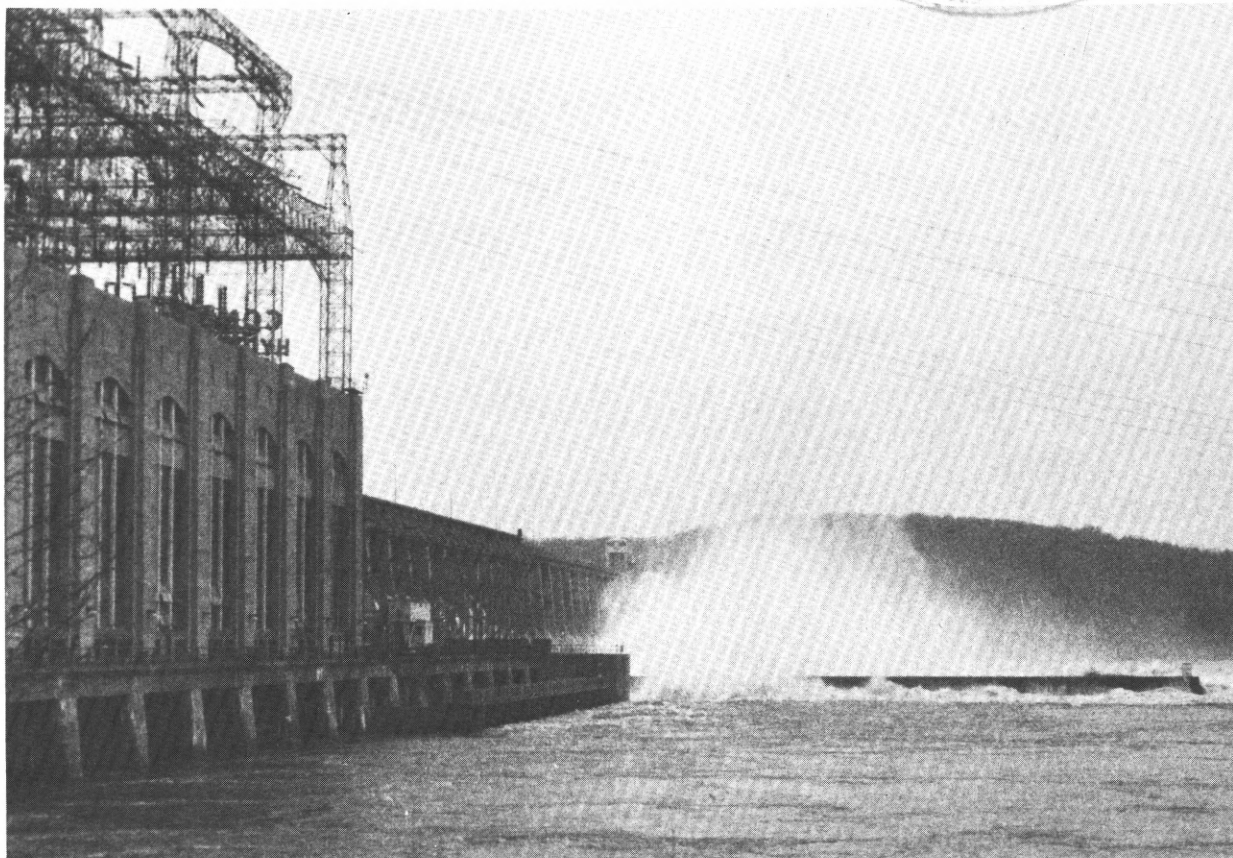
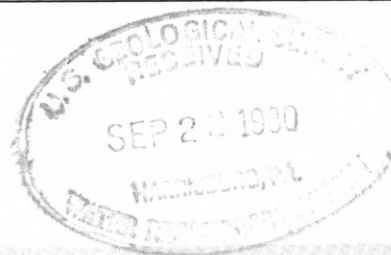


WATER-QUALITY MONITORING OF THREE MAJOR TRIBUTARIES TO THE CHESAPEAKE BAY- INTERIM DATA REPORT

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations 80-78



Prepared in cooperation with the

U.S. ENVIRONMENTAL PROTECTION AGENCY
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September 1980

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

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CONVERSION OF MEASUREMENT UNITS

The following factors may be used to convert the inch-pound units published in this report to International System (SI) metric units.

<u>Multiply inch-pound unit</u>	<u>By</u>	<u>To obtain metric unit</u>
<u>Length</u>		
inch (in.)	25.40	millimeter (mm)
	.0254	meter (m)
foot (ft)	.3048	meter (m)
mile (mi)	1.609	kilometer (km)
<u>Area</u>		
square mile (mi ²)	2.590	square kilometer (km ²)
<u>Volume</u>		
gallon (gal)	3.785	liter (L)
	.003785	cubic meter (m ³)
cubic foot (ft ³)	.02832	cubic meter (m ³)
<u>Flow</u>		
cubic foot per second (ft ³ /s)	28.32	liter per second (L/s)
	.02832	cubic meter per second (m ³ /s)
gallon per minute (gal/min)	.06309	liter per second (L/s)
	.00006309	cubic meter per second (m ³ /s)
<u>Temperature</u>		
degree Fahrenheit (°F)	-32 x 0.555	degree Celsius (°C)

DEFINITION OF TERMS

Terms related to streamflow and water quality as used in the report are given below:

Alkalinity is the capacity of a water to neutralize acids. Alkalinity in water is caused primarily by bicarbonates, carbonates, and hydroxides, and is expressed as equivalent calcium carbonate, CaCO_3 .

Chlorophyll a is the primary pigment of all oxygen-evolving photosynthetic organisms and is present in all algae and photosynthetic organisms, except some photosynthetic bacteria (Wetzel, 1975).

Chlorophyll b, although common to higher plants, is found in green algae and other lower plants. This pigment functions as a light-gathering pigment in which absorbed light energy is transferred to chlorophyll a for primary photochemistry (Wetzel, 1975).

Cubic foot per second (CFS, ft^3/s) is the rate of streamflow 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.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. Their presence in water is considered to indicate fecal pollution. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at $44.5 \pm 0.2^\circ\text{C}$ on M-FC medium (selective nutrient medium for fecal coliform growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

Fecal streptococcal bacteria are bacteria that are present in intestines or feces of warmblooded animals. Their presence in water is considered to indicate 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 $35 \pm 1.0^\circ\text{C}$ on M-enterococcus medium (nutrient medium for fecal streptococci growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample.

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

Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds that are converted to ammonium sulfate, $(\text{NH}_4)_2\text{SO}_4$, under special conditions of sample preparation. The sum of all nitrogen in a water sample is equal to Kjeldahl nitrogen plus nitrite and nitrate nitrogen concentrations.

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

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

Organic nitrogen includes all nitrogenous organic compounds such as amino acids, polypeptides, and proteins. It is present naturally in all surface waters as a result of natural nitrogenous materials and biological life in the watersheds and streams, but excessive concentrations may indicate contamination from man-induced influences.

Orthophosphate is the most common ionized form of phosphorus in water and the only one derived from natural sources. Orthophosphates comprise the inorganic portion of phosphorous and include the three ionization products of phosphoric acid $\text{H}_2\text{PO}_4^{-1}$, HPO_4^{-2} , and PO_4^{-3} in a water body, whose relative concentrations are governed by the pH of the water.

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

The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
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 material is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water.

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

Phosphorus is one of the major nutrients required for plant nutrition and is essential for life. Phosphorous is not the sole cause of eutrophication of natural waters, but there is evidence that it is the key element required by fresh-water plants and, generally, is present in the least amount relative to need.

pH of water is a measure of the hydrogen ion concentration, or more specifically, the hydrogen ion activity. It is most conveniently expressed in logarithmic units and represents the negative base-10 log of the hydrogen-ion activity in moles per liter.

Polychlorinated biphenols (PCB) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine.

Polychlorinated napthalenes (PCN) are organochemical compounds similar to polychlorinated biphenols, except the basic unit of molecular structure is napthalene instead of the biphenol complex.

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 such as slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content of water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per centimeter at 25°C). This relation is not constant from stream to stream, and it may even vary with time in the same stream with changes in the composition of the water.

Streamflow is the volume of water and sediment that passes a given point within a given period of time.

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- μ m 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 par-

ticulate matter is not achieved by the digestion treatment and, thus, the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

Suspended sediment is any particulate or colloidal material that is maintained in suspension by the upward components of turbulent currents.

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

Suspended-sediment discharge (tons/day) is the quantity of sediment, as measured by dry weight or volume, that passes a section of stream in a given time. It is computed by multiplying discharge, in cubic feet per second, times suspended-sediment concentration, in milligrams per liter, times 0.0027.

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- μ m 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."

Total organic carbon is an index of the concentration of dissolved- and suspended-carbonaceous matter. High concentrations of organic matter in an aquatic environment can influence the dissolved-oxygen balance. If decomposable organic matter occurs in sufficient concentrations, intensive bacterial activity can result in complete oxygen depletion.

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

Turbidity of a water is the reduction of transparency due to the presence of suspended-particulate matter. Such material may consist of clay or silt, finely divided organic matter, or other microscopic organisms which cause light to be scattered and absorbed rather than transmitted in straight lines through the sample. One measurement of turbidity is the Naphelometric Turbidity Unit (NTU).

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ABSTRACT

The U.S. Geological Survey is monitoring the water quality of three major tributaries to Chesapeake Bay at their fall lines to obtain estimates of constituent inputs potentially available to the bay. The monitoring sites are: Susquehanna River at Conowingo, Md.; Potomac River at Washington, D.C.; and James River at Cartersville, Va. Water-quality data collected from October 1978 to April 1980 are presented in tables. Concentrations of major ions, nutrient and carbon species, metals, pesticides, suspended sediment, and other selected constituents are presented for a range of flows. The mean, standard deviation, minimum, maximum, and median values for each constituent were determined by standard methods and are presented for each sampling station. Bivariate linear regressions were run for all constituents versus streamflow, specific conductance, and suspended sediment. Those relationships exhibiting coefficients of determination (R^2) greater than 0.50 are tabulated.

INTRODUCTION

The U.S. Environmental Protection Agency (EPA) has been directed by the U.S. Congress (Senate Report No. 94-326) to conduct an in-depth study of the environmental quality of Chesapeake Bay. As part of the EPA study, the U.S. Geological Survey (USGS) is monitoring the water quality of the three major tributaries to Chesapeake Bay--the Susquehanna, Potomac, and James Rivers (see fig. 1). Together, these rivers drain about 65 percent of the land surface area contributing inflow to Chesapeake Bay.

The ultimate objectives of the project are to provide the following water-quality information for the Susquehanna, Potomac, and James Rivers regarding:

1. Estimated loadings of major ions, suspended sediment, and selected nutrient species and trace metals.
2. Seasonal characterization of organic compounds, including selected pesticides.
3. Error analysis and statements of other limitations inherent in the information provided in the first two objectives.

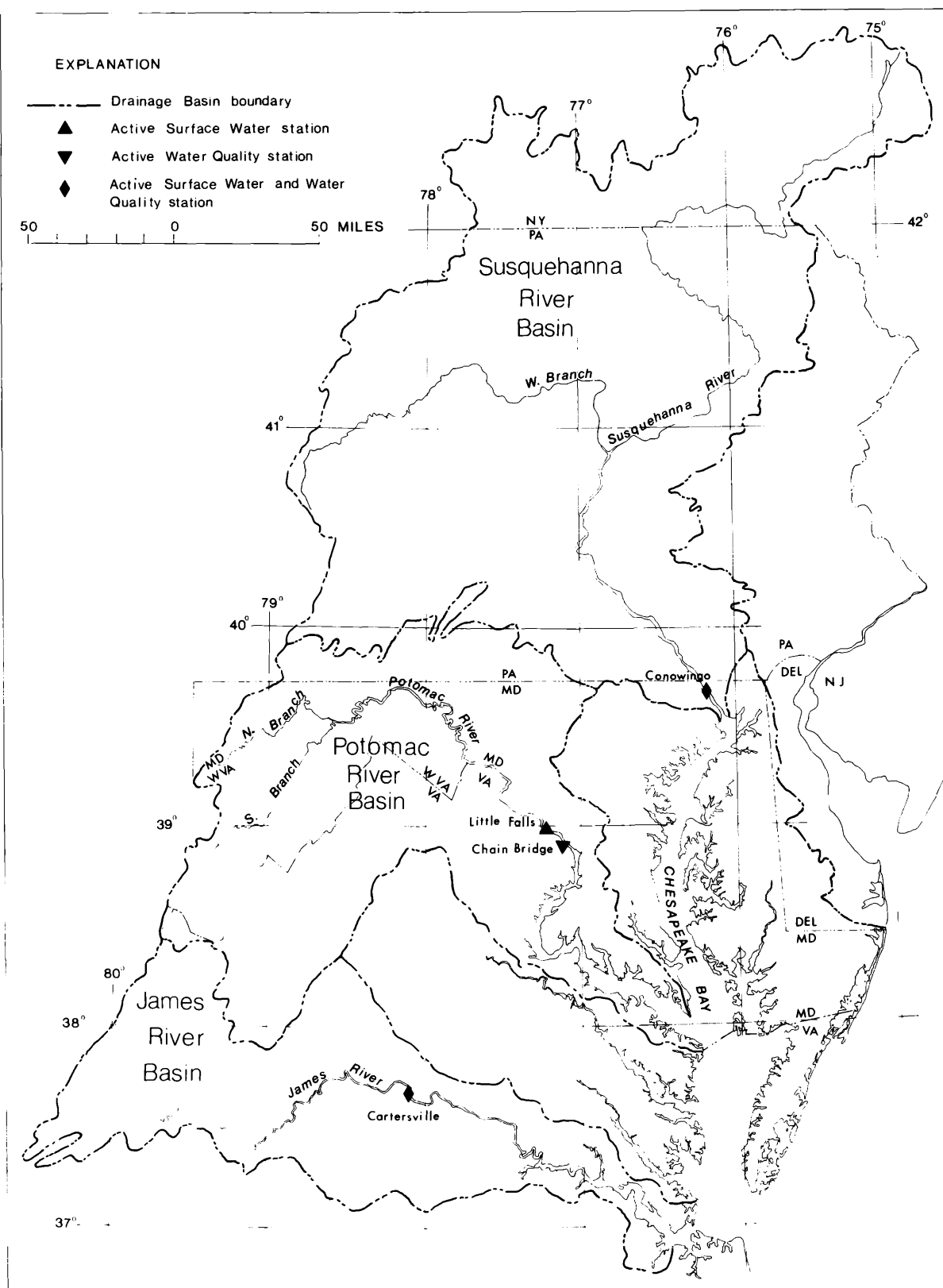


Figure 1.--Location of drainage basins of the Susquehanna, Potomac, and James Rivers.

This report is a compilation of water-quality data collected from October 1978 to April 1980. It provides a base of information useful to many investigators studying Chesapeake Bay and river-estuarine systems. Load assessments and further data analysis will be presented in a final report after completion of the data-collection phase in April 1981.

ACKNOWLEDGMENT

The authors are grateful to Mr. Howard Jarmon and his staff of the Susquehanna Electric Co. for the cooperation and assistance received while sampling at Conowingo Dam on the Susquehanna River.

HYDROLOGIC CONDITIONS

The three primary sampling sites are: Susquehanna River at Conowingo, Md.; Potomac River at Chain Bridge at Washington, D.C.; and James River at Cartersville, Va. As the monitoring points on the Potomac and James Rivers are not located at the mouth of the rivers, the data at these sites do not directly reflect constituent input to Chesapeake Bay. However, the data are representative of constituent concentrations and loads that are potentially available to the bay.

Precipitation during the January 1979 to March 1980 period of data collection was 19 to 41 percent above average (table 1). Some areas recorded in excess of 65 in. of rain in the 1979 calendar year. For the same period, streamflows at the sampling stations were 12, 46, and 37 percent above the historical mean flows for the Susquehanna, Potomac and James Rivers, as shown in the following table.

Station	1979 calendar year average discharge (ft ³ /s)	Long-term average discharge (ft ³ /s)	Percent above mean
Susquehanna River at Harrisburg, Pa.	38,400	34,250	12
Potomac River at Washington, D.C.	16,630	11,390	46
James River at Cartersville, Va.	9,688	7,046	37

Table 1.--Monthly precipitation, in inches, at selected sites from January 1979 to March 1980.

[Data from the National Oceanic and Atmospheric Administration, 1979 and 1980]

Month	Year	<u>Richmond, Va.</u>		<u>College Park, Md.</u>		<u>Harrisburg, Pa.</u>	
		Monthly total	Mean monthly total*	Monthly total	Mean monthly total*	Monthly total	Mean monthly total*
January	1979	6.16	2.86	8.34	2.73	8.01	2.57
February		5.97	2.99	5.99	2.55	4.74	2.42
March		2.59	3.38	2.59	3.61	1.93	3.22
April		3.97	2.77	2.74	3.09	3.60	2.98
May		3.80	3.42	3.46	3.88	4.66	3.76
June		2.42	3.52	4.36	4.74	2.62	3.11
July		4.36	3.09	5.04	4.04	3.14	3.70
August		7.08	5.06	6.59	4.99	3.24	3.22
September		9.76	3.58	9.47	3.39	6.22	2.66
October		3.87	2.94	6.51	2.87	3.91	2.57
November		5.50	3.20	3.11	3.23	2.65	3.19
December		1.64	3.22	1.02	3.26	1.47	3.07
January	1980	6.05	2.86	2.72	2.73	.90	2.57
February		1.01	2.99	1.12	2.55	.82	2.42
March		<u>5.49</u>	<u>3.38</u>	<u>5.52</u>	<u>3.61</u>	<u>5.47</u>	<u>3.22</u>
Normal for period			49.26		51.27		44.68
Total for period		69.67		68.58		53.38	

* Mean monthly totals based on precipitation records 1941-70.

Data-Collection Sites

Figure 1 shows the location of the water-quality monitoring stations used in the study. The Susquehanna River station is at Conowingo Dam, Conowingo, Md., where, if flow conditions permit, base-flow water quality is measured every 2 weeks. The James River station is at Cartersville, Va., and the Potomac River site is at Chain Bridge at Washington, D.C.; both are sampled monthly for base-flow water-quality constituents. The USGS continuously monitors stage and flow at the Cartersville and Conowingo sites. Potomac River flow is monitored at Little Falls, Md., half a mile upstream from Chain Bridge. Water samples analyzed for both sediment and chemical quality are taken at high flows at all sites to better understand the mechanisms that affect the water quality during these critical periods of high mass transport.

Methods of Sample Collection and Analysis

All water-quality and suspended-sediment samples were collected by USGS personnel by depth-integrating methods, as described by Guy and Norman (1970). All water-quality samples were preserved in the field according to methods described in the National Handbook of Recommended Methods for Water Data Acquisition (U.S. Geological Survey, 1977) and analyzed in the USGS Central Laboratory. Pesticide and organic carbon were determined according to methods described by Goerlitz and Brown (1972), and inorganic constituents were analyzed according to procedures cited by Skougstad and others (1979). Sediment samples were analyzed in another USGS laboratory, by methods described by Guy (1969).

Data Presentation

Simple bivariate linear regressions were run for all constituents against discharge, specific conductance, and suspended sediment. The regression line was fitted analytically by the method of least squares.

The coefficient of determination (R^2) was then calculated for each bivariate regression. This coefficient is a measure of the degree to which the variance or square of the standard deviation is explained or accounted for by the linear regression. The greater R^2 is, the better the regression line fits the observed data points, and the more highly correlated one variable is to another. Table 2 contains a list of constituents whose coefficients of determination are greater than 0.50 and are derived from at least six data pairs. Coefficients of determination less than 0.50 were not considered significant because, below this value, less than 50 percent of the variation of the dependent variable is being explained by the independent variable.

