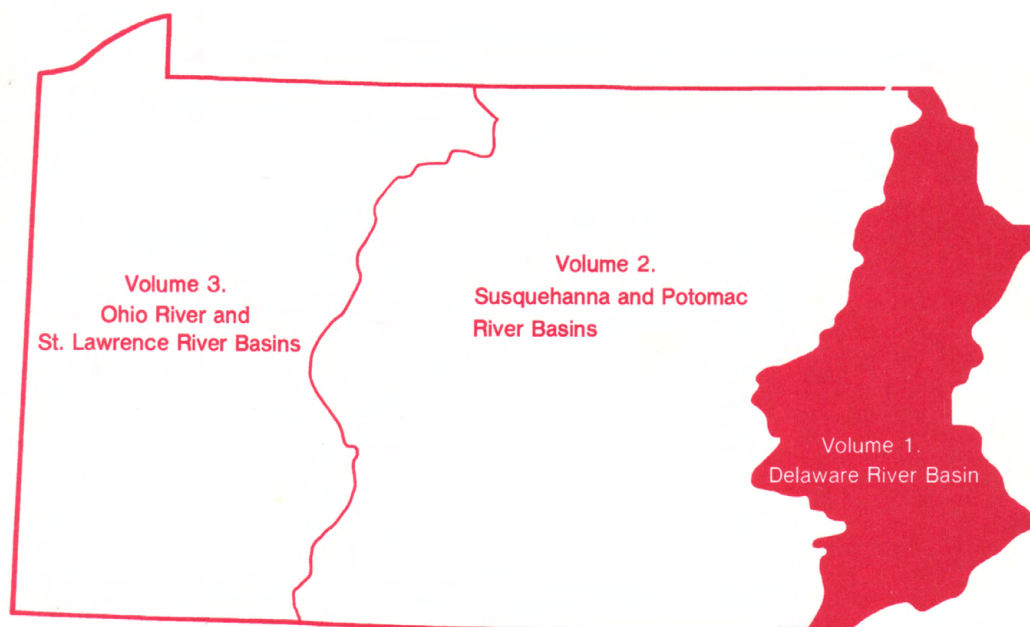
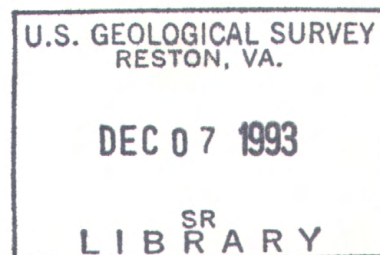


Water Resources Data Pennsylvania Water Year 1992

Volume 1. Delaware River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-92-1
Prepared in cooperation with the Pennsylvania Department
of Environmental Resources, the Philadelphia Water
Department and with other State, municipal, and
Federal agencies

CALENDAR FOR WATER YEAR 1992

1991

OCTOBER

S	M	T	W	T	F	S
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1992

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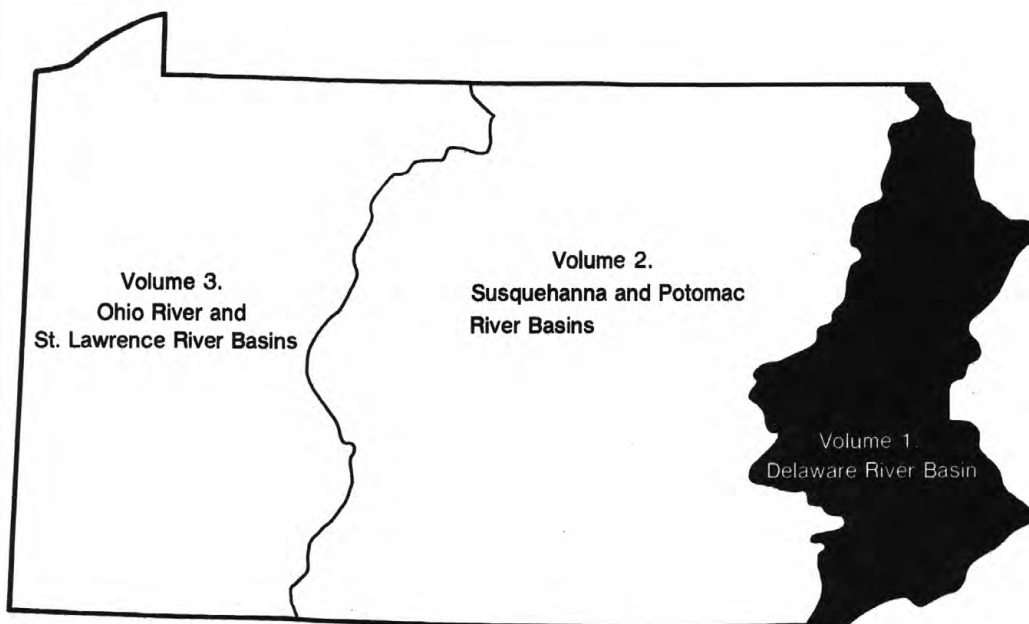
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Water Resources Data Pennsylvania Water Year 1992

Volume 1. Delaware River Basin

by K.E. White, T.E. White, R.L. Druther, and P. Moleski



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-92-1
Prepared in cooperation with the Pennsylvania Department
of Environmental Resources, the Philadelphia Water
Department and with other State, municipal, and
Federal agencies

U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
Robert M Hirsch, Acting Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey, WRD
840 Market Street
Lemoyne, PA 17043
1993

PREFACE

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

- Volume 1. Delaware River Basin
- Volume 2. Susquehanna and Potomac River Basins
- Volume 3. Ohio River and St. Lawrence River Basins

Volume 1 was prepared in cooperation with the Commonwealth of Pennsylvania and other agencies under the general supervision of David E. Click, District Chief, Pennsylvania District, and Charles R. Wood, Subdistrict Chief, Malvern Subdistrict. It is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data.

Richard Campbell
George Jung
Cynthia R. Lesitsky
Michael Collins

Victor Corcino
Cynthia L. Gilliam
Curtis Schreffler
Andrew G. Reif

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4. Title and Subtitle Water Resources Data for Pennsylvania Water Year 1992 Volume 1, Delaware River Basin		5. Report Date September 1993		
		6.		
7. Author(s) K.E. White, T.E. White, R.L. Druther, and P. Moleski		8. Performing Organization Rept. No. USGS-WDR-PA-92-1		
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 840 Market Street Lemoyne, Pa. 17043		10. Project/Task/Work Unit No.		
		11. Contract(C) or Grant(G) No. (C) (G)		
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 840 Market Street Lemoyne, Pa. 17043		13. Type of Report & Period Covered Annual Oct. 1, 1991, to Sept. 30, 1992		
		14.		
15. Supplementary Notes Prepared in cooperation with the State of Pennsylvania and other agencies.				
16. Abstract (Limit: 200 words) Water-resources data for the 1992 water year for Pennsylvania consist of records of discharge and water quality of streams; contents and elevations of lakes and reservoirs; and water levels and water quality of ground-water wells. This report, Volume 1, includes records from the Delaware River Basin. Specifically, it contains; (1) discharge records for 85 continuous record streamflow-gaging stations and 15 partial-record stations, and 5 miscellaneous streamflow sites; (2) elevation and contents records for 12 lakes and reservoirs and elevations for 1 tidal station; (3) water-quality records for 28 gaging stations and 48 ungaged streamsites; and (4) water-level records for 17 observation wells. Locations of these sites are shown on figures 6-9. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data, together with the data in Volumes 2 and 3, represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, Local, and Federal agencies in Pennsylvania.				
17. Document Analysis a. Descriptors *Pennsylvania, *Hydrologic data, *Ground water, *Surface water, *Water quality, Gaging stations, Streamflow, Flow rates, Lakes, Reservoirs, Chemical analysis, Sediments, Water Temperature, Water analysis, Water levels, Water wells, Data collection sites b. Identifiers/Open-Ended terms c. COSATI Field/Group				
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Department of Commerce

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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(Letter after station name designates types of data: (d) discharge, (c) chemical, (b) biological, (t) water temperature, (e) elevation, gage height, or contents, (s) sediment).

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Dilldown Creek near Long Pond (d)	01448500	102
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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

	Station number	Page
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French Creek near Phoenixville (dc)	01472157	202
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East Branch:		
Marsh Creek near Glenmoore (d)	01480675	255
Marsh Creek near Downingtown (d)	01480685	257
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GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED

GROUND-WATER LEVELS

BERKS COUNTY	
Well 402615075530501 Local number BE 623	313
BUCKS COUNTY	
Well 402643075150501 Local number BK 929	314
Well 401157075032001 Local number BK 1020	315
CARBON COUNTY	
Well 410123075425401 Local number CB 104	316
CHESTER COUNTY	
Well 395450075485401 Local number CH 10	317
DELAWARE COUNTY	
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Well 395512075293701 Local number DE 723	319
LEBANON COUNTY	
Well 403429075392401 Local number LB 372	320
LEHIGH COUNTY	
Well 403429075392401 Local number LE 644	321
MONROE COUNTY	
Well 411223075234901 Local number MO 190	322
MONTGOMERY COUNTY	
Well 400808075210401 Local number MG 225	323
Well 401310075181702 Local number MG 884	324
NORTHAMPTON COUNTY	
Well 403511075210001 Local number NP 83	325
PHILADELPHIA COUNTY	
Well 395342075102101 Local number PH 12	326
PIKE COUNTY	
Well 410940074583401 Local number PI 200	327
SCHUYLKILL COUNTY	
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WATER RESOURCES DATA - PENNSYLVANIA, 1992

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations (listed in downstream order) in Pennsylvania have been discontinued. Daily streamflow records were collected and published for the period of record shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Information regarding these stations may be obtained from the District Office at the address given on the back of the title page of this report

Discontinued surface-water discharge stations

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
DELAWARE RIVER BASIN			
North Branch Calkins Creek near Damascus	01427650	7.02	1965-73
Lackawaxen River at West Hawley	01430500	206	1922-37
Shohola Creek near Shohola	01432500	83.6	1920-28
Middle Creek near Hawley	01431000	78.4	1945-59
McMichaels Creek at Stroudsburg	01441000	65.3	1912-37
Pocono Creek near Stroudsburg	01441500	41.0	1912-19
Martins Creek near East Bangor	01446600	10.4	1962-77
Beaver Creek near Pocono Pines	01447550	0.96	1988-89
Lehigh River at Tannery	01448000	322	1919-58
Wild Creek at Hatchery	01449500	16.8	1941-78
Pohopoco Creek near Parryville	01450000	109	1941-69
East Branch Monocacy Creek near Bath	01452300	5.35	1963-68
Saucon Creek at Lanark	01453500	12.1	1948-53
South Branch Saucon Creek at Friedensville	01454000	10.3	1948-53
Saucon Creek at Friedensville	01454500	26.6	1948-53
Tohickon Creek at Point Pleasant	01460000	107	1884-98, 1901-12
Cooks Run at New Britain	01464741	3.08	1985-89
Neshaminy Creek at Rushland	01465000	134	1885-1912
Poquessing Creek at Trevoise Road, Philadelphia	01465770	5.08	1932-33
Poquessing Creek above Byberry Creek at Philadelphia	01465780	13.2	1965-80
Walton Run at Philadelphia	01465785	2.17	1965-70
Byberry Creek at Chalfont Road, Philadelphia	01465790	5.34	1965-77
Byberry Creek at Grant Avenue, Philadelphia	01465795	7.13	1966-77
Pennypack Creek at Pine Road, Philadelphia	01467042	37.9	1965-70
Pennypack Creek below Verree Road, Philadelphia	01467045	42.8	1965-80
Wooden Bridge Run at Philadelphia	01467050	3.35	1966-80
Tacony Creek near Jenkintown	01467083	5.25	1973-78
Rock Creek above Curtis Arboretum near Philadelphia	01467084	1.15	1972-78
Jenkintown Creek at Elkins Park	01467085	1.17	1974-78
Tacony Creek above Adams Avenue, Philadelphia	01467086	16.7	1966-86
Frankford Creek at Torresdale Avenue, Philadelphia	01467089	33.8	1967-80
Schuylkill River at Pottsville	01467500	53.4	1944-69
Little Schuylkill River at Dreherstown	01470000	122	1948-50
Maiden Creek Tributary at Lenhartsville	01470720	7.46	1964-65
Monocacy Creek at Limekiln	01471700	6.68	1966-79
Limekiln Creek at Limekiln	01471710	2.49	1982
Pine Creek Near Manatawny	01471800	9.70	1982
Bieber Creek near Lobachsville	01471835	9.08	1982
Oysterville Creek at Manatawny	01471845	9.29	1982
Manatawny Creek at Earlville	01471900	60.9	1982
Pickering Creek near Chester Springs	01472174	5.98	1967-82
Perkiomen Creek near Frederick	01472500	152	1885-1912
Schuylkill River at Norristown	01473500	1760	1928-32
Wissahickon Creek at Fort Washington	01473900	40.8	1962-68
Wissahickon Creek at Bells Mill Road, Philadelphia	01473950	53.6	1966-70, 1974-81
Wissahickon Creek at Livezey Lane, Philadelphia	01473980	59.2	1967-70
Darby Creek near Darby	01475510*	37.4	1964-90
Cobbs Creek at US Highway No.1 at Philadelphia	01475530	4.78	1965-80
Cobbs Creek below Indian Creek near Upper Darby	01475540	10.6	1965-73
Naylor Creek at West Chester Pike near Philadelphia	01475545	1.10	1974-78
Cobbs Creek at Darby	01475550	22.0	1964-90
Crum Creek at Woodlyn	01476000	33.3	1932-37
Ridley Creek at Moylan	01476500	31.9	1932-54
East Branch Brandywine Creek at Dorlan	01480665	33.4	1967-68
Marsh Creek near Lyndell	01480680	17.8	1961-69
East Branch Brandywine Creek at Downingtown	01480800	81.6	1958-68

WATER RESOURCES DATA - PENNSYLVANIA, 1992

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following continuous-record water-quality stations (listed in downstream order) have been discontinued. Daily records were collected and published for the period of record shown for each station. Discontinued stations with less than three years of record, or stations with data collection less than daily, have not been included. Stations with an asterisk (*) after the station number are currently operated as partial-record stations. Information regarding these stations may be obtained from the District Office at the address given on the back of the title page of this report.

The following abbreviations are used to identify the record type: SC (specific conductance); pH (pH); Temp (water temperature); DO (dissolved oxygen); Sed (sediment concentration and discharge); Biol (biological).

Discontinued continuous-record water-quality stations

Station name	Station number	Drainage area (mi ²)	Type of Record	Period of record (water years)
DELAWARE RIVER BASIN				
Delaware Bay at Ship John Shoal Light, NJ	01412350	--	SC, Temp	1968-86
Delaware River at Narrowsburg, NY	01427740	2,023	SC, pH	1948-51
Delaware River at Montague, NJ	01438500	3,480	Temp	1956-57
			SC, pH	1956-73
Delaware River at Dingmans Ferry, PA	01439000	3,542	Temp, SC, pH	1950-53
Delaware River near East Stroudsburg, PA	01440090	3,830	SC, DO, Temp	1966-78
			pH	1972-78
Delaware River at Dunnfield, NJ	01442750	4,120	Sed	1964-75
Delaware River at Belvidere, NJ	01448000	4,535	Temp	1944-47
				1962-63
			SC	1962-63
Delaware River at Easton, PA	01446700	4,636	SC, DO, Temp, pH	1967-77
Lehigh River at Walnutport, PA	01451000	889	Sed	1948-53
Jordan Creek near Schnecksville, PA	01451800	53.0	Sed	1967-69
Jordan Creek at Allentown, PA	01452000	75.8	Sed	1967-69
Lehigh River at Bethlehem, PA	01453000	1,279	SC, pH	1906-07
				1956-72
Delaware River at Burlington-Bristol Bridge	01464600	7,163	Temp	1954-75, 1979-80
			DO	1961-75, 1978-80
			SC, pH	1967-75, 1978-80
			Sed	1956-58, 1965-69
Neshaminy Creek near Langhorne, PA	01465500	210	Sed	1965-69
Poquessing Creek at Trevoze Road, Philadelphia, PA	01465770	5.08	Sed	1965-70
Poquessing Creek above Byberry Creek, Philadelphia, PA	01465780	13.2	Sed	1965-68
Walton Run at Philadelphia, PA	01465785	2.17	Sed	1966-68, 1970
Byberry Creek at Chalfont Road, Philadelphia, PA	01465790	5.34	Sed	1965-70
Byberry Creek at Grant Avenue, Philadelphia, PA	01465795	7.13	Sed	1965-70
Poquessing Creek at Grant Avenue, Philadelphia, PA	01465798	21.4	Sed	1965-70
Delaware River at Torresdale Intake, Philadelphia, PA	01467030	7,781	Temp	1956-57, 1960-81
			DO	1961-81
			SC	1963-81
			pH	1968-81
Pennypack Creek at Pine Road, Philadelphia, PA	01467042	37.9	Sed	1965-69
Pennypack Creek below Verre Road, Philadelphia, PA	01467045	42.8	Sed	1965-69
Wooden Bridge Run at Philadelphia, PA	01467049	3.35	Sed	1965-70
Delaware River at Palmyra, NJ	01467060	7,850	Sed	1962-64
Tacony Creek at County Line, Philadelphia, PA	01467084	16.2	Sed	1966-69
Frankford Creek at Torresdale Avenue, Philadelphia, PA	01467088	33.8	Sed	1966-70
Delaware River at Lehigh Avenue, Philadelphia, PA	01467100	7,935	Temp, SC, pH, DO	1949-68
Delaware River at Wharton Street, Philadelphia, PA	01467300	7,998	Temp, SC, pH, DO	1949-68
Delaware River at League Island, Philadelphia, PA	01467400	8,072	Temp, SC, pH, DO	1949-68
Schuylkill River at Port Carbon, PA	01467470	27.1	SC, pH, Sed	1949-51, 1963
Schuylkill River at Pottsville, PA	01467500	53.4	SC, pH	1948-51, 1963-66
			Sed	1963-66
West Branch Schuylkill River at Cressona, PA	01467950	52.5	Sed	1963-66
Schuylkill River at Landingville, PA	01468500	133	SC, pH, Temp	1947-53
			Sed	1947-53, 1963-65
Schuylkill River at Auburn, PA	01469000	160	Sed, SC, pH	1947-51, 1963-65
Little Schuylkill River at South Tamaqua, PA	01469700	65.7	SC, pH	1948-51, 1963
			Sed	1950-53, 1963
Little Schuylkill River at Dreherstown, PA	01470000	122	SC, pH, Temp, Sed	1947-51, 1963-65
Schuylkill River at Berne, PA	01470500	355	Temp	1948-53, 1957-81
			SC, pH	1963-81
			Sed	1947-81
Maiden Creek Tributary at Lenhartsville, PA	01470720	7.46	Sed	1963-65
Maiden Creek near East Berkley, PA	01470760	192	Sed	1963-65
Tulpehocken Creek near Reading, PA	01471000	211	Sed	1963-65
Schuylkill River at Pottstown, PA	01472000	1,147	Temp	1944-51, 1956
				1963-66
			Sed, pH	1948-51, 1963-66
			SC	1948-51, 1963-66
				1985-89
Pigeon Creek near Bucktown, PA	01472054	4.20	Biol	1970-83
Pigeon Creek at Porters Mill, PA	01472065	6.97	Biol	1970-83
Stony Run at Spring City, PA	01472110	4.07	Biol	1970-83
Schuylkill River at Black Rock Dam at Mont Clare, PA	01472119	--	SC, DO	1986-90
French Creek at Trythall, PA	01472126	5.06	Biol	1971-83

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Discontinued continuous-record water-quality stations--Continued

Station name	Station number	Drainage area (mi ²)	Type of Record	Period of record (water years)
DELAWARE RIVER BASIN				
French Creek near Knauertown, PA	01472129	11.7	Biol	1970-83
Pickering Creek near Chester Springs, PA	01472174	5.98	Sed	1967-69
Perkiomen Creek at Graterford, PA	01473000	279	SC,pH,Temp	1946-51 1948-53 1963-66
Schuylkill River at Norristown Dam at Bridgeport, PA	01473499	--	Sed	1985-90
Schuylkill River at Plymouth Dam, PA	01473675	--	SC,DO	1985-90
Schuylkill River at Flat Rock Dam at West Manayunk, PA	01473780	--	SC,DO	1985-90
Schuylkill River at Manayunk, PA	01473800	893	SC,pH	1947-70
			Sed	1947-86
			Temp	1956-70
Wissahickon Creek at Fort Washington, PA	01473900	40.8	Sed	1963-69
Wissahickon Creek at Bells Mill Road, Philadelphia, PA	01473950	53.6	Sed	1966-69
Wissahickon Creek at Livezey Lane, Philadelphia, PA	01473980	59.2	Sed	1966-69
Wissahickon Creek at mouth, Philadelphia, PA	01474000	64.0	Sed	1966-69
Darby Creek near Darby, PA	01475510	37.4	Sed	1965-69
Cobbs Creek at US Highway 1 near Philadelphia, PA	01475530	4.78	Sed	1965-70
Cobbs Creek below Indian Creek near Upper Darby, PA	01475540	9.65	Sed	1965-69
Cobbs Creek at Darby, PA	01475550	22.0	Sed	1965-69
Crum Creek near Paoli, PA	01475830	6.16	Biol	1970-83
Delaware River at Eddystone, PA	01476200	10,190	Temp,SC,pH,DO	1949-68
Delaware River at Marcus Hook, PA	01477200	10,370	Temp,SC,pH,DO	1949-77
West Branch Brandywine Creek near Honey Brook, PA	01480300	18.7	Sed	1965-66,1968
East Branch Brandywine Creek near Struble Dam, PA	01480647	4.36	Biol	1972-1982
Marsh Creek near Lyndell, PA	01480680	17.8	Temp	1965-66
			Sed	1965-66,1968
Marsh Creek near Downingtown, PA	01480695	20.3	Temp	1973-87
Brandywine Creek at Chadds Ford, PA	01481000	287	Sed	1963-70
Delaware River at Delaware Memorial Bridge, DE	01482100	11,030	Temp	1956-81
			DO	1962-81
			SC	1963-81
			pH	1968-81

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State and Federal agencies, collects a large amount of data pertaining to the water resources of Pennsylvania each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Pennsylvania, Volumes 1, 2, and 3." Volume 1 contains data for the Delaware River Basin; Volume 2, the Susquehanna and Potomac River Basins; and Volume 3, the Ohio River and St. Lawrence River Basins.

This report, Volume 1, specifically contains (1) discharge records for 85 continuous record streamflow-gaging stations, 15 partial-record stations, and 5 miscellaneous streamflow sites; (2) elevation and contents records for 12 lakes and reservoirs; and elevations for 1 tidal station; (3) water-quality records for 28 gaging stations, and 48 ungaged streamsites; and (4) water-level records for 17 observation wells. Additional water data collected at various sites not involved in the systematic data-collection program are also presented.

Publications similar to this report are published annually by the Geological Survey for all States. For the purpose of archiving, these official reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report PA-92-1." These water-data reports, beginning with the 1971 water year, are for sale as paper copy or microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

The annual series of Water Data Reports for Pennsylvania began with the 1961 water-year report and contained only data relating to quantities of surface water. Starting with the 1964 water year, a companion report (part 2) was introduced that contained only data relating to water quality. Beginning with the 1975 water year the report was changed to its present format of three volumes, with each volume containing data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to the introduction of this series and for several years concurrent with it, water-resources data for Pennsylvania were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface Water Supply of the United States," which was released in numbered parts as determined by natural drainage basins. For the 1961-70 water years, the data were published in two 5-year reports. Data prior to 1961 are included in two reports: "Compilation of Records of Surface Waters of the United States through 1950," and "Compilation of Records of Surface Waters of the United States, October 1950 to September 1960." Data for Pennsylvania are published in Parts 1, 3, 4. Data on chemical quality, temperature, and suspended sediment for the 1941-70 water years were published annually under the title "Quality of Surface Waters of the United States," and ground-water levels for the 1935-74 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Bldg. 41, Box 25425, Denver, Colorado 80225.

Information for ordering specific reports may be obtained from the District Chief at the address given on the back of title page or by contacting the District Hydrologic Information Specialist, telephone (717) 730-6916.

COOPERATION

The U.S. Geological Survey and organizations of the Commonwealth of Pennsylvania have had cooperative agreements for the systematic collection of surface-water records during the periods 1919-21 and 1931 to date, water-quality records from 1944 to date, and ground-water records from 1925 to date. Organizations that supplied data are also acknowledged in station descriptions. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are listed below.

The Commonwealth of Pennsylvania Department of Environmental Resources, Arthur A. Davis, Secretary through the following:

- Office of Resources Management, James R. Grace, Deputy Secretary;
- Bureau of Water Resources Management, John E. McSparran, Director;
- Bureau of Topographic and Geologic Survey, Donald M. Hoskins, Director;

- Delaware River Basin Commission, G. M. Hansler, Executive Director;
- Bucks County Commissioners, A. L. Warren, Chairman;
- City of Allentown, Department of Public Works, D. S. Lichty, Chief Utility Engineer;
- Chester County Water Resources Authority, D. C. Yaeck, Executive Director;
- City of Bethlehem, Department of Public Works, J. A. Andrews, Superintendent, Water Supply and Treatment;
- City of Philadelphia, Water Department, Kumar Kishinchand, Water Commissioner;
- Hazleton City Authority, Water Department, R. L. Zientek, Manager;
- Joint Planning Commission, Lehigh-Northampton Counties, M. N. Kaiser, Senior Planner;
- Borough of Media, Water Department, S. C. Scarfone, Manager;
- North Penn Water Authority, H. J. Borchers, Jr., Executive Manager;
- North Wales Water Authority, P. S. Lukens, Executive Director;
- Tinicum Township Supervisors, N. C. Forte, Chairman;
- West Bradford Township Supervisors, J. A. Haiko, Chairman;

Federal Energy Regulatory Commission Licensees:
 Philadelphia Electric Co.,
 Pennsylvania Power and Light Co.,

The following Federal agencies assisted in the data-collection program by providing funds or services:

Corps of Engineers, U.S. Army, in collecting records for 25 streamflow-gaging stations, 1 tidal station, 5 reservoir stations, and 10 crest-stage gages;

The following organizations aided in collecting records: Palmer Water Company, Philadelphia Suburban Water Company, borough of Tamaqua, Womelsdorf-Robeson Joint Water Authority, and the city of Coatesville.

WATER RESOURCES DATA - PENNSYLVANIA, 1992

SUMMARY OF
HYDROLOGIC CONDITIONS

Precipitation for the 1992 water year was below the 1961-90 normal for the Delaware River Basin. Figure 1 compares the 1992 monthly precipitation with the 1961-90 monthly mean precipitation recorded at Allentown, Pa. December was the wettest month with rainfall about 129 percent of normal. October, November, January, February, April, August, and September had rainfall below normal. December, March, May and July had more rain than normal. The month of June was reported as having insufficient or partial rainfall data. Rainfall for the year was 9.81 inches below normal.

Streamflow for the Delaware River Basin was below normal during the 1992 water year. Figure 2 compares the 1992 monthly and yearly mean discharges with the median discharges for 1961-90 at two representative gaging stations. The yearly mean discharge was 72 percent of the 1961-90 median at Schuylkill River at Pottstown, and 86 percent of the median at Bush Kill at Shoemakers.

Monthly mean streamflow at Bush Kill at Shoemakers was below normal during the months of January through May and above normal during the periods October through December and June through September. Monthly mean streamflow at Schuylkill River at Pottstown was below normal from October through May and August. Streamflow exceeded normal during June, July, and September. Flows at Bush Kill at Shoemakers ranged from 55 percent of normal in February to 226 percent of normal in June. Flows at Schuylkill River at Pottstown ranged from 37 percent of normal in February to 180 percent of normal in June.

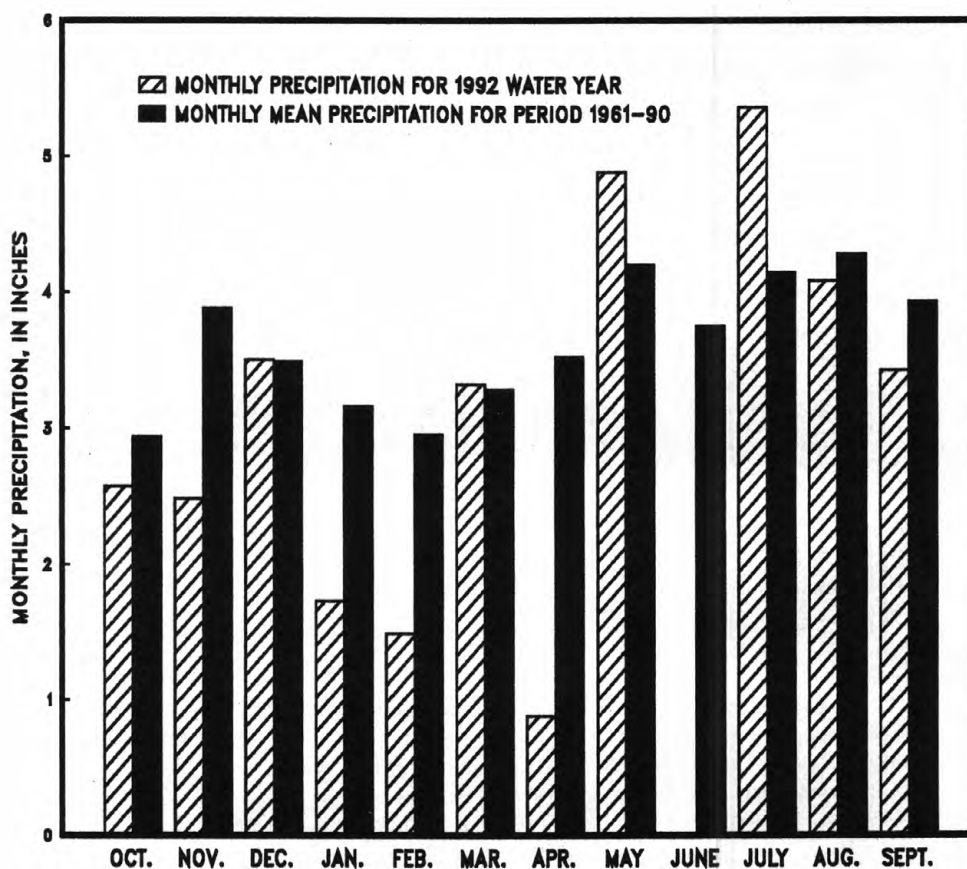
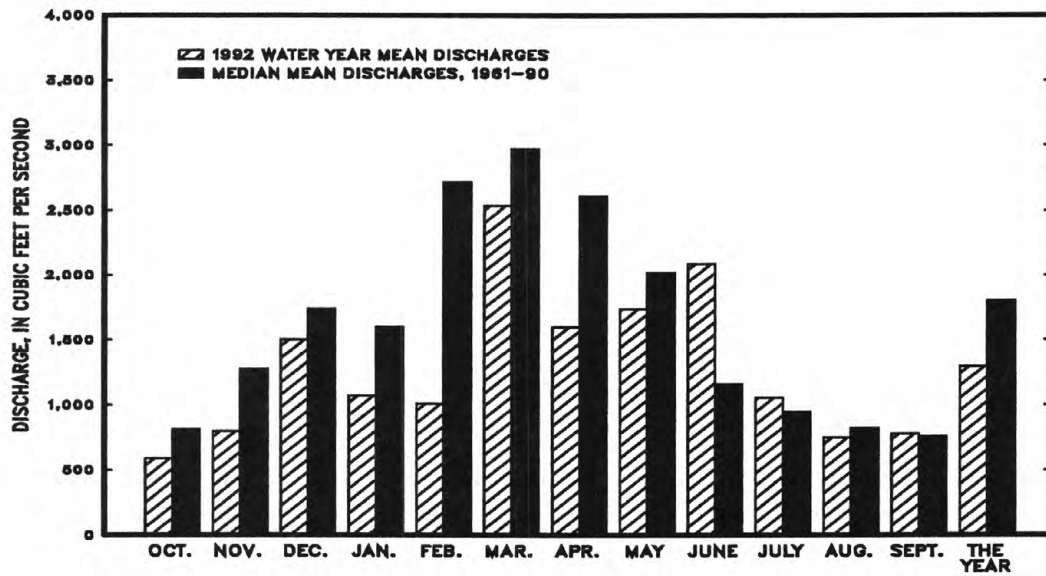


Figure 1.-Comparison of precipitation in the Delaware River Basin above Allentown, Pa. during the 1992 water year with mean precipitation for 1961-90.

BUSH KILL AT SHOEMAKERS



SCHUYLKILL RIVER AT POTTSTOWN

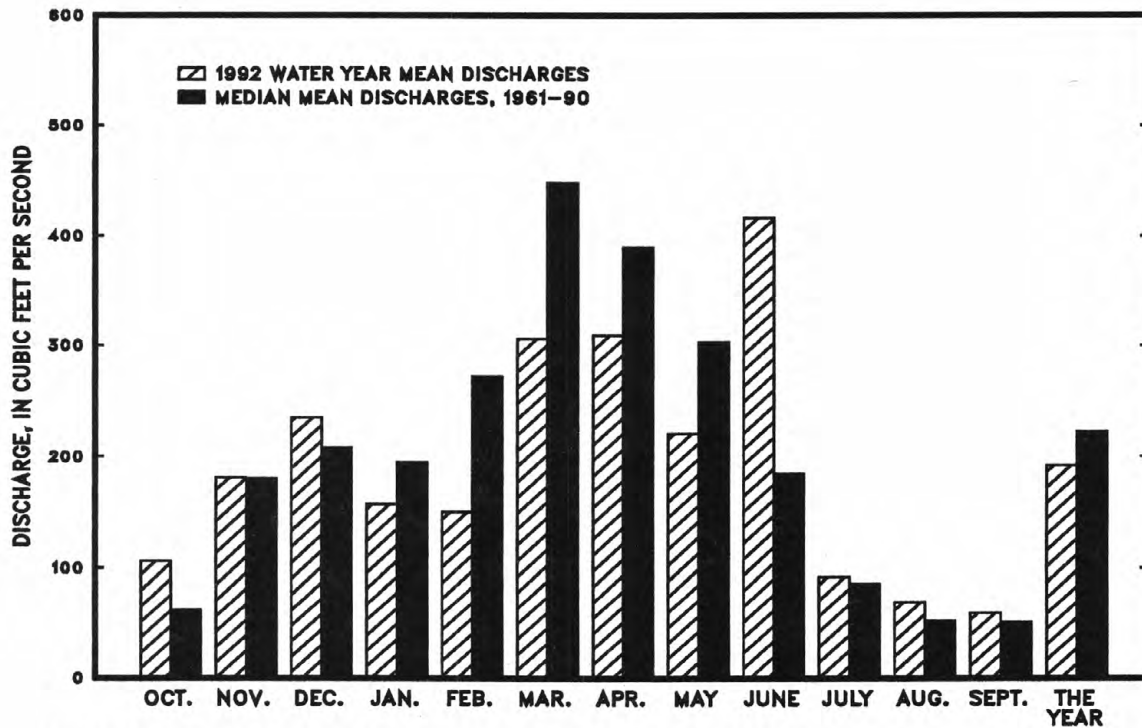


Figure 2.-Comparison of discharge at two long-term representative gaging stations during the 1992 water year with median discharge for period 1961-90.

WATER RESOURCES DATA - PENNSYLVANIA, 1992

Ground-water levels, which were generally below normal throughout much of the Delaware River Basin during the 1991 water year, were generally below normal during the 1992 water year. However, water levels varied substantially throughout the basin due to an uneven distribution of precipitation. Seasonal mean water levels in 17 observation wells relative to long-term seasonal mean levels are shown in figure 3. Long-term mean water levels were calculated from records ranging from 4 to 42 years in length.

During the fall, water levels were generally above normal in the northern and western parts of the basin and normal or above in the southern parts of the basin. During late fall and winter, recharge was insufficient to affect a rise in ground-water levels and most wells stayed at the fall levels, except in the southern part of the basin where ground-water levels decreased to much below normal. Spring levels in the southern part of the basin recovered slightly but were still below normal. Wells located in the carbonate rocks of the Great Valley generally showed a decrease in water level. Summer levels generally improved with more wells at or above normal than during any period during the water year.

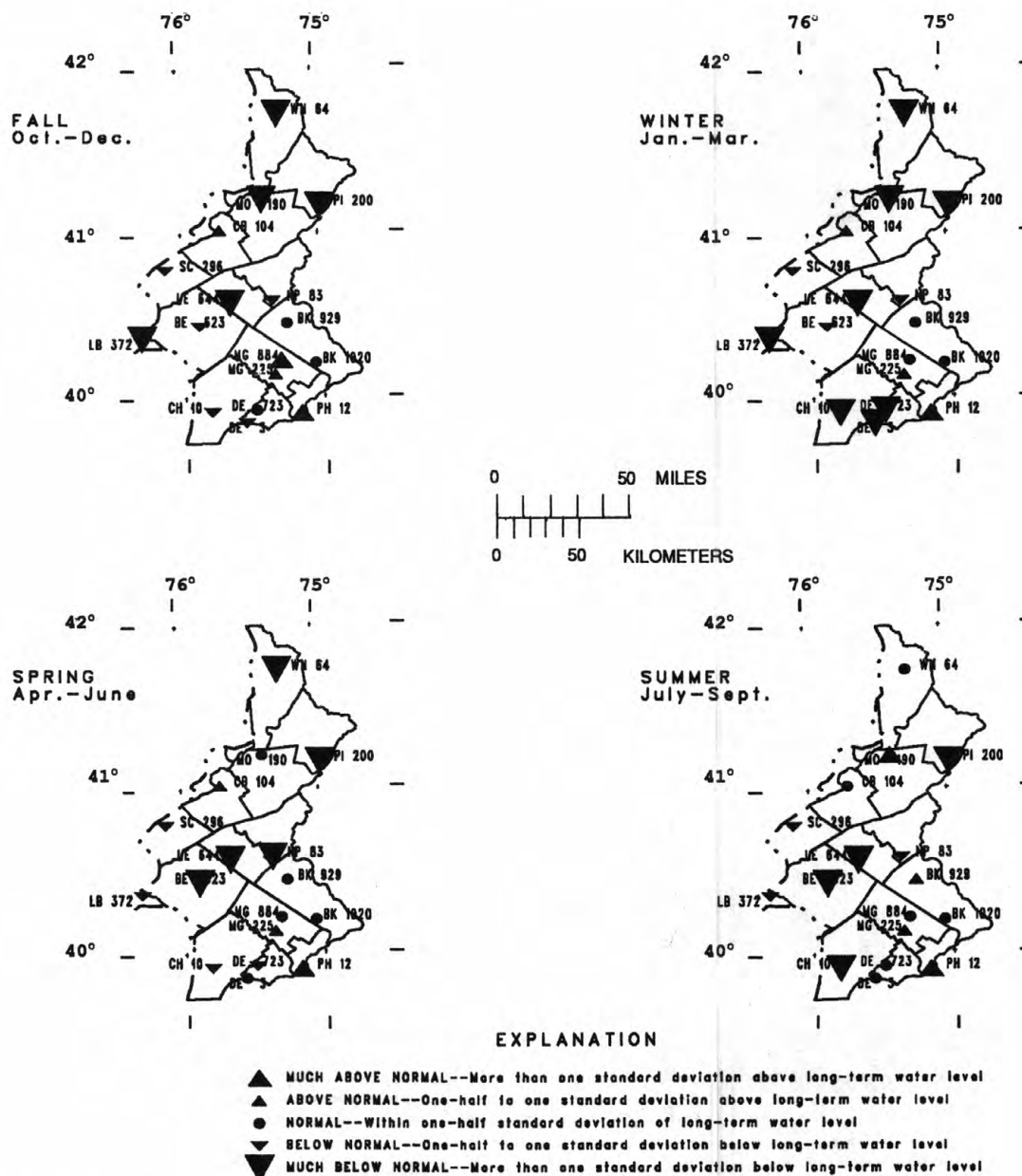


Figure 3.--Relation between mean 1992 seasonal water levels and long-term water levels.

During 1992 a program of monitoring the dissolved oxygen levels of the Brandywine Creek Basin was continued. Figure 4 shows the diurnal fluctuations of dissolved oxygen concentration at three stations on Brandywine Creek for July 5-12, 1992. Each of these stations is equipped with a satellite data collection platform (DCP) to provide near-real-time data.

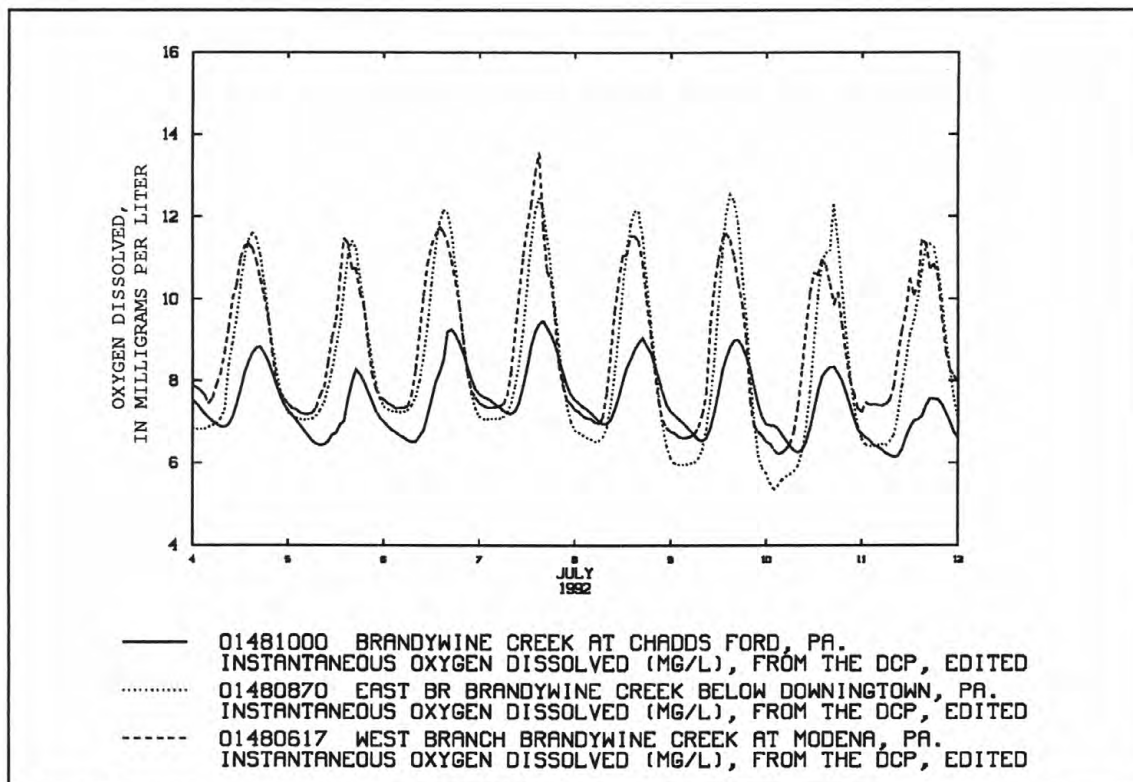


Figure 4.-Diurnal fluctuation of dissolved oxygen concentration at three stations on Brandywine Creek.

WATER RESOURCES DATA - PENNSYLVANIA, 1992

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

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

EXPLANATION OF THE RECORDS

The surface-water and ground-water records in this report are for the 1992 water year that began October 1, 1991, and ended September 30, 1992. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The location of these stations and wells are shown in figures 6-9.

The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream-Order System

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

The station-identification number is assigned in downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. A station number can be from 8 to 15 digits in length and normally appears to the left of the station name. For example, an 8-digit number for a station such as 01570500, includes a 2-digit part number "01" plus a 6-digit downstream-order number "570500." The part number designates major river basins; for example, part "01" is the North Atlantic Slope basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote the degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 5 below.

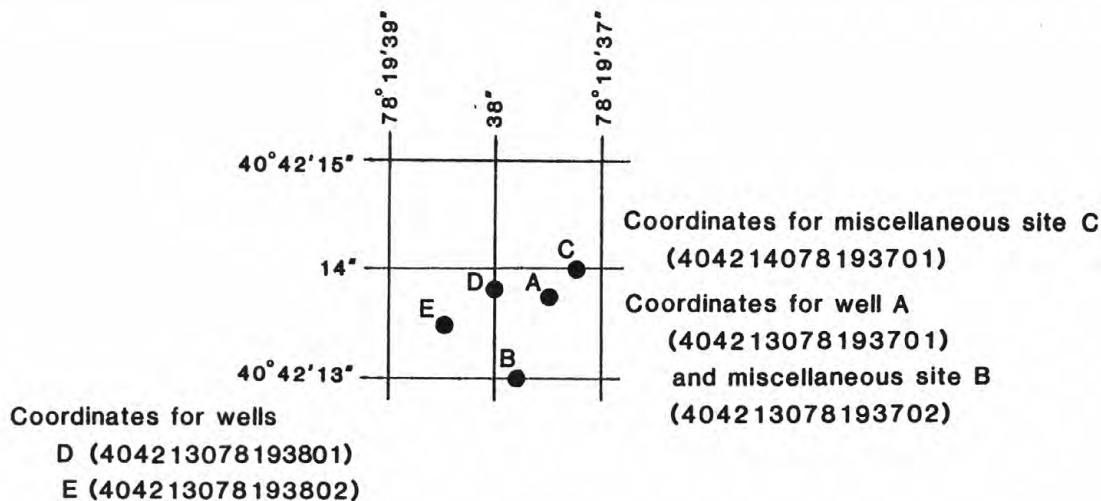


Figure 5.--System for numbering wells and miscellaneous sites (latitude and longitude).

A local well number is also assigned to the wells and consists of a 2-letter abbreviation of the county in which the well is located and a sequential number assigned at the time the well was scheduled.

Records of Stage and Water Discharge

Records of stage and water discharge may be continuous or partial. Continuous records of discharge are those obtained using a continuous stage-recording device through which either instantaneous water discharges may be computed for any time, or mean discharges may be computed for any period of time, during the period of record. Because daily mean discharges or, for reservoirs end-of-day contents, commonly are published for such stations, they are referred to as "daily stations" or "continuous-record stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial-record stations," or "Low-flow partial-record stations." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all continuous-record and partial-record stations for which data are given in this report are shown in figures 6-9.

Data Collection and Computation

The data obtained at a continuous-record gaging station on a stream consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage, with digital recorders that punch stage values on paper tapes at selected time intervals, or with data collection platforms (DCP's) that electronically record and then transmit the data via satellite to ground receiving stations. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

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

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

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

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

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a program to format the annual water-data report to meet user needs and data preferences.

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

Station manuscript

For each continuous-record station, the manuscript provides, under various headings, descriptive information such as station location, period of record, historical extremes outside the period of record, record accuracy, and other remarks pertinent to station operation and regulation. The following comments, as appropriate, clarify information presented under the various headings of the station description.

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

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

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

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

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level. (see Definition of Terms), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

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

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

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

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

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

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

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

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the daily values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS _____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS _____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period for the statistics may not be the same as the period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes may not be within the designated period. Selected streamflow duration statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

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The summary statistics data, as appropriate, are provided with each continuous record of discharge. The following comments clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

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

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

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

ANNUAL RUNOFF (INCHES).--Indicates the depth to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that is exceeded by 10 percent of the flow for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded by 50 percent of the flow for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded by 90 percent of the flow for the designated period.

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

Identifying Estimated Daily Discharge

Beginning with the 1987 annual State data report, estimated daily discharge values published in the water-discharge tables are identified by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated,".

Accuracy of the Records

The accuracy of streamflow records depends primarily on (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s (cubic foot per second); to the nearest tenth from 1.0 to 10 ft³/s; to whole numbers from 10 to 1,000 ft³/s; and to 3 significant figures when greater than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

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

Information on the availability of unpublished data or statistical analyses may be obtained from the district's office for the Scientific Publications and Information Section (telephone number: 717-730-6916).

Records of Surface-Water Quality

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

Classification of Records

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

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 6-9.

Arrangement of Records

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

On-site Measurements and Sample Collections

During the collection of water-quality data, assurance that the data obtained represent the in-situ quality of the water is a major concern. Certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are collected. To assure that measurements made in the laboratory also represent the in-situ water, carefully prescribed procedures need to be followed when collecting the samples, when treating the samples to prevent changes in quality pending analysis, and when shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," (TWRI's) Book 1, Chapter D2; Book 3, Chapter C2; Book 5, Chapters A1, A3, and A4 and in U.S. Geological Survey Open-File Report 90-140. All of the TWRI references are listed on a following page in this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the U.S. Geological Survey District Office.

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

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an

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apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are determined from data that are recorded at 15-, 30-, or 60-minute intervals by digital recorders that punch each value on a paper tape, or with data collection platforms (DCP's). More detailed records (hourly values) may be obtained from the U.S. Geological Survey District Office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. At stations where recording instruments are used, maximum, minimum, and mean temperatures for each day are published. In addition, water temperatures are measured at the time of discharge measurements for water-discharge stations and are on file in the District's offices. For stations where water temperatures are measured manually once or twice daily, it is usually measured at about the same time each day. Large streams have a small diurnal temperature change; temperatures in shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by heated waste-water discharges.

Sediment

Suspended-sediment concentrations are determined from samples collected by hand or by pump samplers. Hand samples utilize the appropriate sampler (dependent on stream depth and velocity) and are collected using the depth-integrating method at single or multiple verticals in the cross section. Samples collected by pump samplers use an intake set to a fixed location in the cross section. The intake is located at a site that best represents the entire cross section on the basis of simultaneous samples collected at various stages by the pumping sampler and by hand. During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, every 15 minutes). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge, mean concentration, and the constant 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. The remaining samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. If other laboratories are used, they are identified in the "Remarks" or "Cooperation" paragraph of each water-quality station manuscript. Methods used in analyzing sediment samples and computing sediment records are given in "Techniques of Water Resources Investigations", Book 5, Chapter C1. Methods used by the Geological Survey laboratory are given in "Techniques of Water Resources Investigations", Book 1, Chapter D2, Book 3, Chapter C2; Book 5, Chapters A1, A3, and A4. Methods used by other laboratories are approved by the U.S. Geological Survey, Water Resources Division.

Historical and current dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

In March 1989 a bias was discovered in the turbidimetric method for sulfate analysis for those samples analyzed by the U.S. Geological Survey National Water-Quality Laboratory indicating that concentrations below 75 mg/L have a median positive bias of 2 mg/L above the true concentration for the period between 1982 and 1989. Sulfate concentrations in this report have not been corrected for this bias.

Data Presentation

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

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

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

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

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

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

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

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

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

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

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remarks Codes

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

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

Records of Ground-Water Levels

Ground-water level data from a basic network of observation wells and from ground-water projects are published herein. Locations of observation wells in the basic network are shown in figures 6 and 7.

Data Collection and Computation

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

The prime identification number for a given well is the 15-digit number that appears above the station description. The secondary identification number is the local well number, an alphanumeric number, derived from the county location of the well.

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Water-level records are obtained from direct measurements with a steel tape, from the graph or punched tape of a water-stage recorder, with solid-state electronic data loggers, or with data collection platforms (DCP's). The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for each day.

Water levels are reported to as many significant figures as can be justified by the local conditions. Accordingly, most measurements are reported to a hundredth of a foot, but some may be given to a tenth of a foot.

Data Presentation

Each well record consists of three parts; (1) the station description, (2) the data table of water levels observed during the current water year, and (3) a graph of the water levels for the last 3 years. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments that follow clarify information presented under the various headings of the well description.

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

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

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

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

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

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

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

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

A table of water levels follows the station description for each well. These tables are usually reported as maximum depth (in feet) above or below land-surface datum. The highest and lowest maximum depths for the water year and their dates of occurrence are shown on a line below the table. Missing records are indicated by dashes in place of the water level. A hydrograph for a selected period of record follows each water-level table.

Records of Ground-Water Quality

Records of ground-water quality are obtained at wells and springs included in ground-water projects. Records of ground-water quality in this report may involve a variety of types of data and measurement frequencies. Those wells with a (c) following the well number in the list of ground-water wells on page viii, have water-quality data published in the report.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were collected by trained personnel.

A variety of sampling techniques is used for collecting ground-water samples for chemical analyses. Techniques for sampling springs are the same as those used for sampling surface water. An appropriate well-sampling technique is selected at each site so that the chemical samples are representative of the water in the aquifer. Wells are pumped, when possible, until a constant water temperature, specific conductance, and pH are obtained before collecting water samples. Pumping rate, length of pumping, and sampling depth depend on the characteristics of the well and aquifer being sampled. Samples are collected either by a submersible pump or a bailer.

Data Presentation

Ground-water-quality data are published with ground-water-level data at stations where level data are collected. Data collected at partial-record stations and miscellaneous sites follow the information for continuous ground-water record stations. Data for each section are listed alphabetically by county, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- * Station Header File - Contains descriptive information on over 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- * Daily Values File - Contains over 220 million daily values of streamflows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- * Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- * Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- * Ground-Water Site Inventory Data Base - Contains inventory data for over 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 and 3-1/2 inch floppy disk; and as noted in the introduction, beginning with the 1990 water year, on Compact Disc - Read Only Memory (CD-ROM) discs. All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

DEFINITION OF TERMS

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

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

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

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

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

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

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

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

Continuous-record station is a station where streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses. Data may be collected continuously or periodically.

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

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

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

Cubic feet per second per square mile [$(\text{ft}^3/\text{s})/\text{mi}^2$]¹ is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Data collection platform (DCP) is an electronic instrument which collects, processes, stores, and transmits data from various sensors to an earth-orbiting Geostationary Operational Environmental Satellite (GOES) and/or through landline telemetry.

Data logger is a microprocessor based data acquisition system designed specifically to acquire, process, and store data. Data is usually downloaded from onsite data loggers for entry into office data systems.

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

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a year water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 - March 31). The date shown in the summary statistics table is the initial data of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Base discharge is an arbitrary instantaneous discharge value, determined for stations meeting certain criteria, that will be exceeded about three times per year.

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

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

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

¹ Until appropriate changes can be made to the WATSTORE and PRIME computer systems, the unit abbreviations "CFS" and "CFSM" will appear in some computer-generated table headings and summaries.

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

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

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

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

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

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

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

Miscellaneous record site is a site where limited streamflow and/or water-quality data are collected on a random basis for use in hydrologic analyses.

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

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

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

Organism is any living entity.

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

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

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

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

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

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with 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. Chemical dispersion is not used for native water analysis.

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

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

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

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

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

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

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

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

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

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

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area of volume per unit time [$\text{mg C}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3 \cdot \text{time})$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg O}/(\text{m}^3 \cdot \text{time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

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

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

Recurrence interval is the average time interval between occurrences of a hydrological event of a given or magnitude, usually expressed in years. May also be called return period.

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

Sea level in this report refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order levels nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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

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

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

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

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

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

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

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

7-day 10-year low flow ($Q_7, 10$) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

Solute is any substance that is dissolved in water.

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

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

Kingdom.....Animal
Phylum.....Arthropoda
Class.....Insecta
Order.....Ephemeroptera
Family.....Ephemeridae
Genus.....Hexagenia
SpeciesHexagenia limbata

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year. Tons-per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

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

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

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

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

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to a State annual hydrologic-data report.

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

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

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PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficken, and G.F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
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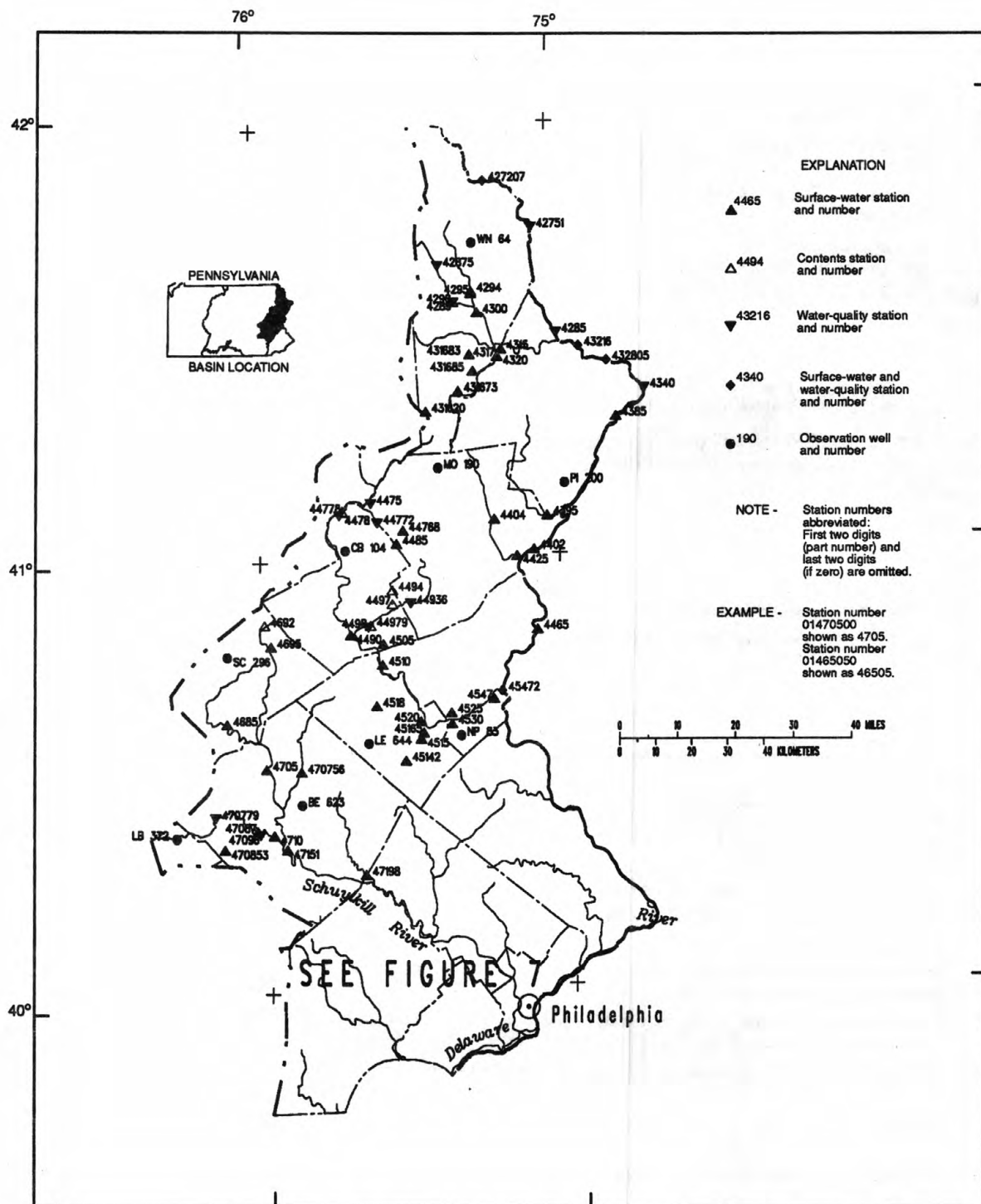


Figure 6.--Location of data-collection stations.

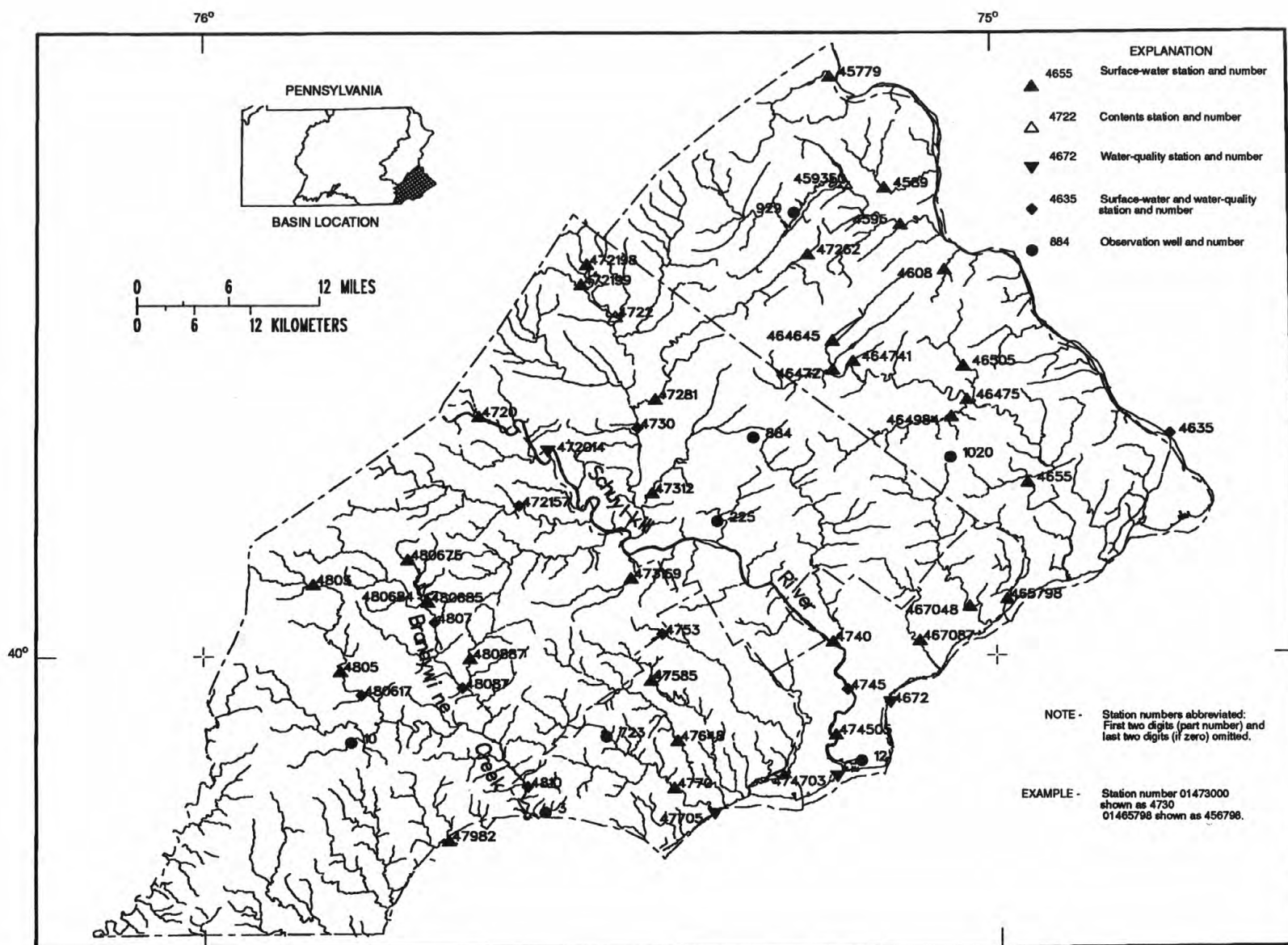


Figure 7.--Location of data-collection stations in the lower Delaware Basin.

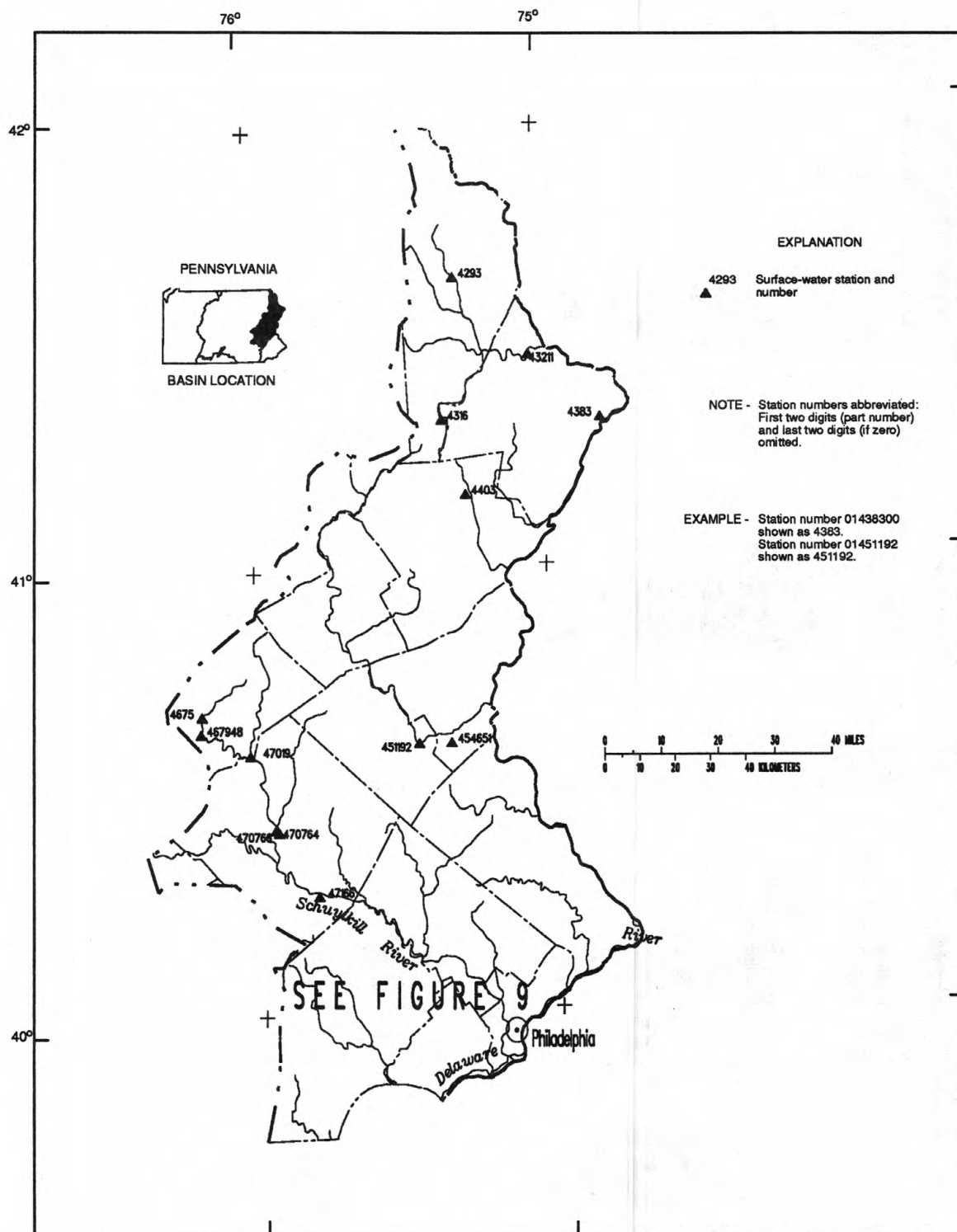


Figure 8.--Location of partial-record data-collection stations.

CONTINUOUS-WATER-DISCHARGE AND WATER-QUALITY RECORDS

Remarks Codes

The following remark codes may appear with the data tables in this sections:

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

Dissolved Trace-Element Concentrations

Note.-- Historical and current dissolved trace-element concentrations are reported herein for water that was collected, processed and analyzed by using either ultra clean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

In March 1989 a bias was discovered in the turbidimetric method for sulfate analysis for those samples analyzed by the U.S. Geological Survey National Water-Quality Laboratory indicating that concentrations below 75 mg/L have a median positive bias of 2 mg/L above the true concentration for the period between 1982 and 1989. Sulfate concentrations in this report have not been corrected for this bias.

CONTINUOUS WATER-DISCHARGE AND WATER-QUALITY STATION RECORDS

DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'02", long 75°12'51", Wayne County, PA, Hydrologic Unit 02040101, on right bank at site of former Lordville-Equinunk Interstate Bridge at Lordville, 9.7 mi southeast of Hancock.

DRAINAGE AREA.--1,590 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1967 to August 1971, June 1973 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area.

