254	49
12	248	85	83	462	110	117	141	121	92	268	249	46
13	248	84	120	415	110	135	135	119	92	268	249	45
14	249	82	120	248	216	178	133	118	81	268	246	43
15	249	82	94	245	238	287	145	120	77	266	244	43
16	249	83	90	240	169	192	500	122	75	270	247	43
17	246	108	88	250	114	163	476	136	80	275	283	42
18	246	139	86	253	232	149	431	125	135	269	260	42
19	247	259	133	268	246	144	330	119	240	273	253	44
20	249	257	275	291	229	149	281	130	240	305	205	44
21	256	256	281	245	215	150	261	136	238	294	76	44
22	214	261	301	89	194	155	254	182	237	270	70	43
23	87	135	290	85	165	162	248	158	337	268	58	44
24	81	101	235	81	151	172	220	142	459	266	53	45
25	80	94	160	100	142	166	201	127	455	264	49	47
26	79	92	118	385	134	166	191	118	455	264	47	53
27	76	106	164	186	140	173	185	111	454	272	47	46
28	75	125	134	126	131	172	179	111	454	265	59	44
29	74	209	124	115	---	163	178	108	453	259	53	47
30	75	132	120	110	---	162	173	102	448	259	49	46
31	75	---	123	100	---	160	---	98	---	257	47	---
TOTAL	4595	3780	4264	6532	4340	4646	6376	4057	6021	8675	5674	2636
MEAN	148	126	138	211	155	150	213	131	201	280	183	87.9
MAX	256	261	301	464	246	287	500	182	459	448	283	208
MIN	64	74	83	72	100	114	133	98	75	257	47	42
CFSM	.93	.79	.86	1.32	.97	.94	1.33	.82	1.26	1.75	1.14	.55
IN.	1.07	.88	.99	1.52	1.01	1.08	1.48	.94	1.40	2.02	1.32	.61

CAL YR 1985 TOTAL 52628 MEAN 144 MAX 2000 MIN 59 CFSM .90 IN 12.24
WTR YR 1986 TOTAL 61596 MEAN 169 MAX 500 MIN 42 CFSM 1.06 IN 14.32

01583100 PINEY RUN AT DOVER, MD

LOCATION.--Lat 39°31'15" long 76°46'02", Baltimore County, Hydrologic Unit 02060003, on right bank 400 ft downstream from bridge on Maryland Route 128, 0.7 mi upstream from mouth, and 2.4 mi southwest of Butler.

DRAINAGE AREA.--12.3 mi².

PERIOD OF RECORD.--May 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 22, 26, Jan. 8-11, 13-14, 28-29, and Feb. 13-17. Records good. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,270 ft³/s, Feb. 12, 1985, gage height, 6.17 ft; minimum discharge, 2.4 ft³/s, Aug. 15, 1986.

EXTREMES FOR CURRENT PERIOD.--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)
July 20	2030	*242	*2.84	No peak greater than base discharge.			

Minimum discharge, 2.4 ft³/s, Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	6.8	19	8.0	9.2	13	11	10	6.4	4.1	3.3	3.8
2	6.6	6.8	19	7.7	11	13	11	9.9	6.3	6.2	3.8	6.4
3	11	7.0	14	8.2	10	13	10	9.6	6.1	4.7	4.2	5.2
4	11	12	12	8.0	30	13	10	9.4	6.2	4.1	3.6	4.7
5	8.6	39	11	7.9	21	13	10	9.5	6.2	3.9	3.3	4.7
6	7.5	14	12	7.8	16	12	12	9.2	6.0	3.8	3.2	4.6
7	6.8	10	11	7.4	14	12	12	9.0	6.1	3.6	3.4	4.2
8	6.5	9.1	10	7.5	12	12	11	8.7	5.9	3.5	3.3	4.1
9	6.2	8.4	9.7	7.5	12	12	10	8.5	5.6	3.6	3.0	3.9
10	6.1	8.1	9.6	7.5	11	12	10	8.5	5.3	3.8	2.7	3.8
11	6.1	7.8	9.6	7.5	12	14	10	8.4	5.3	3.5	3.9	3.9
12	6.1	7.8	9.6	7.5	11	12	9.8	8.3	8.5	3.6	3.1	3.9
13	6.1	7.8	19	7.0	10	15	9.6	8.2	7.4	3.4	3.0	3.7
14	6.1	7.8	15	7.0	9.5	24	9.6	8.6	6.1	3.2	2.7	3.5
15	6.2	7.7	11	6.9	10	33	13	8.9	5.7	2.9	2.6	3.5
16	6.2	8.2	10	7.0	9.5	21	48	8.9	6.0	3.0	16	3.5
17	6.2	11	9.9	7.1	10	17	24	8.9	6.4	4.2	21	3.3
18	6.1	8.8	9.4	7.4	43	15	20	8.1	5.4	3.6	9.7	3.5
19	6.1	8.2	9.0	10	48	15	16	7.7	5.2	4.0	4.9	3.7
20	6.4	8.0	8.9	15	40	14	15	8.6	5.2	29	4.9	3.6
21	8.3	7.7	8.9	9.7	33	12	14	9.7	5.0	9.2	6.5	3.6
22	14	21	9.0	8.8	24	12	15	17	4.8	4.9	6.0	3.5
23	9.7	15	9.1	8.3	21	12	13	8.8	4.8	4.6	4.8	3.7
24	9.2	11	9.0	7.9	18	12	12	8.6	5.2	4.4	4.2	3.7
25	8.7	9.4	9.6	14	17	12	12	8.0	4.7	4.3	3.8	3.8
26	7.8	9.5	8.5	82	15	11	12	7.7	4.3	4.2	3.8	3.8
27	7.7	9.7	8.5	22	15	12	12	7.8	4.3	4.1	3.9	3.6
28	7.3	19	8.3	14	14	11	11	7.8	4.4	4.0	5.6	3.7
29	7.1	32	8.1	12	---	11	11	7.3	4.4	3.8	4.5	3.9
30	7.1	18	7.9	11	---	11	10	7.0	4.0	3.5	4.0	3.8
31	7.0	---	8.0	9.8	---	10	---	6.7	---	3.4	3.8	---
TOTAL	232.1	356.6	333.6	359.4	506.2	431	404.0	273.3	167.2	152.1	156.5	118.6
MEAN	7.49	11.9	10.8	11.6	18.1	13.9	13.5	8.82	5.57	4.91	5.05	3.95
MAX	14	39	19	82	48	33	48	17	8.5	29	21	6.4
MIN	6.1	6.8	7.9	6.9	9.2	10	9.6	6.7	4.0	2.9	2.6	3.3
CFSM	.61	.97	.88	.94	1.47	1.13	1.10	.72	.45	.40	.41	.32
IN.	.70	1.08	1.01	1.09	1.53	1.30	1.22	.83	.51	.46	.47	.36

CAL YR 1985 TOTAL 4395.7 MEAN 12.0 MAX 599 MIN 4.0 CFSM .98 IN 13.29
WTR YR 1986 TOTAL 3490.6 MEAN 9.56 MAX 82 MIN 2.6 CFSM .78 IN 10.56

01583500 WESTERN RUN AT WESTERN RUN, MD

LOCATION.--Lat 39°30'38", long 76°40'37", Baltimore County, Hydrologic Unit 02060003, on right bank 100 ft downstream from bridge on Western Run Road, 0.3 mi southeast of Western Run, 2.5 mi northwest of Cockeysville, 3.2 mi upstream from Beaverdam Run, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--59.8 mi².

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

REVISED RECORDS.--WSP 1502: 1945-46, 1948(M).

GAGE.--Water-stage recorder. Datum of gage is 262.78 ft above National Geodetic Vertical Datum of 1929 (Baltimore County bench mark).

REMARKS.--Estimated daily discharges: Dec. 19-22, 26-28, 31, Jan. 8-17, Jan. 28 to Feb. 1, and Feb. 13-16. Records good except for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 68.7 ft³/s, 15.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s, June 22, 1972, gage height, 26.0 ft, from floodmarks, from rating curve extended above 3,200 ft³/s, on basis of slope-area measurement and contracted-opening measurement of peak flow; minimum discharge, 2.4 ft³/s, Sept. 12, 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)
Apr. 16	0400	*440	*2.59	No peak greater than base discharge.			

Minimum daily discharge, 11 ft³/s, Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	26	78	33	42	61	49	47	29	18	13	14
2	24	26	74	32	46	59	48	46	28	24	17	23
3	41	26	57	34	46	58	47	45	27	21	18	20
4	39	39	51	34	88	58	47	45	27	19	15	19
5	33	126	48	33	92	58	48	44	27	19	13	19
6	28	56	49	33	70	58	58	43	26	18	13	19
7	25	43	48	32	62	55	55	42	27	16	13	17
8	24	36	45	30	55	52	49	40	26	15	13	16
9	24	33	43	30	53	52	47	39	24	15	13	15
10	24	32	41	30	51	53	46	39	24	17	12	14
11	23	31	40	30	54	65	47	39	24	15	15	15
12	23	31	40	30	48	55	46	38	32	15	13	14
13	24	31	63	30	46	69	45	38	32	15	13	13
14	24	30	64	28	44	97	44	40	26	13	12	13
15	25	31	49	28	46	156	50	42	24	13	11	13
16	25	31	46	28	44	100	207	42	26	13	13	13
17	23	45	44	30	46	81	107	43	31	17	50	12
18	24	34	42	32	129	74	96	38	24	15	34	13
19	24	33	40	39	161	71	75	37	23	18	18	13
20	25	32	38	62	163	65	67	41	23	47	18	13
21	34	30	36	41	132	59	64	44	23	68	26	13
22	54	70	36	36	109	58	64	56	21	21	24	13
23	41	67	38	35	93	58	60	37	21	19	18	13
24	36	46	37	33	85	57	57	36	22	18	16	13
25	34	39	42	44	81	55	55	34	20	17	14	15
26	31	38	38	237	73	54	54	34	20	17	14	15
27	29	39	34	101	71	54	52	34	19	17	14	13
28	28	56	34	60	65	53	50	34	20	17	19	14
29	27	114	34	50	---	51	51	32	20	15	18	15
30	27	71	34	46	---	50	48	31	18	14	15	15
31	27	---	34	42	---	49	---	30	---	13	15	---
TOTAL	894	1342	1397	1383	2095	1995	1833	1230	734	599	530	447
MEAN	28.8	44.7	45.1	44.6	74.8	64.4	61.1	39.7	24.5	19.3	17.1	14.9
MAX	54	126	78	237	163	156	207	56	32	68	50	23
MIN	23	26	34	28	42	49	44	30	18	13	11	12
CFSM	.48	.75	.75	.75	1.25	1.08	1.02	.66	.41	.32	.29	.25
IN.	.56	.83	.87	.86	1.30	1.24	1.14	.77	.46	.37	.33	.28

CAL YR 1985 TOTAL 17661 MEAN 48.4 MAX 1920 MIN 13 CFSM .81 IN 10.99
WTR YR 1986 TOTAL 14479 MEAN 39.7 MAX 237 MIN 11 CFSM .66 IN 9.01

01583570 POND BRANCH AT OREGON RIDGE, MD

LOCATION.--Lat 39°28'49", long 76°41'16", Baltimore County, Hydrologic Unit 02060003, on left bank 500 ft upstream from pond, 600 ft above mouth, 1.0 miles southwest of Beaver Dam Road and Ivy Hill Road interchange, and 2.3 miles west of Cockeysville.

DRAINAGE AREA.--0.16 mi².

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

GAGE.--Water-stage recorder, crest-stage gage, and triple V-notch sharp-crested weir plate. Elevation of gage is 450 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 11-20, Oct. 24 to Nov. 3, Dec. 22, 23, 27, Jan. 8, 9, 14-18, and Feb. 13-15. Records good except those for periods of backwater from unknown source, Oct. 11-20 and Oct. 24 to Nov. 3, and periods with ice effect, Dec. 22, 23, 27, Jan. 8, 9, 14-18, and Feb. 13-15, which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18 ft³/s, July 1, 1984, gage height, 2.19 ft; minimum discharge, no flow July 7-9, 10-19, 31, Aug. 1, 3-16, 18, 19, 24-27, Sept. 11-30, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.4 ft³/s, Nov. 4, gage height, 1.56 ft; no flow July 7-9, 10-19, 31, Aug. 1, 3-16, 18, 19, 24-27, Sept. 11-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.06	.11	.07	.08	.09	.07	.08	.05	.02	.00	.01
2	.06	.06	.10	.06	.09	.09	.07	.08	.06	.05	.01	.06
3	.11	.06	.08	.07	.08	.09	.06	.08	.05	.02	.01	.04
4	.09	.33	.08	.07	.14	.09	.06	.08	.06	.01	.00	.03
5	.07	.25	.08	.07	.10	.09	.06	.08	.05	.01	.00	.04
6	.06	.15	.10	.07	.09	.09	.12	.08	.05	.01	.00	.02
7	.06	.08	.10	.07	.08	.09	.09	.08	.05	.00	.00	.02
8	.06	.08	.10	.06	.08	.09	.08	.08	.05	.00	.00	.02
9	.06	.08	.09	.06	.08	.10	.08	.07	.04	.00	.00	.02
10	.06	.08	.09	.06	.08	.10	.08	.07	.04	.01	.00	.02
11	.06	.07	.09	.06	.08	.12	.08	.07	.04	.00	.00	.00
12	.06	.07	.10	.06	.08	.10	.08	.07	.05	.00	.00	.00
13	.05	.07	.14	.06	.07	.12	.07	.07	.06	.00	.00	.00
14	.05	.07	.08	.06	.07	.18	.07	.07	.05	.00	.00	.00
15	.06	.06	.07	.05	.07	.16	.18	.07	.05	.00	.00	.00
16	.05	.10	.07	.05	.07	.13	.33	.07	.06	.00	.00	.00
17	.05	.09	.07	.05	.09	.12	.17	.07	.06	.00	.02	.00
18	.05	.07	.07	.05	.19	.10	.15	.06	.03	.00	.00	.00
19	.05	.05	.06	.12	.15	.09	.13	.05	.03	.00	.00	.00
20	.10	.05	.06	.11	.14	.09	.12	.06	.04	.14	.01	.00
21	.20	.06	.06	.07	.14	.09	.12	.08	.03	.03	.09	.00
22	.23	.20	.06	.06	.13	.09	.12	.08	.02	.01	.02	.00
23	.14	.09	.06	.06	.13	.09	.12	.07	.02	.01	.01	.00
24	.10	.08	.07	.05	.12	.09	.10	.07	.04	.01	.00	.00
25	.08	.07	.09	.12	.12	.08	.09	.06	.02	.01	.00	.00
26	.07	.07	.08	.26	.10	.08	.09	.06	.02	.02	.00	.00
27	.07	.08	.07	.12	.10	.08	.09	.06	.02	.01	.00	.00
28	.07	.15	.07	.09	.10	.08	.09	.06	.02	.02	.04	.00
29	.06	.13	.07	.09	---	.08	.09	.06	.02	.02	.02	.00
30	.06	.13	.07	.08	---	.08	.09	.06	.01	.01	.01	.00
31	.06	---	.07	.08	---	.08	---	.05	---	.00	.01	---
TOTAL	2.40	2.99	2.51	2.41	2.85	3.05	3.15	2.15	1.19	.42	.25	.28
MEAN	.077	.10	.081	.078	.10	.098	.11	.069	.040	.014	.008	.009
MAX	.23	.33	.14	.26	.19	.18	.33	.08	.06	.14	.09	.06
MIN	.05	.05	.06	.05	.07	.08	.06	.05	.01	.00	.00	.00
CFSM	.48	.63	.51	.49	.63	.61	.69	.43	.25	.09	.05	.06
IN.	.55	.69	.58	.56	.66	.70	.73	.50	.27	.10	.06	.06

CAL YR 1985 TOTAL 33.87 MEAN .093 MAX .78 MIN .02 CFSM .58 IN 7.83
WTR YR 1986 TOTAL 23.65 MEAN .065 MAX .33 MIN .00 CFSM .41 IN 5.46

01583600 BEAVERDAM RUN AT COCKEYSVILLE, MD

LOCATION.--Lat 39°29'13", long 76°38'42", Baltimore County, Hydrologic Unit 02060003, on left bank 50 ft upstream from bridge on Beaverdam Run Lane, 600 ft downstream from bridge on Maryland Route 45 at Cockeysville, and 0.45 mi upstream from mouth.

DRAINAGE AREA.--20.9 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 239.04 ft above National Geodetic Vertical Datum of 1929. Previously operated as a low-flow site during water years 1955-59 and 1962-64 at site 600 ft upstream.

REMARKS.--Estimated daily discharges: Jan. 28. Records good. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,360 ft³/s, July 1, 1984, gage height 12.10 ft, from flood-marks, from rating curve extended above 1,000 ft³/s; minimum discharge, 4.0 ft³/s, Aug. 14, 16, 1986.

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)
Apr. 15	2330	*409	*4.57	No peak greater than base discharge.			

Minimum discharge, 4.0 ft³/s, Aug. 14, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	34	14	19	21	16	16	11	8.0	6.5	6.6
2	21	12	27	14	19	20	16	15	10	17	14	21
3	39	13	20	15	17	19	16	15	10	8.4	8.6	9.6
4	26	50	20	15	47	21	17	17	11	7.4	6.8	8.8
5	17	55	21	14	32	21	18	13	10	8.4	6.8	9.4
6	14	26	22	13	24	21	31	14	10	6.5	5.9	8.7
7	11	20	19	13	23	20	21	15	11	6.0	6.6	6.8
8	14	17	19	12	22	19	18	13	9.5	6.3	12	7.2
9	13	16	16	12	23	19	17	14	8.0	7.0	7.7	7.7
10	13	16	16	13	21	18	17	15	9.3	6.8	5.7	7.1
11	13	16	17	13	22	26	16	14	8.7	6.4	6.2	7.4
12	13	17	17	13	20	20	16	12	12	7.9	6.9	7.1
13	12	17	39	12	17	31	17	13	10	6.4	6.0	7.2
14	11	16	22	12	17	57	16	14	8.0	6.7	5.6	6.4
15	13	15	19	12	19	45	51	14	8.5	5.8	6.0	6.5
16	13	25	17	13	18	31	91	14	12	7.7	5.5	7.5
17	11	22	17	13	22	24	43	14	14	7.3	33	7.0
18	11	16	16	13	58	25	32	12	8.5	8.2	12	6.8
19	12	15	14	32	45	23	24	17	8.4	9.1	10	7.1
20	14	16	14	27	41	21	22	18	9.4	45	20	7.2
21	28	15	14	17	38	20	20	25	7.6	15	45	7.0
22	37	63	15	15	31	20	24	17	7.4	10	13	7.0
23	25	25	16	15	35	20	21	13	7.8	8.7	8.9	6.4
24	20	20	17	14	28	18	19	13	10	7.7	6.9	9.0
25	17	16	20	48	28	18	18	13	8.3	7.5	6.9	8.3
26	13	16	14	103	24	18	17	11	7.6	7.8	7.7	7.2
27	12	18	13	39	25	18	18	12	6.9	7.4	7.7	6.9
28	11	46	14	22	23	17	17	12	6.5	7.9	18	6.5
29	13	40	15	20	---	18	17	11	8.1	7.1	8.4	6.6
30	13	41	14	18	---	18	16	11	9.9	6.8	8.2	6.9
31	12	---	15	18	---	17	---	11	---	6.6	7.1	---
TOTAL	506	712	573	624	758	704	702	438	279.4	284.8	329.6	234.9
MEAN	16.3	23.7	18.5	20.1	27.1	22.7	23.4	14.1	9.31	9.19	10.6	7.83
MAX	39	63	39	103	58	57	91	25	14	45	45	21
MIN	11	12	13	12	17	17	16	11	6.5	5.8	5.5	6.4
CFSM	.78	1.13	.89	.96	1.30	1.09	1.12	.68	.45	.44	.51	.38
IN.	.90	1.27	1.02	1.11	1.35	1.25	1.25	.78	.50	.51	.59	.42

CAL YR 1985 TOTAL 7362.5 MEAN 20.2 MAX 600 MIN 6.5 CFSM .97 IN 13.10
WTR YR 1986 TOTAL 6145.7 MEAN 16.8 MAX 103 MIN 5.5 CFSM .80 IN 10.94

01584050 LONG GREEN CREEK AT GLEN ARM, MD

LOCATION.--Lat 39°27'17", long 76°28'45", Baltimore County, Hydrologic Unit 02060003, on right bank 0.5 mi downstream from bridge on Glen Arm Road, 0.6 mi upstream from State Highway 147 (Harford Road), 0.8 mi east of Glen Arm, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--9.40 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 16 to May 7. Records good except for estimated daily discharges (no gage-height record), which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years, 11.4 ft³/s, 16.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s, July 1, 1984, gage height, 6.70 ft, from rating curve extended above 1,300 ft³/s; minimum discharge, 1.0 ft³/s, Jan. 29, 1977, gage height, 0.79 ft, result of freezeup.

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)
Aug. 19	1445	*114	*2.61	No peak greater than base discharge.			

Minimum discharge, 1.5 ft³/s, Aug. 14, 15, 16, gage height, 0.91 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	3.9	13	5.6	7.3	9.9	7.8	7.0	4.5	2.5	1.8	2.5
2	4.8	3.8	12	5.6	8.1	9.6	7.6	6.5	4.5	4.4	7.5	4.2
3	13	4.0	9.5	6.1	7.8	9.6	7.3	6.5	4.5	3.1	3.6	3.2
4	11	7.3	8.8	6.1	17	9.6	7.5	6.5	4.5	2.7	2.6	3.0
5	7.5	18	8.4	6.1	15	9.6	7.5	7.0	4.5	2.6	2.3	2.9
6	6.0	13	8.4	5.9	12	9.3	9.7	7.0	4.5	2.5	2.1	2.8
7	5.5	8.2	8.3	5.5	10	8.7	8.7	6.5	4.2	2.3	2.1	2.6
8	4.9	6.9	7.8	5.1	9.6	8.3	7.9	6.0	4.2	2.1	2.2	2.5
9	4.7	6.3	7.6	5.2	9.3	8.8	7.6	5.9	3.8	2.1	2.1	2.5
10	4.5	6.0	7.3	5.3	9.4	8.7	7.2	5.9	3.8	2.1	1.8	2.3
11	4.5	5.9	7.3	5.3	9.7	9.8	7.0	5.8	3.5	2.0	1.7	2.3
12	4.2	5.6	7.2	5.1	8.9	8.7	7.0	5.6	4.4	1.9	1.6	2.3
13	4.2	5.6	12	5.0	8.2	9.4	7.0	5.6	4.8	1.9	1.6	2.3
14	4.2	5.6	9.5	4.8	8.0	16	7.0	5.6	4.0	1.8	1.6	2.1
15	4.2	5.3	7.8	4.7	8.3	20	9.2	5.6	3.8	1.7	1.5	2.1
16	4.1	5.9	7.4	4.6	7.8	16	28	5.8	6.0	2.0	1.6	2.1
17	4.0	7.5	7.3	4.7	8.4	12	19	5.7	5.3	2.2	7.4	2.1
18	3.8	5.9	7.0	5.0	24	11	14	5.3	3.8	2.1	4.1	2.1
19	3.8	5.6	6.4	10	25	11	11	5.4	3.5	2.2	10	2.1
20	4.2	5.6	6.1	9.9	20	10	9.5	7.1	3.5	5.5	8.9	2.1
21	6.1	5.2	6.1	6.9	16	9.3	9.0	9.4	3.3	4.1	22	2.1
22	8.1	18	6.1	6.4	14	9.0	9.0	6.1	3.1	2.4	6.7	2.1
23	6.1	10	6.4	6.2	14	9.0	9.0	5.9	3.1	2.3	4.0	2.1
24	5.6	7.9	6.7	5.7	13	8.9	8.5	5.6	3.3	2.3	3.2	2.7
25	5.4	7.0	7.1	10	12	8.7	8.5	5.3	3.1	2.1	2.9	2.5
26	4.7	6.5	5.9	35	11	8.7	8.0	5.0	2.9	2.1	2.7	2.3
27	4.7	6.5	5.9	16	11	8.6	7.5	5.0	2.9	3.5	2.7	2.1
28	4.5	16	5.9	9.8	10	8.3	7.5	5.0	2.9	2.9	3.8	2.1
29	4.2	22	5.9	8.4	---	8.3	7.5	5.0	2.7	2.2	2.9	2.1
30	4.2	15	5.7	8.1	---	8.0	7.5	4.8	2.5	1.9	2.7	2.1
31	4.2	---	5.6	7.4	---	8.0	---	4.8	---	1.8	2.5	---
TOTAL	165.8	250.0	236.4	235.5	334.8	310.8	279.5	184.2	115.4	77.3	124.2	72.3
MEAN	5.35	8.33	7.63	7.60	12.0	10.0	9.32	5.94	3.85	2.49	4.01	2.41
MAX	13	22	13	35	25	20	28	9.4	6.0	5.5	22	4.2
MIN	3.8	3.8	5.6	4.6	7.3	8.0	7.0	4.8	2.5	1.7	1.5	2.1
CFSM	.57	.89	.81	.81	1.28	1.06	.99	.63	.41	.27	.43	.26
IN.	.66	.99	.94	.93	1.32	1.23	1.11	.73	.46	.31	.49	.29

CAL YR 1985 TOTAL 2641.0 MEAN 7.24 MAX 175 MIN 2.4 CFSM .77 IN 10.45
WTR YR 1986 TOTAL 2386.2 MEAN 6.54 MAX 35 MIN 1.5 CFSM .70 IN 9.44

01585100 WHITEMARSH RUN AT WHITE MARSH, MD

LOCATION.--Lat 39°22'15", long 76°26'46", Baltimore County, Hydrologic Unit 02060003, on left bank at upstream side of bridge on State Highway 7, 1.0 mi southwest of White Marsh, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--7.61 mi².

PERIOD OF RECORD.--February 1959 to current year.

REVISED RECORDS.--WDR MD-DE-73-1: 1960(M), 1967-68, 1969(M). WDR MD-DE-79-1: 1965-66(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 38.96 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 24 to Nov. 3, Jan. 7, 10, 13-14, 24, 28-29, Feb. 12-13, 26, and Feb. 28 to Mar. 2. Records good except for period of backwater from unknown sources, Oct. 24 to Nov. 3, which are fair. Low flow affected by operations of sand and gravel plant in vicinity of gage. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--27 years, 11.3 ft³/s, 20.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s, Aug. 1, 1971, gage height, 14.05 ft, from rating curve extended above 1,300 ft³/s on basis of a culvert measurement at gage height 10.04 ft and on basis of a culvert and flow-over-road measurement at gage height 14.05 ft; no flow for part of Mar. 20, 1965, caused by construction work upstream from station; minimum daily discharge, 0.10 ft³/s, Sept. 11, 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)
Aug. 21	0315	*1,190	*6.26	No other peak greater than base discharge.			

Minimum discharge, 0.10 ft³/s, Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	1.7	16	2.6	4.3	4.8	3.0	2.6	1.3	.58	.44	.99
2	4.0	1.7	12	3.0	5.8	4.2	2.9	2.5	2.5	12	27	12
3	32	3.4	6.2	4.5	4.8	4.0	2.8	2.2	1.1	1.4	5.7	2.0
4	28	22	5.0	2.9	55	3.9	2.9	2.2	1.3	.66	1.7	1.7
5	4.8	36	4.3	3.1	21	3.8	4.0	2.4	1.3	.55	.82	2.1
6	2.9	20	4.5	2.8	10	3.7	15	2.4	1.3	.50	.72	1.6
7	2.1	4.3	3.7	2.4	7.9	3.0	5.8	2.3	1.3	.55	.56	1.1
8	1.9	3.3	3.5	2.3	8.1	3.5	3.6	2.5	1.3	.51	.61	2.5
9	1.9	3.0	3.4	2.2	10	3.4	3.0	2.2	1.1	.45	.51	1.0
10	1.9	2.9	3.2	2.3	9.4	3.5	2.9	2.2	.93	.70	.43	1.0
11	1.8	2.9	3.3	2.3	9.3	11	2.9	2.2	.94	.43	.48	1.2
12	1.7	2.9	3.4	2.3	7.5	3.8	2.8	1.9	19	1.9	.40	1.2
13	1.7	2.9	36	2.2	6.0	8.4	2.7	1.9	4.3	1.8	.39	.89
14	1.8	2.9	8.4	2.0	4.3	49	2.8	2.2	2.1	2.2	.41	.78
15	2.2	2.7	4.3	1.9	5.5	29	19	2.2	1.5	.53	.44	.81
16	2.2	7.6	3.7	1.9	5.6	17	58	2.2	1.3	.48	.40	.89
17	1.4	8.6	3.5	2.3	10	6.7	25	1.9	2.3	1.1	43	.61
18	1.6	2.8	3.4	2.7	87	5.2	12	1.8	1.1	8.1	6.9	.48
19	1.7	2.5	2.9	34	25	5.0	5.9	2.2	.86	3.8	5.8	1.2
20	3.6	2.5	2.8	19	16	4.2	4.8	5.4	2.3	21	14	.83
21	15	2.3	2.8	4.9	14	3.6	6.0	21	1.0	5.2	170	.92
22	25	70	2.8	3.6	9.5	3.6	5.8	3.3	.76	1.3	11	.74
23	6.5	10	3.2	3.2	20	3.5	4.0	2.0	.79	1.0	3.8	.92
24	4.8	4.9	3.2	3.0	11	4.1	3.5	1.7	4.4	.76	2.5	1.8
25	3.0	3.6	4.9	29	11	3.4	3.2	1.6	1.1	.63	1.9	1.0
26	2.2	3.2	2.9	107	7.0	3.2	3.1	1.6	.65	.55	1.6	.82
27	1.9	3.7	2.9	31	6.8	3.2	3.0	1.5	.57	2.9	1.5	.80
28	1.7	75	2.9	10	5.5	3.1	2.9	1.5	.65	1.2	10	.83
29	1.7	58	2.6	6.5	---	3.0	3.6	1.4	.69	2.2	2.0	.97
30	1.7	41	2.4	5.7	---	3.1	2.7	1.3	.44	1.9	1.2	.91
31	1.7	---	2.6	4.7	---	2.9	---	1.3	---	.55	.97	---
TOTAL	168.1	408.3	166.7	307.3	397.3	213.8	219.6	85.6	60.18	77.43	317.18	44.59
MEAN	5.42	13.6	5.38	9.91	14.2	6.90	7.32	2.76	2.01	2.50	10.2	1.49
MAX	32	75	36	107	87	49	58	21	19	21	170	12
MIN	1.4	1.7	2.4	1.9	4.3	2.9	2.7	1.3	.44	.43	.39	.48
CFSM	.71	1.79	.71	1.30	1.87	.91	.96	.36	.26	.33	1.34	.20
IN.	.82	2.00	.81	1.50	1.94	1.04	1.07	.42	.29	.38	1.55	.22

CAL YR 1985 TOTAL 3320.95 MEAN 9.10 MAX 812 MIN .61 CFSM 1.20 IN 16.23
WTR YR 1986 TOTAL 2466.08 MEAN 6.76 MAX 170 MIN .39 CFSM .89 IN 12.05

01585200 WEST BRANCH HERRING RUN AT IDLEWYLDE, MD

LOCATION.--Lat 39°22'25", long 76°35'05", Baltimore County, Hydrologic Unit 02060003, on left bank 40 ft downstream from bridge on Regester Avenue, at Idlewylde, 0.1 mi north of Baltimore city limits, 1 mi upstream from mouth, and 1.3 mi east of State Highway 45.

DRAINAGE AREA.--2.13 mi².

PERIOD OF RECORD.--July 1957 to May 1965, January 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 285 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 31, 1965, at site 40 ft upstream at datum 3.24 ft higher.

REMARKS.--Estimated daily discharges: Nov. 16-26, Dec. 16-24, and Dec. 30 to Jan. 3. Records good except for period of backwater from debris, Nov. 16-26, and periods of backwater from unknown sources, Dec. 16-24 and Dec. 30 to Jan. 3, which are fair. Diurnal fluctuation (occasionally extensive) caused by ready-mixed concrete plant upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years (water years 1958-64, 1967-86), 2.59 ft³/s, 16.51 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s, Sept. 11, 1971, gage height, 6.80 ft, from rating curve extended above 90 ft³/s on basis of slope-area measurement at gage height 6.37 ft; no flow Aug. 14-24, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 290 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 2	1630	*514	*4.25	No other peak greater than base discharge.			

Minimum discharge, 0.07 ft³/s, Aug. 12, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	.38	2.8	.55	.80	1.2	.86	.83	.66	.87	.22	.25
2	1.7	.37	2.1	.60	1.1	1.2	.81	.82	.67	6.3	12	5.1
3	9.2	.90	1.1	1.1	.82	1.2	.77	.78	.43	.29	.63	.47
4	5.3	14	.99	.58	10	1.2	.81	.77	.44	.27	.36	.32
5	.75	5.7	.98	.60	2.3	1.2	1.4	.81	.45	.27	.30	.86
6	.50	2.9	1.1	.55	1.3	1.1	5.2	.73	.47	.26	.29	.29
7	.44	.68	.85	.49	1.4	.92	1.4	.66	.66	.23	.31	.26
8	.43	.58	.81	.51	1.6	.93	.84	.67	.75	.23	.31	.70
9	.43	.53	.72	.65	1.9	.99	.79	.61	.50	.28	.26	.25
10	.45	.49	.74	.57	1.6	.99	.80	1.1	.57	.24	.24	.28
11	.37	.48	.78	.54	1.3	4.2	.79	1.5	.69	.21	.24	.28
12	.38	.49	.75	.55	1.5	1.0	.83	.61	11	1.5	.18	.26
13	.46	.46	8.9	.50	.94	3.4	.74	.60	.66	4.0	.19	.24
14	.36	.55	1.1	.48	.91	11	.69	.76	.42	.50	.17	.32
15	.79	.42	.98	.45	1.5	6.4	19	.67	.40	.23	.17	.26
16	.36	5.0	.90	.49	1.2	1.9	12	.72	.44	2.9	.19	.40
17	.31	1.0	.80	.51	2.3	1.2	7.5	.66	1.2	.39	9.4	.19
18	.33	.70	.70	.55	12	1.2	2.4	.57	.34	.91	1.0	.22
19	.33	.60	.70	7.6	4.4	1.2	1.6	3.9	.35	.61	9.1	.24
20	1.4	.50	.70	1.8	2.4	.97	1.3	3.1	1.2	9.8	2.9	.25
21	6.6	.50	.80	.64	3.1	.89	1.6	3.5	.32	.65	22	.29
22	7.2	15	.70	.57	1.9	.91	2.4	.88	.33	.31	.75	.18
23	2.9	2.0	1.0	.53	4.2	.87	1.1	.60	.32	.27	.40	.25
24	1.1	1.3	.90	.52	2.2	.78	.96	.59	4.3	.27	.32	.45
25	.53	1.2	2.5	11	2.3	.83	.96	.58	.38	.28	.26	.23
26	.47	1.0	.63	16	1.4	.82	1.1	.59	.30	.26	.27	.20
27	.42	1.2	.64	2.8	1.7	.80	1.1	.61	.30	.24	.31	.20
28	.41	18	.65	1.1	1.2	.81	1.0	.53	.32	.22	4.0	.22
29	.43	4.5	.63	.96	---	.88	1.5	.52	.48	1.8	.29	.21
30	.40	7.1	.60	1.1	---	.84	.92	.56	.81	.30	.25	.19
31	.44	---	.55	.89	---	.82	---	.51	---	.22	.24	---
TOTAL	45.70	88.53	38.10	55.78	69.27	52.65	73.17	30.34	30.16	35.11	67.55	13.86
MEAN	1.47	2.95	1.23	1.80	2.47	1.70	2.44	.98	1.01	1.13	2.18	.46
MAX	9.2	18	8.9	16	12	11	19	3.9	11	9.8	22	5.1
MIN	.31	.37	.55	.45	.80	.78	.69	.51	.30	.21	.17	.18
CFSM	.69	1.39	.58	.85	1.16	.80	1.15	.46	.47	.53	1.02	.22
IN.	.80	1.55	.67	.97	1.21	.92	1.28	.53	.53	.61	1.18	.24

CAL YR 1985 TOTAL 706.38 MEAN 1.94 MAX 74 MIN .14 CFSM .91 IN 12.33
WTR YR 1986 TOTAL 600.22 MEAN 1.64 MAX 22 MIN .17 CFSM .77 IN 10.48

01585300 STEMMERS RUN AT ROSSVILLE, MD

LOCATION.--Lat 39°20'28", long 76°29'17", Baltimore County, Hydrologic Unit 02060003, on left bank 500 ft upstream from bridge on State Highway 7, at Rossville, 0.9 mi upstream from Brien Run, and 2.1 mi upstresm from mouth.

DRAINAGE AREA.--4.46 mi².

PERIOD OF RECORD.--December 1958 to September 1972, October 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 21.64 ft above National Geodetic Vertical Datum of 1929 (Baltimore County bench mark). Prior to Sept. 30, 1972, at site on old channel about 550 ft southeast of present site at datum 2.40 ft lower.

REMARKS.--No estimated daily discharges. Records good. Slight diurnal fluctuation at times from unknown source. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--26 years (water years 1960-72, 1974-86), 6.56 ft³/s, 19.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,950 ft³/s, Aug. 1, 1971, gage height, 11.34 ft, from high-water mark in well, site and datum then in use, from rating curve extended above 1,100 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum daily discharge, 0.10 ft³/s many days in 1962, 1964, 1966, and 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 21	0230	*836	*3.71	No other peak greater than base discharge.			

Minimum discharge, 0.10 ft³/s, Aug. 13, 14, 15, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.66	8.2	1.1	1.8	2.6	1.5	1.4	.48	.15	.15	.31
2	1.1	.65	6.1	1.1	2.4	2.4	1.5	1.2	1.2	7.6	8.8	6.0
3	12	1.3	2.8	2.2	2.0	2.3	1.4	1.1	.43	.63	8.2	.77
4	11	15	2.3	1.3	28	2.3	1.4	1.1	.40	.24	.53	.51
5	2.0	17	2.1	1.4	9.6	2.2	2.0	1.2	.41	.18	.26	.83
6	1.2	9.8	2.2	1.1	4.6	2.1	7.6	1.1	.39	.16	.19	.53
7	.95	2.1	1.8	.98	4.1	2.1	2.5	1.1	.43	.15	.19	.35
8	.83	1.5	1.7	.94	4.1	1.6	1.8	.97	.40	.14	.19	1.3
9	.80	1.2	1.6	.94	5.3	1.8	1.5	.90	.32	.13	.17	.36
10	.77	1.1	1.5	1.0	4.7	1.8	1.5	.85	.27	.15	.14	.28
11	.76	1.1	1.5	1.0	4.9	6.1	1.4	.86	.26	.12	.15	.29
12	.68	1.0	1.6	1.0	4.1	2.0	1.4	.84	15	1.9	.13	.32
13	.68	1.1	18	.97	2.4	5.0	1.4	.86	1.7	1.0	.11	.20
14	.73	1.1	4.0	.92	2.2	26	1.3	.95	.61	1.3	.11	.20
15	.81	.95	2.0	.80	3.3	16	14	.92	.45	.24	.11	.26
16	.91	3.8	1.8	.79	2.9	8.6	24	.98	.37	.18	.10	.20
17	.60	4.6	1.7	.89	6.5	3.5	12	.85	.86	.77	16	.16
18	.61	1.3	1.4	1.1	46	2.7	5.9	.79	.34	4.7	3.5	.19
19	.67	1.2	1.3	14	12	2.5	2.9	.81	.26	3.2	1.9	.27
20	1.5	1.1	1.2	7.5	7.5	2.1	2.4	2.9	1.5	16	7.8	.29
21	8.6	.96	1.3	2.1	7.4	1.8	3.5	11	.38	3.8	76	.23
22	13	36	1.2	1.6	5.2	1.6	3.4	1.6	.23	.53	3.5	.24
23	4.1	5.1	1.6	1.3	12	1.6	2.4	.81	.23	.31	.98	.24
24	3.0	2.4	1.4	1.1	6.7	1.6	1.8	.75	2.4	.22	.59	2.4
25	1.7	1.8	2.5	15	7.2	1.8	1.8	.70	.44	.19	.47	.61
26	1.0	1.7	1.1	50	4.1	1.8	1.7	.67	.22	.18	.37	.32
27	.86	2.0	1.2	14	4.4	1.7	1.6	.65	.19	.23	.37	.30
28	.77	51	1.2	3.4	3.0	1.6	1.5	.64	.18	.22	4.9	.23
29	.72	21	1.1	2.2	---	1.6	1.9	.59	.20	.44	.66	.23
30	.72	24	.97	2.2	---	1.6	1.4	.56	.16	2.2	.37	.22
31	.69	---	.96	1.9	---	1.5	---	.52	---	.20	.35	---
TOTAL	75.06	213.52	79.33	135.83	208.4	113.9	110.4	40.17	30.71	47.46	137.29	18.64
MEAN	2.42	7.12	2.56	4.38	7.44	3.67	3.68	1.30	1.02	1.53	4.43	.62
MAX	13	51	18	50	46	26	24	11	15	16	76	6.0
MIN	.60	.65	.96	.79	1.8	1.5	1.3	.52	.16	.12	.10	.16
CFSM	.54	1.60	.57	.98	1.67	.82	.83	.29	.23	.34	.99	.14
IN.	.63	1.78	.66	1.13	1.74	.95	.92	.33	.26	.40	1.14	.16

CAL YR 1985 TOTAL 1534.58 MEAN 4.20 MAX 393 MIN .16 CFSM .94 IN 12.80
WTR YR 1986 TOTAL 1210.71 MEAN 3.32 MAX 76 MIN .10 CFSM .74 IN 10.10

01585400 BRIEN RUN AT STEMMERS RUN, MD

LOCATION.--Lat 39°20'01", long 76°28'23", Baltimore County, Hydrologic Unit 02060003, on right bank 0.2 mi upstream from mouth and 0.3 mi north of Stemmers Run.

DRAINAGE AREA.--1.97 mi².

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.80 ft above National Geodetic Vertical Datum of 1929 (Baltimore County bench mark).

REMARKS.--Estimated daily discharges: Oct. 17, 18, Nov. 9-15, Dec. 26-28, Jan. 15-17, 20-22, Jan. 28 to Feb. 2, and Sept. 10-15. Records good except for periods of backwater from unknown sources, Oct. 17, 18, Nov. 9-15, and Jan. 20-22, and periods when the stilling well was frozen, Dec. 26-28, Jan. 15-17, and Jan. 28 to Feb. 2, which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 2.55 ft³/s, 17.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s, Aug. 1, 1971, gage height, 10.75 ft from high-water mark in well, from rating curve extended above 180 ft³/s on basis of culvert and flow-over-road measurement of peak flow at site 0.8 mile upstream, adjusted for flow from intervening area; no flow at times many years.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 2	2130	208	3.14	Aug. 21	0230	*268	*3.59

Minimum daily discharge, 0.26 ft³/s, May 6, result of construction upstream, and Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.77	3.8	.37	.70	.69	.49	.41	.30	.38	.29	.30
2	.86	.75	2.5	.36	.90	.66	.46	.40	.30	3.8	26	2.7
3	4.5	.98	1.4	1.1	.81	.60	.42	.44	.32	.56	3.8	.36
4	2.4	4.8	.90	.47	14	.64	.44	.49	.34	.50	.91	.33
5	.86	7.2	.61	.54	4.7	.60	.90	.56	.33	.47	.61	.37
6	.72	4.3	.61	.45	2.3	.59	2.9	.26	.33	.43	.32	.36
7	.83	.88	.60	.47	1.8	.49	.71	.37	.30	.33	.30	.34
8	.61	.74	.60	.36	2.3	.45	.51	.36	.33	.35	.30	.74
9	.64	.70	1.9	.36	2.1	.55	.47	.36	.30	.34	.30	.33
10	.64	.70	.61	.37	1.7	.60	.47	.37	.33	.30	.30	.33
11	.65	.70	.48	.36	1.7	3.0	.47	.40	.31	.27	.30	.32
12	.58	.70	.47	.42	1.7	.58	.42	.36	10	.85	.30	.33
13	.56	.70	7.1	.45	.85	1.6	.46	.38	1.1	.47	.30	.29
14	.63	.70	1.3	.42	.64	13	.47	.36	.71	.37	.30	.26
15	.78	.70	.52	.40	1.1	6.4	5.6	.36	.47	.32	.30	.28
16	.74	2.5	.47	.40	.86	3.2	9.8	.36	.30	.30	.30	.32
17	.60	1.3	.54	.40	3.4	1.7	7.1	.36	.36	.30	6.7	.31
18	.60	.59	.39	.41	24	1.3	3.0	.35	.28	1.0	.54	.36
19	.62	.52	.36	8.7	6.1	.74	1.6	.70	.30	.33	.58	.36
20	.94	.60	.36	4.0	3.5	.59	1.1	1.1	.83	6.4	1.2	.33
21	4.2	.60	.36	1.2	3.9	.48	.93	4.3	.30	1.2	45	.30
22	5.2	15	.36	.60	2.9	.50	1.1	.89	.28	.71	2.7	.32
23	1.9	2.3	.41	.50	6.5	.60	.56	.36	.28	.51	1.2	.35
24	1.4	1.5	.46	.47	3.8	.53	.47	.35	1.5	.30	.64	.36
25	.93	.91	.60	4.8	3.6	.55	.47	.35	.28	.30	.37	.36
26	.77	.64	.40	24	1.8	.60	.47	.33	.30	.30	.39	.30
27	.73	.70	.45	6.8	1.9	.60	.44	.37	.30	.32	.33	.31
28	.74	20	.40	1.2	.81	.47	.47	.34	.30	.30	2.5	.30
29	.75	10	.36	.90	---	.45	.50	.31	.28	.31	.31	.30
30	.74	12	.36	.80	---	.47	.41	.30	.28	.28	.30	.35
31	.91	---	.43	.70	---	.47	---	.30	---	.28	.30	---
TOTAL	38.23	94.48	30.11	62.78	100.37	43.70	43.61	16.95	21.94	22.88	97.99	12.57
MEAN	1.23	3.15	.97	2.03	3.58	1.41	1.45	.55	.73	.74	3.16	.42
MAX	5.2	20	7.1	24	24	13	9.8	4.3	10	6.4	45	2.7
MIN	.56	.52	.36	.36	.64	.45	.41	.26	.28	.27	.29	.26
CFSM	.62	1.60	.49	1.03	1.82	.72	.74	.28	.37	.38	1.60	.21
IN.	.72	1.78	.57	1.18	1.89	.82	.82	.32	.41	.43	1.85	.24

CAL YR 1985 TOTAL 747.99 MEAN 2.05 MAX 227 MIN .30 CFSM 1.04 IN 14.12
WTR YR 1986 TOTAL 585.61 MEAN 1.60 MAX 45 MIN .26 CFSM .81 IN 11.05

.0372

01585500 CRANBERRY BRANCH NEAR WESTMINSTER, MD

LOCATION.--Lat 39°35'35", long 76°58'05", Carroll County, Hydrologic Unit 02060003, on left bank 80 ft upstream from culvert, 0.7 mi upstream from mouth, and 1.8 mi northeast of Westminster.

DRAINAGE AREA.--3.29 mi².

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

REVISED RECORDS.--WSP 1432: Drainage area, 1954-55. WDR MD-DE-75-1: 1972(M). WDR MD-DE-79-1: 1973-78(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 670 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No eastimated daily discharges. Records good. Occasional small diversions to and releases from Cranberry Reservoir located offstream 1 mi upstream from station since August 1957, capacity, 113,700,000 gal. Beginning October 1972 occasional large diversions past the gaging station from the reservoir through a 30-inch pipe. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--37 years, 3.46 ft³/s, 14.28 in/yr, unadjusted for storage and diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,220 ft³/s, Sept. 26, 1975, gage height, 7.47 ft, from rating curve extended above 200 ft³/s on the basis of culvert measurements at gage heights 5.54 ft and 7.47; minimum daily discharge, 0.22 ft³/s, Jan. 30, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 20	1830	*49	*2.48	No peak greater than base discharge.			

Minimum daily discharge, 0.23 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.29	5.1	1.7	1.6	3.6	2.1	1.1	.50	.37	.37	.41
2	.35	.59	5.7	1.7	3.2	3.5	2.0	.64	.71	1.1	.46	.34
3	1.6	.69	2.8	2.0	2.8	2.7	2.0	.65	.62	1.1	.36	.28
4	1.4	3.2	2.5	1.9	6.7	1.1	2.0	.64	1.1	.38	.27	.27
5	1.1	8.0	2.4	1.9	6.3	1.4	2.1	.62	1.4	.35	.32	.32
6	.86	2.9	2.6	1.9	4.1	1.4	2.5	.60	.61	.36	.41	.34
7	.58	1.8	2.5	1.4	2.9	1.3	2.3	.61	.90	.45	.30	.30
8	.60	1.4	2.2	1.3	2.6	1.4	2.1	.77	.75	.51	.32	.40
9	.39	1.3	2.1	.83	2.5	1.8	2.1	.60	.63	.41	.37	.39
10	.28	1.4	2.0	1.1	2.4	2.0	2.0	.59	.60	.37	.33	.40
11	.36	1.4	2.0	1.3	2.5	2.5	1.8	.60	.58	.44	.36	.42
12	.37	.57	2.0	1.3	2.1	1.7	1.8	.59	.81	.40	.39	.39
13	.46	.46	6.4	.78	1.8	3.9	1.6	.61	1.3	.36	.39	.31
14	.39	.65	3.5	1.5	2.2	8.2	1.5	.90	.58	.37	.37	.32
15	.41	.96	2.5	.62	2.1	8.6	4.0	.77	.58	.50	.34	.38
16	.44	1.4	2.2	.87	2.1	4.2	12	.77	.57	.45	.49	.26
17	.35	2.3	2.1	.48	3.2	3.1	7.7	.85	.59	.34	.34	.36
18	.31	1.3	1.9	.47	11	2.8	4.6	.73	.55	.33	.26	.38
19	.24	1.2	1.6	2.1	12	2.8	2.4	.64	.50	.36	.40	.37
20	.29	.77	1.9	2.2	8.8	2.7	1.2	.98	.45	5.9	.31	.35
21	.78	.34	1.7	.91	6.9	2.5	2.3	2.0	.42	2.3	.43	.28
22	3.3	6.3	1.6	.89	4.8	2.5	3.0	5.1	.43	.87	.48	.30
23	1.6	3.0	1.8	.44	4.6	2.5	1.5	1.6	.42	.33	.23	.38
24	1.8	1.9	2.0	.93	4.1	2.4	2.0	.60	.51	.45	.25	.34
25	1.6	1.7	2.2	1.8	4.2	2.4	.85	.57	.62	.47	.40	.32
26	1.4	1.5	1.7	9.9	4.3	2.4	1.5	.55	.39	.37	.31	.41
27	1.3	2.6	1.8	3.9	4.3	2.4	1.7	.54	.60	.41	.37	.30
28	1.2	8.3	1.8	2.1	3.8	2.3	.97	.57	.43	.28	.48	.36
29	.87	6.8	1.7	3.1	---	2.2	.70	.53	.48	.33	.31	.36
30	.43	4.5	1.7	1.9	---	2.2	1.1	.51	.43	.37	.40	.37
31	.30	---	1.6	1.7	---	2.1	---	.51	---	.38	.33	---
TOTAL	25.64	69.52	75.6	54.92	119.9	86.6	75.42	27.34	19.06	21.41	11.15	10.41
MEAN	.83	2.32	2.44	1.77	4.28	2.79	2.51	.88	.64	.69	.36	.35
MAX	3.3	8.3	6.4	9.9	12	8.6	12	5.1	1.4	5.9	.49	.42
MIN	.24	.29	1.6	.44	1.6	1.1	.70	.51	.39	.28	.23	.26
CFSM	.25	.71	.74	.54	1.30	.85	.76	.27	.20	.21	.11	.11
IN.	.29	.79	.85	.62	1.36	.98	.85	.31	.22	.24	.13	.12

CAL YR 1985 TOTAL 865.42 MEAN 2.37 MAX 178 MIN .24 CFSM .72 IN 9.78
WTR YR 1986 TOTAL 596.97 MEAN 1.64 MAX 12 MIN .23 CFSM .50 IN 6.75

01586000 NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD

LOCATION.--Lat 39°30'00", long 76°53'00", Carroll County, Hydrologic Unit 02060003, on left bank at downstream side of private footbridge at Cedarhurst, 0.8 mi downstream from Roaring Run, 8 mi southeast of Westminster, and 16.5 mi upstream from confluence with South Branch.

DRAINAGE AREA.--56.6 mi².

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

REVISED RECORDS.--WSP 1903: 1959-60.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 425 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Slight diurnal fluctuation at low and medium flow caused by mill upstream from station. Low flow affected slightly by Cranberry Reservoir since August 1957, capacity, 113,700,000 gal. Records do not include a mean discharge of 2.80 ft³/s diverted upstream from station for municipal supply of Westminster; sewage effluent discharged into Little Pipe Creek in Monocacy River basin. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 63.9 ft³/s, 15.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,800 ft³/s, June 22, 1972, gage height, 20.75 ft, from high-water mark in well, from rating curve extended above 4,100 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 1.3 ft³/s, Sept. 17, 1983 and Aug. 10, 1985, result of regulation; minimum daily discharge, 3.1 ft³/s, Sept. 10, 12, 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 20	2100	*1,230	*4.87	No other peak greater than base discharge.			

Minimum discharge, 3.5 ft³/s, June 21, result of regulation, gage height, 1.08 ft; minimum daily discharge, 10 ft³/s, July 15, 16, Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	23	81	34	39	66	44	42	27	14	14	14
2	22	23	91	32	47	64	43	40	25	25	19	25
3	50	23	61	35	50	61	42	39	24	19	25	21
4	49	48	54	35	88	60	43	37	24	15	23	18
5	33	126	51	35	91	58	44	36	24	15	15	17
6	26	58	53	32	74	56	54	35	23	13	14	18
7	23	41	52	27	63	52	50	34	26	13	17	16
8	21	36	48	25	57	43	44	33	25	12	14	14
9	21	33	43	27	54	52	42	33	22	13	13	13
10	20	32	41	28	51	52	42	33	22	14	14	13
11	19	31	40	29	55	64	42	32	22	12	14	13
12	19	31	40	29	45	54	42	30	24	13	13	14
13	20	30	79	28	40	68	41	30	34	13	13	14
14	18	31	68	23	41	94	39	33	23	11	12	14
15	19	32	51	23	46	149	45	34	22	10	12	11
16	18	32	46	24	43	92	192	34	22	10	15	11
17	19	56	44	26	49	75	105	36	26	14	44	10
18	18	36	40	30	145	68	89	32	21	13	25	11
19	19	32	34	43	159	67	69	29	20	12	14	12
20	21	31	35	59	141	64	64	33	21	176	23	13
21	30	29	38	41	124	59	63	54	20	69	28	13
22	67	84	35	36	104	57	67	94	18	27	32	12
23	38	67	39	34	95	57	62	42	18	21	20	13
24	34	46	39	31	88	55	55	39	19	20	17	12
25	34	39	45	42	83	52	52	36	16	19	13	13
26	27	39	31	180	76	54	51	33	15	18	13	12
27	27	44	37	84	75	52	49	32	15	17	13	12
28	25	87	37	54	68	50	46	33	17	16	24	13
29	24	124	35	41	---	49	44	30	17	15	17	12
30	24	75	33	46	---	49	42	28	14	14	14	11
31	27	---	32	41	---	47	---	28	---	14	14	---
TOTAL	832	1419	1453	1254	2091	1940	1707	1134	646	687	558	415
MEAN	26.8	47.3	46.9	40.5	74.7	62.6	56.9	36.6	21.5	22.2	18.0	13.8
MAX	67	126	91	180	159	149	192	94	34	176	44	25
MIN	18	23	31	23	39	43	39	28	14	10	12	10
CFSM	.47	.84	.83	.72	1.32	1.11	1.01	.65	.38	.39	.32	.24
IN.	.55	.93	.95	.82	1.37	1.28	1.12	.75	.42	.45	.37	.27

CAL YR 1985 TOTAL 16547 MEAN 45.3 MAX 1950 MIN 11 CFSM .80 IN 10.88
WTR YR 1986 TOTAL 14136 MEAN 38.7 MAX 192 MIN 10 CFSM .68 IN 9.29

01586210 BEAVER RUN NEAR FINKSBURG, MD

LOCATION.--Lat 39°29'22", long 76°54'12", Carroll County, Hydrologic Unit 02060003, on downstream center line of bridge pier on Hughes Road, 0.25 mi northwest of intersection of Hughes Road and Maryland Route 91, and 0.75 mi southwest of Finksburg.

DRAINAGE AREA.--14.0 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 439.12 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 20-23, Jan. 16-19, Jan. 27 to Feb. 3, Feb. 14-16, Apr. 6, 7, 16-18, and Sept. 3-8. Records good except for periods with ice effect, Dec. 20-23, Jan. 16-19, Jan. 27 to Feb. 3, and Feb. 14-16, and periods with no gage-height record, Apr. 6, 7, 16-18, which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft³/s, Feb. 12, 1985, gage height, 5.45 ft, from rating curve extended above 600 ft³/s; minimum discharge, 2.0 ft³/s, Sept. 12, 1983, Sept. 17, 18, 1986.

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)
July 20	2015	*244	*2.49	No peak greater than base discharge.			

Minimum discharge, 2.0 ft³/s Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	5.6	18	7.7	13	18	13	12	7.0	3.6	2.5	3.1
2	5.4	5.6	20	7.2	12	16	13	11	6.7	6.0	5.2	6.0
3	11	5.7	14	7.6	12	16	13	11	6.3	4.4	5.1	4.2
4	12	12	12	7.3	25	16	13	10	6.3	3.9	5.0	3.8
5	8.0	26	12	7.2	23	16	13	9.9	6.3	4.0	3.3	3.6
6	6.2	12	12	7.2	19	15	15	9.8	6.2	3.5	3.2	3.6
7	5.3	9.3	12	5.8	17	15	14	9.7	6.1	3.3	3.8	3.1
8	5.0	8.3	11	6.8	15	14	13	9.9	6.1	2.9	3.4	3.0
9	5.0	7.5	9.9	7.1	15	14	13	9.5	5.6	3.1	3.1	2.9
10	4.9	7.2	9.2	8.4	14	15	12	9.5	5.2	3.5	3.0	2.8
11	5.0	6.9	9.1	8.3	15	19	12	9.5	5.1	3.1	4.6	2.8
12	4.8	6.9	9.1	8.5	14	16	12	9.1	6.1	3.2	3.2	2.7
13	4.8	6.9	18	7.0	13	19	11	8.8	8.2	3.0	3.1	2.5
14	4.9	7.0	14	7.9	13	28	11	8.6	5.9	2.8	2.8	2.5
15	5.0	7.1	11	7.6	13	40	14	9.1	5.3	2.5	2.7	2.3
16	4.9	7.5	10	7.6	13	29	50	9.4	5.9	2.5	3.3	2.2
17	4.5	13	9.8	8.0	15	24	30	9.0	7.4	2.7	6.0	2.1
18	4.6	8.1	9.2	9.0	38	22	22	8.5	5.3	2.7	6.5	2.1
19	4.8	7.6	9.2	10	43	20	18	8.2	4.9	2.5	3.6	2.2
20	4.9	7.2	9.0	12	38	19	16	9.0	5.2	32	3.7	2.2
21	9.9	6.8	9.0	8.6	34	18	16	16	5.0	12	7.0	2.3
22	19	22	9.0	7.7	29	16	17	28	4.7	5.2	6.8	2.3
23	9.1	15	9.0	7.4	27	16	16	11	4.7	4.2	4.4	2.3
24	8.3	11	9.4	7.0	24	16	15	9.9	5.0	3.9	3.8	2.3
25	8.2	9.1	9.8	9.7	23	15	13	9.1	4.2	3.5	3.3	2.4
26	6.9	8.7	9.5	46	20	15	13	8.8	4.1	3.3	3.1	2.4
27	6.5	9.0	9.7	17	20	15	13	8.5	4.1	3.3	3.1	2.3
28	5.9	19	9.0	16	18	14	13	8.6	4.2	3.7	5.4	2.3
29	5.6	29	8.4	16	---	14	13	8.0	4.2	3.3	3.9	2.5
30	5.6	17	8.1	15	---	13	12	7.6	3.8	2.8	3.2	2.5
31	5.6	---	8.6	14	---	13	---	7.3	---	2.7	3.1	---
TOTAL	206.4	324.0	338.0	322.6	575	556	469	314.3	165.1	143.1	124.2	83.3
MEAN	6.66	10.8	10.9	10.4	20.5	17.9	15.6	10.1	5.50	4.62	4.01	2.78
MAX	19	29	20	46	43	40	50	28	8.2	32	7.0	6.0
MIN	4.5	5.6	8.1	5.8	12	13	11	7.3	3.8	2.5	2.5	2.1
CFSM	.48	.77	.78	.74	1.46	1.28	1.11	.72	.39	.33	.29	.20
IN.	.55	.86	.90	.86	1.53	1.48	1.25	.84	.44	.38	.33	.22

CAL YR 1985 TOTAL 4396.5 MEAN 12.0 MAX 504 MIN 2.5 CFSM .86 IN 11.68
WTR YR 1986 TOTAL 3621.0 MEAN 9.92 MAX 50 MIN 2.1 CFSM .71 IN 9.62

01586610 MORGAN RUN NEAR LOUISVILLE, MD

LOCATION.--Lat 39°27'07", long 76°57'20", Carroll County, Hydrologic Unit 02060003, on right downstream wingwall of bridge on London Bridge Road, 1.4 mi southwest of Gamber, and 1.65 mi south of the intersection of Maryland Route 32, and 1.7 mi west of Louisville.

DRAINAGE AREA.--28.0 mi².

PERIOD OF RECORD.--October 1982 to current year.

REVISED RECORDS.--WRD MD-DE-84: 1983(P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 430 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 29 to Feb. 3, Feb. 13-15, and Sept. 18-20. Records good. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,350 ft³/s, Feb. 12, 1985, gage height, 8.26 ft, from floodmarks, from rating curve extended above 1,900 ft³/s; minimum daily discharge, 4.0 ft³/s, Sept. 18, 19, 20, 1986.

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)
Apr. 16	0130	*304	*3.27	No peak greater than base discharge.			

Minimum daily discharge, 4.0 ft³/s, Sept. 18, 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	10	40	16	22	35	26	26	14	7.8	5.2	5.3
2	9.5	9.7	44	16	22	33	26	25	14	12	6.7	10
3	18	9.9	29	15	22	32	26	24	13	9.3	7.3	8.1
4	21	23	25	15	44	33	26	24	14	8.0	7.6	7.2
5	14	46	24	15	43	33	26	24	14	7.6	5.7	6.7
6	11	23	24	15	36	32	34	23	13	7.2	5.5	6.7
7	9.7	18	24	14	32	30	30	22	13	6.8	6.4	5.5
8	9.3	15	22	16	28	27	27	21	13	6.4	5.8	5.5
9	9.1	14	20	16	26	28	25	20	12	7.3	5.4	5.1
10	9.0	13	19	15	26	28	25	20	11	8.1	5.2	4.9
11	8.8	13	19	14	27	38	25	19	11	6.6	7.9	5.1
12	8.8	13	19	15	23	30	25	19	12	6.9	5.3	4.9
13	8.8	13	35	14	25	37	26	19	16	6.6	5.3	4.8
14	9.3	13	30	15	24	54	26	19	13	6.0	5.2	4.8
15	9.5	13	23	15	23	81	34	20	11	5.6	5.3	4.8
16	9.1	14	22	16	23	63	111	20	13	5.6	5.3	4.8
17	8.8	22	21	15	25	52	58	19	15	5.9	7.1	4.4
18	8.8	16	19	16	62	47	50	18	11	5.8	9.3	4.0
19	8.8	14	19	19	78	45	42	17	10	5.3	5.8	4.0
20	9.2	14	18	23	76	41	40	19	11	18	6.7	4.0
21	16	13	18	17	71	36	40	27	10	16	12	4.4
22	32	39	18	15	63	34	42	36	9.5	7.6	10	4.4
23	17	30	18	15	57	34	38	20	9.2	7.1	6.9	4.4
24	15	21	18	14	52	33	34	19	10	6.7	6.0	4.4
25	14	18	21	17	48	31	32	18	9.3	6.5	5.3	4.5
26	13	17	20	62	43	31	32	17	8.8	6.3	5.3	4.6
27	11	17	21	40	42	31	31	17	8.5	6.1	5.2	4.3
28	11	33	18	27	38	30	29	17	8.7	5.9	9.1	4.2
29	10	53	17	25	---	29	28	16	8.5	5.8	6.3	4.3
30	10	36	17	24	---	28	27	15	7.6	5.4	5.5	4.4
31	10	---	18	23	---	28	---	15	---	5.4	5.3	---
TOTAL	368.0	603.6	700	594	1101	1144	1041	635	344.1	231.6	200.9	154.5
MEAN	11.9	20.1	22.6	19.2	39.3	36.9	34.7	20.5	11.5	7.47	6.48	5.15
MAX	32	53	44	62	78	81	111	36	16	18	12	10
MIN	8.5	9.7	17	14	22	27	25	15	7.6	5.3	5.2	4.0
CFSM	.43	.72	.81	.69	1.40	1.32	1.24	.73	.41	.27	.23	.18
IN.	.49	.80	.93	.79	1.46	1.52	1.38	.84	.46	.31	.27	.21

CAL YR 1985 TOTAL 8224.8 MEAN 22.5 MAX 650 MIN 4.6 CFSM .80 IN 10.93
WTR YR 1986 TOTAL 7117.7 MEAN 19.5 MAX 111 MIN 4.0 CFSM .70 IN 9.46

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD

LOCATION.--Lat 39°18'36", long 76°47'34", Baltimore County, Hydrologic Unit 0206003, on left bank at downstream side of highway bridge at Hollofield, 0.3 mi downstream from Dogwood Run, 3.0 mi north of Ellicott City and 28 mi upstream from mouth.

DRAINAGE AREA.--285 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 187.7 ft above National Geodetic Vertical Datum of 1929. June 26 to Dec. 8, 1972, nonrecording gage at same site and datum. Prior to June 22, 1972, water-stage recorder at site on opposite bank at same datum.

REMARKS.--Estimated daily discharges: Dec. 19 to Jan. 8, Jan. 13 to Feb. 12, Feb. 14-16, and Sept.24-30. Records good except for periods of doubtful gage-height record, Dec. 19 to Jan. 8 and Jan. 17 to Feb. 12, which are fair. Flow regulated by Liberty Reservoir, 11 mi upstream, beginning July 22, 1954, usable capacity, 42,070,000,000 gal; dead storage, 1,260,000,000 gal. Diversions upstream from station for municipal supply of Westminster (sewage effluent discharged into Little Pipe Creek), and from Liberty Reservoir beginning Feb. 26, 1953, for municipal supply of Baltimore, and beginning February 1970 for a small municipal supply for part of Carroll County. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,600 ft³/s, June 22, 1972, gage height, 31.3 ft, from flood-marks, from rating curve extended above 27,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 6 ft³/s, Sept. 6, 1944; minimum daily discharge, 9.6 ft³/s, Aug. 12, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 890 ft³/s, Apr. 16, gage height, 3.21 ft; minimum daily discharge, 14 ft³/s, Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	40	282	55	70	128	93	86	44	22	15	19
2	31	40	226	53	76	127	92	83	43	39	16	35
3	64	41	178	56	92	124	88	78	42	30	33	35
4	50	109	157	55	207	124	86	77	41	24	25	28
5	41	266	95	51	224	131	87	78	41	21	19	26
6	34	121	93	52	169	125	118	77	41	21	16	25
7	32	78	93	48	140	115	109	74	39	19	18	23
8	31	60	83	48	117	96	99	70	38	17	20	22
9	30	51	76	47	111	111	89	67	36	17	19	22
10	30	48	72	47	107	110	85	66	33	23	16	20
11	31	48	71	47	115	127	85	64	33	22	15	19
12	30	47	71	47	91	115	87	63	34	22	19	20
13	30	46	107	46	77	124	83	62	41	38	16	18
14	32	46	131	44	80	192	82	62	36	48	15	15
15	38	46	88	44	90	331	104	63	33	27	15	15
16	37	47	76	43	85	245	526	66	31	22	15	16
17	35	77	74	46	87	188	215	62	32	24	43	15
18	33	63	68	47	256	166	198	60	30	23	68	14
19	35	52	65	65	376	156	152	57	29	21	35	15
20	37	50	60	108	402	144	135	61	33	27	50	16
21	61	49	60	67	276	128	130	71	34	64	73	18
22	129	176	60	54	242	124	130	135	30	31	53	17
23	94	203	65	52	216	122	132	72	29	24	32	18
24	55	104	65	49	201	117	115	61	30	22	24	17
25	51	79	80	73	185	111	109	59	29	21	20	16
26	46	69	60	405	165	109	107	56	26	20	18	17
27	43	66	65	218	159	106	102	55	25	20	18	17
28	41	158	59	100	142	102	97	55	25	18	28	15
29	40	348	55	85	---	100	93	54	25	21	33	15
30	40	270	53	75	---	99	90	50	23	20	23	15
31	40	---	52	70	---	95	---	46	---	15	20	---
TOTAL	1350	2898	2840	2297	4558	4192	3718	2090	1006	783	830	583
MEAN	43.5	96.6	91.6	74.1	163	135	124	67.4	33.5	25.3	26.8	19.4
MAX	129	348	282	405	402	331	526	135	44	64	73	35
MIN	29	40	52	43	70	95	82	46	23	15	15	14
(†)	28820	28680	28020	27010	29590	31080	32480	31450	28620	26260	24460	22830
(‡)	129	142	152	155	117	121	122	157	183	154	127	110

CAL YR 1985 TOTAL 32838 MEAN 90.0 MAX 3190 MIN 14 ‡ 177
WTR YR 1986 TOTAL 27145 MEAN 74.4 MAX 526 MIN 14 ‡ 139

† Month-end contents, in millions of gallons in Liberty Reservoir (contents on Sept. 30, 1985, 31,780,000,000 gal). Records provided by Baltimore Department of Public Works.
‡ Diversions, in cubic feet per second, upstream from station for municipal supply of city of Westminster; and from Liberty Reservoir for municipal supply of city of Baltimore, and for part of Carroll County. Records provided by cities of Westminster and Baltimore, respectively.

01589100 EAST BRANCH HERBERT RUN AT ARBUTUS, MD

LOCATION.--Lat 39°14'24", long 76°41'33", Baltimore County, Hydrologic Unit 02060003, on left bank 50 ft upstream from bridge on Tom Day Boulevard at U.S. Route 1 in Arbutus, 0.5 mi upstream from mouth, and 2 mi south of Baltimore city limits.

DRAINAGE AREA.--2.47 mi².

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

REVISED RECORDS.--WDR MD-DE-81: 1979.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to August 1981 at site 100 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 31 to Nov. 2, Nov. 9-16, 20-21, and Jan. 10-22. Records good except for estimated daily discharges (backwater from unknown source), which are fair. Slight regulation at low flow from unknown source upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--29 years, 3.27 ft³/s, 17.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft³/s, Sept. 6, 1979, gage height, 13.7 ft, present site, from floodmarks, from rating curve extended above 280 ft³/s on basis of culvert measurement at gage height 5.0 ft, present site, and culvert and flow-over-road measurement of peak flow at gage height 13.7 ft, present site, from floodmarks; minimum daily discharge, 0.30 ft³/s, July 24, Sept. 4, 11, 1966.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 20	1800	446	4.46	Aug. 17	1445	*584	*5.17
Aug. 2	1630	435	4.40				

Minimum discharge, 0.30 ft³/s, July 10, Aug. 1, 2, gage height, 0.90 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	.60	3.9	.72	1.5	1.3	1.1	.82	.51	.52	.41	.43
2	1.1	.55	2.8	.72	1.5	1.3	1.1	.72	.57	7.3	21	4.7
3	4.7	1.6	2.5	1.3	1.5	1.3	1.1	.72	.61	.46	1.1	.61
4	2.4	22	2.3	.84	19	1.3	1.1	.72	.61	.36	.58	.61
5	.65	6.5	2.0	.79	5.1	1.4	1.8	.72	.61	.36	.49	.61
6	.55	2.2	1.9	.77	3.1	1.5	5.7	.72	.61	.36	1.5	.58
7	.59	1.1	1.6	.68	3.0	1.4	1.8	.72	.61	.36	.71	.49
8	.61	.98	1.5	.54	3.4	1.3	1.3	.72	.61	.55	.51	1.1
9	.61	.90	1.5	.52	3.5	1.5	1.1	.72	.65	.62	.44	.51
10	.61	.80	1.3	.70	2.8	1.5	1.1	.72	.81	.44	.36	.43
11	.69	.80	1.3	.70	3.1	2.4	1.1	.72	.94	.36	1.0	.43
12	.61	.85	1.3	.70	2.6	1.3	.94	.72	8.3	.49	.42	.43
13	.61	.85	9.7	.60	1.3	2.9	.84	.72	.77	12	.36	.43
14	.90	.85	1.5	.60	1.2	13	.84	.83	.51	.99	.36	.37
15	.74	.80	1.0	.60	2.1	5.9	19	.72	.51	.42	.36	.40
16	.51	3.5	.98	.60	1.7	2.6	12	.72	.51	1.2	.36	.43
17	.51	1.4	.99	.65	3.5	1.7	8.4	.72	.80	1.1	26	.43
18	.51	.72	1.1	.66	18	1.5	2.4	.68	.51	1.4	1.1	.43
19	.51	.72	1.0	11	4.8	1.5	1.7	3.7	.51	1.3	3.3	.47
20	1.4	.70	1.0	2.4	2.9	1.5	1.5	2.1	2.9	19	7.7	.51
21	6.4	.70	.98	1.0	2.9	1.3	2.0	2.3	.57	1.8	30	.51
22	6.8	22	.92	.97	2.3	1.3	2.5	1.0	.48	.74	1.8	.43
23	1.1	1.8	.98	.98	6.1	1.2	1.3	.61	.45	.48	.77	.43
24	1.2	1.1	1.0	.84	3.2	1.1	1.3	.61	1.4	.43	.54	.43
25	.84	1.0	1.8	13	4.0	1.1	1.3	.61	.43	.43	.43	.43
26	.65	.94	.75	24	2.0	1.1	1.2	.61	.43	.43	.43	.45
27	.61	1.0	.90	4.9	2.4	1.1	.93	.61	.47	.40	.47	.44
28	.61	17	.98	1.9	1.6	1.1	.84	.61	.61	.36	3.5	.43
29	.63	5.5	.98	1.7	---	1.1	.84	.59	.61	.57	.60	.43
30	.72	12	.81	1.7	---	1.1	.84	.51	.57	.48	.51	.43
31	.65	---	.73	1.6	---	1.1	---	.51	---	.43	.44	---
TOTAL	39.71	111.46	52.00	78.68	110.1	60.7	78.97	27.50	28.48	56.14	107.55	18.81
MEAN	1.28	3.72	1.68	2.54	3.93	1.96	2.63	.89	.95	1.81	3.47	.63
MAX	6.8	22	9.7	24	19	13	19	3.7	8.3	19	30	4.7
MIN	.51	.55	.73	.52	1.2	1.1	.84	.51	.43	.36	.36	.37
CFSM	.52	1.51	.68	1.03	1.59	.79	1.07	.36	.39	.73	1.41	.26
IN.	.60	1.68	.78	1.18	1.66	.91	1.19	.41	.43	.85	1.62	.28

CAL YR 1985 TOTAL 893.17 MEAN 2.45 MAX 92 MIN .35 CFSM .99 IN 13.45
WTR YR 1986 TOTAL 770.10 MEAN 2.11 MAX 30 MIN .36 CFSM .85 IN 11.59

01589300 GWYNNS FALLS AT VILLA NOVA, MD

LOCATION.--Lat 39°20'45", long 76°44'01", Baltimore County, Hydrologic Unit 02060003, on right bank 300 ft downstream from bridge on Essex Road, 300 ft north of State Highway 26 (Liberty Road), in Villa Nova, 1.1 mi west of Baltimore city limits, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--32.5 mi².

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

REVISED RECORDS.--WDR MD-DE-83: 1981-82(P). WDR MD-DE-84: 1981(P).

GAGE.--Water-stage recorder. Datum of gage is 361.32 ft above National Geodetic Vertical Datum of 1929 (Baltimore County bench mark). Prior to Aug. 27, 1963, and Oct. 25, 1972, to Sept. 20, 1973, water-stage recorder, and June 26, 1972, to Oct. 24, 1972, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 19-22, 25-27, 30, 31, Jan. 2, 7-10, 13-17, 29-31, Feb. 9-11 and 14-16. Records good except for estimated daily discharges (ice effect), which are fair. Slight diurnal fluctuation at times from unknown source upstream from station. Small diversion for irrigation upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--29 years, 38.7 ft³/s, 16.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft³/s, June 22, 1972, gage height, 21.5 ft, from flood-marks, from rating curve extended above 4,200 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 1.7 ft³/s, Sept. 7, 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 21, 1956, reached a stage of 12.6 ft, discharge, 5,270 ft³/s on basis of contracted-opening measurement.

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)
Apr. 15	2330	*821	*4.62	No other peak greater than base discharge.			

Minimum discharge, 3.3 ft³/s Aug. 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	58	13	18	24	19	19	10	7.1	4.5	6.5
2	16	12	43	13	20	24	19	18	10	27	9.3	30
3	54	14	25	14	20	24	19	16	9.5	8.4	12	11
4	27	96	22	14	95	26	19	16	9.6	6.9	5.7	8.7
5	16	135	20	14	56	27	21	16	9.7	6.3	4.5	8.3
6	12	39	25	13	35	27	42	16	9.5	5.8	4.2	8.1
7	11	20	24	12	29	24	25	16	9.5	5.3	5.7	7.0
8	10	15	20	12	24	21	21	15	9.4	6.2	5.8	8.0
9	10	14	19	12	24	22	19	14	8.4	6.0	7.3	6.6
10	10	13	17	12	24	24	19	14	7.8	6.7	4.5	6.2
11	10	12	17	12	24	37	20	15	8.0	5.2	5.3	6.5
12	9.8	12	18	12	23	24	19	14	13	16	3.9	6.4
13	9.8	13	58	12	20	42	18	14	14	18	3.7	6.1
14	11	13	32	11	20	97	18	14	8.8	12	3.6	6.5
15	13	13	20	11	20	105	78	17	8.4	5.2	3.3	6.5
16	12	20	19	11	20	56	268	15	8.2	6.7	3.8	6.3
17	9.7	33	18	12	24	37	65	14	12	9.2	42	6.0
18	9.8	15	17	12	159	32	52	14	7.8	6.1	18	6.1
19	10	14	16	29	118	31	31	13	7.0	5.4	26	6.4
20	14	14	15	44	87	28	27	16	9.4	87	45	6.3
21	46	13	15	18	60	24	26	22	7.7	36	89	5.9
22	73	149	15	15	45	24	29	16	6.9	9.5	22	5.5
23	24	42	15	14	51	23	25	14	7.0	7.4	9.0	6.2
24	22	22	15	13	40	22	22	13	15	6.6	7.0	7.9
25	18	18	22	54	41	20	22	12	8.5	6.6	6.4	6.2
26	14	16	17	264	31	21	22	12	6.6	6.5	6.0	5.7
27	13	19	15	61	32	21	21	12	6.8	6.1	6.1	5.1
28	12	106	14	28	27	20	20	12	6.9	6.0	22	4.5
29	12	115	13	24	---	20	21	12	6.8	10	9.6	5.0
30	12	74	13	22	---	19	19	10	6.2	6.0	6.5	4.9
31	13	---	13	19	---	19	---	10	---	4.9	6.5	---
TOTAL	546.1	1103	670	827	1187	965	1046	451	268.4	362.1	408.2	220.4
MEAN	17.6	36.8	21.6	26.7	42.4	31.1	34.9	14.5	8.95	11.7	13.2	7.35
MAX	73	149	58	264	159	105	268	22	15	87	89	30
MIN	9.7	12	13	11	18	19	18	10	6.2	4.9	3.3	4.5
CFSM	.54	1.13	.67	.82	1.31	.96	1.07	.45	.28	.36	.41	.23
IN.	.63	1.26	.77	.95	1.36	1.10	1.20	.52	.31	.41	.47	.25

CAL YR 1985 TOTAL 9909.2 MEAN 27.1 MAX 927 MIN 3.8 CFSM .83 IN 11.34
WTR YR 1986 TOTAL 8054.2 MEAN 22.1 MAX 268 MIN 3.3 CFSM .68 IN 9.22

01589330 DEAD RUN AT FRANKLINTOWN, MD

LOCATION.--Lat 39°18'40", long 76°43'02", Baltimore County, Hydrologic Unit 02060003, on right bank at downstream side of bridge on Colonial Road at Security Boulevard at Franklintown, 0.3 mi west of Baltimore ciy limits, 1.2 mi southwest of Woodlawn, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--5.52 mi².

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR MD-DE-80-1: 1979(m).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 310 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-23, Jan. 7-8, 14-16, and Jan. 28 to Feb. 1. Records good except for estimated daily discharges (stilling well frozen), which are fair. Occasional regulation at low flow from unknown source upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 7.89 ft³/s, 19.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,400 ft³/s, June 22, 1972, gage height, 12.5 ft, from flood-marks, from rating curve extended above 1,600 ft³/s on basis of contracted-opening measurement of peak flow at bridge 0.6 mi downstream, adjusted for flow from intervening area; minimum discharge, 0.10 ft³/s, Sept. 11-12, 1966, gage height, 0.57 ft.

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)
Apr. 15	2245	878	4.83	Aug. 19	1730	*1,290	*5.93
Aug. 17	1530	827	4.68				

Minimum discharge, 0.50 ft³/s, Aug. 9, 10, 11, 12, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.1	14	1.4	e2.4 3.2	3.2	2.0	1.8	1.1	.76	1.1	.83
2	8.0	.97	7.5	1.5	2.8	2.9	2.0	1.7	1.1	17	25	15
3	24	3.5	3.4	2.6	2.3	2.8	1.9	1.5	1.2	.91	1.9	1.3
4	17	76	2.7	1.6	47	3.2	2.0	1.3	1.3	.69	.78	1.1
5	2.8	23	2.7	1.5	13	3.1	4.4	1.4	1.3	.68	.73	1.0
6	1.3	7.5	3.5	1.4	5.9	2.7	13	1.5	1.2	.92	1.0	1.1
7	1.1	2.5	2.1	1.3	4.5	2.5	3.8	1.6	1.1	.88	1.4	.80
8	.99	1.8	2.1	1.1	5.2	2.3	2.3	1.4	1.3	.78	.77	2.2
9	1.1	1.5	1.8	1.2	7.1	2.4	2.0	1.8	1.2	1.2	.64	.80
10	1.3	1.4 1.5	1.8	1.3	5.6	2.7	2.2	1.3	.96	.83	.60	.92
11	1.2	1.4	2.0	1.2	4.7	9.5	2.3	1.3	.96	.77	.99	1.0
12	1.0	1.5	2.1	1.1	4.0	2.4	2.0	1.5	12	3.7	.58	.93
13	.93	1.5	25	1.1	2.9	10	1.7	1.6	2.3	13	.63	.74
14	2.9	1.5	3.6	1.0	2.7	36	1.8	1.5	1.1	3.2	.67	.71
15	2.2	1.3	2.1	1.0	3.8	15	81	1.8	.97	1.1	.69	.70
16	1.1	10	2.1	1.1	3.0	6.7	37	1.6	1.1	3.1	3.0	.76
17	.88	4.6	2.1	1.3	8.4	3.8	27 7.5	1.4	3.4	1.8	52	.72
18	.92	1.3	1.9	1.4	50	3.4	7.6	1.5	.87	1.2	2.6	.75
19	.93	1.3	1.8	21	23	3.4	4.0	4.9	1.0	.89	68 67	.75
20	4.0	1.3	1.8	8.6	10	2.8	3.3	4.1	6.9	31	28	.69
21	24	1.2	1.8	1.9	9.2	2.3	4.8 4.9	5.2	.99	3.2	63	.66
22	27	60	1.6	1.6	5.2	2.2	7.1 7.6	2.0	.85	1.1	4.0	.66
23	3.4	4.8	1.7	1.4	18	2.2	2.7	1.3	.94	.94	1.7	.69
24	5.9	2.5	1.8	1.3 1.5	7.7	2.1	2.4	1.3	2.3	1.1	1.3	.80
25	2.2	2.0	5.3	31	11	2.0	2.1	1.3	.77	.96	1.1 1.2	1.2
26	1.4	1.8	1.3	70	4.5	2.1	1.9	1.3	.90	.95	1.1	1.5
27	1.3	3.4	1.4	11	5.9	2.2	1.8	1.3	.95	.74	1.1	.82
28	1.2	69	1.3	e3.0 3.3	3.7	1.9	1.8	1.3	.73	.70	10	.90
29	1.2	21	1.3	e2.8 3.9	---	1.8	1.9	1.5	.87	16	1.1	.99
30	1.3	36	1.3	e2.6 3.8	---	1.8	1.8	1.3	.66	1.7	.87	.99
31	1.2	---	1.3	e2.4 3.4	---	1.9	---	1.1	---	.95	.83	---
TOTAL	144.85	346.67	106.2	182.7	273.5	143.3	231.6	55.4	52.32	112.75	277.18	42.01
MEAN	4.67	11.6	3.43	5.89	9.77	4.62	7.72	1.79	1.74	3.64	8.94	1.40
MAX	27	76	25	70	50	36	81	5.2	12	31	68	15
MIN	.88	.97	1.3	1.0	2.3	1.8	1.7	1.1	.66	.68	.58	.66
CFSM	.85	2.10	.62	1.07	1.77	.84	1.40	.32	.32	.66	1.62	.25
IN.	.98	2.34	.72	1.23	1.84	.97	1.56	.37	.35	.76	1.87	.28

CAL YR 1985 TOTAL 2214.55 MEAN 6.07 MAX 230 MIN .41 CFSM 1.10 IN 14.92
WTR YR 1986 TOTAL 1968.48 MEAN 5.39 MAX 81 MIN .58 CFSM .98 IN 13.26

01589440 JONES FALLS AT SORRENTO, MD

LOCATION.--Lat 39°23'30", long 76°39'42", Baltimore County, Hydrologic Unit 02060003, on right bank 0.3 mi downstream from bridge on State Highway 25 (Falls Road), 0.4 mi downstream from Slaughterhouse Branch and Sorrento, and 12.5 mi upstream from mouth.

DRAINAGE AREA.--25.2 mi².

PERIOD OF RECORD.--Annual maximum, water years 1958-66. April 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 240 ft above National Geodetic Vertical Datum of 1929, from topographic map. January 1958 to April 1966, non-recording gage at site 450 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 19, 22, 26, 27, Jan. 8, 9, 14-17, Jan. 28 to Feb. 1, Feb. 13-16, and Mar. 8. Records good except for periods with ice effect, Jan. 14-17, Jan. 28 to Feb. 2, and Feb. 13-16, which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--20 years, 32.9 ft³/s, 17.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s, June 22, 1972, gage height, 18.11 ft, from flood-marks, from rating curve extended above 1,400 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 1.8 ft³/s, Sept. 7, 8, 1966, gage height, 1.16 ft.

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)
July 20	1845	*278	*5.27	No peak greater than base discharge.			

Minimum daily discharge, 3.8 ft³/s, Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	41	14	20	26	20	18	10	5.5	4.1	6.2
2	13	13	33	14	23	25	19	18	10	13	5.1	12
3	29	14	24	15	22	24	19	17	9.5	6.5	6.0	8.1
4	21	32	22	14	46	25	19	17	9.5	5.8	5.1	7.4
5	15	49	21	15	39	25	20	17	9.5	5.6	4.5	7.8
6	13	28	22	14	30	25	29	17	9.2	5.4	4.2	7.6
7	12	19	21	13	28	25	23	16	9.2	4.9	4.5	6.9
8	11	16	19	13	25	24	21	15	9.2	4.5	6.5	6.8
9	11	14	18	13	24	25	19	16	8.3	4.9	6.3	6.3
10	10	14	16	13	24	26	19	14	7.5	5.2	4.7	6.3
11	11	13	16	13	25	31	20	15	7.5	4.5	4.2	6.4
12	11	13	17	13	23	25	19	14	10	5.4	4.1	6.3
13	11	13	32	13	22	31	19	14	10	7.0	4.1	5.6
14	11	12	24	12	20	51	19	14	8.3	5.8	3.9	5.8
15	12	13	19	12	21	54	31	15	8.0	4.5	3.8	6.1
16	12	16	18	12	20	40	106	15	7.5	4.7	4.0	5.9
17	11	21	17	13	20	30	44	14	8.9	5.2	16	5.8
18	11	15	17	13	57	27	39	13	7.2	4.6	9.8	6.1
19	12	14	16	24	58	27	30	14	6.9	4.5	17	6.5
20	14	14	15	34	54	25	27	15	7.9	40	23	6.3
21	25	13	15	18	45	24	26	21	6.9	18	41	6.2
22	32	55	15	16	38	23	26	18	6.6	7.5	14	5.3
23	19	30	15	16	38	23	25	13	6.7	6.7	9.2	5.4
24	17	20	16	15	35	23	23	13	9.3	6.3	7.7	5.9
25	16	17	20	34	33	21	22	13	6.5	5.9	6.8	5.4
26	15	16	16	101	29	21	21	12	6.0	5.9	6.9	5.1
27	14	17	14	48	29	21	20	12	5.9	5.8	6.1	4.9
28	13	37	14	30	27	21	20	11	6.0	5.4	9.5	4.7
29	13	55	14	26	---	21	20	11	6.1	4.9	6.9	4.6
30	14	44	14	22	---	21	18	10	5.4	4.5	6.2	4.1
31	13	---	14	20	---	20	---	10	---	4.3	6.1	---
TOTAL	453	660	595	643	875	830	783	452	239.5	222.7	261.3	187.8
MEAN	14.6	22.0	19.2	20.7	31.3	26.8	26.1	14.6	7.98	7.18	8.43	6.26
MAX	32	55	41	101	58	54	106	21	10	40	41	12
MIN	10	12	14	12	20	20	18	10	5.4	4.3	3.8	4.1
CFSM	.58	.87	.76	.82	1.24	1.06	1.04	.58	.32	.29	.34	.25
IN.	.67	.97	.88	.95	1.29	1.23	1.16	.67	.35	.33	.39	.28

CAL YR 1985 TOTAL 7576.2 MEAN 20.8 MAX 447 MIN 5.7 CFSM .83 IN 11.18
WTR YR 1986 TOTAL 6202.3 MEAN 17.0 MAX 106 MIN 3.8 CFSM .68 IN 9.16

01589500 SAWMILL CREEK AT GLEN BURNIE, MD

LOCATION.--Lat 39°10'12", long 76°37'51", Anne Arundel County, Hydrologic Unit 02060003, on left bank 300 ft upstream from bridge on State Highway 648, 0.25 mile southeast of State Highway 3, and 0.50 mile northwest of Glen Burnie.

DRAINAGE AREA.--4.97 mi².

PERIOD OF RECORD.--May 1944 to September 1952. Annual maximum, water years 1965-70. October 1983 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 26.07 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Low flow affected by ground-water diversions from Anne Arundel County municipal well fields upstream from station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years (water years 1945-52, 1984-86), 6.43 ft³/s, 17.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft³/s, Sept. 27, 1985, gage height, 4.03 ft, from rating curve extended above 16.0 ft³/s; maximum gage height, 4.77 ft, Sept. 1, 1952; no flow for part of each day Sept. 6, 7, 1985, July 29, Aug. 2, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1933 reached a stage of about 14 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 20	1830	*30	*2.44	No peak greater than base discharge.			

No flow for part of each day July 29, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.03	2.2	.27	.30	.72	.45	.34	.05	.03	.01	.02
2	.20	.03	1.4	.21	.48	.71	.45	.31	.06	.10	.96	.08
3	2.2	.04	.71	.41	.48	.75	.44	.25	.02	.02	1.6	.03
4	1.0	1.9	.53	.40	2.2	.80	.45	.26	.02	.01	.22	.02
5	.43	2.4	.48	.46	1.8	.80	.56	.26	.02	.01	.04	.02
6	.22	1.1	.46	.34	1.3	.72	2.0	.21	.02	.04	.15	.02
7	.10	.50	.44	.27	.96	.65	1.3	.17	.02	.06	.05	.02
8	.05	.32	.40	.11	.69	.49	.80	.11	.01	.08	.05	.02
9	.04	.24	.38	.07	.68	.64	.62	.08	.01	.07	.03	.02
10	.03	.22	.35	.10	.67	.72	.58	.08	.01	.01	.03	.02
11	.03	.21	.35	.18	.72	.76	.58	.09	.01	.02	.02	.01
12	.03	.17	.37	.22	.59	.70	.54	.06	.37	.02	.02	.01
13	.03	.25	1.2	.27	.45	.98	.50	.06	1.2	.20	.02	.01
14	.04	.24	1.1	.14	.36	1.6	.96	.08	.21	.03	.01	.02
15	.27	.21	.45	.05	.45	1.8	1.2	.15	.03	.02	.02	.01
16	.38	.35	.38	.03	.51	1.4	3.5	.15	.03	.04	.01	.02
17	.10	.68	.39	.04	.66	1.0	1.9	.08	.01	.01	.08	.03
18	.04	.28	.32	.16	2.0	.82	1.7	.04	.01	.02	.02	.02
19	.04	.18	.16	.69	2.1	.88	1.1	.05	.01	.03	.05	.02
20	.06	.11	.11	1.4	1.8	.70	.82	.05	.10	1.2	.12	.02
21	.66	.08	.17	.55	1.9	.57	.83	.12	.02	3.0	.67	.02
22	1.6	2.3	.14	.32	1.7	.55	.85	.17	.01	.33	.26	.02
23	.75	1.9	.23	.24	1.7	.51	.75	.07	.01	.05	.05	.01
24	.36	.67	.37	.18	1.5	.63	.62	.05	.03	.02	.03	.02
25	.27	.41	.50	.50	1.4	.59	.58	.04	.01	.01	.03	.04
26	.14	.33	.20	2.8	1.1	.61	.56	.03	.02	.01	.03	.05
27	.09	.33	.14	1.9	.99	.61	.51	.04	.02	.01	.03	.05
28	.06	.96	.23	.74	.81	.49	.46	.03	.02	.01	.08	.02
29	.04	2.5	.27	.38	---	.48	.44	.02	.04	.01	.02	.02
30	.03	2.3	.22	.34	---	.50	.38	.03	.03	.01	.02	.03
31	.03	---	.19	.29	---	.48	---	.04	---	.01	.02	---
TOTAL	9.65	21.24	14.84	14.06	30.30	23.66	26.43	3.52	2.43	5.49	4.75	.72
MEAN	.31	.71	.48	.45	1.08	.76	.88	.11	.081	.18	.15	.024
MAX	2.2	2.5	2.2	2.8	2.2	1.8	3.5	.34	1.2	3.0	1.6	.08
MIN	.03	.03	.11	.03	.30	.48	.38	.02	.01	.01	.01	.01
CFSM	.06	.14	.10	.09	.22	.15	.18	.02	.02	.04	.03	.005
IN.	.07	.16	.11	.11	.23	.18	.20	.03	.02	.04	.04	.01

CAL YR 1985 TOTAL 357.64 MEAN .98 MAX 103 MIN .01 CFSM .20 IN 2.68
WTR YR 1986 TOTAL 157.09 MEAN .43 MAX 3.5 MIN .01 CFSM .09 IN 1.18

01590500 BACON RIDGE BRANCH AT CHESTERFIELD, MD

LOCATION.--Lat 39°00'07", long 76°36'53", Anne Arundel County, Hydrologic Unit 02060004, on left bank 50 ft downstream from highway bridge, 0.5 mi east of Chesterfield, 1.4 mi upstream from confluence with North River, and 6.8 mi northwest of Annapolis.

DRAINAGE AREA.--6.92 mi².

PERIOD OF RECORD.--October 1942 to September 1952. Annual maximum, water years 1965-74. October 1974 to current year. Monthly discharge only October and November 1942, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 16-18, 20, 21, and 23-25. Records good except those for estimated daily discharges (ice effect), which are fair. Records include sewage from Crownsville State Hospital, which obtains its water supply from wells. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--22 years (water years 1943-52, 1975-86), 9.13 ft³/s, 17.92 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, Aug. 2, 1944, gage height, 5.49 ft, from rating curve extended above 200 ft³/s on basis of contracted-opening measurement at gage height 4.43 ft; minimum discharge, 0.92 ft³/s, Sept. 13, 14, 16, 17, 18, 1986; minimum gage height, 1.71 ft, Feb. 11, 1983, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 185 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 3	1530	*37	*2.34	No peak greater than base discharge.			

Minimum discharge, 0.92 ft³/s, Sept. 13, 14, 16, 17, 18, gage height, 1.77 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.1	15	4.1	5.2	5.5	4.0	3.7	1.5	1.4	1.1	1.2
2	2.7	3.1	8.3	3.6	7.1	5.7	4.2	3.3	1.5	2.2	2.5	3.4
3	24	3.5	5.7	4.9	6.5	6.2	3.8	3.0	1.4	2.4	10	2.1
4	9.3	12	5.0	4.5	17	7.2	3.9	3.0	1.4	1.4	2.0	1.8
5	4.5	15	4.7	4.3	15	6.8	4.2	3.0	1.4	1.3	1.4	1.6
6	3.2	7.5	4.7	3.8	9.0	6.0	14	2.8	1.3	1.2	1.4	1.5
7	2.8	5.0	4.4	3.5	8.7	5.1	9.0	2.6	1.3	1.2	3.6	1.3
8	2.7	4.1	4.3	2.8	6.3	3.8	5.9	2.3	1.4	1.1	1.9	1.8
9	2.6	3.7	4.2	2.9	7.1	5.0	4.8	2.1	1.4	1.3	2.8	1.4
10	2.7	3.7	4.1	3.1	7.3	5.5	4.3	2.2	1.2	1.4	1.5	1.2
11	2.6	3.6	4.0	3.4	7.2	5.0	4.7	2.2	1.1	1.2	1.4	1.3
12	2.3	3.5	4.3	3.5	5.9	4.4	4.7	2.0	4.2	1.5	1.3	1.1
13	2.4	3.7	7.3	3.8	4.8	6.2	4.3	2.0	10	1.6	1.3	1.0
14	2.7	3.6	6.7	3.2	4.3	10	4.3	2.5	1.8	1.5	1.1	.99
15	3.8	3.5	4.2	2.7	5.3	11	4.7	2.5	1.5	1.2	1.1	1.0
16	3.9	3.7	3.8	2.4	5.1	10	16	2.5	1.4	1.5	1.1	1.0
17	2.8	6.3	3.4	3.0	6.4	6.3	11	2.1	1.4	2.6	7.7	.93
18	2.7	4.1	3.2	4.1	17	5.8	11	1.8	1.2	1.5	10	.98
19	2.7	3.8	3.0	7.2	19	5.8	6.6	1.8	1.2	1.5	2.1	1.1
20	2.8	3.8	3.0	11	13	5.1	5.6	3.2	1.6	2.8	2.1	1.2
21	6.4	3.5	3.2	5.1	9.3	4.4	6.5	3.6	1.5	7.5	25	1.2
22	11	13	3.5	4.3	7.6	4.4	6.8	3.2	1.4	1.7	15	1.2
23	6.1	17	3.4	4.0	9.8	4.5	6.4	2.1	1.3	1.5	3.0	1.3
24	4.1	5.9	3.6	3.4	9.2	4.4	5.0	1.8	1.8	1.3	1.8	1.2
25	3.7	4.8	4.0	5.1	8.8	4.1	4.7	1.6	1.4	1.3	1.3	1.3
26	3.2	4.5	3.1	19	7.4	4.4	4.7	1.6	1.2	1.2	1.2	1.2
27	3.1	4.3	3.4	16	7.3	4.7	4.5	1.6	1.3	1.2	1.1	1.2
28	2.9	5.4	3.7	8.0	5.9	4.3	4.2	1.6	1.3	1.1	4.1	1.2
29	2.8	16	4.0	5.5	---	4.3	4.3	1.5	2.3	1.3	2.2	1.2
30	3.0	14	3.6	5.4	---	4.3	3.9	1.5	1.4	2.8	1.3	1.1
31	2.9	---	3.6	5.0	---	4.2	---	1.5	---	1.3	1.2	---
TOTAL	135.0	188.7	142.4	162.6	242.5	174.4	182.0	72.2	54.1	54.0	114.6	40.00
MEAN	4.35	6.29	4.59	5.25	8.66	5.63	6.07	2.33	1.80	1.74	3.70	1.33
MAX	24	17	15	19	19	11	16	3.7	10	7.5	25	3.4
MIN	2.3	3.1	3.0	2.4	4.3	3.8	3.8	1.5	1.1	1.1	1.1	.93
CFSM	.63	.91	.66	.76	1.25	.81	.88	.34	.26	.25	.54	.19
IN.	.73	1.01	.77	.87	1.30	.94	.98	.39	.29	.29	.62	.21

CAL YR 1985 TOTAL 1924.90 MEAN 5.27 MAX 101 MIN 1.3 CFSM .76 IN 10.35
WTR YR 1986 TOTAL 1562.50 MEAN 4.28 MAX 25 MIN .93 CFSM .62 IN 8.40

01591000 PATUXENT RIVER NEAR UNITY, MD

LOCATION.--Lat 39°14'18", long 77°03'23", Montgomery County, Hydrologic Unit 02060006, on right bank at downstream side of bridge on State Highway 97, 0.6 mi upstream from Cattail Creek, 0.8 mi upstream from Triadelphia Reservoir, 1.1 mi northeast of Unity, and 97 mi upstream from mouth.

DRAINAGE AREA.--34.8 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1111: 1947. WSP 1432: 1948.

GAGE.--Water stage recorder and concrete control. Datum of gage is 364.76 ft above National Geodetic Vertical Datum of 1929 (Washington Suburban Sanitary Commission bench mark). Prior to Aug. 14, 1946, non-recording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 25-26, Jan. 8, 29, and Feb. 13. Water-discharge records good. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 39.0 ft³/s, 15.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,800 ft³/s, Sept. 11, 1981, gage height, 18.60 ft, from rating curve extended above 1,500 ft³/s on basis of slope-area measurement at gage height 13.00 ft; minimum discharge, 0.20 ft³/s, Sept 10, 11, 12, 1966, gage height, 1.66 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 770 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 16	0330	*451	*4.47	No peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s, Sept. 28.