TABLE 2.--COEFFICIENTS OF DETERMINATION (R^2) GREATER THAN 0.50 USING MORE THAN FIVE CORRELATED DATA PAIRS FOR BIVARIATE LINEAR REGRESSIONS OF CHEMICAL CONSTITUENTS WITH STREAMFLOW, SPECIFIC CONDUCTANCE, AND SUSPENDED SEDIMENT (THE NUMBER OF CORRELATED DATA PAIRS IN PARENTHESIS)

CONSTITUENT	SUSQUEHANNA RIVER AT CONOWINGO, MD.			POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, D.C.			JAMES RIVER AT CARTERSVILLE, VA.		
	STREAM- FLOW	SPECIFIC CONDUCT- TANCE	SUSPENDED SEDIMENT	STREAM- FLOW	SPECIFIC CONDUCT- TANCE	SUSPENDED SEDIMENT	STREAM- FLOW	SPECIFIC CONDUCT- TANCE	SUSPENDED SEDIMENT
ALKALINITY (MG/L AS CaCO_3)	-	0.82(42)	-	-	0.83(29)	-	-	0.66(22)	-
ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	0.84(43)	-	0.83(25)	0.63(22)	-	0.99(17)	-	-	-
ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	.83(43)	-	.82(25)	.63(22)	-	.99(17)	-	-	-
BARIUM, DISSOLVED RECOVERABLE (UG/L AS BA)	-	-	-	-	-	-	-	.87(7)	-
BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	-	-	-	.91(6)	-	.92(6)	-	-	-
BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	-	-	-	.56(6)	-	.73(6)	-	-	-
CALCIUM, DISSOLVED (MG/L AS CA)	.56(38)	.91(42)	-	-	.87(29)	-	-	.91(22)	-
CARBON, INORGANIC, DISSOLVED (MG/L AS C)	-	-	-	-	.55(21)	.62(14)	-	.72(11)	-
CARBON, ORGANIC DISSOLVED (MG/L AS C)	-	-	-	-	-	.72(17)	-	-	-
CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	-	-	-	.67(6)	-	.99(5)	-	-	-
CARBON, ORGANIC TOTAL (MG/L AS C)	-	-	-	.66(17)	-	.84(14)	-	-	-
CARBON, TOTAL (MG/L AS C)	-	-	-	-	-	.50(11)	-	-	-
CHLORIDE, DISSOLVED (MG/L AS CL)	-	.75(42)	-	-	.58(29)	-	-	.85(22)	-
CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	-	-	-	-	-	.61(6)	-	-	-
CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	-	-	-	-	-	.59(13)	-	-	-
COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	-	-	-	.73(6)	-	.99(6)	-	-	-
COBALT, TOTAL RECOVERABLE (UG/L AS CO)	-	-	-	.71(6)	-	.99(6)	-	-	-
COPPER, DISSOLVED (UG/L AS CU)	-	-	-	-	.66(6)	.59(6)	-	-	-
COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	-	-	-	.70(6)	-	.95(6)	-	.61(7)	-
COPPER, TOTAL RECOVERABLE (UG/L AS CU)	-	-	.91(13)	-	-	.95(13)	-	-	-
HARDNESS (MG/L AS CaCO_3)	.54(38)	.91(42)	-	-	.88(29)	-	-	.91(22)	-
HARDNESS, NONCARBONATE (MG/L CaCO_3)	.54(35)	.81(38)	-	-	.62(29)	.60(22)	-	-	-
IRON, DISSOLVED (UG/L AS FE)	-	-	-	-	-	-	-	-	0.56(8)
IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	.86(43)	-	.99(18)	.63(20)	-	.98(16)	0.99(7)	-	.93(7)
IRON, TOTAL RECOVERABLE (UG/L AS FE)	.88(45)	-	.98(26)	.63(22)	-	.98(17)	.99(7)	-	.93(8)
LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	-	-	-	.59(6)	-	.85(6)	-	.71(7)	-
LEAD, TOTAL RECOVERABLE (UG/L AS PB)	-	-	-	-	-	.74(13)	-	-	-
MAGNESIUM, DISSOLVED (MG/L AS MG)	.51(38)	.91(42)	-	-	.87(29)	-	-	.88(22)	-
MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	.60(44)	-	.86(26)	.58(23)	-	.99(18)	.99(9)	-	.94(10)
MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	.78(44)	-	.90(26)	.59(23)	-	.99(18)	.99(9)	-	.93(10)
MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	-	-	.58(13)	-	-	-	-	-	-
NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	-	-	-	.54(13)	-	-	-	-	-
NITROGEN, AMMONIA TOTAL (MG/L AS N)	-	-	-	-	-	.51(23)	-	-	-
NITROGEN, AMMONIA TOTAL (MG/L AS NH_4)	-	-	-	-	-	.51(23)	-	-	-
NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	-	-	-	-	-	.90(23)	.52(14)	-	-
NITROGEN, NH_4 + ORG. SUSP. TOTAL (MG/L AS N)	-	-	-	-	-	.89(21)	-	-	-
NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	-	-	-	.51(16)	-	-	-	-	-
NITROGEN, ORGANIC TOTAL (MG/L AS N)	-	-	-	-	-	.89(23)	-	-	-
NITROGEN, NITRITE DISSOLVED (MG/L AS N)	-	-	-	-	-	.55(12)	-	-	-
NITROGEN, TOTAL (MG/L AS N)	-	-	-	-	-	.80(23)	-	-	-
NITROGEN, TOTAL (MG/L AS NO_3)	-	-	-	-	-	.80(23)	-	-	-
PHOSPHORUS, DISSOLVED (MG/L AS P)	-	-	-	-	-	.53(22)	-	.54(28)	-
PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	-	-	-	-	-	-	.71(7)	-	-
PHOSPHORUS, TOTAL (MG/L AS P)	.73(45)	-	.89(27)	-	-	.95(23)	.72(14)	-	-
PHOSPHORUS, TOTAL (MG/L AS PO_4)	.73(45)	-	.89(27)	-	-	.96(23)	.72(14)	-	-
SEDIMENT, SUSPENDED (MG/L)	.92(25)	-	1.00	-	-	1.00	.62(11)	-	1.00
SELENIUM, TOTAL (UG/L AS SE)	.75(18)	-	.84(10)	-	-	-	-	-	-
SODIUM, DISSOLVED (MG/L AS NA)	-	.86(42)	-	-	.77(29)	-	-	.90(22)	-
SODIUM + POTASSIUM, DISSOLVED (MG/L AS NA)	-	.87(19)	-	-	-	-	-	.90(10)	-
SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	-	.73(32)	-	-	-	.86(12)	-	-	-
SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	-	.81(12)	-	-	.84(19)	-	-	.90(19)	-
STREAMFLOW, INSTANTANEOUS (CFS)	1.00	-	.92(25)	1.00	-	-	1.00	-	.62(11)
SULFATE, DISSOLVED (MG/L AS SO_4)	-	.91(42)	-	-	.80(29)	-	-	.73(22)	-
ZINC, DISSOLVED (UG/L AS ZN)	-	-	-	.61(6)	-	.97(6)	-	-	-
ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	-	-	-	-	-	.51(6)	-	-	-
ZINC, TOTAL RECOVERABLE	-	-	.55(13)	-	-	.88(13)	-	-	-

¹Because of its potential significance to this study, this coefficient of determination is included in this table even though it is based on only five correlated data pairs.

The data in table 2 demonstrate that there exists significant correlations between chemical constituents for which data are available on an infrequent, periodic basis, and streamflow, specific conductance, and suspended sediment for which continuous or once daily data are available. Along with continuous discharge record, these correlations can be used to provide accurate estimates of constituent loadings.

Tables 3, 4, and 5 list the number of samples (n), maximum, minimum, mean, median, and standard deviation for all parameters collected through April 2, 1980.

A compilation of all water-quality data, except pesticides, for the three stations is found in supplemental data A, B, and C. The data are from the 1979 and 1980 water years.

Pesticide data collected in connection with the study are assembled in supplemental data D. Atrazine and 2,4-D were the two constituents detected most frequently; their concentrations were highest during summer runoff.

Suspended-sediment concentrations and loads for the Potomac River at Chain Bridge and the Susquehanna River at Conowingo are found in supplemental data E and F. Loads will not be tabulated for the James River station until more suspended-sediment information is available.

Bottom material samples were collected approximately 1 mile downstream from Conowingo Dam on the Susquehanna River, on November 3, 1979. Results of this analysis are found in supplemental data G.

TABLE 3.--BASIC STATISTICS OF WATER-QUALITY DATA FOR SUSQUEHANNA RIVER AT CONOWINGO, MARYLAND (01578310)

WATSTORE/ STORET CODE	CONSTITUENT	NO. OF ANAL- YSES	MEAN	STAN- DARD DEVI- ATION	MINIMUM VALUE	MAXIMUM VALUE	MEDIAN
00410	ALKALINITY (MG/L AS CaCO3)	56	32.79	13.45	0.00	59.00	30.50
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	67	129.55	134.23	0.00	600.00	100.00
01107	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	66	937.12	2167.78	0.00	12000.00	330.00
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	67	1090.45	2139.55	0.00	12000.00	600.00
01000	ARSENIC, DISSOLVED (UG/L AS AS)	5	0.80	0.84	0.00	2.00	1.00
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)	5	0.40	0.55	0.00	1.00	0.00
01002	ARSENIC, TOTAL (UG/L AS AS)	19	1.74	1.52	0.00	6.00	1.00
01005	BARIUM, DISSOLVED (UG/L AS BA)	4	17.50	20.62	0.00	40.00	15.00
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	5	22.00	43.82	0.00	100.00	1.00
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	5	30.00	44.72	0.00	100.00	0.00
01025	CADMIUM, DISSOLVED (UG/L AS CD)	5	0.80	0.84	0.00	2.00	1.00
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)	5	4.20	8.29	0.00	19.00	0.00
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	31	1.87	4.37	0.00	20.00	0.00
00915	CALCIUM, DISSOLVED (MG/L AS CA)	56	20.11	7.11	9.30	33.00	18.50
00691	CARBON, INORGANIC, DISSOLVED (MG/L AS C)	36	9.99	4.53	1.70	24.00	10.00
00681	CARBON, ORGANIC DISSOLVED (MG/L AS C)	34	3.36	1.60	1.00	7.40	2.95
00689	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS N)	7	1.47	1.05	0.30	2.80	1.50
00680	CARBON, ORGANIC TOTAL (MG/L AS C)	42	3.04	1.52	1.30	7.60	2.45
00690	CARBON, TOTAL (MG/L AS C)	41	14.59	3.18	10.00	25.00	15.00
70953	CHLOR-A, PHYTOPLANKTON (UG/L)	46	6.84	5.27	0.00	18.40	6.06
70954	CHLOR-B, PHYTOPLANKTON (UG/L)	46	0.00	0.00	0.00	0.00	0.00
00940	CHLORIDE, DISSOLVED (MG/L AS CL)	56	9.90	3.22	3.40	16.00	9.20
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	5	10.00	0.00	10.00	10.00	10.00
01031	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	5	4.00	8.94	0.00	20.00	0.00
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	30	11.03	7.95	0.00	30.00	<10.00
01035	COBALT, DISSOLVED (UG/L AS CO)	5	1.00	1.00	0.00	2.00	1.00
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	5	0.60	0.89	0.00	2.00	0.00
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	5	1.20	1.30	0.00	3.00	1.00
31625	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	12	54.75	81.35	1.00	230.00	10.00
01040	COPPER, DISSOLVED (UG/L AS CU)	5	1.80	0.45	1.00	2.00	2.00
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	5	5.40	8.96	0.00	21.00	1.00
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	31	5.29	4.47	2.00	23.00	4.00
00950	FLUORIDE, DISSOLVED (MG/L AS F)	56	0.09	0.04	0.00	0.20	0.10
00900	HARDNESS (MG/L AS CaCO3)	56	73.50	27.32	33.00	120.00	67.00
01046	IRON, DISSOLVED (UG/L AS FE)	70	69.71	95.67	0.00	690.00	50.00
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	58	1675.52	3161.10	0.00	15000.00	445.00
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)	69	1680.00	2894.47	20.00	15000.00	620.00
01049	LEAD, DISSOLVED (UG/L AS PB)	5	1.00	2.24	0.00	5.00	0.00
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	5	7.00	5.15	2.00	15.00	7.00
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	31	70.10	321.93	0.00	1800.00	5.00
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	56	5.68	2.33	2.40	10.00	5.00
01056	MANGANESE, DISSOLVED (UG/L AS MN)	69	120.14	86.20	0.00	400.00	130.00
01054	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	68	79.41	90.24	0.00	700.00	70.00
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	68	200.44	139.58	50.00	1100.00	180.00
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	29	11.62	7.13	2.00	29.00	10.00
00608	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	50	0.08	0.06	0.00	0.24	0.06
00610	NITROGEN, AMMONIA TOTAL (MG/L AS N)	68	0.11	0.07	0.00	0.31	0.10
00623	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	49	0.37	0.15	0.10	0.61	0.36
00625	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	69	0.52	0.25	0.08	1.50	0.50
00631	NITROGEN, NO2 + NO3 DISSOLVED (MG/L AS N)	64	1.15	0.29	0.53	1.80	1.10
00630	NITROGEN, NO2 + NO3 TOTAL (MG/L AS N)	69	1.16	0.31	0.56	1.90	1.10
00607	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	44	0.30	0.13	0.06	0.53	0.30
00605	NITROGEN, ORGANIC TOTAL (MG/L AS N)	68	0.41	0.22	0.06	1.20	0.38
00602	NITROGEN, DISSOLVED (MG/L AS N)	44	1.59	0.37	0.75	2.50	1.60
00600	NITROGEN, TOTAL (MG/L AS N)	69	1.69	0.38	0.95	2.50	1.60
00300	OXYGEN, DISSOLVED (MG/L)	48	12.02	2.59	5.20	15.40	12.80
00400	PH (UNITS)	56	7.81	0.31	7.05	8.40	7.90
70507	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	63	0.02	0.02	0.00	0.08	0.02
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	70	0.02	0.02	0.00	0.11	0.02
00665	PHOSPHORUS, TOTAL (MG/L AS P)	69	0.18	0.82	0.01	6.90	0.06
60050	PHYTOPLANKTON, TOTAL (CELLS PER ML)	6	12231.67	15749.86	390.00	41000.00	5050.00
00935	POTASSIUM, DISSOLVED (MG/L AS K)	56	1.71	0.33	1.20	2.40	1.60
80154	SEDIMENT, SUSPENDED (MG/L)	131	27.12	53.82	1.00	454.00	15.00
00955	SILICA, DISSOLVED (MG/L AS SiO2)	56	3.67	1.42	0.10	6.00	4.10
01075	SILVER, DISSOLVED (UG/L AS AG)	5	0.00	0.00	0.00	0.00	0.00
00930	SODIUM, DISSOLVED (MG/L AS NA)	56	6.64	2.42	2.90	11.00	6.20
00500	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	39	155.05	36.17	96.00	250.00	157.00
70300	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	20	126.30	45.83	64.00	213.00	115.00
70301	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	52	104.87	33.49	53.00	173.00	98.00
00095	SPECIFIC CONDUCTANCE (MICROMHOS)	145	215.10	45.95	110.00	335.00	220.00
31673	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100/ML)	12	81.58	120.28	1.00	360.00	15.50
00945	SULFATE, DISSOLVED (MG/L AS SO4)	56	35.41	14.20	17.00	65.00	33.00
01090	ZINC, DISSOLVED (UG/L AS ZN)	5	26.00	27.02	0.00	70.00	20.00
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	5	6.00	5.48	0.00	10.00	10.00
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	31	34.84	27.91	0.00	120.00	30.00

TABLE 4.--BASIC STATISTICS OF WATER-QUALITY DATA FOR THE POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON,
D.C. (01646580)

WATSTORE/ STORET CODE	CONSTITUENT	NO. OF ANAL- YSES	MEAN	STAN- DARD DEVI- ATION	MINIMUM VALUE	MAXIMUM VALUE	MEDIAN
00410	ALKALINITY (MG/L AS CaCO3)	38	63.39	24.38	29.00	140.00	61.00
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	35	101.43	92.55	30.00	400.00	60.00
01107	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	34	3563.82	4429.42	0.00	15000.00	1600.00
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	34	3647.65	4384.08	80.00	15000.00	1850.00
01000	ARSENIC, DISSOLVED (UG/L AS AS)	6	1.00	0.63	0.00	2.00	1.00
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)	5	0.40	0.55	0.00	1.00	0.00
01002	ARSENIC, TOTAL (UG/L AS AS)	11	1.18	0.87	0.00	3.00	1.00
01005	BARIUM, DISSOLVED (UG/L AS BA)	4	42.50	41.93	0.00	100.00	35.00
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	5	60.00	89.44	0.00	200.00	0.00
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	66.67	81.65	0.00	200.00	50.00
01025	CADMIUM, DISSOLVED (UG/L AS CD)	6	3.00	4.56	0.00	12.00	1.50
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)	5	0.40	0.89	0.00	2.00	0.00
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	17	0.47	0.87	0.00	3.00	0.00
00915	CALCIUM, DISSOLVED (MG/L AS CA)	38	26.87	9.35	13.00	58.00	25.00
00691	CARBON, INORGANIC, DISSOLVED (MG/L AS C)	26	14.18	6.21	1.80	24.00	14.50
00681	CARBON, ORGANIC DISSOLVED (MG/L AS C)	32	4.07	1.65	2.10	8.10	3.80
00689	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS N)	11	2.96	5.72	0.20	20.00	1.30
00680	CARBON, ORGANIC TOTAL (MG/L AS C)	28	7.35	4.98	1.60	25.00	5.75
00690	CARBON, TOTAL (MG/L AS C)	24	25.46	6.76	19.00	52.00	24.50
70953	CHLOR-A, PHYTOPLANKTON (UG/L)	28	25.41	27.82	0.00	81.00	15.65
70954	CHLOR-B, PHYTOPLANKTON (UG/L)	28	0.56	1.86	0.00	8.79	0.00
00940	CHLORIDE, DISSOLVED (MG/L AS CL)	38	9.42	4.53	4.50	25.00	7.65
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	6	13.33	10.33	0.00	30.00	10.00
01031	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	6	8.33	7.53	0.00	20.00	10.00
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	17	13.06	9.56	0.00	40.00	10.00
01035	COBALT, DISSOLVED (UG/L AS CO)	6	0.67	0.82	0.00	2.00	.50
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	5	4.60	8.23	0.00	19.00	0.00
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	6	4.33	7.34	0.00	19.00	1.50
31625	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	18	855.11	2580.37	1.00	11000.00	60.00
01040	COPPER, DISSOLVED (UG/L AS CU)	6	1.33	1.03	0.00	3.00	1.00
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	6	7.50	12.02	0.00	31.00	3.00
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	17	6.06	7.67	0.00	34.00	4.00
00950	FLUORIDE, DISSOLVED (MG/L AS F)	38	0.12	0.10	0.00	0.70	0.10
00900	HARDNESS (MG/L AS CaCO3)	38	91.34	33.00	43.00	200.00	86.00
01046	IRON, DISSOLVED (UG/L AS FE)	36	58.92	53.62	0.00	270.00	45.00
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	32	7153.12	8909.68	10.00	30000.00	2750.00
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)	34	6905.29	8695.33	70.00	30000.00	2800.00
01049	LEAD, DISSOLVED (UG/L AS PB)	16	7.19	14.82	0.00	60.00	2.00
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	16	23.81	32.72	0.00	120.00	9.00
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	27	23.59	30.17	0.00	130.00	10.00
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	38	5.87	2.35	2.50	13.00	5.35
01056	MANGANESE, DISSOLVED (UG/L AS MN)	36	9.83	6.92	0.00	30.00	8.50
01054	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	35	304.60	339.50	1.00	1200.00	170.00
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	35	313.71	337.40	10.00	1200.00	190.00
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	16	10.12	9.62	1.00	30.00	6.00
00608	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	30	0.05	0.07	0.00	0.31	0.02
00610	NITROGEN, AMMONIA TOTAL (MG/L AS N)	40	0.14	0.24	0.00	0.90	0.06
00623	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	37	0.46	0.31	0.06	1.10	0.39
00625	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	42	0.93	0.82	0.08	3.50	0.60
00631	NITROGEN, NO2 + NO3 DISSOLVED (MG/L AS N)	34	1.18	0.40	0.39	1.90	1.30
00630	NITROGEN, NO2 + NO3 TOTAL (MG/L AS N)	40	1.24	0.36	0.41	2.00	1.30
00607	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	26	0.50	0.31	0.03	1.10	0.41
00605	NITROGEN, ORGANIC TOTAL (MG/L AS N)	40	0.82	0.71	0.06	2.60	0.56
00602	NITROGEN, DISSOLVED (MG/L AS N)	28	1.79	0.52	0.80	2.90	1.70
00600	NITROGEN, TOTAL (MG/L AS N)	40	2.20	0.95	1.10	4.70	2.00
00300	OXYGEN, DISSOLVED (MG/L)	17	10.88	2.31	6.70	14.20	10.80
00400	PH (UNITS)	29	8.16	0.29	7.40	8.70	8.10
70507	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	31	0.05	0.05	0.00	0.23	0.04
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	41	0.05	0.04	0.00	0.17	0.04
00665	PHOSPHORUS, TOTAL (MG/L AS P)	42	0.23	0.25	0.00	1.00	0.12
60050	PHYTOPLANKTON, TOTAL (CELLS PER ML)	7	23512.86	39536.81	190.00	110000.00	3500.00
00935	POTASSIUM, DISSOLVED (MG/L AS K)	38	2.28	0.79	1.20	4.30	1.85
80154	SEDIMENT, SUSPENDED (MG/L)	290	158.23	222.97	2.00	1169.00	46.00
00955	SILICA, DISSOLVED (MG/L AS SiO2)	40	5.08	2.10	0.20	8.40	5.85
01075	SILVER, DISSOLVED (UG/L AS AG)	6	0.00	0.00	0.00	0.00	0.00
00930	SODIUM, DISSOLVED (MG/L AS NA)	38	7.96	4.67	3.00	26.00	7.25
00500	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	25	326.24	256.30	115.00	1030.00	209.00
70300	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	22	160.86	51.33	70.00	306.00	153.50
70301	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	38	126.42	43.93	63.00	284.00	120.00
00095	SPECIFIC CONDUCTANCE (MICROMHOS)	36	238.86	72.87	135.00	450.00	220.00
31673	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100/ML)	18	5501.61	19669.10	2.00	84000.00	270.00
00945	SULFATE, DISSOLVED (MG/L AS SO4)	38	27.21	13.14	11.00	74.00	24.50
01090	ZINC, DISSOLVED (UG/L AS ZN)	6	17.00	31.21	0.00	80.00	6.00
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	6	35.00	25.88	0.00	70.00	40.00
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	17	32.94	32.93	10.00	150.00	30.00

TABLE 5.--BASIC STATISTICS OF WATER-QUALITY DATA FOR THE JAMES RIVER AT CARTERSVILLE, VIRGINIA (02035000)