INSTRUMENTATION.--Water-temperature satellite telemeter since June 1989, provides 15-minute-interval readings. From June 1987 to June 1989, water-temperature satellite telemeter provided one-hour-interval readings. From June 1973 to November 1989, water-temperature digital recorder provided one-hour-interval readings. Prior to August 1971, water-temperature recorder provided continuous recordings.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1968-70, 1973, 1975-86, 1989, 1991-92) 30.5C, June 16, 1976, July 10, 1981; minimum (water years 1968-71, 1974, 1977-78, 1980-92), 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 24.0°C, July 1; minimum, 0.0°C on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	14.0	10.0	11.5	11.0	8.5	9.5	7.5	6.5	7.0	0.0	0.0	0.0
2	16.0	12.5	14.0	11.5	10.5	11.5	7.5	6.0	7.0	0.0	0.0	0.0
3	17.0	15.0	16.0	10.5	8.5	9.5	6.0	4.0	4.5	0.0	0.0	0.0
4	18.0	16.0	16.5	8.5	6.0	7.0	4.0	2.0	3.5	0.0	0.0	0.0
5	17.0	16.0	16.5	6.0	4.0	4.5	2.0	0.0	1.0	0.5	0.0	0.5
6	16.5	14.0	15.5	5.0	3.5	4.0	1.0	0.0	0.5	1.0	0.5	1.0
7	14.0	10.5	12.0	5.0	4.0	4.5	1.5	0.5	1.0	1.5	1.0	1.0
8	12.5	9.5	10.5	5.5	4.5	5.0	3.5	1.5	2.5	1.0	0.0	0.5
9	13.5	10.0	11.5	4.5	3.5	4.0	5.0	3.5	4.5	0.5	0.0	0.0
10	15.5	11.5	13.0	5.0	3.0	4.0	5.0	4.0	5.0	1.5	0.5	1.0
11	14.0	12.0	13.0	5.5	5.0	5.0	4.0	3.0	3.0	1.0	0.0	0.5
12	13.5	12.0	12.5	5.0	4.5	4.5	4.0	2.5	3.0	0.5	0.0	0.5
13	12.5	10.5	12.0	5.0	4.5	5.0	5.5	4.0	4.5	2.0	0.5	1.0
14	11.5	9.0	10.0	6.5	5.0	5.5	7.0	5.5	6.0	3.5	2.0	2.5
15	10.0	9.5	9.5	6.5	5.5	6.0	6.0	2.5	4.0	2.5	0.0	0.5
16	12.0	9.5	10.5	7.0	6.0	---	2.0	0.0	1.0	0.0	0.0	0.0
17	10.5	9.5	9.5	---	3.5	---	0.0	0.0	0.0	0.0	0.0	0.0
18	12.0	9.0	10.5	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
19	11.5	9.5	10.5	5.5	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
20	9.5	7.5	8.5	9.0	5.5	7.5	0.0	0.0	0.0	0.0	0.0	0.0
21	8.5	7.0	7.5	10.0	9.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
22	9.5	6.5	8.0	10.0	9.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0
23	11.0	8.0	9.5	9.5	9.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0
24	12.0	9.5	10.5	9.0	7.5	9.0	0.0	0.0	0.0	0.0	0.0	0.0
25	13.0	11.0	12.0	7.5	4.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0
26	13.5	12.0	12.5	4.5	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
27	15.0	13.0	14.0	3.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
28	15.0	12.0	14.0	4.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
29	12.0	9.5	10.5	5.5	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
30	9.5	7.5	8.5	6.5	5.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0
31	9.0	7.0	8.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	18.0	6.5	11.5	---	2.0	---	7.5	0.0	2.0	3.5	0.0	0.5

DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.5	4.5	11.5	9.5	10.5
2	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.5	3.5	15.5	10.5	13.0
3	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5	3.0	15.0	13.5	14.5
4	0.0	0.0	0.0	0.5	0.0	0.0	4.5	2.0	3.0	14.0	12.0	13.0
5	0.0	0.0	0.0	1.5	0.0	0.5	5.5	2.5	4.0	12.5	9.5	10.5
6	0.0	0.0	0.0	1.5	1.0	1.0	7.5	3.5	5.5	---	8.5	---
7	0.0	0.0	0.0	2.0	1.0	1.5	8.0	5.5	6.5	12.0	8.0	10.0
8	0.0	0.0	0.0	4.0	2.0	3.0	8.5	7.0	7.5	12.0	11.0	11.5
9	0.0	0.0	0.0	5.0	4.0	4.5	7.0	5.5	6.0	14.0	11.5	12.5
10	0.0	0.0	0.0	6.0	4.0	4.5	10.0	6.0	8.0	15.0	12.5	14.0
11	0.0	0.0	0.0	6.0	1.5	4.0	10.0	7.5	8.5	17.5	14.0	15.5
12	0.0	0.0	0.0	1.5	0.5	1.0	7.5	5.5	6.5	19.5	15.0	17.0
13	0.0	0.0	0.0	1.0	0.0	0.5	6.5	3.5	5.0	20.5	17.0	18.5
14	0.0	0.0	0.0	0.5	0.0	0.0	8.5	5.0	6.5	20.0	17.0	18.5
15	0.0	0.0	0.0	0.5	0.0	0.0	9.0	5.5	7.5	17.5	15.5	16.5
16	0.0	0.0	0.0	1.0	0.0	0.5	8.5	5.5	7.0	16.5	14.5	15.5
17	0.0	0.0	0.0	0.0	0.0	0.0	5.5	4.5	5.0	---	---	---
18	0.0	0.0	0.0	2.0	0.0	1.0	5.5	5.0	5.0	17.0	14.5	15.5
19	0.0	0.0	0.0	2.0	1.0	1.5	6.0	5.0	5.5	19.0	14.0	16.5
20	0.0	0.0	0.0	3.0	0.5	1.5	9.0	6.0	7.0	20.0	15.5	17.5
21	0.0	0.0	0.0	3.0	1.0	2.0	11.5	9.0	10.0	21.0	16.0	19.0
22	0.0	0.0	0.0	1.5	0.0	0.5	12.0	11.0	11.5	22.5	17.5	20.0
23	0.0	0.0	0.0	1.5	0.0	0.5	13.0	10.5	11.5	22.5	19.0	21.0
24	0.0	0.0	0.0	1.5	0.0	0.5	12.5	11.0	11.5	21.0	14.5	18.0
25	0.0	0.0	0.0	2.5	0.0	1.5	11.0	9.0	10.0	16.0	12.0	14.0
26	0.0	0.0	0.0	3.5	2.5	3.0	9.5	7.5	8.5	15.0	13.0	14.0
27	0.0	0.0	0.0	3.5	2.5	3.0	11.0	7.5	9.5	13.0	12.0	12.5
28	0.0	0.0	0.0	2.5	1.0	2.0	11.0	9.0	10.0	15.5	11.5	13.5
29	0.0	0.0	0.0	4.0	0.5	2.0	12.0	8.0	10.0	18.0	13.5	15.5
30	---	---	---	3.5	3.0	3.0	11.5	10.0	10.5	17.0	15.5	16.5
31	---	---	---	6.0	3.0	4.5	---	---	---	15.0	14.0	14.5
MONTH	0.0	0.0	0.0	6.0	0.0	1.5	13.0	2.0	7.5	---	---	---
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	14.0	12.5	13.0	24.0	21.0	22.5	19.0	17.0	17.5	18.5	17.0	18.0
2	16.0	12.0	14.0	22.5	20.0	21.5	20.5	17.0	18.5	18.0	15.5	16.5
3	17.5	14.0	15.5	20.5	13.5	16.0	21.0	18.0	19.5	17.0	15.5	16.0
4	19.0	15.5	17.0	16.5	13.0	14.5	20.5	19.0	19.5	18.0	14.5	16.0
5	18.5	16.5	17.0	18.5	16.0	17.5	19.0	17.0	18.0	17.0	15.0	15.5
6	16.5	15.0	15.5	20.5	17.0	18.5	20.5	16.5	18.5	16.0	---	---
7	18.0	15.0	16.5	21.0	18.5	19.5	21.5	18.0	19.5	14.5	13.5	---
8	19.5	17.0	18.0	21.0	18.5	19.5	20.5	18.5	19.5	18.5	14.5	16.5
9	20.0	17.0	18.5	22.0	19.0	20.5	20.0	18.5	19.0	20.0	18.5	19.5
10	20.5	17.0	18.5	23.0	20.0	21.5	21.0	19.0	19.5	20.5	17.5	19.0
11	21.0	16.5	18.5	22.5	20.5	21.5	20.5	19.0	20.0	19.0	16.0	17.0
12	21.5	17.0	19.5	21.5	20.0	20.5	20.5	17.5	19.5	18.0	15.0	16.5
13	22.5	18.5	20.5	21.5	19.5	20.5	19.5	17.0	17.5	18.5	15.5	17.0
14	23.0	19.5	21.0	23.5	19.5	21.5	17.0	16.0	16.5	19.5	16.5	18.0
15	23.0	19.5	21.5	22.5	21.0	21.5	16.5	15.5	16.0	20.0	17.0	18.5
16	22.0	19.0	20.5	21.0	17.5	19.0	16.5	16.0	16.5	21.0	18.5	19.5
17	23.0	19.5	21.0	20.5	19.0	19.5	17.5	16.0	17.0	21.5	19.0	20.0
18	21.5	19.5	20.0	21.0	18.5	19.5	20.5	17.5	19.0	20.5	17.0	19.5
19	19.5	18.0	18.5	23.0	20.0	21.5	20.5	19.0	19.5	17.5	15.0	16.0
20	18.5	17.0	18.0	23.5	20.5	22.0	20.0	17.5	19.0	16.0	13.0	14.5
21	17.0	15.0	16.0	23.0	20.0	21.5	21.0	17.0	19.0	15.0	14.0	14.5
22	15.0	12.5	13.5	22.0	18.0	20.0	20.5	17.0	19.0	16.5	15.0	15.5
23	16.5	11.5	14.0	21.0	17.5	19.0	22.0	18.5	20.0	16.0	14.0	15.0
24	17.5	15.5	16.5	17.5	16.0	17.0	22.5	19.5	---	15.0	12.0	13.5
25	17.5	15.5	16.5	20.0	17.0	18.0	22.5	21.0	---	15.5	12.5	13.5
26	19.0	15.5	17.0	19.5	18.0	18.5	22.5	20.5	21.5	14.0	12.5	13.0
27	20.0	16.5	18.0	20.5	16.5	18.5	22.5	21.0	21.5	14.0	13.0	13.5
28	21.5	17.5	19.5	20.0	18.0	19.0	22.5	20.5	21.5	16.0	13.0	14.5
29	23.0	19.0	21.0	20.0	16.5	18.0	22.0	17.5	20.0	15.5	13.0	14.5
30	23.5	20.5	22.0	21.0	18.0	19.5	18.0	15.5	17.0	13.0	10.5	11.5
31	---	---	---	20.0	17.0	18.5	20.5	17.0	18.0	---	---	---
MONTH	23.5	11.5	18.0	24.0	13.0	19.5	22.5	15.5	---	21.5	---	---

DELAWARE RIVER BASIN

01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'28", Wayne County, PA, Hydrologic Unit 02040101, on right bank, 0.5 mi downstream from Callicoon Creek, 0.5 mi downstream from Interstate Bridge 7, and 0.8 mi southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,820 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD (corrected).--June 1975 to current year.

REVISED RECORDS.--WDR NY-82-1: Drainage area. WDR NY-86-1: 1975-84 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 734.88 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to September 1954, entire flow from 371 mi² of drainage area controlled by Pepacton Reservoir and subsequent to October 1963, entire flow from 454 mi² of drainage area controlled by Cannonsville Reservoir. Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River Basin, as directed by the Delaware River Master. Satellite gage-height and temperature telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,000 ft³/s, Mar. 15, 1986, gage-height, 13.42 ft; maximum gage height, 14.83 ft, Jan. 9, 1979 (ice jam); minimum discharge, 307 ft³/s, Aug. 23, 1985; minimum gage height, 2.20 ft, Sept. 13, 1977, Aug. 23, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,600 ft³/s, Nov. 23, gage height, 7.63 ft; minimum, 417 ft³/s, Oct. 10, gage height, 2.45 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	663	545	e1500	e1200	e1200	e1600	2940	2580	e10000	735	3060	698
2	528	736	e1400	e980	e940	e1400	2780	2400	e6000	722	2140	768
3	525	766	2900	e1100	e700	e1420	2430	3130	e4100	1060	1620	898
4	541	784	4300	e1400	e880	e1350	2170	3120	2980	1140	1560	987
5	1300	865	3220	e1900	e840	e1600	1950	2710	2300	882	1670	1250
6	1320	1110	2500	e2100	e810	1880	1760	2830	3580	897	1430	1220
7	724	1140	2170	e1750	e780	2140	1590	2600	4470	797	1230	1090
8	507	1150	2020	e1550	e740	2980	1570	2290	2650	749	1110	695
9	531	1060	2190	e1450	e690	3260	1530	2340	2130	819	1560	762
10	463	1000	2520	e1350	e450	3150	1570	2150	1740	876	1990	914
11	521	1020	2320	e1250	e600	8370	1620	1900	1480	780	1610	1310
12	1190	1080	2090	e1200	e580	9630	3100	1710	1300	714	1350	1230
13	865	1150	2000	e1150	e560	6070	3740	1550	1210	702	1170	778
14	529	888	2610	1770	e540	e4000	3060	1470	1240	708	1120	632
15	638	913	3330	3680	e580	e3000	2650	1330	1100	849	1120	578
16	614	873	2800	e2300	e800	e2400	2370	1370	960	1550	1060	630
17	1140	789	e2200	e1450	e1000	e2000	3940	1400	864	1470	817	638
18	967	659	e1750	e1500	e1200	e1800	7320	1270	910	1610	765	713
19	871	649	e1400	e1300	e1300	1810	9750	1170	961	1620	820	1130
20	720	725	e1200	e900	e1500	1570	7300	1060	961	1250	905	1090
21	622	709	e1500	e980	e1700	1430	5720	973	960	1080	696	828
22	558	1370	e1600	e1200	e1500	1240	5260	930	934	996	924	775
23	506	14600	1470	e1500	e1320	e1150	5690	1110	911	937	839	1000
24	521	8410	e1300	e2100	e1310	e1100	4780	1130	911	1020	798	1060
25	666	e5400	e1100	e2400	1360	e1050	6220	1130	932	1020	774	668
26	1030	e3700	e980	e1600	1360	1300	6370	1040	936	957	864	926
27	686	e2700	e880	e1200	e1300	5130	5280	978	999	1490	1020	976
28	526	e2200	e890	e1250	e1250	5970	4300	877	868	1290	880	816
29	486	e1900	e940	e1300	e1300	3960	3570	800	804	1090	944	666
30	484	e1700	e1400	e1300	---	3200	2970	733	757	1470	1150	593
31	500	---	e1550	e1250	---	2930	---	2480	---	1760	771	---
TOTAL	21742	60591	60030	47360	29090	89890	115300	52561	59948	33040	37767	26319
MEAN	701	2020	1936	1528	1003	2900	3843	1696	1998	1066	1218	877
MAX	1320	14600	4300	3680	1700	9630	9750	3130	10000	1760	3060	1310
MIN	463	545	880	900	450	1050	1530	733	757	702	696	578

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2302	2547	2470	2164	2904	4668	5041	3537	1714	1238	1236	1515
MAX	6545	4508	6065	7594	7993	11080	9019	7866	3228	2406	2182	3716
(WY)	1978	1987	1978	1978	1976	1977	1983	1984	1984	1976	1976	1977
MIN	701	1130	1127	587	611	1177	1496	935	734	777	560	877
(WY)	1992	1979	1990	1977	1980	1981	1985	1985	1985	1981	1985	1992

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1975 - 1992

ANNUAL TOTAL	750576		633638				
ANNUAL MEAN	2056		1731		2602		
HIGHEST ANNUAL MEAN					3972		1978
LOWEST ANNUAL MEAN					1434		1985
HIGHEST DAILY MEAN	14600	Nov 23	14600	Nov 23	54800	Mar 15	1986
LOWEST DAILY MEAN	375	Sep 26	450	Feb 10	312	Aug 23	1985
ANNUAL SEVEN-DAY MINIMUM	566	Oct 27	566	Oct 27	354	Aug 17	1985
10 PERCENT EXCEEDS	4030		3160		5720		
50 PERCENT EXCEEDS	1400		1210		1400		
90 PERCENT EXCEEDS	717		681		780		

DELAWARE RIVER BASIN

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.5	4.5	13.0	10.0	11.0
2	0.5	0.0	0.0	0.0	0.0	0.0	4.5	3.0	3.5	16.0	11.0	13.5
3	0.5	0.0	0.0	0.5	0.0	0.0	4.0	2.5	3.0	16.5	13.5	15.0
4	0.0	0.0	0.0	1.5	0.0	0.5	5.0	2.0	3.5	14.5	12.5	13.5
5	0.0	0.0	0.0	2.5	0.0	1.0	6.0	2.0	4.0	12.5	10.0	11.5
6	0.5	0.0	0.0	1.5	0.5	1.0	8.0	3.0	5.5	10.5	9.0	9.5
7	0.0	0.0	0.0	1.0	0.5	1.0	8.5	4.5	6.0	12.5	8.5	10.5
8	0.0	0.0	0.0	3.0	1.0	2.0	8.5	6.5	7.5	12.5	10.5	11.5
9	0.0	0.0	0.0	5.0	3.0	4.0	7.5	5.5	6.5	15.0	11.5	13.0
10	0.0	0.0	0.0	5.5	4.0	4.5	11.0	6.0	8.5	15.5	12.5	14.0
11	0.0	0.0	0.0	6.0	2.0	4.5	9.5	7.5	8.5	19.0	14.0	16.0
12	0.0	0.0	0.0	2.0	0.5	1.0	7.5	5.5	7.0	20.5	14.5	17.5
13	0.0	0.0	0.0	1.0	0.0	0.5	7.0	4.5	5.5	21.5	17.0	19.0
14	0.0	0.0	0.0	0.5	0.0	0.0	8.5	5.0	6.5	20.0	17.5	19.0
15	0.0	0.0	0.0	0.5	0.0	0.0	10.0	6.0	7.5	19.5	16.0	17.5
16	0.0	0.0	0.0	0.5	0.0	0.0	8.0	5.5	7.0	17.5	15.0	16.0
17	0.5	0.0	0.0	0.0	0.0	0.0	5.5	5.0	5.0	---	---	---
18	0.0	0.0	0.0	2.0	0.0	0.5	5.5	5.0	5.0	18.0	14.5	16.0
19	0.0	0.0	---	---	---	---	5.5	5.0	5.5	20.0	14.0	17.0
20	---	---	---	3.0	0.0	1.5	8.0	5.5	6.5	21.5	14.5	18.0
21	---	---	---	3.0	0.0	1.5	11.0	8.0	9.5	22.5	15.5	19.0
22	---	---	---	1.5	0.0	0.5	12.5	11.0	11.5	23.5	17.0	20.5
23	---	---	---	1.5	0.0	0.5	13.0	11.0	12.0	24.5	18.5	21.5
24	---	0.0	0.0	2.5	0.0	1.0	13.0	11.5	12.0	22.5	16.5	19.0
25	0.0	0.0	0.0	4.0	0.0	1.5	11.5	9.5	10.5	18.0	14.5	16.0
26	0.0	0.0	0.0	3.5	2.0	2.5	9.5	8.5	9.0	16.0	13.5	14.0
27	0.5	0.0	0.0	3.0	2.0	3.0	11.0	8.0	9.5	14.5	13.0	13.5
28	0.5	0.0	0.0	3.0	1.0	2.0	11.0	9.0	10.0	17.0	12.0	14.5
29	0.0	0.0	0.0	3.5	0.5	2.0	12.5	9.0	10.5	19.5	13.0	16.0
30	---	---	---	3.5	2.0	3.0	11.5	10.0	10.5	18.5	15.5	16.5
31	---	---	---	6.0	3.0	4.0	---	---	---	16.0	13.5	14.5
MONTH	---	---	---	---	---	---	13.0	2.0	7.5	---	---	---
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	14.0	13.0	13.5	26.0	22.0	24.5	19.5	17.5	18.5	20.0	17.0	18.5
2	15.5	12.5	14.0	25.5	21.0	23.5	22.0	17.5	19.5	21.0	16.5	19.0
3	18.0	14.5	16.0	24.0	19.0	21.0	23.0	18.5	21.0	20.0	18.0	19.0
4	20.0	16.0	17.5	20.0	17.0	18.5	21.5	19.5	21.0	21.5	17.5	19.5
5	18.0	16.5	17.5	19.0	17.0	18.0	21.5	18.0	19.5	20.0	17.5	19.0
6	18.5	16.0	17.0	22.5	17.5	20.0	22.5	17.5	20.0	18.5	17.0	17.5
7	18.0	15.5	17.0	23.0	18.5	21.0	23.5	18.5	21.0	17.5	16.5	17.0
8	20.0	17.5	18.5	23.5	19.0	21.5	23.0	19.5	21.0	19.5	16.5	18.0
9	21.5	17.5	19.5	24.5	20.5	22.5	22.0	20.0	21.0	22.0	18.5	20.0
10	22.0	17.0	19.5	25.0	21.0	23.0	22.5	19.0	21.0	23.5	20.0	21.5
11	22.5	17.0	20.0	24.5	22.0	23.5	22.5	20.0	21.0	21.5	18.5	20.0
12	23.5	17.5	20.5	23.5	21.5	22.5	22.5	19.0	21.0	19.0	16.0	17.5
13	24.5	18.5	21.5	24.0	21.5	23.0	20.5	18.0	19.0	19.5	15.0	17.5
14	25.5	20.0	22.5	25.5	21.0	23.0	19.0	17.5	18.5	20.0	16.0	18.0
15	25.0	21.0	23.0	25.0	23.0	24.0	18.0	17.0	17.5	20.5	17.0	19.0
16	24.5	19.0	22.0	23.0	21.0	22.0	17.5	16.5	17.0	22.5	18.5	20.5
17	24.5	19.5	22.0	21.0	19.5	20.0	18.5	17.0	17.5	23.0	19.5	21.5
18	23.0	20.0	21.5	23.5	19.5	21.5	20.5	17.5	19.0	22.5	20.0	21.5
19	21.0	19.5	20.5	25.0	20.5	22.5	20.5	18.5	19.5	22.0	18.0	20.5
20	21.0	19.0	20.0	26.5	21.5	24.0	21.5	18.0	19.5	19.0	15.5	17.0
21	19.0	17.0	18.0	24.5	22.0	23.0	22.5	17.0	---	17.0	15.0	16.0
22	17.0	14.5	15.5	24.5	20.0	22.5	23.5	18.0	---	18.0	16.5	17.0
23	19.0	12.5	16.0	23.0	19.5	20.5	24.0	19.0	---	17.5	15.0	16.0
24	19.0	16.0	17.5	20.0	18.5	19.5	24.5	20.0	---	16.0	12.5	14.5
25	20.5	16.5	18.5	22.5	18.0	20.0	25.5	---	---	15.5	12.0	14.0
26	21.5	16.5	19.0	21.5	19.5	20.0	---	22.0	---	15.0	14.0	14.5
27	22.5	18.0	20.5	23.0	18.5	20.5	---	22.5	---	15.0	14.5	15.0
28	24.0	18.5	21.5	20.5	18.5	19.5	24.5	22.5	23.5	16.5	14.0	15.5
29	25.0	19.5	22.5	22.5	18.0	20.5	23.0	20.0	21.5	15.5	13.0	14.5
30	26.0	21.5	23.5	22.5	19.0	20.5	21.5	18.0	20.0	13.0	11.5	12.0
31	---	---	---	21.0	19.0	20.0	20.0	18.0	19.5	---	---	---
MONTH	26.0	12.5	19.0	26.5	17.0	21.5	---	---	---	23.5	11.5	17.5

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'32", long 74°59'10", Sullivan County, NY, Hydrologic Unit 02040101, on left bank, 1.6 mi upstream from Lackawaxen River, and 4.6 mi northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,020 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Subsequent to September 1954, entire flow from 371 mi² of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² of drainage area controlled by Cannonsville Reservoir. Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River Basin, as directed by the Delaware River Master. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft³/s, Aug. 19, 1955, gage height, 26.40 ft, from floodmarks in gage house, from rating curve extended above 55,000 ft³/s, on basis of slope-area measurement at gage height 23.19 ft; minimum discharge, 122 ft³/s, Sept. 5, 1953, gage height, 1.11 ft; minimum daily, 126 ft³/s, Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,400 ft³/s, Nov. 23, gage height, 9.70 ft; minimum daily discharge, about 500 ft³/s, Feb. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	765	560	1700	e1400	e1400	1900	3430	3000	11600	850	3250	764
2	675	699	1530	e1100	e1200	1730	3270	2760	8100	817	2580	821
3	587	836	3050	1370	e800	1850	2920	3150	5040	989	1960	1020
4	583	851	5180	1740	e1100	1700	2620	3550	3610	1280	1730	1050
5	934	876	3970	2240	e1050	1970	2380	3030	2840	1120	1850	1260
6	1530	1080	3030	2480	e990	2260	2160	3090	3100	1080	1720	1400
7	1060	1220	2600	e2100	e940	2420	1970	2930	5620	978	1460	1290
8	676	1220	2360	e1750	e1000	3190	1930	2610	3330	882	1300	1000
9	611	1180	2410	e1600	e900	3600	1900	2600	2630	913	1420	713
10	560	1110	2680	e1500	e500	3480	1890	2540	2200	1000	2100	1080
11	587	1130	2630	e1450	e800	6850	1970	2230	1850	943	1900	1270
12	916	1150	2360	e1400	e690	11600	3000	2010	1620	855	1570	1550
13	1240	1310	2270	1430	e660	6870	4220	1830	1490	834	1360	1060
14	775	1070	2710	1700	e650	4720	3490	1720	1420	836	1260	795
15	650	1010	3640	3760	e640	3710	3070	1580	1410	903	1260	705
16	820	993	3220	2880	e700	2900	2740	1560	1180	1450	1220	661
17	1020	956	2590	e1700	e1000	2480	3890	1670	1060	1790	1080	794
18	1280	810	e2100	1850	e1300	2230	7890	1520	1000	1490	950	663
19	1050	702	e1700	e1500	e1400	2190	11600	1390	1130	1930	963	1120
20	934	799	e1400	e1000	e1550	1930	8710	1260	1200	1490	1080	1260
21	782	813	1890	e1100	e2000	1740	6520	1150	1150	1240	906	1050
22	688	1140	1930	e1500	e1850	1570	5670	1070	1100	1130	925	877
23	625	14100	1730	e1700	e1600	1450	6140	1080	1040	1080	1010	1010
24	576	10600	e1550	2520	e1400	1420	5260	1270	1100	1130	934	1290
25	647	6020	e1400	3100	e1500	1310	6590	1370	1100	1180	892	935
26	941	4080	e1150	2250	e1480	1420	7200	1240	1090	1140	932	997
27	998	3050	e1000	e1400	e1450	5030	5910	1140	1120	1530	1040	897
28	666	2460	e1050	e1500	e1450	7390	4810	1050	1050	1590	1110	1140
29	576	2120	e1100	e1600	e1450	4710	3990	954	947	1300	990	844
30	544	1890	1670	e1600	---	3760	3410	872	892	1530	1230	719
31	554	---	1820	e1500	---	3440	---	2080	---	1670	1120	---
TOTAL	24850	65835	69420	55720	33450	102820	130550	59306	72019	36950	43102	30035
MEAN	802	2194	2239	1797	1153	3317	4352	1913	2401	1192	1390	1001
MAX	1530	14100	5180	3760	2000	11600	11600	3550	11600	1930	3250	1550
MIN	544	560	1000	1000	500	1310	1890	872	892	817	892	661

e Estimated.

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2129	2636	2992	2521	3107	5118	6049	4094	2325	1560	1346	1545
MAX	7404	6481	7375	8335	9389	12050	12650	8615	6701	3911	2329	4186
(WY)	1978	1973	1974	1978	1976	1977	1970	1984	1972	1973	1976	1987
MIN	527	610	1181	687	712	1399	1878	1161	673	328	465	448
(WY)	1964	1965	1989	1977	1980	1981	1985	1965	1965	1965	1965	1965

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1964 - 1992	
ANNUAL TOTAL	842138		724057		2949	
ANNUAL MEAN	2307		1978		4650	
HIGHEST ANNUAL MEAN					1297	
LOWEST ANNUAL MEAN					62800	
HIGHEST DAILY MEAN	14100	Nov 23	14100	Nov 23		Mar 15 1986
LOWEST DAILY MEAN	427	Sep 27	500	Feb 10	250	Oct 27 1963
ANNUAL SEVEN-DAY MINIMUM	634	Oct 28	634	Oct 28	264	Oct 23 1963
10 PERCENT EXCEEDS	4540		3600		6400	
50 PERCENT EXCEEDS	1530		1400		1650	
90 PERCENT EXCEEDS	813		798		840	

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

CHEMICAL DATA: 1971-73 (a).

NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1967 to current year (no winter record for water years 1969-76).

INSTRUMENTATION.--Water-temperature digital recorder since October 1975, provides one-hour-interval punches.
Prior to October 1975, water-temperature recorder provided continuous recordings.

REMARKS.--Interruption of record was due to malfunction of recording instrument due to vandalism.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1968-75, 1980-81, 1983, 1985-92), 32.0°C, Aug. 2, 3, 1975, July 10, 1981, July 12, 1987; minimum (water years 1968, 1977-92), 0.0°C, on many days during winter each year except, water years 1980-82.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 29.0°C, July 14, but may have been higher during period of instrument malfunction; minimum, 0.0°C on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	16.5	12.5	14.0	12.5	10.5	11.5	6.5	6.0	6.5	0.5	0.0	0.0
2	18.5	14.0	16.0	12.5	11.0	12.0	7.0	6.5	6.5	0.0	0.0	0.0
3	18.5	15.5	17.0	13.0	9.5	11.0	6.5	5.0	6.0	1.0	0.0	0.5
4	20.0	17.0	18.0	10.5	7.5	9.0	5.0	3.0	4.5	0.5	0.5	0.5
5	20.5	17.5	18.5	9.5	5.5	7.5	3.0	1.5	2.5	0.5	0.5	0.5
6	19.0	16.0	18.0	7.5	5.0	6.0	1.5	1.0	1.5	0.5	0.5	0.5
7	16.0	13.0	15.0	6.0	5.0	5.5	1.5	1.0	1.5	0.5	0.0	0.5
8	16.0	12.0	13.5	6.0	4.5	5.0	3.0	1.5	2.0	0.5	0.0	0.0
9	15.0	12.0	13.5	5.0	3.5	4.5	4.0	3.0	3.5	0.0	0.0	0.0
10	16.0	12.5	14.5	5.5	4.0	4.5	5.0	4.0	4.5	1.0	0.0	0.5
11	14.5	13.0	14.0	5.0	4.5	5.0	5.0	4.0	4.5	0.0	0.0	0.0
12	15.0	12.0	13.0	5.5	4.5	5.0	4.5	3.5	4.0	1.0	0.0	0.5
13	14.0	11.5	12.5	5.5	5.0	5.0	4.5	4.0	4.5	2.5	0.0	1.0
14	14.5	10.0	12.0	8.0	5.0	6.0	6.0	4.5	5.5	2.5	1.0	1.5
15	12.0	11.0	11.5	6.5	5.0	6.0	5.5	4.0	4.5	1.0	0.0	0.5
16	15.0	11.0	12.5	8.0	5.5	6.5	3.5	1.5	2.5	0.0	0.0	0.0
17	11.0	10.5	11.0	7.0	4.0	5.0	1.0	0.0	0.5	0.0	0.0	0.0
18	14.5	10.5	12.0	6.0	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
19	13.5	10.5	12.0	7.5	4.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
20	13.5	9.0	11.0	9.5	6.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
21	12.0	8.5	10.0	9.0	8.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0
22	13.0	8.5	10.0	9.5	9.0	9.5	0.5	0.0	0.5	0.0	0.0	0.0
23	12.5	9.5	11.0	10.0	9.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0
24	13.0	10.5	11.5	10.0	9.0	9.5	0.5	0.0	0.5	0.0	0.0	0.0
25	14.5	11.5	13.0	9.0	6.5	7.5	0.5	0.0	0.0	0.0	0.0	0.0
26	16.0	13.0	14.5	6.5	4.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0
27	17.5	14.0	15.5	4.5	3.0	3.5	0.5	0.0	0.5	0.0	0.0	0.0
28	16.5	13.0	15.0	3.5	3.0	3.5	0.5	0.0	0.5	0.0	0.0	0.0
29	14.0	11.0	12.5	5.0	3.5	4.0	0.5	0.0	0.5	0.0	0.0	0.0
30	13.0	9.0	11.0	6.0	4.5	5.5	1.0	0.0	0.5	0.0	0.0	0.0
31	11.5	9.0	10.5	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0
MONTH	20.5	8.5	13.5	13.0	3.0	6.5	7.0	0.0	2.0	2.5	0.0	0.0

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	0.0	0.0	0.0	0.5	0.0	0.5	5.0	4.5	4.5	12.5	11.0	11.5
2	0.0	0.0	0.0	1.0	0.5	0.5	4.5	3.5	4.0	15.0	11.5	13.5
3	0.0	0.0	0.0	1.0	0.5	0.5	4.0	3.0	3.5	16.5	14.5	15.0
4	0.0	0.0	0.0	3.5	0.5	1.5	5.0	3.0	4.0	15.0	13.5	14.5
5	0.5	0.0	0.0	3.0	0.5	1.5	6.0	3.0	4.5	13.0	11.0	12.5
6	0.5	0.0	0.0	1.5	0.5	1.0	7.5	4.0	5.5	11.0	10.0	10.5
7	0.5	0.0	0.0	1.0	0.5	1.0	8.5	5.0	6.5	11.5	9.5	10.5
8	0.0	0.0	0.0	2.5	1.0	2.0	9.0	6.5	7.5	12.0	11.0	11.5
9	0.0	0.0	0.0	4.0	2.5	3.0	8.0	6.5	7.5	14.5	11.5	13.0
10	0.5	0.0	0.5	5.5	4.0	4.5	10.5	7.0	8.5	15.5	13.0	14.0
11	0.5	0.0	0.5	6.0	3.5	5.5	9.0	8.5	9.0	18.0	14.5	16.0
12	0.5	0.5	0.5	3.5	1.5	2.0	8.0	6.5	8.0	20.0	15.5	17.5
13	0.5	0.5	0.5	1.0	0.5	0.5	7.0	5.5	6.5	21.0	17.0	19.0
14	0.5	0.5	0.5	1.0	0.0	0.5	8.0	6.0	7.0	21.0	18.0	19.5
15	0.5	0.5	0.5	1.0	0.0	0.5	9.5	7.0	8.0	20.0	18.0	19.0
16	0.5	0.5	0.5	1.5	0.0	0.5	8.5	7.0	8.0	18.5	16.5	17.5
17	0.5	0.0	0.5	0.5	0.0	0.5	7.0	5.5	6.5	16.5	15.5	16.0
18	0.0	0.0	0.0	2.0	0.0	1.0	5.5	5.0	5.5	18.0	15.5	16.5
19	0.5	0.0	0.5	0.5	0.0	0.5	5.5	5.0	5.5	20.5	15.0	17.5
20	0.5	0.0	0.0	3.0	0.0	1.5	8.0	5.5	6.5	21.0	15.5	18.5
21	0.5	0.0	0.5	3.5	0.5	2.0	10.5	8.0	9.0	22.5	16.5	19.5
22	0.5	0.0	0.5	2.0	0.5	1.0	12.0	10.5	11.5	24.5	18.0	21.0
23	1.5	0.5	1.0	3.0	0.0	1.0	13.5	11.5	12.5	25.0	19.5	22.0
24	0.5	0.5	0.5	3.0	0.0	1.5	13.0	12.0	12.5	22.0	17.5	20.0
25	0.5	0.5	0.5	5.0	0.0	2.5	12.5	10.0	11.5	18.5	16.0	17.0
26	0.5	0.5	0.5	4.0	2.5	3.5	10.0	9.0	9.5	16.0	15.0	15.5
27	1.5	0.5	1.0	4.0	3.0	3.5	10.5	8.5	9.5	15.5	14.0	14.5
28	1.5	0.5	1.0	3.0	2.0	2.5	10.5	9.5	10.5	18.5	12.5	15.5
29	1.0	0.5	0.5	3.0	1.5	2.5	12.5	10.0	11.0	19.5	13.5	16.5
30	---	---	---	3.5	2.5	3.0	11.5	11.0	11.0	17.5	15.5	16.5
31	---	---	---	5.5	3.5	4.5	---	---	---	16.5	15.0	16.0
MONTH	1.5	0.0	0.5	6.0	0.0	2.0	13.5	3.0	8.0	25.0	9.5	16.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	14.5	13.5	14.0	28.5	23.5	25.5	21.5	19.5	20.5	21.5	18.5	20.5
2	15.5	13.0	14.0	27.0	22.5	24.5	21.5	19.0	20.0	22.5	18.0	20.0
3	17.5	14.5	16.0	24.0	21.0	22.5	23.0	20.0	21.5	20.5	19.5	20.0
4	19.0	17.0	18.0	24.0	20.5	21.5	23.5	21.0	22.0	24.5	19.5	21.5
5	18.5	17.5	18.5	22.5	19.5	21.0	22.5	20.0	21.5	21.5	19.5	20.5
6	19.0	17.5	18.0	23.5	19.0	21.0	23.5	19.5	21.5	20.0	19.0	19.5
7	18.5	17.5	18.0	24.5	19.5	22.0	24.0	20.0	22.0	19.5	18.5	19.5
8	20.0	18.0	19.0	24.5	20.5	22.5	24.0	20.5	22.0	21.5	18.0	20.0
9	21.5	18.5	20.0	27.0	22.0	24.0	24.5	21.5	23.0	23.0	19.5	21.0
10	22.0	19.0	20.5	26.0	22.5	24.5	24.0	21.5	22.5	24.5	21.0	22.5
11	22.5	18.5	20.5	26.0	23.5	24.5	23.5	21.5	22.5	23.5	20.5	22.0
12	23.5	19.0	21.5	24.0	22.5	23.5	24.0	20.5	22.0	21.5	19.0	20.0
13	24.5	20.0	22.0	27.5	22.5	24.5	21.5	20.0	20.5	21.5	17.0	19.0
14	25.5	20.5	23.0	29.0	23.0	25.5	20.5	19.5	20.0	21.5	17.0	19.0
15	26.0	22.0	24.0	27.5	25.0	26.0	19.5	19.0	19.5	21.5	18.0	19.5
16	25.5	21.0	23.0	25.0	23.5	24.0	19.0	18.0	18.5	23.0	19.0	21.0
17	25.5	21.0	23.5	23.5	21.5	22.0	19.0	18.0	18.5	24.0	20.5	22.0
18	22.5	21.0	22.0	23.5	20.5	22.0	21.5	18.0	19.5	23.5	20.5	22.0
19	22.0	20.5	21.0	25.5	22.0	23.5	22.0	19.0	20.0	22.5	20.0	21.5
20	22.5	20.5	21.5	27.0	22.5	24.5	22.0	18.5	20.0	22.0	18.0	20.0
21	21.5	18.5	20.0	25.0	23.5	24.5	24.5	18.0	21.0	19.5	17.0	18.5
22	18.5	15.5	17.5	26.0	21.5	23.5	24.0	19.0	21.5	20.0	18.0	19.0
23	21.0	14.5	17.5	24.5	21.5	22.5	25.5	20.0	22.5	20.0	16.0	17.5
24	20.0	16.5	18.0	22.0	20.5	21.0	27.0	21.5	24.0	17.5	14.0	15.5
25	22.0	17.5	19.5	---	19.5	---	26.5	22.5	24.5	16.5	13.0	14.5
26	22.5	18.0	20.0	---	---	---	28.0	23.5	25.5	15.0	14.5	15.0
27	23.5	19.5	21.0	---	---	---	28.5	24.0	26.0	16.5	15.0	15.5
28	25.5	19.5	22.0	22.0	---	---	27.0	24.5	25.5	18.5	15.0	16.5
29	26.0	21.0	23.5	23.5	19.0	21.5	24.5	21.5	23.5	18.0	14.0	15.5
30	27.0	22.5	24.5	23.0	20.5	22.0	24.0	20.0	21.5	15.0	12.5	13.5
31	---	---	---	22.5	20.5	21.5	24.5	20.0	22.0	---	---	---
MONTH	27.0	13.0	20.0	---	---	---	28.5	18.0	22.0	24.5	12.5	19.0

LACKAWAXEN RIVER BASIN

01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE, PA

LOCATION.--Lat 41°40'28", long 75°22'35", Wayne County, Hydrologic Unit 02040104, on right bank at steel bridge on State Highway 247, 0.3 mi downstream from Johnson Creek, and 2.0 mi northwest of Aldenville.

DRAINAGE AREA.--40.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1986 to current year. Crest-stage partial-record site 1975 to 1986.

GAGE.--Water-stage recorder. Datum of gage is 1,244.60 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Published as station 01427950, 1975-1988. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	5.3	25	e49	e33	94	142	78	807	12	54	14
2	4.7	4.7	23	e46	e31	74	120	82	329	11	27	14
3	4.6	4.5	179	e42	e29	68	96	121	177	11	21	14
4	4.6	4.3	136	134	e28	89	82	88	114	13	25	14
5	4.6	4.3	78	151	e28	115	71	110	107	13	24	13
6	4.9	4.7	63	91	e27	110	64	102	282	14	19	12
7	5.0	5.0	55	74	e26	147	65	82	139	12	16	12
8	4.8	5.0	82	62	e25	177	68	82	110	12	15	12
9	4.8	5.0	95	56	e24	140	65	139	83	18	87	12
10	4.8	5.1	69	58	e24	129	69	99	62	13	40	14
11	6.9	12	57	53	e23	671	83	85	48	12	27	27
12	10	11	50	48	e23	275	280	72	39	12	22	18
13	7.4	8.9	54	48	e24	168	143	64	41	13	20	14
14	6.5	7.8	131	210	e23	133	109	58	39	13	20	13
15	6.0	7.5	98	125	e22	101	91	51	28	13	19	13
16	12	7.6	69	87	e60	91	101	81	24	17	18	15
17	9.7	7.0	e58	e69	e58	82	367	66	24	15	18	15
18	14	6.5	e54	e62	e48	66	536	58	23	20	35	16
19	10	6.4	e47	e60	e70	61	492	48	23	16	28	16
20	8.3	6.2	e41	e58	e87	58	292	41	22	13	25	13
21	7.9	6.3	e40	e53	59	53	206	36	21	13	26	12
22	8.6	132	e37	e47	51	e49	258	31	19	12	19	18
23	7.2	317	e35	e50	50	e47	209	28	17	17	16	32
24	5.4	89	e34	e160	51	e44	273	30	18	18	16	21
25	5.0	60	e31	e60	50	e41	348	32	17	14	14	17
26	4.7	44	e28	e52	55	127	234	30	15	33	13	42
27	4.7	35	e27	e47	51	615	176	31	15	40	13	47
28	4.6	31	e26	e44	54	269	123	28	14	20	18	34
29	4.6	29	47	e40	124	160	99	24	14	24	37	28
30	4.6	26	70	e36	---	135	86	25	14	34	20	23
31	4.7	---	57	e34	---	144	---	820	---	66	16	---
TOTAL	200.4	898.1	1896	2206	1258	4533	5348	2722	2685	564	768	565
MEAN	6.46	29.9	61.2	71.2	43.4	146	178	87.8	89.5	18.2	24.8	18.8
MAX	14	317	179	210	124	671	536	820	807	66	87	47
MIN	4.6	4.3	23	34	22	41	64	24	14	11	13	12
CFSM	.16	.74	1.51	1.75	1.07	3.60	4.39	2.16	2.20	.45	.61	.46
IN.	.18	.82	1.74	2.02	1.15	4.15	4.90	2.49	2.46	.52	.70	.52

e Estimated.

LACKAWAXEN RIVER BASIN

01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEAR 1987 - 1992, BY WATER YEAR (WY)

MEAN	54.2	101	89.0	65.7	90.8	121	119	118	64.3	29.0	24.8	41.8
MAX	116	199	228	122	192	173	183	258	200	63.0	54.6	156
(WY)	1991	1987	1991	1990	1990	1987	1987	1989	1989	1989	1990	1987
MIN	6.46	29.9	21.2	21.9	33.7	87.0	58.7	39.5	14.3	8.86	12.9	7.41
(WY)	1992	1992	1989	1989	1987	1989	1988	1987	1991	1991	1988	1991

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1987-1992

ANNUAL TOTAL	20104.9		23643.5				
ANNUAL MEAN	55.1		64.6			76.4	
HIGHEST ANNUAL MEAN						91.0	1987
LOWEST ANNUAL MEAN						53.4	1988
HIGHEST DAILY MEAN	750	Mar 4	820	May 31	1460		Dec 4 1990
LOWEST DAILY MEAN	4.2	Sep 17	4.3	Nov 4	4.2		Sep 17 1991
ANNUAL SEVEN-DAY MINIMUM	4.6	Sep 12	4.6	Oct 30	4.6		Sep 12 1991
INSTANTANEOUS PEAK FLOW			2100	May 31	3440		Mar 15 1986
INSTANTANEOUS PEAK STAGE			6.15	May 31	7.40		Mar 15 1986
ANNUAL RUNNOFF (CFSM)	1.36		1.59		1.88		
ANNUAL RUNNOFF (INCHES)	18.42		21.66		25.55		
10 PERCENT EXCEEDS	126		137		169		
50 PERCENT EXCEEDS	26		34		42		
90 PERCENT EXCEEDS	5.4		7.1		11		

LACKAWAXEN RIVER BASIN

01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: July 1988 to current year.

INSTRUMENTATION.--Temperature probe interfaced with data collection platform.

REMARKS.--Interruptions in daily record were due to downlink problems.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 27°C, Aug. 15, 1989; minimum, 0.0°C, many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23°C, July 14; July 20; minimum, 0.0°C, many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LACKAWAXEN RIVER BASIN

01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA

LOCATION.--Lat 41°35'14", long 75°19'38", Wayne County, Hydrologic Unit 02040103, on left bank 500 ft downstream from Prompton Reservoir, 1,500 ft upstream from bridge on U.S. Highway 6 at Prompton, and 2,000 ft upstream from Van Auken Creek.

DRAINAGE AREA.--59.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year. Prior to October 1952, published as Lackawaxen River at Prompton.

REVISED RECORDS.--WSP 1432: 1948-49. WDR PA-71-1: 1970(M).

GAGE.--Water-stage recorder. Datum of gage is 1,083.78 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1960 by Prompton Reservoir (station 01428900) 500 ft upstream. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1942, reached a stage of 16.7 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	7.3	44	64	50	122	186	127	861	30	40	27
2	7.9	7.0	41	60	48	116	176	117	523	28	43	26
3	7.9	6.8	78	61	47	106	154	134	313	27	43	25
4	7.9	6.3	153	71	45	105	132	132	207	26	43	24
5	7.9	5.9	143	137	43	125	115	124	158	25	43	24
6	10	5.5	118	135	42	143	101	136	206	25	41	23
7	8.7	5.4	99	116	41	149	92	125	208	24	39	22
8	7.9	5.5	95	98	39	184	88	112	166	23	38	21
9	7.6	5.4	111	89	38	184	86	136	124	23	40	20
10	7.6	5.4	108	84	38	169	86	143	109	23	47	19
11	8.4	6.4	95	81	37	395	91	129	94	23	48	21
12	9.6	7.7	84	75	37	423	171	113	79	22	46	21
13	9.7	8.3	78	71	37	274	193	100	70	22	42	21
14	10	8.5	105	97	36	194	162	90	66	21	40	21
15	9.8	8.5	137	169	35	154	136	81	59	21	39	20
16	11	8.7	120	133	36	119	120	84	51	21	38	20
17	11	9.0	97	101	45	105	200	91	47	21	36	20
18	12	8.7	88	92	56	95	408	86	44	21	36	20
19	13	8.1	76	90	64	93	569	78	42	22	37	20
20	13	7.9	68	88	86	82	420	69	41	22	37	19
21	13	8.1	67	78	84	74	309	61	40	20	35	18
22	13	13	67	69	77	68	270	55	39	21	e32	18
23	12	103	64	64	71	67	268	50	37	21	e32	19
24	12	139	63	87	69	62	239	46	37	22	33	20
25	11	109	60	94	70	59	345	46	36	22	31	21
26	10	84	53	89	73	71	323	45	35	23	30	22
27	9.7	67	52	75	73	365	262	44	34	26	28	26
28	9.5	57	50	66	72	402	208	43	33	28	27	28
29	9.0	51	50	63	122	270	170	40	32	29	27	29
30	8.2	47	66	59	---	210	144	38	31	29	28	30
31	7.7	---	71	53	---	186	---	156	---	32	28	---
TOTAL	304.1	820.4	2601	2709	1611	5171	6224	2831	3822	743	1147	665
MEAN	9.81	27.3	83.9	87.4	55.6	167	207	91.3	127	24.0	37.0	22.2
MAX	13	139	153	169	122	423	569	156	861	32	48	30
MIN	7.6	5.4	41	53	35	59	86	38	31	20	27	18
MEAN±	9.21	36.1	85.1	86.9	58.9	169	205	104	106	26.7	34.4	22.6
CFSM±	.15	.60	1.43	1.46	.99	2.83	3.43	1.74	1.78	.45	.58	.38
IN.±	.18	.67	1.64	1.68	1.06	3.26	3.83	2.01	1.98	.52	.66	.42

e Estimated.

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA-Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.0	93.2	114	92.7	126	213	222	135	75.2	41.0	30.0	43.1
MAX	307	362	272	312	369	620	413	329	260	133	71.5	221
(WY)	1978	1973	1972	1979	1981	1977	1983	1989	1973	1984	1986	1987
MIN	7.15	7.65	31.8	19.1	19.0	60.4	86.5	45.8	17.5	10.2	9.43	6.67
(WY)	1965	1965	1965	1981	1980	1981	1988	1965	1962	1966	1962	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1961 - 1992

ANNUAL TOTAL	25768.4		28648.5									
ANNUAL MEAN	70.6	†68.7	78.3	†78.6					104			
HIGHEST ANNUAL MEAN									176			1977
LOWEST ANNUAL MEAN									49.7			1965
HIGHEST DAILY MEAN	572	Mar 4	861	Jun 1					2340		Jun 30	1973
LOWEST DAILY MEAN	5.4	Nov 7	5.4	Nov 7					1.8		Oct 22	1966
ANNUAL SEVEN-DAY MINIMUM	5.6	Nov 4	5.6	Nov 4					2.0		Oct 22	1966
INSTANTANEOUS PEAK FLOW			997	Jun 1					3610		Mar 14	1977
INSTANTANEOUS PEAK STAGE			3.73	Jun 1					7.00		Mar 14	1977
INSTANTANEOUS LOW FLOW			5.4	Nov 6-11					1.8		Oct 22	1966
ANNUAL RUNOFF (CFSM)	1.18	† 1.15	1.31	† 1.32					1.74			
ANNUAL RUNOFF (INCHES)	16.06	†15.63	17.85	†17.89					23.59			
10 PERCENT EXCEEDS	160		167						239			
50 PERCENT EXCEEDS	37		47						55			
90 PERCENT EXCEEDS	8.6		9.7						15			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1960, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	62.2	113	136	130	125	221	264	139	63.6	54.3	45.8	47.0
MAX	376	213	243	245	230	409	539	301	155	190	304	153
(WY)	1956	1946	1951	1952	1951	1945	1958	1947	1960	1947	1955	1960
MIN	15.2	23.7	28.8	36.2	46.4	104	57.4	38.6	16.4	10.3	1.33	11.6
(WY)	1958	1958	1947	1948	1958	1960	1946	1951	1959	1955	1960	1957

SUMMARY STATISTICS

WATER YEARS 1945 - 1960

ANNUAL TOTAL												
ANNUAL MEAN	117											
HIGHEST ANNUAL MEAN	152					1952						
LOWEST ANNUAL MEAN	78.1					1957						
HIGHEST DAILY MEAN	2440				Aug 19	1955						
LOWEST DAILY MEAN	.00				Jul 27	1960						
ANNUAL SEVEN DAY MINIMUM	.00				Jul 27	1960						
INSTANTANEOUS PEAK FLOW	a5860				Aug 18	1955						
INSTANTANEOUS PEAK STAGE	9.24				Aug 18	1955						
INSTANTANEOUS LOW FLOW	b.00				Jul 26	1960						
ANNUAL RUNOFF (CFSM)	1.95											
ANNUAL RUNOFF (INCHES)	26.56											
10 PERCENT EXCEEDS	257											
50 PERCENT EXCEEDS	62											
90 PERCENT EXCEEDS	15											

† Adjusted for change in contents of Prompton Reservoir.

a From rating curve extended above 3,600 ft³/s.

b No flow July 26 to Aug. 25, 1960, result of construction work upstream.

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: October 1987 to current year.

INSTRUMENTATION.--Temperature probe interfaced with data collection platform.

REMARKS.--Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C Sept. 10, 1989; minimum, 1.0°C, Jan. 28, 29, 31, Feb. 1, 2, 6, 7, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.0°C, July 13; minimum, 2.0°C, Mar. 28-30.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	12.5	11.0	11.5
2	3.5	3.0	3.0	3.0	3.0	3.0	3.0	2.5	3.0	12.0	10.5	11.0
3	3.5	3.5	3.5	3.0	2.5	2.5	3.0	3.0	3.0	13.0	11.5	12.5
4	3.5	3.5	3.5	3.0	2.5	3.0	3.5	3.0	3.0	13.0	12.0	12.5
5	3.5	3.5	3.5	3.0	3.0	3.0	3.5	3.0	3.5	12.5	12.0	12.5
6	4.0	3.5	3.5	3.0	3.0	3.0	4.0	3.5	3.5	12.0	12.0	12.0
7	4.0	3.5	3.5	3.0	3.0	3.0	4.0	4.0	4.0	11.5	11.0	11.5
8	4.0	3.5	3.5	3.5	3.0	3.0	4.5	4.0	4.0	11.5	11.5	11.5
9	4.0	3.5	3.5	3.5	3.0	3.0	4.5	4.0	4.0	11.5	10.0	11.0
10	4.0	3.5	3.5	3.5	3.0	3.0	5.5	4.5	4.5	14.0	12.0	13.0
11	3.5	3.5	3.5	3.5	3.5	3.5	4.5	4.5	4.5	13.5	12.5	13.0
12	4.0	3.5	3.5	3.5	3.5	3.5	4.5	4.0	4.5	14.0	13.0	13.5
13	3.5	3.5	3.5	3.5	3.0	3.0	5.0	4.0	4.5	15.0	13.5	14.5
14	4.0	3.5	3.5	3.0	3.0	3.0	6.0	4.5	5.0	16.5	15.0	15.5
15	3.5	3.5	3.5	3.0	3.0	3.0	7.0	5.0	6.0	15.0	14.5	14.5
16	4.0	3.5	3.5	3.0	3.0	3.0	6.5	5.5	6.0	14.5	14.5	14.5
17	4.0	3.5	3.5	3.0	3.0	3.0	6.0	5.5	6.0	---	---	---
18	3.5	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	16.5	14.5	15.5
19	3.5	3.0	3.0	3.0	2.0	3.0	6.0	6.0	6.0	16.0	15.0	15.5
20	3.0	3.0	3.0	3.0	2.5	3.0	6.0	5.5	6.0	15.5	15.0	15.0
21	3.0	3.0	3.0	3.0	2.5	2.5	6.5	6.0	6.0	17.0	14.5	15.5
22	3.0	3.0	3.0	3.0	2.5	2.5	7.5	7.0	7.0	17.0	15.5	16.0
23	3.0	3.0	3.0	3.0	2.5	2.5	11.0	7.5	9.5	17.0	15.5	16.0
24	3.0	3.0	3.0	3.0	2.5	2.5	11.0	10.0	10.5	16.0	15.5	15.5
25	3.0	3.0	3.0	3.0	2.5	3.0	11.5	10.5	11.0	15.5	15.0	15.0
26	3.0	3.0	3.0	2.5	2.5	2.5	11.0	10.0	10.5	15.5	14.5	15.0
27	3.0	3.0	3.0	2.5	2.5	2.5	11.5	10.5	11.0	16.0	14.5	15.5
28	3.0	2.5	3.0	2.5	2.0	2.0	12.0	10.5	11.0	16.5	14.5	15.5
29	3.0	2.5	3.0	2.5	2.0	2.0	13.0	10.5	11.5	15.0	14.0	14.5
30	---	---	---	2.5	2.0	2.5	11.5	10.0	11.0	15.0	13.5	14.0
31	---	---	---	2.5	2.5	2.5	---	---	---	15.5	14.0	15.0
MONTH	4.0	2.5	3.5	3.5	2.0	2.8	13.0	2.5	6.5	17.0	10.0	14.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	16.0	15.0	15.5	17.5	16.5	17.0	22.5	19.5	21.0	21.5	19.0	20.0
2	17.0	14.5	15.5	18.0	16.5	17.0	21.0	20.5	21.0	20.0	19.0	19.5
3	18.0	15.0	16.0	17.5	16.5	17.0	20.5	20.0	20.0	19.5	19.0	19.0
4	16.0	13.5	15.0	18.0	16.5	17.0	21.0	19.5	20.0	20.0	18.5	19.5
5	16.0	14.0	15.0	17.5	17.0	17.5	19.5	18.5	19.0	19.5	18.5	19.0
6	17.0	15.0	16.0	18.0	17.0	17.5	19.0	18.5	19.0	19.5	19.0	19.0
7	18.5	16.5	17.5	18.0	17.0	17.5	19.0	19.0	19.0	19.5	19.0	19.0
8	---	---	---	18.0	17.5	18.0	20.0	19.0	19.5	19.5	19.0	19.0
9	---	---	---	19.5	17.0	18.0	21.0	19.5	20.0	19.5	19.0	19.0
10	19.5	18.0	19.0	18.5	17.0	18.0	20.5	20.0	20.5	20.5	19.0	19.5
11	19.0	17.5	18.5	19.0	17.5	18.0	21.0	20.0	20.0	21.5	19.0	20.5
12	19.5	17.5	18.5	19.0	18.0	18.5	21.0	19.5	20.0	21.0	20.0	20.5
13	18.0	16.5	17.5	23.0	17.0	19.5	20.0	19.5	20.0	20.0	19.5	19.5
14	19.0	17.0	18.0	20.0	17.5	19.0	20.0	19.5	19.5	20.0	18.5	19.0
15	18.0	16.0	17.5	20.0	18.5	19.0	19.5	19.0	19.5	19.5	18.5	19.0
16	17.0	16.0	16.5	20.0	18.5	19.5	19.0	18.5	19.0	19.5	18.0	18.5
17	16.0	15.5	16.0	20.0	18.5	19.5	19.0	18.5	19.0	19.0	18.0	18.5
18	16.5	15.0	16.0	22.5	18.5	20.5	19.0	18.5	18.5	19.0	18.5	18.5
19	17.0	15.0	16.0	20.5	19.5	20.0	19.5	18.0	18.5	20.5	18.5	20.0
20	16.5	15.5	16.5	21.0	19.5	20.0	20.5	18.0	19.0	20.0	19.0	19.5
21	17.0	15.5	16.5	20.5	18.5	20.0	19.0	18.0	18.5	19.0	18.0	18.5
22	19.5	16.0	18.0	21.0	19.5	20.0	---	---	---	19.0	18.5	18.5
23	18.5	15.5	17.0	20.0	20.0	20.0	---	---	---	19.0	18.0	18.5
24	17.0	16.0	16.5	20.0	19.5	20.0	---	---	---	18.0	17.0	17.5
25	19.5	15.5	17.0	20.0	19.0	19.5	19.0	18.5	18.5	17.5	16.5	17.0
26	17.0	16.0	16.5	19.5	19.0	19.5	19.0	18.5	18.5	16.5	16.0	16.5
27	17.0	16.0	16.5	21.5	19.0	20.0	19.0	18.5	19.0	16.5	15.5	16.0
28	17.0	16.0	16.5	22.0	18.5	20.5	19.0	18.0	18.5	16.0	15.5	15.5
29	17.0	16.5	17.0	20.0	19.0	19.5	20.5	18.5	19.5	16.5	15.5	16.0
30	17.5	16.5	17.0	19.5	19.0	19.5	19.5	18.5	19.0	15.5	14.5	15.0
31	---	---	---	20.0	19.0	19.5	21.5	19.0	20.0	---	---	---
MONTH	19.5	13.5	16.5	23.0	16.5	19.0	22.5	18.0	19.5	21.5	14.5	18.5

LACKAWAXEN RIVER BASIN

01429500 DYBERRY CREEK NEAR HONESDALE, PA

LOCATION.--Lat 41°36'25", long 75°16'00", Wayne County, Hydrologic Unit 02040103, on right bank 180 ft upstream from unnamed tributary, 1,700 ft downstream from General Edgar Jadwin Reservoir, 2.1 mi north of Honesdale, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--64.6 mi².

PERIOD OF RECORD.--October 1943 to current year. Published as "at Dyberry" October 1943 to September 1959 and as "near Dyberry" October 1959 to September 1961.

REVISED RECORDS.--WSP 1382: 1947(M), 1950(M), 1951-53.

GAGE.--Water-stage recorder. Datum of gage is 970.70 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1957, nonrecording gage at site 1.9 mi upstream at datum 13.70 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since October 1959 by General Edgar Jadwin Reservoir (station 01429400) 1,700 ft upstream. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	6.5	44	56	55	110	184	127	956	20	107	14
2	7.3	6.4	39	60	49	96	164	141	403	19	57	14
3	8.3	6.6	288	60	e46	87	139	179	199	18	39	17
4	6.7	6.2	272	95	e41	98	125	142	141	21	54	15
5	5.3	6.0	157	160	e38	131	112	131	119	21	61	15
6	9.2	5.9	120	121	e37	138	101	135	246	23	40	13
7	8.8	5.9	101	98	e36	157	96	114	179	19	30	13
8	8.7	6.2	106	86	e34	194	97	102	137	17	25	13
9	7.5	6.2	118	79	30	168	92	132	117	29	75	12
10	6.8	6.0	98	78	29	148	94	115	90	23	70	13
11	8.3	15	82	76	e28	556	110	99	75	18	46	27
12	15	22	74	68	e26	468	283	88	66	18	34	24
13	13	17	79	66	27	236	194	80	60	20	28	19
14	11	15	144	143	e26	174	141	73	54	19	26	16
15	10	14	146	165	e25	137	117	66	49	19	25	17
16	13	13	103	100	77	114	116	93	43	24	24	15
17	16	12	76	87	77	105	331	90	42	23	23	13
18	20	11	e69	e78	64	97	586	79	44	31	32	13
19	18	11	e60	e67	79	97	743	67	45	28	43	15
20	14	10	e57	68	100	90	391	59	41	21	31	17
21	12	9.8	e53	e68	79	83	272	53	34	18	25	15
22	11	123	e50	70	69	74	250	48	32	17	30	18
23	10	705	e47	74	66	e70	282	44	31	21	23	26
24	9.3	195	e46	158	66	e68	269	44	34	31	18	19
25	8.8	120	e41	104	68	e65	463	49	33	24	17	15
26	8.5	86	e38	84	78	122	295	44	32	25	15	20
27	8.2	67	e35	73	73	746	223	48	40	60	18	25
28	7.6	58	e34	70	71	426	181	48	26	39	15	25
29	7.2	53	60	65	144	228	155	40	22	29	17	21
30	6.9	47	95	61	---	189	138	37	20	58	17	17
31	6.8	---	70	60	---	189	---	337	---	99	14	---
TOTAL	310.2	1665.7	2802	2698	1638	5661	6744	2904	3410	852	1079	516
MEAN	10.0	55.5	90.4	87.0	56.5	183	225	93.7	114	27.5	34.8	17.2
MAX	20	705	288	165	144	746	743	337	956	99	107	27
MIN	5.3	5.9	34	56	25	65	92	37	20	17	14	12
MEAN†	10.0	55.5	90.4	87.0	56.5	183	225	93.7	114	27.5	34.8	17.2
CFSM†	.15	.86	1.40	1.35	.87	2.83	3.48	1.45	1.76	.43	.54	.27
IN.†	.18	.96	1.61	1.55	.94	3.26	3.88	1.67	1.96	.49	.62	.30

† Adjusted for change in contents at General Edgar Jadwin Reservoir.

e Estimated.

LACKAWAXEN RIVER BASIN

01429500 DYBERRY CREEK NEAR HONESDALE, PA

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.9	107	121	102	146	234	233	142	78.1	43.7	29.8	43.4
MAX	292	413	326	362	466	552	525	397	291	170	114	281
(WY)	1977	1973	1974	1979	1981	1977	1970	1989	1972	1973	1976	1987
MIN	4.17	5.48	28.2	20.8	20.2	73.0	83.6	43.3	12.0	3.23	5.32	2.26
(WY)	1965	1965	1965	1981	1980	1981	1985	1965	1962	1962	1966	1980

SUMMARY STATISTICS FOR 1991 CALENDAR YEAR FOR 1992 WATER YEAR WATER YEARS 1960 - 1992

ANNUAL TOTAL	26527.2		30279.9									
ANNUAL MEAN	72.7	±73.3	82.7	±82.7					111	±112		
HIGHEST ANNUAL MEAN									186	±186	1973	
LOWEST ANNUAL MEAN									51.4	± 51.4	1965	
HIGHEST DAILY MEAN	740	Mar 4	956	Jun 1					2190	Mar 16	1986	
LOWEST DAILY MEAN	2.4	Sep 14	5.3	Oct 5					1.2	Jul 29	1970	
ANNUAL SEVEN-DAY MINIMUM	2.6	Sep 12	6.1	Nov 4					1.8	Oct 5	1980	
INSTANTANEOUS PEAK FLOW			1060	Jun 1					2200	Sep 27	1985	
INSTANTANEOUS PEAK STAGE			5.14	Jun 1					6.89	Sep 27	1985	
INSTANTANEOUS LOW FLOW			5.1	Oct 5					a.00	Oct 2	1968	
ANNUAL RUNOFF (CFSM)	1.13	± 1.13	1.28	± 1.28					1.72	± 1.73		
ANNUAL RUNOFF (INCHES)	15.28	±15.42	17.44	±17.44					23.44	±23.54		
10 PERCENT EXCEEDS	173		170						248			
50 PERCENT EXCEEDS	38		49						54			
90 PERCENT EXCEEDS	5.4		11						10			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1959, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	53.7	110	128	119	109	236	262	145	55.8	68.9	45.7	30.5
MAX	348	263	255	248	227	539	628	345	127	293	339	90.8
(WY)	1956	1946	1953	1952	1951	1945	1958	1947	1946	1952	1955	1952
MIN	10.2	18.8	20.4	29.0	47.4	91.8	59.9	44.4	19.2	8.16	5.82	5.30
(WY)	1948	1947	1947	1944	1958	1949	1946	1955	1959	1955	1953	1953

SUMMARY STATISTICS WATER YEARS 1944 - 1959

ANNUAL TOTAL												
ANNUAL MEAN	114											
HIGHEST ANNUAL MEAN	170					1952						
LOWEST ANNUAL MEAN	77.2					1957						
HIGHEST DAILY MEAN	5880				Jul 10	1952						
LOWEST DAILY MEAN	2.0				Oct 5	1953						
ANNUAL SEVEN-DAY MINIMUM	2.3				Sep 29	1953						
INSTANTANEOUS PEAK FLOW	b15500				Jul 10	1952						
INSTANTANEOUS PEAK STAGE	c14.60				Jul 10	1952						
INSTANTANEOUS LOW FLOW												
ANNUAL RUNOFF (CFSM)	1.76											
ANNUAL RUNOFF (INCHES)	23.91											
10 PERCENT EXCEEDS	252											
50 PERCENT EXCEEDS	54											
90 PERCENT EXCEEDS	9.4											

† Adjusted for change in contents at General Jadwin Reservoir.

a Result of shutoff at General Jadwin Reservoir.

b From rating curve extended above 2,500 ft³/s on basis of slope-area measurement at gage height 13.70 ft, for site and datum then in use.

c Site and datum then in use.

LACKAWAXEN RIVER BASIN

01430000 LACKAWAXEN RIVER NEAR HONESDALE, PA

LOCATION.--Lat 41°33'43", long 75°14'54", Wayne County, Hydrologic Unit 02040103, on right bank at Lemnitzer Bridge (Brown Street), on U.S. Highway 6, and 1.2 mi downstream from Dyberry Creek.

DRAINAGE AREA.--164 mi².

PERIOD OF RECORD.--October 1948 to September 1969, October 1985 to current year. Operated as crest-stage partial-record station July 1973 to September 1985.

REVISED RECORDS.--WDR PA-90-1: 1989.

GAGE.--Water-stage recorder. Datum of gage is 946.34 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1960 by Prompton Reservoir (station 01428900) and, at high flow, since 1959 by General Edgar Jadwin Reservoir (station 01429400). Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	17	125	158	e136	308	496	318	2340	60	207	45
2	28	17	115	139	e124	292	456	315	1240	56	134	43
3	45	16	536	140	e118	268	395	388	684	54	103	46
4	31	15	643	185	e106	265	346	346	454	e57	133	43
5	40	14	435	357	e96	325	302	312	354	e58	134	41
6	47	13	328	318	e94	359	265	338	618	e61	101	38
7	35	14	270	260	e90	388	242	303	547	e52	85	36
8	41	13	256	221	e87	496	233	275	411	47	77	35
9	47	12	286	200	e78	472	229	370	355	64	128	33
10	29	13	264	196	e73	419	226	353	278	56	143	37
11	46	26	222	188	e70	1180	260	304	224	49	113	55
12	49	43	197	176	e64	1190	584	266	191	45	94	49
13	34	36	194	169	e66	692	529	235	166	47	82	42
14	31	31	318	294	e64	490	401	200	148	50	77	38
15	29	29	391	442	e61	394	331	178	126	50	74	38
16	43	29	304	306	153	308	310	204	108	54	71	34
17	52	26	226	235	170	279	742	224	96	51	69	32
18	55	25	206	e210	163	250	1380	205	96	57	83	31
19	49	23	189	e170	177	240	1680	177	96	59	95	31
20	40	22	e175	e172	235	226	1070	155	94	51	80	31
21	34	23	160	e170	214	207	784	136	88	47	71	28
22	31	194	156	170	190	189	689	121	83	43	71	37
23	28	1040	150	179	176	186	698	107	77	50	64	43
24	27	448	148	316	173	168	599	105	82	66	58	40
25	24	339	143	324	172	158	972	112	83	62	54	35
26	24	254	127	219	197	244	780	111	76	64	51	51
27	22	200	119	e182	196	1520	616	112	86	111	51	58
28	19	172	106	170	192	1170	488	111	75	90	47	58
29	17	153	125	156	370	688	411	100	68	76	50	55
30	17	137	194	146	---	539	354	95	63	95	51	50
31	17	---	175	144	---	501	---	629	---	147	48	---
TOTAL	1049	3394	7283	6712	4105	14411	16868	7205	9407	1929	2699	1233
MEAN	33.8	113	235	217	142	465	562	232	314	62.2	87.1	41.1
MAX	55	1040	643	442	370	1520	1680	629	2340	147	207	58
MIN	17	12	106	139	61	158	226	95	63	43	47	28
MEAN†	33.2	122	236	216	145	467	560	244	293	64.9	84.5	41.8
CFSM†	.20	.74	1.44	1.32	.88	2.85	3.41	1.49	1.79	.40	.52	.25
IN.†	.23	.83	1.66	1.52	.95	3.23	3.81	1.72	1.99	.46	.59	.28

† Adjusted for change in contents of General Edgar Jadwin Reservoir and Prompton Reservoir.

e Estimated.

LACKAWAXEN RIVER BASIN

01430000 LACKAWAXEN RIVER NEAR HONESDALE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1969, 1986 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	138	275	260	220	278	560	503	349	192	88.1	78.7	118
MAX	344	650	679	416	716	1133	1050	985	544	220	240	656
(WY)	1990	1987	1991	1964	1990	1986	1960	1989	1989	1989	1990	1987
MIN	14.5	16.5	80.5	73.5	106	261	240	124	43.9	20.3	17.2	12.3
(WY)	1965	1965	1965	1961	1963	1965	1988	1965	1962	1965	1964	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1960 - 1969
1986 - 1992

ANNUAL TOTAL	73094.6		76295									
ANNUAL MEAN	200	‡200	208	‡209					255	‡258		
HIGHEST ANNUAL MEAN									400	‡400	1960	
LOWEST ANNUAL MEAN									130	‡131	1965	
HIGHEST DAILY MEAN	1660	Mar 4	2340	Jun 1					6280	Mar 15	1986	
LOWEST DAILY MEAN	9.6	Sep 17	12	Nov 9					8.8	Sep 25	1964	
ANNUAL SEVEN-DAY MINIMUM	11	Sep 12	13	Nov 4					9.7	Sep 21	1964	
INSTANTANEOUS PEAK FLOW			2590	Jun 1					6750	Mar 15	1986	
INSTANTANEOUS PEAK STAGE			4.84	Jun 1					8.13	Mar 15	1986	
INSTANTANEOUS LOW FLOW			12	Nov 9					6.2	Sep 25	1964	
ANNUAL RUNOFF (CFSM)	1.22	‡ 1.22	1.27	‡ 1.27					1.55	‡ 1.57		
ANNUAL RUNOFF (INCHES)	16.58	‡16.58	17.31	‡ 17.30					21.09	‡21.32		
10 PERCENT EXCEEDS	449		455						565			
50 PERCENT EXCEEDS	137		130						140			
90 PERCENT EXCEEDS	18		31						29			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1959, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	151	281	412	377	364	538	746	322	126	112	125	83.1
MAX	955	520	649	669	664	788	1458	592	304	425	865	189
(WY)	1956	1956	1951	1962	1951	1951	1958	1952	1956	1952	1955	1952
MIN	37.9	80.6	154	130	127	291	379	108	47.8	26.2	20.6	26.2
(WY)	1949	1958	1956	1956	1958	1949	1955	1951	1959	1955	1953	1957

SUMMARY STATISTICS

WATER YEARS 1949 - 1959

ANNUAL TOTAL												
ANNUAL MEAN	302											
HIGHEST ANNUAL MEAN	428					1952						
LOWEST ANNUAL MEAN	209					1957						
HIGHEST DAILY MEAN	8920				Aug 19	1955						
LOWEST DAILY MEAN	12				Aug 29	1953						
ANNUAL SEVEN-DAY MINIMUM	12				Aug 29	1953						
INSTANTANEOUS PEAK FLOW	a18600				Aug 18	1955						
INSTANTANEOUS PEAK STAGE	15.52				Aug 18	1955						
INSTANTANEOUS LOW FLOW												
ANNUAL RUNOFF (CFSM)	1.84											
ANNUAL RUNOFF (INCHES)	25.06											
10 PERCENT EXCEEDS	695											
50 PERCENT EXCEEDS	152											
90 PERCENT EXCEEDS	32											

‡ Adjusted for change in contents of General Edgar Jadwin Reservoir and Prompton Reservoir.

a From rating curve extended above 11,000 ft³/s.

LACKAWAXEN RIVER BASIN

01431500 LACKAWAXEN RIVER AT HAWLEY, PA

LOCATION.--Lat 41°28'34", long 75°10'21", Wayne County, Hydrologic Unit 02040103, on left bank at bridge on Church Street in Hawley, 700 ft upstream from Wallenpaupack Creek, and 3,000 ft downstream from Middle Creek.

DRAINAGE AREA.--290 mi².

PERIOD OF RECORD.--July 1908 to September 1917, August 1938 to current year. Monthly discharge only for some periods, published in WSP 1302. October 1917 to December 1919, gage heights and discharge measurements only, in reports of Water Supply Commission of Pennsylvania.

REVISED RECORDS.--WSP 1951: 1938-41. WSP 1302: 1909-17. WSP 1432: 1942. WSP 1502: 1956.