DISCHARGE, IN CUBUC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	9.7	68	17	21	42	27	26	12	4.9	3.3	5.2
2	7.3	10	57	18	25	39	27	25	12	8.5	21	9.1
3	14	10	39	18	28	38	25	23	11	6.9	15	8.3
4	12	27	33	17	70	41	24	23	11	5.4	6.7	7.2
5	10	69	30	17	69	44	25	23	11	4.9	5.4	6.9
6	8.7	30	30	16	53	43	33	21	10	4.4	5.7	6.7
7	7.8	20	29	14	44	39	33	20	10	3.7	6.0	5.8
8	7.3	17	26	13	36	33	28	19	10	3.8	6.8	5.7
9	7.2	15	24	14	34	34	26	19	9.8	7.0	6.0	5.1
10	7.2	14	23	15	34	36	24	18	8.7	6.9	4.9	4.8
11	7.1	13	22	15	36	40	25	17	8.7	5.2	6.8	4.9
12	6.9	13	22	15	31	34	24	17	9.3	5.2	5.6	4.6
13	7.0	13	34	14	30	39	23	17	10	5.5	4.8	4.2
14	7.7	13	35	14	29	58	22	18	8.8	6.0	4.3	3.8
15	9.6	13	25	12	28	112	30	18	8.3	4.3	3.9	3.7
16	8.5	13	24	12	27	76	165	19	8.0	3.8	4.1	3.5
17	7.3	22	23	13	27	58	65	17	8.0	4.1	20	3.0
18	7.2	16	22	15	89	52	61	19	7.2	4.2	17	3.1
19	7.2	14	20	19	135	49	46	15	6.9	3.5	7.7	3.4
20	7.6	14	18	27	123	44	40	18	13	14	8.9	3.5
21	17	13	19	19	94	39	39	34	11	19	17	3.5
22	40	59	18	17	76	37	40	41	8.0	7.0	13	3.3
23	22	48	20	16	68	36	45	20	7.4	6.0	8.2	3.4
24	15	26	20	15	63	34	37	18	7.0	5.5	6.7	3.2
25	14	21	19	19	58	33	34	16	6.7	5.5	5.8	3.4
26	12	19	18	85	52	33	32	15	6.1	5.2	5.6	3.5
27	10	19	18	56	51	33	32	14	6.0	4.8	5.4	3.0
28	10	43	18	35	45	30	30	15	5.9	4.4	8.7	2.8
29	9.7	119	17	28	---	29	30	13	5.7	5.9	7.7	3.3
30	9.5	68	16	24	---	29	27	13	5.0	4.6	5.8	3.3
31	9.7	---	17	21	---	27	---	12	---	3.6	5.2	---
TOTAL	333.7	800.7	804	650	1476	1311	1119	603	262.5	183.7	253.0	135.2
MEAN	10.8	26.7	25.9	21.0	52.7	42.3	37.3	19.5	8.75	5.93	8.16	4.51
MAX	40	119	68	85	135	112	165	41	13	19	21	9.1
MIN	6.9	9.7	16	12	21	27	22	12	5.0	3.5	3.3	2.8
CFSM	.31	.77	.74	.60	1.51	1.22	1.07	.56	.25	.17	.23	.13
IN.	.36	.86	.86	.69	1.58	1.40	1.20	.64	.28	.20	.27	.14

CAL YR 1985 TOTAL 8325.5 MEAN 22.8 MAX 905 MIN 3.3 CFSM .66 IN 8.90
WTR YR 1986 TOTAL 7931.8 MEAN 21.7 MAX 165 MIN 2.8 CFSM .62 IN 8.48

01591000 PATUXENT RIVER NEAR UNITY, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1985 to September 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR						
14...	1130	27	101	16.0	25	1.8
MAY						
13...	1430	21	100	16.0	12	0.68
JUN						
12...	1000	10	102	21.5	35	0.95

01591400 CATTAIL CREEK NEAR GLENWOOD, MD

LOCATION (REVISED).--Lat 39°15'21", long 77°03'05", Howard County, Hydrologic Unit 02060006, on right bank at downstream side of bridge on State Highway 97, 1.2 mi upstream from mouth.

DRAINAGE AREA.--22.9 mi².

PERIOD OF RECORD.--June 1978 to September 1983 (published as at Roxbury Mills Road at Roxbury Mills, MD), October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 28, 1983, at site 800 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 7, 8. Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 25.4 ft³/s, 15.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,040 ft³/s, Feb. 12, 1985, gage height, 8.12 ft, from rating curve extended above 1,800 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum discharge , 1.8 ft³/s, July 5, 1986.

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)
Apr. 16	0200	*328	*3.30	No peak greater than base discharge.			

Minimum discharge, 1.8 ft³/s, July 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	8.5	38	12	13	20	16	14	9.8	4.1	2.5	4.8
2	6.3	8.7	31	11	15	20	10	14	9.8	6.7	14	8.4
3	11	8.8	21	12	15	20	11	13	9.1	5.3	9.0	7.0
4	9.9	19	18	12	43	22	13	13	9.0	3.4	4.7	6.3
5	8.3	48	18	12	36	22	15	13	8.9	3.0	3.8	6.1
6	7.2	18	18	11	29	21	19	13	8.1	3.8	4.3	6.1
7	6.5	14	18	10	24	20	19	13	8.3	3.5	5.4	5.5
8	6.3	12	17	9.0	19	17	17	12	7.9	3.2	4.4	5.6
9	5.8	11	15	10	19	18	17	12	7.6	4.2	4.1	5.2
10	5.6	11	15	11	19	18	13	12	7.4	4.8	3.4	5.2
11	5.6	10	15	11	21	20	15	12	7.5	3.8	4.2	5.4
12	5.5	10	15	11	18	18	14	11	7.9	3.6	3.8	5.2
13	5.4	10	24	11	18	22	12	11	8.9	3.6	3.7	4.9
14	5.9	10	20	11	18	35	12	12	7.7	5.1	3.1	4.6
15	6.8	9.9	16	9.4	17	46	18	12	7.3	3.4	2.7	4.6
16	6.2	10	15	9.3	15	35	86	12	7.0	2.9	2.8	4.3
17	5.7	15	15	9.6	16	26	34	12	6.4	3.4	29	3.8
18	6.3	11	14	10	53	23	32	14	5.6	3.4	17	3.9
19	6.3	11	13	12	79	22	22	11	5.1	2.8	6.9	3.8
20	6.6	11	13	17	54	21	21	12	8.4	7.3	6.9	3.8
21	13	9.9	13	12	39	19	21	26	6.9	13	13	3.7
22	29	40	13	12	33	18	20	51	6.0	4.5	9.9	3.5
23	15	26	13	11	31	18	20	17	5.2	4.2	7.3	3.4
24	12	17	13	11	29	18	18	15	4.6	4.0	6.0	3.3
25	11	14	16	14	28	17	18	13	5.0	4.0	5.2	3.6
26	9.8	13	13	65	24	17	17	12	5.1	3.7	5.0	3.7
27	9.3	13	12	32	24	17	17	12	5.0	3.5	4.8	3.5
28	8.9	48	12	19	21	17	17	12	4.6	3.4	7.5	3.5
29	8.5	68	12	16	---	15	16	11	4.7	3.8	5.9	3.8
30	8.4	41	12	15	---	12	16	10	4.1	3.0	5.0	3.6
31	8.4	---	13	13	---	16	---	9.9	---	2.6	4.8	---
TOTAL	266.6	556.8	511	441.3	770	650	596	436.9	208.9	131.0	210.1	140.1
MEAN	8.60	18.6	16.5	14.2	27.5	21.0	19.9	14.1	6.96	4.23	6.78	4.67
MAX	29	68	38	65	79	46	86	51	9.8	13	29	8.4
MIN	5.4	8.5	12	9.0	13	12	10	9.9	4.1	2.6	2.5	3.3
CFSM	.38	.81	.72	.62	1.20	.92	.87	.62	.30	.19	.30	.20
IN.	.43	.90	.83	.72	1.25	1.06	.97	.71	.34	.21	.34	.23

CAL YR 1985 TOTAL 6430.0 MEAN 17.6 MAX 1400 MIN 2.5 CFSM .77 IN 10.44
WTR YR 1986 TOTAL 4918.7 MEAN 13.5 MAX 86 MIN 2.5 CFSM .59 IN 7.99

01591610 PATUXENT RIVER BELOW BRIGHTON DAM NEAR BRIGHTON, MD

LOCATION.--Lat 39°11'31", long 77°00'16", Montgomery County, Hydrologic Unit 02060006, on right bank at Brighton Dam, 500 ft downstream from Triadelphia Reservoir, 1.3 mi east of Brighton, and 92 mi upstream from mouth.

DRAINAGE AREA.--78.6 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 310 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1978 to October 1980, nonrecording gage 300 ft upstream on left bank at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Triadelphia Reservoir, 500 ft upstream, usable capacity, 6,200,000,000 gal; no dead storage. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,280 ft³/s, Dec. 1, 1983, gage height, 6.02 ft; minimum discharge, 1.2 ft³/s, Dec. 3, 1985, gage height, 0.78 ft; minimum daily discharge, 2.1 ft³/s, Jan. 27, 28, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 22, 1972, reached a discharge of 17,800 ft³/s. Data provided by Washington Suburban Sanitary Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 286 ft³/s, Apr. 17, gage height, 2.52 ft; minimum discharge, 1.2 ft³/s, Dec. 3, gage height, 0.78 ft; minimum daily discharge, 7.6 ft³/s, Jan. 12, Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	PEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	22	30	48	55	89	92	69	46	73	72	46
2	20	22	30	44	56	116	91	63	72	69	60	68
3	8.8	22	24	27	57	108	77	48	72	79	34	34
4	8.8	23	38	31	56	103	43	48	89	62	81	9.7
5	8.8	24	38	25	55	90	47	42	62	47	101	9.0
6	8.8	24	38	22	45	87	48	23	50	47	99	8.8
7	8.8	24	38	26	25	106	51	36	50	47	110	8.8
8	8.8	24	38	11	8.4	106	84	34	50	47	118	63
9	15	24	38	33	8.5	103	48	27	50	30	119	75
10	18	23	38	39	22	103	48	8.4	38	55	119	69
11	36	23	38	11	25	102	47	8.4	55	58	118	65
12	53	21	46	7.6	19	87	7.6	27	38	45	101	72
13	53	41	40	11	24	69	7.8	26	47	24	63	90
14	53	60	40	39	22	69	35	28	47	67	77	90
15	67	62	40	49	8.1	49	65	35	48	26	90	90
16	81	62	40	53	8.1	48	115	30	47	12	90	90
17	117	62	63	54	22	71	243	11	51	57	90	90
18	141	61	82	54	12	91	232	11	36	65	90	89
19	140	61	77	54	25	73	193	11	66	79	91	88
20	139	62	52	55	35	77	194	16	66	57	92	88
21	110	70	82	55	81	95	137	37	50	77	92	88
22	49	86	81	55	69	87	92	13	50	33	92	74
23	22	86	72	50	28	9.4	97	10	50	46	92	43
24	22	87	65	51	84	48	81	10	67	46	69	44
25	22	86	64	51	103	86	99	11	71	41	77	43
26	22	100	63	52	108	81	99	11	66	46	87	43
27	22	116	69	53	106	59	99	30	45	42	74	39
28	22	116	57	53	77	96	96	92	8.9	54	81	43
29	22	116	57	25	---	92	95	80	8.4	71	86	21
30	23	58	56	41	---	92	84	78	36	72	47	8.1
31	22	---	51	56	---	92	---	48	---	72	46	---
TOTAL	1373.8	1668	1585	1235.6	1244.1	2584.4	2747.4	1021.8	1532.3	1646	2658	1689.4
MEAN	44.3	55.6	51.1	39.9	44.4	83.4	91.6	33.0	51.1	53.1	85.7	56.3
MAX	141	116	82	56	108	116	243	92	89	79	119	90
MIN	8.8	21	24	7.6	8.1	9.4	7.6	8.4	8.4	12	34	8.1
(†)	4220	4400	4620	4870	5980	6020	5910	6110	5540	4810	3630	2760

CAL YR 1985 TOTAL 21227.3 MEAN 58.2 MAX 704 MIN 6.9 CFSM .74 IN 10.02
WTR YR 1986 TOTAL 20985.8 MEAN 57.5 MAX 243 MIN 7.6 CFSM .73 IN 9.91

† Month-end contents, in millions of gallons, in Triadelphia Reservoir (contents on Sept. 30, 1985, 4,480,000,000 gal). Records provided by Washington Suburban Sanitary Commission.

01591700 HAWLINGS RIVER NEAR SANDY SPRING, MD

LOCATION.--Lat 39°10'29", long 77°01'22", Montgomery County, Hydrologic Unit 02060006, on right bank at downstream side of bridge on State Highway 650, 1.0 mi upstream from mouth, and 1.7 mi north of Sandy Spring.

DRAINAGE AREA.--27.0 mi².

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 21, Jan. 15, and Sept. 13-30. Records good except those for period of backwater from leaves, Sept. 13-30, which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 30.0 ft³/s, 15.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,300 ft³/s, Sept. 6, 1979, gage height, 8.80 ft, from rating curve extended above 1,200 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum discharge, 0.75 ft³/s, Jan. 30, 1981, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 26	0800	*208	*2.71	No peak greater than base discharge.			

Minimum daily discharge, 2.1 ft³/s, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	12	60	14	16	25	18	17	7.4	3.8	2.4	2.9
2	4.6	15	41	11	18	23	18	16	7.2	10	6.9	6.0
3	12	16	26	14	20	23	17	16	7.4	5.4	6.8	4.6
4	8.8	35	21	14	70	26	17	15	7.1	4.1	3.2	4.9
5	7.2	83	20	14	57	32	17	15	7.4	3.8	2.8	4.2
6	5.8	26	20	14	40	29	32	15	7.0	3.5	5.3	4.1
7	4.9	16	20	12	31	26	28	14	7.1	3.3	4.4	3.6
8	4.4	13	18	12	25	23	23	14	7.4	3.1	3.3	3.4
9	4.3	11	18	10	25	21	20	13	7.3	3.4	3.1	3.4
10	4.4	11	17	11	26	22	18	13	6.7	4.5	2.7	3.3
11	4.7	10	16	12	27	25	18	12	6.3	3.8	3.2	3.6
12	4.7	10	16	12	24	24	18	12	6.9	3.3	2.7	4.1
13	4.7	10	28	12	22	24	18	12	8.8	3.3	2.6	3.6
14	5.4	10	29	10	19	38	17	13	6.4	4.4	2.5	3.2
15	7.1	10	19	9.0	20	65	20	14	6.0	3.1	2.4	3.0
16	6.5	10	18	8.8	19	41	112	14	5.7	2.8	2.4	2.8
17	5.9	18	17	9.9	20	33	52	13	6.0	2.8	5.4	2.8
18	6.3	13	16	11	84	28	54	12	5.6	2.9	4.2	2.6
19	7.3	12	12	13	99	26	37	11	5.4	2.8	9.2	2.6
20	8.5	11	12	22	83	25	30	12	8.8	24	8.3	2.3
21	22	11	11	16	48	23	27	19	7.5	17	13	2.3
22	35	72	13	14	39	21	27	76	5.2	3.9	7.3	2.3
23	18	44	14	14	36	22	30	19	4.9	3.5	4.2	2.3
24	13	22	14	13	37	21	26	14	4.8	3.3	3.4	2.3
25	12	17	17	18	35	20	23	12	4.7	3.3	3.2	2.2
26	11	15	14	122	30	20	22	11	4.3	3.2	3.0	2.2
27	10	15	14	55	29	20	21	9.9	4.2	3.0	3.0	2.2
28	9.9	28	14	35	27	19	20	9.9	4.2	2.9	3.6	2.1
29	10	80	14	19	---	19	19	9.4	4.6	2.8	3.7	2.2
30	11	60	13	18	---	19	18	8.3	4.1	2.7	3.1	2.2
31	12	---	11	17	---	18	---	7.8	---	2.6	2.9	---
TOTAL	285.8	716	593	586.7	1026	801	817	469.3	186.4	146.3	134.2	93.3
MEAN	9.22	23.9	19.1	18.9	36.6	25.8	27.2	15.1	6.21	4.72	4.33	3.11
MAX	35	83	60	122	99	65	112	76	8.8	24	13	6.0
MIN	4.3	10	11	8.8	16	18	17	7.8	4.1	2.6	2.4	2.1
CFSM	.34	.89	.71	.70	1.36	.96	1.01	.56	.23	.18	.16	.12
IN.	.39	.99	.82	.81	1.41	1.10	1.13	.65	.26	.20	.18	.13

CAL YR 1985 TOTAL 6830.8 MEAN 18.7 MAX 878 MIN 3.1 CFSM .69 IN 9.41
WTR YR 1986 TOTAL 5855.0 MEAN 16.0 MAX 122 MIN 2.1 CFSM .59 IN 8.07

01592500 PATUXENT RIVER NEAR LAUREL, MD

LOCATION.--Lat 39°06'56", long 76°52'27", Prince Georges County, Hydrologic Unit 02060006, on right bank at Rocky Gorge pumping station, 600 ft downstream from T. Howard Duckett Reservoir, 0.7 mi upstream from Walker Branch, 1.3 mi northwest of Laurel, and 81 mi upstream from mouth.

DRAINAGE AREA.--132 mi².

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

REVISED RECORDS.--WDR MD-DE-78-1: 1976(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 153.5 ft above National Geodetic Vertical Datum of 1929 (levels by Washington Suburban Sanitary Commission). Prior to Oct. 1, 1955, water-stage recorder and concrete control at site 0.3 mi downstream at different datum. Oct. 1, 1955, to Sept. 30, 1956, nonrecording gage at present site at datum 1.2 ft lower. Oct. 1, 1956, to Jan. 27, 1957, nonrecording gage at present site and datum. Jan. 28, 1957, to May 3, 1972, water-stage recorder and concrete control at present site and datum. May 4, 1972, to Sept. 4, 1973, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Records do not include diversion at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Flow regulated by Triadelphia Reservoir, and since March 1954 by T. Howard Duckett Reservoir, combined usable capacity, 11,800,000,000 gal; dead storage, 80,000,000 gal. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 26,000 ft³/s, June 22, 1972, gage height, about 25 ft, from floodmarks, from rating curve extended above 6,600 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 0.05 ft³/s, July 18, 1985 (valve closed for repair); minimum daily discharge, 1.1 ft³/s, June 26, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 654 ft³/s, Apr. 29, gage height, 7.05 ft; minimum daily discharge, 15 ft³/s, May 15, 16, 22, June 5-8, 11, 15-17, 19-24, 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	18	17	18	149	36	70	16	16	16	16
2	18	18	18	17	18	110	18	69	16	16	16	16
3	18	18	18	17	18	86	18	68	17	16	16	16
4	18	18	17	17	18	85	18	68	16	16	16	16
5	18	18	17	17	18	59	18	36	15	16	16	16
6	18	17	17	17	18	47	18	16	15	16	16	16
7	18	17	17	17	18	76	19	16	15	16	16	16
8	17	17	17	17	18	69	18	16	15	16	16	16
9	17	17	17	17	18	69	18	16	16	16	16	16
10	17	17	24	17	18	69	18	16	16	16	16	16
11	17	17	16	17	18	66	18	16	15	16	16	16
12	18	17	16	17	18	66	18	16	16	16	16	16
13	18	17	16	18	18	67	18	16	16	16	16	16
14	18	16	16	18	18	75	18	16	16	16	16	16
15	18	16	16	18	18	125	18	15	15	17	16	19
16	18	17	16	18	18	125	278	15	15	17	16	16
17	18	17	16	18	18	89	501	16	15	16	16	16
18	18	17	16	18	18	75	293	16	16	18	16	16
19	18	18	17	18	18	80	79	16	15	17	16	22
20	18	18	17	18	19	95	80	15	15	17	16	17
21	20	18	17	18	18	102	80	16	15	17	16	16
22	19	18	17	18	18	102	80	15	15	17	16	16
23	18	18	17	18	18	101	80	16	15	17	16	17
24	18	18	17	18	46	87	83	16	15	17	16	16
25	17	18	17	18	67	77	84	16	16	17	16	16
26	17	18	17	18	87	77	84	16	16	17	16	16
27	17	18	17	18	139	79	81	17	15	16	16	16
28	17	18	17	19	145	81	81	17	15	16	16	16
29	18	18	17	19	---	81	216	17	16	16	16	16
30	18	18	17	18	---	81	69	16	16	16	16	18
31	18	---	17	18	---	75	---	16	---	16	16	---
TOTAL	553	525	529	548	899	2625	2458	726	465	508	496	493
MEAN	17.8	17.5	17.1	17.7	32.1	84.7	81.9	23.4	15.5	16.4	16.0	16.4
MAX	20	18	24	19	145	149	501	70	17	18	16	22
MIN	17	16	16	17	18	47	18	15	15	16	16	16
(†)	8720	9080	9520	9800	11380	11360	11640	11370	10550	9620	8690	7480
(‡)	59.4	65.2	53.3	54.2	56.2	48.8	45.2	58.1	57.2	56.7	60.1	57.0

CAL YR 1985 TOTAL 9903.5 MEAN 27.1 MAX 616 MIN 5.7 ‡ 60.9
WTR YR 1986 TOTAL 10825.0 MEAN 29.7 MAX 501 MIN 15 ‡ 55.9

† Combined month-end total contents, in millions of gallons, in Triadelphia and T. Howard Duckett Reservoirs (contents on Sept. 30, 1985, 9,330,000,000 gal). Records provided by Washington Suburban Sanitary Commission.
‡ Diversions, in cubic feet per second, upstream from station at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Records provided by Washington Suburban Sanitary Commission.

01593500 LITTLE PATUXENT RIVER AT GUILFORD, MD

LOCATION.--Lat 39°10'04", long 76°51'07", Howard County, Hydrologic Unit 02060006, on left bank 25 ft downstrem from bridge on State Highway 32, 1 mi west of Guilford, 3 mi upstream from Middle Patuxent River, 4 mi north of Laurel, and 20.1 mi upstream from mouth.

DRAINAGE AREA.--38.0 mi².

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

REVISED RECORDS.--WSP 1502: 1933, 1934(M), 1939(M), 1945(M), 1948(P).

GAGE.--Water-stage recorder. Concrete control since June 20, 1946. Datum of gage is 259.26 ft above National Geodetic Vertical Datum of 1929. Prior to June 25, 1946, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 25-26, Dec. 18, 19, 26, Jan. 7, 8, 12, 14, 28-30, Feb. 12-15, Mar. 8. Records good. Low flow affected by regulation from unknown source. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--54 years, 42.6 ft³/s, 15.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s June 22, 1972, gage height, 18.38 ft, from high-water mark in well, from rating curve extended above 1,800 ft³/s on basis of contracted-opening measurement at gage height 13.26 ft and contracted-opening and flow-over-embankment measurement at gage height 18.38 ft; no flow Sept. 8, and parts of Sept. 6, 7, 9-12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 16	0300	*680	*5.56	No peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s Sept. 14, 17, 18, 19, 28, gage height, 2.41 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	84	18	25	26	19	23	12	4.7	3.6	5.7
2	13	13	52	18	26	26	20	23	12	34	36	18
3	45	13	33	21	27	27	19	21	11	13	26	11
4	37	103	27	21	153	28	19	21	11	8.4	10	8.0
5	23	176	26	21	78	29	20	22	12	7.1	7.2	7.2
6	17	45	26	20	47	27	51	21	10	5.9	8.2	6.7
7	14	29	25	19	38	27	35	20	9.8	5.5	12	4.9
8	12	23	23	18	31	24	26	19	10	4.6	8.6	6.0
9	12	20	22	17	32	23	23	18	9.9	6.4	7.0	5.1
10	12	19	22	18	32	26	22	19	8.6	6.8	5.0	4.3
11	12	18	22	18	34	31	22	19	8.0	4.8	8.4	4.3
12	11	18	22	18	28	25	22	19	13	4.8	5.2	4.5
13	11	17	57	18	26	32	21	17	15	16	4.2	3.9
14	12	17	43	17	25	61	21	19	12	25	3.7	2.9
15	16	16	27	16	24	96	41	19	9.8	8.7	3.5	3.0
16	15	19	24	16	24	46	327	20	8.7	6.6	3.6	3.2
17	12	34	23	17	26	33	91	28	8.8	13	26	2.8
18	11	21	22	18	162	28	74	25	7.3	6.7	26	2.9
19	11	19	20	35	117	28	40	19	6.7	5.2	18	3.2
20	14	19	19	60	81	26	33	22	17	27	28	3.3
21	55	17	19	30	48	24	33	33	9.8	30	78	3.5
22	113	192	19	23	40	23	37	23	8.0	10	38	3.2
23	35	72	20	21	49	23	34	19	7.5	7.7	14	3.5
24	26	35	21	19	43	23	29	17	7.9	6.5	9.7	2.9
25	20	27	27	58	42	22	27	16	6.9	5.4	7.5	3.5
26	16	23	22	343	34	22	27	15	5.7	4.5	6.7	3.4
27	14	23	19	91	34	23	26	15	5.4	5.8	6.3	3.0
28	14	68	19	38	29	24	25	15	5.1	4.4	14	2.8
29	12	201	19	e30	---	22	24	14	5.6	4.3	10	3.5
30	12	100	18	28	---	22	23	13	5.0	6.7	7.1	3.6
31	12	---	22	26	---	21	---	12	---	4.1	6.1	---
TOTAL	652	1411	844	1131	1355	918	1231	606	279.5	303.6	447.6	143.8
MEAN	21.0	47.0	27.2	36.5	48.4	29.6	41.0	19.5	9.32	9.79	14.4	4.79
MAX	113	201	84	343	162	96	327	33	17	34	78	18
MIN	11	13	18	16	24	21	19	12	5.0	4.1	3.5	2.8
CFSM	.55	1.24	.72	.96	1.27	.78	1.08	.51	.25	.26	.38	.13
IN.	.64	1.38	.83	1.11	1.33	.90	1.21	.59	.27	.30	.44	.14

CAL YR 1985 TOTAL 12593.0 MEAN 34.5 MAX 860 MIN 4.7 CFSM .91 IN 12.33
WTR YR 1986 TOTAL 9322.5 MEAN 25.5 MAX 343 MIN 2.8 CFSM .67 IN 9.13

01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD

WATER-QUALITY RECORDS

LOCATION.--Lat 39°08'06", long 76°48'58", Howard County, Hydrologic Unit 02060006, on left bank 20 ft downstream from bridge on southbound lanes of U.S. Highway 1, 0.4 mi southeast of Savage, 0.9 mi downstream from Middle Patuxent River, and 16.2 mi upstream from mouth.

DRAINAGE AREA.--98.4 mi².

PERIOD OF RECORD.--Water year 1969, October 1985 to September 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR						
14...	1500	59	261	17.0	3	0.48
MAY						
13...	1600	43	362	17.0	13	1.5
JUL						
15...	0945	22	212	22.5	3	0.18

01594440 PATUXENT RIVER NEAR BOWIE, MD

LOCATION.--Lat 38°57'21", long 76°41'36", Anne Arundel County, Hydrologic Unit 02060006, on left bank 45 ft upstream from bridge on U.S. Highway 50 (John Hanson Highway), 3.0 mi west of Bowie City Hall, 3.1 mi downstream from mouth of Little Patuxent River, 4.2 mi northwest of Davidsonville, and 60 mi upstream from mouth.

DRAINAGE AREA.--348 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1955 to June 1977 (gage heights and discharge measurements only), August 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.10 ft above National Geodetic Vertical Datum of 1929. Prior to June 27, 1977, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 28, Apr. to Sept. 30. Water- discharge records fair. Flow regulated by T. Howard Duckett Reservoir, usable capacity 5,600,000,000 gal, 21 mi upstream from station.

AVERAGE DISCHARGE.--9 years, 374 ft³/s, 14.94 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,100 ft³/s, June 22, 1972, gage height, 27.9 ft, from flood-marks, on basis of contracted-opening measurement of peak flow; minimum discharge observed, 32 ft³/s, Aug. 9, 1966; minimum daily discharge, 56 ft³/s Sept. 17, 18, 19, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft³/s, Apr. 16, gage height, 9.43 ft; minimum daily discharge, 56 ft³/s, Sept. 17, 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	130	769	156	191	371	215	209	130	79	71	67
2	124	128	464	147	195	355	188	201	127	97	85	83
3	398	132	299	155	209	305	171	189	126	170	356	106
4	270	312	232	161	416	292	166	187	122	104	145	85
5	188	761	210	158	869	311	169	188	122	85	96	77
6	147	503	202	154	486	274	335	162	120	81	86	75
7	129	239	197	148	362	251	355	143	118	78	201	72
8	117	187	190	131	288	241	250	138	117	76	149	72
9	113	166	184	130	267	238	208	133	127	78	154	70
10	110	159	176	142	269	246	188	131	115	81	94	66
11	110	153	175	145	272	250	180	131	110	81	82	65
12	109	150	176	140	261	250	181	132	120	79	81	64
13	106	150	205	146	219	242	173	129	393	79	78	62
14	108	173	358	133	193	324	170	133	144	123	76	61
15	117	152	228	131	210	630	168	140	114	108	73	59
16	151	145	192	128	209	591	816	142	104	82	71	58
17	126	199	185	136	217	421	1070	145	99	93	91	56
18	112	195	177	140	419	309	1030	162	94	89	176	56
19	109	164	157	158	1000	285	738	154	92	147	123	56
20	113	158	152	253	754	280	356	162	94	132	113	57
21	157	152	161	224	485	266	311	184	124	353	297	60
22	432	317	153	174	438	258	321	192	96	156	280	59
23	387	920	166	164	382	258	333	166	86	100	135	59
24	193	346	168	152	445	258	278	148	87	86	94	57
25	174	224	174	153	412	241	251	141	87	81	80	59
26	158	196	159	638	395	232	245	139	86	78	74	60
27	148	190	141	1200	372	232	238	137	81	77	71	60
28	133	196	162	440	392	229	231	139	80	75	86	59
29	129	681	155	227	---	229	225	140	90	73	101	59
30	124	706	149	208	---	228	307	136	88	77	79	58
31	125	---	146	198	---	225	---	134	---	74	70	---
TOTAL	5052	8284	6662	6770	10627	9122	9867	4767	3493	3172	3768	1957
MEAN	163	276	215	218	380	294	329	154	116	102	122	65.2
MAX	432	920	769	1200	1000	630	1070	209	393	353	356	106
MIN	106	128	141	128	191	225	166	129	80	73	70	56
CFSM	.47	.79	.62	.63	1.09	.85	.95	.44	.33	.29	.35	.19
IN.	.54	.89	.71	.72	1.14	.98	1.05	.51	.37	.34	.40	.21

CAL YR 1985 TOTAL 78685 MEAN 216 MAX 3750 MIN 77 CFSM .62 IN 8.41
WTR YR 1986 TOTAL 73541 MEAN 201 MAX 1200 MIN 56 CFSM .58 IN 7.86

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-80, 1985 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Water years 1978-80, 1985 to current year.
WATER TEMPERATURE: Water years 1978-80, 1985 to current year.
SUSPENDED-SEDIMENT DISCHARGE: Water years 1985 to current year.

REMARKS.--Water temperatures are measured daily in field by local observer at time of sampling.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1985-86): Maximum daily, 761 microsiemens, Feb. 7, 1985; minimum daily, 135 microsiemens, Dec. 21, 1984.
WATER TEMPERATURE (water years 1985-86): Maximum daily, 28.0°C, July 29, 1986; minimum daily, 0.0°C, on many days during winter periods.
SEDIMENT CONCENTRATION: Maximun daily mean, 700 mg/L, June 3, 1985; minimum daily mean, 2 mg/L, Dec. 4, 5, 1985.
SEDIMENT LOAD: Maximum daily, 3,720 tons, Feb. 13, 1985; minimum daily, 1.1 tons, Dec. 5, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 753 microsiemens, Feb. 17; minimum daily, 160 microsiemens, Apr. 7.
WATER TEMPERATURE: Maximum daily, 28.0°C, July 29; minimum daily, 0.0°C, Dec. 26, Jan. 13, 14.
SEDIMENT CONCENTRATION: Maximum daily mean, 373 mg/L, Apr. 16; minimum daily mean, 2 mg/L, Dec. 4, 5.
SEDIMENT LOAD: Maximum daily, 903 tons, Apr. 16; minimum daily, 1.1 tons, Dec. 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT											
09...	1030	131	290	7.40	19.0	16.0	778	--	7.4	73	--
NOV											
04-05	1500	632	220	7.30	--	--	--	--	--	--	--
19...	1030	165	257	7.06	19.0	14.0	777	4.3	7.2	69	K76
NOV											
22-24	1430	643	213	7.30	--	--	--	--	--	--	--
NOV 29-											
DEC 01	0400	754	210	7.40	--	--	--	--	--	--	--
18...	1030	174	277	7.60	-1.0	5.0	773	--	10.4	80	--
JAN											
13...	1130	147	282	7.60	8.0	4.0	760	5.0	11.5	88	--
FEB											
18-20	1300	900	520	7.20	--	--	--	--	--	--	--
28...	1100	391	432	7.38	3.0	3.0	766	--	12.5	92	--
MAR											
10...	1100	243	248	7.20	22.0	9.0	768	7.6	10.9	94	K11
14...	1230	322	288	7.33	9.5	7.5	--	--	10.5	--	--
APR											
03...	1230	172	300	7.55	17.0	16.0	773	--	9.6	96	--
16...	1045	735	240	7.10	9.0	10.0	--	--	8.8	--	--
17...	1045	1010	197	7.20	8.0	9.5	--	--	9.2	--	--
MAY											
07...	1030	169	292	7.29	28.0	20.0	762	--	5.5	61	K34
JUN											
11...	0900	142	318	7.20	27.0	22.0	763	--	3.3	38	--
19...	1000	123	358	7.30	21.0	21.0	769	--	5.0	56	--
19...	1005	123	358	7.30	21.0	21.0	769	--	5.0	56	--
26...	1100	109	374	7.45	25.0	21.0	771	--	4.5	50	--
JUL											
03...	1105	216	335	7.45	25.0	23.0	762	--	5.2	61	--
07...	1200	105	350	7.44	39.0	26.0	770	6.0	3.7	45	110
16...	0945	106	303	7.44	28.0	25.0	769	--	3.3	40	--
16...	0950	106	303	7.44	28.0	25.0	769	--	3.3	40	--
21...	1300	442	262	7.50	33.0	25.0	764	--	4.9	59	--
21...	1305	442	220	7.30	33.0	25.0	--	--	--	--	--
23...	1120	122	311	7.36	30.0	25.0	771	--	3.8	46	--
31...	1000	93	352	7.30	26.0	25.0	763	--	3.4	41	--
AUG											
03-03	0200	464	205	7.30	--	--	--	--	--	--	--
AUG											
03-03	0645	418	188	7.30	--	--	--	--	--	--	--
06...	1100	104	305	7.47	27.0	25.0	769	--	4.3	52	--
06...	1105	104	305	7.47	27.0	25.0	769	--	4.3	52	--
AUG											
07-07	1100	277	286	7.51	--	--	--	--	--	--	--
13...	0850	97	332	7.40	23.0	22.0	768	--	4.6	52	--
21...	1400	280	210	7.54	22.0	23.0	769	--	5.8	67	--
AUG											
21-22	1600	--	--	--	--	--	--	--	--	--	--
27...	1045	91	320	7.40	29.5	22.5	760	--	5.0	58	--
SEP											
03...	0900	138	332	7.40	21.0	20.0	770	--	6.3	69	--
09...	1030	95	343	7.41	18.0	18.0	774	4.4	7.9	82	480
18...	1130	80	368	7.61	21.0	16.0	774	--	8.1	81	--
25...	1100	93	350	7.43	27.0	28.0	766	--	5.1	65	--

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

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT											
09...	--	--	--	--	--	--	--	--	--	65	53
NOV											
04-05	--	--	--	--	--	--	--	--	--	45	37
19...	K110	68	16	20	4.3	21	38	1	4.7	63	51
NOV											
22-24	--	--	--	--	--	--	--	--	--	35	29
NOV 29-											
DEC 01	--	--	--	--	--	--	--	--	--	35	29
18...	--	--	--	--	--	--	--	--	--	61	50
JAN											
13...	6600	71	24	21	4.4	24	41	1	4.7	57	48
FEB											
18-20	--	--	--	--	--	--	--	--	--	37	30
28...	--	--	--	--	--	--	--	--	--	39	32
MAR											
10...	K2	62	24	18	4.2	23	43	1	3.5	46	39
14...	--	--	--	--	--	--	--	--	--	46	38
APR											
03...	--	--	--	--	--	--	--	--	--	54	44
16...	--	--	--	--	--	--	--	--	--	43	35
17...	--	--	--	--	--	--	--	--	--	35	29
MAY											
07...	K20	--	--	--	--	--	--	--	--	51	42
JUN											
11...	--	--	--	--	--	--	--	--	--	68	56
19...	--	--	--	--	--	--	--	--	--	71	58
19...	--	--	--	--	--	--	--	--	--	71	58
26...	--	--	--	--	--	--	--	--	--	71	58
JUL											
03...	--	--	--	--	--	--	--	--	--	61	50
07...	76	77	18	24	4.1	31	44	2	5.9	72	59
16...	--	--	--	--	--	--	--	--	--	65	53
16...	--	--	--	--	--	--	--	--	--	65	53
21...	--	--	--	--	--	--	--	--	--	56	46
21...	--	--	--	--	--	--	--	--	--	55	45
23...	--	--	--	--	--	--	--	--	--	54	44
31...	--	--	--	--	--	--	--	--	--	76	62
AUG											
03-03	--	--	--	--	--	--	--	--	--	39	32
AUG											
03-03	--	--	--	--	--	--	--	--	--	35	29
06...	--	--	--	--	--	--	--	--	--	65	53
06...	--	--	--	--	--	--	--	--	--	65	53
AUG											
07-07	--	--	--	--	--	--	--	--	--	52	43
13...	--	--	--	--	--	--	--	--	--	76	62
21...	--	--	--	--	--	--	--	--	--	52	43
AUG											
21-22	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	73	60
SEP											
03...	--	--	--	--	--	--	--	--	--	73	60
09...	600	110	52	30	9.2	11	17	0.5	2.3	74	61
18...	--	--	--	--	--	--	--	--	--	78	64
25...	--	--	--	--	--	--	--	--	--	74	61

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

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
OCT										
09...	4.1	--	--	--	9.9	--	--	--	--	3.97
NOV										
04-05	3.6	--	--	--	7.0	--	--	--	--	2.07
19...	8.7		--	--	9.8		--	--	--	2.90
NOV										
22-24	2.8	--	--	--	6.5	--	--	--	--	1.77
NOV 29-										
DEC 01	2.2	--	--	--	8.0	--	--	--	--	1.68
18...	2.4	--	--	--	11	--	--	--	--	3.47
JAN										
13...	2.3	15	30	0.3	9.3	162	160	0.22	64	4.26
FEB										
18-20	3.7	--	--	--	8.8	--	--	--	--	1.87
28...	2.6	--	--	--	9.5	--	--	--	--	2.07
MAR										
10...	4.6	18	45	0.1	8.8	143	150	0.19	94	2.59
14...	3.4	--	--	--	8.0	--	--	--	--	2.65
APR										
03...	2.4	--	--	--	5.2	--	--	--	--	3.12
16...	5.4	--	--	--	5.7	--	--	--	--	2.24
17...	3.5	--	--	--	7.0	--	--	--	--	1.57
MAY										
07...	4.2	--	--	--	8.7	--	--	--	--	3.62
JUN										
11...	6.8	--	--	--	9.2	--	--	--	--	4.53
19...	5.7	--	--	--	10	--	--	--	--	5.07
19...	5.7	--	--	--	10	--	--	--	--	5.06
26...	4.0	--	--	--	8.4	--	--	--	--	5.53
JUL										
03...	3.4	--	--	--	7.5	--	--	--	--	4.34
07...	4.2	26	36	0.5	7.9	197	170	0.27	56	4.76
16...	3.8	--	--	--	8.6	--	--	--	--	4.25
16...	3.8	--	--	--	--	--	--	--	--	--
21...	2.8	--	--	--	6.8	--	--	--	--	3.40
21...	4.4	--	--	--	6.7	--	--	--	--	3.50
23...	3.7	--	--	--	8.9	--	--	--	--	2.75
31...	6.1	--	--	--	8.2	--	--	--	--	5.41
AUG										
03-03	3.1	--	--	--	5.7	--	--	--	--	2.88
AUG										
03-03	2.8	--	--	--	4.7	--	--	--	--	2.51
06...	3.5	--	--	--	9.1	--	--	--	--	3.84
06...	3.5	--	--	--	9.0	--	--	--	--	3.84
AUG										
07-07	2.6	--	--	--	6.9	--	--	--	--	3.60
13...	4.8	--	--	--	8.9	--	--	--	--	5.18
21...	2.4	--	--	--	7.0	--	--	--	--	1.84
AUG										
21-22	--	--	--	--	--	--	--	--	--	2.04
27...	4.6	--	--	--	8.5	--	--	--	--	4.90
SEP										
03...	4.6	--	--	--	7.6	--	--	--	--	5.29
09...	4.6	53	14	0.2	1.4	184	160	0.25	47	0.90
18...	3.0	--	--	--	7.2	--	--	--	--	5.85
25...	4.4	--	--	--	7.0	--	--	--	--	5.79

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT										
09...	--	0.13	0.43	4.10	--	1.00	1.3	--	0.9	1.7
NOV										
04-05	--	0.03	0.1	2.10	--	0.14	0.18	--	0.36	1.1
19...	--	0.10	0.33	3.00	0.66	0.68	0.88	1.0	0.32	1.7
NOV										
22-24	8.0	0.03	0.1	1.80	--	0.15	0.19	--	0.45	1.0
NOV 29-										
DEC 01	7.5	0.02	0.07	1.70	--	0.20	0.26	--	0.5	0.9
18...	15	0.03	0.1	3.50	--	0.94	1.2	--	0.76	1.7
JAN										
13...	19	0.04	0.13	4.30	1.40	1.40	1.8	0.6	1.0	2.0
FEB										
18-20	--	0.03	0.1	1.90	--	0.40	0.52	--	0.6	1.2
28...	--	0.03	0.1	2.10	--	0.47	0.61	--	0.33	0.9
MAR										
10...	--	0.11	0.36	2.70	0.59	0.58	0.75	0.41	0.52	1.0
14...	--	0.05	0.16	2.70	--	0.27	0.35	--	0.33	1.0
APR										
03...	--	0.08	0.26	3.20	--	0.45	0.58	--	0.45	1.0
16...	--	0.06	0.2	2.30	--	0.25	0.32	--	0.35	2.4
17...	--	0.03	0.1	1.60	--	0.21	0.27	--	0.39	1.1
MAY										
07...	--	0.18	0.59	3.80	0.78	0.73	0.94	0.92	--	1.7
JUN										
11...	--	0.37	1.2	4.90	--	0.38	0.49	--	0.62	1.2
19...	--	0.33	1.1	5.40	--	0.56	0.72	--	0.74	1.7
19...	--	0.34	1.1	5.40	--	0.58	0.75	--	0.72	1.3
26...	--	0.37	1.2	5.90	--	0.52	0.67	--	0.88	1.9
JUL										
03...	--	0.16	0.53	4.50	--	0.33	0.43	--	0.67	1.0
07...	--	0.44	1.4	5.20	0.76	0.76	0.98	1.0	0.94	1.8
16...	--	0.35	1.2	4.60	--	0.44	0.57	--	0.66	1.3
16...	--	--	--	--	--	--	--	--	--	--
21...	--	0.10	0.33	3.50	--	0.22	0.28	--	0.38	1.0
21...	--	0.10	0.33	3.60	--	0.17	0.22	--	0.53	1.0
23...	--	0.25	0.82	3.00	--	0.64	0.82	--	0.66	1.5
31...	--	0.39	1.3	5.80	--	0.56	0.72	--	0.64	1.5
AUG										
03-03	--	0.22	0.72	3.10	--	0.33	0.43	--	0.77	1.6
AUG										
03-03	--	0.09	0.3	2.60	--	0.16	0.21	--	0.54	1.2
06...	--	0.26	0.85	4.10	--	0.66	0.85	--	0.74	1.4
06...	--	0.26	0.85	4.10	--	0.66	0.85	--	0.84	1.5
AUG										
07-07	--	0.10	0.33	3.70	--	0.17	0.22	--	0.73	1.6
13...	--	0.32	1.1	5.50	--	0.66	0.85	--	0.74	2.0
21...	--	0.06	0.2	1.90	--	0.19	0.24	--	0.41	0.9
AUG										
21-22	--	0.06	0.2	2.10	--	0.17	0.22	--	0.43	1.4
27...	--	0.30	0.99	5.20	--	0.76	0.98	--	0.84	1.6
SEP										
03...	--	0.21	0.69	5.50	--	0.61	0.79	--	0.69	1.8
09...	--	0.09	0.3	0.99	0.10	0.10	0.13	0.6	1.6	0.7
18...	--	0.25	0.82	6.10	--	0.65	0.84	--	0.75	1.8
25...	--	0.31	1.0	6.10	--	0.43	0.55	--	0.87	1.3

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
09...	1.9	0.0	6.0	0.59	1.8	0.44	0.41	1.3	20	4.1
NOV										
04-05	0.5	0.6	2.6	0.61	1.9	0.18	0.16	0.49	40	13
19...	1.0	--	--	0.43	1.3	0.24	0.16	0.49	20	4.7
NOV										
22-24	0.6	0.4	2.4	0.34	1.0	0.08	0.08	0.25	90	11
NOV 29-										
DEC 01	0.7	0.2	2.4	0.31	0.95	0.11	0.08	0.25	80	10
18...	1.7	0.0	5.2	0.25	0.77	0.14	0.12	0.37	30	4.2
JAN										
13...	2.4	--	--	0.45	1.4	0.24	0.22	0.67	<100	4.2
FEB										
18-20	1.0	--	--	0.16	--	0.06	0.05	0.15	40	--
28...	0.8	--	--	0.13	--	0.04	0.02	0.06	30	--
MAR										
10...	1.1	--	--	0.26	--	0.10	0.09	0.28	20	4.7
14...	0.6	--	--	0.18	--	0.06	0.04	0.12	20	4.3
APR										
03...	0.9	--	--	0.21	--	0.08	0.07	0.21	<10	5.4
16...	0.6	--	--	0.69	--	0.03	0.02	0.06	30	18
17...	0.6	--	--	0.15	--	0.03	0.02	0.06	50	10
MAY										
07...	--	--	--	0.30	--	0.11	0.09	0.28	10	5.2
JUN										
11...	1.0	--	--	0.36	--	0.26	0.21	0.64	10	9.7
19...	1.3	--	--	0.39	--	0.20	0.17	0.52	10	5.0
19...	1.3	--	--	0.40	--	0.20	0.17	0.52	20	5.0
26...	1.4	--	--	0.35	--	0.17	0.43	1.3	<10	6.9
JUL										
03...	1.0	--	--	0.24	--	0.14	0.13	0.4	<10	7.0
07...	1.7	--	--	0.31	--	0.21	0.20	0.61	20	5.1
16...	1.1	--	--	0.37	--	0.27	0.25	0.77	20	5.1
16...	--	--	--	--	--	--	--	--	--	--
21...	0.6	--	--	0.26	--	0.12	0.12	0.37	50	8.5
21...	0.7	--	--	0.24	--	0.13	0.12	0.37	20	8.0
23...	1.3	--	--	0.25	--	0.09	<0.01	--	<10	7.3
31...	1.2	--	--	0.32	--	0.15	0.14	0.43	<10	7.7
AUG										
03-03	1.1	--	--	0.94	--	0.11	0.09	0.28	20	12
AUG										
03-03	0.7	--	--	0.52	--	0.04	0.03	0.09	70	14
06...	1.4	--	--	0.31	--	0.17	0.14	0.43	<10	6.1
06...	1.5	--	--	0.33	--	0.15	0.13	0.4	<10	6.4
AUG										
07-07	0.9	--	--	0.43	--	0.12	0.11	0.34	30	8.8
13...	1.4	--	--	0.47	--	0.21	0.18	0.55	20	6.3
21...	0.6	--	--	0.37	--	0.07	0.06	0.18	40	8.3
AUG										
21-22	0.6	--	--	0.44	--	0.08	0.07	0.21	--	--
27...	1.6	--	--	0.17	--	0.07	0.07	0.21	20	15
SEP										
03...	1.3	--	--	0.27	--	0.11	0.11	0.34	10	5.5
09...	1.7	--	--	0.05	--	0.02	<0.01	--	10	5.1
18...	1.4	--	--	0.40	--	0.31	0.26	0.8	30	4.1
25...	1.3	--	--	0.48	--	0.22	0.16	0.49	20	6.2

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV										
19...	<1	26	<0.5	<1	<1	<3	2	68	<1	7
MAR										
10...	<1	33	<0.5	<1	4	<3	6	81	3	<4
APR										
03...	--	--	--	--	--	--	--	--	--	--
JUN										
19...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
SEP										
09...	<1	35	<0.5	<1	<1	<3	1	4	<5	9

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
19...	140	--	<10	11	<1	<1	81	<6	18
MAR									
10...	180	--	<10	4	<1	<1	80	<6	35
APR									
03...	--	--	--	--	--	--	--	<1	--
JUN									
19...	--	--	--	--	--	--	--	<1	--
26...	--	--	--	--	--	--	--	<1	--
SEP									
09...	5	<0.1	10	2	<1	<1	160	<6	12

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM % FINER THAN .062 MM
OCT					
03...	1410	492	86	114	--
03...	1900	424	127	145	--
04...	1300	262	97	69	--
09...	1030	131	13	4.6	--
NOV					
04-05	1500	632	101	172	84
19...	1030	165	13	5.8	--
22...	1430	323	56	49	--
NOV					
22-24	1430	643	56	97	--
23...	0600	956	58	150	--
23...	1400	1070	106	305	--
23...	1630	992	41	110	--
24...	0445	426	24	28	--
NOV 29-					
DEC 01	0400	754	60	122	--
NOV					
29...	1045	613	60	99	--
29...	1745	918	105	260	--
29...	2315	984	63	167	--
30...	0530	767	75	155	--
30...	1400	610	48	79	--
30...	2230	698	51	96	--
DEC					
01...	1230	820	49	108	--
01...	1930	742	38	76	--
02...	0400	545	38	56	--
02...	1515	428	63	73	--
02...	2210	376	12	12	--
12...	0945	176	4	1.9	--
14...	0115	332	22	20	--
14...	0730	407	18	20	--
14...	1445	368	18	18	--
14...	1745	338	13	12	--
18...	1030	174	21	9.9	65
JAN					
13...	1130	147	5	2.0	94
26...	0730	457	58	72	--
26...	1210	666	52	94	--
26...	1550	783	69	146	--
26...	1900	899	102	248	--
26...	2150	1030	76	211	--
27...	0610	1420	41	158	--
27...	0810	1430	39	151	--
27...	1010	1390	39	146	--
27...	1640	1130	28	85	--
27...	1950	976	25	66	--
27...	2220	851	21	48	--
FEB					
04...	1300	378	47	48	--
FEB					
04-06	1300	669	48	87	--
04...	2230	764	91	188	--
05...	0500	929	81	203	--
05...	1100	968	97	254	--
05...	1700	851	63	145	--
06...	1100	484	26	34	--
06...	2350	384	23	24	--
07...	0730	366	16	16	--
FEB					
18-20	1300	826	82	183	--
18...	1830	590	82	131	--
19...	1035	1130	142	431	--
19...	1250	1140	120	370	--
20...	0010	816	69	152	--
20...	0745	720	42	82	--
20...	1050	751	100	203	--
20...	1340	790	93	198	--
20...	1700	797	63	135	--
21...	0600	535	56	81	--
21...	1750	428	31	36	--
22...	0645	481	68	88	--
22...	1850	401	17	18	--
23...	0950	357	19	18	--
23...	2330	440	18	21	--
24...	0530	479	18	23	--
24...	1120	462	14	17	--
25...	0045	388	11	12	--
25...	1420	430	17	20	--
26...	0300	432	10	12	--
28...	1100	391	18	19	88
28...	1340	391	597	631	--
MAR					
10...	1100	243	18	12	92
14...	1230	322	24	21	--
APR					
03...	1230	172	15	7.0	--
16...	1045	735	550	1090	--
17...	1045	1010	33	90	--
MAY					
07...	1030	169	30	14	--
07...	1035	168	30	14	--
JUN					
11...	0900	142	25	9.6	--
19...	1000	123	21	7.0	--
19...	1005	123	22	7.3	--
26...	1100	109	42	12	--
JUL					
03...	1105	216	40	23	--
07...	1200	76	17	3.5	92
16...	0950	106	14	4.0	--
16...	1200	103	13	3.6	--
16...	1202	103	8	2.2	--
21...	1300	442	152	181	--
21...	1305	442	127	152	--
23...	1120	122	29	9.6	--
31...	0950	91	16	3.9	--
31...	1000	93	20	5.0	--
AUG					
03-03	0200	464	208	260	--
03...	0500	488	222	293	--
03...	0545	466	384	483	--
03...	0600	458	679	839	--
AUG					
03-03	0645	418	526	593	--
03...	0730	399	1110	1200	--
03...	0830	388	649	679	--
03...	1000	403	545	594	--
03...	1130	430	426	494	--
03...	1230	438	299	354	--
06...	1100	104	29	8.1	--
06...	1105	104	29	8.1	--
AUG					
07-07	1100	277	129	96	--
08...	2345	296	130	104	--
13...	0850	97	32	8.4	--
13...	0940	95	22	5.7	--
18...	1530	222	77	46	--
21...	0610	248	71	47	--
21...	1320	291	165	130	--
21...	1400	280	95	72	--
21...	1600	378	108	110	--
27...	1045	91	18	4.4	--
27...	1050	90	11	2.7	--
SEP					
03...	0855	134	20	7.3	--
03...	0900	138	24	8.9	--
18...	1130	80	7	1.5	--
25...	1100	93	40	10	--

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	287	193	282	392	204	255	247	329	346	346	327
2	280	284	210	268	393	280	267	247	201	348	344	311
3	209	284	228	279	317	285	288	253	202	306	269	305
4	251	209	---	267	305	276	295	244	352	301	239	294
5	251	208	---	272	290	276	305	251	354	324	276	319
6	258	218	260	281	289	276	262	280	359	348	321	327
7	264	242	248	283	273	281	160	290	359	357	299	335
8	275	262	253	289	436	266	276	308	349	---	250	335
9	291	---	260	313	601	276	290	310	308	358	245	331
10	298	278	267	306	590	165	272	297	324	372	295	336
11	301	268	263	289	424	272	291	292	210	377	317	360
12	289	265	243	281	515	269	292	288	342	360	335	360
13	303	---	258	275	690	271	281	291	208	360	331	353
14	298	218	235	263	593	284	178	303	166	365	347	356
15	292	264	223	281	502	208	180	317	313	302	360	349
16	290	277	240	283	528	281	207	316	326	320	352	353
17	276	269	266	289	753	257	186	308	332	325	331	349
18	286	254	260	272	612	165	192	301	357	362	303	354
19	297	259	268	264	430	250	209	288	362	277	252	355
20	288	271	294	285	330	253	237	280	331	314	295	357
21	286	282	296	297	309	235	234	287	330	221	246	357
22	218	206	292	286	340	243	231	271	345	246	251	355
23	212	183	304	286	324	250	223	299	333	280	260	363
24	241	209	290	279	554	240	229	292	338	338	284	343
25	267	232	279	270	260	243	232	304	355	352	313	343
26	275	254	326	412	653	249	235	292	374	355	317	341
27	277	265	334	221	321	233	232	302	330	358	331	353
28	272	267	331	240	392	257	234	300	360	350	313	348
29	283	288	294	282	---	246	243	312	360	350	---	339
30	298	180	246	308	---	251	220	319	360	335	322	336
31	294	---	281	349	---	245	---	198	---	353	326	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	14.0	9.5	4.0	3.5	4.0	17.0	20.0	25.0	22.5	26.0	19.0
2	18.0	14.0	9.5	4.0	6.0	4.5	17.0	17.0	23.5	23.5	26.0	19.5
3	17.0	14.0	6.5	5.5	6.0	5.0	16.0	16.5	20.5	24.0	24.5	21.0
4	18.0	16.0	5.0	5.0	4.5	5.5	16.0	15.0	21.0	23.5	25.5	22.0
5	18.0	14.0	5.0	5.0	5.5	6.0	14.5	17.5	23.0	25.0	25.0	22.0
6	17.0	14.0	6.0	4.0	6.0	6.5	12.5	20.0	24.5	26.0	25.5	23.0
7	15.0	13.0	6.5	2.5	5.0	4.5	15.0	22.0	24.5	---	25.0	22.0
8	16.0	12.0	6.0	1.0	3.5	3.5	16.0	22.0	25.0	---	25.5	21.0
9	16.0	---	6.0	2.0	4.0	6.0	14.0	20.0	24.5	26.0	25.5	19.5
10	17.5	15.0	8.0	3.0	4.5	10.0	12.0	19.0	23.5	26.0	26.0	19.0
11	18.0	14.5	9.0	3.0	1.5	13.0	11.0	17.0	25.0	25.0	25.5	21.5
12	16.0	14.5	10.0	4.0	2.0	9.5	13.5	18.0	25.0	26.0	24.0	22.5
13	18.0	---	9.0	.0	1.5	8.0	12.5	17.5	25.0	26.0	23.5	23.0
14	18.5	17.0	5.0	.0	1.0	10.0	14.0	16.0	25.0	26.5	24.0	20.5
15	19.0	15.0	4.0	1.0	2.0	11.0	13.0	16.5	25.0	25.5	24.5	20.5
16	18.5	13.0	4.0	2.0	3.0	11.5	11.5	18.5	25.0	25.5	25.5	20.5
17	16.5	13.0	4.5	3.0	5.0	10.5	11.0	21.0	25.0	25.5	25.0	18.0
18	16.0	13.0	3.0	6.5	4.5	10.0	13.5	23.0	23.0	27.0	25.5	17.5
19	17.0	14.5	1.0	8.0	5.0	14.0	16.0	23.0	22.0	26.5	24.5	19.5
20	17.0	16.0	1.0	6.0	5.0	11.0	16.0	22.0	23.0	26.0	23.5	20.5
21	15.0	14.0	1.0	6.0	7.0	8.0	16.0	21.0	23.0	27.0	22.0	21.5
22	15.0	10.0	1.0	7.0	5.0	7.0	13.0	20.5	24.0	27.0	23.0	21.0
23	16.0	8.5	3.5	6.0	5.0	9.0	13.0	20.0	24.0	26.0	24.0	22.0
24	17.0	9.0	5.0	4.0	4.0	10.0	14.0	20.5	24.0	27.0	23.0	23.0
25	17.5	8.5	4.0	4.0	3.0	12.0	13.5	21.0	23.0	27.0	21.0	23.5
26	15.5	10.0	.0	4.0	4.0	13.0	15.5	21.5	22.5	---	22.0	23.5
27	15.0	11.0	2.0	2.0	3.0	14.0	18.0	20.0	23.5	27.5	23.5	23.5
28	13.5	11.0	3.0	1.0	3.0	12.0	19.5	22.0	24.5	27.5	21.0	22.0
29	11.0	9.5	3.5	1.0	---	13.5	19.0	23.0	26.0	28.0	---	22.0
30	16.0	9.5	3.0	1.0	---	15.5	18.5	24.0	25.0	26.0	18.0	24.0
31	13.0	---	3.0	2.0	---	16.5	---	25.0	---	25.5	18.0	---

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25	9.1	20	7.0	65	135	19	8.0	14	7.2	22	22
2	108	36	23	7.9	56	70	25	9.9	20	11	16	15
3	157	169	17	6.1	14	11	20	8.4	22	12	13	11
4	127	94	250	278	2	1.3	9	3.9	83	114	28	22
5	55	28	228	452	2	1.1	10	4.3	102	242	28	24
6	39	15	44	65	4	2.2	34	14	51	66	15	11
7	26	9.1	20	13	11	5.9	44	18	30	29	16	11
8	24	7.6	39	20	14	7.2	52	18	22	17	28	18
9	20	6.1	58	26	10	5.0	30	11	19	14	20	13
10	36	11	42	18	16	7.6	21	8.1	18	13	20	13
11	16	4.8	40	17	50	24	17	6.7	26	19	20	13
12	16	4.7	59	24	24	11	16	6.0	24	17	16	11
13	21	6.0	54	22	18	11	13	5.1	16	9.5	17	11
14	18	5.2	21	9.8	49	48	12	4.3	51	27	12	10
15	13	4.1	42	17	27	17	23	8.1	30	17	85	154
16	24	9.8	35	14	14	7.3	32	11	12	6.8	69	111
17	34	12	21	12	8	4.0	40	15	16	9.4	48	55
18	22	6.7	62	33	16	7.6	22	8.3	75	97	58	48
19	9	2.6	51	23	6	2.5	20	8.5	187	512	26	20
20	7	2.1	47	20	12	4.9	107	76	111	226	26	20
21	79	41	27	11	42	18	79	49	71	93	34	24
22	104	117	60	67	28	12	26	12	56	66	26	18
23	68	34	88	223	20	9.0	37	16	38	39	23	16
24	40	21	50	45	12	5.4	19	7.8	33	40	31	22
25	23	11	54	33	8	3.8	12	5.0	27	30	22	14
26	28	12	25	13	4	1.7	159	358	19	20	32	20
27	18	7.2	27	14	11	4.2	181	610	20	20	32	20
28	16	5.7	24	13	23	10	38	48	14	15	40	25
29	29	10	109	218	25	10	39	24	---	---	35	22
30	20	6.7	74	141	33	13	37	21	---	---	32	20
31	22	7.4	---	---	23	9.1	15	8.0	---	---	35	21
TOTAL	---	715.9	---	1862.8	---	479.8	---	1411.4	---	1788.9	---	835
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21	12	44	25	48	17	39	8.3	50	9.6	25	4.5
2	21	11	104	56	85	29	30	7.9	104	26	68	15
3	32	15	64	33	72	24	63	29	249	253	125	36
4	50	22	40	20	116	38	50	14	63	25	78	18
5	28	13	26	13	80	26	58	13	70	18	100	21
6	68	70	20	8.7	34	11	32	7.0	60	14	95	19
7	47	44	58	22	27	8.6	37	7.8	157	92	125	24
8	85	57	70	26	23	7.3	22	4.5	127	51	60	12
9	54	30	38	14	82	28	38	8.0	78	32	24	4.5
10	22	11	78	28	53	16	24	5.2	50	13	125	22
11	11	5.3	73	26	49	15	87	19	25	5.5	98	17
12	25	12	40	14	57	18	66	14	70	15	55	9.5
13	22	10	44	15	120	124	125	27	110	23	55	9.2
14	28	13	60	22	51	21	71	24	115	24	71	12
15	25	11	90	34	34	10	65	19	75	15	65	10
16	373	903	51	20	24	6.7	79	17	172	33	50	7.8
17	240	723	59	23	24	6.4	283	71	103	25	48	7.3
18	76	212	90	39	30	7.6	78	19	164	78	60	9.1
19	47	98	32	13	44	11	87	35	125	42	50	7.6
20	32	31	29	13	50	13	125	47	103	31	65	10
21	30	25	81	40	92	31	285	272	160	128	82	13
22	35	30	76	39	82	21	90	38	163	138	40	6.4
23	27	24	73	33	63	15	205	55	45	16	75	12
24	23	17	178	71	100	23	160	37	85	22	98	15
25	37	25	70	27	107	25	135	30	78	17	80	13
26	96	64	22	8.3	75	17	78	16	48	9.6	70	11
27	51	33	50	18	44	9.6	70	15	45	8.6	55	8.9
28	40	25	42	16	95	21	68	14	63	15	65	10
29	62	42	40	15	37	9.0	130	26	50	14	55	8.8
30	123	113	20	7.3	36	8.6	75	16	50	11	125	20
31	---	---	14	5.1	---	---	58	12	45	8.5	---	---
TOTAL	---	2701.3	---	744.4	---	617.8	---	927.7	---	1212.8	---	393.6

TOTAL LOAD FOR YEAR: 13691.4 TONS.

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD

WATER-QUALITY RECORDS

LOCATION.--Lat 38°48'52", long 76°44'53", Prince Georges County, Hydrologic Unit 02060006, on right bank 1000 ft upstream from bridge on Water Street, 0.2 mi south of Upper Marlboro, and 4.7 mi upstrem from mouth.

DRAINAGE AREA.--79.1 mi².

PERIOD OF RECORD.--October 1985 to September 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAY						
15...	1100	20	305	14.5	38	2.1
JUN						
11...	1030	5.4	340	22.0	24	0.35
JUL						
16...	0930	3.3	278	23.0	22	0.19

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD

LOCATION.--Lat 39°14'37", long 79°25'43", Garrett County, Hydrologic Unit 02070002, on left bank at downstream side of bridge (abandoned) on Dobbin Road, 0.6 mi south of intersection of Kempton Road, 1.2 mi from mouth, and 3.0 mi southwest of Wilson.

DRAINAGE AREA.--8.23 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1980 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 2,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 26 to Nov. 8, Dec. 26 to Jan. 18, and Feb. 13-16. Water-discharge records good except those for periods with ice effect, Dec. 29 to Jan. 18 and Feb. 13-16, and periods of no gage-height record, Oct. 26 to Nov. 8 and Dec. 26-28, which are fair. Natural flow of stream affected by inflow from deep coal mine dewatering process.

AVERAGE DISCHARGE.--6 years, 25.7 ft³/s, 42.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 863 ft³/s, Nov. 5, 1985, gage height, 10.10 ft, from rating curve extended above 450 ft³/s on basis of runoff comparisons with nearby stations; minimum discharge, 3.2 ft³/s, Sept. 26, 1982.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 170 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	0815	251	4.14	Feb. 17	1815	174	3.76
Nov. 5	0100	*863	*10.10	Feb. 19	1445	441	5.80
Nov. 28	2030	343	5.05	Mar. 11	0345	298	4.70
Feb. 4	1645	244	4.31	Mar. 14	2345	328	4.94
Feb. 5	1345	259	4.42	July 9	1730	210	4.05

Minimum discharge, 3.9 ft³/s, Sept. 16, 17, gage height, 1.42 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	16	48	12	21	19	9.6	20	8.7	10	7.3	4.7
2	5.5	23	40	11	31	17	9.3	18	8.9	28	6.7	4.7
3	4.9	40	31	11	44	16	9.0	16	8.0	28	6.3	4.7
4	5.5	800	27	11	182	15	8.5	15	7.6	18	6.0	4.7
5	5.5	420	25	11	223	14	9.2	14	7.4	15	5.9	4.8
6	5.4	180	24	10	130	13	15	13	7.2	13	6.8	4.6
7	5.5	92	22	10	70	14	26	14	7.3	11	6.9	4.4
8	5.9	68	21	10	46	15	20	12	8.7	10	14	4.3
9	6.1	38	21	10	36	16	20	11	7.2	74	11	4.3
10	6.2	32	22	10	30	62	21	10	6.6	51	7.6	4.3
11	6.4	29	25	9.8	28	181	21	9.6	8.1	29	9.0	4.3
12	6.1	26	61	9.8	25	63	35	9.1	8.4	28	6.9	5.2
13	6.9	31	110	9.6	23	32	42	11	7.4	24	6.3	4.7
14	7.2	33	77	9.6	20	117	37	17	6.8	27	6.1	4.4
15	9.8	27	46	9.6	17	179	44	12	6.4	20	5.8	4.4
16	7.6	29	35	9.5	16	69	61	11	7.9	19	5.6	4.4
17	6.4	31	29	9.5	68	43	45	9.8	8.2	30	6.5	4.1
18	6.3	25	26	9.4	106	33	45	9.4	6.3	27	5.7	4.4
19	6.9	23	36	49	242	28	40	11	6.0	22	5.5	5.8
20	51	21	27	66	168	24	34	29	11	22	5.0	4.9
21	163	20	26	40	107	21	32	24	7.7	21	5.2	4.7
22	81	52	24	38	68	19	35	21	6.6	16	5.3	4.7
23	40	39	20	36	45	17	30	18	6.4	14	5.2	5.5
24	29	31	17	31	36	16	27	16	9.5	13	6.9	7.6
25	24	30	15	27	30	14	25	14	6.7	11	5.2	9.5
26	19	33	15	25	26	13	23	12	6.0	12	4.7	9.0
27	16	66	14	23	24	15	21	13	5.9	12	5.1	18
28	14	231	14	31	21	13	20	13	15	9.6	6.0	11
29	13	166	13	25	---	12	26	11	15	9.0	5.1	8.4
30	12	72	13	23	---	11	21	9.7	9.9	8.2	4.8	7.3
31	11	---	12	22	---	10	---	9.7	---	7.8	4.6	---
TOTAL	591.5	2724	936	618.8	1883	1151	811.6	433.3	242.8	639.6	199.0	177.8
MEAN	19.1	90.8	30.2	20.0	67.3	37.1	27.1	14.0	8.09	20.6	6.42	5.93
MAX	163	800	110	66	242	181	61	29	15	74	14	18
MIN	4.4	16	12	9.4	16	10	8.5	9.1	5.9	7.8	4.6	4.1
CFSM	2.32	11.0	3.67	2.43	8.18	4.51	3.29	1.70	.98	2.50	.78	.72
IN.	2.67	12.31	4.23	2.80	8.51	5.20	3.67	1.96	1.10	2.89	.90	.80

CAL YR 1985 TOTAL 11619.8 MEAN 31.8 MAX 800 MIN 3.4 CFSM 3.86 IN 52.52
WTR YR 1986 TOTAL 10408.4 MEAN 28.5 MAX 800 MIN 4.1 CFSM 3.46 IN 47.04

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to current year.
pH: May 1984 to current year.
WATER TEMPERATURE: October 1980 to current year.

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

REMARKS.--All periods of missing record due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1984-86): Maximum, 1,590 microsiemens, Sept. 14, 1984; minimum, 106 microsiemens, Nov.29, 1984.
WATER TEMPERATURE (water years 1984-86): Maximum, 22.5°C, Aug. 9, 10, 1984; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,340 microsiemens, Oct. 11; minimum, 128 microsiemens, Nov. 28.
WATER TEMPERATURE: Maximum, 22.0°C, July 8, 9; minimum, 0.0°C on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	926	848	865
2	---	---	---	---	---	---	---	---	---	933	883	911
3	1240	1190	1210	---	---	---	---	---	---	937	919	931
4	1240	1210	1220	---	---	---	---	---	---	928	903	913
5	1290	1230	1250	---	---	---	---	---	---	930	864	908
6	1300	1280	1290	---	---	---	---	---	---	1010	838	916
7	1310	1280	1290	---	---	---	---	---	---	961	941	951
8	1300	1280	1290	---	---	---	---	---	---	1060	941	994
9	1320	1300	1310	503	416	461	---	---	---	1110	1000	1050
10	1330	1310	1320	559	494	527	---	---	---	1040	1010	1020
11	1340	1320	1330	571	545	558	---	---	---	1020	1010	1020
12	1330	1310	1320	599	564	587	---	---	---	1020	993	1010
13	1320	1300	1310	597	571	589	---	---	---	993	963	971
14	1330	1300	1310	573	535	548	---	---	---	1060	953	996
15	1300	1040	1220	535	519	524	---	---	---	1050	1010	1020
16	1060	1030	1050	519	495	503	---	---	---	1050	1030	1040
17	1160	1060	1110	495	453	466	---	---	---	1030	974	1020
18	1210	1170	1190	458	422	441	---	---	---	974	567	772
19	1230	1210	1230	494	448	464	780	560	660	567	278	428
20	1240	404	891	522	484	500	761	696	729	307	254	265
21	404	168	249	576	512	539	791	731	757	418	319	379
22	204	168	185	584	240	397	897	687	799	445	378	424
23	286	204	240	302	240	269	815	793	806	431	373	398
24	352	286	319	366	300	333	834	815	828	487	431	456
25	396	352	375	388	364	375	842	812	824	544	487	516
26	460	396	420	376	346	362	1000	746	862	578	544	558
27	538	460	504	346	216	262	941	925	930	613	578	595
28	606	538	562	216	128	164	947	913	930	667	612	629
29	652	610	632	168	144	155	956	946	952	701	667	684
30	---	---	---	---	---	---	1080	822	967	741	701	719
31	---	---	---	---	---	---	1000	926	983	791	741	767
MONTH	1340	168	949							1110	254	778

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	821	791	809	552	524	537	857	832	845	568	515	537
2	824	585	731	578	552	565	876	840	860	613	542	563
3	578	448	505	600	578	591	913	851	881	653	594	616
4	448	241	319	618	600	611	934	878	903	685	630	655
5	254	221	243	633	618	626	933	813	893	722	662	690
6	275	223	249	640	633	636	818	496	705	756	709	731
7	312	275	294	641	635	638	496	350	390	764	687	716
8	344	312	330	664	638	649	505	429	457	799	728	766
9	361	344	352	711	668	689	512	441	476	869	812	846
10	405	361	383	717	580	681	442	416	428	883	847	866
11	433	405	420	566	397	455	440	420	428	947	883	922
12	460	433	449	395	382	388	427	224	364	984	937	959
13	517	460	481	422	394	402	251	205	231	1020	823	964
14	597	517	554	445	338	426	286	231	252	823	599	659
15	663	597	634	338	302	311	300	199	280	795	643	724
16	701	663	685	348	320	334	219	179	202	872	795	846
17	713	545	676	386	348	366	234	218	227	924	872	909
18	545	391	451	415	386	397	251	234	243	949	918	936
19	391	202	306	462	415	437	285	235	257	953	777	920
20	232	208	222	490	462	478	320	282	297	696	350	422
21	249	230	242	524	490	501	333	317	321	450	425	435
22	298	247	271	571	524	546	334	303	316	530	450	486
23	351	298	323	606	571	590	352	313	332	589	530	553
24	398	351	376	647	606	628	400	351	367	643	589	615
25	439	398	418	679	647	660	419	380	395	701	643	677
26	471	439	454	720	679	703	463	415	429	750	701	734
27	499	471	485	753	720	738	515	447	471	785	750	775
28	524	499	509	759	748	753	542	491	513	786	756	773
29	---	---	---	763	751	756	530	376	432	760	753	755
30	---	---	---	793	763	778	549	478	498	796	759	770
31	---	---	---	828	793	811	---	---	---	818	758	785
MONTH	824	202	435	828	302	570	934	179	456	1020	350	729
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	851	801	830	676	602	651	886	846	865	1150	1130	1140
2	885	826	856	670	317	480	946	886	922	1150	1100	1120
3	875	826	849	394	306	328	974	944	960	1150	1110	1130
4	952	875	917	536	402	451	1010	974	992	1150	1140	1150
5	954	913	938	654	536	582	1040	1010	1020	1140	1130	1140
6	985	935	970	742	664	697	1050	1020	1040	1140	1120	1130
7	1000	982	994	822	742	788	1020	926	960	1190	1140	1160
8	991	869	937	886	822	864	988	584	784	1200	1160	1180
9	927	868	889	946	230	601	660	578	615	1200	1180	1190
10	1000	925	974	260	218	229	768	660	718	1210	1190	1200
11	1010	916	972	296	260	285	794	732	764	1220	1200	1210
12	916	839	870	332	296	309	814	748	785	1210	1190	1200
13	887	854	870	388	332	370	894	814	864	1190	1150	1170
14	930	886	906	380	356	366	948	894	923	1190	1160	1180
15	976	924	949	416	374	395	984	948	964	1210	1190	1200
16	972	893	926	486	416	454	1020	980	998	1230	1190	1210
17	903	857	883	410	344	382	1030	1010	1020	1250	1230	1240
18	937	856	886	360	332	342	1000	890	960	1250	1240	1250
19	1010	935	967	408	360	387	1050	1000	1030	1230	1110	1180
20	1010	801	939	408	390	398	1100	972	1050	1110	1100	1110
21	789	744	758	410	396	404	1100	1080	1090	1150	1110	1130
22	874	762	819	436	406	421	1090	1060	1080	1180	1150	1170
23	955	874	909	480	434	461	1100	922	1050	1200	1180	1190
24	951	797	871	530	480	507	1080	976	1000	1190	1150	1170
25	834	773	793	594	530	568	1020	978	993	1150	1010	1060
26	934	832	881	618	594	608	1100	1020	1050	1020	947	995
27	971	932	948	612	596	601	1130	1100	1110	947	564	681
28	965	622	831	716	612	680	1110	1010	1050	611	556	587
29	622	541	574	778	716	753	1040	986	1020	710	611	660
30	601	539	563	830	778	808	1100	1030	1060	820	705	762
31	---	---	---	846	830	839	1140	1100	1110	---	---	---
MONTH	1010	539	876	946	218	516	1140	578	963	1250	556	1100

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD, Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	3.3	3.3	3.3
2							---	---	---	3.3	3.3	3.3
3							---	---	---	3.3	3.3	3.3
4							---	---	---	3.3	3.3	3.3
5							---	---	---	3.3	3.3	3.3
6							---	---	---	3.3	3.2	3.3
7							---	---	---	3.3	3.3	3.3
8							---	---	---	3.3	3.3	3.3
9							---	---	---	3.3	3.2	3.2
10							---	---	---	3.3	3.2	3.3
11							---	---	---	3.3	3.2	3.2
12							---	---	---	3.3	3.2	3.2
13							---	---	---	3.3	3.3	3.3
14							---	---	---	3.3	3.2	3.3
15							---	---	---	3.3	3.2	3.2
16							---	---	---	3.3	3.2	3.2
17							---	---	---	3.3	3.2	3.3
18							3.5	3.4	3.4	3.4	3.3	3.3
19							3.5	3.3	3.4	3.8	3.4	3.5
20							3.4	3.3	3.4	3.8	3.8	3.8
21							3.4	3.3	3.4	3.8	3.6	3.7
22							3.4	3.3	3.3	3.8	3.7	3.7
23							3.4	3.3	3.3	3.8	3.7	3.7
24							3.3	3.3	3.3	3.7	3.6	3.7
25							3.3	3.3	3.3	3.6	3.6	3.6
26							3.4	3.2	3.3	3.6	3.6	3.6
27							3.3	3.3	3.3	3.6	3.5	3.6
28							3.3	3.3	3.3	3.6	3.5	3.5
29							3.3	3.2	3.3	3.5	3.5	3.5
30							3.3	3.2	3.2	3.5	3.5	3.5
31							3.3	3.2	3.3	3.5	3.4	3.4
MONTH										3.8	3.2	3.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.6	3.4	3.5	3.8	3.7	3.7	3.7	3.6	3.6	3.5	3.4	3.5
2	3.9	3.6	3.7	3.7	3.7	3.7	3.6	3.5	3.6	3.5	3.4	3.5
3	4.0	3.9	3.9	3.8	3.7	3.7	3.6	3.4	3.5	3.5	3.3	3.4
4	4.2	3.7	3.9	3.8	3.7	3.8	3.6	3.5	3.6	3.5	3.3	3.4
5	4.1	3.8	4.0	3.8	3.8	3.8	3.6	3.5	3.5	3.5	3.4	3.4
6	4.1	3.9	4.0	3.8	3.8	3.8	3.7	3.6	3.6	3.4	3.4	3.4
7	4.0	3.9	4.0	3.8	3.7	3.8	3.8	3.7	3.8	3.4	3.4	3.4
8	4.0	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.7	3.4	3.3	3.4
9	3.9	3.8	3.8	3.8	3.7	3.7	3.7	3.6	3.6	3.3	3.3	3.3
10	3.8	3.8	3.8	4.0	3.8	3.9	3.7	3.6	3.6	3.3	3.2	3.3
11	3.8	3.7	3.7	3.9	3.9	3.9	3.7	3.7	3.7	3.3	3.2	3.3
12	3.7	3.7	3.7	4.1	3.9	3.9	3.9	3.7	3.8	3.3	3.2	3.3
13	3.7	3.6	3.7	4.1	4.1	4.1	3.9	3.9	3.9	3.3	3.2	3.2
14	3.7	3.6	3.7	4.2	4.0	4.1	3.9	3.9	3.9	3.4	3.3	3.4
15	3.7	3.6	3.7	4.1	4.0	4.1	4.0	3.8	3.8	3.4	3.3	3.4
16	3.7	3.6	3.7	4.2	4.1	4.1	4.0	3.9	4.0	3.3	3.3	3.3
17	3.9	3.7	3.7	4.1	4.0	4.1	3.9	3.9	3.9	3.3	3.3	3.3
18	3.9	3.8	3.8	4.0	4.0	4.0	4.0	3.9	3.9	3.3	3.2	3.3
19	4.2	3.8	3.9	4.0	3.9	4.0	3.9	3.8	3.9	3.3	3.2	3.3
20	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.5	3.3	3.5
21	4.2	3.9	4.0	3.8	3.7	3.8	3.7	3.7	3.7	3.5	3.5	3.5
22	4.2	4.1	4.1	3.8	3.7	3.8	3.7	3.7	3.7	3.5	3.4	3.4
23	4.1	4.0	4.0	3.8	3.7	3.8	3.7	3.6	3.7	3.4	3.4	3.4
24	4.0	3.9	3.9	3.8	3.7	3.8	3.7	3.6	3.6	3.4	3.3	3.4
25	3.9	3.8	3.9	3.8	3.7	3.7	3.6	3.6	3.6	3.3	3.3	3.3
26	3.8	3.8	3.8	3.7	3.7	3.7	3.7	3.6	3.6	3.3	3.3	3.3
27	3.8	3.8	3.8	3.7	3.7	3.7	3.6	3.5	3.5	3.3	3.3	3.3
28	3.8	3.7	3.8	3.7	3.6	3.7	3.5	3.4	3.5	3.3	3.3	3.3
29	---	---	---	3.7	3.6	3.7	3.7	3.4	3.6	3.3	3.2	3.3
30	---	---	---	3.7	3.6	3.7	3.6	3.4	3.5	3.2	3.1	3.2
31	---	---	---	3.7	3.6	3.7	---	---	---	3.2	3.1	3.1
MONTH	4.2	3.4	3.8	4.2	3.6	3.8	4.0	3.4	3.7	3.5	3.1	3.4

POTOMAC RIVER BASIN

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	3.2	3.1	3.1	3.5	3.5	3.5	3.0	2.9	3.0	2.9	2.8	2.9
2	3.1	3.1	3.1	3.6	3.5	3.5	3.0	2.9	3.0	2.9	2.9	2.9
3	3.1	3.1	3.1	3.6	3.5	3.6	3.0	2.9	3.0	2.9	2.9	2.9
4	3.1	3.1	3.1	3.6	3.3	3.5	2.9	2.7	2.8	2.9	2.9	2.9
5	3.2	3.1	3.1	3.5	3.3	3.4	3.0	2.7	2.9	2.9	2.9	2.9
6	3.2	3.1	3.1	3.4	3.3	3.4	3.0	3.0	3.0	2.9	2.9	2.9
7	3.2	3.1	3.2	3.3	3.3	3.3	3.0	2.9	2.9	2.8	2.8	2.8
8	3.2	3.2	3.2	3.3	3.2	3.3	3.2	2.9	3.0	2.9	2.8	2.8
9	3.2	3.2	3.2	3.6	3.2	3.4	3.1	3.0	3.1	2.8	2.8	2.8
10	3.2	3.1	3.2	3.6	3.5	3.6	3.1	3.0	3.0	2.8	2.7	2.8
11	3.2	3.2	3.2	3.6	3.5	3.5	3.0	3.0	3.0	2.9	2.8	2.9
12	3.3	3.2	3.2	3.5	3.5	3.5	3.0	3.0	3.0	2.9	2.8	2.9
13	3.3	3.2	3.2	3.5	3.4	3.4	3.0	2.9	2.9	2.9	2.8	2.8
14	3.3	3.2	3.2	3.4	3.4	3.4	2.9	2.9	2.9	2.8	2.8	2.8
15	3.3	3.2	3.2	3.4	3.3	3.3	2.9	2.9	2.9	2.9	2.8	2.8
16	3.3	3.3	3.3	3.3	3.2	3.3	2.9	2.9	2.9	2.9	2.8	2.9
17	3.3	3.3	3.3	3.5	3.3	3.4	2.9	2.9	2.9	2.8	2.8	2.8
18	3.3	3.2	3.3	3.4	3.4	3.4	3.0	2.9	2.9	2.8	2.8	2.8
19	3.3	3.2	3.2	3.4	3.3	3.3	2.9	2.9	2.9	2.9	2.8	2.9
20	3.4	3.3	3.3	3.3	3.2	3.3	2.9	2.9	2.9	2.9	2.9	2.9
21	3.4	3.3	3.4	3.3	3.2	3.2	2.9	2.9	2.9	2.9	2.9	2.9
22	3.4	3.3	3.4	3.3	3.2	3.2	2.9	2.9	2.9	2.9	2.9	2.9
23	3.4	3.4	3.4	3.3	3.2	3.2	2.9	2.9	2.9	2.9	2.9	2.9
24	3.4	3.4	3.4	3.3	3.3	3.3	3.0	2.9	2.9	2.9	2.9	2.9
25	3.5	3.4	3.4	3.3	3.1	3.2	2.9	2.9	2.9	3.0	2.9	3.0
26	3.4	3.3	3.4	3.2	3.1	3.2	2.9	2.9	2.9	3.0	3.0	3.0
27	3.4	3.3	3.3	3.2	3.1	3.2	2.9	2.9	2.9	3.2	3.0	3.1
28	3.4	3.4	3.4	3.3	3.2	3.3	2.9	2.8	2.9	3.2	3.1	3.1
29	3.6	3.5	3.5	3.3	3.2	3.3	2.8	2.8	2.8	3.1	3.1	3.1
30	3.6	3.5	3.5	3.2	3.1	3.1	2.8	2.8	2.8	3.1	3.1	3.1
31	---	---	---	3.1	3.0	3.0	2.8	2.8	2.8	---	---	---
MONTH	3.6	3.1	3.3	3.6	3.0	3.3	3.2	2.7	2.9	3.2	2.7	2.9

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

01594930 LAUREL RUN AT ROBBIN ROAD NEAR WILSON, MD--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

01594934 SOUTH FORK SAND RUN NEAR WILSON, MD

LOCATION.--Lat 39°15'29" long 79°25'07", Garrett County, Hydrologic Unit 02070002, on right bank 0.1 mi downstream from a retention pond, just off Old Wilson Road, 0.4 mi upstream from mouth, and 1.4 mi west of Wilson.

DRAINAGE AREA.--1.55 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to August 1980, October 1980 to September 1986 (discontinued).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 2,540 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 17-19. Water-discharge records good. Natural flow of stream affected by inflow from deep coal mine dewatering process and operation of a retention pond located 0.1 mi upstream since September 1980.

AVERAGE DISCHARGE.--6 years, 4.87 ft³/s, 42.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,000 ft³/s, May 31, 1985, gage height, 5.85 ft, from rating curve extended above 125 ft³/s on basis of slope-area measurement of peak flow; minimum discharge recorded, 0.01 ft³/s, Aug. 20, 1981, gage height, 0.74 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 4	2230	*499	*4.79	Feb. 19	1530	135	3.23
Nov. 28	1845	99	2.90	Mar. 14	2300	116	3.08

Minimum discharge, 0.04 ft³/s, May 5, gage height, 0.76 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.1	8.2	1.7	2.2	5.4	3.7	7.6	.27	3.8	3.2	.12
2	2.4	4.5	12	5.6	2.6	2.2	3.3	6.1	.92	16	.74	3.0
3	4.4	4.9	9.6	6.2	2.9	4.3	4.2	1.5	4.3	8.4	.19	2.9
4	3.5	143	6.7	5.9	56	7.8	4.0	.36	5.4	1.0	1.2	3.8
5	.90	96	6.2	4.8	30	7.5	3.0	.08	4.6	.49	1.6	4.0
6	.13	22	4.8	7.3	18	6.8	.92	1.7	4.3	.31	3.8	.59
7	1.2	15	2.7	6.5	7.5	7.0	2.3	2.5	.66	6.0	4.3	.12
8	2.2	9.4	2.3	5.4	5.1	6.8	1.3	2.6	.32	4.7	7.4	2.7
9	2.2	5.1	4.6	5.6	4.1	6.5	3.5	2.1	1.1	15	.83	4.9
10	4.2	3.4	7.5	6.1	8.4	27	5.6	1.6	2.8	8.4	.38	3.9
11	3.1	5.3	9.0	4.8	8.2	49	5.8	.47	3.2	7.8	3.8	3.4
12	.79	5.8	18	1.4	8.1	15	9.0	.28	4.8	2.6	3.8	3.6
13	.13	6.3	28	3.0	7.2	14	4.8	1.6	1.9	2.1	3.7	.65
14	2.0	7.5	15	3.3	5.2	39	6.2	3.2	.69	7.7	3.6	.16
15	2.8	5.8	6.1	5.5	3.1	43	8.2	3.0	.21	5.9	1.2	.79
16	2.5	4.9	8.3	4.9	1.3	11	15	2.2	3.6	4.4	.37	2.4
17	3.1	4.7	7.7	6.2	28	11	10	.54	2.4	4.5	.16	1.0
18	3.7	6.9	5.3	7.2	38	9.1	11	.35	3.8	5.2	3.0	.35
19	.26	3.0	7.7	11	60	7.3	8.4	2.0	4.1	2.8	3.0	.74
20	10	2.1	7.5	14	44	7.4	3.5	12	3.5	3.2	1.2	.21
21	31	3.3	5.3	11	31	7.0	6.5	8.4	.33	7.1	1.2	.11
22	12	15	1.6	12	16	2.5	9.6	7.4	.18	5.8	1.2	3.0
23	7.2	8.7	5.3	11	7.6	1.5	7.0	6.6	1.7	6.4	.37	5.5
24	8.5	4.1	2.3	9.1	9.8	2.8	5.0	1.4	2.9	6.1	.38	6.1
25	7.4	6.8	1.5	7.5	8.4	2.9	7.1	.65	2.2	3.5	3.5	4.7
26	5.3	6.6	1.2	4.2	7.3	2.5	5.2	.62	2.3	1.7	1.4	3.4
27	1.3	16	1.2	3.6	8.7	5.2	1.6	4.7	3.6	.82	3.3	2.3
28	1.6	61	4.8	3.4	6.8	5.0	3.6	4.8	1.5	1.7	3.1	1.1
29	3.9	27	1.2	3.4	---	3.3	4.7	5.3	.83	3.8	5.0	4.1
30	2.2	9.1	3.7	1.8	---	.81	6.3	4.5	3.6	5.5	.33	6.2
31	3.7	---	1.1	2.5	---	1.8	---	.92	---	5.0	.15	---
TOTAL	135.81	517.3	206.4	185.9	435.5	322.41	170.32	97.07	72.01	157.72	67.40	75.84
MEAN	4.38	17.2	6.66	6.00	15.6	10.4	5.68	3.13	2.40	5.09	2.17	2.53
MAX	31	143	28	14	60	49	15	12	5.4	16	7.4	6.2
MIN	.13	2.1	1.1	1.4	1.3	.81	.92	.08	.18	.31	.15	.11
CFSM	2.83	11.1	4.30	3.87	10.1	6.71	3.67	2.02	1.55	3.28	1.40	1.63
IN.	3.26	12.41	4.95	4.46	10.45	7.73	4.09	2.33	1.73	3.78	1.62	1.82

CAL YR 1985 TOTAL 2511.59 MEAN 6.88 MAX 150 MIN .12 CFSM 4.44 IN 60.24
WTR YR 1986 TOTAL 2443.68 MEAN 6.70 MAX 143 MIN .08 CFSM 4.32 IN 58.61

01594934 SOUTH FORK SAND RUN NEAR WILSON, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1986 (discontinued).
pH: December 1984 to September 1986 (discontinued).
WATER TEMPERATURE: October 1980 to September 1986 (discontinued).

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

REMARKS.--Periods of missing record due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1983-86): Maximum, 2,500 microsiemens, Oct. 18, 1985; minimum, 164 microsiemens, Feb. 19, 1986.
pH (water year 1986): Maximum, >9.9 units, July 16, 1986; minimum, 2.9 units, Oct. 21 , Nov. 4, 1985.
WATER TEMPERATURE (water years 1982-86): Maximum, 29.5°C, July 25, 1982; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,500 microsiemens, Oct. 18; minimum, 164 microsiemens, Feb. 19.
pH: Maximum, >9.9 units, July 16; minimum, 2.9 units, Oct. 21 , Nov. 4.
WATER TEMPERATURE: Maximum, 27.0°C, June 27, July 26; minimum, 0.0°C, Dec. 18, 25, 26, 29, 30, Jan. 20.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	2300	2300	2300	2400	2300	2300	440	260	320	919	639	771
2	2300	2200	2200	2300	1100	1800	810	430	560	1850	566	1220
3	2200	2200	2200	1000	610	770	1400	810	1100	2030	1840	1950
4	2200	2200	2200	1700	290	1000	1400	1200	1300	>2050	2030	>2050
5	2200	2200	2200	510	290	380	1500	1400	1500	>2050	>2050	>2050
6	2200	2200	2200	760	510	640	1500	1300	1400	>2050	>2050	>2050
7	2200	2200	2200	930	760	820	1500	1100	1300	>2050	>2050	>2050
8	2200	2200	2200	1000	930	990	1100	720	880	>2050	>2050	>2050
9	2200	2200	2200	1100	830	960	1400	610	850	>2050	>2050	>2050
10	2300	2200	2200	830	640	730	1700	1400	1500	>2050	>2050	>2050
11	2300	2300	2300	1000	590	740	1800	1600	1700	>2050	>2050	>2050
12	2300	2300	2300	1200	1000	1100	1700	1300	1400	>2050	1890	>2050
13	2400	2300	2300	1300	1200	1200	1300	920	1100	1890	1680	1760
14	2400	2400	2400	1300	1200	1200	950	830	890	2040	1830	1950
15	2400	2400	2400	1400	1300	1300	850	530	670	>2050	>2050	>2050
16	2400	2400	2400	1400	1200	1300	980	450	630	>2050	>2050	>2050
17	2400	2400	2400	1200	900	1000	1200	980	1100	>2050	>2050	>2050
18	2500	2400	2400	1200	850	975	1330	1200	1250	>2050	1310	---
19	2400	2400	2400	1200	960	1100	1790	1330	1610	1310	818	995
20	2400	1700	2100	960	740	830	1890	1780	1840	959	641	783
21	1700	970	1100	1100	680	830	1880	1650	1810	1330	781	1010
22	1200	1100	1100	1000	790	990	1650	947	1220	1330	1070	1190
23	1300	1100	1200	930	810	860	1730	921	1530	1230	1140	1160
24	1600	1300	1400	810	610	700	1740	1080	1420	1370	1230	1320
25	1900	1600	1800	820	560	660	1080	801	897	1450	1230	1390
26	2000	1900	2000	850	740	800	801	598	692	1230	748	944
27	2000	1700	1900	930	710	810	598	488	531	1460	624	957
28	1900	1400	1600	940	500	660	1650	491	1410	1720	1460	1600
29	2200	1900	2100	520	430	470	1510	858	1150	1720	1280	1490
30	2200	2100	2200	430	310	360	1700	813	1500	1700	1030	1350
31	2300	2200	2200	---	---	---	1700	919	1290	1850	1700	1800
MONTH	2500	970	2070	2400	290	943	1890	260	1170	>2050	566	1610

> Greater than.