WATSTORE/ STORET CODE	CONSTITUENT	NO. OF ANAL- YSES	MEAN	STAN- DARD DEVI- ATION	MINIMUM VALUE	MAXIMUM VALUE	MEDIAN
00410	ALKALINITY (MG/L AS CaCO3)	24	43.62	12.79	21.00	67.00	42.00
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	21	211.14	131.28	4.00	600.00	200.00
01107	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	15	1033.33	1625.10	0.00	6300.00	400.00
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	17	1159.65	1583.68	4.00	6700.00	600.00
01000	ARSENIC, DISSOLVED (UG/L AS AS)	7	1.00	1.41	0.00	3.00	0.00
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)	3	1.33	2.31	0.00	4.00	0.00
01002	ARSENIC, TOTAL (UG/L AS AS)	7	1.86	1.77	0.00	4.00	1.00
01005	BARIUM, DISSOLVED (UG/L AS BA)	7	42.86	29.84	0.00	100.00	40.00
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	5	50.00	86.60	0.00	200.00	0.00
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	6	66.67	81.65	0.00	200.00	50.00
01025	CADMIUM, DISSOLVED (UG/L AS CD)	7	1.00	0.58	0.00	2.00	1.00
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)	6	1.00	1.26	0.00	3.00	0.00
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	9	1.22	1.30	0.00	4.00	1.00
00915	CALCIUM, DISSOLVED (MG/L AS CA)	24	15.80	4.74	8.40	31.00	16.00
00691	CARBON, INORGANIC, DISSOLVED (MG/L AS C)	13	11.22	1.95	8.30	14.00	11.00
00681	CARBON, ORGANIC DISSOLVED (MG/L AS C)	18	5.38	3.99	1.20	16.00	4.10
00689	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS N)	5	1.34	1.90	0.20	4.70	0.70
00680	CARBON, ORGANIC TOTAL (MG/L AS C)	21	3.56	1.76	1.60	7.70	2.70
00690	CARBON, TOTAL (MG/L AS C)	14	15.78	1.84	12.00	19.00	16.00
70953	CHLOR-A, PHYTOPLANKTON (UG/L)	7	2.62	2.75	0.00	6.26	2.12
70954	CHLOR-B, PHYTOPLANKTON (UG/L)	7	0.00	0.00	0.00	0.00	0.00
00940	CHLORIDE, DISSOLVED (MG/L AS CL)	24	7.89	5.71	3.00	28.00	6.00
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	7	8.57	6.90	0.00	20.00	10.00
01031	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	6	15.00	10.49	0.00	30.00	15.00
01034	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	6	23.33	15.06	10.00	50.00	10.00
01035	COBALT, DISSOLVED (UG/L AS CO)	7	0.57	0.53	0.00	1.00	1.00
01036	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	6	1.17	1.60	0.00	4.00	0.00
01037	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	7	1.42	1.90	0.00	5.00	1.00
31625	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	17	716.53	1269.37	9.00	4100.00	61.00
01040	COPPER, DISSOLVED (UG/L AS CU)	7	3.43	2.99	1.00	10.00	3.00
01041	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	7	3.43	3.64	0.00	8.00	3.00
01042	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	9	5.67	2.96	3.00	11.00	5.00
00950	FLUORIDE, DISSOLVED (MG/L AS F)	24	0.09	0.03	0.00	0.10	0.10
00900	HARDNESS (MG/L AS CaCO3)	24	53.29	15.39	29.00	100.00	53.00
01046	IRON, DISSOLVED (UG/L AS FE)	23	90.00	60.60	10.00	300.00	80.00
01044	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	19	2548.42	3891.67	210.00	14000.00	1000.00
01045	IRON, TOTAL RECOVERABLE (UG/L AS FE)	23	3247.83	4539.61	290.00	14000.00	1100.00
01049	LEAD, DISSOLVED (UG/L AS PB)	7	2.14	1.95	0.00	5.00	2.00
01050	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	7	5.71	6.92	0.00	19.00	2.00
01051	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	9	6.44	6.39	0.00	21.00	5.00
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	24	3.38	0.97	1.90	5.90	3.20
01056	MANGANESE, DISSOLVED (UG/L AS MN)	25	5.60	4.75	0.00	20.00	4.00
01054	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	25	82.84	105.73	2.00	340.00	30.00
01055	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	25	87.60	105.76	10.00	350.00	40.00
01067	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	5	4.40	2.51	2.00	7.00	4.00
00608	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	16	0.02	0.02	0.00	0.06	0.01
00610	NITROGEN, AMMONIA TOTAL (MG/L AS N)	30	0.04	0.05	0.00	0.23	0.03
00623	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	28	0.26	0.26	0.04	1.30	0.16
00625	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	30	0.43	0.29	0.00	1.40	0.34
00631	NITROGEN, NO2 + NO3 DISSOLVED (MG/L AS N)	17	0.29	0.06	0.15	0.37	0.28
00630	NITROGEN, NO2 + NO3 TOTAL (MG/L AS N)	30	0.37	0.35	0.03	2.10	0.29
00607	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	15	0.33	0.32	0.07	1.30	0.27
00605	NITROGEN, ORGANIC TOTAL (MG/L AS N)	30	0.39	0.28	0.00	1.30	0.30
00602	NITROGEN, DISSOLVED (MG/L AS N)	16	0.63	0.33	0.32	1.60	0.48
00600	NITROGEN, TOTAL (MG/L AS N)	30	0.80	0.51	0.23	2.80	0.62
00300	OXYGEN, DISSOLVED (MG/L)	30	10.91	1.89	7.70	14.10	10.90
00400	PH (UNITS)	32	7.20	0.48	6.30	8.60	7.25
70507	PHOSPHORUS, ORTHO. TOTAL (MG/L AS P)	21	0.05	0.04	0.02	0.19	0.03
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	30	0.05	0.03	0.02	0.15	0.04
00665	PHOSPHORUS, TOTAL (MG/L AS P)	30	0.12	0.10	0.04	0.48	0.09
60050	PHYTOPLANKTON, TOTAL (CELLS PER ML)	7	3951.14	7222.74	43.00	20000.00	1400.00
00935	POTASSIUM, DISSOLVED (MG/L AS K)	24	1.88	1.28	0.90	7.00	1.40
80154	SEDIMENT, SUSPENDED (MG/L)	53	202.00	140.00	2.00	449.00	234.00
00955	SILICA, DISSOLVED (MG/L AS SiO2)	24	7.58	0.94	6.00	9.50	7.60
01075	SILVER, DISSOLVED (UG/L AS AG)	7	0.00	0.00	0.00	0.00	0.00
00930	SODIUM, DISSOLVED (MG/L AS NA)	24	5.31	3.51	2.50	16.00	4.45
00500	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	11	98.73	51.31	34.00	236.00	86.00
70300	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	19	87.63	25.02	63.00	149.00	77.00
70301	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	24	78.96	23.85	49.00	149.00	72.50
00095	SPECIFIC CONDUCTANCE (MICROMHOS)	32	137.78	46.31	75.00	303.00	132.00
31673	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100/ML)	17	765.65	1179.57	11.00	3900.00	92.00
00945	SULFATE, DISSOLVED (MG/L AS SO4)	24	9.98	3.57	6.90	21.00	9.00
01090	ZINC, DISSOLVED (UG/L AS ZN)	7	7.28	7.09	0.00	20.00	8.00
01091	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	7	37.14	20.59	20.00	70.00	30.00
01092	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	9	43.33	18.71	20.00	80.00	40.00

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SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (% FROM L BANK) (000002)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (000061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000095)	PH (UNITS) (00400)	TEMPER- ATURE, AIR (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (000076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV , 1978											
09...	1115	--	61000	315	8.0	14.0	13.5	--	9.3	--	--
28...	1030	25	63500	310	8.0	4.0	9.5	--	10.0	--	--
28...	1100	75	63200	310	7.9	4.0	9.5	--	10.0	--	--
DEC											
21...	1000	75	71300	205	8.0	7.0	3.0	--	13.0	--	--
21...	1100	25	70600	210	7.7	7.0	3.0	--	13.0	--	--
JAN , 1979											
10...	1030	75	102000	140	7.9	-0.5	1.0	--	14.6	--	--
10...	1115	25	120300	165	7.5	--	1.0	--	14.9	--	--
25...	1330	75	285000	205	7.7	3.5	1.5	--	15.4	--	--
25...	1430	25	365000	205	8.1	3.5	1.5	--	15.2	--	--
29...	1015	75	172000	155	8.2	7.0	1.5	--	14.4	--	--
29...	1115	25	158000	160	7.7	7.0	1.5	--	14.6	--	--
FEB											
16...	1000	75	49200	210	7.5	-5.0	1.0	--	13.6	--	--
16...	1030	25	48500	255	7.3	-5.0	1.5	--	13.5	--	--
28...	0945	--	179000	155	7.1	5.5	1.0	--	14.5	--	--
MAR											
07...	1700	--	448000	125	7.9	7.0	4.5	--	13.6	--	--
08...	1630	--	396000	110	7.9	8.0	5.0	--	13.0	--	--
09...	1500	--	305000	115	7.7	11.0	5.5	--	13.8	--	--
12...	1600	--	171000	145	8.1	5.5	4.5	--	13.7	--	--
13...	1500	--	159000	160	8.0	10.0	4.0	--	11.6	--	--
28...	1000	--	152000	190	8.1	6.0	7.0	10	12.6	200	210
APR											
11...	1200	--	84200	180	7.8	13.1	9.0	--	--	--	--
23...	1230	--	78500	185	8.0	24.1	14.2	5.0	10.8	--	--
MAY											
08...	1200	--	70100	220	8.4	25.2	18.5	--	10.2	--	--
22...	1100	--	57200	240	7.8	20.5	21.2	3.0	--	K3	56
JUN											
06...	1500	--	79600	180	8.1	23.3	20.3	--	--	--	--
26...	1030	--	46300	240	7.7	22.0	24.0	4.0	--	K4	K19
JUL											
10...	1130	--	39600	310	7.9	25.0	24.0	--	5.3	--	--
24...	1200	--	57200	300	7.7	28.2	28.0	3.0	5.2	K4	K8
AUG											
08...	1200	--	34300	335	7.6	31.0	29.0	--	6.1	--	--
17...	1230	--	53000	315	7.9	24.5	24.0	4.0	--	K4	K12
SEP											
04...	1100	--	29800	278	8.1	26.5	27.5	89	7.8	K16	<1
08...	1700	--	57100	280	--	--	--	--	--	--	--
19...	0815	--	13100	230	7.9	20.0	--	--	--	--	--
19...	1015	--	39800	230	7.7	21.5	--	--	--	--	--
19...	1215	--	40300	225	7.6	18.0	22.0	--	--	--	--
19...	1415	--	48400	225	7.8	22.0	22.0	--	--	--	--
19...	1615	--	31400	235	7.5	21.0	22.0	--	--	--	--
19...	1915	--	23400	--	--	--	--	--	--	--	--

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

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE, AIR (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT . 1979										
03...	1230	73700	245	8.2	20.0	21.0	--	8.2	--	--
12...	1230	79600	188	8.0	17.0	14.0	--	10.2	--	--
16...	1030	72800	195	7.9	13.0	13.0	8.0	10.0	230	63
31...	1130	65800	--	--	14.0	--	--	8.9	--	--
31...	1200	66000	252	8.2	14.0	14.5	4.0	--	--	--
NOV										
03...	0700	908	240	8.2	9.5	14.0	--	9.9	--	--
03...	0752	916	--	--	9.5	--	--	10.2	--	--
13...	1200	71400	200	7.1	8.5	10.0	1.0	10.7	K84	240
29...	1245	182000	185	8.1	5.0	13.5	--	11.3	--	--
30...	1130	151000	150	--	8.0	10.0	--	12.3	--	--
30...	1230	133000	142	--	8.0	9.0	--	12.3	--	--
DEC										
01...	1100	100000	160	8.0	4.0	8.0	--	--	--	--
01...	1200	104000	150	7.8	4.0	8.0	--	12.2	--	--
11...	1145	66400	190	7.7	9.0	4.5	2.0	12.7	20	K4
JAN . 1980										
03...	1100	74000	157	7.4	6.0	4.0	--	12.8	--	--
15...	1030	60100	209	8.1	8.5	1.5	.80	13.6	90	360
29...	1100	59800	235	7.2	1.0	3.0	--	12.8	--	--
FEB										
12...	1130	59200	185	7.2	1.1	1.5	1.5	14.3	K1	K5
15...	0650	23000	278	7.7	2.0	2.9	--	13.9	--	--
15...	0920	60500	278	7.9	2.0	2.6	--	14.1	--	--
15...	1750	45600	288	8.0	2.0	2.8	--	14.5	--	--
15...	1855	24200	285	7.8	3.0	2.8	--	14.5	--	--
27...	1030	59500	320	7.0	2.0	3.5	--	13.9	--	--
MAR										
10...	1000	48000	175	8.0	9.0	5.5	4.0	13.8	<1	<1
20...	1130	85200	--	--	--	--	--	--	--	--
21...	0615	104000	--	--	--	--	--	--	--	--
22...	1205	191000	--	--	--	--	--	--	--	--
22...	1500	175000	--	--	--	--	--	--	--	--
23...	1400	222000	--	--	--	--	--	--	--	--
23...	1405	222000	--	--	--	--	--	--	--	--
23...	1700	203000	--	--	--	--	30	--	--	--
23...	2000	223000	--	--	--	--	100	--	--	--
24...	1230	222000	114	--	--	6.5	50	--	--	--
APR										
02...	1200	--	--	--	--	--	2.0	--	--	--
02...	1500	207000	--	--	--	--	15	--	--	--
02...	1730	208000	--	--	--	--	13	--	--	--
02...	2000	224000	--	--	--	--	18	--	--	--

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

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	HARD- NESS (MG/L AS CAC03) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CAC03) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY (MG/L AS CAC03) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
NOV , 1978											
09...	120	--	33	10	10	15	.4	2.2	55	63	14
28...	120	--	31	9.5	11	17	.4	2.3	50	62	16
28...	120	--	31	9.4	11	17	.4	2.3	50	61	16
DEC											
21...	68	37	19	5.1	6.2	16	.3	1.8	31	34	9.6
21...	68	37	19	5.0	6.3	16	.3	1.7	31	33	9.9
JAN , 1979											
10...	58	35	16	4.4	5.3	16	.3	1.6	23	24	8.6
10...	61	38	17	4.6	5.4	16	.3	1.5	23	25	8.8
25...	59	34	16	4.6	8.5	23	.5	2.2	25	27	14
25...	58	32	16	4.3	8.6	24	.5	2.4	26	26	14
29...	44	24	12	3.5	6.0	22	.4	1.5	20	24	8.6
29...	47	28	13	3.5	5.1	19	.3	1.6	19	22	8.7
FEB											
16...	92	52	25	7.2	7.6	15	.3	1.5	40	44	12
16...	88	49	24	6.9	7.3	15	.3	1.5	39	43	11
28...	43	21	12	3.1	5.1	20	.3	2.3	22	18	8.1
MAR											
07...	35	18	10	2.5	3.7	18	.3	1.2	17	18	6.0
08...	33	21	9.3	2.4	2.9	15	.2	1.4	12	18	5.1
09...	36	18	10	2.7	3.2	16	.2	1.3	18	20	5.1
12...	47	26	13	3.6	3.6	14	.2	1.3	21	24	6.0
13...	50	50	14	3.7	3.3	12	.2	1.3	--	34	3.4
28...	66	36	18	5.0	4.9	14	.3	1.4	30	32	7.4
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
23...	64	29	18	4.6	4.5	13	.2	1.3	35	30	7.5
MAY											
08...	--	--	--	--	--	--	--	--	--	--	--
22...	90	49	24	7.3	7.1	14	.3	1.5	41	43	9.4
JUN											
06...	--	--	--	--	--	--	--	--	--	--	--
26...	100	59	28	7.9	7.3	13	.3	1.6	43	48	12
JUL											
10...	--	--	--	--	--	--	--	--	--	--	--
24...	120	65	33	10	9.8	20	.4	2.1	59	62	14
AUG											
08...	--	--	--	--	--	--	--	--	--	--	--
17...	120	68	32	9.8	11	22	.4	2.3	52	65	14
SEP											
04...	110	62	29	8.9	9.4	15	.4	2.1	47	55	12
08...	110	59	28	9.0	9.5	16	.4	2.4	48	54	13
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	HARD- NESS (MG/L AS (00900)	HARD- NESS, NONCAR- BONATE (MG/L CAC03) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY AS CAC03) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT , 1979											
03...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
16...	73	41	20	5.6	4.7	16	.2	1.8	32	34	7.5
31...	96	51	25	8.1	8.2	22	.4	2.0	45	45	10
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
13...	76	43	21	5.7	6.2	20	.3	1.6	33	33	9.0
29...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
01...	53	--	15	3.8	3.8	13	.2	1.8	26	28	6.2
01...	56	28	16	4.0	4.1	17	.2	1.7	28	29	6.3
11...	72	38	20	5.4	5.0	17	.3	1.3	34	33	7.2
JAN , 1980											
03...	61	27	17	4.6	4.6	18	.3	1.5	34	29	6.8
15...	80	42	22	6.0	5.7	18	.3	1.6	38	39	8.4
29...	90	48	25	6.8	7.6	15	.3	1.4	42	42	11
FEB											
12...	96	51	26	7.5	8.3	16	.4	1.5	45	43	12
15...	100	56	28	8.2	9.8	17	.4	1.6	48	51	13
15...	100	54	28	8.1	9.3	16	.4	1.5	49	50	13
15...	110	57	30	8.4	10	16	.4	1.6	53	52	14
15...	110	55	29	8.2	9.7	16	.4	1.6	51	50	13
27...	120	61	32	9.6	10	15	.4	1.6	58	56	14
MAR											
10...	110	62	30	9.0	10	16	.4	1.6	50	54	16
20...	76	48	21	5.7	9.2	20	.5	2.1	28	36	14
21...	73	45	20	5.7	8.4	19	.4	2.1	28	34	12
22...	56	31	16	3.9	6.9	20	.4	1.9	25	24	11
22...	54	30	15	3.9	6.5	20	.4	1.9	24	23	10
23...	46	26	13	3.4	5.0	18	.3	1.8	20	20	8.8
23...	46	27	13	3.4	4.7	17	.3	1.8	19	19	8.2
23...	51	21	14	3.9	4.5	16	.3	1.7	30	20	8.0
23...	46	27	13	3.3	4.4	17	.3	1.7	19	20	7.8
24...	39	17	11	2.9	4.3	18	.3	1.6	22	17	6.2
APR											
02...	50	32	14	3.6	4.3	15	.3	1.4	18	23	6.8
02...	50	30	14	3.6	4.4	16	.3	1.4	20	23	6.8
02...	50	30	14	3.6	4.2	15	.3	1.4	20	23	6.6
02...	49	29	14	3.5	4.2	15	.3	1.4	20	24	6.5

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	FLUO- MIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)
NOV , 1978											
09...	.1	.1	--	--	--	--	--	--	.77	3.4	--
28...	.1	.6	--	--	--	--	--	.79	--	--	.02
28...	.1	.5	--	--	--	--	--	.77	--	--	.02
DEC											
21...	.1	4.7	--	104	.14	20000	--	1.1	--	--	.01
21...	.1	4.7	--	103	.14	19600	--	1.1	--	--	.01
JAN , 1979											
10...	.0	4.8	--	84	.11	23100	--	1.2	--	--	.01
10...	.0	4.8	--	87	.12	28200	--	1.2	--	--	.01
25...	.1	4.3	--	98	.13	75400	--	1.2	--	--	.01
25...	.1	4.2	--	98	.13	96600	--	.99	--	--	.01
29...	.1	4.2	--	76	.10	35300	--	.94	--	--	.01
29...	.1	4.3	--	74	.10	31600	--	.95	--	--	.01
FEB											
16...	.1	6.0	--	135	.18	17900	--	1.6	--	--	.01
16...	.1	5.9	--	130	.18	17000	--	1.5	--	--	.01
28...	.1	3.2	--	69	.09	33300	--	.89	--	--	.02
MAR											
07...	.0	3.8	--	59	.08	71400	--	.66	--	--	.02
08...	.0	4.0	--	53	.07	56700	--	--	--	--	--
09...	.1	4.2	--	61	.08	50200	--	--	--	--	--
12...	.1	4.5	--	73	.10	33700	--	--	--	--	--
13...	.0	4.5	--	64	.09	27500	--	.95	--	--	.01
28...	.0	5.1	99	93	.13	40600	126	--	--	--	--
APR											
11...	--	--	--	--	--	--	114	1.2	.99	4.4	.01
23...	.1	3.9	98	91	.13	20800	110	--	--	--	--
MAY											
08...	--	--	--	--	--	--	145	.56	.56	2.5	.02
22...	.1	.5	147	118	.20	22700	162	--	--	--	--
JUN											
06...	--	--	--	--	--	--	127	.95	.97	4.3	.02
26...	.1	1.9	183	133	.25	22900	185	--	--	--	--
JUL											
10...	--	--	--	--	--	--	216	.58	.60	2.7	.11
24...	.2	2.0	213	172	.29	32900	221	--	--	--	--
AUG											
08...	--	--	--	--	--	--	250	--	.91	4.0	--
17...	.1	3.6	205	173	.28	29300	238	.74	.70	3.1	.05
SEP											
04...	.1	2.5	181	147	.25	14600	--	--	--	--	--
08...	.1	2.1	--	149	.20	23000	198	.67	.49	2.2	.07
19...	--	--	--	--	--	--	171	.95	--	--	.04
19...	--	--	--	--	--	--	166	.96	1.1	4.7	.04
19...	--	--	--	--	--	--	159	.96	.97	4.3	.04
19...	--	--	--	--	--	--	165	.96	1.1	4.7	.04
19...	--	--	--	--	--	--	160	.96	.98	4.3	.04
19...	--	--	--	--	--	--	170	.96	.94	4.2	.04

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)
OCT , 1979											
03...	--	--	--	--	--	--	159	1.8	1.8	7.9	.06
12...	--	--	--	--	--	--	141	1.3	1.3	5.7	.03
16...	.1	5.9	--	106	.08	20800	--	1.4	1.4	6.2	.02
31...	.1	3.3	147	135	.20	26200	--	1.4	1.4	6.0	.03
NOV											
03...	--	--	--	--	--	--	157	1.4	1.3	5.6	.04
13...	.1	4.9	119	108	.16	22900	--	1.1	--	--	.01
29...	--	--	--	--	--	--	146	1.2	1.1	4.8	.02
30...	--	--	--	--	--	--	138	--	--	--	--
30...	--	--	--	--	--	--	138	.97	.99	4.4	.02
DEC											
01...	.1	4.4	--	--	--	--	127	.97	.89	3.9	.13
01...	.1	4.1	--	87	.12	24400	151	.98	.99	4.4	.02
11...	.1	5.4	122	104	.17	21900	--	1.2	1.2	5.3	.01
JAN , 1980											
03...	.1	5.0	--	94	.13	18800	121	1.1	1.1	4.8	.00
15...	.1	4.6	111	116	.15	18000	--	1.2	1.3	5.7	.01
29...	.1	3.8	--	124	.17	20000	148	1.4	--	--	.02
FEB											
12...	.2	3.3	145	136	.20	23200	--	1.7	1.6	7.0	.03
15...	.1	2.7	--	151	.21	9380	169	1.6	1.6	7.0	.02
15...	.1	2.8	--	149	.20	24300	167	1.6	1.5	6.6	.02
15...	.1	2.5	--	158	.21	19500	170	1.7	1.6	7.0	.02
15...	.1	2.6	--	152	.21	9930	165	1.7	1.6	7.0	.02
27...	.1	1.4	--	167	.23	26400	188	1.7	1.5	6.6	.02
MAR											
10...	.1	.8	177	159	.24	22900	--	1.5	1.5	6.5	.02
20...	.1	3.1	--	114	.16	26200	125	1.3	1.3	5.7	.02
21...	.1	2.7	--	109	.15	30600	144	1.4	1.5	6.6	.03
22...	.1	3.6	--	89	.12	45900	102	1.4	1.3	5.7	.02
22...	.1	3.7	--	85	.12	40200	105	1.4	1.3	5.7	.02
23...	.1	4.0	--	74	.10	44400	107	1.6	1.3	5.6	.04
23...	.1	4.1	--	72	.10	43200	96	1.5	1.4	6.1	.03
23...	.1	4.2	93	81	.13	51000	--	1.5	1.5	6.5	.04
23...	.1	4.1	66	72	.09	39700	--	1.5	1.3	5.7	.03
24...	.1	4.2	81	67	.11	48600	--	1.2	1.4	6.1	.01
APR											
02...	.1	4.9	99	74	.13	--	--	1.1	1.1	4.8	.01
02...	.1	4.8	87	75	.12	48600	--	1.1	1.1	4.8	.01
02...	.1	4.9	89	75	.12	50000	--	1.2	1.2	5.2	.01
02...	.1	4.7	64	76	.09	38700	--	1.1	1.1	4.8	.01