GAGE.--Water-stage recorder, and crest-stage gage. Datum of gage is 869.00 ft above sea level. Prior to 1938, nonrecording gage at same site and datum. Aug. 10, 1938, to Aug. 19, 1955, water-stage recorder and Aug. 20, 1955, to Feb. 13, 1956, nonrecording gage at site 1,000 ft downstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Regulation since 1960 by Prompton Reservoir (station 01428900) and, at high flow, since 1959 by General Edgar Jadwin Reservoir (station 01429400) located 14.9 mi and 13.0 mi upstream, respectively. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	37	e215	293	e200	544	903	500	3620	107	279	66
2	32	36	e200	280	e190	494	820	478	2120	100	204	62
3	40	35	e910	240	e180	454	709	573	1130	98	157	63
4	43	33	e1020	269	e170	432	610	532	751	110	153	68
5	42	32	e800	539	e145	508	531	461	601	116	214	62
6	94	31	598	516	e135	564	463	495	1170	117	170	62
7	69	31	482	423	e130	584	420	448	1060	106	135	61
8	57	32	449	357	e125	781	404	403	739	92	118	60
9	58	32	467	315	e110	769	385	614	619	127	149	60
10	51	33	445	303	e105	691	397	635	494	130	218	57
11	52	44	372	300	e100	1580	444	512	411	116	160	92
12	90	e76	327	278	e98	2010	848	437	344	107	139	99
13	74	e64	322	257	e100	1170	864	377	303	98	123	80
14	58	e54	478	403	e96	789	639	325	272	109	115	68
15	54	e52	639	759	e88	631	543	282	244	115	114	62
16	64	e50	499	508	e230	493	493	322	203	158	114	60
17	81	e46	377	407	e260	439	1100	356	165	135	111	57
18	116	e43	e340	e360	e240	403	2260	333	146	117	124	56
19	104	e42	e320	e275	283	406	2540	290	143	114	153	63
20	78	e40	e290	e275	365	378	1750	241	192	96	141	57
21	64	e41	e265	e270	335	350	1250	212	160	92	120	56
22	54	e310	e255	e272	293	317	1110	186	148	81	107	57
23	50	e1800	e240	e290	267	324	1120	160	138	86	101	105
24	49	e800	e230	e520	259	283	902	165	169	115	90	85
25	46	e590	e225	e570	259	279	1330	212	185	126	84	69
26	43	e430	e200	e360	306	370	1180	191	149	117	76	98
27	43	e352	e190	e275	333	2550	957	180	164	245	73	114
28	42	e310	e170	e240	324	2290	772	171	155	201	72	105
29	38	e270	192	e230	609	1340	654	154	135	141	74	100
30	37	e236	323	e220	---	1020	548	138	116	145	74	85
31	37	---	310	e215	---	911	---	847	---	155	72	---
TOTAL	1791	5982	12150	10819	6335	24154	26946	11230	16246	3772	4034	2189
MEAN	57.8	199	392	349	218	779	898	362	542	122	130	73.0
MAX	116	1800	1020	759	609	2550	2540	847	3620	245	279	114
MIN	31	31	170	215	88	279	385	138	116	81	72	56
MEAN†	57.2	208	393	349	221	781	896	374	521	125	127	73.7
CFSM†	.20	.72	1.36	1.20	.76	2.69	3.10	1.29	1.80	.43	.44	.25
IN.†	.23	.80	1.56	1.39	.82	3.11	3.46	1.49	2.00	.50	.50	.28

† Adjusted for change in contents in Prompton Reservoir and General Edgar Jadwin Reservoir.

e Estimated.

LACKAWAXEN RIVER BASIN

01431500 LACKAWAXEN RIVER AT HAWLEY, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	246	428	528	450	585	1004	974	623	363	184	131	197
MAX	1056	1643	1487	1410	1434	2651	1820	1826	1475	680	347	1368
(WY)	1977	1973	1974	1979	1976	1977	1983	1989	1972	1984	1990	1987
MIN	20.8	25.7	124	92.0	133	280	348	196	63.6	29.7	30.9	20.5
(WY)	1965	1965	1965	1981	1980	1981	1988	1962	1965	1965	1964	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1960 - 1992

ANNUAL TOTAL	116871		125648									
ANNUAL MEAN	320	‡321	343	‡344					475	‡475		
HIGHEST ANNUAL MEAN									761			1973
LOWEST ANNUAL MEAN									204			1965
HIGHEST DAILY MEAN	2480	Feb 8	3620	Jun 1					11600		Mar 15	1986
LOWEST DAILY MEAN	24	Sep 15	31	Oct 1					16		Sep 26	1964
ANNUAL SEVEN-DAY MINIMUM	25	Sep 12	32	Nov 4					17		Sep 21	1964
INSTANTANEOUS PEAK FLOW			4000	Jun 1					16400		Jun 29	1973
INSTANTANEOUS PEAK STAGE			6.60	Jun 1					13.00		Jun 29	1973
ANNUAL RUNOFF (CFSM)	1.10	‡ 1.11	1.18	‡ 1.19					1.64			
ANNUAL RUNOFF (INCHES)	14.99	‡15.09	16.12	‡16.16					22.25			
10 PERCENT EXCEEDS	785		775						1110			
50 PERCENT EXCEEDS	175		208						245			
90 PERCENT EXCEEDS	38		54						56			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1959, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	239	388	482	527	555	1019	1117	629	296	236	209	156
MAX	1773	1116	1166	1235	1279	2985	2644	1531	680	1246	2485	601
(WY)	1856	1956	1951	1913	1909	1945	1940	1942	1916	1947	1955	1945
MIN	25.4	28.6	89.0	116	180	353	280	166	79.7	38.2	32.1	24.6
(WY)	1910	1910	1909	1944	1940	1915	1946	1941	1959	1955	1957	1909

SUMMARY STATISTICS

WATER YEARS 1909 - 1917
1939 - 1959

ANNUAL TOTAL												
ANNUAL MEAN	487											
HIGHEST ANNUAL MEAN	748					1952						
LOWEST ANNUAL MEAN	316					1917						
HIGHEST DAILY MEAN	28100				May 23	1942						
LOWEST DAILY MEAN	8.0				Sep 8	1909						
ANNUAL SEVEN-DAY MINIMUM	12				Sep 4	1909						
INSTANTANEOUS PEAK FLOW	a51900				Aug 19	1955						
INSTANTANEOUS PEAK STAGE	b24.80				Aug 19	1955						
ANNUAL RUNOFF (CFSM)	1.68											
ANNUAL RUNOFF (INCHES)	22.83											
10 PERCENT EXCEEDS	1110											
50 PERCENT EXCEEDS	242											
90 PERCENT EXCEEDS	49											

‡ Adjusted for change in contents in Prompton Reservoir and General Edgar Jadwin Reservoir.

a From rating curve extended above 12,000 ft³/s, on basis of slope-area measurement at gage height 24.2 ft at present site, 20.1 ft at former site.

b From floodmark.

DELAWARE RIVER BASIN

01431685 PURDY CREEK AT LAKEVILLE, PA

LOCATION.--Lat 41°25'41", long 75°16'08", Wayne County, Hydrologic Unit 02040103, on right bank, 75 ft above State Route 3015 bridge, 300 ft upstream from mouth, and 0.8 mi southeast of Lakeville.

DRAINAGE.--8.18 mi².

PERIOD OF RECORD.--December 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,200 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

[illegible]

LACKAWAXEN RIVER BASIN

01432000 WALLENPAUPACK CREEK AT WILSONVILLE, PA

LOCATION.--Lat 41°27'33", long 75°11'08", Pike County, Hydrologic Unit 02040103, at hydroelectric plant of Pennsylvania Power and Light Co., at lower end of penstock, at Kimble, 1.2 mi south of Hawley.

DRAINAGE AREA.--228 mi².

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1918, 1923-24. WSP 1432: 1920-21. WSP 2102: 1966 (monthly mean): WDR pa-92-1: 190.

GAGE.--Daily discharge determined from flow through turbines, computed from records of generator output and flow over roller gates, computed on basis of head on gates. Prior to Nov. 3, 1925, nonrecording gage at site 1,000 ft downstream from dam at datum 1,146.78 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. No flow over spillway or roller gates. Flow regulated since 1925, by Lake Wallenpaupack (station 01431700).

COOPERATION.--Records of generator load, operation of power plant, net operation head, water-surface elevations in lake, and daily discharges furnished by Pennsylvania Power and Light Co., in connection with a Federal Power Commission project.

REVISIONS.--Revised daily mean discharges, in cubic feet per second, for December 1990 and annual and historical statistics are given below. These figures supersede those published in the report for 1991.

Dec.	1	.....	226	6	.....	869	11	.....	933	16	.....	282	21	.....	841	26	.....	940	31	.....	943
	2	.....	.00	7	.....	976	12	.....	959	17	.....	862	22	.....	468	27	.....	467			
	3	.....	992	8	.....	.00	13	.....	932	18	.....	926	23	.....	465	28	.....	939			
	4	.....	1590	9	.....	.00	14	.....	928	19	.....	945	24	.....	906	29	.....	468			
	5	.....	1330	10	.....	815	15	.....	220	20	.....	936	25	.....	458	30	.....	453			

SUMMARY STATISTICS

FOR 1990 CALENDAR YEAR

FOR 1991 WATER YEAR

WATER YEARS 1926 - 1991

ANNUAL TOTAL	137920.00		118950.00		
ANNUAL MEAN	378		326		358
HIGHEST ANNUAL MEAN					607
LOWEST ANNUAL MEAN					86.9
HIGHEST DAILY MEAN	1610	May 30	1590	Dec 4	6440
LOWEST DAILY MEAN	.00	Many days	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 20	.00	Oct 23	.00
10 PERCENT EXCEEDS	939		937		906
50 PERCENT EXCEEDS	226		109		243
90 PERCENT EXCEEDS	.00		.00		.00

LACKAWAXEN RIVER BASIN

01432000 WALLENPAUPACK CREEK AT WILSONVILLE, PA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

[illegible]

LACKAWAXEN RIVER BASIN

01432000 WALLEPAUPACK CREEK AT WILSONVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	289	259	335	430	429	387	436	339	379	339	322	336
MAX	750	1012	1036	1070	1112	1029	1500	1231	1573	965	995	1018
(WY)	1956	1956	1984	1978	1978	1986	1958	1989	1972	1928	1969	1987
MIN	3.10	1.50	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1984	1966	1926	1926	1926	1926	1926	1926	1958	1956	1956	1956

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1926 - 1992

ANNUAL TOTAL	94598.00	98777.00	
ANNUAL MEAN	259	270	356
HIGHEST ANNUAL MEAN			607
LOWEST ANNUAL MEAN			86.9
HIGHEST DAILY MEAN	1400	May 6	1500
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 20	.00
ANNUAL RUNOFF (CFSM)	1.14		1.18
ANNUAL RUNOFF (INCHES)	15.43		16.12
10 PERCENT EXCEEDS	927		815
50 PERCENT EXCEEDS	.00		170
90 PERCENT EXCEEDS	.00		.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1925, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	235	271	384	490	426	868	831	468	307	206	143	144
MAX	542	627	1043	1219	1031	1656	1677	682	838	575	532	366
(WY)	1913	1920	1921	1911	1915	1920	1916	1924	1917	1916	1915	1915
MIN	28.0	32.0	69.5	104	156	344	396	283	115	57.0	49.0	35.0
(WY)	1910	1910	1923	1918	1920	1924	1025	1922	1921	1912	1910	1910

SUMMARY STATISTICS

WATER YEARS 1910-1925

ANNUAL MEAN	397
HIGHEST ANNUAL MEAN	527
LOWEST ANNUAL MEAN	279
HIGHEST DAILY MEAN	4840
LOWEST DAILY MEAN	8.0
ANNUAL SEVEN-DAY MINIMUM	10
10 PERCENT EXCEEDS	910
50 PERCENT EXCEEDS	240
90 PERCENT EXCEEDS	60

LACKAWAXEN RIVER BASIN

LAKES AND RESERVOIRS IN LACKAWAXEN RIVER BASIN

01428900 PROMPTON RESERVOIR.--Lat 41°35'18", long 75°19'39", Wayne County, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi north of Prompton, 0.4 mi upstream from highway bridge and 0.5 mi upstream from Van Auker Creek. DRAINAGE AREA, 59.6 mi². PERIOD OF RECORD, December 1960 to current year. GAGE, data collection platform. Datum of gage is sea level (levels by U.S. Army Corp of Engineers).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated bedrock spillway at elevation of 1,205.00 ft. Storage began July 1960. Capacity at elevation 1,205.00 ft is 51,700 acre-ft. Ordinary minimum (conservation) pool at elevation of 1,125.00 ft, capacity, 3,420 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel.

COOPERATION.--Records furnished by U.S. Army Corp of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,170 acre-ft, June 29, 1973, at elevation of 1,138.40 ft; minimum (after first filling), 2,500 acre-ft, June 5, 1991, at elevation, of 1,121.46 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 4,694 acre-ft, June 1, at elevation of 1,129.27 ft; minimum contents, 2,890 acre-ft, Nov. 8, at elevation of 1,122.81 ft.

01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15'55", Wayne County, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.45 mi upstream from unnamed tributary, 2.4 mi north of Honesdale, and 2.9 mi upstream from mouth. DRAINAGE AREA, 64.5 mi². PERIOD OF RECORD, October 1959 to current year. GAGE, data collection platform. Datum of gage is sea level (levels by U.S. Army Corp of Engineers).

REMARKS.--Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation of 1,053.00 ft. Storage began in October 1959. Capacity at elevation of 1,053.00 ft is 24,500 acre-ft. Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel.

COOPERATION.--Records furnished by U.S. Army Corp of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 6,520 acre-ft, June 19, 1973, at elevation of 1,017.40 ft; no storage many times.

EXTREMES FOR CURRENT YEAR: Maximum contents, no storage, elevation of 977.88 ft; June 1.

01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek, at Wilsonville, 1.2 mi south of Hawley and 1.5 mi upstream from mouth. DRAINAGE AREA, 228 mi². PERIOD OF RECORD, January 1926 to current year. GAGE, vertical staff. Datum of gage is sea level (levels by Pennsylvania Power and Light Co.).

REMARKS.--Lake formed by concrete gravity-type and earthfill dam, with concrete spillway at elevation of 1,176.00 ft in two sections. Spillway equipped with roller gate, 14 ft high on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation in January 1926. Total capacity at elevation of 1,190.00 ft, top of gates, is 209,300 acre-ft, of which 108,900 acre-ft is controlled storage above elevation 1,170.00 ft, minimum pool (prior to 1984, minimum pool 1,160.00 ft). Reservoir is used for generation of hydroelectric power. Figures given herein represent usable contents. Records prior to 1984 included 48,900 acre-ft more usable contents.

COOPERATION.--Records furnished by Pennsylvania Power and Light Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 129,300 acre-ft, Aug. 19-21, 1955, at elevation of 1,193.45 ft; minimum (after first filling), 12,280 acre-ft, (old minimum pool) Mar. 28, 1958, at elevation of 1,162.60 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 95,260 acre-ft, May 25, at elevation of 1,187.8 ft; minimum contents, 19,160 acre-ft, Oct. 21-26, at elevation of 1,173.7 ft.

LACKAWAXEN RIVER BASIN

LAKES AND RESERVOIRS IN LACKAWAXEN RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)
01428900 Prompton Reservoir				01429400 General Edgar Jadwin Reservoir		
Sept. 30	1,123.06	2,960	--	965.28	0	--
Oct. 31	1,122.94	2,920	- 0.6	965.31	0	0
Nov. 30	1,124.81	3,440	+ 8.8	965.58	0	0
Dec. 31	1,125.08	3,520	+ 1.2	966.70	0	0
CAL YR 1991	--	--	- 2.6	--	--	0
Jan. 31	1,124.96	3,490	- 0.5	966.24	0	0
Feb. 29	1,125.65	3,680	+ 3.3	969.98	0	0
Mar. 31	1,126.07	3,800	+ 2.0	970.07	0	0
Apr. 30	1,125.61	3,670	- 2.2	968.82	0	0
May 31	1,128.35	4,440	+ 12.5	975.12	0	0
June 30	1,123.95	3,200	- 20.7	965.60	0	0
July 31	1,124.55	3,370	+ 2.7	967.43	0	0
Aug. 31	1,123.97	3,210	- 2.6	965.49	0	0
Sept. 30	1,124.12	3,250	+ 0.7	965.51	0	0
WTR YR 1992	--	--	+ 0.4	--	--	0
01431700 Lake Wallenpaupack						
Sept. 30	1,177.4	36,430	--			
Oct. 31	1,173.8	19,680	- 272			
Nov. 30	1,175.9	29,430	+ 164			
Dec. 31	1,179.7	50,490	+ 342			
CAL YR 1991	--	--	- 19.4			
Jan. 31	1,179.7	50,490	- 0			
Feb. 29	1,176.1	30,280	- 351			
Mar. 31	1,180.2	53,600	+ 379			
Apr. 30	1,184.5	77,000	+ 393			
May 31	1,187.2	91,840	+ 241			
June 30	1,185.2	81,290	- 177			
July 31	1,181.8	61,340	- 324			
Aug. 31	1,180.8	56,380	- 80.6			
Sept. 30	1,179.1	46,370	- 168			
WTR YR 1992	--	--	+ 13.7			

DELAWARE RIVER BASIN

01432160 DELAWARE RIVER AT BARRYVILLE, NY

LOCATION.--Lat 41°28'31", long 74°54'46", Pike County, PA, Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft upstream from Shohola Creek.

DRAINAGE AREA.--2,659 mi².

PERIOD OF RECORD.--Water years 1958, 1968 to current year.

CHEMICAL DATA: 1958 (d), 1969 (a), 1973 (b), 1974 (d), 1975 (b).

NUTRIENT DATA: 1973 (b), 1974 (d), 1975 (b).

BIOLOGICAL DATA:

Bacteria.--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1967 to September 1973, March 1975 to current year.

INSTRUMENTATION.--Water-temperature digital recorder since March 1975, provides one-hour-interval punches.

Prior to September 1973, water-temperature recorder provided continuous recordings.

REMARKS.--Unpublished records of daily temperatures for May to September 1964-66 are available in files of the Geological Survey. Temperature probe may be influenced by solar radiation during periods of low flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1968-73, 1976-78, 1980-82, 1986-88, 1990-92), 32.0°C, July 20, 21, 1980; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 27.0°C, Aug. 26, 27; minimum, 0.0°C on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	17.5	13.5	15.5	14.0	10.0	12.0	7.0	6.5	6.5	0.0	0.0	0.0
2	20.5	16.0	17.5	13.0	10.5	12.0	7.0	6.5	7.0	0.0	0.0	0.0
3	20.5	16.5	18.0	11.0	9.0	10.0	6.5	5.0	5.5	1.0	0.0	0.5
4	21.5	17.0	18.5	9.5	7.0	8.5	5.0	3.0	4.5	1.0	0.5	0.5
5	20.5	17.5	19.0	7.5	5.5	6.5	3.0	1.5	2.0	1.5	1.0	1.0
6	19.5	17.0	18.5	6.5	5.0	5.5	1.5	1.0	1.5	1.5	1.0	1.0
7	17.0	14.5	15.5	6.0	5.0	5.5	2.0	1.0	1.5	1.5	1.0	1.0
8	16.0	13.5	15.0	5.5	5.0	5.0	3.0	1.5	2.5	1.5	0.0	0.5
9	17.5	12.5	15.0	5.0	4.0	4.5	4.5	3.0	4.0	0.5	0.0	0.5
10	18.5	13.5	15.5	5.0	4.0	4.5	5.0	4.5	4.5	1.0	0.5	1.0
11	16.0	14.5	15.0	5.5	4.5	5.0	4.5	3.5	4.0	1.0	0.0	0.5
12	16.5	13.0	14.5	5.0	4.5	4.5	4.0	3.5	4.0	1.0	0.0	0.5
13	13.5	11.5	12.5	5.5	5.0	5.0	5.0	4.0	4.5	2.5	0.5	1.5
14	14.0	10.5	12.0	6.0	5.0	5.5	6.0	5.0	5.5	3.0	2.0	2.5
15	13.0	11.0	12.0	6.5	5.0	6.0	5.5	3.5	4.5	3.0	0.0	0.5
16	13.5	11.5	12.5	7.5	5.5	6.5	3.5	1.0	2.5	0.0	0.0	0.0
17	12.0	11.0	11.5	5.5	3.5	4.5	1.0	0.0	0.0	0.0	0.0	0.0
18	14.0	12.0	12.5	5.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
19	13.5	12.5	13.0	7.0	3.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0
20	12.5	11.0	11.5	9.0	5.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0
21	12.0	9.5	10.5	9.5	8.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
22	13.0	8.5	10.0	9.5	9.0	9.5	0.5	0.0	0.0	0.0	0.0	0.0
23	14.0	8.5	11.0	10.0	9.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0
24	14.5	10.0	12.0	10.0	9.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0
25	16.5	11.5	13.5	9.0	6.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
26	15.5	13.0	14.0	6.0	4.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
27	16.5	14.5	15.0	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
28	15.5	11.5	14.0	3.5	2.5	3.0	0.5	0.0	0.0	0.0	0.0	0.0
29	13.5	9.0	11.0	5.0	3.5	4.5	0.5	0.0	0.0	0.5	0.0	0.0
30	11.5	7.0	9.5	6.5	4.5	5.5	0.5	0.0	0.5	0.5	0.0	0.0
31	12.5	8.0	10.0	---	---	---	0.0	0.0	0.0	0.5	0.0	0.5
MONTH	21.5	7.0	13.5	14.0	2.5	6.5	7.0	0.0	2.0	3.0	0.0	0.5

DELAWARE RIVER BASIN

01432160 DELAWARE RIVER AT BARRYVILLE, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	0.5	0.0	0.0	0.5	0.0	0.5	5.0	4.0	4.5	13.0	11.0	12.0
2	1.0	0.0	0.5	1.5	0.5	1.0	4.5	3.5	4.0	16.0	12.0	14.0
3	0.5	0.0	0.0	2.5	1.0	1.5	3.5	3.0	3.5	17.0	14.5	16.0
4	0.5	0.0	0.0	3.5	1.0	2.0	5.0	2.5	4.0	16.0	13.0	14.5
5	0.5	0.0	0.0	4.5	1.5	3.0	5.5	3.0	4.5	13.0	11.5	12.5
6	1.0	0.0	0.5	3.5	2.0	3.0	6.5	4.0	5.5	11.5	10.5	11.0
7	0.5	0.0	0.5	2.5	2.0	2.0	7.0	5.5	6.0	12.0	9.5	11.0
8	1.0	0.0	0.5	4.0	2.5	3.0	8.5	7.0	7.5	12.0	11.0	11.5
9	0.5	0.0	0.5	5.0	3.5	4.0	7.5	6.5	7.0	14.5	11.0	12.5
10	1.0	0.0	0.5	5.5	4.0	4.5	9.5	7.0	8.0	15.5	13.5	14.5
11	0.5	0.0	0.5	6.0	3.5	5.5	9.5	8.5	9.0	17.5	14.0	15.5
12	1.0	0.0	0.5	3.5	1.5	2.5	8.5	7.0	8.0	19.5	15.5	17.5
13	0.5	0.0	0.5	2.0	0.5	1.0	7.0	5.5	6.5	20.5	17.5	19.0
14	0.5	0.0	0.5	1.0	0.0	0.5	8.0	6.0	7.0	20.5	18.5	19.5
15	1.0	0.5	0.5	1.0	0.0	0.5	9.0	7.0	8.0	19.5	18.0	18.5
16	1.5	0.5	1.0	1.5	0.0	0.5	9.0	6.5	8.0	18.0	16.5	17.0
17	1.5	0.5	1.0	1.0	0.0	0.5	6.5	6.0	6.5	16.5	15.5	16.0
18	1.5	1.0	1.0	3.0	0.0	1.5	6.0	6.0	6.0	17.0	15.5	16.5
19	2.5	1.0	2.0	2.0	0.0	1.0	6.0	5.5	6.0	19.0	15.5	17.0
20	2.0	1.0	1.5	2.5	0.0	1.5	8.5	6.0	7.0	19.5	16.5	18.0
21	2.0	1.0	1.5	2.5	0.5	1.5	11.0	8.5	9.5	21.0	17.0	19.0
22	1.5	0.5	1.0	2.0	0.5	1.0	12.0	11.0	11.5	21.5	18.5	20.5
23	2.0	1.0	1.5	1.5	0.0	1.0	13.5	12.0	12.5	23.5	19.0	21.5
24	2.0	1.5	1.5	2.0	0.0	1.0	13.0	12.5	13.0	22.5	18.0	20.5
25	1.5	1.0	1.0	3.5	1.0	2.0	13.0	10.5	12.0	18.0	16.5	17.0
26	1.5	1.0	1.5	4.0	3.5	3.5	10.5	9.5	10.0	16.5	13.0	15.0
27	2.0	1.0	1.5	4.0	2.5	3.5	11.0	9.5	10.0	15.0	13.0	13.5
28	2.5	1.0	2.0	2.5	2.0	2.5	11.5	10.0	10.5	16.0	12.0	14.0
29	2.5	0.0	1.0	3.5	1.0	2.5	12.5	10.0	11.5	17.0	12.5	15.0
30	---	---	---	3.5	3.0	3.0	12.0	11.0	11.5	16.5	13.5	15.0
31	---	---	---	5.5	3.5	4.5	---	---	---	15.5	13.5	14.5
MONTH	2.5	0.0	1.0	6.0	0.0	2.0	13.5	2.5	8.0	23.5	9.5	16.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	14.0	13.5	13.5	26.5	20.5	23.0	21.5	19.5	20.5	21.5	18.0	20.0
2	15.0	13.5	14.5	25.0	19.0	21.5	21.5	19.0	20.0	22.5	17.0	19.5
3	18.0	15.0	16.0	21.0	19.0	20.5	22.5	19.5	21.0	20.5	19.0	19.5
4	17.5	15.5	16.5	23.0	20.0	21.5	22.5	21.0	21.5	22.5	19.0	21.0
5	17.0	15.5	16.5	22.5	20.5	21.0	22.0	20.0	21.0	21.5	20.0	20.5
6	16.5	14.5	15.5	22.5	19.5	21.0	21.5	19.0	20.5	20.0	19.0	19.5
7	18.0	16.0	17.0	22.5	18.0	20.5	22.5	20.0	21.5	19.5	18.5	19.0
8	18.0	16.5	17.0	24.5	18.5	21.0	22.5	20.5	21.5	21.5	18.5	20.0
9	19.0	16.5	18.0	25.0	19.0	22.0	23.5	21.5	22.5	24.0	19.5	21.5
10	19.5	16.0	17.5	24.0	19.5	22.0	23.5	22.0	22.5	23.5	20.5	22.0
11	19.5	16.0	18.0	24.5	20.0	22.0	23.0	21.0	22.0	22.5	21.0	21.5
12	21.0	17.5	19.5	22.5	19.5	21.0	22.5	20.5	21.5	21.0	19.0	20.0
13	23.0	19.5	21.0	25.5	21.5	23.0	21.5	19.5	20.5	20.0	17.5	19.0
14	24.5	21.0	22.5	26.5	20.0	22.5	20.5	19.0	19.5	22.0	17.0	19.0
15	24.5	21.0	23.0	26.5	21.0	23.0	19.0	18.5	19.0	22.0	17.0	19.5
16	23.0	20.0	21.0	23.5	20.5	22.0	18.5	18.0	18.5	23.5	18.0	20.5
17	23.5	20.0	21.5	21.5	19.5	21.0	18.5	17.5	18.0	23.5	19.5	21.0
18	21.0	18.5	20.0	23.0	19.5	21.5	20.0	17.5	18.5	24.0	19.5	21.5
19	21.0	18.5	19.5	25.0	21.5	23.5	20.5	18.5	19.5	21.5	19.5	20.5
20	22.0	18.5	20.5	25.0	22.5	23.5	21.0	18.5	19.5	20.0	18.5	19.5
21	21.5	19.0	20.0	24.0	20.5	22.5	22.0	17.5	19.5	19.5	18.0	18.5
22	19.0	14.5	17.0	24.0	20.0	22.0	23.5	18.0	20.5	20.5	18.5	19.5
23	18.5	14.0	16.5	21.5	19.0	21.0	24.5	20.5	22.0	19.5	17.0	18.0
24	18.5	16.5	17.0	21.0	18.5	19.5	25.5	21.0	22.5	17.0	15.0	15.5
25	20.5	16.5	18.5	22.5	18.0	20.5	26.0	21.5	23.0	16.0	14.0	15.0
26	20.5	17.0	18.5	21.5	20.5	21.5	27.0	22.5	24.0	15.5	15.0	15.5
27	22.0	18.0	20.0	22.5	20.0	21.5	27.0	22.5	24.5	16.0	15.0	15.5
28	23.5	19.5	21.5	22.0	20.0	20.5	26.0	24.0	24.5	17.0	15.0	16.0
29	25.0	21.0	22.5	21.5	19.0	20.5	24.0	21.0	23.0	16.5	15.0	15.5
30	25.0	20.5	22.5	22.0	21.0	21.5	22.5	20.0	21.5	15.0	12.5	13.5
31	---	---	---	21.5	20.5	21.5	22.0	20.5	21.5	---	---	---
MONTH	25.0	13.5	19.0	26.5	18.0	21.5	27.0	17.5	21.0	24.0	12.5	19.0

DELAWARE RIVER BASIN

01432805 DELAWARE RIVER AT POND EDDY, NY

LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, PA, Hydrologic Unit 02040104, at interstate bridge at Pond Eddy, 450 ft downstream from Mill Brook, and 4.5 mi upstream from Mongaup River.

DRAINAGE AREA.--2,820 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1973 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1976, 1978, 1980-81, 1983-84, 1986, 1989-90, 1992) 31.0°C, July 21, 1980; minimum (water years 1974, 1977-78, 1980, 1983-92), 0.0°C on many days during winter, except 1978, 1980, and 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 26.5°C, Aug. 26, 27; minimum, 0.0°C on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	15.5	13.0	14.0	12.5	10.0	11.0	7.0	6.0	6.5	0.5	0.0	0.0
2	19.0	15.0	16.5	12.5	11.0	11.5	7.0	6.5	7.0	0.0	0.0	0.0
3	20.0	17.0	18.0	11.0	10.0	10.5	6.5	5.5	6.0	0.5	0.0	0.0
4	20.0	17.5	18.5	10.0	8.0	9.0	5.5	3.5	4.5	0.5	0.0	0.5
5	20.0	18.0	19.0	8.0	6.5	7.0	3.5	2.0	2.5	1.5	0.5	1.0
6	19.0	17.5	18.5	6.5	5.0	6.0	2.0	1.5	1.5	1.0	1.0	1.0
7	17.5	14.5	16.0	6.0	5.0	5.5	2.0	1.0	1.5	1.0	1.0	1.0
8	16.0	13.5	14.5	5.5	4.5	5.0	3.0	2.0	2.5	1.0	0.0	0.5
9	16.5	13.5	14.5	4.5	4.0	4.0	4.5	3.0	4.0	0.5	0.0	0.5
10	17.0	14.0	15.0	4.5	3.5	4.0	5.0	4.5	4.5	1.0	0.5	1.0
11	15.5	14.0	15.0	5.0	4.5	4.5	4.5	4.0	4.0	0.5	0.0	0.5
12	14.5	13.5	14.0	5.0	4.5	4.5	4.5	3.5	4.0	1.0	0.0	0.5
13	14.0	12.5	13.0	5.0	4.5	5.0	5.0	4.5	4.5	2.0	0.5	1.0
14	13.0	11.0	12.0	6.0	4.5	5.5	6.0	5.0	5.5	3.0	1.5	2.5
15	12.5	11.0	11.5	6.0	5.0	5.5	5.5	4.0	4.5	2.0	0.0	1.0
16	13.0	11.5	12.0	7.0	6.0	6.5	4.0	1.5	2.5	0.0	0.0	0.0
17	12.0	10.5	11.5	6.0	4.5	5.0	1.5	0.0	0.5	0.0	0.0	0.0
18	13.0	10.5	12.0	4.5	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
19	13.0	11.5	12.5	5.5	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
20	12.0	10.0	11.0	8.0	5.0	6.5	0.5	0.0	0.0	0.0	0.0	0.0
21	11.5	10.0	10.5	9.0	7.5	8.0	0.5	0.0	0.0	0.0	0.0	0.0
22	11.5	9.0	10.0	9.5	9.0	9.0	0.5	0.0	0.0	0.5	0.0	0.0
23	12.0	9.0	10.5	10.0	9.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0
24	13.0	10.0	11.5	10.0	9.0	9.5	0.5	0.0	0.0	0.5	0.0	0.0
25	14.5	11.5	12.5	9.0	6.5	7.5	0.5	0.0	0.0	0.0	0.0	0.0
26	15.0	12.5	14.0	6.5	4.5	5.5	0.5	0.0	0.0	0.0	0.0	0.0
27	16.0	14.0	14.5	4.5	3.5	3.5	0.5	0.0	0.0	0.0	0.0	0.0
28	15.5	13.5	14.5	3.5	3.0	3.5	0.5	0.0	0.0	0.0	0.0	0.0
29	13.5	11.0	12.0	5.0	3.5	4.5	0.0	0.0	0.0	0.5	0.0	0.0
30	11.5	8.5	10.0	6.0	5.0	5.0	0.5	0.0	0.5	0.5	0.0	0.0
31	11.0	9.0	10.0	---	---	---	0.5	0.0	0.0	0.5	0.0	0.0
MONTH	20.0	8.5	13.5	12.5	3.0	6.5	7.0	0.0	2.0	3.0	0.0	0.5

DELAWARE RIVER BASIN

01432805 DELAWARE RIVER AT POND EDDY, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	0.5	0.0	0.0	1.0	0.0	0.5	5.0	4.0	4.5	13.0	11.0	12.0
2	0.5	0.0	0.0	1.0	0.5	1.0	5.0	3.5	4.0	15.5	12.0	13.5
3	0.5	0.0	0.0	1.5	1.0	1.5	4.0	3.0	3.5	16.5	14.5	15.5
4	0.5	0.0	0.0	2.5	1.0	2.0	5.0	2.5	4.0	16.0	13.5	14.5
5	0.5	0.0	0.0	3.5	2.5	3.0	5.5	3.0	4.5	13.5	12.0	12.5
6	0.5	0.0	0.0	3.5	2.5	3.0	6.5	4.0	5.5	12.0	10.5	11.0
7	0.5	0.0	0.0	3.0	2.0	2.5	7.0	5.5	6.5	12.0	9.5	11.0
8	0.5	0.0	0.0	3.5	2.0	3.0	9.0	6.5	8.0	12.0	11.0	11.5
9	0.5	0.0	0.0	4.5	3.5	4.0	8.0	7.0	7.5	14.0	11.0	12.5
10	0.5	0.0	0.5	5.5	4.0	4.5	9.5	7.0	8.5	15.0	13.5	14.0
11	0.5	0.0	0.5	6.0	4.0	5.5	9.5	8.5	9.0	17.0	14.5	16.0
12	0.5	0.0	0.0	4.0	1.5	2.5	8.5	7.5	8.0	18.5	15.5	17.0
13	0.5	0.0	0.0	1.5	0.5	1.0	7.5	5.5	6.5	19.5	18.0	19.0
14	0.5	0.0	0.0	1.0	0.0	0.5	8.5	6.0	7.0	20.5	19.0	19.5
15	0.5	0.0	0.0	1.0	0.0	0.5	9.0	6.5	8.0	19.5	18.0	19.0
16	0.5	0.0	0.5	1.0	0.0	0.5	9.0	7.0	8.0	18.0	16.5	17.0
17	0.5	0.0	0.0	1.0	0.0	0.5	7.0	6.5	6.5	16.5	16.0	16.0
18	0.0	0.0	0.0	2.0	0.5	1.0	6.5	5.5	6.0	17.0	15.5	16.5
19	1.0	0.0	0.5	2.0	0.5	1.0	6.0	5.5	5.5	19.0	15.5	17.0
20	1.5	1.0	1.5	2.5	0.5	1.5	8.0	6.0	6.5	20.5	16.5	18.0
21	2.0	1.0	1.5	2.5	1.5	2.0	10.5	8.0	9.0	21.5	17.0	19.0
22	1.0	1.0	1.0	1.5	0.5	1.0	12.0	10.5	11.5	23.0	18.5	20.5
23	2.5	1.0	1.5	1.5	0.5	1.0	13.5	11.5	12.5	24.0	19.0	21.5
24	2.0	1.0	1.5	2.5	0.5	1.5	13.5	12.5	13.0	22.0	19.0	21.0
25	1.0	0.5	1.0	4.0	1.0	2.5	13.0	10.5	12.0	19.0	16.5	17.5
26	1.5	1.0	1.0	4.5	3.0	4.0	10.5	10.0	10.0	16.5	14.5	16.0
27	2.0	1.0	1.5	4.0	3.0	4.0	11.0	9.5	10.0	14.5	13.0	14.0
28	2.0	1.5	2.0	3.0	2.0	2.5	11.0	9.5	10.5	16.0	12.5	14.5
29	2.5	0.0	1.0	3.5	1.5	2.5	12.5	10.0	11.0	17.5	14.0	15.5
30	---	---	---	3.5	2.5	3.0	12.0	11.0	11.5	16.5	15.0	15.5
31	---	---	---	5.5	3.5	4.5	---	---	---	15.5	14.0	15.0
MONTH	2.5	0.0	0.5	6.0	0.0	2.0	13.5	2.5	8.0	24.0	9.5	16.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	14.5	14.0	14.0	26.0	22.0	23.5	21.5	20.5	21.0	22.5	19.5	21.0
2	15.5	13.5	14.5	24.5	21.0	22.5	21.5	19.5	20.5	22.0	18.5	20.0
3	17.5	15.0	16.0	23.0	19.0	20.5	22.0	20.5	21.0	20.0	19.5	20.0
4	18.0	16.0	17.0	23.5	19.5	21.0	23.0	21.5	22.0	24.0	19.5	21.0
5	18.0	16.5	17.0	23.0	21.0	22.0	22.5	20.5	21.5	21.5	20.5	21.0
6	17.0	15.5	16.0	24.0	20.5	22.0	22.5	20.0	21.5	20.5	19.5	20.0
7	18.5	16.5	17.5	22.5	19.0	21.0	23.5	20.5	21.5	19.5	19.0	19.5
8	19.0	17.0	18.0	22.0	19.5	21.0	23.0	20.5	22.0	22.0	19.0	20.0
9	19.5	17.5	18.5	24.5	20.5	22.5	24.0	21.5	22.5	23.5	20.5	21.5
10	19.5	16.5	18.5	23.5	21.0	22.5	24.0	22.5	23.0	24.5	21.5	22.5
11	19.5	17.0	18.5	23.5	21.0	22.5	23.5	22.0	23.0	23.0	21.0	22.0
12	21.0	17.5	19.5	23.5	20.5	21.0	23.5	21.0	22.5	21.0	19.5	20.0
13	22.0	19.0	20.5	25.5	20.5	23.0	22.0	20.5	21.0	21.0	18.5	19.5
14	24.0	21.0	22.5	25.0	21.5	23.5	20.5	19.5	20.0	21.5	17.5	19.0
15	25.0	22.5	23.5	24.5	22.0	23.5	19.5	19.0	19.0	22.0	18.0	19.5
16	23.5	19.5	21.5	24.0	21.0	22.0	19.0	18.5	18.5	23.0	19.0	20.5
17	24.0	19.5	21.5	22.5	20.5	21.0	18.5	18.0	18.5	23.5	20.0	21.5
18	22.0	19.5	20.5	23.5	20.0	21.5	20.5	18.0	19.0	23.0	21.0	22.0
19	20.0	18.5	19.5	24.5	22.0	23.0	20.5	19.0	19.5	22.0	20.0	21.0
20	21.5	19.0	20.0	25.5	23.5	24.5	22.0	18.5	20.0	21.5	18.5	19.5
21	21.0	19.0	20.0	24.5	22.5	23.5	23.0	18.5	20.5	20.5	18.0	19.0
22	19.5	16.5	18.0	24.0	20.0	22.0	23.5	18.5	20.5	20.5	18.5	19.5
23	19.0	14.5	16.5	23.0	20.5	21.5	25.0	20.0	22.0	20.0	17.5	18.5
24	19.0	17.0	18.0	20.5	19.0	19.5	26.0	21.0	23.0	17.5	15.5	16.5
25	20.5	17.0	18.5	22.5	18.5	20.5	25.5	22.5	24.0	16.5	14.5	15.5
26	20.5	17.5	19.0	22.0	21.0	21.5	26.5	23.0	24.5	15.5	14.5	15.0
27	22.0	18.5	20.0	23.5	21.0	22.0	26.5	23.5	25.0	16.0	15.0	15.5
28	24.0	19.5	21.5	22.5	20.5	21.5	26.0	24.5	25.0	17.0	15.0	16.0
29	25.5	21.0	23.0	22.5	19.5	21.0	25.0	22.0	23.5	16.5	15.0	16.0
30	24.0	21.0	23.0	23.0	21.0	21.5	23.5	20.5	22.0	15.0	13.0	14.0
31	---	---	---	22.0	21.0	21.5	23.0	21.0	22.0	---	---	---
MONTH	25.5	13.5	19.0	26.0	18.5	22.0	26.5	18.0	21.5	24.5	13.0	19.0

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY

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

DRAINAGE AREA.--3,070 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1031: 1905-36. WDR NY-71-1:1970. WDR NY-82-1: Drainage area. WDR NY-86-1: 1979-80.

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

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by power plants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² of drainage area controlled by Cannonsville Reservoir. Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River Basin, as directed by the Delaware River Master. Telephone gage-height telemeter and satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft³/s, Aug. 19, 1955, gage height, 23.91 ft, from floodmarks in gage house, from rating curve extended above 89,000 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 26.6 ft, Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft³/s, Sept. 23, 1908, gage height, 0.6 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s, Oct. 10, 1903, gage height, 23.1 ft, from rating curve extended above 70,000 ft³/s, by velocity-area studies; maximum gage height, 25.5 ft, Mar. 8, 1904 (ice jam).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,400 ft³/s, Nov. 23, gage height, 8.08 ft; minimum, 692 ft³/s, Nov. 2, gage height, 1.57 ft; minimum daily, 785 ft³/s, Nov. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	985	2600	2490	e2900	3290	6010	5130	17600	2130	3650	1440
2	1540	785	2810	2420	e2300	3510	5720	4820	14500	1860	3700	1040
3	1520	945	4760	3010	e2600	3440	5230	5040	9210	1680	3300	1840
4	1560	995	9370	3260	3280	3180	4700	5710	8100	1570	2960	1820
5	1510	1010	7210	3000	2970	3240	4360	5070	6570	1600	2820	1740
6	1570	1080	5690	3940	2960	3620	4090	4710	8970	1660	3060	1720
7	1660	1380	4450	3880	2930	3630	3800	4620	11600	2060	2520	1610
8	1820	1480	3910	3530	2290	4500	3720	4600	8710	2140	1870	1690
9	1520	1450	4050	3220	1600	5720	3620	4400	7140	2170	1780	1660
10	1610	1290	4490	3150	1830	5550	3620	4100	6180	2440	3040	1690
11	1570	1340	4360	2880	2800	7960	3550	4130	5130	2140	3220	2200
12	1660	1410	3900	2320	2370	16200	4380	3710	3890	1890	2780	2370
13	1510	1550	3950	2430	2210	10500	6640	3370	3090	1440	2370	1760
14	1220	1480	4180	3080	2330	7110	5650	2770	2410	2230	2220	1530
15	1180	1230	5460	5510	2140	5700	5070	2990	2840	2500	1750	1520
16	1460	1240	5190	e5200	1310	4890	4730	2610	2730	2850	1690	1530
17	1750	1170	4550	e4000	2180	4360	5370	2800	2550	3270	1710	1790
18	3140	1140	4070	e3400	3160	4010	11200	2980	2210	2590	1720	1740
19	2520	946	3550	e2900	3110	4210	15400	2720	2400	2340	1870	1590
20	2150	962	2800	e2700	3150	3730	13300	2490	2090	2600	1610	1520
21	1960	1060	3110	e3000	3680	3180	10200	2040	1740	2750	1800	1560
22	1180	1580	3250	3270	3370	2610	8800	2240	2090	2190	1350	2000
23	1190	15000	2930	3380	2490	2970	9320	1820	2180	2140	1400	2010
24	981	15700	2650	4520	2980	2870	8450	1900	2470	2220	1510	2030
25	920	9140	2360	5180	3530	2690	9130	2200	2570	2110	1650	1900
26	955	6410	2510	3850	3560	2820	10500	2620	2460	1610	1880	1590
27	1340	4940	2150	3460	3670	8080	9350	3060	2030	2510	2030	1400
28	1220	3780	1850	3920	3650	12500	7800	2960	1700	3030	2110	1640
29	1070	3400	1880	3800	3470	8300	6620	2780	1920	2380	1650	1750
30	959	2950	2470	3640	---	6630	5860	2230	2180	2410	1390	1690
31	914	---	3210	3420	---	6120	---	3180	---	2730	1680	---
TOTAL	46759	87828	119720	107760	80820	167120	206190	105800	149260	69240	68090	51370
MEAN	1508	2928	3862	3476	2787	5391	6873	3413	4975	2234	2196	1712
MAX	3140	15700	9370	5510	3680	16200	15400	5710	17600	3270	3700	2370
MIN	914	785	1850	2320	1310	2610	3550	1820	1700	1440	1350	1040

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1992, BY WATER YEAR (WY)

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR			FOR 1992 WATER YEAR		WATER YEARS 1964 - 1992	
ANNUAL TOTAL	1313595			1259957			
ANNUAL MEAN	3599			3443		4679	
HIGHEST ANNUAL MEAN						7216	
LOWEST ANNUAL MEAN						2028	
HIGHEST DAILY MEAN	18600	Mar 5		17600	Jun 1	78300	Jun 30 1973
LOWEST DAILY MEAN	785	Nov 2		785	Nov 2	385	Jul 6 1965
ANNUAL SEVEN-DAY MINIMUM	942	Oct 30		942	Oct 30	432	Jul 1 1965
10 PERCENT EXCEEDS	7320			6250		9980	
50 PERCENT EXCEEDS	2100			2730		2820	
90 PERCENT EXCEEDS	1340			1440		1480	

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.

CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d), 1987 (b), 1988-89 (c), 1990-91 (b), 1992 (a).

MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c), 1987 (b), 1988-89 (c), 1990-91 (b), 1992 (a).

PESTICIDE DATA: 1974 (a), 1987 (b), 1988-89 (c), 1990 (b).

ORGANIC DATA: OC--1974 (b), 1975 (d).

NUTRIENT DATA: 1968 (a), 1969-76 (d), 1987 (b), 1988-89 (c), 1990 (b).

BIOLOGICAL DATA:

Bacteria--1973-76 (d).

Phytoplankton--1974 (b), 1975-76 (c).

Periphyton--1976 (a).

SEDIMENT DATA: 1959 (c), 1976 (c), 1988 (b), 1989 (c), 1990-91 (b), 1992 (a).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1973 to September 1973.

WATER TEMPERATURE: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.

SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

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

REMARKS.--Water-quality samples were collected by personnel of the New York State Department of Environmental Conservation, and were analyzed by USGS laboratories. Interruptions of temperature record were due to malfunctions of recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1957-59, 1973-81, 1983-84, 1988-92), 30.0°C, July 13, 1981; minimum (water years 1958-60, 1973, 1975-92), 0.0°C, on many days during winter, except 1984.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 26.0°C, Aug. 27, but may have been higher during period of missing record; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (µS/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL)
OCT 30...	1200	771	92	7.1	10.5	755	10.9	99	60
DATE		CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
OCT 30...		<1	110	50	4	<10	<0.10	2	40

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 30...	1200	771	1	2.1

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

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	14.0	13.0	13.5	12.0	10.5	11.5	7.0	6.0	6.5	0.0	0.0	0.0
2	17.0	14.0	15.5	12.5	11.5	12.0	7.0	7.0	7.0	0.5	0.0	0.5
3	18.0	17.0	17.5	11.5	10.0	10.5	7.0	6.0	6.0	1.5	0.5	1.0
4	19.0	17.5	18.5	10.0	8.0	9.0	6.0	4.0	5.0	1.5	1.5	1.5
5	19.0	18.0	18.5	8.0	6.5	7.0	4.0	2.5	3.0	1.5	1.5	1.5
6	19.0	17.0	18.5	6.5	5.5	6.0	2.5	2.5	2.5	1.5	1.5	1.5
7	17.0	14.5	15.5	6.0	5.5	5.5	2.5	1.5	2.0	1.5	1.0	1.5
8	14.5	13.0	14.0	5.5	5.0	5.0	3.0	2.0	2.5	1.0	0.5	0.5
9	14.5	13.0	14.0	5.0	4.0	4.5	4.5	3.0	4.0	0.5	0.5	0.5
10	15.0	13.5	14.5	4.5	4.0	4.0	5.0	4.5	4.5	1.0	0.5	0.5
11	15.5	14.0	14.5	5.0	4.5	4.5	4.5	4.0	4.5	1.0	0.5	0.5
12	14.0	13.0	13.5	5.0	4.5	5.0	4.5	4.0	4.5	0.5	0.0	0.5
13	13.5	12.5	13.0	5.0	4.5	5.0	5.0	4.5	5.0	2.0	0.5	1.0
14	12.5	11.0	12.0	6.0	5.0	5.5	6.0	5.0	5.5	3.0	2.0	2.5
15	12.0	11.0	11.5	6.0	5.5	5.5	5.5	4.0	4.5	2.5	0.0	1.0
16	12.5	11.5	12.0	7.0	6.0	6.5	4.0	2.0	3.0	0.0	0.0	0.0
17	12.5	11.0	11.5	6.0	4.5	5.0	2.0	1.0	1.5	0.0	0.0	0.0
18	13.0	10.5	12.0	4.5	3.5	4.5	1.0	0.0	0.5	0.0	0.0	0.0
19	13.5	11.5	12.5	5.5	4.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
20	12.0	10.5	11.0	7.5	5.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0
21	11.0	9.5	10.5	9.0	7.5	8.5	0.5	0.0	0.5	0.0	0.0	0.0
22	11.0	9.5	10.5	9.5	9.0	9.0	1.0	0.5	0.5	0.0	0.0	0.0
23	12.0	9.5	10.5	10.0	9.5	10.0	0.5	0.0	0.5	0.0	0.0	0.0
24	12.5	11.0	11.5	10.0	9.0	10.0	0.5	0.0	0.5	0.0	0.0	0.0
25	13.5	11.5	12.5	9.0	7.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
26	14.5	13.0	14.0	7.0	5.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
27	15.0	14.0	14.5	5.0	4.0	4.0	0.5	0.0	0.5	0.0	0.0	0.0
28	15.0	13.5	14.5	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0
29	13.5	11.5	12.0	5.0	3.5	4.5	0.5	0.5	0.5	0.0	0.0	0.0
30	12.0	10.0	10.5	6.0	5.0	5.5	1.0	0.5	0.5	0.5	0.0	0.0
31	11.0	10.5	10.5	---	---	---	0.5	0.0	0.0	0.5	0.5	0.5
MONTH	19.0	9.5	13.5	12.5	3.5	6.5	7.0	0.0	2.5	3.0	0.0	0.5
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	0.5	0.0	0.0	1.0	0.5	0.5	5.0	4.5	5.0	13.0	11.0	12.0
2	0.5	0.0	0.0	1.0	1.0	1.0	5.5	4.0	4.5	15.0	12.0	13.5
3	0.5	0.0	0.0	2.0	1.0	1.5	4.5	3.5	4.0	16.0	14.5	15.0
4	0.0	0.0	0.0	3.5	1.5	2.5	5.5	3.5	4.0	15.0	13.5	14.5
5	0.0	0.0	0.0	4.5	2.5	3.5	5.5	4.0	4.5	13.5	11.5	12.5
6	0.5	0.0	0.0	4.0	3.0	3.5	7.0	4.5	5.5	12.5	11.0	11.5
7	0.5	0.5	0.5	3.0	2.5	2.5	7.0	5.5	6.5	12.0	10.0	11.0
8	0.5	0.5	0.5	3.5	2.5	3.0	9.5	6.0	8.0	12.0	11.0	11.5
9	0.5	0.5	0.5	4.5	3.5	4.0	8.0	7.0	7.5	13.5	11.5	12.5
10	0.5	0.0	0.5	5.5	4.0	4.5	10.0	7.0	8.5	14.5	13.0	14.0
11	0.0	0.0	0.0	6.0	4.5	5.5	9.0	8.0	8.5	16.5	14.0	15.5
12	0.5	0.0	0.5	4.5	2.0	3.0	9.0	7.5	8.0	18.0	15.0	16.5
13	0.5	0.5	0.5	2.0	1.0	1.5	7.5	6.0	7.0	19.5	16.5	18.0
14	0.5	0.5	0.5	1.0	0.5	1.0	8.5	6.0	7.0	21.0	17.5	19.0
15	0.5	0.5	0.5	1.0	0.5	1.0	9.0	7.0	8.0	19.5	17.0	18.5
16	---	---	---	1.0	0.5	1.0	8.5	7.5	8.0	17.0	16.0	16.5
17	---	---	---	1.0	0.5	1.0	7.5	6.5	7.0	16.5	15.5	16.0
18	---	---	---	2.5	0.5	1.5	6.5	6.0	6.0	17.5	15.5	16.5
19	---	---	---	2.0	1.0	1.5	6.0	6.0	6.0	18.5	15.0	16.5
20	2.0	1.0	1.5	3.0	1.0	2.0	8.0	6.0	6.5	19.5	15.0	17.5
21	2.5	1.0	1.5	3.0	1.5	2.0	10.0	8.0	9.0	20.5	16.0	18.5
22	1.5	1.0	1.5	2.0	1.0	1.5	12.0	10.0	11.0	21.5	18.5	20.0
23	3.0	1.5	2.0	2.5	0.5	1.5	13.5	11.5	12.5	22.5	18.0	20.5
24	3.0	1.5	2.0	3.0	0.5	2.0	13.5	12.5	13.0	22.0	18.5	20.5
25	1.5	1.5	1.5	4.0	1.0	3.0	13.0	11.0	12.0	18.5	16.5	17.5
26	2.0	1.5	1.5	4.5	3.0	4.0	11.0	10.0	10.5	16.5	15.0	16.0
27	2.5	1.5	2.0	4.5	3.5	4.0	11.0	9.5	10.5	15.0	13.5	14.0
28	2.5	1.5	2.0	3.5	2.5	3.0	11.0	9.5	10.5	16.0	13.0	14.5
29	2.0	0.5	1.5	3.5	2.0	2.5	12.5	10.0	11.0	17.5	14.0	15.5
30	---	---	---	3.5	3.0	3.5	12.0	11.0	11.5	16.0	15.0	15.5
31	---	---	---	5.0	3.5	4.5	---	---	---	15.0	14.5	15.0
MONTH	3.0	0.0	1.0	6.0	0.5	2.5	13.5	3.5	8.0	22.5	10.0	15.5

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	14.5	14.0	14.0	---	---	---	---	---	---	21.5	19.5	20.5
2	15.5	13.5	14.5	---	---	---	---	---	---	21.0	19.0	20.0
3	17.0	14.5	16.0	---	---	---	---	---	---	20.5	19.5	20.0
4	18.0	16.5	17.5	---	---	---	---	---	---	22.5	19.5	21.0
5	17.5	16.5	17.0	---	---	---	---	---	---	21.0	20.0	20.5
6	16.5	15.5	16.0	---	---	---	---	---	---	21.0	19.5	20.0
7	18.5	16.5	17.5	---	---	---	---	---	---	19.5	19.5	19.5
8	18.5	17.5	18.0	---	---	---	---	---	---	21.0	19.5	20.5
9	19.0	17.5	18.5	---	---	---	---	---	---	22.0	20.0	21.0
10	19.0	17.5	18.5	---	---	---	---	---	---	23.0	20.5	22.0
11	19.5	17.5	18.5	---	---	---	---	---	---	23.0	21.0	22.0
12	20.5	17.5	19.0	---	---	---	---	---	---	21.0	19.5	20.5
13	21.0	19.0	20.0	---	---	---	---	---	---	20.0	18.0	19.5
14	23.5	19.0	21.5	---	---	---	20.5	19.5	20.0	20.0	18.0	19.0
15	23.5	21.0	22.5	---	---	---	20.0	18.5	19.0	20.0	18.0	19.0
16	22.5	20.5	21.5	---	---	---	18.5	18.0	18.5	21.5	19.0	20.0
17	22.5	20.0	21.0	---	---	---	18.5	18.5	18.5	22.5	20.0	21.0
18	21.5	20.0	21.0	---	---	---	20.0	18.5	19.0	22.5	20.5	21.5
19	20.0	19.0	19.5	---	---	---	20.0	19.0	19.5	21.5	20.0	21.0
20	21.0	19.0	20.0	---	---	---	21.0	18.5	20.0	20.5	18.5	19.5
21	20.5	19.0	20.0	---	---	---	21.5	18.5	20.0	19.5	18.5	19.0
22	19.5	16.5	18.0	---	---	---	21.5	19.5	21.0	20.0	19.0	19.5
23	18.5	15.5	17.0	---	---	---	23.0	20.5	22.0	19.0	17.5	18.0
24	18.5	17.0	18.0	---	---	---	23.5	21.5	23.0	17.5	15.5	16.5
25	19.5	17.5	18.5	---	---	---	24.5	22.0	23.5	16.0	14.0	15.0
26	---	---	---	---	---	---	25.5	22.5	23.5	15.5	14.5	15.0
27	---	---	---	---	---	---	26.0	23.0	24.5	16.0	15.0	15.5
28	---	---	---	---	---	---	25.0	22.5	23.5	17.0	15.5	16.0
29	---	---	---	---	---	---	24.5	22.0	23.5	16.5	15.0	16.0
30	---	---	---	---	---	---	23.0	20.5	22.0	15.0	13.5	14.0
31	---	---	---	---	---	---	22.5	21.5	22.0	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	23.0	13.5	19.0

DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ

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

DRAINAGE AREA.--3,480 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records good except for periods of ice effect, Dec. 19-21 and Jan. 17 to Feb. 20, and periods of shifting control, Oct. 1-15, and July 28 to Sept. 30, which are fair. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, Cliff Lake, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, and Neversink Reservoirs and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoir. Several measurements of water temperature were made during the year. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1740	1040	2940	2830	e3100	3700	7140	5860	17100	2460	4680	1630
2	1680	982	2990	2720	e2400	3790	6740	5520	16200	2280	4500	1080
3	1650	1010	4840	3180	e2500	3800	6170	5710	10600	2020	3640	1720
4	1670	1070	10300	3390	e3500	3490	5480	6400	9230	1800	3370	1880
5	1620	1090	8410	3180	e3000	3490	5060	5730	7720	2020	3370	1880
6	1530	1120	6640	4200	e3100	3910	4630	5250	13700	2110	3340	1710
7	1780	1410	5220	4140	e2900	4020	4410	5180	14900	2570	2820	1720
8	2010	1590	4490	3770	e2600	4880	4210	4980	11400	2420	2390	1690
9	1730	1510	4620	3440	e1600	6200	4110	5120	9420	2540	2110	1760
10	1730	1390	5100	3310	e1500	6140	4110	4600	7960	2780	3120	1690
11	1700	1390	5000	3120	e2900	8170	4090	4500	6640	2620	3650	2540
12	1860	1580	4380	2480	e2400	16600	4750	4120	5120	2330	3210	2560
13	1590	1610	4460	2470	e2200	11800	7350	3700	4280	1530	2680	2050
14	1430	1730	4870	3250	e2300	8630	6350	3160	3340	2530	2490	1590
15	1420	1350	6310	5670	e2400	6970	5670	3110	3370	2810	2160	1700
16	1960	1350	6010	6100	e1400	5950	5170	3100	3360	3430	1890	1580
17	2170	1270	5200	e4400	e2000	5330	5950	3130	3140	3750	1850	1770
18	3770	1270	4570	e4000	e3200	4870	11400	3180	2690	3340	2050	1960
19	3160	1060	e3950	e3400	e3300	4970	15700	3020	2790	2760	2200	1730
20	2630	1030	e3500	e3000	e3400	4630	14400	2710	2810	2820	1990	1590
21	2400	1160	e3400	e3500	3810	4050	11300	2320	2220	3160	1970	1570
22	1540	1910	3570	e3400	3760	3450	9860	2200	2260	2670	1660	2010
23	1310	13400	3330	e3500	2660	3420	10300	2140	2640	2460	1520	2340
24	1290	17400	2880	e4800	2860	3530	9550	1970	2850	2570	1500	2120
25	1130	10500	2580	e5800	3720	3300	9860	2340	3250	2640	1810	2160
26	1090	7630	2630	e4400	3880	3300	11400	2580	2920	1980	2280	1960
27	1490	5830	2400	e3700	4150	8420	10300	3240	2790	2780	2490	1590
28	1380	4480	2070	e4000	4090	13700	8810	3120	2190	3560	2360	1640
29	1180	3830	2030	e4100	4060	10000	7540	2920	2080	2870	1950	2040
30	1110	3450	2520	e3900	---	8000	6690	2590	2540	2690	1490	1860
31	1030	---	3390	e3700	---	7310	---	3230	---	3280	1720	---
TOTAL	53780	95442	134600	116850	84690	189820	228500	116730	181510	81580	78260	55120
MEAN	1735	3181	4342	3769	2920	6123	7617	3765	6050	2632	2525	1837
MAX	3770	17400	10300	6100	4150	16600	15700	6400	17100	3750	4680	2560
MIN	1030	982	2030	2470	1400	3300	4090	1970	2080	1530	1490	1080

e Estimated.

DELANARE RIVER BASIN

01438500 DELANARE RIVER AT MONTAGUE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3371	5059	6100	5648	6050	10040	11720	7512	4477	3036	2597	2679
MAX	15690	11760	14050	15050	15120	24480	31560	16090	15200	11220	14230	9167
(WY)	1956	1952	1974	1949	1976	1945	1940	1943	1972	1945	1955	1960
MIN	807	995	1968	1318	1748	3191	3322	2215	1214	864	715	892
(WY)	1942	1965	1965	1981	1980	1981	1985	1965	1965	1954	1954	1941

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1940 - 1992

ANNUAL TOTAL	1483342		1416882									
ANNUAL MEAN	4064		3871							5685	Unadjusted	
HIGHEST ANNUAL MEAN										8621	1952	
LOWEST ANNUAL MEAN										2309	1965	
HIGHEST DAILY MEAN	21200	Mar 5	17400	Nov 24						187000	Aug 19 1955	
LOWEST DAILY MEAN	982	Nov 2	982	Nov 2						412	Aug 23 1954	
ANNUAL SEVEN-DAY MINIMUM	1050	Oct 30	1050	Oct 30						565	Jul 1 1965	
INSTANTANEOUS PEAK FLOW			25100	Nov 23						250000a	Aug 19 1955	
INSTANTANEOUS PEAK STAGE			11.66	Nov 23						35.15	Aug 19 1955	
INSTANTANEOUS LOW FLOW			827	Oct 31						382	Aug 24 1954	
10 PERCENT EXCEEDS	8390		7410							12000		
50 PERCENT EXCEEDS	2400		3100							3420		
90 PERCENT EXCEEDS	1500		1540							1560		

a From rating curve extended above 90,000 ft³/s on basis of flood-routing study.

DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-73, 1976-78, July 1991.

COOPERATION.--Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy. Analyses of fecal coliform by the MPN method, enterococcus bacteria by the membrane filtration method, water-phase nutrients, and BOD were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (µS/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	ENTEROCOCCI ME, MF WATER TOTAL (COL / 100 ML)
OCT 1991 21...	1145	2550	95	7.5	9.5	10.9	96	<1.0	20	11
FEB 1992 20...	1130	3520	103	7.8	1.0	13.8	99	1.5	<20	<10
APR 06...	1130	4180	86	7.3	5.0	12.2	96	E1.5	<20	<10
JUN 23...	1200	2260	89	8.0	16.0	9.6	99	<1.0	<20	30
AUG 18...	1130	1840	88	7.5	18.5	8.7	94	<1.0	270	130
DATE		HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)
OCT 1991 21...	27	8.0	1.6	6.2	0.80	17	10	12	0.1	
FEB 1992 20...	27	8.5	1.5	7.2	0.90	15	11	13	0.1	
APR 06...	22	6.6	1.3	5.3	0.70	10	10	9.6	0.2	
JUN 23...	23	6.8	1.4	5.5	0.70	16	9.5	9.0	<0.1	
AUG 18...	27	8.2	1.6	6.3	0.80	20	8.7	8.7	<0.1	
DATE		SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT 1991 21...	1.3	51	<0.003	0.004	0.15	0.13	0.14	0.07	0.37	
FEB 1992 20...	2.5	56	0.004	0.004	0.57	0.45	<0.03	0.04	0.39	
APR 06...	2.2	44	0.008	0.009	0.41	0.39	0.04	<0.03	0.29	
JUN 23...	1.7	45	0.005	0.005	0.24	0.24	<0.03	<0.03	0.24	
AUG 18...	1.6	49	0.019	0.020	0.22	0.22	<0.03	<0.03	0.20	
DATE		NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DIS-SOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 1991 21...	0.21	0.52	0.34	0.06	<0.02	3.0	0.3	3	21	
FEB 1992 20...	0.31	0.96	0.76	0.31	<0.02	2.3	0.5	9	86	
APR 06...	0.16	0.70	0.55	<0.02	<0.02	2.1	0.2	7	79	
JUN 23...	0.26	0.48	0.50	0.03	0.04	3.4	0.2	1	6.1	
AUG 18...	0.17	0.42	0.39	0.03	<0.02	2.1	0.2	1	5.0	

DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ARSENIC TOTAL (µG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE)	BORON, TOTAL RECOV- ERABLE (µG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)
JUN 1992 23...	1200	<10	<1	<10	<10	<1	<1	2

DATE	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (µG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
JUN 1992 23...	110	<1	30	<0.10	<1	<1	<10

BUSH KILL BASIN

01439500 BUSH KILL AT SHOEMAKERS, PA

LOCATION.--Lat 41°05'17", long 75°02'17", Monroe County, Hydrologic Unit 02040104, on right bank 30 ft downstream from highway bridge, 0.1 mi downstream from Saw Creek, 0.7 mi northwest of Shoemakers, and 2.0 mi southwest of Bushkill.

DRAINAGE AREA.--117 mi².

PERIOD OF RECORD.--October 1908 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1928, published as Bushkill Creek near Shoemakers; October 1928 to September 1952, published as Bushkill Creek at Shoemakers.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1921, 1932(M), 1933, 1935-36, 1938(M), 1939-40, 1942, 1945, 1946(M), 1948(M). WSP 1302: 1909-15, 1920(M), 1922-29. WDR PA-89-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 421.13 ft above sea level. Sept. 19, 1908 to Aug. 12, 1938, nonrecording gage, and Aug. 13, 1938 to June 20, 1956, water-stage recorder at site 50 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	69	192	e98	166	225	441	267	1500	95	109	43
2	36	67	176	e99	e147	224	391	262	1130	84	83	38
3	33	64	544	e100	e137	213	348	273	825	76	72	39
4	31	61	680	113	e128	208	319	261	618	82	68	50
5	31	56	526	124	e120	205	293	242	594	80	69	46
6	48	52	441	121	e112	202	269	227	1290	131	60	42
7	50	51	374	112	e114	215	253	214	1060	104	54	48
8	37	52	323	103	e100	261	248	208	825	83	50	55
9	30	49	304	99	e86	244	238	262	644	130	125	53
10	26	47	311	100	e73	232	230	246	483	104	104	49
11	30	58	271	98	e64	402	257	223	380	83	78	83
12	70	76	237	93	e80	416	266	202	311	71	67	86
13	76	77	226	92	e99	341	243	188	264	69	57	69
14	60	74	238	144	e101	298	226	179	232	76	54	61
15	80	69	226	218	e101	271	210	167	206	80	52	56
16	226	65	200	e160	225	245	201	208	179	116	49	52
17	245	61	178	e150	188	237	260	230	160	101	59	49
18	350	55	174	e130	156	233	332	216	144	107	84	47
19	288	52	e150	e105	174	240	366	198	140	95	98	49
20	237	51	e142	e107	183	227	342	182	142	81	84	44
21	197	62	e136	e109	167	215	321	167	131	70	72	40
22	168	436	130	e112	154	201	367	154	118	63	64	41
23	148	1010	127	e200	147	200	412	142	107	70	58	83
24	128	699	129	425	148	188	371	138	130	90	52	83
25	111	550	120	341	158	189	423	156	148	79	63	72
26	103	426	117	e260	250	245	394	153	122	74	70	79
27	96	329	119	e240	270	790	357	159	227	147	67	93
28	92	271	109	e225	246	754	327	148	165	126	61	92
29	83	238	116	e205	244	585	302	136	126	98	69	83
30	76	213	157	196	---	486	276	127	105	87	59	70
31	71	---	e124	176	---	487	---	918	---	109	50	---
TOTAL	3298	5440	7297	4855	4338	9479	9283	6853	12506	2861	2161	1795
MEAN	106	181	235	157	150	306	309	221	417	92.3	69.7	59.8
MAX	350	1010	680	425	270	790	441	918	1500	147	125	93
MIN	26	47	109	92	64	188	201	127	105	63	49	38
CFSM	.91	1.55	2.01	1.34	1.28	2.61	2.64	1.89	3.56	.79	.60	.51
IN.	1.05	1.73	2.32	1.54	1.38	3.01	2.95	2.18	3.98	.91	.69	.57

e Estimated.

BUSH KILL BASIN

01439500 BUSH KILL AT SHOEMAKERS, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	122	209	259	253	275	433	428	309	199	133	99.5	94.7
MAX	773	643	769	807	706	1119	962	773	919	747	864	569
(WY)	1956	1933	1974	1979	1909	1936	1983	1989	1972	1945	1955	1933
MIN	7.74	13.6	28.3	44.2	39.7	156	141	90.7	32.8	14.7	8.33	4.39
(WY)	1965	1965	1923	1981	1934	1981	1985	1941	1962	1965	1964	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1909 - 1992

ANNUAL TOTAL	62267.0		70166									
ANNUAL MEAN	171		192							234		
HIGHEST ANNUAL MEAN										419		1928
LOWEST ANNUAL MEAN										95.4		1965
HIGHEST DAILY MEAN	1010	Nov 23				1500	Jun 1			11800	Aug 19	1955
LOWEST DAILY MEAN	7.3	Sep 17				26	Oct 10			2.6	Sep 25	1964
ANNUAL SEVEN-DAY MINIMUM	7.9	Sep 12				36	Oct 5			2.7	Sep 21	1964
INSTANTANEOUS PEAK FLOW						1780	May 31			a23400	Aug 19	1955
INSTANTANEOUS PEAK STAGE						3.77	May 31			b13.95	Aug 19	1955
INSTANTANEOUS LOW FLOW						26	Oct 10			2.6	Sep 25	1964
ANNUAL RUNOFF (CFSM)	1.46					1.64				2.00		
ANNUAL RUNOFF (INCHES)	19.80					22.31				27.20		
10 PERCENT EXCEEDS	370					368				520		
50 PERCENT EXCEEDS	134					136				160		
90 PERCENT EXCEEDS	13					52				27		

a From rating curve extended above 2,600 ft³/s, on basis of slope-area measurement of peak flow

b From floodmarks.