01594934 SOUTH FORK SAND RUN NEAR WILSON, MD--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1920	1350	1720	732	703	721	1720	1500	1610	1980	1820	1880
2	1350	694	997	710	576	646	1920	1710	1820	1990	1970	1980
3	1280	524	862	655	501	553	1930	1830	1880	1990	1900	1940
4	1280	562	861	810	655	760	2000	1800	1900	1900	1600	1780
5	562	369	438	1990	810	1480	2100	2000	2000	1600	1210	1400
6	654	387	516	2020	1970	2000	2030	1260	1550	1620	1380	1480
7	974	654	817	2040	1940	1990	1280	786	955	1650	1470	1570
8	988	639	826	2140	1920	2090	829	652	732	1740	1650	1680
9	639	429	515	2110	1770	1990	1730	853	1270	1890	1740	1820
10	1030	373	636	1770	857	1390	1780	1730	1770	1900	1870	1890
11	1460	1030	1240	857	473	594	1760	1680	1720	1890	1650	1780
12	1700	1390	1560	846	712	778	1690	1000	1490	1740	1470	1630
13	1880	1670	1780	936	846	875	1000	502	667	1720	1470	1600
14	1910	1840	1880	968	410	812	1370	425	858	1670	1620	1650
15	1910	1100	1520	436	326	379	1480	1180	1380	1820	1660	1730
16	1100	741	861	372	251	299	1270	1110	1180	1880	1810	1840
17	1440	676	920	763	229	398	1270	1230	1250	1860	1640	1760
18	758	550	641	1020	756	924	1260	1180	1220	1640	1380	1490
19	550	164	342	1190	1010	1090	1340	1090	1260	1750	1350	1540
20	354	200	281	1340	1190	1260	1090	521	752	1680	1430	1560
21	373	353	363	1580	1340	1420	1350	466	797	1780	1660	1710
22	366	318	337	1580	929	1290	1350	1350	1440	1960	1770	1830
23	318	235	273	929	670	769	1510	1460	1480	2030	1920	1960
24	402	207	266	1260	577	779	1520	1270	1450	2040	1510	1740
25	507	394	422	1610	1180	1410	1600	1470	1540	1510	1180	1270
26	571	499	520	1630	1510	1560	1680	1500	1610	1290	1040	1150
27	658	571	619	1690	1580	1630	1510	939	1170	1920	1000	1440
28	705	658	688	1760	1680	1710	1620	824	1250	2000	1800	1900
29	---	---	---	1780	1500	1700	1670	1620	1650	2100	2000	2100
30	---	---	---	1520	1230	1390	1880	1660	1760	2200	2100	2100
31	---	---	---	1490	1060	1230	---	---	---	2200	2000	2100
MONTH	1920	164	811	2140	229	1160	2100	425	1380	2200	1000	1720

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1940	1720	1810	2400	2300	2400	2100	2100	2100	2200	2100	2200
2	1850	1620	1690	2300	1600	1800	2100	2000	2100	2200	2030	2100
3	2100	1850	2000	---	---	---	2020	1840	1920	2300	2200	2200
4	2200	2100	2100	---	---	---	1980	1860	1900	2300	2300	2300
5	2200	2200	2200	---	---	---	2040	1970	2000	2300	2300	2300
6	2300	2200	2200	---	---	---	2100	2000	2000	2400	2300	2300
7	2300	2100	2200	---	---	---	2100	2000	2100	2300	2300	2300
8	2100	1800	1870	---	---	---	2100	1900	2000	2300	2300	2300
9	2100	1800	1900	---	---	---	1990	1700	1800	2300	2300	2300
10	2200	2100	2200	---	---	---	1700	1550	1640	2300	2300	2300
11	2200	2100	2100	1860	1650	1770	1960	1510	1680	2300	2300	2300
12	2200	2100	2200	1650	973	1160	2000	1950	1970	2300	2200	2300
13	2200	2100	2100	973	758	864	2000	2000	2000	2300	2200	2200
14	2200	2100	2100	1680	828	1090	2100	2000	2100	2300	2200	2300
15	2100	1860	1970	1820	1680	1760	2100	2100	2100	2300	2200	2300
16	2200	1900	2000	1840	1710	1790	2100	2000	2100	2300	2300	2300
17	2200	2200	2200	1710	1110	1310	2100	1960	2000	2300	2300	2300
18	2200	2200	2200	1670	1500	1560	2100	1710	2000	2300	2200	2300
19	2300	2200	2300	1690	1130	1390	2100	2100	2100	2200	2100	2200
20	2300	2200	2200	1100	725	856	2100	2100	2100	2200	2200	2200
21	2200	1900	2000	1600	696	1010	2100	2000	2100	2200	2200	2200
22	2030	1910	1990	1780	1560	1650	2100	2000	2100	2200	2200	2200
23	2200	1900	2000	1940	1760	1840	2100	1970	2100	2300	2200	2300
24	2200	2000	2200	2020	1900	1950	1970	1880	1920	2300	2200	2300
25	2300	2200	2200	2100	1960	1980	2100	1880	2000	2300	1720	2100
26	2300	2200	2300	2000	1070	1450	2100	2100	2100	2300	2200	2200
27	2300	2300	2300	1080	775	941	2100	2100	2100	2200	1350	1700
28	2300	1190	1600	1600	780	972	2100	2100	2100	1360	1140	1240
29	1210	963	1020	1940	1600	1790	2200	2100	2100	2200	1130	1600
30	2400	990	1500	2050	1940	2000	2200	2200	2200	2300	2200	2300
31	---	---	---	2200	2100	2100	2200	2200	2200	---	---	---
MONTH	2400	963	2020				2200	1510	2020	2400	1130	2180

01594934 SOUTH FORK SAND RUN NEAR WILSON, MD--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.8	6.6	6.7	6.6	6.4	6.5	5.1	4.1	4.4	7.1	6.9	7.0
2	6.9	6.6	6.8	6.7	6.6	6.6	6.3	5.0	5.5	7.3	6.9	7.1
3	7.2	6.6	6.9	6.6	3.1	5.7	7.7	6.4	6.8	7.4	7.2	7.3
4	7.1	6.8	7.0	4.0	2.9	3.2	7.8	7.7	7.7	7.5	7.4	7.5
5	7.1	6.6	6.8	3.6	3.3	3.5	7.8	7.6	7.7	7.5	7.3	7.5
6	6.6	6.5	6.5	4.9	3.3	3.8	7.6	7.4	7.5	---	---	---
7	7.0	6.4	6.6	5.8	5.0	5.4	7.4	7.2	7.3	---	---	---
8	7.2	6.8	7.0	6.2	5.8	6.1	7.2	7.0	7.1	---	---	---
9	7.2	6.6	6.8	6.3	6.2	6.3	7.0	6.5	6.9	---	---	---
10	6.6	6.3	6.5	6.3	6.0	6.2	6.5	5.6	5.9	---	---	---
11	6.6	6.3	6.5	6.0	5.7	5.8	6.6	5.8	6.1	---	---	---
12	6.5	6.1	6.3	6.2	5.9	6.0	6.8	4.3	5.1	---	---	---
13	6.1	6.0	6.1	6.4	6.2	6.3	6.0	4.3	5.0	7.6	7.3	7.5
14	6.5	6.0	6.3	6.6	6.4	6.5	6.5	5.3	5.9	7.7	7.3	7.5
15	6.6	6.2	6.4	6.8	6.6	6.6	6.6	6.5	6.6	7.7	7.4	7.6
16	6.5	6.2	6.4	6.8	6.7	6.7	6.9	6.6	6.7	7.7	7.4	7.5
17	6.6	6.2	6.4	6.8	6.6	6.7	7.2	7.0	7.1	7.5	7.4	7.5
18	6.6	6.3	6.5	6.9	6.6	6.7	7.2	7.0	7.2	7.5	6.3	7.0
19	6.2	6.1	6.1	6.9	6.8	6.8	7.3	7.1	7.2	6.2	5.7	6.1
20	6.9	3.1	5.3	6.8	6.8	6.8	7.5	7.3	7.3	6.4	5.7	5.9
21	3.1	2.9	3.0	7.0	6.8	6.9	7.5	7.3	7.4	6.4	4.6	5.9
22	3.5	3.1	3.2	7.1	6.9	7.0	7.3	7.0	7.1	6.3	5.9	6.2
23	4.7	3.5	4.2	7.0	6.8	6.9	7.3	7.0	7.2	6.7	6.2	6.4
24	5.7	4.7	5.2	6.8	6.7	6.8	7.3	7.0	7.1	7.0	6.8	6.9
25	6.3	5.8	6.0	6.8	6.7	6.7	7.0	6.9	7.0	7.1	7.0	7.1
26	6.4	6.3	6.4	6.8	6.6	6.7	6.9	6.8	6.9	7.0	6.8	6.9
27	6.4	6.2	6.3	6.6	3.9	4.6	6.9	6.8	6.8	7.0	6.8	6.9
28	6.5	6.3	6.4	4.6	3.5	3.8	7.5	6.8	7.2	7.2	7.0	7.1
29	6.5	6.4	6.4	5.3	3.8	4.6	7.3	7.0	7.1	7.2	6.9	7.0
30	6.4	6.3	6.4	5.1	4.2	4.6	7.5	7.0	7.4	7.1	6.8	6.9
31	6.5	6.3	6.4	---	---	---	7.4	6.9	7.1	7.4	7.1	7.3
MONTH	7.2	2.9	6.1	7.1	2.9	5.9	7.8	4.1	6.8			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.4	7.0	7.2	7.5	7.2	7.4	7.2	7.0	7.1	8.2	7.6	7.8
2	7.1	6.9	7.0	7.2	5.0	6.5	7.3	7.1	7.2	8.1	7.5	7.8
3	7.3	6.8	7.0	6.9	4.7	5.6	7.3	7.2	7.2	7.5	7.2	7.4
4	7.3	6.3	6.6	7.1	7.0	7.1	7.3	7.1	7.2	7.2	7.1	7.2
5	6.5	6.4	6.5	7.2	7.1	7.1	7.2	7.1	7.1	7.0	6.8	6.9
6	6.8	6.4	6.5	7.2	7.2	7.2	7.3	6.8	6.9	7.4	7.0	7.2
7	7.2	6.8	7.0	7.3	7.1	7.2	7.3	7.1	7.2	7.4	7.3	7.3
8	7.2	6.9	7.1	7.3	7.2	7.3	7.1	7.0	7.0	7.3	7.2	7.2
9	6.9	6.8	6.8	7.4	6.6	7.3	7.4	7.0	7.1	7.2	7.1	7.2
10	7.2	6.7	6.9	6.8	6.3	6.5	7.3	7.2	7.2	7.2	7.1	7.2
11	7.7	7.2	7.5	7.1	6.9	6.9	7.3	7.1	7.1	7.1	7.0	7.0
12	8.1	7.6	7.8	7.1	6.9	7.0	7.4	5.6	6.7	7.0	7.0	7.0
13	8.4	8.1	8.2	7.5	7.1	7.3	5.6	5.5	5.6	7.3	6.9	7.1
14	8.8	8.3	8.5	7.6	6.3	7.2	6.3	5.5	5.9	7.5	7.4	7.5
15	8.7	7.4	8.0	6.2	5.8	5.9	7.1	6.3	6.6	7.4	7.3	7.3
16	7.3	6.5	6.9	5.8	5.5	5.6	6.9	6.4	6.5	7.3	7.2	7.2
17	6.7	6.1	6.4	6.3	5.3	5.7	7.0	6.5	6.7	7.2	7.1	7.1
18	6.4	6.2	6.3	6.7	6.3	6.5	7.0	6.7	6.8	7.1	7.1	7.1
19	6.7	6.1	6.4	6.8	6.7	6.7	6.7	6.6	6.7	7.3	7.0	7.1
20	6.8	6.4	6.6	6.9	6.7	6.8	6.6	6.5	6.5	7.3	6.5	6.8
21	7.1	6.8	7.0	7.2	6.9	7.0	6.7	6.5	6.6	6.8	6.6	6.7
22	7.0	6.7	6.9	7.1	6.8	7.0	7.0	6.7	6.9	7.0	6.7	6.8
23	6.7	5.9	6.2	6.8	6.7	6.8	7.0	6.9	6.9	7.2	7.0	7.1
24	6.8	5.9	6.3	7.0	6.7	6.8	6.9	6.7	6.8	7.2	7.0	7.1
25	7.0	6.7	6.8	7.0	6.8	6.9	6.9	6.8	6.8	7.1	5.5	6.7
26	7.2	7.0	7.1	7.1	6.9	7.0	6.8	6.7	6.8	5.4	4.4	4.8
27	7.3	7.2	7.3	7.1	7.0	7.1	6.7	6.6	6.6	6.7	4.3	5.4
28	7.4	7.3	7.4	7.2	7.1	7.1	7.0	6.6	6.7	7.1	6.7	6.9
29	---	---	---	7.1	6.9	7.1	7.4	7.0	7.2	7.2	7.0	7.1
30	---	---	---	7.0	6.9	6.9	7.8	7.3	7.5	7.3	6.7	7.2
31	---	---	---	7.1	6.8	7.0	---	---	---	7.3	7.1	7.1
MONTH	8.8	5.9	7.0	7.6	4.7	6.8	7.8	5.5	6.8	8.2	4.3	7.0

01594934 SOUTH FORK SAND RUN NEAR WILSON, MD--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.1	7.0	7.1	6.5	6.4	6.4	7.6	7.2	7.4	7.4	6.9	7.0
2	8.3	7.0	7.2	6.8	6.3	6.6	7.5	7.1	7.3	7.2	6.9	7.1
3	8.7	7.7	8.2	---	---	---	7.2	7.1	7.2	7.2	7.1	7.2
4	7.7	7.5	7.6	---	---	---	7.5	7.1	7.3	7.2	7.1	7.2
5	7.6	7.3	7.5	---	---	---	7.5	7.2	7.4	7.2	7.0	7.1
6	7.4	7.3	7.3	---	---	---	7.7	7.3	7.5	7.2	6.9	7.0
7	7.2	6.8	7.0	---	---	---	7.8	7.4	7.6	6.9	6.9	6.9
8	7.0	6.8	6.9	---	---	---	7.9	7.7	7.8	7.2	6.8	7.0
9	7.0	6.8	6.9	---	---	---	7.7	7.1	7.4	7.4	7.2	7.3
10	7.0	6.9	7.0	---	---	---	7.1	6.4	6.9	7.6	7.0	7.4
11	7.2	6.8	7.0	7.0	6.7	6.8	7.2	6.3	6.7	7.6	7.2	7.4
12	7.1	7.0	7.1	6.8	6.3	6.5	7.5	7.1	7.3	7.5	7.4	7.5
13	7.0	6.9	7.0	7.5	6.7	7.0	7.5	7.3	7.4	7.4	7.1	7.2
14	7.0	6.7	6.8	6.6	4.9	5.7	7.5	7.4	7.5	7.2	7.0	7.1
15	6.8	6.7	6.7	6.9	6.6	6.7	7.4	7.2	7.3	7.4	7.0	7.1
16	7.0	6.6	6.8	>9.9	6.1	7.6	7.4	7.1	7.2	7.4	7.2	7.3
17	6.9	6.7	6.8	9.8	9.0	9.3	7.1	7.0	7.1	7.4	6.9	7.2
18	6.9	6.7	6.8	9.4	8.3	8.9	7.5	7.0	7.3	7.3	6.9	7.1
19	6.9	6.7	6.8	8.3	7.3	8.0	7.5	7.2	7.4	7.3	6.7	7.0
20	6.9	6.8	6.9	7.1	5.9	6.3	7.4	7.1	7.3	7.2	7.0	7.1
21	6.9	6.6	6.7	7.1	6.0	6.5	7.3	7.1	7.2	7.0	6.9	7.0
22	6.7	6.5	6.6	7.2	7.1	7.2	7.3	7.1	7.2	7.4	6.9	7.2
23	6.8	6.5	6.7	7.1	6.9	7.0	7.3	7.0	7.1	7.4	7.3	7.4
24	6.8	6.6	6.7	7.2	7.0	7.1	7.4	7.2	7.3	7.4	7.2	7.3
25	6.7	6.5	6.6	7.3	7.1	7.2	7.6	7.4	7.5	7.8	7.1	7.5
26	6.6	6.4	6.5	7.8	7.2	7.6	7.5	7.2	7.3	7.1	6.8	7.0
27	6.6	6.5	6.6	7.8	7.6	7.7	7.4	7.1	7.3	7.2	5.0	6.3
28	6.7	6.5	6.6	7.7	7.4	7.6	7.4	7.2	7.3	4.9	4.7	4.8
29	6.7	6.6	6.7	7.7	7.4	7.6	7.4	7.3	7.4	6.3	4.7	5.3
30	6.7	6.6	6.7	7.5	7.5	7.5	7.3	7.0	7.1	7.0	6.4	6.7
31	---	---	---	7.6	7.5	7.5	7.1	7.0	7.0	---	---	---
MONTH	8.7	6.4	6.9				7.9	6.3	7.3	7.8	4.7	7.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

> Greater than.

01594934 SOUTH FORK SAND RUN NEAR WILSON, MD--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.5	3.0	3.5	6.0	3.0	5.0	14.5	12.0	13.5	14.5	13.5	14.0
2	3.0	1.5	2.0	3.5	2.0	2.5	15.5	12.0	13.5	14.5	12.5	13.5
3	4.0	1.5	2.5	5.0	2.0	3.0	14.5	12.0	13.0	14.0	11.0	12.5
4	4.0	3.0	3.5	5.5	5.0	5.5	15.0	13.0	14.0	17.5	10.5	13.0
5	5.0	3.5	4.5	6.0	5.5	6.0	15.0	13.0	14.0	21.0	9.0	14.5
6	5.5	5.0	5.5	6.0	3.5	5.5	15.0	12.5	13.5	17.5	13.5	15.5
7	5.0	4.0	4.0	3.5	2.0	2.5	16.5	12.0	14.0	20.0	14.5	17.0
8	4.0	3.0	3.0	4.0	1.5	3.5	16.0	12.5	14.0	20.0	16.0	17.5
9	3.0	2.0	2.5	6.5	4.0	5.0	12.0	9.5	10.5	17.0	13.5	15.0
10	3.0	1.5	2.5	6.5	5.0	5.5	10.0	7.5	9.0	17.0	13.0	15.0
11	4.0	3.0	3.5	5.0	4.5	5.0	7.5	7.0	7.5	21.0	13.5	17.0
12	4.0	3.5	4.0	5.0	4.5	5.0	10.5	6.5	8.5	20.0	14.0	17.0
13	4.5	3.5	4.0	6.0	5.0	5.5	9.5	6.5	8.0	16.5	14.5	15.5
14	4.5	4.0	4.5	7.0	6.0	6.5	10.5	7.0	9.0	16.0	14.0	14.5
15	4.5	1.0	2.5	6.5	6.0	6.0	10.5	9.5	10.0	17.5	14.0	15.5
16	2.0	1.0	1.5	6.0	5.5	5.5	9.5	8.0	8.5	19.5	15.0	17.0
17	3.5	1.0	2.0	6.0	5.0	5.5	8.0	7.0	7.0	22.5	17.0	19.5
18	3.5	1.5	2.5	7.0	5.5	6.5	11.5	6.5	8.5	22.5	18.5	20.5
19	3.5	2.5	3.0	9.5	7.0	8.5	13.0	8.5	10.5	20.0	17.5	19.0
20	6.5	3.5	5.5	9.0	6.5	8.0	12.5	10.0	11.5	17.5	15.5	16.5
21	6.5	5.5	6.0	7.5	5.5	6.5	11.5	10.0	11.0	15.5	13.5	14.5
22	5.5	4.0	4.5	7.5	3.5	5.5	10.5	8.5	9.5	14.5	13.0	13.5
23	4.0	2.0	3.0	7.0	3.0	5.0	8.5	8.0	8.0	14.0	13.0	13.0
24	3.5	2.0	3.0	9.0	4.5	6.5	11.5	7.5	9.5	16.5	12.0	14.5
25	4.0	2.0	3.0	11.0	6.0	8.5	11.0	8.5	10.0	18.0	12.5	15.0
26	4.0	2.0	3.5	12.0	8.5	10.5	14.0	10.0	12.0	20.0	14.0	17.0
27	5.0	4.0	4.5	11.0	10.0	10.5	18.5	11.0	14.5	17.5	15.5	16.5
28	5.0	4.5	5.0	12.5	9.5	10.5	17.0	13.5	15.5	18.5	15.0	16.5
29	---	---	---	14.5	9.5	11.5	17.0	14.0	15.5	19.5	15.0	17.0
30	---	---	---	15.5	10.0	12.5	17.0	13.5	15.0	19.0	16.0	17.5
31	---	---	---	16.5	11.0	13.5	---	---	---	22.5	16.5	19.0
MONTH	6.5	1.0	3.5	16.5	1.5	6.5	18.5	6.5	11.5	22.5	9.0	16.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	17.5	20.0	18.5	17.5	18.0	21.5	17.0	18.5	17.0	15.5	16.5
2	21.0	18.0	19.0	19.0	17.0	17.5	22.0	17.5	19.5	17.0	16.0	16.5
3	18.5	16.0	17.5	---	---	---	22.5	18.5	20.5	17.5	16.0	16.5
4	19.0	16.0	17.0	---	---	---	23.0	18.0	20.5	17.0	16.0	16.5
5	18.0	16.0	17.0	---	---	---	23.5	18.5	20.5	18.5	16.5	17.0
6	19.5	16.5	18.0	---	---	---	21.0	19.0	20.0	19.5	15.5	17.5
7	23.0	17.5	20.0	---	---	---	21.0	18.5	19.5	17.5	15.5	16.5
8	23.5	19.5	20.5	---	---	---	19.5	18.5	19.0	18.5	13.5	16.0
9	23.5	17.5	20.5	---	---	---	22.5	18.0	20.0	18.0	15.0	16.0
10	19.5	18.0	19.0	---	---	---	22.5	19.5	21.0	17.5	14.5	16.0
11	22.0	18.0	19.0	20.0	18.0	18.5	21.5	19.0	20.5	18.0	15.5	16.5
12	21.0	18.0	19.0	22.0	17.5	19.5	19.5	17.5	18.5	17.5	16.5	16.5
13	19.0	17.5	18.0	22.5	20.0	21.0	18.0	17.0	17.5	19.5	15.5	17.0
14	25.5	16.5	20.5	21.0	19.0	20.0	19.5	17.0	18.0	19.0	15.0	17.0
15	25.5	18.5	21.5	21.5	18.5	19.5	22.0	17.5	19.5	19.0	15.5	17.0
16	23.5	19.5	21.5	22.0	18.5	20.0	22.5	18.5	20.5	18.5	16.0	17.5
17	21.5	18.0	19.5	22.5	19.5	20.5	23.0	20.0	21.5	18.5	13.0	16.0
18	20.5	16.5	18.5	23.5	19.5	21.0	23.0	19.5	21.5	16.0	14.5	15.5
19	20.0	16.0	18.0	23.0	19.5	21.0	21.0	18.5	19.5	18.0	15.5	16.5
20	20.0	17.0	18.0	25.0	19.5	22.0	19.0	18.5	18.5	18.5	16.5	17.5
21	25.5	16.0	20.5	23.0	20.5	22.0	19.0	18.0	18.5	20.0	16.5	18.0
22	27.0	17.5	22.0	22.0	20.5	21.0	22.5	17.5	19.5	20.0	16.5	18.0
23	23.0	19.5	21.5	21.5	19.5	20.0	21.5	18.0	19.5	17.5	16.5	17.0
24	21.5	19.0	20.5	20.5	19.0	19.5	22.0	18.5	20.0	16.5	16.0	16.5
25	21.0	17.0	19.0	21.5	19.0	20.0	21.0	17.5	19.5	18.0	16.5	17.0
26	21.0	14.5	18.0	27.0	19.0	22.5	22.5	18.0	20.0	19.5	16.5	17.5
27	20.0	17.0	18.5	25.0	20.0	22.5	20.0	18.0	19.5	19.0	16.5	17.5
28	20.5	17.5	19.0	24.0	20.0	22.0	18.0	16.0	17.0	20.5	17.5	19.0
29	24.5	18.5	21.5	23.0	19.5	21.0	17.0	15.0	15.5	20.5	17.5	19.0
30	22.0	19.0	20.5	19.5	17.5	18.5	19.0	13.5	16.0	19.5	17.5	18.0
31	---	---	---	20.0	17.0	18.0	19.0	14.0	16.5	---	---	---
MONTH	27.0	14.5	19.5				23.5	13.5	19.0	20.5	13.0	17.0

01594936 NORTH FORK SAND RUN NEAR WILSON, MD

LOCATION.--Lat 39°15'36", long 79°24'36", Garrett County, Hydrologic Unit 02070002, on right bank, 0.1 mi northwest of Wilson-Corunna Road, 0.1 mi upstream from mouth and 0.8 mi northwest of Wilson.

DRAINAGE AREA.--1.91 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1980 to current year.

GAGE.--Water-stage recorder and steel weir plate. Elevation of gage is 2,515 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-3, Oct.6-14, Nov. 15-19, Jan. 1-17, Feb. 11-16, Mar. 15 to May 19, and June 2-26. Water-discharge records good above 0.5 ft³/s and fair below, except those for period with ice effect, Jan. 1-17 and Feb. 11-16, period of missing record, Oct. 1-3, and periods of backwater from beaver dams, Oct.6-14, Nov. 15-19, Mar. 15 to May 19, and June 2-26, which are fair.

AVERAGE DISCHARGE.--6 years, 4.84 ft³/s, 34.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft³/s, May 31, 1985, gage height, 10.47 ft, from rating curve extended above 90 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 0.09 ft³/s, Aug. 22, 1983, gage height, 1.54 ft.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	0700	58	3.41	Feb. 17	1815	40	3.17
Nov. 4	2330	*481	*7.30	Feb. 19	1345	112	4.16
Nov. 28	1745	82	3.78	Mar. 11	0215	77	3.70
Feb. 4	1530	68	3.57	Mar. 14	2130	96	3.97
Feb. 5	1300	72	3.63				

Minimum discharge, 0.36 ft³/s, Oct. 4, gage height, 1.72 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	2.7	11	1.6	2.8	3.8	1.7	3.0	1.5	.98	1.2	.59
2	.45	5.8	8.2	1.5	7.2	3.4	1.7	2.8	1.4	8.9	1.1	.61
3	.50	7.4	5.8	1.5	11	3.2	1.6	2.4	1.2	7.1	.97	.58
4	.39	120	4.8	1.5	49	3.0	1.6	2.2	1.2	3.0	.88	.57
5	.72	111	4.4	1.4	53	2.7	1.6	2.0	1.2	2.1	.80	.77
6	.64	25	4.3	1.3	28	2.7	2.5	2.3	1.1	1.6	.95	.73
7	.54	15	3.7	1.3	17	2.6	6.2	2.2	1.1	1.4	1.0	.57
8	.50	9.7	3.5	1.2	11	2.5	4.0	2.1	1.0	1.2	1.8	.53
9	.49	6.4	3.6	1.2	7.9	3.8	4.0	2.0	.86	6.8	1.5	.50
10	.48	5.0	3.8	1.2	6.0	18	4.5	1.9	.73	4.8	.97	.48
11	.47	4.5	4.3	1.1	5.0	43	5.0	1.8	1.1	4.3	1.3	.45
12	.56	4.1	13	1.1	4.2	15	10	1.7	1.4	6.7	.99	.60
13	.45	5.5	23	1.1	3.8	12	8.0	2.0	1.0	4.7	.81	.53
14	.37	6.9	16	1.1	3.5	34	7.5	2.4	.85	5.6	.75	.46
15	.90	4.0	9.8	1.1	3.1	36	8.0	2.0	.89	3.8	.71	.43
16	.78	3.8	7.1	1.1	3.0	15	12	1.8	.89	3.5	.69	.44
17	.59	5.6	5.7	1.3	18	8.7	10	1.6	.99	4.1	.81	.41
18	.54	4.6	4.7	3.9	28	7.3	11	1.5	.91	3.3	.72	.42
19	.52	4.0	4.0	12	55	7.5	9.0	1.8	.91	3.0	.61	.66
20	7.0	3.6	3.7	14	37	6.0	8.0	6.7	1.5	3.6	.59	.52
21	28	3.3	3.3	7.9	29	4.4	7.0	4.7	1.1	4.3	.75	.46
22	12	14	3.0	8.4	18	3.5	6.5	3.8	.69	3.2	.69	.43
23	6.3	9.9	2.9	7.8	12	3.1	6.0	3.3	.64	2.7	.75	.47
24	4.5	6.7	2.7	5.8	9.2	2.6	5.5	2.9	.74	2.4	1.2	.56
25	3.8	6.6	2.6	5.1	7.1	2.4	5.0	2.6	.53	2.1	.67	1.0
26	3.1	7.5	2.4	4.8	5.9	2.3	4.5	2.4	.52	2.6	.56	.61
27	2.7	15	2.2	4.2	5.4	2.4	4.0	2.4	.62	2.1	.63	1.8
28	2.6	58	2.1	5.5	4.5	2.2	3.5	2.3	2.5	1.7	1.0	1.6
29	2.3	33	2.0	4.6	---	2.1	5.0	2.0	1.8	1.6	.72	.86
30	2.2	16	1.8	3.1	---	2.0	4.0	1.8	1.1	1.4	.60	.64
31	2.1	---	1.9	2.7	---	1.8	---	1.7	---	1.3	.53	---
TOTAL	86.89	524.6	171.3	111.4	444.6	259.0	168.9	76.1	31.97	105.88	27.25	19.28
MEAN	2.80	17.5	5.53	3.59	15.9	8.35	5.63	2.45	1.07	3.42	.88	.64
MAX	28	120	23	14	55	43	12	6.7	2.5	8.9	1.8	1.8
MIN	.37	2.7	1.8	1.1	2.8	1.8	1.6	1.5	.52	.98	.53	.41
CFSM	1.47	9.16	2.90	1.88	8.33	4.37	2.95	1.28	.56	1.79	.46	.34
IN.	1.69	10.21	3.33	2.17	8.65	5.04	3.29	1.48	.62	2.06	.53	.38

CAL YR 1985 TOTAL 2208.73 MEAN 6.05 MAX 139 MIN .30 CFSM 3.17 IN 43.00
WTR YR 1986 TOTAL 2027.17 MEAN 5.55 MAX 120 MIN .37 CFSM 2.91 IN 39.46

01594936 NORTH FORK SAND RUN NEAR WILSON, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to current year.
pH: June to September 1985.
WATER TEMPERATURE: October 1980 to current year.

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

REMARKS.--Periods of missing record due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1982-86): Maximum, 1,530 microsiemens, Sept. 18, 1986; minimum, 53 microsiemens, Nov. 5, 1985.
pH (water year 1986): Maximum, 7.1 units, Apr. 4-6, 1986; minimum, 5.5 units, Nov. 5, 1986.
WATER TEMPERATURE (water years 1982-86): Maximum, 25.5°C, July 20, 1983; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,530 microsiemens, Sept. 18; minimum, 53 microsiemens, Nov. 5.
pH: Maximum, 7.1 units, Apr.4-6; minimum, 5.5 units, Nov. 5.
WATER TEMPERATURE: Maximum, 21.5°C, June 16, Aug. 9; minimum, 0.0°C, Dec. 15, 18-23, 25-31, Jan. 1-17, Mar. 6.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	>1000	>1000	>1000	507	446	487	129	112	121	418	395	403
2	>1000	>1000	>1000	446	271	357	147	129	136	414	395	407
3	>1000	>1000	>1000	271	214	241	168	147	158	425	412	418
4	>1000	>1000	>1000	214	56	146	190	168	180	440	422	430
5	>1000	>1000	>1000	87	53	71	203	190	197	461	439	449
6	>1000	>1000	>1000	115	88	101	215	200	207	487	461	475
7	>1000	>1000	>1000	139	115	127	235	215	225	519	486	503
8	>1000	>1000	>1000	161	139	150	243	233	239	583	519	553
9	>1000	>1000	>1000	183	161	173	245	237	241	617	583	607
10	>1000	>1000	>1000	205	183	194	237	230	232	615	602	609
11	>1000	>1000	>1000	219	205	212	230	209	221	632	606	620
12	>1000	>1000	>1000	235	219	226	209	131	150	647	606	633
13	>1000	>1000	>1000	242	221	235	148	99	116	606	589	596
14	>1000	>1000	>1000	222	211	216	125	105	114	625	589	612
15	>1000	>1000	>1000	239	223	232	153	125	139	647	619	632
16	>1000	>1000	>1000	248	214	237	161	142	152	667	645	658
17	>1000	>1000	>1000	212	198	204	185	161	173	663	643	659
18	>1000	>1000	>1000	224	212	218	211	185	198	643	335	519
19	>1000	>1000	>1000	240	224	231	241	211	229	335	135	251
20	>1000	275	---	255	238	246	262	241	256	158	134	145
21	275	122	155	268	253	261	297	262	280	191	158	176
22	180	162	169	270	121	184	316	296	308	201	170	190
23	216	177	196	153	130	144	320	314	317	197	171	184
24	248	217	234	168	155	162	333	320	328	223	197	211
25	274	248	261	177	160	173	346	333	340	241	223	234
26	308	274	292	170	155	165	376	344	366	251	241	246
27	342	308	327	155	114	136	384	374	379	263	251	258
28	377	342	362	114	73	86	397	382	388	303	263	288
29	422	377	402	93	75	84	410	399	404	324	303	317
30	469	421	439	112	93	103	429	410	421	351	324	337
31	504	461	481	---	---	---	440	418	433	377	351	365
MONTH	>1000	122	744	507	53	193	440	99	247	667	134	419

> Greater than.

POTOMAC RIVER BASIN

01594936 NORTH FORK SAND RUN NEAR WILSON, MD--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	397	377	389	306	270	288	533	514	521	514	474	494
2	391	210	300	320	306	316	559	528	540	570	514	550
3	210	173	191	327	317	323	592	559	574	611	570	597
4	173	90	111	343	325	334	621	561	598	627	603	618
5	97	83	89	373	343	356	644	598	624	626	591	616
6	113	90	100	398	373	390	648	506	610	624	601	617
7	135	112	123	418	398	408	493	352	387	618	577	598
8	164	134	149	445	415	435	400	360	377	688	618	646
9	185	163	174	447	295	403	409	382	400	749	688	723
10	205	184	195	295	103	200	382	359	370	791	749	773
11	226	204	213	114	86	98	360	333	353	808	758	788
12	258	226	242	149	114	133	330	178	278	809	778	797
13	290	257	274	160	149	155	219	180	202	795	632	722
14	315	289	306	165	72	131	230	215	222	625	503	566
15	337	315	327	111	74	93	246	160	229	621	539	576
16	347	337	342	139	114	126	176	161	166	696	621	658
17	336	111	239	166	139	152	192	176	188	758	696	727
18	121	101	112	198	166	183	195	184	189	784	758	772
19	107	69	87	226	198	214	226	191	207	789	742	781
20	90	77	84	260	226	245	240	226	234	742	547	614
21	100	87	93	297	260	281	243	236	240	547	501	514
22	120	97	109	319	297	311	255	243	248	509	494	501
23	143	120	131	331	319	327	295	255	280	520	498	507
24	159	142	150	347	328	340	334	295	318	550	520	536
25	189	159	174	380	347	366	373	334	354	569	550	559
26	208	188	199	407	375	393	428	373	402	595	569	581
27	232	207	217	409	389	399	449	428	444	602	591	596
28	267	232	249	436	401	416	455	449	452	617	597	605
29	---	---	---	465	436	446	455	414	437	658	617	633
30	---	---	---	499	465	478	474	425	458	736	658	692
31	---	---	---	516	492	502	---	---	---	786	735	755
MONTH	397	69	192	516	72	298	648	160	363	809	474	636

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	810	755	787	976	894	940	890	798	834	1320	1230	1290
2	816	769	785	976	192	448	948	883	910	1300	1220	1250
3	813	781	793	312	196	252	977	936	957	1280	1230	1250
4	886	811	838	416	312	366	994	959	978	1300	1270	1290
5	941	880	908	517	416	471	1070	990	1020	1310	1190	1270
6	986	921	955	613	517	568	1080	1010	1050	1190	1090	1120
7	995	966	988	692	613	647	1050	926	959	1270	1150	1210
8	985	946	970	779	692	727	1000	620	801	1330	1270	1300
9	1020	985	994	785	275	556	772	626	683	1390	1320	1350
10	1070	1020	1040	339	273	301	946	772	865	1430	1370	1410
11	1100	874	991	400	301	362	948	812	873	1470	1400	1440
12	896	764	807	301	259	266	914	790	837	1470	1360	1410
13	890	826	852	304	272	289	1030	918	978	1400	1290	1340
14	994	898	942	278	252	263	1120	1020	1070	1420	1330	1380
15	1100	1010	1040	340	278	307	1190	1120	1150	1450	1390	1440
16	1100	1040	1080	377	337	355	1220	1150	1190	1490	1430	1470
17	1120	1050	1090	345	321	330	1220	1090	1150	1510	1460	1490
18	1210	1100	1150	395	347	369	1140	1080	1100	1530	1470	1510
19	1300	1210	1250	438	377	412	1220	1140	1170	1490	1290	1410
20	1320	660	951	388	335	366	1250	1210	1230	1290	1240	1270
21	866	767	795	335	303	315	1240	1160	1200	1360	1290	1340
22	1070	866	955	378	330	353	1190	1130	1180	1400	1330	1380
23	1160	1070	1120	431	366	402	1220	1060	1190	1420	1370	1400
24	1170	936	1040	490	431	461	1080	874	924	1440	1280	1340
25	1230	1100	1160	571	490	531	1090	880	974	1280	909	994
26	1310	1220	1280	575	464	512	1230	1110	1160	952	906	924
27	1370	1130	1330	562	497	525	1260	1220	1240	975	621	786
28	1180	602	782	637	562	601	1230	976	1100	696	617	649
29	716	624	655	678	631	651	1120	968	1020	788	685	727
30	886	716	796	735	678	697	1250	1120	1180	880	778	847
31	---	---	---	798	735	760	1310	1230	1280	---	---	---
MONTH	1370	602	971	976	192	465	1310	620	1040	1530	617	1240

01594936 NORTH FORK SAND RUN NEAR WILSON, MD--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.7	6.4	6.6	6.6	6.5	6.6	6.2	6.1	6.1	6.5	6.5	6.5
2	6.6	6.4	6.6	6.5	6.2	6.4	6.2	6.2	6.2	6.5	6.5	6.5
3	6.7	6.5	6.6	6.2	6.1	6.2	6.2	6.2	6.2	6.6	6.5	6.6
4	6.7	6.5	6.6	6.2	5.7	6.0	6.3	6.2	6.2	6.6	6.6	6.6
5	6.8	6.6	6.7	5.8	5.5	5.7	6.3	6.2	6.3	6.6	6.5	6.6
6	6.7	6.6	6.7	5.9	5.8	5.9	6.3	6.3	6.3	6.5	6.5	6.5
7	6.7	6.6	6.6	6.1	5.9	6.0	6.3	6.3	6.3	6.5	6.5	6.5
8	6.7	6.6	6.6	6.2	6.1	6.1	6.4	6.3	6.3	6.5	6.4	6.4
9	6.6	6.5	6.6	6.3	6.2	6.2	6.4	6.4	6.4	6.4	6.4	6.4
10	6.6	6.5	6.6	6.4	6.3	6.3	6.4	6.3	6.4	6.5	6.5	6.5
11	6.6	6.6	6.6	6.4	6.4	6.4	6.4	6.3	6.4	6.6	6.5	6.5
12	6.7	6.6	6.6	6.5	6.4	6.4	6.3	6.2	6.2	6.6	6.6	6.6
13	6.7	6.6	6.6	6.5	6.4	6.5	6.2	6.0	6.1	6.6	6.6	6.6
14	6.7	6.6	6.6	6.5	6.4	6.4	6.0	5.9	5.9	6.6	6.5	6.5
15	6.7	6.5	6.6	6.5	6.5	6.5	6.0	5.9	6.0	6.6	6.5	6.5
16	6.7	6.6	6.7	6.6	6.4	6.5	6.1	6.0	6.1	6.6	6.6	6.6
17	6.8	6.7	6.7	6.4	6.3	6.4	6.2	6.1	6.1	6.6	6.6	6.6
18	6.8	6.7	6.7	6.5	6.4	6.4	6.2	6.1	6.2	6.6	6.5	6.6
19	6.8	6.7	6.7	6.6	6.5	6.5	6.2	6.1	6.2	6.5	6.1	6.4
20	6.7	5.9	6.4	6.7	6.6	6.6	6.3	6.2	6.2	6.3	6.1	6.2
21	6.0	5.7	5.8	6.7	6.6	6.6	6.3	6.3	6.3	6.3	6.3	6.3
22	6.0	5.9	6.0	6.6	6.2	6.4	6.4	6.3	6.3	6.4	6.3	6.3
23	6.1	6.0	6.1	6.3	6.3	6.3	6.4	6.4	6.4	6.3	6.3	6.3
24	6.3	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.3	6.4
25	6.4	6.3	6.3	6.3	6.2	6.3	6.4	6.4	6.4	6.4	6.4	6.4
26	6.4	6.3	6.4	6.3	6.2	6.3	6.4	6.3	6.3	6.4	6.4	6.4
27	6.5	6.4	6.4	6.3	6.2	6.2	6.4	6.4	6.4	6.4	6.4	6.4
28	6.5	6.5	6.5	6.2	5.8	6.0	6.5	6.4	6.5	6.4	6.3	6.3
29	6.6	6.5	6.6	6.0	5.8	5.9	6.5	6.5	6.5	6.4	6.4	6.4
30	6.6	6.5	6.6	6.1	6.0	6.0	6.5	6.5	6.5	6.5	6.4	6.5
31	6.6	6.6	6.6	---	---	---	6.5	6.5	6.5	6.6	6.5	6.5
MONTH	6.8	5.7	6.5	6.7	5.5	6.3	6.5	5.9	6.3	6.6	6.1	6.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.6	6.6	6.6	6.6	6.5	6.6	6.9	6.9	6.9			
2	6.6	6.5	6.6	6.7	6.6	6.6	6.9	6.9	6.9			
3	6.5	6.4	6.5	6.7	6.7	6.7	7.0	6.8	6.9			
4	6.4	6.0	6.1	6.7	6.7	6.7	7.1	7.0	7.1			
5	6.1	5.9	5.9	6.8	6.7	6.8	7.1	7.0	7.1			
6	6.1	5.9	6.0	6.8	6.7	6.7	7.1	6.9	7.0			
7	6.2	6.1	6.1	6.7	6.7	6.7	6.9	6.9	6.9			
8	6.3	6.2	6.3	6.7	6.6	6.6	6.9	6.9	6.9			
9	6.4	6.3	6.4	6.7	6.6	6.7	6.9	6.8	6.9			
10	6.5	6.4	6.4	6.7	6.2	6.5	6.8	6.8	6.8			
11	6.5	6.4	6.5	6.4	6.1	6.2	6.8	6.8	6.8			
12	6.5	6.5	6.5	6.4	6.3	6.3	6.8	6.6	6.7			
13	6.5	6.5	6.5	6.4	6.3	6.4	6.6	6.6	6.6			
14	6.6	6.5	6.5	6.4	6.0	6.3	6.6	6.6	6.6			
15	6.6	6.6	6.6	6.2	6.0	6.1	6.7	6.6	6.6			
16	6.6	6.6	6.6	6.3	6.2	6.2	6.6	6.5	6.5			
17	6.7	6.2	6.5	6.3	6.2	6.3	6.5	6.4	6.4			
18	6.3	6.2	6.3	6.4	6.3	6.3	6.5	6.4	6.4			
19	6.4	6.0	6.1	6.6	6.4	6.5	6.4	6.3	6.4			
20	6.1	6.0	6.0	6.5	6.5	6.5	6.3	6.2	6.3			
21	6.4	6.0	6.1	6.5	6.4	6.5	6.4	6.2	6.2			
22	6.2	6.1	6.1	6.6	6.5	6.5	6.3	6.3	6.3			
23	6.3	6.2	6.2	6.6	6.5	6.6	6.4	6.3	6.3			
24	6.4	6.3	6.3	6.7	6.6	6.7	6.4	6.3	6.3			
25	6.4	6.4	6.4	6.8	6.7	6.7	6.4	6.3	6.4			
26	6.5	6.4	6.5	6.8	6.7	6.8	6.4	6.2	6.3			
27	6.5	6.5	6.5	6.8	6.8	6.8	6.2	6.2	6.2			
28	6.6	6.5	6.5	6.8	6.7	6.8	6.3	6.2	6.2			
29	---	---	---	6.8	6.8	6.8	6.4	6.2	6.3			
30	---	---	---	6.9	6.8	6.8	6.7	6.3	6.5			
31	---	---	---	6.9	6.8	6.9	---	---	---			
MONTH	6.7	5.9	6.3	6.9	6.0	6.6	7.1	6.2	6.6			

01594936 NORTH FORK SAND RUN NEAR WILSON, MD--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	6.4	6.3	6.4	5.9	5.8	5.9	6.5	6.4	6.4
2	---	---	---	6.5	6.0	6.2	5.9	5.8	5.9	6.5	6.4	6.4
3	---	---	---	6.3	6.1	6.2	5.9	5.8	5.9	6.5	6.4	6.5
4	---	---	---	6.4	6.3	6.3	5.9	5.8	5.9	6.5	6.4	6.5
5	5.9	5.7	5.9	6.4	6.3	6.3	5.9	5.8	5.9	6.5	6.4	6.4
6	6.0	5.8	5.9	6.4	6.3	6.4	5.9	5.8	5.8	6.5	6.4	6.5
7	6.0	5.8	6.0	6.5	6.4	6.4	6.2	5.7	5.9	6.6	6.5	6.5
8	6.1	6.0	6.0	6.5	6.4	6.4	6.2	5.9	6.1	6.6	6.5	6.5
9	6.2	6.0	6.1	6.4	6.1	6.3	6.1	6.1	6.1	6.6	6.5	6.5
10	6.2	6.1	6.1	6.2	6.0	6.1	6.2	6.1	6.2	6.6	6.5	6.5
11	6.2	6.1	6.1	6.3	6.0	6.1	6.3	6.1	6.2	6.7	6.5	6.6
12	6.3	6.0	6.2	6.1	6.0	6.0	6.3	6.2	6.2	6.7	6.5	6.6
13	6.3	6.1	6.2	6.2	5.9	6.0	6.3	6.2	6.2	6.8	6.6	6.7
14	6.3	5.9	6.1	6.2	6.0	6.1	6.3	6.2	6.2	6.7	6.6	6.7
15	6.3	6.0	6.2	6.0	6.0	6.0	6.3	6.2	6.2	6.7	6.6	6.7
16	6.4	6.0	6.2	6.0	5.9	6.0	6.3	6.2	6.2	6.8	6.6	6.7
17	6.5	6.0	6.2	6.2	5.9	6.0	6.3	6.2	6.2	6.8	6.6	6.7
18	6.5	6.1	6.3	5.9	5.9	5.9	6.3	6.2	6.3	6.7	6.6	6.7
19	6.5	6.1	6.3	6.0	5.9	5.9	6.4	6.2	6.3	6.7	6.6	6.6
20	6.3	6.0	6.1	6.1	5.9	6.0	6.4	6.3	6.3	6.6	6.5	6.6
21	6.3	6.2	6.2	6.0	5.8	5.9	6.4	6.3	6.3	6.7	6.5	6.6
22	6.4	6.1	6.2	5.9	5.8	5.9	6.4	6.3	6.3	6.7	6.5	6.6
23	6.5	6.0	6.2	5.9	5.8	5.8	6.4	6.3	6.3	6.6	6.5	6.6
24	6.4	6.0	6.2	5.9	5.8	5.9	6.5	6.3	6.4	6.7	6.5	6.6
25	6.5	6.2	6.4	5.9	5.9	5.9	6.4	6.4	6.4	6.6	6.4	6.5
26	6.5	6.3	6.4	6.0	5.7	5.9	6.5	6.4	6.4	6.6	6.4	6.5
27	6.6	6.3	6.5	5.9	5.8	5.9	6.4	6.4	6.4	6.6	6.4	6.5
28	6.4	6.3	6.3	6.0	5.9	5.9	6.5	6.4	6.4	6.6	6.4	6.5
29	6.3	6.3	6.3	6.0	5.9	5.9	6.4	6.4	6.4	6.6	6.4	6.5
30	6.4	6.3	6.3	6.0	5.9	6.0	6.4	6.4	6.4	6.5	6.4	6.5
31	---	---	---	5.9	5.8	5.9	6.5	6.4	6.4	---	---	---
MONTH				6.5	5.7	6.1	6.5	5.7	6.2	6.8	6.4	6.6

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

01594936 NORTH FORK SAND RUN NEAR WILSON, MD--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

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

01595000 NORTH BRANCH POTOMAC RIVER AT STEYER, MD

LOCATION.--Lat 39°18'07", long 79°18'26", Garrett County, Hydrologic Unit 02070002, on left bank 0.3 mi southeast of Steyer, 0.4 mi downstream from Steyer Run, 2.0 mi northeast of Gorman, and at mile 81.8.

DRAINAGE AREA.--73.0 mi².

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,276.01 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 26 to Jan. 15 and Feb. 10 to Mar. 5. Records fair except those for period with ice effect, Dec. 26 to Jan. 15, and for period of missing record, Feb. 10 to Mar. 5, which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--30 years, 174 ft³/s, 32.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s, Nov. 5, 1985, gage height, 13.14 ft, from rating curve extended above 3,000 ft³/s on basis of slope-area measurement at gage height 10.30 ft; minimum discharge 2.9 ft³/s, Sept. 10, 1965, gage height, 2.03 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 15, 1954, reached a stage of 13.0 ft, from floodmarks; discharge, 11,300 ft³/s, from rating curve extended as explained above.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0030	*11,500	*13.14	Mar. 14	2330	2,700	6.74
Nov. 28	2000	2,260	6.28				

Minimum discharge, 5.4 ft³/s, Oct. 1, gage height, 2.10 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	78	365	90	156	140	75	132	56	56	36	17
2	18	210	305	88	319	130	75	125	50	208	33	18
3	21	286	235	86	847	120	70	106	55	225	27	30
4	26	2810	202	84	1270	110	68	97	58	105	22	36
5	22	4410	183	82	815	110	69	90	53	70	22	39
6	21	903	184	82	480	103	99	87	51	52	31	40
7	15	492	165	80	350	104	213	91	47	44	42	32
8	14	346	148	80	270	96	148	91	43	46	62	27
9	15	259	154	80	225	144	146	76	33	314	60	36
10	14	214	173	78	e 210	558	169	72	29	323	35	38
11	17	200	190	78	e 180	1300	179	62	38	188	38	36
12	17	183	429	78	e 160	486	277	56	53	210	40	44
13	9.8	191	846	76	e 140	403	326	63	43	137	34	44
14	12	229	597	76	e 130	941	271	119	37	171	34	30
15	20	183	351	88	e 110	1420	270	89	26	116	30	25
16	38	206	272	100	e 120	548	461	77	34	93	26	38
17	20	267	227	122	580	358	360	65	53	117	22	60
18	17	205	206	264	1000	275	398	100	37	120	22	37
19	13	179	257	527	1400	232	363	166	32	86	23	48
20	136	158	327	530	1100	192	283	342	65	111	23	67
21	845	143	263	301	800	159	261	252	53	136	24	59
22	438	457	280	301	580	140	254	189	30	89	25	52
23	229	355	175	304	410	129	230	154	24	92	24	75
24	158	251	124	239	280	121	207	128	43	76	40	99
25	141	235	112	211	230	105	189	105	39	64	22	110
26	107	262	100	201	200	97	172	89	31	60	21	106
27	91	530	98	172	180	106	149	87	30	54	17	185
28	81	1670	96	164	160	97	134	96	87	43	33	131
29	72	1180	94	257	---	89	186	84	99	40	32	96
30	63	537	93	217	---	83	148	78	56	42	25	92
31	62	---	90	209	---	76	---	68	---	39	18	---
TOTAL	2761.7	17629	7341	5345	12702	8972	6250	3436	1385	3527	943	1747
MEAN	89.1	588	237	172	454	289	208	111	46.2	114	30.4	58.2
MAX	845	4410	846	530	1400	1420	461	342	99	323	62	185
MIN	8.9	78	90	76	110	76	68	56	24	39	17	17
CFSM	1.22	8.06	3.25	2.36	6.22	3.96	2.85	1.52	.63	1.56	.42	.80
IN.	1.41	8.98	3.74	2.72	6.47	4.57	3.18	1.75	.71	1.80	.48	.89

CAL YR 1985 TOTAL 76926.7 MEAN 211 MAX 4410 MIN 8.9 CFSM 2.89 IN 39.20
WTR YR 1986 TOTAL 72038.7 MEAN 197 MAX 4410 MIN 8.9 CFSM 2.70 IN 36.71

01595200 STONY RIVER NEAR MT. STORM, WV

LOCATION.--Lat 39°16'10", long 79°15'45", Grant County, Hydrologic Unit 02070002, on left bank 100 ft downstream from highway bridge on U.S. Highway 50, 1.0 mi west of Mt. Storm, and at mile 6.4.

DRAINAGE AREA.--48.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,554.54 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 4-7. Records good except those for period of no gage-height record, Nov. 4-7, which are fair. Flow regulated by Stony River Reservoir, 14.0 mi upstream from station, capacity, 1,948,000,000 gal, of which 1,681,000,000 gal is controlled above minimum pool. Regulation since 1963 by Virginia Electric and Power Company dam (Mount Storm Lake), 4.0 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--25 years, 101 ft³/s, 28.11 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft³/s, Nov. 5, 1985, gage height, 16.41 ft, from rating curve extended above 7,500 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 1.8 ft³/s, July 13, 1968, Sept. 25, 1985; minimum gage height, 1.73 ft, Sept. 25, 1985.

EXTREMES FOR CURRENT YEAR.--Maximium discharge, @14,000 ft³/s, Nov. 5, gage height, 16.41 ft; minimum discharge, 2.7 ft³/s, Oct. 7, gage height, 1.80 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	113	294	38	41	47	35	45	23	23	8.3	5.4
2	5.7	193	208	34	82	45	33	43	24	47	6.1	5.9
3	5.0	245	72	35	96	40	32	38	25	37	6.4	8.3
4	4.6	675	64	34	422	37	32	36	23	14	6.1	7.8
5	3.9	9680	62	35	755	35	33	34	23	9.6	8.7	7.2
6	3.1	3350	61	44	303	35	44	33	28	8.0	7.2	4.9
7	2.8	1290	56	35	352	35	65	41	26	7.5	6.1	3.7
8	3.3	810	52	36	272	35	47	46	22	9.1	6.4	3.4
9	4.2	655	53	37	76	49	50	36	21	76	6.4	3.6
10	4.0	359	58	33	64	167	56	31	22	44	5.9	3.2
11	5.4	62	59	31	201	700	63	28	24	22	6.1	3.1
12	8.7	56	87	31	121	169	89	29	25	22	6.4	3.3
13	8.4	56	179	31	57	612	113	37	23	15	8.7	3.3
14	9.4	59	133	34	61	810	125	56	20	21	8.3	3.2
15	20	49	114	36	376	1070	150	47	21	14	8.3	3.2
16	19	68	220	40	203	210	532	44	23	11	7.5	3.2
17	12	93	199	36	177	195	177	38	25	10	7.0	3.1
18	13	62	735	53	279	510	203	37	22	11	7.8	4.2
19	16	52	496	105	1130	429	218	38	21	11	9.1	5.9
20	35	46	58	116	588	69	242	148	29	13	11	4.9
21	188	43	47	73	215	58	242	110	22	18	14	3.6
22	137	125	51	87	306	53	183	100	18	12	10	3.3
23	89	97	44	84	306	50	129	86	19	10	7.0	4.7
24	105	69	43	65	191	46	96	57	28	10	8.7	6.4
25	133	68	42	57	70	44	58	34	22	11	6.7	7.2
26	130	77	46	55	59	43	52	34	20	9.6	6.7	4.7
27	131	119	47	51	58	44	49	52	20	7.0	5.9	7.0
28	130	496	43	57	49	46	47	103	26	7.5	6.7	5.9
29	130	370	42	72	---	38	56	89	23	6.7	5.9	4.5
30	122	324	40	57	---	36	47	41	20	6.4	5.4	4.0
31	110	---	42	45	---	36	---	26	---	8.3	5.2	---
TOTAL	1593.3	19761	3747	1577	6910	5793	3298	1617	688	531.7	230.0	142.1
MEAN	51.4	659	121	50.9	247	187	110	52.2	22.9	17.2	7.42	4.74
MAX	188	9680	735	116	1130	1070	532	148	29	76	14	8.3
MIN	2.8	43	40	31	41	35	32	26	18	6.4	5.2	3.1
(†)	1197	1122	994	1122	1042	1197	1175	1164	1241	1283	1208	1224

CAL YR 1985 TOTAL 51781.1 MEAN 142 MAX 9680 MIN 2.0 CFSM 2.91 IN 39.47
WTR YR 1986 TOTAL 45888.1 MEAN 126 MAX 9680 MIN 2.8 CFSM 2.58 IN 34.98

† Month-end contents, in millions of gallons, in Stony River Reservoir, provided by West Virginia Pulp and Paper Company.

01595200 STONY RIVER NEAR MOUNT STORM, WV--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: December 1961 to March 1974, September 1974 to current year.

INSTRUMENTATION.--Temperature recorder (continuous ethyl alcohol - actuated thermograph) since December 1961.

REMARKS.--Temperature recorder stopped Nov. to Jan. 17, Jan. 20, 21..

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 27.5°C, Aug. 14, 1984; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 24.0°C, July 7, 8; minimum, 0.5°C, Jan. 18.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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

01595200 STONY RIVER NEAR MOUNT STORM ,WV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	12.0	11.0	9.0	16.0	14.5	20.0	18.5	22.0	19.0	15.5	14.0
2	13.5	12.0	10.5	7.5	16.0	13.5	20.0	18.5	22.0	19.5	15.5	14.5
3	12.5	10.5	8.5	5.5	13.5	11.5	19.5	18.0	22.0	19.0	17.0	15.0
4	14.0	11.5	8.5	4.5	15.0	11.5	20.5	16.5	21.5	19.0	17.0	16.5
5	13.5	12.5	10.0	5.5	16.0	14.5	22.0	17.5	20.0	19.0	18.5	16.5
6	13.0	12.0	11.5	8.5	16.0	14.5	23.0	19.0	21.0	19.0	18.5	15.0
7	13.0	12.0	13.0	10.0	17.0	15.0	24.0	20.5	22.5	19.5	16.5	14.5
8	13.0	11.0	13.0	10.5	17.0	16.0	24.0	22.5	21.0	19.5	16.0	13.0
9	11.0	9.5	10.5	9.0	17.0	14.0	22.5	19.0	22.5	19.5	15.0	11.5
10	9.5	9.0	11.0	6.5	16.0	13.5	21.0	18.5	21.0	19.5	16.0	12.5
11	9.0	7.5	11.5	7.0	17.5	15.5	20.0	19.0	20.5	19.5	19.5	15.5
12	9.0	7.0	10.0	8.0	18.5	17.5	21.5	19.0	20.0	19.0	19.0	18.0
13	9.5	8.0	9.0	6.5	18.0	16.0	21.5	20.0	19.0	18.5	18.5	16.0
14	12.0	9.0	7.0	6.5	18.0	15.0	21.0	19.5	20.5	17.5	17.0	14.5
15	11.5	10.5	9.5	7.0	18.5	16.0	21.5	19.0	19.5	18.0	18.0	15.0
16	13.0	9.5	11.0	9.0	18.5	16.5	20.5	19.0	21.5	18.5	18.0	15.5
17	9.5	8.5	12.0	11.0	19.0	17.5	22.0	20.0	21.0	19.5	15.5	11.5
18	11.0	8.0	12.0	11.0	17.5	15.5	23.0	21.0	21.0	20.0	14.0	12.0
19	12.5	9.5	12.0	11.0	18.5	15.0	23.5	22.0	20.5	19.0	16.0	13.5
20	13.0	12.0	15.0	11.5	18.0	16.5	23.5	21.0	20.0	19.0	17.0	15.5
21	12.5	11.5	12.5	11.0	19.0	15.5	23.5	20.5	19.0	18.5	17.5	16.5
22	11.5	9.5	11.0	10.0	20.0	16.0	23.0	20.5	20.5	18.0	18.0	15.5
23	9.5	8.5	10.5	9.5	20.5	19.0	22.5	20.5	20.5	18.0	17.5	16.5
24	9.0	6.0	11.0	10.0	20.0	18.0	23.5	21.0	20.0	18.0	17.5	17.5
25	8.0	6.5	10.5	9.0	19.5	17.5	23.0	21.0	18.5	16.0	18.5	17.5
26	11.5	7.0	12.0	9.0	20.0	16.0	23.0	21.0	20.0	17.0	20.0	18.0
27	12.0	9.0	12.0	11.0	20.0	17.0	22.0	20.0	19.5	18.0	20.0	18.5
28	12.5	9.5	14.5	12.5	19.5	19.0	22.5	20.0	18.0	16.5	19.5	18.5
29	12.0	10.5	16.0	13.5	21.0	19.5	23.0	20.0	16.5	12.0	19.0	17.0
30	12.0	9.0	16.0	14.5	21.0	19.5	21.0	20.0	16.0	11.5	20.0	17.5
31	---	---	16.0	15.0	---	---	21.0	19.0	16.0	12.0	---	---
MONTH	14.0	6.0	16.0	4.5	21.0	11.5	24.0	16.5	22.5	11.5	20.0	11.5

01596500 SAVAGE RIVER NEAR BARTON, MD

LOCATION.--Lat 39°34'05", long 79°06'10", Garrett County, Hydrologic Unit 02070002, on right bank 0.9 mi upstream from Bear Pen Run, 1.5 mi downstream from Popular Lick Run, 5.4 mi northwest of Barton, and 10 mi upstream from mouth.

DRAINAGE AREA.--49.1 mi².

PERIOD OF RECORD.--September 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1603.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 19 to Jan. 1, Jan. 8-19, Jan. 30 to Feb. 4, Feb. 11-17, Mar. 8. Records good except those for estimated daily discharges (ice effect), which are fair. U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--38 years, 75.3 ft³/s, 20.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,510 ft³/s, Oct. 15, 1954, gage height, 8.45 ft, from rating curve extended above 1,600 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 0.40 ft³/s, Sept. 3, 4, 1966, gage height, 0.96 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0130	*4,320	*6.57	Feb. 19	1845	1,480	4.17
Nov. 28	0830	1,420	4.09	Mar. 15	0145	1,410	4.08
Feb. 5	1800	816	3.35				

Minimum discharge, 1.6 ft³/s, Oct. 7, 8, 9, 10, 11, 12, gage height, 1.05 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	15	214	30	60	78	26	33	20	5.5	8.7	3.6
2	9.7	41	190	31	55	73	25	31	18	33	7.7	3.8
3	7.4	87	142	33	55	55	23	27	16	36	7.1	4.0
4	4.4	1120	116	31	160	48	22	25	14	18	6.4	4.0
5	2.6	2180	101	26	698	44	21	23	15	12	5.6	4.3
6	2.0	591	91	25	562	41	31	23	15	9.2	5.1	4.1
7	1.7	289	76	21	360	33	56	22	35	7.5	9.2	3.5
8	1.6	178	67	20	238	40	49	21	26	6.4	8.8	3.2
9	1.6	120	63	19	174	52	50	19	20	25	6.9	2.9
10	1.6	90	63	18	137	132	54	18	14	25	5.8	2.9
11	1.7	75	75	17	110	317	60	17	13	14	6.2	2.8
12	1.8	67	91	17	90	244	74	15	14	38	5.2	2.7
13	1.9	63	114	17	75	211	99	16	14	46	4.5	2.7
14	2.7	73	140	17	65	372	98	46	12	56	4.4	2.7
15	5.4	92	121	17	60	981	94	40	9.7	35	4.2	2.7
16	6.2	250	107	22	60	408	176	36	8.8	24	4.2	2.5
17	4.3	437	88	30	180	259	235	36	15	24	4.2	2.5
18	3.2	255	68	70	565	175	283	33	10	19	4.3	2.5
19	2.7	168	60	180	951	139	216	32	8.3	31	4.1	2.7
20	3.5	123	55	248	853	108	161	76	8.7	70	4.0	3.0
21	57	95	50	172	511	82	131	126	8.5	51	5.5	2.9
22	98	237	46	134	368	70	103	116	7.1	33	6.9	2.9
23	76	394	44	127	260	60	83	92	7.2	49	5.2	2.8
24	66	245	42	116	182	54	69	75	7.1	31	6.2	3.9
25	59	166	40	102	136	48	59	59	6.0	35	5.7	11
26	39	141	40	92	108	44	54	48	5.5	24	4.1	6.2
27	29	357	38	75	94	41	49	42	5.6	19	6.9	6.0
28	23	1150	36	63	73	37	45	40	8.3	15	8.5	6.2
29	19	668	34	175	---	32	41	32	7.5	15	5.4	5.6
30	15	324	32	100	---	30	36	26	6.0	12	4.3	4.4
31	14	---	30	70	---	27	---	24	---	10	3.7	---
TOTAL	564.8	10091	2474	2115	7240	4335	2523	1269	375.3	828.6	179.0	115.0
MEAN	18.2	336	79.8	68.2	259	140	84.1	40.9	12.5	26.7	5.77	3.83
MAX	98	2180	214	248	951	981	283	126	35	70	9.2	11
MIN	1.6	15	30	17	55	27	21	15	5.5	5.5	3.7	2.5
CFSM	.37	6.84	1.63	1.39	5.28	2.85	1.71	.83	.26	.54	.12	.08
IN.	.43	7.65	1.87	1.60	5.49	3.28	1.91	.96	.28	.63	.14	.09

CAL YR 1985 TOTAL 29071.0 MEAN 79.6 MAX 2180 MIN 1.2 CFSM 1.62 IN 22.02
WTR YR 1986 TOTAL 32109.7 MEAN 88.0 MAX 2180 MIN 1.6 CFSM 1.79 IN 24.33

01597500 SAVAGE RIVER, BELOW SAVAGE RIVER DAM, NEAR BLOOMINGTON, MD

LOCATION.--Lat 39°30'05", long 79°07'25", Garrett County, Hydrologic Unit 02070002, on left bank 0.7 mi downstream from Savage River Dam, 1.1 mi downstream from Crabtree Creek, 3.2 mi northwest of Bloomington, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--106 mi².

PERIOD OF RECORD.--October 1948 to current year.

REVISED RECORDS.--WSP 1432: 1955.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,276.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 26 to Jan. 4. Records good except those for period of no gage-height record, Dec. 26 to Jan. 4, which are fair. Diversions upstream from station by Baltimore and Ohio Railroad and by cities of Frostburg and Westernport for municipal supply. Flow regulated by Savage River Reservoir beginning December 1950, capacity 20,000 acre-ft. U.S. Army Corps of Engineers satellite telemeter at station. Upper Potomac River Commission gage height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--38 years, 166 ft³/s, 21.27 in/yr, adjusted for storage since December 1950.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,530 ft³/s, Oct. 16, 1954, gage height, 7.70 ft; minimum discharge, 0.35 ft³/s, Oct. 27, 1966, gage height, 0.57 ft; minimum daily discharge, 0.6 ft³/s, July 27-31, Aug. 5, 6, 9, 10, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,550 ft³/s, Nov. 4, gage height, 7.81 ft; minimum discharge, 9.3 ft³/s, Sept. 25, gage height, 0.66 ft; minimum daily discharge, 43 ft³/s, Aug. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	53	1130	62	109	167	90	121	95	53	50	189
2	121	53	1120	62	108	167	74	107	70	55	150	51
3	56	55	1100	62	108	167	74	100	73	54	159	51
4	51	123	765	62	358	130	74	100	56	53	47	51
5	52	3600	575	62	729	105	74	83	56	335	47	51
6	52	1390	567	62	858	102	74	74	56	360	47	50
7	52	1150	558	62	857	92	74	74	56	91	47	50
8	52	832	549	62	846	86	74	67	56	91	47	50
9	52	457	539	62	835	86	74	64	55	67	46	50
10	52	453	427	62	532	88	75	64	54	52	46	50
11	52	447	253	62	303	108	75	64	54	52	46	50
12	52	442	185	62	302	118	75	64	54	52	46	50
13	52	438	187	62	298	244	76	64	54	52	46	50
14	52	437	189	62	297	500	77	64	54	52	55	50
15	52	334	190	62	295	1120	78	64	54	52	50	50
16	52	262	190	62	295	1110	106	64	54	52	50	50
17	52	269	188	62	293	795	126	64	55	52	50	50
18	52	411	188	62	303	436	128	64	54	52	50	50
19	52	515	187	62	911	319	384	64	54	52	50	50
20	52	513	188	60	1780	262	507	86	54	52	50	50
21	56	509	186	59	1450	160	330	112	54	52	50	50
22	56	511	185	75	1230	119	326	119	54	52	49	50
23	54	514	185	90	837	119	235	119	54	52	48	50
24	54	514	185	98	674	118	145	119	54	52	48	50
25	53	579	184	100	403	117	123	119	54	53	48	48
26	53	617	131	103	217	117	123	119	54	51	48	48
27	53	617	85	108	168	117	123	118	54	51	43	191
28	53	651	75	108	167	117	121	119	54	51	43	242
29	53	1330	75	109	---	117	120	119	53	51	218	107
30	53	1150	75	109	---	117	121	104	53	50	395	47
31	53	---	69	109	---	116	---	96	---	50	390	---
TOTAL	1881	19226	10710	2306	15563	7536	4156	2779	1706	2296	2559	2026
MEAN	60.7	641	345	74.4	556	243	139	89.6	56.9	74.1	82.5	67.5
MAX	230	3600	1130	109	1780	1120	507	121	95	360	395	242
MIN	51	53	69	59	108	86	74	64	53	50	43	47
(†)	8900	18800	7950	10380	11070	15560	19090	19280	17540	16200	11790	8030

CAL YR 1985 TOTAL 74624 MEAN 204 MAX 3600 MIN 48 CFSM 1.93 IN 26.19
WTR YR 1986 TOTAL 72744 MEAN 199 MAX 3600 MIN 43 CFSM 1.88 IN 25.53

† Monthend contents, in acre-feet, in Savage River Reservoir (contents on Sept. 30, 1985, 10,500 acre-feet). Records provided by U.S. Army Corps of Engineers.

01598500 NORTH BRANCH POTOMAC RIVER AT LUKE, MD

LOCATION.--Lat 39°28'45", long 79°03'55", Mineral County, W. Va., Hydrologic Unit 02070002, on right bank 0.2 mi downstream from Savage River, 0.5 mi northwest of Luke, and at mile 53.3.

DRAINAGE AREA.--404 mi².

PERIOD OF RECORD.--June 1899 to July 1906 (published as at Piedmont, W. Va.), October 1949 to current year.

REVISED RECORDS.--WSP 192: 1899-1904. WSP 1432: 1905-6, drainage area at former site.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 944.22 ft above National Geodetic Vertical Datum of 1929. June 27, 1899, to July 15, 1906, nonrecording gage at bridge 1.1 mi downstream at datum about 35 ft lower.

REMARKS.--Estimated daily discharges: Jan. 1 to Mar. 31. Records good except those for periods of partially plugged intakes, Jan. 1 to Mar. 31, which are poor. Flow regulated prior to July 1981 by Stony River Reservoir, 45 mi upstream from station (see station 01597500), since December 1950 by Savage River Reservoir, 5 mi upstream from station (see station 01597500), and since July 1981 by Jennings Randolph Lake, 9 mi upstream from station (see station 01595800). Some regulation at low flow by West Virginia Pulp and Paper Company at site used 1899 1906. U.S. Army Corps of Engineers satellite telemeter at station. Upper Potomac River Commission gage height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--43 years (water years 1900-05, 1950-86), 719 ft³/s, 24.17 in/yr, adjusted for storage since October 1949.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,400 ft³/s, Oct. 15, 1954, gage height, 17.15 ft, from rating curve extended above 25,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily discharge, 6 ft³/s, Sept. 4, 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,940 ft³/s, Nov. 7, gage height, 8.85 ft; minimum discharge, 143 ft³/s, July 21, gage height, 1.56 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	473	608	3530	998	287	625	389	459	310	229	244	550
2	394	620	3470	988	310	584	332	420	276	250	564	309
3	326	682	3940	880	333	557	284	390	254	240	725	307
4	323	1960	3660	633	518	519	282	390	242	232	289	305
5	322	5110	2790	606	1940	473	286	364	240	740	287	304
6	321	4250	2530	597	1930	421	294	322	240	922	293	302
7	320	7820	2200	592	1960	356	300	322	242	270	291	299
8	319	6950	2140	590	1950	367	293	278	241	268	288	299
9	318	5660	2190	595	1940	449	295	257	238	257	286	299
10	318	5810	2090	597	1590	1180	296	256	237	234	286	299
11	318	5890	1820	577	966	1230	301	254	238	240	288	298
12	318	5050	1810	566	671	1750	303	254	237	243	285	298
13	318	3180	1870	532	608	1830	304	259	234	240	281	296
14	318	2230	1880	429	545	2400	302	271	234	239	293	296
15	318	1440	1850	372	533	5760	314	262	233	235	295	296
16	317	1250	1830	351	519	5770	422	259	233	226	293	295
17	315	1290	1810	314	529	2960	426	256	241	241	294	296
18	315	1340	1780	294	870	1680	429	254	232	225	298	371
19	315	1520	1710	291	1290	1730	639	257	230	226	309	435
20	322	1320	1580	316	4020	1340	797	387	236	231	312	432
21	467	1500	1710	295	3840	730	592	578	232	233	315	431
22	711	1600	1680	294	3570	589	668	655	230	254	309	429
23	659	1610	1530	318	2670	609	664	529	230	254	309	430
24	651	1580	1320	314	1890	645	564	422	229	250	307	444
25	638	1600	1280	320	1350	521	530	418	228	257	306	439
26	630	1640	1200	321	1010	430	527	416	228	250	304	435
27	625	1700	1080	317	833	421	496	416	230	247	301	739
28	618	2150	1040	354	750	413	471	415	233	245	298	958
29	614	3220	1060	413	---	413	467	412	230	247	514	594
30	608	3600	1030	320	---	414	462	368	229	245	774	303
31	607	---	1010	283	---	415	---	314	---	244	770	---
TOTAL	13436	84180	60420	14667	39222	37581	12729	11114	7167	8714	11008	11788
MEAN	433	2806	1949	473	1401	1212	424	359	239	281	355	393
MAX	711	7820	3940	998	4020	5770	797	655	310	922	774	958
MIN	315	608	1010	283	287	356	282	254	228	225	244	295

CAL YR 1985 TOTAL 363738 MEAN 997 MAX 7820 MIN 261 CFSM 2.47 IN 33.49
WTR YR 1986 TOTAL 312026 MEAN 855 MAX 7820 MIN 225 CFSM 2.12 IN 28.73

01599000 GEORGES CREEK AT FRANKLIN, MD

LOCATION.--Lat 39°29'38", long 79°02'42", Allegany County, Hydrologic Unit 02070002, on right bank at Franklin, and 1.2 mi upstream from Westernport and mouth.
DRAINAGE AREA.--72.4 mi².
PERIOD OF RECORD.--May 1905 to July 1906 (published as at Westernport), October 1929 to current year.
REVISED RECORDS.--WSP 726: Drainage area. WSP 1502: 1940.
GAGE.--Water-stage recorder. Datum of gage is 958.96 ft Westvaco Corporation datum. May 4, 1905, to July 15, 1906, nonrecording gage at bridge 0.8 mi downstream at different datum. Oct. 16, 1929, to Oct. 1, 1937, water-stage recorder at site 95 ft downstream at present datum.
REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 19, Feb. 19, Mar. 3-9, 14, Mar. 25 to Apr. 6, Apr. 27 to May 20, June 2 to July 1, July 5-21. Records fair except those for periods of lagging or plugged intake, Mar. 3-9, Mar. 25 to Apr. 6, Apr. 27 to May 20, June 2 to July 1, July 5-21, which are poor. Records include about 0.5 ft³/s of sewage from city of Frostburg, which obtains its water supply from Big Piney Run (Monongahela River basin) and Savage River. A negligible discharge is diverted upstream from station by Frostburg Water Co. for municipal supplies of Eckhart and Welch Hill. An undetermined amount of water is diverted from the upper third of basin into the Wills Creek basin by the Hoffman drainage tunnel (see station 01601500). Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.
AVERAGE DISCHARGE.--57 years (water years 1930-86), 81.9 ft³/s, 15.36 in/yr.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,500 ft³/s, Mar. 17, 1936, gage height, 9.6 ft, site then in use, from rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 1.6 ft³/s, Sept. 29 to Oct. 13, 1930.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1924, reached a stage of about 10 ft, from floodmarks, at site 95 ft downstream.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 4	2300	*4,300	*10.78	Feb. 19	1715	1,660	6.66

Minimum discharge, 3.3 ft³/s, Sept. 15, 16, 17, 18.

REVISIONS.--The maximum discharge reported for water year 1984 has been revised to 3,250 ft³/s, Apr. 5, 1984, gage height, 9.40 ft., superseding the figure published in the report for 1984. The peak discharge for July 4, 1984 has been revised to 2,940 ft³/s, gage height, 8.96 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	18	339	45	57	124	46	52	46	13	8.8	5.4
2	7.9	32	326	48	61	112	44	50	36	27	8.5	6.2
3	8.8	161	217	52	79	95	42	46	30	37	7.9	6.2
4	8.4	1880	178	46	260	85	40	42	28	23	7.2	6.2
5	7.9	1640	163	40	350	80	40	40	26	16	6.8	6.3
6	7.4	661	153	38	304	75	50	38	24	13	11	5.6
7	6.6	356	136	35	221	70	88	36	50	12	15	5.1
8	6.3	220	124	32	169	65	73	36	36	11	12	4.9
9	6.2	159	113	30	144	80	69	34	26	12	9.1	4.4
10	6.1	127	108	28	127	161	70	34	22	32	7.7	4.2
11	6.1	106	106	27	118	242	73	32	20	20	8.7	4.2
12	6.3	95	100	27	98	183	77	32	28	18	7.0	4.1
13	6.4	90	139	26	83	216	76	32	24	46	6.7	3.9
14	8.6	105	146	26	82	480	75	70	19	50	6.6	3.8
15	8.9	97	115	26	84	890	75	50	15	30	6.4	3.7
16	7.9	274	107	26	76	550	122	46	14	20	6.5	3.5
17	7.1	336	98	27	152	362	143	44	26	19	6.6	3.4
18	7.1	210	86	28	510	263	177	42	18	19	6.5	3.9
19	7.3	167	77	37	960	218	154	40	14	30	5.8	5.4
20	10	142	76	105	1030	174	139	40	13	65	7.5	5.1
21	65	116	72	78	826	144	130	114	18	34	11	4.8
22	104	354	70	77	569	127	118	99	16	26	9.2	4.3
23	75	322	69	82	405	115	105	90	14	31	7.1	3.9
24	66	219	68	70	290	102	95	86	13	18	6.7	5.1
25	52	178	60	72	226	85	88	81	13	32	5.7	7.4
26	32	167	54	71	187	75	83	75	12	20	5.3	5.6
27	25	344	52	71	168	65	75	59	12	18	5.9	6.5
28	21	936	51	63	141	60	65	59	12	13	7.3	7.5
29	18	688	49	60	---	55	60	57	20	13	5.6	6.1
30	16	445	48	57	---	55	55	55	14	12	5.1	5.3
31	15	---	47	57	---	50	---	54	---	10	5.1	---
TOTAL	635.6	10645	3547	1507	7777	5458	2547	1665	659	740	236.3	152.0
MEAN	20.5	355	114	48.6	278	176	84.9	53.7	22.0	23.9	7.62	5.07
MAX	104	1880	339	105	1030	890	177	114	50	65	15	7.5
MIN	5.3	18	47	26	57	50	40	32	12	10	5.1	3.4
CFSM	.28	4.90	1.58	.67	3.84	2.43	1.17	.74	.30	.33	.11	.07
IN.	.33	5.47	1.82	.77	4.00	2.80	1.31	.86	.34	.38	.12	.08

CAL YR 1985 TOTAL 34616.1 MEAN 94.8 MAX 1880 MIN 5.1 CFSM 1.31 IN 17.79
WTR YR 1986 TOTAL 35568.9 MEAN 97.4 MAX 1880 MIN 3.4 CFSM 1.35 IN 18.28

01601500 WILLS CREEK NEAR CUMBERLAND, MD

LOCATION.--Lat 39°40'07", long 78°47'18", Allegany County, Hydrologic Unit 02070002, on right bank at downstream side of Western Maryland Railway bridge, 0.15 mi downstream from Braddock Run, 2.0 mi upstream from Cumberland, and mouth.

DRAINAGE AREA.--247 mi².

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Cumberland"), October 1929 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1432: 1906, 1930(M), 1933-34(M), 1936-37, 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 640.89 ft above National Geodetic Vertical Datum of 1929. May 6, 1905, to July 14, 1906, nonrecording gage at highway bridge 700 ft upstream at different datum. Oct. 18, 1929, to Mar. 17, 1936, water-stage recorder, and Apr. 1, 1936, to Mar. 19, 1937, nonrecording gage at site 200 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 25-30, Jan. 6-9, 27-31, and Feb. 11-15. Records good except those for period with ice effect, Dec. 25-30, Jan. 6-9, 27-31, and Feb. 11-15, which are fair. Records include drainage from numerous active and abandoned coal mines. An undetermined amount of water is diverted into the basin from Georges Creek basin by Hoffman drainage tunnel. Miscellaneous measurements of discharge from the Hoffman drainage tunnel have been made in the water years 1944, 1964-65, and 1967-82, 84 by the U.S. Geological Survey, and in the water years 1958 and 1959 by the Maryland Geological Survey. Slight diurnal fluctuation at low flow caused by quarry upstream. U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

DISCHARGE.--57 years (water years 1930-86), 329 ft³/s, 18.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,100 ft³/s, Mar. 17, 1936, gage height, 20.2 ft, from floodmarks at present site, from rating curve extended above 11,000 ft³/s on basis of slope-area measurements at gage heights 13.45 ft and 20.2 ft; minimum discharge, 9 ft³/s, Oct. 14, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0830	*8,970	*9.10	Feb. 19	2315	7,170	8.28
Nov. 27	0415	5,410	7.36	Mar. 15	0400	5,590	7.46
Nov. 28	0845	5,410	7.36				

Minimum discharge, 19 ft³/s, Sept. 15, 16, 17, 18, gage height, 1.59 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	68	1260	150	192	420	195	197	118	47	36	23
2	27	79	1290	136	213	377	186	190	105	84	35	23
3	29	300	1000	139	319	362	176	173	97	76	34	24
4	31	2860	835	143	963	327	170	161	88	56	32	24
5	29	6760	713	137	2010	303	170	153	86	46	31	25
6	27	2310	638	95	2030	286	227	147	126	43	33	25
7	26	1170	549	95	1270	268	299	150	251	40	43	24
8	25	768	484	75	886	204	261	142	673	38	36	23
9	24	564	436	85	699	263	259	131	382	120	34	22
10	24	453	399	109	584	426	265	126	247	123	32	22
11	23	367	384	112	510	810	274	120	191	78	32	22
12	24	320	407	110	420	781	267	114	206	113	31	22
13	24	349	478	112	330	801	244	116	159	89	30	21
14	27	350	532	85	290	1440	231	138	132	73	28	20
15	31	729	454	91	340	4420	246	133	111	60	27	20
16	31	1540	460	85	309	2050	474	121	98	60	26	19
17	30	2800	423	94	400	1240	672	117	110	68	27	19
18	29	1510	358	107	1060	900	923	112	93	57	28	19
19	28	988	241	169	3810	760	829	125	79	96	28	21
20	31	750	268	433	4800	628	687	370	75	95	27	22
21	96	592	275	428	2760	506	608	406	67	96	30	22
22	342	1230	217	380	1880	441	513	345	62	75	31	22
23	305	1560	274	391	1310	399	428	309	57	61	33	21
24	352	1160	257	349	969	359	362	267	62	55	34	26
25	318	861	190	359	776	316	320	228	70	63	28	61
26	187	1070	120	357	650	290	296	198	56	55	28	62
27	136	4490	140	323	594	273	267	183	52	55	28	40
28	106	4830	160	160	493	253	244	198	57	48	25	33
29	85	3040	130	150	---	232	233	163	56	43	24	30
30	73	1730	130	190	---	216	208	142	50	40	23	29
31	66	---	141	180	---	205	---	130	---	38	23	---
TOTAL	2609	45598	13643	5829	30867	20556	10534	5605	4016	2091	937	786
MEAN	84.2	1520	440	188	1102	663	351	181	134	67.5	30.2	26.2
MAX	352	6760	1290	433	4800	4420	923	406	673	123	43	62
MIN	23	68	120	75	192	204	170	112	50	38	23	19
CFSM	.34	6.15	1.78	.76	4.46	2.68	1.42	.73	.54	.27	.12	.11
IN.	.39	6.87	2.05	.88	4.65	3.10	1.59	.84	.60	.31	.14	.12

CAL YR 1985 TOTAL 145278 MEAN 398 MAX 6760 MIN 22 CFSM 1.61 IN 21.88
WTR YR 1986 TOTAL 143071 MEAN 392 MAX 6760 MIN 19 CFSM 1.59 IN 21.55

01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD

LOCATION.--Lat 39°37'16", long 78°46'24", Allegany County, Hydrologic Unit 02070002, on left bank at downstream side of Wiley Ford Bridge, 2.0 mi south of Cumberland, 2.1 mi downstream from Wills Creek, and at mile 19.6.

DRAINAGE AREA.--875 mi².

PERIOD OF RECORD.--May 1929 to current year. Gage-height records collected at various sites about 2.0 mi upstream from September 1901 to December 1932 and thereafter at present site, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 726: Drainage area. WSP 781: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 585.22 ft above National Geodetic Vertical Datum of 1929. Prior to June 18, 1929, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 28-31. Records good except those for period with ice effect, Jan. 28-31, which are fair. Prior to July 1981 some regulation at low flow by Stony River Reservoir, 79 mi upstream from station (see station 01595200). Low-flow regulation since December 1950 by Savage River Reservoir, 39 mi upstream from station (see station 01597500). Flow regulated by Jennings Randolph Lake, 43 mi upstream from station (see station 01595800) since July 1981. Prior to July 1957, small amount of inflow from industrial wastes and sewage from city of Cumberland from water diverted from Evitts Creek, mouth of which is downstream from station. Diversion to Chesapeake and Ohio Canal prior to 1935. National Weather Service gage height telemeter at station. U.S. Army Corps of Engineers satellite telemeter at gage. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--57 years, 1,275 ft³/s, 19.79 in/yr, adjusted for storage since October 1981.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,200 ft³/s, Mar. 17, 1936, gage height, 29.1 ft, from rating curve extended above 33,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge (river only), 12 ft³/s, Sept. 22, 1932, gage height, 2.38 ft; minimum daily discharge (including flow in canal), 38 ft³/s, Sept. 24, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 29.2 ft June 1, 1889, discharge, about 89,000 ft³/s. Flood of Mar. 29, 1924, reached a stage of 28.4 ft, discharge, about 82,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,500 ft³/s, Nov. 5, gage height, 18.85 ft; minimum discharge, 292 ft³/s, Aug. 1, 2, gage height, 2.50 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	584	845	5820	1220	697	1490	843	891	549	320	316	875
2	608	892	5800	1190	699	1370	768	874	520	414	315	517
3	435	1240	5420	1180	875	1330	681	759	445	441	1020	373
4	409	5700	5550	956	1870	1270	635	725	427	361	572	369
5	396	19700	4010	866	5760	1170	633	708	416	359	361	375
6	388	8880	3780	810	5930	1120	744	642	442	1360	363	365
7	384	9540	3220	804	4930	992	885	633	565	621	432	360
8	385	9100	3070	743	4330	861	807	604	1040	358	386	354
9	383	6700	2990	754	3970	952	771	524	718	490	370	351
10	382	6450	3020	780	3570	1290	788	509	570	458	359	354
11	381	6540	2520	784	2240	2580	811	489	511	376	364	353
12	380	6200	2570	766	1590	3520	818	475	526	450	354	349
13	381	3910	2960	769	1330	3530	790	481	471	413	348	345
14	408	3070	3310	586	1170	4980	772	562	436	380	345	344
15	400	2440	2970	519	1220	13700	785	566	409	355	363	344
16	393	3210	2870	537	1130	11000	1180	516	395	341	359	341
17	386	5200	2720	456	1270	5860	1590	497	426	386	363	336
18	387	3400	2580	448	3180	3470	2080	489	405	369	370	338
19	386	3020	2320	542	7700	3310	1880	508	367	397	379	510
20	401	2440	2070	992	13400	2910	2090	954	372	441	392	528
21	763	2330	2320	958	10100	1620	1710	1320	367	432	408	525
22	1470	3710	2180	878	8430	1340	1520	1360	350	391	406	520
23	1500	4430	2170	943	6160	1270	1520	1270	343	407	398	517
24	1380	3620	1730	905	4500	1420	1290	975	344	384	395	553
25	1330	3110	1670	923	3270	1190	1170	895	355	424	375	590
26	1080	3240	1480	928	2440	1050	1130	841	332	393	372	587
27	980	7010	1340	901	2100	984	1090	801	332	374	375	619
28	923	9360	1330	600	1880	970	991	825	360	352	364	1160
29	883	8370	1260	630	---	931	968	763	353	343	356	1070
30	855	6850	1240	670	---	898	919	720	329	332	820	418
31	836	---	1210	670	---	870	---	599	---	326	891	---
TOTAL	20257	160507	87500	24708	105741	79248	32659	22775	13475	13248	13291	14640
MEAN	653	5350	2823	797	3776	2556	1089	735	449	427	429	488
MAX	1500	19700	5820	1220	13400	13700	2090	1360	1040	1360	1020	1160
MIN	380	845	1210	448	697	861	633	475	329	320	315	336

CAL YR 1985 TOTAL 625894 MEAN 1715 MAX 19700 MIN 361 CFSM 1.96 IN 26.61
WTR YR 1986 TOTAL 588049 MEAN 1611 MAX 19700 MIN 315 CFSM 1.84 IN 25.00

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV

LOCATION.--Lat 39°26'49", long 78°39'16", Hampshire County, Hydrologic Unit 02070001, on left bank at highway bridge, 2.0 mi east of Springfield, and at mile 13.4.

DRAINAGE AREA.--1,471 mi².

PERIOD OF RECORD.--June 1894 to February 1896 (fragmentary), June 1899 to February 1902, August 1903 to July 1906, August 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 562.02 ft above National Geodetic Vertical Datum of 1929. June 1984 to February 1986, nonrecording gage at Baltimore & Ohio Railroad bridge 11.2 mi upstream at different datum. June 26, 1899, to Feb. 2, 1902, nonrecording gage at bridge 10.0 mi upstream at different datum. Aug. 28, 1903, to July 14, 1906, nonrecording gage at present site at different datum. Aug. 8, to Sept. 24, 1928, nonrecording gage at present site and datum.

REMARKS.-- National Weather Service gage-height telemeter and U.S. Army Corps of Engineers satellite telementry at station.

AVERAGE DISCHARGE.--61 years (water years 1900-01, 1904-05, 1929-85), 1,309 ft³/s, 12.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s, Mar. 18, 1936, gage height, 34.2 ft, from rating curve extended above 28,000 ft³/s on basis of measurement made about 10 mi upstream from station, adjusted for storage and inflow and slope-area measurement at gage height 29.84 ft; minimum discharge, 29 ft³/s, Jan.28, 1956, result of freezeup, July 30, 1966, result of temporary dam; minimum gage height, 0.39 ft, July 30, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1877 reached a stage of about 34 ft, from floodmarks, discharge, 140,000 ft³/s.

NOTE: For 1986 water-year data on this station see U.S. Geological Survey Water-Data Report WV-86-1. Data for this station will also appear in U.S. Geological Survey Water-Data Report MD-DE-87-1.

01610000 POTOMAC RIVER AT PAW PAW, WV

LOCATION.--Lat 39°32'13", long 78°27'28", Allegany County, Md., Hydrologic Unit 02070003, on left bank 250 ft upstream from bridge on Maryland State Highway 51 at Paw Paw, 3.3 mi downstream from Little Cacapon River, and at mile 277.

DRAINAGE AREA.--3,109 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 487.88 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 25, 1939, nonrecording gage at bridge 250 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 14-17, 28-31, and Feb. 1, 11-14. Records good. Low flow affected by Stony River Reservoir prior to July 1981 (see station 01595200), since December 1950 by Savage River Reservoir (see station 01597500), and since July 1981 by Jennings Randolph Lake (see station 01595800). National Weather Service gage height telemeter at station. U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--48 years, 3,307 ft³/s, 14.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 235,000 ft³/s, Nov. 5, 1985, gage height, 53.58 ft, from rating curve extended above 85,000 ft³/s on basis of slope-area measurement of peak flow at site 5.0 mi upstream at Okonoko, W. Va.; minimum discharge, 164 ft³/s, Sept. 10, 11, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 54.0 ft Mar. 18, 1936, discharge, 240,000 ft³/s, from rating curve extended above 85,000 ft³/s on basis of slope-area measurement of peak flow at site 5.0 mi upstream at Okonoko, W. Va.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	2215	*235,000	*53.58	Feb. 20	0845	28,300	20.93
Nov. 29	0345	21,900	18.76	Mar. 15	2145	54,600	27.86

Minimum discharge, 441 ft³/s, Sept. 18, gage height, 4.73 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985	1210	12100	2540	2100	4210	2290	2610	1580	1130	603	1010
2	874	1220	10800	2420	2050	3820	2200	2480	1470	1350	587	845
3	838	2400	9340	2430	2190	3660	2080	2310	1420	2450	725	632
4	701	13400	8940	2330	2880	3560	1970	2140	1230	2540	1040	572
5	746	113000	7200	2140	7110	3430	1940	2040	1160	2040	608	562
6	790	125000	6720	2070	9020	3320	2010	1960	1110	2000	561	641
7	803	28900	6120	2010	7700	3250	2240	1880	1210	2090	600	593
8	793	20700	5690	1910	6650	2970	2490	1850	2160	1240	632	563
9	781	15100	5350	1890	5990	2840	2430	1760	1970	1180	593	539
10	777	12100	5210	1950	5770	2990	2470	1660	1560	1220	572	524
11	767	10700	4740	1870	4900	4400	2510	1600	1430	1060	584	513
12	758	9400	4590	1840	4200	6840	2450	1540	1430	1110	586	505
13	749	7570	5070	1850	3600	6560	2380	1490	1400	1130	574	489
14	770	6100	8100	1600	3300	9030	2430	1560	1280	996	557	477
15	836	5440	7600	1500	3270	43600	2450	1690	1180	898	546	470
16	803	5120	6640	1450	3090	35500	2930	1650	1080	847	570	464
17	787	9970	5970	1500	3080	16400	4450	1550	1120	882	568	454
18	775	7070	5440	1540	5840	9770	5750	1500	1070	853	578	443
19	775	5820	4790	1520	15000	7510	5060	1570	937	842	610	471
20	786	5130	4320	1890	25900	6590	4600	2090	888	885	635	605
21	1100	4540	4240	2840	18700	5070	4230	4820	874	947	661	606
22	4410	5890	3930	2880	14500	4210	3800	5610	845	861	677	597
23	4980	12200	4060	2710	10600	3790	3500	4170	842	797	666	598
24	4170	9760	3760	2750	8240	3620	3160	3410	842	862	673	603
25	3620	7680	3610	2700	6810	3360	2860	2890	820	765	664	663
26	2950	6800	3280	2630	5740	3070	2700	2550	813	784	660	683
27	2500	9600	3000	2600	5190	2860	2590	2320	830	723	668	669
28	2240	14800	2910	2350	4770	2730	2450	2200	885	687	651	857
29	2040	21700	2750	1900	---	2610	2350	2150	859	662	608	1120
30	1640	17200	2630	1950	---	2500	2380	1770	835	679	710	943
31	1260	---	2490	2000	---	2390	---	1650	---	637	1000	---
TOTAL	46804	515520	171390	65560	198190	216460	87150	70470	35130	35147	19967	18711
MEAN	1510	17180	5529	2115	7078	6983	2905	2273	1171	1134	644	624
MAX	4980	125000	12100	2880	25900	43600	5750	5610	2160	2540	1040	1120
MIN	701	1210	2490	1450	2050	2390	1940	1490	813	637	546	443

CAL YR 1985 TOTAL 1633814 MEAN 4476 MAX 125000 MIN 560 CFSM 1.44 IN 19.55
WTR YR 1986 TOTAL 1480499 MEAN 4056 MAX 125000 MIN 443 CFSM 1.31 IN 17.71

01610155 SIDELING HILL CREEK NEAR BELLEGROVE, MD

WATER-QUALITY RECORDS

LOCATION.--Lat 39°38'58", long 78°20'40", Washington County, Hydrologic Unit 02070003, on left bank at bridge on Pearre Road, 1.2 mi upstream from mouth, and 4.0 mi south of Bellegrove.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--Water years 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY											
13...	1330	13	86	7.40	20.0	17.0	5	9.9	30	9	7.2
AUG											
26...	1150	0.55	139	7.70	27.0	24.0	10	--	46	7	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY											
13...	3.0	4.2	22	0.3	1.8	26	21	1.6	14	6.9	<0.1
AUG											
26...	4.4	6.3	22	0.4	2.5	48	39	1.5	12	8.2	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY											
13...	3.6	53	54	0.07	1.9	<0.10	0.01	100	68	20	9
AUG											
26...	1.1	74	69	0.1	0.11	<0.10	<0.01	130	47	30	16

01612500 LITTLE TONOLOWAY CREEK NEAR HANCOCK MD

WATER-QUALITY RECORDS

LOCATION.--Lat 39°42'45", long 78°13'55", Washington County, Hydrologic Unit 02070004, on right bank at downstream side of highway bridge, 100 ft downstream from unnamed tributary, and 2.8 mi northwest of Hancock.

DRAINAGE AREA.--16.9 mi².

PERIOD OF RECORD.--Water years 1964, 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY											
29...	2015	1.5	339	7.10	21.5	19.5	5	7.8	91	65	20
AUG											
26...	1415	13	660	6.90	32.0	21.0	10	--	220	170	51

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY											
29...	10	22	34	1	2.6	32	26	4.0	56	44	<0.1
AUG											
26...	22	33	24	1	3.5	62	51	12	130	68	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY											
29...	7.8	193	180	0.26	0.77	0.60	<0.01	90	12	2000	2
AUG											
26...	9.7	368	350	0.5	13	0.90	<0.01	80	15	1700	1600

01613000 POTOMAC RIVER AT HANCOCK, MD

LOCATION.--Lat 39°41'49", long 78°10'39", Washington County, Hydrologic Unit 02070004, on left bank, 0.2 mi downstream from Little Tonoloway Creek, 0.5 mi downstream from bridge on U.S. Highway 522 at Hancock, 1.1 mi upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek), and at mile 239.

DRAINAGE AREA.--4,073 mi².

PERIOD OF RECORD.--October 1932 to current year. Gage-height records collected at same site since June 1925 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 781: 1933(M). WSP 801: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 383.68 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1932, to Jan. 5, 1935, Mar. 18, 1936, to Jan. 20, 1937, nonrecording gage, on former highway bridge just upstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 5-7, Jan. 16-19, and Jan.31 to Feb. 2. Records good. Slight regulation at low flow from power plants upstream. Low flow affected slightly by Stony River Reservoir prior to July 1981 (see station 01595200), since December 1950 by Savage River Reservoir (see station 01597500), and since July 1981 by Jennings Randolph Lake (see station 01595800). National Weather Service gage height telemeter at station. U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--54 years, 4,167 ft³/s, 13.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340,000 ft³/s, Mar. 18, 1936, gage height, 47.6 ft, from rating curve extended above 120,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge observed, 180 ft³/s, Oct. 4, 1932, gage height, 2.01 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1932, about 40 ft in May 1889, discharge, about 220,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 23,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 6	0630	*207,000	*41.20	Feb. 20	1430	39,900	17.74
Nov. 29	2145	28,400	14.75	Mar. 15	2345	71,600	24.25

Minimum discharge, 560 ft³/s, Sept. 18, gage height, 2.74 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160	1700	17700	2640	2300	6460	2930	3130	2010	863	729	1180
2	986	1640	15200	2600	2400	5620	2780	3170	1780	1190	679	1210
3	876	1770	13400	2540	2450	5210	2600	2930	1620	1650	653	1030
4	836	8590	11700	2510	3360	5030	2430	2660	1470	2810	828	768
5	689	84200	10100	2340	8400	4870	2300	2440	1350	2570	1190	699
6	678	168000	8610	2060	13800	4680	2340	2310	1280	1990	726	711
7	682	51300	7990	2000	12200	4590	2560	2220	1280	2260	673	816
8	698	25600	7200	1900	10200	4280	2990	2100	1790	1920	809	768
9	701	18900	6660	1620	8820	3850	3250	2020	2940	1280	899	723
10	686	14500	6270	1700	8240	3880	3050	1890	2370	1280	764	690
11	673	12600	5930	1960	7760	5090	3280	1750	2000	1220	719	670
12	661	11000	5390	1830	6670	8480	3290	1660	1650	1120	696	655
13	653	9470	5510	1730	5510	9780	3150	1590	1510	1200	688	639
14	655	7220	8960	1650	4790	11500	3020	1570	1440	1200	667	617
15	674	6290	10800	1450	4480	51900	3120	1670	1330	1060	642	596
16	719	5760	9160	1400	4370	57600	3600	1810	1230	949	630	587
17	682	12000	8000	1350	4220	27800	5490	1720	1150	907	689	578
18	672	10400	7070	1350	6760	17000	8820	1610	1150	961	677	568
19	662	7350	6130	1500	20400	12100	9300	1730	1100	925	668	569
20	667	6260	5270	1620	36700	10400	7680	2200	981	886	760	577
21	753	5270	4770	2370	30400	8520	6970	4940	926	929	831	737
22	2270	5240	4890	3710	23600	6860	6040	9960	911	943	840	765
23	6300	14200	4500	3360	17400	6080	5300	7210	884	881	838	760
24	6660	14500	4540	3320	13400	5480	4770	5440	892	823	839	779
25	5090	10800	4100	3430	11000	4960	4150	4310	890	873	829	780
26	4020	8800	3740	3370	9140	4360	3770	3620	853	854	811	835
27	3110	10800	3340	3330	7980	3960	3550	3130	842	938	801	863
28	2590	16700	3140	3030	7310	3690	3340	2800	880	847	797	850
29	2240	26800	3140	2390	---	3480	3090	2650	924	790	766	1080
30	1980	25100	3010	2070	---	3290	2920	2500	888	749	705	1390
31	1800	---	2840	2200	---	3100	---	2250	---	777	801	---
TOTAL	51523	602760	219060	70330	294060	313900	121880	90990	40321	37645	23644	23490
MEAN	1662	20090	7066	2269	10500	10130	4063	2935	1344	1214	763	783
MAX	6660	168000	17700	3710	36700	57600	9300	9960	2940	2810	1190	1390
MIN	653	1640	2840	1350	2300	3100	2300	1570	842	749	630	568
CFSM	.41	4.93	1.74	.56	2.58	2.49	1.00	.72	.33	.30	.19	.19
IN.	.47	5.51	2.00	.64	2.69	2.87	1.11	.83	.37	.34	.22	.21

CAL YR 1985 TOTAL 1894317 MEAN 5190 MAX 168000 MIN 589 CFSM 1.27 IN 17.30
WTR YR 1986 TOTAL 1889603 MEAN 5177 MAX 168000 MIN 568 CFSM 1.27 IN 17.26

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD

LOCATION.--Lat 39°42'57", long 77°49'28", Washington County, Hydrologic Unit 02070004, on right bank 0.7 mi upstream from highway bridge in Fairview, 2.0 mi upstream from Rockdale Run, 6.5 mi northwest of Hagerstown, and 19.1 mi upstream from mouth.

DRAINAGE AREA.--494 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 756: Drainage area. WSP 1432: 1929(M), 1930, 1931-32(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 391.85 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 6, 1932, nonrecording gage at highway bridge 0.7 mi downstream at datum 2.93 ft lower. Dec. 6, 1932, to Oct. 7, 1933, nonrecording gage 150 ft downstream from former site at datum 4.92 ft lower than present datum.

REMARKS.--Estimated daily discharges: Dec. 20-21, Jan. 9-13, 17-18, 30-31, and Feb. 1, 13-17. Water-discharge records good except those for periods with ice effect, Dec. 20-21, Jan. 9-13, 17-18, 30-31, and Feb. 1, 13-17, which are fair. Low flow partly regulated by small powerplants near Mercersburg, Pa. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--58 years, 592 ft³/s, 16.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s, June 23, 1972, gage height, 24.5 ft, from floodmark, from rating curve extended above 15,000 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum discharge, 21 ft³/s, Aug. 8, Sept. 12, 1966; minimum daily discharge, 25 ft³/s Nov. 28, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1928, about 16.5 ft, present datum, sometime in 1889, from information by local residents, discharge, about 22,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	1445	4,760	7.92	Mar. 15	1845	*9,780	*11.46
Nov. 17	0815	4,350	7.55				

Minimum discharge, 73 ft³/s, Sept. 22, gage height, 1.19 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	123	1680	321	240	1060	557	448	271	136	120	98
2	112	124	2160	302	278	964	531	427	258	167	113	103
3	142	133	1740	299	332	891	502	404	241	189	121	110
4	135	1150	1380	298	740	844	485	383	238	151	113	112
5	130	3350	1200	295	1590	827	476	369	225	141	110	112
6	116	3050	1110	269	1600	812	504	355	235	134	150	107
7	106	1440	1060	252	1270	789	532	355	324	130	142	107
8	103	972	975	227	1030	638	510	345	350	127	130	102
9	99	723	883	220	890	658	457	319	263	139	126	96
10	97	585	803	215	809	672	429	307	228	151	119	93
11	96	507	743	210	788	952	418	294	210	140	128	90
12	93	463	714	210	727	971	409	280	204	137	127	89
13	92	435	802	205	570	1060	391	267	255	138	122	85
14	93	413	1110	202	510	1960	374	263	268	133	114	82
15	96	507	903	200	520	8450	375	267	215	125	108	81
16	98	698	802	195	510	6420	878	267	201	117	109	80
17	92	3820	738	200	520	3040	1720	297	201	123	121	78
18	86	2010	664	210	1400	2190	2000	284	202	125	186	84
19	87	1340	544	224	2610	1800	1490	255	187	125	149	84
20	90	1060	520	488	3920	1520	1210	423	180	132	128	88
21	102	869	490	708	3590	1280	1060	1710	172	192	139	87
22	182	1170	465	539	3610	1120	943	1040	167	212	174	79
23	255	1960	480	468	2610	1020	834	700	161	278	158	79
24	266	1320	471	409	2100	933	733	564	164	210	137	89
25	292	1040	452	373	1780	847	658	481	155	163	123	105
26	224	950	369	380	1500	791	610	420	146	159	116	98
27	186	1900	384	383	1380	752	566	387	142	150	112	94
28	160	2390	391	281	1230	704	528	391	142	137	110	90
29	142	2600	351	259	---	662	497	356	142	129	105	86
30	132	1880	333	250	---	622	474	321	139	122	102	84
31	126	---	321	245	---	589	---	296	---	117	100	---
TOTAL	4138	38982	25038	9337	38654	45838	21151	13275	6286	4629	3912	2772
MEAN	133	1299	808	301	1381	1479	705	428	210	149	126	92.4
MAX	292	3820	2160	708	3920	8450	2000	1710	350	278	186	112
MIN	86	123	321	195	240	589	374	255	139	117	100	78
CFSM	.27	2.63	1.64	.61	2.80	2.99	1.43	.87	.43	.30	.26	.19
IN.	.31	2.94	1.89	.70	2.91	3.45	1.59	1.00	.47	.35	.29	.21

CAL YR 1985 TOTAL 175338 MEAN 480 MAX 4760 MIN 86 CFSM .97 IN 13.20
WTR YR 1986 TOTAL 214012 MEAN 586 MAX 8450 MIN 78 CFSM 1.19 IN 16.12

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-83, 1985 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1966 to September 1980 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1966 to September 1980 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 30.0°C, July 17, 1969; minimum daily, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATION: Maximum daily mean, 1,050 mg/L, Oct. 25, 1971; minimum daily mean, 1 mg/L, on many days.
SEDIMENT LOAD: Maximum daily, 73,000 tons, June 23, 1972; minimum daily, 0.17 ton, Nov. 24, 26, 27, 1966.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD 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)
APR												
02...	1515	528	300	8.90	20.5	17.0	--	--	--	--	--	--
AUG												
21...	1400	138	440	8.30	--	22.0	10	190	30	56	12	10

DATE	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
APR												
02...	--	--	--	171	140	0.3	--	--	--	--	--	--
AUG												
21...	10	0.3	5.5	194	159	1.5	24	17	0.2	4.4	248	220

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
AUG											
21...	0.34	92	3.40	3.4	6.8	30	0.32	360	30	60	9

01617800 MARSH RUN AT GRIMES, MD

LOCATION.--Lat 39°30'53", long 77°46'38", Washington County, Hydrologic Unit 02070004, on right bank 220 ft upstream from bridge on Sprecher Road, 0.1 mi downstream from unnamed tributary, 0.5 mi southwest of Grimes, 1.5 mi upstream from mouth, and 2.2 mi southwest of Fairplay.

DRAINAGE AREA.--18.9 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 354.72 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 1, Jan. 5-8, 26-30, and Feb. 10-11. Water-discharge records good except those for periods with ice effect, Dec. 25 to Jan. 1, Jan. 5-8, 26-30, and Feb. 10-11, which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--23 years, 12.8 ft³/s, 9.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 459 ft³/s, Feb. 12, 1985, gage height, 4.45 ft, from rating curve extended above 220 ft³/s; no flow Oct.1, 1977, result of regulation caused by construction work upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 15	0315	*76	*2.10	No other peak greater than base discharge.			