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00604)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV , 1978											
09...	.02	.07	--	.79	--	.08	--	.10	--	.33	--
28...	--	--	.81	.81	.22	--	.27	--	.20	--	.42
28...	--	--	.79	.79	.24	.24	--	.31	.19	--	.43
DEC											
21...	--	--	1.1	1.1	.12	--	.15	--	.11	--	.23
21...	--	--	1.1	1.1	.12	--	.15	--	.07	--	.19
JAN , 1979											
10...	--	--	1.2	1.2	.08	--	.10	--	.29	--	.37
10...	--	--	1.2	1.2	.09	--	.11	--	.27	--	.36
25...	--	--	1.2	1.3	.24	--	.28	--	.48	--	.72
25...	--	--	1.0	1.2	.31	--	.40	--	1.2	--	1.5
24...	--	--	.95	.85	.11	--	.13	--	.33	--	.44
24...	--	--	.96	.84	.08	--	.10	--	.38	--	.46
FEB											
16...	--	--	1.6	1.6	.21	--	.25	--	.19	--	.40
16...	--	--	1.5	1.5	.20	--	.24	--	.21	--	.41
28...	--	--	.91	.88	.30	--	.39	--	1.0	--	1.3
MAR											
07...	--	--	.68	.70	.23	--	.28	--	.87	--	1.1
08...	--	--	--	.70	--	--	--	--	--	--	--
09...	--	--	--	.72	--	--	--	--	--	--	--
12...	--	--	--	.91	--	--	--	--	--	--	--
13...	--	--	.96	--	.06	--	.08	--	.42	--	.48
28...	--	--	.92	--	.07	--	.09	--	.16	--	.23
APR											
11...	.01	.03	1.2	1.0	.07	.07	.09	.09	.23	.22	.30
23...	--	--	.87	--	.02	--	.02	--	.06	--	.08
MAY											
08...	.02	.07	.58	.58	.02	.03	.02	.04	.36	.14	.38
22...	--	--	.61	--	.11	--	.13	--	.58	--	.69
JUN											
06...	.02	.07	.97	.99	.07	.07	.08	.09	.23	.13	.30
26...	--	--	.56	--	.23	--	.28	--	.27	--	.50
JUL											
10...	.08	.26	.69	.68	.21	.23	.25	.30	.32	.30	.53
24...	--	--	.91	.85	.05	.06	.06	.08	.71	.45	.76
AUG											
08...	.06	.20	.92	.97	.04	.05	.05	.06	.37	.06	.41
17...	--	--	.79	.81	.14	.16	.17	.21	.43	.41	.57
SEP											
04...	--	--	.97	--	.00	--	.00	--	.38	--	.38
08...	.04	.13	.74	.53	.11	.07	.13	.09	.44	.24	.55
19...	.03	.10	.99	--	.11	.05	.13	.06	.62	--	.73
19...	.03	.10	1.0	1.1	.12	.05	.15	.06	.47	.42	.59
19...	.03	.10	1.0	1.0	.10	.04	.12	.05	.61	.20	.71
19...	.03	.10	1.0	1.1	.11	.02	.13	.03	.40	.12	.51
19...	.02	.07	1.0	1.0	.11	.02	.13	.03	.34	.32	.45
19...	.02	.07	1.0	.96	--	.03	--	.04	--	.24	.83

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT , 1979											
03...	.02	.07	1.9	1.8	.10	.09	.12	.12	.23	--	.33
12...	.02	.07	1.3	1.3	.04	.01	.05	.01	.26	.33	.30
16...	.01	.03	1.4	1.4	.04	.00	.05	.00	.66	--	.70
31...	.05	.16	1.4	1.4	.14	.12	.17	.15	.49	.17	.63
NOV											
03...	.04	.13	1.4	1.3	.06	.01	.07	.01	.71	.24	.77
13...	.01	.03	1.1	--	.08	.04	.10	.05	.16	--	.24
29...	.01	.03	1.2	1.1	.04	.05	.05	.06	.54	.44	.58
30...	--	--	1.1	1.1	.15	--	.18	--	.40	--	.55
30...	.01	.03	.99	1.0	.08	.03	.10	.04	.54	.53	.62
DEC											
01...	.11	.36	1.1	1.0	.01	.01	.01	.01	.43	.28	.44
01...	.01	.03	1.0	1.0	.03	.03	.04	.04	.51	.52	.54
11...	.01	.03	1.2	1.2	.07	.02	.08	.03	.29	.37	.36
JAN , 1980											
03...	.02	.07	1.1	1.1	.03	.00	.04	.00	.37	.50	.40
15...	.01	.03	1.2	1.3	.10	.09	.12	.12	.55	.51	.65
29...	--	--	1.4	--	.07	.06	.08	.08	.20	--	.27
FEB											
12...	.02	.07	1.7	1.6	.07	.09	.08	.12	.22	.07	.29
15...	.03	.10	1.6	1.6	.09	.10	.11	.13	.54	.41	.63
15...	.02	.07	1.6	1.5	.09	.09	.11	.12	.25	.27	.34
15...	.02	.07	1.7	1.6	.08	.08	.10	.10	.54	.46	.62
15...	.02	.07	1.7	1.6	.08	.07	.10	.09	.51	.28	.59
27...	.02	.07	1.7	1.5	.17	.08	.21	.10	.22	.31	.39
MAR											
10...	.03	.10	1.5	1.5	.05	.09	.06	.12	.23	.52	.28
20...	.02	.07	1.3	1.3	.22	.22	.27	.28	.32	.32	.54
21...	.02	.07	1.4	1.5	.19	.21	.23	.27	.61	.40	.80
22...	.02	.07	1.4	1.3	.17	.12	.21	.15	.50	.48	.67
22...	.02	.07	1.4	1.3	.17	.16	.21	.21	.58	.35	.75
23...	.03	.10	1.6	1.3	.17	.13	.21	.17	.58	.24	.75
23...	.02	.07	1.5	1.4	.14	.12	.17	.15	.44	.15	.58
23...	.03	.10	1.5	1.5	.17	.16	.21	.21	.66	.34	.83
23...	.02	.07	1.5	1.3	.13	.13	.16	.17	.74	.35	.87
24...	.03	.10	1.2	1.4	.16	.03	.19	.04	.40	.29	.56
APR											
02...	.01	.03	1.1	1.1	.06	.04	.07	.05	.34	.15	.40
02...	.00	.03	1.1	1.1	.06	.04	.07	.05	.16	.08	.22
02...	.02	.07	1.2	1.2	.06	.01	.07	.01	.12	.29	.18
02...	.01	.03	1.1	1.1	.06	.05	.07	.06	.21	.19	.27

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	NITRO- GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, DIS- TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, TOTAL (MG/L AS N03) (71887)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, TOTAL (MG/L AS P04) (71886)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, DIS- TOTAL (MG/L AS P) (70507)	PHOS- PHORUS, ORTH0, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTH0, DIS- SOLVED (MG/L AS P04) (00660)
NOV , 1978											
09...	--	.41	--	--	--	--	--	.01	--	.00	.00
28...	--	--	1.2	--	5.4	.04	.12	.02	.01	.01	.03
28...	--	--	1.2	--	5.4	.04	.12	.01	.01	.00	.00
DEC											
21...	--	--	1.3	--	5.9	.04	.12	.01	.01	.01	.03
21...	--	--	1.3	--	5.7	.04	.12	.01	.02	.02	.06
JAN , 1979											
10...	--	--	1.6	--	7.0	.06	.18	.02	.02	.01	.03
10...	--	--	1.6	--	6.9	.06	.18	.02	.02	.01	.03
25...	--	--	1.9	--	8.5	.31	.95	.06	.06	.04	.12
25...	--	--	2.5	--	11	.28	.86	.03	.03	.03	.09
29...	--	--	1.4	--	6.2	.07	.21	.11	.02	.10	.31
29...	--	--	1.4	--	6.3	.08	.24	.00	.02	.00	.00
FEB											
16...	--	--	2.0	--	8.9	.03	.09	.02	.02	.01	.03
16...	--	--	1.9	--	8.5	.03	.09	.01	.02	.01	.03
28...	--	--	2.2	--	9.8	.29	.89	.06	.06	.06	.18
MAR											
07...	--	--	1.8	--	7.9	.35	1.1	.02	.03	.00	.00
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	1.4	--	6.4	.05	.15	.00	.01	.01	.03
28...	.01	.22	1.2	--	5.1	.04	.12	.01	--	.00	.00
APR											
11...	.01	.29	1.5	1.3	6.6	.03	.09	.01	.00	.01	.03
23...	.00	.10	.95	--	4.2	.03	.09	.01	--	.01	.03
MAY											
08...	.21	.17	.96	.75	4.3	.02	.06	.01	.01	.00	.00
22...	.30	.39	1.3	--	5.8	.04	.12	.00	--	.00	.00
JUN											
06...	.10	.20	1.3	1.2	5.6	.05	.15	.02	.01	.01	.03
26...	.04	.46	1.1	--	4.7	.04	.12	.02	--	.01	.03
JUL											
10...	.00	.53	1.2	1.2	5.4	.03	.09	.00	.01	.02	.06
24...	.25	.51	1.7	1.4	7.4	.03	.09	.01	.00	.00	.00
AUG											
08...	.30	.11	1.3	1.1	5.9	.05	.15	.01	.00	.00	.00
17...	.00	.57	1.4	1.4	6.0	.06	.18	.02	.03	.00	.00
SEP											
04...	.16	.22	1.4	--	6.0	.03	.09	.02	--	--	--
08...	.24	.31	1.3	.84	5.7	.09	.28	.04	.03	.05	.15
19...	--	--	1.7	--	7.6	.06	.18	.03	.07	.00	.00
19...	.12	.47	1.6	1.6	7.0	.06	.18	.02	.01	.00	.00
19...	.47	.24	1.7	1.2	7.6	.05	.15	.02	.07	.00	.00
19...	.37	.14	1.5	1.2	6.7	.05	.15	.01	.01	.00	.00
19...	.11	.34	1.5	1.3	6.4	.06	.18	.02	.08	.00	.00
19...	.56	.27	1.8	1.2	8.1	.06	.18	.02	--	.00	.00

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	NITRO- GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO- GEN, AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	NITRO- GEN, DIS- TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, TOTAL (MG/L AS NO3) (71867)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, TOTAL (MG/L AS P04) (71886)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTH0. DIS- TOTAL (MG/L AS P) (70507)	PHOS- PHORUS, ORTH0. DIS- SOLVED (MG/L AS P) (00671)
OCT , 1979										
03...	.00	--	2.2	2.5	9.9	.08	.25	.03	.04	.04
12...	.00	.34	1.6	1.6	7.1	.07	.21	.03	.03	.03
16...	.00	--	2.1	--	4.3	.04	.12	.03	.02	.04
31...	.34	.29	2.0	1.7	9.0	.01	.03	.04	.00	.01
NOV										
03...	.52	.25	2.2	1.6	4.6	.05	.15	.04	.04	.00
13...	.00	--	1.3	--	5.9	.03	.09	.02	.00	--
29...	.09	.49	1.8	1.6	7.9	.09	.28	.01	.00	.00
30...	--	--	1.7	--	7.3	.07	.21	.02	.00	--
30...	.06	.56	1.6	1.6	7.1	.07	.21	.01	.00	.03
DEC										
01...	.15	.29	1.5	1.3	6.8	.06	.18	.01	.00	.02
01...	.00	.55	1.5	1.6	6.8	.08	.25	.01	.00	.02
11...	.00	.39	1.6	1.6	6.9	.04	.12	.02	.03	--
JAN , 1980										
03...	.00	.50	1.5	1.6	6.6	.03	.09	.06	.06	.05
15...	.05	.60	1.9	1.9	8.2	.04	.12	.02	.03	.03
24...	--	--	1.7	--	7.4	.05	.15	.00	.01	.00
FEB										
12...	.13	.16	2.0	1.8	8.8	.04	.12	.03	.02	.01
15...	.12	.51	2.2	2.1	9.9	.08	.25	.03	.03	.00
15...	.00	.36	1.9	1.9	8.6	.05	.15	.02	.05	.04
15...	.03	.54	2.3	2.1	10	.05	.15	.02	.03	.03
15...	.24	.35	2.3	2.0	10	.05	.15	.03	.03	.03
27...	.00	.39	2.1	1.9	9.3	.05	.15	.03	.05	.05
MAR										
10...	.00	.61	1.8	2.1	7.9	.04	.12	.02	.00	.01
20...	.00	.54	1.8	1.8	8.1	.08	.25	.04	.04	.00
21...	.19	.61	2.2	2.1	9.7	.11	.34	.03	.05	.00
22...	.07	.60	2.1	1.9	9.2	.12	.37	.02	.00	.02
22...	.24	.51	2.2	1.8	9.5	.15	.46	.03	.01	.04
23...	.38	.37	2.4	1.7	10	.20	.61	.03	.01	.00
23...	.31	.27	2.1	1.7	9.2	.34	1.0	.02	.01	.00
23...	.33	.50	2.3	2.0	10	.18	.55	.03	.08	.04
23...	.39	.48	2.4	1.8	11	.32	.98	.02	.01	.00
24...	.24	.32	1.8	1.7	7.8	.15	.46	.01	.06	.00
APR										
02...	.21	.19	1.5	1.3	6.6	.07	.21	.01	.00	.00
02...	.10	.12	1.3	1.2	5.8	.07	.21	.01	.00	.00
02...	.00	.30	1.4	1.5	6.1	.07	.21	.01	.00	.00
02...	.03	.24	1.4	1.3	6.1	.07	.21	.01	.00	.00

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL) (01107)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS) (01001)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA) (01006)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)
NOV . 1978										
09...	300	260	40	0	--	--	--	--	--	10
28...	130	130	0	--	--	--	--	--	--	--
28...	170	160	10	--	--	--	--	--	--	--
DEC										
21...	220	180	40	1	--	--	--	--	--	0
21...	220	170	50	1	--	--	--	--	--	0
JAN . 1979										
10...	420	380	40	1	--	--	--	--	--	0
10...	450	400	50	1	--	--	--	--	--	0
25...	9300	9200	110	--	--	--	--	--	--	--
25...	10000	10000	30	--	--	--	--	--	--	--
29...	1600	1600	20	1	--	--	--	--	--	0
29...	1800	1800	30	1	--	--	--	--	--	0
FEB										
16...	0	0	0	--	--	--	--	--	--	--
16...	0	0	10	--	--	--	--	--	--	--
28...	0	0	0	3	--	--	--	--	--	0
MAR										
07...	12000	12000	0	2	--	--	--	--	--	0
08...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
13...	1100	1100	0	1	--	--	--	--	--	0
28...	--	--	--	1	0	1	0	0	0	--
APR										
11...	230	180	50	--	--	--	--	--	--	--
23...	220	140	80	6	--	--	--	--	--	0
MAY										
08...	160	10	150	--	--	--	--	--	--	--
22...	80	40	40	3	--	--	--	--	--	0
JUN										
06...	130	90	40	--	--	--	--	--	--	--
26...	220	170	50	3	1	2	0	0	--	0
JUL										
10...	170	130	40	--	--	--	--	--	--	--
24...	150	110	40	4	--	--	--	--	--	0
AUG										
08...	400	360	40	--	--	--	--	--	--	--
17...	--	--	70	2	--	--	--	--	--	0
SEPT										
04...	--	--	--	2	1	1	100	100	0	--
08...	290	240	50	--	--	--	--	--	--	--
19...	700	600	100	--	--	--	--	--	--	--
19...	600	600	0	--	--	--	--	--	--	--
19...	800	800	0	--	--	--	--	--	--	--
19...	600	500	100	--	--	--	--	--	--	--
19...	800	700	100	--	--	--	--	--	--	--
19...	800	800	0	--	--	--	--	--	--	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00560)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL) (01107)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS) (01001)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA) (01006)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
OCT , 1979										
03...	.12	500	0	600	--	--	--	--	--	--
12...	.09	500	100	400	--	--	--	--	--	--
16...	.12	300	0	300	--	--	--	--	--	--
31...	.03	600	300	300	--	--	--	--	--	--
NOV										
03...	.00	600	100	500	--	--	--	--	--	--
13...	--	600	0	600	--	--	--	--	--	--
29...	.00	700	400	300	--	--	--	--	--	--
30...	--	800	500	300	--	--	--	--	--	--
30...	.09	800	600	200	--	--	--	--	--	--
DEC										
01...	.06	700	400	300	--	--	--	--	--	--
01...	.06	800	600	200	--	--	--	--	--	--
11...	--	500	300	200	0	0	0	0	0	30
JAN , 1980										
03...	.15	600	400	200	--	--	--	--	--	--
15...	.09	200	100	100	--	--	--	--	--	--
29...	.00	200	100	100	--	--	--	--	--	--
FEB										
12...	.03	300	200	100	--	--	--	--	--	--
15...	.00	300	200	100	--	--	--	--	--	--
15...	.12	200	0	200	--	--	--	--	--	--
15...	.09	200	100	100	--	--	--	--	--	--
15...	.09	200	100	100	--	--	--	--	--	--
27...	.15	400	100	300	--	--	--	--	--	--
MAR										
10...	.03	300	100	200	0	0	0	<50	<10	40
20...	.00	500	400	200	--	--	--	--	--	--
21...	.00	600	500	100	--	--	--	--	--	--
22...	.06	1100	900	200	--	--	--	--	--	--
22...	.12	1200	1000	200	--	--	--	--	--	--
23...	.00	2200	2000	200	--	--	--	--	--	--
23...	.00	2300	2200	100	--	--	--	--	--	--
23...	.12	2800	--	--	--	--	--	--	--	--
23...	.00	2400	2300	100	--	--	--	--	--	--
24...	.00	2000	1900	100	--	--	--	--	--	--
APR										
02...	.00	700	600	100	--	--	--	--	--	--
02...	.00	900	800	100	--	--	--	--	--	--
02...	.00	800	700	100	--	--	--	--	--	--
02...	.00	1100	1000	100	--	--	--	--	--	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD) (01026)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, SUS- PENDE RECOV- ERABLE (UG/L AS CR) (01031)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, SUS- PENDE RECOV- ERABLE (UG/L AS CO) (01036)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, SUS- PENDE RECOV- ERABLE (UG/L AS CU) (01041)
NOV , 1978											
09...	1	--	--	<10	--	--	--	--	--	5	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	0	--	--	<10	--	--	--	--	--	4	--
21...	1	--	--	<10	--	--	--	--	--	4	--
JAN , 1979											
10...	5	--	--	<10	--	--	--	--	--	5	--
10...	1	--	--	<10	--	--	--	--	--	4	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
29...	0	--	--	10	--	--	--	--	--	3	--
29...	1	--	--	<10	--	--	--	--	--	4	--
FEB											
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
28...	0	--	--	30	--	--	--	--	--	10	--
MAR											
07...	1	--	--	10	--	--	--	--	--	18	--
13...	1	--	--	<10	--	--	--	--	--	4	--
28...	20	19	1	30	20	10	3	1	2	23	21
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
23...	1	--	--	10	--	--	--	--	--	3	--
MAY											
08...	--	--	--	--	--	--	--	--	--	--	--
22...	12	--	--	20	--	--	--	--	--	3	--
JUN											
06...	--	--	--	--	--	--	--	--	--	--	--
26...	1	1	0	<10	0	10	0	0	0	7	5
JUL											
10...	--	--	--	--	--	--	--	--	--	--	--
24...	1	--	--	30	--	--	--	--	--	4	--
AUG											
08...	--	--	--	--	--	--	--	--	--	--	--
17...	10	--	--	20	--	--	--	--	--	5	--
SEP											
04...	2	1	1	10	0	<10	2	2	0	2	1
08...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM SUS- PENDE RECov- ERABLE (UG/L AS CD) (01026)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, SUS- PENDE RECov- ERABLE (UG/L AS CR) (01031)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, SUS- PENDE RECov- ERABLE (UG/L AS CO) (01036)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, SUS- PENDE RECov- ERABLE (UG/L AS CU) (01041)
OCT , 1979											
03...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
16...	0	--	--	4	--	--	--	--	--	3	--
31...	0	--	--	--	--	--	--	--	--	3	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
13...	0	--	--	0	--	--	--	--	--	3	--
29...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
11...	0	0	0	10	0	<10	1	0	1	2	0
JAN , 1980											
03...	--	--	--	--	--	--	--	--	--	--	--
15...	0	--	--	10	--	--	--	--	--	3	--
29...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	0	--	--	6	--	--	--	--	--	4	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	0	0	2	10	0	<10	0	0	2	2	0
20...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	0	--	--	14	--	--	--	--	--	6	--
23...	0	--	--	13	--	--	--	--	--	8	--
24...	0	--	--	0	--	--	--	--	--	6	--
APR											
02...	0	--	--	4	--	--	--	--	--	4	--
02...	0	--	--	5	--	--	--	--	--	5	--
02...	0	--	--	5	--	--	--	--	--	3	--
02...	0	--	--	0	--	--	--	--	--	4	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE) (01044)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB) (01050)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN) (01054)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
NOV , 1978											
09...	--	280	280	0	5	--	--	50	50	0	<.5
24...	--	380	350	30	--	--	--	70	50	20	--
28...	--	450	390	60	--	--	--	80	50	30	--
DEC											
21...	--	790	740	50	2	--	--	110	0	120	<.5
21...	--	540	490	50	4	--	--	100	0	100	1.0
JAN , 1979											
10...	--	920	870	50	5	--	--	180	50	130	1.4
10...	--	980	610	370	0	--	--	180	50	130	1.0
25...	--	12000	12000	200	--	--	--	530	190	340	--
25...	--	15000	15000	130	--	--	--	--	--	--	--
29...	--	2900	2900	40	53	--	--	240	100	140	1.4
29...	--	3000	3000	40	55	--	--	270	130	140	1.4
FEB											
16...	--	480	350	130	--	--	--	280	20	260	--
16...	--	590	510	80	--	--	--	270	10	260	--
28...	--	7700	7700	40	6	--	--	300	140	160	<.5
MAR											
07...	--	14000	14000	50	18	--	--	1100	700	400	1.2
13...	--	1500	1500	40	3	--	--	220	60	160	<.5
28...	2	1000	310	690	12	7	5	180	0	180	.5
APR											
11...	--	730	640	90	--	--	--	190	10	180	--
23...	--	620	490	130	8	--	--	190	20	170	.5
MAY											
08...	--	620	520	100	--	--	--	100	100	0	--
22...	--	310	290	20	120	--	--	140	60	80	<.5
JUN											
06...	--	670	550	120	--	--	--	200	40	160	--
26...	2	330	330	0	8	8	0	200	70	130	<.5
JUL											
10...	--	370	370	0	--	--	--	130	90	40	--
24...	--	350	350	0	5	--	--	180	110	70	<.5
AUG											
04...	--	420	420	0	--	--	--	150	110	40	--
17...	--	--	--	10	3	--	--	--	--	30	<.5
SEP											
04...	1	270	270	0	15	15	0	160	110	50	<.5
08...	--	890	460	30	--	--	--	120	110	10	--
19...	--	390	370	20	--	--	--	90	90	0	--
19...	--	430	410	20	--	--	--	90	90	0	--
19...	--	330	310	20	--	--	--	90	90	0	--
19...	--	340	330	10	--	--	--	80	70	10	--
19...	--	320	310	10	--	--	--	90	90	10	--
19...	--	470	450	20	--	--	--	110	100	10	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE) (01044)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB) (01050)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, SUS- PENDED RECOV- ERABLE (UG/L AS MN) (01054)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
OCT , 1979											
03...	--	950	920	30	--	--	--	120	120	0	--
12...	--	940	890	50	--	--	--	110	70	40	--
16...	--	790	720	70	5	--	--	130	40	90	.1
31...	--	540	510	30	7	--	--	110	100	10	.1
NOV											
03...	--	520	500	20	--	--	--	90	90	0	--
13...	--	730	620	110	1800	--	--	140	50	90	<.1
29...	--	1400	1400	20	--	--	--	200	110	90	--
30...	--	2100	2000	80	--	--	--	240	100	140	--
30...	--	2200	2200	10	--	--	--	230	100	130	--
DEC											
01...	--	2000	2000	10	--	--	--	170	100	70	--
01...	--	2800	2800	30	--	--	--	160	120	40	--
11...	2	620	440	180	3	3	0	160	10	150	<.1
JAN , 1980											
03...	--	1100	1000	60	--	--	--	150	20	130	--
15...	--	400	260	140	2	--	--	160	0	160	<.1
29...	--	500	370	130	--	--	--	190	0	200	--
FEB											
12...	--	400	320	80	2	--	--	180	10	170	--
15...	--	380	320	60	--	--	--	180	0	180	--
15...	--	380	310	70	--	--	--	180	0	180	--
15...	--	380	330	50	--	--	--	170	0	170	--
15...	--	370	310	60	--	--	--	170	0	180	--
27...	--	550	530	20	--	--	--	220	20	200	--
MAR											
10...	2	360	350	10	2	2	0	210	50	160	.2
20...	--	1100	950	150	--	--	--	270	50	220	--
21...	--	1100	970	130	--	--	--	310	40	270	--
22...	--	1800	1700	80	--	--	--	260	120	140	--
22...	--	1900	1800	110	--	--	--	240	100	140	--
23...	--	3800	3800	50	--	--	--	330	140	190	--
23...	--	3700	3700	40	--	--	--	350	150	200	--
23...	--	4300	4300	40	0	--	--	350	160	190	<.1
23...	--	3800	3800	30	7	--	--	380	150	230	<.1
24...	--	3400	3300	80	6	--	--	290	150	140	<.1
APR											
02...	--	70	20	50	2	--	--	160	60	100	.1
02...	--	70	10	60	3	--	--	190	80	110	.1
02...	--	20	0	30	6	--	--	180	70	110	.1
02...	--	80	20	60	6	--	--	180	70	110	.1