DELAWARE RIVER BASIN

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

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

DRAINAGE AREA.--3,850 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 293.64 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs. Several measurements of water temperature were made during the year. Gage height satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 19, 1955, reached a stage of 37.4 ft, present datum (discharge about 260,000 cfs). Information on stage supplied by Harlan Fish, retired caretaker of Worthington State Forest.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	1190	3650	3480	4930	4560	8790	6870	17600	2990	4520	2190
2	1720	1220	3310	3030	3920	4530	8360	6580	23400	2940	5790	1660
3	1750	1100	4770	3320	3470	4740	7740	6360	14900	2490	4380	1630
4	1700	1180	10900	3490	4150	4620	6990	7070	11400	2130	4130	2280
5	1670	1200	10600	3710	3890	4240	6370	6970	9890	2370	3890	2320
6	1550	1210	8410	4050	3750	4580	5750	6140	15700	2500	3790	1960
7	1830	1290	6750	4750	3830	5030	5480	6080	19500	3140	3560	2200
8	2020	1620	5760	4330	3590	5460	5180	5750	15300	2850	3160	2090
9	1890	1590	5310	4020	2930	6620	4980	6440	12500	3100	2610	2270
10	1690	1560	5930	3570	2290	7260	4870	5600	10300	3130	2940	1990
11	1750	1470	5970	3650	3070	8420	5060	5290	8710	3240	4320	2620
12	1850	1590	5400	3000	3380	18400	5120	5230	7060	2760	3970	2900
13	1660	1690	5010	2680	2650	15000	7330	4610	5840	2160	3340	2810
14	1760	1860	5280	3300	2520	10800	7680	4180	4670	2520	3070	2100
15	1550	1630	6440	5200	3050	8390	6690	3600	4000	3070	2770	2040
16	1840	1440	6960	7240	2440	6980	6030	4050	4510	3540	2290	1850
17	2710	1420	6220	6060	2230	6270	6400	3840	4050	4000	2300	2010
18	3690	1370	5380	4750	3640	5840	10500	3860	3650	4030	2560	2240
19	4030	1320	4650	4070	4180	5640	16300	3860	3410	3080	2650	2100
20	3200	1190	4130	4960	4180	5570	17400	3430	3640	3180	2680	1810
21	2720	1220	3860	5750	4310	4890	13400	3150	2900	3610	2330	1850
22	2130	1840	4040	5700	4690	4220	11400	2630	2700	3270	2320	2100
23	1550	11100	3880	4840	3650	3710	11300	2890	3320	2780	1820	2710
24	1590	24100	3470	6280	3250	4110	11200	2330	3210	2860	1880	2450
25	1330	13400	3170	7560	4380	3850	10600	2660	3910	2930	2110	2590
26	1260	9480	2650	6730	4890	3830	12700	2950	3750	2350	2280	2440
27	1330	7220	3040	5450	5280	7530	11800	3810	3950	2620	2910	1910
28	1580	5900	2780	5450	5220	17700	10500	3760	3000	3970	2720	1920
29	1430	4650	2280	5950	5240	13300	8880	3580	2640	3740	2740	2490
30	1360	4320	2520	5600	---	10100	7780	3340	3130	3070	2090	2190
31	1210	---	3420	4960	---	9200	---	3690	---	3610	1960	---
TOTAL	58850	111370	155940	146930	109000	225390	262580	140600	232540	94030	93880	65720
MEAN	1898	3712	5030	4740	3759	7271	8753	4535	7751	3033	3028	2191
MAX	4030	24100	10900	7560	5280	18400	17400	7070	23400	4030	5790	2900
MIN	1210	1100	2280	2680	2230	3710	4870	2330	2640	2130	1820	1630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1992, BY WATER YEAR (WY)

	MEAN	4028	5218	6670	5982	7300	10280	11690	8457	5441	3469	2797	3077
MAX	13030	12870	16730	17960	17320	21490	24100	17970	18150	9455	6242	10310	
(WY)	1978	1973	1974	1979	1976	1977	1983	1989	1972	1973	1969	1987	
MIN	1193	992	1914	1437	1936	3873	3796	2746	1397	950	1101	1283	
(WY)	1965	1965	1965	1981	1980	1981	1985	1965	1965	1965	1965	1965	

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1964 - 1992
ANNUAL TOTAL	1720530	1696830	
ANNUAL MEAN	4714	4636	6214
HIGHEST ANNUAL MEAN			9418
LOWEST ANNUAL MEAN			2572
HIGHEST DAILY MEAN	26300	Mar 5	96000
LOWEST DAILY MEAN	1100	Nov 3	580
ANNUAL SEVEN-DAY MINIMUM	1190	Oct 31	620
INSTANTANEOUS PEAK FLOW		30500	110000
INSTANTANEOUS PEAK STAGE		11.58	24.00
INSTANTANEOUS LOW FLOW		1060	---
10 PERCENT EXCEEDS	9480	8730	13000
50 PERCENT EXCEEDS	2780	3650	3770
90 PERCENT EXCEEDS	1590	1690	1850

BRODHEAD CREEK BASIN

01440400 BRODHEAD CREEK NEAR ANALOMINK, PA

LOCATION.--Lat 41°05'05", long 75°12'54", Monroe County, Hydrologic Unit 02040104, on left bank 1.5 mi upstream from Paradise Creek, 1.6 mi southeast of Henryville, and 2.3 mi north of Analomink.

DRAINAGE AREA.--65.9 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 586.50 ft above sea level. Prior to Dec. 12, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	101	81	110	138	237	143	933	55	54	23
2	18	24	93	76	e100	131	210	135	616	49	43	22
3	17	24	341	76	e93	124	188	149	372	45	39	25
4	18	25	343	81	88	118	172	134	288	51	41	29
5	17	23	250	87	e82	114	158	124	344	49	39	25
6	23	22	205	82	e77	110	145	117	876	103	35	24
7	22	21	177	76	77	135	136	107	552	64	32	27
8	20	21	160	72	75	158	130	115	389	50	30	31
9	18	21	157	71	e62	142	123	272	306	93	72	30
10	18	20	158	72	e52	139	123	202	241	67	52	28
11	21	26	138	69	e47	319	147	170	200	54	42	128
12	43	30	125	66	e40	291	141	153	169	46	38	71
13	35	27	131	65	e52	239	125	141	148	46	33	52
14	30	25	140	141	65	202	114	133	129	52	31	44
15	32	24	130	164	65	177	108	124	116	50	30	40
16	72	24	114	e115	106	157	107	195	100	65	32	36
17	81	24	104	e100	93	145	155	182	92	56	36	34
18	129	23	99	e88	83	136	201	159	85	70	55	31
19	92	22	e88	e79	102	141	209	138	86	56	57	31
20	72	21	e87	e80	100	130	187	123	84	45	44	28
21	59	23	86	e82	88	120	175	112	73	40	37	26
22	52	243	85	86	81	112	277	102	68	37	33	30
23	45	615	84	144	78	111	290	93	64	43	30	80
24	41	332	84	308	81	102	250	94	86	60	28	50
25	39	237	77	198	88	99	258	101	80	49	26	40
26	36	186	71	163	166	150	223	96	66	48	26	64
27	34	148	69	148	153	522	200	98	151	103	25	82
28	34	129	66	133	137	392	178	88	94	71	26	72
29	30	116	90	126	159	296	162	78	71	55	34	60
30	27	108	112	122	---	256	150	76	60	48	28	52
31	27	---	92	117	---	273	---	1020	---	54	24	---
TOTAL	1221	2609	4057	3368	2600	5679	5279	4974	6939	1774	1152	1315
MEAN	39.4	87.0	131	109	89.7	183	176	160	231	57.2	37.2	43.8
MAX	129	615	343	308	166	522	290	1020	933	103	72	128
MIN	17	20	66	65	40	99	107	76	60	37	24	22
CFSM	.60	1.32	1.99	1.65	1.36	2.78	2.67	2.43	3.51	.87	.56	.67
IN.	.69	1.47	2.29	1.90	1.47	3.21	2.98	2.81	3.92	1.00	.65	.74

e Estimated.

BRODHEAD CREEK BASIN

01440400 BRODHEAD CREEK NEAR ANALOMINK, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	71.4	120	168	143	163	247	250	189	112	62.4	42.1	54.2
MAX	237	336	489	459	371	537	596	440	474	380	159	464
(WY)	1977	1973	1974	1978	1981	1977	1983	1989	1972	1969	1973	1987
MIN	8.36	10.2	21.3	15.1	41.8	92.7	84.0	62.3	23.2	10.7	8.30	7.56
(WY)	1964	1965	1981	1981	1980	1989	1985	1962	1962	1965	1964	1964

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1958 - 1992	
ANNUAL TOTAL	34716.0		40967		135	
ANNUAL MEAN	95.1		112		213	
HIGHEST ANNUAL MEAN					59.6	
LOWEST ANNUAL MEAN					6070	
HIGHEST DAILY MEAN	623	Mar 4	1020	May 31	Jul 28 1969	
LOWEST DAILY MEAN	7.0	Aug 8	17	Oct 3	5.4	
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 12	19	Oct 1	5.9	
INSTANTANEOUS PEAK FLOW			1940	May 31	a12900	
INSTANTANEOUS PEAK STAGE			5.58	May 31	11.82	
INSTANTANEOUS LOW FLOW			17	Oct 5	5.4	
ANNUAL RUNOFF (CFSM)	1.44		1.70		2.05	
ANNUAL RUNOFF (INCHES)	19.60		23.13		27.83	
10 PERCENT EXCEEDS	207		206		292	
50 PERCENT EXCEEDS	72		84		84	
90 PERCENT EXCEEDS	11		26		17	

a From rating curve extended above 1,400 ft³/s on basis of slope-area measurement of peak flow.

b Also Sep. 14, 1980.

BRODHEAD CREEK BASIN

01442500 BRODHEAD CREEK AT MINISINK HILLS, PA

LOCATION.--Lat 40°59'55", long 75°08'35", Monroe County, Hydrologic Unit 02040104, on left bank at Minisink Hills, 500 ft upstream from Marshall Creek, 1,500 ft downstream from Coates Paper Box Co., 0.8 mi upstream from mouth, and 3.0 mi southeast of East Stroudsburg.

DRAINAGE AREA.--259 mi².

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

REVISED RECORDS.--WSP 1232: 1951(P).

GAGE.--Water-stage recorder. Datum of gage is 301.84 ft above sea level. Prior to Aug. 19, 1955, water-stage recorder, and Aug. 23 to Nov. 24, 1955, nonrecording gage at site about 1,300 ft upstream at datum 2.19 ft higher. Nov. 25, 1955, to July 24, 1956, nonrecording gage at site 40 ft upstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	81	e380	247	376	509	981	470	3330	251	275	122
2	67	82	e360	257	337	481	858	446	2200	221	195	118
3	63	79	e1260	259	316	460	754	454	1490	206	174	133
4	65	77	1310	278	296	432	665	404	1130	235	177	196
5	67	77	883	309	e278	412	594	369	1590	220	175	139
6	120	77	737	278	259	387	534	362	3980	301	157	130
7	91	75	623	250	260	471	504	336	2490	239	149	162
8	74	78	558	236	253	579	480	382	1800	202	142	167
9	70	79	538	233	220	496	444	1410	1410	550	356	163
10	68	80	580	258	180	472	444	840	1090	325	256	157
11	74	95	485	230	e160	1130	512	704	891	248	194	327
12	116	105	434	221	e150	996	484	614	755	214	177	236
13	98	92	448	225	175	815	436	558	656	217	162	174
14	85	87	470	446	222	712	402	509	576	230	153	157
15	104	83	425	556	220	631	377	451	500	224	151	146
16	171	85	363	387	407	562	361	738	441	293	150	e141
17	233	80	334	e345	336	526	483	665	404	231	185	e137
18	467	78	322	e300	281	497	616	581	376	293	279	132
19	244	79	272	264	358	530	631	496	391	240	264	143
20	172	77	e271	e268	344	488	589	438	384	202	193	131
21	139	83	e271	e272	302	448	559	405	322	184	166	126
22	122	805	270	277	275	415	887	374	291	174	152	143
23	109	e2200	268	455	276	418	898	344	283	201	144	289
24	101	e1250	274	1250	271	376	769	329	353	259	139	194
25	97	e800	234	673	324	370	840	371	333	223	134	155
26	92	e670	221	579	709	616	726	348	278	193	134	289
27	92	e560	213	527	642	2520	651	365	702	280	128	350
28	86	e470	205	486	565	1800	573	310	423	234	132	274
29	83	e420	315	456	579	1340	529	267	313	199	164	223
30	81	e395	397	428	---	1130	490	251	276	184	143	191
31	81	---	302	420	---	1170	---	3500	---	277	129	---
TOTAL	3602	9299	14023	11670	9371	22189	18071	18091	29458	7550	5529	5445
MEAN	116	310	452	376	323	716	602	584	982	244	178	181
MAX	467	2200	1310	1250	709	2520	981	3500	3980	550	356	350
MIN	63	75	205	221	150	370	361	251	276	174	128	118
CFSM	.45	1.20	1.75	1.45	1.25	2.76	2.33	2.25	3.79	.94	.69	.70
IN.	.52	1.34	2.01	1.68	1.35	3.19	2.60	2.60	4.23	1.08	.79	.78

e Estimated.

BRODHEAD CREEK BASIN

01442500 BRODHEAD CREEK AT MINISINK HILLS, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	307	537	722	596	679	981	992	729	434	260	253	237
MAX	1560	1634	1913	1811	1498	2108	2293	1619	1876	923	2505	1649
(WY)	1956	1973	1974	1979	1951	1977	1983	1989	1972	1969	1955	1987
MIN	54.4	68.1	83.4	50.6	196	387	312	268	119	65.4	46.4	40.8
(WY)	1964	1965	1981	1981	1980	1985	1985	1962	1962	1965	1957	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1951 - 1992

ANNUAL TOTAL	136366		154298									
ANNUAL MEAN	374		422							560		
HIGHEST ANNUAL MEAN										957		1952
LOWEST ANNUAL MEAN										238		1965
HIGHEST DAILY MEAN	2330	Mar 4		3980	Jun 6				30500		Aug 19	1955
LOWEST DAILY MEAN	46	Sep 18		63	Oct 3				30		Sep 26	1964
ANNUAL SEVEN-DAY MINIMUM	59	Sep 12		77	Nov 3				33		Sep 6	1964
INSTANTANEOUS PEAK FLOW				7040	May 31				a66800		Aug 19	1955
INSTANTANEOUS PEAK STAGE				7.37	May 31				b27.00		Aug 19	1955
INSTANTANEOUS LOW FLOW				61	Oct 3, 4				29		Sep 27	1964
ANNUAL RUNOFF (CFSM)	1.44			1.63					2.16			
ANNUAL RUNOFF (INCHES)	19.59			22.16					29.37			
10 PERCENT EXCEEDS	777			759					1220			
50 PERCENT EXCEEDS	257			293					348			
90 PERCENT EXCEEDS	74			94					93			

a From rating curve extended above 4,600 ft³/s, on basis of computation of flow-over-dam at gage height 14.43 ft and slope-area measurement of peak flow.

b From floodmarks.

DELAWARE RIVER BASIN

01443000 DELAWARE RIVER AT PORTLAND, PA

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

DRAINAGE AREA.--4,165 mi².

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

COOPERATION.--Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy. Analyses of fecal coliform by the MPN method, enterococcus bacteria by the membrane filtration method, water-phase nutrients, and BOD were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (µS/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML)
OCT 1991 22...	1130	2100	98	7.6	10.5	10.5	94	E1.6	790	<2
JAN 1992 21...	1200	4200	101	8.7	0.5	14.8	103	<1.1	210	40
APR 07...	1130	6200	101	8.3	6.5	13.6	112	E1.5	40	<10
JUN 23...	1100	3600	117	7.8	17.5	11.2	119	<1.0	<20	<10
AUG 18...	1200	3000	111	8.6	19.0	9.1	100	<1.0	110	200

DATE	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 1991 22...	31	9.4	1.8	7.0	0.80	19	13	10	<0.1
JAN 1992 21...	34	11	1.6	5.4	0.80	16	16	11	0.2
APR 07...	25	7.4	1.5	5.1	0.60	13	10	9.4	0.2
JUN 23...	31	9.5	1.7	5.3	0.60	21	11	8.5	<0.1
AUG 18...	33	10	1.9	5.5	0.80	23	10	8.5	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 1991 22...	1.9	56	0.004	0.004	0.12	0.13	0.07	0.09	0.49
JAN 1992 21...	3.4	61	0.008	0.003	0.37	0.38	0.04	0.07	0.24
APR 07...	2.3	46	0.011	0.010	0.31	0.32	0.03	<0.03	0.19
JUN 23...	1.9	52	0.005	0.004	0.19	0.20	<0.03	0.05	0.22
AUG 18...	2.0	53	0.018	0.019	0.19	0.20	<0.03	<0.03	0.15

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 1991 22...	0.37	0.61	0.50	0.41	0.03	3.0	0.3	1	5.7
JAN 1992 21...	0.18	0.61	0.56	0.03	<0.02	2.9	0.3	2	23
APR 07...	0.17	0.50	0.49	<0.02	<0.02	2.1	0.2	7	117
JUN 23...	0.26	0.41	0.46	0.04	0.02	2.5	0.2	2	19
AUG 18...	--	0.34	--	0.04	0.02	2.5	0.3	2	16

DELAWARE RIVER BASIN

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ARSENIC TOTAL (µG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE)	BORON, TOTAL RECOV- ERABLE (µG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)
JUN 1992 23...	1100	<10	<1	<10	<10	<1	<1	<1

DATE	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (µG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
JUN 1992 23...	100	<1	30	<0.10	<1	<1	<10

DELAWARE RIVER BASIN

01446500 DELAWARE RIVER AT BELVIDERE, NJ

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

DRAINAGE AREA.--4,535 mi².

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

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

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

REMARKS.--Records good except for estimated daily discharges, which are fair. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs and smaller reservoirs. Diversions from Pepacton, Cannonsville, and Neversink Reservoirs. Satellite telemeter and National Weather Service gage-height telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1720	1390	4630	4400	5540	e5720	11200	8720	18900	3560	5080	2350
2	2030	1390	4270	3760	4250	e5750	10600	8070	27000	3380	6250	2140
3	1970	1420	6560	3830	3680	e5870	9790	7790	18000	3010	5060	1730
4	1960	1440	12900	4420	4020	e5690	8870	8350	13700	2890	4700	2720
5	1970	1520	13500	4840	4580	e5290	8060	8400	12300	2770	4260	2620
6	2080	1480	10800	4750	e4360	e5610	7360	7500	19800	3060	4050	2440
7	2010	1460	8800	5630	e4510	e5970	6900	7200	23300	3400	4050	2580
8	2190	1790	7430	5300	e4120	e6400	6510	6940	19100	3330	3470	2620
9	2310	1940	6780	4900	e3480	e7840	6300	8480	15700	4200	3190	2590
10	2030	1870	7410	4540	e2880	e8390	6140	7340	13000	3860	3460	2480
11	2080	1840	7450	4550	e3630	e9530	6380	6850	11000	3810	4610	2880
12	2170	1910	6840	4080	e3720	e20100	6470	6630	9070	3300	4480	3360
13	2290	2060	6340	3500	e2990	e17500	8050	5950	7440	3030	3830	3310
14	1990	2130	6540	3950	e3000	e13400	9220	5410	6090	2640	3380	2610
15	1890	2140	7290	5960	e3380	e10700	7980	4680	5180	3550	3130	2230
16	2490	1790	8280	8220	e2820	e8940	7310	5330	5460	4240	2690	2220
17	3330	1760	7430	5940	e2800	e7970	7530	5180	4900	4670	2670	2150
18	4370	1670	6560	4520	e4500	7190	11200	5110	4460	4880	3190	2380
19	5040	1650	5450	3570	e4780	7020	17400	5050	4300	3930	3450	2460
20	4010	1410	4560	3680	e4850	6980	19600	4530	4510	3660	3290	2250
21	3370	1370	4830	3970	e5250	6220	15700	4140	3840	3880	2800	2090
22	2970	2520	4910	4720	e5500	5480	13700	3570	3410	3710	2800	2150
23	2150	11700	4880	5120	e4380	4910	13700	3630	3710	3260	2330	2980
24	1930	26200	4480	7720	e4020	5190	13700	3160	3860	3460	2200	2930
25	1790	16400	4120	7840	e5150	4910	12800	3410	4540	3420	2250	2840
26	1610	11800	3520	7310	e5520	5230	15000	3740	4430	3100	2530	2910
27	1550	8960	3570	5790	e6190	10300	14300	4340	5120	3020	3060	2760
28	1950	7340	3410	5530	e6500	20700	12800	4500	4310	4240	3060	2510
29	1810	5860	3180	6070	e6410	17200	11000	4260	3530	4330	3110	2630
30	1580	5380	3570	5940	---	13100	9720	3980	3550	3520	2590	2620
31	1480	---	4200	5940	---	11900	---	7190	---	3900	2150	---
TOTAL	72120	131590	194490	160290	126810	277000	315290	179430	283510	111010	107170	76540
MEAN	2326	4386	6274	5171	4373	8935	10510	5788	9450	3581	3457	2551
MAX	5040	26200	13500	8220	6500	20700	19600	8720	27000	4880	6250	3360
MIN	1480	1370	3180	3500	2800	4910	6140	3160	3410	2640	2150	1730

e Estimated.

DELAWARE RIVER BASIN

01446500 DELAWARE RIVER AT BELVIDERE, NJ--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4645	7128	8295	7819	8399	13980	15610	9964	6016	4328	3667	3812
MAX	19570	21140	20590	20890	19930	42520	40720	21470	22280	16840	19260	13940
(WY)	1956	1928	1974	1949	1976	1936	1940	1989	1972	1928	1955	1938
MIN	1055	1226	1481	1683	2452	5243	4512	3261	1590	1017	881	1199
(WY)	1942	1965	1923	1981	1980	1981	1985	1965	1965	1965	1954	1941

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1923 - 1992	
ANNUAL TOTAL	2093250		2035250		7797	
ANNUAL MEAN	5735		5561		14130	
HIGHEST ANNUAL MEAN					2990	
LOWEST ANNUAL MEAN					184000	
HIGHEST DAILY MEAN	29500	Mar 5	27000	Jun 2	610	Aug 19 1955
LOWEST DAILY MEAN	1370	Nov 21	1370	Nov 21	782	Aug 25 1954
ANNUAL SEVEN-DAY MINIMUM	1440	Nov 1	1440	Nov 1	273000a	Aug 14 1954
INSTANTANEOUS PEAK FLOW			31800	Jun 2	30.21b	Aug 19 1955
INSTANTANEOUS PEAK STAGE			10.12	Jun 2	609	Aug 19 1955
INSTANTANEOUS LOW FLOW			1270	Nov 2	16500	Sep 28 1943
10 PERCENT EXCEEDS	11700		11000		5000	
50 PERCENT EXCEEDS	3410		4360		1900	
90 PERCENT EXCEEDS	1860		2050			

a From rating curve extended above 170,000 ft³/s on basis of flood-routing study.

b From high-water mark in gage house.

DELAWARE RIVER BASIN

01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA

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

DRAINAGE AREA.--4,717 mi².

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

COOPERATION.--Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy. Analyses of fecal coliform by the MPN method, enterococcus bacteria by the membrane filtration method, water-phase nutrients, and BOD were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (µS/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, EC BROTH (MPN)	ENTERO- COCCI ME, MF WATER TOTAL (COL / 100 ML)
OCT 1991 23...	1345	3300	150	7.8	10.5	10.9	98	E1.5	20	<2
JAN 1992 22...	1200	4600	140	8.7	1.0	13.5	95	<1.0	80	20
APR 08...	1300	6400	134	7.7	8.5	11.7	101	E1.4	<20	10
JUN 24...	1100	3900	144	7.7	19.0	11.0	121	<1.0	80	120
AUG 19...	1200	3100	165	7.8	21.0	7.7	87	<1.0	90	90
DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	
OCT 1991 23...	51	14	3.9	8.3	1.1	35	24	15	<0.1	
JAN 1992 22...	51	15	3.2	7.0	1.1	30	23	14	0.2	
APR 08...	43	12	3.2	6.5	0.20	26	15	13	<0.1	
JUN 24...	50	14	3.7	6.6	0.80	37	16	10	<0.1	
AUG 19...	69	20	4.6	8.1	1.0	47	16	12	<0.1	
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	
OCT 1991 23...	2.1	92	0.003	0.003	0.46	0.47	0.06	0.12	0.29	
JAN 1992 22...	3.5	88	0.004	0.004	0.64	0.63	0.05	<0.03	0.30	
APR 08...	2.1	70	0.012	0.012	0.56	0.59	<0.03	<0.03	0.22	
JUN 24...	1.9	77	0.007	0.006	0.49	0.48	<0.03	<0.03	0.26	
AUG 19...	2.8	95	0.018	0.018	0.51	0.51	<0.03	<0.03	0.23	
DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	
OCT 1991 23...	0.23	0.75	0.70	0.05	0.03	3.5	0.2	2	13	
JAN 1992 22...	0.25	0.94	0.88	0.17	0.02	2.9	0.3	2	25	
APR 08...	0.21	0.78	0.80	<0.02	<0.02	2.2	0.2	15	259	
JUN 24...	0.17	0.75	0.65	0.07	0.03	2.5	0.2	3	32	
AUG 19...	0.24	0.74	0.75	0.04	0.06	3.0	0.3	2	17	

DELAWARE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ARSENIC TOTAL (µG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE)	BORON, TOTAL RECOV- ERABLE (µG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)
JUN 1992 24...	1100	<10	<1	<10	<10	<1	<1	2

DATE	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (µG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
JUN 1992 24...	90	1	20	<0.10	1	<1	<10

LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA

LOCATION.--Lat 41°07'49", long 75°37'33", Monroe County, Hydrologic Unit 02040106, on left bank 75 ft upstream from bridge on State Highway 115, at Stoddartsville, 1.9 mi upstream from Tobyhanna Creek, and 4.0 mi southwest of Thornhurst.

DRAINAGE AREA.--91.7 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1382: 1947, 1951.

GAGE.--Water-stage recorder. Datum of gage is 1,463.81 ft above sea level. Prior to Oct. 1, 1946, nonrecording gage at site 350 ft downstream at datum 2.14 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF PERIOD.--Flood of May 22, 1942, reached a stage of 12.03 ft, from floodmark, present site and datum, discharge, 15,700 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	32	116	136	115	229	310	185	780	106	116	48
2	22	29	110	124	109	199	280	179	621	91	100	49
3	22	27	414	117	e102	182	250	260	433	81	87	53
4	24	26	494	146	e100	171	225	236	331	83	78	66
5	25	26	349	187	96	167	205	204	332	83	75	54
6	68	25	273	165	e93	153	186	184	633	188	71	49
7	83	25	229	143	e90	168	174	170	513	124	64	49
8	64	24	206	124	88	196	168	226	381	99	60	49
9	59	24	210	118	e76	184	160	633	324	187	97	56
10	47	24	205	120	e67	177	160	465	259	153	105	84
11	53	36	182	116	e60	410	205	371	217	126	83	331
12	98	45	163	109	e53	424	205	311	187	108	76	204
13	78	41	193	105	e69	319	177	268	166	110	70	136
14	61	41	245	178	e90	261	156	237	150	135	94	106
15	51	38	233	246	90	225	145	212	135	147	93	89
16	77	36	197	191	119	200	139	372	121	297	77	75
17	89	35	171	e160	118	181	180	335	112	212	72	68
18	187	34	157	e142	109	169	239	293	108	203	117	63
19	133	31	144	e123	126	174	256	255	113	167	142	53
20	98	30	e143	e124	139	168	228	219	116	133	102	48
21	77	36	e142	e128	122	155	207	190	106	128	81	46
22	64	260	140	138	108	144	303	172	98	113	81	56
23	57	821	136	142	101	145	423	156	93	111	68	128
24	50	468	142	266	106	134	332	154	156	137	57	95
25	45	304	130	218	113	130	333	171	155	130	51	75
26	43	224	122	168	165	179	294	157	121	125	47	119
27	40	179	114	e154	162	563	266	154	302	247	46	143
28	38	160	111	142	150	521	232	144	210	187	65	128
29	36	142	129	131	252	369	208	128	153	151	74	103
30	38	124	159	123	---	312	190	123	121	139	61	90
31	35	---	142	117	---	336	---	517	---	127	52	---
TOTAL	1885	3347	5901	4601	3188	7345	6836	7681	7547	4428	2462	2713
MEAN	60.8	112	190	148	110	237	228	248	252	143	79.4	90.4
MAX	187	821	494	266	252	563	423	633	780	297	142	331
MIN	22	24	110	105	53	130	139	123	93	81	46	46
CFSM	.66	1.22	2.08	1.62	1.20	2.58	2.48	2.70	2.74	1.56	.87	.99
IN.	.76	1.36	2.39	1.87	1.29	2.98	2.77	3.12	3.06	1.80	1.00	1.10

e Estimated.

LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	117	175	211	182	200	303	348	261	163	113	92.2	87.6
MAX	613	439	561	581	709	577	765	604	655	528	1101	511
(WY)	1956	1973	1974	1979	1981	1977	1983	1989	1972	1947	1955	1987
MIN	14.1	17.1	35.5	18.3	62.2	131	144	95.9	43.0	19.8	14.2	9.18
(WY)	1964	1965	1981	1981	1980	1989	1946	1955	1962	1965	1964	1964

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1944 - 1992	
ANNUAL TOTAL	49269		57934		187	
ANNUAL MEAN	135		158		268	
HIGHEST ANNUAL MEAN					86.2	
LOWEST ANNUAL MEAN					18900	
HIGHEST DAILY MEAN	821	Nov 23	821	Nov 23	Aug 19 1955	
LOWEST DAILY MEAN	13	Sep 14	22	Oct 2	7.0	
ANNUAL SEVEN-DAY MINIMUM	14	Sep 12	25	Nov 4	7.4	
INSTANTANEOUS PEAK FLOW			991	Nov 23	a31900	
INSTANTANEOUS PEAK STAGE			3.11	Nov 23	b16.37	
INSTANTANEOUS LOW FLOW			22	Oct 1	7.0	
ANNUAL RUNOFF (CFSM)	1.47		1.73		2.04	
ANNUAL RUNOFF (INCHES)	19.99		23.50		27.78	
10 PERCENT EXCEEDS	293		302		386	
50 PERCENT EXCEEDS	111		133		127	
90 PERCENT EXCEEDS	20		47		33	

a From rating curve extended above 1,700 ft³/s, on basis of slope-area measurement of peak flow.

b From floodmark.

LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1980 to current year.

INSTRUMENTATION.--Temperature probe interfaced with data collection platform.

REMARKS.--Records fair. Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C, August 5, 1990, July 20, 21, 1991; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 24.0°C, July 1: minimum, 0.0°C on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	1.0	.0	.5	---	---	---	5.5	4.0	5.0	10.5	9.0	9.5
2	1.5	.0	.5	---	---	---	5.0	3.5	4.0	13.5	10.0	10.5
3	2.0	.0	.5	---	---	---	4.5	3.0	4.0	13.5	11.0	11.5
4	2.0	.5	1.0	---	---	---	6.0	3.0	4.5	12.0	11.0	11.5
5	2.0	.5	1.0	8.5	6.0	7.0	7.0	3.0	5.0	11.0	10.0	10.5
6	2.0	.5	1.0	6.5	4.5	5.5	8.5	4.0	6.0	10.0	9.5	9.5
7	2.5	.5	1.0	5.0	4.0	4.5	9.0	5.5	7.0	10.0	8.0	9.0
8	2.0	.5	1.0	6.5	5.0	6.0	10.5	7.0	8.5	11.0	9.5	10.0
9	1.5	.5	1.0	8.0	6.0	7.0	8.0	7.0	7.5	11.0	9.5	10.0
10	2.0	.5	1.0	7.5	6.0	7.0	11.0	7.0	8.5	10.5	10.0	10.0
11	2.0	.5	1.0	8.0	3.5	6.5	10.0	8.5	9.5	11.0	10.0	10.5
12	2.0	.5	1.0	3.5	2.0	2.5	9.5	7.0	8.5	11.5	10.5	11.0
13	1.5	.5	1.0	3.0	1.0	2.0	9.5	4.5	7.0	12.0	11.5	11.5
14	1.5	.5	.5	3.0	1.5	2.0	10.5	5.5	8.0	12.5	11.5	12.0
15	1.0	.0	.5	3.0	1.5	2.0	11.0	7.0	9.0	12.0	12.0	12.0
16	1.5	.0	.5	3.5	1.0	2.0	9.5	7.0	8.0	14.0	11.5	12.0
17	3.0	1.0	2.0	3.0	1.5	2.5	9.5	6.5	8.0	---	---	---
18	2.0	1.5	1.5	4.5	2.0	3.0	9.0	7.5	8.5	11.5	11.0	11.5
19	5.0	2.0	3.0	3.5	2.0	2.5	8.5	7.0	7.5	12.0	11.0	11.5
20	4.0	2.5	3.0	5.0	2.0	3.5	10.0	8.0	9.0	12.0	11.5	12.0
21	5.0	2.5	3.5	4.0	1.5	2.5	12.0	10.0	11.0	12.5	11.5	12.0
22	3.0	2.5	3.0	2.5	1.0	2.0	12.5	11.0	12.0	13.0	12.0	12.5
23	6.0	2.5	4.5	4.0	1.0	2.5	11.0	9.5	10.0	13.5	12.0	13.0
24	5.0	3.5	4.0	4.0	1.0	2.5	10.0	9.5	10.0	14.0	13.0	13.5
25	---	---	---	6.5	2.0	4.0	10.0	9.5	9.5	13.0	11.5	12.0
26	---	---	---	5.0	4.0	4.5	9.5	9.0	9.5	11.5	11.0	11.0
27	4.0	2.0	3.0	4.5	3.5	4.0	10.0	9.0	9.5	11.5	11.0	11.0
28	4.0	2.5	3.5	3.5	2.0	3.0	9.5	9.0	9.5	11.5	10.0	11.0
29	---	---	---	4.5	1.0	3.0	10.0	9.0	9.5	14.0	10.5	12.0
30	---	---	---	4.5	3.5	4.0	9.5	9.5	9.5	13.0	11.0	12.5
31	---	---	---	7.0	3.5	5.0	---	---	---	13.5	11.0	12.5
MONTH	6.0	0.0	1.7	8.5	1.0	3.8	12.5	3.0	8.1	14.0	8.0	11.3
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	24.0	20.5	22.0	20.5	17.0	18.5	17.5	14.0	16.0
2	---	---	---	23.0	20.0	21.0	19.0	15.5	17.5	18.5	13.0	15.5
3	---	---	---	21.0	18.5	19.5	20.0	16.0	18.0	17.0	15.5	16.5
4	14.0	13.5	14.0	21.0	18.0	19.5	20.0	16.5	18.0	20.0	16.0	17.5
5	15.0	14.0	14.5	---	---	---	19.5	14.5	17.0	17.5	15.5	16.5
6	14.5	14.0	14.5	---	---	---	20.5	14.0	17.0	16.5	16.0	16.0
7	14.5	14.5	14.5	21.5	16.5	18.5	20.0	15.0	17.5	17.5	15.5	16.5
8	15.5	14.5	15.0	21.5	18.5	20.0	18.5	15.0	17.0	19.0	16.5	17.5
9	15.5	15.0	15.5	20.5	16.0	17.0	20.0	17.0	18.0	20.0	17.0	18.5
10	15.5	15.0	15.0	17.5	17.0	17.0	20.0	17.0	18.5	22.0	17.5	19.5
11	15.5	15.0	15.0	22.0	17.5	19.0	21.0	17.5	19.0	---	---	---
12	15.5	15.0	15.0	22.5	20.5	21.5	20.5	16.5	18.5	---	---	---
13	15.5	15.0	15.0	23.0	21.0	21.5	18.5	16.5	17.5	---	---	---
14	16.0	15.0	15.5	---	---	---	17.5	16.5	17.0	---	---	---
15	18.0	15.5	16.5	---	---	---	17.5	15.5	16.5	---	---	---
16	21.0	17.0	19.0	---	---	---	16.5	15.5	16.0	---	---	---
17	21.5	17.5	19.0	---	---	---	16.5	15.5	16.0	---	---	---
18	20.0	18.5	19.0	---	---	---	---	---	---	---	---	---
19	20.5	18.5	19.0	---	---	---	---	---	---	---	---	---
20	20.5	17.5	19.0	---	---	---	---	---	---	---	---	---
21	18.0	16.5	17.5	---	---	---	19.0	13.0	16.0	---	---	---
22	17.0	14.5	16.0	23.0	19.5	21.0	18.0	14.0	15.5	---	---	---
23	---	---	---	---	---	---	20.0	13.5	16.5	---	---	---
24	---	---	---	---	---	---	21.0	15.0	17.5	14.0	10.5	12.0
25	---	---	---	---	---	---	22.0	16.5	19.0	12.5	9.5	11.0
26	---	---	---	---	---	---	23.0	18.0	20.5	12.0	11.5	11.5
27	---	---	---	---	---	---	22.0	18.5	20.0	12.5	12.0	12.0
28	---	---	---	---	---	---	21.5	19.0	20.0	13.0	12.0	12.5
29	---	---	---	---	---	---	19.0	16.0	17.5	13.5	10.5	12.0
30	22.5	16.5	19.0	---	---	---	18.5	13.5	16.0	10.5	8.5	9.5
31	---	---	---	---	---	---	20.0	15.5	17.5	---	---	---
MONTH	22.5	13.5	16.5	---	---	---	23.0	13.0	17.5	22.0	8.5	15.0

LEHIGH RIVER BASIN

01447680 TUNKHANNOCK CREEK NEAR LONG POND, PA

LOCATION.--Lat 41°03'55", long 75°31'14", Monroe County, Hydrologic Unit 02040106, on left bank 0.6 mi downstream from unnamed tributary, 0.9 mi downstream from bridge on Legislative Route 45040, 3.0 mi west of Long Pond, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--18.0 mi². At site used prior to July 7, 1966, 16.8 mi².

PERIOD OF RECORD.--March 1965 to current year.

REVISED RECORD.--WDR PA-90-1: 1990 (monthly runoff).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,804.83 ft above sea level. Prior to July 7, 1966, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion above station, since October 1969, to Wild Creek Basin. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	5.6	18	19	21	50	44	28	284	41	24	15
2	6.1	5.8	18	15	e19	27	37	31	263	34	23	14
3	5.0	4.9	39	16	e18	23	33	33	179	30	22	14
4	4.9	4.9	62	18	e18	22	31	35	110	31	22	16
5	4.7	5.0	58	22	e17	21	26	36	106	34	22	16
6	6.2	5.1	41	24	e17	23	27	34	223	37	22	17
7	6.6	4.8	31	20	e16	27	28	33	247	37	21	18
8	7.6	4.4	27	19	e16	37	25	39	205	34	21	18
9	7.3	4.8	28	21	e15	35	27	98	146	47	26	19
10	6.2	4.9	32	19	e14	35	27	76	105	52	30	22
11	7.0	5.8	32	17	e14	92	36	53	82	49	36	30
12	11	6.0	28	18	e13	106	37	42	69	42	35	32
13	16	8.2	24	18	e12	93	35	37	62	34	31	33
14	15	7.3	23	36	e13	58	31	33	58	33	28	31
15	12	7.5	24	70	17	33	28	35	52	33	25	27
16	12	5.4	22	e49	30	e29	28	48	50	36	23	23
17	18	5.3	18	e28	33	26	32	53	46	35	22	20
18	33	6.5	16	e26	27	e24	40	43	44	41	24	18
19	34	5.5	16	e23	29	e24	42	39	45	38	25	16
20	27	5.2	e15	e21	31	e22	37	35	47	36	27	15
21	19	6.7	14	e22	26	e21	35	32	45	32	27	14
22	13	42	15	21	23	e20	84	30	41	28	25	15
23	11	122	15	27	21	e19	76	30	40	29	23	21
24	8.2	116	16	65	22	e18	53	30	45	31	21	24
25	7.0	89	15	92	22	e20	46	35	51	33	19	27
26	6.6	56	e14	42	26	32	41	37	47	33	18	35
27	6.5	34	13	e32	30	104	36	36	77	34	17	38
28	5.3	24	14	25	28	94	33	35	95	33	17	41
29	6.3	20	17	23	32	77	30	33	82	31	16	39
30	5.5	20	25	22	---	53	29	31	57	28	16	35
31	5.2	---	39	22	---	44	---	159	---	27	15	---
TOTAL	340.3	642.6	769	892	620	1309	1114	1349	3003	1093	723	703
MEAN	11.0	21.4	24.8	28.8	21.4	42.2	37.1	43.5	100	35.3	23.3	23.4
MAX	34	122	62	92	33	106	84	159	284	52	36	41
MIN	4.7	4.4	13	15	12	18	25	28	40	27	15	14
†	.33	.37	6.7	14.2	9.9	12.3	16.4	6.4	3.6	5.2	4.1	5.2
MEAN†	11.3	21.8	31.5	43	31.3	54.5	53.5	49.9	104	40.5	27.4	28.6
CFSM†	.63	1.21	1.75	2.39	1.74	3.03	2.97	2.77	5.78	2.25	1.52	1.59
IN.†	.72	1.35	2.02	2.75	1.87	3.49	3.32	3.20	6.45	2.59	1.76	1.77

† Diversion above station to Wild Creek Basin, equivalent in cubic feet per second, furnished by the city of Bethlehem.

‡ Adjusted for diversion.

e Estimated.

LEHIGH RIVER BASIN

01447680 TUNKHANNOCK CREEK NEAR LONG POND, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	35.3	45.8	53.5	43.7	46.6	67.5	79.1	63.5	47.6	31.4	22.1	28.9
MAX	93.2	90.1	114	108	83.6	148	188	115	116	89.5	63.6	142
(WY)	1978	1971	1974	1979	1970	1977	1983	1990	1972	1984	1990	1987
MIN	7.35	9.39	7.07	3.85	13.2	21.1	20.5	29.6	15.9	8.68	9.27	5.63
(WY)	1981	1981	1981	1981	1980	1989	1985	1985	1987	1991	1980	1980

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1970 - 1992

ANNUAL TOTAL	11640.5		12557.9									
ANNUAL MEAN	31.9	‡32.9	34.3	‡41.4						47.1	‡48.8	
HIGHEST ANNUAL MEAN										65.9	‡66.4	1978
LOWEST ANNUAL MEAN										23.7	‡25.2	1985
HIGHEST DAILY MEAN	179	Mar 5	284	Jun 1						643	Apr 6	1984
LOWEST DAILY MEAN	4.2	Sep 17	4.4	Nov 8						3.3	Jan 1	1981
ANNUAL SEVEN-DAY MINIMUM	4.4	Sep 11	4.8	Nov 3						3.4	Dec 30	1980
INSTANTANEOUS PEAK FLOW			300	Jun 1						679	Apr 6	1984
INSTANTANEOUS PEAK STAGE			3.42	Jun 1						4.76	Apr 6	1984
INSTANTANEOUS LOW FLOW			4.1	Nov 8						3.3	Jan 1	1981
ANNUAL RUNOFF (CFSM)	1.77	‡ 1.83	1.91	‡ 2.30						2.61	‡ 2.71	
ANNUAL RUNOFF (INCHES)	24.06	‡24.83	25.95	‡31.38						35.52	‡36.82	
10 PERCENT EXCEEDS	70		58							95		
50 PERCENT EXCEEDS	23		27							34		
90 PERCENT EXCEEDS	5.7		7.4							11		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1969, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	21.5	29.2	37.5	25.7	23.3	55.7	42.6	38.3	38.8	26.6	27.7	16.0
MAX	36.3	35.8	63.0	33.0	27.8	64.7	53.3	49.0	83.3	77.1	80.8	26.6
(WY)	1966	1969	1969	1969	1968	1966	1967	1968	1969	1969	1969	1969
MIN	12.5	22.9	21.0	17.1	21.1	42.2	29.4	20.8	10.4	7.17	8.46	8.86
(WY)	1969	1966	1966	1966	1967	1969	1966	1965	1965	1965	1966	1966

SUMMARY STATISTICS

WATER YEARS 1965 - 1969

ANNUAL TOTAL												
ANNUAL MEAN	33.8											
HIGHEST ANNUAL MEAN	47.0					1969						
LOWEST ANNUAL MEAN	24.7					1966						
HIGHEST DAILY MEAN	448				Jul 30	1969						
LOWEST DAILY MEAN	4.0				Sep 13	1966						
ANNUAL SEVEN-DAY MINIMUM	4.7				Sep 8	1966						
INSTANTANEOUS PEAK FLOW	480				Jul 30	1969						
INSTANTANEOUS PEAK STAGE	4.34				Jul 30	1969						
INSTANTANEOUS LOW FLOW	3.0				Mar 11	1969						
ANNUAL RUNOFF (CFSM)	1.88											
ANNUAL RUNOFF (INCHES)	25.53											
10 PERCENT EXCEEDS	60											
50 PERCENT EXCEEDS	24											
90 PERCENT EXCEEDS	8.6											

‡ Adjusted for diversion.

LEHIGH RIVER BASIN

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA

LOCATION.--Lat 41°05'05", long 75°36'21", Carbon County, Hydrologic Unit 02040106, on left bank 50 ft downstream from bridge on State Highway 940, 500 ft downstream from Shingle Mill Run, and 1.5 mi southwest of Blakeslee.

DRAINAGE AREA.--118 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,511.23 ft above sea level. Prior to Jan. 16, 1962, nonrecording gage at site 50 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Power generation at Pocono Lake about 5.0 mi upstream since 1985 and minor diversion from Tunkhannock Creek Basin into Wild Creek Basin. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 19, 1955, reached a stage of 19.41 ft, from floodmark, discharge 35,300 ft³/s, by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	64	135	130	e144	246	414	217	1460	178	154	71
2	45	60	135	128	e138	209	389	227	1070	131	124	67
3	43	45	373	130	133	180	343	202	711	123	117	71
4	44	44	458	172	132	161	304	252	500	129	106	90
5	44	44	370	207	126	163	271	234	563	139	105	83
6	165	44	279	182	126	182	239	208	1550	194	94	77
7	142	40	197	162	121	225	221	196	1270	174	89	73
8	106	33	179	152	123	301	206	260	840	144	87	81
9	80	31	189	131	117	264	213	673	628	312	155	119
10	63	22	221	111	e100	256	197	606	478	245	158	113
11	114	35	201	126	e89	612	197	461	380	187	144	471
12	138	38	180	120	e78	625	259	355	316	166	125	368
13	107	77	199	116	e90	450	253	293	266	151	109	240
14	86	71	229	291	114	355	213	259	233	175	99	146
15	75	68	210	413	126	270	194	236	210	192	101	130
16	116	66	210	330	191	220	185	343	197	271	91	110
17	178	64	159	221	189	199	214	384	176	240	91	89
18	307	64	137	173	174	192	327	335	157	245	133	87
19	230	59	e134	152	192	208	362	288	182	208	150	83
20	147	39	e130	e144	211	198	316	242	183	163	128	75
21	120	61	e128	141	183	191	279	212	174	131	114	69
22	98	554	125	140	167	181	514	193	157	116	98	74
23	86	1090	127	214	160	181	548	181	146	171	89	136
24	80	689	133	438	134	173	449	172	201	230	84	135
25	73	457	127	357	131	169	457	193	227	207	78	117
26	70	316	115	272	215	250	406	195	195	181	64	229
27	68	202	113	186	243	853	343	184	478	232	65	271
28	66	164	105	173	237	831	277	184	444	247	70	254
29	65	145	145	164	285	560	270	170	319	184	79	192
30	65	121	180	154	---	447	190	172	218	156	79	155
31	64	---	157	e148	---	420	---	1010	---	155	76	---
TOTAL	3132	4807	5780	5978	4469	9772	9050	9137	13929	5777	3256	4276
MEAN	101	160	186	193	154	315	302	295	464	186	105	143
MAX	307	1090	458	438	285	853	548	1010	1550	312	158	471
MIN	43	22	105	111	78	161	185	170	146	116	64	67
CFSM	.86	1.36	1.58	1.63	1.31	2.67	2.56	2.50	3.93	1.58	.89	1.21
IN.	.99	1.52	1.82	1.88	1.41	3.08	2.85	2.88	4.39	1.82	1.03	1.35

e Estimated.

LEHIGH RIVER BASIN

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1980 to current year.

INSTRUMENTATION.--Temperature probe interfaced with data collection platform.

REMARKS.--Interruptions in daily record were due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 28.0°C, Aug. 13, 1988; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--Maximum, 24.0°, July 14; minimum, 0.0°C, Jan. 19, 20, Feb. 2, 4, 6, 9, 10, 12, 13.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	13.5	11.5	12.5	11.0	8.5	9.5	6.5	6.0	6.0	1.5	.0	1.0
2	16.5	12.5	14.5	11.0	8.5	10.0	6.0	4.0	5.5	2.5	1.0	2.0
3	17.0	14.5	16.0	8.5	5.5	7.0	5.0	4.0	4.5	3.5	2.5	3.0
4	17.0	15.0	16.0	5.5	4.0	5.0	4.5	2.5	3.5	3.5	3.0	3.0
5	17.0	16.0	16.5	4.0	2.0	3.0	2.5	1.5	2.0	3.0	2.5	3.0
6	17.0	13.0	15.5	4.5	2.0	3.5	2.5	1.5	2.0	3.0	2.0	2.5
7	13.0	11.5	12.5	4.5	3.0	4.0	2.0	1.5	1.5	2.5	2.0	2.5
8	14.0	10.5	12.0	4.0	2.5	3.5	3.0	2.0	2.5	2.5	1.0	1.5
9	14.0	10.0	12.0	2.5	1.5	2.0	4.0	3.5	3.5	2.5	1.5	2.0
10	14.0	10.5	12.5	4.0	2.0	3.0	3.0	2.0	3.0	3.0	2.0	2.5
11	13.5	11.5	12.5	4.0	3.0	4.0	3.5	2.0	2.5	2.0	1.0	2.0
12	12.0	10.5	11.5	3.5	2.5	3.0	3.5	2.0	3.0	3.0	2.0	2.5
13	11.0	9.5	10.5	4.0	3.5	3.5	4.5	3.5	4.0	4.5	2.5	3.5
14	10.5	7.5	9.0	5.0	3.5	4.0	5.5	3.0	4.5	5.0	2.5	4.0
15	11.5	9.0	10.5	5.5	3.0	4.5	3.0	2.0	2.0	2.0	1.5	2.0
16	12.0	9.5	11.0	6.5	4.0	5.5	2.0	.5	1.0	2.0	1.0	1.5
17	9.5	9.0	9.5	4.0	2.0	3.0	3.5	.5	1.0	2.0	1.0	1.5
18	11.5	9.5	10.0	5.0	2.5	3.5	1.0	.0	.5	1.5	.0	1.0
19	11.0	9.0	10.0	6.5	2.5	4.5	.0	.0	.0	.5	.0	.0
20	9.5	7.5	8.5	8.0	4.5	6.0	.5	.0	.0	1.0	.0	.5
21	9.0	7.0	7.5	12.5	7.5	8.5	1.5	.5	1.0	1.5	.5	1.0
22	10.0	6.5	8.5	9.0	8.0	8.5	2.0	1.0	1.0	2.0	.5	1.5
23	11.0	7.0	9.0	8.5	7.0	7.5	2.5	1.0	1.5	2.5	1.5	2.0
24	12.0	8.5	10.5	8.0	6.0	7.5	2.0	.5	1.5	2.0	1.0	1.5
25	13.0	10.5	11.5	6.0	4.0	5.0	2.0	.5	1.0	1.5	1.0	1.5
26	13.5	11.0	12.0	---	---	---	1.0	.0	.5	1.5	1.0	1.5
27	13.5	12.0	12.5	3.5	2.5	3.0	2.0	1.0	1.5	1.5	.5	1.0
28	12.0	9.0	11.0	4.0	2.5	3.5	2.0	.0	1.0	2.0	.5	1.0
29	9.0	6.5	8.0	5.5	4.0	4.5	3.5	2.0	2.5	2.0	.5	1.0
30	8.5	5.5	7.0	6.5	4.0	5.0	3.0	1.0	2.5	2.5	.5	1.5
31	10.0	7.0	8.5	---	---	---	1.5	.5	1.0	2.5	1.5	2.0
MONTH	17.0	5.5	11.5	12.5	1.5	5.0	6.5	0.0	2.0	5.0	0.0	2.0

LEHIGH RIVER BASIN

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	1.5	.0	1.0	4.0	1.5	2.5	4.0	2.5	3.5	14.0	10.0	11.5
2	.5	.0	.0	4.5	3.0	3.5	4.0	2.5	3.0	16.0	11.0	13.0
3	1.5	.0	.5	5.0	3.0	3.5	4.0	2.0	3.0	16.0	12.5	13.5
4	1.5	.0	1.0	6.0	3.0	4.0	4.5	2.5	3.5	13.0	11.5	12.0
5	1.5	.5	1.0	7.5	3.5	5.0	6.0	2.5	4.0	11.5	10.5	11.0
6	1.5	.0	.5	5.0	3.5	4.5	7.0	3.0	4.5	12.0	10.0	11.0
7	2.5	1.0	1.5	4.5	3.5	4.0	7.5	3.5	5.0	13.0	8.5	11.0
8	2.5	1.5	1.5	5.0	4.0	4.5	9.0	6.0	7.5	11.0	10.0	10.5
9	1.0	.0	.5	6.5	4.5	5.0	6.5	5.0	5.5	12.5	10.0	11.0
10	1.0	.0	.0	6.0	4.5	5.5	10.0	5.5	7.0	12.5	11.0	11.5
11	2.0	.5	1.0	5.5	2.5	4.5	7.5	7.0	7.0	16.0	11.0	13.0
12	.5	.0	.0	3.0	1.5	2.0	8.0	6.5	7.0	17.5	12.5	14.5
13	1.0	.0	.5	2.5	1.0	1.5	8.5	5.0	7.0	17.5	14.5	16.0
14	2.5	.5	1.5	2.5	.5	1.0	9.5	5.0	7.0	17.0	13.0	15.0
15	2.5	1.5	2.0	2.0	.0	1.0	10.5	5.5	7.5	15.5	13.5	14.5
16	3.0	1.5	2.0	2.5	.0	1.0	7.5	6.5	7.0	14.5	13.5	14.0
17	4.0	2.0	2.5	3.0	.5	2.0	9.0	6.5	8.0	---	---	---
18	3.0	2.5	3.0	4.0	1.0	2.5	8.0	7.0	7.5	15.0	13.0	14.0
19	5.0	3.0	3.5	2.5	1.0	2.0	8.0	7.0	7.5	17.5	12.5	14.5
20	3.5	2.5	3.0	4.5	1.5	3.0	9.0	7.0	8.0	18.5	12.5	15.0
21	4.0	2.5	3.0	4.0	1.5	2.5	11.0	8.5	9.5	19.5	12.5	15.5
22	3.5	2.0	2.5	2.5	1.0	1.5	10.5	9.5	10.0	20.0	13.0	16.5
23	5.5	2.5	4.0	4.0	1.5	2.5	11.5	9.0	10.0	21.0	14.0	17.0
24	4.0	2.5	3.0	4.0	1.0	2.5	12.0	10.0	11.0	16.0	12.5	14.5
25	---	---	---	6.0	1.5	3.5	11.0	10.0	10.5	14.0	11.5	12.5
26	3.0	2.5	2.5	4.5	3.5	3.5	10.5	9.5	10.0	13.0	12.0	12.5
27	3.5	2.5	3.0	3.0	2.5	3.0	12.5	9.0	10.5	13.5	11.5	12.5
28	4.0	2.5	3.0	3.0	2.0	2.5	12.0	8.5	10.5	15.5	10.5	12.5
29	3.5	1.5	2.0	4.0	2.0	3.0	14.0	9.5	11.5	16.5	10.5	13.5
30	---	---	---	3.0	2.5	3.0	11.5	10.0	10.5	13.0	12.0	12.5
31	---	---	---	5.0	2.5	3.5	---	---	---	13.0	11.0	12.5
MONTH	5.5	0.0	2.0	7.5	0.0	3.0	14.0	2.0	7.5	21.0	8.5	14.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	13.0	12.5	13.0	23.0	18.0	20.0	21.0	17.5	19.0	18.0	14.5	16.5
2	14.5	12.5	13.5	22.0	16.5	19.0	21.0	15.5	18.5	18.0	14.0	16.0
3	15.5	13.0	14.5	18.5	16.5	17.5	22.0	17.5	19.5	17.5	16.5	17.0
4	17.5	14.0	15.5	20.0	16.5	18.0	20.0	17.5	19.0	21.0	17.0	18.5
5	16.5	15.0	15.5	19.5	15.5	17.5	20.5	15.5	17.5	18.0	16.0	17.0
6	16.0	15.0	15.5	21.5	17.5	19.0	21.5	15.0	18.0	17.0	16.0	16.5
7	17.0	15.5	16.0	21.0	17.0	19.0	21.5	16.0	18.5	18.0	16.0	17.0
8	18.0	16.5	17.0	20.5	16.5	18.5	19.5	16.0	18.0	19.5	17.0	18.0
9	18.5	17.0	17.5	21.0	17.0	19.0	22.0	17.5	19.5	20.0	17.0	18.5
10	19.5	16.0	17.5	21.5	18.0	19.5	22.5	18.5	20.0	21.0	18.0	19.0
11	19.5	15.5	17.5	21.5	19.5	20.5	22.0	18.5	20.0	19.5	17.5	18.5
12	20.5	15.5	17.5	20.5	18.5	19.5	21.5	17.5	19.5	19.5	16.5	18.0
13	20.0	16.0	17.5	22.5	19.0	20.5	19.0	17.0	18.0	18.5	16.0	17.0
14	20.5	16.0	18.0	24.0	19.0	21.0	19.0	17.5	18.0	18.5	14.5	16.5
15	21.0	16.5	18.5	23.0	20.5	21.5	18.0	16.5	17.5	19.0	14.5	16.5
16	20.5	15.5	18.0	22.5	20.0	21.5	17.0	16.0	16.5	19.5	15.0	17.0
17	21.0	16.0	18.5	21.5	20.5	21.0	17.5	16.5	17.0	19.5	16.0	17.5
18	18.5	16.0	17.5	22.5	20.0	21.0	20.0	17.0	18.0	19.0	16.0	17.5
19	18.0	16.5	17.5	23.0	19.5	21.0	19.0	16.0	17.5	18.0	14.5	17.0
20	19.0	16.5	17.5	23.5	19.0	21.0	19.0	14.5	17.0	16.5	12.5	15.0
21	16.5	15.0	15.5	21.0	19.5	20.0	20.0	14.0	17.0	17.5	14.0	16.0
22	15.0	13.5	14.0	23.0	18.0	20.0	20.0	14.5	17.5	18.5	16.5	17.5
23	18.0	12.0	15.0	19.5	18.5	19.0	20.5	14.5	17.5	16.5	13.0	15.5
24	17.0	14.5	16.0	19.5	18.5	19.0	21.0	16.0	18.5	15.0	12.5	13.5
25	18.5	15.5	16.5	21.0	18.0	19.5	22.0	17.0	19.5	13.5	11.5	12.5
26	19.0	15.0	17.0	19.0	18.5	18.5	22.5	18.0	20.5	14.0	12.5	13.5
27	18.5	15.5	17.0	21.5	18.5	19.5	21.5	18.5	20.0	14.5	14.0	14.5
28	20.0	16.5	18.0	19.0	17.5	18.5	21.0	19.0	20.0	15.0	12.5	14.0
29	20.5	16.5	19.0	21.5	16.5	19.0	19.5	15.5	17.5	13.5	11.5	12.5
30	21.0	18.0	19.0	21.0	18.5	19.5	19.5	14.0	17.0	11.0	9.5	10.5
31	---	---	---	21.5	18.5	20.0	20.0	16.5	18.0	---	---	---
MONTH	21.0	12.0	16.5	24.0	15.5	19.5	22.5	14.0	18.5	21.0	9.5	16.0

LEHIGH RIVER BASIN

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA

LOCATION.--Lat 41°06'17", long 75°43'57", Luzerne County, Hydrologic Unit 02040106, on right bank 0.7 mi downstream from Francis E. Walter Reservoir, 2.0 mi upstream from Fawn Run, and 4.0 mi northeast of White Haven.

DRAINAGE AREA.--290 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962 published as "below Bear Creek Reservoir," October 1962 to September 1971 published as "below Francis E. Walter Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 1,212.95 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Francis E. Walter Reservoir (station 01447780) 0.7 mi upstream since February 1961. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	118	806	499	399	692	1100	531	2590	534	341	213
2	134	125	651	493	396	848	952	537	3450	351	341	182
3	102	126	871	440	305	803	851	542	2430	220	341	149
4	91	94	1190	372	329	604	706	816	1500	220	314	151
5	70	75	1200	377	358	487	706	727	977	222	272	151
6	72	75	1090	480	275	539	567	520	931	391	271	151
7	124	75	888	480	247	545	476	474	1060	493	244	151
8	154	75	869	388	247	549	552	688	1750	386	202	151
9	185	75	841	388	e235	749	575	1500	2110	579	199	151
10	202	75	832	320	e225	687	500	2070	1730	598	322	153
11	194	77	722	209	e235	1450	477	1410	1200	427	398	540
12	185	112	659	209	e235	1980	490	1120	995	423	352	675
13	185	134	693	373	e220	1230	794	868	911	319	229	674
14	185	147	766	500	249	854	668	726	690	313	199	563
15	232	126	771	877	313	859	474	599	403	345	199	234
16	256	151	768	1010	313	689	395	557	345	649	199	159
17	256	151	704	703	319	e615	392	599	349	728	218	172
18	290	151	539	480	392	e590	446	1270	348	552	325	411
19	525	151	379	e320	432	e585	469	1370	384	552	431	509
20	518	151	317	e300	508	e565	1190	926	432	549	456	137
21	456	115	321	e300	462	e490	1110	591	427	436	363	137
22	299	427	325	e300	332	e480	1090	478	285	308	236	138
23	232	899	492	e410	332	e460	1530	427	217	308	236	140
24	199	969	540	726	400	e400	1350	430	293	389	236	141
25	169	991	460	574	401	e395	1050	432	450	505	205	307
26	134	1320	299	e520	466	e600	1070	580	511	505	160	393
27	134	1330	199	814	622	1720	1350	588	655	697	160	394
28	145	1200	202	580	600	2240	963	469	722	814	160	471
29	154	990	206	383	516	1650	577	393	974	681	163	445
30	194	831	462	383	---	1080	529	372	667	426	163	332
31	189	---	505	438	---	1170	---	699	---	339	194	---
TOTAL	6416	11336	19567	14646	10363	26605	23399	23309	29786	14259	8129	8575
MEAN	207	378	631	472	357	858	780	752	993	460	262	286
MAX	525	1330	1200	1010	622	2240	1530	2070	3450	814	456	675
MIN	70	75	199	209	220	395	392	372	217	220	160	137
MEAN†	202	432	590	465	368	847	779	788	962	455	263	296
CFSM†	.70	1.49	2.03	1.60	1.27	2.92	2.69	2.72	3.32	1.57	.91	1.02
IN.†	.80	1.66	2.35	1.85	1.37	3.37	3.00	3.13	3.70	1.81	1.05	1.14

† Adjusted for change in contents in Francis E. Walter Reservoir.

e Estimated.

LEHIGH RIVER BASIN

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	426	618	683	568	666	1031	1065	799	546	365	273	342
MAX	1435	1488	1748	1858	1542	2018	2685	1968	1359	1165	1153	1784
(WY)	1978	1986	1974	1979	1981	1977	1983	1989	1972	1973	1969	1987
MIN	68.5	68.1	156	131	197	326	341	313	135	67.1	62.0	43.2
(WY)	1964	1965	1965	1981	1980	1981	1966	1962	1962	1965	1964	1964

SUMMARY STATISTICS FOR 1991 CALENDAR YEAR FOR 1992 WATER YEAR WATER YEARS 1961 - 1992

ANNUAL TOTAL	162882			196390								
ANNUAL MEAN	446	‡447		537	‡537					614	‡615	
HIGHEST ANNUAL MEAN										895	‡893	1978
LOWEST ANNUAL MEAN										289	‡292	1965
HIGHEST DAILY MEAN	2390	Mar 5		3450	Jun 2					8390	Sep 29	1985
LOWEST DAILY MEAN	52	Aug 8		70	Oct 5					22	Jul 20	1965
ANNUAL SEVEN-DAY MINIMUM	53	Aug 5		75	Nov 5					33	Jul 19	1965
INSTANTANEOUS PEAK FLOW						3740	Jun 1			9140	Mar 31	1978
INSTANTANEOUS PEAK STAGE						6.26	Jun 1			8.70	Mar 31	1978
INSTANTANEOUS LOW FLOW						8.2	Oct 30			al.3	Nov 14	1961
ANNUAL RUNOFF (CFSM)	1.54	‡ 1.54				1.85	‡ 1.85			2.12	‡ 2.12	
ANNUAL RUNOFF (INCHES)	20.89	‡20.93				25.19	‡25.15			28.79	‡28.80	
10 PERCENT EXCEEDS	977			1060						1320		
50 PERCENT EXCEEDS	317			432						411		
90 PERCENT EXCEEDS	75			151						109		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1960, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	378	571	1002	692	678	790	1886	909	425	245	190	371
MAX	502	854	1504	778	1039	926	2536	1134	521	339	270	744
(WY)	1960	1960	1958	1960	1960	1958	1958	1958	1960	1960	1960	1960
MIN	173	347	371	549	467	610	1262	520	310	195	129	135
(WY)	1958	1958	1959	1959	1959	1960	1959	1959	1959	1959	1959	1959

SUMMARY STATISTICS WATER YEARS 1958 - 1960

ANNUAL TOTAL												
ANNUAL MEAN	676											
HIGHEST ANNUAL MEAN	807					1960						
LOWEST ANNUAL MEAN	478					1959						
HIGHEST DAILY MEAN	10700				Dec 21	1957						
LOWEST DAILY MEAN	50				Oct 4	1957						
ANNUAL SEVEN-DAY MINIMUM	63				Oct 1	1957						
INSTANTANEOUS PEAK FLOW	b13800				Dec 21	1957						
INSTANTANEOUS PEAK STAGE	9.85				Dec 21	1957						
INSTANTANEOUS LOW FLOW												
ANNUAL RUNOFF (CFSM)	2.33											
ANNUAL RUNOFF (INCHES)	31.69											
10 PERCENT EXCEEDS	1390											
50 PERCENT EXCEEDS	440											
90 PERCENT EXCEEDS	141											

‡ Adjusted for change in contents in Francis E. Walter Reservoir.

a Result of shutoff at reservoir.

b From rating curve extended above 6,100 ft³/s.

LEHIGH RIVER BASIN

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1987 to current year.

INSTRUMENTATION.--Temperature probe interfaced with data collection platform.

REMARKS.--Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 31.5°C, July 21, 1988; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.0°C, July 14-16; minimum, 0.0°C, on several days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.0	9.5	10.0	6.5	5.5	6.0	1.0	1.0	1.0
2	---	---	---	10.0	9.5	10.0	7.0	6.0	6.5	1.0	1.0	1.0
3	---	---	---	10.5	9.0	9.5	6.5	5.5	6.5	1.5	.5	1.0
4	---	---	---	9.5	7.5	8.5	6.0	5.5	5.5	2.0	1.5	1.5
5	---	---	---	8.5	6.0	7.0	5.5	4.0	5.0	---	---	---
6	---	---	---	7.0	6.0	6.5	4.0	2.5	3.5	---	---	---
7	---	---	---	6.5	5.5	6.0	3.0	2.5	3.0	---	---	---
8	---	---	---	7.0	5.5	6.0	2.5	2.5	2.5	2.5	2.0	2.0
9	---	---	---	6.0	5.5	5.5	---	---	---	---	---	---
10	13.5	12.5	13.0	6.5	5.5	6.0	---	---	---	2.0	2.0	2.0
11	13.0	12.5	13.0	6.0	5.0	5.5	4.0	4.0	4.0	---	---	---
12	13.0	11.5	12.5	6.0	5.5	5.5	4.0	3.5	3.5	---	---	---
13	12.0	11.0	11.5	5.5	5.0	5.0	3.5	3.5	3.5	2.5	2.0	2.0
14	11.5	10.5	11.0	5.5	5.0	5.0	4.5	4.0	4.5	2.5	2.0	2.5
15	---	---	---	6.5	5.0	5.5	5.0	4.5	5.0	3.0	2.0	2.5
16	---	---	---	5.5	5.0	5.0	4.5	2.5	3.5	2.0	1.0	1.5
17	---	---	---	5.5	4.5	5.0	2.5	1.5	2.0	1.0	.5	1.0
18	---	---	---	5.5	4.5	5.0	1.5	1.0	1.5	.5	.5	.5
19	---	---	---	5.5	4.5	5.0	1.5	1.0	1.0	.5	.5	.5
20	---	---	---	6.0	4.5	5.0	1.0	1.0	1.0	.5	.0	.5
21	---	---	---	6.5	5.0	5.5	1.0	.5	1.0	.5	.0	.0
22	---	---	---	8.0	5.5	6.5	1.0	.5	.5	.5	.0	.0
23	---	---	---	8.5	8.0	8.5	.5	.5	.5	.5	.0	.0
24	---	---	---	9.0	8.5	8.5	1.0	.5	.5	.5	.0	.0
25	---	---	---	8.5	7.5	8.0	1.0	.5	.5	.5	.0	.0
26	---	---	---	7.5	6.5	7.0	1.0	.5	.5	.5	.0	.0
27	---	---	---	6.5	5.5	6.0	1.0	.5	.5	.0	.0	.0
28	---	---	---	6.0	5.5	5.5	---	---	---	.5	.0	.0
29	11.5	10.0	10.5	6.0	5.0	5.5	---	---	---	.5	.0	.0
30	12.5	10.0	11.0	5.5	5.5	5.5	1.5	1.0	1.5	.5	.0	.0
31	12.5	9.0	10.5	---	---	---	1.5	1.0	1.0	.5	.0	.5
MONTH	---	---	---	11.0	4.5	6.4	7.0	0.5	2.8	3.0	0.0	1.0

LEHIGH RIVER BASIN

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	.5	.0	.5	2.0	1.5	2.0	4.5	3.5	4.0	11.5	11.0	11.0
2	.5	.0	.5	2.5	1.5	2.0	4.0	3.5	3.5	12.5	11.0	12.0
3	1.0	.0	.5	3.0	2.5	3.0	3.5	3.0	3.0	14.0	12.0	13.0
4	.5	.0	.5	3.5	3.0	3.0	3.5	3.0	3.0	14.5	13.5	14.0
5	.5	.0	.5	4.0	3.0	3.5	4.0	3.0	3.5	13.5	7.5	12.0
6	1.0	.0	.5	4.5	3.5	4.0	5.0	3.5	4.5	11.5	6.5	10.5
7	1.0	.5	.5	4.5	4.0	4.0	6.5	4.5	5.5	11.0	10.0	10.5
8	.5	.0	.5	4.5	4.0	4.5	7.5	6.5	7.0	11.5	10.5	11.0
9	.5	.0	.0	5.0	4.5	5.0	7.0	6.5	6.5	12.0	10.5	11.0
10	.5	.0	.5	5.5	5.0	5.0	8.5	7.0	7.5	12.0	11.5	12.0
11	.5	.0	.5	6.5	5.0	6.0	8.0	8.0	8.0	13.5	12.0	12.5
12	.5	.0	.0	5.0	2.0	3.0	9.0	8.0	8.5	15.0	13.5	14.0
13	.5	.0	.0	2.0	1.5	1.5	8.0	7.0	7.5	16.0	15.0	15.0
14	.5	.0	.5	1.5	1.0	1.0	8.0	6.5	7.5	16.5	15.5	16.0
15	.5	.0	.0	1.5	1.0	1.0	8.5	7.5	8.0	16.0	15.0	15.5
16	.5	.0	.0	1.5	1.0	1.0	8.0	7.5	8.0	15.0	14.0	14.5
17	.5	.0	.5	1.5	1.0	1.0	8.5	7.0	7.5	---	---	---
18	1.0	.5	.5	2.0	1.0	1.5	8.0	7.5	8.0	15.0	14.0	14.0
19	1.5	1.0	1.0	2.0	1.5	2.0	8.0	7.5	7.5	14.5	14.0	14.5
20	2.0	1.5	2.0	2.0	1.5	1.5	8.5	7.5	8.0	15.0	14.0	14.5
21	2.5	2.0	2.0	2.5	1.5	2.0	9.5	8.5	9.0	16.5	14.5	14.5
22	2.5	2.0	2.5	2.5	1.5	2.0	11.0	9.5	10.5	15.5	14.5	15.0
23	3.0	2.0	2.5	2.0	1.5	1.5	12.0	10.5	11.0	16.5	15.0	16.0
24	3.0	2.5	3.0	2.0	1.5	1.5	12.0	11.0	11.5	17.0	16.0	16.5
25	3.0	2.5	3.0	2.5	1.5	2.0	12.0	11.5	12.0	15.5	14.0	14.5
26	2.5	2.5	2.5	3.0	2.0	3.0	11.5	10.5	10.5	14.0	13.5	13.5
27	2.5	2.0	2.5	4.0	3.0	3.5	10.5	10.0	10.5	13.5	13.0	13.0
28	2.5	2.0	2.5	3.0	2.0	2.5	10.5	10.0	10.5	13.5	12.5	13.0
29	3.0	2.0	2.5	3.0	2.0	2.0	10.5	10.0	10.0	13.5	12.5	13.0
30	---	---	---	3.5	3.0	3.0	11.0	10.0	10.5	13.5	12.5	13.0
31	---	---	---	3.5	3.0	3.5	---	---	---	13.0	13.0	13.0
MONTH	3.0	0.0	1.1	6.5	1.0	2.5	12.0	3.0	7.5	17.0	6.5	13.5
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	13.5	13.0	13.0	20.5	19.5	20.0	20.5	19.5	19.5	20.0	18.5	19.0
2	14.0	13.0	13.5	21.0	20.0	20.5	20.0	19.0	19.5	19.5	18.0	19.0
3	15.5	13.5	14.0	20.0	19.5	20.0	20.0	19.0	19.5	19.0	18.5	18.5
4	16.0	14.5	15.5	19.5	18.5	19.0	20.0	19.5	20.0	20.0	18.5	19.0
5	16.5	16.0	16.0	20.0	18.5	19.0	20.0	19.0	19.5	19.0	18.5	19.0
6	16.0	15.5	15.5	20.0	19.0	19.5	20.0	18.5	19.0	19.0	18.5	18.5
7	16.0	15.5	16.0	20.0	19.5	19.5	20.0	19.0	19.5	18.5	18.0	18.5
8	17.0	16.0	16.5	20.5	19.0	19.5	19.5	19.0	19.0	19.0	18.0	18.5
9	17.5	17.0	17.5	20.5	19.5	20.0	20.5	19.0	19.5	19.5	18.5	19.0
10	18.0	17.5	17.5	21.0	20.5	20.5	20.5	19.5	20.0	20.0	18.5	19.0
11	18.0	17.5	17.5	21.0	20.5	21.0	21.0	20.0	20.5	20.0	19.0	19.5
12	18.0	17.5	18.0	21.5	21.0	21.0	21.0	20.0	20.5	19.5	18.0	18.5
13	18.5	18.0	18.5	21.5	20.5	21.0	20.5	19.5	20.0	18.5	17.5	18.0
14	19.0	18.5	18.5	22.0	20.5	21.0	20.0	19.0	19.5	18.0	17.0	17.5
15	19.5	18.5	19.0	22.0	21.5	21.5	19.5	18.5	19.0	17.5	16.0	17.0
16	19.5	18.0	18.5	22.0	21.5	21.5	18.5	18.0	18.0	17.5	16.0	17.0
17	19.0	18.5	19.0	21.5	21.0	21.5	18.0	18.0	18.0	19.5	17.0	17.5
18	19.0	18.5	19.0	21.0	21.0	21.0	19.0	18.0	18.5	18.5	17.0	18.0
19	19.0	18.5	19.0	21.5	15.5	20.0	19.0	18.5	18.5	19.5	17.5	18.5
20	19.0	18.5	19.0	21.5	14.5	19.5	18.5	18.0	18.5	18.5	16.5	17.0
21	18.5	17.5	18.0	21.5	21.0	21.0	18.5	17.0	18.0	18.0	17.0	17.0
22	17.5	15.5	16.5	21.5	20.5	21.0	18.0	17.0	17.5	17.5	17.0	17.5
23	16.0	15.0	15.5	21.0	20.5	21.0	18.5	17.5	17.5	18.0	16.0	17.0
24	16.5	15.0	15.5	20.5	19.5	20.0	18.5	17.5	18.0	16.0	13.5	15.0
25	17.0	16.5	16.5	19.5	19.0	19.5	19.0	18.0	18.5	15.0	14.0	14.5
26	17.5	16.5	17.0	19.5	19.5	19.5	19.5	18.5	19.0	15.0	14.0	14.5
27	17.5	17.0	17.5	19.5	19.0	19.5	20.0	18.5	19.5	14.5	14.0	14.5
28	18.0	17.5	17.5	20.0	19.0	19.5	20.5	19.0	20.0	15.0	14.5	14.5
29	18.5	18.0	18.0	19.0	18.5	18.5	20.0	19.5	19.5	15.5	14.0	14.5
30	19.5	18.5	19.0	19.0	18.5	19.0	20.0	18.5	19.0	14.0	12.5	13.5
31	---	---	---	20.0	18.5	19.5	20.0	18.5	19.0	---	---	---
MONTH	19.5	13.0	17.0	22.0	14.5	20.0	21.0	17.0	19.0	20.0	12.5	17.5

LEHIGH RIVER BASIN

01449000 LEHIGH RIVER AT LEHIGHTON, PA

LOCATION.--Lat 40°49'45", long 75°42'20", Carbon County, Hydrologic Unit 02040106, on left bank 190 ft downstream from highway bridge at East Weissport, and 0.3 mi upstream from Mahoning Creek.