Minimum discharge, 0.84 ft³/s, Sept. 30, gage height, 0.74 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	4.5	19	14	8.5	20	19	12	8.2	4.7	4.0	2.5
2	2.7	3.1	22	14	9.2	20	19	12	8.0	6.6	4.1	2.8
3	3.1	3.9	20	15	9.7	19	18	12	7.8	7.7	4.1	2.8
4	3.2	17	20	14	15	20	18	12	7.9	6.8	3.9	2.8
5	3.1	33	19	13	16	20	18	12	8.0	6.8	3.7	3.1
6	2.9	19	19	12	15	20	20	12	15	4.7	3.5	2.7
7	2.9	13	19	12	14	20	19	11	26	6.5	3.5	2.2
8	2.7	12	18	12	13	20	18	11	14	5.6	3.5	2.3
9	2.7	11	18	11	13	18	18	11	12	5.3	3.3	2.0
10	2.6	9.9	18	11	12	17	17	11	11	6.8	3.2	2.0
11	3.3	9.7	19	11	12	19	17	11	10	4.6	3.2	1.9
12	4.2	9.4	19	11	12	17	17	10	9.9	6.3	3.2	1.8
13	3.2	9.1	24	12	12	20	16	10	9.5	5.2	3.2	1.7
14	2.0	9.7	24	10	12	30	16	11	8.0	6.8	3.1	1.7
15	2.2	9.5	19	8.4	12	62	16	11	6.4	5.3	3.0	1.7
16	2.0	9.6	17	8.2	12	40	24	11	7.0	3.9	2.8	1.6
17	1.9	14	17	8.2	14	35	23	9.9	8.5	5.1	3.1	1.6
18	2.6	11	17	8.8	21	32	21	9.0	7.3	7.0	3.8	1.7
19	2.8	11	15	10	27	30	18	9.2	6.1	7.9	4.3	1.7
20	2.9	9.9	15	13	30	27	17	19	7.2	9.2	4.3	1.7
21	6.1	9.8	15	11	27	25	17	30	7.7	5.8	6.1	1.5
22	13	20	15	11	27	25	17	16	7.1	7.7	4.4	1.5
23	9.7	23	16	10	27	24	16	14	6.0	5.4	3.1	1.5
24	6.3	17	16	10	27	23	15	13	8.5	4.2	3.0	1.5
25	6.1	12	16	10	26	22	15	12	7.5	5.1	3.2	1.6
26	5.3	12	16	10	25	22	15	12	5.0	6.1	4.4	1.4
27	5.0	14	15	10	24	21	14	11	5.7	6.0	2.6	1.3
28	4.6	20	15	10	21	21	14	11	7.7	5.2	2.8	1.3
29	3.6	23	15	9.8	---	20	13	11	7.7	4.1	2.6	1.3
30	4.4	20	14	9.5	---	20	13	9.6	6.0	4.0	2.5	1.1
31	5.6	---	14	9.2	---	20	---	8.9	---	4.1	2.5	---
TOTAL	125.1	400.1	545	339.1	493.4	749	518	375.6	266.7	180.5	108.0	56.3
MEAN	4.04	13.3	17.6	10.9	17.6	24.2	17.3	12.1	8.89	5.82	3.48	1.88
MAX	13	33	24	15	30	62	24	30	26	9.2	6.1	3.1
MIN	1.9	3.1	14	8.2	8.5	17	13	8.9	5.0	3.9	2.5	1.1
CFSM	.21	.70	.93	.58	.93	1.28	.92	.64	.47	.31	.18	.10
IN.	.25	.79	1.07	.67	.97	1.47	1.02	.74	.52	.36	.21	.11

CAL YR 1985 TOTAL 2941.9 MEAN 8.06 MAX 216 MIN 1.9 CFSM .43 IN 5.79
WTR YR 1986 TOTAL 4156.8 MEAN 11.4 MAX 62 MIN 1.1 CFSM .60 IN 8.18

01617800 MARSH RUN AT GRIMES, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
02...	1245	18	570	8.10	22.5	17.0	3	11.0	280	32	97
AUG											
20...	1740	4.2	600	8.10	21.5	23.0	5	--	270	52	95

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
02...	9.3	8.9	6	0.2	2.2	304	249	3.8	22	21	0.2
AUG											
20...	9.0	9.9	7	0.3	3.2	271	222	3.4	28	26	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
02...	8.2	339	320	0.46	17	5.10	0.03	260	<3	30	10
AUG											
20...	9.4	303	310	0.41	3.4	4.10	0.04	340	6	30	7

01618000 POTOMAC RIVER AT SHEPHERDSTOWN, WV

LOCATION.--Lat 39°26'04", long 77°48'07", Jefferson County, Hydrologic Unit 02070004, on right bank, 0.1 mi downstream from Rumsey Bridge at Shepherdstown, 3.3 mi upstream from Antietam Creek, and at mile 184.

DRAINAGE AREA.--5,936 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to September 1953. Annual maximums, water years 1954-64. July 1964 to current year. Gage-height record and estimated discharges October 1953 to June 1964 available in files of the Mid-Atlantic district office.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1929(M).

GAGE.--Water-stage recorder. Datum of gage is 281.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: May 4-5. Water-discharge records good. Some regulation at low flow by power plants upstream from station, prior to July 1981 by Stony River Reservoir (see station 01595200), since December 1950 by Savage River Reservoir (see station 01597500), and since July 1981 by Jennings Randolph Lake (see station 01595800). National Weather Service gage height telemeter at station.

AVERAGE DISCHARGE.--47 years (water years 1929-53, 1965-86), 6,148 ft³/s, 14.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 335,000 ft³/s, Mar. 19, 1936, gage height, 42.1 ft, from floodmarks, from rating curve extended above 200,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 170 ft³/s, Aug. 1, 1966; minimum daily discharge, 185 ft³/s, July 31, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in June 1889 and May 1924 reached stages of 39.2 ft and 29.8 ft respectively, from floodmarks, discharges, about 290,000 ft³/s and 168,000 ft³/s respectively, from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 23,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 7	0030	*187,000	*31.44	Nov. 29	2300	39,800	12.44
Nov. 18	0330	23,300	8.93	Feb. 20	2300	54,900	15.30
Nov. 24	0530	24,400	9.18	Mar. 16	0800	93,700	21.43

Minimum discharge, 565 ft³/s, Aug. 17, gage height, 1.53 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	892	2200	28700	3690	3470	10800	4670	4100	3000	1310	942	975
2	1320	2050	23200	3570	3910	9370	4350	4320	2730	1360	1030	1330
3	1390	2160	21500	3500	4400	8320	4020	4070	2460	1550	994	1460
4	1190	6000	17600	3460	4660	7870	3630	3800	2270	1970	1010	1260
5	1210	52900	15700	3410	9700	7630	3800	3600	2160	3060	1060	1090
6	1100	138000	13000	3170	18500	7400	3940	3340	2110	2830	1320	1010
7	974	137000	11800	3000	19200	7150	3570	3180	2150	2240	1210	968
8	799	39800	10800	2890	15800	6890	4380	3140	2120	2420	1040	1040
9	896	27400	9840	3010	13400	6230	4600	2970	2740	2230	1030	1100
10	866	20200	9040	2480	11800	5960	4570	2870	3360	1730	1160	830
11	836	16500	8460	2660	11400	6270	4210	2700	2900	1620	1100	931
12	791	14500	7800	2800	10200	8830	4320	2600	2610	1630	1010	915
13	845	12700	7520	2880	8670	12800	4250	2500	2240	1400	980	877
14	812	10300	9780	2670	7140	14500	4110	2440	2110	1520	969	839
15	818	8420	14800	2480	6540	48200	4390	2420	2070	1530	964	833
16	841	7750	13600	2340	6430	87700	4950	2460	1880	1460	897	780
17	939	13100	11700	2340	6250	52000	6980	2580	1780	1310	788	814
18	937	20600	10300	2370	7700	30400	12000	2500	1660	1200	1240	841
19	891	13200	8830	2670	21400	21100	14900	2340	1640	1180	1110	672
20	854	10000	7390	3080	46100	16700	12600	2580	1610	1370	1110	790
21	976	8400	6730	4230	49500	14200	10800	5160	1520	1320	1100	787
22	1470	7340	5910	5270	39500	11400	9570	12000	1420	1350	1260	842
23	4270	15800	5880	5650	30500	9460	8220	11400	1320	1390	1200	959
24	8450	22800	6260	5220	23100	8300	7260	8220	1440	1390	1190	972
25	7690	17200	5810	5010	18600	7680	6430	6490	1380	1300	1140	1020
26	5940	13300	5140	5060	15400	7090	5750	5310	1350	1230	1090	965
27	4560	13200	4200	5000	13400	6430	5300	4610	1260	1230	1060	1060
28	3640	19800	4510	4540	12000	5890	4790	4130	1270	1210	1110	1070
29	3060	33300	4010	3950	---	5540	4580	3770	1300	1180	1040	1060
30	2660	37600	3880	3250	---	5270	4170	3530	1310	1130	999	1160
31	2370	---	3710	3190	---	4900	---	3310	---	932	982	---
TOTAL	64287	743520	317400	108840	438670	462280	181110	128440	59170	48582	33135	29250
MEAN	2074	24780	10240	3511	15670	14910	6037	4143	1972	1567	1069	975
MAX	8450	138000	28700	5650	49500	87700	14900	12000	3360	3060	1320	1460
MIN	791	2050	3710	2340	3470	4900	3570	2340	1260	932	788	672
CFSM	.35	4.18	1.73	.59	2.64	2.51	1.02	.70	.33	.26	.18	.16
IN.	.40	4.66	1.99	.68	2.75	2.90	1.13	.80	.37	.30	.21	.18

CAL YR 1985 TOTAL 2497460 MEAN 6842 MAX 138000 MIN 733 CFSM 1.15 IN 15.65
WTR YR 1986 TOTAL 2614684 MEAN 7164 MAX 138000 MIN 672 CFSM 1.21 IN 16.39

01618000 POTOMAC RIVER AT SHEPHERDSTOWN, WV--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1981 (discontinued).
WATER TEMPERATURE: October 1980 to September 1981 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD--
SPECIFIC CONDUCTANCE: Maximum, 670 microsiemens, Aug. 6, 10, 15, 30, Sept. 3, 1881; minimum, 160 microsiemens, Apr. 14-15, 1981.
WATER TEMPERATURE: Maximum, 30.0°C, July 17, 21, 25, 1981; minimum, 1.0°C, Feb. 13, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV											
04...	1230	4440	350	7.70	14.5	13.0	751	1.9	--	--	67
06...	1300	145000	165	7.60	16.0	13.0	751	3500	--	--	>600
JAN											
07...	1030	2980	340	7.80	-2.0	1.5	769	2.7	14.4	102	K3
MAR											
03...	1045	8240	253	7.65	6.0	0.0	756	4.4	13.4	92	K6
MAY											
05...	1100	3650	300	8.15	19.0	18.0	758	--	9.7	103	22
JUL											
01...	1230	1300	440	8.11	22.0	24.0	760	1.0	7.5	90	65
SEP											
02...	1135	1250	462	8.00	20.0	21.0	764	3.4	9.8	110	K140

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD 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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
NOV										
04...	87	150	78	47	8.3	11	13	0.4	2.7	90
06...	K31000	66	16	22	2.6	2.2	6	0.1	3.2	61
JAN										
07...	>10000	150	70	44	9.0	8.1	11	0.3	2.1	94
MAR										
03...	K16	110	53	32	6.5	6.6	12	0.3	1.7	66
MAY										
05...	K10	--	--	--	--	--	--	--	--	76
JUL										
01...	64	170	68	52	9.2	12	13	0.4	2.5	122
SEP										
02...	--	190	90	61	10	16	15	0.5	3.2	127

DATE	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV										
04...	74	2.9	63	16	0.2	6.1	200	200	0.27	2400
06...	49	2.4	22	3.5	0.2	5.1	97	92	0.13	38000
JAN										
07...	77	2.4	56	13	<0.1	5.0	193	190	0.26	1550
MAR										
03...	54	2.3	28	12	0.2	6.4	130	130	0.18	2890
MAY										
05...	62	0.9	--	--	--	--	--	--	--	--
JUL										
01...	100	1.5	59	22	0.1	2.4	239	220	0.33	839
SEP										
02...	103	2.0	85	30	0.2	4.3	284	270	0.39	958

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

01618000 POTOMAC RIVER AT SHEPHERDSTOWN, WV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
NOV										
04...	1.29	--	0.01	0.03	1.30	0.08	0.07	0.09	0.62	--
06...	0.86	--	0.02	0.07	0.88	0.86	0.18	0.23	3.2	0.72
JAN										
07...	1.59	7.1	0.01	0.03	1.60	0.12	0.12	0.15	0.38	--
MAR										
03...	1.69	--	0.01	0.03	1.70	0.06	0.07	0.09	0.34	--
MAY										
05...	0.81	--	0.01	0.03	0.82	0.04	0.03	0.04	0.36	--
JUL										
01...	0.91	--	0.01	0.03	0.92	0.05	0.04	0.05	0.55	--
SEP										
02...	0.98	--	0.02	0.07	1.00	0.09	0.07	0.09	0.51	--

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)
NOV										
04...	0.7	--	--	--	0.07	0.21	0.06	0.05	0.15	20
06...	4.1	0.9	3.2	1.8	3.30	10	0.03	0.02	0.06	300
JAN										
07...	0.5	--	--	--	0.06	0.18	0.04	0.04	0.12	--
MAR										
03...	0.4	--	--	--	0.03	--	0.03	0.02	0.06	40
MAY										
05...	0.4	--	--	--	0.03	--	<0.01	<0.01	--	--
JUL										
01...	0.6	--	--	--	0.04	--	0.02	0.02	0.06	--
SEP										
02...	0.6	--	--	--	0.08	--	0.05	0.05	0.15	<10

DATE	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)	LITHIUM DISSOLVED (UG/L AS LI)
NOV										
04...	<1	55	<0.5	<1	<1	<3	1	26	<1	9
06...	1	42	<0.5	<1	<1	<3	3	220	<1	6
MAR										
03...	<1	46	<0.5	<1	<1	<3	<1	27	<1	5
SEP										
02...	1	53	<0.5	1	<1	<3	3	<3	<5	16

DATE	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									
04...	34	<0.1	<10	1	<1	<1	230	<6	25
06...	9	<0.1	<10	1	<1	1	90	<6	22
MAR									
03...	53	<0.1	<10	2	<1	<1	150	<6	3
SEP									
02...	5	<0.1	<10	3	<1	<1	300	<6	8

POTOMAC RIVER BASIN

01618000 POTOMAC RIVER AT SHEPHERDSTOWN, WV--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 04...	1230	4440	8	96
JAN 07...	1030	2980	4	32
MAR 03...	1045	8240	2	44

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
NOV 06...	1300	145000	4460	1750000	59	76	90

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 06...	96	99	100	100	100	100

01619000 ANTIETAM CREEK NEAR WAYNESBORO, PA

LOCATION.--LAT 39°42'59", long 77°36'28", Washington County, Md., Hydrologic Unit 02070004, on right bank 100 ft upstream from highway bridge at Rocky Forge, 0.4 mi downstream from Pennsylvania-Maryland State line, 0.7 mi downstream from confluence of west and east branches, 1.9 mi northeast of Leitersburg, Md., 2.5 mi southwest of Waynesboro, Pa., and 36.6 mi upstream from mouth.

DRAINAGE AREA.--93.5 mi.

PERIOD OF RECORD.--Water years 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR											
14...	1240	113	379	8.70	19.5	12.5	4	180	23	50	14
AUG											
20...	1120	43	472	7.90	24.0	21.0	5	210	32	57	17

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	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)
APR											
14...	5.3	6	0.2	2.6	195	160	0.6	17	8.8	0.2	5.3
AUG											
20...	5.8	6	0.2	2.9	220	180	4.4	22	12	0.2	5.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR										
14...	220	200	0.3	67	4.40	0.20	140	14	20	11
AUG										
20...	251	230	0.34	29	4.10	0.17	490	10	40	22

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD

LOCATION.--Lat 39°27'01", long 77°43'52", Washington County, Hydrologic Unit 02070004, on left bank 400 ft downstream from Burnside Bridge, 1.0 mi southeast of Sharpsburg, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--281 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1897 to September 1905, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1302.
REVISED RECORDS.--WSP 192: 1897-1905. WSP 726: Drainage area. WSP 1432: 1929-31(M), 1933, 1935(M), 1937(M), 1949(M), 1952(M).
GAGE.--Water-stage recorder. Concrete control since Mar. 29, 1934. Datum of gage is 311.05 ft above National Geodetic Vertical Datum of 1929. June 24, 1897, to Aug. 25, 1905, nonrecording gage a few hundred feet downstream from Middle Bridge, 1.2 mi upstream at datum 12 ft higher. Aug. 21, 1928, to July 13, 1933, nonrecording gage at Burnside Bridge, 0.1 mi upstream at present datum.
REMARKS.--Estimated daily discharges: Jan. 28-30 and Feb. 11-14. Water-discharge records good. Some diurnal fluctuation caused by powerplant upstream from station. Since 1928 records include pumpage from the Potomac River for municipal supply of Hagerstown. This water later enters Antietam Creek upstream from station as sewage. Several measurements of water temperature were made during the year.
AVERAGE DISCHARGE.--63 years (water years 1898-1903, 1905, 1931-86), 277 ft³/s, 13.39 in/yr, adjusted for inflow since January 1930.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s, July 20, 1956, gage height, 16.73 ft, from rating curve extended above 7,300 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 9.4 ft³/s, Nov. 22, 1957, result of regulation caused by construction work upstream from station; minimum daily discharge, 37 ft³/s, Jan. 30, 1966.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 15	1415	*1,870	*5.99	No other peak greater than base discharge.			

Minimum discharge, 89 ft³/s, Sept. 22, 28, 29, gage height, 2.30 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	109	558	251	184	520	410	315	211	165	120	106
2	118	109	620	245	187	495	395	309	206	200	118	114
3	127	111	556	243	208	480	384	297	200	193	118	122
4	119	240	496	242	262	474	375	289	197	167	125	117
5	113	923	470	236	346	468	374	285	196	159	123	114
6	107	633	465	230	388	447	392	281	208	155	118	111
7	105	418	440	226	368	433	377	279	661	153	152	107
8	102	327	411	212	340	396	365	279	336	151	155	103
9	101	280	388	209	322	397	354	263	276	163	141	103
10	101	255	372	213	315	393	345	258	246	165	121	101
11	98	237	359	212	300	422	341	255	231	154	119	108
12	97	227	352	209	290	407	332	248	227	153	119	100
13	97	216	399	208	265	425	317	243	257	151	115	96
14	101	216	463	202	260	581	310	246	240	149	114	94
15	112	234	394	197	282	1630	314	245	215	143	112	93
16	101	218	371	189	276	1180	589	246	209	139	113	93
17	98	324	366	195	295	922	563	253	212	139	125	91
18	96	297	354	195	524	813	620	240	214	141	173	92
19	96	257	334	206	754	748	538	226	199	144	134	96
20	97	247	320	254	948	692	489	289	204	164	123	96
21	131	237	315	259	891	634	470	595	195	187	156	95
22	201	345	303	221	843	596	465	367	186	177	167	91
23	166	485	301	209	761	571	440	311	183	147	135	92
24	148	371	303	202	714	549	407	279	217	144	123	92
25	147	331	305	199	660	520	384	263	205	139	115	103
26	132	317	280	207	611	500	374	251	181	138	115	102
27	122	414	270	210	596	487	359	244	178	134	113	95
28	116	528	278	185	561	471	346	244	177	131	129	91
29	112	641	267	175	---	454	336	236	173	128	117	91
30	110	562	261	185	---	439	325	225	167	121	111	94
31	110	---	256	190	---	426	---	220	---	122	108	---
TOTAL	3586	10109	11627	6616	12751	17970	12090	8581	6807	4716	3927	3003
MEAN	116	337	375	213	455	580	403	277	227	152	127	100
MAX	201	923	620	259	948	1630	620	595	661	200	173	122
MIN	96	109	256	175	184	393	310	220	167	121	108	91
(†)	-14.0	-9.2	-7.1	-8.8	-10.0	-8.9	-9.0	-9.9	-10.8	-14.7	-16.0	-15.5
MEAN‡	102	328	368	204	445	571	394	267	216	137	111	84.5
CFSM‡	0.36	1.17	1.31	0.73	1.58	2.03	1.40	0.95	0.77	0.49	0.40	0.30
IN‡	0.42	1.30	1.51	0.84	1.64	2.34	1.56	1.10	0.86	0.56	0.46	0.34

CAL YR 1985 TOTAL 91982 MEAN 252 MAX 3260 MIN 96 MEAN‡ 240 CFSM‡ 0.85 IN‡ 11.62
WTR YR 1986 TOTAL 101783 MEAN 279 MAX 1630 MIN 91 MEAN‡ 268 CFSM‡ 0.95 IN‡ 12.93

† Pumpage in cubic feet per second, from Potomac River for municipal supply of Hagerstown.
‡ Adjusted for pumpage.

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965-83, 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
02...	0915	396	505	8.10	20.0	14.5	5	10.9	230	24	69
AUG											
27...	1230	13	589	8.10	23.0	21.0	5	--	240	31	71

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
02...	15	10	8	0.3	3.4	256	210	3.2	18	20	0.2
AUG											
27...	15	18	14	0.5	5.3	253	208	3.2	33	22	0.3

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
02...	3.7	303	270	0.41	324	4.80	0.10	--	--	--
AUG										
27...	7.6	318	300	0.43	12	4.90	0.30	5	2	40

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
02...	--	140	4	--	--	30	16	--	--	--
AUG										
27...	30	200	6	17000	70	30	9	480	0.21	120

01636500 SHENANDOAH RIVER AT MILLVILLE, WV

LOCATION.--Lat 39°16'55", long 77°47'22", Jefferson County, Hydrologic Unit 02070007, on left bank 0.4 mi downstream from Cattail Run, 1.0 mi upstream from Millville, 5.0 mi upstream from Harpers Ferry, and at mile 5.0.

DRAINAGE AREA.--3,040 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1895 to March 1909, August 1928 to current year.

REVISED RECORDS.--WSP 951: 1936(M). WSP 1432: Drainage area at former site, 1895-99, 1901-02, 1905, 1907-08, 1932(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 293.00 ft above National Geodetic Vertical Datum of 1929. Apr. 15, 1895, to Mar. 31, 1909, nonrecording gage at site 0.8 mi downstream at datum 0.32 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. Regulation by hydroelectric plants, particularly that of Potomac Light and Power Company, 0.5 mi upstream from station. National Weather Service gage-height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--71 years (water years 1896-1908, 1929-86), 2,699 ft³/s, 12.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 230,000 ft³/s, Oct. 16, 1942, gage height, 32.4 ft, from floodmarks; minimum discharge, 59 ft³/s, Oct. 4, 1930, gage height, 0.39 ft; minimum daily discharge, 194 ft³/s, July 24, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft, discharge, 151,000 ft³/s.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 6	1900	*142,000	*25.60	Mar. 16	1630	18,000	9.23

Minimum discharge, 285 ft³/s, June 23, gage height, 1.03 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	78	365	90	156	140	75	132	56	56	36	17
2	18	210	305	88	319	130	75	125	50	208	33	18
3	21	286	235	86	847	120	70	106	55	225	27	30
4	26	2810	202	84	1270	110	68	97	58	105	22	36
5	22	4410	183	82	815	110	69	90	53	70	22	39
6	21	903	184	82	480	103	99	87	51	52	31	40
7	15	492	165	80	350	104	213	91	47	44	42	32
8	14	346	148	80	270	96	148	91	43	46	62	27
9	15	259	154	80	225	144	146	76	33	314	60	36
10	14	214	173	78	210	558	169	72	29	323	35	38
11	17	200	190	78	180	1300	179	62	38	188	38	36
12	17	183	429	78	160	486	277	56	53	210	40	44
13	9.8	191	846	76	140	403	326	63	43	137	34	44
14	12	229	597	76	130	941	271	119	37	171	34	30
15	20	183	351	88	110	1420	270	89	26	116	30	25
16	38	206	272	100	120	548	461	77	34	93	26	38
17	20	267	227	122	580	358	360	65	53	117	22	60
18	17	205	206	264	1000	275	398	100	37	120	22	37
19	13	179	257	527	1400	232	363	166	32	86	23	48
20	136	158	327	530	1100	192	283	342	65	111	23	67
21	845	143	263	301	800	159	261	252	53	136	24	59
22	438	457	280	301	580	140	254	189	30	89	25	52
23	229	355	175	304	410	129	230	154	24	92	24	75
24	158	251	124	239	280	121	207	128	43	76	40	99
25	141	235	112	211	230	105	189	105	39	64	22	110
26	107	262	100	201	200	97	172	89	31	60	21	106
27	91	530	98	172	180	106	149	87	30	54	17	185
28	81	1670	96	164	160	97	134	96	87	43	33	131
29	72	1180	94	257	---	89	186	84	99	40	32	96
30	63	537	93	217	---	83	148	78	56	42	25	92
31	62	---	90	209	---	76	---	68	---	39	18	---
TOTAL	2761.7	17629	7341	5345	12702	8972	6250	3436	1385	3527	943	1747
MEAN	89.1	588	237	172	454	289	208	111	46.2	114	30.4	58.2
MAX	845	4410	846	530	1400	1420	461	342	99	323	62	185
MIN	8.9	78	90	76	110	76	68	56	24	39	17	17
CFSM	1.22	8.06	3.25	2.36	6.22	3.96	2.85	1.52	.63	1.56	.42	.80
IN.	1.41	8.98	3.74	2.72	6.47	4.57	3.18	1.75	.71	1.80	.48	.89

CAL YR 1985 TOTAL 76926.7 MEAN 211 MAX 4410 MIN 8.9 CFSM 2.89 IN 39.20
WTR YR 1986 TOTAL 72038.7 MEAN 197 MAX 4410 MIN 8.9 CFSM 2.70 IN 36.71

01636500 SHENANDOAH RIVER AT MILLVILLE, WV--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-63, 1965, 1969-71, 1979 to current year.

INSTRUMENTATION.--Water-quality monitor October 1980 to September 1983.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1983 (discontinued).
WATER TEMPERATURES: October 1980 to September 1983 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1981-82): Maximum, 778 microsiemens, Dec. 29, 1980; minimum, 212 microsiemens, Jan. 17,1982.
WATER TEMPERATURE: Maximum, 30.0°C, July 20, 21, 1981; minimum, 0.0°C on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV											
04...	1030	14700	210	7.80	14.0	13.0	752	100	9.3	89	>2000
06...	1610	140000	144	7.30	14.0	12.0	752	1600	--	--	>3000
JAN											
06...	1015	1710	390	8.70	5.0	3.0	756	1.1	13.3	100	K2
MAR											
04...	1115	2900	290	9.11	8.0	5.0	756	1.6	14.1	--	0
MAY											
05...	0900	1590	317	8.64	20.0	17.0	758	--	9.0	94	31
JUL											
01...	1000	618	490	8.70	21.0	25.0	759	1.0	5.6	68	67
SEP											
02...	0920	515	510	8.58	19.0	21.0	763	5.9	9.5	107	K560

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD 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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
NOV										
04...	2000	86	22	24	6.3	9.6	19	0.5	2.7	78
06...	>20000	53	16	17	2.6	2.3	8	0.1	3.3	45
JAN										
06...	1000	170	41	45	13	16	17	0.6	2.4	141
MAR										
04...	K11	130	36	36	9.0	11	16	0.4	1.7	96
MAY										
05...	22	--	--	--	--	--	--	--	--	96
JUL										
01...	E730	140	36	33	13	45	41	2	2.9	112
SEP										
02...	K450	170	35	43	16	56	41	2	3.0	159

DATE	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV										
04...	62	2.0	25	8.2	<0.1	8.6	125	120	0.17	4960
06...	36	3.6	20	3.5	0.1	5.0	83	80	0.11	31400
JAN										
06...	125	0.4	44	12	0.1	1.0	221	220	0.3	1020
MAR										
04...	92	0.1	26	9.3	0.2	1.2	161	160	0.22	1260
MAY										
05...	87	0.3	--	--	--	--	--	--	--	--
JUL										
01...	100	0.4	97	21	0.1	1.4	277	280	0.38	463
SEP										
02...	139	0.7	120	28	0.2	3.2	328	360	0.45	456

E: Estimated.
K: Results based on colony count outside the accepted range (non-ideal colony).

01636500 SHENANDOAH RIVER AT MILLVILLE, WV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
NOV										
04...	--	--	<0.01	--	0.90	0.07	0.05	0.06	1.6	--
06...	0.77	3.4	0.01	0.03	0.78	0.45	0.21	0.27	3.2	0.49
JAN										
06...	1.59	7.1	0.01	0.03	1.60	0.03	0.02	0.03	0.37	--
MAR										
04...	0.95	--	0.01	0.03	0.96	0.02	0.02	0.03	0.28	--
MAY										
05...	0.43	--	0.01	0.03	0.44	0.04	0.04	0.05	0.56	--
JUL										
01...	--	--	<0.01	--	<0.10	0.04	0.02	0.03	1.6	--
SEP										
02...	0.33	--	0.01	0.03	0.34	0.05	0.02	0.03	0.35	--

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)
NOV										
04...	1.7	--	--	--	0.41	1.3	0.08	0.07	0.21	20
06...	3.6	0.7	2.9	1.5	1.80	5.5	0.09	0.04	0.12	110
JAN										
06...	0.4	--	--	--	0.02	0.06	0.02	0.03	0.09	--
MAR										
04...	0.3	--	--	--	0.02	--	0.03	<0.01	--	10
MAY										
05...	0.6	--	--	--	0.05	--	0.02	<0.01	--	--
JUL										
01...	1.6	--	--	--	0.23	--	0.02	0.02	0.06	--
SEP										
02...	0.4	--	--	--	0.13	--	0.07	0.07	0.21	<10

DATE	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)	LITHIUM DISSOLVED (UG/L AS LI)
NOV										
04...	<1	28	<0.5	1	<1	<3	<1	68	1	4
06...	1	23	<0.5	<1	<1	<3	5	120	2	<4
MAR										
04...	<1	35	<0.5	<1	<1	<3	3	23	1	5
SEP										
02...	2	36	<0.5	<1	<1	<3	2	4	<5	13

DATE	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									
04...	9	<0.1	<10	<1	<1	<1	78	<6	8
06...	3	0.1	<10	<1	<1	1	41	<6	11
MAR									
04...	8	<0.1	<10	<1	<1	<1	130	<6	16
SEP									
02...	2	--	<10	1	<1	<1	170	<6	10

01636500 SHENANDOAH RIVER AT MILLVILLE, WV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
04...	1030	14700	312	12400	73
06...	1610	140000	1850	701000	95
JAN					
06...	1015	1710	1	4.6	55
MAR					
04...	1115	2900	3	24	49
MAY					
05...	0900	1590	6	26	89
JUL					
01...	1000	618	29	48	84
SEP					
02...	0920	515	14	19	90

01637500 CATOCTIN CREEK NEAR MIDDLETOWN, MD

LOCATION.--Lat 39°25'35", long 77°33'25", Frederick County, Hydrologic Unit 02070008, on right bank 300 ft downstream from bridge on State Highway 17, 1.3 mi south of Middletown, 2.2 mi downstream from Little Catoctin Creek, and 14.8 mi upstream from mouth.

DRAINAGE AREA.--66.9 mi².

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

REVISED RECORDS.--WSP 1432: 1947-48. WDR MD-DE-77-1: 1960(M), 1965(M), 1970(M), 1972(P), 1975(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 385 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 16-18, 20-25, 27-29, Jan. 3-5, 16-19, Jan. 29 to Feb. 2, Aug. 3-30, Sept. 12-15, 17, 19-30. Records good except those for periods of ice effect, Dec. 16-18, 20-25, 27-29, Jan. 3-5, 16-19, Jan. 29 to Feb. 2 and periods of variable backwater, Aug. 3-30, Sept. 12-15, 17, 19-30, which are fair. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--39 years, 76.1 ft³/s, 15.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s, Oct. 9, 1976, gage height, 14.13 ft, from rating curve extended above 2,600 ft³/s on basis of slope-area measurement of peak flow; no flow Aug. 27 to Sept. 12, 1966.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0230	*2,040	*5.70	Mar. 15	0130	1,340	4.72

Minimum daily discharge, 0.50 ft³/s, Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	23	221	46	34	133	69	64	25	7.6	1.7	1.6
2	11	22	254	43	40	120	66	60	24	16	1.7	3.4
3	17	36	186	42	65	111	61	55	23	18	2.3	7.2
4	16	350	164	41	136	106	59	53	22	9.7	2.0	8.6
5	16	842	148	40	164	103	61	52	22	6.7	2.0	6.2
6	15	310	147	39	160	99	81	49	21	5.6	2.2	4.6
7	11	205	136	30	136	92	73	49	113	5.1	3.0	3.2
8	9.5	153	124	23	117	74	61	46	47	4.4	9.0	2.6
9	8.7	122	112	31	104	80	55	41	33	11	4.0	2.2
10	8.0	103	104	35	96	84	53	41	26	12	3.0	1.9
11	7.5	90	97	36	94	150	53	39	23	8.3	2.6	1.9
12	7.0	80	93	34	80	107	54	37	23	7.4	2.2	1.7
13	6.8	72	164	31	72	150	49	35	22	8.1	2.0	1.4
14	9.0	72	165	20	78	347	48	40	19	6.5	2.0	1.2
15	13	74	132	28	74	815	60	43	16	6.0	2.0	1.0
16	11	67	115	26	74	442	291	40	15	4.7	2.2	.83
17	9.0	131	100	26	80	346	225	40	15	4.7	4.0	.90
18	8.1	85	88	28	282	286	207	36	14	4.9	14	.79
19	7.7	76	83	32	413	251	167	31	13	4.2	9.0	.65
20	8.5	71	74	74	456	212	151	139	19	5.1	6.0	.60
21	29	65	68	49	399	175	141	176	20	26	12	.60
22	107	253	64	42	333	157	133	86	14	9.9	20	.55
23	74	231	60	40	287	141	134	61	12	6.2	14	.50
24	68	162	58	33	246	129	105	53	15	5.1	8.0	.80
25	76	134	56	33	215	114	94	46	21	4.6	4.5	.80
26	50	119	53	44	186	104	90	41	12	4.1	3.0	.80
27	41	124	51	49	178	98	85	38	10	3.8	2.0	.85
28	34	249	49	27	150	88	77	41	10	2.9	2.6	.90
29	29	293	48	40	---	83	73	35	9.8	2.6	2.4	.95
30	26	233	47	36	---	79	67	31	8.2	2.2	3.0	1.0
31	24	---	46	34	---	74	---	28	---	1.9	2.0	---
TOTAL	765.6	4847	3307	1132	4749	5350	2943	1626	667.0	225.3	150.4	60.22
MEAN	24.7	162	107	36.5	170	173	98.1	52.5	22.2	7.27	4.85	2.01
MAX	107	842	254	74	456	815	291	176	113	26	20	8.6
MIN	6.8	22	46	20	34	74	48	28	8.2	1.9	1.7	.50
CFSM	.37	2.42	1.60	.55	2.54	2.59	1.47	.79	.33	.11	.07	.03
IN.	.43	2.70	1.84	.63	2.64	2.97	1.64	.90	.37	.13	.08	.03

CAL YR 1985 TOTAL 23567.10 MEAN 64.6 MAX 1550 MIN 5.3 CFSM .97 IN 13.10
WTR YR 1986 TOTAL 25822.52 MEAN 70.7 MAX 842 MIN .50 CFSM 1.06 IN 14.36

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD

LOCATION.--Lat 39°16'25", long 77°32'35", Frederick County, Hydrologic Unit 02070008, on left bank at downstream side of bridge on U.S. Highway 15 at Point of Rocks, 0.3 mi downstream from Catoctin Creek (Virginia), 6 mi upstream from Monocacy River, and at mile 159.5.

DRAINAGE AREA.--9,651 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1895 to current year.

REVISED RECORDS.--WSP 192: 1895-1905. WSP 1432: 1899, 1901-2, 1904-5, 1912, 1914(M), 1915, 1917(M), 1918, 1919(M), 1920, 1921-23(M), 1924, 1925-28(M), 1930(M).

GAGE.--Water-stage recorder. Datum of gage is 200.63 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 28, 1929, nonrecording gage at same site. Prior to Sept. 2, 1902, at datum about 0.45 ft higher.

REMARKS.--Estimated daily discharges: Dec. 25, 26, Jan. 11-18, 29-31. Records good except those for estimated daily discharges (ice effect), which are fair. Low flow affected slightly from 1913 to July 1981 by Stony River Reservoir (see station 01595200), since December 1950 by Savage River Reservoir (see station 01597500), and since July 1981, by Jennings Randolph Lake (see station 01595800). Low flow affected extensively at times by run-of-the-river hydroelectric plants. National Weather Service gage height telemeter at station.

AVERAGE DISCHARGE.--91 years, 9,410 ft³/s, 13.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 480,000 ft³/s, Mar. 19, 1936, gage height, 41.03 ft from rating curve extended above 300,000 ft³/s on the basis of adjustment of figure of peak flow at station near Washington for inflow and storage, and slope-area measurement of peak flow; minimum discharge, 530 ft³/s, Sept. 11, 12, 1966, gage height, 0.27 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889, reached a stage of 40.2 ft, from floodmarks, discharge, about 460,000 ft³/s from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 7	0330	*309,000	*36.28	Feb. 21	0500	65,000	12.94
Nov. 30	0230	45,200	10.03	Mar. 16	1400	116,000	19.35

Minimum discharge, 1,130 ft³/s, Sept. 20, gage height, 0.65 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	3490	39600	6040	4950	16000	7940	6860	4860	2070	1540	1600
2	1570	3340	36000	5950	5390	14400	7530	6840	4470	2140	1590	1690
3	2120	5490	32500	5810	5780	13000	7210	6720	4130	2380	1610	2150
4	1990	15800	27300	5630	6410	12300	6820	6340	3790	2710	1590	2270
5	1970	83100	23600	5580	10100	11900	6620	5980	3580	3730	1610	1940
6	1880	230000	20500	5350	20300	11700	6560	5590	3450	4150	1620	1800
7	1780	253000	18200	4950	23800	11300	6780	5410	3650	3540	1990	1870
8	1670	76100	16800	4530	20400	10900	7140	5300	3780	3250	2080	1760
9	1560	45300	15200	4320	17500	9980	7660	5000	3660	3030	1920	1810
10	1530	34300	13900	3990	15800	9530	7850	4790	4800	2830	1850	1660
11	1540	27100	13000	3900	15400	9800	7580	4610	5010	2610	1830	1530
12	1490	23300	12200	3800	14800	11500	7600	4390	4390	2890	1620	1540
13	1430	20000	11800	3700	13200	15800	7590	4240	3880	2410	1520	1460
14	1490	16900	13200	3600	11300	18400	7260	4120	3630	2240	1450	1390
15	1490	13700	18400	3500	10100	46600	7070	4190	3420	2300	1480	1370
16	1550	12300	18800	3400	9800	110000	8920	4250	3170	2180	1570	1330
17	1480	14100	16400	3300	9570	78400	10200	4290	2970	2090	1440	1210
18	1470	25100	14700	3200	10800	46000	15500	4460	2400	2000	1490	1290
19	1450	18300	13100	3820	22300	32800	20600	4270	2500	1840	1990	1270
20	1460	14100	11400	4500	49500	26000	18900	4350	2550	2080	1790	1170
21	1570	12000	10300	5740	61700	22000	16100	6270	2570	2150	1930	1260
22	2540	11100	9410	6970	49700	18300	14600	12200	2380	2080	2150	1240
23	4740	16500	8970	7780	39800	15300	13000	15400	2160	2080	2230	1330
24	11400	28900	9400	7240	31300	13600	11600	12700	2190	2120	1960	1440
25	12000	25300	8600	6850	26000	12400	10500	10300	2230	2070	1970	1510
26	9340	20100	8000	6960	22200	11600	9400	8510	2160	2050	1970	1490
27	7370	17800	7450	6920	19500	10700	8730	7380	2140	1900	1830	1510
28	5710	23300	7290	6850	17600	9850	8220	6570	2070	1880	1810	1500
29	4830	35600	6970	4900	---	9270	7780	5930	2040	1880	1800	1530
30	4190	44600	6610	4800	---	8800	7290	5470	2090	1840	1660	1540
31	3760	---	6300	4700	---	8360	---	5170	---	1690	1600	---
TOTAL	99900	1170020	475900	158580	565000	656490	290550	197900	96120	74210	54490	46460
MEAN	3223	39000	15350	5115	20180	21180	9685	6384	3204	2394	1758	1549
MAX	12000	253000	39600	7780	61700	110000	20600	15400	5010	4150	2230	2270
MIN	1430	3340	6300	3200	4950	8360	6560	4120	2040	1690	1440	1170
CFSM	.33	4.04	1.59	.53	2.09	2.20	1.00	.66	.33	.25	.18	.16
IN.	.39	4.51	1.83	.61	2.18	2.53	1.12	.76	.37	.29	.21	.18

CAL YR 1985 TOTAL 3787920 MEAN 10380 MAX 253000 MIN 1350 CFSM 1.08 IN 14.60
WTR YR 1986 TOTAL 3885620 MEAN 10650 MAX 253000 MIN 1170 CFSM 1.10 IN 14.98

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1960 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1960 to current year.

REMARKS.--Water temperatures are measured daily in field by local observer at time of sampling.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 33.5°C, Aug. 24, 1964, July 19, 1977; minimum daily, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATION: Maximum daily mean, 2,690 mg/L, Nov. 7, 1985; minimum daily mean, 1 mg/L, on many days most years.
SEDIMENT LOAD: Maximum daily, 1,930,000 tons, Nov. 7, 1985; minimum daily, 2.0 tons on many days during 1964, 1966-69.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum daily, 31.0°C, July 29; minimum daily, 0.0°C, Jan. 2, 14, 15.
SEDIMENT CONCENTRATION: Maximum daily mean, 2,690 mg/L, Nov. 7; minimum daily mean, 1 mg/L, Oct. 2, Sept. 16.
SEDIMENT LOAD: Maximum daily, 1,930,000 tons, Nov. 7; minimum daily, 3.6 tons, Sept. 16.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
NOV 06...	1730	256000	2630	1820000	40	55	76
FEB 21...	1205	61400	437	72400	--	28	41

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 06...	89	94	98	99	100	100	100
FEB 21...	55	77	77	83	91	99	100

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	12.0	9.0	1.0	---	4.0	16.0	18.0	25.0	23.0	29.0	22.0
2	18.0	12.0	---	.0	3.0	4.0	16.0	17.0	24.0	24.0	27.0	20.0
3	18.0	12.0	---	2.0	3.0	4.0	14.0	14.0	20.0	24.0	28.0	20.0
4	17.0	12.0	---	3.0	2.0	5.0	14.0	17.0	21.0	26.0	27.0	22.0
5	17.0	12.0	---	2.0	3.0	6.0	15.0	19.0	22.0	26.0	28.0	23.0
6	17.0	12.0	---	2.0	2.0	4.0	13.0	17.0	25.0	27.0	27.0	24.0
7	17.0	12.0	---	1.0	2.0	---	14.0	19.0	25.0	29.0	27.0	23.0
8	17.0	12.0	---	1.0	3.0	---	14.0	19.0	26.0	29.0	27.0	21.0
9	19.0	12.0	6.0	2.0	3.0	6.0	14.0	18.0	25.0	27.0	28.0	20.0
10	20.0	11.0	6.0	2.0	2.0	6.0	---	17.0	23.0	28.0	29.0	22.0
11	20.0	13.0	6.0	2.0	2.0	7.0	10.0	20.0	25.0	27.0	27.0	21.0
12	16.0	13.0	7.0	2.0	2.0	10.0	13.0	18.0	28.0	28.0	27.0	23.0
13	17.0	12.0	6.0	1.0	2.0	9.0	13.0	18.0	26.0	---	26.0	22.0
14	17.0	13.0	5.0	.0	1.0	10.0	12.0	17.0	24.0	---	26.0	23.0
15	20.0	12.0	5.0	.0	1.0	8.0	12.0	17.0	---	---	25.0	24.0
16	20.0	11.0	5.0	1.0	2.0	8.0	10.0	20.0	---	28.0	25.0	22.0
17	17.0	12.0	4.0	1.0	2.0	8.0	10.0	20.0	17.0	26.0	26.0	---
18	17.0	10.0	4.0	2.0	2.0	7.0	10.0	24.0	18.0	30.0	25.0	20.0
19	19.0	11.0	4.0	---	2.0	10.0	11.0	22.0	23.0	28.0	26.0	20.0
20	18.0	11.0	3.0	---	3.0	8.0	12.0	21.0	25.0	29.0	24.0	21.0
21	15.0	11.0	3.0	---	5.0	7.0	13.0	20.0	24.0	29.0	23.0	23.0
22	14.0	10.0	2.0	---	4.0	7.0	13.0	20.0	27.0	28.0	25.0	21.0
23	15.0	10.0	2.0	---	5.0	9.0	11.0	19.0	25.0	29.0	26.0	21.0
24	15.0	10.0	2.0	---	4.0	9.0	13.0	19.0	25.0	28.0	25.0	23.0
25	15.0	9.0	7.0	---	4.0	10.0	12.0	20.0	23.0	29.0	25.0	23.0
26	15.0	8.0	6.0	---	3.0	11.0	---	19.0	25.0	27.0	26.0	23.0
27	15.0	8.0	5.0	---	4.0	10.0	15.0	19.0	26.0	30.0	25.0	24.0
28	14.0	8.0	2.0	---	3.0	12.0	16.0	19.0	25.0	30.0	21.0	21.0
29	13.0	8.0	2.0	---	---	10.0	17.0	20.0	28.0	31.0	22.0	24.0
30	12.0	8.0	1.0	---	---	15.0	16.0	23.0	27.0	27.0	22.0	23.0
31	12.0	---	1.0	---	---	15.0	---	22.0	---	28.0	24.0	---

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2	8.3	5	47	130	13900	5	82	5	67	13	562
2	1	4.2	5	45	120	11700	5	80	7	102	10	389
3	3	17	25	371	100	8770	6	94	6	94	10	351
4	4	21	80	3410	85	6270	7	106	5	87	10	332
5	2	11	374	96000	75	4780	5	75	9	245	10	321
6	2	10	1990	1290000	60	3320	4	58	45	2470	10	316
7	14	67	2690	1930000	45	2210	4	53	63	4050	12	40300
8	15	68	774	184000	30	1360	4	49	45	2480	15	441
9	12	51	250	30600	15	616	4	47	32	1510	12	323
10	9	37	215	19900	23	863	4	43	24	1020	11	283
11	6	25	160	11700	15	526	5	53	15	624	12	318
12	3	12	128	8050	11	362	6	62	13	519	14	435
13	4	15	84	4540	20	637	5	50	11	392	22	939
14	5	20	68	3100	95	3390	5	49	10	305	32	1590
15	5	20	54	2000	45	2240	5	47	11	300	238	29900
16	5	21	44	1460	35	1780	5	46	12	318	960	285000
17	6	24	37	1410	30	1330	5	45	15	388	990	220000
18	7	28	140	9490	23	913	5	43	11	321	260	32300
19	6	23	95	4690	16	566	7	72	30	1810	155	13700
20	5	20	43	1640	12	369	9	109	380	50800	80	5620
21	5	21	30	972	40	1110	10	155	680	113000	60	3560
22	5	34	20	599	15	381	12	226	175	23500	25	1240
23	15	192	30	1340	10	242	14	294	95	10200	20	826
24	55	1690	95	7410	10	254	12	235	42	3550	16	588
25	78	2530	86	5870	11	255	10	185	35	2460	16	536
26	77	1940	55	2980	11	238	10	188	25	1500	16	501
27	67	1330	40	1920	12	241	10	187	12	632	14	404
28	56	863	110	6920	15	295	10	185	15	713	11	293
29	38	496	140	13500	15	282	7	93	---	---	10	250
30	21	238	177	21300	11	196	5	65	---	---	9	214
31	13	132	---	---	6	102	5	63	---	---	10	226
TOTAL	---	9968.5	---	3665264	---	69498	---	3139	---	223457	---	642058
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10	214	11	204	16	210	15	84	8	33	4	17
2	8	163	11	203	14	169	22	127	9	39	8	37
3	7	136	12	218	13	145	23	148	12	52	13	75
4	8	147	12	205	14	143	21	154	15	64	14	86
5	9	161	12	194	14	135	25	252	18	78	12	63
6	11	195	11	166	12	112	33	370	19	83	7	34
7	13	238	9	131	11	108	31	296	20	107	9	45
8	15	289	8	114	15	153	24	211	22	124	9	43
9	16	331	6	81	20	198	14	115	24	124	8	39
10	21	445	6	78	25	324	17	130	25	125	12	54
11	25	512	7	87	26	352	17	120	24	119	9	37
12	23	472	9	107	26	308	17	133	11	48	8	33
13	20	410	11	126	23	241	19	124	12	49	5	20
14	14	274	9	100	20	196	21	127	12	47	10	38
15	13	248	7	79	20	185	22	137	14	56	4	15
16	16	385	8	92	18	154	23	135	15	64	1	3.6
17	22	606	9	104	20	160	21	119	16	62	6	20
18	42	1760	9	108	25	162	19	103	23	93	9	31
19	90	5010	9	104	22	148	17	84	41	220	12	41
20	68	3470	10	117	20	138	16	90	40	193	18	57
21	21	913	12	203	18	125	23	134	39	203	14	48
22	13	512	62	2040	18	116	28	157	28	163	12	40
23	9	316	72	2990	17	99	22	124	24	145	16	57
24	9	282	42	1440	17	101	17	97	16	85	18	70
25	10	283	30	834	18	108	20	112	20	106	18	73
26	11	279	18	414	20	117	24	133	23	122	22	89
27	11	259	14	279	19	110	20	103	13	64	23	94
28	9	200	11	195	18	101	16	81	12	59	18	73
29	9	189	11	176	15	83	17	86	10	49	13	54
30	10	197	12	177	12	68	18	89	6	27	19	79
31	---	---	15	209	---	---	14	64	4	17	---	---
TOTAL	---	18896	---	11575	---	4769	---	4239	---	2820	---	1465.6

TOTAL LOAD FOR YEAR: 4657149.1 TONS.

01639000 MONOCACY RIVER AT BRIDGEPORT, MD

LOCATION.--Lat 39°40'43", long 77°14'06", Frederick County, Hydrologic Unit 02070009, on right bank 60 ft downstream from bridge on State Highway 140 at Bridgeport, 0.9 mi upstream from Cattail Branch, 3.4 mi northwest of Taneytown, 4.8 mi downstream from confluence of Rock and Marsh Creeks at Pennsylvania-Maryland State line, and 52 mi upstream from mouth.

DRAINAGE AREA.--173 mi².

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

REVISED RECORDS.--WSP 1382: 1944(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 15, 1947. Datum of gage is 340.83 ft above National Geodetic Vertical datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to May 3, 1946, nonrecording gage and crest-stage gages at site 0.3 mi downstream at datum 0.98 ft lower.

REMARKS.--Estimated daily discharges: Dec. 23-26, Jan. 17-20, Feb. 11, 13-16, Apr. 30 to May 5. Records good. Occasional regulation at low flow from unknown source upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--44 years, 204 ft³/s, 16.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,300 ft³/s, June 22, 1972, gage height, 24.05 ft, from rating curve extended above 7,000 ft³/s on basis of slope-conveyance study; no flow July 24-29, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 24, 1933, reached a stage of about 25 ft, present site and datum, from floodmarks, discharge, about 23,000 ft³/s. Stage exceeded that of June 1889, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 15	0600	*7,730	*12.91	No other peak greater than base discharge.			

Minimum discharge, 2.3 ft³/s, Sept. 21, 22, gage height, 1.73 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	914	58	57	222	73	70	21	6.2	7.3	7.9
2	18	17	1330	52	63	200	69	64	19	8.1	7.3	8.8
3	30	18	428	56	123	182	65	58	18	20	7.4	10
4	32	1180	303	63	348	197	61	52	18	17	13	17
5	30	1930	264	59	954	267	64	51	17	11	9.0	21
6	42	844	274	48	732	302	75	49	18	6.8	7.3	17
7	30	335	327	44	360	260	93	48	499	5.1	5.9	12
8	22	210	291	39	272	125	81	46	96	5.4	5.5	9.6
9	18	150	230	36	221	137	66	40	51	4.4	8.5	7.6
10	16	121	195	42	200	171	60	38	34	4.6	9.2	6.4
11	15	104	159	41	195	448	56	35	26	5.5	7.0	5.7
12	14	95	154	39	177	258	56	33	23	6.5	5.5	5.3
13	14	93	450	43	140	371	53	31	128	5.5	4.7	4.8
14	13	89	663	26	135	1360	49	31	56	4.5	4.2	4.0
15	12	121	244	32	135	4570	50	33	31	4.9	3.7	3.7
16	12	153	188	26	130	849	994	35	23	5.0	3.4	3.2
17	12	1310	172	24	159	482	1360	42	20	6.4	123	3.0
18	11	365	147	22	1610	347	830	42	19	10	74	2.8
19	11	248	96	20	2050	294	365	31	17	8.0	30	2.6
20	11	203	99	100	2270	243	260	36	14	33	19	2.5
21	13	170	94	115	1970	185	214	444	12	289	21	2.4
22	24	1070	74	77	1240	164	201	157	11	43	68	2.4
23	59	882	70	69	671	152	203	102	9.8	20	34	2.7
24	38	334	70	53	559	140	150	65	12	15	18	4.0
25	47	243	65	48	451	120	126	51	14	13	12	5.3
26	45	236	65	96	344	112	116	42	11	12	10	7.5
27	30	1190	67	225	326	106	104	36	9.6	9.0	8.7	5.7
28	24	1710	73	158	280	98	93	35	8.3	7.9	9.7	5.0
29	21	1280	64	107	---	90	85	33	6.8	7.8	9.9	5.3
30	19	662	58	73	---	85	80	27	6.0	7.0	10	5.0
31	17	---	52	64	---	80	---	24	---	8.0	8.2	---
TOTAL	717	15380	7680	1955	16172	12617	6152	1881	1248.5	609.6	564.4	200.2
MEAN	23.1	513	248	63.1	578	407	205	60.7	41.6	19.7	18.2	6.67
MAX	59	1930	1330	225	2270	4570	1360	444	499	289	123	21
MIN	11	17	52	20	57	80	49	24	6.0	4.4	3.4	2.4
CFSM	.13	2.97	1.43	.37	3.34	2.35	1.19	.35	.24	.11	.11	.04
IN.	.15	3.31	1.65	.42	3.48	2.71	1.32	.40	.27	.13	.12	.04

CAL YR 1985 TOTAL 59336.3 MEAN 163 MAX 4150 MIN 5.1 CFSM .94 IN 12.76
WTR YR 1986 TOTAL 65176.7 MEAN 179 MAX 4570 MIN 2.4 CFSM 1.04 IN 14.01

01639500 BIG PIPE CREEK AT BRUCEVILLE, MD

LOCATION.--Lat 39°36'45", long 77°14'10", Carroll County, Hydrologic Unit 02070009, on left bank 300 ft downstream from bridge on State Highway 194, 800 ft downstream from Bruceville, 3.5 mi upstream from Detour, and confluence with Little Pipe Creek.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--October 1947 to current year. Prior to December 1947, monthly discharge only, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 340 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-22, Jan. 7, 8, 14, 15, Jan. 27 to Feb. 3, Feb. 12-15. Records good. Occasional diversion for irrigation upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--39 years, 111 ft³/s, 14.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s, Sept. 26, 1975, gage height, 18.98 ft, from rating curve extended above 3,900 ft³/s on the basis of contracted-opening measurement at gage height 17.86 ft; minimum daily discharge, 1.0 ft³/s, Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 15	0300	*1,440	*4.83	No peak greater than base discharge.			

Minimum discharge, 7.5 ft³/s, Sept. 18, 23, 24, 28, gage height, 0.71 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	33	285	58	60	128	76	79	36	19	13	18
2	37	32	393	63	60	119	74	76	34	23	14	21
3	68	32	176	57	60	114	70	70	32	28	17	28
4	79	59	142	59	185	116	71	69	32	21	17	27
5	59	228	128	57	270	114	72	68	32	19	16	24
6	45	117	131	59	215	108	82	65	31	19	13	21
7	40	81	128	52	152	100	83	65	35	18	52	21
8	36	65	110	48	126	86	75	62	32	16	24	19
9	35	54	99	45	116	91	69	59	29	17	20	18
10	34	49	92	50	113	92	66	58	28	20	17	16
11	32	47	88	46	118	107	66	57	27	19	18	16
12	32	46	87	48	100	92	67	54	26	15	17	16
13	30	46	278	47	80	129	62	53	40	18	14	14
14	33	46	219	25	80	297	62	53	31	16	13	13
15	32	48	123	35	95	787	66	57	28	12	14	13
16	32	48	112	40	97	280	560	58	27	14	13	13
17	28	112	105	47	94	199	376	65	26	19	21	12
18	29	71	97	49	353	166	275	56	27	20	31	11
19	29	60	85	57	604	154	177	51	22	17	19	12
20	29	56	80	86	589	136	150	58	21	16	30	16
21	36	51	80	66	466	117	138	66	23	130	33	13
22	72	273	75	56	330	110	147	97	22	32	34	14
23	65	220	81	54	275	108	136	57	22	24	26	13
24	47	109	81	48	235	102	112	52	25	22	20	14
25	52	90	94	49	210	95	104	47	29	20	21	15
26	43	88	77	183	174	93	101	44	22	19	17	18
27	39	133	73	170	171	92	94	43	22	19	16	16
28	36	406	68	90	147	87	90	46	21	18	23	13
29	34	452	66	80	---	85	86	42	23	17	26	15
30	33	248	69	70	---	82	82	39	19	18	18	12
31	34	---	64	65	---	78	---	38	---	12	20	---
TOTAL	1266	3400	3786	1959	5575	4464	3689	1804	824	697	647	492
MEAN	40.8	113	122	63.2	199	144	123	58.2	27.5	22.5	20.9	16.4
MAX	79	452	393	183	604	787	560	97	40	130	52	28
MIN	28	32	64	25	60	78	62	38	19	12	13	11
CFSM	.40	1.11	1.20	.62	1.95	1.41	1.21	.57	.27	.22	.21	.16
IN.	.46	1.24	1.38	.71	2.03	1.63	1.35	.66	.30	.25	.24	.18

CAL YR 1985 TOTAL 32652 MEAN 89.5 MAX 3480 MIN 18 CFSM .88 IN 11.91
WTR YR 1986 TOTAL 28603 MEAN 78.4 MAX 787 MIN 11 CFSM .77 IN 10.43

01640965 HUNTING CREEK NEAR FOXVILLE, MD

LOCATION.--Lat 39°37'10", long 77°28'00", Frederick County, Hydrologic Unit 02070008, on left downstream wingwall of culvert on park road in Cunningham Falls State Park, 0.25 mi upstream from Hunting Creek Lake, and 2.9 mi west of Thurmont.

DRAINAGE AREA.--2.14 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,030 ft above National Geodetic Vertical datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good except those above 20 ft³/s, which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 3.34 ft³/s, 21.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 255 ft³/s, Feb. 14, 1984, gage height, 4.00 ft; minimum daily discharge, 0.04 ft³/s, Aug. 30, Sept. 18, 1982, Sept. 15-19, 22, 23, 1986.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 4	0900	89	3.40	Apr. 16	0045	42	3.12
Nov. 5	0145	77	3.34	May 20	1630	44	3.13
Mar. 14	2215	49	3.17	June 6	2100	*102	*3.46

Minimum daily discharge, 0.04 ft³/s, Sept. 15-19, 22,23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.46	18	1.8	1.6	4.2	2.4	2.6	.75	.30	.07	.06
2	.19	.48	19	1.7	2.5	3.8	2.3	2.3	.75	.76	.07	.11
3	.20	14	11	1.9	3.1	3.6	2.1	2.1	.65	.41	.07	.16
4	.20	48	8.4	1.8	7.2	3.5	2.1	1.9	.58	.31	.07	.17
5	.27	42	7.2	1.7	14	3.4	1.9	1.8	.55	.25	.07	.11
6	.21	20	6.7	1.6	9.7	3.2	2.6	1.6	11	.23	.20	.09
7	.14	10	5.8	1.3	6.8	2.9	2.3	1.5	18	.21	.14	.06
8	.11	6.7	5.3	1.3	5.3	2.7	2.0	1.4	5.6	.19	.12	.06
9	.10	5.1	4.8	1.2	4.5	2.7	1.7	1.3	3.5	.32	.09	.06
10	.10	4.3	4.4	1.3	4.0	4.5	1.7	1.2	2.5	.26	.07	.05
11	.10	3.7	4.2	1.3	3.8	12	1.7	1.1	2.1	.20	.07	.05
12	.09	3.4	3.8	1.3	3.2	5.9	1.7	.98	1.8	.21	.06	.05
13	.09	3.2	11	1.3	3.2	12	1.6	.93	1.6	.20	.06	.05
14	.12	3.5	7.9	1.2	3.0	23	1.5	1.0	1.3	.21	.06	.05
15	.18	3.3	5.7	1.1	2.8	35	4.4	1.1	1.1	.15	.06	.04
16	.18	6.3	5.2	1.0	2.6	20	23	1.0	.97	.13	.06	.04
17	.17	8.6	4.5	1.1	6.0	13	21	1.3	.95	.15	.07	.04
18	.15	5.1	4.0	1.2	17	9.9	14	.88	.80	.15	.10	.04
19	.17	4.4	3.4	1.9	26	8.6	9.3	.74	.73	.16	.07	.04
20	.22	3.9	3.2	3.0	25	7.0	7.7	14	.80	.22	.08	.05
21	1.5	3.5	3.1	1.8	24	5.5	6.6	5.4	.66	.20	.34	.05
22	5.3	18	2.8	1.9	17	4.8	6.2	5.6	.56	.14	.14	.04
23	2.5	14	2.9	1.9	12	4.4	5.7	3.3	.51	.12	.10	.04
24	1.7	8.2	2.7	1.6	8.8	3.9	4.7	2.6	1.2	.13	.08	.05
25	1.4	6.3	2.6	1.6	7.4	3.5	4.3	2.1	.62	.12	.07	.06
26	.82	5.9	2.2	2.3	6.2	3.4	3.9	1.7	.50	.11	.06	.06
27	.66	6.7	2.2	2.4	5.6	3.2	3.6	1.6	.43	.11	.08	.05
28	.55	23	2.2	2.3	4.7	3.1	3.3	1.5	.41	.10	.11	.05
29	.49	19	2.2	2.0	---	2.8	3.1	1.2	.39	.09	.07	.05
30	.46	17	2.0	1.7	---	2.7	2.7	1.0	.31	.07	.06	.05
31	.43	---	1.8	1.6	---	2.6	---	.85	---	.07	.06	---
TOTAL	18.86	318.04	170.2	51.1	237.0	220.8	151.1	67.58	61.62	6.28	2.83	1.88
MEAN	.61	10.6	5.49	1.65	8.46	7.12	5.04	2.18	2.05	.20	.091	.063
MAX	5.3	48	19	3.0	26	35	23	14	18	.76	.34	.17
MIN	.06	.46	1.8	1.0	1.6	2.6	1.5	.74	.31	.07	.06	.04
CFSM	.29	4.95	2.57	.77	3.95	3.33	2.36	1.02	.96	.09	.04	.03
IN.	.33	5.53	2.96	.89	4.12	3.84	2.63	1.17	1.07	.11	.05	.03

CAL YR 1985 TOTAL 1039.80 MEAN 2.85 MAX 48 MIN .06 CFSM 1.33 IN 18.07
WTR YR 1986 TOTAL 1307.29 MEAN 3.58 MAX 48 MIN .04 CFSM 1.67 IN 22.71

01640970 HUNTING CREEK TRIBUTARY NEAR FOXVILLE, MD

LOCATION.--Lat 39°37'42", long 77°27'44", Frederick County, Hydrologic Unit 02070003, on left downstream wingwall of culvert of park road in Cunningham Falls State Park, 600 ft upstream from Hunting Creek Lake, and 2.7 mi west of Thurmont.

DRAINAGE AREA.--4.01 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,030 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-23, 25-27, Jan. 6, 7, 10, 14, 16, 17, Jan. 28, 29 to Feb. 2, Feb. 12-16, Mar. 7, 8. Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 6.90 ft³/s, 23.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 506 ft³/s, Aug. 11, 1984, gage height, 3.44 ft; minimum discharge, 0.12 ft³/s, Sept. 10, 11, 12, 20, 1983.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 4	0915	134	2.28	Mar. 15	0115	99	2.06
Nov. 5	0230	134	2.28	June 6	2115	*229	*2.69

Minimum discharge, 0.18 ft³/s, Sept. 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	2.1	23	4.8	4.6	8.9	5.9	5.5	2.6	1.4	.40	.20
2	1.4	2.1	25	4.6	5.4	8.4	5.7	5.1	2.5	3.0	.54	.60
3	1.4	22	15	5.3	7.0	7.8	5.3	4.8	2.3	1.6	.64	1.1
4	1.4	83	13	5.1	12	7.9	5.2	4.5	2.2	1.3	.51	.89
5	1.6	67	13	4.9	21	7.8	5.6	4.3	2.2	1.2	.37	.55
6	.98	25	12	4.0	13	7.5	7.4	4.1	28	1.1	.85	.46
7	.80	15	11	3.8	9.8	7.0	6.1	4.1	21	1.0	1.0	.25
8	.71	11	10	3.8	8.5	7.0	5.2	3.7	7.4	.95	.75	.22
9	.69	9.4	10	3.8	8.0	7.9	4.8	3.7	5.1	1.8	.52	.20
10	.69	8.5	9.3	3.7	7.4	11	4.6	3.5	4.3	1.3	.35	.20
11	.69	8.0	8.8	3.7	7.2	17	4.8	3.3	3.9	.99	.32	.20
12	.69	7.6	8.4	3.7	6.8	9.6	4.6	3.0	3.6	1.0	.28	.20
13	.70	7.3	19	3.6	6.5	18	4.3	3.0	3.4	.96	.28	.19
14	.77	8.2	13	3.5	6.2	35	4.1	3.5	3.0	.88	.24	.18
15	.99	7.4	9.6	3.4	6.0	52	9.1	3.6	2.7	.76	.23	.18
16	1.1	14	9.3	3.2	6.0	26	32	3.5	2.5	.76	.24	.18
17	.95	15	8.8	3.6	12	19	25	6.3	2.9	.88	.25	.18
18	.94	9.1	7.5	4.1	28	16	16	3.3	2.3	.82	.45	.18
19	.94	8.4	7.0	6.9	33	15	12	2.8	2.2	.70	.23	.18
20	1.0	7.8	6.8	8.3	32	13	10	27	2.5	1.5	.24	.18
21	5.4	7.1	6.4	4.9	30	11	9.6	13	2.0	1.4	1.8	.18
22	12	27	6.2	5.0	20	9.9	11	11	1.9	.80	.66	.18
23	7.1	18	6.8	4.6	17	9.7	9.7	6.8	1.8	.73	.44	.18
24	5.6	12	6.8	4.0	14	9.0	8.1	5.7	3.6	.75	.31	.23
25	4.3	10	6.8	4.2	12	8.4	7.5	4.8	2.0	.73	.20	.38
26	2.8	11	6.5	5.5	11	8.1	7.2	4.2	1.7	.66	.20	.30
27	2.5	13	6.5	5.0	10	7.8	6.7	4.2	1.6	.60	.38	.21
28	2.3	30	5.7	5.0	9.3	7.2	6.3	4.0	1.6	.52	.85	.23
29	2.1	22	5.3	5.0	---	7.0	6.9	3.4	1.6	.49	.37	.39
30	2.1	21	5.0	4.9	---	6.7	5.8	3.0	1.3	.43	.21	.42
31	2.1	---	4.9	4.7	---	6.3	---	2.8	---	.46	.20	---
TOTAL	67.36	509.0	306.4	140.6	363.7	392.9	256.5	165.5	125.7	31.47	14.31	9.22
MEAN	2.17	17.0	9.88	4.54	13.0	12.7	8.55	5.34	4.19	1.02	.46	.31
MAX	12	83	25	8.3	33	52	32	27	28	3.0	1.8	1.1
MIN	.62	2.1	4.9	3.2	4.6	6.3	4.1	2.8	1.3	.43	.20	.18
CFSM	.54	4.24	2.46	1.13	3.24	3.17	2.13	1.33	1.05	.25	.12	.08
IN.	.62	4.72	2.84	1.30	3.37	3.64	2.38	1.53	1.17	.29	.13	.09

CAL YR 1985 TOTAL 2076.94 MEAN 5.69 MAX 83 MIN .53 CFSM 1.42 IN 19.26
WTR YR 1986 TOTAL 2382.66 MEAN 6.53 MAX 83 MIN .18 CFSM 1.63 IN 22.10

01640975 HUNTING CREEK NEAR THURMONT, MD

LOCATION.--Lat 39°27'48", long 77°27'20", Frederick County, Hydrologic Unit 02070008, on left bank 600 ft downstream from dam on Hunting Creek Lake, 1.6 mi upstream from Bear Branch, 2.4 mi west of Thurmont, and 10.7 mi upstream from mouth.

DRAINAGE AREA.--7.08 mi².

PERIOD OF RECORD.--December 1981 to May 1986 (discontinued).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 940 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 5-18. Records good except those for period of no gage-height record, Mar. 5-18, which are fair. Flow regulated by Hunting Creek Lake 600 ft upstream. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 915 ft³/s, Feb. 14, 1984, gage height, 4.82 ft; minimum discharge, 1.3 ft³/s, Aug. 15, 16, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 266 ft³/s, Nov. 5, gage height, 2.85 ft; minimum discharge, 2.7 ft³/s, Oct. 3, 4, 5, gage height, 0.16 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.4	34	8.9	4.7	23	9.7	9.3				
2	3.2	4.4	39	8.9	4.7	17	9.3	9.2				
3	3.0	4.8	31	8.9	4.7	13	8.9	8.6				
4	2.7	88	27	8.9	4.7	9.3	8.6	8.0				
5	2.9	129	27	5.8	5.6	9.3	8.6	7.8				
6	2.9	46	26	3.5	9.5	9.3	9.6	7.7				
7	2.9	28	26	3.7	15	9.3	9.8	---				
8	2.9	23	26	3.8	15	9.3	8.9	---				
9	2.9	19	26	4.0	15	9.3	8.0	---				
10	3.0	16	26	4.0	15	9.3	7.6	---				
11	3.2	13	25	4.0	15	11	7.2	---				
12	2.9	12	25	4.0	15	11	7.4	---				
13	2.9	11	25	4.0	15	20	7.0	---				
14	2.9	11	25	4.0	15	50	6.2	---				
15	2.9	12	25	4.0	15	60	7.5	---				
16	3.1	13	25	4.0	15	40	44	---				
17	3.2	25	24	4.0	15	32	34	---				
18	3.2	20	20	4.0	19	28	31	---				
19	3.1	16	16	4.0	28	26	24	---				
20	2.9	14	16	4.4	40	24	20	---				
21	3.0	13	16	4.4	44	21	19	---				
22	3.2	28	15	4.4	44	19	18	---				
23	3.8	38	15	4.4	44	18	19	---				
24	4.4	26	15	4.4	43	17	15	---				
25	4.4	22	15	4.4	42	16	13	---				
26	4.4	21	15	4.4	40	14	12	---				
27	4.4	24	15	4.4	38	14	11	---				
28	4.5	31	15	4.6	32	13	10	---				
29	4.7	40	15	4.7	---	11	10	---				
30	4.7	33	14	4.7	---	10	9.7	---				
31	4.7	---	11	4.7	---	9.9	---	---				
TOTAL	106.4	785.6	675	150.3	612.9	583.0	414.0	---				
MEAN	3.43	26.2	21.8	4.85	21.9	18.8	13.8	---				
MAX	4.7	129	39	8.9	44	60	44	---				
MIN	2.7	4.4	11	3.5	4.7	9.3	6.2	---				
CFSM	.48	3.70	3.08	.69	3.09	2.66	1.95	---				
IN.	.56	4.13	3.55	.79	3.22	3.06	2.17	---				

CAL YR 1985 TOTAL 3494.6 MEAN 9.57 MAX 129 MIN 1.8 CFSM 1.35 IN 18.36

01641000 HUNTING CREEK AT JIMTOWN, MD

LOCATION.--Lat 39°35'40", long 77°23'50", Frederick County, Hydrologic Unit 02070009, on right bank just downstream from highway bridge, 0.4 mi southwest of Jimtown, about 2.2 mi southeast of Thurmont, 2.2 mi upstream from Little Hunting Creek, and 5.2 mi upstream from mouth.

DRAINAGE AREA.--18.4 mi².

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

REVISED RECORDS.--WSP 1332: 1952.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 355 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 9-20. Records good except those for period of backwater from leaves, Oct. 9-20, which are fair. Slight regulation at irregular intervals caused by pumpage at recreation camp near Foxville, and from occasional draining and refilling of pond near Thurmont by Maryland Game and Inland Fish Commission. Regulation since spring of 1970 at low flow by Hunting Creek Lake, 5.6 miles upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--37 years, 26.9 ft³/s, 19.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft³/s, Oct. 9, 1976, gage height, 6.32 ft; minimum discharge, 0.4 ft³/s, Sept. 9, 1966, gage height, 1.48 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0300	*639	*3.85	Mar. 14	2300	359	3.22

Minimum discharge, 2.0 ft³/s, Sept. 12, 13, 14, gage height, 1.57 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	7.4	77	19	10	44	23	22	8.5	6.2	2.9	3.7
2	7.8	7.4	86	19	12	35	23	21	8.0	9.1	3.1	5.0
3	5.9	41	66	20	12	32	21	19	6.7	5.6	3.1	6.9
4	5.9	228	56	19	36	28	21	18	6.7	5.0	3.1	5.1
5	6.4	273	53	17	32	27	21	18	6.6	4.2	2.9	4.3
6	5.1	98	56	12	28	27	25	16	32	4.1	3.6	4.1
7	4.6	61	53	10	33	26	24	15	87	4.0	4.3	3.9
8	4.4	45	49	9.6	31	26	22	13	27	4.0	3.7	3.7
9	4.4	34	47	10	30	25	20	13	18	5.2	3.5	3.7
10	4.5	28	44	10	29	25	18	12	18	4.3	3.1	3.8
11	4.8	24	43	9.8	30	34	18	12	13	4.0	2.9	3.9
12	4.5	23	43	10	27	27	18	11	8.9	4.1	3.0	3.6
13	4.5	22	69	9.8	25	48	16	11	8.4	4.0	3.1	2.1
14	4.4	23	53	9.3	27	112	15	12	7.3	3.9	2.9	3.0
15	4.4	22	48	8.8	26	173	39	12	7.1	3.7	3.0	3.5
16	4.7	37	47	9.8	25	111	115	12	6.9	3.8	3.2	3.7
17	4.9	52	46	9.6	38	86	83	15	7.0	4.0	6.4	3.8
18	5.0	36	39	9.7	68	72	69	12	6.3	3.8	5.8	3.9
19	5.0	30	30	13	90	66	53	11	6.3	3.6	3.8	4.2
20	5.0	26	30	22	104	56	46	41	6.8	11	3.8	4.1
21	14	24	31	13	107	48	43	50	6.3	5.3	8.6	4.0
22	18	89	30	12	93	44	39	32	6.6	4.0	4.4	3.8
23	11	75	30	11	89	40	38	23	6.5	3.9	4.0	4.0
24	11	54	30	10	83	38	33	20	11	5.1	3.8	4.5
25	9.5	45	30	11	77	34	30	17	6.9	4.2	3.7	4.5
26	7.9	43	27	17	71	32	28	13	6.9	3.9	3.7	4.4
27	7.5	48	27	16	68	31	26	10	6.9	3.7	3.9	4.2
28	7.4	91	26	11	57	29	25	11	7.0	3.4	4.8	4.6
29	7.4	88	25	12	---	27	24	11	6.6	3.2	3.7	4.7
30	7.4	76	24	13	---	25	22	9.5	6.3	3.0	3.7	4.3
31	7.4	---	22	12	---	24	---	8.9	---	2.9	3.6	---
TOTAL	211.0	1750.8	1337	395.4	1358	1452	998	521.4	367.5	140.2	119.1	123.0
MEAN	6.81	58.4	43.1	12.8	48.5	46.8	33.3	16.8	12.3	4.52	3.84	4.10
MAX	18	273	86	22	107	173	115	50	87	11	8.6	6.9
MIN	4.4	7.4	22	8.8	10	24	15	8.9	6.3	2.9	2.9	2.1
CFSM	.37	3.17	2.34	.70	2.64	2.54	1.81	.91	.67	.25	.21	.22
IN.	.43	3.54	2.70	.80	2.75	2.94	2.02	1.05	.74	.28	.24	.25

CAL YR 1985 TOTAL 7787.6 MEAN 21.3 MAX 273 MIN 3.5 CFSM 1.16 IN 15.74
WTR YR 1986 TOTAL 8773.4 MEAN 24.0 MAX 273 MIN 2.1 CFSM 1.30 IN 17.74

01643000 MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD

LOCATION.--Lat 39°24'13", long 77°21'58", Frederick County, Hydrologic Unit 02070009, on right bank 0.2 mi upstream from Jug Bridge on U.S. Highway 40, 0.4 mi downstream from Linganore Creek, 2.0 mi east of Frederick, and 16.9 mi upstream from mouth.

DRAINAGE AREA.--817 mi².

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for October, November 1929, published in WSP 1302.

REVISED RECORDS.--WSP 711: 1930.

GAGE.--Water-stage recorder. Nonrecording gage at site 0.2 mile downstream. Datum of gage is 231.92 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: July 24 to Sept. 30. Records good except for estimated daily discharges (backwater from grass), which are fair. Occasional regulation at low and medium flows since September 1972 by Linganore Reservoir, total capacity, 883,200,000 gal, 2.8 mi upstrem from station. National Weather Service gage height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--57 years, 931 ft³/s, 15.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,600 ft³/s, June 23, 1972, gage height, 35.9 ft, from floodmark; minimum daily, 19 ft³/s, Sept. 7-13, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1889 reached a stage of 30 ft, from floodmarks, discharge, 56,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 15	1900	*14,300	*13.66	No other peak greater than base discharge.			

Minimum discharge, 77 ft³/s, July 17, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	181	3070	396	409	1430	579	514	225	122	87	103
2	158	174	3950	347	414	1250	548	485	213	138	89	124
3	187	190	2360	374	504	1130	523	454	199	144	93	145
4	246	2530	1550	382	827	1070	498	426	193	144	92	166
5	256	5370	1340	378	2510	1110	493	413	192	136	95	154
6	217	3950	1300	335	2630	1160	578	401	193	123	142	148
7	196	1750	1410	296	1750	1130	610	386	678	113	160	147
8	175	1120	1260	313	1280	955	567	375	718	113	149	132
9	157	822	1090	313	1130	782	504	354	334	109	120	120
10	148	660	940	301	1010	796	457	336	248	104	113	114
11	139	570	849	291	1020	985	438	326	214	100	111	114
12	131	512	796	279	929	1370	434	307	197	104	100	115
13	127	479	1150	301	744	1070	415	297	197	105	93	109
14	132	458	2760	217	667	2680	395	295	359	99	93	104
15	136	464	1410	262	735	11400	416	304	246	94	87	105
16	131	493	1040	245	666	5320	2970	312	200	86	85	122
17	125	1940	961	243	702	2760	3350	316	183	82	96	97
18	120	1520	866	260	2090	2060	3620	325	175	85	169	93
19	121	900	669	293	5830	1730	1890	295	174	94	217	92
20	124	744	555	473	7160	1620	1400	293	183	121	165	102
21	175	646	647	631	5470	1400	1210	1080	172	585	183	120
22	442	1180	1440	470	5090	1200	1150	919	164	504	180	122
23	564	4230	912	389	3040	1080	1170	643	154	200	214	117
24	423	1580	577	349	2760	987	951	454	156	138	189	120
25	385	1120	611	320	2310	890	812	376	171	119	131	116
26	330	963	447	416	1920	817	755	333	167	113	108	110
27	281	2010	483	1050	1720	773	697	298	148	105	99	110
28	238	3410	510	711	1650	730	633	291	140	98	114	116
29	209	5410	434	783	---	677	589	285	137	93	107	101
30	191	2650	393	962	---	641	552	262	127	87	118	86
31	184	---	372	587	---	613	---	242	---	87	110	---
TOTAL	6610	48026	36152	12967	56967	51616	29204	12397	6857	4345	3909	3524
MEAN	213	1601	1166	418	2035	1665	973	400	229	140	126	117
MAX	564	5410	3950	1050	7160	11400	3620	1080	718	585	217	166
MIN	120	174	372	217	409	613	395	242	127	82	85	86
CFSM	.26	1.96	1.43	.51	2.49	2.04	1.19	.49	.28	.17	.15	.14
IN.	.30	2.19	1.65	.59	2.59	2.35	1.33	.56	.31	.20	.18	.16

CAL YR 1985 TOTAL 259937 MEAN 712 MAX 20300 MIN 98 CFSM .87 IN 11.84
WTR YR 1986 TOTAL 272574 MEAN 747 MAX 11400 MIN 82 CFSM .91 IN 12.41

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE NEAR FREDERICK, MD

LOCATION.--Lat 39°23'16", long 77°22'40", Frederick County, Hydrologic Unit 02070009, at Reich's Ford Bridge, 1.1 mi downstream from U.S. Highway 40, 1.2 mi downstream from gaging station, 2 mi southeast of Frederick, and 15.0 mi upstream from mouth.

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1960 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1960 to current year.

REMARKS.--Water temperatures are measured daily in field by local observer at time of sampling. Water-discharge records for Monocacy River at Jug bridge near Frederick (station 01643000) are used for computation of sediment loads. Prior to 1970, published as Monocacy River at Jug Bridge near Frederick (station 01643000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE (water years 1961-72, 1975, 1977, 1980-86): Maximum daily, 32.0°C, July 21, 1980; minimum, daily, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATION: Maximum daily mean, 2,000 mg/L, July 10, 1970; minimum daily mean, 1 mg/L on many days in water years 1961-67, 1970, 1972, 1982, 1985.
SEDIMENT LOAD: Maximum daily, 134,000 tons, June 22, 1972; minimum daily, 0.39 ton, Dec. 14, 1981.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum daily, 29.0°C, July 27, 29; minimum daily, 1.0°C, Dec. 20-22, Jan. 7, 25, 28, Feb. 7.
SEDIMENT CONCENTRATION: Maximum daily mean, 463 mg/L, Mar. 15; minimum daily mean, 2 mg/L, July 12, 13, Aug. 13, 14.
SEDIMENT LOAD: Maximum daily, 14,800 tons, Mar. 15; minimum daily, 0.50 ton, Aug. 13, 14.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOIBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	14.0	9.0	3.0	---	7.0	17.0	21.0	26.0	24.0	27.0	21.0
2	21.0	14.0	7.0	4.0	4.0	6.0	18.0	19.0	26.0	25.0	27.0	22.0
3	18.0	13.0	7.0	4.0	4.0	5.0	17.0	16.0	22.0	23.0	26.0	20.0
4	18.0	14.0	5.0	4.0	4.0	6.0	17.0	17.0	23.0	24.0	25.0	23.0
5	19.0	14.0	5.0	3.0	4.0	7.0	16.0	19.0	26.0	28.0	26.0	22.0
6	17.0	15.0	8.0	3.0	4.0	7.0	14.0	20.0	27.0	28.0	24.0	22.0
7	17.0	14.0	6.0	1.0	1.0	3.0	16.0	22.0	25.0	27.0	26.0	21.0
8	17.0	12.0	5.0	4.0	5.0	5.0	15.0	21.0	25.0	29.0	25.0	20.0
9	20.0	12.0	6.0	5.0	4.0	6.0	13.0	20.0	23.0	26.0	26.0	21.0
10	21.0	15.0	6.0	4.0	5.0	9.0	12.0	20.0	24.0	26.0	27.0	21.0
11	20.0	14.0	10.0	4.0	3.0	11.0	10.0	20.0	27.0	25.0	25.0	24.0
12	16.0	13.0	9.0	4.0	3.0	10.0	11.0	20.0	25.0	26.0	25.0	23.0
13	17.0	15.0	7.0	2.0	2.0	10.0	13.0	19.0	24.0	27.0	24.0	22.0
14	19.0	16.0	5.0	3.0	2.0	10.0	15.0	18.0	25.0	25.0	25.0	23.0
15	22.0	13.0	5.0	2.0	3.0	11.0	12.0	17.0	27.0	28.0	26.0	22.0
16	19.0	11.0	6.0	4.0	3.0	10.0	10.0	21.0	26.0	24.0	26.0	20.0
17	17.0	14.0	5.0	3.0	5.0	11.0	8.0	22.0	20.0	26.0	25.0	18.0
18	18.0	12.0	---	5.0	5.0	11.0	11.0	26.0	23.0	28.0	26.0	18.0
19	19.0	13.0	2.0	6.0	5.0	15.0	12.0	25.0	26.0	29.0	25.0	21.0
20	17.0	13.0	1.0	3.0	4.0	12.0	16.0	23.0	24.0	27.0	24.0	21.0
21	15.0	12.0	1.0	3.0	7.0	8.0	16.0	21.0	24.0	26.0	24.0	20.0
22	16.0	12.0	1.0	5.0	5.0	9.0	13.0	20.0	25.0	26.0	22.0	20.0
23	15.0	9.0	2.0	3.0	6.0	10.0	11.0	20.0	24.0	27.0	25.0	---
24	15.0	9.0	3.0	2.0	4.0	10.0	13.0	20.0	24.0	26.0	23.0	---
25	16.0	8.0	3.0	1.0	6.0	11.0	14.0	21.0	24.0	28.0	25.0	---
26	15.0	9.0	3.0	2.0	4.0	15.0	17.0	22.0	25.0	28.0	25.0	---
27	15.0	9.0	---	3.0	5.0	12.0	18.0	20.0	25.0	29.0	23.0	26.0
28	14.0	9.0	---	1.0	5.0	12.0	20.0	22.0	25.0	26.0	20.0	22.0
29	15.0	8.0	4.0	---	---	15.0	20.0	26.0	26.0	29.0	20.0	24.0
30	12.0	8.0	2.0	---	---	16.0	21.0	24.0	23.0	25.0	21.0	26.0
31	13.0	---	---	---	---	17.0	---	26.0	---	27.0	20.0	---

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE NEAR FREDERICK, MD--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24	10	27	13	43	356	4	4.3	10	11	11	42
2	26	11	33	16	83	885	6	5.6	10	11	9	30
3	28	14	24	12	40	255	8	8.1	10	14	8	24
4	36	24	181	1780	13	54	7	7.2	24	54	7	20
5	28	19	290	4200	10	36	7	7.1	84	569	8	24
6	25	15	120	1280	8	28	8	7.2	80	568	10	31
7	25	13	56	265	9	34	8	6.4	24	113	12	37
8	24	11	22	67	7	24	7	5.9	15	52	13	34
9	23	9.7	20	44	5	15	6	5.1	12	37	10	21
10	22	8.8	22	39	3	7.6	5	4.1	10	27	12	26
11	40	15	30	46	3	6.9	4	3.1	8	22	30	80
12	41	15	30	41	11	24	5	3.8	6	15	42	155
13	35	12	20	26	34	106	6	4.9	5	10	47	136
14	36	13	25	31	61	455	7	4.1	4	7.2	87	696
15	43	16	28	35	29	110	8	5.7	6	12	463	14800
16	41	15	35	47	9	25	8	5.3	6	11	221	3760
17	34	11	138	945	4	10	7	4.6	8	15	75	559
18	30	9.7	88	361	5	12	7	4.9	97	738	55	306
19	27	8.8	44	107	5	9.0	6	4.7	290	4560	40	187
20	26	8.7	29	58	4	6.0	12	15	230	4450	30	131
21	38	18	21	37	16	28	13	22	90	1330	21	79
22	78	93	39	185	10	39	9	11	80	1100	10	32
23	78	119	121	1410	3	7.4	8	8.4	63	517	5	15
24	42	48	43	183	6	9.3	11	10	41	306	22	59
25	36	37	18	54	3	4.9	8	6.9	29	181	29	70
26	46	41	11	29	10	12	8	9.0	21	109	21	46
27	48	36	45	316	10	13	10	28	16	74	18	38
28	47	30	86	787	7	9.6	12	23	13	58	16	32
29	39	22	127	1850	7	8.2	12	25	---	---	15	27
30	28	14	51	365	6	6.4	15	39	---	---	14	24
31	26	13	---	---	4	4.0	12	19	---	---	12	20
TOTAL	---	730.7	---	14629	---	2600.3	---	318.4	---	14971.2	---	21541
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10	16	40	56	31	19	5	1.6	7	1.6	3	.83
2	8	12	38	50	25	14	6	2.2	5	1.2	3	1.0
3	21	30	33	40	20	11	8	3.1	5	1.3	3	1.2
4	35	47	27	31	14	7.3	9	3.5	7	1.7	8	3.6
5	22	29	20	22	12	6.2	7	2.6	7	1.8	9	3.7
6	31	48	16	17	11	5.7	7	2.3	11	4.2	9	3.6
7	36	59	19	20	92	315	8	2.4	17	7.3	8	3.2
8	32	49	19	19	140	271	8	2.4	12	4.8	5	1.8
9	25	34	17	16	85	77	6	1.8	6	1.9	8	2.6
10	14	17	26	24	20	13	4	1.1	4	1.2	10	3.1
11	12	14	40	35	9	5.2	3	.81	6	1.8	8	2.5
12	12	14	32	27	7	3.7	2	.56	5	1.4	14	4.3
13	12	13	20	16	6	3.2	2	.57	2	.50	25	7.4
14	12	13	22	18	18	17	5	1.3	2	.50	26	7.3
15	12	13	19	16	12	8.0	7	1.8	4	.94	16	4.5
16	220	2060	10	8.4	9	4.9	8	1.9	4	.92	14	4.6
17	160	1450	11	9.4	6	3.0	7	1.5	5	1.3	18	4.7
18	150	1470	12	11	6	2.8	6	1.4	7	3.2	19	4.8
19	80	408	8	6.4	10	4.7	4	1.0	6	3.5	16	4.0
20	62	234	8	6.3	10	4.9	5	1.6	4	1.8	11	3.0
21	50	163	189	764	8	3.7	110	174	6	3.0	7	2.3
22	45	140	90	223	8	3.5	90	122	6	2.9	7	2.3
23	28	88	44	76	8	3.3	28	15	7	4.0	7	2.2
24	34	87	34	42	10	4.2	17	6.3	6	3.1	8	2.6
25	38	83	25	25	11	5.1	10	3.2	5	1.8	6	1.9
26	33	67	20	18	7	3.2	8	2.4	3	.87	4	1.2
27	43	81	16	13	4	1.6	7	2.0	6	1.6	4	1.2
28	59	101	15	12	4	1.5	6	1.6	7	2.2	5	1.6
29	38	60	13	10	6	2.2	7	1.8	6	1.7	6	1.6
30	35	52	18	13	6	2.1	7	1.6	6	1.9	5	1.2
31	---	---	---	---	---	---	7	1.6	4	1.2	---	---
TOTAL	---	6952	---	1644.5	---	827.0	---	366.94	---	67.13	---	89.83

TOTAL LOAD FOR YEAR: 64738.00 TONS.

01643500 BENNETT CREEK AT PARK MILLS, MD

LOCATION.--Lat 39°17'40", long 77°24'30", Frederick County, Hydrologic Unit 02070009, on left bank 75 ft downstream from highway bridge, 0.2 mi south of Park Mills, 1.8 mi upstream from mouth, and 3.7 mi southwest of Urbana.

DRAINAGE AREA.--62.8 mi².

PERIOD OF RECORD.--July 1948 to September 1958. Annual maximum, water years 1960-66. August 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 21, 28, 29, Jan. 30, 31, Feb, 1. Records good except those for periods with ice effect, Dec. 21, 28, 29, Jan. 30, 31, Feb. 1, which are fair. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--30 years (water years 1949-58, 1967-86), 68.9 ft³/s, 14.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s, June 21, 1972, gage height, 22.1 ft, from flood-mark, from rating curve extended above 2,700 ft³/s on basis of contracted-opening measurements at gage heights 11.15 ft, 14.33 ft, and 22.1 ft; minimum discharge, 0.30 ft³/s, Sept. 8, 1966, gage height, 0.80 ft.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 16	0245	*929	*4.51	No peak greater than base discharge.			

Minimum daily discharge, 4.5 ft³/s, July 31, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	19	149	29	32	77	42	40	21	9.3	4.5	8.6
2	15	20	140	28	42	72	42	39	20	14	4.9	15
3	25	20	82	29	46	71	40	37	19	12	9.4	15
4	25	44	67	28	138	73	40	37	19	8.8	6.5	12
5	19	213	59	27	143	76	41	36	19	8.6	4.8	11
6	15	66	60	27	105	73	48	35	19	7.9	5.7	10
7	13	40	55	25	86	68	50	34	19	7.0	10	8.7
8	12	33	45	20	67	56	43	32	19	6.4	15	8.6
9	12	29	42	23	62	56	40	30	18	10	7.7	7.7
10	13	27	40	25	61	60	39	30	16	12	6.5	7.1
11	13	26	39	24	67	73	40	30	17	8.7	18	7.7
12	12	24	39	25	57	59	38	29	17	8.6	8.3	7.0
13	12	24	70	24	53	70	37	28	18	8.6	7.0	6.3
14	15	24	65	21	50	133	36	30	16	9.1	6.1	5.6
15	19	25	44	22	46	353	81	30	14	7.2	5.6	5.9
16	15	24	42	20	44	190	384	30	14	5.9	5.9	5.8
17	13	40	40	23	50	133	153	31	14	6.7	35	5.2
18	13	29	38	25	223	109	126	33	12	7.0	36	5.7
19	13	26	36	30	298	100	92	27	12	5.6	12	5.8
20	15	26	34	43	268	87	79	31	19	27	13	5.6
21	34	24	32	32	217	74	75	30	16	31	34	5.7
22	90	113	33	28	168	69	79	35	13	11	23	5.6
23	51	94	36	27	150	66	81	28	12	9.3	13	6.0
24	32	47	35	24	134	62	62	27	13	8.6	10	5.7
25	27	39	39	26	121	55	56	26	12	8.6	8.6	5.9
26	23	36	30	70	106	53	52	24	10	8.4	8.3	6.5
27	21	36	29	77	104	52	47	25	10	7.6	8.0	5.2
28	19	118	28	48	87	47	44	26	11	6.9	17	4.6
29	19	274	29	35	---	46	43	24	11	5.8	13	6.0
30	19	143	29	36	---	44	40	23	9.5	5.1	8.7	6.0
31	19	---	30	34	---	44	---	22	---	4.5	8.6	---
TOTAL	656	1703	1536	955	3025	2601	2070	939	459.5	297.2	374.1	221.5
MEAN	21.2	56.8	49.5	30.8	108	83.9	69.0	30.3	15.3	9.59	12.1	7.38
MAX	90	274	149	77	298	353	384	40	21	31	36	15
MIN	12	19	28	20	32	44	36	22	9.5	4.5	4.5	4.6
CFSM	.34	.90	.79	.49	1.72	1.34	1.10	.48	.24	.15	.19	.12
IN.	.39	1.01	.91	.57	1.79	1.54	1.23	.56	.27	.18	.22	.13

CAL YR 1985 TOTAL 15021.6 MEAN 41.2 MAX 1400 MIN 5.7 CFSM .66 IN 8.90
WTR YR 1986 TOTAL 14837.3 MEAN 40.7 MAX 384 MIN 4.5 CFSM .65 IN 8.79

01645000 SENECA CREEK AT DAWSONVILLE, MD

LOCATION.--Lat 39°07'41", long 77°20'13", Montgomery County, Hydrologic Unit 02070008, on right bank 60 ft downstream from bridge on State Highway 28, 150 ft downstream from mouth of Great Seneca Creek, 0.5 mi east of Dawsonville, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--101 mi².

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

REVISED RECORDS.--WSP 726: Drainage area. WSP 1232: 1930. WSP 1272: 1933. WSP 1432: 1934-35(M), 1941(M). WDR MD-DE-74-1: 1970(M).

GAGE.--Water-stage recorder. Concrete control since Mar. 3, 1934. Datum of gage is 214.02 ft above National Geodetic Vertical Datum of 1929. Sept. 26 to Nov. 9, 1930, chain gage, and Nov. 10, 1930, to Apr. 6, 1934, water-stage recorder, at highway bridge 60 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 20, 21, Jan. 15, 16, 28. Records good except those for estimated daily discharges (ice effect), which are fair. Small diversion at times for irrigation upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--56 years, 102 ft³/s, 13.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,100 ft³/s, June 22, 1972, gage height, 16.4 ft, from high-water mark in gage house, from rating curve extended above 3,000 ft³/s on basis of contracted-opening and flow over-road measurement at gage height 12.17 ft at gage; and contracted-opening and flow-over-road measurement at gage height 16.32 ft at site 5.0 mi downstream, adjusted for flow from intervening area; minimum discharge observed, 1.7 ft³/s, Sept. 28, 29, 1930, gage height, 0.56 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 16	0315	*1,070	*4.93	No peak greater than base discharge.			

Minimum discharge, 10 ft³/s, Sept. 25, gage height, 1.69 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	30	191	47	53	88	64	64	43	25	22	20
2	29	34	143	43	58	86	64	62	42	58	59	42
3	70	33	92	45	65	86	62	58	40	35	87	30
4	53	114	78	45	206	91	61	57	42	28	32	27
5	38	414	71	45	177	103	64	58	37	27	27	25
6	31	101	75	41	123	94	124	55	38	26	28	23
7	28	68	69	37	101	87	96	53	35	25	36	21
8	27	53	64	32	88	72	76	52	35	23	31	22
9	28	48	60	37	87	77	69	52	35	25	27	20
10	27	46	57	37	88	78	66	52	35	32	25	19
11	27	45	54	40	95	88	68	51	34	26	26	19
12	27	42	54	40	81	76	67	49	43	26	25	18
13	27	42	99	40	67	85	63	48	59	25	27	16
14	29	40	90	35	70	149	62	53	38	27	24	15
15	35	39	62	32	71	335	94	54	35	24	22	15
16	37	40	59	32	68	149	568	53	34	22	22	15
17	28	75	57	38	70	116	186	72	35	23	76	15
18	28	48	54	40	290	103	157	64	31	24	83	15
19	29	44	48	49	309	98	110	52	30	23	31	15
20	32	41	47	81	275	90	98	70	41	210	75	15
21	116	41	45	52	167	81	97	76	39	318	76	15
22	146	282	47	46	141	77	104	157	32	60	47	14
23	96	168	52	44	145	76	109	62	30	37	39	15
24	59	81	51	45	141	76	86	55	30	32	34	15
25	52	65	63	53	130	72	81	51	27	30	30	14
26	43	57	47	258	113	75	77	49	28	29	29	15
27	40	59	47	152	112	72	73	48	28	28	23	15
28	37	96	46	70	98	68	70	50	28	27	33	14
29	34	293	46	68	---	67	68	46	29	25	30	16
30	33	199	44	61	---	67	65	46	27	25	22	17
31	32	---	43	55	---	65	---	44	---	24	20	---
TOTAL	1345	2738	2055	1740	3489	2947	3049	1813	1060	1369	1168	557
MEAN	43.4	91.3	66.3	56.1	125	95.1	102	58.5	35.3	44.2	37.7	18.6
MAX	146	414	191	258	309	335	568	157	59	318	87	42
MIN	27	30	43	32	53	65	61	44	27	22	20	14
CFSM	.43	.90	.66	.56	1.24	.94	1.01	.58	.35	.44	.37	.18
IN.	.50	1.01	.76	.64	1.29	1.09	1.12	.67	.39	.50	.43	.21

CAL YR 1985 TOTAL 27220 MEAN 74.6 MAX 1980 MIN 17 CFSM .74 IN 10.03
WTR YR 1986 TOTAL 23330 MEAN 63.9 MAX 568 MIN 14 CFSM .63 IN 8.59

01645200 WATTS BRANCH AT ROCKVILLE, MD

LOCATION.--Lat 39°05'03", long 77°10'38", Montgomery County, Hydrologic Unit 02070008, on left bank 0.2 mi south of State Highway 28, 1.3 mi west of post office in Rockville, and 9.4 mi upstream from mouth.

DRAINAGE AREA.--3.70 mi².