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	MERCURY SUS- PENDE RECov- ERABLE (UG/L AS HG) (71895)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECov- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECov- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE) (01146)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECov- ERABLE (UG/L AS AG) (01077)	SILVER, SUS- PENDE RECov- ERABLE (UG/L AS AG) (01076)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECov- ERABLE (UG/L AS ZN) (01092)	ZINC, SUS- PENDE RECov- ERABLE (UG/L AS ZN) (01091)
NOV , 1978											
09...	--	--	13	0	--	--	--	--	--	40	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	19	0	--	--	--	--	--	20	--
21...	--	--	10	0	--	--	--	--	--	30	--
JAN , 1979											
10...	--	--	12	0	--	--	--	--	--	50	--
10...	--	--	11	0	--	--	--	--	--	30	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	16	0	--	--	--	--	--	20	--
29...	--	--	18	0	--	--	--	--	--	30	--
FEB											
15...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	25	0	--	--	--	--	--	70	--
MAR											
07...	--	--	27	1	--	--	--	--	--	110	--
13...	--	--	16	0	--	--	--	--	--	0	--
28...	.0	.5	--	0	0	0	0	0	0	30	10
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	15	0	--	--	--	--	--	20	--
MAY											
08...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	14	0	--	--	--	--	--	30	--
JUN											
06...	--	--	--	--	--	--	--	--	--	--	--
26...	.0	<.5	29	0	0	0	0	0	0	20	10
JUL											
10...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	2	0	--	--	--	--	--	30	--
AUG											
08...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	6	0	--	--	--	--	--	40	--
SEP											
04...	.0	<.5	--	0	0	0	0	0	0	10	10
08...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	MERCURY SUS- PENDED RECOV- ERABLE (UG/L AS HG) (71895)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE) (01146)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG) (01076)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN) (01091)
OCT , 1979											
03...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	2	--	--	--	--	--	--	20	--
31...	--	--	3	--	--	--	--	--	--	20	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	6	--	--	--	0	--	--	90	--
29...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
11...	<.0	.1	7	0	0	0	0	0	0	10	0
JAN , 1980											
03...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	6	--	--	--	--	--	--	20	--
29...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	8	--	--	--	0	--	--	20	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	.0	.2	14	0	0	0	0	0	0	30	0
20...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	8	--	--	--	0	--	--	120	--
23...	--	--	9	--	--	--	0	--	--	60	--
24...	--	--	8	--	--	--	0	--	--	30	--
APR											
02...	--	--	7	--	--	--	0	--	--	20	--
02...	--	--	6	--	--	--	0	--	--	20	--
02...	--	--	6	--	--	--	7	--	--	20	--
02...	--	--	10	--	--	--	0	--	--	20	--

SUPPLEMENTAL DATA A: WATER-QUALITY DATA, NOVEMBER 1978 THROUGH APRIL 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

DATE	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDEd (MG/L) (80154)
FEB 1979			
28...	--	--	197
MAR			
07...	--	--	454
13...	--	--	35
28...	20	--	--
APR			
11...	--	--	31
23...	--	100	10
MAY			
08...	--	--	16
22...	--	100	4
JUN			
06...	--	--	12
26...	10	100	8
JUL			
10...	--	--	7
24...	--	82	17
AUG			
08...	--	97	17
17...	--	100	4
SEP			
04...	0	100	9
OCT			
03...	--	--	22
12...	--	--	23
16...	--	90	18
NOV			
13...	--	92	13
30...	--	--	34
30...	--	--	57
DEC			
01...	--	--	29
01...	--	--	50
11...	30	92	10
JAN 1980			
03...	--	--	15
15...	--	83	6
29...	--	--	6
FEB			
27...	--	81	6
MAR			
10...	--	48	6
20...	--	99	16
23...	--	100	132
23...	--	100	138
APR			
02...	--	100	40

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (000061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000095)	PH (UNITS) (00400)	TEMPER- ATURE, AIR (DEG C) (000020)	TEMPER- ATURE (DEG C) (000010)	TUR- BID- ITY (NTU) (000076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS (MG/L AS CAC03) (00900)
OCT , 1978											
02...	1341	1790	--	--	--	--	--	--	--	--	--
04...	1423	1840	--	--	--	--	--	--	--	--	--
10...	1020	1940	450	8.6	14.0	14.5	2.0	10.8	K13	270	180
NOV											
14...	1015	1790	450	8.5	18.5	12.5	7.0	11.1	80	240	200
DEC											
19...	1000	5780	290	8.2	5.5	3.5	5.0	13.7	60	240	120
JAN , 1979											
16...	1115	11700	275	7.7	4.5	1.0	4.0	14.1	40	400	92
FEB											
27...	1900	197000	135	8.0	3.5	3.0	90	14.2	1700	7000	43
MAR											
01...	1230	73800	--	--	--	--	--	--	--	--	56
19...	1230	16500	265	8.2	--	8.0	--	--	--	--	100
27...	1000	49800	200	8.0	10.5	9.0	65	--	1500	3800	78
APR											
26...	1300	10100	245	8.7	16.0	18.0	4.0	9.6	K9	360	110
MAY											
23...	1045	9970	195	8.4	21.5	22.0	6.0	9.6	48	270	100
JUN											
05...	1030	34200	230	8.1	--	21.0	--	--	--	--	--
13...	1030	21200	260	8.1	23.0	21.0	25	9.8	170	140	110
JUL											
17...	1030	4440	325	8.5	28.8	29.0	7.0	8.5	60	530	120
AUG											
15...	1030	4940	310	8.5	20.0	24.5	15	9.5	120	1100	120
SEP											
06...	1030	62000	180	7.8	26.5	24.5	150	8.5	K11000	E84000	69
06...	1330	62300	177	8.3	--	24.7	--	--	--	--	68
06...	2000	58700	160	--	--	24.6	--	--	--	--	60
07...	0745	70600	165	--	--	23.7	--	--	--	--	64
07...	1100	84200	205	--	--	24.1	--	--	--	--	76
07...	1430	95300	220	--	--	--	--	--	--	--	83
07...	1830	104000	230	--	--	--	--	--	--	--	89
08...	1030	80900	168	--	--	--	--	--	--	--	--
09...	1415	36200	178	--	--	--	--	--	--	--	72
OCT											
11...	1130	68800	172	8.1	--	11.4	--	--	--	--	--
17...	1100	28400	215	7.4	17.0	11.9	3.0	8.4	270	120	93
NOV											
27...	1100	11900	325	8.2	11.0	14.0	1.0	11.8	280	270	110
DEC											
12...	1030	9140	280	8.1	2.4	7.1	1.0	6.7	K7	K4	120
JAN , 1980											
14...	1030	10200	285	8.1	2.5	2.3	.51	12.6	33	280	120
FEB											
11...	1030	7310	340	8.0	5.0	2.0	.50	14.1	<1	K2	130
MAR											
11...	1100	14900	180	8.5	8.0	8.0	.20	11.9	<1	K3	110
18...	1230	23600	225	8.0	--	9.0	--	--	--	--	89
18...	1600	26200	217	8.1	--	9.0	--	--	--	--	86
18...	1900	28900	210	8.3	--	9.0	--	--	--	--	86
19...	1000	41200	220	7.9	--	9.0	--	--	--	--	--
19...	1315	43000	222	7.8	--	9.0	--	--	--	--	--
22...	1045	57200	--	--	--	--	--	--	--	--	51
22...	1330	--	--	--	--	--	--	--	--	--	59
22...	1630	59300	--	--	--	--	--	--	--	--	59
23...	1230	55600	--	--	--	--	--	--	--	--	65
23...	1450	54200	--	--	--	--	--	--	--	--	68
24...	1230	42100	--	--	--	8.0	50	--	--	--	65
APR											
02...	1100	59700	200	8.2	--	9.0	22	--	--	--	75
02...	1300	59900	195	8.2	--	9.0	25	--	--	--	75

K Results based on colony count outside the acceptable range (non-ideal colony count).
E Estimated.

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY (MG/L AS CAC03) (00410)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT , 1978											
02...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
10...	58	50	13	22	21	.7	2.7	120	66	20	.1
NOV											
14...	58	58	13	26	22	.8	3.0	140	74	25	.2
DEC											
19...	47	34	7.6	9.3	15	.4	2.2	69	40	9.0	.1
JAN , 1979											
16...	32	27	5.9	8.0	16	.4	1.8	60	27	13	.1
FEB											
27...	14	13	2.5	3.0	13	.2	2.1	29	16	4.5	.1
MAR											
01...	26	17	3.4	3.6	12	.2	1.9	30	18	5.4	.1
19...	36	30	6.8	7.0	13	.3	1.6	67	30	7.8	.1
27...	33	23	4.9	5.2	12	.3	1.7	45	25	7.2	.0
APR											
26...	35	33	7.0	8.2	14	.3	1.5	76	34	9.4	.1
MAY											
23...	31	30	6.2	8.6	15	.4	1.8	69	30	7.5	.1
JUN											
05...	--	--	--	--	--	--	--	--	--	--	--
13...	29	33	6.6	7.4	12	.3	2.8	81	29	7.0	.1
JUL											
17...	37	34	9.6	15	20	.6	2.4	87	49	15	.1
AUG											
15...	38	34	8.1	13	19	.5	3.0	80	43	15	.1
SEP											
06...	6	21	3.9	5.9	15	.3	3.3	63	15	6.3	.1
06...	6	21	3.8	5.4	14	.3	3.3	62	15	6.4	.1
06...	9	18	3.6	4.7	14	.3	4.3	51	11	6.1	.1
07...	18	19	3.9	5.5	15	.3	4.0	46	16	6.0	.1
07...	16	23	4.6	7.5	17	.4	3.7	60	20	6.9	.1
07...	14	25	5.1	7.1	15	.3	3.5	69	20	7.7	.1
07...	14	27	5.2	8.1	16	.4	3.3	75	23	8.3	.1
08...	--	--	--	--	--	--	--	--	--	--	--
09...	23	22	4.1	4.0	10	.2	2.6	49	19	4.6	.1
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
17...	25	28	5.5	4.5	12	.2	1.7	68	21	5.4	.1
NOV											
27...	23	32	6.9	8.4	18	.4	1.7	85	30	9.3	.1
DEC											
12...	33	35	7.4	7.8	16	.3	1.6	85	29	9.1	.7
JAN , 1980											
14...	34	36	7.5	9.6	19	.4	1.7	87	32	11	.1
FEB											
11...	33	40	8.1	11	15	.4	1.5	100	31	12	.2
MAR											
11...	35	31	7.4	8.9	15	.4	1.2	73	34	10	.1
18...	31	26	5.8	9.9	19	.5	1.6	58	27	14	.1
18...	30	25	5.8	9.6	19	.5	1.7	56	27	13	.1
18...	28	25	5.7	9.3	19	.4	1.6	58	26	19	.1
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
22...	19	15	3.4	4.4	15	.3	2.4	32	17	8.1	.1
22...	25	17	4.0	4.4	13	.3	2.3	34	17	7.6	.1
22...	24	17	4.1	4.3	13	.2	2.3	35	17	7.3	.1
23...	26	19	4.3	4.9	14	.3	1.8	39	20	7.1	.1
23...	23	20	4.3	5.0	13	.3	1.8	45	20	7.1	.1
24...	27	19	4.3	5.0	14	.3	1.6	38	19	6.2	.1
APR											
02...	31	22	4.9	5.4	13	.3	1.7	44	24	7.0	.1
02...	31	22	4.8	5.5	13	.3	1.8	44	23	6.7	.1

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C TOTAL (MG/L) (00500)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N03) (71851)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT , 1978											
02...	2.6	--	--	--	--	--	--	--	--	--	--
04...	2.3	--	--	--	--	--	--	--	--	--	--
19...	1.4	254	247	.35	1360	--	--	--	--	--	--
NOV											
14...	.2	306	284	.42	1480	--	--	--	--	--	--
DEC											
19...	6.1	149	116	.20	2330	--	1.5	--	--	.01	--
JAN , 1979											
16...	7.3	149	126	.20	4710	--	--	--	--	--	--
FEB											
27...	4.3	70	63	.10	37200	--	--	--	--	--	--
MAR											
01...	5.9	--	79	.11	15700	--	1.1	--	--	.02	--
14...	7.1	147	138	.20	6550	--	1.6	1.6	7.0	.01	.01
27...	5.7	113	100	.15	15200	134	--	--	--	--	--
APR											
26...	1.1	157	140	.21	4280	158	--	--	--	--	--
MAY											
23...	5.8	154	132	.21	4150	162	--	--	--	--	--
JUN											
05...	--	--	--	--	--	233	1.3	1.3	5.7	.02	.02
13...	6.7	154	141	.21	8820	207	--	--	--	--	--
JUL											
17...	1.5	222	181	.30	2540	224	.40	.40	1.8	.01	.01
AUG											
15...	5.8	185	172	.25	2470	209	.45	.44	1.9	.01	.01
SEP											
06...	6.1	118	104	.16	19800	1030	--	--	--	--	--
06...	5.8	--	103	.14	17300	767	1.2	.97	4.3	.00	.03
06...	6.1	--	89	.12	14100	682	.97	.85	3.8	.03	.02
07...	6.6	--	93	.13	17700	568	1.1	.97	4.3	.02	.03
07...	6.5	--	113	.15	25700	622	1.4	.98	4.3	.03	.02
07...	6.7	--	119	.16	30600	623	2.0	.46	2.0	.01	.03
07...	7.0	--	135	.18	37900	589	1.8	1.8	7.9	.01	.01
08...	--	--	--	--	--	308	--	--	--	--	--
09...	7.9	--	96	.13	9380	363	.77	.36	1.6	.06	.03
OCT											
11...	--	--	--	--	--	226	1.2	1.3	5.7	.03	.01
17...	8.4	126	121	.17	9660	--	1.3	1.3	5.7	.00	.01
NOV											
27...	2.0	163	147	.22	5240	--	1.1	1.1	4.9	.00	.00
DEC											
12...	3.2	157	152	.21	3870	--	1.4	1.4	6.2	.00	.01
JAN , 1980											
14...	4.3	153	161	.21	4210	--	1.5	1.5	6.6	.01	.01
FEB											
11...	5.1	206	178	.28	4070	--	1.8	1.9	8.4	.01	.01
MAR											
11...	1.8	152	142	.21	6120	--	.86	.87	3.9	.00	.01
18...	3.7	--	129	.18	8220	135	1.2	1.3	5.7	.02	.02
18...	3.8	--	126	.17	8910	134	1.2	1.3	5.7	.02	.02
18...	3.7	--	131	.18	10200	137	1.3	1.3	5.6	.02	.03
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
22...	5.5	--	82	.11	12700	124	1.4	1.5	6.5	.06	.03
22...	6.0	--	86	.12	--	173	1.5	1.5	6.4	.06	.05
22...	6.0	--	86	.12	13800	117	1.2	1.5	6.5	.06	.04
23...	6.4	--	94	.13	14100	116	1.3	1.5	6.6	.33	.02
23...	6.7	--	99	.13	14500	115	1.3	1.5	6.6	.03	.02
24...	6.9	111	91	.15	12600	--	1.5	1.4	6.2	.02	.01
APR											
02...	6.7	123	105	.17	19800	--	1.4	1.4	6.2	.02	.01
02...	6.7	165	103	.22	26700	--	1.4	1.4	6.2	.02	.01

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO ₂) (71856)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH ₄) (71845)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH ₄) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,NH ₄ + ORG. SUSP. TOTAL (MG/L AS N) (00624)
OCT , 1978											
02...	--	--	.58	--	--	--	--	--	--	.38	--
04...	--	--	.64	--	--	--	--	--	--	.53	.36
10...	--	.79	--	.04	--	.05	--	.32	--	.36	.01
NOV											
14...	--	.53	--	.01	--	.01	--	.55	--	.56	.34
DEC											
19...	--	1.5	1.5	.03	--	.04	--	.30	--	.33	.25
JAN , 1979											
16...	--	1.7	--	.08	--	.10	--	.31	--	.39	.04
FEB											
27...	--	.90	--	.16	--	.21	--	1.1	--	1.3	1.1
MAR											
01...	--	1.1	1.2	.07	--	.09	--	.63	--	.70	--
19...	.03	1.6	1.6	.02	.03	.03	.04	.06	.03	.08	.02
27...	--	1.4	--	.05	--	.06	--	.58	--	.63	.35
APR											
26...	--	.79	--	.08	--	.10	--	.28	--	.36	.27
MAY											
23...	--	1.0	--	.01	--	.01	--	.60	--	.61	.21
JUN											
05...	.07	1.3	1.3	.02	.00	.02	.00	.95	.42	.97	.55
13...	--	1.1	--	.02	--	.02	--	.47	--	.49	.36
JUL											
17...	.03	.41	.41	.07	.01	.08	.01	.68	.40	.75	.34
AUG											
15...	.03	.46	.45	.04	.00	.05	.00	.69	.68	.73	.05
SEP											
06...	--	1.2	1.0	.87	.01	1.1	.01	2.6	.59	3.5	2.9
08...	.10	1.2	1.0	.05	.08	.06	.10	2.4	.92	2.4	1.4
06...	.07	1.0	.87	.10	.08	.12	.10	2.2	.71	2.3	1.5
07...	.10	1.1	1.0	.01	.00	.01	.00	.99	1.0	1.0	.00
07...	.07	1.4	1.0	.13	.05	.16	.06	2.1	.54	2.2	1.6
07...	.10	2.0	.49	.90	.25	1.1	.32	1.3	.68	2.2	1.3
07...	.03	1.8	1.8	.66	.01	.80	.01	1.7	1.1	2.4	1.3
08...	--	--	--	--	--	--	--	--	--	--	--
09...	.10	.83	.39	.85	.31	1.0	.40	.45	.10	1.3	.89
OCT											
11...	.03	1.2	1.3	.06	.02	.07	.03	1.1	--	1.2	.00
17...	.03	1.3	1.3	.00	.01	.00	.01	.22	--	.22	.00
NOV											
27...	.00	1.1	1.1	.01	.00	.01	.00	.43	--	.44	--
DEC											
12...	.03	1.4	1.4	.01	.00	.01	.00	.11	.10	.12	.02
JAN , 1980											
14...	.03	1.5	1.5	.12	.00	.15	.00	.17	.26	.29	.03
FEB											
11...	.03	1.8	1.9	.01	.01	.01	.01	.28	.34	.29	.00
MAR											
11...	.03	.86	.88	.09	.01	.11	.01	.26	.32	.35	.02
18...	.07	1.2	1.3	.07	.06	.08	.08	.36	--	.43	--
18...	.07	1.2	1.3	.03	.02	.04	.03	.47	.37	.50	.11
18...	.10	1.3	1.3	.09	.05	.11	.06	.64	.13	.73	.55
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
22...	.10	1.5	1.5	.20	.18	.24	.23	2.4	.77	2.6	1.7
22...	.16	1.6	1.5	.13	.02	.16	.03	1.1	1.1	1.2	.10
22...	.13	1.3	1.5	.10	.10	.12	.13	1.9	.65	2.0	1.3
23...	.07	1.6	1.5	.06	.08	.07	.10	.53	.36	.59	.15
23...	.07	1.3	1.5	.06	.09	.07	.12	.77	.31	.83	.43
24...	.03	1.5	1.4	.07	.03	.08	.04	.39	.57	.46	.00
APR											
02...	.03	1.4	1.4	.04	.04	.05	.05	.13	.23	.17	.00
02...	.03	1.4	1.4	.04	.03	.05	.04	.24	.21	.28	.04