DRAINAGE AREA.--591 mi².

PERIOD OF RECORD.--December 1982 to current year. Daily gage-height records, previously referred to as continuous records for water years 1946-1948. Miscellaneous measurements 1977-1978, 1980-1981, and annual maximum 1982.

GAGE.--Water-stage recorder. Datum of gage is 444.26 ft above sea level. Prior to December 1982, nonrecording gage at highway bridge 190 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Francis E. Walter Reservoir (station 01447780) since February 1961. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	253	1180	839	827	1100	2500	1200	e4500	945	633	359
2	249	233	1120	831	777	1290	2100	1180	e5400	826	594	359
3	232	239	1680	801	771	1360	1990	1150	e4000	554	578	378
4	205	233	2280	774	630	1160	1670	1190	e2700	576	572	467
5	197	205	2040	765	760	964	1580	1400	2770	554	515	353
6	272	189	1920	772	649	951	1460	1080	3290	630	481	333
7	256	189	1560	861	585	1080	1230	948	2890	791	470	350
8	251	189	1490	758	564	1180	1220	1220	2890	755	430	345
9	266	187	1480	689	e500	1160	1250	3190	3490	1130	567	361
10	298	188	1460	702	e460	1350	1170	3880	3090	1180	532	355
11	326	232	1320	574	e500	2720	1130	2850	2220	783	638	1080
12	388	243	1160	508	e500	3940	1130	2270	1880	714	616	1050
13	340	251	1170	511	e460	2880	1140	1980	1670	712	510	923
14	315	262	1380	967	e490	1980	1370	1700	1550	652	410	876
15	308	268	1350	1250	585	1860	1020	1510	1060	741	407	639
16	405	248	1270	1480	734	1680	920	1900	922	917	409	378
17	429	262	1220	1260	720	1400	871	1770	830	1220	407	376
18	648	262	1110	901	672	1350	995	1920	850	1070	492	371
19	719	261	913	e698	822	1330	1040	2610	838	936	658	826
20	687	260	745	e660	858	1310	1300	1870	928	864	660	410
21	651	281	732	e685	902	1100	1900	1540	860	822	628	316
22	550	881	747	717	651	1080	1870	1270	807	606	454	337
23	403	3450	763	871	612	1050	2760	1120	606	617	403	458
24	359	2100	987	1410	631	940	2530	1080	692	721	395	372
25	339	1750	836	1140	762	924	2170	1080	866	909	389	340
26	298	1710	794	e1000	928	e1300	2040	1090	829	867	347	779
27	268	1910	541	e980	1120	e4400	2070	1260	1580	970	320	753
28	263	1630	522	1280	1160	4740	2080	1090	1270	1150	366	720
29	271	1520	588	826	1100	3730	1400	931	1390	1070	421	756
30	272	1210	688	851	---	2550	1230	e950	1120	831	358	626
31	339	---	865	843	---	2620	---	e3300	---	642	332	---
TOTAL	11052	21096	35911	27204	20730	56479	47136	51529	57788	25755	14992	16046
MEAN	357	703	1158	878	715	1822	1571	1662	1926	831	484	535
MAX	719	3450	2280	1480	1160	4740	2760	3880	5400	1220	660	1080
MIN	197	187	522	508	460	924	871	931	606	554	320	316

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1992, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	750	1196	1555	940	1382	1812	2252	2057	1277	856
MAX	2017	2366	3353	1630	2470	3164	5475	4038	1965	1955
(WY)	1991	1986	1984	1991	1984	1986	1983	1989	1988	1990
MIN	238	303	515	532	566	926	899	986	431	246
(WY)	1983	1985	1990	1989	1987	1989	1985	1991	1991	1991

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1983 - 1992
ANNUAL TOTAL	333897	385718	
ANNUAL MEAN	915	1054	1287
HIGHEST ANNUAL MEAN			1729
LOWEST ANNUAL MEAN			758
HIGHEST DAILY MEAN	4470	5400	15100
LOWEST DAILY MEAN	161	187	142
ANNUAL SEVEN-DAY MINIMUM	169	197	151
INSTANTANEOUS PEAK FLOW		6210	a25500
INSTANTANEOUS PEAK STAGE		b6.12	18.22
INSTANTANEOUS LOW FLOW		174	147
10 PERCENT EXCEEDS	1960	2040	2670
50 PERCENT EXCEEDS	681	841	881
90 PERCENT EXCEEDS	197	305	297

a From rating curve extended above 16,000 ft³/s.

b From crest-stage gage reading.

LEHIGH RIVER BASIN

01449360 POBOPOCO CREEK AT KRESGEVILLE, PA

LOCATION.--Lat 40°53'51", long 75°30'10", Monroe County, Hydrologic Unit 02040106, on right bank 20 ft downstream from bridge on U.S. Highway 209 at Kresgeville, 0.2 mi downstream from Middle Creek, and 13 mi northeast of Leighton.

DRAINAGE AREA.--49.9 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 659.72 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	33	38	64	80	163	93	416	67	63	32
2	17	18	34	38	59	80	149	91	284	64	52	32
3	17	18	135	38	57	76	137	89	220	63	50	54
4	17	17	116	41	56	73	126	83	187	71	54	65
5	17	16	86	43	e52	71	118	81	231	63	49	42
6	36	16	76	40	51	68	111	77	384	71	46	40
7	23	16	68	38	50	88	107	74	317	60	44	51
8	20	16	62	37	50	87	103	109	266	56	44	53
9	18	16	61	38	47	77	98	224	227	164	83	46
10	18	16	70	39	e43	79	97	156	189	82	55	44
11	23	21	58	37	e42	151	102	144	166	70	50	61
12	34	21	53	36	41	135	93	134	150	65	48	45
13	24	18	56	35	e41	e126	85	127	138	64	45	42
14	21	17	61	79	43	e118	83	122	128	66	44	40
15	21	16	57	75	45	e111	79	112	119	e77	44	39
16	28	16	50	63	74	104	80	180	110	e129	44	38
17	43	15	45	e60	56	101	87	137	105	e96	44	37
18	51	15	45	59	52	97	88	127	101	93	57	36
19	31	14	40	e56	60	101	85	119	105	69	51	39
20	26	14	e38	55	56	93	79	112	98	62	45	36
21	23	19	43	e53	51	88	77	106	91	59	42	34
22	22	105	43	52	48	84	124	103	87	57	40	45
23	20	166	42	84	48	e80	108	98	83	67	39	65
24	20	80	42	124	49	76	110	98	98	71	38	44
25	20	57	39	82	59	77	125	97	85	63	37	41
26	19	48	37	79	111	125	111	93	77	60	36	69
27	18	42	37	75	95	319	106	91	116	68	35	62
28	18	39	34	73	90	280	102	83	82	57	35	58
29	18	36	55	71	89	227	99	79	74	53	39	51
30	18	34	54	68	---	193	96	82	70	51	36	49
31	18	---	43	68	---	189	---	393	---	63	34	---
TOTAL	716	960	1713	1774	1679	3654	3128	3714	4804	2221	1423	1390
MEAN	23.1	32.0	55.3	57.2	57.9	118	104	120	160	71.6	45.9	46.3
MAX	51	166	135	124	111	319	163	393	416	164	83	69
MIN	17	14	33	35	41	68	77	74	70	51	34	32
CFSM	.46	.64	1.11	1.15	1.16	2.36	2.09	2.40	3.21	1.44	.92	.93
IN.	.53	.72	1.28	1.32	1.25	2.72	2.33	2.77	3.58	1.66	1.06	1.04

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1992, BY WATER YEAR (WY)

MEAN	65.0	92.6	126	109	119	154	154	132	101	68.7	54.4	57.6
MAX	181	203	271	323	185	330	369	270	248	165	193	264
(WY)	1977	1973	1974	1979	1975	1977	1983	1989	1972	1969	1969	1987
MIN	18.9	24.7	22.9	13.9	45.0	60.2	47.9	68.5	36.4	24.4	17.0	15.5
(WY)	1981	1981	1981	1981	1980	1985	1985	1987	1987	1985	1985	1980

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1967 - 1992
ANNUAL TOTAL	24934	27176	
ANNUAL MEAN	68.3	74.3	103
HIGHEST ANNUAL MEAN			149
LOWEST ANNUAL MEAN			46.5
HIGHEST DAILY MEAN	298	Mar 5	1550
LOWEST DAILY MEAN	14	Nov 19	12
ANNUAL SEVEN-DAY MINIMUM	15	Sep 12	13
INSTANTANEOUS PEAK FLOW			a2080
INSTANTANEOUS PEAK STAGE			9.21
INSTANTANEOUS LOW FLOW			9.2
ANNUAL RUNOFF (CFSM)	1.37	1.49	2.06
ANNUAL RUNOFF (INCHES)	18.59	20.26	27.95
10 PERCENT EXCEEDS	140	127	202
50 PERCENT EXCEEDS	46	60	75
90 PERCENT EXCEEDS	17	21	28

a From rating curve extended above 800 ft³/s.

LEHIGH RIVER BASIN

01449360 POHOPOCO CREEK AT KRESGEVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1968 to September 1970, May 1971 to current year.

INSTRUMENTATION.--Subsequent to water year 1986, temperature probe interfaced with data collection platform.

REMARKS.--Interruptions in the daily record were due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 31.5°C July 25, 1970; minimum, 0.0°C on several days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.5°C, July 14, Aug. 26, 27; minimum, 0.0°C, on many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	13.0	11.0	12.0	11.5	9.5	10.5	9.5	8.0	9.0	1.0	.0	.5
2	14.5	12.5	13.5	12.0	10.0	11.5	9.0	7.5	8.5	2.5	.5	1.5
3	15.5	13.5	14.5	10.0	7.5	8.5	7.5	6.0	6.5	4.5	3.0	4.0
4	16.0	14.0	15.0	7.5	5.0	6.5	6.5	4.0	5.5	5.0	4.5	5.0
5	16.5	15.0	15.5	5.0	3.0	4.0	4.0	2.5	3.0	5.5	5.0	5.0
6	16.5	13.0	15.0	4.5	2.5	3.5	4.0	3.0	3.5	5.0	4.0	4.5
7	13.0	10.5	11.5	5.0	3.0	4.0	4.0	3.0	3.5	4.0	3.5	3.5
8	11.0	8.5	10.0	5.0	4.0	4.5	5.5	3.5	4.5	3.5	2.0	3.0
9	11.0	8.0	9.5	4.5	3.0	3.5	7.5	6.0	6.5	3.0	2.0	2.5
10	12.0	9.0	10.5	6.0	3.5	4.5	7.0	5.0	6.0	3.5	2.5	3.0
11	13.0	10.5	11.5	6.0	5.5	5.5	5.0	3.5	4.5	3.0	2.0	2.5
12	10.5	9.0	10.0	6.0	5.0	5.5	6.5	4.5	5.0	4.0	2.5	3.0
13	10.5	8.5	9.5	6.5	5.5	6.0	7.5	6.5	7.0	5.5	3.5	4.5
14	9.5	7.5	8.5	7.5	5.5	6.5	8.5	6.5	8.0	7.0	5.0	6.0
15	11.0	8.5	9.0	7.5	5.5	6.5	6.0	3.0	4.0	4.5	1.0	2.0
16	11.5	10.0	11.0	9.5	7.5	8.5	3.0	1.0	2.0	1.0	.0	.5
17	11.0	9.0	9.5	7.5	4.5	6.0	1.0	.5	.5	.0	.0	.0
18	12.0	9.5	10.5	5.0	3.0	4.0	1.5	.5	1.0	.5	.0	.0
19	11.5	9.5	10.5	7.0	4.0	5.5	.5	.0	.0	3.0	.0	.0
20	10.0	8.0	9.0	9.0	6.0	7.5	1.0	.0	.5	.0	.0	.0
21	8.5	6.0	7.5	11.0	9.0	10.0	2.0	1.0	1.5	.5	.0	.0
22	9.5	6.0	8.0	11.0	10.5	11.0	3.0	2.0	2.5	1.0	.0	.5
23	11.0	7.5	9.0	11.0	10.5	10.5	3.0	2.0	2.5	3.5	1.0	1.5
24	12.0	9.5	10.5	10.5	7.5	10.0	3.0	1.5	2.5	2.5	1.0	2.0
25	13.5	11.0	12.0	7.5	4.0	5.5	3.0	1.5	2.0	1.0	.0	.5
26	14.0	12.0	13.0	4.0	3.0	3.5	2.0	.5	1.0	1.5	.0	.5
27	14.5	13.5	14.0	3.0	1.5	2.5	3.0	1.0	2.0	1.0	.0	.5
28	13.5	11.0	13.0	5.0	2.5	3.5	2.0	.5	1.5	2.0	.0	1.0
29	11.0	8.0	9.0	7.5	5.0	6.5	4.0	2.5	3.0	2.5	.5	1.5
30	8.5	5.5	7.0	8.0	6.0	7.0	4.5	2.5	4.0	3.0	1.0	2.0
31	11.0	7.5	9.0	---	---	---	2.5	.5	1.5	3.5	3.0	3.5
MONTH	16.5	5.5	11.0	12.0	1.5	6.5	9.5	0.0	3.5	7.0	0.0	2.0

LEHIGH RIVER BASIN

01449360 POHOPOCO CREEK AT KRESGEVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	3.0	.5	2.0	4.0	.0	2.0	6.5	4.5	5.5	13.0	9.5	11.0
2	1.0	.0	.5	5.0	4.0	4.5	5.5	4.0	5.0	15.5	11.0	13.5
3	2.0	.0	1.0	5.5	4.0	4.5	6.0	3.5	5.0	16.0	13.0	14.5
4	2.0	.5	1.5	5.5	4.0	4.5	6.5	4.0	5.0	14.0	10.5	11.5
5	2.0	.5	1.5	8.0	4.0	6.0	7.5	4.0	5.5	10.5	9.0	9.5
6	1.0	.0	.5	7.0	5.0	6.0	8.0	4.5	6.5	11.5	8.5	10.0
7	2.5	.5	1.5	5.5	4.5	5.0	9.0	5.5	7.5	11.0	7.5	9.5
8	3.0	1.5	2.0	7.5	5.5	6.5	10.5	7.0	9.0	10.5	9.5	10.0
9	2.0	.0	1.0	9.5	7.0	8.0	9.0	7.0	7.5	12.5	10.5	11.5
10	1.5	.0	.0	8.5	7.0	7.5	10.5	7.0	8.5	12.0	10.5	11.5
11	1.0	.0	.5	8.5	4.0	7.5	10.5	8.0	9.0	15.0	11.0	12.5
12	1.0	.0	.5	4.5	2.0	3.5	9.5	7.5	8.5	15.0	11.0	13.0
13	.5	.0	.0	4.0	1.5	3.0	8.5	5.0	7.0	16.0	12.5	14.5
14	1.5	.0	.5	3.5	1.5	2.5	9.5	6.0	8.0	16.0	13.0	14.5
15	3.0	.5	1.0	3.5	1.0	2.5	10.0	6.0	8.0	14.5	12.5	13.0
16	3.5	1.0	2.5	3.0	.5	2.0	9.0	7.0	7.5	12.5	12.0	12.5
17	4.5	2.0	3.5	4.5	1.0	2.5	9.5	6.5	8.0	---	---	---
18	4.0	3.0	3.5	5.0	2.5	4.0	9.0	7.5	8.0	13.5	12.0	12.5
19	5.5	3.5	4.5	4.0	.5	1.5	7.5	7.0	7.5	14.5	11.0	13.0
20	4.5	3.5	4.0	4.5	1.5	3.0	9.0	7.5	8.0	14.5	10.0	12.5
21	5.0	3.0	4.0	3.5	1.0	2.5	11.5	9.0	10.0	14.5	10.0	12.5
22	4.0	2.5	3.5	2.5	.5	1.5	12.0	11.0	11.5	15.5	12.0	14.0
23	6.5	3.0	4.5	4.5	1.0	2.5	13.5	10.0	12.0	16.0	13.0	14.5
24	6.0	3.5	5.0	4.0	.5	2.5	13.0	10.5	11.5	15.5	12.5	14.0
25	3.5	3.0	3.5	6.0	1.5	4.0	12.0	9.5	11.0	12.0	11.0	11.5
26	4.5	3.0	3.5	5.0	4.0	4.5	10.0	8.5	9.0	11.5	10.5	11.0
27	4.5	2.5	3.5	5.0	4.0	4.5	11.5	8.5	9.5	12.0	10.5	11.0
28	5.0	3.5	4.0	5.0	3.5	4.5	11.0	9.0	10.0	12.5	9.5	11.0
29	5.0	1.0	3.0	6.5	3.0	5.0	12.5	8.0	10.0	13.0	10.0	11.5
30	---	---	---	6.0	5.0	5.5	11.0	8.5	10.0	13.0	11.0	11.5
31	---	---	---	8.0	5.0	6.5	---	---	---	12.5	11.0	12.0
MONTH	6.5	0.0	2.5	9.5	0.0	4.0	13.5	3.5	8.5	16.0	7.5	12.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	12.5	12.0	12.0	19.0	16.5	17.5	---	---	---	17.0	14.5	16.0
2	13.0	11.5	12.5	18.0	15.5	17.0	---	---	---	16.5	14.5	15.5
3	14.0	11.0	12.5	17.0	14.5	15.0	---	---	---	17.5	16.0	16.5
4	14.0	12.0	13.5	17.5	14.5	15.5	---	---	---	18.5	17.0	17.5
5	14.0	13.0	13.5	17.0	14.5	16.0	---	---	---	17.5	16.5	16.5
6	14.0	13.0	13.5	18.0	16.0	17.0	---	---	---	16.5	16.0	16.5
7	14.5	13.0	14.0	17.5	15.0	16.5	---	---	---	16.5	16.0	16.0
8	15.0	13.5	14.5	17.0	15.0	16.0	---	---	---	18.0	16.5	17.0
9	15.0	14.0	14.5	19.0	16.0	17.5	---	---	---	18.5	17.0	17.5
10	15.0	12.5	14.0	18.5	16.0	17.5	---	---	---	19.5	17.5	18.5
11	15.0	12.5	14.0	19.0	17.0	18.0	---	---	---	18.5	16.5	17.5
12	15.5	12.0	14.0	18.0	16.5	17.0	---	---	---	16.0	14.0	15.0
13	16.0	13.0	14.5	19.5	16.5	18.0	---	---	---	14.5	12.5	14.0
14	16.5	13.5	15.0	20.5	17.5	19.0	---	---	---	15.0	12.5	13.5
15	16.5	14.5	15.5	20.0	18.5	19.5	---	---	---	15.5	13.0	14.5
16	15.5	13.0	14.5	---	---	---	---	---	---	17.0	14.5	15.5
17	16.0	13.5	15.0	---	---	---	---	---	---	18.0	16.0	17.0
18	16.0	14.0	14.5	---	---	---	---	---	---	18.0	16.0	17.0
19	14.5	14.0	14.5	---	---	---	---	---	---	17.5	15.5	17.0
20	16.0	14.0	15.0	---	---	---	17.0	15.5	16.0	15.5	13.0	14.5
21	15.0	13.0	14.0	---	---	---	17.0	14.0	15.5	15.0	13.5	14.5
22	13.0	12.0	12.5	---	---	---	17.0	14.0	15.5	17.5	15.0	16.0
23	14.0	10.5	12.0	---	---	---	17.5	14.5	16.0	17.0	13.0	15.5
24	14.5	13.0	14.0	---	---	---	18.5	15.5	17.0	13.0	11.0	12.0
25	15.5	13.5	14.5	---	---	---	19.0	16.5	18.0	12.0	9.5	10.5
26	15.5	13.0	14.5	---	---	---	20.5	18.0	19.0	15.0	11.5	13.0
27	16.5	14.5	15.5	---	---	---	20.5	18.5	19.5	14.5	13.5	14.0
28	17.0	14.5	16.0	---	---	---	20.0	18.5	19.5	14.5	13.0	14.0
29	17.0	14.0	15.5	---	---	---	19.5	16.5	18.0	13.5	11.5	12.5
30	18.0	16.0	17.0	---	---	---	17.0	14.0	16.0	11.0	9.0	10.0
31	---	---	---	---	---	---	18.5	16.0	17.0	---	---	---
MONTH	18.0	10.5	14.0	20.5	14.5	17.0	20.5	14.0	17.0	19.5	9.0	15.0

LEHIGH RIVER BASIN

01449800 POHOPOCO CREEK BELOW BELTZVILLE LAKE NEAR PARRYVILLE, PA

LOCATION.--Lat 40°50'44", long 75°38'46", Carbon County, Hydrologic Unit 02040106, on right bank 0.1 mi upstream from Sawmill Run, 0.45 mi downstream from Beltzville Dam, 1.3 mi upstream from Bull Run, and 2.3 mi northeast of Parryville.

DRAINAGE AREA.--96.4 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 492.05 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Wild Creek Reservoir (station 01449700) and Penn Forest Reservoir station 01449400), 7.3 mi and 10.0 mi upstream, respectively, and Beltzville Lake (station 01449790), 0.45 mi upstream. Figures of daily discharge do not include diversion from Wild Creek Reservoir to city of Bethlehem. Diversion from Tunkhannock Creek to Wild Creek Basin above station since October 1969. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	15	14	96	154	247	153	683	58	60	48
2	16	16	15	14	96	74	209	154	878	46	60	48
3	16	16	16	14	96	34	209	154	508	48	60	49
4	16	16	16	14	83	96	209	132	370	48	61	50
5	16	16	15	14	76	90	209	120	321	48	60	50
6	17	16	15	14	76	95	178	120	330	115	60	50
7	17	16	15	14	76	107	136	97	330	108	60	50
8	17	16	15	14	76	107	136	140	424	85	60	50
9	17	16	15	14	76	195	136	209	474	333	62	50
10	17	16	15	14	76	127	151	209	474	241	118	49
11	62	16	14	14	76	234	169	328	413	107	83	52
12	113	16	14	14	76	245	169	256	271	107	46	52
13	113	16	14	15	76	161	129	154	192	69	46	52
14	113	16	14	17	85	120	87	154	192	47	68	52
15	68	16	14	136	96	120	76	154	192	47	99	52
16	18	16	14	135	96	318	76	154	153	130	99	52
17	19	16	14	97	96	209	113	154	133	149	65	46
18	17	16	14	88	55	105	133	330	133	102	47	48
19	16	16	14	88	32	202	133	261	168	102	48	50
20	16	41	14	88	63	148	133	162	192	102	48	50
21	16	62	14	76	80	80	133	158	192	72	48	50
22	16	42	14	81	80	80	156	154	123	58	48	51
23	16	16	14	131	80	109	169	154	85	58	48	88
24	16	16	14	230	80	126	169	154	85	87	48	68
25	16	16	14	154	80	126	169	154	85	102	48	125
26	16	16	14	154	151	126	169	100	85	102	48	165
27	16	16	14	106	157	424	152	71	85	105	48	166
28	16	16	14	79	154	438	129	71	85	105	48	115
29	16	16	14	90	154	438	129	141	223	72	48	88
30	16	15	14	96	---	438	143	192	161	58	48	88
31	16	---	14	96	---	363	---	198	---	59	48	---
TOTAL	896	576	446	2125	2594	5689	4556	5142	8040	2970	1838	2004
MEAN	28.9	19.2	14.4	68.5	89.4	184	152	166	268	95.8	59.3	66.8
MAX	113	62	16	230	157	438	247	330	878	333	118	166
MIN	16	15	14	14	32	34	76	71	85	46	46	46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1992, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	121	136	188	171	186	244	251	224	158	116	88.9	98.3													
MAX	405	302	489	527	459	576	544	538	358	321	491	529													
(WY)	1983	1971	1978	1979	1976	1977	1984	1990	1972	1975	1969	1987													
MIN	28.9	19.2	14.4	33.3	17.0	16.2	32.5	25.2	48.2	32.4	18.0	29.2													
(WY)	1992	1992	1992	1981	1981	1981	1981	1971	1987	1985	1985	1970													

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1968 - 1992
ANNUAL TOTAL	40361	36876	
ANNUAL MEAN	111	101	165
HIGHEST ANNUAL MEAN			251
LOWEST ANNUAL MEAN			60.2
HIGHEST DAILY MEAN	793	Mar 5	1450
LOWEST DAILY MEAN	14	Dec 11	11
ANNUAL SEVEN-DAY MINIMUM	14	Dec 11	14
INSTANTANEOUS PEAK FLOW			1740
INSTANTANEOUS PEAK STAGE			5.59
INSTANTANEOUS LOW FLOW			.90
10 PERCENT EXCEEDS	241	204	377
50 PERCENT EXCEEDS	83	76	105
90 PERCENT EXCEEDS	16	15	36

LEHIGH RIVER BASIN

01449800 POHOPOCO CREEK BELOW BELTZVILLE LAKE NEAR PARRYVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1968 to current year.

INSTRUMENTATION.--Subsequent to water year 1986, temperature probe interfaced with data collection platform.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C, on several days during July, August 1970; minimum, 0.0°C December 9, 1969.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.0°C, July 29; minimum, 2.0°C, many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LEHIGH RIVER BASIN

01449800 POHOPOCO CREEK BELOW BELTZVILLE LAKE NEAR PARRYVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LEHIGH RIVER BASIN

01450500 AQUASHICOLA CREEK AT PALMERTON, PA

LOCATION.--Lat 40°48'22", long 75°35'54", Carbon County, Hydrologic Unit 02040106, on right bank 1,200 ft upstream from bridge on Sixth Street in Palmerton, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--76.7 mi².

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

REVISED RECORDS.--WSP 1051: 1940-45 (monthly net diversion), Drainage area. WSP 2102: 1967 (monthly net diversion).

GAGE.--Water-stage recorder. Datum of gage is 389.08 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional diversion from Pohopoco Creek into Aquashicola Creek above station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	32	76	70	98	124	238	144	784	67	75	41
2	20	32	75	73	88	119	212	137	471	64	64	41
3	20	31	232	74	84	111	190	128	346	63	61	47
4	20	29	295	78	81	105	174	120	282	69	65	55
5	20	28	220	79	e77	99	160	115	374	65	61	44
6	73	26	181	76	73	94	148	108	733	101	57	43
7	47	26	155	72	73	107	141	102	593	69	54	59
8	33	25	139	70	72	110	135	138	433	63	53	57
9	29	23	129	71	68	102	127	298	349	151	79	49
10	27	27	142	73	62	106	123	255	292	94	61	49
11	35	35	119	68	e61	192	123	220	249	76	58	65
12	58	28	110	67	60	230	114	195	217	69	58	53
13	40	27	114	67	59	210	106	178	193	68	53	49
14	34	25	114	105	62	185	101	164	174	104	53	47
15	33	24	105	119	65	164	96	150	159	102	51	45
16	58	23	99	e105	91	146	95	198	145	176	52	45
17	86	21	93	e100	78	138	100	166	134	129	57	44
18	115	21	93	e97	72	129	104	159	126	120	64	44
19	87	21	85	95	77	134	98	151	132	100	61	46
20	74	21	82	e91	76	122	93	141	125	89	55	44
21	68	24	87	90	71	114	90	134	110	82	52	42
22	62	137	85	86	68	108	126	128	102	76	50	44
23	56	394	84	114	67	e104	135	121	94	90	49	53
24	49	207	80	173	69	99	150	119	117	100	47	44
25	45	145	75	140	77	99	240	120	102	81	46	42
26	43	116	70	136	131	163	215	111	87	75	46	71
27	39	100	70	124	153	775	195	109	98	93	44	65
28	37	91	67	120	150	633	176	99	85	76	44	59
29	34	84	91	113	140	412	163	92	75	69	48	54
30	33	78	93	108	---	318	152	93	70	66	44	51
31	33	---	75	106	---	281	---	679	---	76	42	---
TOTAL	1428	1901	3535	2960	2403	5833	4320	5072	7251	2723	1704	1492
MEAN	46.1	63.4	114	95.5	82.9	188	144	164	242	87.8	55.0	49.7
MAX	115	394	295	173	153	775	240	679	784	176	79	71
MIN	20	21	67	67	59	94	90	92	70	63	42	41
†	2.4	2.0	1.7	2.0	2.1	1.7	1.9	1.4	1.7	1.9	2.0	2.1
MEAN†	43.7	61.4	112	93.5	80.8	186	142	163	240	85.9	53	47.6
CFSM†	.57	.80	1.46	1.22	1.05	2.42	1.85	2.13	3.13	1.12	.69	.62
IN.†	.66	.89	1.68	1.41	1.13	2.88	2.07	2.45	3.49	1.29	.80	.69

† Figures of net diversion, equivalent in cubic feet per second, includes water diverted from Pohopoco Creek to Aquashicola Creek, furnished by Palmer Water Company.

‡ Adjusted for diversion.

e Estimated.

LEHIGH RIVER BASIN

01450500 AQUASHICOLA CREEK AT PALMERTON, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	95.6	145	181	161	175	241	232	185	118	104	88.4	91.4
MAX	331	379	467	541	325	534	625	480	412	638	468	417
(WY)	1956	1973	1984	1979	1971	1977	1983	1989	1972	1945	1942	1987
MIN	17.2	21.6	38.3	19.4	38.4	86.5	74.7	55.9	38.8	19.8	13.7	15.2
(WY)	1964	1965	1981	1981	1940	1985	1985	1941	1955	1955	1964	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1940 - 1992

ANNUAL TOTAL	36689		40622		151	
ANNUAL MEAN	101	†96.7	111	†109	242	†246 1952
HIGHEST ANNUAL MEAN					69.2	† 67.4 1965
LOWEST ANNUAL MEAN					4680	Jul 10 1945
HIGHEST DAILY MEAN	587	Mar 5	784	Jun 1	9.1	Sep 15 1964
LOWEST DAILY MEAN	19	Aug 14	20	Oct 1	10	Sep 10 1964
ANNUAL SEVEN-DAY MINIMUM	20	Sep 12	22	Nov 15	11700	Jul 10 1945
INSTANTANEOUS PEAK FLOW			1080	May 31	13.63	Jul 10 1945
INSTANTANEOUS PEAK STAGE			5.84	May 31	2.6	Sep 12 1957
INSTANTANEOUS LOW FLOW			19	Oct 5	1.97	
ANNUAL RUNOFF (CFSM)	1.31	† 1.26	1.45	† 1.42	26.81	
ANNUAL RUNOFF (INCHES)	17.79	†17.12	19.70	†19.31	303	
10 PERCENT EXCEEDS	207		192		100	
50 PERCENT EXCEEDS	75		87		36	
90 PERCENT EXCEEDS	23		38			

† Adjusted for diversion.

LEHIGH RIVER BASIN

01451420 LITTLE LEHIGH CREEK NEAR EAST TEXAS, PA

LOCATION.--Lat 40°31'59", long 75°32'9", Lehigh County, Hydrologic Unit 02040106, on right bank 300 ft, upstream from bridge on Mill Creek Road, on Seem Road, and 0.8 mi southeast of East Texas.

DRAINAGE AREA.--51.2 mi².

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 360 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	5.7	6.5	11	8.5	8.0	27	12	35	12	14	10
2	7.3	5.3	7.7	10	9.6	7.8	26	11	19	12	14	10
3	7.0	5.3	63	9.9	8.1	7.4	24	11	15	13	13	10
4	6.7	5.2	42	11	7.4	7.0	23	10	13	15	13	10
5	6.4	5.2	18	12	7.4	6.7	22	10	40	12	13	9.9
6	12	5.1	15	10	7.7	6.5	20	10	76	22	12	10
7	7.2	5.0	13	9.4	6.7	13	20	9.7	35	13	12	15
8	6.2	5.0	12	8.7	6.8	13	19	28	37	11	11	12
9	5.9	4.8	12	9.6	6.4	9.3	18	57	26	22	20	10
10	5.7	4.9	25	11	e6.0	8.9	18	23	22	13	14	10
11	8.1	6.8	16	9.1	e5.9	20	18	17	20	12	15	12
12	10	6.1	13	8.4	e5.8	14	17	15	19	12	16	9.7
13	6.8	5.2	14	8.1	e5.7	10	16	14	18	13	14	9.0
14	6.1	4.9	16	14	e5.6	9.4	15	13	17	14	14	8.6
15	6.0	4.7	13	e11	7.3	8.9	15	12	17	16	13	8.2
16	6.8	4.5	12	e9.0	21	8.2	15	18	16	27	13	7.8
17	25	4.3	11	e8.7	10	8.2	17	14	15	16	17	7.6
18	33	4.2	11	7.8	8.4	8.3	20	13	15	47	22	7.4
19	12	4.2	e10	e7.0	9.7	11	22	12	23	18	26	7.1
20	9.3	4.1	e10	e6.8	9.1	11	17	11	34	15	15	7.0
21	8.2	4.2	9.8	e6.8	7.9	10	16	10	20	14	13	6.8
22	7.8	18	9.8	e6.8	6.9	10	19	9.7	17	13	12	7.9
23	7.3	58	9.9	12	6.7	10	25	9.1	16	24	11	10
24	6.8	14	10	30	6.6	9.2	17	8.8	21	26	11	7.0
25	6.5	9.8	9.1	13	7.4	9.7	15	9.1	18	19	11	7.1
26	6.4	8.4	8.4	11	21	34	14	11	15	19	11	30
27	6.3	7.5	8.4	11	14	104	13	12	14	25	11	17
28	5.9	7.0	8.3	9.2	10	56	13	9.6	14	22	11	12
29	5.7	6.6	18	8.8	9.3	35	12	8.8	13	16	12	9.6
30	5.9	6.4	16	8.6	---	29	12	9.4	13	16	11	8.4
31	5.9	---	12	8.6	---	29	---	56	---	15	10	---
TOTAL	267.7	240.4	459.9	318.3	252.9	532.5	545	474.2	673	544	425	307.1
MEAN	8.64	8.01	14.8	10.3	8.72	17.2	18.2	15.3	22.4	17.5	13.7	10.2
MAX	33	58	63	30	21	104	27	57	76	47	26	30
MIN	5.7	4.1	6.5	6.8	5.6	6.5	12	8.8	13	11	10	6.8
CFSM	.17	.16	.29	.20	.17	.34	.35	.30	.44	.34	.27	.20
IN.	.19	.17	.33	.23	.18	.39	.40	.34	.49	.40	.31	.22

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1992, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1987	1988	1989	1990	1991	1992
MEAN	19.5	26.5	33.3	32.8	37.1	40.0	35.7	47.2	34.1	26.9	19.5	30.1
MAX	30.5	42.4	51.8	61.0	71.1	60.9	53.8	97.7	60.0	47.0	34.5	110
(WY)	1988	1988	1987	1991	1988	1988	1987	1989	1989	1989	1990	1987
MIN	8.64	8.01	14.8	10.3	8.72	17.2	18.2	15.3	22.2	17.5	11.7	8.82
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1991	1992	1991	1988

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1987 - 1992
ANNUAL TOTAL	9833.7	5040.0	
ANNUAL MEAN	26.9	13.8	30.0
HIGHEST ANNUAL MEAN			39.8
LOWEST ANNUAL MEAN			13.8
HIGHEST DAILY MEAN	132 Jan 17	104 Mar 27	1760 Sep 9 1987
LOWEST DAILY MEAN	4.1 Nov 20	4.1 Nov 20	4.1 Nov 20 1991
ANNUAL SEVEN-DAY MINIMUM	4.3 Nov 15	4.3 Nov 15	4.3 Nov 15 1991
INSTANTANEOUS PEAK FLOW		123 Mar 27	4330 Sep 9 1987
INSTANTANEOUS PEAK STAGE		2.71 Mar 27	6.97 Sep 9 1987
ANNUAL RUNOFF (CFSM)	.53	.27	.59
ANNUAL RUNOFF (INCHES)	7.14	3.66	7.97
10 PERCENT EXCEEDS	54	23	54
50 PERCENT EXCEEDS	19	11	25
90 PERCENT EXCEEDS	6.1	6.4	9.4

LEHIGH RIVER BASIN

01451500 LITTLE LEHIGH CREEK NEAR ALLENTOWN, PA

LOCATION.--Lat 40°34'56", long 75°29'00", Lehigh County, Hydrologic Unit 02040106, on right bank at downstream side of bridge on Lehigh Parkway in Allentown, 0.8 mi upstream from Cedar Creek, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--80.8 mi².

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1946, published as "at Allentown".

REVISED RECORDS.--WDR PA-73-1: 1946(M), 1951(P), 1955(M), 1956(M), 1958(M), 1962(M), 1963(M), 1965(M), 1969(M), 1971(M), WDR PA-87-1: 1946 to 1986(P).

GAGE.--Water-stage recorder and masonry control. Datum of gage is 253.41 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional regulation at low flow by fish hatchery above gage. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	33	43	48	48	46	70	52	93	50	52	45
2	48	33	45	48	45	46	67	51	60	47	51	45
3	47	33	167	48	48	46	66	50	53	50	51	45
4	46	33	111	51	47	46	65	48	51	55	50	45
5	45	32	64	52	46	46	63	48	153	50	49	45
6	60	32	57	49	46	45	61	48	167	68	49	45
7	51	32	54	47	46	57	61	48	80	53	49	54
8	46	32	53	46	46	62	59	89	80	48	48	52
9	45	32	52	47	44	52	57	137	72	75	71	48
10	43	32	72	49	43	54	57	69	63	53	56	47
11	45	36	59	47	43	82	58	60	60	48	53	55
12	52	37	53	45	43	64	58	57	58	47	58	48
13	47	36	54	45	42	55	56	54	56	49	59	45
14	44	36	57	68	45	51	56	52	56	54	56	44
15	43	35	55	61	49	51	55	49	54	70	52	43
16	52	34	53	51	67	49	56	58	54	75	52	42
17	109	33	51	46	52	48	58	55	54	60	54	42
18	82	32	50	e44	48	48	65	57	52	94	64	41
19	45	31	47	43	49	54	67	53	65	61	73	40
20	40	30	48	e43	49	56	60	49	80	55	59	39
21	36	30	48	e43	48	55	59	49	62	53	54	38
22	35	93	48	43	47	53	59	48	58	52	51	42
23	34	136	48	60	45	52	63	46	56	76	50	49
24	34	60	48	85	43	52	59	45	64	72	49	42
25	33	51	48	54	44	52	57	45	60	59	49	40
26	33	48	47	56	67	90	56	47	55	60	49	82
27	33	47	46	50	59	239	55	48	52	84	55	64
28	33	45	45	51	52	125	53	45	52	64	51	54
29	33	45	65	49	.49	84	52	43	52	58	51	48
30	33	43	63	48	---	75	52	44	51	56	47	45
31	33	---	52	48	---	73	---	147	---	55	46	---
TOTAL	1409	1262	1803	1565	1400	2008	1780	1791	2023	1851	1658	1414
MEAN	45.5	42.1	58.2	50.5	48.3	64.8	59.3	57.8	67.4	59.7	53.5	47.1
MAX	109	136	167	85	67	239	70	147	167	94	73	82
MIN	33	30	43	43	42	45	52	43	51	47	46	38
CFSM	.56	.52	.72	.62	.60	.80	.73	.72	.83	.74	.66	.58
IN.	.65	.58	.83	.72	.64	.92	.82	.82	.93	.85	.76	.65

e Estimated.

LEHIGH RIVER BASIN

01451500 LITTLE LEHIGH CREEK NEAR ALLENTOWN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	66.0	75.5	93.9	104	120	129	138	120	102	85.6	76.7	70.7
MAX	182	177	314	385	325	248	331	315	381	366	192	213
(WY)	1976	1976	1984	1979	1979	1978	1983	1984	1972	1984	1971	1987
MIN	27.3	28.1	25.7	26.6	41.0	43.1	37.1	35.8	29.2	26.5	26.5	28.9
(WY)	1964	1966	1966	1966	1967	1965	1966	1965	1965	1965	1965	1965

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1946 - 1992	
ANNUAL TOTAL	29680		19964		98.3	
ANNUAL MEAN	81.3		54.5		203	
HIGHEST ANNUAL MEAN					33.8	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	261	Jan 17	239	Mar 27	4050	Jul 7 1984
LOWEST DAILY MEAN	30	Nov 20	30	Nov 20	23	Dec 20 1965
ANNUAL SEVEN-DAY MINIMUM	32	Nov 4	32	Nov 4	23	Dec 18 1965
INSTANTANEOUS PEAK FLOW			341	Jun 5	a11800	Jun 22 1972
INSTANTANEOUS PEAK STAGE			3.04	Jun 5	11.80	Jun 22 1972
INSTANTANEOUS LOW FLOW			30	Nov 20, 21	b17	Feb 4 1965
ANNUAL RUNOFF (CFSM)	1.01		.68		1.22	
ANNUAL RUNOFF (INCHES)	13.66		9.19		16.53	
10 PERCENT EXCEEDS	132		69		169	
50 PERCENT EXCEEDS	69		51		77	
90 PERCENT EXCEEDS	39		40		39	

a From rating curve extended above 980 ft³/s on basis of slope-area measurement of peak flow.

b Result of upstream shutoff.

LEHIGH RIVER BASIN

01451650 LITTLE LEHIGH CREEK AT TENTH STREET BRIDGE, ALLENTOWN, PA

LOCATION.--Lat 40°35'47", long 75°28'28", Lehigh County, Hydrologic Unit 02040106, on left bank at bridge on Tenth Street, and 0.9 mi upstream from confluence with Jordan Creek in Allentown, Pa.

DRAINAGE AREA.--98.2 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 245.63 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. Diversion for municipal water supply by city of Allentown. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	59	43	47	48	46	76	55	135	56	67	50
2	44	60	56	52	44	49	71	55	79	52	77	46
3	44	60	250	47	48	47	71	52	69	55	63	44
4	44	60	136	53	46	46	71	49	66	72	68	44
5	41	55	69	53	45	45	70	56	254	66	68	42
6	67	57	59	49	44	42	65	54	205	89	63	56
7	45	60	54	47	43	66	66	51	92	67	62	62
8	41	60	53	46	44	67	63	88	88	60	61	52
9	40	60	56	49	42	55	63	174	76	100	151	46
10	37	61	89	49	39	58	63	88	62	58	66	52
11	44	69	62	45	42	98	64	72	57	52	72	61
12	50	67	54	44	40	69	67	67	57	51	74	53
13	43	64	58	44	39	56	55	63	54	54	87	40
14	41	62	58	90	42	53	61	62	53	67	69	42
15	41	62	54	65	49	58	58	54	52	109	74	41
16	54	61	51	50	79	50	60	80	52	125	63	39
17	162	61	55	46	55	50	66	71	51	106	78	39
18	107	61	48	46	49	49	72	69	51	245	105	39
19	51	61	46	40	51	56	83	64	94	88	101	39
20	49	61	45	46	50	59	65	58	94	75	74	45
21	47	65	45	45	46	57	64	54	67	72	67	37
22	47	182	45	43	46	55	68	54	62	67	73	57
23	45	202	47	82	44	56	69	52	56	148	60	55
24	41	65	52	111	44	54	62	52	75	108	58	39
25	43	51	45	57	48	55	59	56	65	91	58	41
26	45	46	51	54	84	106	58	57	60	85	55	144
27	44	45	44	49	64	314	56	60	59	167	61	68
28	46	46	42	51	53	147	57	55	60	90	62	50
29	49	50	90	48	49	95	55	54	55	77	63	42
30	48	42	68	50	---	83	53	53	57	72	63	47
31	55	---	51	49	---	83	---	138	---	74	51	---
TOTAL	1599	2015	1976	1647	1417	2224	1931	2067	2357	2698	2214	1512
MEAN	51.6	67.2	63.7	53.1	48.9	71.7	64.4	66.7	78.6	87.0	71.4	50.4
MAX	162	202	250	111	84	314	83	174	254	245	151	144
MIN	37	42	42	40	39	42	53	49	51	51	51	37
†	19	17.7	16.2	18.1	18.4	18.5	18.4	18.5	17.7	17.4	16.4	16.4
MEAN†	70.6	84.9	79.9	71.2	67.3	90.2	82.8	85.2	96.3	104	87.8	66.8
CFSM†	.72	.86	.81	.73	.69	.92	.84	.87	.98	1.06	.89	.68
IN.†	.83	.96	.94	.84	.74	1.06	.94	1.00	1.09	1.23	1.03	.76

† Diversion for water supply, in cubic feet per second, by city of Allentown.

‡ Adjusted for diversion.

LEHIGH RIVER BASIN

01451650 LITTLE LEHIGH CREEK AT TENTH STREET BRIDGE, ALLENTOWN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.2	97.3	106	107	114	120	115	138	109	102	83.2	121
MAX	104	122	163	162	184	153	179	236	184	145	124	368
(WY)	1990	1987	1987	1991	1988	1991	1987	1989	1989	1989	1990	1987
MIN	51.6	67.2	63.7	53.1	48.9	71.7	64.4	66.7	78.6	83.0	57.1	50.4
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1992	1991	1991	1992

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1987 - 1992	
ANNUAL TOTAL	34890		23657			
ANNUAL MEAN	95.6		64.6		107	
HIGHEST ANNUAL MEAN	#114		#82.2		135	
LOWEST ANNUAL MEAN					#155	
HIGHEST DAILY MEAN	292		314		64.6	
LOWEST DAILY MEAN	32		37		5200	
ANNUAL SEVEN-DAY MINIMUM	39		40		Sep 9 1987	
INSTANTANEOUS PEAK FLOW			633		32	
INSTANTANEOUS PEAK STAGE			3.65		39	
ANNUAL RUNOFF (CFSM)	.97		.66		Sep 12 1991	
ANNUAL RUNOFF (INCHES)	13.22		8.96		7370	
10 PERCENT EXCEEDS	159		89		9.47	
50 PERCENT EXCEEDS	83		56		1.09	
90 PERCENT EXCEEDS	44		44		# 1.29	
					14.87	
					#17.56	

Adjusted for diversion.

LEHIGH RIVER BASIN

01451800 JORDAN CREEK NEAR SCHNECKSVILLE, PA

LOCATION.--Lat 40°39'42", long 75°37'38", Lehigh County, Hydrologic Unit 02040106, on left bank 54 ft downstream from wooden covered bridge at Trexler-Lehigh County Game Preserve, 1.0 mi downstream from Mill Creek, and 1.1 mi southwest of Schnecksville.

DRAINAGE AREA.--53.0 mi².

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

REVISED RECORDS.--WDR PA-90-1: 1989.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 400 ft above sea level, from topographic map. Prior to Oct. 2, 1973, nonrecording gage at bridge 54 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	46	43	e37	93	146	38	295	20	33	20
2	10	14	45	44	e31	84	121	36	193	19	28	19
3	9.9	13	282	43	e30	75	101	34	140	20	26	25
4	9.4	12	282	49	e29	68	88	32	109	32	31	25
5	8.6	11	201	49	e27	62	78	33	244	24	30	21
6	32	11	154	43	e26	57	68	32	326	51	24	21
7	17	11	121	41	e25	85	64	29	252	26	22	35
8	12	11	98	39	e26	81	59	103	188	21	21	27
9	10	10	91	41	e24	69	54	215	143	94	39	23
10	9.4	10	137	44	e22	71	52	140	111	38	26	24
11	13	14	96	39	e21	156	51	114	90	32	44	51
12	23	14	92	37	e20	137	48	93	76	29	50	28
13	14	12	101	36	e20	131	43	82	65	31	30	24
14	11	11	100	92	e21	115	40	73	57	43	29	22
15	9.9	9.9	84	75	e23	99	39	63	51	33	27	21
16	15	9.8	73	65	103	85	39	133	44	37	29	20
17	58	9.0	e60	62	65	77	43	82	41	30	35	20
18	90	8.7	e58	e60	54	72	45	75	39	41	51	19
19	55	8.7	e53	e58	65	79	46	68	72	29	45	18
20	44	8.7	e51	e56	62	68	40	58	53	25	37	17
21	36	9.4	e52	e52	55	62	38	53	39	23	32	17
22	31	94	53	e49	52	58	62	49	35	22	30	20
23	27	260	53	75	51	57	67	45	32	58	28	43
24	24	120	51	145	52	53	50	43	38	49	26	21
25	22	86	44	100	68	58	58	45	36	42	33	20
26	20	70	40	72	149	177	48	44	29	38	35	86
27	19	59	39	63	144	936	44	44	27	59	30	56
28	17	53	38	57	131	584	41	38	25	43	27	47
29	15	48	67	57	116	332	40	34	22	38	37	40
30	14	44	64	56	---	231	38	36	20	36	26	35
31	14	---	45	51	---	191	---	417	---	36	22	---
TOTAL	701.2	1066.2	2771	1793	1549	4503	1751	2381	2892	1119	983	865
MEAN	22.6	35.5	89.4	57.8	53.4	145	58.4	76.8	96.4	36.1	31.7	28.8
MAX	90	260	282	145	149	936	146	417	326	94	51	86
MIN	8.6	8.7	38	36	20	53	38	29	20	19	21	17
CFSM	.43	.67	1.69	1.09	1.01	2.74	1.10	1.45	1.82	.68	.60	.54
IN.	.49	.75	1.94	1.26	1.09	3.16	1.23	1.67	2.03	.79	.69	.61

e Estimated.

LEHIGH RIVER BASIN

01451800 JORDAN CREEK NEAR SCNECKSVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.9	93.3	126	114	131	144	126	105	71.5	42.1	34.0	48.3
MAX	184	270	363	404	295	286	391	353	346	126	110	343
(WY)	1978	1971	1984	1979	1971	1978	1983	1989	1972	1984	1990	1987
MIN	8.37	20.1	18.6	6.85	35.2	41.3	31.0	36.5	9.18	1.68	3.77	3.69
(WY)	1973	1979	1981	1981	1980	1985	1985	1969	1966	1966	1980	1980

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1966 - 1992
ANNUAL TOTAL	21527.2	22374.4	
ANNUAL MEAN	59.0	61.1	91.6
HIGHEST ANNUAL MEAN			148
LOWEST ANNUAL MEAN			43.9
HIGHEST DAILY MEAN	475	Mar 4	2800
LOWEST DAILY MEAN	5.2	Sep 18	.60
ANNUAL SEVEN-DAY MINIMUM	5.9	Sep 12	1.0
INSTANTANEOUS PEAK FLOW		1130	a7100
INSTANTANEOUS PEAK STAGE		5.74	b12.32
INSTANTANEOUS LOW FLOW		8.4	.40
ANNUAL RUNOFF (CFSM)	1.11	1.15	1.73
ANNUAL RUNOFF (INCHES)	15.11	15.70	23.49
10 PERCENT EXCEEDS	129	115	200
50 PERCENT EXCEEDS	40	43	47
90 PERCENT EXCEEDS	8.7	15	9.9

a From rating curve extended above 680 ft³/s, on basis of contracted-opening measurement of peak flow.

b From floodmark.

LEHIGH RIVER BASIN

01452000 JORDAN CREEK AT ALLENTOWN, PA

LOCATION.--Lat 40°37'23", long 75°28'58", Lehigh County, Hydrologic Unit 02040106, on right bank 200 ft upstream from bridge on State Highway 145, 0.5 mi northwest of city limits of Allentown, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--75.8 mi².

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

REVISED RECORDS.--WDR PA-76-1: 1970(M), 1971.

GAGE.--Water-stage recorder and rubble masonry control, crest raised 1 ft in August 1958 and further modified filling in square notches on sides and notching center of dam at 17:1 slope in August 1974. Datum of gage is 259.82 ft above Pennsylvania Department of Transportation datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	9.7	46	e46	63	119	232	45	446	27	35	21
2	7.3	11	50	e46	48	111	190	42	274	21	26	19
3	7.0	16	279	61	50	97	162	40	186	22	23	20
4	7.1	15	411	64	44	87	143	35	147	31	25	25
5	7.1	13	274	71	46	79	128	34	244	31	29	23
6	13	12	195	62	34	73	111	36	517	51	23	20
7	12	12	151	57	38	85	102	32	396	37	19	28
8	10	12	126	54	43	115	98	56	284	23	19	35
9	7.2	12	111	54	31	89	88	290	208	117	47	24
10	7.4	13	156	62	21	86	84	175	158	58	34	24
11	12	13	120	57	e19	162	80	145	131	37	40	54
12	11	16	113	53	e18	163	77	123	111	30	87	38
13	18	15	117	49	e18	161	68	107	95	29	54	24
14	12	12	123	66	e18	146	62	96	81	40	40	20
15	9.9	11	121	129	39	130	52	80	71	41	37	19
16	10	11	105	76	99	108	45	138	60	42	35	18
17	29	10	93	53	95	101	50	110	53	37	48	17
18	119	9.3	94	e47	72	94	54	94	49	45	73	16
19	67	8.3	58	e45	73	101	55	89	103	35	83	15
20	53	8.3	e50	e44	76	95	50	73	91	25	e70	13
21	40	10	e49	e43	67	82	46	64	56	22	e53	e15
22	32	38	e48	e42	62	75	62	60	47	20	e45	e17
23	26	337	e48	e41	60	72	82	55	43	35	e43	e31
24	22	147	76	167	60	65	59	51	46	78	e40	e18
25	19	107	63	92	70	66	65	52	53	46	e37	e17
26	18	84	50	86	155	149	58	51	38	42	e35	e52
27	16	68	e45	61	177	1430	53	53	34	64	e33	e47
28	14	60	42	e55	165	1170	49	45	30	53	32	e37
29	11	54	74	e57	150	615	46	39	26	42	38	42
30	11	49	103	64	---	394	44	38	24	38	34	37
31	10	---	67	69	---	314	---	473	---	36	25	---
TOTAL	645.8	1193.6	3458	1973	1911	6634	2495	2821	4102	1255	1262	786
MEAN	20.8	39.8	112	63.6	65.9	214	83.2	91.0	137	40.5	40.7	26.2
MAX	119	337	411	167	177	1430	232	473	517	117	87	54
MIN	7.0	8.3	42	41	18	65	44	32	24	20	19	13
CFSM	.27	.52	1.47	.84	.87	2.82	1.10	1.20	1.80	.53	.54	.35
IN.	.32	.59	1.70	.97	.94	3.26	1.22	1.38	2.01	.62	.62	.39

e Estimated.

LEHIGH RIVER BASIN

01452000 JORDAN CREEK AT ALLENTOWN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	61.1	107	144	141	166	195	165	124	80.2	54.9	53.4	63.8
MAX	304	321	513	522	354	421	551	438	517	255	326	449
(WY)	1956	1971	1984	1979	1951	1977	1983	1989	1972	1945	1955	1987
MIN	3.93	8.62	20.7	8.45	34.3	55.0	38.0	22.3	5.89	1.21	1.81	2.83
(WY)	1964	1965	1981	1981	1980	1985	1985	1965	1965	1966	1966	1964

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1945 - 1992	
ANNUAL TOTAL	26615.2		28536.4		113	
ANNUAL MEAN	72.9		78.0		203	
HIGHEST ANNUAL MEAN					44.9	
LOWEST ANNUAL MEAN					6650	
HIGHEST DAILY MEAN	514	Jan 17	1430	Mar 27	Sep 9 1987	
LOWEST DAILY MEAN	7.0	Oct 3	7.0	Oct 3	Jul 7 1966	
ANNUAL SEVEN-DAY MINIMUM	7.6	Sep 29	8.8	Oct 1	Jul 9 1966	
INSTANTANEOUS PEAK FLOW			2010	Mar 27	a16200	
INSTANTANEOUS PEAK STAGE			5.28	Mar 27	b11.61	
INSTANTANEOUS LOW FLOW			6.7	Sep 23	no flow for many days	
ANNUAL RUNOFF (CFSM)	.96		1.03		1.49	
ANNUAL RUNOFF (INCHES)	13.06		14.00		20.19	
10 PERCENT EXCEEDS	165		148		245	
50 PERCENT EXCEEDS	48		50		60	
90 PERCENT EXCEEDS	9.5		14		11	

a From rating curve extended above 6,100 ft³/s, on basis of slope-area measurement of peak flow.

b From floodmark.

LEHIGH RIVER BASIN

01452500 MONOCACY CREEK AT BETHLEHEM, PA

LOCATION.--Lat 40°38'28", long 75°22'47", Northampton County, Hydrologic Unit 02040106, on right bank 40 ft downstream from highway bridge at entrance to Monocacy Park at Bethlehem and 2.1 mi upstream from mouth.

DRAINAGE AREA.--44.5 mi².

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

GAGE.--Water-stage recorder. Concrete control since July 17, 1969. Datum of gage is 247.24 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 15, 1962, nonrecording gage at site 40 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation at low flow by mill above station since April 1954. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 10, 1945, reached a stage of 9.74 ft, from floodmarks, discharge 5,200 ft³/s, by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	22	e22	21	e19	e30	21	67	24	26	21
2	19	18	22	e21	20	e19	e27	21	58	24	23	e21
3	18	18	73	e21	e21	e19	e25	21	50	27	22	e21
4	18	18	e57	e23	e21	e19	e24	21	45	31	23	e21
5	18	18	e44	e23	e20	e19	e23	21	64	26	24	21
6	23	17	e39	22	e20	e18	e22	20	111	32	22	20
7	18	17	e38	e21	20	e22	e22	20	93	27	22	26
8	18	17	36	e20	20	e23	e22	42	76	24	22	24
9	18	17	35	21	e19	21	e21	67	64	72	35	22
10	18	17	37	e22	e19	21	21	42	53	33	26	22
11	18	e19	33	21	e18	29	21	37	46	31	29	25
12	19	e20	29	e20	e18	27	21	34	41	29	31	22
13	19	e20	28	e20	e17	25	20	33	37	29	27	21
14	19	e19	28	27	e19	25	20	29	35	41	26	21
15	19	e19	28	24	20	24	20	28	32	34	26	20
16	32	e18	28	21	28	23	20	38	29	34	26	20
17	43	e18	27	20	25	22	20	35	29	29	34	20
18	39	e17	26	e20	21	22	21	30	28	35	38	20
19	26	16	26	e20	e22	e25	20	27	50	27	30	19
20	23	16	25	e20	e22	e26	20	26	41	26	28	19
21	21	16	25	e20	21	e25	20	26	30	25	27	19
22	21	38	25	e20	21	e24	24	26	29	24	26	23
23	21	63	25	30	21	e23	27	24	28	34	26	27
24	21	31	25	40	21	e23	22	22	32	31	23	20
25	20	27	25	25	20	e23	22	22	31	28	e23	20
26	19	24	25	22	28	26	21	23	27	28	e23	32
27	19	22	25	22	e24	103	21	25	24	31	23	24
28	19	22	25	21	e22	e60	21	22	24	28	22	22
29	19	22	28	21	e20	e37	21	21	24	27	24	21
30	19	22	29	21	---	e31	21	21	24	26	22	20
31	18	---	28	21	---	e30	---	73	---	26	22	---
TOTAL	661	644	966	692	609	853	660	918	1322	943	801	654
MEAN	21.3	21.5	31.2	22.3	21.0	27.5	22.0	29.6	44.1	30.4	25.8	21.8
MAX	43	63	73	40	28	103	30	73	111	72	38	32
MIN	18	16	22	20	17	18	20	20	24	24	22	19
CFSM	.48	.48	.70	.50	.47	.62	.49	.67	.99	.68	.58	.49
IN.	.55	.54	.81	.58	.51	.71	.55	.77	1.11	.79	.67	.55

e Estimated.

LEHIGH RIVER BASIN

01452500 MONOCACY CREEK AT BETHLEHEM, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	38.5	45.7	53.7	57.7	65.4	70.5	70.0	57.2	50.5	43.9	40.1	39.2
MAX	93.3	110	119	201	163	151	173	129	142	141	88.2	106
(WY)	1976	1973	1978	1979	1979	1978	1983	1984	1972	1984	1984	1987
MIN	8.90	10.0	6.88	7.14	21.0	21.3	18.6	16.2	15.0	11.6	10.6	9.51
(WY)	1966	1966	1966	1966	1992	1965	1966	1965	1965	1966	1965	1965

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1949 - 1992	
ANNUAL TOTAL	15224		9723			
ANNUAL MEAN	41.7		26.6		52.6	
HIGHEST ANNUAL MEAN					89.7	
LOWEST ANNUAL MEAN					15.5	
HIGHEST DAILY MEAN	115	Jan 18	111	Jun 6	1200	Jan 26 1978
LOWEST DAILY MEAN	16	Nov 19	16	Nov 19	5.2	Jan 1 1966
ANNUAL SEVEN-DAY MINIMUM	17	Nov 15	17	Nov 15	5.9	Dec 27 1965
INSTANTANEOUS PEAK FLOW			150	Jul 9	3490	Jan 25 1979
INSTANTANEOUS PEAK STAGE			2.95	Jul 9	8.19	Jan 25 1979
INSTANTANEOUS LOW FLOW					3.0	Jan 9 1966
ANNUAL RUNOFF (CFSM)	.94		.60		1.18	
ANNUAL RUNOFF (INCHES)	12.73		8.13		16.07	
10 PERCENT EXCEEDS	73		37		95	
50 PERCENT EXCEEDS	34		23		41	
90 PERCENT EXCEEDS	19		19		21	

LEHIGH RIVER BASIN

01453000 LEHIGH RIVER AT BETHLEHEM, PA

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

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

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

REVISED RECORDS.--WSP 261: 1903-5, WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft above sea level. Prior to October 1928, nonrecording gage at New Street bridge 120 ft downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft downstream at datum 2.49 ft lower. Oct. 1, 1963, to Dec. 14, 1975, water-stage recorder at site 40 ft downstream at same datum.

REMARKS.--No estimated daily discharge. Records good. Flow regulated by Wild Creek Reservoir (station 01449700) since January 1941, Penn Forest Reservoir (station 01449400) since October 1958, Francis E. Walter Reservoir (station 01447780) since February 1961, and Beltzville Lake (station 01449790) since February 1971. Satellite telemetry at station. Several measurements of water temperature were made during the year.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	661	1790	1360	1650	2210	4320	2270	7620	1650	1320	691
2	507	573	1790	1420	1430	2300	3800	2170	8140	1420	1210	705
3	505	539	3350	1380	1460	2230	3480	2120	6630	1280	1140	740
4	495	528	4370	1400	1340	2100	3180	2020	4720	1160	1180	962
5	473	522	3600	1390	1300	1940	2930	2230	4840	1140	1150	829
6	685	509	3200	1350	1260	1750	2760	2040	7050	1510	1010	729
7	712	498	2800	1380	1200	2000	2430	1800	5740	1480	955	894
8	576	492	2510	1360	1170	2400	2300	2050	4920	1380	925	865
9	539	486	2410	1250	1090	2150	2280	5040	5290	2440	1340	789
10	534	479	2740	1270	884	2440	2230	5050	4820	2450	1220	790
11	615	592	2400	1200	1040	3480	2190	4480	4040	1700	1330	1430
12	853	557	2090	991	1000	5280	2180	3870	3430	1410	1350	1680
13	830	546	2070	967	891	4550	2030	3270	2970	1400	1270	1480
14	724	532	2300	1480	1030	3560	2200	2910	2780	1650	1040	1420
15	713	527	2280	2350	1160	3160	1910	2660	2400	1570	957	1280
16	766	525	2090	2480	1620	2950	1740	3280	2030	2030	963	951
17	1180	517	1990	2160	1560	2810	1730	3200	1820	2180	1070	745
18	1860	512	1910	1950	1370	2420	1910	2980	1730	2350	1150	743
19	1420	510	1600	1510	1410	2480	1970	3730	2040	1860	1310	885
20	1310	505	1350	1450	1540	2590	1910	3140	2060	1670	1250	1190
21	1200	531	1460	1430	1580	2130	2610	2740	1840	1570	1200	669
22	1090	1350	1380	1470	1470	1970	2800	2320	1740	1360	1100	724
23	898	5450	1360	1690	1290	1970	3560	2140	1430	1450	850	1020
24	761	3680	1540	2960	1290	1870	3470	2020	1480	1620	827	954
25	684	2870	1500	2450	1490	1810	3730	2030	1650	1630	814	746
26	670	2500	1360	2130	2150	2330	3380	1980	1590	1680	818	1640
27	607	2670	1190	1950	2620	7490	3200	2030	1900	1980	746	1850
28	589	2370	993	2170	2510	9200	3300	1920	2170	1930	771	1600
29	573	2220	1260	1800	2420	6650	2670	1710	1880	1860	851	1430
30	565	1910	1550	1630	---	5250	2330	1710	2190	1620	852	1320
31	562	---	1440	1640	---	4700	---	5390	---	1400	725	---
TOTAL	24007	36161	63673	51418	42225	100170	80530	86300	102940	51830	32694	31751
MEAN	774	1205	2054	1659	1456	3231	2684	2784	3431	1672	1055	1058
MAX	1860	5450	4370	2960	2620	9200	4320	5390	8140	2450	1350	1850
MIN	473	479	993	967	884	1750	1730	1710	1430	1140	725	669
CFSM	.61	.94	1.61	1.30	1.14	2.53	2.10	2.18	2.68	1.31	.82	.83
IN.	.70	1.05	1.85	1.50	1.23	2.91	2.34	2.51	2.99	1.51	.95	.92

LEHIGH RIVER BASIN

01453000 LEHIGH RIVER AT BETHLEHEM, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1549	2300	2831	2572	2782	3779	3797	3140	2113	1649	1351	1387
MAX	5778	5294	6991	7898	5820	7708	9038	7041	7272	6362	6192	6907
(WY)	1956	1952	1984	1979	1951	1977	1983	1989	1972	1945	1955	1987
MIN	406	474	514	286	1132	1632	1428	1053	681	366	405	334
(WY)	1964	1965	1981	1981	1980	1981	1985	1941	1965	1965	1964	1964

SUMMARY STATISTICS FOR 1991 CALENDAR YEAR FOR 1992 WATER YEAR WATER YEARS 1941 - 1992

ANNUAL TOTAL	656539	703699	
ANNUAL MEAN	1799	1923	2435
HIGHEST ANNUAL MEAN			3973
LOWEST ANNUAL MEAN			1165
HIGHEST DAILY MEAN	7760	Mar 5	70400
LOWEST DAILY MEAN	361	Sep 17	210
ANNUAL SEVEN-DAY MINIMUM	412	Sep 12	216
INSTANTANEOUS PEAK FLOW			a92000
INSTANTANEOUS PEAK STAGE			b25.90
INSTANTANEOUS LOW FLOW			125
ANNUAL RUNOFF (CFSM)	1.41		1.90
ANNUAL RUNOFF (INCHES)	19.10		25.87
10 PERCENT EXCEEDS	3640		4830
50 PERCENT EXCEEDS	1380		1760
90 PERCENT EXCEEDS	515		677

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1904, 1909 - 1940, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1532	1827	2184	2346	2430	4134	3815	2280	1753	1530	1239	1214
MAX	4808	5660	5287	5287	5913	11920	7547	3681	4255	5182	4599	6407
(WY)	1903	1927	1939	1915	1915	1936	1940	1924	1928	1935	1933	1933
MIN	308	370	470	677	668	1887	1499	1020	832	572	428	374
(WY)	1911	1910	1931	1925	1934	1911	1915	1926	1921	1912	1910	1932

SUMMARY STATISTICS WATER YEARS 1903 - 1904 1909 - 1940

ANNUAL TOTAL		
ANNUAL MEAN	2189	
HIGHEST ANNUAL MEAN	3600	1928
LOWEST ANNUAL MEAN	1262	1931
HIGHEST DAILY MEAN	47900	Aug 24 1933
LOWEST DAILY MEAN	160	Oct 15 1910
ANNUAL SEVEN-DAY MINIMUM	260	Oct 13 1910
INSTANTANEOUS PEAK FLOW	64800	Aug 24 1933
INSTANTANEOUS PEAK STAGE	18.70	Aug 24 1933
INSTANTANEOUS LOW FLOW	160	Oct 15 1910
ANNUAL RUNOFF (CFSM)	1.71	
ANNUAL RUNOFF (INCHES)	23.25	
10 PERCENT EXCEEDS	4420	
50 PERCENT EXCEEDS	1500	
90 PERCENT EXCEEDS	548	

a From rating curve extended above 48,000 ft³/s.

b From floodmark, present site and datum.