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

REVISED RECORDS.--WSP 2103: 1965. WDR MD-DE-75-1: 1967-70.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 330 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 7-12, May 23-31, June 3-11,13-15, 19, 21-23, June 25 to July 1, July 6-8, 10, 12, 15, July 23 to Aug. 1, Aug. 25, 26, Sept. 4-5. Records good except those for estimated daily discharges which are fair, and for those above 250 ft³/s, which are poor.
Some regulation of low flow from unknown source upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--29 years, 4.12 ft³/s, 15.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s, Sept. 26, 1975, gage height, 7.32 ft, from rating curve extended above 280 ft³/s on basis of combined computation of culvert and slope-area measurements of tributary inflow at gage height 7.22 ft, in well, 7.83 ft, from floodmarks; minimum discharge, 0.10 ft³/s Sept. 2, 1966, gage height, 1.10 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 220 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 4	2315	318	4.68	July 20	1930	339	4.81
May 21	2100	*867	*6.41	Aug. 2	1630	268	4.32

Minimum discharge, 0.20 ft³/s, Sept. 13, 14, 15, 16, 28, gage height, 1.14 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.1	6.8	1.5	2.0	2.4	1.6	1.6	3.1	.60	.38	.36
2	4.2	1.3	4.3	1.6	3.0	2.5	1.5	1.5	1.7	8.8	19	6.3
3	4.4	1.6	2.6	1.9	2.9	2.7	1.4	1.4	1.2	1.0	1.4	.79
4	3.0	34	2.5	1.5	20	3.2	1.4	1.4	1.0	.60	.64	.70
5	1.3	23	2.6	1.5	5.8	2.7	4.7	1.4	.95	.55	.63	.60
6	1.1	4.2	2.9	1.4	3.8	2.5	15	1.3	.85	.55	2.1	.75
7	1.1	2.2	2.4	1.4	3.4	2.2	3.4	1.4	.80	.50	.89	.66
8	1.0	1.9	2.5	1.3	3.2	2.0	2.0	1.3	1.0	.50	1.5	1.0
9	1.1	1.8	2.4	1.4	3.2	2.0	1.9	1.3	.90	1.2	.62	.46
10	1.1	1.8	2.4	1.4	3.4	2.3	1.8	1.3	.75	.60	.43	.33
11	1.2	1.7	2.1	1.4	3.6	3.4	2.2	1.3	2.0	.77	4.2	.29
12	1.1	2.6	2.0	1.4	3.4	2.1	1.7	1.2	7.8	.60	.56	.27
13	.98	1.6	10	1.4	3.1	4.0	1.6	1.2	1.4	1.7	.60	.23
14	1.7	1.5	2.2	1.3	2.9	14	1.6	2.7	1.2	1.0	.46	.26
15	5.7	1.5	1.8	1.2	4.1	7.0	16	1.3	1.0	.50	.51	.28
16	1.1	5.4	1.8	1.2	3.5	2.6	15	1.2	.90	.52	.44	.28
17	1.0	2.8	1.8	1.3	5.4	2.2	9.2	13	1.5	.62	7.0	.26
18	1.0	1.7	1.7	1.3	26	2.0	3.6	2.1	.75	.45	.92	.34
19	1.2	1.7	1.6	9.2	13	1.9	2.5	1.2	.70	2.2	1.2	.35
20	1.3	1.6	1.7	3.2	5.2	1.7	2.3	7.4	1.9	27	1.2	.31
21	18	1.5	2.5	1.6	6.2	1.7	3.1	72	.80	3.0	5.2	.30
22	14	30	1.8	1.5	4.0	1.6	4.7	9.0	.70	.72	.98	.25
23	2.7	3.0	1.8	1.4	8.5	1.9	2.4	2.0	.65	.55	.65	.32
24	2.3	2.1	2.1	1.4	4.7	1.9	2.0	1.6	1.1	.50	.61	.27
25	1.8	1.9	3.7	8.9	5.7	1.6	2.0	1.4	.80	.45	.54	.41
26	1.5	1.8	1.5	30	3.4	1.7	1.9	1.3	.70	.45	.50	.34
27	1.5	2.4	1.5	5.4	4.1	1.8	1.8	1.2	.60	.40	.47	.24
28	1.4	18	1.5	2.5	2.5	1.7	1.7	1.4	.80	.40	3.6	.30
29	1.4	8.0	1.5	2.4	---	1.7	1.7	1.2	.60	.38	.63	.34
30	1.4	19	1.4	2.2	---	1.6	1.5	1.2	.60	.38	.42	.34
31	1.3	---	1.4	2.0	---	1.5	---	1.6	---	.38	.35	---
TOTAL	83.18	183.7	78.8	97.1	160.0	84.1	113.2	140.4	38.75	57.87	58.63	17.93
MEAN	2.68	6.12	2.54	3.13	5.71	2.71	3.77	4.53	1.29	1.87	1.89	.60
MAX	18	34	10	30	26	14	16	72	7.8	27	19	6.3
MIN	.98	1.3	1.4	1.2	2.0	1.5	1.4	1.2	.60	.38	.35	.23
CFSM	.72	1.65	.69	.85	1.54	.73	1.02	1.22	.35	.51	.51	.16
IN.	.84	1.85	.79	.98	1.61	.85	1.14	1.41	.39	.58	.59	.18

CAL YR 1985 TOTAL 1247.74 MEAN 3.42 MAX 97 MIN .30 CFSM .92 IN 12.54
WTR YR 1986 TOTAL 1113.66 MEAN 3.05 MAX 72 MIN .23 CFSM .82 IN 11.19

01646500 POTOMAC RIVER NEAR WASHINGTON, DC

LOCATION.--Lat 38°56'58", long 77°07'40", Montgomery County, Md., Hydrologic Unit 02070008, on left bank just above Little Falls Dam, 1 mi upstream from District of Columbia boundary line, 1.2 mi upstream from Chain Bridge, 1.8 mi east of Langley, Fairfax County, Va., and at mile 117.4.
DRAINAGE AREA.--11,560 mi².
PERIOD OF RECORD.--March 1930 to current year.
REVISED RECORDS.--WSP 726: Drainage area. WDR MD-DE-75-1: 1973-74(M).
GAGE.--Water-stage recorder and concrete control. Datum of gage is 37.95 ft above National Geodetic Vertical Datum of 1929. Prior to June 7, 1930, nonrecording gage, and June 7, 1930, to Jan. 22, 1965, water-stage recorder at site 1 mi upstream on right bank at same datum.
REMARKS.--Estimated daily discharges: Nov. 30 to Jan.30, Feb. 1-5, 14-18, and Mar. 3-13. Records good except for estimated daily discharges (construction on control), which are fair. Diversions at Great Falls through aqueducts, and since June 1959, from gage pool at Little Falls Dam, for municipal supply of Washington, D.C.; since October 1958, at Rockville Filtration Plant, for municipal supply of city of Rockville; since April 1961, at Potomac Filtration Plant for water supply of Washington Suburban Sanitary District; since October 1961, at Fairfax Water Treatment Plant for water supply of city of Fairfax (from Goose Creek); since April 1964, at Violets Lock to Chesapeake and Ohio Canal; and since October 1985, at Fairfax County Water Authority Treatment Plant for water supply of the county. Low flow affected slightly prior to July 1981 by Stony River Reservoir (see station 01595200), since December 1950, by Savage River Reservoir (see station 01597500), and since July 1981, by Jennings Randolph Lake (see station 01595800). Gage-height telemeter at station.
AVERAGE DISCHARGE.--56 years, 11,520 ft³/s, 13.54 in/yr, adjusted for diversions.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 484,000 ft³/s, Mar. 19, 1936, gage height, 28.1 ft, site then in use; minimum daily discharge observed at gaging station, 121 ft³/s, Sept. 9, 1966, does not include diversion of 489 ft³ for municipal use; minimum daily discharge (adjusted), 601 ft³/s, Sept. 10, 1966, includes diversion of 449 ft³/s for municipal use.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889, was of approximately the same magnitude as that of March 19, 1936.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 45,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 07	1200	*317,000	*17.99	Feb. 21	1415	77,100	7.96
Nov. 30	1345	55,400	6.97	Mar. 16	1945	136,000	10.09

Minimum daily discharge, 577 ft³/s, Sept. 22, does not include diversion for municipal use; minimum daily (adjusted) discharge, 1,270 ft³/s, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1760	3730	49700	6300	5300	22800	9060	7890	4730	1450	1100	1010
2	1560	3500	40000	6300	6000	19300	8640	7310	4490	1840	910	1050
3	1790	3380	35000	6200	6500	15700	8180	7300	4280	1770	1150	1170
4	2150	8160	30000	6000	8300	14600	7830	7110	3930	1810	1130	1440
5	2150	58800	26500	5800	11900	13900	7420	6760	3530	2090	1010	1590
6	2060	190000	23000	5700	21600	13600	8110	6510	3220	2860	1030	1380
7	1940	293000	20500	5400	29500	13300	8390	6220	3140	3300	1570	1220
8	1820	136000	18000	5000	27000	12600	8280	6060	3400	2670	1700	1280
9	1710	54400	16000	4700	24300	11600	8320	5890	3780	2440	1730	1240
10	1490	40100	15000	4300	21800	10900	8650	5540	3340	2840	1520	1140
11	1480	31400	13500	4100	20600	10600	8680	5150	4140	2320	1370	1150
12	1470	26300	12500	4100	20100	11400	8420	4960	4330	1940	1430	916
13	1340	22900	12000	3900	18100	14500	8340	4570	3930	1760	1150	932
14	1350	19900	14000	3800	15700	19800	8250	4350	3290	1760	1030	880
15	1450	16400	16000	3700	13900	42800	8010	4300	3140	1530	916	811
16	1510	14100	19000	3600	12500	122000	14600	4340	3020	1510	866	712
17	1490	13400	20000	3500	12200	110000	16500	4470	2750	1490	1130	725
18	1390	23900	16000	3400	14400	61200	18900	4830	2450	1470	1560	704
19	1340	24300	14500	3880	24200	41400	24300	4610	2110	1210	1700	657
20	1340	17600	13000	4520	50900	31900	24200	4570	1930	1280	2040	741
21	1910	14600	11000	5500	74600	26500	20700	5210	2060	3050	2290	597
22	2950	14200	10000	6800	64300	22600	18500	9220	2060	2290	2190	577
23	3940	17200	9500	7800	52000	18800	16300	16000	1820	2090	2000	677
24	7040	29200	9000	8000	40300	16500	14600	15000	1640	1740	1900	668
25	13000	31100	9500	7500	32800	14800	13000	12200	1600	1600	1850	848
26	11900	24700	8500	8900	30000	13700	11800	10000	1610	1650	1800	942
27	9310	20500	8000	9000	29200	12800	10700	8150	1510	1470	1750	988
28	7210	23200	7500	7700	25900	11700	9930	7140	1520	1340	1740	922
29	5580	38900	7000	5300	---	10900	9240	6090	1520	1340	1280	965
30	4770	46000	6800	4900	---	10300	8580	5360	1400	1280	1160	944
31	4130	---	6600	4900	---	9830	---	4950	---	1240	1020	---
TOTAL	104330	1260870	517600	170500	713900	782330	356430	212060	85670	58430	45022	28876
MEAN	3365	42030	16700	5500	25500	25240	11880	6841	2856	1885	1452	963
MAX	13000	293000	49700	9000	74600	122000	24300	16000	4730	3300	2290	1590
MIN	1340	3380	6600	3400	5300	9830	7420	4300	1400	1210	866	577
(†)	607	543	551	545	530	539	563	630	725	704	655	632
MEAN‡	3971	42620	17250	6045	26020	25800	12450	7474	3581	2590	2109	1595
CFSM‡	.34	3.69	1.49	.52	2.25	2.23	1.08	.65	.31	.22	.18	.14
IN‡	.40	4.11	1.72	.60	2.34	2.57	1.20	.75	.35	.26	.21	.15

CAL YR 1985 TOTAL 4222123 MEAN 11570 MAX 293000 MIN 993 MEAN‡ 12160 CFSM‡ 1.05 IN‡ 14.28
WTR YR 1986 TOTAL 4336018 MEAN 11880 MAX 293000 MIN 577 MEAN‡ 12490 CFSM‡ 1.08 IN‡ 14.67

† Diversions, in cubic feet per second, for municipal supply of Washington, D.C., Washington Suburban Sanitary District, city of Rockville, city of Fairfax (from Goose Creek), Fairfax County, and the Chesapeake and Ohio Canal (insignificant diversion to canal during current water year). Records provided by U.S. Army Corps of Engineers, Washington Suburban Sanitary Commission, city of Rockville, city of Fairfax, and Fairfax County Water Authority.
‡ Adjusted for diversion.

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC
(National stream-quality accounting network station)

LOCATION.--Lat 38°55'46", long 77°07'02", Arlington County, Va., Hydrologic Unit 02070010, under right downstream side of bridge on Virginia State Highway 123, and at river mile 115.9.

DRAINAGE AREA.--11,570 mi².

PERIOD OF RECORD.--Water years 1973 to current year. Prior to October 1977, published as "at Great Falls."

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1978 to September 1981 (discontinued).
pH: June 1978 to September 1981 (discontinued).
WATER TEMPERATURE: June 1978 to September 1981 (discontinued).
DISSOLVED OXYGEN: June 1978 to September 1981 (discontinued).
SUSPENDED SEDIMENT DISCHARGE: October 1978 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor June 1978 to September 1981.

REMARKS--High flows are sampled from the George Mason Memorial Bridge (14th Street) located 6 mi downstream from Chain Bridge.

EXTREMES FOR PERIOD OF DAILY RECORD--
SPECIFIC CONDUCTANCE (water years 1979, 1981): Maximum, 598 microsiemens, Sept. 12, 1981; minimum, 116 microsiemens, Jan. 25, 1979.
pH (water years 1979, 1981): Maximum, 9.3 units, Mar. 29, 1981; minimum, 6.7 units, June 2, 1981.
WATER TEMPERATURE (water years 1979, 1981): Maximum, 31.0°C, July 23-24, 1978; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN (water years 1979, 1981): Maximum, 16.4 mg/L, on many days in 1979; minimum, 5.6 mg/L, June 2, 1981.
SEDIMENT CONCENTRATION: Maximun daily mean, 812 mg/L, Sept. 6, 1979; minimum daily mean, 1 mg/L on many days during winter periods.
SEDIMENT LOAD: Maximum daily, 281,000 tons, Feb. 27, 1979; minimum daily, 3.2 tons, Jan. 5, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV											
05...	1045	50200	283	7.80	14.0	14.0	751	190	10.6	104	>2000
05...	1100	50200	283	7.80	14.0	14.0	751	--	10.6	104	--
07...	1430	318000	162	7.40	20.0	13.0	759	2700	--	--	>30000
JAN											
09...	1030	5090	370	9.07	-1.0	1.0	778	3.4	14.9	103	K3
09...	1115	5090	350	8.30	1.0	2.0	777	--	14.9	106	--
MAR											
05...	1120	14900	278	7.96	7.0	5.0	765	4.0	13.5	105	--
05...	1121	14900	268	8.00	7.0	5.0	765	--	13.5	105	K4
05...	1125	14900	278	7.96	7.0	5.0	765	--	13.5	105	--
MAY											
06...	1130	7310	280	8.50	26.0	21.0	763	--	8.5	95	--
06...	1135	7310	285	8.50	26.0	21.0	763	--	8.3	93	K25
JUL											
02...	1100	1740	355	7.96	24.0	26.0	756	1.0	6.6	82	50
02...	1110	1740	328	7.85	24.0	26.0	756	--	6.6	82	--
SEP											
03...	1100	936	435	8.11	21.0	23.0	770	2.6	10.1	117	90
03...	1105	936	435	8.16	21.0	23.0	770	--	10.1	117	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD 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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
NOV											
05...	>10000	110	42	33	7.8	13	19	0.5	3.7	89	73
05...	--	--	--	--	--	--	--	--	--	102	84
07...	67000	68	14	23	2.6	2.4	7	0.1	3.0	66	52
JAN											
09...	2600	160	55	47	9.9	11	13	0.4	1.9	108	105
09...	--	--	--	--	--	--	--	--	--	113	93
MAR											
05...	--	110	52	33	7.3	8.6	14	0.4	1.8	74	61
05...	78	--	--	--	--	--	--	--	--	76	62
05...	--	--	--	--	--	--	--	--	--	76	62
MAY											
06...	--	--	--	--	--	--	--	--	--	80	66
06...	K29	--	--	--	--	--	--	--	--	78	67
JUL											
02...	98	120	46	31	10	18	24	0.7	3.0	89	73
02...	--	--	--	--	--	--	--	--	--	92	76
SEP											
03...	K310	150	58	41	12	26	27	1	3.3	115	94
03...	--	--	--	--	--	--	--	--	--	115	94

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

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
NOV											
05...	2.2	37	13	<0.1	7.7	177	160	0.24	24000	1.19	--
05...	2.6	--	--	--	6.8	--	--	--	--	1.19	--
07...	4.2	20	3.3	0.2	4.6	98	92	0.13	84100	0.86	--
JAN											
09...	0.1	44	11	0.1	5.5	200	210	0.27	2750	1.98	8.9
09...	0.9	--	--	--	4.4	--	--	--	--	1.89	--
MAR											
05...	1.3	27	14	0.2	5.6	145	130	0.2	5830	1.89	--
05...	1.2	--	--	--	5.8	--	--	--	--	1.79	--
05...	1.3	--	--	--	5.8	--	--	--	--	1.79	--
MAY											
06...	0.4	--	--	--	0.1	--	--	--	--	0.598	--
06...	0.4	--	--	--	--	--	--	--	--	0.61	--
JUL											
02...	1.6	53	19	0.1	3.2	190	180	0.26	894	0.19	--
02...	2.1	--	--	--	3.2	--	--	--	--	0.187	--
SEP											
03...	1.4	78	29	0.2	4.4	250	250	0.34	632	0.38	--
03...	1.3	--	--	--	4.1	--	--	--	--	0.401	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)
NOV											
05...	0.01	0.03	--	1.20	0.11	0.09	0.12	3.1	--	3.2	--
05...	0.01	0.03	--	1.20	--	0.10	0.13	--	0.5	2.7	0.6
07...	0.01	0.03	--	0.87	1.00	0.23	0.3	7.9	0.37	8.9	0.6
JAN											
09...	0.02	0.07	--	2.00	0.07	0.07	0.09	0.23	--	0.3	--
09...	0.01	0.03	--	1.90	--	0.08	0.1	--	0.32	0.4	0.4
MAR											
05...	0.01	0.03	--	1.90	0.02	0.03	0.04	0.18	--	0.2	--
05...	0.014	0.05	--	1.80	--	0.03	0.04	--	0.47	0.3	0.5
05...	0.014	0.05	--	1.80	--	0.03	0.04	--	0.37	0.3	0.4
MAY											
06...	0.012	0.04	--	0.61	--	0.03	0.04	--	0.27	0.7	0.3
06...	0.01	0.03	--	0.62	0.05	0.04	0.05	0.65	--	0.7	--
JUL											
02...	0.01	0.03	--	0.20	0.10	0.10	0.13	0.7	--	0.8	--
02...	0.013	0.04	--	0.20	--	0.13	0.17	--	0.37	0.9	0.5
SEP											
03...	0.01	0.03	--	0.39	0.08	0.07	0.09	0.32	--	0.4	--
03...	0.009	0.03	0.40	0.41	--	0.08	0.1	--	0.42	0.3	0.5

DATE	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV											
05...	--	--	--	--	0.82	2.5	0.07	0.06	0.18	30	--
05...	2.1	--	--	--	0.83	2.5	0.07	0.05	0.15	20	29
07...	8.3	--	1.5	--	2.20	6.7	0.03	0.02	0.06	100	--
JAN											
09...	--	--	--	--	0.04	0.12	0.03	0.03	0.09	--	--
09...	0.0	--	2.3	--	0.04	0.12	0.03	0.03	0.09	<10	1.8
MAR											
05...	--	--	--	--	0.03	--	0.04	0.01	0.03	20	--
05...	--	--	--	--	0.03	--	0.03	0.01	0.03	40	3.9
05...	--	--	--	--	0.03	--	0.03	0.01	0.03	30	3.6
MAY											
06...	--	--	--	--	0.04	--	<0.01	<0.01	--	20	5.2
06...	--	--	--	--	0.04	--	<0.01	<0.01	--	--	--
JUL											
02...	--	--	--	--	0.06	--	0.02	0.01	0.03	--	--
02...	--	--	--	--	0.06	--	0.02	<0.01	--	20	4.4
SEP											
03...	--	--	--	--	0.04	--	0.01	<0.01	--	<10	--
03...	--	0.7	--	3.1	0.04	--	0.01	0.01	0.03	<10	4.3

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV										
05...	<1	40	<0.5	<1	<1	<3	<1	34	<1	4
07...	<1	36	<0.5	<1	<1	<3	2	92	1	<4
MAR										
05...	<1	43	<0.5	<1	<1	<3	1	9	<1	5
SEP										
03...	<1	47	1	<1	<1	<3	2	<3	<5	13

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV										
05...	29	<0.1	--	<10	<1	<1	<1	130	<6	20
07...	5	<0.1	--	<10	1	<1	<1	76	<6	10
MAR										
05...	20	--	0.2	<10	1	<1	<1	150	<6	27
SEP										
03...	6	--	--	<10	1	<1	<1	240	<6	10

RADIOCHEMICAL ANALYSES

DATE	TIME	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
MAR									
05...	1120	<1.6	11	2.7	<0.6	2.1	<0.6	0.03	0.07

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
NOV					
05...	1045	50200	675	91500	84
05...	1100	50200	117	15900	49
JAN					
09...	1030	5090	3	41	82
09...	1115	5090	3	41	--
MAR					
05...	1120	14900	5	201	84
05...	1125	14900	6	241	92
MAY					
06...	1130	7310	11	217	--
JUL					
02...	1110	1740	18	85	--
SEP					
03...	1100	1210	17	56	66

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
NOV							
07...	1430	318000	2990	2570000	46	64	79

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
NOV						
07...	90	95	97	99	99	100

POTOMAC RIVER BASIN

01648000 ROCK CREEK AT SHERRILL DRIVE, WASHINGTON, DC

LOCATION.--Lat 38°58'21", long 77°02'25", District of Columbia, Hydrologic Unit 02070010, on left bank 125 ft downstream from Sherrill Drive Bridge in Rock Creek Park in Washington, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--62.2 mi².

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 1432: 1933(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 148.87 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 28-30, Feb. 14. Records good. Flow affected by two upstream reservoirs which control flow from about 25 mi², Needwood Lake on Rock Creek since Sept. 1966 and Bernard Frank Lake on North Branch Rock Creek since February 1968. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--57 years, 62.0 ft³/s, 13.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s, June 22, 1972, gage height, 16.2 ft, from flood-mark, from rating curve extended above 5,640 ft³/s on basis of contracted-opening measurements at gage heights 13.19 ft and 16.2 ft; minimum discharge, 0.5 ft³/s, Oct. 1-7, 1930, gage height, 1.04 ft.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 16	0300	*1,070	*5.44	No peak greater than base discharge.			

Minimum discharge, 2.4 ft³/s, Sept. 22, 23, 27, 28, gage height, 1.13 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	122	22	32	43	30	32	19	7.9	4.8	4.7
2	20	19	86	22	31	41	30	31	24	128	13	55
3	90	16	58	24	32	41	29	29	17	45	41	16
4	29	213	45	24	173	44	29	29	16	14	18	9.6
5	25	325	38	22	105	46	34	28	16	10	11	8.0
6	18	99	37	22	70	44	183	29	16	9.8	57	14
7	15	56	32	21	67	41	83	29	15	8.6	62	15
8	14	39	30	20	55	37	47	28	15	8.8	55	22
9	12	31	29	20	53	36	40	27	20	14	14	13
10	12	27	28	21	50	37	35	26	14	14	8.8	11
11	12	23	28	21	54	40	36	25	13	7.6	19	15
12	11	22	27	21	48	36	33	24	53	11	13	12
13	11	21	85	21	43	47	31	24	49	8.2	8.5	11
14	15	21	49	22	37	100	30	43	18	27	7.1	10
15	50	20	36	19	41	139	79	27	16	8.4	6.1	10
16	31	31	32	19	38	76	364	26	14	7.1	5.9	6.7
17	15	60	29	21	42	55	140	50	17	7.5	162	3.5
18	12	26	28	20	195	48	105	80	14	6.8	54	4.4
19	11	23	26	53	136	44	71	25	12	8.2	21	10
20	12	22	25	60	119	41	56	60	34	174	20	9.8
21	149	20	25	31	105	37	54	112	20	142	96	6.4
22	147	262	24	28	82	35	74	186	11	37	29	3.3
23	53	100	27	25	109	35	63	59	10	22	15	3.4
24	35	60	25	22	78	34	47	40	15	19	10	3.1
25	27	43	43	78	87	33	42	31	10	11	7.6	3.1
26	22	35	26	323	61	33	40	27	8.2	8.3	6.1	7.8
27	20	32	26	139	62	36	38	24	8.3	6.9	5.4	4.3
28	17	58	24	60	50	31	36	25	8.4	6.0	40	3.1
29	16	176	24	48	---	31	34	23	38	25	13	3.5
30	15	195	23	40	---	31	33	21	8.9	18	6.2	2.7
31	14	---	23	38	---	31	---	21	---	5.6	4.9	---
TOTAL	953	2099	1160	1327	2055	1403	1946	1241	549.8	826.7	834.4	301.4
MEAN	30.7	70.0	37.4	42.8	73.4	45.3	64.9	40.0	18.3	26.7	26.9	10.0
MAX	149	325	122	323	195	139	364	186	53	174	162	55
MIN	11	16	23	19	31	31	29	21	8.2	5.6	4.8	2.7
CFSM	.49	1.13	.60	.69	1.18	.73	1.04	.64	.29	.43	.43	.16
IN.	.57	1.26	.69	.79	1.23	.84	1.16	.74	.33	.49	.50	.18

CAL YR 1985 TOTAL 17331.3 MEAN 47.5 MAX 923 MIN 4.5 CFSM .76 IN 10.37
WTR YR 1986 TOTAL 14696.3 MEAN 40.3 MAX 364 MIN 2.7 CFSM .65 IN 8.79

01649500 NORTHEAST BRANCH ANACOSTIA RIVER AT RIVERDALE, MD

LOCATION.--Lat 38°57'37", long 76°55'34", Prince Georges County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on Riverdale Road, 1.8 mi downstream from Indian Creek, and 1.8 mi upstream from confluence with Northwest Branch.
DRAINAGE AREA.--72.8 mi².
PERIOD OF RECORD.--August 1938 to current year.
REVISED RECORDS.--WDR MD-DE-75-1: 1972(M).
GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 12.68 ft above National Geodetic Vertical Datum of 1929 (Washington Suburban Sanitary Commission bench mark). Prior to June 12, 1942, nonrecording gage; June 12, 1942, to Mar. 22, 1966, and Apr. 12, 1967, to Sept. 3, 1969, water-stage recorder, all at bridge at datum 14.00 ft above mean sea level. Mar. 23, 1966, to Apr. 11, 1967, nonrecording gage 600 ft downstream from bridge at datum 9.25 ft above mean sea level.
REMARKS.--Estimated daily discharges: Dec. 19-23, 27, 31, Jan. 1, 9-11, 14, 15, Feb. 9-12, May 10 to June 11, July 26-28, 30, 31, Aug. 1, 4, 5. Records fair. Some regulation at low flow by sand and gravel plants upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.
AVERAGE DISCHARGE.--48 years, 84.1 ft³/s, 15.68 in/yr.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s, June 22, 1972, gage height, 9.52 ft, from rating curve extended above 3,800 ft³/s on basis of the average of contracted-opening and slope-area measurements at gage height 9.52 ft; maximum gage height, 12.93 ft, prior to major channel improvements, Oct. 16, 1942; minimum daily discharge, 1.4 ft³/s Sept. 12, 1966.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 23 or 24, 1933, reached a stage of about 15.5 ft at datum 14.00 ft above mean sea level, from floodmarks, discharge, 10,500 ft³/s, from rating curve extended above 3,000 ft³/s on basis of velocity-area study.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 20	1945	2,400	5.46	Aug. 8	1445	*3,150	*6.19

Minimum daily discharge, 8.4 ft³/s, Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	30	160	28	40	56	30	38	22	11	9.0	12
2	23	26	83	27	43	53	30	35	20	125	88	53
3	121	25	51	31	46	54	29	33	20	36	72	22
4	36	270	42	29	343	60	29	32	18	16	15	21
5	30	232	38	28	179	62	39	33	18	14	13	16
6	26	74	38	27	97	56	199	33	16	12	143	15
7	21	46	35	26	99	50	95	32	16	12	89	13
8	17	37	32	26	72	43	55	31	16	10	354	19
9	17	31	31	26	64	40	44	30	24	15	54	14
10	16	29	31	26	58	43	39	30	18	14	21	12
11	16	29	31	26	60	43	40	32	18	10	17	12
12	16	28	33	26	54	38	38	32	119	12	14	12
13	17	29	107	26	49	51	36	30	63	12	12	11
14	22	28	59	25	44	117	35	60	20	15	11	11
15	42	27	38	25	54	148	96	36	15	10	9.1	11
16	28	47	34	25	45	84	445	32	14	9.7	9.3	9.4
17	18	62	34	26	66	57	176	80	15	9.8	120	8.9
18	16	33	31	26	393	49	131	70	12	11	44	8.4
19	17	28	30	86	231	48	72	36	11	12	26	13
20	17	26	28	76	145	44	60	90	27	360	24	21
21	149	23	28	38	100	39	69	120	19	115	143	21
22	175	426	28	31	87	36	77	70	12	17	44	19
23	54	128	33	29	146	35	65	50	13	11	23	9.7
24	46	56	32	28	115	35	50	40	21	12	18	9.2
25	35	41	41	115	125	36	48	34	12	10	15	11
26	29	35	34	520	82	36	46	28	11	9.5	14	15
27	28	35	32	200	86	36	43	26	10	9.5	14	11
28	26	90	30	72	63	33	40	26	9.8	9.0	61	9.6
29	23	194	29	52	---	33	38	24	39	20	21	9.4
30	23	285	29	49	---	33	38	23	14	10	14	8.6
31	23	---	28	44	---	31	---	22	---	9.5	13	---
TOTAL	1146	2450	1310	1819	2986	1579	2232	1288	662.8	959.0	1524.4	438.2
MEAN	37.0	81.7	42.3	58.7	107	50.9	74.4	41.5	22.1	30.9	49.2	14.6
MAX	175	426	160	520	393	148	445	120	119	360	354	53
MIN	16	23	28	25	40	31	29	22	9.8	9.0	9.0	8.4
CFSM	.51	1.12	.58	.81	1.47	.70	1.02	.57	.30	.42	.68	.20
IN.	.59	1.25	.67	.93	1.53	.81	1.14	.66	.34	.49	.78	.22

CAL YR 1985 TOTAL 20469.1 MEAN 56.1 MAX 1610 MIN 6.0 CFSM .77 IN 10.46
WTR YR 1986 TOTAL 18394.4 MEAN 50.4 MAX 520 MIN 8.4 CFSM .69 IN 9.40

01651000 NORTHWEST BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD

LOCATION.--Lat 38°57'09", long 76°58'00", Prince Georges County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on Queens Chapel Road (State Highway 500), 0.8 mi downstream from Sligo Branch, 1.0 mi west of Hyattsville, and 1.6 mi upstream from confluence with Northeast Branch.

DRAINAGE AREA.--49.4 mi².

PERIOD OF RECORD.--July 1938 to current year. Monthly discharge only for July 1938 published in WSP 1302.

REVISED RECORDS.--WSP 971: 1942(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 17.10 ft above National Geodetic Vertical Datum of 1929 (Washington Suburban Sanitary Commission bench mark). Prior to Oct. 22, 1938, nonrecording gage; Oct. 22, 1938, to Sept. 17, 1951, water-stage recorder; Sept. 17, 1951, to Aug. 29, 1952, nonrecording gage and crest-stage gage.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 1, Jan. 3-6, 9-14, Feb. 10-11. Records good. Prior to June 1961, low flow regulated by storage at Burnt Mills Dam, 7.0 mi upstream from station. Inflow pumped from Patuxent River to augment water supply for Washington Suburban Sanitary District, August 1939 to August 1960. Small diversion since 1962 for irrigation of golf courses upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--48 years, 46.5 ft³/s, 12.78 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s, June 22, 1972, gage height, 14.47 ft, from rating curve extended above 4,000 ft³/s on the basis of the average of slope-area and step-backwater measurements of peak flow 14.47 ft; minimum discharge, 0.2 ft³/s, Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 20	1945	3,200	5.38	Aug. 8	1415	*7,390	*7.39

Minimum discharge, 0.4 ft³/s Dec. 26, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	18	93	16	20	29	20	22	12	8.1	6.8	6.6
2	14	13	49	15	21	29	22	21	12	184	32	40
3	69	9.8	30	19	23	29	20	19	12	32	18	15
4	17	240	25	18	221	31	20	19	11	8.8	7.6	11
5	12	212	23	18	88	37	23	19	11	7.0	7.4	10
6	9.8	38	22	17	47	33	159	19	11	6.3	123	10
7	8.0	20	21	16	52	29	60	18	11	5.3	46	8.9
8	7.3	16	20	14	37	27	30	17	10	4.9	456	12
9	7.3	14	19	15	36	26	27	15	14	9.6	21	8.2
10	7.6	12	19	15	35	26	24	15	10	8.1	10	6.6
11	7.9	13	19	15	35	27	26	16	9.5	6.7	9.0	6.2
12	8.5	14	20	14	34	27	24	15	96	8.3	9.8	5.9
13	10	15	71	14	28	36	22	15	33	7.6	7.4	5.6
14	15	14	34	14	24	85	22	33	12	8.7	4.8	5.2
15	28	16	19	13	32	112	87	17	8.8	5.9	4.8	5.9
16	21	35	17	13	26	52	121	16	8.2	4.5	6.3	6.5
17	9.1	38	17	14	35	36	115	45	10	4.1	104	5.1
18	8.1	16	16	15	240	31	77	33	9.9	4.0	32	5.3
19	7.3	14	14	83	111	32	40	16	8.8	4.2	11	5.8
20	7.3	14	15	52	77	30	39	49	39	324	12	7.0
21	137	14	16	19	52	26	44	53	19	83	90	5.7
22	136	303	14	17	54	25	56	23	10	12	27	5.2
23	29	66	16	15	87	24	48	16	8.1	8.7	12	5.6
24	22	27	17	14	61	24	30	15	16	15	9.9	5.9
25	15	21	26	87	71	24	29	14	9.4	11	9.3	5.2
26	10	19	11	388	43	25	28	13	8.2	6.9	8.7	20
27	11	18	18	94	49	25	27	13	8.0	6.0	8.0	3.8
28	9.6	62	18	33	34	23	26	15	8.2	6.1	39	2.2
29	8.9	146	17	24	---	23	24	14	36	40	13	2.5
30	8.7	193	17	24	---	22	23	14	9.6	15	8.0	4.2
31	8.8	---	17	21	---	21	---	12	---	6.4	6.9	---
TOTAL	679.8	1650.8	750	1146	1673	1026	1313	641	481.7	862.2	1160.7	247.1
MEAN	21.9	55.0	24.2	37.0	59.8	33.1	43.8	20.7	16.1	27.8	37.4	8.24
MAX	137	303	93	388	240	112	159	53	96	324	456	40
MIN	7.3	9.8	11	13	20	21	20	12	8.0	4.0	4.8	2.2
CFSM	.44	1.11	.49	.75	1.21	.67	.89	.42	.33	.56	.76	.17
IN.	.51	1.24	.56	.86	1.26	.77	.99	.48	.36	.65	.87	.19

CAL YR 1985 TOTAL 13806.9 MEAN 37.8 MAX 1190 MIN 3.0 CFSM .77 IN 10.40
WTR YR 1986 TOTAL 11631.3 MEAN 31.9 MAX 456 MIN 2.2 CFSM .65 IN 8.76

01653600 PISCATAWAY CREEK AT PISCATAWAY, MD

LOCATION.--Lat 38°42'20", long 76°58'00", Prince Georges County, Hydrologic Unit 02070010, on left bank 75 ft downstream from bridge on State Highway 223, at Piscataway, 0.4 mi upstream from Tinker Creek, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--39.5 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--21 years, 45.9 ft³/s, 15.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,540 ft³/s, Sept. 6, 1979, gage height, 11.21 ft, from rating curve extended above 1,700 ft³/s on basis of contracted-opening measurement of peak flow at bridge 100 ft upstream; no flow at times in 1966, 1970, 1977, 1980-83, 1985, and 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 3	1000	*445	*5.74	Nov. 30	2400	*445	*5.74

No flow June 15, 16, 19, 20, 28, July 7-9, 13, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	13	262	24	31	52	27	17	3.2	.12	.03	4.3
2	8.9	15	97	19	38	51	27	16	2.7	.15	1.7	6.9
3	318	16	65	22	35	51	26	14	1.9	14	17	8.6
4	100	153	54	21	103	54	25	13	1.9	4.1	5.2	5.5
5	38	229	51	20	81	52	26	13	1.8	1.0	1.6	4.6
6	22	66	48	18	54	48	52	12	1.5	.06	6.0	19
7	15	41	42	16	60	43	50	12	1.5	.00	47	6.1
8	13	31	40	14	48	37	36	10	1.4	.00	8.7	5.9
9	15	26	37	15	51	41	29	8.9	1.5	.00	4.2	5.5
10	14	24	34	17	47	43	26	8.5	.67	1.3	2.4	3.9
11	11	22	34	16	51	41	26	8.6	.30	.69	1.3	3.3
12	8.5	21	36	17	43	36	25	7.8	.27	.02	.88	2.7
13	7.6	21	45	16	37	44	24	7.4	.11	.00	.94	1.8
14	6.5	20	48	14	34	85	23	8.2	.01	.57	.39	1.1
15	12	18	34	13	37	92	24	9.2	.00	.37	.11	.81
16	8.9	19	32	13	37	94	95	9.0	.00	2.3	.02	.63
17	7.0	39	30	15	43	57	49	7.7	.18	28	1.8	.42
18	5.7	24	27	18	150	51	44	6.8	.06	4.8	5.5	.29
19	5.6	19	23	29	133	50	34	6.0	.00	1.9	3.2	.34
20	6.2	18	24	46	91	45	30	19	.00	.87	5.3	.36
21	58	17	26	25	66	39	34	46	7.1	10	68	.43
22	143	122	24	19	56	38	38	22	3.2	4.3	50	.30
23	73	105	26	17	72	38	40	12	.63	1.5	12	.33
24	42	45	27	15	79	37	29	8.5	2.1	.65	5.8	.28
25	33	34	25	23	77	34	26	7.4	6.0	.36	3.5	.32
26	23	30	19	130	67	34	27	6.6	1.2	.10	2.7	.25
27	18	30	20	111	66	33	25	6.2	.09	.01	8.8	.17
28	15	43	21	47	55	31	22	6.2	.00	.00	36	.07
29	13	252	21	38	---	30	20	5.1	1.5	.00	20	.13
30	13	262	20	35	---	31	18	4.7	1.7	5.4	7.3	.16
31	12	---	20	31	---	29	---	4.2	---	.80	4.8	---
TOTAL	1075.4	1775	1312	874	1742	1441	977	343.0	42.52	83.37	332.17	84.49
MEAN	34.7	59.2	42.3	28.2	62.2	46.5	32.6	11.1	1.42	2.69	10.7	2.82
MAX	318	262	262	130	150	94	95	46	7.1	28	68	19
MIN	5.6	13	19	13	31	29	18	4.2	.00	.00	.02	.07
CFSM	.88	1.50	1.07	.71	1.58	1.18	.83	.28	.04	.07	.27	.07
IN.	1.01	1.67	1.24	.82	1.64	1.36	.92	.32	.04	.08	.31	.08

CAL YR 1985 TOTAL 10683.52 MEAN 29.3 MAX 500 MIN .00 CFSM .74 IN 10.06
WTR YR 1986 TOTAL 10081.95 MEAN 27.6 MAX 318 MIN .00 CFSM .70 IN 9.49

01660920 ZEKIAH SWAMP RUN NEAR NEWTOWN, MD

LOCATION.--Lat 38°29'26", long 76°55'37", Charles County, Hydrologic Unit 02070011, on left-center downstream side of bridge on Maryland Route 6, 1.0 miles southeast of Newtown, and 1.7 miles downstream from Kerrick Swamp.

DRAINAGE AREA.--79.9 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 34.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 26-27, Jan. 15-16, 27-31, and Feb. 13-15. Records good. Low flow affected by ground-water diversions from municipal well fields at Waldorf and St. Charles, and occasional farm irrigation upstream from station during summer months. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s, Mar. 29, 1984, gage height, 4.71 ft; no flow for several days in 1983, 1985, and 1986.

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)
Nov. 30	2230	*982	*4.14	No other peak greater than base discharge.			

No flow Aug. 1-5.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	48	909	65	85	106	51	36	7.2	5.0	.00	12
2	21	61	612	63	93	100	48	30	6.1	6.0	.00	13
3	115	70	308	63	98	97	53	25	8.2	10	.00	18
4	224	162	184	68	148	97	51	22	5.8	11	.00	18
5	174	315	146	64	227	99	53	24	4.5	8.1	.00	14
6	74	278	127	56	178	94	60	23	2.9	4.5	11	15
7	40	162	113	51	148	90	72	21	2.0	2.8	119	18
8	28	102	104	48	146	87	71	17	1.6	1.7	73	18
9	23	83	99	46	121	78	62	14	1.2	3.7	18	15
10	20	73	93	42	108	78	55	12	.69	4.1	8.1	12
11	20	69	91	47	117	77	51	12	1.8	3.0	10	10
12	19	67	91	49	121	74	50	12	2.7	2.2	6.2	9.0
13	17	66	93	53	120	77	47	12	2.5	2.1	3.8	7.4
14	19	66	106	52	110	142	46	13	1.7	3.1	2.4	7.1
15	23	64	98	46	100	189	46	23	.85	2.6	1.1	5.1
16	25	59	87	42	95	152	104	27	.30	2.5	.30	3.5
17	22	80	81	40	94	116	109	25	.15	9.0	4.3	2.6
18	20	88	77	52	125	95	82	20	.07	25	137	1.8
19	17	75	75	73	195	91	73	14	.02	19	162	1.5
20	29	66	74	135	204	87	63	19	.01	16	118	.96
21	111	61	74	136	167	78	60	77	.03	53	176	.81
22	297	99	74	90	122	71	67	91	.65	42	257	.69
23	303	183	73	69	116	70	70	65	.23	20	102	.53
24	193	168	76	57	140	69	67	36	.21	12	31	.24
25	113	104	76	56	145	66	56	26	.16	6.5	16	1.7
26	83	83	70	168	138	65	54	21	.09	3.5	11	1.9
27	66	78	60	260	133	67	50	17	.03	1.8	8.9	1.8
28	55	87	56	150	124	65	45	19	1.5	.94	18	1.7
29	47	451	58	120	---	62	41	16	3.4	.33	43	1.7
30	45	795	60	100	---	60	38	13	5.5	.13	31	1.7
31	43	---	59	90	---	56	---	10	---	.04	17	---
TOTAL	2314	4163	4304	2451	3718	2755	1795	792	62.09	281.64	1385.10	214.73
MEAN	74.6	139	139	79.1	133	88.9	59.8	25.5	2.07	9.09	44.7	7.16
MAX	303	795	909	260	227	189	109	91	8.2	53	257	18
MIN	17	48	56	40	85	56	38	10	.01	.04	.00	.24
CFSM	.93	1.74	1.74	.99	1.67	1.11	.75	.32	.03	.11	.56	.09
IN.	1.08	1.94	2.00	1.14	1.73	1.28	.84	.37	.03	.13	.64	.10

CAL YR 1985 TOTAL 24168.11 MEAN 66.2 MAX 909 MIN .00 CFSM .83 IN 11.25
WTR YR 1986 TOTAL 24235.56 MEAN 66.4 MAX 909 MIN .00 CFSM .83 IN 11.28

01661050 ST. CLEMENT CREEK NEAR CLEMENTS, MD

LOCATION.--Lat 38°20'00", long 76°43'31", St. Marys County, Hydrologic Unit 02070011, on left bank 60ft downstream from bridge on State Highway 242, 0.5 mi north of Clements, 2.3 mi upstream from mouth, and 5.7 mi northwest of Leonardtown.

DRAINAGE AREA.--18.5 mi².

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR MD-DE-79-1: 1974(P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 16-18, Jan. 7, 8, 30. Records good. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years, 20.6 ft³/s, 15.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s, Sept. 6, 1979, from rating curve extended above 480 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; maximum gage height, 6.96 ft, Sept. 6, 1979 (backwater from tide); maximum gage height unaffected by backwater, 6.55 ft, June 22, 1972; no flow at times in 1977, 1980, 1981, 1983, 1985 and 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 220 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 30	1830	*430	*4.65	No other peak greater than base discharge.			

No flow for part of July 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	18	189	20	23	21	16	9.6	2.9	3.3	.40	3.1
2	8.8	23	53	17	26	21	16	8.3	2.4	2.8	.26	2.8
3	51	22	33	22	25	21	15	6.2	2.0	3.0	.20	3.0
4	37	44	28	23	59	21	14	6.3	2.1	2.4	.53	3.0
5	20	51	26	18	44	21	14	6.5	2.2	1.4	.52	3.0
6	13	29	25	16	29	20	16	6.6	2.1	.87	.32	3.0
7	10	22	23	12	48	20	20	6.5	1.8	.62	1.5	2.7
8	8.0	20	22	11	33	15	19	5.5	1.8	.42	1.5	2.8
9	7.7	18	22	12	27	17	17	5.0	1.7	.25	1.2	3.0
10	7.7	17	20	14	24	18	15	4.7	1.4	.58	.86	2.4
11	7.7	17	20	15	35	18	15	4.7	1.3	.90	.63	2.3
12	7.3	17	20	15	28	17	14	4.7	2.9	.71	.51	2.1
13	7.3	17	22	16	22	49	14	4.4	2.0	.42	.45	1.6
14	6.9	17	24	12	19	81	14	5.7	1.5	.26	.55	1.2
15	7.2	18	20	11	23	42	14	7.5	1.1	.16	.48	1.1
16	6.9	14	17	10	23	37	16	7.6	.99	.24	.31	1.1
17	6.5	29	16	12	25	27	16	6.4	1.2	44	20	.93
18	6.0	23	15	16	35	24	16	5.2	.81	13	94	.85
19	5.7	19	15	31	37	23	15	4.4	.47	3.7	51	.77
20	13	18	15	52	28	22	14	9.9	.41	2.2	32	.85
21	83	20	17	28	25	20	15	24	.65	21	37	.96
22	120	57	16	20	23	20	18	42	.61	12	26	1.1
23	57	48	19	17	29	19	19	15	.51	4.9	11	1.2
24	34	28	21	15	29	19	15	8.9	.33	5.1	5.7	1.2
25	25	24	20	19	27	18	13	7.1	.41	2.6	3.5	1.6
26	20	22	13	118	26	18	13	6.1	.28	1.6	2.5	1.4
27	17	22	15	75	27	18	12	5.6	.25	1.4	3.4	1.1
28	16	23	16	30	25	18	12	5.3	4.0	1.0	13	.82
29	14	48	16	21	---	17	11	4.9	17	.83	14	1.0
30	14	239	15	19	---	16	11	4.2	9.1	.83	6.7	1.5
31	14	---	15	21	---	16	---	3.5	---	.66	4.0	---
TOTAL	661.7	984	808	738	824	734	449	252.3	66.22	133.15	334.02	53.48
MEAN	21.3	32.8	26.1	23.8	29.4	23.7	15.0	8.14	2.21	4.30	10.8	1.78
MAX	120	239	189	118	59	81	20	42	17	44	94	3.1
MIN	5.7	14	13	10	19	15	11	3.5	.25	.16	.20	.77
CFSM	1.15	1.77	1.41	1.29	1.59	1.28	.81	.44	.12	.23	.58	.10
IN.	1.33	1.98	1.62	1.48	1.66	1.48	.90	.51	.13	.27	.67	.11

CAL YR 1985 TOTAL 6993.61 MEAN 19.2 MAX 879 MIN .00 CFSM 1.04 IN 14.06
WTR YR 1986 TOTAL 6037.87 MEAN 16.5 MAX 239 MIN .16 CFSM .89 IN 12.14

01661500 ST. MARYS RIVER AT GREAT MILLS, MD

LOCATION.--Lat 38°14'36", long 76°30'13", St. Marys County, Hydrologic Unit 02070011, on left bank at downstream side of bridge on State Highway 471 in Great Mills, 0.3 mi downstream from Western Branch, and 12.0 mi upstream from mouth.

DRAINAGE AREA.--24.0 mi².

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

REVISED RECORDS.--WSP 1702: 1946, 1948-49, 1955, 1957-58. WDR MD-DE-83-1: 1981-82(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation by reservoir on Western Branch of St. Marys River, 2.0 mi upstream since 1975, total capacity, 3,200 acre feet. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--40 years, 23.9 ft³/s, 13.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,950 ft³/s, Aug. 20, 1969, gage height, 13.34 ft, from rating curve extended above 1,500 ft³/s on basis of contracted-opening measurement at gage height 12.08 ft; minimum discharge, 0.2 ft³/s, Sept. 7, 1966, gage height, 1.13 ft.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 30	1900	*597	*5.85	No other peak greater than base discharge.			

Minimum discharge, 0.80 ft³/s, July 15, 16, gage height 1.20 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	17	283	28	16	21	12	9.4	3.6	2.7	1.5	3.6
2	20	19	134	25	21	20	15	8.3	3.7	3.3	1.4	4.1
3	41	22	69	27	17	18	12	6.8	4.6	2.9	1.9	4.2
4	31	40	46	15	57	18	12	6.3	3.1	2.1	2.2	3.3
5	22	47	35	12	41	18	13	6.5	3.1	1.8	1.6	4.9
6	16	28	29	10	26	18	14	6.3	2.8	1.6	1.4	8.6
7	12	22	25	9.6	58	17	18	6.1	5.2	1.4	2.2	5.1
8	10	17	22	8.8	34	15	16	5.6	3.5	1.3	2.1	6.3
9	9.2	15	20	8.3	23	15	15	4.9	2.5	1.5	1.7	5.7
10	8.6	14	37	9.2	19	16	13	4.6	2.0	1.7	1.3	4.0
11	8.4	13	56	9.4	36	16	12	4.6	2.0	1.5	1.2	3.7
12	7.5	13	56	9.4	26	14	12	4.4	2.0	1.3	1.7	3.4
13	7.2	13	56	9.6	18	28	11	4.2	1.8	1.2	3.5	2.8
14	6.9	12	54	8.3	16	52	11	5.5	1.8	1.0	2.4	2.3
15	6.6	12	51	8.2	16	49	11	6.6	1.8	.90	2.0	2.2
16	6.3	12	49	7.7	16	65	13	6.5	1.7	1.3	1.8	1.9
17	5.7	21	48	8.7	17	41	12	6.0	1.6	4.2	18	1.7
18	5.4	15	46	10	20	32	12	5.3	1.5	2.6	45	1.6
19	5.4	14	44	15	22	29	11	4.6	1.4	1.9	12	1.7
20	12	13	42	22	17	25	11	12	1.8	1.8	26	1.7
21	76	15	42	14	16	21	12	22	2.7	2.6	44	1.7
22	157	55	40	11	15	18	14	48	1.9	2.1	20	1.7
23	106	42	40	9.9	23	17	17	19	1.8	2.0	11	1.8
24	59	29	39	9.2	20	17	18	13	2.0	1.8	7.5	2.7
25	40	23	38	13	23	15	12	10	1.9	1.5	4.8	2.3
26	27	19	34	188	23	16	11	8.3	3.0	1.3	3.6	2.0
27	21	18	32	102	25	15	11	6.9	2.3	1.2	4.6	1.7
28	17	17	32	37	23	14	10	6.4	3.3	1.2	16	1.5
29	14	24	30	23	---	14	10	5.9	6.5	1.4	11	1.5
30	13	309	28	19	---	13	10	5.8	3.6	2.9	6.9	1.6
31	12	---	27	16	---	13	---	5.0	---	1.8	4.8	---
TOTAL	810.2	930	1584	703.3	684	700	381	274.8	80.5	57.80	265.1	91.3
MEAN	26.1	31.0	51.1	22.7	24.4	22.6	12.7	8.86	2.68	1.86	8.55	3.04
MAX	157	309	283	188	58	65	18	48	6.5	4.2	45	8.6
MIN	5.4	12	20	7.7	15	13	10	4.2	1.4	.90	1.2	1.5
CFSM	1.09	1.29	2.13	.95	1.02	.94	.53	.37	.11	.08	.36	.13
IN.	1.26	1.44	2.46	1.09	1.06	1.08	.59	.43	.12	.09	.41	.14

CAL YR 1985 TOTAL 8312.49 MEAN 22.8 MAX 1180 MIN .37 CFSM .95 IN 12.88
WTR YR 1986 TOTAL 6562.00 MEAN 18.0 MAX 309 MIN .90 CFSM .75 IN 10.17

03075500 YOUGHIOGHENY RIVER NEAR OAKLAND, MD

LOCATION.--Lat 39°25'19", long 79°25'32", Garrett County, Hydrologic Unit 05020006, on left bank 200 ft downstream from Baltimore and Ohio Railroad bridge, 250 ft downstream from Little Youghiogheny River, 1.2 mi northwest of Oakland, and 1.5 mi upstream from Dunkard Lick Run.

DRAINAGE AREA.--134 mi².

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

REVISED RECORDS.--WSP 1113: 1947(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,353.61 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1946, nonrecording gage at bridge 200 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 22 to Jan. 17. Records good except those for period with ice effect, Dec. 22 to Jan. 17, which are fair. Town of Oakland diverted an average of 0.4 ft³/s for water supply. The diversion is returned upstream from station as sewage. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--45 years, 301 ft³/s, 30.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s, Oct. 16, 1954, gage height, 12.16 ft, from rating curve extended above 7,000 ft³/s; minimum daily discharge, 2.5 ft³/s, Oct. 4, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of 15.3 ft, from floodmarks.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0815	*11,700	*12.07	Feb. 19	2130	4,560	7.59
Nov. 28	2315	4,870	7.83	Mar. 11	0815	2,500	5.78
Feb. 4	2200	3,870	7.03	Mar. 15	0630	3,030	6.29

Minimum discharge, 12 ft³/s, Sept. 18, gage height, 1.89 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	79	888	147	172	245	96	157	70	55	71	21
2	36	110	729	120	602	211	95	145	66	162	63	23
3	45	299	517	115	1070	196	82	126	62	525	61	24
4	37	1320	411	105	2700	179	77	113	52	198	52	26
5	31	8570	355	100	3560	166	76	105	51	127	46	35
6	27	2590	350	96	2290	158	101	98	50	93	43	42
7	26	1190	299	94	1190	150	180	133	51	74	49	30
8	24	767	271	90	787	151	134	137	47	61	62	23
9	24	534	281	90	567	179	141	109	46	445	71	20
10	23	397	322	86	437	826	203	100	39	617	49	18
11	23	356	353	84	386	2150	225	90	48	327	97	16
12	25	331	829	82	328	1120	418	81	59	534	74	17
13	26	343	1190	82	268	834	684	87	58	382	46	18
14	27	541	1230	82	301	1050	505	139	47	664	38	17
15	37	535	758	80	238	2580	454	112	38	349	35	17
16	58	527	549	80	265	1320	711	94	34	243	32	15
17	46	722	444	80	689	790	625	85	74	386	32	14
18	36	528	350	213	2240	557	662	78	51	444	36	13
19	31	432	326	670	3050	448	567	90	35	279	32	16
20	70	359	238	1210	3260	369	468	340	71	417	27	21
21	1170	295	207	681	1920	281	420	273	83	475	29	20
22	844	1030	170	575	1380	235	408	223	45	301	35	17
23	524	1160	160	630	901	209	360	190	36	275	34	16
24	343	700	150	488	650	186	317	169	35	202	60	17
25	292	544	140	399	504	160	278	144	29	219	46	38
26	208	554	130	366	400	145	249	125	24	181	28	42
27	162	1150	125	311	353	155	213	121	24	163	26	89
28	133	3480	115	214	282	139	186	132	193	127	35	91
29	106	3630	110	257	---	121	226	104	137	113	34	56
30	91	1490	105	218	---	111	178	86	74	99	26	37
31	85	---	105	187	---	103	---	78	---	85	22	---
TOTAL	4630	34563	12207	8032	30790	15524	9339	4064	1729	8622	1391	849
MEAN	149	1152	394	259	1100	501	311	131	57.6	278	44.9	28.3
MAX	1170	8570	1230	1210	3560	2580	711	340	193	664	97	91
MIN	20	79	105	80	172	103	76	78	24	55	22	13
CFSM	1.11	8.60	2.94	1.93	8.21	3.74	2.32	.98	.43	2.08	.34	.21
IN.	1.29	9.60	3.39	2.23	8.55	4.31	2.59	1.13	.48	2.39	.39	.24

CAL YR 1985 TOTAL 145345 MEAN 398 MAX 8570 MIN 14 CFSM 2.97 IN 40.35
WTR YR 1986 TOTAL 131740 MEAN 361 MAX 8570 MIN 13 CFSM 2.69 IN 36.57

03076000 DEEP CREEK RESERVOIR NEAR OAKLAND, MD

LOCATION.--Lat 39°30'34", long 79°23'28", Garrett County, Hydrologic Unit 05020006, on Deep Creek at dam, 1.8 mi upstream from mouth and 7.0 mi north of Oakland.

DRAINAGE AREA.--64.7 mi².

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1950, monthend contents published in WSP 1305, and October 1950 to September 1955, monthend contents published in WSP 1385.

GAGE.--Water-stage recorder at right end of spillway. Datum of gage is at mean sea level, unadjusted.

REMARKS.--Reservoir is formed by an earthfill dam completed January 1925, with storage beginning at that time. Usable capacity, 92,975 acre-ft between elevations 2,425 ft, top of intake to outlet tunnel, and 2,462 ft, crest of spillway. Dead storage, 13,085 acre-ft. Figures given herein represent usable contents. Reservoir is used for hydroelectric power.

COOPERATION.--Elevations and capacity table furnished by Pennsylvania Electric Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 93,258 acre-ft, July 24, 25, 1949, elevation, 2,462.075 ft; minimum observed, 11,763 acre-ft, Sept. 30, 1925, elevation, 2,433.45 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 90,000 acre-ft, July 22, elevation, 2,461.20 ft; minimum, 66,000 acre-ft, Sept. 17, elevation, 2,454.50 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTBER 1985 TO SEPTEMBER 1986

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2458.1	78600	
Oct. 31	2457.6	76800	-1800
Nov. 30	2459.8	84800	+8000
Dec. 31	2455.9	70800	-6000
CAL YR 1985			+3100
Jan. 31	2455.6	69800	-1000
Feb. 28	2458.4	79700	+9900
Mar. 31	2458.4	79700	0
Apr. 30	2459.3	83000	+3300
May 31	2459.5	83700	+700
June 30	2459.6	84100	+400
July 31	2460.3	86700	+2600
Aug. 31	2457.9	77900	-8800
Sept. 30	2454.5	66000	-11900
WTR YR 1986			-4600

03076500 YOUGHIOGHENY RIVER AT FRIENDSVILLE, MD

LOCATION.--Lat 39°39'13", long 79°24'31", Garrett County, Hydrologic Unit 05020006, on left bank 0.7 mi upstream from bridge on State Highway 42 at Friendsville, and 1.5 mi upstream from Bear Creek.

DRAINAGE AREA.--295 mi².

PERIOD OF RECORD.--August 1898 to December 1904 and October 1940 to current year. Annual maximum, water years 1905, 1923-31, 1940, published in WSP 1675. October, November 1940 monthly discharge only, published in WSP 1305. September 1922 to September 1926 (gage heights only) in reports of Pennsylvania Department of Forests and Waters.

REVISED RECORDS.--WSP 1385: Drainage area at former site, 1898-1905, 1941(M), 1942, 1944-45, 1948-49, 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 1,487.33 ft above National Geodetic Vertical Datum of 1929. Aug. 17, 1898, to Dec. 31, 1904, and Sept. 1, 1922, to Sept. 30, 1926, nonrecording gages at bridge 0.7 mi downstream at datum 16.24 ft and 16.29 ft lower, respectively.

REMARKS.--Estimated daily discharges: Dec. 28-29. Records good. Low and medium flow regulated since July 1925 by Deep Creek Reservoir (see station 03076000). U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--52 years (water years 1899-1904, 1941-86), 647 ft³/s, 29.78 in/yr, adjusted for storage since October 1940.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft³/s, Mar. 29, 1924, gage height, 14.2 ft, from flood-marks, site and datum then in use or 10.2 ft, present site and datum, from rating curve extended above 5,800 ft³/s on basis of slope-area measurement of peak flow; minimum daily discharge, 8.2 ft³/s, Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft³/s, Nov. 5, gage height, 8.59 ft, from rating curve extended above 12,500 ft³/s; minimum discharge, 36 ft³/s, Sept. 20, gage height, 1.89 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	295	2330	328	334	732	433	366	168	113	457	111
2	107	176	2040	576	507	687	302	345	152	236	335	273
3	112	323	1660	525	1470	670	307	272	145	709	141	340
4	112	1600	1440	252	3960	535	273	248	128	410	339	294
5	70	10000	1330	254	6380	502	238	277	131	233	319	299
6	58	4460	1050	385	4350	487	214	264	186	174	319	244
7	95	2520	966	528	2420	425	394	284	127	145	359	151
8	93	1780	753	533	1640	348	367	312	121	118	339	213
9	93	1150	803	436	1070	312	344	266	111	225	398	212
10	91	854	922	418	959	1040	436	202	103	908	130	206
11	88	746	962	208	898	3270	467	188	103	440	341	202
12	45	940	1700	186	795	2220	601	220	133	741	357	210
13	43	786	2200	288	685	1720	1170	226	184	609	318	205
14	95	1270	2490	349	668	1920	994	292	123	971	305	65
15	107	1550	1350	372	604	4040	811	276	104	562	287	202
16	65	1620	1340	297	426	2380	1140	244	94	560	304	196
17	168	2420	1140	270	1020	1610	1050	181	137	734	105	198
18	110	1590	1030	268	3900	1280	1120	172	144	849	337	197
19	55	1240	887	843	4610	1080	916	176	102	522	241	64
20	63	1040	875	1930	5340	935	774	450	149	1250	229	140
21	1360	924	475	1210	3460	786	763	464	154	1230	231	112
22	1210	2270	379	995	2750	647	754	387	118	886	234	195
23	828	2600	706	1130	1920	436	709	380	94	843	138	206
24	654	1670	774	914	1480	583	617	312	86	725	133	392
25	525	1330	414	668	1230	575	552	267	79	776	176	499
26	366	1360	629	601	1030	508	474	289	73	601	159	507
27	290	2920	712	635	946	409	417	236	117	315	235	565
28	360	6480	361	493	822	412	421	267	148	494	144	679
29	266	6370	240	546	---	363	428	216	240	536	133	292
30	235	3410	530	503	---	282	411	236	153	512	126	93
31	203	---	614	472	---	330	---	181	---	482	72	---
TOTAL	8057	65694	33102	17413	55674	31524	17897	8496	3907	17909	7741	7562
MEAN	260	2190	1068	562	1988	1017	597	274	130	578	250	252
MAX	1360	10000	2490	1930	6380	4040	1170	464	240	1250	457	679
MIN	43	176	240	186	334	282	214	172	73	113	72	64
(†)	-29.3	+135	-97.8	-16.3	+178	0	+55.5	+11.4	+6.7	+42.3	-143	-200
MEAN‡	231	2325	970	546	2166	1017	652	285	137	620	107	52
CFSM‡	0.78	7.88	3.29	1.85	7.34	3.45	2.21	0.97	0.46	2.10	0.36	0.18
IN‡	0.90	8.79	3.79	2.13	7.64	3.98	2.47	1.12	0.51	2.42	0.42	0.20

CAL YR 1985 TOTAL 301803 MEAN 827 MAX 10000 MIN 41 MEAN‡ 827 CFSM‡ 2.80 IN‡ 38.00
WTR YR 1986 TOTAL 274976 MEAN 753 MAX 10000 MIN 43 MEAN‡ 753 CFSM‡ 2.55 IN‡ 34.62

† Change in contents, equivalent in cubic feet per second, in Deep Creek Reservoir, provided by Pennsylvania Electric Co.
‡ Adjusted for change in contents.

03076600 BEAR CREEK AT FRIENDSVILLE, MD

LOCATION.--Lat 39°39'22", long 79°23'41", Garrett County, Hydrologic Unit 05020006, on right bank 0.2 mi downstream from bridge on Accident-Friendsville Road, 0.6 mi downstream from South Branch Bear Creek, 0.8 mi southeast of Friendsville, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--48.9 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,551.34 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 19-23, 27-31, Jan. 3-17, May 14 to June 5,and June 15 to July 10. Records good except those for periods with ice effect, Dec. 19-23, 27-31, and Jan. 3-17, and periods of missing record, May 14 to June 5 and June 15 to July 10, which are fair. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--22 years, 90.6 ft³/s, 25.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,650 ft³/s, Sept. 14, 1971, gage height, 9.6 ft, from flood-marks, from rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 1.5 ft³/s, Sept. 12, 1966, gage height, 0.42 ft.

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)
Nov. 5	0115	1,910	5.43	Feb. 18	1400	1,310	4.47
Nov. 16	2215	756	3.58	Feb. 19	1645	1,440	4.68
Nov. 22	1100	681	3.47	Mar. 15	0030	1,350	4.53
Nov. 28	1645	1,810	5.28	July 17	0015	1,810	5.28
Feb. 4	1600	1,510	4.79	July 20	0400	1,140	4.19
Feb. 5	1145	*2,000	*5.58	July 20	2045	655	3.43

Minimum discharge, 4.0 ft³/s, Oct. 1, gage height, 0.63 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	7.6	347	41	70	79	37	52	31	10	31	9.1
2	8.8	9.5	260	34	122	70	37	48	29	56	28	9.4
3	7.7	18	152	33	242	63	35	44	28	72	27	8.7
4	6.0	265	120	32	1010	59	33	41	26	27	23	8.8
5	5.2	1180	100	31	1580	54	33	39	24	17	21	9.8
6	4.7	523	94	31	900	52	42	37	28	12	20	8.7
7	4.6	319	81	30	466	48	52	36	36	10	40	7.8
8	4.1	184	74	30	317	48	43	34	28	9.0	27	7.8
9	4.1	114	71	30	217	65	48	31	26	62	23	7.0
10	4.2	87	71	29	147	217	58	29	21	47	20	6.7
11	4.3	77	82	29	128	376	66	28	22	16	21	6.7
12	4.5	75	165	29	102	296	132	26	25	77	17	7.1
13	4.7	80	291	29	91	274	268	28	25	93	14	7.5
14	6.6	136	346	28	114	417	201	95	22	97	13	6.4
15	10	202	253	28	78	1020	168	60	17	57	13	6.3
16	10	460	163	28	79	507	190	45	13	112	12	6.1
17	6.3	548	122	28	244	317	250	38	35	493	16	5.6
18	5.6	352	98	94	1050	235	319	33	21	183	14	5.3
19	5.4	213	75	282	1130	168	281	75	16	135	12	7.0
20	6.3	133	70	340	847	127	223	270	18	592	11	7.1
21	56	97	65	235	484	95	164	200	19	360	12	6.3
22	35	401	60	253	379	82	141	120	13	209	15	6.0
23	28	420	60	257	312	75	119	95	13	124	11	6.5
24	21	302	58	157	255	68	102	78	12	91	11	19
25	23	191	48	129	158	59	94	66	9.5	78	9.6	17
26	15	192	52	115	126	55	85	55	8.5	61	8.7	12
27	12	707	50	97	110	54	76	52	8.5	52	13	21
28	10	1500	46	69	87	49	69	60	18	44	16	13
29	8.9	962	43	96	---	46	62	47	16	55	13	9.7
30	8.2	466	41	78	---	44	55	37	11	40	11	8.2
31	7.9	---	36	73	---	40	---	34	---	35	9.6	---
TOTAL	342.3	10221.1	3594	2795	10845	5159	3483	1933	619.5	3326.0	532.9	267.6
MEAN	11.0	341	116	90.2	387	166	116	62.4	20.7	107	17.2	8.92
MAX	56	1500	347	340	1580	1020	319	270	36	592	40	21
MIN	4.1	7.6	36	28	70	40	33	26	8.5	9.0	8.7	5.3
CFSM	.23	6.97	2.37	1.85	7.91	3.40	2.37	1.28	.42	2.19	.35	.18
IN.	.26	7.78	2.73	2.13	8.25	3.92	2.65	1.47	.47	2.53	.41	.20

CAL YR 1985 TOTAL 42429.5 MEAN 116 MAX 1500 MIN 4.0 CFSM 2.37 IN 32.28
WTR YR 1986 TOTAL 43118.4 MEAN 118 MAX 1580 MIN 4.1 CFSM 2.41 IN 32.80

03078000 CASSELMAN RIVER AT GRANTSVILLE, MD

LOCATION.--Lat 39°42'08", long 79°08'12", Garrett County, Hydrologic Unit 05020006, on left bank at downstream side of highway bridge, 0.3 mi upstream from Slaubaugh Run, 0.7 mi downstream from U.S. Highway 40, and 1.0 mi northeast of Grantsville.

DRAINAGE AREA.--62.5 mi².

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

REVISED RECORDS.--WSP 1143: 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,088.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 17. Records good except those for period with ice effect, Dec. 27 to Jan. 17, which are fair. U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

AVERAGE DISCHARGE.--39 years, 119 ft³/s, 25.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s, Oct. 15, 1954, gage height, 10.70 ft, from rating curve extended above 1,600 ft³/s on basis of contracted-opening measurement at gage height 8.13 ft; no flow Aug. 31, 1962, result of regulation from unknown source.

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)
Nov. 5	0400	*4,030	*7.04	Feb. 18	1815	1,160	3.93
Nov. 28	1545	1,770	4.57	Feb. 19	2000	1,780	4.58
Feb. 4	1815	1,190	3.96	Mar. 15	0315	1,620	4.43

Minimum discharge, 2.4 ft³/s, Oct. 1, gage height, 0.94 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	18	335	52	86	121	49	63	40	13	34	9.7
2	9.6	30	358	50	216	109	46	59	39	74	27	9.9
3	12	91	248	48	315	101	44	51	38	96	25	11
4	8.7	857	200	46	807	90	43	47	33	36	21	11
5	6.7	2320	177	46	1390	84	42	45	31	22	19	11
6	5.2	661	170	44	873	81	72	44	64	16	17	10
7	5.0	361	149	44	439	68	131	43	116	14	37	8.7
8	4.8	263	135	43	306	77	83	46	47	12	33	8.1
9	4.4	195	128	43	240	111	75	41	40	82	27	7.0
10	4.4	155	141	42	200	359	96	39	32	62	23	6.5
11	4.4	144	182	42	179	492	105	37	29	28	25	6.0
12	4.6	154	264	42	161	274	165	34	31	96	20	5.7
13	5.0	171	281	42	141	283	239	39	31	139	16	6.2
14	7.7	258	274	42	134	464	175	127	28	149	14	5.9
15	12	263	188	44	129	1050	168	79	22	56	13	5.5
16	15	587	155	48	147	436	307	59	17	39	13	4.7
17	10	586	137	52	272	296	297	49	45	139	13	4.3
18	8.2	316	110	162	891	230	316	44	31	85	14	13
19	7.6	234	91	351	1150	207	229	98	21	122	14	15
20	9.2	191	99	353	912	174	186	354	23	206	13	14
21	159	156	92	200	591	137	175	267	25	202	15	9.5
22	159	521	93	200	438	118	162	164	17	97	21	7.9
23	111	482	91	219	308	108	146	124	17	70	20	7.2
24	95	282	84	164	245	100	126	104	16	59	29	31
25	87	229	72	156	205	88	109	85	13	187	14	21
26	48	311	61	124	177	81	99	72	11	82	11	19
27	34	801	60	107	158	81	87	69	11	58	19	23
28	27	1530	58	81	137	74	79	80	23	45	33	21
29	23	846	56	127	---	65	74	61	21	68	18	15
30	19	454	54	105	---	59	67	48	15	48	13	11
31	18	---	52	104	---	53	---	45	---	40	11	---
TOTAL	927.8	13467	4595	3223	11247	6071	3992	2517	927	2442	622	338.8
MEAN	29.9	449	148	104	402	196	133	81.2	30.9	78.8	20.1	11.3
MAX	159	2320	358	353	1390	1050	316	354	116	206	37	31
MIN	3.3	18	52	42	86	53	42	34	11	12	11	4.3
CFSM	.48	7.18	2.37	1.66	6.43	3.14	2.13	1.30	.49	1.26	.32	.18
IN.	.55	8.02	2.73	1.92	6.69	3.61	2.38	1.50	.55	1.45	.37	.20

CAL YR 1985 TOTAL 50456.2 MEAN 138 MAX 2320 MIN 2.8 CFSM 2.21 IN 30.03
WTR YR 1986 TOTAL 50369.6 MEAN 138 MAX 2320 MIN 3.3 CFSM 2.21 IN 29.98

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
DELAWARE RIVER BASIN									
01477800 - SHELLPOT C AT WILMINGTON DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					JUN				
10...	1135	0.8	16.5	15.5	24...	1225	0.68	28.0	24.5
NOV					JUL				
15...	1040	1.0	11.0	6.0	09...	1125	3.0	25.0	23.0
DEC					AUG				
11...	1320	1.5	10.0	8.0	01...	1240	5.6	23.0	21.0
MAR					SEP				
04...	1410	2.1	3.0	5.0	11...	1015	2.3	26.0	21.5
APR					18...	0935	0.44	18.5	17.0
09...	1055	1.8	5.0	7.5					
MAY									
07...	0925	1.5	17.0	16.0					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					APR				
03...	0930	35	15.0	16.0	17...	1030	73	8.0	9.0
NOV					MAY				
19...	1020	1.8	17.5	12.0	05...	0910	1.9	20.0	13.0
DEC					JUL				
24...	1020	1.9	6.5	1.5	30...	1200	0.76	27.0	24.0
FEB					SEP				
12...	1100	4.7	-4.5	0.5	15...	1250	0.24	22.5	20.0
MAR									
24...	1025	2.5	12.5	4.5					
01478000 - CHRISTINA R AT COOCHS BRIDGE DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
12...	1335	4.7	20.5	16.0	01...	1420	6.1	29.0	19.5
NOV					JUN				
15...	1350	6.9	13.5	7.5	27...	0925	3.1	21.5	17.5
FEB					AUG				
19...	1330	18	11.0	4.0	13...	0915	4.1	24.0	22.0
MAR					SEP				
04...	1005	10	1.0	5.0	17...	0900	2.1	19.5	15.5
APR									
10...	1335	8.3	9.0	10.0					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					JUN				
07...	0910	6.7	13.5	13.5	23...	1030	3.9	29.0	22.5
NOV					JUL				
25...	1230	9.2	5.5	7.0	02...	1050	22	24.0	20.5
MAR					30...	0935	8.4	25.5	23.0
31...	1025	11	19.5	15.0	SEP				
APR					09...	1115	2.6	20.0	17.5
16...	1025	60	14.0	9.0	19...	0930	0.7	24.0	15.0
MAY									
05...	1225	9.2	24.5	17.5					
01479000 - WHITE CLAY C NR NEWARK DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
10...	1410	57	18.0	15.0	09...	1100	63	1.5	6.5
NOV					JUN				
15...	1035	66	12.0	5.5	21...	0915	42	22.0	19.0
DEC					AUG				
12...	1050	77	5.5	5.0	12...	1005	51	25.5	22.0
FEB					SEP				
19...	1100	91	11.0	3.5	16...	1000	24	21.5	15.5
27...	1020	92	12.0	8.5					

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
DELAWARE RIVER BASIN--Continued									
01479000 - WHITE CLAY C NR NEWARK DE--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					JUL				
26...	1030	63	7.5	6.0	03...	0930	43	22.5	20.5
DEC					AUG				
30...	1045	59	1.0	0.0	04...	0930	40	25.0	22.5
FEB					20...	1050	31	24.5	24.0
19...	1155	320	8.0	3.0	SEP				
APR					15...	0940	16	22.5	19.0
04...	1035	77	10.0	12.0					
MAY									
16...	0935	61	20.5	16.5					
01480000 - RED CLAY C AT WOODDALE DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
12...	1000	35	18.5	14.0	09...	1330	36	12.0	8.5
NOV					JUN				
15...	1310	34	11.0	7.0	24...	0955	19	29.0	24.0
DEC					AUG				
12...	1300	41	7.5	5.5	13...	1140	24	24.5	22.5
FEB					SEP				
27...	1310	54	10.0	10.5	16...	1210	15	17.5	15.5
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
15...	1000	28	22.0	16.5	16...	1140	42	26.0	17.0
NOV					JUN				
26...	1320	35	7.5	7.0	27...	0945	21	24.0	20.0
FEB					AUG				
20...	1130	170	4.0	4.0	04...	1200	20	26.5	23.5
APR					SEP				
04...	1315	45	20.5	13.0	11...	1015	11	25.0	19.0
28...	0855	52	18.0	15.0	17...	1325	9.0	15.0	16.5
01481500 - BRANDYWINE C AT WILMINGTON DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
02...	1005	461	10.5	13.0	01...	0945	159	21.0	18.5
JAN					31...	1045	174	23.0	21.0
02...	1030	283	9.0	8.0	JUL				
APR					01...	1150	137	24.5	24.0
01...	1315	573	14.5	10.5	SEP				
					03...	1150	127	31.5	26.5
					23...	1210	104	22.0	21.5
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
DEC					JUL				
02...	1035	864	8.0	8.0	01...	1010	122	24.0	23.0
FEB					14...	1025	140	29.5	26.0
03...	1140	653	3.5	2.0	15...	0925	71	25.0	27.5
MAR					AUG				
03...	1125	528	3.5	3.0	01...	0940	95	26.0	26.0
APR					SEP				
17...	1050	2010	8.0	10.0	02...	1045	148	20.5	20.5
JUN					03...	1440	144	22.5	20.0
02...	0920	223	21.0	25.0	19...	1125	89	22.0	21.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
DELAWARE RIVER BASIN--Continued									
01483200 - BLACKBIRD C AT BLACKBIRD DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
10...	1400	1.3	20.5	18.0	10...	1110	3.2	5.0	10.5
NOV					JUN				
16...	1030	1.4	13.5	9.0	11...	1155	1.1	27.0	24.0
DEC					JUL				
10...	1355	2.5	8.5	5.0	15...	1155	0.74	29.0	29.0
JAN					AUG				
15...	1220	2.2	-0.5	2.5	21...	1115	2.2	19.0	24.0
MAR					SEP				
05...	1340	6.0	18.5	11.0	18...	1230	0.26	22.5	23.5
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
09...	1040	2.4	20.5	17.5	12...	1210	2.0	20.5	20.5
NOV					19...	1245	1.6	30.0	26.5
19...	1305	2.0	20.5	15.0	28...	1235	1.5	25.5	23.5
DEC					JUN				
24...	1305	3.6	13.5	4.5	16...	1255	1.3	36.0	29.5
FEB					23...	1230	0.72	32.0	29.0
14...	0950	3.9	-3.5	3.5	JUL				
MAR					02...	0840	0.31	24.5	23.0
10...	1050	5.2	19.0	6.5	16...	0820	0.4	28.0	25.5
24...	1310	4.2	15.0	5.5	21...	1350	0.25	32.0	27.5
APR					SEP				
14...	1345	3.5	19.0	14.0	08...	0850	0.38	16.5	21.0
16...	1250	6.1	15.0	11.0					
25...	1240	4.1	22.5	17.0					
ST. JONES RIVER BASIN									
01483700 - ST JONES R AT DOVER DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
02...	1420	54	16.0	16.0	31...	0835	12	20.0	20.0
NOV					JUL				
01...	1400	7.2	20.0	20.0	01...	0805	2.8	20.5	21.5
DEC					02...	0735	3.3	20.0	21.5
03...	0935	15	10.0	8.0	25...	0820	2.8	26.5	24.5
FEB					SEP				
28...	0855	18	-0.5	8.0	03...	0820	5.1	26.0	24.5
APR									
01...	1045	42	15.0	13.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
01...	0820	48	20.0	19.0	01...	0920	16	27.5	19.5
DEC					JUN				
02...	0920	79	14.0	9.5	02...	1255	7.5	21.5	25.0
JAN					AUG				
02...	0955	18	4.5	3.5	01...	1320	1.9	29.5	26.0
FEB					21...	0750	21	21.0	24.0
03...	0915	58	3.0	3.0	26...	0815	1.7	23.0	21.5
MAR					SEP				
03...	1005	43	7.5	4.0	02...	0830	3.6	19.0	20.5
APR									
01...	0945	22	18.0	16.0					
MISPILLION RIVER BASIN									
01484100 - BEAVERDAM B AT HOUSTON DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
03...	1230	1.3	18.0	13.5	10...	1330	1.4	24.0	16.5
NOV					JUL				
06...	1515	0.93	13.0	13.5	02...	1330	1.1	25.0	18.0
JAN					AUG				
03...	1225	1.4	2.0	8.0	15...	1015	0.99	29.0	20.5
FEB					SEP				
12...	1225	9.4	9.0	6.5	19...	1025	0.71	23.0	16.0
MAR					27...	1425	39	22.0	21.0
04...	1030	2.3	4.5	8.0					
APR									
05...	0930	2.1	21.0	13.0					

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

MISPILLION RIVER BASIN--Continued

01484100 - BEAVERDAM B AT HOUSTON DE--Continued

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT					MAY				
11...	1300	2.0	19.0	17.0	07...	0905	2.3	24.5	15.0
NOV					JUN				
15...	1105	1.4	11.5	14.0	19...	1215	1.0	26.5	17.0
JAN					AUG				
06...	1425	2.2	4.5	7.0	06...	0720	0.76	22.5	18.5
FEB					SEP				
25...	0915	5.4	-2.0	6.0	05...	1200	0.53	27.0	19.5
APR									
02...	1440	3.4	23.0	17.0					

INDIAN RIVER BASIN

01484500 - STOCKLEY B AT STOCKLEY DE

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					MAY				
03...	1000	2.0	15.0	12.5	10...	1035	2.3	22.0	15.0
NOV					JUL				
08...	0955	1.5	8.0	8.5	02...	0910	1.4	20.5	17.0
DEC					AUG				
13...	1400	2.4	17.5	11.0	05...	0930	0.93	23.5	17.0
FEB					19...	0955	99	25.0	22.5
26...	1305	6.0	10.0	11.5	SEP				
APR					18...	1320	2.7	22.0	16.5
02...	1025	4.6	10.0	10.5	27...	1520	68	23.0	21.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAY				
22...	1005	6.2	17.5	15.5	14...	1230	2.8	16.5	13.5
NOV					JUN				
26...	1325	4.0	17.5	12.0	19...	0940	1.8	22.0	16.0
JAN					JUL				
03...	1230	6.4	9.5	7.5	31...	1140	1.0	25.5	20.5
FEB					SEP				
14...	1230	9.8	1.0	3.0	17...	0915	0.75	14.5	13.0
MAR									
31...	0955	6.0	22.0	13.0					

POCOMOKE RIVER BASIN

01485000 - POCOMOKE R NR WILLARDS, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					MAY				
05...	1240	8.8	20.5	14.5	07...	0930	17	21.0	18.0
NOV					JUN				
13...	1155	11	6.0	8.0	27...	0945	9.3	22.0	18.0
DEC					JUL				
14...	1130	30	13.0	10.5	23...	1305	6.8	24.0	23.5
FEB					AUG				
07...	1105	97	1.0	5.0	12...	1345	6.3	27.5	24.5
28...	1240	53	5.0	8.0	19...	1530	608	27.0	23.0
APR					SEP				
03...	1255	48	10.0	9.0	18...	1000	19	20.0	15.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAY				
21...	1145	32	14.5	15.5	09...	1150	19	15.5	15.5
NOV					JUN				
26...	1125	53	16.5	11.0	24...	1255	13	23.0	22.0
JAN					JUL				
08...	1145	54	-2.5	2.0	31...	0900	4.7	26.5	22.5
FEB					SEP				
18...	1200	117	16.0	10.0	17...	1205	5.7	17.5	15.5
MAR									
24...	1200	44	15.5	9.5					

POCOMOKE RIVER BASIN--Continued

01485500 - NASSAWANGO C NR SNOW HILL, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
31...	1120	6.4	23.0	17.5
DEC				
11...	1225	28	9.5	6.5
FEB				
07...	1330	65	1.5	1.0
11...	1205	45	8.0	1.0
12...	1050	69	10.0	3.5
27...	1310	46	15.5	10.5
APR				
03...	1030	28	12.5	9.0
MAY				
07...	1155	6.8	21.0	17.0
JUN				
27...	1245	2.9	21.0	16.5
AUG				
12...	1035	5.8	25.0	21.0
SEP				
05...	1035	13	27.5	22.0
16...	1010	3.9	19.5	13.5
28...	1220	466	19.0	18.5
30...	1110	316	21.5	17.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
03...	1235	81	20.5	18.0
18...	1235	18	20.0	14.5
NOV				
19...	1105	20	22.0	13.0
JAN				
06...	1120	64	5.0	2.0
FEB				
10...	1035	145	4.5	4.0
MAR				
28...	1135	19	13.0	11.0
MAY				
06...	1015	9.4	28.5	16.0
JUN				
13...	1055	2.3	25.5	20.5
JUL				
30...	1205	1.7	25.5	21.0
SEP				
15...	1325	3.1	23.0	17.0

MANOKIN RIVER BASIN

01486000 - MANOKIN B NR PRINCESS ANNE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
30...	1130	0.44	19.0	18.5
DEC				
10...	1225	1.4	9.0	6.5
JAN				
16...	1230	1.5	-0.5	1.5
FEB				
25...	1255	3.8	18.5	14.0
MAR				
29...	1120	4.2	27.0	17.0
MAY				
06...	1010	0.96	24.5	17.5
JUN				
24...	1210	1.1	31.0	26.0
AUG				
08...	1235	0.37	26.0	24.0
19...	1110	251	26.0	23.5
23...	1400	7.2	27.0	21.5
SEP				
16...	1345	1.1	23.5	18.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
08...	1220	3.4	23.0	15.0
NOV				
18...	1300	2.3	19.5	14.0
DEC				
26...	1140	2.8	-4.5	1.0
FEB				
04...	1150	35	8.5	5.5
MAR				
26...	1110	2.7	21.0	13.5
MAY				
05...	1115	1.5	23.5	16.0
JUN				
12...	1040	0.68	33.5	27.0
JUL				
30...	0850	0.65	26.5	24.5
SEP				
15...	0945	2.5	23.5	19.0

NANTICOKE RIVER BASIN

01487000 - NANTICOKE R NR BRIDGEVILLE, DE

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
11...	1040	33	17.0	16.0
NOV				
08...	1240	30	9.5	10.0
DEC				
12...	1345	34	13.0	9.0
FEB				
04...	1215	82	-2.0	3.0
MAR				
04...	1305	74	8.0	8.0
APR				
02...	1325	57	10.0	13.0
MAY				
02...	1005	39	14.5	17.5
JUN				
03...	0940	43	26.0	20.5
JUL				
02...	1130	31	23.0	18.0
19...	1125	25	26.5	22.5
AUG				
05...	1150	21	23.5	21.5
SEP				
04...	1005	25	27.5	22.0
27...	1705	317	21.5	22.0

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NANTICOKE RIVER BASIN--Continued									
01487000 - NANTICOKE R NR BRIDGEVILLE, DE--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					JUN				
03...	0905	59	18.0	18.0	16...	1210	34	28.0	23.0
11...	1020	45	20.0	17.0	JUL				
NOV					16...	1115	22	27.0	23.0
12...	1145	38	19.0	15.0	AUG				
JAN					05...	0755	23	23.0	22.5
27...	1230	221	2.0	5.5	11...	1120	19	27.5	25.0
APR					SEP				
11...	1220	78	13.5	10.0	05...	0930	20	23.5	20.5
MAY					24...	1010	17	25.5	21.0
14...	0850	49	15.5	15.0					
01488500 - MARSHYHOPE C NR ADAMSVILLE DE									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
NOV					JUN				
06...	1310	11	11.0	15.0	06...	1050	54	25.5	22.0
DEC					12...	1155	22	29.0	26.0
18...	1400	14	18.0	13.5	28...	1320	14	24.0	22.0
MAR					AUG				
07...	1025	31	7.0	6.0	13...	1250	14	31.5	27.0
APR					SEP				
04...	1315	26	20.5	14.5	17...	1210	9.7	23.5	19.5
MAY									
09...	1325	16	23.0	22.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					MAY				
25...	1255	25	7.0	8.0	15...	0930	23	18.0	16.0
JAN					JUN				
10...	1250	28	4.0	1.0	23...	1255	9.1	33.0	23.5
FEB					AUG				
13...	1225	87	-5.0	3.0	05...	1300	8.0	26.0	29.0
APR					SEP				
04...	1145	44	18.0	13.0	16...	1300	5.8	21.0	22.5
01489000 - FAULKNER B AT FEDERALSBURG, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
NOV					MAY				
06...	1010	2.2	12.5	14.0	09...	1020	2.0	20.5	16.0
DEC					JUN				
18...	1055	3.7	16.0	10.0	28...	1025	1.3	19.0	16.0
FEB					AUG				
21...	1155	15	9.0	5.0	13...	0940	1.8	24.0	21.0
MAR					SEP				
06...	1205	9.3	7.0	7.0	17...	0930	1.4	18.0	15.5
APR									
04...	1035	6.7	15.5	9.0					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					MAY				
22...	1250	5.6	11.5	11.0	15...	1315	3.7	18.5	15.5
JAN					JUN				
10...	1025	5.2	2.0	2.0	25...	1010	0.7	19.0	20.5
FEB					AUG				
13...	1020	16	-5.0	2.0	05...	1055	0.27	25.5	23.0
MAR					SEP				
31...	1315	9.9	27.5	17.5	16...	1025	1.1	17.0	19.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

CHOPTANK RIVER BASIN

01491000 - CHOPTANK R NR GREENSBORO, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
19...	1115	19	24.0	16.0
26...	1005	22	20.0	17.5
NOV				
26...	1130	24	9.0	5.0
26...	1245	22	12.0	4.5
DEC				
05...	1130	31	4.0	5.0
26...	1010	33	2.0	4.0
JAN				
10...	1130	56	4.0	1.0
FEB				
11...	1030	86	3.0	2.0
13...	1135	435	2.0	2.0
14...	1015	376	1.5	2.0
26...	1020	98	8.5	12.0
MAR				
07...	1145	74	6.5	7.0
27...	1015	89	16.0	9.0
APR				
18...	1100	58	22.0	16.5
26...	0920	49	19.5	16.5
MAY				
15...	1100	33	16.0	22.0
24...	1100	101	16.0	17.0
28...	0835	49	26.0	21.0
JUN				
20...	1405	23	25.5	22.0
26...	0835	19	20.5	20.0
JUL				
11...	0930	29	24.0	23.0
26...	0930	15	24.5	23.5
26...	1100	17	25.0	24.0
AUG				
15...	0900	17	28.5	24.5
28...	0935	17	23.5	22.5
29...	1100	18	24.0	23.0
SEP				
06...	1235	18	28.5	25.0
13...	1000	17	14.0	17.5
27-27	1335	219	20.0	20.5
27...	1340	180	22.0	20.5
28...	0830	1410	19.0	17.0
28...	0930	1400	17.0	19.0
29...	1045	588	22.0	18.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
CT				
31...	1125	53	15.5	11.5
NOV				
04...	0840	50	14.0	13.5
18...	1045	61	16.0	13.0
27...	1010	74	8.5	9.5
DEC				
27...	1130	62	1.0	4.0
JAN				
30...	1045	267	-3.0	1.0
FEB				
03...	1030	206	6.0	6.0
26...	1145	292	-0.5	3.0
28...	0945	230	3.0	2.0
MAR				
26...	1030	128	19.0	11.0
28...	0945	123	13.0	12.0
28...	0950	123	13.0	12.0
APR				
18...	0950	128	14.0	10.0
25...	0940	101	19.0	11.0
30...	1000	80	21.0	17.0
MAY				
09...	1030	39	16.0	18.5
19...	1000	38	26.0	23.0
27...	1000	32	21.0	19.5
27...	1140	32	24.0	19.5
JUN				
05...	0855	22	25.0	20.0
16...	1130	23	28.0	25.0
26...	0935	18	24.5	21.0
30...	0830	19	23.5	24.0
JUL				
11...	1345	18	17.0	15.0
17...	1315	18	27.5	25.0
28...	0900	13	28.5	24.5
AUG				
05...	1055	22	28.0	23.0
19...	1200	17	26.0	24.0
26...	1025	14	25.0	20.0
26...	1200	14	25.0	20.0
SEP				
08...	1000	11	17.0	19.0
16...	0915	6.5	16.0	18.0
26...	1000	11	25.5	21.0

CHESTER RIVER BASIN

01493000 - UNICORN B NR MILLINGTON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NOV				
02...	1310	10	14.0	17.5
DEC				
17...	1350	28	13.0	9.5
MAR				
05...	1415	17	16.5	11.0
28...	1305	18	22.0	14.5
MAY				
13...	1000	11	24.0	24.0
SEP				
06...	1005	5.3	28.5	28.0
12...	1255	6.2	19.0	25.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
04...	1225	111	20.0	17.0
NOV				
14...	1310	12	22.5	17.0
DEC				
20...	1135	14	-1.0	2.0
FEB				
12...	1250	44	-3.0	2.0
MAR				
25...	1255	22	16.5	11.5
MAY				
13...	1305	12	21.5	21.0
JUN				
30...	1035	7.9	25.5	26.5

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

CHESTER RIVER BASIN--Continued

01493500 - MORGAN C NR KENNEDYVILLE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NOV				
02...	1045	6.3	15.0	16.0
DEC				
17...	1100	6.6	13.5	9.0
MAR				
05...	1125	10	16.0	10.0
28...	1105	6.1	24.0	12.5
MAY				
08...	1325	4.0	22.0	16.5
29...	1245	23	17.0	18.0
JUN				
25...	1040	3.7	22.5	20.5
JUL				
22...	0920	3.9	27.0	23.0
AUG				
14...	1005	3.4	30.0	22.5
SEP				
12...	1020	3.7	18.0	16.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
04...	1045	23	20.0	16.0
NOV				
14...	1050	4.9	18.5	13.5
DEC				
20...	0925	3.7	-6.0	0.0
FEB				
12...	1035	7.8	-5.5	0.0
MAR				
25...	1015	5.4	11.5	5.5
MAY				
13...	0945	3.6	15.5	13.0
JUN				
30...	0850	3.0	25.5	20.0
JUL				
08...	0945	2.9	27.5	23.0
10...	1135	2.6	25.0	22.0
29...	0915	2.7	26.5	23.0
SEP				
11...	1025	3.0	26.5	18.0

ELK RIVER BASIN

01495000 - BIG ELK C AT ELK MILLS, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
09...	1055	37	18.0	13.5
NOV				
07...	1235	45	9.5	10.0
DEC				
10...	1110	49	6.5	3.5
JAN				
14...	1330	49	5.0	0.5
FEB				
20...	1235	60	6.5	3.5
25...	1355	56	11.5	11.0
APR				
02...	1310	49	9.5	9.0
MAY				
06...	1305	39	22.0	18.0
JUN				
25...	1145	19	22.0	20.5
SEP				
12...	1225	17	20.0	18.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
17...	1305	31	17.5	14.0
DEC				
23...	1320	44	7.0	0.0
APR				
02...	1250	49	22.5	17.0
JUN				
15...	1025	38	16.5	15.0
25...	1200	20	24.0	21.0
SEP				
17...	1140	10	15.0	15.5

PRINCIPIO CREEK BASIN

01496200 - PRINCIPIO C NR PRINCIPIO FURNACE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
04...	1045	4.2	17.5	14.0
NOV				
14...	1115	4.2	9.5	6.0
DEC				
17...	1150	5.7	11.0	9.5
JAN				
14...	1040	6.3	6.0	0.5
FEB				
20...	1025	7.4	5.5	2.5
25...	1100	7.5	11.0	10.5
APR				
02...	1030	8.6	7.5	8.5
MAY				
06...	1010	4.9	22.0	16.5
JUN				
25...	0920	2.6	20.5	20.0
AUG				
08...	0925	44	24.0	21.5
SEP				
12...	0945	1.3	21.5	17.0

PRINCIPIO RIVER BASIN--Continued

01496200 - PRINCIPIO C NR PRINCIPIO FURNACE, MD--Continued

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
17...	0935	4.2	11.0	13.0
NOV				
22...	1035	7.8	7.0	8.0
DEC				
23...	1040	6.2	5.0	1.0
FEB				
18...	1025	22	7.5	3.0
APR				
02...	1020	7.1	19.5	15.0
MAY				
13...	1035	4.6	19.5	17.5
JUN				
25...	0930	2.2	20.5	20.0
JUL				
17...	0945	1.7	22.0	21.5
29...	1010	1.4	26.0	24.0
SEP				
17...	0940	0.92	13.5	13.0

SUSQUEHANNA RIVER BASIN

01578310 - SUSQUEHANNA R AT CONOWINGO, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
25...	1130	35000	14.0	19.0
NOV				
19...	1030	60300	7.0	9.0
DEC				
27...	1030	57500	4.0	5.0
JAN				
28...	1100	68500	4.0	2.0
FEB				
21...	1200	60100	8.0	3.0
27...	0930	137000	13.0	6.5
28...	1200	109000	3.0	5.0
MAR				
01...	1330	90200	10.0	6.0
06...	1230	72100	2.0	7.0
APR				
02...	1030	126000	11.0	11.0
APR				
03...	1200	140000	10.0	19.0
04...	1200	140000	19.0	12.0
05...	1200	101000	23.0	9.0
22...	1030	74500	26.0	17.0
MAY				
13...	1030	48500	22.5	19.5
JUN				
27...	1230	38100	23.0	25.0
JUL				
10...	0930	5240	29.0	26.0
AUG				
07...	1445	5100	29.0	27.0
22...	1145	11500	25.5	28.0
22...	1200	11500	25.5	28.0
SEP				
09...	1100	5240	26.5	27.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
16...	1100	6650	20.5	19.0
NOV				
18...	1200	182000	16.0	12.0
20...	1100	156000	22.0	13.0
30...	1100	146000	7.0	8.0
DEC				
04...	1230	113000	4.0	5.5
19...	1200	72300	-3.0	2.0
JAN				
15...	1100	41400	-2.0	2.0
FEB				
25...	1240	149000	5.0	4.0
MAR				
11...	1100	71100	17.0	5.0
14...	1130	143000	11.0	7.0
14...	1135	143000	11.0	7.0
17...	1112	364000	11.0	7.0
18...	1032	290000	8.0	6.0
19...	1015	225000	17.0	5.0
20...	0915	198000	6.0	6.5
APR				
18...	1100	154000	14.0	12.0
21...	1230	126000	18.0	13.0
28...	1130	73100	18.5	15.0
MAY				
12...	1100	39800	19.0	20.0
JUN				
11...	1300	53400	33.0	27.0
25...	1300	50600	25.0	25.0
JUL				
09...	1130	11600	26.0	27.0
30...	1130	27600	26.0	29.0
AUG				
13...	1310	57400	26.0	26.0
27...	1130	30000	29.0	25.5
27...	1135	30000	29.0	25.5
SEP				
10...	1200	17200	25.0	24.0
23...	1030	878	25.0	23.0

01580000 - DEER C AT ROCKS, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
APR				
25...	1400	82	20.0	16.0
JUN				
11...	1250	61	25.0	22.0
JUL				
31...	1100	48	30.0	23.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
15...	1300	47	23.0	17.0
FEB				
24...	1345	168	3.0	4.0
APR				
02...	1330	97	20.0	16.0
MAY				
15...	1315	89	16.0	15.0
JUN				
30...	1200	39	26.0	23.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

BUSH RIVER BASIN

01581700 - WINTERS RN NR BENSON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
FEB					JUL				
15...	0940	49	-1.0	0.5	26...	1205	21	25.0	23.0
APR					AUG				
25...	1030	27	16.0	15.0	29...	1020	16	25.0	21.0
JUN					SEP				
11...	0910	22	20.0	20.0	27...	1110	1800	18.0	17.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					APR				
15...	0950	20	21.0	16.0	02...	0945	34	20.0	13.0
DEC					MAY				
05...	1130	40	3.0	3.0	15...	0945	31	15.0	14.0
FEB					JUN				
24...	0940	55	1.0	2.0	30...	0840	11	23.0	21.0

GUNPOWDER RIVER BASIN

01582000 - LITTLE FALLS AT BLUE MOUNT, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

APR					JUL				
16...	1300	53	19.0	15.0	17...	1245	34	30.0	23.0
18...	0915	46	14.0	10.0	SEP				
JUN					04...	0900	20	22.0	20.0
10...	0930	37	21.0	19.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAR				
02...	0950	31	14.0	16.0	27...	1020	58	14.0	10.0
NOV					MAY				
27...	1010	60	11.0	8.0	07...	1100	54	27.0	19.0
JAN					JUN				
09...	1145	35	0.0	0.0	20...	1115	30	24.0	20.0
FEB					JUL				
21...	1200	123	4.0	5.0	08...	0840	21	25.0	23.0

01582500 - GUNPOWDER FALLS AT GLENCOE MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

FEB					JUL				
15...	1500	324	2.0	3.0	16...	1210	145	28.0	22.0
APR					AUG				
18...	1100	127	19.0	12.0	22...	1100	67	23.0	19.0
JUN					SEP				
04...	1040	107	21.0	19.0	05...	1020	60	26.0	20.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT					MAR				
02...	1315	66	15.0	15.0	25...	1130	162	15.0	6.0
NOV					MAY				
25...	1400	91	6.0	5.0	06...	1330	138	28.0	18.0
JAN					JUN				
07...	1500	73	-3.0	0.0	19...	1230	241	24.0	14.0
FEB									
13...	1500	141	-5.0	0.0					

GUNPOWDER RIVER BASIN--Continued

01583100 - PINEY RN AT DOVER MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
APR					AUG				
16...	1600	10	23.0	18.0	13...	1020	5.1	28.0	21.0
JUN					22...	0900	4.8	22.0	19.0
04...	0830	8.7	22.0	18.0					
JUL									
16...	0940	8.6	33.0	22.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAR				
04...	0940	15	17.0	15.0	25...	1300	11	20.0	10.0
NOV					MAY				
25...	1210	8.7	7.0	5.0	06...	1050	9.5	26.0	18.0
JAN					JUN				
07...	1315	8.9	-1.0	1.0	20...	1340	5.4	27.0	23.0
FEB					JUL				
13...	1300	17	-5.0	1.0	08...	1015	3.8	28.0	25.0

01583500 - WESTERN RN AT WESTERN RUN, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

JUN					AUG				
04...	1425	38	24.0	21.0	19...	1315	22	30.0	22.0
JUL					SEP				
16...	1400	33	30.0	25.0	05...	0845	15	24.0	22.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAR				
01...	1355	24	24.0	18.0	25...	1500	53	18.0	10.0
NOV					MAY				
27...	1210	39	12.0	9.0	05...	1430	44	26.0	18.0
JAN					JUN				
07...	1130	31	-4.0	0.0	19...	1420	23	26.0	22.0
FEB					JUL				
10...	1500	52	1.0	4.0	07...	1200	16	31.0	25.0

01583570 - POND BR AT OREGON RIDGE MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					JUN				
18...	1125	0.14	20.0	16.0	20...	1215	0.05	20.5	17.0
NOV					AUG				
15...	1505	0.11	14.0	8.5	01...	1300	0.05	21.5	20.0
DEC					22...	1335	0.03	24.5	19.5
20...	1135	0.08	7.5	7.0					
APR									
25...	1425	0.09	20.0	16.5					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAR				
03...	0850	0.11	13.0	14.5	28...	0825	0.08	4.5	5.0
NOV					JUN				
20...	1255	0.07	24.0	16.5	18...	1235	0.04	20.5	17.0
JAN					AUG				
09...	1430	0.06	3.5	0.5	13...	0915	0.02	20.5	18.0

01583600 - BEAVERDAM RN AT COCKEYSVILLE MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

FEB					JUL				
15...	1145	32	0.0	2.5	17...	0850	8.5	21.0	20.0
APR					AUG				
18...	1300	15	22.0	14.0	13...	1145	7.6	27.0	22.0
JUN									
04...	1240	11	24.0	19.0					