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, TOTAL (MG/L AS N03) (71887)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS TOTAL (MG/L AS P04) (71886)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P) (70507)	PHOS- PHORUS, ORTHO. DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO. DIS- SOLVED (MG/L AS P04) (00660)	ALUM- INUM, TOTAL RECOV- ERABLE (G/G/L AS AL) (01105)
	OCT , 1978										
	02...	--	--	--	--	.06	.18	.01	--	--	--
04...	.17	--	--	--	.04	.12	.00	--	--	--	--
10...	.35	1.2	--	5.1	.04	.12	.01	--	--	--	--
NOV											
14...	.22	1.1	--	4.8	.04	.12	.01	--	--	--	--
DEC											
19...	.08	1.8	--	8.1	.07	.21	.06	.05	.04	.12	200
JAN , 1979											
16...	.35	2.1	--	9.3	.06	.18	.05	--	--	--	--
FEB											
27...	.22	2.2	--	9.7	.41	1.3	.06	--	--	--	--
MAR											
01...	--	1.8	--	8.0	.11	.34	.04	.04	.03	.09	2500
19...	.06	1.7	1.7	7.4	.05	.15	.03	.02	.02	.06	190
27...	.28	2.0	--	9.0	.14	.43	.03	--	.01	.03	--
APR											
26...	.09	1.2	--	5.1	.00	.00	.00	--	.00	.00	80
MAY											
23...	.40	1.6	--	7.1	.09	.28	.03	--	.00	.00	130
JUN											
05...	.42	2.3	1.7	10	.18	.55	.05	.02	.01	.03	2400
13...	.13	1.6	--	7.0	.11	.34	.04	--	.03	.09	830
JUL											
17...	.41	1.2	.82	5.1	.06	.18	.01	.02	.00	.00	220
AUG											
15...	.68	1.2	1.1	5.3	.11	.34	.01	.04	.00	.00	170
SEP											
06...	.60	4.7	1.6	21	.76	2.3	--	--	--	--	13000
06...	1.0	3.6	2.0	16	.63	1.9	.06	.05	.03	.09	12000
06...	.79	3.3	1.7	15	.68	2.1	.08	.08	.03	.09	9800
07...	1.0	2.1	2.0	9.3	.57	1.7	.12	.06	.03	.09	7000
07...	.59	3.6	1.6	16	.60	1.8	.11	.05	.04	.12	7100
07...	.93	4.2	1.4	19	.56	1.7	.17	.12	.04	.12	7700
07...	1.1	4.2	2.9	19	.52	1.6	.09	.07	.02	.06	7700
08...	--	--	--	--	--	--	--	--	--	--	--
09...	.41	2.1	.80	9.4	.26	.80	.10	.23	.04	.12	3100
OCT											
11...	--	2.4	2.8	11	.22	.67	.10	.07	.04	.12	1600
17...	.32	1.5	1.6	6.7	.06	.18	.03	.00	--	--	900
NOV											
27...	--	1.5	--	6.8	.02	.06	.01	.00	.00	.00	400
DEC											
12...	.10	1.5	1.5	6.7	.02	.06	.02	.05	.00	.00	300
JAN , 1980											
14...	.26	1.8	1.8	7.9	.04	.12	.03	.02	.03	.09	200
FEB											
11...	.35	2.1	2.3	9.3	.04	.12	.03	.02	.01	.03	--
MAR											
11...	.33	1.2	1.2	5.4	.02	.06	.02	.00	.01	.03	200
18...	--	1.6	--	7.2	.08	.25	.05	.01	.01	.03	500
18...	.39	1.7	1.7	7.5	.10	.31	.03	.00	.00	.00	700
18...	.18	2.0	1.5	9.0	.14	.43	.03	.01	.01	.03	600
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
22...	.95	4.1	2.5	18	1.0	3.1	.07	.16	.03	.09	15000
22...	1.1	2.8	2.6	12	.38	1.2	.06	.12	.03	.09	11000
22...	.75	3.3	2.3	15	.57	1.7	.08	.11	.08	.25	8000
23...	.44	2.2	1.9	9.7	.23	.71	.05	.04	.05	.15	2400
23...	.40	2.1	1.9	9.4	.22	.67	.04	.03	.06	.18	2000
24...	.60	2.0	2.0	8.7	.17	.52	.04	.08	.00	.00	1700
APR											
02...	.27	1.6	1.7	7.0	.16	.49	.03	.02	.03	.09	2200
02...	.24	1.7	1.6	7.4	.17	.52	.03	.01	.02	.06	2200

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL) (01107)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS) (01001)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA) (01006)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD) (01026)
OCT , 1978											
02...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
19...	170	30	1	0	1	100	0	100	--	3	0
JAN , 1979											
16...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
01...	2500	30	1	--	--	--	--	--	0	0	--
19...	150	40	0	--	--	--	--	--	0	1	--
27...	--	--	1	0	1	100	100	0	--	2	2
APR											
26...	0	80	3	--	--	--	--	--	0	0	--
MAY											
23...	80	50	--	--	--	--	--	--	--	--	--
JUN											
05...	2400	40	--	--	--	--	--	--	--	--	--
13...	780	50	2	0	2	0	0	--	0	0	0
JUL											
17...	170	50	0	--	--	--	--	--	0	1	--
AUG											
15...	120	50	1	--	--	--	--	--	0	0	--
SEP											
06...	13000	60	2	1	1	200	200	30	--	1	0
06...	12000	40	--	--	--	--	--	--	--	--	--
06...	9800	40	--	--	--	--	--	--	--	--	--
07...	7000	40	--	--	--	--	--	--	--	--	--
07...	7100	30	--	--	--	--	--	--	--	--	--
07...	7700	40	--	--	--	--	--	--	--	--	--
07...	7700	30	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
09...	3100	30	--	--	--	--	--	--	--	--	--
OCT											
11...	1300	300	--	--	--	--	--	--	--	--	--
17...	800	100	--	--	--	--	--	--	--	0	--
NOV											
27...	200	200	--	--	--	--	--	--	--	0	--
DEC											
12...	0	300	1	1	0	0	0	40	--	0	0
JAN , 1980											
14...	100	100	--	--	--	--	--	--	--	0	--
FEB											
11...	--	200	--	--	--	--	--	--	--	--	--
MAR											
11...	100	100	1	0	1	0	0	--	--	0	0
18...	400	100	--	--	--	--	--	--	--	--	--
18...	600	100	--	--	--	--	--	--	--	--	--
18...	500	100	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
22...	15000	100	--	--	--	--	--	--	--	--	--
22...	11000	60	--	--	--	--	--	--	--	--	--
22...	7900	60	--	--	--	--	--	--	--	--	--
23...	2100	300	--	--	--	--	--	--	--	--	--
23...	1600	400	--	--	--	--	--	--	--	--	--
24...	1600	100	--	--	--	--	--	--	--	0	--
APR											
02...	2100	100	--	--	--	--	--	--	--	0	--
02...	2100	100	--	--	--	--	--	--	--	0	--

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	CADMIUM DIS- SOLVED (UG/L AS CU) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, SUS- PENDED RECOV- ERABLE (UG/L AS CR) (01031)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CORALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	CORALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO) (01036)	CORALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU) (01041)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE) (01044)
OCT , 1978												
10...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
14...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
19...	3	<10	<10	0	1	0	1	0	0	0	310	40
JAN , 1979												
16...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
01...	--	10	--	--	--	--	--	10	--	--	5200	5200
19...	--	<10	--	--	--	--	--	4	--	--	430	290
27...	0	20	10	10	4	4	0	7	6	1	4300	4300
APR												
26...	--	10	--	--	--	--	--	4	--	--	290	240
MAY												
23...	--	--	--	--	--	--	--	--	--	--	530	520
JUN												
05...	--	--	--	--	--	--	--	--	--	--	4500	4400
13...	0	20	0	30	2	0	2	9	8	1	1800	1800
JUL												
17...	--	20	--	--	--	--	--	4	--	--	450	450
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
15...	--	20	--	--	--	--	--	4	--	--	940	920
SEP												
06...	1	40	20	20	19	19	0	34	31	3	23000	23000
06...	--	--	--	--	--	--	--	--	--	--	24000	24000
06...	--	--	--	--	--	--	--	--	--	--	20000	20000
07...	--	--	--	--	--	--	--	--	--	--	14000	14000
07...	--	--	--	--	--	--	--	--	--	--	14000	14000
07...	--	--	--	--	--	--	--	--	--	--	15000	15000
07...	--	--	--	--	--	--	--	--	--	--	16000	16000
09...	--	--	--	--	--	--	--	--	--	--	6300	6200
09...	--	--	--	--	--	--	--	--	--	--	--	6300
OCT												
11...	--	--	--	--	--	--	--	--	--	--	3900	3800
17...	--	0	--	--	--	--	--	3	--	--	1000	1000
NOV												
27...	--	8	--	--	--	--	--	3	--	--	--	--
DEC												
12...	2	20	10	10	0	0	0	1	0	1	130	100
JAN , 1980												
14...	--	11	--	--	--	--	--	3	--	--	200	160
FEB												
11...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
11...	12	10	0	<10	0	0	1	1	0	2	230	200
18...	--	--	--	--	--	--	--	--	--	--	820	790
18...	--	--	--	--	--	--	--	--	--	--	1000	960
18...	--	--	--	--	--	--	--	--	--	--	1100	1100
19...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	30000	30000
22...	--	--	--	--	--	--	--	--	--	--	22000	22000
22...	--	--	--	--	--	--	--	--	--	--	14000	14000
23...	--	--	--	--	--	--	--	--	--	--	3600	3600
23...	--	--	--	--	--	--	--	--	--	--	2900	2800
24...	--	1	--	--	--	--	--	5	--	--	2700	2700
APR												
02...	--	7	--	--	--	--	--	5	--	--	70	10
02...	--	5	--	--	--	--	--	6	--	--	80	20

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB) (01050)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, SUS- PENDE RECOV- ERABLE (UG/L AS MN) (01054)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG) (71895)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
OCT , 1978											
10...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
19...	270	38	33	5	30	10	20	<.5	.0	<.5	15
JAN , 1979											
16...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
01...	50	8	--	--	190	170	20	<.5	--	--	30
19...	140	7	--	--	40	20	20	<.5	--	--	21
27...	20	38	35	3	220	220	3	.5	.0	.5	--
APR											
26...	50	4	--	--	30	30	0	.5	--	--	18
MAY											
23...	10	--	--	--	40	40	3	--	--	--	--
JUN											
05...	70	--	--	--	190	170	20	--	--	--	--
13...	0	59	50	9	110	100	10	<.5	.0	<.5	11
JUL											
17...	1	30	--	--	90	90	2	<.5	--	--	4
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
15...	20	13	--	--	90	90	3	<.5	--	--	5
SEP											
06...	0	130	120	6	1200	1200	6	<.5	.0	<.5	29
06...	130	--	--	--	990	980	8	--	--	--	--
06...	60	--	--	--	850	850	3	--	--	--	--
07...	80	--	--	--	600	590	7	--	--	--	--
07...	50	--	--	--	650	640	10	--	--	--	--
07...	80	--	--	--	710	700	10	--	--	--	--
07...	110	--	--	--	650	640	6	--	--	--	--
09...	50	--	--	--	370	370	4	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
OCT											
11...	70	--	--	--	170	160	10	--	--	--	--
17...	40	9	--	--	60	60	5	<.1	--	--	3
NOV											
27...	30	35	--	--	20	20	4	<.1	--	--	3
DEC											
12...	30	9	9	0	10	1	9	.1	.0	.1	2
JAN , 1980											
14...	40	10	--	--	20	10	10	<.1	--	--	2
FEB											
11...	20	--	--	--	--	--	10	<.1	--	--	--
MAR											
11...	30	0	0	0	40	20	20	.1	.0	.1	1
18...	30	82	22	60	70	50	20	--	--	--	--
18...	40	11	0	16	80	50	30	--	--	--	--
18...	30	5	0	7	100	80	20	--	--	--	--
19...	--	9	9	0	--	--	--	--	--	--	--
19...	--	8	8	0	--	--	--	--	--	--	--
22...	60	24	24	0	970	970	5	--	--	--	--
22...	40	0	0	0	780	770	10	--	--	--	--
22...	180	0	0	0	600	590	10	--	--	--	--
23...	30	11	3	8	230	220	7	--	--	--	--
23...	100	69	68	1	200	190	8	--	--	--	--
24...	40	7	--	--	160	160	5	<.1	--	--	6
APR											
02...	60	12	--	--	200	190	7	.1	--	--	6
02...	60	9	--	--	220	210	9	.1	--	--	6

SUPPLEMENTAL DATA B: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE) (01146)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG) (01076)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN) (01091)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT , 1978											
10...	--	--	--	--	--	--	--	--	--	100	56
NOV											
14...	--	--	--	--	--	--	--	--	--	100	11
DEC											
19...	0	0	10	0	0	0	50	50	0	100	10
JAN , 1979											
16...	--	--	--	--	--	--	--	--	--	83	13
FEB											
27...	--	--	--	--	--	--	--	--	--	71	466
27...	--	--	--	--	--	--	--	--	--	87	480
27...	--	--	--	--	--	--	--	--	--	90	423
27...	--	--	--	--	--	--	--	--	--	88	425
27...	--	--	--	--	--	--	--	--	--	86	583
MAR											
01...	0	--	--	--	--	--	30	--	--	86	178
19...	0	--	--	--	--	--	30	--	--	--	--
27...	0	0	0	0	0	0	50	40	10	91	209
APR											
26...	0	--	--	--	--	--	30	--	--	100	8
MAY											
23...	--	--	--	--	--	--	--	--	--	92	24
JUN											
05...	--	--	--	--	--	--	--	--	--	98	134
13...	0	0	0	0	0	0	40	40	2	98	47
JUL											
17...	0	--	--	--	--	--	10	--	--	96	19
17...	--	--	--	--	--	--	--	--	--	94	15
AUG											
15...	0	--	--	--	--	--	30	--	--	85	25
SEP											
06...	0	0	0	0	0	0	150	70	80	92	947
06...	--	--	--	--	--	--	--	--	--	--	786
06...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	90	526
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	560
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	10	--	--	94	32
NOV											
27...	--	--	--	0	--	--	10	--	--	90	9
DEC											
12...	0	0	0	0	0	0	10	0	10	83	3
JAN , 1980											
14...	--	--	--	--	--	--	20	--	--	100	15
FEB											
11...	--	--	--	--	--	--	--	--	--	46	4
MAR											
11...	0	0	0	0	0	0	10	10	0	95	4
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	0	--	--	20	--	--	--	--
APR											
02...	--	--	--	0	--	--	30	--	--	--	--
02...	--	--	--	0	--	--	30	--	--	--	--

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)
OCT , 1978											
04...	1245	1030	220	7.1	19.5	1.0	8.2	86	240	73	11
NOV											
06...	1230	1170	303	7.5	14.0	2.0	10.8	<10	23	100	35
DEC											
05...	1230	4230	205	7.4	11.0	5.0	11.0	290	270	68	14
JAN , 1979											
09...	1230	12600	95	6.8	3.5	30	12.5	370	3900	35	10
FEB											
06...	1315	5720	112	7.6	2.0	6.0	14.1	39	20	48	13
MAR											
06...	1200	63300	75	7.3	9.0	8.0	11.5	3100	2200	29	8
APR											
13...	1315	8240	132	7.6	14.5	5.0	8.2	61	64	54	12
27...	1200	6970	140	6.3	18.0	--	--	--	--	--	--
MAY											
07...	1230	7580	135	6.3	18.5	3.0	9.7	<14	39	53	11
18...	1215	10100	98	6.8	18.5	--	9.2	--	--	--	--
JUN											
12...	1230	10300	130	7.6	22.0	25	10.2	48	610	53	8
22...	1415	6400	145	8.0	22.5	4.0	10.6	--	--	64	2
JUL											
03...	1400	4300	143	8.6	25.0	3.0	10.1	39	19	60	0
AUG											
10...	1245	2030	195	7.7	27.5	1.0	8.6	<9	28	62	11
21...	0930	2500	190	7.2	26.0	--	7.7	--	--	--	--
SEP											
07...	0730	56900	85	6.5	20.0	--	8.1	--	--	--	--
24...	1500	35900	113	7.3	17.5	100	8.5	--	--	41	11
OCT											
11...	0900	25500	105	7.1	12.5	30	9.8	4100	2400	38	7
24...	1430	7360	132	7.4	16.0	--	9.2	--	--	--	--
NOV											
13...	1400	20100	143	7.5	10.5	1.0	10.7	960	780	54	13
19...	0900	9510	138	7.1	9.0	--	--	--	--	--	--
DEC											
06...	1310	6580	160	7.3	5.0	--	12.6	33	20	--	--
18...	1300	5190	155	7.5	4.0	--	13.4	--	--	64	14
JAN , 1980											
15...	1400	32000	105	6.9	5.0	8.0	13.2	2600	2300	42	8
25...	1230	15400	110	6.7	6.0	--	12.7	--	--	43	3
FEB											
08...	1300	6620	140	6.6	2.0	2.5	13.2	12	11	59	8
22...	1330	5360	170	7.2	8.5	--	12.4	--	--	67	10
MAR											
06...	1400	13600	100	6.9	5.5	--	13.6	410	92	--	--
14...	1230	12800	102	7.3	7.0	--	12.2	--	--	41	4
20...	1030	31000	95	7.3	8.0	--	11.6	--	--	36	7
31...	1300	20500	125	7.0	10.5	--	12.4	--	--	47	12
APR											
01...	1045	23100	130	6.9	9.5	--	11.2	--	--	48	5

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY (MG/L AS CAC03) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SI02) (00955)
OCT . 1978											
04...	21	5.1	13	27	.7	2.7	62	21	14	.1	8.1
NOV											
06...	31	5.9	16	25	.7	2.8	67	19	28	.1	6.0
DEC											
05...	20	4.5	12	27	.6	2.8	54	15	18	.1	8.2
JAN . 1979											
09...	9.7	2.7	3.4	17	.2	1.3	25	8.5	4.2	.1	8.7
FEB											
06...	14	3.2	4.6	17	.3	1.3	35	9.0	6.1	.1	9.5
MAR											
06...	8.4	1.9	2.5	14	.2	3.0	21	7.7	5.8	.0	7.3
APR											
13...	16	3.5	4.5	15	.3	1.2	42	9.3	6.0	.1	6.7
27...	--	--	--	--	--	--	--	--	--	--	--
MAY											
07...	16	3.2	4.5	14	.3	7.0	42	8.4	12	.0	6.6
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
12...	16	3.2	3.4	12	.2	1.4	45	8.0	4.3	.1	8.3
22...	19	4.1	4.9	14	.3	2.0	62	9.7	5.8	.1	6.9
JUL											
03...	18	3.7	5.5	16	.3	2.5	63	9.7	8.2	.1	6.3
AUG											
10...	18	4.1	7.8	21	.4	2.4	51	13	13	.1	7.8
21...	--	--	--	--	--	--	--	--	--	--	--
SEP											
07...	--	--	--	--	--	--	--	--	--	--	--
24...	13	2.1	2.6	12	.2	1.5	30	9.5	3.0	.1	6.6
OCT											
11...	11	2.5	3.2	15	.2	1.4	31	6.9	3.5	.1	9.3
24...	--	--	--	--	--	--	--	--	--	--	--
NOV											
13...	16	3.4	4.4	19	.3	1.5	41	8.2	6.0	.1	8.0
19...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
18...	19	3.9	5.8	20	.3	1.6	50	9.0	7.6	.1	8.0
JAN . 1980											
15...	12	2.8	3.6	20	.2	1.3	34	9.8	6.2	.1	7.2
25...	13	2.6	2.6	14	.2	1.0	40	8.5	3.9	.1	7.6
FEB											
08...	17	3.9	4.8	15	.3	1.1	51	10	7.2	.1	8.5
22...	20	4.2	5.6	15	.3	1.2	57	9.0	9.3	.1	7.2
MAR											
06...	--	--	--	--	--	--	--	--	--	--	--
14...	12	2.7	3.7	16	.3	.9	37	7.9	5.0	.1	7.5
20...	11	2.0	2.5	13	.2	1.0	29	7.9	3.1	.1	6.1
31...	14	2.9	3.1	12	.2	1.1	35	7.1	4.3	.1	7.6
APR											
01...	14	3.1	3.5	13	.2	1.0	43	7.4	4.9	.1	7.8

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N03) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N02) (71856)
OCT , 1978											
04...	137	122	.19	381	--	--	--	--	--	--	--
NOV											
06...	149	149	.20	471	--	--	--	--	--	--	--
DEC											
05...	124	113	.17	1420	--	--	--	--	--	--	--
JAN , 1979											
09...	63	54	.09	2140	--	--	--	--	--	--	--
FEB											
05...	72	69	.10	1110	--	--	--	--	--	--	--
MAR											
06...	70	49	.10	12000	--	--	--	--	--	--	--
APR											
13...	81	73	.11	1800	--	--	--	--	--	--	--
27...	75	--	.10	1410	--	--	--	--	--	--	--
MAY											
07...	85	83	.12	1740	--	--	--	--	--	--	--
18...	70	--	.10	1910	--	--	--	--	--	--	--
JUN											
12...	76	72	.10	2110	--	--	--	--	--	--	--
22...	91	90	.12	1570	--	--	--	--	--	--	--
JUL											
03...	94	92	.13	1090	--	--	--	--	--	--	--
AUG											
10...	113	97	.15	619	--	--	--	--	--	--	--
21...	--	--	--	--	132	.26	.26	1.2	.01	.01	.03
SEP											
07...	--	--	--	--	236	.34	.33	1.5	.02	.00	.00
24...	66	58	.09	6400	--	--	--	--	--	--	--
OCT											
11...	68	58	.09	4680	--	--	--	--	--	--	--
24...	--	--	--	--	88	.26	.26	1.2	.01	.00	.00
NOV											
13...	73	73	.10	3960	--	--	--	--	--	--	--
19...	--	--	--	--	79	.25	.15	.66	.00	.00	.00
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
18...	--	87	.12	1220	96	.35	.33	1.5	.00	.01	.03
JAN , 1980											
15...	77	65	.10	6650	--	.31	.32	1.4	.00	.01	.03
25...	--	65	.09	2700	86	2.1	.27	1.2	.00	.01	.03
FEB											
08...	81	85	.11	1450	--	.33	.34	1.5	.01	.01	.03
22...	--	92	.13	1330	104	.25	.26	1.2	.01	.01	.03
MAR											
06...	--	--	--	--	--	--	.24	1.1	.01	.00	.03
14...	--	64	.09	2210	70	.27	.29	1.2	.01	.01	.03
20...	--	53	.07	4440	34	.32	.32	1.4	.01	.01	.03
31...	--	0	.00	.00	80	3.8	.36	<1.6	.01	.00	.03
APR											
01...	--	69	.09	4300	81	.33	.34	1.5	.01	.01	.03