LEHIGH RIVER BASIN

01454700 LEHIGH RIVER AT GLENDON, PA

LOCATION.--Lat 40°40'09", long 75°14'12", Northampton County, Hydrologic Unit 02040106, on right bank 140 ft upstream from highway bridge in Hugh Moore Parkway at Glendon, 1.9 mi upstream from mouth, and 2.0 mi southwest of Easton.

DRAINAGE AREA.--1,359 mi².

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

REVISED RECORDS.--WDR PA-72-1: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 164.30 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Francis E. Walter Reservoir (station 01447780), Penn Forest Reservoir (station 01449400), Wild Creek Reservoir (station 01449700), and since February 1971, Beltzville Lake (station 01449790), about 60.0 mi upstream. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	598	801	1830	1380	1700	2200	4660	2240	8280	1660	1350	783
2	609	671	1830	1430	1490	2280	4030	2150	8560	1450	1230	801
3	604	640	3770	1390	1510	2210	3660	2090	7160	1330	1170	832
4	575	636	4910	1440	1420	2090	3320	1980	5140	1240	1200	998
5	548	620	3860	1410	1340	1970	3030	2170	5210	1190	1190	923
6	757	577	3360	1360	1330	1750	2840	2010	7770	1540	1060	828
7	817	565	2910	1390	1260	2010	2500	1770	6320	1510	1010	1020
8	644	570	2540	1380	1230	2390	2350	2190	5380	1410	983	963
9	623	559	2430	1280	1160	2150	2320	5590	5740	2590	1450	882
10	621	555	2860	1300	989	2420	2280	5470	5240	2540	1250	876
11	708	698	2460	1240	1110	3630	2250	4810	4370	1760	1340	1410
12	925	683	2140	1060	1100	5790	2230	4090	3630	1440	1430	1660
13	936	653	2100	1030	999	4930	2090	3390	3080	1430	1260	1480
14	816	645	2320	1460	1100	3730	2230	3000	2850	1660	1160	1410
15	835	644	2300	2400	1230	3260	1970	2650	2480	1610	1020	1280
16	904	654	2120	2500	1690	3030	1790	3400	2070	2110	1020	1020
17	1390	613	2010	2190	1630	2900	1770	3330	1840	2210	1190	827
18	1950	635	1920	2030	1440	2470	1950	3050	1750	2640	1270	818
19	1470	628	1630	1480	1450	2550	2020	3900	2180	1920	1360	878
20	1340	627	1380	1470	1550	2660	1950	3230	2140	1700	1290	1230
21	1230	677	1470	1470	1570	2200	2640	2770	1880	1590	1220	762
22	1150	1510	1400	1520	1490	2030	2840	2340	1780	1410	1140	783
23	992	6090	1380	1770	1300	2020	3700	2140	1490	1520	930	1120
24	870	4000	1540	3110	1310	1920	3590	2020	1520	1670	901	1010
25	800	3000	1530	2560	1470	1860	3880	2040	1680	1620	888	828
26	777	2560	1380	2200	2150	2430	3500	2000	1590	1680	885	1620
27	707	2690	1240	2000	2620	8320	3290	2030	1800	2100	828	1860
28	692	2440	1060	2190	2490	9930	3390	1910	2190	1970	845	1560
29	723	2270	1310	1900	2410	7240	2670	1710	1870	1890	929	1390
30	714	1980	1600	1690	---	5700	2310	1730	2220	1660	918	1310
31	708	---	1450	1690	---	5120	---	5530	---	1430	812	---
TOTAL	27033	39891	66040	52720	43538	105190	83050	88730	109210	53480	34529	33162
MEAN	872	1330	2130	1701	1501	3393	2768	2862	3640	1725	1114	1105
MAX	1950	6090	4910	3110	2620	9930	4660	5590	8560	2640	1450	1860
MIN	548	555	1060	1030	989	1750	1770	1710	1490	1190	812	762

LEHIGH RIVER BASIN

01454700 LEHIGH RIVER AT GLENDON, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1974	2667	3363	2876	3308	4147	4251	3599	2721	1943	1548	1764
MAX	5272	5438	7790	8238	5385	8344	10390	8542	7607	4641	4179	7920
(WY)	1977	1971	1984	1979	1976	1977	1983	1989	1972	1984	1969	1987
MIN	771	835	633	405	1278	1805	1639	2001	1104	811	711	660
(WY)	1981	1985	1981	1981	1980	1981	1985	1987	1987	1991	1980	1983

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1967 - 1992	
ANNUAL TOTAL	726331		736573		2843	
ANNUAL MEAN	1990		2012		3997	
HIGHEST ANNUAL MEAN					1594	
LOWEST ANNUAL MEAN					44300	
HIGHEST DAILY MEAN	8480	Mar 5	9930	Mar 28	330	Jun 23 1972
LOWEST DAILY MEAN	495	Sep 15	548	Oct 5	349	Jan 31 1981a
ANNUAL SEVEN-DAY MINIMUM	521	Sep 12	583	Nov 4	b60600	Jan 26 1981
INSTANTANEOUS PEAK FLOW			11200	Mar 27		Jun 23 1972
INSTANTANEOUS PEAK STAGE			12.67	Mar 27	24.86	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.46		1.48		2.09	
ANNUAL RUNOFF (INCHES)	19.89		20.11		28.41	
10 PERCENT EXCEEDS	4000		3630		5630	
50 PERCENT EXCEEDS	1500		1640		2090	
90 PERCENT EXCEEDS	612		772		898	

a Also Feb. 1, 1981.

b From rating curve extended above 36,000 ft³/s.

LEHIGH RIVER BASIN

01454720 LEHIGH RIVER AT EASTON, PA

LOCATION.--Lat 40°41'12", long 75°12'32", Northampton County, Hydrologic Unit 02040106, near bridge on U.S. Highway 611 in Easton.

DRAINAGE AREA.--1,364 mi².

PERIOD OF RECORD.--October 1961 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to current year.

pH: October 1972 to September 1974, October 1975 to current year.

WATER TEMPERATURE: October 1961 to current year.

DISSOLVED OXYGEN: June 1966 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1961. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Subsequent to water year 1978, station has not been operated October to March. Other interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 581 microsiemens Aug. 19, 1963; minimum, 70 microsiemens Nov. 14, 1970.

pH: Maximum, 8.7 July 18, 19, 1991; minimum, 6.0 Mar. 16, 1978.

WATER TEMPERATURE: Maximum, 30.5°C July 29, 1970, and July 21, 1980; minimum, 0.0°C on many days during winter.

DISSOLVED OXYGEN: Maximum, 15.7 mg/L April 14, 1986; minimum 0.0°C mg/L Aug. 4, 1966.

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	168	160	164	213	201	207
2	---	---	---	---	---	---	174	166	169	216	205	211
3	---	---	---	---	---	---	180	173	177	215	203	209
4	---	---	---	---	---	---	182	176	178	209	201	205
5	---	---	---	---	---	---	188	179	184	217	199	208
6	---	---	---	---	---	---	186	180	183	204	195	200
7	---	---	---	---	---	---	198	182	190	220	201	213
8	---	---	---	---	---	---	210	199	206	234	212	223
9	---	---	---	---	---	---	215	203	210	231	148	184
10	---	---	---	---	---	---	220	204	214	145	134	140
11	---	---	---	---	---	---	223	211	218	148	133	137
12	---	---	---	---	---	---	219	205	214	158	149	153
13	---	---	---	---	---	---	214	204	210	172	163	165
14	---	---	---	---	---	---	224	210	218	181	173	176
15	---	---	---	---	---	---	211	208	209	188	183	185
16	---	---	---	---	---	---	234	211	227	195	175	189
17	---	---	---	---	---	---	249	228	241	176	163	171
18	---	---	---	---	---	---	249	226	240	177	172	174
19	---	---	---	---	---	---	225	213	220	181	154	167
20	---	---	---	---	---	---	216	208	212	166	156	159
21	---	---	---	---	---	---	228	192	212	178	170	175
22	---	---	---	---	---	---	194	182	189	196	182	187
23	---	---	---	---	---	---	189	172	181	205	198	202
24	---	---	---	---	---	---	171	164	168	212	201	206
25	---	---	---	---	---	---	171	156	165	210	200	206
26	---	---	---	---	---	---	175	163	168	212	202	206
27	---	---	---	---	---	---	169	162	166	223	208	216
28	---	---	---	---	---	---	173	164	169	223	216	219
29	---	---	---	---	---	---	185	167	172	234	218	227
30	---	---	---	---	---	---	198	186	195	242	222	233
31	---	---	---	---	---	---	---	---	---	231	147	204
MONTH	---	---	---	---	---	---	249	156	196	242	133	192

LEHIGH RIVER BASIN

01454720 LEHIGH RIVER AT EASTON, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	133	118	126	217	188	203	278	260	268	343	332	338
2	130	110	118	236	216	227	279	270	275	362	340	353
3	125	115	119	248	237	242	281	272	276	372	368	370
4	149	126	136	268	240	252	295	278	284	380	365	374
5	166	149	154	274	263	269	298	285	291	367	336	351
6	163	137	146	279	264	275	312	289	296	342	336	337
7	150	141	144	267	255	261	321	313	317	337	330	335
8	156	148	150	262	249	253	326	315	321	333	316	324
9	157	141	148	250	218	237	327	298	314	339	317	324
10	147	140	144	225	192	209	291	272	282	364	343	355
11	162	146	150	210	192	200	298	285	291	361	347	356
12	172	162	166	242	213	229	296	269	282	342	261	297
13	178	172	175	252	242	248	296	268	283	252	229	237
14	187	175	181	264	247	254	294	290	292	233	228	230
15	185	179	182	259	242	252	317	292	299	253	232	241
16	216	195	207	260	237	255	326	319	323	274	253	260
17	234	216	225	239	215	232	322	307	312	297	279	286
18	246	228	239	216	204	210	323	304	311	344	307	328
19	246	226	235	217	209	214	328	316	323	357	346	353
20	239	230	235	228	215	222	322	306	312	358	291	339
21	232	219	227	247	226	237	307	299	303	289	266	275
22	231	218	222	259	242	251	304	293	298	308	277	293
23	245	226	238	279	251	262	303	290	294	347	310	333
24	282	245	263	279	262	269	320	305	310	346	316	330
25	280	264	273	281	262	275	333	321	328	341	324	334
26	270	260	265	262	235	252	354	338	346	338	310	329
27	262	248	257	236	228	233	364	357	360	301	238	268
28	241	191	212	242	225	234	371	365	368	236	229	232
29	203	190	198	233	225	229	379	367	374	254	230	241
30	212	188	201	237	225	232	364	350	355	268	254	260
31	---	---	---	260	236	248	346	326	338	---	---	---
MONTH	282	110	191	281	188	241	379	260	311	380	228	309

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	---	---	---	7.2	7.1	7.2	7.6	7.3	7.4
2	---	---	---	---	---	---	7.3	7.2	7.2	7.6	7.4	7.5
3	---	---	---	---	---	---	7.3	7.1	7.2	7.7	7.4	7.5
4	---	---	---	---	---	---	7.3	7.3	7.3	7.5	7.4	7.4
5	---	---	---	---	---	---	7.4	7.3	7.3	7.4	7.4	7.4
6	---	---	---	---	---	---	7.4	7.3	7.3	7.5	7.4	7.4
7	---	---	---	---	---	---	7.3	7.2	7.3	7.6	7.4	7.5
8	---	---	---	---	---	---	7.3	7.3	7.3	7.5	7.3	7.4
9	---	---	---	---	---	---	7.4	7.3	7.3	7.4	7.1	7.2
10	---	---	---	---	---	---	7.4	7.2	7.3	7.1	7.1	7.1
11	---	---	---	---	---	---	7.4	7.3	7.3	7.2	7.1	7.1
12	---	---	---	---	---	---	7.4	7.3	7.3	7.3	7.1	7.2
13	---	---	---	---	---	---	7.5	7.4	7.4	7.3	7.2	7.2
14	---	---	---	---	---	---	7.5	7.4	7.4	7.4	7.2	7.3
15	---	---	---	---	---	---	7.5	7.3	7.4	7.3	7.3	7.3
16	---	---	---	---	---	---	7.4	7.3	7.4	7.3	7.2	7.2
17	---	---	---	---	---	---	7.4	7.3	7.3	7.2	7.2	7.2
18	---	---	---	---	---	---	7.4	7.3	7.4	7.3	7.2	7.2
19	---	---	---	---	---	---	7.4	7.3	7.3	7.3	7.2	7.2
20	---	---	---	---	---	---	7.5	7.3	7.4	7.3	7.1	7.2
21	---	---	---	---	---	---	7.4	7.3	7.4	7.4	7.2	7.3
22	---	---	---	---	---	---	7.3	7.2	7.2	7.4	7.2	7.3
23	---	---	---	---	---	---	7.3	7.2	7.2	7.5	7.3	7.4
24	---	---	---	---	---	---	7.3	7.0	7.2	7.5	7.3	7.4
25	---	---	---	---	---	---	7.3	7.2	7.2	7.5	7.3	7.4
26	---	---	---	---	---	---	7.3	7.2	7.3	7.5	7.3	7.4
27	---	---	---	---	---	---	7.4	7.3	7.3	7.5	7.3	7.4
28	---	---	---	---	---	---	7.3	7.2	7.3	7.5	7.4	7.5
29	---	---	---	---	---	---	7.4	7.2	7.3	7.6	7.3	7.5
30	---	---	---	---	---	---	7.5	7.4	7.4	7.5	7.4	7.4
31	---	---	---	---	---	---	---	---	---	7.4	7.2	7.3
MONTH	---	---	---	---	---	---	7.5	7.0	7.3	7.7	7.1	7.3

LEHIGH RIVER BASIN

01454720 LEHIGH RIVER AT EASTON, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

LEHIGH RIVER BASIN

01454720 LEHIGH RIVER AT EASTON, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	---	---	---	11.6	11.3	11.4	---	---	---
2	---	---	---	---	---	---	11.8	11.5	11.6	---	---	---
3	---	---	---	---	---	---	11.8	11.5	11.6	---	---	---
4	---	---	---	---	---	---	11.7	11.6	11.6	---	---	---
5	---	---	---	---	---	---	11.8	11.4	11.6	---	---	---
6	---	---	---	---	---	---	11.9	11.4	11.6	---	---	---
7	---	---	---	---	---	---	11.5	10.7	11.2	---	---	---
8	---	---	---	---	---	---	11.3	10.6	10.9	---	---	---
9	---	---	---	---	---	---	11.0	10.3	10.7	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	10.0	9.4	9.8
12	---	---	---	---	---	---	---	---	---	9.4	8.9	9.2
13	---	---	---	---	---	---	---	---	---	9.4	8.5	9.0
14	---	---	---	---	---	---	---	---	---	8.9	8.4	8.7
15	---	---	---	---	---	---	---	---	---	9.1	8.6	8.9
16	---	---	---	---	---	---	---	---	---	9.6	9.0	9.3
17	---	---	---	---	---	---	---	---	---	9.8	9.4	9.7
18	---	---	---	---	---	---	---	---	---	9.5	9.3	9.4
19	---	---	---	---	---	---	---	---	---	9.9	9.2	9.5
20	---	---	---	---	---	---	---	---	---	10.1	9.0	9.3
21	---	---	---	---	---	---	---	---	---	9.6	8.9	9.3
22	---	---	---	---	---	---	---	---	---	9.3	8.5	8.9
23	---	---	---	---	---	---	---	---	---	9.3	8.3	8.7
24	---	---	---	---	---	---	---	---	---	9.0	8.1	8.4
25	---	---	---	---	---	---	---	---	---	9.4	8.2	8.8
26	---	---	---	---	---	---	---	---	---	9.8	9.0	9.4
27	---	---	---	---	---	---	---	---	---	9.9	9.3	9.6
28	---	---	---	---	---	---	---	---	---	10.0	9.2	9.6
29	---	---	---	---	---	---	---	---	---	9.9	9.0	9.4
30	---	---	---	---	---	---	---	---	---	9.3	8.8	9.0
31	---	---	---	---	---	---	---	---	---	9.2	8.6	8.9
MONTH	---	---	---	---	---	---	---	---	---	10.1	8.1	9.2

LEHIGH RIVER BASIN

01454720 LEHIGH RIVER AT EASTON, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	9.4	9.1	9.3	8.0	7.3	7.6	8.4	7.5	7.9	9.7	7.4	8.4
2	9.6	9.2	9.5	8.2	7.3	7.7	8.7	7.6	8.1	10.1	7.7	8.7
3	9.2	8.9	9.1	7.7	7.4	7.6	9.0	7.8	8.4	9.2	7.7	8.1
4	8.9	8.3	8.6	8.2	7.4	7.6	8.7	7.7	8.1	9.3	7.6	8.2
5	8.8	8.1	8.5	8.5	7.3	7.8	9.2	7.6	8.3	8.3	7.5	8.0
6	9.3	8.9	9.2	8.3	7.2	7.7	9.6	8.3	8.8	8.5	7.4	7.8
7	9.3	9.1	9.2	8.5	7.2	7.8	9.2	7.9	8.4	8.4	7.6	7.9
8	9.1	8.8	8.9	8.5	7.5	7.8	9.2	7.6	8.3	8.7	7.8	8.1
9	9.4	8.7	8.8	7.6	6.9	7.1	8.4	7.5	7.9	8.9	7.4	8.0
10	9.0	8.6	8.8	7.7	6.9	7.2	8.7	7.4	8.0	8.7	7.5	8.0
11	9.3	8.8	9.1	7.8	7.1	7.4	8.3	7.4	7.7	8.5	7.1	7.7
12	9.1	8.7	8.9	7.3	7.0	7.1	8.3	7.6	7.9	8.8	7.5	8.1
13	9.2	8.5	8.8	7.8	6.9	7.3	8.2	7.6	7.9	8.8	8.0	8.3
14	8.7	8.1	8.5	7.4	6.8	7.1	8.0	7.7	7.8	8.9	8.2	8.5
15	8.3	7.7	8.1	7.4	6.5	6.9	8.0	7.5	7.7	9.4	8.3	8.6
16	8.2	7.5	7.8	7.0	6.7	6.9	8.3	7.9	8.0	9.0	8.3	8.6
17	9.7	7.5	8.4	7.3	6.9	7.1	8.4	8.0	8.3	8.7	7.7	8.1
18	9.3	8.7	9.0	7.2	7.1	7.2	8.5	8.2	8.3	8.8	7.3	8.0
19	8.9	6.7	8.6	7.5	7.0	7.3	8.3	8.0	8.1	8.8	7.3	7.8
20	9.2	8.4	8.8	7.5	7.0	7.2	8.5	7.9	8.2	9.0	7.6	8.2
21	9.0	8.4	8.8	7.4	6.8	7.0	8.5	7.9	8.1	9.2	8.0	8.5
22	9.5	8.7	9.1	7.9	7.2	7.4	8.6	7.8	8.1	8.9	7.9	8.3
23	10.1	9.1	9.5	7.5	7.0	7.2	9.0	7.7	8.2	8.5	7.6	8.0
24	9.3	8.3	9.0	8.0	7.3	7.6	8.9	7.7	8.2	9.4	7.9	8.5
25	9.0	8.3	8.6	8.3	7.8	8.0	8.9	7.5	8.1	9.6	8.5	8.9
26	9.0	8.0	8.4	7.9	7.7	7.8	9.0	7.4	8.1	9.2	8.8	9.0
27	8.7	7.8	8.1	7.9	7.5	7.7	8.8	7.1	7.8	9.3	9.0	9.1
28	8.5	7.6	8.0	7.9	7.5	7.7	8.5	6.8	7.5	9.3	8.9	9.1
29	8.4	7.3	7.7	8.1	7.6	7.8	8.6	6.8	7.5	9.7	8.7	9.0
30	8.3	7.1	7.6	7.9	7.2	7.5	9.2	7.2	8.0	9.8	9.1	9.4
31	---	---	---	8.2	7.1	7.6	9.4	7.5	8.2	---	---	---
MONTH	10.1	6.7	8.7	8.5	6.5	7.4	9.6	6.8	8.1	10.1	7.1	8.4

LEHIGH RIVER BASIN

LAKES AND RESERVOIRS IN LEHIGH RIVER BASIN

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft downstream from Bear Creek and 5.0 mi northeast of White Haven. DRAINAGE AREA, 289 mi². PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft. Storage began Feb. 17, 1961; reservoir first reached conservation pool in June 1961. Total capacity elevation of 1,450.0 ft is 110,700 acre-ft of which 108,700 acre-ft is controlled storage above elevation 1,300.0 ft, conservation pool. Dead storage is 2,000 acre-ft. Reservoir is used for flood control and recreation. Flow regulated by three gates and low-flow by-pass system.

COOPERATION.--Records furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 62,100 acre-ft Sept. 28, 1985, at elevation of 1,417.08 ft; minimum contents (after establishment of conservation pool), 980 acre-ft July 6, 1982, at elevation of 1,287.70 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 9,850 acre-ft, Nov. 25, 26, at elevation of 1,343.83 ft; minimum contents, 1,601 acre-ft, Apr. 28, at elevation of 1,296.13 ft.

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 0.7 mi upstream from Hatchery, 2.6 mi upstream from Wild Creek Dam, 4.4 mi upstream from mouth and 10.0 mi northeast of Palmerton. DRAINAGE AREA, 16.5 mi². PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by city of Bethlehem).

REMARKS.--Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation of 1,000.00 ft. Storage began in October 1958. Capacity at elevation 1,000.00 ft is 19,980 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin in to Wild Creek basin.

COOPERATION.--Records furnished by city of Bethlehem.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 20,800 acre-ft, Apr. 16, 1983, at elevation of 1,001.69 ft; minimum contents, 176 acre-ft, Oct. 6, 1965, at elevation of 902.40 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 19,280 acre-ft, Jun. 21, at elevation of 998.52 ft; minimum contents, 9,773 acre-ft, Feb. 19, 20, 24, at elevation of 973.13 ft.

01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 1.6 mi upstream from mouth, 2.4 mi south of Hatchery, and 7.5 mi northeast of Palmerton. DRAINAGE AREA, 22.2 mi². PERIOD OF RECORD, January 1941 to current year. Nonrecording gage. Datum of gage is sea level (levels by city of Bethlehem).

REMARKS.--Reservoir formed by earthfill dam, with concrete ungated spillway at elevation of 820.00 ft. Storage began January 27, 1941; water in reservoir first reached minimum contents pool elevation in February 1941. Total capacity at elevation of 820.00 ft is 12,500 acre-ft of which 12,000 acre-ft is controlled storage. Reservoir is used for municipal water supply. Figures given herein represent usable contents. Regulation is accomplished by valves on pipe through dam. Since October 1969 the basin upstream has received diversion from Tunkhannock Creek basin.

COOPERATION.--Records furnished by city of Bethlehem.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 12,880 acre-ft, May 23, 1942, at elevation of 822.93 ft; minimum contents (after first filling), 2,680 acre-ft, Nov. 15, 1966, at elevation of 774.10 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 11,680 acre-ft, Dec. 3, at elevation of 818.55 ft; minimum contents 10,860 acre-ft, May 25, at elevation of 815.56 ft.

01449790 BELTEVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.45 mi upstream from gaging station on Pohopoco Creek, 0.55 mi upstream from Sawmill Run and 2.3 mi northeast of Parryville. DRAINAGE AREA, 96.3 mi². PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by U. S. Army Corps of Engineers).

REMARKS.--Lake formed by an earth and rockfill dam with ungated, partially lined spillway at elevation of 651.00 ft. Storage began Feb. 8, 1971. Capacity at elevation of 651.00 ft is 68,300 acre-ft. Ordinary minimum contents (conservation) pool elevation is 628.00 ft, capacity, 41,250 acre-ft. Dead storage is 1,390 acre-ft. Lake is used for recreation, flood control, low flow augmentation and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system, and two flood-control gates.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 49,730 acre-ft, Jan. 29, 1976, at elevation of 636.30 ft; minimum contents, 15,110 acre-ft, Mar. 31, 1983, at elevation of 588.79 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 42,500 acre-ft, June 1, at elevation of 629.26 ft; minimum contents, 33,380 acre-ft, Oct. 15, at elevation of 618.93 ft.

LEHIGH RIVER BASIN

LAKES AND RESERVOIRS IN LEHIGH RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)
01447780 Francis E. Walter Reservoir				01449400 Penn Forest Reservoir		
Sept. 30	1,302.33	2,220	--	984.58	13,560	--
Oct. 31	1,299.12	2,900	- 5.2	979.12	11,660	- 30.9
Nov. 30	1,323.67	2,130	+ 54.3	975.33	10,440	- 20.5
Dec. 31	1,306.09	2,620	- 40.8	979.54	10,200	- 3.9
CAL YR 1991	--	--	- 0.3	--	--	- 13.8
Jan. 31	1,302.13	2,200	- 6.8	974.20	10,090	- 1.8
Feb. 29	1,308.01	2,840	+ 11.1	973.48	29,880	- 3.7
Mar. 31	1,301.73	2,160	- 11.1	981.04	12,310	+ 39.6
Apr. 30	1,301.22	2,110	- 0.8	988.15	14,900	+ 43.5
May 31	1,318.82	4,320	+ 36.0	992.50	16,650	+ 28.5
June 30	1,304.61	2,470	- 31.1	997.58	18,860	+ 37.1
July 31	1,301.55	2,150	- 15.2	995.88	18,110	- 12.2
Aug. 31	1,302.16	2,210	+ 1.0	992.77	16,770	- 21.8
Sept. 30	1,307.70	2,800	+ 9.9	989.63	15,490	- 21.5
WTR YR 1992	--	--	+ 0.8	--	--	+ 2.7
01449700 Wild Creek Reservoir				01449790 Beltzville Lake		
Sept. 30	817.80	11,470	--	619.55	33,840	--
Oct. 31	818.09	11,550	+ 1.3	619.58	33,880	+ 0.7
Nov. 30	818.13	11,560	+ 0.2	621.75	35,690	+ 30.4
Dec. 31	818.04	11,540	- 0.3	626.73	40,090	+ 71.5
CAL YR 1991	--	--	- 0.8	--	--	- 1.1
Jan. 31	817.96	11,520	- 0.3	628.13	41,400	+ 21.3
Feb. 29	818.08	11,550	+ 0.5	627.89	41,200	- 3.5
Mar. 31	817.46	11,380	- 278	628.03	41,330	+ 2.1
Apr. 30	816.16	11,020	- 6.0	628.13	41,420	+ 1.5
May 31	816.00	10,980	+ 0.7	628.93	42,180	+ 12.4
June 30	817.30	11,330	+ 5.9	627.82	41,130	- 17.6
July 31	817.76	11,460	+ 2.1	627.99	41,290	+ 2.6
Aug. 31	817.92	11,510	+ 0.8	627.78	41,090	- 3.3
Sept. 30	818.04	11,540	+ 0.5	627.45	40,780	- 5.2
WTR YR 1992	--	--	+ 0.1	--	--	+ 9.6

DELAWARE RIVER BASIN

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'36", long 75°11'17", Warren County, NJ, Hydrologic Unit 02040105, just upstream of suspension bridge at Riegelsville, 600 ft upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931). Datum of gage is 125.12 ft above sea level. Water-quality samples are collected from the bridge and do not include flow of the Musconetcong River.

DRAINAGE AREA.--6,328 mi².

PERIOD OF RECORD.--Water years 1934, 1943, 1950, 1960-79, 1991 to current year.

COOPERATION.--Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy. Analyses of fecal coliform by the MPN method, enterococcus bacteria by the membrane filtration method, water-phase nutrients, and BOD were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (µS/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML)
OCT 1991 24...	1100	3400	205	7.8	13.0	9.3	87	<1.0	40	13
JAN 1992 23...	1045	7100	--	7.8	2.5	13.8	--	E1.6	50	10
APR 08...	1100	9200	161	7.7	9.0	11.5	100	E1.4	50	10
JUN 25...	1100	6600	176	8.4	20.0	8.6	96	<1.0	50	130
AUG 19...	1100	5400	203	8.0	20.5	8.2	92	<1.0	130	80

DATE	HARD-NESS TOTAL (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CAC03)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 1991 24...	73	19	6.3	12	1.5	49	32	21	<0.1
JAN 1992 23...	52	14	4.2	8.4	1.1	33	22	14	0.1
APR 08...	52	14	4.2	7.9	1.0	30	19	15	<0.1
JUN 25...	61	16	5.2	8.7	1.1	42	20	14	<0.1
AUG 19...	73	19	6.1	10	1.5	53	23	16	<0.1

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT 1991 24...	3.1	129	0.019	0.016	1.03	1.01	0.11	0.13	0.52
JAN 1992 23...	4.2	93	0.010	0.012	1.04	1.09	0.06	0.06	0.31
APR 08...	2.8	86	0.016	0.016	0.98	0.99	<0.03	0.04	0.26
JUN 25...	2.9	97	0.010	0.011	0.94	0.94	<0.03	<0.03	0.28
AUG 19...	3.5	115	0.022	0.023	0.94	0.94	<0.03	<0.03	0.26

DATE	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 1991 24...	0.26	1.5	1.3	0.12	0.08	3.0	0.3	1	9.2
JAN 1992 23...	0.22	1.3	1.3	0.08	0.04	2.5	0.4	1	19
APR 08...	0.23	1.2	1.2	0.05	0.03	2.1	0.3	7	174
JUN 25...	0.17	1.2	1.1	0.07	0.06	2.4	0.3	1	18
AUG 19...	0.17	1.2	1.1	0.11	0.09	2.6	0.4	4	58

DELAWARE RIVER BASIN

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ARSENIC TOTAL (µG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE)	BORON, TOTAL RECOV- ERABLE (µG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)
JUN 1992 25...	1100	11	<1	<10	30	<1	<1	2

DATE	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (µG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
JUN 1992 25...	90	<1	20	<0.10	2	<1	20

COOKS CREEK BASIN

01457790 COOKS CREEK AT DURHAM FURNACE, PA

LOCATION.--Lat 40°34'56", long 75°12'20", Bucks County, Hydrologic Unit 02040105, on left downstream side of bridge, 0.8 mi west of Route 611, off Route 212 at Durham Furnace, and 1.0 mi above mouth.

DRAINAGE AREA.--29.4 mi².

PERIOD OF RECORD.--December 1990 to January 1993 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 170 ft above sea level, from topographic map. Previously a low-flow partial-record station 0.3 mi downstream.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.6	17	19	19	23	33	16	25	13	14	7.2
2	10	9.6	17	17	18	22	30	15	19	11	12	7.0
3	10	9.6	718	17	17	21	28	15	16	12	11	10
4	9.9	9.1	309	19	16	20	26	14	14	18	11	11
5	9.5	9.1	77	20	15	19	24	14	202	12	11	9.1
6	11	9.1	43	18	15	18	22	14	237	20	10	9.0
7	11	9.1	30	17	14	25	22	13	57	13	9.6	36
8	9.5	9.1	26	16	15	30	21	42	35	11	9.0	16
9	9.1	9.1	24	17	14	24	20	91	28	33	17	12
10	9.1	8.8	78	19	e14	23	20	35	23	15	12	11
11	9.8	12	34	17	e14	143	25	29	20	13	15	17
12	12	11	28	16	e13	58	22	24	18	11	19	12
13	10	10	30	15	e13	38	19	22	17	12	12	10
14	9.4	9.5	33	62	13	30	19	20	16	12	12	9.5
15	15	9.1	28	38	16	27	18	18	15	29	11	9.1
16	22	9.1	24	25	45	23	18	23	14	30	12	8.6
17	178	8.7	21	e22	25	22	21	20	14	17	23	8.0
18	58	8.1	20	e19	23	21	23	19	14	35	31	7.4
19	26	8.7	e17	e16	27	25	24	18	30	18	25	8.2
20	20	8.3	e15	e17	27	22	22	16	22	15	18	7.3
21	17	8.9	e16	e17	24	23	21	15	16	13	15	6.8
22	15	292	16	15	22	23	23	14	15	12	13	8.4
23	14	305	16	48	22	23	21	14	14	26	11	15
24	13	54	16	118	21	22	20	13	18	20	10	8.3
25	13	30	14	38	22	31	20	14	16	16	9.8	7.9
26	11	24	13	e26	75	116	19	15	14	14	9.5	31
27	11	20	13	e24	42	578	18	16	14	46	9.0	24
28	10	18	12	e19	32	133	17	13	13	21	9.2	25
29	9.9	17	23	e18	28	69	17	12	12	17	10	17
30	9.6	16	24	e18	---	48	16	12	14	16	8.6	14
31	9.6	---	19	e18	---	42	---	48	---	15	7.7	---
TOTAL	592.4	971.6	1771	785	661	1742	649	664	982	566	407.4	382.8
MEAN	19.1	32.4	57.1	25.3	22.8	56.2	21.6	21.4	32.7	18.3	13.1	12.8
MAX	178	305	718	118	75	578	33	91	237	46	31	36
MIN	9.1	8.1	12	15	13	18	16	12	12	11	7.7	6.8

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
MEAN	19.1	32.4	57.1	56.6	31.6	68.3	42.6	26.9	26.7	20.2	12.8	12.7
MAX	19.1	32.4	57.1	87.8	40.6	80.5	63.6	32.3	32.7	22.1	13.1	12.8
(WY)	1992	1992	1992	1991	1991	1991	1991	1991	1992	1991	1992	1992
MIN	19.1	32.4	57.1	25.3	22.8	56.2	21.6	21.4	20.7	18.3	12.4	12.7
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1991	1992	1991	1991

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR
ANNUAL TOTAL	14674.5	10174.2
ANNUAL MEAN	40.2	27.8
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	718 Dec 3	718 Dec 3
LOWEST DAILY MEAN	7.0 Sep 18	6.8 Sep 21
ANNUAL SEVEN-DAY MINIMUM	7.1 Sep 12	7.8 Sep 16
INSTANTANEOUS PEAK FLOW	1870 Dec 3	1870 Dec 3
INSTANTANEOUS PEAK STAGE	3.78 Jan 16	3.64 Dec 3
INSTANTANEOUS LOW FLOW	7.0 Sep 17	6.4 Sep 21
10 PERCENT EXCEEDS	81	35
50 PERCENT EXCEEDS	23	17
90 PERCENT EXCEEDS	9.1	9.5

COOKS CREEK BASIN

01457790 COOKS CREEK AT DURHAM FURNACE, PA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	30	32	---	---	---	---	---	---	---	---
2	12	11	28	28	---	---	---	---	---	---	---	---
3	11	277	26	26	---	---	---	---	---	---	---	---
4	10	57	23	27	---	---	---	---	---	---	---	---
5	9.6	35	24	310	---	---	---	---	---	---	---	---
6	9.6	60	21	106	---	---	---	---	---	---	---	---
7	9.2	32	21	66	---	---	---	---	---	---	---	---
8	9.1	27	20	53	---	---	---	---	---	---	---	---
9	16	23	19	42	---	---	---	---	---	---	---	---
10	33	21	19	34	---	---	---	---	---	---	---	---
11	31	19	1090	32	---	---	---	---	---	---	---	---
12	38	18	389	---	---	---	---	---	---	---	---	---
13	22	510	163	---	---	---	---	---	---	---	---	---
14	19	71	87	---	---	---	---	---	---	---	---	---
15	18	41	59	---	---	---	---	---	---	---	---	---
16	16	30	48	---	---	---	---	---	---	---	---	---
17	14	26	441	---	---	---	---	---	---	---	---	---
18	13	24	213	---	---	---	---	---	---	---	---	---
19	13	21	96	---	---	---	---	---	---	---	---	---
20	13	19	79	---	---	---	---	---	---	---	---	---
21	12	19	54	---	---	---	---	---	---	---	---	---
22	12	32	44	---	---	---	---	---	---	---	---	---
23	11	e2740	39	---	---	---	---	---	---	---	---	---
24	12	224	34	---	---	---	---	---	---	---	---	---
25	15	135	31	---	---	---	---	---	---	---	---	---
26	12	96	29	---	---	---	---	---	---	---	---	---
27	12	86	26	---	---	---	---	---	---	---	---	---
28	11	55	27	---	---	---	---	---	---	---	---	---
29	11	42	30	---	---	---	---	---	---	---	---	---
30	11	34	36	---	---	---	---	---	---	---	---	---
31	11	---	39	---	---	---	---	---	---	---	---	---
TOTAL	459.5	4796	3285	---	---	---	---	---	---	---	---	---
MEAN	14.8	160	106	---	---	---	---	---	---	---	---	---
MAX	38	2740	1090	---	---	---	---	---	---	---	---	---
MIN	9.1	11	19	---	---	---	---	---	---	---	---	---

e Estimated.

TINICUM CREEK BASIN

01458900 TINICUM CREEK NEAR OTTSVILLE, PA

LOCATION.--Lat 40°28'14", long 75°08'13", Bucks County, Hydrologic Unit 02040105, at concrete bridge on gravel road, 0.9 mi below confluence of Rapp Creek and Beaver Creek, 1.5 mi east of Ottsville, and 5.3 mi above mouth.

DRAINAGE AREA.--14.7 mi².

PERIOD OF RECORD.--December 1990 to January 1993 (discontinued). Crest-stage gage at same site and datum, 1971-1981. Low-flow partial-record station, 1982-1990.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.96	1.3	e7.7	7.2	e12	18	6.7	28	.38	5.6	.41
2	.10	.79	2.1	4.5	13	e11	15	6.2	12	.51	3.3	.59
3	.13	.68	190	4.8	6.7	e11	13	5.8	7.5	.98	2.3	.98
4	.17	.64	94	8.0	4.2	e11	11	5.8	5.4	2.1	1.8	2.9
5	.14	.68	25	11	8.1	e10	9.9	5.1	114	1.5	1.4	2.8
6	.62	.86	20	7.1	4.9	e10	11	4.5	149	4.6	1.1	1.7
7	.41	.73	9.8	5.2	3.0	e18	9.0	4.1	35	1.9	2.8	8.8
8	.63	.82	6.0	4.0	2.3	e18	8.3	48	36	.91	3.1	5.5
9	1.1	.80	5.2	4.7	3.9	e16	8.4	141	27	7.6	2.4	3.6
10	1.4	.64	33	7.9	3.4	e17	11	48	15	4.6	1.2	3.0
11	1.7	.95	17	5.7	2.9	e40	14	32	8.2	3.2	1.1	6.7
12	1.6	1.0	10	4.4	2.1	e27	12	20	5.8	1.6	3.2	4.0
13	1.0	1.1	14	4.0	2.5	e19	9.3	15	4.4	1.1	1.4	2.4
14	1.0	1.4	22	31	2.2	e15	7.6	12	3.6	1.3	1.3	1.7
15	1.9	.87	16	e14	5.3	e13	7.0	9.0	3.1	3.0	1.2	1.4
16	4.9	1.8	8.9	e8.0	47	e11	6.7	14	2.5	9.7	2.6	1.3
17	26	.90	5.9	e7.5	e13	e10	9.8	14	1.8	4.4	4.3	1.4
18	13	.71	4.8	e6.4	e10	e9.8	14	10	1.8	11	7.4	1.3
19	3.7	.72	e4.0	e5.4	e19	e14	20	8.6	3.1	5.4	5.9	1.1
20	2.0	.99	e3.7	e5.7	e14	14	15	6.6	4.7	3.7	4.1	1.1
21	1.4	1.0	3.1	e5.8	e13	15	13	5.6	3.1	2.7	2.8	1.0
22	1.2	46	2.4	e5.7	e12	15	20	4.8	2.4	2.9	1.7	1.3
23	1.5	68	2.6	e5.6	e11	15	20	4.1	1.9	3.1	1.2	1.5
24	.73	16	2.6	75	e10	15	14	3.5	2.4	7.6	.97	1.3
25	.63	6.3	2.1	48	e9.6	26	12	3.1	2.8	3.9	1.0	1.6
26	.51	3.5	e2.0	28	e42	84	11	3.4	5.7	2.9	.79	5.1
27	.59	2.2	1.6	14	e20	175	9.9	3.7	3.1	17	.71	7.2
28	.70	1.5	1.1	9.0	e16	48	9.0	3.4	2.3	7.4	.87	7.5
29	.78	1.2	8.7	3.2	e14	27	10	2.7	2.1	4.0	2.3	5.1
30	.84	1.3	16	4.2	---	21	7.7	3.6	.71	3.0	1.6	7.0
31	.97	---	9.2	3.8	---	21	---	41	---	3.8	.53	---
TOTAL	71.41	165.04	544.1	359.3	322.3	768.8	356.6	495.3	494.41	127.78	71.97	91.28
MEAN	2.30	5.50	17.6	11.6	11.1	24.8	11.9	16.0	16.5	4.12	2.32	3.04
MAX	26	68	190	75	47	175	20	141	149	17	7.4	8.8
MIN	.06	.64	1.1	3.2	2.1	9.8	6.7	2.7	.71	.38	.53	.41
CFSM	.16	.37	1.19	.79	.76	1.69	.81	1.09	1.12	.28	.16	.21
IN.	.18	.42	1.38	.91	.82	1.95	.90	1.25	1.25	.32	.18	.23

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

	MEAN	2.30	5.50	17.6	25.1	17.1	32.4	21.0	11.7	8.96	2.88	1.70	5.29
MAX	2.30	2.50	17.6	38.5	23.3	40.1	30.2	16.0	16.5	4.12	2.32	3.04	
(WY)	1992	1992	1992	1991	1991	1991	1991	1992	1992	1992	1992	1992	
MIN	2.30	5.50	17.6	11.6	11.1	24.8	11.9	7.41	1.43	1.63	1.07	1.55	
(WY)	1992	1992	1992	1992	1992	1992	1992	1991	1991	1991	1991	1991	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

ANNUAL TOTAL	5176.00	3868.29
ANNUAL MEAN	14.2	10.6
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	190	190
LOWEST ANNUAL MEAN	.05	.06
ANNUAL SEVEN-DAY MINIMUM	.10	.23
INSTANTANEOUS PEAK FLOW		643
INSTANTANEOUS PEAK STAGE		3.98
INSTANTANEOUS LOW FLOW		.03
ANNUAL RUNOFF (CFSM)	.96	.72
ANNUAL RUNOFF (INCHES)	13.10	9.79
10 PERCENT EXCEEDS	35	20
50 PERCENT EXCEEDS	3.1	4.7
90 PERCENT EXCEEDS	.45	.89

TINICUM CREEK BASIN

01458900 TINICUM CREEK NEAR OTTSVILLE, PA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

[illegible]

TOHICKON CREEK BASIN

01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA

LOCATION.--Lat 40°26'01", long 75°07'01", Bucks County, Hydrologic Unit 02040105, on right bank at highway bridge, 1.5 mi northeast of Pipersville, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--97.4 mi².

PERIOD OF RECORD.--July 1935 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 258.96 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Regulated since December 1973 by Nockamixon Reservoir about 6.2 mi upstream. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	13	36	85	57	92	121	39	170	12	41	8.7
2	20	326	40	68	53	73	104	38	130	10	28	7.0
3	19	321	910	60	53	66	87	39	87	9.2	23	6.5
4	17	10	1220	77	39	60	71	32	59	11	21	7.5
5	15	4.1	415	105	35	55	67	28	457	11	20	8.4
6	15	3.6	207	94	34	50	56	60	1330	23	17	7.8
7	14	3.4	129	78	28	69	48	19	497	22	14	13
8	12	3.3	95	61	28	162	51	35	309	20	11	24
9	9.2	3.1	82	58	33	151	46	342	260	28	10	27
10	7.8	3.1	233	75	e32	125	45	377	140	30	10	27
11	7.4	3.7	219	75	e31	818	59	267	87	28	11	42
12	7.5	3.8	147	64	e28	483	75	169	60	24	13	48
13	7.5	3.7	129	56	e27	246	67	115	46	21	15	35
14	6.5	3.5	181	146	e27	381	55	89	37	21	15	27
15	7.0	3.3	170	243	28	364	49	63	31	23	14	23
16	15	3.3	120	161	162	26	45	77	25	39	13	20
17	74	3.1	84	104	186	19	50	86	22	40	19	18
18	203	3.2	70	74	142	18	65	80	19	63	41	16
19	142	3.1	63	e60	144	25	99	65	21	69	68	15
20	82	3.1	49	e50	151	29	107	52	28	49	60	12
21	51	3.1	40	e43	129	48	96	43	29	36	42	10
22	39	34	37	37	104	63	130	37	26	27	32	9.0
23	32	201	35	45	92	99	99	32	21	25	26	9.2
24	28	249	38	267	87	115	87	29	21	26	22	7.7
25	26	145	35	230	86	134	79	27	21	26	20	5.6
26	25	88	31	145	246	309	65	24	20	28	18	15
27	23	59	30	102	271	1060	59	24	19	56	16	29
28	23	46	28	75	179	567	50	22	17	79	15	66
29	20	39	54	64	136	281	45	20	15	53	14	67
30	16	35	114	57	---	168	41	18	13	38	13	44
31	15	---	111	55	---	145	---	80	---	35	10	---
TOTAL	1001.9	1623.5	5152	2914	2648	6301	2118	2428	4017	982.2	692	655.4
MEAN	32.3	54.1	166	94.0	91.3	203	70.6	78.3	134	31.7	22.3	21.8
MAX	203	326	1220	267	271	1060	130	377	1330	79	68	67
MIN	6.5	3.1	28	37	27	18	41	18	13	9.2	10	5.6
MEAN†	31.2	57.6	167	95.1	92.5	204	70.6	79.4	129	35.1	17.7	27.7
CFSM†	.32	.59	1.71	.98	.95	2.09	.72	.82	1.32	.36	.18	.28
IN.†	.37	.66	1.98	1.13	1.02	2.41	.81	.94	1.48	.42	.21	.32

† Adjusted for change in contents in Nockamixon Reservoir.

e Estimated.

TOHICKON CREEK BASIN

01459500 TOHICKON CREEK NEAR PIPERSVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	71.6	172	211	245	205	261	231	210	90.0	81.7	43.7	83.0
MAX	264	553	566	916	436	651	707	579	314	602	232	430
(WY)	1980	1976	1978	1979	1984	1978	1983	1984	1989	1984	1978	1989
MIN	5.87	24.7	19.5	16.4	28.3	43.1	36.9	29.1	11.4	8.85	4.12	4.03
(WY)	1983	1974	1981	1977	1974	1976	1985	1986	1977	1980	1983	1980

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1974 - 1992

ANNUAL TOTAL	38634.9		30533.0									
ANNUAL MEAN	106	†104	83.4	†83.9					159	†161		
HIGHEST ANNUAL MEAN									300	†301	1984	
LOWEST ANNUAL MEAN									78.7		1981	
HIGHEST DAILY MEAN	1730	Jan 17	1330	Jun 6					6750	Jul 7	1984	
LOWEST DAILY MEAN	1.6	Sep 12	3.1	Nov 9					1.6	Sep 12	1991	
ANNUAL SEVEN-DAY MINIMUM	1.7	Sep 12	3.2	Nov 15					1.7	Sep 12	1991	
INSTANTANEOUS PEAK FLOW			2330	Jun 5					a16200	Jul 7	1984	
INSTANTANEOUS PEAK STAGE			4.94	Jun 5					11.32	Jul 7	1984	
INSTANTANEOUS LOW FLOW			b3.0	Nov 10,16,17,20								
ANNUAL RUNOFF (CFPM)	1.09	† 1.07	.86	† .86					1.63	† 1.65		
ANNUAL RUNOFF (INCHES)	14.76	†14.48	11.66	†11.70					22.12	†22.45		
10 PERCENT EXCEEDS	257		173						396			
50 PERCENT EXCEEDS	39		40						45			
90 PERCENT EXCEEDS	3.6		10						6.7			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1973, BY WATER YEAR (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	43.4	138	183	190	235	300	217	121	79.0	54.0	66.8	54.3
MAX	367	601	464	501	572	795	612	430	413	288	515	513
(WY)	1956	1973	1973	1949	1971	1936	1952	1948	1972	1938	1955	1960
MIN	1.46	3.51	11.5	37.8	42.5	133	35.2	15.9	4.64	1.68	1.12	1.21
(WY)	1965	1965	1966	1966	1947	1949	1946	1955	1965	1957	1957	1957

SUMMARY STATISTICS

WATER YEARS 1936 - 1973

ANNUAL TOTAL												
ANNUAL MEAN	240											
HIGHEST ANNUAL	240					1973						
LOWEST ANNUAL MEAN	45.8					1965						
HIGHEST DAILY MEAN	6820	Sep 12				1960						
LOWEST DAILY MEAN	.10	Sep 24				1941						
ANNUAL SEVEN-DAY MINIMUM	.47	Jul 24				1955						
INSTANTANEOUS PEAK FLOW	16000	Aug 18				1955						
INSTANTANEOUS PEAK FLOW	11.26	Aug 18				1955						
INSTANTANEOUS LOW FLOW	.05	Sep 24				1941						
ANNUAL RUNOFF (CFPM)	1.43											
ANNUAL RUNOFF (INCHES)	19.48											
10 PERCENT EXCEEDS	325											
50 PERCENT EXCEEDS	37											
90 PERCENT EXCEEDS	3.8											

† Adjusted for change in contents in Nockamixon Reservoir.

a From rating curve extended above 3,600 ft³/s on basis of slope-area measurement at gage height 10.48 ft.

b Also Sep 2

TOHICKON CREEK BASIN

RESERVOIR IN TOHICKON CREEK BASIN

01459350 NOCKAMIXON RESERVOIR.--Lat 40°28'13", long 75°11'10", Bucks County, Hydrologic Unit 02040105, at dam on Tohickon Creek, 6.2 mi upstream from gaging station on Tohickon Creek, 2.9 mi upstream from Mink Run, 1.3 mi east of Ottsville. DRAINAGE AREA, 73.3 mi². PERIOD OF RECORD, December 1973 to current year. GAGE, water stage recorder. Datum of gage is sea level (levels by Pennsylvania Department of Environmental Resources).

REMARKS.--Reservoir formed by earthfill dam with concrete spillway at elevation of 395.0 ft. Storage began December 1973. Total capacity 66,500 acre-ft at elevation of 410 ft. Reservoir is used primarily for recreation, but can be used for water supply and flood control.

COOPERATION.--Records furnished by Pennsylvania Department of Environmental Resources.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 44,380 acre-ft, Jan. 20, 1979, at elevation of 397.85 ft; minimum contents (after first filling), 15,900 acre-ft, around Dec. 31, 1975, at elevation of 372.78 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 40,410 acre-ft, May 31 and Sept. 29, at elevation of 395.15 ft; minimum contents, 38,590 acre-ft, Oct. 3, at elevation of 393.85 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)
01459350 Nockamixon Reservoir			
Sept. 30	394.80	39,920	--
Oct. 31	394.75	39,850	- 1.1
Nov. 30	394.90	40,060	+ 3.5
Dec. 31	394.95	40,130	+ 1.1
CAL YR 1991	--	--	- 1.7
Jan. 31	395.00	40,200	+ 1.1
Feb. 29	395.05	40,270	+ 1.2
Mar. 31	395.10	40,340	+ 1.1
Apr. 30	395.10	40,340	0
May 31	395.15	40,410	+ 1.1
June 30	394.95	40,130	- 4.7
July 31	395.10	40,340	+ 3.4
Aug. 31	394.90	40,060	- 4.6
Sept. 30	395.15	40,410	+ 5.9
WTR YR 1992	--	--	+ 0.7

PAUNNACUSSING CREEK BASIN

01460800 PAUNNACUSSING CREEK AT CARVERSVILLE, PA

LOCATION.--Lat 40°23'17", long 75°03'43", Bucks County, Hydrologic Unit 02040105, on right bank at downstream bridge at Carversville, and 2.1 mi above mouth.

DRAINAGE AREA.--6.49 mi².

PERIOD OF RECORD.--December 1990 to January 1993 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 210 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.0	3.2	4.1	4.3	5.3	12	4.0	5.8	2.7	1.8	1.3
2	2.1	1.9	6.5	4.2	e4.1	5.0	11	3.9	4.3	2.5	1.7	1.5
3	2.2	1.7	130	4.2	3.9	5.0	9.7	3.7	3.7	3.0	1.7	3.1
4	2.0	1.7	32	5.6	3.8	4.8	9.0	3.6	3.4	3.5	1.9	1.6
5	1.9	1.7	11	5.2	3.7	4.6	8.3	3.5	220	2.8	1.6	1.5
6	2.0	1.6	8.9	4.7	e3.7	4.4	7.6	3.4	101	6.8	1.5	2.2
7	1.9	1.6	7.3	4.4	3.6	11	7.3	3.4	23	2.8	1.5	2.0
8	1.9	1.5	6.6	4.2	3.7	8.0	6.9	29	16	2.6	1.5	1.7
9	1.9	1.9	6.9	5.0	3.7	6.4	6.5	18	12	5.4	1.4	1.4
10	2.0	2.2	21	4.8	e3.7	8.3	6.4	8.6	9.5	3.1	1.7	2.3
11	2.2	3.3	7.9	4.3	e3.6	52	8.2	7.1	7.9	2.4	2.6	1.6
12	2.3	2.8	6.6	4.1	e3.6	15	6.4	6.1	7.1	2.4	1.5	1.3
13	2.0	2.4	7.3	4.0	e5.0	12	5.7	5.7	6.2	2.4	1.9	1.2
14	2.0	2.1	8.1	13	3.5	10	5.5	5.1	5.8	2.9	1.7	1.2
15	4.2	2.0	6.5	7.0	11	8.6	5.2	4.6	5.4	12	1.8	1.2
16	2.8	2.0	5.7	6.3	15	7.7	5.6	7.8	4.9	4.2	2.5	1.2
17	20	1.8	5.6	e6.0	5.5	7.4	6.1	5.4	4.9	4.7	3.7	1.1
18	4.5	1.8	5.2	e5.3	5.1	6.9	6.4	4.8	4.4	5.4	2.4	.90
19	3.1	1.9	4.5	e5.0	5.9	9.5	7.1	4.3	6.4	2.6	1.8	.78
20	3.0	2.0	4.3	e4.8	5.4	11	5.7	4.1	5.5	2.1	1.5	.71
21	2.8	2.1	4.6	4.2	4.9	11	5.3	3.9	4.4	2.0	1.4	.74
22	2.8	18	4.4	4.3	4.8	9.9	7.0	3.7	4.3	2.2	1.4	1.2
23	2.5	7.0	4.3	9.2	4.9	11	5.6	3.6	3.9	2.8	1.3	1.0
24	2.5	3.5	4.1	11	4.7	10	5.3	3.6	4.6	2.2	1.3	.80
25	2.3	3.0	3.8	5.7	5.0	10	5.3	3.9	4.1	2.4	1.3	3.5
26	2.2	2.8	3.6	5.2	11	25	4.9	3.7	3.6	2.5	17	5.9
27	2.1	2.7	3.6	e4.9	6.5	54	5.0	3.7	3.4	2.5	4.0	3.9
28	2.1	2.6	3.4	4.7	6.1	19	4.7	3.3	3.2	2.0	2.8	2.3
29	2.0	2.6	11	4.6	5.7	15	4.3	3.2	3.0	1.9	1.6	1.7
30	2.1	2.6	6.0	4.5	---	14	4.2	3.5	2.9	2.0	1.5	1.4
31	2.0	---	4.5	4.4	---	15	---	16	---	2.4	1.5	---
TOTAL	91.6	86.8	348.4	168.9	155.4	396.8	198.2	188.2	494.6	101.2	72.8	52.23
MEAN	2.95	2.89	11.2	5.45	5.36	12.8	6.61	6.07	16.5	3.26	2.35	1.74
MAX	20	18	130	13	15	54	12	29	220	12	17	5.9
MIN	1.9	1.5	3.2	4.0	3.5	4.4	4.2	3.2	2.9	1.9	1.3	.71
CFSM	.46	.45	1.73	.84	.83	1.97	1.02	.94	2.54	.50	.36	.27
IN.	.53	.50	2.00	.97	.89	2.27	1.14	1.08	2.83	.58	.42	.30

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
MEAN	2.95	2.89	11.2	10.4	7.12	12.4	8.68	7.28	9.92	3.20	2.82	2.18
MAX	2.95	2.89	11.2	15.3	8.95	12.8	10.7	8.48	16.5	3.26	3.28	2.62
(WY)	1992	1992	1992	1991	1991	1992	1991	1991	1992	1992	1991	1991
MIN	2.95	2.89	11.2	5.45	5.36	12.0	6.61	6.07	3.35	3.13	2.35	1.74
(WY)	1992	1992	1992	1992	1992	1991	1992	1992	1991	1991	1992	1992

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR
ANNUAL TOTAL	2587.3	2355.13
ANNUAL MEAN	7.09	6.43
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	130 Dec 3	220 Jun 5
LOWEST DAILY MEAN	1.2 Jul 22	.71 Sep 20
ANNUAL SEVEN-DAY MINIMUM	1.4 Jul 16	.88 Sep 18
INSTANTANEOUS PEAK FLOW		904 Jun 5
INSTANTANEOUS PEAK STAGE		3.14 Jun 5
INSTANTANEOUS LOW FLOW		.62 Sep 20
ANNUAL RUNOFF (CFSM)	1.09	.99
ANNUAL RUNOFF (INCHES)	14.83	13.50
10 PERCENT EXCEEDS	14	11
50 PERCENT EXCEEDS	5.4	4.1
90 PERCENT EXCEEDS	1.8	1.6

PAUNNACUSSING CREEK BASIN

01460800 PAUNNACUSSING CREEK AT CARVERSVILLE, PA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.1	3.9	8.4	7.8	---	---	---	---	---	---	---	---
2	e1.1	4.4	7.7	7.0	---	---	---	---	---	---	---	---
3	e1.3	54	7.0	6.8	---	---	---	---	---	---	---	---
4	e1.3	6.6	6.6	7.0	---	---	---	---	---	---	---	---
5	e1.3	5.8	7.1	53	---	---	---	---	---	---	---	---
6	1.3	7.6	6.0	15	---	---	---	---	---	---	---	---
7	1.3	5.4	5.9	12	---	---	---	---	---	---	---	---
8	1.4	4.9	5.5	---	---	---	---	---	---	---	---	---
9	6.5	4.8	5.2	---	---	---	---	---	---	---	---	---
10	7.1	4.7	7.4	---	---	---	---	---	---	---	---	---
11	4.2	4.7	493	---	---	---	---	---	---	---	---	---
12	4.1	4.9	115	---	---	---	---	---	---	---	---	---
13	3.8	22	53	---	---	---	---	---	---	---	---	---
14	3.8	4.5	28	---	---	---	---	---	---	---	---	---
15	3.9	3.7	21	---	---	---	---	---	---	---	---	---
16	3.8	3.4	18	---	---	---	---	---	---	---	---	---
17	3.7	3.3	83	---	---	---	---	---	---	---	---	---
18	3.8	3.2	33	---	---	---	---	---	---	---	---	---
19	3.8	3.0	21	---	---	---	---	---	---	---	---	---
20	3.8	2.8	21	---	---	---	---	---	---	---	---	---
21	3.8	2.8	16	---	---	---	---	---	---	---	---	---
22	3.8	4.0	15	---	---	---	---	---	---	---	---	---
23	3.8	142	13	---	---	---	---	---	---	---	---	---
24	3.9	13	12	---	---	---	---	---	---	---	---	---
25	4.0	12	10	---	---	---	---	---	---	---	---	---
26	3.8	19	9.5	---	---	---	---	---	---	---	---	---
27	3.7	15	8.3	---	---	---	---	---	---	---	---	---
28	3.6	11	9.0	---	---	---	---	---	---	---	---	---
29	3.8	10	9.4	---	---	---	---	---	---	---	---	---
30	3.7	9.6	11	---	---	---	---	---	---	---	---	---
31	3.9	---	9.7	---	---	---	---	---	---	---	---	---
TOTAL	104.2	396.0	1075.7	---	---	---	---	---	---	---	---	---
MEAN	3.36	13.2	34.7	---	---	---	---	---	---	---	---	---
MAX	7.1	142	493	---	---	---	---	---	---	---	---	---
MIN	1.1	2.8	5.2	---	---	---	---	---	---	---	---	---
CFSM	.52	2.03	5.35	---	---	---	---	---	---	---	---	---
IN.	.60	2.27	6.17	---	---	---	---	---	---	---	---	---

e Estimated

DELAWARE RIVER BASIN

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

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

DRAINAGE AREA.--6,598 mi².

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

COOPERATION.--Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection and Energy. Analyses of fecal coliform by the MPN method, enterococcus bacteria by the membrane filtration method, water-phase nutrients, and BOD were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (µS/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	ENTERO-COCCI ME, MF WATER TOTAL (COL / 100 ML)
OCT 1991										
24...	1330	3200	197	8.1	13.5	10.1	96	<1.0	<20	<2
JAN 1992										
23...	1330	7600	--	7.7	2.5	14.5	--	E2.0	70	30
APR										
09...	1100	8800	165	8.0	10.5	12.2	110	E1.2	<20	<10
JUN										
24...	1100	5400	184	8.3	19.0	8.8	96	<1.0	<20	50
AUG										
19...	1200	5400	212	8.4	20.5	8.7	97	<1.0	490	30
DATE		HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 1991										
24...		70	18	6.1	11	1.5	47	31	20	<0.1
JAN 1992										
23...		56	15	4.6	9.3	1.2	35	23	15	0.1
APR										
09...		53	14	4.3	8.1	0.90	32	20	15	<0.1
JUN										
24...		66	17	5.8	9.0	1.2	45	21	14	<0.1
AUG										
19...		73	19	6.3	10	1.7	54	23	16	<0.1
DATE		SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT 1991										
24...		2.7	124	0.015	0.015	1.09	1.10	0.15	0.13	0.45
JAN 1992										
23...		4.0	98	0.014	0.014	1.15	1.14	0.06	0.05	0.36
APR										
09...		2.5	88	0.018	0.019	0.86	0.85	<0.03	<0.03	0.23
JUN										
24...		3.3	103	0.010	0.011	0.91	1.01	<0.03	<0.03	0.30
AUG										
19...		3.6	117	0.021	0.021	1.06	1.04	<0.03	<0.03	0.36
DATE		NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED, TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 1991										
24...		0.37	1.5	1.5	0.07	0.06	3.2	0.2	1	8.6
JAN 1992										
23...		0.32	1.5	1.5	0.59	0.57	2.6	0.1	1	21
APR										
09...		0.24	1.1	1.1	0.04	0.03	1.8	0.4	7	166
JUN										
24...		0.31	1.2	1.3	0.06	0.09	2.6	0.3	3	44
AUG										
19...		0.28	1.4	1.3	0.10	0.08	2.8	0.5	5	73

DELAWARE RIVER BASIN

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ARSENIC TOTAL (µG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE)	BORON, TOTAL RECOV- ERABLE (µG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)
JUN 1992 24...	1100	<10	<1	<10	20	<1	<1	2

DATE	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (µG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
JUN 1992 24...	100	<1	20	<0.10	2	<1	20

DELAWARE RIVER BASIN

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

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

DRAINAGE AREA.--6,780 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.

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

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Sept. 30, 1965, at datum 7.77 ft higher. Feb. 24, 1913 to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 450 ft downstream.

REMARKS.--No estimated daily discharges. Records excellent except from June 6 to Sept. 30, which are good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack and Hopatcong, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, Neversink, Wild Creek, and Merrill Creek Reservoirs and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs. Diversion to Bradshaw and Merrill Creek Reservoirs and to Delaware and Raritan Canal. Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply. Satellite gage height and water-quality parameter telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft above National Geodetic Vertical Datum of 1929, discharge estimated, 295,000 ft³/s. Maximum elevation since 1957, 30.6 ft above National Geodetic Vertical Datum of 1929, Mar. 8, 1904, from floodmark, due to ice jam.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	0245	*46,800	*13.98	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2610	2670	7710	6380	8040	9580	17200	12000	21700	5940	6500	3230
2	2760	2670	6990	6260	7260	8660	15900	11000	35300	5320	7640	3230
3	3020	2790	10600	5760	5840	8510	14700	10500	30200	4930	8650	3300
4	3030	2730	19400	6150	5450	8570	13600	10300	21900	4680	7120	3010
5	2990	2390	20700	6690	5830	8220	12400	10800	21000	4230	6660	4000
6	2940	2450	16900	6820	6130	7640	11400	10700	35600	4290	6030	4140
7	3240	2410	14200	6850	5420	7950	10400	9530	33600	4850	5660	3960
8	3140	2390	11900	7540	5540	9640	9850	9370	29600	5100	5490	4070
9	3200	2540	10600	7070	5630	10000	9370	13400	24700	5790	4910	4200
10	3350	2810	11200	6870	4560	11000	9150	15300	21200	7960	5300	3930
11	3070	2840	11800	6420	3370	15000	9110	13600	17900	6710	5250	4040
12	3170	2900	10800	6270	3960	20000	9380	11900	15000	5760	6770	4720
13	3460	2960	9820	5560	4520	27300	9320	10900	12500	5010	6720	6020
14	3590	3010	9950	5390	3930	20500	11500	9730	10900	4720	6000	5730
15	3230	3010	10300	7710	4320	16000	11300	8740	9470	4880	5090	4910
16	3480	3140	11000	9730	5710	13400	10100	8160	8090	6340	4700	4140
17	4240	2800	10900	10700	6320	11800	9520	10000	8040	7320	4320	3850
18	6840	2710	9890	8350	5410	10800	10600	9020	7070	8390	4610	3300
19	7510	2640	8750	7230	6260	10500	16400	8990	7250	8060	5060	3510
20	7060	2580	7230	5860	7230	10400	21700	9220	7750	6270	5550	3790
21	5880	2460	6540	5960	7190	10100	20200	7880	7160	5780	5270	4060
22	5160	2710	6800	6060	7160	9000	17700	7160	5910	5940	4630	3310
23	4590	10300	6840	6760	7280	8310	17200	6180	5370	5580	4390	3340
24	3680	26800	6750	9910	6280	7710	17800	6100	5560	5790	3740	4370
25	3230	25000	6480	12100	5860	7880	17300	5580	5990	5710	3350	4710
26	3130	17100	6000	10900	8010	8350	17500	5890	6650	5610	3300	4670
27	2860	13500	5320	9610	10600	16400	18600	6230	6320	5640	3610	5500
28	2700	11400	5190	8270	10400	29200	17100	6850	7990	5870	4040	5990
29	2910	9740	5120	8420	9960	29300	15400	6620	6560	6900	4490	5190
30	2970	8370	5710	8380	---	22200	13300	6240	5720	6980	4520	4750
31	2800	---	5970	8130	---	18400	---	6950	---	5910	4090	---
TOTAL	115840	181820	297360	234110	183470	412320	415000	284840	442000	182260	163460	126970
MEAN	3737	6061	9592	7552	6327	13300	13830	9188	14730	5879	5273	4232
MAX	7510	26800	20700	12100	10600	29300	21700	15300	35600	8390	8650	6020
MIN	2610	2390	5120	5390	3370	7640	9110	5580	5370	4230	3300	3010

DELAWARE RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6809	10390	12370	12160	12850	20590	22060	14220	9170	7090	5959	5801
MAX	28710	27340	31070	34950	27550	60840	52680	31690	33460	25720	30290	22490
(WY)	1956	1928	1974	1979	1951	1936	1940	1989	1972	1928	1955	1933
MIN	1632	1868	2037	2539	3500	7715	6828	5209	2572	1548	1808	1762
(WY)	1942	1915	1923	1981	1920	1981	1985	1965	1965	1965	1965	1932

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR			FOR 1992 WATER YEAR			WATER YEARS 1913 - 1992		
ANNUAL TOTAL	3129580			3039450			11610		
ANNUAL MEAN	8574			8305			19810		
HIGHEST ANNUAL MEAN							4708		
LOWEST ANNUAL MEAN							279000		
HIGHEST DAILY MEAN	36400			35600			Aug 20 1955		
LOWEST DAILY MEAN	2390			2390			Oct 31 1914		
ANNUAL SEVEN-DAY MINIMUM	2530			2530			Oct 31 1914		
INSTANTANEOUS PEAK FLOW				46800			329000a		
INSTANTANEOUS PEAK STAGE				13.98			Aug 20 1955		
INSTANTANEOUS LOW FLOW				2320			28.60b		
10 PERCENT EXCEEDS	17100			16100			1180		
50 PERCENT EXCEEDS	5720			6670			24400		
90 PERCENT EXCEEDS	2800			3140			7850		
							2980		

a From rating curve extended above 230,000 ft³/s, maximum flow since 1692.

b From high-water mark in gage house.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1968 to September 1978, May 1979 to current year.
 pH: June 1968 to September 1978, May to September 1979, February 1980 to August 1982, April 1983 to current year.

WATER TEMPERATURE: October 1944 to September 1978, May 1979 to current year.

DISSOLVED OXYGEN: October 1962 to September 1978, May 1979 to current year.

SUSPENDED-SEDIMENT DISCHARGE: Water years 1949 to 1981.

INSTRUMENTATION.--Temperature recorder since October 1944, water-quality monitor since October 1962. Monitor probes are located within raw water intake of Trenton Filtration Plant.

REMARKS.--Missing continuous water-quality records are the result of malfunctions of the instrument, or interruptions of flow through the filtration plant. Unpublished records of suspended sediment discharge for the period October 1, 1981 to March 31, 1982 are available in files of the district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 377 microsiemens, Feb. 12, 1985; minimum, 63 microsiemens, July 7, 1984.

pH: Maximum, 10.3, Aug. 9, 1983; minimum, 5.3, June 22, 1972.

WATER TEMPERATURE: Maximum, 37.0°C, July 21, 1977; minimum, 0.0°C, on many days during the winter months.

DISSOLVED OXYGEN: Maximum, 20.0 mg/l, Feb. 11, 1989; minimum, 4.0 mg/l, Nov. 9, 1972.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 277 microsiemens, NOV. 10; minimum, 89 microsiemens, June 6.

pH: Maximum, 9.7, Feb. 14; minimum, 6.9, Nov. 24-26, June 5, 6.

WATER TEMPERATURE: Maximum, 30.0°C, July 15; minimum, 0.0°C, on several days during the winter months.

DISSOLVED OXYGEN: Maximum, 17.9 mg/l, Feb. 14; minimum recorded, 6.0 mg/l, Aug. 29, but may have been lower during instrument malfunction, July 6-20.