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
GUNPOWDER RIVER BASIN--Continued									
01583000 - BEAVERDAM RN AT COCKEYSVILLE MD--CONTINUED									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
04...	1130	29	17.0	15.0	25...	0900	17	9.0	6.0
NOV					MAY				
25...	1530	14	5.0	7.0	06...	0830	13	22.0	15.0
JAN					JUN				
07...	0920	13	-5.0	1.0	19...	1000	7.7	19.0	18.0
FEB					JUL				
13...	1030	13	-6.0	1.0	07...	1340	4.5	30.0	26.0
01584050 - LONG GREEN C AT GLEN ARM, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
18...	1500	9.3	21.0	17.0	31...	1310	3.3	26.0	23.0
JUN					AUG				
17...	1010	8.5	25.0	18.0	22...	1400	2.8	23.0	21.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
04...	1410	10	17.0	16.0	27...	1450	8.5	17.0	12.0
JAN					MAY				
09...	1415	5.0	2.0	0.0	07...	1330	6.5	30.0	21.0
FEB									
21...	1430	17	7.0	6.0					
01585100 - WHITEMARSH RN AT WHITE MARSH, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
19...	1330	3.2	26.0	24.0	29...	1315	1.2	27.0	25.0
JUN					AUG				
07...	1040	2.1	21.0	21.0	23...	1150	0.71	25.0	23.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
08...	1215	1.9	19.0	16.0	28...	1310	3.2	15.0	15.0
NOV					MAY				
29...	1320	22	8.0	9.0	08...	1315	2.2	27.0	24.0
JAN					JUN				
10...	1240	2.6	8.0	1.0	26...	1245	0.56	27.0	25.0
FEB									
14...	1415	5.6	-1.0	0.0					
BACK RIVER BASIN									
01585200 - WB HERRING RN AT IDLEWYLDE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
19...	0900	0.61	26.0	16.0	15...	1400	0.34	35.0	28.0
JUN					SEP				
10...	1500	0.4	30.0	24.0	04...	1315	0.2	32.0	28.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
11...	1430	0.25	21.0	19.0	16...	1150	0.74	28.0	20.0
JAN					JUN				
06...	1505	0.58	5.0	3.0	26...	1430	0.31	29.0	24.0
FEB									
21...	0930	3.4	5.0	5.0					
01585300 - STEMMERS RN AT ROSSVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
17...	1515	0.97	17.0	20.0	29...	1120	0.41	27.0	24.0
JUN					AUG				
07...	1215	0.78	21.0	22.0	23...	1020	0.17	25.0	26.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
BACK RIVER BASIN--Continued									
01585300 - STEMMERS RN AT ROSSVILLE, MD--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
08...	1030	0.78	18.0	15.0	28...	1115	1.5	15.0	11.0
NOV					MAY				
29...	1125	12	11.0	9.0	16...	1010	1.1	23.0	19.0
FEB					JUN				
14...	1230	2.7	-1.0	1.0	26...	1030	0.33	26.0	25.0
01585400 - BRIEN RN AT STEMMERS RUN, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
17...	1200	0.5	14.0	14.0	29...	1000	1.2	22.0	21.0
JUN					AUG				
07...	0900	0.44	17.0	16.0	23...	0845	0.47	19.0	18.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
08...	0900	0.63	11.0	12.0	28...	0900	0.51	8.0	7.0
NOV					MAY				
29...	0940	6.3	6.0	8.0	08...	1100	0.35	24.0	18.0
FEB					JUN				
14...	1030	0.63	-1.0	1.0	26...	0800	0.31	19.0	16.0
PATAPSCO RIVER BASIN									
01585500 - CRANBERRY B NR WESTMINSTER, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
NOV					APR				
12...	0955	0.88	5.5	8.0	15...	1330	3.0	17.5	13.5
DEC					JUN				
13...	1455	1.1	16.0	11.0	18...	1335	0.88	25.5	19.5
JAN					JUL				
29...	1450	2.1	-0.5	2.0	24...	1415	0.29	25.0	21.0
MAR					AUG				
11...	1430	0.68	10.0	7.5	28...	1345	0.35	25.0	21.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
10...	1335	0.25	24.0	17.5	27...	1430	2.5	15.0	12.5
DEC					JUN				
03...	1400	2.9	1.5	4.0	18...	0825	0.61	16.0	15.5
FEB					AUG				
12...	1255	2.5	-4.5	1.0	12...	1200	0.47	21.5	20.0
01586000 - NB PATAPSCO R AT CEDARHURST, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAR				
03...	1020	37	11.5	10.5	11...	1015	41	10.0	6.0
NOV					JUN				
07...	0950	44	7.0	8.5	18...	0835	29	21.5	21.0
DEC					JUL				
13...	0955	60	10.5	6.5	30...	0955	24	27.0	22.0
JAN					AUG				
29...	1030	34	-1.5	0.5	28...	0900	18	22.5	21.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					FEB				
10...	0920	19	19.5	14.5	12...	0935	24	-6.0	0.0
DEC					MAR				
03...	0910	61	-1.5	3.0	27...	1010	52	14.0	10.5
JAN					AUG				
09...	1245	28	4.0	1.0	14...	1230	11	25.0	22.5

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

PATAPSCO RIVER BASIN--Continued

01586210 - BEAVER RN NR FINKSBURG MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NOV					APR				
07...	1210	13	--	9.0	05...	1050	15	17.0	11.5
DEC					JUN				
13...	1145	17	16.0	8.0	18...	1015	8.5	24.0	19.5
FEB					JUL				
19...	1005	18	7.0	3.5	24...	1100	4.8	26.0	20.0
MAR					AUG				
11...	1130	12	13.0	6.5	28...	1035	4.9	25.0	21.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAR				
10...	1050	4.6	24.0	14.5	10...	1315	14	21.5	9.5
DEC					27...	1120	15	15.5	11.0
03...	1030	14	0.5	3.0	JUL				
FEB					14...	1520	2.5	28.0	24.5
24...	1000	23	0.5	2.5	AUG				
					14...	0935	2.7	23.0	20.0

01586610 - MORGAN RN NR LOUISVILLE MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

NOV					JUN				
07...	1420	24	8.5	8.5	18...	1150	18	22.5	20.0
DEC					JUL				
13...	1325	35	13.5	8.5	24...	1250	9.7	25.5	22.5
MAR					AUG				
11...	1305	25	15.0	7.5	28...	1210	9.3	24.0	22.0
APR									
05...	1200	34	22.0	12.0					
15...	1140	26	15.0	13.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					JUN				
10...	1220	9.0	27.0	15.0	18...	1015	12	18.0	17.5
DEC					JUL				
03...	1225	27	1.0	3.0	14...	1410	5.9	28.5	25.5
FEB					AUG				
24...	1120	49	4.5	3.0	12...	1345	5.4	22.0	21.0
MAR									
27...	1300	31	13.0	11.5					

01589000 - PATAPSCO R AT HOLLOFIELD, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

APR					AUG				
26...	1230	78	26.0	19.0	20...	1305	28	28.0	25.0
JUN					SEP				
10...	1230	72	28.0	24.0	04...	1115	20	29.0	25.0
JUL									
18...	1230	32	33.0	25.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAR				
03...	1400	67	15.0	16.0	26...	1430	104	21.0	14.0
NOV					MAY				
26...	1350	67	8.0	8.0	09...	1330	65	19.0	22.0
JAN					JUN				
08...	1400	53	-1.0	0.0	25...	1330	29	24.0	25.0
FEB					JUL				
12...	1515	102	-2.0	2.0	11...	0830	23	23.0	24.0

01589100 - EB HERBERT RN AT ARBUTUS, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

APR					JUL				
26...	1015	0.72	25.0	16.0	18...	0945	0.59	25.0	21.0
JUN					AUG				
06...	1015	2.2	20.0	19.0	20...	0905	0.62	23.0	22.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
PATAPSCO RIVER BASIN--Continued									
01589100 - EB HERBERT RN AT ARBUTUS, MD--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
03...	0940	4.0	15.0	16.0	09...	0850	0.7	13.0	15.0
FEB					JUN				
12...	1045	1.9	-3.0	1.0	25...	0930	0.44	19.0	19.0
MAR									
26...	1000	1.2	18.0	10.0					
01589300 - GWYNNS FALLS AT VILLA NOVA, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
19...	1115	20	27.0	19.0	15...	1000	10	30.0	25.0
JUN					AUG				
05...	0955	152	23.0	19.0	19...	0925	13	25.0	21.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
01...	1010	12	23.0	17.0	24...	1300	21	10.0	10.0
NOV					MAY				
12...	1200	13	13.0	12.0	05...	1000	16	20.0	15.0
JAN					JUN				
06...	1115	13	2.0	0.5	18...	1100	7.3	19.0	22.0
FEB					JUL				
10...	1110	24	3.0	3.0	11...	1010	4.8	27.0	24.0
01589330 - DEAD RN AT FRANKLINTOWN, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
24...	1330	1.4	14.0	15.0	24...	1345	0.61	26.0	23.0
JUN					AUG				
06...	1230	3.1	24.0	21.0	20...	1100	1.2	24.0	22.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
03...	1145	14	15.0	16.0	26...	1210	2.2	22.0	14.0
NOV					MAY				
26...	1150	1.9	8.0	8.0	09...	1115	1.5	20.0	18.0
FEB					JUN				
12...	1240	3.4	-2.0	2.0	25...	1120	0.9	23.0	21.0
01589440 - JONES FALLS AT SORRENTO, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
JUN					AUG				
05...	1310	53	21.0	18.0	19...	1115	8.8	25.0	21.0
06...	1400	21	25.0	20.0					
JUL									
15...	1215	11	30.0	23.0					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
01...	1155	11	24.0	17.0	24...	1500	22	13.0	11.0
NOV					MAY				
12...	1400	13	13.0	12.0	05...	1215	18	26.0	15.0
JAN					JUN				
06...	1320	14	4.0	2.0	18...	1315	7.4	22.0	20.0
FEB					JUL				
10...	1315	23	2.0	4.0	11...	1130	4.5	22.0	22.0
01589500 - SAWMILL C AT GLEN BURNIE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
NOV					AUG				
27...	1015	0.85	--	2.5	14...	0915	0.04	32.0	22.0
JUN					SEP				
06...	0920	2.0	22.0	19.5	09...	0910	0.02	29.5	23.0
JUL					18...	0915	0.01	21.0	15.0
18...	0955	0.02	28.0	19.5					

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

PATAPSCO RIVER BASIN--Continued

01589500 - SAWMILL C AT GLEN BURNIE, MD--Continued

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT					MAR				
18...	0955	0.04	17.0	13.0	28...	1000	0.51	10.5	7.5
JAN					JUN				
16...	0955	0.04	-2.0	0.5	20...	0925	0.02	22.0	21.0
FEB					AUG				
21...	1130	1.4	9.5	4.5	13...	1055	0.02	24.0	20.5

SOUTH RIVER BASIN

01590500 - BACON RIDGE B AT CHESTERFIELD, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

APR					JUL				
24...	1110	4.0	15.0	14.0	24...	1130	1.3	25.0	18.0
JUN					AUG				
14...	1200	2.4	22.0	16.0	28...	1150	2.0	25.0	19.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					APR				
11...	0935	2.6	18.0	15.0	03...	1320	3.8	16.0	16.0
JAN					MAY				
15...	1030	2.6	-6.0	0.0	14...	1155	2.8	15.0	14.0

PATUXENT RIVER BASIN

01591000 - PATUXENT R NR UNITY, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					APR				
11...	1330	14	19.5	16.0	22...	1130	19	31.5	18.5
NOV					JUN				
14...	1200	16	7.0	6.5	04...	1030	16	21.0	19.0
DEC					JUL				
10...	1100	27	5.0	3.5	22...	1215	6.1	23.5	22.5
MAR					SEP				
07...	1130	22	4.5	3.5	03...	0930	6.4	24.0	19.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					FEB				
02...	1000	7.1	13.5	15.5	25...	1345	55	0.5	3.0
NOV									
19...	1130	15	18.0	11.0					

01591400 - CATTAIL C NR GLENWOOD, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					JUN				
11...	1440	11	23.0	17.0	04...	0845	13	20.5	19.0
NOV					JUL				
14...	1015	12	7.0	5.5	22...	1005	5.0	24.0	22.5
MAR					AUG				
07...	1020	15	2.0	2.5	30...	1015	4.8	24.5	20.5
APR									
22...	0945	12	26.5	17.5					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					FEB				
17...	0930	5.5	10.5	12.5	25...	1140	28	0.0	1.5
NOV					AUG				
19...	1005	11	18.0	11.0	04...	1030	4.8	22.0	21.5

PATUXENT RIVER BASIN--Continued

01591700 - HAWLINGS R NR SANDY SPRING, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 12...	1030	8.2	18.0	15.0
NOV 14...	1340	10	10.5	7.0
DEC 10...	1300	19	9.0	4.5
MAR 12...	1300	21	13.0	9.0
APR 22...	1300	15	31.0	20.0
JUN 13...	1330	12	18.0	18.0
JUL 17...	1130	6.1	24.0	22.5
AUG 30...	1215	3.6	25.5	21.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 16...	1230	5.8	21.5	16.5
NOV 19...	1415	11	20.5	12.5
AUG 04...	1300	3.3	26.0	23.0

01592500 - PATUXENT R NR LAUREL, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 15...	1230	7.0	19.0	18.5
FEB 04...	1500	11	-0.5	1.5
JUN 19...	1225	30	24.5	16.5
JUL 17...	1330	18	25.0	19.0
SEP 03...	1310	19	30.5	24.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 17...	1130	17	16.0	18.0
JAN 06...	1155	18	4.0	3.5
FEB 14...	1000	18	-3.0	2.0
MAR 24...	1455	78	12.5	7.0
AUG 01...	1010	15	28.0	24.5

01593500 - L PATUXENT R AT GUILFORD, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 15...	1030	15	17.0	14.0
NOV 09...	1010	18	7.5	7.5
MAR 12...	1440	32	10.5	10.5
APR 19...	1015	21	28.0	18.0
JUN 14...	1105	18	20.0	18.0
JUL 19...	0930	9.6	24.5	21.5
AUG 26...	1035	20	28.5	21.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 15...	1105	13	26.0	18.0
NOV 25...	1025	25	4.5	7.0
JUL 31...	1155	3.8	30.0	25.0

01594440 - PATUXENT R NR BOWIE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 24...	1030	235	15.0	17.0
NOV 28...	1130	126	15.0	9.0
DEC 13...	1200	176	18.0	9.0
JAN 16...	1045	139	-3.0	2.0
FEB 22...	1230	213	20.0	8.0
MAR 13...	1130	183	14.5	12.0
APR 12...	1030	156	17.0	12.5
22...	1040	133	29.0	19.0
MAY 07...	0930	148	18.0	18.0
JUN 12...	1000	184	26.0	22.0
13...	0930	186	16.0	21.5
JUL 09...	1000	123	27.0	24.0
11...	1115	310	28.0	22.0
24...	0910	113	23.0	21.0
26...	1500	497	31.0	25.0
AUG 07...	1000	114	25.0	22.5
21...	1130	119	22.0	23.0
21...	1145	119	22.0	23.0
SEP 10...	0930	104	25.0	24.5
27...	1320	1180	19.5	18.0
27...	1325	1180	19.5	18.0
28...	0915	3120	16.0	18.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

PATUXENT RIVER BASIN--Continued

01594440 - PATUXENT R NR BOWIE, MD--Continued

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT					JUL				
09...	1030	131	19.0	16.0	03...	1105	216	25.0	23.0
NOV					07...	1200	105	--	26.0
19...	1030	165	19.0	14.0	16...	0945	106	28.0	25.0
DEC					16...	0950	106	28.0	25.0
18...	1030	174	-1.0	5.0	21...	1300	442	33.0	25.0
JAN					21...	1305	442	33.0	25.0
13...	1130	147	8.0	4.0	23...	1120	122	30.0	25.0
FEB					31...	1000	93	26.0	25.0
28...	1100	391	3.0	3.0	AUG				
MAR					06...	1100	104	27.0	25.0
10...	1100	243	22.0	9.0	06...	1105	104	27.0	25.0
14...	1230	322	9.5	7.5	13...	0850	97	23.0	22.0
14...	1240	322	9.5	7.5	21...	1400	280	22.0	23.0
APR					27...	1045	91	29.5	22.5
03...	1230	172	17.0	16.0	SEP				
16...	1045	735	9.0	10.0	03...	0900	138	21.0	20.0
17...	1045	1010	8.0	9.5	09...	1030	95	18.0	18.0
MAY					18...	1130	80	21.0	16.0
07...	1030	169	28.0	20.0	25...	1100	93	27.0	28.0
JUN									
11...	0900	142	27.0	22.0					
19...	1000	123	21.0	21.0					
19...	1005	123	21.0	21.0					
26...	1100	109	25.0	21.0					

POTOMAC RIVER BASIN

01594930 - LAUREL RN AT DOBBIN RD NR WILSON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					JUN				
05...	1055	5.3	12.0	11.0	13...	1015	46	4.0	10.0
NOV					JUL				
20...	1120	13	-1.0	0.5	24...	1100	13	21.5	14.5
DEC					AUG				
18...	1130	22	11.0	10.5	07...	1125	12	20.0	12.0
JAN					SEP				
30...	1525	9.9	3.0	0.0	03...	1030	4.1	18.0	17.0
FEB					16...	1315	3.9	24.5	13.0
22...	1055	16	8.0	2.0					
MAY									
31...	1345	450	13.0	6.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					APR				
01...	1315	3.8	16.0	12.0	02...	1110	9.2	15.0	11.5
NOV					30...	1440	22	24.0	13.0
18...	1235	25	14.0	7.5	MAY				
DEC					30...	1300	9.7	24.0	17.0
18...	1325	27	-1.0	0.0	JUL				
JAN					01...	1300	11	21.5	17.0
14...	1100	7.8	-6.0	0.0	09...	1530	174	17.0	18.0
FEB					AUG				
04...	1100	225	1.5	1.5	05...	1305	5.6	26.0	18.5
MAR					SEP				
04...	1235	15	0.5	2.5	09...	1300	4.6	21.0	12.5

01594934 - SF SAND RN NR WILSON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					MAR				
05...	1220	2.0	20.0	13.5	07...	1210	5.8	5.0	6.0
10...	1030	0.9	25.5	14.0	20...	1025	6.7	--	7.0
NOV					JUN				
20...	1215	3.9	-1.0	3.5	13...	1230	11	7.0	13.5
DEC					JUL				
18...	1230	5.3	10.0	11.0	24...	1030	5.1	21.5	18.0
JAN					AUG				
23...	1240	2.7	-4.0	1.0	07...	1330	7.8	26.0	16.0
FEB					SEP				
05...	1300	4.1	-3.5	2.5	03...	1330	0.04	27.0	24.0
					18...	1015	0.38	22.0	16.0

POTOMAC RIVER BASIN--Continued

01594934 - SF SAND RN NR WILSON, MD--Continued

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
DEC					APR				
18...	1345	6.1	-10.0	1.5	02...	1400	3.9	16.0	14.5
JAN					JUL				
14...	1250	3.5	-5.0	2.0	02...	1430	11	21.5	19.0
FEB					AUG				
04...	1300	68	2.5	3.0	05...	1500	2.6	27.0	23.0
MAR					SEP				
04...	1315	9.4	0.5	5.5	10...	1200	2.6	24.5	16.0

01594936 - NF SAND RN NR WILSON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					JUN				
05...	1300	0.6	14.0	10.5	13...	1410	8.1	7.0	11.0
10...	1130	0.49	24.0	12.5	AUG				
23...	1300	2.6	12.0	13.5	08...	1125	2.6	13.0	18.0
NOV					SEP				
20...	1315	2.8	-1.5	2.0	05...	1100	0.51	26.0	19.0
DEC					18...	1125	0.33	25.5	13.0
18...	1335	3.8	12.0	10.0					
JAN									
23...	1330	1.8	-6.0	0.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAY				
03...	1130	0.49	11.0	10.0	22...	1430	4.0	--	12.5
NOV					JUN				
19...	1350	4.1	23.0	9.5	26...	1100	1.0	22.0	15.0
DEC					JUL				
18...	1500	4.6	-10.0	0.0	02...	1055	5.1	17.0	16.5
JAN					AUG				
14...	1410	1.1	-4.0	0.0	07...	1215	1.2	24.5	19.0
FEB					14...	1400	0.82	24.5	17.5
04...	1345	60	2.5	3.0	SEP				
MAR					10...	1500	0.49	24.0	12.0
05...	1150	2.8	-3.0	1.5					

01595000 - NB POTOMAC R AT STEYER, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					JUN				
10...	1315	20	28.0	21.0	12...	1215	300	21.0	19.0
NOV					AUG				
27...	1345	90	21.0	2.5	08...	1310	142	22.0	15.0
JAN									
25...	1150	53	-2.0	0.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					APR				
08...	1115	14	13.0	9.0	30...	1440	153	23.0	14.0
NOV					JUL				
06...	1435	790	8.0	9.0	31...	1310	37	20.0	19.0
DEC					AUG				
18...	1045	177	-12.0	1.0	19...	1215	23	27.0	23.0
MAR									
05...	1315	110	2.5	2.0					

01595500 - NB POTOMAC R AT KITZMILLER, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					MAY				
17...	1050	54	15.0	15.0	16...	1245	211	18.0	19.0
NOV					31...	1250	15800	16.5	15.0
23...	1445	127	3.0	0.5	JUN				
DEC					27...	0855	117	12.0	16.0
10...	1100	394	2.0	3.0	AUG				
JAN					06...	0920	147	18.0	17.5
09...	1010	277	-5.0	0.5	SEP				
FEB					05...	0950	31	19.0	20.0
25...	1105	4330	5.0	3.5	10...	1000	25	23.0	21.5
MAR					19...	0900	27	15.0	14.0
11...	1125	559	9.0	5.0					

POTOMAC RIVER BASIN--Continued

01595500 - NB POTOMAC R AT KITZMILLER, MD--Continued

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT					MAR				
15...	1245	20	18.0	16.5	10...	1425	1600	16.5	5.0
NOV					APR				
01...	1205	188	6.0	10.0	03...	0800	256	6.0	9.5
13...	0850	529	12.5	11.0	MAY				
14...	1400	539	13.5	12.5	01...	1040	371	20.0	14.0
DEC					JUN				
12...	0855	975	6.0	8.0	03...	1525	172	23.0	19.5
27...	1450	345	-1.0	0.0	JUL				
JAN					11...	0910	320	19.0	20.0
10...	0915	320	-2.0	0.0	AUG				
24...	1000	497	-5.0	0.0	20...	1155	50	20.0	20.5
FEB					SEP				
20...	1115	3380	4.0	5.0	18...	1015	24	11.0	13.5

01595800 - NB POTOMAC R AT BARNUM, WV

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					APR				
17...	1345	279	19.0	14.0	30...	1100	407	19.0	13.5
NOV					JUN				
23...	1100	274	2.0	8.0	27...	1400	213	20.5	21.5
JAN					SEP				
09...	1545	422	-4.0	6.5	10...	1245	299	26.0	19.0
FEB					19...	1430	284	25.5	18.0
15...	1200	527	-3.0	4.0					
MAR									
11...	1340	901	11.0	4.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT					MAY				
31...	1245	588	12.0	8.5	15...	1440	210	20.0	14.5
DEC					JUN				
11...	1245	1530	10.5	8.0	25...	1430	201	23.5	19.5
JAN					JUL				
24...	1410	222	1.0	3.0	23...	1110	226	26.5	18.5
MAR					SEP				
06...	1430	247	-1.0	3.5	04...	1310	288	13.0	17.0
APR					30...	1120	291	26.5	17.5
03...	1010	219	11.0	9.0					

01596500 - SAVAGE R NR BARTON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT					MAY				
15...	1600	3.3	20.0	13.0	15...	0945	28	12.0	14.0
NOV					JUN				
28...	1305	78	10.0	8.0	25...	1530	11	24.0	19.0
29...	1540	364	4.5	6.0	AUG				
JAN					08...	0825	8.5	19.0	18.5
10...	1555	36	-4.0	0.0	SEP				
FEB					30...	1630	2.5	24.0	18.5
22...	1445	80	7.0	1.5					
APR									
02...	1115	350	2.5	4.5					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

NOV					APR				
06...	0950	579	8.0	9.0	21...	1510	126	12.0	9.0
DEC					MAY				
03...	1245	104	-4.5	1.5	28...	1100	39	21.0	15.5
11...	0905	78	4.5	4.0	JUL				
JAN					07...	1100	7.7	24.5	18.0
22...	1425	125	2.0	1.5	AUG				
FEB					18...	1510	4.3	26.0	22.0
19...	1630	479	3.0	2.5					
20...	1000	212	3.0	4.0					
28...	1500	84	-2.0	0.5					

PATAPSCO RIVER BASIN--Continued

01597500 - SAVAGE R BL SAVAGE R DAM NR BLOOMINGTON, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NOV				
28...	1130	65	11.0	10.0
JAN				
09...	1335	102	-4.0	5.0
JUN				
25...	1215	65	21.0	14.0
AUG				
06...	1520	64	23.0	16.0
SEP				
17...	1330	60	23.0	16.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
DEC				
10...	1040	395	7.5	5.5
JAN				
29...	1000	109	-12.0	6.0
MAR				
06...	1000	101	0.5	3.5
APR				
21...	1255	314	13.0	7.0
MAY				
29...	1430	118	27.5	18.5
JUL				
07...	1230	89	27.0	19.0

01598500 - NB POTOMAC R AT LUKE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
17...	1045	363	18.0	16.0
DEC				
06...	0945	443	0.0	5.5
JAN				
09...	1310	521	-4.0	4.0
14...	1200	500	1.0	4.5
MAY				
15...	1155	624	15.0	11.0
JUN				
25...	0945	266	17.0	18.0
AUG				
05...	1450	296	24.0	21.0
SEP				
17...	1200	296	22.0	16.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
DEC				
10...	1250	2040	8.5	6.0
17...	1115	1800	-2.0	6.0
JAN				
29...	1300	664	-3.5	0.0
MAR				
05...	1615	770	4.5	3.5
07...	1145	331	-3.0	2.0
APR				
18...	1005	461	12.0	8.0
25...	1210	508	20.0	10.5

01599000 - GEORGES C AT FRANKLIN, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
16...	1310	14	20.0	16.0
NOV				
28...	1000	45	15.0	10.0
29...	1425	205	4.0	5.0
JAN				
09...	1545	46	-5.0	4.0
FEB				
12...	0925	35	6.5	0.0
MAR				
01...	1545	202	8.5	4.5
06...	1405	95	2.0	3.5
MAY				
19...	1220	42	19.0	15.0
JUN				
24...	1445	25	27.0	23.5
AUG				
05...	1415	10	23.0	19.0
SEP				
17...	0850	6.3	14.0	11.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NOV				
04...	1200	3360	14.5	11.0
05...	1210	1340	12.0	10.0
06...	1055	628	11.0	11.0
08...	1140	219	7.5	9.0
DEC				
03...	1110	215	-2.0	6.5
10...	1325	100	8.0	4.5
JAN				
29...	1510	56	-3.5	0.0
30...	1210	56	-1.0	0.0
FEB				
13...	1450	92	-8.0	0.0
14...	1415	92	-4.0	0.0
MAR				
05...	1440	83	5.5	4.0
APR				
21...	1040	140	15.5	10.5
MAY				
30...	1140	56	26.5	14.5
JUL				
08...	1040	11	30.5	24.5
AUG				
19...	1355	6.0	26.0	22.0

POTOMAC RIVER BASIN--Continued

01600000 - NB POTOMAC R AT PINTO, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
16...	1510	413	21.0	18.0
NOV				
20...	1140	360	-3.0	6.0
JAN				
10...	1300	666	-3.0	4.0
14...	1410	643	2.0	5.0
FEB				
27...	1115	4680	6.0	5.0
APR				
02...	0945	5000	3.0	5.5
MAY				
14...	1500	644	27.0	20.0
JUN				
24...	1250	383	29.0	22.5
AUG				
05...	1100	333	24.0	22.0
SEP				
16...	1200	350	22.5	17.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
11...	1315	348	22.0	18.5
DEC				
10...	1500	2390	9.0	8.0
17...	1320	2200	0.0	6.0
JAN				
30...	1325	506	-2.0	1.0
MAR				
05...	1135	819	1.5	5.0
APR				
18...	1200	1050	14.0	10.0
JUN				
02...	1615	376	22.0	22.5
AUG				
01...	1355	287	30.0	24.0
20...	1130	344	25.0	23.0

01601500 - WILLS C NR CUMBERLAND, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
10...	1215	44	16.0	17.0
NOV				
19...	1535	137	4.0	4.0
JAN				
02...	1220	314	6.0	7.0
FEB				
13...	1045	1900	5.0	3.0
MAR				
25...	1545	1310	9.0	5.5
MAY				
07...	1025	562	11.0	9.0
JUN				
18...	0955	96	18.0	16.0
JUL				
31...	0920	180	24.0	22.0
SEP				
12...	1525	28	19.0	18.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
25...	1230	306	17.0	14.0
JAN				
17...	1000	88	-4.0	2.0
FEB				
24...	1020	995	-2.0	6.0
APR				
08...	1300	253	18.0	10.0
MAY				
28...	1030	225	18.0	13.0
JUN				
30...	1115	53	26.0	17.0
AUG				
15...	0930	28	20.0	17.0

01603000 - NB POTOMAC R NR CUMBERLAND, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
10...	1015	508	18.0	16.0
NOV				
20...	1245	488	-2.0	6.5
JAN				
02...	1325	1360	5.0	7.0
FEB				
13...	1425	3820	-4.0	0.0
APR				
01...	1615	7520	7.0	6.5
MAY				
07...	1115	2220	12.0	10.0
JUN				
18...	1035	871	22.0	19.0
JUL				
31...	0955	612	26.0	24.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
25...	1025	1310	16.0	15.0
DEC				
04...	1320	6180	-2.0	9.0
JAN				
17...	1045	451	-2.0	2.0
FEB				
24...	1100	4620	-2.0	5.0
MAY				
28...	0945	832	16.0	14.0
JUN				
30...	1305	337	28.0	21.0
AUG				
15...	1020	409	24.0	20.0

POTOMAC RIVER BASIN--Continued

01610000 - POTOMAC R AT PAW PAW, WV

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
OCT				
10...	1410	1380	17.0	18.0
26...	1100	1110	18.0	15.0
NOV				
26...	1310	1340	12.0	10.0
JAN				
28...	1000	2140	-1.0	0.0
FEB				
25...	1125	19900	7.0	4.5
APR				
25...	1520	1960	16.0	9.0
MAY				
28...	1300	3010	18.0	14.0
29...	1530	2950	20.0	15.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
NOV				
27...	1245	11400	9.0	9.5
JAN				
28...	0845	2470	-12.0	0.0
FEB				
27...	0940	5240	-2.0	4.0
MAR				
27...	1030	2870	14.0	7.0
JUL				
03...	1115	2330	22.0	20.0
29...	1025	635	30.0	24.0
SEP				
29...	0925	1130	22.0	20.0

01613000 - POTOMAC R AT HANCOCK, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
OCT				
11...	1500	1160	20.0	18.0
26...	0915	1270	14.0	15.0
NOV				
26...	1155	1510	10.0	8.0
JAN				
28...	1055	2700	2.0	0.0
FEB				
25...	0930	20500	8.0	4.0
APR				
25...	1330	2130	15.0	8.0
MAY				
28...	1050	3810	16.0	13.0
JUL				
30...	1420	1410	29.0	24.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
OCT				
22...	0925	961	14.0	13.0
NOV				
27...	1015	9800	10.0	9.5
JAN				
16...	1355	1520	2.0	0.0
FEB				
27...	1040	7980	0.0	4.0
MAR				
27...	0845	4000	12.0	8.0
APR				
08...	1015	3110	12.0	10.0
JUL				
29...	1225	811	31.0	26.0

01614500 - CONOCOCHEAGUE C AT FAIRVIEW, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
OCT				
09...	1055	165	18.0	14.0
NOV				
19...	1035	153	2.0	5.0
JAN				
03...	1120	378	3.0	6.5
FEB				
14...	1020	2170	-3.0	2.0
MAY				
06...	1140	798	16.0	10.0
JUN				
17...	1150	214	22.0	18.0
JUL				
29...	1120	230	23.0	18.0
AUG				
26...	1615	153	24.0	23.0
SEP				
12...	0910	124	12.0	17.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)
OCT				
22...	1110	153	15.0	13.0
DEC				
03...	1215	1730	-2.0	7.0
JAN				
16...	1000	146	-6.0	0.0
FEB				
28...	1130	1240	-3.0	0.5
APR				
02...	1515	528	20.5	17.0
07...	1040	533	14.0	10.0
MAY				
21...	1025	2090	14.0	12.0
JUL				
01...	1005	132	19.0	19.0
30...	1240	114	27.0	23.0
AUG				
11...	0835	126	22.0	21.0
21...	1400	138	--	22.0

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

POTOMAC RIVER BASIN--Continued

01617800 - MARSH RUN AT GRIMES, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
09...	1250	5.2	20.0	16.0
NOV				
19...	1140	3.5	2.0	6.0
JAN				
03...	1250	5.6	4.0	7.0
FEB				
14...	1325	18	0.0	2.0
MAR				
29...	1145	9.9	17.0	4.5
MAY				
06...	1435	4.2	22.0	14.0
JUN				
17...	1350	4.2	25.0	19.0
JUL				
29...	1255	3.2	25.0	20.0
SEP				
12...	1140	3.5	14.0	16.0
19...	1130	2.4	21.0	16.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
22...	1300	15	15.0	14.0
DEC				
02...	1440	22	0.0	7.0
JAN				
16...	1110	8.2	-4.0	2.0
FEB				
20...	1100	28	4.0	6.0
APR				
02...	1245	18	22.5	17.0
07...	1250	18	16.0	12.0
MAY				
21...	1145	30	15.0	13.0
JUL				
01...	1340	4.6	22.0	18.0
30...	1350	4.1	28.0	22.0
AUG				
11...	0955	3.3	25.0	23.0
20...	1740	4.2	21.5	23.0

01618000 - POTOMAC R AT SHEPHERDSTOWN, WV

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
09...	1445	1320	23.0	17.0
11...	1225	2090	19.0	18.0
NOV				
07...	1300	1870	8.0	11.0
19...	1255	1670	4.0	8.0
JAN				
03...	1415	4510	3.0	7.0
07...	1230	6160	7.0	6.0
FEB				
14...	1410	27400	-2.0	1.5
MAR				
11...	1200	5080	12.0	8.5
MAY				
01...	1200	2370	23.5	24.5
06...	1345	14600	20.0	12.0
JUN				
17...	1540	2960	27.0	21.0
JUL				
01...	1230	1200	20.0	24.0
30...	1050	2150	27.0	25.0
SEP				
03...	1200	1270	28.0	26.0
11...	1115	1400	22.0	22.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
17...	1400	939	14.0	12.0
22...	1340	1400	14.0	13.0
NOV				
04...	1230	4440	14.5	13.0
06...	1300	145000	16.0	13.0
DEC				
02...	1210	22700	2.0	9.0
JAN				
07...	1030	2980	-2.0	1.5
16...	1215	2050	0.0	0.0
FEB				
20...	1220	46400	8.0	6.0
MAR				
03...	1045	8240	6.0	0.0
APR				
07...	1355	3130	17.0	12.0
MAY				
05...	1100	3650	19.0	18.0
21...	1340	4770	16.0	13.0
22...	1135	12000	17.0	14.0
JUL				
01...	1230	1300	22.0	24.0
01...	1530	1350	23.0	24.0
AUG				
12...	1045	1070	17.0	22.0
SEP				
02...	1135	1250	20.0	21.0

01619500 - ANTIETAM C NR SHARPSBURG, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
09...	1420	172	21.0	15.0
NOV				
19...	1315	168	4.0	6.0
JAN				
03...	1520	227	3.0	7.0
FEB				
15...	1055	652	-5.0	2.0
MAY				
06...	1405	293	21.0	13.0
JUN				
17...	1520	202	27.0	19.0
JUL				
29...	1450	156	27.0	23.0
SEP				
11...	1250	130	25.0	22.0
12...	1255	130	17.0	18.0
25...	1700	100	19.5	17.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
POTOMAC RIVER BASIN--Continued									
01619500 - ANTIETAM C NR SHARPSBURG, MD--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
22...	1450	220	15.0	13.0	21...	1300	666	17.0	14.0
DEC					JUL				
02...	1245	631	2.0	8.0	01...	1445	158	21.0	19.0
JAN					30...	1450	121	29.0	24.0
16...	1245	191	0.0	2.0	AUG				
FEB					11...	1230	122	25.0	24.0
28...	1335	553	-2.0	4.0	27...	1230	13	23.0	21.0
APR									
02...	0915	396	20.0	14.5					
07...	1415	370	17.0	11.0					
01637500 - CATOCTIN C NR MIDDLETOWN, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
02...	1340	23	14.0	13.0	16...	1255	53	17.5	15.0
NOV					JUN				
08...	1330	24	6.5	8.5	12...	0830	35	23.5	21.5
DEC					JUL				
21...	1040	41	4.0	5.5	23...	1140	13	20.5	23.0
FEB					AUG				
14...	1435	200	2.0	2.0	23...	0915	17	18.5	19.0
MAR									
06...	0935	62	-2.0	3.0					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
09...	0845	8.1	12.5	11.5	02...	1025	61	14.0	14.5
NOV					JUN				
14...	0945	65	16.0	13.0	19...	1230	13	23.5	21.0
FEB					JUL				
20...	1320	452	4.5	4.5	03...	1120	19	22.0	22.0
MAR					AUG				
26...	1010	99	13.0	8.0	06...	1030	2.3	26.0	23.0
01639000 - MONOCACY R AT BRIDGEPORT, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
10...	1225	17	20.0	17.0	17...	1340	75	14.5	16.0
DEC					JUN				
17...	1320	112	16.0	9.5	10...	1445	43	25.0	25.0
MAR					AUG				
04...	1405	97	2.0	6.0	19...	1310	16	26.0	24.5
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
07...	1335	28	14.5	14.5	24...	1445	144	9.5	9.0
NOV					MAY				
12...	1400	100	12.5	12.5	05...	1315	52	26.5	17.5
JAN					JUN				
07...	1225	47	-3.5	0.5	23...	1325	8.8	31.0	27.5
01639500 - B PIPE C AT BRUCEVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
10...	1000	43	17.0	15.5	17...	1130	71	14.0	15.0
NOV					JUN				
06...	1410	97	8.5	10.0	10...	1255	57	26.0	24.0
DEC					JUL				
17...	1105	91	12.0	9.5	16...	1150	128	30.5	24.5
MAR					AUG				
04...	1140	78	2.5	6.0	19...	1105	29	27.0	23.0

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
POTOMAC RIVER BASIN--Continued									
01639500 - B PIPE C AT BRUCEVILLE, MD--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAY				
07...	1125	33	12.0	13.0	05...	1015	67	21.5	15.5
NOV					JUN				
12...	1200	47	13.0	12.5	23...	1050	25	26.5	24.0
FEB					AUG				
18...	1115	204	2.0	0.5	04...	1125	13	27.5	26.0
MAR									
24...	1225	106	10.5	8.5					
01640965 - HUNTING C NR FOXVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					JUN				
09...	1240	0.38	17.0	14.0	04...	1230	1.0	20.0	17.0
29...	0940	1.3	19.0	15.0	11...	1200	1.1	21.0	16.5
NOV					JUL				
05...	1500	2.2	12.0	11.0	15...	1330	0.18	27.5	21.0
DEC					16...	1320	0.62	31.0	21.0
18...	1500	1.6	13.0	8.5	30...	1300	0.44	23.0	20.0
JAN					AUG				
30...	1350	1.0	-0.5	1.0	20...	1200	0.16	21.5	18.5
MAR					SEP				
05...	1130	3.2	10.5	7.0	26...	1210	0.14	17.0	15.0
APR									
18...	1050	1.7	16.5	11.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					MAR				
08...	1150	0.11	14.0	10.5	25...	1420	3.5	17.5	9.0
NOV					APR				
13...	1315	3.1	17.0	13.0	02...	1330	2.4	27.0	13.0
26...	1240	5.7	10.0	8.0	JUN				
DEC					24...	1025	2.3	19.5	16.5
17...	1300	4.3	4.0	3.0	AUG				
JAN					05...	0900	0.1	19.5	17.0
08...	1100	1.4	-5.0	0.0					
FEB									
19...	1120	18	3.0	3.0					
01640970 - HUNTING C TR NR FOXVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					JUN				
09...	1410	1.7	17.0	14.0	11...	1320	2.4	21.0	17.5
NOV					18...	1255	1.9	23.0	18.0
05...	1645	5.6	11.0	10.0	JUL				
DEC					11...	1310	1.0	33.0	22.0
18...	1350	4.1	12.5	8.5	15...	1205	0.91	26.0	22.0
MAR					AUG				
05...	1305	6.7	12.0	6.0	06...	1135	0.62	22.0	19.5
APR					20...	1245	0.74	21.5	19.5
18...	1210	4.5	19.0	12.0	SEP				
MAY					26...	1305	0.58	17.0	15.0
14...	1050	3.3	22.0	16.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					APR				
08...	1325	0.43	15.5	12.0	24...	1310	8.3	12.0	9.0
NOV					JUN				
13...	1455	6.6	16.5	12.5	24...	0930	8.9	19.0	17.0
FEB					AUG				
19...	1300	21	2.5	3.0	05...	1035	0.44	21.0	19.5
MAR									
25...	1220	7.7	15.0	6.5					

POTOMAC RIVER BASIN--Continued

01640975 - HUNTING C NR THURMONT,MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
09...	1125	3.4	20.0	16.5
NOV				
05...	1340	6.7	13.5	13.0
DEC				
18...	1130	16	13.5	6.0
JAN				
30...	1215	3.4	-0.5	4.5
MAR				
05...	1015	9.7	10.0	5.0
APR				
18...	0930	8.1	15.5	13.0
23...	1155	7.0	26.0	15.5
MAY				
14...	1200	7.1	24.5	19.5
21...	1330	9.4	25.0	17.0
JUN				
04...	1045	5.6	21.0	18.0
11...	1040	4.9	19.5	14.5
18...	1425	3.5	26.0	14.0
JUL				
02...	1340	1.9	26.0	10.5
15...	1040	2.0	24.0	13.5
AUG				
20...	1410	2.3	22.0	19.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
01...	1240	3.1	25.0	19.0
08...	1020	3.0	13.0	16.5
23...	1110	3.1	14.0	15.0
NOV				
13...	1125	12	16.0	11.5
JAN				
08...	0930	4.5	-7.5	3.0
FEB				
19...	0940	24	3.0	4.0
MAR				
25...	1610	15	16.0	18.5

01641000 - HUNTING C AT JIMTOWN, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
09...	1610	7.4	20.0	16.5
NOV				
06...	1210	12	10.0	10.0
DEC				
18...	0950	23	10.0	7.0
MAR				
04...	1600	39	1.5	4.0
APR				
17...	1550	18	17.5	16.0
JUN				
11...	0840	10	21.0	19.0
JUL				
16...	0930	5.1	26.0	22.5
AUG				
20...	0945	4.7	22.0	21.0

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
08...	0900	4.2	9.5	11.0
NOV				
13...	0920	21	15.5	13.0
JAN				
07...	1515	11	-3.0	1.0
FEB				
18...	1425	92	3.5	2.5
MAR				
25...	0945	35	11.0	6.0
MAY				
06...	0855	17	22.0	15.0
JUN				
24...	1405	12	26.5	22.0
JUL				
28...	1340	4.0	29.0	24.5

01643000 - MONOCACY R AT JUG BRIDGE NR FREDERICK, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
NOV				
12...	1235	410	7.0	9.0
DEC				
19...	0945	555	6.0	8.5
MAR				
05...	1625	622	11.0	8.5
APR				
16...	1100	520	18.5	15.5
JUN				
12...	1235	269	22.5	24.0
JUL				
22...	1425	135	28.5	26.5
AUG				
21...	1325	159	23.0	24.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT				
11...	1045	136	19.0	18.0
JUN				
19...	1050	170	23.5	22.5

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
POTOMAC RIVER BASIN--Continued									
01643500 - BENNETT C AT PARK MILLS, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
02...	1145	31	15.5	12.0	18...	1430	35	25.0	17.0
NOV					JUN				
12...	1530	26	5.5	8.5	12...	1030	29	22.0	20.0
DEC					JUL				
21...	1315	36	3.0	5.5	23...	0845	56	22.5	20.0
FEB					AUG				
20...	1215	56	8.0	3.5	21...	1015	13	26.0	21.0
MAR									
06...	1600	36	3.5	6.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					FEB				
09...	1230	10	20.0	14.5	20...	0945	258	3.0	4.0
NOV					AUG				
14...	1200	22	17.5	14.0	06...	1330	4.9	26.5	23.0
01645000 - SENECA C AT DAWSONVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAR				
26...	1130	45	19.0	16.5	27...	1045	88	13.5	7.5
JAN					JUL				
28...	1200	61	2.0	1.0	26...	1030	75	24.0	23.0
FEB					AUG				
26...	1050	85	9.0	8.0	23...	1230	29	23.5	21.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					AUG				
31...	1200	34	19.0	12.0	06...	1130	26	26.5	24.0
01645200 - WATTS B AT ROCKVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAR				
15...	1435	0.74	25.0	17.0	06...	1350	1.7	5.5	7.5
NOV					APR				
13...	0955	0.93	6.0	6.5	24...	1110	1.4	15.0	15.5
DEC					JUL				
11...	1030	1.6	8.0	6.5	29...	1310	1.4	25.5	21.0
FEB					SEP				
05...	1140	2.2	-1.0	0.5	05...	1140	0.41	30.0	24.5
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					JAN				
16...	0940	1.2	19.0	16.5	30...	1130	1.9	-3.0	0.5
NOV					AUG				
26...	1145	1.7	10.0	8.0	06...	0940	0.5	26.0	23.0
01648000 - ROCK C AT SHERRILL DR WASH, DC									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					APR				
16...	1025	15	16.0	17.5	23...	1330	24	25.0	21.5
NOV					JUN				
15...	1240	16	14.0	7.0	17...	1330	23	26.5	22.5
DEC					JUL				
11...	1315	31	10.5	6.5	31...	1245	21	28.5	25.0
MAR					AUG				
13...	1030	28	10.5	8.5	27...	1430	27	26.0	23.5
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					NOV				
04...	1200	24	17.5	16.5	21...	1430	19	11.0	13.0

POTOMAC RIVER BASIN--Continued

01649500 - NE B ANACOSTIA R AT RIVERDALE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
OCT 16...	1410	15	25.0	19.0	APR 23...	0945	27	26.0	21.0
DEC 14...	1050	33	13.5	10.0	JUN 17...	0930	19	24.5	23.0
JAN 09...	1045	36	-3.5	0.0	JUL 25...	1145	8.5	31.5	29.0
FEB 06...	1120	81	1.5	2.0	AUG 27...	1045	25	27.0	24.5
MAR 13...	1420	34	16.0	13.5					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT 01...	1220	19	25.0	21.0	MAR 10...	1345	42	22.0	13.5
NOV 21...	1025	23	11.0	13.0	JUL 18...	0810	11	28.5	27.0

01651000 - NW B ANACOSTIA R NR HYATTSVILLE, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCT 16...	1215	12	21.5	18.5	APR 23...	1130	17	25.5	23.5
DEC 14...	1315	20	16.0	10.5	JUN 17...	1120	15	25.5	26.0
FEB 06...	1330	50	3.5	2.5	JUL 31...	1030	9.5	31.0	27.0
MAR 13...	1300	20	14.5	12.5	AUG 27...	1245	20	29.0	27.5

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT 01...	1045	7.0	25.5	20.5	JUL 18...	1045	4.5	32.0	30.0
NOV 21...	1230	13	11.5	12.0	AUG 05...	0930	6.5	29.0	25.5

01653600 - PISCATAWAY C AT PISCATAWAY, MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

APR 24...	0835	10	14.0	17.0	AUG 27...	1100	3.3	30.0	23.0
JUN 14...	0930	5.5	19.0	16.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT 10...	1335	15	23.0	16.0	MAR 31...	1005	30	23.0	13.0
DEC 03...	1140	67	3.0	5.0	MAY 12...	0935	8.8	18.0	15.0
JAN 13...	1330	17	3.0	1.0	JUN 23...	0910	0.64	23.0	20.0
FEB 18...	1455	199	7.0	4.0					

01660920 - ZEKIAH SWAMP RN NR NEWTON MD

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

APR 22...	1635	23	31.0	24.0	AUG 27...	1530	29	25.0	23.0
JUN 12...	1630	52	21.0	22.0					

WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

OCT 10...	1140	18	23.0	14.0	MAY 12...	1445	11	20.0	15.0
MAR 31...	1625	57	27.0	19.0	JUN 23...	1220	0.17	24.0	21.0

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
POTOMAC RIVER BASIN--Continued									
01661050 - ST CLEMENT C NR CLEMENTS, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
23...	1615	5.3	23.0	22.0	22...	1600	0.02	28.0	26.0
JUN					AUG				
13...	1450	2.2	19.0	20.0	26...	1510	57	27.0	23.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					APR				
09...	1500	7.6	21.0	15.0	01...	0915	16	17.0	13.0
DEC					MAY				
02...	1605	46	6.0	10.0	13...	0900	4.4	16.0	14.0
JAN					JUN				
14...	1600	14	-3.0	0.0	23...	1510	0.51	28.0	22.0
FEB					24...	0820	0.45	21.0	21.0
19...	1515	32	7.0	7.0					
01661500 - ST MARYS R AT GREAT MILLS, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
APR					JUL				
23...	1030	5.3	23.0	19.0	22...	1300	0.5	31.0	25.0
JUN					AUG				
13...	0845	3.0	15.0	19.0	26...	1220	12	26.0	22.0
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
OCT					APR				
09...	1200	9.1	21.0	15.0	01...	1240	12	22.0	15.0
DEC					MAY				
02...	1300	119	10.0	11.0	13...	1240	4.1	18.0	16.0
JAN					JUN				
14...	1200	6.6	-4.0	0.0	24...	1120	1.9	22.0	22.0
FEB									
19...	1200	21	9.0	7.0					
MONONGAHELA RIVER BASIN									
03075500 - YOUGHIOGHENY R NR OAKLAND, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
16...	1515	29	22.0	17.0	16...	1505	92	21.0	18.5
NOV					JUN				
27...	1530	204	17.5	3.0	26...	1410	101	22.0	19.0
JAN					AUG				
08...	1325	193	-4.0	1.5	07...	1500	85	25.5	20.5
FEB					SEP				
21...	1430	167	7.0	1.5	18...	1500	16	26.0	18.0
APR									
03...	1550	642	5.5	4.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					APR				
05...	1650	7240	9.5	10.0	23...	1000	370	-3.0	6.0
DEC					25...	1015	262	13.0	6.5
12...	1125	1050	5.5	7.5	MAY				
MAR					29...	1130	108	24.5	19.5
11...	1300	2350	3.5	5.0	AUG				
					19...	1045	32	24.0	22.0
03076500 - YOUGHIOGHENY R AT FRIENDSVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
16...	1025	77	15.0	15.0	17...	0930	219	11.0	17.0
NOV					JUN				
27...	1000	331	5.0	4.0	26...	0940	248	18.0	17.5
JAN					AUG				
08...	0940	367	-4.0	2.0	07...	1055	163	20.0	18.5
FEB					SEP				
21...	1010	407	1.0	1.5	18...	1015	46	15.5	14.0
22...	1045	369	10.0	2.0					
APR									
03...	1045	1210	-1.0	4.5					

WATER-QUALITY DATA, WATER YEARS 1985 AND 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
POTOMAC RIVER BASIN--Continued									
03076500 - YOUGHIOGHENY R AT FRIENDSVILLE, MD--Continued									
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					MAR				
05...	1040	10900	8.5	10.5	11...	1030	3630	6.0	5.0
DEC					APR				
13...	0900	1590	1.0	6.5	22...	0915	673	2.0	8.5
16...	1000	1010	0.5	6.5	AUG				
JAN					18...	0945	103	22.0	20.0
23...	0915	1080	-0.5	2.0					
FEB									
27...	0915	999	0.0	2.0					
03076600 - BEAR C AT FRIENDSVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
11...	1405	17	21.0	14.5	17...	1240	36	12.5	15.5
NOV					JUN				
27...	1210	53	6.0	4.0	26...	1150	40	20.0	14.0
JAN					AUG				
08...	1045	69	-4.0	1.0	07...	1150	17	23.0	18.0
FEB					SEP				
21...	1230	63	3.0	1.0	18...	1235	5.5	21.0	13.0
APR									
03...	1330	280	3.0	4.0					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					FEB				
05...	0935	1030	8.0	9.5	13...	1215	83	-11.0	0.0
06...	1240	503	8.5	9.0	27...	1225	106	0.0	20.0
DEC					APR				
13...	0955	287	0.0	5.5	22...	1130	139	2.0	6.5
16...	1205	155	0.5	3.0	JUN				
JAN					03...	1210	40	17.5	8.5
23...	1035	199	-1.0	2.5	AUG				
23...	1355	189	-1.0	2.5	18...	1040	14	23.0	18.0
28...	1525	70	-15.0	0.0					
03078000 - CASSELMAN R AT GRANTSVILLE, MD									
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985									
OCT					MAY				
15...	1445	7.0	20.0	15.5	15...	1515	43	19.0	17.5
NOV					JUN				
27...	1335	75	9.0	5.0	26...	1600	34	20.0	23.0
JAN					AUG				
08...	1510	82	-4.0	1.0	05...	1620	16	23.0	22.5
FEB					SEP				
22...	1210	139	10.0	1.0	20...	0825	4.5	11.0	14.0
APR									
02...	1430	374	2.5	4.5					
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986									
NOV					APR				
05...	0835	2820	9.0	10.0	22...	1435	160	0.0	7.0
DEC					MAY				
03...	1445	238	-4.0	2.0	28...	1335	81	25.5	16.0
12...	1510	292	3.0	6.5	JUL				
JAN					08...	1505	12	33.5	22.0
22...	1215	169	5.5	1.5	AUG				
FEB					18...	1310	13	26.0	23.0
28...	1330	125	-3.5	0.5					

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 three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of annual maximum stage for tidal crest-stage stations.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1986

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		INDIAN RIVER BASIN				
01484510	Sheep Pen Ditch near Shortly, De.	Lat 38°36'21", long 75°21'29", Sussex County, Hydrologic Unit 02060010 at bridge on road no. 432, 2.0 mi east of Shortly, and 3.8 mi upstream from mouth at Millsboro Pond.	5.4	1986	4- 3-86 9-12-86	6.31 .88
01484525	Millsboro Pond Outlet at Millsboro, De.	Lat 38°35'40", long 75°17'29", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 24, at Millsboro.	66	1985-86	11-20-85 4- 3-86 9-12-86	54.9 64.4 18.3
01484530	Iron Branch at Millsboro, De.	Lat 38°34'40", long 75°17'19", Sussex County, Hydrologic Unit 02060010, at bridge on U.S. Highway 113, at Millsboro, 1.1 mi upstream from Whartons Branch, and 1.4 mi upstream from mouth.	8.0	1985-86	11-20-85 4- 3-86 9-12-86	2.97 4.92 .59
01484531	Whartons Branch near Millsboro, De.	Lat 38°33'42", long 75°16'30", Sussex County, Hydrologic Unit 02060010, at bridge on U.S. Highway 113, 2.2 mi southeast of Millsboro, and 1.7 mi upstream from mouth.	5.8	1968-69, 1971, 1985-86	11-20-85 4- 3-86 9-12-86	1.97 2.72 .47
01484535	Swan Creek near Warwick, De.	Lat 38°36'49", long 75°15'19", Sussex County, Hydrologic Unit 02060010, at bridge on road No. 304, 0.6 mi upstream from Waples Pond, 1.5 mi northwest of Warwick, and 2.3 miles upstream from mouth.	7.2	1985-86	11-20-85 4- 3-86 9-12-86	2.84 3.65 1.32
01484550	Pepper Creek at Dagsboro, De.	Lat 38°32'50", long 75°14'40", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 26, at Dagsboro, and 3.5 mi upstream from mouth.	8.78	1955-71, 1985-86	11-20-85 4- 3-86 9-12-86	5.07 5.17 1.36
01484600	Blackwater Creek near Clarksville, De.	Lat 38°32'43", long 75°09'49", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 54, 1.0 mi west of Clarksville, and 3.1 mi upstream from mouth.	3.5	1968-69*, 1971*, 1985-86	11-20-85 4- 3-86 9-12-86	1.53 1.06 .08
01484655	Love Creek at Robinsonville, De.	Lat 38°43'03", long 75°11'14", Sussex County, Hydrologic Unit 02060010, at bridge on road No. 277, 0.4 mi northeast of Robinsonville, and about 2.8 mi upstream from mouth.	12	1985-86	11-20-85 4- 3-86 9-12-86	4.27 7.32 3.39

* Drainage area was published as 4.5 sq mi.

Discharge measurements made at low-flow partial-record stations during water year 1986

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		INDIAN RIVER BASIN--Continued				
01484677	Chapel Branch at Angola, De.	Lat 38°40'18", long 75°11'10", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 24, at Angola, and 0.3 mi upstream from mouth.	8.0	1985-86	11-20-85 4- 3-86 9-12-86	2.25 4.87 .96
		DIRICKSON CREEK BASIN				
01484700	Bearhole Ditch at Bunting, De.	Lat 38°28'17", long 75°09'22", Sussex County, Hydrologic Unit 02060010, at culverts on road No. 390A, 0.6 mi north of Bunting, 3.7 mi east of Selbyville, and 1.6 mi upstream from mouth.	6.4	1968-71*, 1985-86	11-20-85 4- 3-86 9-12-86	3.32 2.67 1.27
		CHOPTANK RIVER BASIN				
01490550	Choptank River near Choptank Mills, De.	Lat 39°03'15", long 75°44'05", Kent County, Hydrologic Unit 02060005, at bridge on road No. 211, near Choptank Mills, 2.2 mi southeast of Henderson, Md., 1.5 mi downstream from mud millpond, and about 66 mi upstream from mouth.	58	1985-86	5-12-86 9-12-86	24.6 4.49

* Drainage area was published as 6.2 sq mi.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1986

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		Delaware River basin					
01478040	Christina River near Bear, DE	Lat 39°38'12", long 75°40'53", New Castle County, Hydrologic Unit 02040205, on right bank 500 ft upstream from highway bridge, 1.3 mi northwest of Bear, 1.6 mi downstream from Belltown Run, and 17.7 mi upstream from mouth.	40.6	1979-82‡, 1983-86	1-26-86	7.29	986
*01484531	Whartons Branch near Millsboro, De.	Lat 38°33'42", long 75°16'30", Sussex County, Hydrologic Unit 02060010, at bridge on U. S. Highway 113, 1.7 mi upstream from mouth, and 2.2 mi southeast on Millsboro.	5.8	1986	12- 1-85	3.21	90
*01484600	Blackwater Creek near Clarksville, De.	Lat 38°32'43", long 75°09'49", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 54, 1.0 mi west of Clarksville, and 3.1 mi upstream from mouth.	3.5	1986	12- 1-85 1-26-86	3.71 3.71	71 71
		Susquehanna River basin					
01577940	Broad Creek tributary at Whiteford, MD	Lat 39°42'14", long 76°21'49", Harford County, Hydrologic Unit 02050306, at upstream side of culvert on State Highway 165, 0.8 mi upstream from mouth, and 1.0 mi southwest of Whiteford.	.77	1971-86	11- 5-85	6.79	165
		Gunpowder River basin					
01584500	Little Gunpowder Falls at Laurel Brook, MD	Lat 39°30'18", long 76°25'56", Baltimore County, Hydrologic Unit 02060003, 750 ft upstream from bridge on Bottom Road, 5 mi southwest of Bel Air, and 10.5 mi upstream from mouth.	36.1	1927-70‡, 1971-86	1986	b<5.5	-
		Potomac River basin					
01596005	Savage River near Frostburg, MD	Lat 39°40'56", long 78°57'54", Garrett County, Hydrologic Unit 02070002, at upstream side of culvert on U.S. Highway 40, 1.9 mi northwest of Frostburg city limits, and about 26 mi upstream from mouth.	a1.5	1971-86	1986	b<19.0	-
01601000	Wills Creek below Hyndman, PA	Lat 39°48'43", long 78°43'00", Bedford County, Hydrologic Unit 02070002, 150 ft above county highway bridge, 150 ft downstream from Pennsylvania Railroad bridge, 0.35 mi downstream from Little Wills Creek, and 0.5 mi south of Hyndman.	146	1951-67‡, 1968-86	11- 5-85	6.32	3,490
01610105	Pratt Hollow tributary at Pratt, MD	Lat 39°41'35", long 78°30'18", Allegany County, Hydrologic Unit 02070003, at upstream side of culvert on U.S. Highway 40, 0.2 mi northeast of Pratt, and 1.0 mi upstream from Kifer Hollow.	.70	1971-86	5-21-86	11.89	59

‡ Operated as a continuous-record station.
* Operated as a low-flow partial-record station
b Peak stage did not reach bottom of gage.

Annual maximum discharge at crest-stage partial-record stations during water year 1986

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		Potomac River Basin--Continued					
01613150	Ditch Run near Hancock, MD	Lat 39°41'30", long 78°07'57", Washington County, Hydrologic Unit 02070004, at upstream side of culvert on U.S. Highway 40, 0.3 mi upstream from mouth, and 2.7 mi east of Hancock.	a4.8	1965-86	11- 5-85	5.81	220
01658000	Mattawoman Creek near Pomonkey MD	Lat 38°35'45", long 77°03'25", Charles County, Hydrologic Unit 02070011, at downstream side of bridge on State Highway 227, 1.2 mi southeast of Pomonkey, and 12.6 mi upstream from mouth.	54.8	1949-72‡, 1973-86	11-30-85	5.25	1,590
		Monongahela River basin					
03075600	Toliver Run tributary near Hoyes Run, MD	Lat 39°29'39", long 79°25'14", Garrett County, Hydrologic Unit 05020006, at upstream side of culvert on Swallow Falls Road, 100 ft upstream from mouth, and 2.4 mi south of Hoyes Run.	.53	1965-86	11- 5-85	6.23	73
03078500	Big Piney Run near Salisbury, PA	Lat 39°43'34", long 79°02'55", Somerset County, Hydrologic Unit 05020006, 600 ft upstream from Little Piney Run, and 2.5 mi southeast of Salisbury.	24.5	1932-70‡, 1974-86	11- 5-85	6.22	2,720

‡ Operated as a continuous-record station.
a Approximately

Annual maximum discharge at crest-stage partial-record stations during water year 1986

Tidal crest-stage partial-record stations

The following table contains annual maximum stages for tidal crest-stage stations. The informaton 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. 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 stage at tidal crest-stage partial-record stations during water year 1986

Station No.	Station Name	Location	Period of Record	Annual Maximum Date	Annual Maximum Elevation, in feet NGVD
		SMYRNA RIVER BASIN			
01483335	Duck Creek at Smyrna, DE	Lat 39°18'31", long 75°36'34", Kent County, Hydrologic Unit 02040207, at bridge on U.S. Highway 13, at north edge of Smyrna, 2 mi north of intersection of State Highway 300 and U.S. Highway 13 on downstream right wingwall of bridge.	1966-86	11- 3-85	4.70
		MURDERKILL RIVER BASIN			
01484085	Murderkill River at Bowers, DE	Lat 39°03'30", long 75°23'51", Kent County, Hydrologic Unit 02040207, at Faulkner's Landing in Bowers, on left bank 10 ft southeast of southeast corner of restaurant on Faulkner's Pier.	1966-86	12-13-85	6.19
		CEDAR CREEK BASIN			
01484235	Cedar Creek near Slaughter Beach, DE	Lat 38°56'06", long 75°19'26", Sussex County, Hydrologic Unit 02040207, at bridge No. S-164 on State Highway 36, 1.8 mi northwest of Slaughter Beach.	1966-86	12-13-85	4.79
		INDIAN RIVER BASIN			
01484549	Vines Creek near Dagsboro, DE	Lat 38°33'23", long 75°12'13", Sussex County, Hydrologic Unit 02060010, on right bank at upstream side of bridge on State Highway 26, 2.4 mi east of Dagsboro and 3.8 mi upstream from the confluence with Indian River at Indian River Bay.	1985-86	11- 3-85	3.73
01484595	Indian River at Oak Orchard, DE	Lat 38°35'45", long 75°10'24", Sussex County, Hydrologic Unit 02060010, at Hanes Landing, 2.0 mi southeast of intersection of State Highways 24 and 5, at Oak Orchard.	1966-86	11-13-85	4.10
01484670	Rehoboth Bay at Dewey Beach, DE	Lat 38°41'40", long 75°05'05", Sussex County, Hydrologic Unit 02060010, on north shore of Rehoboth Bay at Head of Bay Cove, at Dewey Beach and at south end of Ventian Drive on bulkhead of a boat slip.	1985-86	11- 5-85	3.21

Potomac River basin low-flow investigations

Base-flow discharge measurements were made throughout Washington County as part of a water-availability study in cooperation with Washington County and the Maryland Geological Survey. The data collected in these measurements, along with that already collected, will provide the basis for determining the base-flow yields throughout the county.

Weather records at Hagerstown, in the eastern portion of the area, and Hancock, in the western part of the area, were used to check periods prior to measurements for rainfall. Measurements are considered to represent base flow except as indicated.

The measurements on each stream are listed in order proceeding downstream, and each tributary is inserted in the order in which it enters the main stream. Drainage areas were determined from recent U.S. Geological Survey topographic maps of a scale of 1:24,000 and contour interval of 10 to 20 ft. Previous series of measurements were made as indicated.

Discharge measurements of tributaries to the Potomac River in Washington County, MD

Station No.	Station Name	Location	Drainage area (mi^2)	Measured previously (water years)	Date of measurement	Measured discharge (ft^3/s)	Cfs per square mile
01610150*	Bear Creek at Forest Park, Md.	Lat 39°42'07", long 78°19'02", Washington County, Hydrologic Unit 02070004, at upstream side of culvert on U.S. Highway 40, 0.2 mi upstream from mouth, and 0.9 mi west of Forest Park.	10.4	1985	5-13-86 6- 3-86 8-26-86	1.41 1.43 .04	0.136 .138 .004
01610155	Sideling Hill Creek near Bellegrove, Md.	Lat 39°38'58", long 78°20'40", Washington County, Hydrologic Unit 02070003, on left bank at Highway bridge on Pearre Road, 1.2 mi upstream from mouth, and 4.0 mi south of Bellegrove.	102	1967-77‡, 1985	5-13-86 8-26-86	13.4 .55	.131 .005
01610170	Potomac River Tributary at Woodmont, Md.	Lat 39°37'55", long 78°18'33", Washington County, Hydrologic Unit 02070004, upstream side of culvert on Pearre Road, 0.1 mi upstream from mouth, and 0.2 mi west of Woodmont Road intersection.	3.29	1985	5-13-86 6- 3-86 8-26-86	.47 .34 .07	.143 .103 .021
01612500	Little Tonoloway Creek near Hancock, Md.	Lat 39°42'45", long 78°13'55", Washington County, Hydrologic Unit 02070004, on right bank at downstream side of highway bridge, 100 ft downstream from unnamed tributary and 2.8 miles northwest of Hancock.	16.9	1947-64‡, 1985	5-29-86 8-26-86	1.47 .13	.087 .008
01613100	Tonoloway Creek at Hancock, Md.	Lat 39°41'55", long 78°09'15", Washington County, Hydrologic Unit 02070004, on Raylock Road directly under westbound Interstate 70 bridge at Hancock, and 0.6 mi upstream from mouth.	113	1985	6- 3-86 8-26-86	16.9 2.34	.150 .021
01613150*	Ditch Run near Hancock, Md.	Lat 39°41'30", long 78°07'57", Washington County, Hydrologic Unit 02070004, at upstream side of culvert on U.S. Highway 40, 0.3 mi upstream from mouth, and 2.7 mi east of Hancock.	4.80	1985	5-29-86	.87	.181
01613540	Lanes Run near Forsythe, Md.	Lat 39°39'50", long 78°00'08", Washington County, Hydrologic Unit 02070004, at bridge on Little Cove Road, 1.2 mi north of Indian Springs, and 2.4 mi upstream from mouth.	9.98	1980-82, 1985	5-12-86	2.30	.230
01613545	Licking Creek near Pecktonville, Md.	Lat 39°39'05", long 78°02'47" Washington County, Hydrologic Unit 02070004, at westbound Interstate 70 bridge, 0.3 mi upstream from mouth, and 1.25 mi south of Pecktonville.	212	1985	5-12-86 6- 3-86 8-29-86	82.3 69.3 11.8	.388 .327 .056

* Also a crest-stage partial-record station.
‡ Operated as a continuous-record gaging station.

Discharge measurements of tributaries to the Potomac River in Washington County, MD

Station No.	Station Name	Location	Drainage area (mi^2)	Measured previously (water years)	Date of measurement	Measured discharge (ft^3/s)	Cfs per square mile
01614050	Little Conococheague Creek near Charlton, Md.	Lat 39°35'17", long 77°34'38", Washington County, Hydrologic Unit 02070004, at bridge on Dam #5 Road, 0.1 mi upstream from mouth, and 2.0 mi south of Charlton.	18.1	1985	4- 3-86 6- 3-86 8-22-86	13.3 5.61 3.55	.735 .310 .196
01614525	Rockdale Run at Fairview, Md.	Lat 39°42'07", long 77°50'45", Washington County, Hydrologic Unit 02070004, at bridge on Rockdale Road, 0.7 mi south of Fairview, and 1.7 mi upstream from mouth.	9.67	1976-79, 1981-82, 1985	4- 3-86 8-21-86	12.5 4.50	1.293 .465
01614575	Rush Run near Huyett, Md.	Lat 39°40'23", long 77°47'37", Washington County, Hydrologic Unit 02070004, at bridge on State Highway 63, 1.5 mi north of Huyett, and 1.9 mi upstream from mouth.	5.20	1976-79, 1981-82, 1985	4- 3-86 8-22-86	6.61 1.42	1.271 .273
01614625	Meadow Brook at Conococheague, Md.	Lat 39°38'55", long 77°51'19", Washington County, Hydrologic Unit 02070004, at bridge on Ridge Road, 0.7 mi southwest of Conococheague, and 2.1 mi upstream from mouth.	6.77	1976-79, 1981-82, 1985	4- 3-86	7.82	1.155
01614675	Conococheague Creek tributary near Huyett, Md.	Lat 39°37'39", long 77°48'43", Washington County, Hydrologic Unit 02070004, at bridge on light-duty road, 0.4 mi upstream from mouth, and 1.9 mi south of Huyett.	7.94	1977-79, 1981-82, 1985	4- 3-86 8-27-86	8.86 1.12	1.116 .141
01614705	Conococheague Creek at Williamsport, Md.	Lat 39°36'29", long 77°49'09", Washington County, Hydrologic Unit 02070004, downstream side of Western Maryland Railroad bridge at Williamsport, 0.9 mi upstream from mouth.	564	1985	4- 3-86 8-21-86	609 132	1.080 .234
01617780	St. James Run at Spielman, Md.	Lat 39°33'03", long 77°45'52", Washington County, Hydrologic Unit 02070004, at bridge on Jordon Road, 0.9 mi north of Spielman, and 1.0 mi upstream from Marsh Run.	7.14	1977-79, 1981-82, 1985	4-15-86 8-27-86	6.43 2.55	.901 .357
01619000	Antietam Creek near Waynesboro, Pa.	Lat 39°42'59", long 77°36'28", Washington County, Hydrologic Unit 02070004, on right bank 100 ft upstream from highway bridge at Rocky Forge, 0.4 mi downstream from Pennsylvania-Maryland State line, 0.7 mi downstream from confluence of west and east branches, 1.9 mi northeast of Leitersburg, Md., 2.5 mi southwest of Waynesboro, Pa., and 36.6 mi upstream from mouth.	93.5	1948-81‡, 1985	4-14-86 8-20-86	113 43.0	1.209 .460
01619050	Little Antietam Creek at Leitersburg, Md.	Lat 39°40'57", long 77°37'44", Washington County, Hydrologic Unit 02070004, at bridge on State Highway 62, 0.4 mi upstream from mouth, and 0.8 mi southwest of Leitersburg.	24.5	1976-79, 1981-82, 1985	4-14-86 6- 5-86 8-20-86	18.9 14.8 7.72	.771 .604 .315
01619150	Marsh Run at Fiddlesburg, Md.	Lat 39°39'29", long 77°41'16", Washington County, Hydrologic Unit 02070004, at bridge on Old Forge Road at Fiddlesburg, 0.5 mi east of Hagerstown city limits, and 0.6 mi above mouth.	a31	1965-74, 1976-79, 1985	4-14-86 6- 5-86 8-20-86	27.9 11.3 3.68	.900 .365 .119

‡ Operated as a continuous-record gaging station.
a Approximately.

Discharge measurements of tributaries to the Potomac River in Washington, County, MD

Station No.	Station Name	Location	Drainage area (mi^2)	Measured previously (water years)	Date of measurement	Measured discharge (ft^3/s)	Cfs per square mile
01619275	Landis Spring Branch near Benevola, Md.	Lat 39°34'17", long 77°41'23", Washington County, Hydrologic Unit 02070004, at bridge on U.S. Highway 40, 100 ft upstream from mouth, and 1.9 mi northwest of Benevola.	6.60	1976-79, 1981-82, 1985	4- 4-86 8-27-86	4.50 1.22	.682 .185
01619325	Beaver Creek at Benevola, Md.	Lat 39°33'04", long 77°40'55", Washington County, Hydrologic Unit 02070004, at bridge on light-duty road at Benevola, and 0.4 mi upstream from Little Beaver Creek.	22.9	1975-79, 1985	4- 4-86 8-27-86	31.8 13.4	1.389 .585
01619350	Little Beaver Creek at Benevola, Md.	Lat 39°32'48", long 77°40'39", Washington County, Hydrologic Unit 02070004, at bridge on U.S. Highway 40 (Alternate) at Benevola, and 0.2 mi upstream from Beaver Creek.	8.70	1975-79, 1985	4- 4-86 8-20-86	12.6 4.18	1.448 .480
01619480	Little Antietam Creek at Keedysville, Md.	Lat 39°29'10", long 77°42'05", Washington County, Hydrologic Unit 02070004, at bridge on Koffman Lane at Keedysville, and 1.2 mi upstream from mouth.	a24	1964-67, 1976-79, 1985	4-14-86 8-20-86	25.0 6.37	1.042 .265
01636730	Israel Creek at Weverton, Md.	Lat 39°19'45", long 77°41'03", Washington County, Hydrologic Unit 02070004, at bridge on light-duty road at Weverton, and 0.1 mi upstream from mouth.	13.2	1975-79, 1985	4-15-86 8-22-86	10.2 1.80	.773 .136

a Approximately.

Water-quality partial-record stations are particular sites where chemical-quality, biological, and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin are referred to as miscellaneous sites.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

HERRING CREEK BASIN

383924075125501 - PHILLIPS B AT FAIRMOUNT, DE

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)
JUN 19...	1420	68	5.70	29.5	15.0	5.2	11	0	3.1

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
JUN 19...	0.69	8.1	59	1	1.2	12	42	0.8	8.6

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)
JUN 19...	21	50	0.07	0.0	1.80	<0.02	<0.2	<0.01	<5

383930075123101 - PHILLIPS B NR FAIRMOUNT, DE

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 18...	1250	104	6.80	22.0	20.0	24	12	5.8	2.2	8.7

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JUN 18...	43	0.8	1.4	12	3.7	3.8	8.1	20	57

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)
JUN 18...	0.08	0.0	4.30	0.04	0.05	0.56	0.6	0.02	19

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

PATAPSCO RIVER BASIN

01585680 - EAST BRANCH TR AT GREENMOUNT, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD 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)	PERCENT SODIUM
MAY 20...	0740	0.12	265	6.70	18.0	52	22	19	1.1	7.6	23

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	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)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
MAY 20...	0.5	2.5	30	9.5	49	8.8	0.2	1.1	160	0.21	0.05

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
MAY 20...	1.38	0.12	0.39	1.60	1.50	1.50	1.30	1.7	1.7	1.3	3.2

DATE	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
MAY 20...	2.6	4.8	21	0.37	0.28	0.23	0.19	370	80	<1	<1

DATE	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 20...	<10	<0.5	60	1	<1	<10	<1	<1	2	<3	30

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)
MAY 20...	30	630	76	33	<10	<10	<4	120	83	<1	<10

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAY 20...	9	5	<1	<1	60	38	36	590	390	44

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

PATUXENT RIVER BASIN

01594680 - MILL C TR AT PRINCE FREDERICK, MD

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
AUG 28...	1245	187	8.28	20.0	25.5	94	3	8.3	411	4.8	20	3.4

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	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)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
AUG 28...	7	0.2	1.1	91	0.9	7.3	3.7	<0.1	1.6	97	0.13	0.0

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
AUG 28...	0.80	0.78	0.03	0.02	0.03	<0.2	<0.2	0.02	0.03	0.02	<0.01	20

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
AUG 28...	20	<1	<1	<10	<0.5	20	<1	<1	<10	5	<1	<1

DATE	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
AUG 28...	1	3	3	110	7	<5	<5	<10	<4	<10	<1	1

DATE	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
AUG 28...	6	3	1	<1	<1	<10	15	<1	10	5	2.6

DATE	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ACENAPHTHENE TOTAL (UG/L)	ACENAPHTHYLENE TOTAL (UG/L)	ANTHRACENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BENZO B FLUORANTHENE TOTAL (UG/L)	BENZOGH I PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L)	BENZO K FLUORANTHENE TOTAL (UG/L)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L)
AUG 28...	3.3	<5.0	<5.0	<5.0	<3.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.0

DATE	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L)	BROMOFORM TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	CHLOROETHYLENE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)
AUG 28...	<5.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

PATUXENT RIVER BASIN-Continued

01594680 - MILL C TR AT PRINCE FREDERICK, MD-Continued

DATE	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DIETHYL PHTHAL-ATE TOTAL (UG/L)	DI-METHYL PHTHAL-ATE TOTAL (UG/L)	DI-N-BUTYL PHTHAL-ATE TOTAL (UG/L)	DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	HEXA-CHLORO-BENZENE TOTAL (UG/L)
AUG 28...	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0	<10.0	<3.0	<5.0	<5.0	<5.0

DATE	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISO-PHORONE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL CHLOR-IDE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L)	N-NITRO-SODI-METHY-LAMINE TOTAL (UG/L)
AUG 28...	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	0.06	<5.0	<5.0

DATE	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	PARA-CHLORO-META CRESOL TOTAL (UG/L)	PENTA-CHLORO-PHENOL TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)
AUG 28...	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<6.0	<5.0	<5.0	<3.0	<3.0

DATE	TOLUENE TOTAL (UG/L)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLOURO-METHANE TOTAL (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,2-DIBROMO ETH-YLENE TOTAL (UG/L)
AUG 28...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2,4-TRI-CHLORO-BENZENE TOTAL (UG/L)	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	2-CHLORO-NAPH-THALENE TOTAL (UG/L)	2-CHLORO-PHENOL TOTAL (UG/L)
AUG 28...	<3.0	<3.0	<3.0	<5.0	<10.0	<3.0	<3.0	<3.0	<3.0	<5.0	<6.0

DATE	2-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L)	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L)	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L)	4-NITRO-PHENOL TOTAL (UG/L)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L)
AUG 28...	<6.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<30.0	<30.0

01591510 - PATUXENT R TR NR DAYTON, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAY 13...	1200	0.01	274	12.0	60	0.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN

01610150 - BEAR C AT FOREST PARK, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY											
13...	1045	1.4	140	7.80	17.5	14.0	5	10.0	46	18	11
AUG											
26...	1030	0.04	690	7.60	22.0	17.0	5	--	180	110	47

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY											
13...	4.4	8.9	29	0.6	2.2	34	28	0.9	17	16	<0.1
AUG											
26...	16	45	34	1	5.0	94	77	3.8	42	120	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
MAY										
13...	2.7	84	79	0.11	0.32	0.30	<0.01	--	--	--
AUG										
26...	4.6	355	330	0.48	0.04	0.60	0.01	6	<1	4

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
MAY										
13...	--	50	16	--	--	20	9	--	--	--
AUG										
26...	7	90	20	7100	10	80	53	550	0.02	40

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01610170 - POTOMAC R TR AT WOODMONT, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY											
13...	1530	0.47	75	6.80	16.5	15.5	15	8.8	26	11	5.8
AUG											
26...	1315	0.07	210	7.40	28.0	20.0	5	--	39	0	8.8

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY											
13...	2.9	3.6	21	0.3	1.9	18	15	4.5	19	5.7	<0.1
AUG											
26...	4.1	3.5	15	0.3	2.5	61	50	3.9	4.1	4.7	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
MAY										
13...	6.6	53	54	0.07	0.07	0.30	0.01	--	--	--
AUG										
26...	7.8	61	66	0.08	0.01	0.30	0.02	12	<1	10

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
MAY										
13...	--	200	98	--	--	20	10	--	--	--
AUG										
26...	20	870	200	2700	20	210	68	940	0.08	90

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01613100 - TONOLOWAY C AT HANCOCK, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY											
29...	1815	32	140	7.40	25.5	23.0	--	9.1	--	--	--
AUG											
26...	1530	2.3	395	8.90	31.0	25.0	15	--	150	51	42

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAY											
29...	--	--	--	--	--	50	--	41	3.2	--	--
AUG											
26...	11	10	12	0.4	4.3	106	8.0	99	0.2	53	13

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
MAY											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
26...	0.1	2.0	216	200	0.29	1.4	0.40	0.20	9	<1	6

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
MAY										
29...	--	--	--	--	--	--	--	--	--	--
AUG										
26...	7	220	11	11000	10	100	11	260	0.04	40

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01613150 - DITCH RN NR HANCOCK, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY 29...	1500	0.87	126	7.00	25.0	20.0	10	8.1	46	19	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY 29...	4.4	5.9	20	0.4	3.9	33	27	5.2	18	9.1	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 29...	5.3	84	74	0.11	0.2	1.00	0.02	120	67	30	18

01613500 - LICKING CREEK NEAR SYLVAN, PA.

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY 29...	1230	90	195	6.80	26.0	19.5	5	9.5	95	10	24

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY 29...	8.6	3.6	7	0.2	1.8	104	85	26	12	6.0	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 29...	3.3	117	110	0.16	28	1.10	0.02	180	4	30	19

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01613540 - LANES RN NR FORSYTHE, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY 12...	1430	2.3	115	8.00	20.0	17.5	5	9.6	59	9	18

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY 12...	3.3	2.4	8	0.1	1.3	61	50	1	9.4	3.7	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 12...	5.8	76	74	0.1	0.47	0.40	<0.01	50	19	10	6

01613545 - LICKING C NR PECTONVILLE, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY 12...	1815	82	230	8.00	22.0	18.0	5	9.4	110	15	30

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY 12...	8.9	3.3	6	0.1	1.6	118	97	1.9	13	6.0	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 12...	1.3	126	120	0.17	28	0.90	0.01	140	24	20	11

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01614050 - L CONOCOCHEAGUE C NR CHARLTON, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
03...	1515	13	327	8.60	21.0	15.5	5	10.6	160	20	49
AUG											
22...	1100	3.6	428	8.20	22.0	20.0	5	--	190	16	58

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
03...	9.2	5.5	7	0.2	2.0	171	140	0.7	16	7.8	0.1
AUG											
22...	11	5.6	6	0.2	5.3	212	174	2.1	14	10	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
03...	4.4	176	180	0.24	6.3	3.20	0.02	160	14	30	17
AUG											
22...	8.7	234	220	0.32	2.2	3.00	0.12	1100	21	70	25

01614525 - ROCKDALE RN AT FAIRVIEW, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
03...	1400	12	408	8.70	22.0	17.0	5	13.4	210	57	60
AUG											
21...	1530	4.5	468	8.10	19.0	18.0	--	--	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
03...	14	3.6	4	0.1	2.2	183	150	0.6	18	7.1	0.1
AUG											
21...	--	--	--	--	--	--	--	0	--	--	--

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
03...	4.1	226	200	0.31	7.6	8.00	0.03	220	12	20	3
AUG											
21...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01614575 - RUSH RN NR HUYETT, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 03...	1640	6.6	605	7.90	19.5	15.0	7	9.5	280	66	89
AUG 22...	1245	1.4	830	7.80	25.0	19.0	5	--	330	76	110

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR 03...	13	13	9	0.4	3.7	256	210	5.1	36	27	0.1
AUG 22...	14	20	11	0.5	8.3	312	256	7.9	49	43	0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR 03...	4.8	355	310	0.48	6.3	11.0	0.06	440	5	30	8
AUG 22...	9.6	430	410	0.58	1.6	8.20	0.16	1200	13	50	8

01614625 - MEADOW BK AT CONOCOCHEAGUE, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 03...	1220	7.8	550	8.20	22.0	14.5	5	10.8	270	48	86

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR 03...	13	8.7	7	0.2	2.1	268	220	2.7	23	20	0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR 03...	6.9	315	290	0.43	6.7	8.00	0.02	170	5	20	3

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01614675 - CONOCOCHEAGUE C NR HUYETT, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
03...	1745	8.9	611	7.80	18.0	14.5	5	8.8	280	63	92
AUG											
27...	0830	1.1	745	7.90	24.0	18.0	5	--	340	82	110

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
03...	13	14	10	0.4	2.8	268	220	6.7	34	34	0.1
AUG											
27...	16	17	10	0.4	3.9	316	259	6.3	36	40	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
03...	6.3	362	330	0.49	8.7	7.40	0.02	--	--	--
AUG										
27...	8.9	300	390	0.41	0.91	6.90	0.12	6	1	20

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
03...	--	350	<3	--	--	30	8	--	--	--
AUG										
27...	10	1000	<3	5000	30	60	6	710	0.06	50

01614705 - CONOCOCHEAGUE C AT WILLIAMSPORT, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
03...	0930	609	360	8.70	14.0	14.5	5	10.1	180	25	52
AUG											
21...	1630	132	445	8.50	21.0	23.0	10	--	190	27	55

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
03...	11	6.3	7	0.2	2.1	183	150	0.6	18	13	0.1
AUG											
21...	13	10	10	0.3	4.2	200	164	1.0	24	17	0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
03...	0.9	211	190	0.29	347	4.40	0.05	80	5	20	5
AUG											
21...	2.2	242	220	0.33	86	2.30	0.20	240	11	40	6

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01617780 - ST. JAMES RN AT SPIELMAN, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
15...	0900	6.4	638	8.10	9.5	10.0	1	9.4	320	55	110
AUG											
27...	1040	2.6	687	8.00	24.0	20.0	5	--	290	43	100

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
15...	9.8	12	8	0.3	2.2	317	260	4.0	31	28	0.2
AUG											
27...	9.3	12	8	0.3	2.8	299	245	4.8	34	26	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
15...	9.3	360	360	0.49	6.2	4.70	0.03	--	--	--
AUG										
27...	9.5	270	340	0.37	1.9	4.20	0.02	3	2	9

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
15...	--	290	5	--	--	30	6	--	--	--
AUG										
27...	20	250	7	4600	40	20	5	230	0.06	60

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01619050 - L ANTIETAM C AT LEITERSBURG, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR											
14...	1400	19	483	8.70	18.0	13.0	2	240	31	65	19
AUG											
20...	1300	7.7	532	8.00	23.5	21.5	5	250	42	66	20

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR										
14...	6.9	6	0.2	2.5	256	210	0.8	25	15	0.2
AUG										
20...	6.8	6	0.2	2.9	250	205	4.0	23	16	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
14...	3.8	284	260	0.39	14	4.70	0.04	--	--	--
AUG										
20...	7.4	288	270	0.39	6.0	4.00	0.09	3	<1	10

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
14...	--	80	27	--	--	20	10	--	--	--
AUG										
20...	20	120	8	12000	30	10	8	510	0.11	50

01619150 - MARSH RN AT FIDDLERSBURG, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
14...	1515	28	611	8.20	20.5	13.5	1	10.8	320	74	110
AUG											
20...	0930	3.7	610	8.10	24.0	20.0	5	--	300	54	100

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
14...	12	5.7	4	0.1	2.6	305	250	3.1	25	15	0.2
AUG											
20...	12	5.1	4	0.1	3.5	299	245	3.8	30	17	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
14...	7.8	356	330	0.48	27	8.40	0.03	140	<3	20	4
AUG											
20...	7.6	233	320	0.32	2.3	6.00	0.07	500	12	40	12

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01619275 - LANDIS SPRING B NR BENEVOLA, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
04...	1040	4.5	628	8.10	20.0	14.5	3	9.8	310	53	89
AUG											
27...	1445	1.2	611	8.00	25.0	20.0	5	--	300	48	88

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
04...	22	11	7	0.3	3.0	317	260	4.0	35	25	0.3
AUG											
27...	19	8.9	6	0.2	3.4	305	250	4.8	31	19	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
04...	5.5	365	350	0.5	4.4	5.70	0.02	--	--	--
AUG										
27...	9.5	240	330	0.33	0.79	5.40	0.01	3	2	6

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
04...	--	250	<3	--	--	20	5	--	--	--
AUG										
27...	5	180	20	1800	20	20	5	520	0.03	20

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01619325 - BEAVER C AT BENEVOLA, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
04...	1200	32	459	8.50	20.5	14.5	5	14.2	240	51	62
AUG											
27...	1340	13	577	8.20	25.0	20.0	5	--	270	43	71

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
04...	21	5.6	5	0.2	2.4	232	190	1.2	20	13	0.2
AUG											
27...	22	5.8	4	0.2	2.8	275	225	2.8	29	11	0.3

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
04...	4.6	200	240	0.27	17	4.70	0.02	--	--	--
AUG										
27...	8.2	327	290	0.44	12	5.10	0.03	3	<1	10

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
04...	--	170	9	--	--	30	13	--	--	--
AUG										
27...	10	160	7	11000	20	20	9	320	0.06	60

01619350 - L BEAVER C AT BENEVOLA, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
04...	1330	13	356	8.60	21.0	16.5	5	11.5	170	25	43
AUG											
20...	1600	4.2	445	8.20	23.0	21.0	5	--	200	26	52

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
04...	14	8.8	10	0.3	2.2	171	140	0.7	37	14	0.1
AUG											
20...	16	8.2	8	0.3	3.1	207	170	2.1	15	18	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
04...	6.1	203	210	0.28	6.9	3.40	0.05	200	66	20	8
AUG											
20...	8.3	238	220	0.32	2.7	3.50	0.07	200	19	20	8

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

POTOMAC RIVER BASIN-Continued

01619480 - L ANTIETAM C AT KEEDYSVILLE, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
14...	1625	25	364	8.30	18.5	14.5	2	9.9	180	15	52
AUG											
20...	1440	6.4	530	7.70	23.0	20.0	5	--	230	22	67

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
14...	11	6.4	7	0.2	2.4	195	160	1.6	14	9.4	0.2
AUG											
20...	15	8.9	8	0.3	3.5	252	207	8.0	17	17	0.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR											
14...	7.1	208	200	0.28	14	3.10	0.07	110	45	30	12
AUG											
20...	9.7	272	260	0.37	4.7	3.30	0.14	240	15	40	24

01636730 - ISRAEL C AT WEVERTON, MD

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
APR											
15...	1040	10	129	8.30	10.0	10.0	5	11.7	48	9	12
AUG											
22...	1430	1.8	233	7.80	26.0	22.0	10	--	77	9	20

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
APR											
15...	4.5	5.9	20	0.4	1.3	48	39	0.4	12	8.5	<0.1
AUG											
22...	6.5	7.7	17	0.4	5.8	83	68	2.1	14	13	0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
APR										
15...	10	91	78	0.12	2.5	1.50	0.02	--	--	--
AUG										
22...	16	127	120	0.17	0.62	0.60	0.11	2	<1	9

DATE	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOMCMA-TERIAL (UG/L AS HG)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
APR										
15...	--	110	30	--	--	20	6	--	--	--
AUG										
22...	10	510	61	18000	30	30	9	420	0.03	50

GROUND-WATER LEVELS

DELAWARE

KENT COUNTY

391026075304901. Local number, Id 55-1.
LOCATION.--Lat 39°10'26", long 75°30'49", Hydrologic Unit 02040207, White Oak Road at Dover.
Owner: City of Dover.
AQUIFER.--Piney Point.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 2.5 in., depth 349 ft, cased to 329 ft, screened 329 to 349 ft.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.0 ft above land-surface datum.
REMARKS.--Water level affected by pumping in the Dover area. Missing record from Oct. 1 to Nov. 13 was due to recorder malfunction; for period of Sept. 17-23, 26-30 water level was below orifice.
PERIOD OF RECORD.--August 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 67.40 ft below land-surface datum, May 5, 1970; lowest recorded, 150.36 ft below land-surface datum, Sept. 17-23, 26-30, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	------	------	135.33	131.42	132.72	131.19	129.12	127.17	136.72	141.29	145.85	148.01
10	------	------	135.73	131.22	132.77	131.42	128.88	129.45	139.11	142.81	147.17	148.41
15	------	135.87	135.12	131.31	132.49	130.87	128.82	130.82	141.54	144.23	148.49	149.79
20	------	136.24	134.69	131.59	131.84	130.01	128.07	132.63	142.63	145.28	149.40	------
25	------	136.30	133.83	132.28	131.68	129.79	127.01	133.92	142.22	146.16	149.22	150.17
EOM	------	135.50	132.38	132.58	131.72	128.60	126.83	134.11	142.14	146.74	148.67	------

WTR YEAR 19856 HIGHEST *126.67 MAY 1, 1986 LOWEST *150.36 SEP 17-23, 26-30, 1986

*Maximum and minimum water levels recorded.

390607075331501. Local number, Jd 42-3.
LOCTION.--Lat 39°06'07", long 75°33'15", Hydrologic Unit 02040207, 1 mi south of Camden.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 11 ft, well point 8.5 to 11 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 44 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
REMARKS.--This is a replacement well and is located 2 ft north of the original well. The measurements published in WSP 1782, for the years 1958-61 for the original well, are doubtful.
PERIOD OF RECORD.--October 1950 to December 1961, August 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.69 ft below land-surface datum, July 18, 1975; lowest measured, 9.70 ft below land-surface datum, Nov. 24, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	8.10	NOV 27	8.49	JAN 28	8.21	MAR 27	6.56	JUN 20	7.82	AUG 29	9.05
31	8.16	DEC 27	8.24	FEB 27	7.07	APR 29	6.77	26	7.91	SEP 26	9.57
NOV 21	8.45	JAN 23	8.62	28	7.02	MAY 27	7.39	JUL 23	8.40		

385041075395601. Local number, Mc 51-1.
LOCATION.--Lat 38°50'41", long 75°39'56", Hydrologic Unit 02060008, 1.3 mi northeast of Adamsville.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 19 ft, well point 15 to 19 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
REMARKS.--This is a replacement well and is located about 60 ft north of original well.
PERIOD OF RECORD.--September 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.28 ft below land-surface datum, May 31, 1984; lowest measured, 15.74 ft below land-surface datum, Sept. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	13.61	DEC 27	13.08	FEB 28	11.32	MAY 15	12.12	JUL 23	13.90	SEP 30	15.30
NOV 21	13.87	JAN 23	13.53	APR 4	10.73	JUN 20	13.15	SEP 2	14.77		

DELAWARE--Continued

KENT COUNTY--Continued

385310075331301. Local number, Md 22-1.
LOCATION.--Lat 38°53'10", long 75°33'13", Hydrologic Unit 02040207, 2.4 mi west of Williamsville.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 17 ft, well point 14 to 17 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 58 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--September 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft below land-surface datum, July 14, 1975; lowest measured, 11.14 ft below land-surface datum, Jan. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	6.67	DEC 27	5.41	FEB 26	2.47	APR 12	3.96	JUN 20	7.67	AUG 28	9.38
22	6.76	30	5.77	28	2.52	MAY 2	5.08	30	8.00	SEP 2	9.49
29	6.95	JAN 23	6.20	MAR 26	3.49	7	5.36	JUL 23	8.40	SEP 30	10.09
NOV 21	7.57	30	3.63	APR 2	3.96	29	6.61	AUG 4	8.85		

NEW CASTLE COUNTY

393854075415401. Local number, Db 24-10.
LOCATION.--Lat 39°38'54", long 75°41'54", Hydrologic Unit 02040205, 2 mi south of Ogletown.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 24 ft, well point 21 to 24 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 77 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
REMARKS.--Well was destroyed, replacement well local number Db 24-17.
PERIOD OF RECORD.--August 1957 to May 1986 (destroyed).
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.71 ft below land-surface datum, May 24, 1983; lowest measured, 17.43 ft below land-surface datum, Feb. 10, 1966. Previous highest water level measured, 4.33 ft below land-surface datum, Oct. 6, 1978, doubtful reading (well plugged).