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	NITRO- GEN, NO2+N03 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+N03 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)
OCT , 1978											
04...	.35	--	.02	--	--	--	.23	--	.25	.00	.29
NOV											
06...	.03	--	.03	--	--	--	.32	--	.35	.15	.20
DEC											
05...	.46	--	.05	--	--	--	.19	--	.24	.11	.13
JAN , 1979											
09...	.44	--	.04	--	--	--	.30	--	.34	.22	.12
FEB											
06...	.51	--	.06	--	--	--	.25	--	.31	.18	.13
MAR											
06...	.46	--	.09	--	--	--	.72	--	.81	.44	.37
APR											
13...	.23	--	.01	--	.01	--	.00	--	.00	.00	.04
27...	.13	--	.03	--	--	--	.40	--	.44	--	--
MAY											
07...	.28	--	.01	--	.01	--	.28	--	.29	.00	.29
18...	.28	--	.00	--	--	--	.62	--	.62	--	--
JUN											
12...	.59	--	.23	--	.28	--	.25	--	.48	.37	.11
22...	.21	--	.02	--	.02	--	.31	--	.33	.22	.11
JUL											
03...	.07	--	.05	--	.06	--	.23	--	.28	.17	.11
AUG											
10...	.10	--	.03	--	.04	--	.32	--	.35	.28	.07
21...	.27	.27	.03	.00	.04	.00	.15	.13	.18	.05	.13
SEP											
07...	.36	.33	.15	.04	.18	.05	1.3	.81	1.4	.55	.85
24...	.29	.22	.04	--	.05	--	.91	--	.95	.85	.10
OCT											
11...	.28	.28	.04	.00	.05	.00	.37	.18	.41	.23	.18
24...	.27	.26	.00	.01	.00	.01	.21	.37	.21	.00	.38
NOV											
13...	.22	.18	.01	.02	.01	.03	.26	.28	.27	.00	.30
19...	.25	.15	.03	.00	.04	.00	.35	.31	.38	.07	.31
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
18...	.35	.34	.00	.01	.00	.01	.20	.11	.20	.08	.12
JAN , 1980											
15...	.31	.33	.11	.00	.13	.00	.43	.35	.54	.19	.35
25...	2.1	.28	.00	.01	.00	.01	.73	.27	.73	.45	.28
FEB											
08...	.34	.35	.06	.06	.07	.08	.14	.07	.20	.07	.13
22...	.26	.27	.01	.01	.01	.01	.78	1.3	.79	.00	1.3
MAR											
06...	--	.25	--	.00	--	.00	--	--	--	--	--
14...	.28	.29	.00	.00	.00	.00	.19	.14	.19	.05	.14
20...	.33	.33	.06	.06	.07	.08	.71	.39	.77	.32	.45
31...	3.8	.37	.25	.02	.30	.03	.10	.18	.35	.15	.20
APR											
01...	.34	.35	.01	.02	.01	.03	.23	.12	.24	.10	.14

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, TOTAL (MG/L AS NO3) (71847)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, TOTAL (MG/L AS PO4) (71886)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTH0, TOTAL (MG/L AS P) (70507)	PHOS- PHORUS, ORTH0, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTH0, DIS- SOLVED (MG/L AS PO4) (00660)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL) (01107)
OCT , 1978											
04...	.60	--	2.7	.12	--	.10	--	--	--	--	--
NOV											
06...	.38	--	1.7	.15	--	.14	--	--	--	--	--
DEC											
05...	.70	--	3.1	.12	--	.10	--	--	--	--	--
JAN , 1979											
09...	.78	--	3.5	.10	--	.02	--	--	--	--	--
FEB											
06...	.82	--	3.6	.05	--	.03	--	--	--	--	--
MAR											
06...	1.3	--	5.6	.35	--	.03	--	--	--	--	--
APR											
13...	.23	--	1.0	.06	.18	.05	.03	.03	.09	4	0
27...	.57	--	2.5	.05	--	.03	.03	.02	.06	500	400
MAY											
07...	.57	--	2.5	.07	.21	.15	--	--	--	--	--
18...	.90	--	4.0	.07	--	.05	.03	.04	.12	700	400
JUN											
12...	1.1	--	4.7	.09	.28	.03	.02	.02	.06	--	--
22...	.54	--	2.4	.07	.21	.04	.03	.03	.09	--	--
JUL											
03...	.35	--	1.6	.04	.12	.02	.03	.02	.06	--	--
AUG											
10...	.45	--	2.0	.09	.28	.09	.07	.07	.21	--	--
21...	.45	.40	2.0	.10	.31	.09	.07	.06	.18	10	0
SEP											
07...	1.8	1.2	7.8	.48	1.5	.05	.07	.01	.03	6700	6300
24...	1.2	.32	5.5	.33	1.0	.04	--	--	--	--	--
OCT											
11...	.69	.46	3.1	.12	.37	.03	--	--	--	--	--
24...	.48	.64	2.1	.07	.21	.06	.05	.04	.12	700	500
NOV											
13...	.49	.48	2.2	.09	.28	.05	--	--	--	--	--
19...	.63	.46	2.8	.06	.18	.04	.03	.01	.03	600	0
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
18...	.55	.46	2.4	.07	.21	.07	.06	.05	.15	600	300
JAN , 1980											
15...	.85	.69	3.8	.12	.37	.03	.05	.02	.06	1900	1700
25...	2.8	.56	13	.05	.15	.03	.03	.03	.09	500	400
FEB											
08...	.54	.48	2.4	.07	.21	.05	.03	.02	.06	200	100
22...	1.1	1.6	4.6	.08	.25	.06	.04	.03	.09	300	100
MAR											
06...	--	--	--	--	--	--	.02	.01	.03	1800	1700
14...	.47	.43	2.1	.06	.18	.02	.02	.01	.03	500	300
20...	1.1	.78	4.9	.24	.74	.02	.19	.22	.67	2500	2300
31...	4.1	.57	18	.09	.28	.03	.00	.02	.06	1100	900
APR											
01...	.58	.49	2.6	.16	.49	.05	.05	.04	.12	1100	900

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS) (01001)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA) (01006)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD) (01026)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)
OCT , 1978											
04...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	--	1	--	0	0	0	0	1	0	1	<10
JAN , 1979											
09...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	--	--	--	--	--	--	--	--	--	--	--
MAR											
06...	--	3	--	3	100	0	100	2	1	1	20
APR											
13...	4	--	--	--	--	--	--	--	--	--	--
27...	100	--	--	--	--	--	--	--	--	--	--
MAY											
07...	--	--	--	--	--	--	--	--	--	--	--
18...	300	--	--	--	--	--	--	--	--	--	--
JUN											
12...	300	4	--	3	100	50	50	4	3	1	30
22...	300	1	--	1	0	0	30	1	0	1	20
JUL											
03...	200	--	--	--	--	--	--	--	--	--	--
AUG											
10...	200	--	--	--	--	--	--	--	--	--	--
21...	30	--	--	--	--	--	--	--	--	--	--
SEP											
07...	400	--	--	--	--	--	--	--	--	--	--
24...	--	4	4	0	0	0	40	1	0	1	50
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
24...	200	--	--	--	--	--	--	--	--	--	--
NOV											
13...	--	0	0	0	--	--	40	0	0	2	10
19...	600	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
18...	300	--	--	--	--	--	--	--	--	--	--
JAN , 1980											
15...	200	--	--	--	--	--	--	0	--	--	--
25...	100	--	--	--	--	--	--	--	--	--	--
FEB											
08...	100	0	0	0	200	200	40	2	2	0	--
22...	200	--	--	--	--	--	--	--	--	--	--
MAR											
06...	100	--	--	--	--	--	--	0	--	--	--
14...	200	--	--	--	--	--	--	--	--	--	--
20...	200	--	--	--	--	--	--	--	--	--	--
31...	200	--	--	--	--	--	--	--	--	--	--
APR											
01...	200	--	--	--	--	--	--	--	--	--	--

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	CHROMIUM, SUS- PENDED RECOV. (UG/L AS CR) (01031)	CHROMIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO) (01036)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU) (01041)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE) (01044)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT , 1978											
04...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	<10	0	0	0	0	3	0	3	490	360	130
JAN , 1979											
09...	--	--	--	--	--	--	--	--	--	--	--
FEB											
05...	--	--	--	--	--	--	--	--	--	--	--
MAR											
06...	20	0	3	2	1	11	4	3	14000	14000	110
APR											
13...	--	--	--	--	--	--	--	--	500	420	80
27...	--	--	--	--	--	--	--	--	750	690	60
MAY											
07...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	1000	900	100
JUN											
12...	20	10	0	0	1	5	3	2	2100	2000	60
22...	10	<10	1	1	0	5	0	10	710	660	50
JUL											
03...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	360	330	30
SEP											
07...	--	--	--	--	--	--	--	--	14000	14000	300
24...	--	--	--	--	--	--	--	--	--	--	--
24...	30	20	5	4	1	10	8	2	10000	10000	110
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	600	500	100
NOV											
13...	0	<10	1	0	1	3	0	3	1900	1800	60
19...	--	--	--	--	--	--	--	--	510	420	90
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	320	210	110
JAN , 1980											
15...	--	--	--	--	--	5	--	--	12000	12000	200
25...	--	--	--	--	--	--	--	--	1100	1000	80
FEB											
08...	--	10	0	0	0	6	5	1	290	230	60
22...	--	--	--	--	--	--	--	--	370	320	50
MAR											
06...	--	--	--	--	--	3	--	--	3600	3500	110
14...	--	--	--	--	--	--	--	--	1200	1200	50
20...	--	--	--	--	--	--	--	--	5000	4900	80
31...	--	--	--	--	--	--	--	--	2200	2200	10
APR											
01...	--	--	--	--	--	--	--	--	1700	1700	40

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB) (01050)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, SUS- PENDE RECOV- ERABLE (UG/L AS MN) (01054)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG) (71895)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)
OCT , 1978											
04...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	3	0	5	20	20	0	<.5	.0	<.5	--	0
JAN , 1979											
09...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	--	--	--	--	--	--	--	--	--	--	--
MAR											
06...	21	19	2	280	280	0	<.5	.0	<.5	--	0
APR											
13...	--	--	--	30	30	3	--	--	--	--	--
27...	--	--	--	40	30	10	--	--	--	--	--
MAY											
07...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	50	50	0	--	--	--	--	--
JUN											
12...	6	2	4	70	70	3	<.5	.0	<.5	--	0
22...	4	1	3	30	30	3	<.5	.0	<.5	--	0
JUL											
03...	--	--	--	20	20	2	--	--	--	--	--
AUG											
10...	--	--	--	10	6	4	--	--	--	--	--
21...	--	--	--	20	10	10	--	--	--	--	--
SEP											
07...	--	--	--	340	340	0	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	12	11	1	350	340	8	<.5	<.0	<.5	7	0
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	20	20	0	--	--	--	--	--
NOV											
13...	5	5	0	100	90	6	<.1	<.0	.2	2	0
19...	--	--	--	20	10	10	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	10	3	7	--	--	--	--	--
JAN , 1980											
15...	5	--	--	190	170	20	<.1	--	--	4	--
25...	--	--	--	40	40	5	--	--	--	--	--
FEB											
08...	2	2	0	20	10	10	<.1	<.0	<.1	2	0
22...	--	--	--	10	2	8	--	--	--	--	--
MAR											
06...	0	--	--	100	90	10	.2	--	--	7	--
14...	--	--	--	40	30	10	--	--	--	--	--
20...	--	--	--	250	250	3	--	--	--	--	--
31...	--	--	--	70	70	4	--	--	--	--	--
APR											
01...	--	--	--	60	60	4	--	--	--	--	--

SUPPLEMENTAL DATA C: WATER-QUALITY DATA, OCTOBER 1978 THROUGH APRIL 1980

James River at Cartersville, Virginia (0203500)--Continued

DATE	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE) (01146)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG) (01076)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN) (01091)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT , 1978										
04...	--	--	--	--	--	--	--	--	100	3
NOV										
06...	--	--	--	--	--	--	--	--	48	6
DEC										
05...	0	0	0	0	0	30	30	0	100	34
JAN , 1979										
04...	--	--	--	--	--	--	--	--	64	87
FEB										
06...	--	--	--	--	--	--	--	--	68	12
MAR										
06...	0	0	0	0	0	60	60	0	--	--
APR										
13...	--	--	--	--	--	--	--	--	100	19
27...	--	--	--	--	--	--	--	--	--	--
MAY										
07...	--	--	--	--	--	--	--	--	100	6
18...	--	--	--	--	--	--	--	--	--	--
JUN										
12...	0	0	0	0	0	80	70	8	93	62
22...	0	0	0	0	0	30	20	10	--	--
JUL										
03...	--	--	--	--	--	--	--	--	91	14
AUG										
10...	--	--	--	--	--	--	--	--	100	2
21...	--	--	--	--	--	--	--	--	--	20
SEP										
07...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	91	294
24...	0	0	0	0	0	50	40	10	--	--
OCT										
11...	--	--	--	--	--	--	--	--	49	150
24...	--	--	--	--	--	--	--	--	--	16
NOV										
13...	0	0	0	0	0	20	20	3	52	54
19...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	--	--	--	--	--	86	7
18...	--	--	--	--	--	--	--	--	--	--
JAN , 1980										
15...	--	--	--	--	--	30	--	--	72	157
25...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	0	0	0	0	0	40	20	20	100	3
22...	--	--	--	--	--	--	--	--	--	--
MAR										
06...	--	--	--	--	--	50	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
APR										
01...	--	--	--	--	--	--	--	--	--	--

SUPPLEMENTAL DATA D: PESTICIDE DATA

Susquehanna River at Conowingo, Maryland (01578310), November 1978 through April 1980

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	ATRA- ZINE, TOTAL (UG/L) (39630)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)
NOV , 1978									
09...	1115	.0	.00	.00	.0	.00	.00	.00	.00
DEC									
21...	1000	.0	.00	.10	.0	.00	.00	.00	.00
21...	1100	.0	.00	.00	.0	.00	.00	.00	.00
JAN , 1979									
10...	1030	.0	.00	--	.0	.00	.00	.00	.00
10...	1115	.0	.00	.00	.0	.00	.00	.00	.00
29...	1015	.0	.00	.00	.0	.00	.00	.00	.00
29...	1115	.0	.00	.00	.0	.00	.00	.00	.00
FEB									
28...	0945	.0	.00	.00	.0	.00	.00	.00	.00
MAR									
28...	1000	.0	.00	.00	.0	.00	.00	.00	.00
APR									
23...	1230	.0	.00	.00	.0	.00	.00	.00	.00
MAY									
22...	1100	.0	.00	.20	.0	.00	.00	.00	.00
JUN									
26...	1030	.0	.00	.30	.0	.00	.00	.00	.00
JUL									
24...	1200	.0	.00	.50	.0	.00	.00	.00	.00
AUG									
17...	1230	.0	.00	.20	.0	.00	.00	.00	.00
SEP									
04...	1100	.0	.00	.10	.0	.00	.00	.00	.00
OCT									
16...	1030	.0	.00	.10	.0	.00	.00	.00	.00
NOV									
13...	1200	.0	.00	.00	.0	.00	.00	.00	.00
DEC									
11...	1145	.0	.00	.00	.0	.00	.00	.00	.00
JAN , 1980									
15...	1030	.0	.00	.10	.0	.00	.00	.00	.00
29...	1100	.0	.00	.00	.0	.00	.00	.00	.00
FEB									
12...	1130	.0	.00	.00	.0	.00	.00	.00	.00
MAR									
10...	1000	.0	.00	.10	.0	.00	.00	.00	.00
22...	1500	.0	.00	.10	.0	.00	.00	.00	.00
24...	1320	.0	.00	.10	.0	.00	.00	.00	.00
APR									
02...	1200	.0	.00	.00	.0	.00	.00	.00	.00

SUPPLEMENTAL DATA D: PESTICIDE DATA--Continued

Susquehanna River at Conowingo, Maryland (01578310), November 1978 through April 1980--Continued

DATE	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	PER- THANE TOTAL (UG/L) (39034)
NOV , 1978									
09...	.00	.00	.00	.00	.00	--	.00	.00	.00
DEC									
21...	.00	.00	.00	.00	.00	--	.00	.00	.00
21...	.00	.00	.00	.00	.00	--	.00	.00	.00
JAN , 1979									
10...	.00	.00	.00	.00	.00	--	.00	.00	.00
10...	.00	.00	.00	.00	.00	--	.00	.00	.00
29...	.00	.00	.00	.00	.00	--	.00	.00	.00
29...	.00	.00	.00	.00	.00	--	.00	.00	.00
FEB									
28...	.00	.00	.00	.00	.00	--	.00	.00	.00
MAR									
28...	.00	.00	.00	.00	.00	--	.00	.00	.00
APR									
23...	.00	.00	.00	.00	.00	--	.00	.00	.00
MAY									
22...	.00	.00	.00	.00	.00	--	.00	.00	.00
JUN									
26...	.00	.00	.00	.00	.00	--	.00	.00	.00
JUL									
24...	.00	.00	.00	.00	.00	--	.00	.00	.00
AUG									
17...	.00	.00	.00	.00	.00	--	.00	.00	.00
SEP									
04...	.00	.00	.00	.00	.00	--	.00	.00	.00
OCT									
16...	.00	.00	.00	.00	.00	.00	.00	.00	.00
NOV									
13...	.00	.00	.00	.00	.00	.00	.00	.00	.00
DEC									
11...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN , 1980									
15...	.00	.00	.00	.00	.00	.00	.00	.00	.00
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00
FEB									
12...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR									
10...	.00	.00	.00	.00	.00	.00	.00	.00	.00
22...	.00	.00	.00	.00	.00	.00	.00	.00	.00
24...	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR									
02...	.00	.00	.00	.00	.00	.00	.00	.00	.00

SUPPLEMENTAL DATA D: PESTICIDE DATA--Continued

Susquehanna River at Conowingo, Maryland (01578310), November 1978 through April 1980--Continued

DATE	PROME- TONE TOTAL (UG/L) (39056)	PROME- TRYNE TOTAL (UG/L) (39057)	SIME- TRYNE TOTAL (UG/L) (39054)	SIMA- ZINE TOTAL (UG/L) (39055)	TOX- APHENE, TOTAL (UG/L) (39400)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
NOV , 1978								
04...	--	--	--	--	0	.00	.01	.00
DEC								
21...	--	--	--	--	0	.00	.00	.00
21...	--	--	--	--	0	.00	.00	.00
JAN , 1979								
10...	--	--	--	--	0	.00	.01	.00
10...	--	--	--	--	0	.00	.01	.00
29...	--	--	--	--	0	.02	.01	.00
29...	--	--	--	--	0	.00	.01	.00
FEB								
28...	--	--	--	--	0	.07	.02	.00
MAR								
28...	--	--	--	--	0	.03	.01	.00
APR								
23...	--	--	--	--	0	.07	.00	.00
MAY								
22...	--	--	--	--	0	.22	.00	.00
JUN								
26...	--	--	--	--	0	.09	.00	.00
JUL								
24...	--	--	.0	.0	0	.00	.00	.00
AUG								
17...	.0	.0	.0	.0	0	--	--	--
SEP								
04...	.0	.0	.0	.1	0	.17	.00	.00
OCT								
16...	.0	.0	.0	.0	0	.00	.00	.00
NOV								
13...	.0	.0	.0	.0	0	.00	.00	.00
DEC								
11...	.0	.0	.0	.0	0	.01	.00	.00
JAN , 1980								
15...	.3	.7	.0	.0	0	.00	.00	.00
29...	.0	.0	.0	.0	0	.03	.00	.00
FEB								
12...	.0	.0	.0	.0	0	.03	.00	.00
MAR								
10...	.0	.0	.0	.0	0	.16	.00	.00
22...	.0	.0	.0	.0	0	.02	.00	.00
24...	.0	.0	.0	.0	0	.02	.00	.00
APR								
02...	.0	.0	.0	.0	0	.01	.00	.00

SUPPLEMENTAL DATA D: PESTICIDE DATA--Continued

Potomac River at Chain Bridge at Washington, D.C. (01646580), March 1979 through March 1980

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	ATRA- ZINE, TOTAL (UG/L) (39630)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	ENDO- SULFAN, TOTAL (UG/L) (39388)
MAR , 1979											
01...	1230	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
27...	1000	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
APR											
26...	1300	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
MAY											
09...	1330	ND	ND	--	ND	ND	ND	ND	ND	ND	--
23...	1045	.0	.00	.20	.0	.00	.00	.00	--	.00	.00
JUN											
13...	1030	.0	.00	.40	.0	.00	.00	.00	--	.00	.00
JUL											
17...	1030	.5	.00	.30	.0	.00	.00	.00	--	.00	.00
AUG											
15...	1030	.0	.00	.30	.0	.00	.00	.00	--	.00	.00
SEP											
06...	1030	.0	.00	.40	.0	.01	.01	.00	--	.01	.00
OCT											
17...	1100	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
DEC											
12...	1030	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
JAN , 1980											
14...	1030	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
FEB											
11...	1030	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
MAR											
11...	1100	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
14...	1230	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
18...	1900	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
19...	1000	.0	.00	.00	.0	.00	.00	.00	--	.00	.00
22...	1330	.1	.00	.10	.0	.00	.00	.00	--	.00	.00

DATE	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL PARA- THION, TOTAL (UG/L) (39600)	METHYL TRI- THION, TOTAL (UG/L) (39790)	MIREX, TOTAL (UG/L) (39755)	PARA- THION, TOTAL (UG/L) (39540)
MAR , 1979											
01...	.00	--	.00	.00	.00	--	--	--	--	.00	--
27...	.00	--	.00	.00	.00	--	--	--	--	.00	--
APR											
26...	.00	--	.00	.00	.00	--	--	--	--	.00	--
MAY											
09...	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND
23...	.00	--	.00	.00	.00	--	--	--	--	.00	--
JUN											
13...	.00	--	.00	.00	.00	--	--	--	--	.00	--
JUL											
17...	.00	--	.00	.00	.00	--	--	--	--	.00	--
AUG											
15...	.00	--	.00	.00	.00	--	--	--	--	.00	--
SEP											
06...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
OCT											
17...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
DEC											
12...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
JAN , 1980											
14...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
FEB											
11...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
MAR											
11...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
18...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
18...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
19...	.00	--	.00	.00	.00	--	.00	--	--	.00	--
22...	.00	--	.00	.00	.00	--	.00	--	--	.00	--

ND Below limits of detection (not detected).