COOPERATION.--Analyses of fecal coliform by the MPN method, enterococcus bacteria by the membrane filtration method, BOD, and water-phase nutrients for Oct. 24, 1991 and April 9, 1992, were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (µS/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	ENTERO-COCCI ME, MF WATER TOTAL (COL /100 ML)
OCT 1991												
24...	1300	3680	195	7.8	13.5	--	12.2	116	<1.0	20	--	<20
NOV												
20...	1230	9750	236	8.7	10.0	0.80	13.5	120	--	--	K7	--
JAN 1992												
27...	1300	9860	143	7.5	1.0	2.5	--	--	E1.7	20	K7	10
MAR												
12...	1100	19000	153	7.4	--	4.0	--	91	--	--	--	--
28...	1200	28800	166	7.4	6.0	38	--	92	--	--	--	--
APR												
09...	1200	9310	162	7.9	11.0	--	14.2	128	E1.9	5	--	<10
20...	1025	22600	120	7.4	8.0	5.4	12.0	101	--	--	--	--
JUN												
02...	1345	39300	109	7.4	16.0	25	9.3	94	--	--	--	--
29...	1330	6340	172	7.8	25.5	1.4	10.8	132	E1.4	70	28	<10
AUG												
13...	1200	6780	178	7.8	26.0	2.0	9.5	117	<1.0	<20	41	<10

DATE	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE (MG/L IT-FLD - CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT WH TOT FET (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 1991												
24...	--	66	17	5.7	11	1.5	--	--	44	--	25	17
NOV												
20...	<1	81	20	7.4	14	1.8	73	60	61	59	28	19
JAN 1992												
27...	K16	45	12	3.6	8.4	1.0	--	--	27	--	17	13
MAR												
12...	--	48	13	3.8	8.4	1.4	37	30	30	30	16	13
28...	--	54	15	4.0	9.2	1.2	--	--	29	--	20	16
APR												
09...	--	53	14	4.3	8.3	1.0	--	--	32	--	20	15
20...	--	37	10	2.8	6.2	0.80	--	--	21	--	15	12
JUN												
02...	--	34	9.5	2.4	5.6	0.90	28	23	21	24	13	9.4
29...	13	59	15	5.2	9.1	1.2	49	40	40	40	18	13
AUG												
13...	K4	62	16	5.4	9.5	1.3	43	36	44	36	19	14

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
OCT 1991											
24...	<0.1	2.7	111	0.009	0.009	0.93	0.94	0.16	0.25	0.39	0.34
NOV											
20...	0.1	--	131	0.020	0.010	1.00	1.00	<0.01	0.02	0.30	--
JAN 1992											
27...	0.2	4.0	79	<0.010	<0.010	0.73	0.73	0.03	0.03	0.30	--
MAR											
12...	0.2	3.7	82	0.020	0.010	0.87	0.83	0.08	0.08	0.90	--
28...	0.2	4.3	93	0.030	0.020	1.20	1.30	0.11	0.09	1.1	--
APR											
09...	<0.1	2.3	88	0.018	0.017	0.80	0.81	<0.03	<0.03	0.30	0.21
20...	0.2	3.0	65	0.010	0.010	0.59	0.59	0.03	0.03	0.30	--
JUN											
02...	<0.1	3.4	61	0.010	<0.010	0.54	0.57	0.05	0.03	0.90	--
29...	<0.1	1.8	90	0.010	<0.010	0.61	0.61	0.02	0.02	0.20	--
AUG											
13...	0.1	2.7	93	0.010	<0.010	0.67	0.70	0.02	0.01	0.30	--

DATE	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1991											
24...	1.3	1.3	0.06	0.06	--	--	3.9	0.3	2	20	86
NOV											
20...	1.3	--	0.08	0.07	0.07	0.06	--	--	3	79	70
JAN 1992											
27...	1.0	--	0.06	0.03	0.03	0.02	2.8	0.4	5	133	89
MAR											
12...	1.8	--	0.15	0.03	0.04	0.03	--	--	33	1690	94
28...	2.3	--	0.31	0.03	0.06	0.02	--	--	126	9800	93
APR											
09...	1.1	1.0	0.04	0.03	--	--	2.2	0.4	4	101	--
20...	0.89	--	0.07	<0.01	0.03	0.02	--	--	24	1460	85
JUN											
02...	1.4	--	0.13	0.04	0.03	0.02	--	--	94	9970	84
29...	0.81	--	0.07	<0.01	0.05	0.03	2.3	0.4	5	86	85
AUG											
13...	0.97	--	0.06	0.06	0.05	0.05	3.0	0.4	5	92	--

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	ALUM- INUM, DIS- SOLVED (µG/L AS AL)	ARSENIC TOTAL (µG/L AS AS)	BARIUM, DIS- SOLVED (µG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE)	BORON, TOTAL RECOV- ERABLE (µG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR)
NOV 1991									
20...	1230	--	<10	--	24	--	--	--	--
JAN 1992									
27...	1300	--	20	--	24	--	--	--	--
JUN									
29...	1330	14	30	<1	24	<10	20	<1	<1
AUG									
13...	1200	--	20	--	24	--	--	--	--

DATE	COBALT, DIS- SOLVED (µG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU)	IRON, TOTAL RECOV- ERABLE (µG/L AS FE)	IRON, DIS- SOLVED (µG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB)	LITHIUM DIS- SOLVED (µG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN)	MANGA- NESE, DIS- SOLVED (µG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG)
NOV 1991									
20...	<3	--	--	6	--	<4	--	2	--
JAN 1992									
27...	<3	--	--	23	--	5	--	17	--
JUN									
29...	<3	4	130	22	<1	<4	20	<1	<0.10
AUG									
13...	<3	--	--	20	--	<4	--	7	--

DATE	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI)	NICKEL, DIS- SOLVED (µG/L AS NI)	SELE- NIUM, TOTAL (µG/L AS SE)	SELE- NIUM, DIS- SOLVED (µG/L AS SE)	SILVER, DIS- SOLVED (µG/L AS AG)	STRON- TIUM, DIS- SOLVED (µG/L AS SR)	VANA- DIUM, DIS- SOLVED (µG/L AS V)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN)
NOV 1991									
20...	<10	--	<1	--	<1	<1.0	82	<6	--
JAN 1992									
27...	<10	--	<1	--	<1	<1.0	51	<6	--
JUN									
29...	<10	2	2	<1	<1	<1.0	70	<6	30
AUG									
13...	<10	--	2	--	<1	<1.0	74	<6	--

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	236	222	230	244	241	242	149	143	146	197	190	194
2	249	236	240	252	245	249	152	147	149	190	177	185
3	254	249	252	258	252	255	158	142	151	---	---	---
4	251	240	247	264	254	261	165	142	155	183	176	179
5	241	237	239	265	259	262	---	---	---	184	178	182
6	241	238	240	262	256	259	136	130	132	180	175	178
7	238	232	236	263	259	261	141	137	139	179	177	177
8	240	232	236	272	264	268	145	141	144	---	---	---
9	252	240	248	274	270	272	152	145	149	168	165	167
10	245	224	233	277	271	275	159	150	156	171	165	167
11	224	207	216	270	252	261	164	157	161	176	171	173
12	221	211	217	256	243	249	161	158	159	182	176	180
13	228	221	225	249	242	244	160	157	158	182	176	179
14	239	229	236	250	246	248	167	160	163	187	176	182
15	239	210	232	248	239	245	168	164	166	196	182	187
16	224	216	220	239	234	236	164	152	160	203	175	193
17	216	186	206	236	227	231	152	146	147	172	147	157
18	216	209	212	---	---	---	152	146	148	---	---	---
19	226	210	218	239	236	238	156	152	153	169	153	159
20	213	192	203	240	237	239	158	156	157	176	169	172
21	191	181	185	243	234	241	168	159	163	183	176	180
22	188	182	186	239	200	221	179	169	173	---	---	---
23	195	186	190	250	210	234	179	173	176	194	186	189
24	---	---	---	237	114	170	173	169	171	191	175	184
25	212	201	206	111	105	109	174	170	171	188	170	183
26	226	212	219	113	105	109	179	174	178	169	152	159
27	233	227	230	122	113	117	178	174	176	153	147	150
28	244	234	238	133	122	128	181	173	177	165	153	157
29	249	243	246	136	133	135	185	179	182	172	163	167
30	250	245	248	144	135	139	184	180	181	172	161	166
31	---	---	---	---	---	---	197	184	193	166	157	160
MONTH	254	181	225	277	105	221	197	130	161	203	147	174
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	166	161	163	171	167	169	136	133	134	134	127	130
2	169	163	165	167	163	165	137	134	135	139	134	137
3	171	165	168	167	165	166	139	135	137	144	139	142
4	179	170	175	167	165	166	141	138	140	---	---	---
5	185	179	182	171	166	168	143	141	142	142	139	141
6	187	174	180	173	168	170	147	143	145	142	137	139
7	178	174	176	177	169	173	148	144	147	141	140	141
8	184	179	182	176	169	172	154	148	151	146	141	144
9	186	180	182	168	161	166	160	153	157	160	145	147
10	182	179	181	161	149	155	162	157	159	163	133	148
11	194	181	185	---	---	---	163	159	161	134	132	133
12	---	---	---	152	141	149	162	160	161	135	132	133
13	216	209	213	137	112	120	160	158	159	140	136	139
14	211	202	207	118	111	114	---	---	---	148	139	144
15	252	199	208	124	117	119	142	138	140	153	147	150
16	258	221	238	130	125	128	143	141	142	160	152	156
17	226	219	223	135	130	133	151	143	147	167	160	163
18	222	219	220	---	---	---	154	150	153	161	153	157
19	221	207	215	155	140	148	150	124	141	157	153	156
20	206	186	194	161	153	157	123	107	115	158	153	156
21	189	182	185	---	---	---	108	106	107	153	149	150
22	187	181	184	---	---	---	114	106	112	161	153	156
23	187	177	181	181	167	173	121	114	117	165	161	163
24	178	171	174	182	178	180	124	120	122	176	169	172
25	186	176	182	187	182	184	122	119	120	176	173	174
26	190	186	189	186	180	183	126	122	124	176	173	175
27	187	180	183	193	165	178	123	114	118	---	---	---
28	180	173	177	190	136	166	117	114	115	176	173	173
29	172	169	171	134	124	128	119	117	118	176	165	170
30	---	---	---	129	125	126	127	120	122	169	165	166
31	---	---	---	135	129	132	---	---	---	173	141	164
MONTH	258	161	189	193	111	155	163	106	136	176	127	152

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	173	122	157	183	172	177	182	177	179	217	213	215
2	122	94	107	184	172	178	184	176	181	220	216	217
3	98	94	95	176	172	175	---	---	---	221	218	220
4	102	94	98	183	175	181	166	157	161	---	---	---
5	109	102	106	191	181	186	170	159	165	242	221	229
6	123	89	107	196	189	191	179	170	173	247	237	243
7	---	---	---	202	195	198	181	178	179	237	228	232
8	108	104	107	204	197	202	178	175	177	228	216	221
9	119	108	114	196	184	192	180	178	179	223	219	221
10	119	115	118	193	184	187	187	180	184	222	216	220
11	121	118	119	190	180	183	202	188	196	223	214	218
12	128	120	122	181	173	177	193	186	188	236	222	226
13	---	---	---	176	173	175	187	181	183	242	235	240
14	---	---	---	188	175	182	181	176	178	233	204	219
15	---	---	---	194	187	190	192	177	184	205	191	195
16	---	---	---	207	194	201	195	191	193	195	192	193
17	---	---	---	---	---	---	198	192	194	204	196	200
18	---	---	---	195	182	188	207	197	200	207	204	206
19	169	149	163	184	175	180	215	207	210	209	205	207
20	183	168	175	175	169	171	217	215	216	215	204	208
21	186	181	183	179	171	175	222	216	219	219	213	215
22	186	180	182	181	179	180	222	214	218	229	219	225
23	184	181	183	---	---	---	216	212	213	228	214	223
24	187	184	185	184	180	182	217	214	216	217	210	212
25	188	181	184	202	181	195	215	210	213	221	213	219
26	192	184	189	199	198	199	219	211	215	213	194	202
27	189	179	183	203	195	200	226	221	223	205	202	204
28	181	177	178	198	193	196	230	224	227	225	206	218
29	176	173	175	199	191	195	226	216	222	219	207	211
30	172	169	170	191	180	185	216	211	214	207	202	204
31	---	---	---	180	160	174	218	215	217	---	---	---
MONTH	---	---	---	207	160	186	230	157	197	247	191	216

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	17.0	16.0	16.5	27.0	24.0	25.5	25.0	23.0	24.0	25.0	22.5	23.5
2	16.5	15.5	16.0	27.0	24.5	25.5	25.5	23.0	24.0	24.0	22.0	23.0
3	17.5	15.5	16.5	25.0	22.5	24.0	---	---	---	23.5	22.0	23.0
4	18.5	16.5	17.5	24.5	22.0	23.0	25.0	23.5	24.0	---	---	---
5	18.5	18.0	18.0	26.5	22.5	24.5	25.0	22.5	24.0	24.0	23.0	23.5
6	18.5	17.0	17.5	26.5	24.0	25.0	26.0	23.0	24.0	23.0	22.0	22.5
7	---	---	---	26.5	23.5	25.0	26.0	23.0	24.5	22.5	22.0	22.0
8	19.5	18.0	19.0	26.5	24.0	25.0	25.0	23.0	24.0	24.5	22.0	23.0
9	21.0	19.5	20.0	27.5	24.0	25.5	26.0	23.5	24.5	25.5	22.5	24.0
10	21.0	19.5	20.5	27.0	25.0	26.0	27.0	24.5	25.5	25.5	23.5	24.5
11	21.5	19.5	20.5	27.5	25.5	26.5	27.0	25.0	26.0	25.5	23.5	24.5
12	22.0	20.0	21.0	26.5	25.5	26.0	26.0	24.5	25.0	24.0	22.0	23.0
13	---	---	---	27.5	25.0	26.0	25.0	24.0	24.5	23.5	21.5	22.5
14	---	---	---	29.0	25.5	27.5	24.0	23.0	23.5	23.5	21.0	22.0
15	---	---	---	30.0	27.0	28.0	23.0	21.5	22.0	23.0	20.5	22.0
16	---	---	---	27.5	25.5	27.0	21.5	20.5	21.0	23.5	21.0	22.0
17	---	---	---	---	---	---	21.5	20.5	21.0	24.5	21.5	23.0
18	---	---	---	25.5	24.5	25.0	22.5	20.5	21.5	25.0	22.0	23.5
19	22.5	21.0	22.0	26.0	24.0	25.0	23.5	21.0	22.5	23.5	22.5	23.0
20	23.5	21.0	22.5	27.5	24.5	26.0	24.0	21.5	22.5	23.5	21.0	22.0
21	23.0	21.0	22.0	28.5	25.5	27.0	24.5	21.5	23.0	22.0	21.0	21.5
22	21.0	19.0	20.0	27.0	25.5	26.5	24.0	21.5	23.0	23.5	21.5	22.5
23	21.5	18.0	19.5	---	---	---	25.0	21.5	23.5	23.0	20.5	22.0
24	21.5	19.5	20.5	24.0	22.5	23.0	26.0	22.5	24.0	20.5	18.5	19.5
25	22.5	19.5	21.0	24.5	22.0	23.0	26.5	23.5	25.0	19.0	17.5	18.0
26	23.5	20.5	22.0	23.5	22.5	23.0	28.0	25.0	26.0	17.5	17.0	17.0
27	23.5	21.5	22.5	25.0	22.5	23.5	28.0	25.5	26.5	18.0	17.0	17.5
28	24.5	22.0	23.0	24.5	23.0	23.5	28.0	26.0	27.0	18.0	17.5	17.5
29	25.5	22.5	24.0	25.0	22.0	23.5	26.5	24.0	25.0	18.5	17.0	17.5
30	26.0	23.0	24.5	26.5	23.5	25.0	25.0	22.5	24.0	16.5	15.0	16.0
31	---	---	---	26.0	24.0	24.5	25.0	23.0	24.0	---	---	---
MONTH	---	---	---	30.0	22.0	25.0	28.0	20.5	24.0	25.5	15.0	21.5

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	---	---	---	---	---	---	11.4	11.0	11.2	13.5	12.7	13.0
2	11.4	8.3	9.6	---	---	---	11.1	10.7	10.9	13.4	12.7	13.0
3	10.7	8.2	9.2	---	---	---	10.7	10.4	10.5	---	---	---
4	11.3	8.2	9.5	---	---	---	10.9	10.4	10.6	12.8	12.1	12.5
5	10.6	8.2	9.2	---	---	---	---	---	---	12.9	11.9	12.3
6	9.5	7.7	8.5	---	---	---	12.0	11.7	11.9	13.2	12.0	12.5
7	10.7	8.1	9.4	---	---	---	12.4	12.0	12.2	13.3	12.1	12.6
8	11.5	9.4	10.2	13.1	10.9	11.8	12.4	12.1	12.2	---	---	---
9	11.8	9.8	10.6	13.6	10.9	12.1	12.2	11.7	12.0	13.1	12.3	12.6
10	11.7	9.6	10.5	13.1	10.9	12.0	11.9	11.6	11.7	13.4	12.2	12.7
11	10.5	8.8	9.7	12.4	10.8	11.5	11.9	11.5	11.7	14.0	12.5	13.1
12	11.5	8.7	9.9	13.6	10.9	12.1	11.9	11.5	11.6	14.4	12.7	13.4
13	11.7	9.4	10.4	13.8	11.3	12.4	11.6	11.2	11.4	14.8	12.8	13.6
14	12.2	9.9	10.8	14.3	11.3	12.5	11.2	11.0	11.1	13.9	11.9	12.7
15	10.5	9.4	10.1	13.6	11.2	12.1	11.6	10.9	11.3	13.4	12.0	12.6
16	11.9	9.1	10.3	13.4	10.7	11.8	12.2	11.5	11.9	13.4	12.5	13.0
17	10.7	9.8	10.2	13.8	10.7	12.0	12.6	12.1	12.3	13.8	13.1	13.4
18	10.9	9.6	10.2	---	---	---	12.8	12.3	12.5	---	---	---
19	10.8	9.7	10.1	14.5	11.2	12.5	13.4	12.7	13.1	15.2	14.4	14.7
20	11.3	9.8	10.5	14.1	10.9	12.2	13.8	13.4	13.5	15.3	14.4	14.8
21	11.9	10.3	11.0	12.2	9.8	10.9	13.4	13.0	13.3	15.2	14.2	14.6
22	12.4	10.5	11.3	10.0	8.8	9.5	13.3	12.8	13.0	---	---	---
23	12.5	10.5	11.3	9.6	8.2	8.7	13.0	12.6	12.8	14.2	12.9	13.7
24	---	---	---	9.7	8.8	9.3	13.0	12.4	12.7	13.8	12.7	13.2
25	12.5	10.1	11.0	10.4	9.7	10.1	13.2	12.6	12.8	13.8	13.0	13.5
26	12.9	9.8	11.1	11.0	10.4	10.7	13.4	12.7	13.0	14.6	13.7	14.1
27	13.1	9.7	11.1	11.6	11.0	11.4	13.5	12.8	13.1	15.1	14.1	14.6
28	13.1	9.4	11.0	12.0	11.5	11.8	13.5	12.9	13.1	15.4	14.3	14.7
29	13.7	9.9	11.5	12.1	11.6	11.8	12.9	12.2	12.6	15.3	14.1	14.6
30	13.9	10.6	12.0	12.1	11.4	11.7	12.8	12.0	12.3	14.8	13.7	14.3
31	---	---	---	---	---	---	13.3	12.3	12.8	14.1	13.1	13.6
MONTH	13.9	7.7	10.4	---	---	---	13.8	10.4	12.2	15.4	11.9	13.5

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	14.3	12.9	13.5	15.0	12.6	13.6	12.5	11.5	11.9	10.9	9.7	10.3
2	14.8	13.2	14.0	14.2	12.4	13.3	12.2	11.3	11.8	10.9	9.4	10.1
3	15.2	13.4	14.2	14.7	12.3	13.3	12.5	11.5	12.0	10.6	8.9	9.7
4	15.4	13.4	14.2	15.3	12.5	13.6	12.8	11.5	12.1	---	---	---
5	15.2	13.1	14.0	15.2	12.5	13.6	12.8	11.6	12.2	10.5	8.8	9.6
6	15.4	13.2	14.2	14.4	12.3	13.1	13.2	11.6	12.3	11.0	9.2	10.1
7	15.5	13.1	14.2	12.9	11.4	12.1	13.1	11.4	12.1	11.2	9.5	10.3
8	15.3	13.0	13.9	13.6	11.2	12.3	13.2	11.0	12.0	10.4	9.7	10.0
9	15.6	12.9	14.2	13.7	11.5	12.6	13.0	10.8	11.7	10.0	9.0	9.6
10	16.8	13.5	15.0	12.8	11.3	12.0	13.7	10.5	11.9	9.6	8.9	9.2
11	17.7	13.7	15.4	---	---	---	11.9	10.5	11.1	10.1	9.2	9.6
12	---	---	---	11.5	10.7	11.1	13.0	10.2	11.3	10.3	9.2	9.7
13	16.1	13.7	14.6	11.9	11.2	11.7	14.1	10.6	12.2	9.7	8.7	9.1
14	17.9	13.0	15.1	12.3	11.9	12.2	---	---	---	10.0	8.3	9.1
15	16.0	12.7	14.1	12.9	12.3	12.6	13.8	10.8	12.2	9.4	8.2	8.8
16	15.1	12.2	13.4	13.4	12.6	12.9	11.5	10.5	11.0	9.0	8.4	8.7
17	16.1	12.4	14.0	13.3	12.7	12.9	13.1	10.3	11.3	10.1	8.6	9.2
18	14.4	12.4	13.2	---	---	---	12.3	10.6	11.3	9.7	8.8	9.2
19	15.5	11.9	13.3	12.8	12.3	12.5	11.2	10.6	11.0	10.4	8.9	9.6
20	14.9	12.1	13.4	13.4	12.3	12.8	11.5	11.1	11.3	10.4	9.1	9.7
21	15.8	12.5	14.0	---	---	---	11.5	10.9	11.2	10.4	8.9	9.7
22	16.1	12.6	14.1	---	---	---	11.2	10.5	10.8	10.3	8.7	9.5
23	16.1	12.4	14.0	13.7	12.1	12.9	11.1	10.1	10.5	10.1	8.4	9.2
24	14.7	12.2	13.3	14.2	12.3	13.2	10.1	9.5	9.8	9.9	8.1	8.9
25	14.1	12.0	12.7	14.3	12.2	13.2	9.7	9.2	9.5	9.8	7.9	8.8
26	13.9	11.7	12.7	13.3	11.6	12.5	10.2	9.4	9.8	10.3	8.5	9.4
27	13.8	12.0	12.7	11.6	10.9	11.1	10.4	9.7	10.0	---	---	---
28	14.0	12.0	12.8	11.6	10.9	11.2	10.7	9.9	10.2	11.0	9.3	10.2
29	14.1	11.9	12.9	12.0	11.6	11.9	11.0	10.1	10.5	11.2	9.3	10.2
30	---	---	---	12.0	11.8	11.9	10.9	10.0	10.4	10.4	9.3	9.8
31	---	---	---	12.2	11.6	11.9	---	---	---	9.3	8.7	9.0
MONTH	17.9	11.7	13.8	15.3	10.7	12.5	14.1	9.2	11.2	11.2	7.9	9.5
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	9.1	8.9	8.9	9.9	7.0	8.5	9.6	6.9	8.1	12.0	6.8	9.2
2	9.2	9.1	9.2	10.1	6.6	8.4	9.6	7.1	8.2	11.9	6.9	9.2
3	9.3	8.9	9.1	8.3	6.5	7.4	---	---	---	10.5	6.8	8.4
4	9.1	8.6	8.9	9.5	6.2	7.6	---	---	---	---	---	---
5	8.6	8.3	8.5	9.5	6.3	7.7	---	---	---	9.5	6.7	8.0
6	8.7	8.2	8.5	---	---	---	---	---	---	10.1	6.6	8.2
7	---	---	---	---	---	---	---	---	---	9.9	6.7	8.1
8	8.5	8.3	8.4	---	---	---	10.6	7.5	8.9	11.0	6.9	8.7
9	8.3	8.2	8.3	---	---	---	10.7	7.3	8.7	11.6	6.9	9.0
10	8.4	8.2	8.3	---	---	---	11.2	7.2	9.0	10.8	6.7	8.4
11	8.6	8.0	8.3	---	---	---	10.8	7.1	8.4	11.2	6.5	8.5
12	8.6	8.1	8.3	---	---	---	10.7	6.8	8.6	10.9	6.9	8.7
13	---	---	---	---	---	---	10.3	7.1	8.5	10.8	7.3	8.8
14	---	---	---	---	---	---	9.9	7.1	8.5	11.2	7.5	9.1
15	---	---	---	---	---	---	9.1	7.2	8.0	11.6	7.4	9.2
16	---	---	---	---	---	---	9.7	7.5	8.3	11.9	7.3	9.4
17	---	---	---	---	---	---	10.3	7.6	8.7	12.1	7.3	9.4
18	---	---	---	---	---	---	11.6	7.6	9.4	12.0	7.0	9.3
19	8.6	7.8	8.2	---	---	---	11.6	7.7	9.5	11.3	6.9	8.7
20	9.1	7.5	8.3	---	---	---	11.9	7.7	9.6	12.5	7.1	9.4
21	9.5	7.8	8.6	9.5	6.7	7.9	12.1	7.7	9.8	11.1	7.6	9.1
22	9.7	8.2	8.9	9.3	6.6	7.8	12.5	7.7	9.8	11.6	7.1	8.9
23	10.5	8.5	9.5	---	---	---	13.0	7.6	10.1	12.4	7.1	9.5
24	9.8	8.5	9.0	8.4	6.8	7.5	13.3	7.4	10.1	12.1	8.0	9.8
25	10.3	8.2	9.2	9.9	7.3	8.4	13.3	7.2	9.9	10.0	8.2	9.1
26	10.1	8.2	9.2	8.9	7.3	7.9	13.3	6.9	9.6	10.2	8.1	9.0
27	10.0	7.9	8.9	9.8	7.1	8.3	12.7	6.7	9.5	10.2	8.5	9.2
28	10.0	7.8	8.9	9.9	7.2	8.4	10.9	6.5	8.5	11.1	8.6	9.6
29	10.5	7.5	9.0	10.0	7.4	8.5	10.8	6.0	8.3	12.3	8.6	10.2
30	10.3	7.4	8.8	10.0	7.3	8.4	11.4	6.7	8.9	12.2	9.0	10.4
31	---	---	---	9.3	7.1	7.7	11.6	6.8	9.0	---	---	---
MONTH	---	---	---	---	---	---	13.3	6.0	9.0	12.5	6.5	9.1

NESHAMINY CREEK BASIN

01464645 NORTH BRANCH NESHAMINY CREEK BELOW LAKE GALENA NEAR NEW BRITAIN, PA

LOCATION.--Lat 40°18'44", long 75°12'25", Bucks County, Hydrologic Unit 02040201, on left bank, 2.0 mi north of Chalfont on Callowhill Road, and 0.3 mi downstream from Lake Galena (Peace Valley Reservoir).

DRAINAGE AREA.--16.2 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 280 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges, records good. Flow regulated by Peace Valley Reservoir (Lake Galena) about 0.3 mi upstream. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	6.0	5.6	44	12	6.0	26	6.3	9.9	6.0	5.6	6.0
2	6.8	5.6	6.2	47	12	6.0	22	6.8	8.2	6.0	5.6	6.0
3	6.3	5.6	45	49	12	5.2	19	7.8	7.7	6.0	5.6	6.3
4	6.0	5.6	112	49	9.9	4.5	16	7.5	7.3	5.9	5.6	6.0
5	6.0	5.6	68	49	7.9	4.6	15	7.2	64	5.7	5.4	6.1
6	5.9	5.6	45	48	7.9	4.5	12	7.4	224	6.5	5.2	6.0
7	5.6	5.6	33	47	7.9	5.3	10	7.8	108	6.0	5.5	6.0
8	6.7	5.6	26	47	7.9	5.3	9.7	9.5	62	5.8	6.6	5.7
9	7.5	5.6	23	47	7.6	4.7	8.7	12	41	5.8	6.4	4.9
10	7.7	5.8	49	46	7.5	5.3	8.2	15	28	5.2	6.3	5.0
11	8.0	6.2	43	45	6.6	13	9.2	16	20	5.2	6.4	5.6
12	8.2	6.0	33	44	5.6	6.7	8.5	14	15	5.5	6.3	5.2
13	8.2	5.9	28	44	5.6	6.0	7.9	12	11	5.6	6.6	5.0
14	7.9	5.6	30	48	5.6	5.3	6.9	11	8.6	6.1	6.1	5.5
15	8.0	5.6	30	47	6.1	5.2	6.6	9.2	7.5	6.3	5.2	5.9
16	7.0	5.6	25	47	7.4	5.0	6.7	12	5.9	6.0	5.2	5.7
17	7.4	5.6	20	45	6.4	4.9	7.0	11	4.8	6.0	5.4	5.4
18	6.5	5.6	17	44	6.4	4.8	7.8	11	4.9	6.0	4.1	5.5
19	6.3	5.6	14	44	6.6	5.5	8.5	9.6	5.2	6.0	3.7	5.6
20	6.3	5.4	11	44	6.5	6.6	8.5	8.4	6.0	6.0	4.4	5.6
21	6.3	5.2	10	42	6.3	6.4	8.5	7.9	5.2	6.0	4.4	6.2
22	6.3	7.3	9.1	35	6.0	6.0	11	7.8	4.9	6.0	4.3	7.0
23	6.3	7.0	8.7	14	6.0	6.3	11	8.8	5.0	6.0	4.2	7.1
24	6.3	6.3	12	10	6.0	6.0	11	8.9	5.3	6.0	4.5	7.2
25	6.3	6.3	7.5	8.9	6.0	6.0	10	8.9	5.2	6.7	5.2	6.3
26	6.3	6.3	14	8.6	7.3	10	9.4	8.9	5.2	6.1	4.9	5.1
27	6.3	6.1	29	8.3	6.5	68	8.5	8.9	5.2	6.0	4.6	4.6
28	6.1	6.0	33	8.2	6.2	60	8.0	8.9	5.2	6.0	4.6	3.8
29	6.3	5.8	33	9.9	6.0	42	6.8	8.9	5.4	6.0	4.9	3.2
30	6.3	5.6	36	12	---	33	6.1	8.9	6.0	6.0	4.7	3.6
31	6.3	---	42	12	---	30	---	13	---	5.9	5.0	---
TOTAL	208.9	175.6	898.1	1093.9	211.7	388.1	314.5	301.3	701.6	184.3	162.5	167.1
MEAN	6.74	5.85	29.0	35.3	7.30	12.5	10.5	9.72	23.4	5.95	5.24	5.57
MAX	8.2	7.3	112	49	12	68	26	16	224	6.7	6.6	7.2
MIN	5.6	5.2	5.6	8.2	5.6	4.5	6.1	6.3	4.8	5.2	3.7	3.2
MEAN†	3.44	5.25	30.2	11.0	14.3	35.0	8.0	7.4	24.0	3.75	2.44	.47
CFSM†	.21	.32	1.86	.68	.88	2.16	.49	.46	1.48	.23	.15	.03
IN.†	.24	.36	2.15	.78	.95	2.49	.55	.53	1.65	.27	.17	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1992, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992
MEAN	12.8	15.5	47.9	32.4	26.0	20.6	23.4
MAX	48.0	43.3	82.4	73.5	58.8	38.9	37.9
(WY)	1990	1989	1987	1991	1988	1986	1989
MIN	3.91	5.85	28.1	6.62	5.36	4.75	4.68
(WY)	1989	1992	1990	1986	1989	1988	1986

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1986 - 1992

ANNUAL TOTAL	7062.2	4807.6		
ANNUAL MEAN	19.3	12.1	21.7	22.0
HIGHEST ANNUAL MEAN			31.0	32.4
LOWEST ANNUAL MEAN			13.1	12.1
HIGHEST DAILY MEAN	194	224	700	Sep 20 1989
LOWEST DAILY MEAN	3.8	3.2	3.1	Dec 22 1989
ANNUAL SEVEN-DAY MINIMUM	4.3	4.2	3.1	Dec 22 1989
INSTANTANEOUS PEAK FLOW		279	1280	Sep 20 1989
INSTANTANEOUS PEAK STAGE		3.01	4.35	Sep 20 1989
ANNUAL RUNOFF (CFSM)	1.19	.81	1.34	1.36
ANNUAL RUNOFF (INCHES)	16.22	11.04	18.22	18.47
10 PERCENT EXCEEDS	59	37	60	
50 PERCENT EXCEEDS	7.1	6.4	6.3	
90 PERCENT EXCEEDS	4.9	5.2	4.1	

† Adjusted for change in contents of Lake Galena.

NESHAMINY CREEK BASIN

01464710 PINE RUN AT CHALFONT, PA

LOCATION.--Lat 40°17'20", long 75°12'11", Bucks County, Hydrologic Unit 02040203 on right bank, 40 ft upstream from abandoned bridge at Forest Park Water Company water intakes, and 500 ft upstream from mouth, in Chalfont.

DRAINAGE AREA.--11.60 mi².

PERIOD OF RECORD.--March 1990 to January 1992 (discontinued).

GAGE.--Water-stage recorder and steel V-notch weir. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No diversion of water by Forest Park Water Company. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.1	4.2	7.9	---	---	---	---	---	---	---	---
2	3.2	4.8	6.5	7.6	---	---	---	---	---	---	---	---
3	3.1	6.6	95	7.3	---	---	---	---	---	---	---	---
4	2.3	3.4	65	8.7	---	---	---	---	---	---	---	---
5	2.8	4.8	18	9.0	---	---	---	---	---	---	---	---
6	1.4	3.2	14	7.9	---	---	---	---	---	---	---	---
7	2.2	4.2	12	7.4	---	---	---	---	---	---	---	---
8	2.0	3.0	12	7.0	---	---	---	---	---	---	---	---
9	2.1	2.5	11	---	---	---	---	---	---	---	---	---
10	2.2	2.8	31	---	---	---	---	---	---	---	---	---
11	2.8	4.2	16	---	---	---	---	---	---	---	---	---
12	3.8	5.5	12	---	---	---	---	---	---	---	---	---
13	3.0	4.7	11	---	---	---	---	---	---	---	---	---
14	2.5	3.2	13	---	---	---	---	---	---	---	---	---
15	3.5	2.7	13	---	---	---	---	---	---	---	---	---
16	5.5	2.5	11	---	---	---	---	---	---	---	---	---
17	19	2.2	9.6	---	---	---	---	---	---	---	---	---
18	16	2.1	8.4	---	---	---	---	---	---	---	---	---
19	6.4	2.2	7.5	---	---	---	---	---	---	---	---	---
20	4.4	2.0	7.0	---	---	---	---	---	---	---	---	---
21	3.6	2.3	7.2	---	---	---	---	---	---	---	---	---
22	3.5	12	7.2	---	---	---	---	---	---	---	---	---
23	3.5	20	7.4	---	---	---	---	---	---	---	---	---
24	3.3	7.5	7.5	---	---	---	---	---	---	---	---	---
25	3.3	4.8	6.9	---	---	---	---	---	---	---	---	---
26	3.3	3.9	6.4	---	---	---	---	---	---	---	---	---
27	3.4	3.6	5.9	---	---	---	---	---	---	---	---	---
28	3.6	3.4	5.6	---	---	---	---	---	---	---	---	---
29	3.5	3.3	15	---	---	---	---	---	---	---	---	---
30	3.6	3.3	17	---	---	---	---	---	---	---	---	---
31	4.2	---	10	---	---	---	---	---	---	---	---	---
TOTAL	130.2	134.8	473.3	---	---	---	---	---	---	---	---	---
MEAN	4.20	4.49	15.3	---	---	---	---	---	---	---	---	---
MAX	19	20	95	---	---	---	---	---	---	---	---	---
MIN	1.4	2.0	4.2	---	---	---	---	---	---	---	---	---
CFSM	.36	.39	1.32	---	---	---	---	---	---	---	---	---
IN.	.42	.43	1.52	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1992, BY WATER YEAR (WY)

	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992
MEAN	5.53	5.81	18.7	31.0	13.7	16.8	15.9	20.8	10.2	7.65	9.18	5.22
MAX	6.85	7.12	22.2	31.0	13.7	22.6	16.5	31.0	15.4	10.5	9.71	7.51
(WY)	1991	1991	1991	1991	1991	1991	1990	1990	1990	1991	1991	1991
MIN	4.20	4.49	15.3	31.0	13.7	10.9	15.3	10.5	5.01	4.78	8.64	2.93
(WY)	1992	1992	1992	1991	1991	1990	1991	1991	1991	1990	1990	1990

NESHAMINY CREEK BASIN

01464720 NORTH BRANCH NESHAMINY CREEK AT CHALFONT, PA

LOCATION.--Lat 40°17'17", long 75°12'15", Bucks County, Hydrologic Unit 02040201, on right bank, 250 ft upstream from Route 202 bridge, 0.6 mi upstream from mouth, in Chalfont.

DRAINAGE AREA.--31.5 mi².

PERIOD OF RECORD.--December 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion for water supply by Forest Park Water Company above the gage. Regulated by Lake Galena. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	4.9	7.9	56	17	e12	45	8.9	30	5.4	6.2	4.1
2	7.8	5.7	15	58	16	e11	37	8.8	17	5.3	4.9	4.7
3	7.2	8.7	188	60	16	e10	31	9.7	12	5.8	4.2	6.2
4	6.9	5.1	185	63	13	e9.9	28	9.0	9.6	8.0	4.6	8.4
5	6.2	6.7	95	62	11	8.7	25	8.6	169	6.9	4.6	6.3
6	5.2	5.0	66	59	10	8.7	20	8.3	315	19	4.8	5.2
7	3.6	6.3	49	57	11	18	18	8.8	141	8.1	3.9	7.0
8	4.1	5.1	40	56	11	23	17	21	100	6.1	4.7	6.7
9	5.0	4.9	37	57	9.5	15	15	51	67	8.8	4.5	5.0
10	5.5	6.0	101	58	11	18	16	28	43	6.9	4.8	4.2
11	6.3	7.6	68	56	8.0	124	20	25	30	5.7	17	6.6
12	7.0	8.8	51	54	e7.0	38	16	20	22	5.1	14	5.0
13	6.0	8.2	44	53	e7.5	26	13	17	17	5.2	7.0	3.7
14	5.5	6.6	51	73	e7.9	21	11	15	13	10	6.8	3.5
15	7.4	5.7	48	65	e11	17	11	12	11	13	5.7	e4.5
16	8.0	5.5	38	57	e39	15	11	27	9.5	19	5.3	4.3
17	31	4.9	30	e54	e19	14	13	e20	7.9	9.4	15	3.9
18	20	4.7	26	e53	e13	14	14	15	7.7	10	19	4.3
19	9.1	4.6	21	e53	e14	e23	16	13	9.4	7.7	8.6	4.3
20	6.7	5.4	17	e52	e15	36	14	10	14	5.7	6.9	4.0
21	5.6	6.1	15	e51	e14	33	14	8.8	9.1	5.1	5.1	3.9
22	5.4	32	15	42	12	25	21	9.1	7.6	5.9	4.4	6.2
23	5.5	36	15	29	12	27	20	10	7.3	7.1	4.0	7.5
24	5.2	15	21	43	13	25	17	9.6	8.4	7.3	3.9	6.7
25	5.2	10	15	22	13	21	16	9.8	7.9	8.9	4.5	7.1
26	5.3	7.8	23	18	29	41	14	9.8	6.8	7.4	4.1	e15
27	5.0	7.3	40	19	e23	154	12	10	6.4	8.2	3.9	e11
28	5.1	7.2	38	e18	e17	96	11	9.3	5.8	7.1	4.9	e8.0
29	4.6	6.7	57	e18	e13	69	11	8.9	5.3	5.7	6.1	5.0
30	4.7	6.4	60	17	---	55	9.7	8.6	5.6	4.9	4.1	3.4
31	4.8	---	57	17	---	55	---	58	---	6.0	4.0	---
TOTAL	223.1	254.9	1533.9	1450	412.9	1063.3	536.7	488.0	1115.3	244.7	201.5	175.7
MEAN	7.20	8.50	49.5	46.8	14.2	34.3	17.9	15.7	37.2	7.89	6.50	5.86
MAX	31	36	188	73	39	154	45	58	315	19	19	15
MIN	3.6	4.6	7.9	17	7.0	8.7	9.7	8.3	5.3	4.9	3.9	3.4
†	4.6	4.6	4.5	4.5	4.4	4.5	4.5	4.6	4.6	4.6	4.6	4.6
MEAN†	8.5	12.5	55.2	27	25.6	61.3	19.9	18	42.4	10.3	8.3	5.36
CFSM†	.27	.40	1.75	.86	.81	1.95	.63	.57	1.35	.33	.26	.17
IN.†	.31	.44	2.02	.99	.87	2.24	.70	.66	1.50	.38	.30	.19

† Diversion from North Branch Neshaminy Creek and Pine Run by Forest Park Water Company.

‡ Adjusted for diversion and change in contents of Lake Galena.

e Estimated.

NESHAMINY CREEK BASIN

01464720 NORTH BRANCH NESHAMINY CREEK AT CHALFONT, PA

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.20	8.50	49.5	78.9	24.5	43.4	33.1	24.2	22.5	11.2	9.68	9.80
MAX	7.20	8.50	49.5	111	35.2	52.6	48.3	32.7	37.2	14.6	12.9	13.7
(WY)	1992	1992	1992	1991	1991	1991	1991	1991	1992	1991	1991	1991
MIN	7.20	8.50	49.5	46.8	14.2	34.3	17.9	15.7	7.80	7.89	6.50	5.86
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1991	1992	1992	1992

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

ANNUAL TOTAL	12032.8		7700.0	
ANNUAL MEAN	33.0	±36.3	21.0	±24.5
HIGHEST ANNUAL MEAN				
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	341	Jan 12	315	Jun 6
LOWEST DAILY MEAN	2.3	Aug 18	3.4	Sep 30
ANNUAL SEVEN-DAY MINIMUM	3.0	Aug 12	4.1	Sep 13
INSTANTANEOUS PEAK FLOW			560	Jun 5
INSTANTANEOUS PEAK STAGE			5.39	Jun 5
INSTANTANEOUS LOW FLOW			2.2	Aug 31
ANNUAL RUNOFF (CFSM)	1.05	± 1.15	.67	± .78
ANNUAL RUNOFF (INCHES)	14.21	±15.66	9.09	±10.58
10 PERCENT EXCEEDS	89		54	
50 PERCENT EXCEEDS	14		10	
90 PERCENT EXCEEDS	4.1		4.9	

‡ Diversion from North Branch Neshaminy Creek and Pine Run by Forest Park Water Company.

NESHAMINY CREEK BASIN

01464750 NESHAMINY CREEK NEAR RUSHLAND, PA

LOCATION.--Lat 40°15'27", long 75°02'03", Bucks County, Hydrologic Unit 02040201, on left bank at bridge on Rushland Road at Rushland, 2,000 ft upstream from confluence with Little Neshaminy Creek.

DRAINAGE AREA.--91.0 mi².

PERIOD OF RECORD.--December 1986 to September 1992 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 160 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	21	32	90	61	66	132	54	141	20	39	16
2	31	23	49	87	58	64	114	52	64	21	26	e15
3	29	23	881	93	e55	63	97	49	51	20	22	e18
4	28	25	695	101	53	59	87	46	43	36	22	e26
5	27	21	212	112	50	54	80	44	663	33	28	e21
6	26	22	134	98	44	54	71	44	1080	84	24	e19
7	25	20	103	93	46	76	66	39	422	42	21	e28
8	25	23	86	91	44	160	62	77	269	27	20	e32
9	26	21	78	94	e40	90	58	277	215	30	20	e29
10	26	21	e200	112	e37	78	55	93	110	33	19	e22
11	27	34	156	e93	e37	641	65	81	83	24	21	e28
12	36	38	113	91	e37	230	61	65	69	20	69	e21
13	32	30	101	90	e38	129	54	58	58	19	38	e18
14	26	27	119	173	41	102	50	52	50	27	36	e17
15	31	24	124	179	52	88	48	46	43	42	37	e16
16	68	22	92	106	222	78	47	135	40	104	34	e16
17	135	21	81	e82	100	72	56	e93	35	42	69	e16
18	150	20	74	e68	75	e70	86	e75	32	32	103	e15
19	60	19	62	e61	83	e130	66	e64	45	32	e58	e15
20	45	20	e57	e58	88	209	61	e60	71	25	e39	e16
21	38	20	52	e56	76	236	57	e57	49	21	31	e17
22	34	84	e49	e52	68	141	73	e52	35	20	25	e18
23	33	322	e46	e120	65	138	76	e49	31	25	25	e20
24	32	79	e44	261	66	147	64	e48	35	36	23	e17
25	31	51	e42	102	68	113	61	e58	42	28	17	e17
26	32	40	41	80	157	128	59	e58	31	36	19	e90
27	31	34	50	70	123	659	55	e54	28	30	16	e63
28	e31	32	62	72	92	281	53	e44	25	30	25	e47
29	e31	30	109	70	79	186	52	e37	22	25	29	e30
30	e31	29	147	66	---	149	53	31	21	22	26	e22
31	e32	---	101	62	---	155	---	225	---	22	17	---
TOTAL	1243	1196	4192	2983	2055	4846	2019	2217	3903	1008	998	745
MEAN	40.1	39.9	135	96.2	70.9	156	67.3	71.5	130	32.5	32.2	24.8
MAX	150	322	881	261	222	659	132	277	1080	104	103	90
MIN	25	19	32	52	37	54	47	31	21	19	16	15
CFSM	.44	.44	1.49	1.06	.78	1.72	.74	.79	1.43	.36	.35	.27
IN.	.51	.49	1.71	1.22	.84	1.98	.83	.91	1.60	.41	.41	.30

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1992, BY WATER YEAR (WY)

	MEAN	211	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	80.7	116	126	183	159	161	161	194	147	132	68.6	76.8	
MAX	211	249	187	311	315	214	321	374	443	315	132	244	
(WY)	1990	1989	1991	1990	1988	1987	1989	1989	1989	1989	1989	1989	
MIN	39.4	39.9	78.7	96.2	70.9	95.7	61.9	70.0	30.4	32.5	32.2	24.8	
(WY)	1991	1992	1990	1992	1992	1990	1988	1987	1991	1992	1987	1992	

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1987 - 1992
ANNUAL TOTAL	39041	27405	
ANNUAL MEAN	107	74.9	135
HIGHEST ANNUAL MEAN			214
LOWEST ANNUAL MEAN			74.9
HIGHEST DAILY MEAN	1230	Jun 12	3130
LOWEST DAILY MEAN	16	Jul 12	15
ANNUAL SEVEN-DAY MINIMUM	20	Jun 25	16
INSTANTANEOUS PEAK FLOW		2300	4700
INSTANTANEOUS PEAK STAGE		7.64	12.33
ANNUAL RUNOFF (CFSM)	1.18	.82	1.48
ANNUAL RUNOFF (INCHES)	15.96	11.20	20.14
10 PERCENT EXCEEDS	233	134	285
50 PERCENT EXCEEDS	59	50	71
90 PERCENT EXCEEDS	21	21	24

NESHAMINY CREEK BASIN

01464984 LITTLE NESHAMINY CREEK AT WALTON ROAD NEAR JACKSONVILLE, PA

LOCATION.--Lat 40°14'26", long 75°03'15", Bucks County, Hydrologic Unit 02040203, on right bank, 15 ft downstream from old bridge abutment on Walton Road, 2.0 mi upstream from mouth and 1.0 mi northwest of Jacksonville.

DRAINAGE AREA.--40.1 mi².

PERIOD OF RECORD.--November 1985 to September 1992 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 146.27 ft above Philadelphia Electric Co. datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	17	25	23	30	52	21	78	17	15	7.0
2	12	12	43	24	20	29	47	21	32	15	11	e10
3	11	11	697	24	19	29	42	19	25	16	9.1	e38
4	11	11	261	30	19	28	39	18	21	33	12	e9.7
5	11	10	55	37	19	27	36	17	794	19	11	e8.6
6	11	11	40	27	18	26	33	17	570	16	8.8	e16
7	11	11	32	24	18	55	33	15	198	15	8.3	e8.5
8	11	11	28	22	19	74	33	86	71	13	7.8	e5.5
9	11	10	29	26	18	41	31	149	55	22	7.4	e4.0
10	10	11	147	38	15	38	29	48	44	16	7.7	e10
11	12	23	47	28	15	346	36	39	37	13	7.9	5.0
12	18	17	35	24	15	74	33	29	32	12	8.4	e4.0
13	14	14	34	23	15	48	27	25	29	12	8.8	e4.0
14	12	11	44	60	16	40	25	22	26	17	14	e4.0
15	26	10	38	49	29	35	25	20	25	25	12	e3.5
16	33	10	29	28	151	32	26	79	22	52	e18	e3.1
17	195	9.6	27	24	45	30	45	43	20	34	e29	e2.1
18	52	9.5	26	22	35	30	69	28	19	18	e21	e1.5
19	20	9.3	22	20	41	86	37	24	210	14	e17	e1.0
20	14	9.4	21	19	41	120	33	20	168	12	12	e1.7
21	13	9.4	22	18	33	104	31	18	38	11	9.7	e3.0
22	13	113	22	17	28	58	45	17	28	10	8.8	e6.0
23	13	113	21	49	27	61	41	15	25	17	8.3	e3.0
24	12	30	22	199	27	64	31	14	25	17	7.9	e2.0
25	11	19	19	45	28	49	30	22	26	13	7.7	e5.8
26	11	16	18	33	104	64	26	21	21	13	8.4	e17
27	11	15	17	27	55	360	26	21	19	13	8.1	e40
28	11	14	17	27	39	85	25	17	17	12	8.8	e16
29	12	13	65	26	35	58	24	16	16	11	10	e8.0
30	12	13	60	25	---	50	22	15	18	9.7	7.0	e6.0
31	12	---	35	25	---	64	---	156	---	15	7.7	---
TOTAL	639	587.2	1990	1065	967	2235	1032	1072	2709	532.7	338.6	254.0
MEAN	20.6	19.6	64.2	34.4	33.3	72.1	34.4	34.6	90.3	17.2	10.9	8.47
MAX	195	113	697	199	151	360	69	156	794	52	29	40
MIN	10	9.3	17	17	15	26	22	14	16	9.7	7.0	1.0
CFSM	.51	.49	1.60	.86	.83	1.80	.86	.86	2.25	.43	.27	.21
IN.	.59	.55	1.85	.99	.90	2.08	.96	1.00	2.52	.49	.31	.24

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1992, BY WATER YEAR

	1986	1987	1988	1989	1990	1991	1992
MEAN	39.4	81.1	77.6	92.0	86.5	78.8	80.5
MAX	103	180	203	146	167	103	141
(WY)	1990	1987	1987	1990	1988	1989	1989
MIN	19.1	19.6	18.5	34.4	33.3	53.7	34.4
(WY)	1987	1992	1990	1992	1992	1990	1992

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1986 - 1992
ANNUAL TOTAL	20787.7	13421.5	
ANNUAL MEAN	57.0	36.7	73.6
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			36.7
HIGHEST DAILY MEAN	1300	794	2180
LOWEST DAILY MEAN	7.5	1.0	1.0
ANNUAL SEVEN-DAY MINIMUM	8.4	2.3	2.3
INSTANTANEOUS PEAK FLOW		2480	7970
INSTANTANEOUS PEAK STAGE		6.31	9.99
ANNUAL RUNOFF (CFSM)	1.42	.92	1.84
ANNUAL RUNOFF (INCHES)	19.30	12.46	24.96
10 PERCENT EXCEEDS	109	59	136
50 PERCENT EXCEEDS	26	21	35
90 PERCENT EXCEEDS	9.6	8.8	11

NESHAMINY CREEK BASIN

01465050 MILL CREEK NEAR WYCOMBE, PA

LOCATION.--Lat 40°17'30", long 75°02'19", Bucks County, Hydrologic Unit 02040201, on Creek Road at Briarwood Day Camp about 3.0 mi southeast of Doylestown.

DRAINAGE AREA.--14.0 mi².

PERIOD OF RECORD.--November 1985 to February 1989, October 1989 to January 1993 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 210 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.8	4.2	6.7	6.3	5.9	16	6.3	10	5.7	4.0	1.4
2	2.9	2.8	6.8	e6.5	e5.9	6.0	15	6.1	7.1	5.2	3.2	1.3
3	3.2	2.6	72	e6.3	5.4	5.8	14	5.7	6.1	5.3	3.0	2.3
4	3.0	2.2	39	8.1	5.5	5.5	13	5.6	5.5	7.3	3.4	3.1
5	3.1	2.2	15	7.7	5.2	5.4	12	5.4	115	5.5	3.5	1.9
6	3.4	2.2	13	6.8	5.4	5.2	11	5.5	153	12	2.8	1.4
7	3.3	2.2	12	6.3	5.0	11	11	5.4	31	5.9	2.6	2.5
8	3.2	2.2	11	6.0	5.1	11	11	20	25	5.1	2.8	2.5
9	3.0	2.3	10	7.3	4.4	7.7	10	31	21	7.0	2.7	2.0
10	3.1	2.5	21	7.6	e4.2	9.1	10	13	18	5.1	2.2	1.8
11	3.4	3.6	13	6.5	4.1	32	12	11	16	4.7	3.0	3.4
12	4.6	2.8	11	6.1	4.0	14	e10	9.3	15	4.3	3.3	2.0
13	3.6	2.2	12	5.8	4.3	12	e9.3	8.6	14	4.1	2.8	1.6
14	3.3	2.1	14	13	4.4	11	9.0	8.1	13	6.9	4.1	1.2
15	5.9	2.1	11	9.7	8.2	11	8.6	7.2	12	8.9	3.3	1.2
16	5.3	2.4	9.9	8.0	18	9.8	8.8	16	10	11	3.4	.88
17	21	2.1	9.3	e7.1	8.2	9.4	10	11	10	6.1	5.6	.54
18	10	2.2	8.3	6.2	7.2	9.0	10	9.1	9.5	7.2	9.5	.46
19	5.0	2.2	7.1	e6.0	8.7	14	11	7.8	12	5.6	4.5	.98
20	3.8	2.2	7.0	5.7	7.6	17	9.4	7.1	14	4.8	3.2	1.3
21	3.5	2.3	7.0	5.5	6.7	16	8.9	6.8	9.8	4.4	2.7	1.4
22	3.3	13	6.8	5.2	6.2	14	10	6.1	8.8	4.7	2.4	2.2
23	3.1	13	6.6	12	6.2	15	9.0	5.7	8.2	6.2	2.2	3.6
24	3.1	5.9	6.5	20	6.3	14	8.3	5.4	9.9	6.0	1.9	2.5
25	2.8	4.3	5.8	10	6.2	13	10	6.1	8.9	5.2	1.8	2.7
26	2.6	3.6	5.5	8.2	13	20	9.0	6.0	7.8	4.8	1.7	13
27	2.8	3.4	5.3	e7.3	9.1	41	8.1	6.2	7.3	6.1	1.6	8.0
28	2.7	3.2	5.2	7.3	7.6	20	7.3	5.5	6.7	4.6	2.0	6.2
29	2.8	3.1	13	7.0	6.8	17	7.0	5.1	6.1	3.8	3.0	3.4
30	2.8	3.1	11	6.8	---	16	6.6	5.0	6.1	3.5	2.3	2.7
31	2.8	---	7.6	6.9	---	18	---	19	---	3.8	1.6	---
TOTAL	129.2	102.8	386.9	239.6	195.2	415.8	305.3	276.1	596.8	180.8	96.1	79.46
MEAN	4.17	3.43	12.5	7.73	6.73	13.4	10.2	8.91	19.9	5.83	3.10	2.65
MAX	21	13	72	20	18	41	16	31	153	12	9.5	13
MIN	2.6	2.1	4.2	5.2	4.0	5.2	6.6	5.0	5.5	3.5	1.6	.46
CFSM	.30	.24	.89	.55	.48	.96	.73	.64	1.42	.42	.22	.19
IN.	.34	.27	1.03	.64	.52	1.10	.81	.73	1.59	.48	.26	.21

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1992, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992
MEAN	7.87	14.2	16.0	18.1	20.4	19.1	20.4
MAX	28.6	28.1	39.6	28.7	31.9	26.0	35.8
(WY)	1990	1989	1987	1991	1988	1987	1990
MIN	1.32	3.43	7.41	7.73	6.73	13.4	9.72
(WY)	1987	1992	1990	1992	1992	1988	1992

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1986 - 1992
ANNUAL TOTAL	4384.3	3004.06	
ANNUAL MEAN	12.0	8.21	13.6
HIGHEST ANNUAL MEAN			17.8
LOWEST ANNUAL MEAN			8.21
HIGHEST DAILY MEAN	133	153	268
LOWEST DAILY MEAN	1.0	.46	.46
ANNUAL SEVEN-DAY MINIMUM	1.3	.94	.81
INSTANTANEOUS PEAK FLOW		460	1370
INSTANTANEOUS PEAK STAGE		5.90	6.98
ANNUAL RUNOFF (CFSM)	.86	.59	.97
ANNUAL RUNOFF (INCHES)	11.65	7.98	13.22
10 PERCENT EXCEEDS	23	14	25
50 PERCENT EXCEEDS	8.2	6.1	8.8
90 PERCENT EXCEEDS	2.2	2.2	2.5

NESHAMINY CREEK BASIN

01465050 MILL CREEK NEAR WYCOMBE, PA--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	e3.1	8.5	14	---	---	---	---	---	---	---	---
2	2.4	e3.2	8.1	12	---	---	---	---	---	---	---	---
3	2.0	30	7.8	12	---	---	---	---	---	---	---	---
4	1.8	7.0	7.2	12	---	---	---	---	---	---	---	---
5	1.6	4.9	8.0	---	---	---	---	---	---	---	---	---
6	e1.4	7.1	6.9	---	---	---	---	---	---	---	---	---
7	e1.3	4.7	6.8	---	---	---	---	---	---	---	---	---
8	e1.2	3.8	6.4	---	---	---	---	---	---	---	---	---
9	e3.2	3.2	5.9	---	---	---	---	---	---	---	---	---
10	e8.9	3.2	6.5	---	---	---	---	---	---	---	---	---
11	e3.9	3.0	297	---	---	---	---	---	---	---	---	---
12	e3.6	3.1	102	---	---	---	---	---	---	---	---	---
13	e3.5	17	52	---	---	---	---	---	---	---	---	---
14	e3.4	6.7	30	---	---	---	---	---	---	---	---	---
15	e3.4	5.1	25	---	---	---	---	---	---	---	---	---
16	e3.2	4.3	22	---	---	---	---	---	---	---	---	---
17	e3.2	4.0	68	---	---	---	---	---	---	---	---	---
18	e3.2	3.7	45	---	---	---	---	---	---	---	---	---
19	e3.3	3.3	27	---	---	---	---	---	---	---	---	---
20	e3.3	3.1	27	---	---	---	---	---	---	---	---	---
21	e3.2	3.2	23	---	---	---	---	---	---	---	---	---
22	e3.2	4.1	21	---	---	---	---	---	---	---	---	---
23	e3.3	69	20	---	---	---	---	---	---	---	---	---
24	e3.5	13	18	---	---	---	---	---	---	---	---	---
25	e3.7	11	16	---	---	---	---	---	---	---	---	---
26	e3.2	17	16	---	---	---	---	---	---	---	---	---
27	e2.6	19	14	---	---	---	---	---	---	---	---	---
28	e2.6	11	14	---	---	---	---	---	---	---	---	---
29	e2.7	10	15	---	---	---	---	---	---	---	---	---
30	e2.8	9.1	17	---	---	---	---	---	---	---	---	---
31	e3.0	---	16	---	---	---	---	---	---	---	---	---
TOTAL	94.0	289.9	957.1	---	---	---	---	---	---	---	---	---
MEAN	3.03	9.66	30.9	---	---	---	---	---	---	---	---	---
MAX	8.9	69	297	---	---	---	---	---	---	---	---	---
MIN	1.2	3.0	5.9	---	---	---	---	---	---	---	---	---
CFM	.22	.69	2.21	---	---	---	---	---	---	---	---	---
IN.	.25	.77	2.54	---	---	---	---	---	---	---	---	---

e Estimated.

NESHAMINY CREEK BASIN

01465500 NESHAMINY CREEK NEAR LANGHORNE, PA

LOCATION.--Lat 40°10'26", long 74°57'26", Bucks County, Hydrologic Unit 02040201, on left bank at bridge on State Highway 213, 0.3 mi downstream from Mill Creek, and 1.7 mi west of Langhorne.

DRAINAGE AREA.--210 mi².

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

REVISED RECORDS.--WSP 1332: 1949. WSP 1432: 1936-37. WDR PA-83-1: 1982(P)

GAGE.--Water-stage recorder. Datum of gage is 40.57 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation at low flow by mills above station. Flow regulated by upstream reservoirs on Little Neshaminy Creek, Robin Run, Pine Run, North Branch Neshaminy Creek, and Core Creek (combined flood control capacity, about 9,560 acre-ft). Occasional regulation by Springfield Lake, capacity, 650 mil gal, completed in 1934; no significant regulation except during period May 1934 to January 1944, when the lake was filling, and in September 1949, July 1954, July through October 1957, September, October 1961. Interceptor sewer installed along left bank in May, June 1966. Satellite telemetry at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 23, 1933, reached a stage of 17.3 ft, from floodmark, discharge, 30,000 ft³/s, from rating curve extended as explained in footnotes.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	48	73	167	121	135	272	125	426	82	101	39
2	64	47	111	157	103	124	241	126	189	84	69	38
3	60	48	1680	159	102	122	219	118	135	e80	55	38
4	57	47	1520	172	101	116	199	105	111	e160	51	42
5	54	48	424	207	99	110	188	97	2190	e150	65	55
6	53	43	286	179	100	106	170	93	5040	e595	55	45
7	50	45	230	162	102	143	160	88	1050	111	47	43
8	48	44	195	151	103	296	158	166	563	79	44	52
9	48	44	177	153	101	198	148	630	534	93	43	52
10	50	42	452	199	89	170	140	247	e340	91	43	69
11	49	57	323	176	95	1020	150	203	e270	72	46	91
12	58	81	233	157	91	453	161	160	e215	64	87	66
13	62	62	206	149	82	266	137	135	e185	60	73	50
14	54	56	225	201	95	221	124	121	e165	70	69	42
15	84	49	245	349	110	194	119	107	e145	100	67	40
16	134	46	191	202	398	172	119	213	e120	215	64	39
17	263	45	164	e145	251	154	155	279	111	135	68	39
18	421	42	152	e120	173	150	241	159	102	102	248	38
19	148	41	125	e110	168	241	181	137	429	77	128	39
20	96	41	117	e102	184	367	160	116	461	68	80	37
21	72	42	125	e98	159	438	147	102	202	59	63	35
22	63	194	112	e92	136	282	156	94	130	54	53	34
23	60	598	107	235	126	266	199	86	e122	67	49	e40
24	57	209	108	501	125	289	158	84	e145	80	47	e35
25	54	126	106	252	128	241	149	95	e160	74	45	e35
26	52	96	92	173	254	241	142	96	e120	66	e55	e600
27	52	82	92	158	269	1100	139	95	e103	70	e39	e370
28	51	74	104	140	186	489	130	90	e93	65	43	234
29	47	70	175	127	162	340	127	81	e83	58	48	109
30	48	68	322	121	---	285	124	76	82	53	47	61
31	48	---	210	123	---	290	---	334	---	87	42	---
TOTAL	2526	2535	8682	5437	4213	9019	4913	4658	14021	3221	2034	2507
MEAN	81.5	84.5	280	175	145	291	164	150	467	104	65.6	83.6
MAX	421	598	1680	501	398	1100	272	630	5040	595	248	600
MIN	47	41	73	92	82	106	119	76	82	53	39	34
CFSM	.39	.40	1.33	.84	.69	1.39	.78	.72	2.23	.49	.31	.40
IN.	.45	.45	1.54	.96	.75	1.60	.87	.83	2.48	.57	.36	.44

e Estimated.

NESHAMINY CREEK BASIN

01465500 NESHAMINY CREEK NEAR LANGHORNE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	115	239	350	405	470	523	433	288	202	187	161	147
MAX	629	1169	1190	1509	1074	1246	1455	862	882	1161	1694	885
(WY)	1980	1973	1984	1979	1939	1936	1983	1989	1989	1938	1955	1971
MIN	13.8	23.2	34.3	47.2	115	105	89.8	54.5	33.7	21.8	15.1	15.4
(WY)	1958	1937	1966	1981	1947	1985	1985	1963	1965	1957	1966	1951

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1935 - 1992

ANNUAL TOTAL	88044	63766	
ANNUAL MEAN	241	174	292
HIGHEST ANNUAL MEAN			565
LOWEST ANNUAL MEAN			121
HIGHEST DAILY MEAN	3640	Jan 12	5040
LOWEST DAILY MEAN	39	Sep 14	34
ANNUAL SEVEN-DAY MINIMUM	41	Sep 12	36
INSTANTANEOUS PEAK FLOW			13600
INSTANTANEOUS PEAK STAGE			11.86
INSTANTANEOUS LOW FLOW			33
ANNUAL RUNOFF (CFSM)	1.15	.83	1.39
ANNUAL RUNOFF (INCHES)	15.60	11.30	18.91
10 PERCENT EXCEEDS	470	285	566
50 PERCENT EXCEEDS	144	111	136
90 PERCENT EXCEEDS	48	46	30

a Flow rating curve extended above 4,700 ft³/s, on basis of contracted-opening measurement at gage height 15.94 ft, and slope-area measurement of peak flow.

b From floodmarks.

POQUESSING CREEK BASIN

01465798 POQUESSING CREEK AT GRANT AVENUE, PHILADELPHIA, PA

LOCATION.--Lat 40°03'25", long 74°59'08", Philadelphia County, Hydrologic Unit 02040202, on right bank 600 ft upstream from Delaware River Expressway and 3,000 ft upstream from mouth in northeast Philadelphia.

DRAINAGE AREA.--21.4 mi².

PERIOD OF RECORD.--July 1965 to current year. Records for 1971-74 published in WDR PA-81-1.

REVISED RECORD.--WDR PA-86-1: 1985.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 2.68 ft, above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	5.8	20	8.4	7.7	8.2	12	8.0	22	7.8	33	3.0
2	4.5	4.6	79	8.0	7.0	8.4	12	8.4	11	6.9	9.1	3.1
3	4.2	4.6	263	8.0	7.2	8.5	11	8.1	11	42	8.9	4.0
4	4.3	4.7	49	23	7.3	8.5	11	7.7	9.0	39	7.2	9.3
5	4.1	4.7	14	12	7.1	8.4	11	8.0	987	9.4	5.8	3.6
6	4.1	4.8	11	8.6	6.9	8.1	11	8.0	593	7.4	5.4	3.4
7	3.6	5.0	9.4	7.9	7.1	72	11	7.2	29	6.6	4.8	8.0
8	3.4	5.2	8.7	7.5	9.4	19	11	177	19	6.5	4.7	6.9
9	4.1	4.9	18	16	8.6	11	11	54	15	26	9.3	3.8
10	3.9	9.3	68	12	6.3	39	10	18	13	43	4.7	21
11	12	54	12	9.1	6.9	94	13	11	12	17	131	75
12	9.4	8.4	10	7.5	6.1	15	10	9.3	12	6.4	17	6.0
13	3.9	7.8	13	7.4	6.8	12	9.3	9.0	10	6.3	7.8	3.9
14	3.4	5.5	15	45	10	10	9.0	8.4	9.7	12	34	3.2
15	71	5.1	11	13	44	9.6	9.0	7.8	9.2	18	17	2.9
16	12	4.9	8.6	8.3	49	8.9	19	123	8.7	20	25	2.9
17	199	4.5	8.0	8.2	12	9.2	44	16	8.4	7.3	26	2.6
18	16	4.9	8.0	7.6	15	9.9	20	12	8.0	26	30	2.5
19	6.8	5.1	7.5	6.7	13	100	11	27	406	17	9.3	17
20	5.2	5.2	7.4	7.0	9.7	24	9.6	8.5	44	10	7.3	3.9
21	4.9	5.4	7.7	7.2	8.6	17	9.4	7.8	14	5.8	6.1	2.7
22	4.7	213	7.4	7.1	8.1	14	18	7.6	16	5.7	5.5	30
23	4.7	41	7.5	36	8.0	25	14	7.5	11	77	5.0	52
24	4.7	12	7.4	42	16	15	10	10	11	13	4.7	4.5
25	4.7	7.4	6.7	11	11	12	12	22	20	8.5	4.7	59
26	4.7	6.7	7.2	10	47	52	9.6	11	16	6.6	4.8	226
27	4.7	7.2	7.2	8.9	13	51	24	12	9.5	11	5.5	39
28	4.1	6.4	7.1	8.4	10	16	9.3	7.1	8.2	6.6	6.3	15
29	5.3	6.3	70	8.3	9.2	13	8.8	6.5	7.8	5.6	11	6.9
30	7.7	5.9	17	8.1	---	12	8.4	9.8	8.2	5.1	3.9	5.1
31	17	---	9.9	8.0	---	22	---	282	---	331	3.1	---
TOTAL	446.4	470.3	795.7	386.2	378.0	732.7	388.4	919.7	2358.7	810.5	457.9	626.2
MEAN	14.4	15.7	25.7	12.5	13.0	23.6	12.9	29.7	78.6	26.1	14.8	20.9
MAX	199	213	263	45	49	100	44	282	987	331	131	226
MIN	3.4	4.5	6.7	6.7	6.1	8.1	8.4	6.5	7.8	5.1	3.1	2.5
CFSM	.67	.73	1.20	.58	.61	1.10	.60	1.39	3.67	1.22	.69	.98
IN.	.78	.82	1.38	.67	.66	1.27	.68	1.60	4.10	1.41	.80	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1992, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	20.8	27.2	31.6	35.3	35.3	36.6	37.4	36.0	31.6	41.4	31.8	25.7																
MAX	42.1	112	79.2	136	105	71.3	104	74.2	84.7	112	130	82.4																
(WY)	1990	1973	1978	1979	1979	1983	1983	1989	1989	1989	1971	1975																
MIN	7.05	5.03	6.73	4.34	10.3	9.17	8.91	10.6	5.94	7.07	5.10	3.93																
(WY)	1966	1966	1981	1981	1980	1985	1985	1977	1966	1966	1966	1970																

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1965 - 1992
ANNUAL TOTAL	10524.3	8770.7	
ANNUAL MEAN	28.8	24.0	32.7
HIGHEST ANNUAL MEAN			52.3
LOWEST ANNUAL MEAN			16.7
HIGHEST DAILY MEAN	1000	987	2170
LOWEST DAILY MEAN	2.4	2.5	1.3
ANNUAL SEVEN-DAY MINIMUM	3.4	3.4	1.6
INSTANTANEOUS PEAK FLOW		4560	a9400
INSTANTANEOUS PEAK STAGE		10.82	b5.35
INSTANTANEOUS LOW FLOW		2.1	1.1
ANNUAL RUNOFF (CFSM)	1.35	1.12	1.53
ANNUAL RUNOFF (INCHES)	18.29	15.25	20.77
10 PERCENT EXCEEDS	53	42	60
50 PERCENT EXCEEDS	9.9	9.0	12
90 PERCENT EXCEEDS	4.1	4.7	4.5

a From rating curve extended above 550 ft³/s, on basis of slope-area measurement of peak flow.

b From floodmark.

PENNYPACK CREEK BASIN

01467048 PENNYPACK CREEK AT LOWER RHAWN STREET BRIDGE, PHILADELPHIA, PA

LOCATION.--Lat 40°03'00", long 75°01'59", Philadelphia County, Hydrologic Unit 02040202, on left bank at downstream side of footbridge pier, 400 ft downstream from Lower Rhawn Street bridge, 0.8 mi upstream from Wooden Bridge Run, in Philadelphia.

DRAINAGE AREA.--49.8 mi².

PERIOD OF RECORD.--June 1965 to current year. Records for 1971-74 published in WDR PA-81-1.