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	15.00	NOV 25	15.25	JAN 31	14.32	FEB 28	12.44	MAR 28	11.76	MAY 29	12.27
15	14.83	JAN 2	14.65								

393855075415402. Local number Db 24-17.
LOCATION.--Lat 39°38'55", long 75°41'54", Hydrologic Unit 02040205, 2 mi south of Ogletown.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 22 ft, screened 17 to 22 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 77 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casingg, 0.55 ft above land-surface datum.
REMARKS.--This is a replacement well for Db 24-10, and is located 48 ft west of Db 24-10.
PERIOD OF RECORD.--June 1986 to September 1986.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.02 ft below land-surface datum, June 25, 1986; lowest measured, 15.01 ft below land-surface datum.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, JUNE 1986 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 25	13.02	JUN 30	13.13	AUG 4	13.96	AUG 29	14.46	SEP 22	14.96	SEP 30	15.01

NEW CASTLE COUNTY--continued

391949075410701. Local number, Hb 14-1.
LOCATION.--Lat 39°19'49", long 75°41'07", Hydrologic Unit 02040205, at Prices Corners.
Owner: Delaware Department of Highways and Transporation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 19 ft, well point 16 to 19 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 72 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--October 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.49 ft below land-surface datum, Apr. 7, 1958; lowest measured, 11.95 ft below land-surface datum, Aug. 31, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	8.05	DEC 24	7.66	JAN 30	7.22	MAR 31	5.80	JUN 20	7.52	AUG 28	9.07
23	7.73	27	7.73	FEB 26	5.13	MAY 2	6.50	30	7.85	SEP 2	9.12
29	7.90	30	7.84	28	5.31	12	6.56	JUL 23	8.35	SEP 30	9.62
NOV 21	8.08	JAN 23	7.93	MAR 26	5.68	29	7.12	AUG 4	8.59		

SUSSEX COUNTY

384930075370201. Local number, Nc 13-3.
LOCATION.--Lat 38°49'30", long 75°37'02", Hydrologic Unit 02060008, 2.0 mi northwest of Greenwood.
Owner: University of Delaware.
AQUIFER.--Piney Point.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 630 ft, cased to 620 ft, screened 620 to 630 ft.
INSTRUMENTATION.--Digital water-level recorder--60-minute punch.
DATUM.--Land surface datum is 62.5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.
PERIOD OF RECORD.--December 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 69.70 ft below land-surface datum, Jan. 1, 1971; lowest recorded, 81.76 ft below land-surface datum, Sept. 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	81.00	81.00	81.24	81.02	80.91	81.01	81.23	81.13	81.25	81.38	81.42	81.43
10	81.22	81.36	81.31	81.18	81.11	81.10	80.92	81.24	81.34	81.31	81.36	81.60
15	81.12	81.42	81.22	81.42	80.99	80.96	81.11	81.28	81.24	81.34	81.43	81.64
20	81.32	81.32	81.27	80.91	81.04	81.02	81.04	81.16	81.24	81.24	81.53	81.62
25	81.22	81.39	81.07	81.27	80.94	81.36	81.09	81.21	81.30	81.34	81.47	81.58
EOM	81.22	81.19	81.15	81.23	81.02	81.13	81.14	81.10	81.23	81.27	81.59	81.64

WTR YEAR 1986 HIGHEST 80.73 MAR 14, 1986 LOWEST 81.76 SEP 17, 1986

384639075353101. Local number, Nc 45-1.
LOCATION.--Lat 38°46'39", long 75°35'31", Hydrologic Unit 02060008, 2.0 mi south of Greenwood.
Owner: P. H. Cannon.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1 in., depth 15 ft, screened 14 to 15 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 43 ft above National Geodectic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--October 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.67 ft below land-surface datum, Jan. 30, 1952; lowest measured, 14.66 ft below land-surface datum, Dec. 11, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	12.35	DEC 27	12.06	FEB 28	11.02	MAY 15	12.47	JUL 23	13.29	SEP 30	13.84
NOV 21	12.06	JAN 23	12.24	APR 4	11.84	JUN 20	12.95	SEP 2	13.62		

DELAWARE--continued

SUSSEX COUNTY--continued

384955075192801. Local number, Ng 11-1.
LOCATION.--Lat 38°49'55", long 75°19'28", Hydrologic Unit 02040207, 1.2 mi east of Jefferson Crossroads.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 19 ft, well point 16 to 19 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--September 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.91 ft below land-surface datum, Apr. 10, 1984; lowest measured, 14.64 ft below land-surface datum, Jan. 7, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	12.25	DEC 27	11.90	FEB 28	10.53	MAY 22	11.57	JUL 23	12.12	SEP 30	13.60
NOV 21	12.78	JAN 23	12.03	APR 4	10.60	JUN 20	12.18	SEP 2	13.50		

383138075260201. Local number, Qe 44-1.
LOCTION.--Lat 38°31'38", long 75°26'02", Hydrologic Unit 02060008, 1.0 mi east of Whaleys Crossroads.
Owner: Delaware Department of Highways and Transportation.
AQUIFER.--Columbia Deposits.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 25 ft, well point 22 to 25 ft.
INSTRUMENTATION.--Measurements with chalked tape.
DATUM.--Elevation of land-surface datum is about 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--September 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.98 ft below land-surface datum, Mar.16, 1979, and Mar. 15, 1984; lowest measured, 12.22 ft below land-surface datum, Dec. 2, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	5.85	NOV 25	7.70	JAN 30	6.05	MAY 2	8.31	JUN 30	10.84	SEP 2	10.81
22	7.22	DEC 27	7.44	FEB 26	6.03	22	9.29	JUL 23	11.47	12	10.89
29	7.53	30	7.62	28	6.28	29	9.62	AUG 4	11.172	29	11.49
NOV 21	8.31	JAN 23	7.66	MAR 26	7.27	JUN 20	10.50	28	10.94	30	11.60

MARYLAND

ALLEGANY COUNTY

394024078273401. Local number, AL Ah 1.
LOCATION.--Lat 39°40'24", long 78°27'34", Hydrologic Unit 02070003, near Fifteen Mile Creek, 2.8 mi southeast of Pratt.
Owner: Green Ridge State Forest
AQUIFER.--Jennings Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, reported depth 300 ft, measured depth 113 ft; casing diameter 8 in. to unknown depth; open hole.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 720 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of sanitary seal in casing, 0.3 ft above land-surface datum.
REMARKS.--Water level was deeper than 40 ft below land-surface datum on Nov. 19, 1969, and Feb. 12, 1970, when well was being pumped.
PERIOD OF RECORD.--December 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft below land-surface datum, May 18, 1978; lowest measured 22.80 ft below land-surface datum, July 16, 1968.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	5.33	JAN 16	5.07	APR 07	4.32	JUL 01	5.67				
DEC 02	2.89	FEB 20	1.85	MAY 21	4.40	AUG 11	6.01				

ANNE ARUNDEL COUNTY

390303076463201. Local number, AA Cb 1.
LOCATION.--Lat 39°03'03", long 76°46'32", Hydrologic Unit 02060006, on Duvall Bridge Rd., Fort George G. Meade.
Owner: U.S. Army.
AQUIFER.--Patuxent Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 505 ft; casing diameter 6 in. with depth to 485 ft; screened from 485 to 505 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 126 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top lip of 3 in. extension pipe, 3.35 ft above land-surface datum.
REMARKS.--Equipped with water-level recorder from July 2, 1964 to current year.
PERIOD OF RECORD.--March 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 40.60 ft below land-surface datum, May 1, 1962; lowest measured, 86.14 ft below land-surface datum, July 11, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	84.68	JAN 17	82.65	FEB 21	83.95	MAY 21	83.44				
NOV 25	83.65	30	83.08	MAR 26	83.48	JUL 11	86.14				

390423076432001. Local number, AA Cc 40.
LOCATION.--Lat 39°04'23", long 76°43'20", Hydrologic Unit 02060006, on Rifle Range Rd., Fort George G. Meade.
Owner: U.S. Army.
AQUIFER.--Patapsco Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 238 ft; casing diameter 6 in. with depth to 208 ft; screened from 208 to 238 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 137 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of recorder platform, 1.0 ft above land-surface datum.
REMARKS.--Equipped with water-level recorder Dec. 4, 1959 to July 21, 1960 and Jan. 12, 1978 to current year.
PERIOD OF RECORD.--December 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.58 ft below land-surface datum, March 25, 1961; lowest measured, 50.09 ft below land-surface datum, Oct. 15, 1981.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	48.25	NOV 25	47.90	MAR 26	47.89	SEP 08	49.39

BALTIMORE CITY

391617076322001. Local number, 2S5E-1
LOCATION.--Lat 39°16'17", long 76°32'20", Hydrologic Unit 02060003, near Holabird Avenue and Pumphrey Street, at Holabird Industrial Park.
Owner: City of Baltimore.
AQUIFER.--Patuxent Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 290 ft, casing diameter 13 in.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 30 ft above National Geodetic Vertical Datum of 1929.
Measuring point: lip of discharge pipe, 2.0 ft above land-surface datum from April 1943 to April 1966; top of casing, 1.8 ft above land-surface datum from April 1966 to current year.
REMARKS.-- Water-level reported 58 ft in 1934.
PERIOD OF RECORD.--April 1943 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.15 ft below land-surface datum, Sept. 27, 1976; lowest measured, 103.70 ft below land-surface datum, Oct. 15, 1948.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 03	69.52	FEB 05	72.53	APR 01	76.96	JUN 04	82.33	JUL 30	76.58		
JAN 02	59.70	MAR 03	71.20	MAY 09	82.05	JUL 08	81.47	SEP 03	75.45		

BALTIMORE COUNTY

393102076341801. Local number, BA Ce 21.
LOCATION.--Lat 39°31'02", long 76°34'18", Hydrologic Unit 02060003, on Paper Mill Rd., 0.6 mi west of Jacksonville.
Owner: Baltimore County.
AQUIFER.--Loch Raven Schist.
WELL CHARACTERISTICS.--Drilled unused water-table well, depth 350 ft; casing diameter 10 in. with depth to 12.4 ft; casing diameter 6 in. from 0 to 33.1 ft; open hole.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 536 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 2 ft above land-surface datum.
PERIOD OF RECORD.--November and December 1955, November 1956 through September 1975, July 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.60 ft below land-surface datum, June 23, 1972; lowest measured, 21.54 ft below land-surface datum, Feb. 10, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	20.43	DEC 02	19.46	FEB 03	18.50	APR 01	17.04	JUN 02	17.80	JUL 28	19.74
NOV 06	20.18	JAN 06	18.74	MAR 04	17.73	MAY 01	16.88	JUL 03	19.08	SEP 08	20.83

CALVERT COUNTY

381952076270901. Local number, CA Gd 6.
LOCATION.--Lat 38°19'52", long 76°27'09", Hydrologic Unit 02060006, at the Lord Calvert Yacht Club, 0.5 mi northeast of Solomons.
Owner: Calvert Marina.
AQUIFER.--Aquia Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 493 ft; casing diameter 8 in. with depth to 272 ft; casing diameter 6 in. with depth to 472 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of pump base, 10 ft above land-surface datum.
REMARKS.--Water level reported at land surface 1942; water level measured 58.9 ft below land-surface datum, Jan. 13, 1944. Equipped with water-level recorder Oct. 19, 1949 to Feb. 25, 1960.
PERIOD OF RECORD.-- October 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.15 ft below land-surface datum May 16, 1950; lowest measured, 70.99 ft below land-surface datum, Aug. 6, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	61.41	JAN 03	58.95	APR 02	58.84	JUL 09	68.99	SEP 25	69.01		
NOV 15	59.65	31	61.05	MAY 14	61.36	AUG 06	70.99				
DEC 03	61.48	MAR 04	58.57	JUN 04	63.27	SEP 12	69.10				

MARYLAND--Continued

CARROLL COUNTY

393638076510001. Local number, CL Bf 1.
LOCATION.--Lat 39°36'38", long 76°51'00", Hydrologic Unit 02060003, on Hillcrest St., Hampstead.
Owner: Town of Hampstead.
AQUIFER.-- Prettyboy Schist.
WELL CHARACTERISTICS.--Drilled unused water-table well, depth 407 ft; casing diameter 8 in. with depth to approximately 65 ft; open hole.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 933 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of 2 in. casing extension, 2.35 ft above land-surface datum.
REMARKS.--Equipped with water-level recorder July 1, 1952, to Nov. 7, 1962.
PERIOD OF RECORD.--September and December 1946, April and September 1947, February 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.30 ft below land-surface datum, May 13, 1952; lowest measured, 76.26 ft below land-surface datum, Feb. 10, 1966.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	72.67	DEC 02	72.78	FEB 03	69.99	APR 01	65.00	JUN 02	67.29	JUL 28	70.83
NOV 05	72.96	JAN 06	69.89	MAR 04	67.22	MAY 02	65.65	JUL 03	69.18	SEP 08	73.41

CHARLES COUNTY

383422077114601. Local number, CH Cb 7.
LOCATION.--Lat 38°34'22", long 77°11'46", Hydrologic Unit 02070011, at Caffee and Greenslade Rds., U.S. Naval Ordnance Station, about 2.5 mi southwest of Indian Head.
Owner: U.S. Navy.
AQUIFER.--Patapsco Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 400 ft; casing diameter 8 in. with depth to 400 ft; screen diameter 6 in. from 154.1 to 167 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 36 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing at land-surface datum.
REMARKS.--Equipped with water-level recorder Sept. 21, 1953, to July 8, 1965.
PERIOD OF RECORD.--March and April 1952, August 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.35 ft below land-surface datum, April 18, 1952; lowest measured, 88.58 ft below land-surface datum, Oct. 22, 1968.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	79.74	DEC 04	80.65	FEB 10	80.50	APR 04	80.10	JUN 05	81.87	AUG 07	84.42
NOV 15	80.13	JAN 08	82.03	MAR 05	81.74	MAY 15	80.11	JUL 10	83.84	SEP 26	83.53

DORCHESTER COUNTY

383346076030301. Local number, DO Ce 21.
LOCATION.--Lat 38°33'46", long 76°03'03", Hydrologic Unit 02060005, on Shoal Creek about 1.5 mi southeast of Cambridge.
Owner: Eastern Shore State Hospital.
AQUIFER.--Piney Point Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 368.5 (?) ft; casing diameter 8 in. with depth to 239 ft; casing diameter 4.5 in. with depth to 368.5 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 11.7 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing at land-surface datum.
REMARKS.--Equipped with water-level recorder Aug. 23, 1956 to Nov. 6, 1958, and Sept. 11, 1965 to Oct. 13, 1966. Water-level measured 73.77 ft below land-surface datum, Feb. 14, 1952. Water levels may be affected by nearby pumping.
PERIOD OF RECORD.--August 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level reported, 14 ft below land-surface datum, August 1914; highest water level measured, 59.53 ft below land surface datum, Nov. 4, 1985; lowest measured, 132.95 ft below land-surface datum, Sept. 6, 1956.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	59.53	JAN 14	61.92	APR 08	60.71	JUL 07	67.75	SEP 22	68.36		
DEC 09	60.36	FEB 27	60.24	MAY 28	64.83	AUG 07	68.50				

GARRETT COUNTY

394017078581701. Local number, GA Ag 1.
LOCATION.--Lat 39°40'17", long 78°58'17", Hydrologic Unit 02070002, in the Savage River Valley, 2.5 mi northwest of Frostburg.
Owner: Town of Frostburg.
AQUIFER.--Pocono Formation.
WELL CHARACTERISTICS.--Drilled unused water-table well, depth 30 ft; casing diameter 8 in. to unknown depth; open hole.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 2,530 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing at land-surface datum.
REMARKS.--Water level measured, 11.75 ft below land-surface datum, March 26, 1984; water-levels affected by nearby pumping.
PERIOD OF RECORD.--October 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.71 ft below land-surface datum, Jan. 14, 1950; lowest measured, 14.59 ft below land-surface datum, Jan. 28, 1985.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	6.92	JAN 22	7.81	FEB 28	7.72	JUN 04	7.82	AUG 18	8.58		
DEC 09	7.75	28	10.32	APR 23	7.70	JUL 07	7.94				

HARFORD COUNTY

392343076161901. Local number, HA Ed 24.
LOCATION.--Lat 39°23'43", long 76°16'19", Hydrologic Unit 02060003, at Bush River Rd. and 29th St. about 2 mi southeast of Edgewood.
Owner: U.S. Army.
AQUIFER.--Patapsco Formation.
WELL CHARACTERISTICS.--Drilled unused artesian well, depth 149 ft; casing diameter 18 in. from 0 to 73 ft; casing diameter 10 in. from 65 to 120 ft; screen diameter 10 in. from 120 to 135 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 12.8 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 1.15 ft above land-surface datum.
REMARKS.--Water level measured 8.24 ft below land-surface datum, Apr. 13, 1944. Equipped with water-level recorder Jan. 24, 1950, to June 6, 1961.
PERIOD OF RECORD.-- September 1949, January 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.41 ft below land-surface datum, Sept. 17, 1984; lowest measured, 42.55 ft below land-surface datum, June 26, 1955.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	10.19	NOV 19	10.23	FEB 05	10.03	APR 01	10.29	JUN 04	9.28	AUG 14	10.57
NOV 05	8.74	JAN 02	10.18	MAR 03	8.78	MAY 06	9.97	JUL 02	9.78	SEP 24	10.64

MONTGOMERY COUNTY

390434076573002. Local number, MO Eh 20.
LOCATION.--Lat 39°04'34", long 76°57'30", Hydrologic Unit 02070010, at MD Rt. 196 and Fairland Rd., Fairland.
Owner: Cities Service Oil Co.
AQUIFER.--Wissahickon Formation (lower pelitic schist).
WELL CHARACTERISTICS.--Drilled unused water-table well, depth 102.9 ft; casing diameter 6 in. with depth to 50 ft; open hole.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 410 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing at land-surface datum.
PERIOD OF RECORD.--March 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.39 ft below land-surface datum, June 25, 1972; lowest measured, 16.34 ft below land-surface datum, Sept. 29, 1986.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	15.29	DEC 27	14.06	MAR 27	12.12	JUN 27	14.73	SEP 29	16.34		
31	15.20	JAN 30	13.48	APR 29	12.21	JUL 29	15.70				
NOV 28	14.40	FEB 28	11.57	MAY 29	13.39	AUG 27	15.79				

MARYLAND--Continued

WASHINGTON COUNTY

393638078001301. Local number, WA Be 2.
LOCATION.--Lat 39°36'38", long 78°00'13", Hydrologic Unit 02070004, about 1.2 mi southeast of Big Pool.
Owner: Fort Frederick State Park.
AQUIFER.--Romney Formation.
WELL CHARACTERISTICS.--Dug stone-lined unused water-table well, diameter 42 in., depth 42.7 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 470 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of stone sill, 0.8 ft above land-surface datum.
PERIOD OF RECORD.--December 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.75 ft below land-surface datum, April 26, 1984; lowest measured, 36.92 ft below land-surface datum, Jan. 11, 1965.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	36.03	JAN 28	29.87	MAR 27	22.62	MAY 27	32.45	JUL 28	34.95	SEP 29	35.92
NOV 27	25.04	FEB 27	21.75	APR 28	29.25	JUN 26	34.38	AUG 29	35.57		

WICOMICO COUNTY

382037075310801. Local number, WI Cf 3.
LOCATION.--Lat 38°20'37", long 75°31'08", Hydrologic Unit 02060007, on Airport Rd., about 5 mi southeast of Salisbury.
Owner: Salisbury Wicomico Airport.
AQUIFER.--Beaverdam Sand.
WELL CHARACTERISTICS.--Drilled unused water-table well, depth 109 ft; casing diameter 16 in. with depth to 90 ft; screened from 90 to 110 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 44.79 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 2.0 ft above land-surface datum.
REMARKS.--Water level reported 7.2 ft below land-surface datum, Oct 26, 1942; equipped with water-level recorder March 24, 1948 to July 9, 1948, and Aug. 2, 1949 to April 11, 1960, and Aug. 29, 1963 to Aug. 20, 1968.
PERIOD OF RECORD.--September 1947 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 2.18 ft below land-surface datum, May 8, 1958; lowest measured, 13.44 ft below land-surface datum, Sept. 18, 1947.

WATER LEVELS, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	7.39	DEC 27	7.15	FEB 26	5.74	MAY 27	8.61	JUL 28	10.00	SEP 25	10.03
NOV 27	7.08	JAN 29	5.58	MAR 27	7.14	JUN 26	9.49	AUG 29	9.77		

REMARK CODES.--The following remark codes may appear with the water-quality data in this section.

PRINTED OUTPUT	REMARK
E	Estimated
>	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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

NEW CASTLE COUNTY, DELAWARE

		LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
CD51	15	10043	394050075340001	217PTMC	11-21-85	1400	137.00	137	127	41.4
CD52	28	10047	394050075335502	217PTMC	11-21-85	1430	107.00	107	97	38.0
DC14	43	48941	393955075362501	217PTMC	11-21-85	1330	112.00	112	100	65.0

		LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
CD51	15	10043	>60	100	4040	146	5.20	19.0	15.0	46	10
CD52	28	10047	>60	200	4040	225	7.00	19.0	14.0	63	13
DC14	43	48941	>60	150	4040	129	6.80	19.0	14.0	36	7.6

		LOCAL IDENTIFIER	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
CD51	15	10043	5.0	6.8	23	0.5	2.4	110	22	12
CD52	28	10047	7.4	12	28	0.7	2.7	2.7	27	21
DC14	43	48941	4.2	5.9	25	0.4	2.0	4.3	11	10

		LOCAL IDENTIFIER	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
CD51	15	10043	<0.1	14	78	0.11	2.40	<0.01	150	18
CD52	28	10047	<0.1	15	110	0.14	3.70	<0.01	3	5
DC14	43	48941	<0.1	9.7	59	0.08	2.10	<0.01	10	3

Geologic unit (aquifer): 217PTMC - Potomac Group

Sampling method: 4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE

LOCAL IDENTIFIER		STATION NUMBER	GEOLOGIC UNIT	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)
NG41	3	384641075191601	112CLMB	07-01-86	--	80.00	80	--	5.0	>20
NI51	31	384524075091602	122PCMK	02-03-86	--	150.00	150	100	16.0	15
NI51	31	384524075091602	122PCMK	04-03-86	--	150.00	150	100	16.0	5
NI51	31	384524075091602	122PCMK	07-07-86	--	150.00	150	100	16.0	15
NI51	31	384524075091602	122PCMK	08-20-86	--	150.00	150	100	16.0	15
NI52	11	384558075083501	122PCMK	10-17-85	10.49	155.00	155	145	16.0	25
NI52	11	384558075083501	122PCMK	02-03-86	10.59	155.00	155	145	16.0	30
NI52	11	384558075083501	122PCMK	04-03-86	10.37	155.00	155	145	16.0	20
NI52	11	384558075083501	122PCMK	07-07-86	11.41	155.00	155	145	16.0	30
NI52	11	384558075083501	122PCMK	08-19-86	11.37	155.00	155	145	16.0	30
NI52	12	384558075083502	112CLMB	02-03-86	10.03	80.00	80	70	16.0	20
NI52	12	384558075083502	112CLMB	04-03-86	9.70	80.00	80	70	16.0	25
NI52	12	384558075083502	112CLMB	07-07-86	11.07	80.00	80	70	16.0	15
NI52	12	384558075083502	112CLMB	08-19-86	11.42	80.00	80	70	16.0	15
OH54	1	384038075110001	122MNKN	10-18-85	11.03	290.00	290	280	18.0	20
OH54	1	384038075110001	122MNKN	02-05-86	11.47	290.00	290	280	18.0	65
OH54	1	384038075110001	122MNKN	04-03-86	9.68	290.00	290	280	18.0	40
OH54	1	384038075110001	122MNKN	07-07-86	10.73	290.00	290	280	18.0	50
OH54	1	384038075110001	122MNKN	08-19-86	11.34	290.00	290	280	18.0	90
OH54	2	384038075110002	122PCMK	10-18-85	11.73	189.00	189	179	18.0	30
OH54	2	384038075110002	122PCMK	02-05-86	11.16	189.00	189	179	18.0	30
OH54	2	384038075110002	122PCMK	04-03-86	10.23	189.00	189	179	18.0	45
OH54	2	384038075110002	122PCMK	07-07-86	11.47	189.00	189	179	18.0	30
OH54	2	384038075110002	122PCMK	08-19-86	12.09	189.00	189	179	18.0	30
OI24	6	384258075063101	122MNKN	10-17-85	19.28	250.00	250	230	26.0	35
OI24	6	384258075063101	122MNKN	02-05-86	19.03	250.00	250	230	26.0	45
OI24	6	384258075063101	122MNKN	04-03-86	18.99	250.00	250	230	26.0	60
OI24	6	384258075063101	122MNKN	07-07-86	20.12	250.00	250	230	26.0	30
OI24	6	384258075063101	122MNKN	08-19-86	20.30	250.00	250	230	26.0	30
OI34	1	384257075063101	112CLMB	02-05-86	--	131.00	131	69	23.0	--
OI34	1	384257075063101	112CLMB	04-03-86	--	131.00	131	69	23.0	--
OI34	1	384257075063101	112CLMB	07-07-86	--	131.00	131	69	23.0	--
OI34	1	384257075063101	112CLMB	08-19-86	--	131.00	131	69	23.0	--
OI35	30 1024	384239075055101	112CLMB	07-01-86	--	35.00	35	25	20.0	>15
PG53	13	383525075174101	122MNKN	02-06-86	--	406.00	255	205	22.0	--
PG53	13	383525075174101	122MNKN	04-08-86	--	406.00	255	205	22.0	--
PG53	13	383525075174101	122MNKN	07-08-86	--	406.00	255	205	22.0	--
PG53	13	383525075174101	122MNKN	08-21-86	--	406.00	255	205	22.0	--
PH13	2	383907075123601	112CLMB	09-18-86	11.21	90.00	90	50	21.9	35
PH13	3 59683	383907075124104	112CLMB	10-21-85	11.97	25.00	25	20	22.0	25
PH13	3 59683	383907075124104	112CLMB	01-21-86	10.32	25.00	25	20	22.0	20
PH13	3 59683	383907075124104	112CLMB	03-21-86	--	25.00	25	20	22.0	40
PH13	3 59683	383907075124104	112CLMB	06-20-86	13.87	25.00	25	20	22.0	30
PH13	3 59683	383907075124104	112CLMB	09-30-86	--	25.00	25	20	22.0	25
PH13	4 59678	383903075123005	112CLMB	10-22-85	9.34	25.00	25	20	20.0	25
PH13	4 59678	383903075123005	112CLMB	01-13-86	7.42	25.00	25	20	20.0	30
PH13	4 59678	383903075123005	112CLMB	03-19-86	6.08	25.00	25	20	20.0	40
PH13	4 59678	383903075123005	112CLMB	06-17-86	7.72	25.00	25	20	20.0	55
PH13	4 59678	383903075123005	112CLMB	09-30-86	8.77	25.00	25	20	20.0	25
PH13	8 59688	383919075123505	112CLMB	01-17-86	11.40	25.00	25	20	22.0	20
PH13	8 59688	383919075123505	112CLMB	03-18-86	--	25.00	25	20	22.0	35
PH13	8 59688	383919075123505	112CLMB	06-19-86	11.85	25.00	25	20	22.0	30
PH13	8 59688	383919075123505	112CLMB	09-22-86	12.46	25.00	25	20	22.0	20
PH13	12 59694	383929075123104	112CLMB	01-16-86	13.60	40.00	40	35	18.0	30
PH13	12 59694	383929075123104	112CLMB	03-20-86	--	40.00	40	35	18.0	35
PH13	12 59694	383929075123104	112CLMB	06-19-86	13.76	40.00	40	35	18.0	50
PH13	12 59694	383929075123104	112CLMB	09-22-86	12.42	40.00	40	35	18.0	35
PH13	13 59695	383929075123103	112CLMB	01-16-86	13.50	60.00	60	55	18.0	30
PH13	13 59695	383929075123103	112CLMB	03-20-86	12.65	60.00	60	55	18.0	35
PH13	13 59695	383929075123103	112CLMB	06-19-86	13.68	60.00	60	55	18.0	30

Geologic unit (aquifer): 112CLMB - Columbia Formation
122MNKN - Manokin Aquifer
122PCMK - Pocomoke Aquifer

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENT-I-FIER			FLOW RATE, INSTAN-TANEOUS (GPM)	SAM-PLING METHOD, CODES	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NG41	3		5.0	4040	170	5.24	25.0	21.0	--	8.2	47	11
NI51	31		750	4040	115	5.90	9.0	14.0	--	--	--	--
NI51	31		750	4040	108	5.60	12.0	14.0	--	--	18	4.4
NI51	31		750	4040	130	5.40	34.0	15.0	--	--	--	--
NI51	31		750	4040	120	5.70	25.0	14.5	25	--	23	5.5
NI52	11		22	4030	68	--	19.0	14.5	--	--	--	--
NI52	11		27	4030	68	6.00	9.0	14.5	--	--	--	--
NI52	11		50	4030	70	5.85	12.0	15.0	--	--	--	--
NI52	11		27	4030	74	5.72	33.0	15.0	--	--	--	--
NI52	11		24	4030	71	--	27.0	15.0	--	--	--	--
NI52	12		60	4030	245	5.80	9.0	14.0	--	--	--	--
NI52	12		60	4030	255	5.65	12.0	14.0	--	--	--	--
NI52	12		60	4030	269	5.66	33.0	14.5	--	--	--	--
NI52	12		60	4030	240	--	27.0	14.0	--	--	--	--
OH54	1		0.8	4030	325	--	18.0	16.0	--	--	--	--
OH54	1		3.0	4030	320	--	13.0	15.5	--	--	--	--
OH54	1		11	4030	330	7.70	13.0	15.0	--	--	9	1.3
OH54	1		11	4030	355	7.75	36.0	16.0	--	--	--	--
OH54	1		8.5	4030	348	--	31.0	16.0	31	--	9	1.3
OH54	2		30	4030	57	--	18.0	14.5	--	--	--	--
OH54	2		20	4030	54	--	11.5	14.5	--	--	--	--
OH54	2		40	4030	55	5.90	13.0	14.5	--	--	7	2.0
OH54	2		58	4030	61	5.58	36.0	15.0	--	--	--	--
OH54	2		40	4030	58	--	32.0	15.0	32	--	7	1.8
OI24	6		20	4030	76	--	19.0	15.0	--	--	--	--
OI24	6		45	4030	78	7.50	11.0	14.5	--	--	--	--
OI24	6		50	4030	80	6.25	13.0	15.0	--	--	11	2.3
OI24	6		37	4030	85	5.93	37.0	15.0	--	--	--	--
OI24	6		17	4030	82	--	30.0	15.0	30	--	10	2.1
OI34	1		--	4040	160	6.20	11.0	14.0	--	--	--	--
OI34	1		--	4040	170	5.55	12.5	14.0	--	--	41	7.5
OI34	1		--	4040	170	5.58	37.0	14.5	--	--	--	--
OI34	1		--	4040	165	--	28.0	14.0	28	0	34	6.7
OI35	30	1024	--	4090	330	5.80	25.0	15.0	--	1.9	90	22
PG53	13		--	4040	127	5.90	9.0	14.5	--	--	--	--
PG53	13		--	4040	130	5.80	22.0	15.0	--	--	19	4.3
PG53	13		--	4040	133	6.48	30.0	16.0	--	--	--	--
PG53	13		--	4040	131	6.60	23.0	15.5	--	--	19	4.3
PH13	2		1.0	4040	183	5.60	22.0	14.5	--	9.0	48	11
PH13	3	59683	1.0	4040	302	4.87	17.0	15.0	--	8.4	94	27
PH13	3	59683	--	4030	310	5.00	12.0	17.0	--	--	94	27
PH13	3	59683	--	4030	290	5.07	-2.0	14.5	--	--	88	25
PH13	3	59683	1.0	4040	320	4.80	24.0	13.5	--	9.2	97	28
PH13	3	59683	1.0	4040	337	4.76	34.0	17.5	--	--	100	29
PH13	4	59678	1.0	4040	369	5.00	19.0	14.5	--	9.6	130	27
PH13	4	59678	4.0	4030	373	5.00	7.5	16.0	--	--	140	29
PH13	4	59678	--	4030	375	4.95	17.5	15.0	--	--	130	26
PH13	4	59678	1.0	4040	295	5.00	26.5	14.0	--	10.3	130	26
PH13	4	59678	1.0	4040	308	4.90	27.0	16.0	--	--	110	22
PH13	8	59688	--	4030	395	4.80	13.0	17.5	--	--	150	19
PH13	8	59688	--	4030	380	4.76	13.0	16.5	--	--	140	17
PH13	8	59688	1.0	4040	358	4.63	28.5	13.5	--	9.4	130	16
PH13	8	59688	1.0	4040	348	4.78	24.0	15.0	--	8.9	120	16
PH13	12	59694	--	4030	345	5.60	15.0	11.5	--	--	130	33
PH13	12	59694	--	4030	358	5.67	10.0	15.5	--	--	130	34
PH13	12	59694	1.0	4040	397	5.60	26.5	15.0	--	8.3	150	39
PH13	12	59694	1.0	4040	345	5.67	23.0	15.0	--	8.4	130	35
PH13	13	59695	--	4030	77	5.60	10.0	16.0	--	--	14	4.2
PH13	13	59695	--	4030	69	5.59	10.0	15.5	--	--	--	--
PH13	13	59695	1.0	4040	68	5.74	29.5	15.0	--	5.2	11	3.1

Sampling method: 4030 - Suction pump
4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENTIFIER			MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
NG41	3		4.7	9.1	28	0.6	2.5	5	4	46	7.6	13
NI51	31		--	--	--	--	--	--	--	--	--	16
NI51	31		1.7	12	57	1	1.4	--	--	29	9.8	11
NI51	31		--	--	--	--	--	--	--	--	--	17
NI51	31		2.2	10	47	0.9	1.6	11	9	35	14	14
NI52	11		--	--	--	--	--	--	--	--	--	12
NI52	11		--	--	--	--	--	--	--	--	--	12
NI52	11		--	--	--	--	--	--	--	--	--	13
NI52	11		--	--	--	--	--	--	--	--	--	12
NI52	11		--	--	--	--	--	--	--	--	--	12
NI52	12		--	--	--	--	--	--	--	--	--	25
NI52	12		--	--	--	--	--	--	--	--	--	25
NI52	12		--	--	--	--	--	--	--	--	--	24
NI52	12		--	--	--	--	--	--	--	--	--	23
OH54	1		--	--	--	--	--	--	--	--	--	8.0
OH54	1		--	--	--	--	--	--	--	--	--	7.0
OH54	1		1.3	72	90	11	6.4	--	--	4.3	8.3	9.1
OH54	1		--	--	--	--	--	--	--	--	--	9.0
OH54	1		1.3	71	91	11	5.6	--	--	--	4.1	8.2
OH54	2		--	--	--	--	--	--	--	--	--	8.0
OH54	2		--	--	--	--	--	--	--	--	--	9.0
OH54	2		0.5	7.3	66	1	1.0	--	--	20	3.7	7.9
OH54	2		--	--	--	--	--	--	--	--	--	9.0
OH54	2		0.5	6.9	65	1	1.1	--	--	--	3.2	7.1
OI24	6		--	--	--	--	--	--	--	--	--	11
OI24	6		--	--	--	--	--	--	--	--	--	12
OI24	6		1.3	8.4	55	1	2.8	--	--	14	4.7	8.8
OI24	6		--	--	--	--	--	--	--	--	--	12
OI24	6		1.2	7.7	55	1	2.8	--	--	--	4.4	10
OI34	1		--	--	--	--	--	--	--	--	--	18
OI34	1		5.3	13	40	0.9	1.5	--	--	44	16	15
OI34	1		--	--	--	--	--	--	--	--	--	19
OI34	1		4.2	12	42	0.9	1.9	--	--	--	11	16
OI35	30	1024	8.6	20	31	0.9	5.2	38	31	96	41	25
PG53	13		--	--	--	--	--	--	--	--	--	6.5
PG53	13		2.0	14	58	1	2.2	--	--	120	9.1	6.0
PG53	13		--	--	--	--	--	--	--	--	--	7.0
PG53	13		1.9	14	59	1	2.3	70	57	28	7.9	5.9
PH13	2		5.0	12	34	0.8	2.0	11	9	44	4.2	14
PH13	3	59683	6.4	5.9	10	0.3	16	2	2	43	18	18
PH13	3	59683	6.5	6.0	10	0.3	16	2	2	32	15	17
PH13	3	59683	6.1	5.5	10	0.3	16	2	2	27	16	17
PH13	3	59683	6.5	5.5	9	0.3	15	2	2	50	19	18
PH13	3	59683	7.2	5.6	9	0.3	20	0	0	101	14	21
PH13	4	59678	16	8.1	11	0.3	7.0	2	2	32	16	28
PH13	4	59678	17	8.2	11	0.3	7.1	4	3	64	12	31
PH13	4	59678	16	8.1	11	0.3	7.2	4	3	71	15	27
PH13	4	59678	15	7.6	11	0.3	6.7	2	2	32	18	24
PH13	4	59678	13	7.0	12	0.3	6.5	3	3	60	17	21
PH13	8	59688	25	6.9	9	0.2	7.7	4	3	101	12	34
PH13	8	59688	23	6.6	9	0.2	7.3	1	1	28	12	34
PH13	8	59688	21	6.3	9	0.2	6.6	0	0	136	12	32
PH13	8	59688	20	6.1	9	0.2	6.8	2	2	53	12	28
PH13	12	59694	11	11	15	0.4	2.5	10	8	40	14	25
PH13	12	59694	10	10	14	0.4	2.6	10	8	34	16	25
PH13	12	59694	12	10	13	0.4	2.5	12	10	48	24	27
PH13	12	59694	10	10	14	0.4	2.3	9	7	31	18	23
PH13	13	59695	0.9	7.9	52	0.9	1.4	12	10	48	1.0	9.1
PH13	13	59695	--	--	--	--	--	13	11	53	--	--
PH13	13	59695	0.69	8.1	59	1	1.2	13	11	38	0.8	8.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENT-I-FIER			FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
NG41	3		--	16	--	66	0.09	11.0	0.03	0.04	0.57
NI51	31		--	--	--	--	--	--	--	--	--
NI51	31		<0.1	19	74	63	0.1	1.20	--	--	--
NI51	31		--	--	--	--	--	--	--	--	--
NI51	31		<0.1	18	77	71	0.1	3.20	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
OH54	1		--	--	--	--	--	--	--	--	--
OH54	1		--	--	--	--	--	--	--	--	--
OH54	1		0.5	14	200	180	0.27	<0.10	--	--	--
OH54	1		--	--	--	--	--	--	--	--	--
OH54	1		0.5	14	200	200	0.27	<0.10	--	--	--
OH54	2		--	--	--	--	--	--	--	--	--
OH54	2		--	--	--	--	--	--	--	--	--
OH54	2		<0.1	23	50	50	0.07	0.59	--	--	--
OH54	2		--	--	--	--	--	--	--	--	--
OH54	2		<0.1	22	48	48	0.06	0.57	--	--	--
OI24	6		--	--	--	--	--	--	--	--	--
OI24	6		--	--	--	--	--	--	--	--	--
OI24	6		<0.1	20	46	58	0.06	<0.10	--	--	--
OI24	6		--	--	--	--	--	--	--	--	--
OI24	6		<0.1	20	61	58	0.08	<0.10	--	--	--
OI34	1		--	--	--	--	--	--	--	--	--
OI34	1		<0.1	15	97	78	0.13	5.20	--	--	--
OI34	1		--	--	--	--	--	--	--	--	--
OI34	1		<0.1	16	99	73	0.13	<0.10	--	--	--
OI35	30	1024	--	17	--	160	0.22	11.0	0.77	0.99	0.53
PG53	13		--	--	--	--	--	--	--	--	--
PG53	13		<0.1	32	97	100	0.13	<0.10	--	--	--
PG53	13		--	--	--	--	--	--	--	--	--
PG53	13		0.1	31	89	110	0.12	<0.10	--	--	--
PH13	2		--	18	--	72	0.1	13.0	0.02	0.03	0.68
PH13	3	59683	<0.1	9.6	--	100	0.14	24.0	--	--	--
PH13	3	59683	--	10	--	99	0.13	22.0	0.01	0.01	0.89
PH13	3	59683	--	9.3	--	96	0.13	21.0	<0.01	--	--
PH13	3	59683	--	8.8	--	100	0.14	24.0	0.07	0.09	0.63
PH13	3	59683	--	9.5	--	110	0.15	24.0	0.01	0.01	1.3
PH13	4	59678	<0.1	16	--	120	0.16	28.0	--	--	--
PH13	4	59678	--	18	--	120	0.17	30.0	<0.01	--	--
PH13	4	59678	--	16	--	120	0.16	28.0	<0.01	--	--
PH13	4	59678	--	17	--	120	0.16	28.0	0.02	0.03	0.38
PH13	4	59678	--	17	--	100	0.14	22.0	<0.01	--	--
PH13	8	59688	--	17	--	120	0.17	32.0	0.02	0.03	0.88
PH13	8	59688	--	15	--	120	0.16	28.0	<0.01	--	--
PH13	8	59688	--	16	--	110	0.15	27.0	0.01	0.01	0.59
PH13	8	59688	--	16	--	110	0.14	28.0	<0.01	--	--
PH13	12	59694	--	20	--	120	0.17	25.0	0.01	0.01	0.99
PH13	12	59694	--	19	--	120	0.17	25.0	<0.01	--	--
PH13	12	59694	--	19	--	140	0.19	31.0	<0.01	--	--
PH13	12	59694	--	20	--	120	0.17	28.0	0.01	0.01	--
PH13	13	59695	--	21	--	51	0.07	3.00	0.02	0.03	0.88
PH13	13	59695	--	--	--	--	--	--	--	--	--
PH13	13	59695	--	21	--	50	0.07	1.80	0.02	0.03	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENT-I-FIER			NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
NG41	3		0.6	--	<0.01	--	--	<10	65	--	0.11
NI51	31		--	--	--	--	--	--	--	--	--
NI51	31		--	--	--	<0.01	--	--	55	10	--
NI51	31		--	--	--	--	--	--	--	--	--
NI51	31		--	--	--	0.12	0.37	--	7	7	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	11		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
NI52	12		--	--	--	--	--	--	--	--	--
OH54	1		--	--	--	--	--	--	--	--	--
OH54	1		--	--	--	--	--	--	--	--	--
OH54	1		--	--	--	0.98	3.0	--	93	10	--
OH54	1		--	--	--	--	--	--	--	--	--
OH54	1		--	--	--	0.98	3.0	--	93	9	--
OH54	2		--	--	--	--	--	--	--	--	--
OH54	2		--	--	--	--	--	--	--	--	--
OH54	2		--	--	--	<0.01	--	--	12	<1	--
OH54	2		--	--	--	--	--	--	--	--	--
OH54	2		--	--	--	<0.01	--	--	7	1	--
OI24	6		--	--	--	--	--	--	--	--	--
OI24	6		--	--	--	--	--	--	--	--	--
OI24	6		--	--	--	<0.01	--	--	2000	23	--
OI24	6		--	--	--	--	--	--	--	--	--
OI24	6		--	--	--	<0.01	--	--	1900	22	--
OI34	1		--	--	--	--	--	--	--	--	--
OI34	1		--	--	--	<0.01	--	--	24	5	--
OI34	1		--	--	--	--	--	--	--	--	--
OI34	1		--	--	--	<0.01	--	--	17	4	--
OI35	30	1024	1.3	--	0.03	--	--	40	15	--	0.15
PG53	13		--	--	--	--	--	--	--	--	--
PG53	13		--	--	--	<0.01	--	--	7500	210	--
PG53	13		--	--	--	--	--	--	--	--	--
PG53	13		--	--	--	<0.01	--	--	7600	220	--
PH13	2		0.7	--	0.01	--	--	<10	<3	--	0.13
PH13	3	59683	--	--	--	<0.01	--	--	<3	73	--
PH13	3	59683	0.9	--	<0.01	--	--	--	110	--	--
PH13	3	59683	1.6	--	0.05	--	--	--	57	--	--
PH13	3	59683	0.7	--	0.06	--	--	--	5	--	--
PH13	3	59683	1.3	--	0.70	--	--	--	21	--	--
PH13	4	59678	--	--	--	<0.01	--	--	<3	77	--
PH13	4	59678	1.0	--	<0.01	--	--	--	64	--	--
PH13	4	59678	1.1	--	0.02	--	--	--	40	--	--
PH13	4	59678	0.4	--	<0.01	--	--	--	4	--	--
PH13	4	59678	1.5	--	<0.01	--	--	--	7	--	--
PH13	8	59688	0.9	33	<0.01	--	--	--	190	--	--
PH13	8	59688	1.2	--	<0.01	--	--	--	130	--	--
PH13	8	59688	0.6	--	<0.01	--	--	--	10	--	--
PH13	8	59688	0.6	--	<0.01	--	--	--	16	--	--
PH13	12	59694	1.0	26	<0.01	--	--	--	38	--	--
PH13	12	59694	1.1	--	<0.01	--	--	--	30	--	--
PH13	12	59694	0.3	--	<0.01	--	--	--	6	--	--
PH13	12	59694	<0.2	--	<0.01	--	--	--	14	--	--
PH13	13	59695	0.9	3.9	<0.01	--	--	--	29	--	--
PH13	13	59695	--	--	--	--	--	--	--	--	--
PH13	13	59695	<0.2	--	0.01	--	--	--	5	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENT-I-FIER		STATION NUMBER	GEO-LOGIC UNIT	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)
PH13	13 59695	383929075123103	112CLMB	09-22-86	--	60.00	60	55	18.0	30
PH13	14 59696	383929075123102	112CLMB	01-16-86	13.50	75.00	75	70	18.0	30
PH13	14 59696	383929075123102	112CLMB	03-20-86	12.65	75.00	75	70	18.0	40
PH13	14 59696	383929075123102	112CLMB	06-19-86	13.72	75.00	75	70	18.0	30
PH13	14 59696	383929075123102	112CLMB	09-22-86	14.58	75.00	75	70	18.0	30
PH13	16 59684	383907075124103	112CLMB	10-21-85	12.02	45.00	45	40	22.0	45
PH13	16 59684	383907075124103	112CLMB	01-21-86	10.40	45.00	45	40	22.0	35
PH13	16 59684	383907075124103	112CLMB	03-21-86	--	45.00	45	40	22.0	30
PH13	16 59684	383907075124103	112CLMB	06-20-86	--	45.00	45	40	22.0	30
PH13	16 59684	383907075124103	112CLMB	09-30-86	--	45.00	45	40	22.0	30
PH13	17 59685	383907075124102	112CLMB	10-21-85	12.08	60.00	60	55	22.0	40
PH13	17 59685	383907075124102	112CLMB	01-21-86	10.40	60.00	60	55	22.0	35
PH13	17 59685	383907075124102	112CLMB	03-21-86	9.22	60.00	60	55	22.0	35
PH13	17 59685	383907075124102	112CLMB	06-20-86	13.87	60.00	60	55	22.0	40
PH13	17 59685	383907075124102	112CLMB	09-30-86	--	60.00	60	55	22.0	40
PH13	18 59686	383907075124101	112CLMB	10-21-85	12.11	85.00	85	80	22.0	45
PH13	18 59686	383907075124101	112CLMB	01-16-86	10.50	85.00	85	80	22.0	30
PH13	18 59686	383907075124101	112CLMB	03-21-86	9.26	85.00	85	80	22.0	35
PH13	18 59686	383907075124101	112CLMB	06-20-86	--	85.00	85	80	22.0	30
PH13	18 59686	383907075124101	112CLMB	09-30-86	--	85.00	85	80	22.0	30
PH13	19 59689	383919075123504	112CLMB	01-17-86	11.40	45.00	45	40	22.0	40
PH13	19 59689	383919075123504	112CLMB	03-18-86	10.39	45.00	45	40	22.0	45
PH13	19 59689	383919075123504	112CLMB	06-19-86	11.86	45.00	45	40	22.0	35
PH13	19 59689	383919075123504	112CLMB	09-22-86	12.48	45.00	45	40	22.0	30
PH13	20 59690	383919075123503	112CLMB	01-17-86	11.50	60.00	60	55	22.0	30
PH13	20 59690	383919075123503	112CLMB	03-18-86	10.48	60.00	60	55	22.0	45
PH13	20 59690	383919075123503	112CLMB	06-19-86	11.91	60.00	60	55	22.0	30
PH13	20 59690	383919075123503	112CLMB	09-22-86	--	60.00	60	55	22.0	30
PH13	21 59691	383919075123502	112CLMB	01-17-86	11.30	85.00	85	80	22.0	30
PH13	21 59691	383919075123502	112CLMB	03-18-86	10.26	85.00	85	80	22.0	35
PH13	21 59691	383919075123502	112CLMB	06-19-86	11.61	85.00	85	80	22.0	25
PH13	21 59691	383919075123502	112CLMB	09-22-86	12.32	85.00	85	80	22.0	25
PH13	23 59679	383903075123004	112CLMB	10-22-85	9.45	45.00	45	40	20.0	35
PH13	23 59679	383903075123004	112CLMB	01-13-86	7.58	45.00	45	40	20.0	30
PH13	23 59679	383903075123004	112CLMB	03-19-86	6.24	45.00	45	40	20.0	25
PH13	23 59679	383903075123004	112CLMB	06-17-86	7.87	45.00	45	40	20.0	30
PH13	23 59679	383903075123004	112CLMB	09-30-86	8.91	45.00	45	40	20.0	30
PH13	24 59680	383903075123003	112CLMB	10-22-85	9.34	65.00	65	60	20.0	40
PH13	24 59680	383903075123003	112CLMB	01-13-86	7.59	65.00	65	60	20.0	30
PH13	24 59680	383903075123003	112CLMB	03-19-86	6.24	65.00	65	60	20.0	35
PH13	24 59680	383903075123003	112CLMB	06-17-86	7.89	65.00	65	60	20.0	40
PH13	24 59680	383903075123003	112CLMB	09-30-86	8.93	65.00	65	60	20.0	25
PH13	25 59681	383903075123002	112CLMB	01-13-86	7.57	85.00	85	80	20.0	45
PH13	25 59681	383903075123002	112CLMB	03-19-86	6.22	85.00	85	80	20.0	45
PH13	25 59681	383903075123002	112CLMB	06-18-86	8.02	85.00	85	80	20.0	45
PH13	25 59681	383903075123002	112CLMB	09-23-86	8.88	85.00	85	80	20.0	35
PH13	26 59682	383903075123001	112CLMB	06-18-86	8.15	102.00	102	97	20.0	35
PH13	26 59682	383903075123001	112CLMB	09-23-86	8.95	102.00	102	97	20.0	35
PH23	10 59673	383854075122004	112CLMB	03-17-86	6.30	25.00	25	20	20.0	25
PH23	10 59673	383854075122004	112CLMB	06-17-86	7.85	25.00	25	20	20.0	30
PH23	10 59673	383854075122004	112CLMB	09-23-86	9.19	25.00	25	20	20.0	30
PH23	12 59674	383854075122003	112CLMB	01-09-86	7.67	45.00	45	40	20.0	20
PH23	12 59674	383854075122003	112CLMB	03-17-86	6.25	45.00	45	40	20.0	30
PH23	12 59674	383854075122003	112CLMB	06-17-86	7.81	45.00	45	40	20.0	35
PH23	12 59674	383854075122003	112CLMB	09-23-86	9.13	45.00	45	40	20.0	30
PH23	13 59675	383854075122002	112CLMB	01-09-86	7.88	65.00	65	60	20.0	25
PH23	13 59675	383854075122002	112CLMB	03-17-86	6.45	65.00	65	60	20.0	40
PH23	13 59675	383854075122002	112CLMB	06-17-86	8.02	65.00	65	60	20.0	45
PH23	13 59675	383854075122002	112CLMB	09-23-86	9.31	65.00	65	60	20.0	25
PH23	14 59676	383854075122001	112CLMB	01-09-86	7.93	83.00	83	78	20.0	--

Geologic unit (aquifer): 112CLMB - Columbia Formation

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENTIFIER			FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
PH13	13	59695	--	4040	66	5.60	22.0	14.5	5.3	10	3.2	0.57
PH13	14	59696	--	4030	70	5.70	6.0	16.0	--	10	2.8	0.7
PH13	14	59696	--	4040	69	5.54	10.0	15.5	--	--	--	--
PH13	14	59696	1.0	4040	70	5.13	29.0	15.0	5.2	9	2.7	0.66
PH13	14	59696	1.0	4040	70	5.60	22.0	14.5	5.5	9	2.8	0.59
PH13	16	59684	1.0	4040	420	5.30	16.5	13.5	10.5	160	29	22
PH13	16	59684	--	4030	440	5.37	10.5	17.0	--	160	28	22
PH13	16	59684	--	4030	422	5.29	-2.0	16.0	--	--	--	--
PH13	16	59684	1.0	4040	433	5.09	23.0	14.0	9.3	160	28	21
PH13	16	59684	1.0	4040	342	5.22	32.5	16.0	8.5	130	24	18
PH13	17	59685	1.0	4040	403	4.73	14.5	14.0	5.7	150	30	18
PH13	17	59685	--	4030	413	4.90	11.0	20.0	--	150	30	19
PH13	17	59685	--	4030	401	4.75	0.0	19.0	--	--	--	--
PH13	17	59685	1.0	4040	423	4.60	25.5	15.0	6.0	--	--	--
PH13	17	59685	1.0	4040	397	4.70	32.5	16.5	--	140	29	16
PH13	18	59686	1.0	4040	113	5.70	17.0	14.0	6.2	20	6.1	1.2
PH13	18	59686	--	4040	91	5.70	10.0	15.5	--	14	4.4	0.8
PH13	18	59686	--	4030	90	5.58	-1.5	15.0	--	--	--	--
PH13	18	59686	1.0	4040	187	5.35	27.0	14.5	6.4	--	--	--
PH13	18	59686	1.0	4040	155	5.40	32.0	15.5	--	38	11	2.5
PH13	19	59689	--	4030	273	5.30	15.0	16.5	--	87	21	8.5
PH13	19	59689	--	4030	295	5.22	18.0	16.5	--	--	--	--
PH13	19	59689	1.0	4040	294	5.14	28.5	14.5	8.5	89	21	8.9
PH13	19	59689	1.0	4040	293	5.30	24.0	14.5	8.6	94	23	8.9
PH13	20	59690	--	4030	257	5.34	12.5	16.0	--	75	20	6.1
PH13	20	59690	--	4030	254	5.20	19.5	15.5	--	--	--	--
PH13	20	59690	1.0	4040	260	5.20	28.5	14.5	7.7	72	19	6.0
PH13	20	59690	--	4030	286	5.30	25.0	14.5	8.0	90	24	7.3
PH13	21	59691	--	4030	212	5.45	9.5	15.5	--	63	15	6.3
PH13	21	59691	--	4030	187	5.28	20.0	15.5	--	--	--	--
PH13	21	59691	1.0	4040	210	5.33	28.5	14.5	7.6	59	14	5.8
PH13	21	59691	--	4040	235	5.40	24.0	14.5	8.4	71	17	6.9
PH13	23	59679	1.0	4040	365	5.00	19.0	14.0	9.5	130	28	15
PH13	23	59679	--	4030	360	5.00	8.5	15.5	--	130	29	15
PH13	23	59679	--	4030	351	4.92	21.5	15.5	--	--	--	--
PH13	23	59679	1.0	4040	291	5.00	26.5	14.5	8.6	130	27	14
PH13	23	59679	1.0	4040	345	5.00	25.0	16.0	--	120	26	14
PH13	24	59680	1.0	4040	342	5.60	19.0	14.0	6.9	120	29	11
PH13	24	59680	4.0	4030	338	5.60	13.0	15.0	--	120	29	11
PH13	24	59680	--	4030	339	5.47	21.5	15.0	--	--	--	--
PH13	24	59680	1.0	4040	292	5.50	26.5	14.5	7.0	120	30	11
PH13	24	59680	1.0	4040	313	5.60	25.0	15.0	--	110	26	9.9
PH13	25	59681	1.3	4030	178	5.40	7.5	17.5	--	49	13	3.9
PH13	25	59681	1.0	4030	165	5.27	21.5	17.5	--	--	--	--
PH13	25	59681	1.0	4040	176	5.70	21.0	14.5	1.6	49	13	4.1
PH13	25	59681	1.0	4040	136	5.50	29.0	15.0	6.7	46	12	3.8
PH13	26	59682	1.0	4040	179	5.60	23.0	14.0	6.6	48	13	3.8
PH13	26	59682	1.0	4040	137	5.40	28.5	14.5	6.7	41	11	3.3
PH23	10	59673	1.0	4040	377	4.79	10.5	14.0	--	140	23	20
PH23	10	59673	1.0	4040	361	4.92	27.0	13.0	0.2	130	22	19
PH23	10	59673	1.0	4040	327	4.87	24.5	15.5	0	120	20	17
PH23	12	59674	4.0	4030	392	5.26	7.0	15.0	--	150	30	19
PH23	12	59674	--	4030	348	5.17	10.5	15.0	--	--	--	--
PH23	12	59674	1.0	4040	363	5.35	26.0	14.0	2.1	160	32	20
PH23	12	59674	1.0	4040	445	5.25	26.0	14.0	2.9	170	32	21
PH23	13	59675	4.0	4030	307	5.43	6.5	14.5	--	110	27	11
PH23	13	59675	--	4030	269	5.39	12.5	15.0	--	--	--	--
PH23	13	59675	1.0	4040	245	5.56	27.0	14.0	5.6	110	25	11
PH23	13	59675	1.0	4040	276	5.55	23.0	14.0	6.2	92	22	9.1
PH23	14	59676	4.0	4030	321	5.40	2.5	14.5	--	110	30	8.8

Sampling method: 4030 - Suction pump
4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

	LOCAL IDENTIFIER		SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
PH13	13	59695	8.3	60	1	1.2	16	13	64	1.6	8.8
PH13	14	59696	8.7	62	1	1.3	11	9	35	1.1	8.5
PH13	14	59696	--	--	--	--	12	10	55	--	--
PH13	14	59696	8.5	63	1	1.2	12	10	141	0.8	8.7
PH13	14	59696	8.9	64	1	1.3	13	11	52	1.6	9.5
PH13	16	59684	9.5	11	0.3	5.0	3	3	24	14	26
PH13	16	59684	9.3	11	0.3	5.1	5	4	34	13	28
PH13	16	59684	--	--	--	--	4	3	33	--	--
PH13	16	59684	9.3	11	0.3	5.3	2	2	26	15	23
PH13	16	59684	8.6	12	0.3	5.7	5	5	48	13	21
PH13	17	59685	8.6	11	0.3	7.5	1	1	30	20	24
PH13	17	59685	8.5	10	0.3	6.7	1	1	20	17	24
PH13	17	59685	--	--	--	--	1	1	28	--	--
PH13	17	59685	--	--	--	--	0	0	0	--	--
PH13	17	59685	8.6	11	0.3	8.9	0	0	116	21	21
PH13	18	59686	13	56	1	1.6	10	8	32	1.1	13
PH13	18	59686	11	60	1	1.5	11	9	35	1.0	10
PH13	18	59686	--	--	--	--	11	9	46	--	--
PH13	18	59686	--	--	--	--	7	6	50	--	--
PH13	18	59686	11	37	0.8	2.2	7	6	44	0.9	14
PH13	19	59689	13	24	0.6	3.0	4	3	32	1.5	23
PH13	19	59689	--	--	--	--	4	3	38	--	--
PH13	19	59689	12	22	0.6	3.0	4	3	46	1.9	23
PH13	19	59689	12	21	0.6	2.9	4	3	32	2.2	23
PH13	20	59690	14	28	0.7	2.9	5	4	36	0.9	22
PH13	20	59690	--	--	--	--	6	5	60	--	--
PH13	20	59690	13	27	0.7	2.8	6	5	60	0.7	22
PH13	20	59690	12	22	0.6	2.9	4	4	32	1.4	21
PH13	21	59691	11	27	0.6	2.3	6	5	34	3.0	21
PH13	21	59691	--	--	--	--	6	5	50	--	--
PH13	21	59691	9.5	25	0.6	2.2	5	4	37	0.5	17
PH13	21	59691	11	24	0.6	2.3	5	4	32	1.2	22
PH13	23	59679	8.7	12	0.3	6.7	4	3	64	15	20
PH13	23	59679	8.5	12	0.3	6.4	3	2	33	12	26
PH13	23	59679	--	--	--	--	3	2	57	--	--
PH13	23	59679	8.6	12	0.3	6.6	3	2	48	20	18
PH13	23	59679	8.3	12	0.3	6.8	3	2	48	17	18
PH13	24	59680	12	17	0.5	4.3	10	8	40	16	24
PH13	24	59680	11	16	0.5	4.7	9	8	36	12	26
PH13	24	59680	--	--	--	--	10	8	54	--	--
PH13	24	59680	12	17	0.5	5.1	10	8	50	17	21
PH13	24	59680	11	18	0.5	4.8	12	10	48	15	19
PH13	25	59681	11	32	0.7	1.9	8	7	51	6.4	14
PH13	25	59681	--	--	--	--	6	5	51	--	--
PH13	25	59681	11	32	0.7	1.9	9	7	29	5.8	10
PH13	25	59681	11	33	0.7	1.9	8	7	40	5.9	11
PH13	26	59682	12	34	0.8	2.0	9	7	36	5.5	12
PH13	26	59682	12	37	0.8	2.0	9	7	57	4.7	12
PH23	10	59673	9.4	12	0.4	4.3	7	6	180	18	22
PH23	10	59673	9.0	12	0.3	3.5	10	8	191	24	21
PH23	10	59673	9.0	14	0.4	3.6	7	6	150	24	19
PH23	12	59674	12	14	0.4	2.9	17	14	126	12	20
PH23	12	59674	--	--	--	--	15	12	161	--	--
PH23	12	59674	13	15	0.5	3.1	13	11	92	17	25
PH23	12	59674	12	13	0.4	3.1	15	12	134	16	26
PH23	13	59675	10	16	0.4	2.0	9	7	43	8.9	20
PH23	13	59675	--	--	--	--	9	7	58	--	--
PH23	13	59675	11	18	0.5	2.1	10	8	44	9.9	19
PH23	13	59675	10	19	0.5	2.0	8	7	36	10	20
PH23	14	59676	12	19	0.5	2.3	6	5	38	7.6	27

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

	LOCAL IDENTIFIER		FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
PH13	13	59695	--	21	53	0.07	1.90	<0.01	--	--	1.3
PH13	14	59696	--	22	51	0.07	2.10	0.03	0.04	0.47	0.5
PH13	14	59696	--	--	--	--	--	--	--	--	--
PH13	14	59696	--	21	49	0.07	2.20	<0.01	--	--	<0.2
PH13	14	59696	--	21	52	0.07	2.40	0.01	0.01	0.29	0.3
PH13	16	59684	<0.1	16	120	0.17	37.0	--	--	--	--
PH13	16	59684	--	17	120	0.17	41.0	0.01	0.01	1.4	1.4
PH13	16	59684	--	--	--	--	--	--	--	--	--
PH13	16	59684	--	16	120	0.16	39.0	0.02	0.03	0.78	0.8
PH13	16	59684	--	16	110	0.15	31.0	0.01	0.01	1.4	1.4
PH13	17	59685	<0.1	17	130	0.17	34.0	--	--	--	--
PH13	17	59685	--	17	120	0.17	34.0	0.01	0.01	1.1	1.1
PH13	17	59685	--	--	--	--	--	--	--	--	--
PH13	17	59685	--	--	--	--	--	--	--	--	--
PH13	17	59685	--	18	120	0.17	33.0	0.02	0.03	0.78	0.8
PH13	18	59686	<0.1	17	58	0.08	6.70	--	--	--	--
PH13	18	59686	--	19	53	0.07	4.60	0.01	0.01	0.59	0.6
PH13	18	59686	--	--	--	--	--	--	--	--	--
PH13	18	59686	--	--	--	--	--	--	--	--	--
PH13	18	59686	--	18	63	0.09	10.0	0.02	0.03	0.78	0.8
PH13	19	59689	--	18	90	0.12	23.0	<0.01	0.01	--	0.7
PH13	19	59689	--	--	--	--	--	--	--	--	--
PH13	19	59689	--	17	89	0.12	26.0	<0.01	--	--	0.4
PH13	19	59689	--	18	92	0.13	25.0	<0.01	--	--	0.3
PH13	20	59690	--	18	86	0.12	21.0	0.01	0.01	0.89	0.9
PH13	20	59690	--	--	--	--	--	--	--	--	--
PH13	20	59690	--	17	83	0.11	21.0	<0.01	--	--	0.5
PH13	20	59690	--	17	88	0.12	24.0	0.02	0.03	0.48	0.5
PH13	21	59691	--	17	79	0.11	16.0	0.01	0.01	0.59	0.6
PH13	21	59691	--	--	--	--	--	--	--	--	--
PH13	21	59691	--	17	69	0.09	14.0	0.02	0.03	0.48	0.5
PH13	21	59691	--	17	80	0.11	18.0	0.02	0.03	0.58	0.6
PH13	23	59679	<0.1	15	110	0.15	28.0	--	--	--	--
PH13	23	59679	--	16	110	0.15	28.0	<0.01	--	--	0.8
PH13	23	59679	--	--	--	--	--	--	--	--	--
PH13	23	59679	--	16	110	0.15	29.0	0.02	0.03	0.38	0.4
PH13	23	59679	--	16	110	0.15	29.0	0.02	0.03	1.7	1.7
PH13	24	59680	<0.1	17	120	0.16	24.0	--	--	--	--
PH13	24	59680	--	17	120	0.16	26.0	0.01	0.01	1.1	1.1
PH13	24	59680	--	--	--	--	--	--	--	--	--
PH13	24	59680	--	18	120	0.16	28.0	0.02	0.03	0.38	0.4
PH13	24	59680	--	18	110	0.15	23.0	<0.01	--	--	0.8
PH13	25	59681	--	18	72	0.1	13.0	0.01	0.01	0.59	0.6
PH13	25	59681	--	--	--	--	--	--	--	--	--
PH13	25	59681	--	19	69	0.09	12.0	<0.01	--	--	1.3
PH13	25	59681	--	18	68	0.09	12.0	<0.01	--	--	0.5
PH13	26	59682	--	19	72	0.1	13.0	0.01	0.01	0.39	0.4
PH13	26	59682	--	18	67	0.09	12.0	0.02	0.03	0.48	0.5
PH23	10	59673	--	11	110	0.15	29.0	<0.01	--	--	1.3
PH23	10	59673	--	11	110	0.16	28.0	0.02	0.03	0.58	0.6
PH23	10	59673	--	12	110	0.15	23.0	0.02	0.03	0.38	0.4
PH23	12	59674	--	17	120	0.16	34.0	0.01	0.01	1.9	1.9
PH23	12	59674	--	--	--	--	--	--	--	--	--
PH23	12	59674	--	18	130	0.18	37.0	0.02	0.03	0.38	0.4
PH23	12	59674	--	17	130	0.18	39.0	<0.01	--	--	0.4
PH23	13	59675	--	17	100	0.14	25.0	0.01	0.01	1.3	1.3
PH23	13	59675	--	--	--	--	--	--	--	--	--
PH23	13	59675	--	17	100	0.14	24.0	0.02	0.03	0.28	0.3
PH23	13	59675	--	17	94	0.13	21.0	0.02	0.03	0.38	0.4
PH23	14	59676	--	19	110	0.15	27.0	0.01	0.01	0.79	0.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENTIFIER			NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
PH13	13	59695	--	<0.01	--	--	--	--	5	--	0.03
PH13	14	59696	2.6	<0.01	--	--	--	--	22	--	--
PH13	14	59696	--	--	--	--	--	--	--	--	--
PH13	14	59696	--	<0.01	--	--	--	--	12	--	--
PH13	14	59696	--	<0.01	--	--	--	--	13	--	0.04
PH13	16	59684	--	--	<0.01	--	--	--	4	83	--
PH13	16	59684	42	<0.01	--	--	--	--	73	--	--
PH13	16	59684	--	--	--	--	--	--	--	--	--
PH13	16	59684	--	<0.01	--	--	--	--	<3	--	--
PH13	16	59684	--	0.03	--	--	--	--	10	--	--
PH13	17	59685	--	--	0.02	0.06	--	--	34	230	--
PH13	17	59685	35	<0.01	--	--	--	--	420	--	--
PH13	17	59685	--	--	--	--	--	--	--	--	--
PH13	17	59685	--	--	--	--	--	--	--	--	--
PH13	17	59685	--	<0.01	--	--	--	--	17	--	--
PH13	18	59686	--	--	<0.01	--	--	--	6	13	--
PH13	18	59686	5.2	<0.01	--	--	100	--	25	--	--
PH13	18	59686	--	--	--	--	--	--	--	--	--
PH13	18	59686	--	--	--	--	--	--	--	--	--
PH13	18	59686	--	<0.01	--	--	--	--	9	--	--
PH13	19	59689	24	<0.01	--	--	--	--	84	--	--
PH13	19	59689	--	--	--	--	--	--	--	--	--
PH13	19	59689	--	<0.01	--	--	--	--	8	--	--
PH13	19	59689	--	<0.01	--	--	--	--	<3	--	0.21
PH13	20	59690	22	<0.01	--	--	--	--	29	--	--
PH13	20	59690	--	--	--	--	--	--	--	--	--
PH13	20	59690	--	<0.01	--	--	--	--	4	--	--
PH13	20	59690	--	<0.01	--	--	--	--	12	--	--
PH13	21	59691	17	<0.01	--	--	--	--	36	--	--
PH13	21	59691	--	--	--	--	--	--	--	--	--
PH13	21	59691	--	<0.01	--	--	--	--	31	--	--
PH13	21	59691	--	<0.01	--	--	--	--	5	--	--
PH13	23	59679	--	--	<0.01	--	--	--	5	67	--
PH13	23	59679	--	<0.01	--	--	--	--	62	--	--
PH13	23	59679	--	--	--	--	--	--	--	--	--
PH13	23	59679	--	<0.01	--	--	--	--	<3	--	--
PH13	23	59679	--	<0.01	--	--	--	<10	11	--	0.23
PH13	24	59680	--	--	0.03	0.09	--	--	4	34	--
PH13	24	59680	--	<0.01	--	--	--	--	25	--	--
PH13	24	59680	--	--	--	--	--	--	--	--	--
PH13	24	59680	--	<0.01	--	--	--	--	<3	--	--
PH13	24	59680	--	0.01	--	--	--	--	5	--	--
PH13	25	59681	--	<0.01	--	--	--	--	84	--	--
PH13	25	59681	--	--	--	--	--	--	--	--	--
PH13	25	59681	--	<0.01	--	--	--	--	<3	--	--
PH13	25	59681	--	0.01	--	--	--	--	10	--	--
PH13	26	59682	--	<0.01	--	--	--	--	<3	--	--
PH13	26	59682	--	0.01	--	--	--	--	8	--	--
PH23	10	59673	--	<0.01	--	--	--	--	91	--	--
PH23	10	59673	--	<0.01	--	--	--	--	4	--	--
PH23	10	59673	--	<0.01	--	--	--	--	10	--	--
PH23	12	59674	--	<0.01	--	--	--	--	86	--	--
PH23	12	59674	--	--	--	--	--	--	--	--	--
PH23	12	59674	--	<0.01	--	--	--	--	6	--	--
PH23	12	59674	--	<0.01	--	--	--	--	12	--	--
PH23	13	59675	--	<0.01	--	--	--	--	86	--	--
PH23	13	59675	--	--	--	--	--	--	--	--	--
PH23	13	59675	--	<0.01	--	--	--	--	<3	--	--
PH23	13	59675	--	<0.01	--	--	--	--	9	--	--
PH23	14	59676	--	<0.01	--	--	--	--	26	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

	LOCAL IDENTIFIER		STATION NUMBER	GEOLOGIC UNIT	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)
PH23	14	59676	383854075122001	112CLMB	03-17-86	6.57	83.00	83	78	20.0	50
PH23	14	59676	383854075122001	112CLMB	06-17-86	8.12	83.00	83	78	20.0	45
PH23	14	59676	383854075122001	112CLMB	09-23-86	9.31	83.00	83	78	20.0	50
PH35	17		383803075105201	112CLMB	09-18-86	13.07	15.00	15	0.0	22.0	20
PJ41	4	47453	383646075041801	122PCMK	10-17-85	--	220.00	220	200	10.0	--
PJ41	4	47453	383646075041801	122PCMK	02-03-86	--	220.00	220	200	10.0	--
PJ41	4	47453	383646075041801	122PCMK	04-04-86	--	220.00	220	200	10.0	--
PJ41	4	47453	383646075041801	122PCMK	07-10-86	--	220.00	220	200	10.0	--
PJ41	4	47453	383646075041801	122PCMK	08-20-86	--	220.00	220	200	10.0	15
QG14	5	48810	383426075160601	112CLMB	05-08-86	--	33.00	--	--	22.0	4
QH54	4		383050075105201	122MNKN	10-18-85	12.84	328.00	328	324	28.0	22
QH54	4		383050075105201	122MNKN	02-05-86	12.03	328.00	328	324	28.0	65
QH54	4		383050075105201	122MNKN	04-07-86	12.81	328.00	328	324	28.0	30
QH54	4		383050075105201	122MNKN	07-08-86	15.35	328.00	328	324	28.0	28
QH54	4		383050075105201	122MNKN	08-22-86	15.93	328.00	328	324	28.0	25
QH54	5		383050075105202	122OCNC	10-18-85	12.79	232.00	232	229	28.0	10
QH54	5		383050075105202	122OCNC	02-05-86	12.01	232.00	232	229	28.0	40
QH54	5		383050075105202	122OCNC	04-07-86	12.78	232.00	232	229	28.0	45
QH54	5		383050075105202	122OCNC	07-08-86	15.31	232.00	232	229	28.0	20
QH54	5		383050075105202	122OCNC	08-22-86	15.89	232.00	232	229	28.0	30
QH54	6		383050075105203	122PCMK	10-18-85	12.10	148.00	148	144	28.0	10
QH54	6		383050075105203	122PCMK	04-07-86	12.15	148.00	148	144	28.0	45
QH54	6		383050075105203	122PCMK	07-08-86	14.65	148.00	148	144	28.0	15
QH54	6		383050075105203	122PCMK	08-22-86	15.19	148.00	148	144	28.0	25
QH54	7		383050075105204	112CLMB	10-18-85	12.01	108.00	108	104	28.0	15
QH54	7		383050075105204	112CLMB	02-05-86	11.17	108.00	108	104	28.0	30
QH54	7		383050075105204	112CLMB	04-07-86	12.06	108.00	108	104	28.0	50
QH54	7		383050075105204	112CLMB	07-08-86	14.60	108.00	108	104	28.0	15
QH54	7		383050075105204	112CLMB	08-22-86	15.11	108.00	108	104	28.0	20
QJ32	17	45128	383210075035802	122MNKN	12-02-85	3.09	400.00	400	335	5.0	60
QJ32	22		383210075035801	122MNKN	02-05-86	--	250.00	250	200	7.0	--
QJ32	22		383210075035801	122MNKN	04-04-86	--	250.00	250	200	7.0	--
QJ32	22		383210075035801	122MNKN	07-09-86	--	250.00	250	200	7.0	--
QJ32	22		383210075035801	122MNKN	08-20-86	--	250.00	250	200	7.0	15
QJ41	2		383122075040301	122MNKN	02-03-86	--	366.00	366	341	7.0	--
QJ41	2		383122075040301	122MNKN	04-07-86	--	366.00	366	341	6.0	--
QJ41	2		383122075040301	122MNKN	07-09-86	--	366.00	366	341	6.0	--
QJ41	2		383122075040301	122MNKN	08-20-86	--	366.00	366	341	6.0	20
QJ41	4		383123075040201	122MNKN	02-03-86	2.22	390.00	390	370	6.0	30
QJ41	7		383123075040202	122OCNC	02-03-86	1.59	294.00	294	284	6.0	20
QJ41	7		383123075040202	122OCNC	04-07-86	0.42	294.00	294	284	6.0	20
QJ41	7		383123075040202	122OCNC	07-08-86	4.60	294.00	294	284	6.0	35
QJ41	7		383123075040202	122OCNC	08-20-86	5.33	294.00	294	284	6.0	25
QJ41	8		383123075040203	122PCMK	02-03-86	0.59	210.00	210	200	6.0	35
QJ41	8		383123075040203	122PCMK	04-07-86	0.4	210.00	210	200	6.0	40
QJ41	8		383123075040203	122PCMK	07-08-86	4.55	210.00	210	200	6.0	15
QJ41	8		383123075040203	122PCMK	08-20-86	5.30	210.00	210	200	6.0	35
RJ22	5		382808075030501	122MNKN	10-17-85	3.27	455.00	455	450	5.0	30
RJ22	5		382808075030501	122MNKN	02-03-86	0.7	455.00	455	450	5.0	20
RJ22	6		382808075030502	122OCNC	10-17-85	2.99	295.00	295	290	5.0	30
RJ22	6		382808075030502	122OCNC	02-03-86	0.51	295.00	295	290	5.0	25
RJ22	8		382808075030504	112CLMB	02-03-86	4.11	115.00	115	110	5.0	10
RJ31	7		382721075042601	122PCMK	02-05-86	--	200.00	200	150	5.0	--
RJ31	7		382721075042601	122PCMK	04-04-86	--	200.00	200	150	5.0	--
RJ31	7		382721075042601	122PCMK	07-09-86	--	200.00	200	150	5.0	--
RJ31	7		382721075042601	122PCMK	08-21-86	--	200.00	200	150	5.0	--
RJ31	8		382721075042602	122MNKN	02-05-86	--	380.00	365	345	5.0	--
RJ31	8		382721075042602	122MNKN	04-04-86	--	380.00	365	345	5.0	15
RJ31	8		382721075042602	122MNKN	07-09-86	--	380.00	365	345	5.0	--
RJ31	8		382721075042602	122MNKN	08-21-86	--	380.00	365	345	--	--

Geologic unit (aquifer): 112CLMB - Columbia Formation
122MNKN - Manokin Aquifer
122OCNC - Ocean City Aquifer
122PCMK - Pocomoke Aquifer

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

	LOCAL IDENTIFIER		FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
PH23	14	59676	1.0	4030	278	5.19	12.5	14.5	--	--	--
PH23	14	59676	1.0	4040	283	5.30	28.0	14.0	2.4	120	31
PH23	14	59676	1.0	4040	335	5.40	23.0	14.0	2.5	120	31
PH35	17		1.0	4080	121	5.30	26.0	24.0	--	34	1.3
PJ41	4	47453	--	4040	305	--	18.0	--	--	--	--
PJ41	4	47453	--	4040	300	6.20	11.0	15.5	--	--	--
PJ41	4	47453	--	4040	320	6.05	12.5	15.5	--	85	23
PJ41	4	47453	--	4040	295	6.03	29.0	18.5	--	--	--
PJ41	4	47453	--	4040	320	6.20	25.0	16.0	--	63	17
QG14	5	48810	--	4040	285	5.20	19.0	15.5	--	93	19
QH54	4		10	4030	390	6.40	22.0	15.5	--	--	--
QH54	4		4.0	4030	380	--	14.0	15.5	--	--	--
QH54	4		12	4030	375	6.30	13.0	15.0	--	90	25
QH54	4		8.0	4030	395	6.45	32.0	16.0	--	--	--
QH54	4		12	4030	378	6.50	20.5	15.5	--	100	34
QH54	5		20	4030	200	--	22.0	15.0	--	--	--
QH54	5		4.0	4030	202	--	14.0	15.5	--	--	--
QH54	5		21	4030	193	6.20	13.0	15.0	--	41	13
QH54	5		23	4030	205	6.31	32.0	15.0	--	--	--
QH54	5		20	4030	188	6.24	21.0	15.0	--	40	13
QH54	6		28	4030	210	--	22.0	15.0	--	--	--
QH54	6		30	4030	210	6.20	23.0	14.5	--	54	19
QH54	6		50	4030	225	6.45	32.0	15.0	--	--	--
QH54	6		30	4030	210	6.46	23.0	15.0	--	29	9.3
QH54	7		25	4030	310	--	22.0	15.0	--	--	--
QH54	7		10	4030	303	--	14.5	15.5	--	--	--
QH54	7		28	4030	300	6.50	13.0	14.5	--	110	40
QH54	7		60	4030	328	6.60	32.0	15.0	--	--	--
QH54	7		30	4030	300	6.69	23.0	15.0	--	110	39
QJ32	17	45128	50	4030	680	6.72	11.0	16.0	--	--	--
QJ32	22		--	4040	285	6.40	11.0	14.5	--	--	--
QJ32	22		--	4040	285	6.15	13.0	15.0	--	110	32
QJ32	22		--	4040	315	6.48	--	15.5	--	--	--
QJ32	22		--	4040	290	6.80	24.0	15.5	--	100	33
QJ41	2		350	4040	415	6.50	--	15.5	--	--	--
QJ41	2		350	4040	400	5.85	12.0	16.0	--	110	35
QJ41	2		350	4040	430	6.62	35.0	17.0	--	--	--
QJ41	2		350	4040	430	6.70	26.0	16.0	--	100	33
QJ41	4		60	4030	475	6.50	10.0	15.5	--	--	--
QJ41	7		25	4030	280	6.50	10.0	15.5	--	--	--
QJ41	7		50	4030	288	6.40	12.0	15.5	--	--	--
QJ41	7		45	4030	300	6.51	33.0	16.0	--	--	--
QJ41	7		40	4030	290	6.80	25.0	16.0	--	--	--
QJ41	8		8.0	4030	280	6.70	10.0	15.5	--	--	--
QJ41	8		10	4030	290	6.00	12.0	15.0	--	--	--
QJ41	8		9.0	4030	310	6.61	--	16.0	--	--	--
QJ41	8		9.0	4030	287	6.85	25.0	16.0	--	--	--
RJ22	5		5.0	4030	1900	--	18.0	18.0	--	--	--
RJ22	5		5.0	4030	2000	7.30	7.0	16.5	--	--	--
RJ22	6		10	4030	210	--	19.0	17.0	--	--	--
RJ22	6		10	4030	210	6.20	7.0	16.0	--	--	--
RJ22	8		1.0	4030	>50000	6.60	7.0	16.0	--	--	--
RJ31	7		--	4040	220	6.40	7.0	16.0	--	--	--
RJ31	7		--	4040	230	6.10	14.0	15.5	--	72	20
RJ31	7		--	4040	245	6.47	33.0	17.0	--	--	--
RJ31	7		--	4040	225	6.56	27.0	16.0	--	72	20
RJ31	8		--	4040	250	6.00	7.0	16.0	--	--	--
RJ31	8		--	4040	295	6.13	15.0	16.5	--	49	15
RJ31	8		--	4040	300	6.46	33.0	18.0	--	--	--
RJ31	8		--	4040	270	6.30	27.0	17.0	--	49	15

Sampling method: 4030 - Suction pump
4040 - Submersible pump
4080 - Peristaltic pump

SUSSEX COUNTY, DELAWARE-Continued

	LOCAL IDENTIFIER		MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
PH23	14	59676	--	--	--	--	--	--	--	--	--
PH23	14	59676	9.3	12	18	0.5	2.2	5	45	40	9.1
PH23	14	59676	9.4	12	18	0.5	2.3	7	6	44	9.6
PH35	17		7.4	5.0	23	0.4	2.6	6	5	48	10
PJ41	4	47453	--	--	--	--	--	--	--	--	--
PJ41	4	47453	--	--	--	--	--	--	--	--	--
PJ41	4	47453	6.7	15	27	0.7	3.6	--	--	119	5.3
PJ41	4	47453	--	--	--	--	--	--	--	--	--
PJ41	4	47453	4.9	24	43	1	4.3	130	105	128	1.0
QG14	5	48810	11	9.8	18	0.5	3.9	3	2	30	22
QH54	4		--	--	--	--	--	--	--	--	--
QH54	4		--	--	--	--	--	--	--	--	--
QH54	4		6.8	26	37	1	4.0	--	--	111	17
QH54	4		--	--	--	--	--	--	--	--	--
QH54	4		4.4	37	43	2	4.3	190	157	96	35
QH54	5		--	--	--	--	--	--	--	--	--
QH54	5		--	--	--	--	--	--	--	--	--
QH54	5		2.0	8.5	30	0.6	1.7	--	--	62	32
QH54	5		--	--	--	--	--	--	--	--	--
QH54	5		1.9	8.7	31	0.6	2.0	110	92	102	52
QH54	6		--	--	--	--	--	--	--	--	--
QH54	6		1.6	8.7	25	0.5	1.2	--	--	77	29
QH54	6		--	--	--	--	--	--	--	--	--
QH54	6		1.4	47	77	4	1.6	120	95	64	45
QH54	7		--	--	--	--	--	--	--	--	--
QH54	7		--	--	--	--	--	--	--	--	--
QH54	7		2.2	9.9	16	0.4	1.1	--	--	73	18
QH54	7		--	--	--	--	--	--	--	--	--
QH54	7		2.2	9.9	17	0.4	1.4	180	147	58	23
QJ32	17	45128	--	--	--	--	--	--	--	--	--
QJ32	22		--	--	--	--	--	--	--	--	--
QJ32	22		6.2	11	18	0.5	2.9	--	--	156	16
QJ32	22		--	--	--	--	--	--	--	--	--
QJ32	22		5.4	11	18	0.5	3.1	170	135	42	20
QJ41	2		--	--	--	--	--	--	--	--	--
QJ41	2		4.3	36	42	2	3.4	--	--	331	16
QJ41	2		--	--	--	--	--	--	--	--	--
QJ41	2		4.5	36	42	2	4.2	180	145	56	7.6
QJ41	4		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	170	135	42	--
QJ41	8		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	170	140	38	--
RJ22	5		--	--	--	--	--	--	--	--	--
RJ22	5		--	--	--	--	--	--	--	--	--
RJ22	6		--	--	--	--	--	--	--	--	--
RJ22	6		--	--	--	--	--	--	--	--	--
RJ22	8		--	--	--	--	--	--	--	--	--
RJ31	7		--	--	--	--	--	--	--	--	--
RJ31	7		5.3	10	22	0.5	2.8	--	--	126	19
RJ31	7		--	--	--	--	--	--	--	--	--
RJ31	7		5.3	11	24	0.6	3.3	130	105	56	2.0
RJ31	8		--	--	--	--	--	--	--	--	--
RJ31	8		2.8	30	56	2	2.4	--	--	105	12
RJ31	8		--	--	--	--	--	--	--	--	--
RJ31	8		2.9	25	51	2	2.8	110	88	85	2.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

LOCAL IDENTIFIER			CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)
PH23	14	59676	--	--	--	--	--	--	--	--	--
PH23	14	59676	20	--	19	--	110	0.14	29.0	<0.01	--
PH23	14	59676	22	--	19	--	110	0.15	29.0	0.01	0.01
PH35	17		10	--	12	--	53	0.07	7.00	0.81	1.0
PJ41	4	47453	43	--	--	--	--	--	--	--	--
PJ41	4	47453	39	--	--	--	--	--	--	--	--
PJ41	4	47453	42	<0.1	31	178	180	0.24	<0.10	--	--
PJ41	4	47453	42	--	--	--	--	--	--	--	--
PJ41	4	47453	42	0.1	37	191	200	0.26	<0.10	--	--
QG14	5	48810	16	--	13	--	96	0.13	21.0	<0.01	--
QH54	4		29	--	--	--	--	--	--	--	--
QH54	4		30	--	--	--	--	--	--	--	--
QH54	4		32	<0.1	34	225	240	0.31	<0.10	--	--
QH54	4		31	--	--	--	--	--	--	--	--
QH54	4		33	<0.1	38	239	300	0.33	<0.10	--	--
QH54	5		9.5	--	--	--	--	--	--	--	--
QH54	5		11	--	--	--	--	--	--	--	--
QH54	5		11	<0.1	32	135	150	0.18	<0.10	--	--
QH54	5		10	--	--	--	--	--	--	--	--
QH54	5		12	<0.1	33	76	200	0.1	<0.10	--	--
QH54	6		10	--	--	--	--	--	--	--	--
QH54	6		12	<0.1	37	152	160	0.21	<0.10	--	--
QH54	6		13	--	--	--	--	--	--	--	--
QH54	6		13	<0.1	39	140	230	0.19	<0.10	--	--
QH54	7		12	--	--	--	--	--	--	--	--
QH54	7		13	--	--	--	--	--	--	--	--
QH54	7		12	<0.1	44	220	210	0.3	<0.10	--	--
QH54	7		13	--	--	--	--	--	--	--	--
QH54	7		14	<0.1	45	219	240	0.3	<0.10	--	--
QJ32	17	45128	120	--	--	--	--	--	--	--	--
QJ32	22		13	--	--	--	--	--	--	--	--
QJ32	22		13	<0.1	38	191	200	0.26	<0.10	--	--
QJ32	22		14	--	--	--	--	--	--	--	--
QJ32	22		14	0.1	39	183	220	0.25	<0.10	--	--
QJ41	2		45	--	--	--	--	--	--	--	--
QJ41	2		49	<0.1	37	239	260	0.33	<0.10	--	--
QJ41	2		52	--	--	--	--	--	--	--	--
QJ41	2		50	0.1	36	268	270	0.36	<0.50	--	--
QJ41	4		59	--	--	--	--	--	--	--	--
QJ41	7		9.0	--	--	--	--	--	--	--	--
QJ41	7		12	--	--	--	--	--	--	--	--
QJ41	7		13	--	--	--	--	--	--	--	--
QJ41	7		13	--	--	--	--	--	--	--	--
QJ41	8		12	--	--	--	--	--	--	--	--
QJ41	8		12	--	--	--	--	--	--	--	--
QJ41	8		12	--	--	--	--	--	--	--	--
QJ41	8		13	--	--	--	--	--	--	--	--
RJ22	5		450	--	--	--	--	--	--	--	--
RJ22	5		450	--	--	--	--	--	--	--	--
RJ22	6		14	--	--	--	--	--	--	--	--
RJ22	6		13	--	--	--	--	--	--	--	--
RJ22	8		--	--	--	--	--	--	--	--	--
RJ31	7		14	--	--	--	--	--	--	--	--
RJ31	7		12	<0.1	38	147	170	0.2	<0.10	--	--
RJ31	7		14	--	--	--	--	--	--	--	--
RJ31	7		13	<0.1	38	150	160	0.2	<0.10	--	--
RJ31	8		33	--	--	--	--	--	--	--	--
RJ31	8		34	<0.1	33	166	190	0.23	<0.10	--	--
RJ31	8		35	--	--	--	--	--	--	--	--
RJ31	8		34	<0.1	33	153	180	0.21	<0.10	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SUSSEX COUNTY, DELAWARE-Continued

	LOCAL IDENT-I-FIER		NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
PH23	14	59676	--	--	--	--	--	--	--	--	--
PH23	14	59676	--	0.3	<0.01	--	--	--	5	--	--
PH23	14	59676	--	<0.2	<0.01	--	--	--	16	--	--
PH35	17		0.99	1.8	0.03	--	--	10	380	--	0.09
PJ41	4	47453	--	--	--	--	--	--	--	--	--
PJ41	4	47453	--	--	--	--	--	--	--	--	--
PJ41	4	47453	--	--	--	0.02	0.06	--	16000	170	--
PJ41	4	47453	--	--	--	--	--	--	--	--	--
PJ41	4	47453	--	--	--	<0.01	--	--	9800	130	--
QG14	5	48810	--	0.5	0.01	--	--	10	59	--	0.17
QH54	4		--	--	--	--	--	--	--	--	--
QH54	4		--	--	--	--	--	--	--	--	--
QH54	4		--	--	--	0.39	1.2	--	21000	180	--
QH54	4		--	--	--	--	--	--	--	--	--
QH54	4		--	--	--	0.27	0.83	--	20000	130	--
QH54	5		--	--	--	--	--	--	--	--	--
QH54	5		--	--	--	--	--	--	--	--	--
QH54	5		--	--	--	0.19	0.58	--	20000	98	--
QH54	5		--	--	--	--	--	--	--	--	--
QH54	5		--	--	--	0.01	0.03	--	21000	120	--
QH54	6		--	--	--	--	--	--	--	--	--
QH54	6		--	--	--	0.18	0.55	--	18000	94	--
QH54	6		--	--	--	--	--	--	--	--	--
QH54	6		--	--	--	0.02	0.06	--	19000	120	--
QH54	7		--	--	--	--	--	--	--	--	--
QH54	7		--	--	--	--	--	--	--	--	--
QH54	7		--	--	--	0.16	0.49	--	15000	170	--
QH54	7		--	--	--	--	--	--	--	--	--
QH54	7		--	--	--	0.13	0.4	--	15000	160	--
QJ32	17	45128	--	--	--	--	--	--	--	--	--
QJ32	22		--	--	--	--	--	--	--	--	--
QJ32	22		--	--	--	0.20	0.61	--	9000	130	--
QJ32	22		--	--	--	--	--	--	--	--	--
QJ32	22		--	--	--	0.15	0.46	--	9400	130	--
QJ41	2		--	--	--	--	--	--	--	--	--
QJ41	2		--	--	--	0.13	0.4	--	8400	140	--
QJ41	2		--	--	--	--	--	--	--	--	--
QJ41	2		--	--	--	0.10	0.31	--	8900	120	--
QJ41	4		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	7		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	--	--	--	--
QJ41	8		--	--	--	--	--	--	--	--	--
RJ22	5		--	--	--	--	--	--	--	--	--
RJ22	5		--	--	--	--	--	--	--	--	--
RJ22	6		--	--	--	--	--	--	--	--	--
RJ22	6		--	--	--	--	--	--	--	--	--
RJ22	8		--	--	--	--	--	--	--	--	--
RJ31	7		--	--	--	--	--	--	--	--	--
RJ31	7		--	--	--	0.07	0.21	--	10000	110	--
RJ31	7		--	--	--	--	--	--	--	--	--
RJ31	7		--	--	--	0.03	0.09	--	8000	100	--
RJ31	8		--	--	--	--	--	--	--	--	--
RJ31	8		--	--	--	0.01	0.03	--	14000	130	--
RJ31	8		--	--	--	--	--	--	--	--	--
RJ31	8		--	--	--	<0.01	--	--	14000	120	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

ANNE ARUNDEL COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
AA DE 140	385920076322401	125AQUI	09-04-86	1300	36.81	46.00	43	33	84.7
AA DE 142	385928076321701	125AQUI	09-02-86	0900	26.68	37.00	34	24	69.8
AA DE 156	385927076321703	125AQUI	09-03-86	1400	9.67	39.00	34	24	54.1
AA DE 157	385927076321702	125AQUI	09-03-86	1500	9.57	24.00	20	9.5	80.0

LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)
AA DE 140	>10	4020	43	4.80	--	12.0	6.7	10	--	--
AA DE 142	6	4020	67	5.08	22.5	16.0	6.2	16	--	--
AA DE 156	24	4020	185	4.82	--	12.0	--	46	--	--
AA DE 157	15	4020	975	4.18	--	12.0	--	280	0.2	9.9

LOCAL IDENTIFIER	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
AA DE 140	2.7	0.7	1.6	22	0.2	2.1	6	5	151	1.8
AA DE 142	3.6	1.8	3.1	26	0.3	2.1	8	7	106	0.5
AA DE 156	9.3	5.6	6.9	22	0.5	5.0	6	5	144	2.1
AA DE 157	69	25	40	23	1	12	--	--	315	2.4

LOCAL IDENTIFIER	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)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)
AA DE 140	5.1	<0.1	14	31	0.04	0.60	0.66	0.03	0.01	0.01
AA DE 142	12	<0.1	13	40	0.05	0.30	0.31	<0.01	0.01	0.01
AA DE 156	46	0.2	17	95	0.13	0.30	0.31	0.02	0.04	0.05
AA DE 157	270	0.1	16	440	0.59	--	--	--	--	--

LOCAL IDENTIFIER	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)
AA DE 140	<0.2	<0.2	0.72	<0.01	<0.01	<0.01	--	4900	40	1
AA DE 142	<0.2	<0.2	0.18	<0.01	<0.01	<0.01	--	4200	30	<1
AA DE 156	<0.2	<0.2	0.09	0.03	<0.01	0.02	0.06	370	--	<1
AA DE 157	--	--	--	--	--	--	--	--	--	--

Geologic unit (aquifer): 125AQUI - Aquia Formation

Sampling method: 4020 - Bailer

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

ANNE ARUNDEL COUNTY, MARYLAND-Continued

LOCAL IDENT-I-FIER	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
AA DE 140	<1	5	<1	<10	<0.5	10	<1	<1	70	<1
AA DE 142	<1	3	<1	<10	<0.5	20	<1	<1	60	<1
AA DE 156	<1	<1	<1	<10	<0.5	10	9	9	130	<1
AA DE 157	<1	--	<1	--	3	<10	--	27	--	<2

LOCAL IDENT-I-FIER	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)
AA DE 140	1	1	2	11	6	40000	21	12	<5	<10
AA DE 142	<1	1	2	12	1	33000	6	10	<5	<10
AA DE 156	<1	3	3	6	4	4100	6	<5	<5	20
AA DE 157	<1	--	5	--	10	--	13	--	5	--

LOCAL IDENT-I-FIER	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)
AA DE 140	<4	140	57	3	<1	8	4	<1	10	7
AA DE 142	<4	170	44	3	<1	10	4	<1	20	18
AA DE 156	10	130	110	2	4	32	20	<1	60	38
AA DE 157	15	--	200	--	2	--	62	<1	--	210

LOCAL IDENT-I-FIER	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	ACENAPHTHENE TOTAL (UG/L)	ACENAPHTHYLENE TOTAL (UG/L)	ANTHRACENE TOTAL (UG/L)
AA DE 140	<1	140	49	2.8	0.5	0.01	--	--	--	--
AA DE 142	<1	110	24	2.3	0.6	0.01	--	--	--	--
AA DE 156	<1	120	120	0.5	0.9	0.04	--	<5.0	<5.0	<5.0
AA DE 157	1	--	200	--	--	--	<1	--	--	--

LOCAL IDENT-I-FIER	BENZENE TOTAL (UG/L)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BENZO B FLUORANTHENE TOTAL (UG/L)	BENZOGH I PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L)	BENZO K FLUORANTHENE TOTAL (UG/L)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L)
AA DE 140	<3.0	--	--	--	--	--	--	--	--	--
AA DE 142	--	--	--	--	--	--	--	--	--	--
AA DE 156	<3.0	<10.0	<10.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
AA DE 157	--	--	--	--	--	--	--	--	--	--

LOCAL IDENT-I-FIER	BROMOFORM TOTAL (UG/L)	CARBON-TETRACHLORIDE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)	CHLOROETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	CHLOROETHYLENE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)
AA DE 140	<3.0	<3.0	<3.0	<3.0	3.5	<3.0	<3.0	--	<3.0	<3.0
AA DE 142	--	--	--	--	--	--	--	--	--	--
AA DE 156	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0	<3.0	<3.0
AA DE 157	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

ANNE ARUNDEL COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DI-METHYL PHTHALATE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	DI-N-OCTYL PHTHALATE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXA-CHLORO-BENZENE TOTAL (UG/L)
AA DE 140	<3.0	--	--	--	--	<3.0	--	--	--
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<3.0	<5.0	<5.0	<5.0	<10.0	<3.0	<5.0	<5.0	<5.0
AA DE 157	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	HEXA-CHLORO-BUTADIENE TOTAL (UG/L)	HEXA-CHLORO-CYCLO-PENTADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL CHLORIDE TOTAL (UG/L)	METHYLENE CHLORIDE TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)
AA DE 140	--	--	--	--	--	<3.0	<3.0	<3.0	--
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0
AA DE 157	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	N-NITRO-SODI-METHYLAMINE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITRO-SODI-PHENYLAMINE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	PARA-CHLORO-META CRESOL TOTAL (UG/L)	PENTACHLOROPHENOL TOTAL (UG/L)	PHENOL (C6H5OH) TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)
AA DE 140	--	--	--	--	--	--	--	--	--
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<6.0	<5.0
AA DE 157	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	PYRENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)	TRICHLOROFLUOROMETHANE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)
AA DE 140	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	5.2	<3.0	<3.0
AA DE 157	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	1,1-DICHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	1,1,2-TRICHLOROETHANE TOTAL (UG/L)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L)	1,2-DIBROMO ETHYLENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)	1,2,4-TRICHLOROBENZENE TOTAL (UG/L)
AA DE 140	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0
AA DE 157	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L)	1,3-DICHLOROBENZENE TOTAL (UG/L)	1,3-DICHLOROPROPANE TOTAL (UG/L)	1,4-DICHLOROBENZENE TOTAL (UG/L)	2-CHLOROETHYL-VINYL-ETHER TOTAL (UG/L)	2-CHLORONAPHTHALENE TOTAL (UG/L)	2-CHLOROPHENOL TOTAL (UG/L)	2-NITROPHENOL TOTAL (UG/L)	2,4-DICHLOROPHENOL TOTAL (UG/L)
AA DE 140	--	<3.0	<3.0	<3.0	<3.0	--	--	--	--
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<10.0	<3.0	<3.0	<3.0	<3.0	<5.0	<6.0	<6.0	<6.0
AA DE 157	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	2,4-DIMETHYL-PHENOL TOTAL (UG/L)	2,4-DINITRO-TOLUENE TOTAL (UG/L)	2,4,-DINITROPHENOL TOTAL (UG/L)	2,6-DINITRO-TOLUENE TOTAL (UG/L)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L)	4-NITROPHENOL TOTAL (UG/L)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L)
AA DE 140	--	--	--	--	--	--	--	--	--
AA DE 142	--	--	--	--	--	--	--	--	--
AA DE 156	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<30.0	<30.0
AA DE 157	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

BALTIMORE CITY, MARYLAND

LOCAL IDENT-I-FIER	STATION NUMBER	GEO-LOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
3S2E-5	391600076353301	217PTXN	03-27-86	1630	183.00	136	126	15.0

PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	SAM-PLING METHOD, CODES	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)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
60	4040	460	88	58	610	74	13	6.6

SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
100	1200	<0.1	10	2060	2100	2.8	<0.01

Geologic unit (aquifer): 217PTXN - Patuxent Formation

Sampling method: 4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CALVERT COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
CA FC 13	382343076302901	122CLVR	08-05-86	1100	29.01	34.00	34	29	51.0
CA FC 13	382343076302901	122CLVR	09-04-86	1430	29.33	34.00	34	29	51.0
CA FC 15	382340076303001	122CLVR	08-06-86	1230	16.53	37.00	37	32	32.0
CA FC 15	382340076303001	122CLVR	09-04-86	1315	16.86	37.00	37	32	32.0
CA FC 16	382340076303002	122CLVR	08-06-86	1100	16.79	24.00	24	19	32.0
CA FC 16	382340076303002	122CLVR	09-04-86	1245	17.14	24.00	24	19	32.0
CA FC 18	382340076303801	122CLVR	08-05-86	1400	8.49	25.00	25	20	21.0
CA FC 18	382340076303801	122CLVR	09-04-86	1100	10.58	25.00	25	20	21.0
CA FC 21	382342076303401	122CLVR	08-06-86	1500	18.83	35.00	35	30	38.0
CA FC 21	382342076303401	122CLVR	09-04-86	1410	19.24	35.00	35	30	38.0
CA FC 22	382340076303201	122CLVR	08-06-86	1400	19.16	36.00	36	31	42.0
CA FC 22	382340076303201	122CLVR	09-04-86	1345	19.46	36.00	36	31	42.0
CA DB 66	383216076351402	112UPLD	08-27-86	1330	24.25	34.00	31	21	172
CA DB 67	383216076351403	112UPLD	08-27-86	1500	23.15	31.00	28	18	171
CA DB 69	383217076351802	112UPLD	08-28-86	1400	28.70	39.00	36	26	170
CA DB 71	383217076351701	112PLSC	08-27-86	1030	169.00	40.00	37	27	40.0
CA DB 72	383217076351702	112UPLD	08-27-86	1000	25.79	35.00	32	22	170
CA DB 73	383217076351703	112PLSC	08-27-86	1200	--	32.00	29	19	169

LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
CA FC 13	60	0.2	4040	700	7.20	33.0	25.0	--	--	--
CA FC 13	--	--	4010	655	7.11	26.0	20.0	--	--	--
CA FC 15	45	0.3	4040	650	7.20	34.0	18.5	--	--	--
CA FC 15	--	--	4010	560	7.50	26.0	20.0	--	--	--
CA FC 16	30	0.6	4040	690	7.30	30.0	16.0	--	--	--
CA FC 16	--	--	4010	590	7.40	26.0	20.0	--	--	--
CA FC 18	30	0.5	4040	700	7.20	30.5	20.0	--	--	--
CA FC 18	50	0.3	4040	630	7.20	26.0	20.0	--	--	--
CA FC 21	30	0.3	4040	585	7.40	31.0	19.5	--	--	--
CA FC 21	--	--	4010	465	7.40	26.0	20.0	--	--	--
CA FC 22	60	0.3	4040	690	7.22	34.0	18.5	--	--	--
CA FC 22	--	--	4010	630	7.33	26.0	20.0	--	--	--
CA DB 66	--	--	4020	421	6.86	33.0	19.0	210	71	7.1
CA DB 67	--	--	4020	269	6.35	33.0	21.0	--	--	--
CA DB 69	--	--	4020	418	4.90	21.0	15.0	72	16	7.8
CA DB 71	--	--	4020	990	6.44	25.5	18.0	230	57	21
CA DB 72	--	--	4020	1030	6.49	25.5	18.5	250	69	19
CA DB 73	--	--	4020	--	--	--	--	--	--	--

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
CA FC 13	--	--	--	--	320	258	32	--	--	--
CA FC 13	--	--	--	--	--	--	--	--	--	--
CA FC 15	--	--	--	--	270	222	27	--	--	--
CA FC 15	--	--	--	--	--	--	--	--	--	--
CA FC 16	--	--	--	--	310	250	24	--	--	--
CA FC 16	--	--	--	--	--	--	--	--	--	--
CA FC 18	--	--	--	--	300	249	30	--	--	--
CA FC 18	--	--	--	--	300	245	30	--	--	--
CA FC 21	--	--	--	--	210	169	13	--	--	--
CA FC 21	--	--	--	--	--	--	--	--	--	--
CA FC 22	--	--	--	--	290	236	28	--	--	--
CA FC 22	--	--	--	--	--	--	--	--	--	--
CA DB 66	8.0	8	0.3	0.6	270	219	58	16	3.0	0.1
CA DB 67	--	--	--	--	270	210	190	--	--	--
CA DB 69	49	58	3	3.6	39	32	780	11	93	<0.1
CA DB 71	80	43	2	5.0	220	178	125	10	200	0.1
CA DB 72	78	39	2	8.3	210	174	109	10	200	<0.1
CA DB 73	--	--	--	--	--	--	--	--	--	--

Geologic unit (aquifer): 112PLSC - Pleistocene Series
112ULPD - Upland Deposits
122CLVR - Calvert Formation

Sampling method: 4010 - Thief sampler
4020 - Bailer
4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CALVERT COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)
CA FC 13	--	--	--	--	<0.01	--	--	8.20	--	0.11
CA FC 13	--	--	--	8.59	0.01	0.03	--	8.60	--	0.08
CA FC 15	--	--	--	11.0	0.01	0.03	--	11.0	--	0.08
CA FC 15	--	--	--	--	<0.01	--	--	11.0	--	0.06
CA FC 16	--	--	--	--	<0.01	--	--	11.0	--	0.10
CA FC 16	--	--	--	12.0	0.01	0.03	--	12.0	--	0.12
CA FC 18	--	--	--	--	<0.01	--	--	7.70	--	0.07
CA FC 18	--	--	--	15.0	0.01	0.03	--	15.0	--	0.05
CA FC 21	--	--	--	--	<0.01	--	--	8.80	--	0.03
CA FC 21	--	--	--	4.89	0.01	0.03	--	4.90	--	0.03
CA FC 22	--	--	--	--	<0.01	--	--	11.0	--	0.04
CA FC 22	--	--	--	--	<0.01	--	--	11.0	--	0.06
CA DB 66	6.4	240	0.33	--	--	--	0.10	0.15	0.10	0.04
CA DB 67	--	--	--	--	--	--	--	--	--	--
CA DB 69	9.8	210	0.28	--	--	--	4.50	4.40	0.09	0.06
CA DB 71	9.9	490	0.67	--	--	--	1.10	1.40	0.11	0.04
CA DB 72	14	510	0.68	--	--	--	2.30	2.30	0.11	0.05
CA DB 73	--	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)
CA FC 13	0.14	--	0.79	--	0.9	--	--	--	--	--
CA FC 13	0.1	--	0.62	--	0.7	--	--	--	--	--
CA FC 15	0.1	--	0.72	--	0.8	--	--	--	--	--
CA FC 15	0.08	--	0.74	--	0.8	--	--	--	--	--
CA FC 16	0.13	--	0.3	--	0.4	--	--	--	--	--
CA FC 16	0.15	--	1.5	--	1.6	--	--	--	--	--
CA FC 18	0.09	--	0.13	--	0.2	--	--	--	--	--
CA FC 18	0.06	--	0.45	--	0.5	--	--	--	--	--
CA FC 21	0.04	--	--	--	<0.2	--	--	--	--	--
CA FC 21	0.04	--	0.57	--	0.6	--	--	--	--	--
CA FC 22	0.05	--	0.46	--	0.5	--	--	--	--	--
CA FC 22	0.08	--	0.74	--	0.8	--	--	--	--	--
CA DB 66	0.05	--	--	<0.2	<0.2	--	--	0.72	0.01	0.12
CA DB 67	--	--	--	--	--	--	--	--	--	--
CA DB 69	0.08	1.0	0.74	1.1	0.8	5.6	25	6.00	0.03	0.05
CA DB 71	0.05	0.19	0.26	0.3	0.3	1.4	6.2	10.0	0.02	0.12
CA DB 72	0.06	0.39	0.25	0.5	0.3	2.8	12	4.00	0.01	0.18
CA DB 73	--	--	--	--	--	--	--	--	--	--

LOCAL IDENTIFIER	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)
CA DB 66	0.01	0.03	3400	<10	<1	<1	5	<1	<10	<0.5
CA DB 69	<0.01	--	51000	40	3	<1	21	<1	10	<0.5
CA DB 71	<0.01	--	19000	10	2	<1	22	<1	<10	<0.5
CA DB 72	<0.01	--	16000	1600	1	<1	15	<1	10	<0.5

LOCAL IDENTIFIER	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
CA DB 66	40	<1	<1	20	1	<1	10	4	11	2
CA DB 69	20	<1	<1	130	1	<1	30	20	44	7
CA DB 71	10	1	<1	50	3	<1	30	20	24	4
CA DB 72	30	1	1	60	10	<1	60	30	30	4

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CALVERT COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)
CA DB 66	13000	7	12	<5	<10	<4	330	230	4	5
CA DB 69	99000	18	45	<5	20	<4	460	350	10	3
CA DB 71	53000	89	31	<5	20	4	3300	2300	4	4
CA DB 72	53000	4600	28	<5	20	5	2100	1200	7	<1

LOCAL IDENTIFIER	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
CA DB 66	20	7	1	1	430	420	<1	90	14	--
CA DB 69	26	10	1	<1	200	92	<1	370	63	11
CA DB 71	51	17	5	<1	470	350	<1	230	210	--
CA DB 72	70	30	3	<1	550	470	1	420	320	2.7