SUPPLEMENTAL DATA D: PESTICIDE DATA--Continued

Potomac River at Chain Bridge at Washington, D.C. (01646580), March 1979 through March 1980--Continued

DATE	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	PER- THANE TOTAL (UG/L) (39034)	PROME- TONE TOTAL (UG/L) (39056)	PROME- TRYNE TOTAL (UG/L) (39057)	SIME- TRYNE TOTAL (UG/L) (39054)	SIMA- ZINE TOTAL (UG/L) (39055)	TOX- APHENE, TOTAL (UG/L) (39400)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
MAR , 1979										
01...	.00	.00	--	--	--	--	0	.01	.01	.00
27...	.00	.00	--	--	--	--	0	.01	.01	.00
APR										
26...	.00	.00	--	--	--	--	0	.01	.00	.00
MAY										
09...	--	--	--	--	--	--	ND	--	--	--
23...	.00	.00	--	--	--	--	0	.01	.00	.00
JUN										
13...	.00	.00	--	--	--	--	0	.02	.00	.00
JUL										
17...	.00	.00	.0	.2	.0	.0	0	.07	.00	.00
AUG										
15...	.00	.00	.1	.3	.0	.0	0	.00	.00	.00
SEP										
06...	.00	.00	.0	.3	.0	.0	0	.14	.01	.00
OCT										
17...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
DEC										
12...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
JAN , 1980										
14...	.00	.00	.2	.0	.0	.0	0	.00	.00	.00
FEB										
11...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
MAR										
11...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
18...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
18...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
19...	.00	.00	.0	.0	.0	.0	0	.00	.00	.00
22...	.00	.00	.1	.1	.0	.0	0	.02	.00	.00

ND Below limits of detection (not detected).

SUPPLEMENTAL DATA D: PESTICIDE DATA--Continued

James River at Cartersville, Virginia (02035000), November 1979 through March 1980

DATE	TIME	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	ATRA- ZINE, TOTAL (UG/L) (39630)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)
NOV , 1979									
19...	0900	.0	.00	.00	.0	.00	.00	.00	.00
DEC									
06...	1310	.0	.00	.00	.0	.00	.00	.00	.00
18...	1300	.0	.00	.00	.0	.00	.00	.00	.00
JAN , 1980									
15...	1400	.0	.00	.00	.0	.00	.00	.00	.00
MAR									
20...	1030	.0	.00	.00	.0	.00	.00	.00	.00
31...	1300	--	--	.00	--	--	--	--	--

DATE	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	PER- THANE TOTAL (UG/L) (39034)
NOV , 1979									
19...	.00	.00	.00	.00	.00	.00	.00	.00	.00
DEC									
06...	.00	.00	.00	.00	.00	.00	.00	.00	.00
18...	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN , 1980									
15...	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR									
20...	.00	.00	.00	.00	.00	.00	.00	.00	.00
31...	--	--	--	--	--	--	--	--	--

DATE	PROME- TONE TOTAL (UG/L) (39056)	PROME- TRYNE TOTAL (UG/L) (39057)	SIME- TRYNE TOTAL (UG/L) (39054)	SIMA- ZINE TOTAL (UG/L) (39055)	TOX- APHENE, TOTAL (UG/L) (39400)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)
NOV , 1979								
19...	.0	.0	.0	.0	0	.00	.00	.00
DEC								
06...	.0	.0	.0	.0	0	.00	.00	.00
18...	.0	.0	.0	.0	0	.00	.00	.01
JAN , 1980								
15...	.0	.0	.0	.0	0	.00	.00	.00
MAR								
20...	.0	.0	.0	.0	0	.00	.00	.00
31...	.0	.0	.0	.0	--	--	--	--

SUPPLEMENTAL DATA E: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1979 THROUGH MARCH 1980

Susquehanna River at Conowingo, Maryland (01578310)

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	40100	25	2710	24100	10	651	91300	52	12800
2	56700	25	3830	27100	10	732	76500	52	10700
3	53200	25	3590	33100	8	715	69900	49	9250
4	57900	25	3910	59100	8	1280	58200	33	5190
5	77600	25	5240	66900	8	1450	50500	16	2180
6	74200	23	4610	70300	13	2470	55300	12	1790
7	101000	27	7360	73100	19	3750	41700	12	1350
8	118000	32	10200	61500	8	1330	34100	12	1100
9	111000	29	8690	51700	17	2370	12000	12	389
10	96300	28	7280	45700	15	1850	35100	13	1230
11	78600	25	5310	21600	12	700	35200	13	1240
12	72700	25	4910	44400	10	1200	31300	13	1100
13	58300	25	3940	39900	9	970	34000	15	1380
14	27900	25	1880	40500	9	984	31500	16	1360
15	47200	18	2290	34800	9	846	25900	16	1120
16	51200	18	2490	34400	9	836	11800	15	478
17	46100	13	1620	23700	10	640	36600	15	1480
18	38800	12	1260	13400	10	362	32600	13	1140
19	33800	13	1190	33800	10	913	28600	13	1000
20	23500	13	825	34100	8	737	24300	12	787
21	16900	22	1000	41200	6	667	27600	11	820
22	28700	25	1940	1010	3	8.2	9620	9	234
23	26500	24	1720	25700	5	347	11000	7	208
24	26100	24	1690	24900	10	672	38900	7	735
25	17700	23	1100	7460	13	262	17000	5	229
26	27600	20	1490	42100	17	1930	53500	7	1010
27	12100	13	425	65000	23	4040	75900	18	3690
28	14100	12	457	101000	24	6540	101000	32	8730
29	27000	12	875	173000	47	22000	82100	42	9310
30	30800	12	998	133000	52	18700	66700	31	5580
31	24000	10	648	---	---	---	69600	25	4700
TOTAL	1515600	---	95478	1447570	---	79952.2	1369320	---	92310

SUPPLEMENTAL DATA E: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1979 THROUGH MARCH 1980

Susquehanna River at Conowingo, Maryland (01578310)--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

58

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	54600	23	3390	17400	3	141	8970	5	121
2	49800	22	2960	950	3	7.7	904	5	12
3	43700	19	2240	946	3	7.7	13800	7	261
4	47600	18	2310	12200	3	99	11700	6	190
5	34100	15	1380	13300	3	108	11100	5	150
6	5220	13	183	17000	2	92	17700	6	287
7	33000	10	891	20700	2	112	17700	7	335
8	29600	7	559	16400	2	89	7770	7	147
9	28200	3	228	5460	2	29	1020	8	22
10	26400	2	143	2960	2	16	21000	8	454
11	22700	2	123	16700	2	90	42300	8	914
12	12400	2	67	14800	2	80	53100	7	1000
13	9620	2	52	14200	2	77	62400	13	2190
14	27700	2	150	16400	4	177	48700	19	2500
15	28400	3	230	16500	4	178	35100	33	3130
16	31300	3	254	8030	3	65	10400	22	618
17	33100	3	268	995	3	8.1	29700	12	962
18	38000	3	308	8190	3	66	51900	22	3080
19	32200	3	261	12000	2	65	65500	24	4240
20	15100	3	122	9920	2	54	84000	25	5670
21	33700	3	273	13200	3	107	119000	42	13500
22	29900	3	242	24000	3	194	173000	60	28000
23	28500	3	231	9080	2	49	215000	99	57500
24	30900	3	250	2350	2	13	202000	116	63300
25	25000	3	202	20900	3	169	161000	108	46900
26	11600	3	94	23600	4	255	146000	88	34700
27	5560	4	60	18400	5	248	139000	77	28900
28	16700	4	180	21800	5	294	116000	60	18800
29	22300	3	181	20200	5	273	98900	47	12600
30	18300	3	148	---	---	---	94200	35	8900
31	17100	3	139	---	---	---	136000	35	12900
TOTAL	842300	---	18119	378581	---	3163.5	2194864	---	352283

SUPPLEMENTAL DATA F: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1978 THROUGH MARCH 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

59

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	1770	17	81	1690	14	64	3430	15	139
2	1770	17	81	1700	14	64	4260	18	207
3	1790	18	87	1720	14	65	5030	21	285
4	1790	18	87	1800	14	68	5220	24	338
5	1880	17	86	1740	13	61	6360	26	446
6	2150	16	93	1700	13	60	6240	25	421
7	2080	16	90	1690	13	59	9320	23	579
8	2040	15	83	1710	12	55	8700	18	423
9	1950	15	79	1660	11	49	10800	38	1180
10	1930	14	73	1700	11	50	16300	118	5200
11	1840	14	70	1740	11	52	20700	141	7800
12	1790	13	63	1700	12	55	18600	73	3620
13	1710	13	60	1680	12	54	14600	42	1680
14	1720	13	60	1720	12	56	12300	32	1070
15	1840	13	65	1720	11	51	10400	26	730
16	1980	12	64	1870	11	56	8790	21	498
17	2170	12	70	2130	12	69	7370	18	358
18	2130	12	69	2620	12	85	6310	15	256
19	2080	12	67	2730	13	96	5700	11	169
20	2040	12	66	2700	14	102	5170	7	98
21	2020	12	65	2760	12	89	5120	7	97
22	2000	12	65	2910	9	71	4800	7	91
23	1960	13	69	2870	9	70	4790	7	91
24	1920	13	67	2870	9	70	9070	45	1240
25	1880	11	56	2490	9	61	16700	119	5500
26	1800	10	49	2320	10	63	21400	186	10700
27	1810	11	54	2440	10	66	22900	111	6860
28	1800	12	58	2540	11	75	19300	60	3130
29	1770	13	62	2750	11	82	15300	32	1320
30	1700	14	64	3380	12	110	12300	20	664
31	1770	15	72	---	---	---	10300	20	556
TOTAL	58880	---	2175	65050	---	2028	327580	---	55746

SUPPLEMENTAL DATA F: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1978 THROUGH MARCH 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

69

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	10000	22	594	17800	24	1150	78200	187	39500
2	22400	200	13600	15400	22	915	61200	99	16400
3	35100	271	25900	13500	20	729	55500	78	11700
4	41900	333	37700	12200	18	593	54400	83	12200
5	33600	180	16100	11200	16	484	55500	106	15900
6	24200	103	6460	10000	15	405	77500	134	28000
7	20000	58	3130	9340	14	353	91200	158	38900
8	20600	23	1280	8470	13	297	76200	165	33900
9	22600	27	1650	8920	12	289	55200	161	24000
10	21200	31	1770	7300	8	158	44000	146	17300
11	20200	29	1580	5560	6	90	41000	116	12800
12	16700	27	1220	5790	4	63	37100	81	8110
13	14200	25	958	5130	2	28	31000	44	3680
14	13100	23	814	5220	2	28	27200	32	2350
15	12800	21	726	5860	2	32	24200	29	1890
16	11800	19	605	5770	2	31	21500	26	1510
17	10700	17	491	6020	2	33	19800	21	1120
18	9480	15	384	5190	2	28	18000	16	778
19	8470	15	343	4940	2	27	16600	11	493
20	8370	15	339	4690	2	25	15500	6	251
21	22700	78	6340	6720	2	36	14500	10	391
22	44700	295	35600	7810	2	42	13700	13	481
23	68100	350	64400	9350	4	101	12800	10	346
24	65200	322	56700	14300	53	2580	14100	20	761
25	101000	593	169000	106000	328	99000	19600	79	4180
26	103000	512	149000	189000	533	272000	39800	131	14100
27	54200	212	31000	201000	517	281000	48300	172	22400
28	36900	112	11200	147000	351	139000	36800	106	10500
29	29800	62	4990	---	---	---	28800	68	5290
30	24700	43	2870	---	---	---	24100	51	3320
31	21200	28	1600	---	---	---	21000	40	2270
TOTAL	948920	---	648344	849480	---	799517	1174300	---	334821

SUPPLEMENTAL DATA F: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1978 THROUGH MARCH 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

61

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	18700	25	1260	18500	29	1450	19400	64	3350
2	17200	21	975	17000	16	734	16400	70	3100
3	18600	21	1050	16000	15	648	21500	118	8790
4	27800	66	4950	14500	13	509	33100	310	27700
5	32200	140	12200	13300	12	431	33900	152	13900
6	36400	196	19300	13000	10	351	32600	196	17300
7	33700	203	18500	13200	8	285	26800	143	10300
8	27800	155	11600	13200	6	214	20500	102	5650
9	24200	61	4000	12200	6	198	16400	75	3320
10	24500	29	1920	11200	6	181	14000	58	2190
11	23300	32	2010	10400	6	168	12900	46	1600
12	20300	22	1210	9710	6	157	18300	69	3410
13	18000	20	972	9970	6	162	20600	67	3730
14	16900	18	821	15700	45	1910	16000	66	2850
15	16600	16	717	22900	68	4200	12800	51	1760
16	16100	14	609	25800	80	5570	10800	60	1750
17	15500	12	502	21300	70	4030	10200	60	1650
18	14600	9	355	17200	41	1900	10900	57	1680
19	13800	9	335	14500	30	1170	9670	34	888
20	13000	9	316	12700	26	892	8920	22	530
21	12300	9	299	11400	18	554	7950	14	301
22	11600	9	282	10600	12	343	7140	10	193
23	11100	9	270	9960	10	269	6450	8	139
24	10600	9	258	13900	38	1430	6080	11	181
25	10200	9	248	17100	108	4990	5640	15	228
26	10100	9	245	23700	144	9210	5250	12	170
27	10300	9	250	36500	206	20300	5000	11	148
28	11100	9	270	33200	129	11600	4790	11	142
29	15700	36	1530	25400	98	6720	4600	10	124
30	19100	62	3200	21200	64	3660	4480	10	121
31	---	---	---	18100	45	2200	---	---	---
TOTAL	551300	---	90454	523340	---	86436	423070	---	117195

SUPPLEMENTAL DATA F: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1978 THROUGH MARCH 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	4600	12	149	4970	14	188	8820	48	1140
2	5630	21	319	5170	20	279	7020	39	739
3	5820	19	299	5920	35	559	5690	35	538
4	5750	17	264	8010	41	887	4920	32	425
5	5810	15	235	5030	40	543	8390	160	6200
6	5450	12	177	4100	36	399	51200	812	112000
7	5710	12	185	3600	25	243	84000	525	119000
8	6370	16	275	3130	18	152	77500	443	93900
9	5970	13	210	3260	18	158	38900	262	27300
10	4950	11	147	3180	15	129	25000	158	10500
11	4350	10	117	3120	20	168	18600	96	4700
12	4000	10	108	4610	33	411	14700	65	2580
13	4040	18	196	5080	40	549	12200	45	1480
14	4170	20	225	5040	30	408	10700	32	924
15	4430	22	263	5000	31	418	9740	32	842
16	4540	18	221	5630	38	578	9640	30	781
17	4660	16	201	5400	36	525	10200	28	771
18	6850	22	407	4380	34	402	9030	30	731
19	7690	25	519	3900	46	484	7860	25	531
20	6540	27	477	4100	35	387	6970	22	414
21	6100	20	329	5540	48	718	7240	27	540
22	6200	21	352	4790	53	685	24700	246	16800
23	5500	21	312	4580	40	495	32100	212	17800
24	5970	22	355	5340	37	533	36600	230	22000
25	5120	20	276	10200	78	2150	31400	174	14400
26	4930	23	306	7510	67	1360	25900	122	8530
27	4640	26	326	7770	74	1870	20000	80	4320
28	4920	28	372	9400	75	1900	16300	45	1980
29	6190	28	468	6820	62	1140	13800	36	1340
30	6850	30	555	5600	58	877	12100	30	980
31	5320	24	345	8270	52	1160	---	---	---
TOTAL	169070	---	8990	168450	---	20755	641220	---	474186
YEAR	5900660		2640647						

SUPPLEMENTAL DATA F: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1978 THROUGH MARCH 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	30600	335	30500	10000	5	135	22000	30	1780
2	42500	380	43500	9680	10	261	18500	15	749
3	33900	240	22000	10800	10	292	16100	10	435
4	48700	210	28000	36700	315	31000	14300	10	386
5	55800	280	42000	45000	300	37000	13100	10	354
6	54300	225	34000	32500	80	7000	12100	10	326
7	67100	235	41500	25100	30	2030	11700	15	500
8	50300	160	21700	21200	25	1430	11100	10	300
9	37900	90	9210	18700	25	1260	10500	5	142
10	49200	120	16700	17500	20	945	9850	2	53
11	69700	180	33500	16300	20	880	9340	5	50
12	78000	283	60000	17000	20	918	8830	10	238
13	63600	175	30400	15600	10	421	8610	10	232
14	51400	100	13900	15300	20	826	9000	2	49
15	42000	65	7370	15100	10	408	9600	2	52
16	34500	60	5590	15000	10	405	10800	2	58
17	28300	35	2670	14400	10	389	11000	2	59
18	24200	30	1960	13600	10	367	10600	2	57
19	21200	30	1720	12900	10	348	9770	1	26
20	18500	25	1250	12300	10	332	9200	1	25
21	16500	25	1110	11600	10	313	9000	1	24
22	15000	20	810	11000	5	148	8740	1	24
23	13900	20	751	10500	10	283	8250	5	111
24	13900	20	751	9990	5	135	8020	20	433
25	14000	20	756	9700	5	131	8420	20	455
26	13800	15	559	9920	10	268	15300	118	4950
27	12800	15	518	12900	10	3500	30700	165	13000
28	11700	15	474	33900	205	19000	28200	45	3430
29	11200	10	302	35900	85	8500	22300	40	2410
30	10900	10	294	27400	45	3330	18700	30	1510
31	10600	10	286	---	---	---	16400	10	443
TOTAL	1046000	---	454081	547490	---	122255	410030	---	32661

SUPPLEMENTAL DATA F: SUSPENDED-SEDIMENT RECORDS, OCTOBER 1979 THROUGH MARCH 1980

Potomac River at Chain Bridge at Washington, D.C. (01646580)--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	14700	10	397	11800	6	191	9580	5	129
2	13400	10	362	11800	6	191	8500	10	229
3	12500	10	337	9230	5	125	7780	1	21
4	11600	5	157	9270	5	125	7220	5	97
5	11100	5	150	9280	5	125	7030	15	285
6	10500	1	28	8740	5	95	8290	5	112
7	9680	1	26	8110	5	65	8820	10	238
8	9260	1	25	8900	10	195	11400	20	690
9	9100	2	49	8060	5	109	16200	50	2190
10	8750	1	24	7890	5	107	14600	20	788
11	8500	1	23	7510	5	101	14900	15	603
12	9680	10	261	7300	5	99	14600	15	591
13	9780	5	132	6850	5	92	14300	15	579
14	10600	5	143	6570	2	35	15300	15	620
15	16000	20	900	6300	2	34	14800	10	400
16	30700	60	5700	6220	5	84	14300	10	386
17	42100	85	9500	6290	5	85	15700	20	848
18	33500	60	5430	6010	5	81	24300	40	3000
19	36000	55	5350	5910	1	16	41800	100	12000
20	37200	35	3520	5770	2	31	46200	70	9000
21	38500	40	4160	5820	2	31	42300	100	12000
22	31900	55	4740	6190	5	84	58700	588	92100
23	26500	35	2500	6560	20	354	56800	178	27900
24	23100	30	1870	7060	5	95	42900	114	13400
25	19600	15	794	10400	35	1000	34100	130	12000
26	17500	10	472	13600	50	1840	29400	55	4370
27	15900	10	429	13000	125	4390	25300	30	2050
28	14800	5	200	11500	10	310	22100	15	895
29	13800	5	186	10500	35	992	24700	25	1670
30	12800	10	346	---	---	---	31700	60	5140
31	12200	6	198	---	---	---	40700	70	7690
TOTAL	571250	---	48409	242440	---	11082	724320	---	212021

SUPPLEMENTAL DATA G: DATA FROM ANALYSIS OF BOTTOM MATERIAL AND WATER SAMPLES

Susquehanna River below Conowingo Dam at Conowingo, Maryland (01579515), November 3, 1979

		SPE- CIFIC CON- DUCT- ANCE			SOLIDS, RESIDUE AT 105 DEG. C,	SOLIDS, VOLA- TILE IN BOTTOM	NITRO- GEN, NITRATE	NITRO- GEN, NITRATE	NITRO- GEN, NITRATE	NITRO- GEN, NITRATE	NITRO- GEN, NITRATE	
DATE	TIME	(MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TOTAL (MG/L) (00500)	MA- TERIAL (MG/KG) (00496)	TOTAL (MG/L AS N) (00620)	SOLVED (MG/L AS N) (00618)	SOLVED (MG/L AS N03) (71851)	TOTAL (MG/L AS N) (00615)	DIS- SOLVED (MG/L AS N) (00613)	
NOV , 1979 03...	0900	272	8.3	11.5	155	5170	1.6	1.6	6.9	.03	.04	
DATE		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N02) (71856)	NITRO- GEN, NO2+N03 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+N03 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+N03 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	
NOV , 1979 03...	.13	1.6	1.6	1.6	.05	.04	4.7	.06	.05	.67	.27	
DATE		NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, TOTAL (MG/L AS N03) (71887)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN,TOT IN BOT- TOM MA- TERIAL (MG/KG AS N) (00603)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, TOTAL (MG/L AS P04) (71886)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)
NOV , 1979 03...	.72	.41	.31	2800	2.3	10	1.9	2800	.03	.09	.03	
DATE		PHOS- PHORUS, ORTHO. DIS- SOLVED (MG/L AS P) (70507)	PHOS- PHORUS, ORTHO. DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO. DIS- SOLVED (MG/L AS P04) (00660)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL) (01107)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038)
NOV , 1979 03...	.04	.00	.00	67	700	100	600	0	<10	10	10	
DATE		COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE) (01044)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN) (01054)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921)
NOV , 1979 03...	<10	420	390	30	8700	10	90	90	0	960	.00	

SUPPLEMENTAL DATA G: DATA FROM ANALYSIS OF BOTTOM MATERIAL AND WATER SAMPLES

Susquehanna River below Conowingo Dam at Conowingo, Maryland (01579515), November 3, 1979--Continued

DATE	/INC. RECOV. FM BOT- TUM MA- TERIAL (UG/G AS ZN) (01093)	CARBON, TOTAL (MG/L AS C) (00690)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, INOR- GANIC, TOTAL (MG/L AS C) (00695)	CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) (00691)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)	PCB, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39351)	DDD, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39363)
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NOV , 1979

03... 90 16 2.0 14 13 1.1 .0 0 .0 0 .4

DATE	DDE, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39368)	DDT, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39373)	DI- AZINON, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39571)	DI- ELDRIN, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39399)	HEPTA- CHLOR, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TUM MA- TERIAL (UG/KG) (39423)	LINDANE TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39343)	MALA- THION, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39531)	METH- OXY- CHLOR, TOT. IN BOT- TUM MA- TERIAL (UG/KG) (39481)
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NOV , 1979

03... .2 .7 .0 .0 .0 .0 .0 .0 .0 .0 .0

DATE	METHYL PARA- THION, TOT. IN BOT- TUM MA- TERIAL (UG/KG) (39601)	METHYL TRI- THION, TOT. IN BOT- TUM MA- TERIAL (UG/KG) (39791)	PARA- THION, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39541)	TOXA- PHENE, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39403)	TRI- THION, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39787)	2,4-D, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39731)	2,4,5-T TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39741)	SILVEX, TOTAL IN BOT- TUM MA- TERIAL (UG/KG) (39761)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)
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NOV , 1979

03... .0 .0 .0 0 .0 0 0 .0 10.9 .000