LOCAL IDENTIFIER	CARBON, ORGANIC DISSOLVED (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	ACENAPHTHENE TOTAL (UG/L)	ACENAPHTHYLENE TOTAL (UG/L)	ANTHRACENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BENZO B FLUORANTHENE TOTAL (UG/L)
CA DB 67	1.6	--	--	<5.0	<5.0	<5.0	<3.0	<10.0	<10.0	<10.0
CA DB 69	1.5	0.08	--	--	--	--	--	--	--	--
CA DB 71	--	0.08	--	--	--	--	--	--	--	--
CA DB 72	--	--	<1	--	--	--	--	--	--	--
CA DB 73	2.4	--	--	<5.0	<5.0	<5.0	<3.0	<10.0	<10.0	<10.0

LOCAL IDENTIFIER	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L)	BENZO K FLUORANTHENE TOTAL (UG/L)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L)	BROMOFORM TOTAL (UG/L)	CARBONTETRACHLORIDE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLORODIBROMOMETHANE TOTAL (UG/L)
CA DB 67	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0
CA DB 73	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0

LOCAL IDENTIFIER	CHLOROETHANE TOTAL (UG/L)	CHLOROFORM TOTAL (UG/L)	CHLOROETHYLENE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L)	DICHLOROBROMOMETHANE TOTAL (UG/L)	DICHLORODIFLUOROMETHANE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DIMETHYL PHTHALATE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)
CA DB 67	<3.0	4.0	<3.0	<10.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
CA DB 73	<3.0	3.7	<3.0	<10.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0

LOCAL IDENTIFIER	DI-N-OCTYL PHTHALATE TOTAL (UG/L)	ETHYLBENZENE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXACHLOROBENZENE TOTAL (UG/L)	HEXACHLOROBUTADIENE TOTAL (UG/L)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L)	HEXACHLOROETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)
CA DB 67	<10.0	<3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
CA DB 73	<10.0	<3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0

LOCAL IDENTIFIER	METHYLBROMIDE TOTAL (UG/L)	METHYL CHLORIDE TOTAL (UG/L)	METHYLENE CHLORIDE TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	N-NITROSODIMETHYLAMINE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITROSODIPHENYLAMINE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NITROBENZENE TOTAL (UG/L)	PARACHLORO META CRESOL TOTAL (UG/L)
CA DB 67	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CA DB 73	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CALVERT COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	PENTACHLOROPHENOL TOTAL (UG/L)	PHENOL (C6H5OH) TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRACHLOROETHYLENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)	TRICHLOROFLUOROMETHANE TOTAL (UG/L)
CA DB 67	<30.0	<6.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
CA DB 73	<30.0	<6.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

LOCAL IDENTIFIER	VINYL CHLORIDE TOTAL (UG/L)	1,1-DICHLOROETHANE TOTAL (UG/L)	1,1-DICHLOROETHYLENE TOTAL (UG/L)	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	1,1,2-TRICHLOROETHANE TOTAL (UG/L)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L)	1,2-DIBROMO ETHYLENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)	1,2-DICHLOROETHANE TOTAL (UG/L)	1,2-DICHLOROPROPANE TOTAL (UG/L)
CA DB 67	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
CA DB 73	<3.0	<3.0	<3.0	3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

LOCAL IDENTIFIER	1,2,4-TRICHLOROBENZENE TOTAL (UG/L)	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L)	1,3-DICHLOROBENZENE TOTAL (UG/L)	1,3-DICHLOROPROPANE TOTAL (UG/L)	1,4-DICHLOROBENZENE TOTAL (UG/L)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L)	2-CHLORONAPHTHALENE TOTAL (UG/L)	2-CHLOROPHENOL TOTAL (UG/L)	2-NITROPHENOL TOTAL (UG/L)	2,4-DICHLOROPHENOL TOTAL (UG/L)
CA DB 67	<5.0	<10.0	<3.0	<3.0	<3.0	<3.0	<5.0	<6.0	<6.0	<6.0
CA DB 73	<5.0	<10.0	<3.0	<3.0	<3.0	<3.0	<5.0	<6.0	<6.0	<6.0

LOCAL IDENTIFIER	2,4-DIMETHYLPHENOL TOTAL (UG/L)	2,4-DINITROTOLUENE TOTAL (UG/L)	2,4,-DINITROPHENOL TOTAL (UG/L)	2,6-DINITROTOLUENE TOTAL (UG/L)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L)	4-NITROPHENOL TOTAL (UG/L)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L)
CA DB 67	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<30.0	<30.0
CA DB 73	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<30.0	<30.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CARROLL COUNTY, MARYLAND

	LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
CL BF 194	CL-81-2609	393811076521101	300PRTB	06-25-86	1130	10.30	53.00	53	48	826
CL BF 195	CL-81-2610	393811076521102	300PRTB	06-19-86	1300	8.87	18.00	18	8.0	826
CL BF 198	CL-81-2613	393817076520801	300PRTB	06-25-86	1515	55.40	73.00	71	46	867
CL BF 199	CL-81-2608	393810076521001	300PRTB	06-20-86	1000	8.89	18.00	15	5.0	821
CL BF 200	CL-81-2863	393810076521002	300PRTB	06-20-86	1300	9.57	79.00	76	66	821

	LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
CL BF 194	CL-81-2609	126	4020	200	5.90	14.0	12.5	5.7	52	8.9
CL BF 195	CL-81-2610	60	4020	270	5.50	23.0	14.0	3.8	64	11
CL BF 198	CL-81-2613	57	4020	158	5.70	21.0	15.5	6.0	45	6.2
CL BF 199	CL-81-2608	12	4020	250	5.40	23.0	13.5	5.2	60	14
CL BF 200	CL-81-2863	30	4020	225	5.60	25.0	14.5	4.3	51	8.7

	LOCAL IDENTIFIER	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
CL BF 194	CL-81-2609	7.2	11	31	0.7	1.7	16	13	32	3.5
CL BF 195	CL-81-2610	8.8	18	37	1	1.5	12	10	60	14
CL BF 198	CL-81-2613	7.1	6.2	22	0.4	1.5	15	12	48	1.0
CL BF 199	CL-81-2608	6.0	18	39	1	1.0	14	12	89	6.5
CL BF 200	CL-81-2863	7.2	13	34	0.8	2.1	15	12	60	--

	LOCAL IDENTIFIER	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)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
CL BF 194	CL-81-2609	18	<0.1	6.8	65	0.09	9.29	0.01	0.03	9.40
CL BF 195	CL-81-2610	33	<0.1	6.8	99	0.13	--	<0.01	--	11.0
CL BF 198	CL-81-2613	10	<0.1	5.9	46	0.06	8.98	0.02	0.07	9.20
CL BF 199	CL-81-2608	38	<0.1	6.0	97	0.13	7.89	0.01	0.03	8.20
CL BF 200	CL-81-2863	--	--	--	--	--	--	<0.01	--	9.60

	LOCAL IDENTIFIER	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
CL BF 194	CL-81-2609	9.30	0.03	0.14	0.18	0.57	0.56	0.6	0.7	10
CL BF 195	CL-81-2610	11.0	0.01	0.05	0.06	0.59	0.55	0.6	0.6	12
CL BF 198	CL-81-2613	9.00	0.02	0.06	0.08	1.1	0.64	1.1	0.7	10
CL BF 199	CL-81-2608	7.90	0.01	0.08	0.1	0.79	0.22	0.8	0.3	9.0
CL BF 200	CL-81-2863	9.10	--	0.04	0.05	--	1.1	--	1.1	--

Geologic unit (aquifer): 300PRTB - Prettyboy Schist

Sampling method: 4020 - Bailer

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CARROLL COUNTY, MARYLAND-Continued

		LOCAL IDENTIFIER	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	ALUMPHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHORUS, ORTHO, DISSOLVED (MG/L AS P)	INUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)	ANTIMONY, DISSOLVED (UG/L AS SB)
CL BF	194	CL-81-2609	44	0.02	0.02	0.02	<0.01	70	<10	10	6
CL BF	195	CL-81-2610	51	0.05	<0.01	<0.01	<0.01	290	30	<1	<1
CL BF	198	CL-81-2613	46	0.31	<0.01	<0.01	<0.01	7400	<10	1	<1
CL BF	199	CL-81-2608	40	0.20	0.01	<0.01	<0.01	3700	20	<1	<1
CL BF	200	CL-81-2863	--	0.19	1.00	--	<0.01	4200	20	12	2

		LOCAL IDENTIFIER	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
CL BF	194	CL-81-2609	2	2	<10	<0.5	<10	26	16	<10	1
CL BF	195	CL-81-2610	<1	<1	<10	0.7	<10	<1	<1	<10	<1
CL BF	198	CL-81-2613	1	<1	<10	1	<10	2	2	30	<1
CL BF	199	CL-81-2608	<1	<1	<10	<0.5	<10	<1	<1	20	<1
CL BF	200	CL-81-2863	1	<1	<10	<0.5	--	9	9	40	4

		LOCAL IDENTIFIER	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
CL BF	194	CL-81-2609	<1	2	1	24	10	210	3	15	6
CL BF	195	CL-81-2610	<1	<1	<1	9	4	690	14	<5	<5
CL BF	198	CL-81-2613	<1	50	30	100	2	21000	3	33	<5
CL BF	199	CL-81-2608	<1	9	2	50	5	19000	<3	10	<5
CL BF	200	CL-81-2863	<1	9	3	52	9	13000	9	62	7

		LOCAL IDENTIFIER	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)
CL BF	194	CL-81-2609	<10	8	150	140	1	<1	9	10	<1
CL BF	195	CL-81-2610	<10	4	60	49	1	<1	14	9	1
CL BF	198	CL-81-2613	40	8	1400	490	1	<1	52	28	<1
CL BF	199	CL-81-2608	<10	5	210	83	1	<1	11	8	<1
CL BF	200	CL-81-2863	20	10	350	120	1	1	23	11	<1

		LOCAL IDENTIFIER	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)
CL BF	194	CL-81-2609	70	45	<1	80	81	1.7	2.1	0.12	<1
CL BF	195	CL-81-2610	50	52	<1	30	40	19	1.3	--	<1
CL BF	198	CL-81-2613	50	38	<1	160	47	29	1.9	0.1	3
CL BF	199	CL-81-2608	60	54	<1	110	67	1.5	1.7	0.11	<1
CL BF	200	CL-81-2863	60	46	--	290	190	--	1.5	0.14	<1

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

CHARLES COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)
CH BD 46	383742077011101	217PPSC	06-26-86	233.30	830.00	820	730	180	420
CH BE 60	383706076575604	217PPSC	04-23-86	231.90	630.00	625	610	213	150
CH BF 151	383508076540703	217PPSC	03-11-86	232.70	655.00	650	635	192	360
CH BF 157	383637076545803	217PPSC	09-08-86	266.50	622.00	622	608	225	115
CH BF 158	383732076531902	217PPSC	09-30-86	222.90	645.00	645	630	203	310

LOCAL IDENTIFIER	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	MAGNESIUM, DISSOLVED (MG/L AS MG)
CH BD 46	90	4040	410	7.43	27.0	18.0	3	0.6	--	0.3
CH BE 60	27	4040	310	7.40	10.0	17.0	10	2.5	--	1.0
CH BF 151	115	4040	335	7.50	16.0	15.0	100	26	--	9.1
CH BF 157	30	4040	300	8.20	24.0	19.0	99	25	8.0	8.8
CH BF 158	50	4040	260	8.50	85.0	19.0	47	11	4.5	4.6

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
CH BD 46	95	97	26	3.7	250	205	15	13	2.9	1.4
CH BE 60	64	88	9	6.1	170	140	11	7.7	1.6	0.5
CH BF 151	20	27	0.9	12	180	150	9.2	9.4	0.9	0.2
CH BF 157	24	31	1	12	--	--	1.9	8.5	1.2	0.2
CH BF 158	35	57	2	8.0	160	130	0.8	9.9	0.7	0.4

LOCAL IDENTIFIER	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)
CH BD 46	33	297	270	0.4	1.10	180	<1	<1	33	<0.5
CH BE 60	10	181	180	0.25	0.11	<10	<1	<1	62	<0.5
CH BF 151	9.7	163	180	0.22	0.03	20	<1	<1	520	<0.5
CH BF 157	9.3	188	180	0.26	0.03	<10	<1	<1	380	<0.5
CH BF 158	9.9	160	160	0.22	0.01	40	<1	<1	320	<0.5

LOCAL IDENTIFIER	BORON, DISSOLVED (UG/L AS B)	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, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
CH BD 46	400	1	<1	1	85	450	220	<5	<4	30
CH BE 60	270	<1	<1	<1	<1	610	85	1	<4	40
CH BF 151	100	<1	1	<1	<1	500	350	1	6	20
CH BF 157	110	<1	<1	1	2	550	500	<5	12	20
CH BF 158	130	<1	1	1	2	560	530	<5	7	10

LOCAL IDENTIFIER	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)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
CH BD 46	24	<0.1	1	3	<1	<1	8	150	0.3
CH BE 60	29	--	<1	1	<1	<1	35	13	--
CH BF 151	24	--	4	1	<1	1	410	23	0.1
CH BF 157	20	0.1	2	1	<1	<1	370	11	0.4
CH BF 158	14	<0.1	9	<1	<1	<1	200	16	0.5

Geologic unit (aquifer): 217PPSC - Patapsco Formation

Sampling method: 4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

HOWARD COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
HO CD 20	391440076555401	300WSCK	08-04-86	1030	9.41	100.00	100	30	398
HO CD 20	391440076555401	300WSCK	09-03-86	0930	9.74	100.00	100	30	398
HO CD 21	391442076555301	300WSCK	08-04-86	1300	17.65	99.00	99	55	420
HO CD 21	391442076555301	300WSCK	09-03-86	1130	17.88	99.00	99	55	420
HO CD 25	391444076554701	300WSCK	08-04-86	1500	--	100.00	100	60	460
HO CD 25	391444076554701	300WSCK	09-03-86	1000	44.97	100.00	100	60	460
HO CD 26	391442076554701	300WSCK	09-03-86	1230	50.50	125.00	125	106	465
HO CD 28	391447076554702	300WSCK	09-03-86	1245	30.57	50.00	50	45	450

LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3
HO CD 20	60	0.9	4040	130	6.80	26.5	13.0	57	47
HO CD 20	45	0.7	4040	120	6.91	21.5	12.5	55	45
HO CD 21	90	0.5	4040	110	7.34	26.5	14.0	51	42
HO CD 21	45	0.7	4040	114	7.34	22.0	14.5	68	56
HO CD 25	--	--	4020	78	6.80	30.0	18.5	--	--
HO CD 25	--	--	4010	73	6.76	21.5	14.5	24	20
HO CD 26	--	--	4010	182	8.29	24.0	14.5	97	80
HO CD 28	--	--	4010	39	6.48	24.0	14.5	12	10

LOCAL IDENTIFIER	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
HO CD 20	14	--	<0.01	--	<0.10	0.02	0.03	0.18	0.2
HO CD 20	11	--	<0.01	--	<0.10	0.03	0.04	--	<0.2
HO CD 21	3.7	--	0.03	0.1	<0.10	0.05	0.06	0.25	0.3
HO CD 21	4.9	--	0.01	0.03	<0.10	0.02	0.03	0.18	0.2
HO CD 25	0	0.25	0.03	0.1	0.28	0.30	0.39	0.7	1.0
HO CD 25	6.6	0.14	0.03	0.1	0.17	0.09	0.12	0.11	0.2
HO CD 26	0.8	--	<0.01	--	<0.10	0.03	0.04	0.27	0.3
HO CD 28	6.3	0.52	0.03	0.1	0.55	0.03	0.04	--	<0.2

Geologic unit (aquifer): 300WSCK - Wissahickon Formation

Sampling method: 4010 - Thief sampler
4020 - Bailer
4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

QUEEN ANNES COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SAMPLING METHOD, CODES	CHLORIDE, DISSOLVED (MG/L AS CL)
QA DB 10	390011076184401	125AQUI	02-12-86	136.00	--	--	15.0	--	18
QA DB 13	390158076183701	112PLSC	02-18-86	35.00	35	25	15.0	4090	47
QA DB 14	390055076184501	125AQUI	02-12-86	165.00	165	145	15.0	4040	14
QA DB 17	390059076191801	125AQUI	01-12-86	--	--	--	20.0	--	63
QA DB 19	390211076183401	112PLSC	02-12-86	60.00	60	55	23.0	--	350
QA DB 23	390033076184501	125AQUI	02-12-86	185.00	185	165	18.0	4040	18
QA DB 25	390212076181501	112PLSC	02-12-86	45.00	45	37	19.0	4040	110
QA DB 27	390117076191301	125AQUI	02-12-86	145.00	145	110	15.0	4090	310
QA EA 10	385755076205201	125AQUI	09-06-86	120.00	120	100	20.0	4080	5.3
QA EA 43	385704076211401	125AQUI	10-15-85	180.00	180	160	15.0	--	18
QA EA 45	385554076213801	125AQUI	10-15-85	210.00	210	200	15.0	4040	4.5
QA EA 48	385825076261201	125AQUI	10-15-85	160.00	160	129	5.0	--	190
QA EA 50	385820076200701	125AQUI	10-15-85	145.00	--	--	8.0	--	3.8
QA EA 52	385807076204401	125AQUI	10-15-85	170.00	170	150	8.0	4090	140
QA EA 53	385810076204101	125AQUI	02-18-86	90.00	90	80	17.0	4040	14
QA EA 55	385805076204501	125AQUI	10-15-85	110.00	110	D95	19.0	4090	11
QA EA 57	385705076212301	125AQUI	10-15-85	194.00	194	165	10.0	4090	170
QA EA 59	385505076215001	125AQUI	10-15-85	215.00	215	195	10.0	4040	68
QA EA 60	385701076212501	125AQUI	10-15-85	185.00	185	165	7.0	4090	200
QA EA 61	385812076202801	125AQUI	10-15-85	170.00	170	150	18.0	4040	430
QA EA 71	385742076205801	125AQUI	10-15-85	135.00	135	115	20.0	4040	35
QA EB 121	385826076195201	125AQUI	02-18-86	151.00	151	118	5.0	4090	3.5
QA EB 123	385848076195801	125AQUI	03-04-86	120.00	120	100	5.0	4040	11
QA EB 124	385910076193501	125AQUI	03-04-86	150.00	150	130	20.0	4040	4.0
QA EB 126	385943076191801	125AQUI	03-06-86	--	--	--	18.0	--	220
QA EB 127	385938076191401	125AQUI	03-04-86	265.00	265	245	17.0	--	4.8
QA FA 64	385454076214901	125AQUI	02-18-86	231.00	231	191	5.0	4040	140

Geologic unit (aquifer): 112PLSC - Pleistocene Series
125AQUI - Aquia Formation

Sampling method: 4040 - Submersible pump
4080 - Peristaltic pump
4090 - Jet pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

QUEEN ANNES COUNTY, MARYLAND-Continued

LOCAL IDENT-I-FIER	STATION NUMBER	GEO-LOGIC UNIT	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
QA EF 29	385538075574001	125AQUI	06-27-86	65.20	1340.00	1320	1110	60.0

PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)	SAM-PLING METHOD, CODES	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
420	700	4040	197	6.20	25.0	0	12	3.2

MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
1.0	36	81	5	5.0	96	79	96	18

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)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
2.0	0.2	11	120	0.17	<0.10	0.27	0.83	10

ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)
<1	<1	52	<0.5	<1	<1	<1	6	<5

MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
0.5	<1	8	<1	<1	140	10	2.3

Geologic unit (aquifer): 125AQUI - Aquia Formation

Sampling method: 4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

ST MARYS COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
SM Dd 65	381835076381501	125AQUI	07-24-86	0545	210.00	520.00	515	445	108

PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
1430	300	4040	235	7.40	19.0	5	21	5.5	1.8

SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
37	73	4	7.1	7.8	9.5	1.6	0.2	11

SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
128	130	0.17	<0.10	0.02	80	26	<10	1

Geologic unit (aquifer): 125AQUI - Aquia Formation

Sampling method: 4040 - Submersible pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND

	LOCAL IDENT-I-FIER	STATION NUMBER	GEO-LOGIC UNIT	DATE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
SO AD	13 SO 81 0467	381526075453301	122MNKN	09-10-86	160.00	--	--	10.0	30	7.0
SO AE	16	381618075435201	112PCPC	08-05-86	65.00	65	--	20.0	70	1.0
SO AE	17 SO-81-0266	381558075432001	112PCPC	09-10-86	60.00	--	--	10.0	25	7.0
SO AE	18	381655075410401	122MNKN	09-10-86	100.00	--	--	25.0	30	5.0
SO AF	20 SO 81 0091	381651075390601	122MNKN	08-05-86	180.00	180	170	30.0	50	5.0
SO BB	15 SO 73 1490	381005075565001	122MNKN	08-06-86	125.00	125	105	5.0	30	--
SO BB	19	381006075565301	125PLCN	08-06-86	720.00	720	--	5.0	50	8.0
SO BC	15 SO 73 0366	381048075540701	122MNKN	08-06-86	140.00	140	130	5.0	40	3.0
SO BD	33 SO 81 0343	381448075480201	122MNKN	08-06-86	140.00	140	105	5.0	65	4.0
SO BD	37	381337075453101	112PCPC	06-26-86	75.00	--	--	10.0	30	1.0
SO BD	39 SO 71 0030	381136075470101	122MNKN	08-07-86	148.00	148	140	10.0	45	4.0
SO BE	51	381208075412403	122MNKN	08-28-86	215.00	--	--	20.0	45	200
SO BE	54	381222075421101	122MNKN	08-28-86	260.00	--	--	10.0	45	300
SO BE	56 SO 81 0771	381036075405801	122MNKN	08-28-86	240.00	230	180	15.0	20	320
SO BE	58 SO 73 0628	381127075414601	122MNKN	08-07-86	200.00	200	180	15.0	60	2.0
SO BE	72 SO 73 1948	381126075402502	122PCMK	08-07-86	90.00	90	60	15.0	30	7.0
SO BE	77 SO 81 0760	381258075404301	112PCPC	07-29-86	68.00	68	30	15.0	50	1.0
SO BE	83 SO 81 0451	381315075415701	122MNKN	08-05-86	190.00	--	--	15.0	50	9.0
SO BE	84 SO 71 0089	381316075415801	122MNKN	08-05-86	187.00	187	167	15.0	50	8.0
SO BE	86 SO 73 0897	381058075444401	122MNKN	08-12-86	182.00	182	172	10.0	30	1.0
SO BE	87 SO 73-1872	381154075422901	112PCPC	07-29-86	60.00	60	20	10.0	60	1.0
SO BE	88 SO 73 0945	381229075431901	112PCPC	08-06-86	73.00	73	53	15.0	60	1.0
SO BE	89 SO 73 1180	381221075432901	112PCPC	08-06-86	80.00	80	40	15.0	65	1.0
SO BE	91	381126075402503	122MNKN	08-07-86	180.00	180	--	15.0	30	9.0
SO BE	92	381355075425601	122MNKN	09-05-86	160.00	160	--	15.0	45	5.0
SO BE	93	381033075434001	122MNKN	09-05-86	190.00	190	170	5.0	40	3.0
SO BE	94 SO 81 0827	381119075415201	112PCPC	09-08-86	100.00	--	--	15.0	40	7.0
SO BE	95	381120075414301	122MNKN	09-08-86	225.00	--	--	15.0	30	5.0
SO BF	14 SO 81 0135	381026075364201	122MNKN	08-07-86	205.00	205	200	20.0	30	5.0
SO BF	15 SO 73 0885	381237075031301	122MNKN	08-07-86	250.00	250	240	40.0	30	8.0
SO BF	17 SO 81 0595	381329075361701	122MNKN	08-07-86	230.00	230	200	35.0	35	8.0
SO BF	18 SO 81 0207	381333075391101	122MNKN	08-08-86	200.00	200	175	20.0	40	7.0
SO BF	20 SO 71 0005	381201075391901	112PCPC	08-07-86	27.00	27	20	20.0	40	7.0
SO CB	24 SO 81 0040	380916075571001	122MNKN	09-04-86	140.00	140	120	10.0	40	5.0
SO CC	6	380535075512101	217PTMC	09-04-86	1086.00	--	--	5.0	--	100
SO CD	41	380606075483601	217PTMC	09-04-86	1145.00	1140	1110	5.0	15	200
SO CD	44 SO-81-0252	380655075452001	112PCPC	08-14-86	50.00	--	--	5.0	30	4.0
SO CD	45	380940075454501	112PCPC	08-14-86	65.00	65	35	5.0	55	1.0
SO CD	49 SO 81 0800	380923075473201	122MNKN	07-29-86	165.00	165	145	5.0	35	--
SO CD	50 SO 81 0086	380934075471401	122MNKN	09-03-86	162.00	162	142	5.0	65	15
SO CD	51 SO 73 0529	380902075465401	122MNKN	07-31-86	200.00	200	180	10.0	50	2.0
SO CD	52	380625075475601	112PCPC	08-14-86	57.00	57	--	5.0	30	8.0
SO CE	53 SO 73 1252	380943075412101	122MNKN	08-12-86	220.00	220	200	15.0	45	--
SO CE	56 SO 81 0733	380707075423001	122MNKN	08-08-86	230.00	230	--	10.0	60	10
SO CE	64 SO 73 0639	380552075430401	122PCMK	08-12-86	127.00	127	121	10.0	30	--
SO CE	65 SO 73 0796	380744075421802	122MNKN	08-08-86	240.00	240	210	10.0	50	5.0
SO CE	74 SO 73 0303	380707075401101	122MNKN	08-13-86	250.00	250	220	15.0	55	3.0
SO CE	81 SO 81 0036	380505075442601	122PCMK	09-03-86	80.00	80	40	5.0	35	100
SO CE	83	380732075412802	112PCPC	08-12-86	30.00	--	--	15.0	55	5.0
SO CF	16 SO 73 1635	380701075392501	122MNKN	08-12-86	240.00	240	220	20.0	40	6.0
SO CF	20 SO 73 1985	380701075394701	112PCPC	08-12-86	35.00	35	25	20.0	45	3.0
SO DC	4	380034075503601	217PTMC	09-09-86	1136.00	1140	1120	5.0	--	--
SO DC	5 SO 73 1722	380047075502001	122MNKN	08-27-86	122.00	122	117	5.0	30	--
SO DC	6 SO-81-0228	380005075510701	112PCPC	08-13-86	55.00	--	--	2.0	35	5.0
SO DD	48 SO 73 1299	380117075475701	122MNKN	08-13-86	155.00	155	135	5.0	40	5.0
SO DD	51 SO 73 0385	380037075471501	122MNKN	08-14-86	148.00	148	138	5.0	30	8.0
SO DD	58 SO 73 0576	380259075470601	122PCMK	08-14-86	85.00	85	70	5.0	45	1.0
SO DD	59 SO 73 1961	380135075491701	122MNKN	08-13-86	155.00	155	130	5.0	40	5.0
SO DD	60 SO 73 1989	380108075492001	122MNKN	08-14-86	160.00	160	140	5.0	55	1.0
SO DE	29 SO 81 0211	380139075412301	122PCMK	08-14-86	100.00	100	85	5.0	40	7.0

Geologic unit (aquifer): 112PLPC - Pleistocene-Pliocene Series
122MNKN - Manokin Aquifer
122PCMK - Pocomoke Aquifer
125PLCN - Paleocene Series
217PTMC - Potomac Group

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

	LOCAL IDENT-I-FIER		SAM-PLING METHOD, CODES	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
SO AD	13	SO 81 0467	4090	320	6.84	24.5	17.0	0.2	88	<0.1	--	23
SO AE	16		4040	131	4.60	33.5	15.5	6.9	53	<0.1	--	8.3
SO AE	17	SO-81-0266	4090	168	5.38	24.5	16.0	--	59	<0.1	--	5.5
SO AE	18		4090	254	6.81	24.5	17.0	0	59	<0.1	--	15
SO AF	20	SO 81 0091	4090	305	6.61	34.0	23.0	--	97	0.1	5.0	27
SO BB	15	SO 73 1490	4090	1520	6.80	--	19.0	0	220	0.3	15	43
SO BB	19		4090	1920	7.58	28.0	20.5	0	33	<0.1	--	6.1
SO BC	15	SO 73 0366	4090	1850	7.50	--	19.0	0	130	<0.1	--	24
SO BD	33	SO 81 0343	4030	351	6.60	30.5	18.0	0	34	<0.1	--	7.5
SO BD	37		4030	390	6.60	24.5	15.0	--	140	0.5	25	41
SO BD	39	SO 71 0030	4090	910	7.60	--	16.5	0.5	47	<0.1	--	9.6
SO BE	51		4040	575	7.81	16.0	16.0	--	40	<0.1	--	8.2
SO BE	54		4040	615	7.99	15.5	16.0	0	42	<0.1	--	8.8
SO BE	56	SO 81 0771	4040	876	7.75	17.5	16.5	0	47	<0.1	--	9.0
SO BE	58	SO 73 0628	4090	820	7.93	30.5	21.0	--	44	<0.1	--	8.4
SO BE	72	SO 73 1948	4090	325	6.51	34.5	16.0	0	26	<0.1	--	4.6
SO BE	77	SO 81 0760	4040	179	4.47	34.0	16.0	0	49	0.7	35	8.5
SO BE	83	SO 81 0451	4090	529	7.70	33.5	17.5	--	45	<0.1	--	10
SO BE	84	SO 71 0089	4090	520	7.42	29.0	18.0	--	32	<0.1	--	4.7
SO BE	86	SO 73 0897	4040	947	7.77	20.5	17.0	2.0	60	<0.1	--	12
SO BE	87	SO 73-1872	4040	112	5.60	33.0	16.5	0	11	0.3	15	2.4
SO BE	88	SO 73 0945	4040	205	4.90	--	16.5	1.0	56	0.1	5.0	11
SO BE	89	SO 73 1180	4040	--	5.08	34.5	16.5	0	16	<0.1	--	2.6
SO BE	91		4090	750	7.74	35.0	18.0	--	37	<0.1	--	6.9
SO BE	92		4090	432	6.59	26.5	18.0	--	36	<0.1	--	8.2
SO BE	93		4090	1010	7.67	26.5	17.5	--	2	<0.1	--	0.4
SO BE	94	SO 81 0827	4090	149	5.96	20.5	17.0	0	20	<0.1	--	3.2
SO BE	95		4090	825	7.40	20.5	16.5	0.2	46	<0.1	--	8.5
SO BF	14	SO 81 0135	4040	630	7.90	--	18.0	0	39	<0.1	--	8.3
SO BF	15	SO 73 0885	4040	446	8.20	--	16.5	0	43	<0.1	--	9.9
SO BF	17	SO 81 0595	4040	387	7.80	--	16.5	0	78	<0.1	--	19
SO BF	18	SO 81 0207	4040	440	7.62	30.5	--	0	51	<0.1	--	12
SO BF	20	SO 71 0005	4090	285	5.49	29.0	15.0	--	79	<0.1	--	16
SO CB	24	SO 81 0040	4090	1360	7.11	23.0	17.5	--	170	0.2	9.9	29
SO CC	6		4040	1160	--	24.0	27.5	--	6	<1.0	--	1.4
SO CD	41		4040	955	8.71	25.0	27.0	0	6	<0.1	--	1.5
SO CD	44	SO-81-0252	4090	286	5.60	28.0	16.5	0	68	0.4	20	17
SO CD	45		4040	170	5.76	28.0	15.5	0	33	0.2	9.9	8.8
SO CD	49	SO 81 0800	4040	1880	7.70	30.0	22.5	0.7	130	<0.1	--	25
SO CD	50	SO 81 0086	4040	1550	6.99	22.0	17.5	--	260	0.2	9.9	63
SO CD	51	SO 73 0529	4040	2240	7.72	34.0	19.0	0	190	<0.1	--	35
SO CD	52		4090	494	5.50	27.5	16.5	0	46	0.5	25	8.6
SO CE	53	SO 73 1252	4090	730	7.31	18.0	20.5	0	83	<0.1	--	21
SO CE	56	SO 81 0733	4040	3300	7.80	30.0	16.5	0	230	<0.1	--	41
SO CE	64	SO 73 0639	4040	1310	7.65	22.0	22.0	3.3	120	<0.1	--	21
SO CE	65	SO 73 0796	4090	1900	7.60	27.5	17.0	0	130	<0.1	--	24
SO CE	74	SO 73 0303	4090	1860	7.80	25.0	16.0	0.4	110	<0.1	--	19
SO CE	81	SO 81 0036	4040	787	6.50	25.5	15.0	0	180	0.3	15	53
SO CE	83		4090	347	5.81	20.0	21.5	--	45	0.9	45	10
SO CF	16	SO 73 1635	4090	1800	7.50	22.5	16.5	0	120	<0.1	--	22
SO CF	20	SO 73 1985	4030	380	5.00	23.0	16.5	--	50	0.7	35	11
SO DC	4		4040	957	8.47	23.0	28.0	--	3	<0.1	--	0.62
SO DC	5	SO 73 1722	4040	1070	7.30	28.5	19.5	0	280	<0.1	--	41
SO DC	6	SO-81-0228	4090	7700	6.50	23.0	16.0	0	2500	0.7	35	800
SO DD	48	SO 73 1299	4040	680	7.20	23.5	16.0	0.2	180	<0.1	--	31
SO DD	51	SO 73 0385	4090	1810	7.30	27.5	15.5	0	360	<0.1	--	59
SO DD	58	SO 73 0576	4040	508	6.04	27.0	16.5	0	160	0.3	15	47
SO DD	59	SO 73 1961	4040	1150	7.30	23.5	17.0	0.3	160	<0.1	--	26
SO DD	60	SO 73 1989	4040	1270	7.33	29.0	17.5	0	150	<0.1	--	24
SO DE	29	SO 81 0211	4090	380	6.70	24.0	15.5	0	140	<0.1	--	31

Sampling method: 4030 - Suction pump
4040 - Submersible pump
4090 - Jet pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

		LOCAL IDENTIFIER	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
SO AD	13	SO 81 0467	7.4	43	50	2	5.1	230	190	53	1.7
SO AE	16		7.9	6.5	20	0.4	2.3	--	--	195	25
SO AE	17	SO-81-0266	11	5.1	15	0.3	2.0	7	6	46	27
SO AE	18		5.2	31	51	2	4.2	170	140	42	4.4
SO AF	20	SO 81 0091	7.2	25	35	1	4.3	190	158	75	2.3
SO BB	15	SO 73 1490	28	210	65	6	19	390	320	98	12
SO BB	19		4.2	400	95	31	13	940	772	39	68
SO BC	15	SO 73 0366	18	340	83	13	17	550	450	28	58
SO BD	33	SO 81 0343	3.8	62	76	5	6.4	440	356	175	3.4
SO BD	37		9.1	14	18	0.5	2.3	100	84	41	79
SO BD	39	SO 71 0030	5.6	180	87	12	8.6	460	380	18	11
SO BE	51		4.7	150	87	11	6.8	370	305	9.2	10
SO BE	54		4.9	150	87	10	6.8	370	305	6.0	14
SO BE	56	SO 81 0771	6.0	190	88	12	8.1	420	345	12	10
SO BE	58	SO 73 0628	5.5	170	87	11	7.9	390	319	7.3	7.9
SO BE	72	SO 73 1948	3.6	56	78	5	5.7	180	152	91	7.6
SO BE	77	SO 81 0760	6.7	14	37	0.9	2.6	0	0	0	69
SO BE	83	SO 81 0451	4.8	110	82	7	5.9	330	272	11	3.2
SO BE	84	SO 71 0089	4.9	110	86	9	5.6	320	264	19	3.0
SO BE	86	SO 73 0897	7.2	210	86	12	9.5	500	410	13	19
SO BE	87	SO 73-1872	1.2	13	69	2	1.5	32	26	128	14
SO BE	88	SO 73 0945	6.8	12	31	0.7	2.1	5	4	100	55
SO BE	89	SO 73 1180	2.3	6.4	23	0.7	25	11	9	145	45
SO BE	91		4.7	150	88	11	7.5	490	405	14	4.1
SO BE	92		3.8	90	82	7	4.4	290	240	120	3.7
SO BE	93		0.2	230	99	76	1.5	430	355	15	19
SO BE	94	SO 81 0827	2.9	20	66	2	2.2	74	61	129	8.5
SO BE	95		5.9	180	88	12	7.5	430	350	27	10
SO BF	14	SO 81 0135	4.3	130	86	9	5.6	--	--	7.3	5.3
SO BF	15	SO 73 0885	4.5	76	77	5	5.9	280	230	2.8	2.1
SO BF	17	SO 81 0595	7.3	53	57	3	6.1	240	200	6.1	1.0
SO BF	18	SO 81 0207	5.0	74	74	5	5.0	270	220	10	1.6
SO BF	20	SO 71 0005	9.5	13	24	0.7	8.8	16	13	82	40
SO CB	24	SO 81 0040	24	270	75	9	19	460	375	56	6.1
SO CC	6		0.6	270	98	50	6.7	800	660	--	23
SO CD	41		0.6	230	97	41	5.5	650	530	2.0	24
SO CD	44	SO-81-0252	6.2	16	33	0.9	2.3	73	60	291	59
SO CD	45		2.6	15	47	1	3.0	62	51	171	16
SO CD	49	SO 81 0800	17	370	84	14	16	480	395	15	110
SO CD	50	SO 81 0086	24	210	62	6	15	260	210	42	47
SO CD	51	SO 73 0529	25	460	82	15	19	490	405	15	110
SO CD	52		5.9	49	69	3	2.2	73	60	367	63
SO CE	53	SO 73 1252	7.3	140	77	7	7.6	360	295	28	21
SO CE	56	SO 81 0733	32	590	83	17	24	520	430	13	140
SO CE	64	SO 73 0639	17	240	78	10	18	490	400	17	16
SO CE	65	SO 73 0796	16	350	84	14	16	370	300	15	98
SO CE	74	SO 73 0303	14	350	86	15	15	510	415	13	86
SO CE	81	SO 81 0036	11	80	48	3	7.1	240	200	123	63
SO CE	83		4.8	19	47	1	1.7	68	56	167	72
SO CF	16	SO 73 1635	16	370	85	15	15	510	420	26	86
SO CF	20	SO 73 1985	5.5	34	59	2	1.6	15	12	238	82
SO DC	4		0.35	230	98	59	4.7	540	440	2.9	47
SO DC	5	SO 73 1722	42	120	46	3	22	410	340	33	84
SO DC	6	SO-81-0228	110	870	43	8	13	270	220	135	300
SO DD	48	SO 73 1299	25	65	41	2	17	360	295	36	2.6
SO DD	51	SO 73 0385	51	240	57	6	27	480	395	38	200
SO DD	58	SO 73 0576	9.4	31	29	1	5.5	200	165	291	49
SO DD	59	SO 73 1961	24	180	67	6	20	430	350	34	12
SO DD	60	SO 73 1989	22	210	72	8	18	--	350	32	26
SO DE	29	SO 81 0211	14	26	28	1	8.9	230	186	72	2.9

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

		LOCAL IDENTIFIER	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)
SO AD	13	SO 81 0467	15	0.3	20	220	230	0.3	<0.10	0.22	0.28
SO AE	16		14	<0.1	13	100	80	0.14	6.30	0.02	0.03
SO AE	17	SO-81-0266	14	<0.1	12	108	80	0.15	5.70	<0.01	--
SO AE	18		7.1	0.3	26	173	180	0.24	<0.10	0.15	0.19
SO AF	20	SO 81 0091	5.8	0.2	22	184	190	0.25	<0.10	0.15	0.19
SO BB	15	SO 73 1490	320	0.2	38	846	870	1.2	<0.10	2.40	3.1
SO BB	19		180	2.3	23	1180	1200	1.6	<0.10	0.60	0.77
SO BC	15	SO 73 0366	330	0.3	11	1070	1100	1.5	<0.10	0.96	1.2
SO BD	33	SO 81 0343	11	0.2	24	226	340	0.31	<0.10	0.23	0.3
SO BD	37		21	0.3	17	236	250	0.32	<0.10	0.15	0.19
SO BD	39	SO 71 0030	74	0.3	11	537	530	0.73	<0.10	0.34	0.44
SO BE	51		47	0.4	11	593	420	0.81	0.10	0.29	0.37
SO BE	54		54	0.4	11	404	430	0.55	<0.10	0.28	0.36
SO BE	56	SO 81 0771	93	0.4	10	524	530	0.71	<0.10	0.38	0.49
SO BE	58	SO 73 0628	72	0.4	10	491	470	0.67	<0.10	0.33	0.43
SO BE	72	SO 73 1948	7.7	0.4	39	220	220	0.3	<0.10	0.18	0.23
SO BE	77	SO 81 0760	18	<0.1	29	160	--	0.22	<0.10	0.24	0.31
SO BE	83	SO 81 0451	20	0.4	12	332	330	0.45	<0.10	0.25	0.32
SO BE	84	SO 71 0089	20	0.3	150	329	460	0.45	<0.10	0.22	0.28
SO BE	86	SO 73 0897	110	0.4	11	599	630	0.81	<0.10	0.37	0.48
SO BE	87	SO 73-1872	9.3	<0.1	27	90	92	0.12	<0.10	0.06	0.08
SO BE	88	SO 73 0945	19	0.1	24	150	130	0.2	1.20	0.03	0.04
SO BE	89	SO 73 1180	10	<0.1	14	108	110	0.15	0.15	0.04	0.05
SO BE	91		51	0.4	68	435	540	0.59	<0.10	0.29	0.37
SO BE	92		12	0.5	16	276	280	0.38	<0.10	0.20	0.26
SO BE	93		120	0.4	9.8	620	600	0.84	<0.10	0.12	0.15
SO BE	94	SO 81 0827	10	0.4	38	131	130	0.18	<0.10	0.22	0.28
SO BE	95		78	0.5	11	544	510	0.74	<0.10	0.37	0.48
SO BF	14	SO 81 0135	28	0.3	11	378	370	0.51	<0.10	0.22	0.28
SO BF	15	SO 73 0885	12	0.3	12	262	260	0.36	<0.10	0.18	0.23
SO BF	17	SO 81 0595	7.0	0.2	14	230	230	0.31	<0.10	0.20	0.26
SO BF	18	SO 81 0207	6.7	0.2	14	250	250	0.34	<0.10	0.19	0.24
SO BF	20	SO 71 0005	22	<0.1	12	178	130	0.24	<0.10	0.26	0.33
SO CB	24	SO 81 0040	300	0.1	24	847	900	1.2	<0.10	2.30	3.0
SO CC	6		6.7	4.8	12	710	720	0.97	<0.10	0.13	0.17
SO CD	41		7.4	2.5	12	580	600	0.79	<0.10	0.42	0.54
SO CD	44	SO-81-0252	16	0.2	76	242	250	0.33	<0.10	0.90	1.2
SO CD	45		15	0.2	21	123	120	0.17	<0.10	0.28	0.36
SO CD	49	SO 81 0800	370	0.2	10	1190	1200	1.6	<0.10	0.82	1.1
SO CD	50	SO 81 0086	350	0.2	17	807	860	1.1	<0.10	0.35	0.45
SO CD	51	SO 73 0529	490	0.2	10	1430	1400	1.9	<0.10	1.00	1.3
SO CD	52		72	0.1	33	287	310	0.39	<0.10	0.10	0.13
SO CE	53	SO 73 1252	63	0.3	21	464	460	0.63	<0.10	0.39	0.5
SO CE	56	SO 81 0733	770	0.2	9.9	1860	1900	2.5	<0.10	1.40	1.8
SO CE	64	SO 73 0639	210	0.1	14	770	780	1.0	0.68	0.05	0.06
SO CE	65	SO 73 0796	340	0.2	9.8	1100	1000	1.5	<0.10	0.89	1.1
SO CE	74	SO 73 0303	320	0.2	9.3	1070	1100	1.5	<0.10	1.00	1.3
SO CE	81	SO 81 0036	110	0.3	51	444	510	0.6	<0.10	1.00	1.3
SO CE	83		31	<0.1	24	224	250	0.3	<0.10	0.16	0.21
SO CF	16	SO 73 1635	310	0.2	11	1060	1100	1.4	<0.10	0.91	1.2
SO CF	20	SO 73 1985	54	<0.1	42	252	270	0.34	<0.10	0.69	0.89
SO DC	4		41	2.0	12	610	600	0.83	<0.10	0.12	0.15
SO DC	5	SO 73 1722	120	0.7	12	590	650	0.8	<0.10	1.00	1.3
SO DC	6	SO-81-0228	2800	0.2	59	5720	5100	7.8	<0.10	3.00	3.9
SO DD	48	SO 73 1299	57	<0.1	15	381	390	0.52	<0.10	1.10	1.4
SO DD	51	SO 73 0385	270	0.1	12	1100	1100	1.5	<0.10	1.80	2.3
SO DD	58	SO 73 0576	40	0.2	61	358	360	0.49	<0.10	1.10	1.4
SO DD	59	SO 73 1961	180	0.1	13	642	670	0.87	<0.10	1.10	1.4
SO DD	60	SO 73 1989	210	0.2	13	745	740	1.0	<0.10	1.10	1.4
SO DE	29	SO 81 0211	17	0.1	41	253	260	0.34	<0.10	0.51	0.66

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

		LOCAL IDENTIFIER	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)
SO AD	13	SO 81 0467	0.18	0.4	0.27	23	<0.5	150	<1	<3	<10
SO AE	16		0.38	0.4	0.04	92	<0.5	20	1	4	10
SO AE	17	SO-81-0266	--	0.7	0.02	48	<0.5	20	<1	<3	<10
SO AE	18		0.25	0.4	0.27	20	<0.5	100	<1	<3	<10
SO AF	20	SO 81 0091	0.15	0.3	0.37	18	<0.5	110	<1	<3	<10
SO BB	15	SO 73 1490	0.0	2.3	0.41	36	<0.5	780	2	<3	<10
SO BB	19		0.1	0.7	0.04	10	<0.5	3000	<1	<3	<10
SO BC	15	SO 73 0366	0.14	1.1	0.18	32	<0.5	1200	4	<3	<10
SO BD	33	SO 81 0343	0.07	0.3	0.69	15	<0.5	190	<1	<3	<10
SO BD	37		0.15	0.3	<0.01	37	<0.5	20	1	<3	<10
SO BD	39	SO 71 0030	0.26	0.6	0.35	18	<0.5	560	<1	<3	<10
SO BE	51		0.11	0.4	0.47	12	<0.5	410	2	<3	<10
SO BE	54		0.12	0.4	0.46	14	2	450	3	<3	<10
SO BE	56	SO 81 0771	0.12	0.5	0.34	13	0.6	600	2	<3	<10
SO BE	58	SO 73 0628	0.27	0.6	0.40	14	<0.5	520	<1	<3	<10
SO BE	72	SO 73 1948	0.22	0.4	1.60	20	<0.5	120	<1	<3	<10
SO BE	77	SO 81 0760	0.26	0.5	0.01	160	2	20	<1	<3	<10
SO BE	83	SO 81 0451	0.15	0.4	0.61	14	<0.5	260	<1	<3	10
SO BE	84	SO 71 0089	0.28	0.5	0.62	16	<0.5	250	<1	<3	<10
SO BE	86	SO 73 0897	0.13	0.5	0.36	15	<0.5	670	<1	<3	<10
SO BE	87	SO 73-1872	--	<0.2	0.02	16	<0.5	20	<1	<3	<10
SO BE	88	SO 73 0945	--	<0.2	0.01	75	0.9	10	<1	70	<10
SO BE	89	SO 73 1180	0.26	0.3	<0.01	38	<0.5	30	<1	<3	<10
SO BE	91		0.31	0.6	0.42	12	<0.5	480	<1	<3	<10
SO BE	92		--	<0.2	0.82	17	<0.5	220	<1	<3	<10
SO BE	93		2.1	2.2	0.37	11	<0.5	670	1	<3	<10
SO BE	94	SO 81 0827	0.08	0.3	0.72	27	<0.5	40	3	<3	<10
SO BE	95		0.23	0.6	0.37	15	<0.5	540	1	<3	<10
SO BF	14	SO 81 0135	0.28	0.5	0.38	14	<0.5	350	<1	<3	<10
SO BF	15	SO 73 0885	0.12	0.3	0.41	14	<0.5	240	<1	<3	<10
SO BF	17	SO 81 0595	0.2	0.4	0.30	18	<0.5	170	<1	<3	<10
SO BF	18	SO 81 0207	0.21	0.4	0.40	16	<0.5	200	<1	<3	<10
SO BF	20	SO 71 0005	0.44	0.7	0.01	110	<0.5	40	<1	<3	10
SO CB	24	SO 81 0040	0.5	2.8	2.10	16	<0.5	840	<1	<3	<10
SO CC	6		0.17	0.3	0.24	36	0.5	2000	<1	<3	<10
SO CD	41		0.28	0.7	0.29	28	0.6	1200	<1	<3	<10
SO CD	44	SO-81-0252	0.1	1.0	0.13	27	<0.5	40	2	<3	<10
SO CD	45		0.12	0.4	0.01	26	<0.5	20	<1	<3	<10
SO CD	49	SO 81 0800	0.18	1.0	0.14	27	<0.5	1200	5	<3	<10
SO CD	50	SO 81 0086	0.25	0.6	0.01	54	<0.5	430	7	<3	<10
SO CD	51	SO 73 0529	0.2	1.2	0.12	40	<2	1300	7	<9	<30
SO CD	52		--	<0.2	0.02	48	<0.5	30	3	<3	<10
SO CE	53	SO 73 1252	0.51	0.9	0.52	15	<0.5	420	<1	<3	<10
SO CE	56	SO 81 0733	0.1	1.5	0.13	43	5	1600	4	<9	<30
SO CE	64	SO 73 0639	0.25	0.3	0.11	22	<0.5	980	<1	<3	40
SO CE	65	SO 73 0796	0.01	0.9	0.15	24	<0.5	1100	2	<3	<10
SO CE	74	SO 73 0303	0.2	1.2	0.17	22	<0.5	1200	5	<3	<10
SO CE	81	SO 81 0036	0.5	1.5	0.18	37	<0.5	140	<1	<3	<10
SO CE	83		0.14	0.3	<0.01	43	<0.5	30	4	<3	<10
SO CF	16	SO 73 1635	0.19	1.1	0.22	18	<0.5	1100	4	<3	<10
SO CF	20	SO 73 1985	0.21	0.9	0.01	56	<0.5	20	3	<3	<10
SO DC	4		0.18	0.3	0.40	30	<0.5	1300	<1	<3	<10
SO DC	5	SO 73 1722	0.0	1.0	0.10	30	0.7	560	4	<3	<10
SO DC	6	SO-81-0228	0.0	2.8	<0.01	370	<0.5	80	<10	<3	<10
SO DD	48	SO 73 1299	0.3	1.4	0.10	21	<0.5	500	1	<3	<10
SO DD	51	SO 73 0385	0.0	1.8	0.09	38	<0.5	1000	<1	<3	<10
SO DD	58	SO 73 0576	0.1	1.2	0.06	27	<0.5	70	2	<3	<10
SO DD	59	SO 73 1961	0.2	1.3	0.16	24	<0.5	800	<1	<3	<10
SO DD	60	SO 73 1989	0.3	1.4	0.14	30	<0.5	940	2	<3	<10
SO DE	29	SO 81 0211	0.29	0.8	0.55	27	<0.5	100	<1	<3	<10

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

		LOCAL IDENTIFIER	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
SO AD	13	SO 81 0467	1400	<10	15	67	<10	210	<6	52	--
SO AE	16		50	10	6	34	<10	120	<6	42	--
SO AE	17	SO-81-0266	210	<10	5	21	<10	110	<6	48	--
SO AE	18		3400	<10	15	130	<10	140	<6	5	--
SO AF	20	SO 81 0091	2500	10	12	110	<10	220	<6	15	--
SO BB	15	SO 73 1490	4100	<10	18	290	<10	380	<6	50	--
SO BB	19		370	20	35	3	<10	180	<6	7	--
SO BC	15	SO 73 0366	140	10	22	42	<10	320	<6	52	--
SO BD	33	SO 81 0343	1700	<10	12	46	<10	71	<6	160	--
SO BD	37		13000	<10	9	250	<10	250	<6	8	--
SO BD	39	SO 71 0030	130	<10	12	5	<10	110	<6	100	0.9
SO BE	51		41	<10	11	9	<10	110	<6	8	--
SO BE	54		57	<10	15	12	<10	120	<6	12	--
SO BE	56	SO 81 0771	50	<10	11	12	<10	120	<6	10	--
SO BE	58	SO 73 0628	41	<10	8	9	<10	110	<6	100	--
SO BE	72	SO 73 1948	2200	<10	8	32	<10	48	<6	3	--
SO BE	77	SO 81 0760	13000	20	15	140	<10	110	<6	36	--
SO BE	83	SO 81 0451	71	10	8	17	<10	100	<6	64	--
SO BE	84	SO 71 0089	110	10	13	17	<10	100	<6	<3	--
SO BE	86	SO 73 0897	71	<10	12	11	10	140	<6	40	--
SO BE	87	SO 73-1872	7500	<10	6	100	<10	27	<6	17	--
SO BE	88	SO 73 0945	1300	<10	6	30	<10	180	<6	340	--
SO BE	89	SO 73 1180	2200	20	<4	35	<10	41	<6	57	--
SO BE	91		30	<10	11	8	<10	92	<6	<3	--
SO BE	92		460	<10	12	36	<10	83	<6	17	--
SO BE	93		13	<10	13	3	<10	5	<6	<3	--
SO BE	94	SO 81 0827	4000	<10	13	110	<10	37	<6	3000	--
SO BE	95		46	<10	13	9	<10	120	<6	25	--
SO BF	14	SO 81 0135	19	10	7	6	<10	92	<6	17	--
SO BF	15	SO 73 0885	87	<10	9	9	<10	90	<6	25	--
SO BF	17	SO 81 0595	160	10	7	27	<10	170	<6	<3	--
SO BF	18	SO 81 0207	89	<10	7	17	<10	110	<6	6	--
SO BF	20	SO 71 0005	9	10	<4	11	<10	190	<6	5	--
SO CB	24	SO 81 0040	56	<10	23	34	<10	350	<6	7	--
SO CC	6		21	<10	12	8	10	42	<6	<3	--
SO CD	41		10	<10	11	8	<10	36	<6	<3	--
SO CD	44	SO-81-0252	17000	<10	52	210	<10	110	<6	130	--
SO CD	45		11000	<10	5	540	<10	55	<6	11	--
SC CD	49	SO 81 0800	110	<10	24	17	<10	340	<6	26	--
SO CD	50	SO 81 0086	3200	<10	22	310	<10	500	<6	110	--
SC CD	51	SO 73 0529	470	<30	29	22	<30	520	<18	100	--
SO CD	52		41000	<10	19	900	<10	61	<6	79	--
SO CE	53	SO 73 1252	1300	<10	13	120	<10	250	<6	610	--
SO CE	56	SO 81 0733	200	30	29	15	<30	690	<18	57	--
SO CE	64	SO 73 0639	10	<10	10	11	<10	260	<6	25	--
SO CE	65	SO 73 0796	140	10	14	10	<10	360	<6	32	--
SO CE	74	SO 73 0303	110	<10	13	7	<10	330	<6	100	--
SO CE	81	SO 81 0036	9700	<10	34	180	<10	330	<6	<3	--
SO CE	83		48000	<10	13	180	<10	90	8	2800	--
SO CF	16	SO 73 1635	140	<10	11	5	<10	370	<6	210	--
SO CF	20	SO 73 1985	27000	<10	29	160	<10	96	<6	41	--
SO DC	4		20	10	11	7	10	22	<6	<3	--
SO DC	5	SO 73 1722	300	<10	17	9	<10	500	<6	34	--
SO DC	6	SO-81-0228	55000	70	200	1300	<10	4500	8	120	--
SC DD	48	SO 73 1299	550	<10	15	11	<10	360	<6	190	--
SO DD	51	SO 73 0385	500	<10	29	18	<10	810	<6	91	--
SC DD	58	SO 73 0576	16000	<10	38	300	<10	290	<6	12	--
SO DD	59	SO 73 1961	180	<10	19	10	<10	320	<6	76	--
SO DD	60	SO 73 1989	220	<10	21	13	<10	340	<6	14	--
SO DE	29	SO 81 0211	2400	<10	12	49	<10	240	<6	140	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)
SO DE 31 SO 73 0604	380426075434001	122PCMK	08-14-86	100.00	100	85	5.0	40	10
SO DE 33 SO 73 1857	380148075435501	122PCMK	08-13-86	118.00	118	30	10.0	60	1.0
SO DE 36	380241075421901	122PCMK	08-13-86	120.00	--	--	5.0	55	1.0
SO DF 9 SO 73 0375	380451075352901	122MNKN	08-12-86	300.00	290	250	15.0	45	5.0
SO DF 13 SO 81 0027	380457075360901	122MNKN	08-15-86	280.00	280	250	20.0	50	4.0
SO DF 14 SO 67 0012	380457075360801	122PCMK	08-15-86	69.00	69	65	20.0	60	4.0
SO DF 16 SO 81 0065	380455075395601	122PCMK	08-15-86	80.00	80	70	15.0	50	7.0
SO DF 20 SO 81 0785	380006075380501	122PCMK	08-13-86	100.00	--	--	5.0	50	1.0
SO DF 21	380043075390401	122PCMK	08-13-86	120.00	--	--	5.0	55	1.0
SO DF 26 SO 73 1875	380339075395301	122PCMK	08-15-86	100.00	100	40	15.0	65	1.0
SO DF 27	380417075393101	122PCMK	09-04-86	80.00	80	--	15.0	35	--
SO DG 5 SO 73 0160	380445075345301	122MNKN	08-12-86	200.00	200	180	10.0	45	4.0
SO DG 7 SO-73-0137	380444075343801	122PCMK	08-12-86	100.00	100	88	10.0	35	4.0
SO EC 1	375902075503701	125PLCN	09-09-86	994.00	994	974	5.0	--	200
SO EC 3	375834075514301	217PTMC	09-09-86	1076.00	1080	1020	5.0	--	--
SO EC 47 SO 72 0054	375846075513001	217PTMC	09-09-86	1156.00	1160	1120	5.0	--	--
SO EC 49 SO 81 0413	375932075504001	217PTMC	09-09-86	1320.00	1320	922	5.0	--	900
SO ED 42 SO 73 0286	375759075495001	122MNKN	08-27-86	200.00	200	185	5.0	35	7.0
SO ED 43	375840075495901	122MNKN	08-27-86	225.00	225	--	5.0	50	7.0
SO ED 45	375919075482601	122MNKN	08-27-86	210.00	210	190	5.0	50	--
SO EF 6 SO 73 0764	375831075384501	122PCMK	08-29-86	101.00	101	91	5.0	50	--

LOCAL IDENTIFIER	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
SO DE 31 SO 73 0604	4090	642	6.40	24.0	16.5	0	180	0.1	5.0	60
SO DE 33 SO 73 1857	4040	108	6.26	23.0	15.5	0	22	0.4	20	6.2
SO DE 36	4040	455	6.56	23.0	16.5	0	180	<0.1	--	55
SO DF 9 SO 73 0375	4040	2150	7.60	25.0	18.0	0	140	<0.1	--	23
SO DF 13 SO 81 0027	4090	2070	7.60	30.0	16.0	0	120	<0.1	--	21
SO DF 14 SO 67 0012	4090	445	5.14	26.0	18.0	0.6	140	<0.1	--	22
SO DF 16 SO 81 0065	4090	151	5.68	31.0	17.5	0	40	0.3	15	9.1
SO DF 20 SO 81 0785	4040	683	7.19	23.0	16.0	0	190	0.1	5.0	40
SO DF 21	4040	762	7.15	23.0	15.5	0.3	200	<0.1	--	38
SO DF 26 SO 73 1875	4040	141	4.69	30.5	16.0	0	24	0.2	9.9	2.8
SO DF 27	4090	289	6.42	24.0	15.0	0	100	0.3	15	37
SO DG 5 SO 73 0160	4090	2010	7.40	23.0	18.0	0	120	<0.1	--	22
SO DG 7 SO-73-0137	4090	181	6.00	23.0	18.0	0	48	<0.1	--	12
SO EC 1	4040	1670	8.49	22.0	26.5	--	10	<0.1	--	1.9
SO EC 3	4040	1110	8.39	25.0	26.5	--	3	<0.1	--	0.71
SO EC 47 SO 72 0054	4040	1110	8.64	25.0	27.5	0.3	3	<0.1	--	0.62
SO EC 49 SO 81 0413	4040	1210	8.65	22.0	28.5	--	4	<0.1	--	0.8
SO ED 42 SO 73 0286	4090	2100	6.98	34.0	18.0	0.4	210	<0.1	--	34
SO ED 43	4090	1430	7.10	30.5	20.0	0.6	250	0.1	5.0	45
SO ED 45	4090	1240	7.37	29.0	19.0	0	76	<0.1	--	14
SO EF 6 SO 73 0764	4040	1700	7.31	18.0	17.0	0	410	0.1	5.0	91

Geologic unit (aquifer): 122MNKN - Manokin Aquifer
122PCMK - Pocomoke Aquifer
125PLCN - Paleocene Series
217PTMC - Potomac Group

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

SOMERSET COUNTY, MARYLAND-Continued

		LOCAL IDENT-I-FIER	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WH WAT TOTAL FIELD MG/L AS HCO3	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
SO DE	31	SO 73 0604	7.9	55	39	2	5.3	230	185	143	35
SO DE	33	SO 73 1857	1.6	8.2	43	0.8	1.2	44	36	38	12
SO DE	36		9.5	27	24	0.9	5.3	200	162	87	26
SO DF	9	SO 73 0375	19	410	85	16	18	480	395	19	89
SO DF	13	SO 81 0027	17	400	86	16	17	460	380	18	91
SO DF	14	SO 67 0012	20	13	14	0.5	25	18	15	207	120
SO DF	16	SO 81 0065	4.1	13	40	0.9	2.5	83	68	276	18
SO DF	20	SO 81 0785	22	85	48	3	10	290	240	30	19
SO DF	21		26	89	47	3	16	380	310	43	19
SO DF	26	SO 73 1875	4.1	9.9	45	0.9	2.0	6	5	195	30
SO DF	27		2.4	12	20	0.5	1.2	160	133	98	2.4
SO DG	5	SO 73 0160	16	380	85	15	16	470	385	30	79
SO DG	7	SO-73-0137	4.4	12	34	0.8	2.6	93	76	148	22
SO EC	1		1.2	400	98	57	8.9	870	710	4.5	62
SO EC	3		0.4	260	98	63	5.3	570	470	3.7	53
SO EC	47	SO 72 0054	0.36	260	98	67	5.0	550	450	2.0	51
SO EC	49	SO 81 0413	0.5	280	98	62	5.2	570	465	2.0	56
SO ED	42	SO 73 0286	29	440	80	14	25	580	475	96	53
SO ED	43		33	200	61	6	24	460	380	58	55
SC ED	45		10	280	86	14	16	540	440	36	28
SO EF	6	SO 73 0764	45	190	48	4	22	370	305	29	48

		LOCAL IDENT-I-FIER	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)
SO DE	31	SO 73 0604	80	0.2	56	422	420	0.57	<0.10	1.20	1.5
SO DE	33	SO 73 1857	11	0.1	53	116	120	0.16	<0.10	0.50	0.64
SO DE	36		36	0.2	41	309	300	0.42	0.70	0.33	0.43
SO DF	9	SO 73 0375	450	0.2	10	1260	1300	1.7	<0.10	1.10	1.4
SO DF	13	SO 81 0027	420	0.2	9.6	1200	1200	1.6	<0.10	1.10	1.4
SO DF	14	SO 67 0012	35	<0.1	13	281	260	0.38	6.50	0.04	0.05
SO DF	16	SO 81 0065	15	0.2	37	136	150	0.18	<0.10	0.37	0.48
SO DF	20	SO 81 0785	95	0.2	34	456	450	0.62	<0.10	0.49	0.63
SO DF	21		71	0.1	32	464	480	0.63	<0.10	0.58	0.75
SO DF	26	SO 73 1875	17	<0.1	19	97	96	0.13	<0.10	0.03	0.04
SO DF	27		13	0.3	29	177	190	0.24	<0.10	0.21	0.27
SO DG	5	SO 73 0160	410	0.2	12	1170	1200	1.6	<0.10	0.93	1.2
SO DG	7	SO-73-0137	9.4	0.4	36	132	150	0.18	<0.10	0.23	0.3
SO EC	1		130	4.4	11	1070	1000	1.5	<0.10	0.55	0.71
SO EC	3		66	2.2	12	680	680	0.92	<0.10	0.50	0.64
SO EC	47	SO 72 0054	72	2.1	12	708	670	0.96	<0.10	0.09	0.12
SO EC	49	SO 81 0413	110	2.0	12	733	750	1.0	<0.10	0.17	0.22
SC ED	42	SO 73 0286	530	0.2	29	1840	1400	2.5	<0.10	1.50	1.9
SO ED	43		240	0.2	19	1180	850	1.6	<0.10	1.30	1.7
SO ED	45		220	0.3	23	853	860	1.2	<0.10	0.99	1.3
SO EF	6	SO 73 0764	380	0.2	33	1440	1000	2.0	<0.10	1.00	1.3

Sampling method: 4040 - Submersible pump
4090 - Jet pump

SOMERSET COUNTY, MARYLAND-Continued

		LOCAL IDENT-I-FIER	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COBALT, DIS-SOLVED (UG/L AS CO)
SO DE	31	SO 73 0604	0.2	1.4	--	0.11	38	<0.5	100	1	<3
SO DE	33	SO 73 1857	0.0	0.5	--	0.01	13	<0.5	20	<1	<3
SO DE	36		0.27	0.6	--	0.11	58	<0.5	70	<1	<3
SO DF	9	SO 73 0375	0.3	1.4	--	0.13	21	<0.5	1300	<1	<3
SO DF	13	SO 81 0027	0.3	1.4	--	0.16	20	<0.5	1400	<1	<3
SO DF	14	SO 67 0012	0.46	0.5	--	<0.01	39	<0.5	10	2	30
SO DF	16	SO 81 0065	0.03	0.4	--	0.16	20	<0.5	20	1	<3
SO DF	20	SO 81 0785	0.11	0.6	0.50	0.37	19	<0.5	190	<1	<3
SO DF	21		0.22	0.8	--	0.31	21	<0.5	260	<1	<3
SO DF	26	SO 73 1875	--	<0.2	--	<0.01	54	<0.5	20	1	<3
SO DF	27		0.0	0.2	--	0.19	33	0.5	10	<1	<3
SO DG	5	SO 73 0160	0.17	1.1	--	0.10	19	<0.5	1300	6	<3
SO DG	7	SO-73-0137	0.17	0.4	--	0.42	16	<0.5	30	<1	<3
SO EC	1		0.25	0.8	--	0.31	65	<0.5	3200	<1	<3
SO EC	3		0.1	0.6	--	0.35	31	<0.5	1400	1	<3
SO EC	47	SO 72 0054	0.11	0.2	--	0.35	29	<0.5	1400	<1	<3
SO EC	49	SO 81 0413	0.13	0.3	--	0.36	66	<0.5	1600	<1	<3
SO ED	42	SO 73 0286	0.2	1.7	--	0.07	14	<2	1500	<1	<9
SO ED	43		0.6	1.9	--	0.07	21	<0.5	960	<1	<3
SO ED	45		0.51	1.5	--	0.13	16	2	1300	6	3
SO EF	6	SO 73 0764	0.0	0.9	--	0.14	31	<0.5	310	<1	<3

		LOCAL IDENT-I-FIER	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
SO DE	31	SO 73 0604	<10	4400	<10	38	120	<10	360	<6	22
SO DE	33	SO 73 1857	<10	5500	<10	12	55	<10	31	<6	13
SO DE	36		<10	380	<10	17	83	<10	320	<6	7
SO DF	9	SO 73 0375	<10	170	<10	13	17	<10	410	<6	79
SO DF	13	SO 81 0027	<10	130	<10	12	6	<10	400	<6	58
SO DF	14	SO 67 0012	<10	73	<10	5	640	<10	350	<6	120
SO DF	16	SO 81 0065	<10	13000	<10	10	250	<10	69	<6	12
SO DF	20	SO 81 0785	<10	1000	<10	18	96	<10	350	<6	10
SO DF	21		<10	690	<10	19	12	<10	360	<6	17
SO DF	26	SO 73 1875	<10	7500	<10	7	100	<10	47	<6	54
SO DF	27		<10	13000	<10	15	270	<10	250	<6	14
SO DG	5	SO 73 0160	<10	150	<10	11	5	<10	380	<6	210
SO DG	7	SO-73-0137	<10	9500	<10	10	250	<10	90	<6	120
SO EC	1		<10	24	<10	21	4	20	65	<6	4
SO EC	3		<10	26	<10	12	7	<10	29	<6	5
SO EC	47	SO 72 0054	<10	15	<10	14	6	10	25	<6	6
SO EC	49	SO 81 0413	<10	22	<10	12	9	10	36	<6	<3
SO ED	42	SO 73 0286	<30	90	<30	45	<3	<30	600	<18	22
SO ED	43		<10	210	<10	32	7	<10	540	<6	13
SO ED	45		<10	78	<10	31	8	<10	240	<6	14
SO EF	6	SO 73 0764	<10	980	<10	44	52	<10	920	<6	29

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WASHINGTON COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	SITE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)
WA AB 72	394150078152501	341WDMN	07-15-86	1400	GW	180.00	640	12
WA AC 47	394310078124301	354MCKZ	07-14-86	1455	SP	--	525	--
WA AD 53	394152078064301	341WDMN	07-16-86	1000	GW	180.00	680	15
WA AD 77	394120078071001	341PRKD	07-15-86	1640	GW	142.00	470	15
WA AE 32	394302078035101	347ORSK	07-14-86	1740	GW	201.00	570	5
WA AK 40	394237077340201	377WSBR	07-14-86	1715	GW	205.00	770	5
WA BB 15	393810078192801	341HMPR	07-15-86	1200	GW	125.00	460	10
WA BC 1	393907078142401	354RSHL	07-15-86	1015	GW	125.00	420	30
WA BE 43	393905078023201	347HDBG	07-16-86	1125	GW	250.00	530	10
WA BF 41	393927077595701	351TNLY	07-16-86	1235	GW	185.00	605	10
WA BK 29	393826077315701	400CTCN	07-14-86	1355	SP	--	1470	--
WA DI 152	392707077421301	377ANTM	07-16-86	1445	GW	325.00	830	15

LOCAL IDENTIFIER	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
WA AB 72	12	4040	185	7.83	29.0	13.0	77	19	7.2
WA AC 47	1.3	4100	279	7.50	30.0	15.0	160	57	3.7
WA AD 53	4.2	4040	125	6.66	23.0	14.5	47	5.9	7.9
WA AD 77	2.1	4040	180	7.57	27.5	14.0	66	18	5.1
WA AE 32	4.8	4040	529	7.56	26.5	14.0	300	100	11
WA AK 40	15	4040	691	7.22	27.5	13.0	330	88	27
WA BB 15	1.8	4040	482	6.64	26.0	13.5	170	34	21
WA BC 1	2.5	4040	278	7.13	22.5	12.0	130	26	16
WA BE 43	2.0	4040	1060	7.33	25.0	14.5	310	110	8.1
WA BF 41	9.1	4040	404	7.41	23.0	13.0	220	68	13
WA BK 29	14	4100	175	6.40	25.5	11.0	63	13	7.4
WA DI 152	2.6	4040	181	7.89	27.5	15.0	68	20	4.4

Geologic unit (aquifer):
341HMPR - Hampshire Formation
341PRKD - Parkhead Sandstone
341WDMN - Woodmont Formation
347HDBG - Heldeberg Group
347ORSK - Oriskany Group
351TNLY - Tonoloway Limestone
354MCKZ - McKenzie Formation
354RSHL - Rose Hill Formation
377ANTM - Antietam Formation
377WSBR - Waynesboro Formation
400CTCN - Catoctin Metabasalt

Site type: GW - Ground Water
SP - Spring

Sampling method: 4040 - Submersible pump
4100 - Flowing well

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WASHINGTON COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
WA AB 72	13	27	0.7	0.5	113	93	2.7	4.4	5.2
WA AC 47	1.5	2	0	0.8	195	160	9.8	21	1.9
WA AD 53	6.8	24	0.4	0.6	66	54	23	6.4	2.3
WA AD 77	15	33	0.8	0.4	110	90	4.7	3.9	2.1
WA AE 32	6.2	4	0.2	1.1	355	291	16	23	1.5
WA AK 40	16	9	0.4	2.3	340	279	33	31	43
WA BB 15	33	29	1	2.2	115	94	42	16	89
WA BC 1	6.4	10	0.2	1.3	157	129	18	25	7.5
WA BE 43	90	39	2	0.8	268	220	20	15	200
WA BF 41	1.1	1	0	0.7	252	207	16	15	1.6
WA BK 29	7.3	20	0.4	0.5	37	30	23	9.9	27
WA DI 152	8.6	21	0.5	0.6	73	60	1.5	23	8.1

LOCAL IDENTIFIER	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
WA AB 72	0.2	17	120	0.17	<0.10	<10	42	160
WA AC 47	<0.1	6.8	190	0.26	0.26	<10	5	12
WA AD 53	0.2	20	83	0.11	<0.10	<10	310	170
WA AD 77	0.2	17	120	0.16	<0.10	<10	240	150
WA AE 32	0.1	12	330	0.45	0.11	20	7	8
WA AK 40	0.3	12	390	0.53	5.40	<10	5	<1
WA BB 15	0.1	13	270	0.36	6.50	10	330	40
WA BC 1	0.1	7.4	170	0.23	<0.10	10	1100	1500
WA BE 43	<0.1	10	570	0.77	2.40	<10	14	<1
WA BF 41	0.1	7.6	230	0.31	0.48	<10	4	<1
WA BK 29	<0.1	18	100	0.14	0.89	<10	5	2
WA DI 152	0.2	20	120	0.16	<0.10	<10	22	9

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WORCESTER COUNTY, MARYLAND

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
WO AE 23	382621075174201	122MNKN	02-10-86	1350	13.40	280.00	280	270	40.0
WO AE 23	382621075174201	122MNKN	04-11-86	1125	--	280.00	280	270	40.0
WO AE 23	382621075174201	122MNKN	07-09-86	1505	16.11	280.00	280	270	40.0
WO AE 23	382621075174201	122MNKN	08-22-86	1250	16.79	280.00	280	270	40.0
WO AE 24	382621075174202	122OCNC	02-10-86	1415	10.57	220.00	220	190	40.0
WO AE 24	382621075174202	122OCNC	04-11-86	1210	--	220.00	220	190	40.0
WO AE 24	382621075174202	122OCNC	07-09-86	1540	13.60	220.00	220	190	40.0
WO AE 24	382621075174202	122OCNC	08-22-86	1325	14.13	220.00	220	190	40.0
WO AE 25	382621075174203	122PCMK	02-10-86	1440	8.25	118.00	118	108	40.0
WO AE 25	382621075174203	122PCMK	04-11-86	1300	--	118.00	118	108	40.0
WO AE 25	382621075174203	122PCMK	07-09-86	1600	11.76	118.00	118	108	40.0
WO AE 25	382621075174203	122PCMK	08-22-86	1410	11.93	118.00	118	108	40.0
WO AH 34	382632075031901	122MNKN	10-21-85	1040	--	450.00	450	350	5.0
WO AH 34	382632075031901	122MNKN	04-08-86	1145	--	450.00	450	350	5.0
WO AH 34	382632075031901	122MNKN	07-14-86	1020	--	450.00	450	350	5.0
WO AH 34	382632075031901	122MNKN	08-27-86	0955	--	450.00	450	350	5.0
WO AH 36	382635075030602	122MNKN	01-22-86	1150	12.14	430.00	430	420	13.0
WO BG 15	382359075094501	122MNKN	10-23-85	1045	--	325.00	318	288	7.0
WO BG 15	382359075094501	122MNKN	02-10-86	1110	-2.28	325.00	318	288	7.0
WO BG 15	382359075094501	122MNKN	04-10-86	1125	--	325.00	318	288	7.0
WO BG 15	382359075094501	122MNKN	07-10-86	1435	1.62	325.00	318	288	7.0
WO BG 15	382359075094501	122MNKN	08-26-86	1150	2.76	325.00	318	288	7.0
WO BG 45	382358075094501	112CLMB	02-10-86	1205	6.89	77.00	77	56	10.0
WO BG 45	382358075094501	112CLMB	04-10-86	1230	8.20	77.00	77	56	10.0
WO BG 45	382358075094501	112CLMB	07-10-86	1525	9.59	77.00	77	56	10.0
WO BG 45	382358075094501	112CLMB	08-26-86	1305	9.28	77.00	77	56	10.0
WO BG 46	382358075094502	122PCMK	02-10-86	1145	1.29	200.00	194	164	10.0
WO BG 46	382358075094502	122PCMK	04-10-86	1200	2.22	200.00	194	164	10.0
WO BG 46	382358075094502	122PCMK	07-10-86	1505	5.04	200.00	194	164	10.0
WO BG 46	382358075094502	122PCMK	08-26-86	1230	5.61	200.00	194	164	10.0
WO BG 47	382325075063301	122OCNC	10-22-85	1430	--	268.00	268	258	5.0
WO BG 47	382325075063301	122OCNC	02-12-86	1225	5.44	268.00	268	258	5.0
WO BG 47	382325075063301	122OCNC	04-09-86	1440	--	268.00	268	258	5.0
WO BG 47	382325075063301	122OCNC	07-10-86	1310	11.04	268.00	268	258	5.0
WO BG 47	382325075063301	122OCNC	08-26-86	1550	12.16	268.00	268	258	5.0
WO BG 48	382325075063302	122MNKN	10-22-85	1400	--	420.00	420	410	5.0
WO BG 48	382325075063302	122MNKN	02-12-86	1140	5.54	420.00	420	410	5.0
WO BG 48	382325075063302	122MNKN	04-09-86	1400	--	420.00	420	410	5.0
WO BG 48	382325075063302	122MNKN	07-10-86	1235	12.40	420.00	420	410	5.0
WO BG 48	382325075063302	122MNKN	08-26-86	1510	13.85	420.00	420	410	5.0
WO BG 49	382038075065901	122OCNC	10-23-85	1230	--	243.00	243	232	10.0
WO BG 49	382038075065901	122OCNC	02-06-86	1555	10.42	243.00	243	232	10.0
WO BG 49	382038075065901	122OCNC	04-10-86	1420	--	243.00	243	232	10.0
WO BG 49	382038075065901	122OCNC	07-11-86	1345	19.12	243.00	243	232	10.0
WO BH 28	382215075041802	122OCNC	10-21-85	1115	--	294.00	294	248	5.0
WO BH 28	382215075041802	122OCNC	02-06-86	1215	--	294.00	294	248	5.0
WO BH 28	382215075041802	122OCNC	04-08-86	1300	--	294.00	294	248	5.0
WO BH 28	382215075041802	122OCNC	07-14-86	1145	--	294.00	294	248	5.0
WO BH 28	382215075041802	122OCNC	08-27-86	1340	--	294.00	294	248	5.0
WO BH 31	382215075041801	122MNKN	04-24-86	1120	--	278.00	278	263	5.0
WO BH 34	382443075033501	122MNKN	10-22-85	1050	7.75	353.00	353	337	4.0
WO BH 34	382443075033501	122MNKN	02-06-86	1155	4.19	353.00	353	337	4.0
WO BH 34	382443075033501	122MNKN	04-09-86	1210	--	353.00	353	337	4.0
WO BH 34	382443075033501	122MNKN	07-14-86	1510	12.52	353.00	353	337	4.0
WO BH 34	382443075033501	122MNKN	08-27-86	1640	14.69	353.00	353	337	4.0
WO BH 84	382215075041901	112PLSC	10-22-85	1240	--	86.00	86	81	5.0
WO BH 84	382215075041901	112PLSC	02-06-86	1400	4.46	86.00	86	81	5.0
WO BH 84	382215075041901	112PLSC	04-08-86	1440	--	86.00	86	81	5.0
WO BH 84	382215075041901	112PLSC	07-14-86	1225	5.07	86.00	86	81	5.0
WO BH 84	382215075041901	112PLSC	08-27-86	1505	5.16	86.00	86	81	5.0

Geologic unit (aquifer):
112CLMB - Columbia Formation
112PLSC - Pleistocene Series
122MNKN - Manokin Aquifer
122OCNC - Ocean City Aquifer
122PCMK - Pocomoke Aquifer

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WORCESTER COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
WO AE 23	30	60	4030	138	6.35	2.0	14.0	--	--	--
WO AE 23	40	50	4030	135	6.30	12.5	14.0	38	9.2	3.7
WO AE 23	25	43	4030	146	6.35	27.0	14.5	--	--	--
WO AE 23	40	36	4030	140	6.80	27.0	15.0	38	9.1	3.6
WO AE 24	25	60	4030	480	6.85	3.0	14.0	--	--	--
WO AE 24	--	60	4030	475	6.75	12.0	14.0	220	83	3.1
WO AE 24	25	43	4030	490	6.82	29.0	14.5	--	--	--
WO AE 24	30	36	4030	470	7.10	27.0	14.5	190	70	2.6
WO AE 25	25	60	4030	485	6.95	3.0	14.0	--	--	--
WO AE 25	--	--	4030	492	6.70	12.0	14.0	230	90	2.2
WO AE 25	15	60	4030	515	6.88	29.0	14.5	--	--	--
WO AE 25	40	48	4030	490	7.10	27.0	14.5	230	90	2.2
WO AH 34	--	--	4030	460	--	15.0	16.0	--	--	--
WO AH 34	--	--	4030	475	6.10	23.0	16.5	72	21	4.7
WO AH 34	--	--	4030	490	6.48	33.0	17.0	--	--	--
WO AH 34	760	--	4030	485	6.52	28.0	18.0	73	21	5.1
WO AH 36	75	50	4030	800	--	--	16.5	--	--	--
WO BG 15	30	--	4030	275	--	21.0	15.0	--	--	--
WO BG 15	40	60	4030	275	6.50	4.0	15.0	--	--	--
WO BG 15	60	60	4030	269	6.40	12.0	15.0	60	16	4.9
WO BG 15	45	60	4030	270	6.40	30.0	15.0	--	--	--
WO BG 15	40	40	4030	266	6.75	27.0	15.5	71	20	5.2
WO BG 45	15	70	4030	73	6.15	4.0	13.5	--	--	--
WO BG 45	20	70	4030	75	5.70	12.0	13.5	--	--	--
WO BG 45	15	70	4030	80	5.80	29.0	14.0	--	--	--
WO BG 45	30	40	4030	77	5.83	28.0	14.0	--	--	--
WO BG 46	25	70	4030	270	6.65	4.0	14.0	--	--	--
WO BG 46	35	60	4030	258	6.40	12.0	14.0	--	--	--
WO BG 46	30	60	4030	275	6.50	29.0	14.0	--	--	--
WO BG 46	35	50	4030	238	6.60	28.0	14.5	--	--	--
WO BG 47	30	--	4030	395	--	19.0	16.0	--	--	--
WO BG 47	25	50	4030	385	6.60	-3.0	15.5	--	--	--
WO BG 47	40	--	4030	370	6.50	15.0	16.0	62	14	6.5
WO BG 47	30	33	4030	400	6.70	32.0	16.5	--	--	--
WO BG 47	35	26	4030	380	6.75	27.0	16.5	140	45	5.9
WO BG 48	30	--	4030	440	--	19.0	17.0	--	--	--
WO BG 48	40	60	4030	430	6.65	-3.0	16.5	--	--	--
WO BG 48	35	--	4030	432	6.50	15.0	16.5	74	16	8.3
WO BG 48	40	43	4030	440	6.62	32.0	16.5	--	--	--
WO BG 48	45	30	4030	430	6.69	27.0	17.0	--	--	--
WO BG 49	--	15	4030	420	--	20.0	15.5	--	--	--
WO BG 49	30	23	4030	418	7.15	4.0	15.0	--	--	--
WO BG 49	--	25	4030	400	7.30	12.0	15.0	120	31	9.5
WO BG 49	35	15	4030	430	7.33	29.0	15.5	--	--	--
WO BH 28	--	--	4030	480	--	17.0	17.0	--	--	--
WO BH 28	20	--	4030	900	6.65	7.0	16.0	--	--	--
WO BH 28	--	--	4030	837	6.35	24.0	17.0	110	19	16
WO BH 28	--	--	4030	760	6.47	32.0	17.0	--	--	--
WO BH 28	760	--	4030	740	6.72	31.0	17.0	110	18	16
WO BH 31	--	--	4030	1080	6.65	--	16.5	130	23	17
WO BH 34	20	43	4030	220	--	20.0	16.5	--	--	--
WO BH 34	20	60	4030	218	--	8.0	15.5	--	--	--
WO BH 34	45	60	4030	219	6.30	17.0	16.5	61	15	5.7
WO BH 34	20	41	4030	230	6.52	33.0	16.5	--	--	--
WO BH 34	40	30	4030	207	6.69	35.0	17.0	58	14	5.6
WO BH 84	--	60	4030	350	--	20.0	16.0	--	--	--
WO BH 84	15	60	4030	347	--	6.0	14.5	--	--	--
WO BH 84	--	33	4030	350	6.60	24.0	15.5	90	18	11
WO BH 84	15	55	4030	365	6.76	32.0	16.0	--	--	--
WO BH 84	50	50	4030	365	6.91	32.0	16.0	88	17	11

Sampling method: 4030 - Suction pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WORCESTER COUNTY,MARYLAND-Continued

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY, CARBONATE IT-FLD (MG/L - CAC03)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
WO AE 23	--	--	--	--	--	--	--	--	5.0	--
WO AE 23	9.4	33	0.7	3.1	--	--	54	12	6.9	<0.1
WO AE 23	--	--	--	--	--	--	--	--	7.0	--
WO AE 23	9.6	34	0.7	2.9	82	67	21	12	6.5	<0.1
WO AE 24	--	--	--	--	--	--	--	--	6.0	--
WO AE 24	7.9	7	0.2	1.2	--	--	76	7.2	8.2	<0.1
WO AE 24	--	--	--	--	--	--	--	--	9.5	--
WO AE 24	7.5	8	0.3	1.5	311	255	39	3.8	9.4	0.1
WO AE 25	--	--	--	--	--	--	--	--	8.5	--
WO AE 25	8.6	7	0.3	0.6	--	--	90	8.6	10	<0.1
WO AE 25	--	--	--	--	--	--	--	--	10	--
WO AE 25	8.7	7	0.3	0.8	323	265	41	8.7	12	0.1
WO AH 34	--	--	--	--	--	--	--	--	85	--
WO AH 34	54	61	3	3.8	--	--	128	19	81	<0.1
WO AH 34	--	--	--	--	--	--	--	--	82	--
WO AH 34	57	61	3	4.4	149	122	72	14	84	<0.1
WO AH 36	--	--	--	--	--	--	--	--	160	--
WO BG 15	--	--	--	--	--	--	--	--	24	--
WO BG 15	--	--	--	--	--	--	--	--	25	--
WO BG 15	24	45	1	3.2	--	--	69	18	20	<0.1
WO BG 15	--	--	--	--	--	--	--	--	25	--
WO BG 15	24	41	1	3.4	124	102	35	20	26	0.1
WO BG 45	--	--	--	--	--	--	--	--	13	--
WO BG 45	--	--	--	--	--	--	--	--	14	--
WO BG 45	--	--	--	--	--	--	--	--	15	--
WO BG 45	--	--	--	--	24	20	56	--	15	--
WO BG 46	--	--	--	--	--	--	--	--	6.0	--
WO BG 46	--	--	--	--	--	--	--	--	10	--
WO BG 46	--	--	--	--	--	--	--	--	10	--
WO BG 46	--	--	--	--	149	122	59	--	10	--
WO BG 47	--	--	--	--	--	--	--	--	49	--
WO BG 47	--	--	--	--	--	--	--	--	49	--
WO BG 47	50	61	3	5.3	--	--	62	27	47	<0.1
WO BG 47	--	--	--	--	--	--	--	--	50	--
WO BG 47	23	26	0.9	5.1	146	120	41	13	51	0.1
WO BG 48	--	--	--	--	--	--	--	--	63	--
WO BG 48	--	--	--	--	--	--	--	--	65	--
WO BG 48	53	58	3	7.6	--	--	65	9.2	62	0.2
WO BG 48	--	--	--	--	--	--	--	--	65	--
WO BG 48	--	--	--	--	144	118	47	--	65	--
WO BG 49	--	--	--	--	--	--	--	--	15	--
WO BG 49	--	--	--	--	--	--	--	--	12	--
WO BG 49	42	41	2	9.9	250	205	20	18	12	<0.1
WO BG 49	--	--	--	--	--	--	--	--	15	--
WO BH 28	--	--	--	--	--	--	--	--	80	--
WO BH 28	--	--	--	--	--	--	--	--	200	--
WO BH 28	110	66	5	10	--	--	101	38	160	0.2
WO BH 28	--	--	--	--	--	--	--	--	150	--
WO BH 28	96	65	4	1.3	165	135	50	1.4	160	0.2
WO BH 31	160	71	6	12	--	--	55	0.9	260	0.2
WO BH 34	--	--	--	--	--	--	--	--	150	--
WO BH 34	--	--	--	--	--	--	--	--	15	--
WO BH 34	12	28	0.7	5.0	--	--	71	26	14	0.1
WO BH 34	--	--	--	--	--	--	--	--	16	--
WO BH 34	11	27	0.6	4.7	124	102	40	2.5	15	0.1
WO BH 84	--	--	--	--	--	--	--	--	37	--
WO BH 84	--	--	--	--	--	--	--	--	38	--
WO BH 84	29	38	1	9.1	--	--	40	12	36	<0.1
WO BH 84	--	--	--	--	--	--	--	--	39	--
WO BH 84	29	39	1	8.7	161	132	31	13	40	0.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WORCESTER COUNTY, MARYLAND-Continued

LOCAL IDENTIFIER	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
WO AE 23	--	--	--	--	--	--	--	--	--
WO AE 23	28	93	110	0.13	<0.10	0.07	0.21	5400	97
WO AE 23	--	--	--	--	--	--	--	--	--
WO AE 23	28	98	120	0.13	<0.10	0.01	0.03	6600	82
WO AE 24	--	--	--	--	--	--	--	--	--
WO AE 24	30	289	290	0.39	<0.10	0.12	0.37	14000	91
WO AE 24	--	--	--	--	--	--	--	--	--
WO AE 24	29	290	290	0.39	<0.10	0.07	0.21	12000	84
WO AE 25	--	--	--	--	--	--	--	--	--
WO AE 25	34	309	310	0.42	<0.10	0.02	0.06	14000	130
WO AE 25	--	--	--	--	--	--	--	--	--
WO AE 25	36	324	330	0.44	<0.10	0.03	0.09	14000	130
WO AH 34	--	--	--	--	--	--	--	--	--
WO AH 34	34	258	280	0.35	<0.10	0.04	0.12	13000	140
WO AH 34	--	--	--	--	--	--	--	--	--
WO AH 34	36	264	310	0.36	<0.10	0.02	0.06	12000	130
WO AH 36	--	--	--	--	--	--	--	--	--
WO BG 15	--	--	--	--	--	--	--	--	--
WO BG 15	--	--	--	--	--	--	--	--	--
WO BG 15	36	173	190	0.24	<0.10	0.27	0.83	8900	110
WO BG 15	--	--	--	--	--	--	--	--	--
WO BG 15	37	179	210	0.24	<0.10	0.30	0.92	9600	98
WO BG 45	--	--	--	--	--	--	--	--	--
WO BG 45	--	--	--	--	--	--	--	--	--
WO BG 45	--	--	--	--	--	--	--	--	--
WO BG 45	--	--	--	--	--	--	--	--	--
WO BG 46	--	--	--	--	--	--	--	--	--
WO BG 46	--	--	--	--	--	--	--	--	--
WO BG 46	--	--	--	--	--	--	--	--	--
WO BG 46	--	--	--	--	--	--	--	--	--
WO BG 47	--	--	--	--	--	--	--	--	--
WO BG 47	--	--	--	--	--	--	--	--	--
WO BG 47	37	202	260	0.27	<0.10	0.33	1.0	8200	94
WO BG 47	--	--	--	--	--	--	--	--	--
WO BG 47	35	220	260	0.3	<0.10	0.37	1.1	7000	85
WO BG 48	--	--	--	--	--	--	--	--	--
WO BG 48	--	--	--	--	--	--	--	--	--
WO BG 48	37	253	260	0.34	<0.10	0.31	0.95	4800	91
WO BG 48	--	--	--	--	--	--	--	--	--
WO BG 48	--	--	--	--	--	--	--	--	--
WO BG 49	--	--	--	--	--	--	--	--	--
WO BG 49	--	--	--	--	--	--	--	--	--
WO BG 49	23	252	270	0.34	<0.10	0.06	0.18	1500	29
WO BG 49	--	--	--	--	--	--	--	--	--
WO BH 28	--	--	--	--	--	--	--	--	--
WO BH 28	--	--	--	--	--	--	--	--	--
WO BH 28	33	431	460	0.59	<0.10	0.02	0.06	7200	130
WO BH 28	--	--	--	--	--	--	--	--	--
WO BH 28	33	430	410	0.58	<0.10	0.07	0.21	7100	130
WO BH 31	33	588	590	0.8	<0.10	0.03	0.09	9200	180
WO BH 34	--	--	--	--	--	--	--	--	--
WO BH 34	--	--	--	--	--	--	--	--	--
WO BH 34	35	161	170	0.22	<0.10	0.02	0.06	12000	91
WO BH 34	--	--	--	--	--	--	--	--	--
WO BH 34	36	152	160	0.21	<0.10	0.11	0.34	5300	100
WO BH 84	--	--	--	--	--	--	--	--	--
WO BH 84	--	--	--	--	--	--	--	--	--
WO BH 84	36	228	210	0.31	<0.10	0.26	0.8	6400	75
WO BH 84	--	--	--	--	--	--	--	--	--
WO BH 84	35	212	240	0.29	<0.10	0.21	0.64	6300	78

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WORCESTER COUNTY,MARYLAND-Continued

LOCAL IDENTIFIER	STATION NUMBER	GEOLOGIC UNIT	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)
WO BH 85	382215075041902	122PCMK	10-22-85	1200	--	195.00	195	190	5.0
WO BH 85	382215075041902	122PCMK	02-06-86	1340	4.46	195.00	195	190	5.0
WO BH 85	382215075041902	122PCMK	04-08-86	1350	--	195.00	195	190	5.0
WO BH 85	382215075041902	122PCMK	07-14-86	1205	6.27	195.00	195	190	5.0
WO BH 85	382215075041902	122PCMK	08-27-86	1425	6.98	195.00	195	190	5.0
WO BH 89	382215075041903	122MNKN	09-15-86	1300	90.00	500.00	500	388	5.0
WO CG 32	381941075052201	122OCNC	10-21-85	1130	--	280.00	280	250	6.0
WO CG 32	381941075052201	122OCNC	02-06-86	1255	--	280.00	280	250	6.0
WO CG 32	381941075052201	122OCNC	04-08-86	1530	--	280.00	280	250	6.0
WO CG 32	381941075052201	122OCNC	07-14-86	1300	--	280.00	280	250	6.0
WO CG 32	381941075052201	122OCNC	08-27-86	1120	--	280.00	280	250	6.0
WO CG 69	381931075071101	122OCNC	10-23-85	1350	--	235.00	235	215	10.0
WO CG 69	381931075071101	122OCNC	02-06-86	1445	9.89	235.00	235	215	10.0
WO CG 69	381931075071101	122OCNC	04-10-86	1600	--	235.00	235	215	10.0
WO CG 69	381931075071101	122OCNC	08-26-86	1015	20.11	235.00	235	215	10.0
WO CG 75	381939075052102	122MNKN	10-21-85	1135	--	427.00	427	367	6.0
WO CG 75	381939075052102	122MNKN	02-06-86	1235	--	427.00	427	367	6.0
WO CG 75	381939075052102	122MNKN	04-08-86	1615	--	427.00	427	367	6.0
WO CG 75	381939075052102	122MNKN	07-14-86	1255	--	427.00	427	367	6.0
WO CG 75	381939075052102	122MNKN	08-27-86	1145	--	427.00	427	367	6.0
WO DE 36	381457075174101	122MNKN	04-24-86	1400	12.97	330.00	330	320	30.0
WO DG 21	381427075081102	122MNKN	10-24-85	1655	--	310.00	310	300	6.0
WO DG 21	381427075081102	122MNKN	02-12-86	1415	1.03	310.00	310	300	6.0
WO DG 21	381427075081102	122MNKN	04-11-86	1540	--	310.00	310	300	6.0
WO DG 21	381427075081102	122MNKN	07-11-86	1110	2.42	310.00	310	300	6.0
WO DG 21	381427075081102	122MNKN	08-25-86	1210	4.63	310.00	310	300	6.0

LOCAL IDENTIFIER	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	FLOW RATE, INSTANTANEOUS (GPM)	SAMPLING METHOD, CODES	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
WO BH 85	45	8.0	4030	440	--	20.0	16.5	--	--	--
WO BH 85	60	8.0	4030	418	--	7.0	15.0	--	--	--
WO BH 85	55	20	4030	430	6.50	25.0	16.0	100	17	14
WO BH 85	30	20	4030	430	6.67	32.0	16.5	--	--	--
WO BH 85	50	16	4030	410	6.79	32.0	16.5	100	17	14
WO BH 89	--	--	4030	1500	6.70	23.0	17.5	210	25	37
WO CG 32	--	--	4030	430	--	17.0	17.0	--	--	--
WO CG 32	--	--	4030	450	7.00	6.0	16.0	--	--	--
WO CG 32	--	--	4040	450	6.60	21.0	16.5	130	33	11
WO CG 32	--	--	4030	460	6.98	32.0	17.0	--	--	--
WO CG 32	760	--	4030	440	7.14	30.0	17.0	--	--	--
WO CG 69	45	25	4030	430	--	22.0	15.5	--	--	--
WO CG 69	45	35	4030	420	7.35	5.0	15.0	--	--	--
WO CG 69	45	50	4030	400	7.40	11.0	15.0	130	32	12
WO CG 69	60	14	4030	420	7.56	24.0	15.5	140	33	13
WO CG 75	--	--	4030	435	--	17.0	17.0	--	--	--
WO CG 75	--	--	4030	525	6.00	7.0	16.5	--	--	--
WO CG 75	--	--	4030	460	6.40	20.0	17.0	60	10	8.6
WO CG 75	--	--	4030	500	6.46	32.0	18.0	--	--	--
WO CG 75	30	--	4030	470	6.81	30.0	18.0	59	9.5	8.6
WO DE 36	50	4.5	4030	300	--	13.0	17.0	--	--	--
WO DG 21	45	21	4030	485	--	22.0	16.5	--	--	--
WO DG 21	40	25	4030	485	7.60	-2.0	16.0	--	--	--
WO DG 21	40	27	4030	475	7.40	11.0	16.5	150	37	13
WO DG 21	40	25	4030	500	7.71	32.0	17.0	--	--	--
WO DG 21	55	16	4030	480	7.92	25.0	17.0	150	37	13

Geologic unit (aquifer): 122MNKN - Manokin Aquifer
122OCNC - Ocean City Aquifer
122PCMK - Pocomoke Aquifer

Sampling method: 4030 - Suction pump

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

WORCESTER COUNTY,MARYLAND-Continued

LOCAL IDENTIFIER	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	ALKALINITY, CARBONATE IT-FLD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
WO BH 85	--	--	--	--	--	--	--	--	45	--
WO BH 85	--	--	--	--	--	--	--	--	45	--
WO BH 85	38	42	2	11	--	--	84	5.4	43	<0.1
WO BH 85	--	--	--	--	--	--	--	--	46	--
WO BH 85	39	42	2	14	174	143	45	3.4	46	0.1
WO BH 89	230	68	7	16	2.1	1.7	0.7	3.6	440	0.2
WO CG 32	--	--	--	--	--	--	--	--	37	--
WO CG 32	--	--	--	--	--	--	--	--	32	--
WO CG 32	36	36	1	9.5	--	--	84	6.2	37	0.2
WO CG 32	--	--	--	--	--	--	--	--	38	--
WO CG 32	--	--	--	--	216	177	25	--	35	--
WO CG 69	--	--	--	--	--	--	--	--	17	--
WO CG 69	--	--	--	--	--	--	--	--	12	--
WO CG 69	36	35	1	11	--	--	15	3.8	17	<0.1
WO CG 69	34	33	1	12	250	205	11	1.1	18	0.1
WO CG 75	--	--	--	--	--	--	--	--	31	--
WO CG 75	--	--	--	--	--	--	--	--	59	--
WO CG 75	64	66	4	7.8	--	--	84	5.9	69	0.2
WO CG 75	--	--	--	--	--	--	--	--	77	--
WO CG 75	64	67	4	7.2	146	120	36	8.4	78	0.2
WO DE 36	--	--	--	--	--	--	--	--	8.0	--
WO DG 21	--	--	--	--	--	--	--	--	24	--
WO DG 21	--	--	--	--	--	--	--	--	23	--
WO DG 21	45	38	2	9.6	--	--	17	2.7	24	0.1
WO DG 21	--	--	--	--	--	--	--	--	25	--
WO DG 21	42	37	2	9.0	271	222	5.2	0.7	24	0.1

LOCAL IDENTIFIER	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
WO BH 85	--	--	--	--	--	--	--	--	--
WO BH 85	--	--	--	--	--	--	--	--	--
WO BH 85	33	235	250	0.32	<0.10	0.16	0.49	4200	74
WO BH 85	--	--	--	--	--	--	--	--	--
WO BH 85	33	222	260	0.3	<0.10	0.16	0.49	4500	87
WO BH 89	35	1140	800	1.6	<0.10	0.01	0.03	7800	120
WO CG 32	--	--	--	--	--	--	--	--	--
WO CG 32	--	--	--	--	--	--	--	--	--
WO CG 32	25	253	260	0.34	<0.10	0.09	0.28	1400	82
WO CG 32	--	--	--	--	--	--	--	--	--
WO CG 32	--	--	--	--	--	--	--	--	--
WO CG 69	--	--	--	--	--	--	--	--	--
WO CG 69	--	--	--	--	--	--	--	--	--
WO CG 69	20	264	250	0.36	<0.10	0.06	0.18	1400	49
WO CG 69	24	246	260	0.33	<0.10	--	--	1100	46
WO CG 75	--	--	--	--	--	--	--	--	--
WO CG 75	--	--	--	--	--	--	--	--	--
WO CG 75	29	260	270	0.35	<0.10	0.31	0.95	5500	150
WO CG 75	--	--	--	--	--	--	--	--	--
WO CG 75	29	260	290	0.35	<0.10	0.39	1.2	7000	170
WO DE 36	--	--	--	--	--	--	--	--	--
WO DG 21	--	--	--	--	--	--	--	--	--
WO DG 21	--	--	--	--	--	--	--	--	--
WO DG 21	19	276	290	0.38	<0.10	0.17	0.52	300	42
WO DG 21	--	--	--	--	--	--	--	--	--
WO DG 21	20	278	280	0.38	<0.10	0.14	0.43	30	42

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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)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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