REVISED RECORDS.--WDR PA-81-1: 1974. WDR PA-89-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 21.27 ft, above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	21	44	35	e36	e31	54	34	86	32	58	18
2	25	22	116	33	e32	e32	52	34	42	29	27	17
3	e24	21	648	33	e33	e33	48	32	35	84	24	20
4	e23	20	245	e80	e33	33	47	32	31	136	24	30
5	e22	20	55	e42	e32	33	46	33	979	33	23	22
6	e22	21	46	e36	e31	32	45	32	562	28	22	21
7	e20	21	41	e34	e32	169	45	33	91	28	20	30
8	e19	21	38	e31	e42	70	44	293	64	26	32	27
9	23	21	54	e58	e39	42	43	241	57	62	46	23
10	21	26	185	e48	e30	68	43	53	50	99	46	77
11	34	110	50	e38	e33	358	47	44	46	46	310	127
12	43	36	42	e32	e30	63	42	37	44	25	36	26
13	24	28	45	e31	e32	49	40	36	41	25	44	22
14	21	24	54	e102	e44	44	40	34	39	39	69	20
15	163	22	41	e63	e100	42	40	30	39	46	44	20
16	56	22	37	e38	e110	41	51	242	36	80	49	19
17	387	20	36	e36	e45	40	109	49	35	37	61	17
18	62	21	36	e33	e50	41	110	39	33	86	93	16
19	29	22	34	e30	e48	255	43	36	649	26	37	30
20	24	21	33	e31	e36	91	40	32	255	24	29	e24
21	22	22	33	e32	e31	67	40	30	52	24	27	e18
22	22	407	34	e32	e30	54	64	29	44	23	28	e60
23	21	182	33	e80	e29	69	46	27	41	146	26	e100
24	22	39	32	e98	e39	57	43	31	44	35	25	e29
25	22	29	30	e46	e36	49	43	57	57	26	31	e100
26	22	26	27	e43	e108	101	36	38	44	26	24	e430
27	20	24	29	e40	e64	264	56	42	35	30	25	e70
28	19	24	30	e38	e38	68	37	29	33	25	29	e56
29	20	23	131	e38	e36	56	36	28	32	23	43	e42
30	20	22	72	e37	---	53	34	31	31	25	23	e32
31	21	---	39	e37	---	76	---	469	---	457	18	---
TOTAL	1299	1338	2370	1385	1279	2481	1464	2207	3627	1831	1393	1543
MEAN	41.9	44.6	76.5	44.7	44.1	80.0	48.8	71.2	121	59.1	44.9	51.4
MAX	387	407	648	102	110	358	110	469	979	457	310	430
MIN	19	20	27	30	29	31	34	27	31	23	18	16
CFSM	.84	.90	1.54	.90	.89	1.61	.98	1.43	2.43	1.19	.90	1.03
IN.	.97	1.00	1.77	1.03	.96	1.85	1.09	1.65	2.71	1.37	1.04	1.15

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1992, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1965	58.1	151	1980	20.3	1966
1966	78.3	300	1973	17.5	1966
1967	91.8	213	1984	21.1	1981
1968	99.0	334	1979	14.0	1981
1969	101	252	1979	35.5	1969
1970	113	204	1983	33.5	1985
1971	121	338	1983	32.5	1985
1972	108	194	1978	43.0	1977
1973	88.1	245	1989	21.8	1965
1974	92.1	257	1975	23.7	1966
1975	71.6	163	1967	15.7	1970
1976	67.8	176	1971	17.4	

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1965 - 1992
ANNUAL TOTAL	30864	22217	
ANNUAL MEAN	84.6	60.7	91.3
HIGHEST ANNUAL MEAN			165
LOWEST ANNUAL MEAN			43.2
HIGHEST DAILY MEAN	1290	Aug 9	3040
LOWEST DAILY MEAN	19	Oct 8	8.4
ANNUAL SEVEN-DAY MINIMUM	20	Oct 26	9.3
INSTANTANEOUS PEAK FLOW		3060	a9770
INSTANTANEOUS PEAK STAGE		7.03	13.15
INSTANTANEOUS LOW FLOW		15	6.0
ANNUAL RUNOFF (CFSM)	1.70	1.22	1.83
ANNUAL RUNOFF (INCHES)	23.06	16.60	24.91
10 PERCENT EXCEEDS	163	100	173
50 PERCENT EXCEEDS	47	36	50
90 PERCENT EXCEEDS	22	22	21

a From rating curve extended above 3,900 ft³/s, on basis of slope-area measurement of peak flow.

FRANKFORD CREEK BASIN

01467087 FRANKFORD CREEK AT CASTOR AVENUE, PHILADELPHIA, PA

LOCATION.--Lat 40°00'57", long 75°05'50", Philadelphia County, Hydrologic Unit 02040203, on left bank at upstream side of Castor Avenue bridge 2.8 mi upstream from mouth in Northeast Philadelphia.

DRAINAGE AREA.--30.4 mi².

PERIOD OF RECORD.--July 1982 to current year. October 1965 to July 1982 at site 0.7 mi downstream. Not equivalent drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6.58 ft, above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	10	153	9.1	8.5	9.9	16	11	18	12	e12	e5.0
2	7.5	11	337	8.4	8.1	9.9	16	11	15	12	e6.8	e4.7
3	7.1	11	138	7.8	8.8	9.9	15	9.9	11	e51	e6.1	e5.3
4	6.6	13	21	15	8.8	9.5	15	9.6	11	e89	e6.1	e8.2
5	6.5	12	14	9.9	8.8	9.9	15	9.9	542	e14	e6.0	e6.1
6	7.2	11	12	e8.8	7.9	9.9	14	9.9	54	12	e5.8	e6.0
7	7.7	12	11	e8.2	7.9	129	14	9.9	22	11	e5.2	e8.7
8	8.1	12	11	e7.8	10	17	15	327	17	11	e7.5	e8.0
9	6.9	12	43	25	9.6	11	14	43	15	e51	e13	e6.4
10	6.7	15	101	14	7.9	69	14	13	14	e80	e13	e20
11	16	55	12	12	9.2	143	17	10	13	e29	e79	e35
12	13	9.2	9.9	10	8.2	16	14	9.6	12	8.8	e9.7	e7.8
13	7.9	11	15	9.6	8.4	14	12	9.9	12	8.8	e12	e6.2
14	8.3	7.7	19	77	9.7	13	13	9.9	12	e28	e18	e5.6
15	114	7.4	11	17	126	11	14	9.9	11	e39	e13	e5.6
16	12	7.9	8.9	14	51	e11	23	148	e11	e61	e14	e5.3
17	293	7.9	7.9	13	12	e10	e58	14	e11	8.8	e17	e4.9
18	14	7.9	7.0	14	15	e10	e60	11	e11	e67	e26	e4.5
19	9.0	8.0	6.9	13	12	e104	e16	10	e395	e9.9	e9.9	e8.3
20	8.1	8.2	6.7	12	10	e32	e14	9.9	29	e9.0	e7.6	e6.8
21	8.4	9.7	6.6	14	9.9	e26	e13	9.4	16	8.8	e7.2	e5.1
22	9.3	305	7.4	12	9.9	e22	e28	9.2	15	8.5	e7.6	e17
23	9.0	29	7.9	80	9.9	e46	12	10	14	150	e7.1	e27
24	8.8	9.7	7.6	54	19	e25	11	15	23	e17	e6.9	e7.7
25	8.8	8.5	7.0	13	10	14	12	22	26	e9.8	e8.2	e22
26	9.3	7.9	7.4	13	65	102	11	18	19	e9.7	e6.2	e104
27	9.2	7.7	7.9	11	12	58	e27	15	12	e17	e6.4	e19
28	8.8	8.0	7.9	9.1	11	17	11	9.9	12	e13	e7.8	e17
29	8.8	8.2	e78	9.2	10	16	11	9.9	12	e9.0	e12	e13
30	9.2	12	e29	9.9	---	15	11	12	12	e9.0	e6.3	e9.6
31	10	---	9.9	9.6	---	32	---	385	---	e204	e5.2	---
TOTAL	666.7	654.9	1121.9	540.4	504.5	1022.0	536	1211.8	1397	1068.1	368.6	409.8
MEAN	21.5	21.8	36.2	17.4	17.4	33.0	17.9	39.1	46.6	34.5	11.9	13.7
MAX	293	305	337	80	126	143	60	385	542	204	79	104
MIN	6.5	7.4	6.6	7.8	7.9	9.5	11	9.2	11	8.5	5.2	4.5
CFSM	.71	.72	1.19	.57	.57	1.08	.59	1.29	1.53	1.13	.39	.45
IN.	.82	.80	1.37	.66	.62	1.25	.66	1.48	1.71	1.31	.45	.50

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1992, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	24.4	41.0	37.2	32.3	34.9	43.4	50.1	57.8	43.9	61.3	41.0
MAX	41.4	81.7	90.9	57.3	80.4	86.8	143	98.4	111	116	61.8
(WY)	1990	1987	1984	1991	1988	1983	1983	1989	1989	1989	1985
MIN	14.1	17.7	15.5	10.6	17.4	11.7	14.4	20.8	15.8	34.5	11.9
(WY)	1987	1985	1989	1985	1992	1985	1985	1986	1986	1992	1992

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1982 - 1992
ANNUAL TOTAL	14583.1	9501.7	
ANNUAL MEAN	40.0	26.0	42.5
HIGHEST ANNUAL MEAN			54.6
LOWEST ANNUAL MEAN			26.0
HIGHEST DAILY MEAN	1050	Aug 9	1570
LOWEST DAILY MEAN	6.3	Jul 28	2.6
ANNUAL SEVEN-DAY MINIMUM	7.1	Oct 4	2.7
INSTANTANEOUS PEAK FLOW			2750
INSTANTANEOUS PEAK STAGE			5.81
INSTANTANEOUS LOW FLOW			11.82
ANNUAL RUNOFF (CFSM)	1.31	.85	1.1
ANNUAL RUNOFF (INCHES)	17.85	11.63	1.40
10 PERCENT EXCEEDS	54	52	19.00
50 PERCENT EXCEEDS	14	11	83
90 PERCENT EXCEEDS	8.0	7.2	16
			7.6

a From rating curve extended above 8,000 ft³/s, on basis of slope-area measurements of peak flow.

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA

LOCATION.--Lat 39°57'11", long 75°08'05", Philadelphia County, Hydrologic Unit 02040202, at center of river on a line 200 ft upstream from bridge from the north side of pier 12 north through channel station +14.3 to pier-head line on New Jersey side of river.

DRAINAGE AREA.--7,993 mi².

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1963 to current year.

pH: October 1967 to current year.

WATER TEMPERATURE: November 1960 to current year.

DISSOLVED OXYGEN: November 1960 to current year.

INSTRUMENTATION.--Water-quality monitor interfaced with data collection platform, located at river end of pier 12 north about 100 ft upstream from bridge. From November 1960 to July 1988 located on edge of pier 11.

REMARKS.--Further information on this station is given in U.S. Geological Survey Water-Supply Paper 1809-0. Interruptions in the daily record were due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,450 microsiemens, Nov. 20, 1964; minimum, 65 microsiemens, Sept. 15, 1979.

pH: Maximum, 8.7, Oct. 14, 1979; minimum, 4.7, Dec. 29, 1978.

WATER TEMPERATURE: Maximum, 31.0°C, July 13-15, 1966; minimum, 0.0°C on many days during winter.

DISSOLVED OXYGEN: Maximum, 14.1 mg/L, Dec. 14, 1962; minimum, 0.0 mg/L, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 418 microsiemens, Nov. 10; minimum, 114 microsiemens, June 6.

pH: Maximum, 7.8, Nov. 17; minimum, 6.2, Aug. 17.

WATER TEMPERATURE: Maximum, 27.5°C, July 21, 22; minimum, 2.5°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 12.0 mg/L, Dec. 31, Jan. 1, 4; minimum, 3.1 mg/L, Sept. 7.

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	319	276	294	361	317	338	228	171	198	217	202	209
2	327	284	299	362	320	339	217	165	189	216	202	209
3	324	284	304	360	317	335	214	165	186	221	203	210
4	330	292	310	366	320	342	190	151	162	231	203	215
5	335	293	313	368	324	346	173	152	163	225	211	218
6	341	300	316	384	334	357	177	164	170	226	212	219
7	334	297	314	392	340	364	182	170	175	223	214	219
8	337	296	316	392	344	366	187	175	181	223	214	219
9	342	298	319	401	338	367	192	180	184	225	214	220
10	341	297	320	418	345	376	191	181	186	236	217	224
11	345	298	323	408	336	375	187	174	183	228	220	224
12	346	303	325	368	323	343	185	169	174	230	220	225
13	---	---	---	372	322	343	---	---	---	231	221	227
14	347	301	319	366	315	339	---	---	---	234	222	229
15	339	304	319	375	313	341	---	---	---	230	218	225
16	335	296	312	361	317	337	187	178	183	229	212	222
17	334	298	312	370	315	338	192	180	187	236	215	223
18	321	284	299	372	314	342	198	187	193	229	215	221
19	321	284	297	383	310	342	202	192	196	227	211	220
20	309	280	292	398	324	355	204	195	199	239	212	225
21	312	281	295	393	316	348	205	197	201	243	217	229
22	310	284	295	---	---	---	207	198	202	247	218	231
23	308	279	292	415	318	364	211	199	204	250	221	235
24	311	281	293	---	---	---	212	199	206	249	232	240
25	318	280	296	309	291	301	211	197	205	235	213	225
26	321	283	302	288	267	278	212	193	203	242	215	229
27	325	289	306	283	249	270	213	193	202	250	224	236
28	336	291	312	278	226	255	213	197	206	248	223	236
29	354	300	326	261	195	226	215	196	207	251	231	241
30	354	310	332	243	181	210	214	198	206	253	236	244
31	368	323	343	---	---	---	218	201	209	256	241	248
MONTH	368	276	310	418	181	330	228	151	191	256	202	226

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	252	236	245	257	229	245	205	172	188	168	156	162
2	246	228	239	252	228	240	188	160	172	167	156	161
3	247	224	237	253	219	240	172	160	166	166	155	160
4	250	221	235	252	228	240	172	163	168	172	155	165
5	242	209	227	248	229	238	173	163	169	172	160	166
6	241	210	225	245	221	232	170	161	167	187	161	173
7	239	209	227	251	225	238	172	163	169	181	167	176
8	240	213	229	247	216	233	177	167	173	190	175	183
9	239	214	225	239	208	224	183	169	176	190	174	179
10	226	204	216	236	208	222	186	176	180	186	177	181
11	232	208	220	234	200	214	185	175	181	181	165	174
12	230	211	221	207	197	202	188	179	183	184	175	180
13	237	215	226	208	200	203	186	175	182	190	182	186
14	244	222	232	206	191	200	186	176	182	193	184	188
15	249	227	238	200	180	190	187	179	184	197	187	192
16	253	237	245	189	172	181	194	182	188	205	192	197
17	250	235	243	189	165	177	213	188	195	193	176	185
18	260	228	246	182	157	170	199	192	196	202	180	193
19	265	243	252	186	161	173	204	193	199	198	177	189
20	261	243	251	180	160	171	202	179	194	199	180	189
21	258	240	250	174	160	167	195	177	186	197	180	188
22	256	239	249	173	160	167	194	182	188	196	182	189
23	258	244	251	182	165	176	190	172	181	197	185	192
24	259	246	253	183	174	179	182	158	171	201	190	196
25	263	251	257	187	177	180	170	142	160	205	193	199
26	265	257	262	191	183	187	167	142	154	204	195	201
27	268	255	261	208	184	197	159	140	148	206	197	201
28	263	244	255	205	195	199	152	142	147	205	193	201
29	261	234	248	209	196	205	164	148	153	206	194	201
30	---	---	---	209	201	205	164	152	156	---	---	---
31	---	---	---	212	188	203	---	---	---	---	---	---
MONTH	268	204	240	257	157	203	213	140	175	206	155	184
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	208	198	204	244	212	225	250	229	239
2	214	188	203	211	201	208	240	211	225	254	231	242
3	197	180	192	218	205	212	238	211	224	256	234	245
4	194	160	180	220	208	213	236	214	224	258	241	250
5	190	147	167	218	206	213	234	216	225	262	240	250
6	148	114	128	221	209	216	236	213	225	266	244	254
7	125	117	121	225	213	219	238	216	226	266	246	256
8	128	122	125	230	214	221	240	222	230	---	---	---
9	143	124	135	230	216	224	241	221	233	---	---	---
10	143	132	138	235	216	225	241	220	231	268	249	260
11	143	131	138	238	214	226	243	219	231	272	250	261
12	143	132	140	239	213	226	242	210	226	269	250	261
13	---	---	---	239	215	227	244	212	228	272	253	263
14	---	---	---	239	216	228	243	212	228	273	253	264
15	---	---	---	242	219	231	244	214	230	273	254	264
16	---	---	---	242	219	231	243	213	227	276	259	267
17	---	---	---	249	219	235	240	211	225	280	260	271
18	---	---	---	247	223	235	235	211	223	292	268	278
19	---	---	---	245	219	233	236	214	223	294	272	282
20	---	---	---	244	221	231	230	208	219	300	269	284
21	---	---	---	242	220	231	232	210	220	302	274	288
22	---	---	---	245	220	232	233	210	221	301	276	289
23	184	168	174	241	220	231	237	211	222	301	271	287
24	185	172	179	243	218	229	237	213	223	303	275	291
25	189	180	184	241	218	229	241	218	227	313	281	297
26	194	184	190	245	217	229	239	216	229	310	267	289
27	203	190	195	247	219	232	246	220	233	296	264	280
28	200	189	196	243	218	230	250	225	237	293	254	275
29	201	190	196	245	220	233	251	226	238	287	259	271
30	203	195	199	246	218	232	249	226	237	---	---	---
31	---	---	---	248	212	232	251	227	237	---	---	---
MONTH	214	114	167	249	198	226	251	208	227	313	229	269

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	7.1	7.0	7.1	7.2	7.2	7.2	7.1	6.9	7.0	7.3	7.2	7.2
2	7.1	7.0	7.0	7.2	7.2	7.2	7.0	6.9	7.0	7.3	7.2	7.2
3	7.0	7.0	7.0	7.3	7.2	7.3	7.0	6.8	6.9	7.3	6.7	7.0
4	7.1	7.0	7.0	7.5	7.3	7.4	7.0	6.8	6.9	7.1	7.0	7.0
5	7.0	7.0	7.0	7.3	7.3	7.3	7.1	7.0	7.1	7.0	7.0	7.0
6	7.1	7.0	7.0	7.3	7.3	7.3	7.1	6.7	6.9	7.1	7.0	7.0
7	7.1	7.1	7.1	7.3	7.2	7.3	6.7	6.6	6.6	7.1	7.0	7.0
8	7.1	7.1	7.1	7.5	7.2	7.4	6.7	6.6	6.6	7.1	7.0	7.1
9	7.1	7.1	7.1	7.5	7.5	7.5	6.7	6.6	6.6	7.1	7.0	7.0
10	7.1	7.1	7.1	7.6	7.5	7.5	6.7	6.6	6.6	7.1	7.0	7.0
11	7.1	7.1	7.1	7.5	7.5	7.5	6.6	6.6	6.6	7.1	7.0	7.1
12	7.1	7.1	7.1	7.6	7.5	7.5	6.6	6.6	6.6	7.1	7.0	7.1
13	---	---	---	7.5	7.5	7.5	---	---	---	7.1	7.0	7.1
14	7.1	7.1	7.1	7.5	7.5	7.5	---	---	---	7.1	7.0	7.0
15	7.1	7.1	7.1	7.5	7.5	7.5	---	---	---	7.1	7.1	7.1
16	7.1	7.0	7.0	7.5	7.4	7.5	7.2	6.8	7.0	7.1	7.1	7.1
17	7.1	7.1	7.1	7.8	7.4	7.6	7.3	7.2	7.2	7.2	7.1	7.1
18	7.1	7.1	7.1	7.6	7.3	7.4	7.3	7.2	7.2	7.2	7.1	7.1
19	7.1	7.1	7.1	7.7	7.3	7.4	7.3	7.3	7.3	7.2	7.1	7.2
20	7.2	7.1	7.2	7.7	7.4	7.6	7.3	7.3	7.3	7.2	7.1	7.2
21	7.3	7.2	7.2	7.4	7.3	7.4	7.3	7.3	7.3	7.2	7.1	7.1
22	7.2	7.1	7.2	---	---	---	7.3	7.3	7.3	7.2	7.1	7.1
23	7.2	7.1	7.2	7.3	7.2	7.3	7.3	7.3	7.3	7.2	7.1	7.1
24	7.2	7.1	7.1	---	---	---	7.3	7.3	7.3	7.2	7.1	7.1
25	7.2	7.1	7.1	7.4	7.2	7.3	7.3	7.3	7.3	7.2	7.1	7.2
26	7.2	7.1	7.1	7.4	7.3	7.4	7.3	7.3	7.3	7.2	7.1	7.1
27	7.1	7.0	7.1	7.4	7.3	7.3	7.3	7.3	7.3	7.1	7.1	7.1
28	7.2	7.0	7.1	7.3	7.2	7.3	7.3	7.2	7.3	7.1	7.1	7.1
29	7.2	7.2	7.2	7.2	7.0	7.1	7.3	7.2	7.2	7.1	7.1	7.1
30	7.2	7.1	7.2	7.1	7.0	7.0	7.2	7.2	7.2	7.1	7.1	7.1
31	7.2	7.1	7.2	---	---	---	7.3	7.2	7.2	7.1	7.0	7.1
MONTH	7.3	7.0	7.1	7.8	7.0	7.4	7.3	6.6	7.0	7.3	6.7	7.1
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	7.1	7.0	7.1	7.3	7.2	7.2	7.1	6.9	7.0	6.9	6.7	6.8
2	7.1	7.1	7.1	7.2	7.2	7.2	7.0	6.9	6.9	7.0	6.7	6.8
3	7.1	7.1	7.1	7.2	7.1	7.2	6.9	6.9	6.9	6.9	6.7	6.7
4	7.1	7.1	7.1	7.2	7.1	7.2	6.9	6.9	6.9	6.9	6.7	6.8
5	7.1	7.1	7.1	7.2	7.1	7.1	6.9	6.9	6.9	7.1	6.5	6.7
6	7.1	7.1	7.1	7.2	7.1	7.1	6.9	6.9	6.9	6.9	6.7	6.8
7	7.1	7.1	7.1	7.2	7.1	7.1	6.9	6.8	6.9	6.9	6.7	6.8
8	7.1	7.0	7.1	7.1	7.1	7.1	6.9	6.9	6.9	7.0	6.8	6.9
9	7.1	7.0	7.1	7.1	7.0	7.0	6.9	6.8	6.9	6.9	6.8	6.9
10	7.1	7.1	7.1	7.1	7.0	7.0	6.9	6.8	6.9	7.0	6.8	6.9
11	7.2	7.1	7.1	7.1	7.0	7.1	6.9	6.8	6.9	6.9	6.6	6.7
12	7.1	7.1	7.1	7.1	7.0	7.1	6.9	6.8	6.9	6.8	6.8	6.8
13	7.2	7.1	7.1	7.1	7.1	7.1	6.9	6.8	6.9	6.8	6.8	6.8
14	7.2	7.1	7.1	7.1	7.1	7.1	7.0	6.8	6.9	6.8	6.8	6.8
15	7.1	7.1	7.1	7.1	7.0	7.0	7.0	6.9	6.9	---	---	---
16	7.1	7.0	7.1	7.0	6.9	7.0	7.0	6.9	6.9	6.8	6.8	6.8
17	7.1	7.0	7.0	7.0	6.6	6.9	7.0	6.9	6.9	6.8	6.7	6.8
18	7.1	7.0	7.1	6.9	6.8	6.9	7.0	6.9	6.9	6.8	6.7	6.8
19	7.1	7.0	7.1	6.9	6.8	6.9	7.0	6.9	6.9	6.8	6.7	6.7
20	7.1	7.0	7.0	6.9	6.8	6.8	7.0	6.9	6.9	6.8	6.7	6.7
21	7.1	7.0	7.0	6.8	6.8	6.8	7.1	6.9	7.0	6.8	6.7	6.7
22	7.1	7.0	7.1	6.8	6.8	6.8	7.1	7.0	7.1	6.8	6.7	6.7
23	7.2	7.0	7.1	6.9	6.8	6.8	7.1	7.0	7.0	6.8	6.7	6.8
24	7.2	7.0	7.1	6.8	6.8	6.8	7.0	7.0	7.0	6.9	6.7	6.8
25	7.2	7.1	7.1	6.8	6.8	6.8	7.0	6.9	6.9	6.9	6.8	6.8
26	7.2	7.1	7.1	6.9	6.8	6.8	6.9	6.8	6.8	6.8	6.8	6.8
27	7.2	7.1	7.1	7.0	6.9	7.0	6.8	6.7	6.7	6.8	6.7	6.8
28	7.2	7.1	7.2	7.1	7.0	7.0	6.8	6.7	6.7	6.7	6.7	6.7
29	7.3	7.1	7.2	7.2	7.1	7.2	6.7	6.7	6.7	6.7	6.7	6.7
30	---	---	---	7.2	7.1	7.1	6.7	6.7	6.7	---	---	---
31	---	---	---	7.1	7.0	7.1	---	---	---	---	---	---
MONTH	7.3	7.0	7.1	7.3	6.6	7.0	7.1	6.7	6.9	7.1	6.5	6.8

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	6.6	6.6	6.6	6.6	6.5	6.5	6.7	6.6	6.6
2	6.8	6.5	6.6	6.7	6.6	6.6	6.6	6.5	6.5	6.7	6.6	6.6
3	6.8	6.6	6.7	6.7	6.6	6.7	6.6	6.6	6.6	6.7	6.6	6.6
4	6.8	6.7	6.8	6.7	6.6	6.6	6.6	6.6	6.6	6.7	6.6	6.6
5	6.8	6.6	6.7	6.7	6.6	6.6	6.6	6.6	6.6	6.7	6.6	6.6
6	6.6	6.5	6.5	6.8	6.6	6.7	6.7	6.6	6.6	6.7	6.6	6.6
7	6.5	6.4	6.5	6.8	6.7	6.7	6.8	6.6	6.7	6.7	6.6	6.6
8	6.5	6.4	6.4	6.8	6.7	6.7	6.8	6.7	6.7	---	---	---
9	6.5	6.4	6.5	6.8	6.7	6.7	6.7	6.6	6.7	---	---	---
10	6.5	6.5	6.5	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.6
11	6.5	6.5	6.5	6.7	6.7	6.7	6.7	6.6	6.7	6.7	6.6	6.6
12	6.5	6.5	6.5	6.7	6.6	6.7	6.6	6.6	6.6	6.7	6.6	6.6
13	---	---	---	6.7	6.6	6.6	6.6	6.6	6.6	6.7	6.6	6.6
14	---	---	---	6.6	6.6	6.6	6.6	6.6	6.6	6.7	6.6	6.7
15	---	---	---	6.6	6.6	6.6	6.6	6.6	6.6	6.7	6.6	6.7
16	---	---	---	6.6	6.6	6.6	6.6	6.6	6.6	6.7	6.6	6.7
17	---	---	---	6.6	6.6	6.6	6.6	6.2	6.6	6.7	6.6	6.7
18	---	---	---	6.6	6.6	6.6	6.6	6.5	6.5	6.7	6.6	6.7
19	---	---	---	6.6	6.5	6.6	6.6	6.5	6.5	6.7	6.7	6.7
20	---	---	---	6.6	6.5	6.5	6.6	6.5	6.5	6.8	6.7	6.7
21	---	---	---	6.6	6.5	6.5	6.6	6.5	6.5	6.8	6.7	6.7
22	---	---	---	6.6	6.5	6.6	6.6	6.5	6.5	6.8	6.7	6.7
23	6.5	6.3	6.4	6.6	6.5	6.6	6.6	6.5	6.5	6.8	6.7	6.7
24	6.6	6.4	6.5	6.6	6.5	6.5	6.6	6.5	6.5	6.8	6.7	6.8
25	6.6	6.5	6.5	6.6	6.5	6.5	6.6	6.5	6.6	6.9	6.8	6.8
26	6.7	6.5	6.6	6.6	6.5	6.5	6.6	6.5	6.5	6.9	6.8	6.8
27	---	---	---	6.6	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.8
28	6.6	6.5	6.6	6.6	6.5	6.5	6.6	6.5	6.5	6.8	6.8	6.8
29	6.6	6.6	6.6	6.6	6.5	6.6	6.6	6.6	6.6	6.8	6.6	6.8
30	6.6	6.6	6.6	6.7	6.6	6.6	6.6	6.6	6.6	---	---	---
31	---	---	---	6.6	6.6	6.6	6.6	6.6	6.6	---	---	---
MONTH	6.8	6.3	6.6	6.8	6.5	6.6	6.8	6.2	6.6	6.9	6.6	6.7

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	21.5	21.0	21.5	16.0	15.5	15.5	11.0	10.5	11.0	4.0	3.5	4.0
2	21.5	21.0	21.5	16.0	15.5	15.5	11.0	10.5	10.5	4.0	3.5	4.0
3	21.5	21.0	21.5	15.5	15.0	15.5	11.0	10.5	10.5	4.5	4.0	4.0
4	22.0	21.5	21.5	15.5	14.5	15.0	11.0	9.0	9.5	5.0	4.5	4.5
5	22.0	21.5	21.5	14.5	14.0	14.0	9.0	8.5	8.5	5.0	4.5	5.0
6	22.0	21.0	21.5	14.0	13.5	14.0	8.5	8.0	8.0	5.0	5.0	5.0
7	21.5	20.5	21.0	14.0	13.5	13.5	8.0	7.5	8.0	5.0	5.0	5.0
8	20.5	20.0	20.0	13.5	13.0	13.5	8.0	7.5	8.0	5.0	5.0	5.0
9	20.0	19.5	20.0	13.0	12.5	13.0	8.5	8.0	8.0	5.5	5.0	5.0
10	20.0	19.5	20.0	12.5	12.0	12.5	8.0	7.5	8.0	5.5	5.0	5.5
11	20.0	19.5	19.5	12.5	11.5	12.0	8.0	7.5	7.5	5.5	5.5	5.5
12	19.5	19.0	19.5	12.0	11.5	11.5	7.5	7.0	7.5	5.5	5.5	5.5
13	---	---	---	11.5	11.5	11.5	---	---	---	5.5	5.5	5.5
14	19.0	18.5	18.5	11.5	11.0	11.5	---	---	---	6.0	5.5	6.0
15	19.0	18.5	18.5	12.0	11.0	11.5	---	---	---	6.0	5.5	5.5
16	18.5	18.0	18.5	12.0	11.5	11.5	6.5	6.0	6.5	5.5	4.5	5.0
17	18.0	17.5	17.5	12.0	11.0	11.5	6.5	6.0	6.0	4.5	4.5	4.5
18	17.5	17.0	17.0	11.5	11.0	11.0	6.0	5.5	6.0	4.5	4.0	4.5
19	17.5	17.0	17.0	12.0	11.0	11.5	5.5	5.0	5.5	4.0	3.5	3.5
20	17.0	16.5	16.5	12.5	12.0	12.0	5.5	5.0	5.0	3.5	3.0	3.5
21	17.0	16.0	16.5	12.5	12.0	12.0	5.5	5.0	5.0	3.5	3.0	3.0
22	16.5	16.5	16.5	---	---	---	5.5	5.0	5.0	3.5	3.0	3.0
23	17.0	16.0	16.5	13.0	12.5	13.0	5.0	5.0	5.0	4.0	3.0	3.5
24	17.0	16.0	16.5	---	---	---	5.0	4.5	5.0	4.0	3.5	3.5
25	17.0	16.5	16.5	12.0	11.5	11.5	5.0	4.0	4.5	3.5	2.5	3.0
26	17.0	16.5	16.5	12.0	11.0	11.5	4.5	4.0	4.5	3.0	2.5	2.5
27	17.0	16.5	17.0	11.5	11.0	11.0	4.5	4.0	4.0	3.0	2.5	2.5
28	17.0	16.5	17.0	11.0	11.0	11.0	4.5	3.5	4.0	3.0	2.5	2.5
29	16.5	16.0	16.5	11.0	10.5	11.0	4.5	3.5	4.0	3.0	2.5	2.5
30	16.0	16.0	16.0	11.0	10.5	11.0	4.5	4.0	4.0	3.0	2.5	3.0
31	16.0	15.5	16.0	---	---	---	4.0	3.5	4.0	3.0	3.0	3.0
MONTH	22.0	15.5	18.5	16.0	10.5	12.5	11.0	3.5	6.5	6.0	2.5	4.1

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	3.0	3.0	3.0	6.5	6.0	6.0	8.5	7.5	8.0	15.5	15.0	15.0
2	3.0	2.5	3.0	6.5	6.0	6.0	8.0	7.5	8.0	16.5	15.0	15.5
3	3.0	2.5	3.0	6.5	6.0	6.5	7.5	7.5	7.5	16.0	15.5	15.5
4	3.0	2.5	3.0	6.5	6.0	6.5	8.0	7.5	7.5	16.5	15.5	16.0
5	3.0	2.5	3.0	6.5	6.5	6.5	8.5	7.5	8.0	16.5	15.0	15.5
6	3.0	2.5	2.5	7.0	6.5	6.5	9.0	8.0	8.5	16.0	15.0	15.5
7	3.0	2.5	3.0	7.0	6.5	7.0	9.0	8.5	9.0	16.0	15.0	15.5
8	3.0	3.0	3.0	7.5	7.0	7.5	9.5	9.0	9.5	18.0	16.0	16.5
9	3.0	2.5	3.0	7.5	7.0	7.5	10.0	9.5	9.5	15.0	14.5	15.0
10	2.5	2.5	2.5	8.0	7.5	7.5	10.5	9.5	10.0	15.5	14.5	15.0
11	3.0	2.5	3.0	8.0	8.0	8.0	10.5	10.0	10.5	17.0	15.5	16.5
12	3.0	2.5	3.0	8.0	7.5	7.5	11.0	10.5	10.5	16.5	15.5	16.0
13	3.0	2.5	2.5	8.0	7.5	8.0	11.0	10.5	10.5	16.5	16.0	16.5
14	3.0	2.5	3.0	8.0	7.5	8.0	11.5	10.5	11.0	17.0	16.5	17.0
15	3.5	3.0	3.5	8.0	7.5	7.5	12.0	11.0	11.5	17.0	16.5	17.0
16	4.0	3.5	4.0	7.5	6.5	7.0	12.0	11.0	11.5	17.0	16.5	17.0
17	4.0	3.5	4.0	7.0	6.0	6.5	12.5	11.5	12.0	17.0	16.5	17.0
18	4.5	4.0	4.0	7.0	6.0	6.5	12.0	11.5	12.0	17.5	17.0	17.5
19	4.5	4.0	4.5	6.5	5.5	6.0	12.0	11.5	12.0	18.0	17.0	17.5
20	5.0	4.5	4.5	6.5	5.5	6.0	12.0	12.0	12.0	18.5	17.5	18.0
21	5.0	4.5	5.0	6.0	5.0	5.5	13.0	12.0	12.5	19.0	17.5	18.5
22	5.5	4.5	5.0	5.5	5.0	5.5	13.5	13.0	13.0	20.0	18.5	19.0
23	5.5	5.0	5.5	5.5	5.0	5.5	13.5	13.0	13.5	20.5	19.0	19.5
24	5.5	5.5	5.5	5.5	5.0	5.5	13.5	13.0	13.5	21.0	19.5	20.0
25	5.5	5.5	5.5	6.0	5.5	6.0	13.5	13.0	13.0	20.0	19.5	20.0
26	6.0	5.5	6.0	6.5	6.0	6.0	13.5	12.5	13.0	20.0	19.0	19.5
27	6.0	5.5	6.0	7.0	6.0	6.5	14.5	13.0	13.5	20.0	19.0	19.5
28	6.5	6.0	6.0	7.0	6.5	7.0	15.0	13.5	14.5	20.0	19.0	19.5
29	6.5	6.0	6.0	8.0	7.0	7.5	15.5	14.0	14.5	20.0	19.0	19.5
30	---	---	---	8.0	7.5	8.0	15.0	14.5	15.0	---	---	---
31	---	---	---	8.5	7.5	8.0	---	---	---	---	---	---
MONTH	6.5	2.5	4.0	8.5	5.0	6.8	15.5	7.5	11.2	21.0	14.5	17.2
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	24.5	24.0	24.0	25.0	25.0	25.0	24.5	24.0	24.5
2	20.0	19.5	19.5	24.5	24.0	24.0	25.0	25.0	25.0	24.5	24.0	24.0
3	19.5	19.0	19.5	24.0	23.5	24.0	25.0	24.5	25.0	24.0	24.0	24.0
4	19.5	18.5	19.0	24.0	23.5	23.5	25.0	25.0	25.0	---	---	---
5	19.5	18.5	18.5	24.0	23.5	24.0	25.0	25.0	25.0	24.5	24.0	24.5
6	18.5	18.0	18.5	24.0	24.0	24.0	25.0	24.5	25.0	24.0	24.0	24.0
7	19.5	19.0	19.0	24.5	24.0	24.0	25.0	25.0	25.0	24.0	23.5	24.0
8	20.0	19.5	20.0	24.5	24.0	24.5	25.0	25.0	25.0	---	---	---
9	20.5	20.0	20.0	25.0	24.5	24.5	25.0	25.0	25.0	---	---	---
10	21.0	20.0	20.5	25.5	25.0	25.0	25.5	25.0	25.5	---	---	---
11	21.0	20.5	21.0	26.0	25.0	25.5	25.5	25.5	25.5	25.0	24.5	25.0
12	21.0	21.0	21.0	26.0	25.5	25.5	25.5	25.5	25.5	24.5	24.5	24.5
13	---	---	---	26.0	25.5	26.0	25.5	25.0	25.5	24.5	24.0	24.5
14	---	---	---	26.5	26.0	26.0	25.0	25.0	25.0	24.5	24.0	24.0
15	---	---	---	27.0	26.0	26.5	25.0	24.5	24.5	24.5	24.0	24.0
16	---	---	---	26.5	26.5	26.5	24.5	24.0	24.0	24.5	24.0	24.5
17	---	---	---	26.5	26.0	26.5	24.0	24.0	24.0	24.5	24.0	24.5
18	---	---	---	27.0	26.5	26.5	24.0	24.0	24.0	24.5	24.5	24.5
19	---	---	---	27.0	26.5	26.5	24.0	24.0	24.0	24.5	24.5	24.5
20	---	---	---	27.0	26.5	27.0	24.5	24.0	24.0	24.5	24.0	24.0
21	---	---	---	27.5	27.0	27.0	24.5	24.0	24.0	24.0	24.0	24.0
22	---	---	---	27.5	27.0	27.0	24.0	24.0	24.0	24.5	24.0	24.0
23	23.0	22.5	22.5	27.0	26.5	26.5	24.5	24.0	24.0	24.0	23.5	24.0
24	22.5	22.5	22.5	26.5	26.0	26.0	24.5	24.0	24.5	23.5	22.5	23.0
25	23.0	22.5	22.5	26.0	25.5	25.5	25.0	24.5	24.5	22.5	21.5	22.0
26	23.0	22.5	23.0	25.5	25.5	25.5	25.0	24.5	24.5	21.5	21.5	21.5
27	23.5	23.0	23.0	25.5	25.0	25.5	25.0	25.0	25.0	21.5	21.0	21.5
28	23.5	23.0	23.0	25.5	25.0	25.5	25.5	25.0	25.0	21.5	21.0	21.0
29	23.5	23.0	23.5	25.5	25.0	25.0	25.5	25.0	25.5	21.0	20.5	21.0
30	24.0	23.5	23.5	25.5	25.0	25.5	24.5	24.5	24.5	---	---	---
31	---	---	---	25.5	25.0	25.0	24.5	24.5	24.5	---	---	---
MONTH	24.0	18.0	21.1	27.5	23.5	25.4	25.5	24.0	24.7	25.0	20.5	23.6

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	5.3	4.8	5.0	7.2	6.8	7.0	8.8	8.2	8.5	12.0	11.4	11.7
2	5.3	4.9	5.1	7.3	6.9	7.0	9.0	8.2	8.6	11.9	11.1	11.5
3	5.3	4.9	5.1	7.5	6.9	7.2	8.9	8.3	8.7	11.8	11.3	11.6
4	5.2	4.8	5.0	7.8	7.1	7.5	10.3	8.5	9.4	12.0	11.5	11.6
5	5.4	4.7	5.0	7.9	7.3	7.6	10.8	10.2	10.5	11.7	11.4	11.6
6	5.2	5.0	5.1	7.9	7.5	7.7	10.8	10.5	10.6	11.7	11.3	11.5
7	5.3	5.0	5.1	7.9	7.6	7.7	10.7	10.2	10.5	11.6	11.4	11.5
8	5.5	5.1	5.3	8.0	7.5	7.8	10.4	10.1	10.3	11.6	11.3	11.4
9	5.7	5.3	5.5	8.3	7.8	8.0	10.3	9.9	10.1	11.5	10.8	11.2
10	5.7	5.4	5.5	8.8	8.3	8.5	10.4	10.1	10.2	11.1	7.5	8.8
11	5.7	5.3	5.5	8.7	8.5	8.6	10.7	10.2	10.4	8.0	7.2	7.5
12	5.4	5.1	5.3	8.8	8.4	8.7	10.9	10.4	10.8	7.4	7.2	7.3
13	---	---	---	8.9	8.7	8.8	---	---	---	7.5	7.1	7.3
14	5.5	5.1	5.3	9.0	8.7	8.8	---	---	---	7.4	7.0	7.2
15	5.5	5.2	5.3	9.0	8.7	8.8	---	---	---	7.6	7.2	7.4
16	5.3	5.0	5.1	9.1	8.6	8.9	11.7	11.5	11.6	8.0	7.3	7.7
17	5.7	5.1	5.5	9.5	8.9	9.2	11.7	11.4	11.5	8.5	8.0	8.2
18	6.1	5.6	5.8	9.2	8.9	9.0	11.5	11.4	11.4	8.2	7.6	7.8
19	6.2	5.5	5.8	9.6	8.9	9.1	11.7	11.5	11.7	8.3	7.8	8.0
20	6.7	5.7	6.3	9.5	9.1	9.3	11.7	11.0	11.4	8.2	7.6	7.9
21	6.9	5.9	6.3	9.2	9.0	9.1	11.4	11.0	11.3	8.5	7.8	8.1
22	6.7	6.0	6.2	---	---	---	11.4	11.0	11.3	8.3	7.8	8.1
23	6.8	6.0	6.3	---	---	---	11.4	11.0	11.2	8.3	7.5	7.9
24	6.8	6.0	6.3	---	---	---	11.4	11.0	11.2	7.9	7.5	7.7
25	6.6	5.8	6.2	9.3	8.4	8.8	11.5	11.0	11.3	8.9	7.7	8.1
26	6.5	5.7	6.0	9.5	9.0	9.3	11.7	11.1	11.4	9.2	8.1	8.6
27	6.3	5.6	5.9	9.3	8.8	9.0	11.7	11.1	11.5	9.3	8.4	8.8
28	6.4	5.5	6.0	9.0	8.6	8.9	11.9	11.1	11.5	9.3	8.5	8.8
29	6.9	6.3	6.5	8.8	8.5	8.6	11.9	11.0	11.4	9.6	8.5	9.0
30	6.8	6.4	6.6	8.7	8.2	8.5	11.9	11.3	11.5	10.2	8.5	9.3
31	7.1	6.6	6.8	---	---	---	12.0	11.4	11.7	10.4	9.2	9.8
MONTH	7.1	4.7	5.7	9.6	6.8	8.4	12.0	8.2	10.8	12.0	7.0	9.1
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	10.4	8.5	9.5	10.4	9.9	10.2	10.1	9.7	9.9	7.8	7.0	7.5
2	11.1	9.5	10.3	10.7	10.0	10.5	10.2	9.8	10.0	7.9	7.4	7.7
3	10.8	9.3	10.1	10.7	10.4	10.6	10.4	10.1	10.2	7.8	7.4	7.6
4	10.6	9.0	10.0	10.6	10.4	10.5	10.4	10.2	10.3	7.9	7.4	7.7
5	10.6	8.5	9.5	10.5	10.1	10.3	10.3	9.8	10.0	8.2	7.3	7.6
6	10.9	9.3	10.1	10.9	10.1	10.6	10.0	9.7	9.8	7.9	7.6	7.7
7	11.5	10.8	11.3	10.9	10.1	10.5	10.8	9.3	9.6	7.9	7.5	7.7
8	11.7	10.4	11.2	10.3	10.0	10.2	9.6	9.1	9.3	7.7	7.0	7.5
9	11.9	11.3	11.6	10.4	9.9	10.1	9.3	8.9	9.1	7.2	6.7	6.9
10	11.8	10.8	11.3	10.4	9.9	10.1	9.4	8.9	9.2	7.0	6.7	6.9
11	11.3	10.2	10.7	10.2	9.6	9.8	9.5	9.2	9.3	6.9	6.3	6.5
12	11.3	10.0	10.8	9.9	9.6	9.8	9.4	8.9	9.1	6.7	6.2	6.5
13	11.0	9.7	10.6	9.8	8.9	9.5	9.3	8.9	9.1	6.5	6.1	6.4
14	10.9	9.4	10.3	9.7	9.1	9.4	9.1	8.8	8.9	6.4	6.0	6.2
15	10.7	9.3	10.1	9.5	9.0	9.2	9.1	8.8	8.9	---	---	---
16	10.0	8.0	9.0	9.4	9.0	9.2	8.8	8.4	8.6	7.3	6.6	7.1
17	10.3	8.4	9.2	9.4	9.1	9.2	8.6	8.3	8.5	7.0	6.3	6.6
18	10.5	9.0	10.0	9.4	8.8	9.1	8.7	8.1	8.5	6.6	6.0	6.3
19	10.3	9.2	9.9	9.6	9.0	9.3	8.7	8.3	8.4	6.5	6.0	6.2
20	10.4	9.8	10.1	9.6	9.1	9.3	8.7	8.2	8.4	6.5	6.0	6.2
21	10.5	10.0	10.2	10.0	9.2	9.5	8.7	8.2	8.4	6.6	5.9	6.2
22	10.5	9.9	10.3	10.0	9.6	9.8	8.4	8.0	8.3	7.0	6.0	6.6
23	10.5	9.9	10.2	10.1	9.7	9.8	8.7	8.1	8.3	7.7	6.7	7.0
24	10.6	9.9	10.4	10.0	9.7	9.8	9.1	8.2	8.6	7.9	7.0	7.3
25	10.8	10.2	10.5	10.1	9.7	9.8	9.2	8.6	8.9	7.8	6.9	7.4
26	10.7	9.8	10.4	9.9	9.5	9.7	9.0	8.5	8.8	7.4	6.6	6.9
27	10.5	9.8	10.2	10.4	9.7	10.1	8.6	7.9	8.4	6.6	5.9	6.2
28	10.2	9.7	10.0	10.7	10.1	10.4	8.3	7.6	7.9	6.0	5.5	5.7
29	10.4	9.9	10.2	10.9	10.4	10.6	8.0	7.3	7.5	6.0	5.2	5.6
30	---	---	---	10.7	9.9	10.3	7.7	7.1	7.3	---	---	---
31	---	---	---	10.2	9.6	9.9	---	---	---	---	---	---
MONTH	11.9	8.0	13.5	10.9	8.8	9.9	10.4	7.1	8.9	8.2	5.2	6.8

DELAWARE RIVER BASIN

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE AT PHILADELPHIA, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	6.6	5.9	6.2	4.8	4.3	4.5	4.4	4.0	4.2
2	6.2	5.4	5.6	7.0	5.8	6.3	4.9	4.3	4.5	4.4	4.0	4.1
3	6.8	5.4	6.2	6.8	6.3	6.5	5.2	4.5	4.8	4.3	3.8	4.0
4	7.2	6.2	6.7	6.3	5.9	6.1	5.4	4.7	5.1	---	---	---
5	7.3	6.8	7.0	6.7	5.7	6.3	5.7	4.8	5.2	4.0	3.6	3.7
6	7.2	6.9	7.0	7.0	6.1	6.5	6.5	5.0	5.6	3.8	3.5	3.6
7	6.9	6.5	6.7	7.2	6.1	6.6	6.7	5.3	5.9	3.7	3.1	3.5
8	6.6	6.2	6.4	7.4	6.3	6.8	6.5	5.7	6.1	---	---	---
9	6.7	6.1	6.4	7.1	6.3	6.7	6.2	5.4	5.9	---	---	---
10	6.8	6.1	6.5	7.1	6.2	6.6	5.9	5.4	5.7	---	---	---
11	6.5	6.1	6.3	6.5	5.9	6.2	5.7	4.9	5.3	---	---	---
12	6.5	6.1	6.3	6.1	5.3	5.8	5.0	4.6	4.8	4.3	3.7	4.0
13	---	---	---	5.5	4.8	5.2	4.8	4.4	4.6	4.3	3.8	4.0
14	---	---	---	4.9	4.5	4.7	4.8	4.2	4.5	4.3	3.8	4.0
15	---	---	---	4.7	4.3	4.5	4.8	4.3	4.5	4.2	3.7	3.9
16	---	---	---	4.6	4.1	4.4	4.7	4.1	4.3	4.0	3.6	3.7
17	---	---	---	4.6	4.1	4.3	4.4	3.6	3.9	4.0	3.5	3.7
18	---	---	---	4.6	3.9	4.1	4.0	3.3	3.6	4.5	3.7	4.1
19	---	---	---	4.5	3.7	4.0	3.9	3.2	3.5	4.7	4.2	4.4
20	---	---	---	4.5	3.5	3.9	4.2	3.2	3.7	4.9	4.2	4.5
21	---	---	---	4.4	3.7	4.0	4.4	3.4	3.9	4.7	4.2	4.4
22	---	---	---	4.6	3.8	4.1	4.7	3.6	4.1	4.6	4.0	4.2
23	6.4	5.6	5.9	4.4	3.6	4.0	4.8	3.7	4.2	4.5	3.9	4.2
24	6.6	5.8	6.1	4.1	3.6	3.8	4.8	3.9	4.3	4.9	4.2	4.6
25	6.6	5.8	6.2	4.3	3.4	3.7	4.5	3.8	4.2	5.2	4.6	4.9
26	7.1	6.0	6.5	4.2	3.2	3.6	4.2	3.6	3.9	5.2	4.9	5.1
27	7.1	6.0	6.5	4.1	3.2	3.6	4.0	3.6	3.8	4.9	4.3	4.6
28	7.0	6.3	6.6	4.4	3.3	3.7	4.3	3.4	3.8	4.5	4.0	4.2
29	6.7	6.1	6.4	5.1	3.7	4.2	4.4	3.9	4.0	4.2	3.9	4.0
30	6.7	6.2	6.4	5.5	4.2	4.7	4.5	3.8	4.1	---	---	---
31	---	---	---	5.4	4.5	4.9	4.5	4.0	4.2	---	---	---
MONTH	7.3	5.4	6.4	7.4	3.2	5.0	6.7	3.2	4.5	5.2	3.1	4.1

SCHUYLKILL RIVER BASIN

01468500 SCHUYLKILL RIVER AT LANDINGVILLE, PA

LOCATION.--Lat 40°37'45", long 76°07'30", Schuylkill County, Hydrologic Unit 02040203, on left bank 10 ft upstream from highway bridge at Landingville, 0.1 mi upstream from Mahannon Creek, and 5.0 mi downstream from West Branch Schuylkill River.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--August 1947 to April 1953, October 1963 to September 1965, August 1973 to current year.

REVISED RECORDS.--WDR PA-75-1: 1973(P), 1974(P).

GAGE.--Water-stage recorder. Datum of gage is 470.64 ft above sea level. Prior to Aug. 27, 1947, nonrecording gage 10 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1972 reached a stage of 17.36 ft, discharge 14,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	68	110	99	131	204	506	352	762	137	155	89
2	52	63	114	98	128	194	447	330	589	130	144	92
3	51	57	351	98	122	178	416	315	493	139	138	91
4	53	57	256	123	119	168	380	291	426	164	130	95
5	52	58	198	115	114	159	356	281	683	152	132	87
6	120	58	177	107	111	154	331	264	687	224	117	96
7	55	58	156	102	111	225	309	247	585	137	121	107
8	55	55	143	96	110	204	294	332	518	127	115	102
9	56	53	e139	104	105	184	277	442	454	249	144	148
10	55	e50	e170	101	e96	193	268	339	409	147	122	187
11	93	e53	143	94	e85	509	279	318	367	131	123	298
12	84	e58	137	93	e80	456	241	300	346	130	130	155
13	61	e60	175	93	e78	404	223	294	311	132	105	140
14	58	60	174	168	87	360	212	311	290	211	110	132
15	56	61	152	133	104	324	201	282	271	185	100	122
16	94	57	141	120	140	290	200	464	247	207	104	115
17	183	53	137	e105	107	269	205	364	235	156	108	119
18	194	54	131	e100	100	250	216	358	218	172	157	109
19	96	53	121	e110	118	269	209	337	286	139	119	108
20	80	52	117	e120	112	243	192	317	226	131	110	106
21	76	71	115	e130	105	229	239	292	201	125	97	104
22	72	571	113	e120	102	220	589	280	188	121	95	155
23	71	683	117	e140	103	209	514	257	178	148	94	174
24	70	284	108	210	109	196	497	250	240	150	90	110
25	68	187	98	153	141	207	497	239	190	222	84	123
26	64	147	92	148	284	399	489	232	176	147	82	499
27	63	126	83	144	256	1790	433	227	190	181	87	269
28	62	112	80	145	239	1090	404	204	168	206	138	196
29	66	109	e154	144	231	782	384	197	153	167	205	155
30	67	102	128	141	---	646	362	200	143	196	105	138
31	68	---	107	140	---	605	---	1160	---	179	96	---
TOTAL	2345	3530	4437	3794	3728	11610	10170	10076	10230	5042	3657	4421
MEAN	75.6	118	143	122	129	375	339	325	341	163	118	147
MAX	194	683	351	210	284	1790	589	1160	762	249	205	499
MIN	50	50	80	93	78	154	192	197	143	121	82	87
CFSM	.57	.88	1.08	.92	.97	2.82	2.55	2.44	2.56	1.22	.89	1.11
IN.	.66	.99	1.24	1.06	1.04	3.25	2.84	2.82	2.86	1.41	1.02	1.24

e Estimated.

SCHUYLKILL RIVER BASIN

01468500 SCHUYLKILL RIVER AT LANDINGVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1953, 1964 - 1965, 1974 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	176	252	338	328	329	425	419	373	233	176	132	161
MAX	760	569	805	887	620	929	1016	811	562	471	243	475
(WY)	1977	1952	1951	1979	1981	1977	1983	1989	1982	1984	1973	1975
MIN	28.5	52.5	62.4	41.2	124	164	157	127	77.1	54.2	57.2	55.6
(WY)	1964	1965	1981	1981	1980	1985	1985	1965	1965	1965	1949	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948 - 1953

1964 - 1965

1974 - 1992

ANNUAL TOTAL	67325		73040									
ANNUAL MEAN	184		200							275		
HIGHEST ANNUAL MEAN										441		1952
LOWEST ANNUAL MEAN										122		1965
HIGHEST DAILY MEAN	683	Nov 23	1790	Mar 27	4660	Apr 16	1983					
LOWEST DAILY MEAN	50	Oct 1	50	Oct 1	21	Nov 4	1963					
ANNUAL SEVEN-DAY MINIMUM	52	Sep 29	55	Nov 5	23	Oct 25	1963					
INSTANTANEOUS PEAK FLOW			2340	Mar 27	8570	Nov 25	1950					
INSTANTANEOUS PEAK STAGE			8.41	Mar 27	13.60	Apr 16	1983					
INSTANTANEOUS LOW FLOW			a48	Oct 1,3,7	19	Oct 30	1963					
ANNUAL RUNOFF (CFSM)	1.39		1.50			2.06						
ANNUAL RUNOFF (INCHES)	18.83		20.43			28.05						
10 PERCENT EXCEEDS	369		381			557						
50 PERCENT EXCEEDS	135		143			195						
90 PERCENT EXCEEDS	55		68			74						

a Also Nov 17.

SCHUYLKILL RIVER BASIN

01469500 LITTLE SCHUYLKILL RIVER AT TAMAQUA, PA

LOCATION.--Lat 40°48'25", long 75°58'20", Schuylkill County, Hydrologic Unit 02040203, on left bank at pumping plant of Panther Valley Water Co., 0.6 mi upstream from Tamaqua, and 0.8 mi upstream from Panther Creek.

DRAINAGE AREA.--42.9 mi².

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1302. June 1916 to September 1919, gage heights and discharge measurements only, in reports of Water Supply Commission of Pennsylvania.

REVISED RECORDS.--WSP 756: Drainage area. WSP 971: 1942. WSP 1302: 1922, 1926-30. WSP 1432: 1920-21, 1933.

GAUGE.--Water-stage recorder and broad-crested weir. Datum of gage is 817.48 ft above sea level. Prior to June 21, 1929, nonrecording gage at site 3,600 ft downstream at datum 28.64 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Still Creek Reservoir (station 01469200) 6.5 mi upstream. Figures of daily discharge do not include water diverted from reservoir. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	7.8	33	36	44	75	168	102	333	32	35	22
2	6.8	7.8	32	32	e40	73	147	93	244	29	31	20
3	6.7	7.8	106	31	38	70	133	84	191	27	29	30
4	6.4	7.3	99	37	36	67	119	75	158	34	28	36
5	6.4	7.3	83	39	35	64	106	72	253	34	27	25
6	18	7.3	74	37	34	61	94	68	332	43	25	23
7	11	7.3	68	34	32	75	87	62	259	30	24	24
8	8.4	7.3	63	33	31	76	81	111	216	26	24	24
9	7.2	7.1	59	33	e30	69	74	178	180	65	41	31
10	6.8	7.4	64	33	e29	70	71	139	148	41	31	44
11	12	12	54	33	e28	167	72	136	127	31	28	113
12	16	11	49	33	e26	164	67	134	108	27	32	70
13	11	9.8	51	32	e27	148	60	135	94	28	33	58
14	9.3	8.7	54	53	e28	130	56	143	85	120	23	52
15	8.6	8.4	50	57	29	114	54	120	78	73	22	48
16	14	7.9	46	e50	46	98	51	201	67	64	21	44
17	23	7.5	45	e49	41	91	52	180	61	50	22	41
18	37	7.1	44	e48	36	82	55	169	57	50	40	38
19	22	7.0	43	e46	39	85	54	149	65	40	35	36
20	17	6.9	46	e45	39	75	51	129	61	35	27	32
21	15	12	39	e43	36	67	60	116	55	32	23	29
22	13	127	39	43	34	61	185	103	48	30	21	33
23	13	243	39	56	32	59	194	95	42	34	20	43
24	11	106	39	78	33	54	201	90	57	39	19	32
25	10	71	36	57	37	53	232	86	51	43	18	29
26	10	56	34	52	83	93	204	81	42	41	18	124
27	14	47	32	49	80	611	174	77	51	47	18	96
28	16	40	30	47	76	424	147	68	43	41	23	81
29	17	37	44	46	85	299	129	61	37	36	54	70
30	8.6	33	47	45	---	231	114	61	34	34	30	62
31	8.0	---	38	45	---	209	---	373	---	37	24	---
TOTAL	390.0	932.7	1580	1352	1184	4015	3292	3691	3577	1293	846	1410
MEAN	12.6	31.1	51.0	43.6	40.8	130	110	119	119	41.7	27.3	47.0
MAX	37	243	106	78	85	611	232	373	333	120	54	124
MIN	6.4	6.9	30	31	26	53	51	61	34	26	18	20
†	9.9	8.3	7.4	8.6	8.3	7.6	7.5	8.1	8.8	6.9	8.2	7.7
MEAN†	13.5	35.2	58.4	50.8	49.1	161	128	133	128	48.1	30.2	52.3
CFSM†	.31	.82	1.36	1.18	1.14	3.75	2.98	3.10	2.98	1.12	.70	1.22
IN.†	.36	.92	1.57	1.37	1.23	4.33	3.33	.57	3.33	1.29	.81	1.36

† Diversion from Still Creek Reservoir, equivalent in cubic feet per second, furnished by the Borough of Tamaqua.

‡ Adjusted for diversion and change in contents in Still Creek Reservoir.

e Estimated.

SCHUYLKILL RIVER BASIN

01469500 LITTLE SCHUYLKILL RIVER AT TAMAQUA, PA

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	49.3	79.0	101	85.0	93.9	138	137	109	65.9	52.2	40.1	45.4
MAX	317	242	288	278	241	365	402	315	430	394	226	259
(WY)	1977	1952	1974	1979	1951	1936	1983	1989	1972	1947	1933	1933
MIN	5.82	7.81	12.2	8.57	26.6	42.5	46.6	21.1	14.6	8.87	6.25	6.46
(WY)	1964	1942	1981	1981	1934	1985	1985	1941	1941	1965	1944	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1933 - 1992

ANNUAL TOTAL	19347.6		23562.7									
ANNUAL MEAN	53.0	±58.1	64.4	±74.0								
HIGHEST ANNUAL MEAN									83.0	±90.5		
LOWEST ANNUAL MEAN									155			1952
HIGHEST DAILY MEAN	243	Nov 23	611	Mar 27					33.8			1965
LOWEST DAILY MEAN	6.0	Sep 18	6.4	Oct 4					2790		Aug 24	1933
ANNUAL SEVEN-DAY MINIMUM	6.5	Sep 12	7.3	Nov 4					2.9		Sep 2	1966
INSTANTANEOUS PEAK FLOW			773	Mar 27					3.5		Aug 27	1966
INSTANTANEOUS PEAK STAGE			4.21	Mar 27					a7790		Aug 18	1955
INSTANTANEOUS LOW FLOW			6.2	Oct 4					11.10		Aug 18	1955
ANNUAL RUNOFF (CFSM)	1.24	± 1.35	1.50	± 1.72					1.8		Dec 18	1931
ANNUAL RUNOFF (INCHES)	16.78	± 18.39	20.43	±23.42					1.93	± 2.11		
10 PERCENT EXCEEDS	119		137						26.27	±28.65		
50 PERCENT EXCEEDS	37		44						175			
90 PERCENT EXCEEDS	7.6		12						50			
									13			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1932, BY WATER YEAR (WY) (PRIOR TO REGULATION)

MEAN	73.0	96.5	101	78.7	103	188	143	112	74.4	57.0	33.7	37.7
MAX	227	308	241	266	344	410	227	208	209	185	81.5	152
(WY)	1928	1927	1928	1924	1925	1920	1928	1924	1922	1928	1927	1924
MIN	6.67	6.74	7.99	13.3	25.7	88.5	72.6	32.8	27.3	14.5	10.3	6.66
(WY)	1931	1931	1931	1931	1931	1931	1926	1926	1921	1923	1923	1932

SUMMARY STATISTICS

WATER YEARS 1920 - 1932

ANNUAL TOTAL	91.5											
ANNUAL MEAN	145											
HIGHEST ANNUAL MEAN	42.3											
LOWEST ANNUAL MEAN	3600											
HIGHEST DAILY MEAN	3.0											
LOWEST DAILY MEAN	3.8											
ANNUAL SEVEN-DAY MINIMUM	5000											
INSTANTANEOUS PEAK FLOW	---											
INSTANTANEOUS PEAK STAGE	1.8											
INSTANTANEOUS LOW FLOW	2.13											
ANNUAL RUNOFF (CFSM)	28.97											
ANNUAL RUNOFF (INCHES)	201											
10 PERCENT EXCEEDS	54											
50 PERCENT EXCEEDS	12											
90 PERCENT EXCEEDS												

‡ Adjusted for diversion and change in contents in Still Creek Reservoir.

a From rating curve extended above 3,200 ft³/s, on basis of contracted-opening measurement of peak flow.

SCHUYLKILL RIVER BASIN

01470500 SCHUYLKILL RIVER AT BERNE, PA

LOCATION.--Lat 40°31'21", long 75°59'55", Berks County, Hydrologic Unit 02040203, on right bank 50 ft upstream from highway bridge at Berne, 0.5 mi upstream from Mill Creek, 6.5 mi downstream from Little Schuylkill River. Water-quality sampling site at bridge 50 ft downstream.

DRAINAGE AREA.--355 mi².

PERIOD OF RECORD.--August 1947 to current year. Monthly discharge only for August 1947, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 310.65 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation at low flow by mine pumpage and by Still Creek Reservoir (station 01469200) about 25.0 mi upstream. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	e175	e320	e300	370	e668	1450	824	2600	271	362	187
2	127	e174	e370	e280	330	e615	1250	760	1830	250	308	179
3	127	e173	e900	e310	334	e576	1130	713	1430	248	287	183
4	127	e175	1090	e360	314	539	1010	647	1170	338	291	231
5	127	e150	801	e395	305	e480	909	608	1800	286	286	190
6	431	e160	670	e360	280	467	814	590	2670	502	255	180
7	214	e161	576	e320	285	594	753	542	2030	307	241	222
8	156	e150	517	315	281	660	711	765	1650	263	235	205
9	148	e140	486	307	262	579	647	1680	1360	548	312	261
10	143	e145	642	334	e250	566	623	1280	1140	361	273	225
11	167	e150	515	311	e240	1430	636	1110	972	290	306	652
12	299	e160	482	298	e250	1550	587	979	854	260	335	365
13	194	e165	e470	291	e245	1320	530	891	749	265	270	294
14	168	163	e500	415	e250	1120	492	940	681	457	255	268
15	160	157	e490	514	270	e710	469	781	619	408	233	251
16	223	152	e460	422	425	e640	453	1370	556	517	225	239
17	e400	152	e400	e380	365	746	460	1190	514	359	226	228
18	e730	143	e350	e370	318	688	495	1140	472	400	307	223
19	e700	142	e280	e360	348	721	495	1030	582	321	313	214
20	e460	136	e250	e360	371	659	448	914	541	281	246	206
21	e410	136	e260	e360	348	600	432	817	442	261	222	198
22	e310	690	e250	e370	333	558	1280	750	404	250	207	218
23	e260	e1400	e245	385	326	543	1250	683	379	288	199	462
24	e255	e1200	e270	712	326	499	1160	632	465	331	193	255
25	e260	e800	e250	516	376	496	1320	607	445	524	185	221
26	e230	e600	e230	455	773	1020	1270	573	372	382	177	1110
27	e225	e500	e200	520	868	6150	1140	580	376	447	174	870
28	e220	e360	e195	480	806	3920	1020	509	347	467	179	653
29	e218	e350	e240	392	770	2590	955	468	312	391	446	511
30	e240	e300	e310	385	---	1980	876	446	286	469	248	433
31	e230	---	e350	385	---	1780	---	2960	---	384	209	---
TOTAL	8082	9459	13369	11962	11019	35464	25065	27779	28048	11126	8005	9934
MEAN	261	315	431	386	380	1144	835	896	935	359	258	331
MAX	730	1400	1090	712	868	6150	1450	2960	2670	548	446	1110
MIN	123	136	195	280	240	467	432	446	286	248	174	179
CFSM	.73	.89	1.21	1.09	1.07	3.22	2.35	2.52	2.63	1.01	.73	.93
IN.	.85	.99	1.40	1.25	1.15	3.72	2.63	2.91	2.94	1.17	.84	1.04

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)

	MEAN	408	677	907	780	895	1139	1092	897	573	379	340	360
MAX	1896	1631	2408	2547	1735	2454	3309	2689	3410	1240	1594	1381	
(WY)	1977	1971	1984	1979	1981	1977	1983	1989	1972	1984	1955	1987	
MIN	75.7	120	125	88.4	290	462	424	325	148	113	119	94.6	
(WY)	1964	1965	1981	1981	1980	1985	1985	1965	1965	1965	1957	1964	

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1947 - 1992
ANNUAL TOTAL	177432	199312	
ANNUAL MEAN	486	545	703
HIGHEST ANNUAL MEAN			1182
LOWEST ANNUAL MEAN			321
HIGHEST DAILY MEAN	2070	Jan 17	26000
LOWEST DAILY MEAN	102	Sep 3	40
ANNUAL SEVEN-DAY MINIMUM	115	Aug 2	65
INSTANTANEOUS PEAK FLOW			a42800
INSTANTANEOUS PEAK STAGE			b19.90
INSTANTANEOUS LOW FLOW			31
ANNUAL RUNOFF (CFSM)	1.37	1.53	1.98
ANNUAL RUNOFF (INCHES)	18.59	20.89	26.91
10 PERCENT EXCEEDS	1020	1110	1450
50 PERCENT EXCEEDS	350	379	446
90 PERCENT EXCEEDS	133	180	158

a From rating curve extended above 17,000 ft³/s.

b From floodmark in gage shelter.

SCHUYLKILL RIVER BASIN

01470756 MAIDEN CREEK AT VIRGINVILLE, PA

LOCATION.--Lat 40°30'51", long 75°53'00", Berks County, Hydrologic Unit 02040203, on right bank 0.9 mi downstream from Sacony Creek, 0.9 mi southwest of Virginville, and 1.0 mi upstream from Moselem Creek.

DRAINAGE AREA.--159 mi².

PERIOD OF RECORD.--January 1973 to current year.

REVISED RECORD.--WDR PA-87-1: 1975(P), 1976(P), 1978(P), 1979(P), 1982-1984(P).

GAGE.--Water-stage recorder. Elevation of gage is 310 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 reached a stage of 17.2 feet, from floodmarks, discharge, about 40,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	35	80	98	112	229	434	119	700	63	114	55
2	28	35	85	106	95	200	367	114	470	57	92	51
3	27	35	674	106	105	e180	312	108	350	60	82	66
4	27	33	702	122	86	e170	270	97	283	101	100	69
5	26	30	468	123	76	e160	230	100	590	73	90	56
6	83	28	340	103	72	e150	219	98	826	182	67	56
7	50	27	258	93	81	236	205	88	616	84	58	86
8	34	27	211	85	71	255	192	365	496	65	53	75
9	27	26	190	91	59	209	170	966	394	215	182	66
10	23	25	382	102	e48	203	164	603	318	84	106	62
11	30	34	263	86	e48	496	158	452	267	64	132	161
12	78	38	260	77	e48	423	151	353	229	55	187	75
13	42	31	254	75	e48	355	134	300	199	62	112	58
14	35	28	250	250	e48	296	124	273	174	83	107	55
15	32	25	205	281	90	258	118	230	162	121	95	51
16	41	24	172	231	269	213	115	420	136	141	93	49
17	174	22	156	e140	180	189	126	295	123	106	110	46
18	305	21	147	e110	151	179	147	258	114	307	194	43
19	156	21	e115	e98	175	206	161	230	214	135	173	41
20	115	21	e87	e90	175	176	130	196	165	101	128	38
21	93	21	e82	e84	155	161	121	172	126	83	110	37
22	79	206	e80	e82	142	149	196	157	110	72	98	46
23	69	615	e79	e82	135	e140	215	143	100	146	90	142
24	61	245	107	404	133	e130	166	130	131	147	84	51
25	54	173	88	259	162	e130	172	130	127	151	79	42
26	51	132	75	e180	406	e600	167	132	96	135	74	352
27	47	108	71	e160	392	2600	149	138	88	222	68	229
28	43	92	65	e150	342	1450	134	114	80	246	68	179
29	39	85	148	138	297	e970	127	100	71	167	118	136
30	37	75	179	128	---	e720	121	103	66	192	71	112
31	37	---	116	123	---	e570	---	1040	---	137	60	---
TOTAL	1971	2318	6389	4257	4201	12403	5495	8024	7821	3857	3195	2585
MEAN	63.6	77.3	206	137	145	400	183	259	261	124	103	86.2
MAX	305	615	702	404	406	2600	434	1040	826	307	194	352
MIN	23	21	65	75	48	130	115	88	66	55	53	37
CFSM	.40	.49	1.30	.86	.91	2.52	1.15	1.63	1.64	.78	.65	.54
IN.	.46	.54	1.49	1.00	.98	2.90	1.29	1.88	1.83	.90	.75	.60

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1992, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	167	223	338	343	354	390	382	332	196	146	101	142								
MAX	505	571	833	982	565	802	1049	1103	528	457	247	613								
(WY)	1980	1978	1978	1979	1979	1977	1983	1989	1982	1984	1978	1987								
MIN	29.2	67.5	49.7	35.3	110	124	92.4	119	58.1	44.4	21.9	17.6								
(WY)	1981	1981	1981	1981	1980	1985	1985	1986	1987	1987	1980	1983								

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1973 - 1992
ANNUAL TOTAL	62837	62516	
ANNUAL MEAN	172	171	257
HIGHEST ANNUAL MEAN			403
LOWEST ANNUAL MEAN			123
HIGHEST DAILY MEAN	1200	2600	7010
LOWEST DAILY MEAN	15	21	11
ANNUAL SEVEN-DAY MINIMUM	16	22	13
INSTANTANEOUS PEAK FLOW		3330	17000
INSTANTANEOUS PEAK STAGE		7.25	12.67
INSTANTANEOUS LOW FLOW		20	11
ANNUAL RUNOFF (CFSM)	1.08	1.07	1.62
ANNUAL RUNOFF (INCHES)	14.70	14.63	21.99
10 PERCENT EXCEEDS	385	341	555
50 PERCENT EXCEEDS	112	120	152
90 PERCENT EXCEEDS	27	39	41

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA

LOCATION.--Lat 40°24'48", long 76°10'19", Berks County, Hydrologic Unit 02040203, on left bank 30 ft downstream from bridge at Kricks Mill, 0.4 mi upstream from Mill Creek, and 3.5 mi west of Bernville.

DRAINAGE AREA.--66.5 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 311.26 ft above Pennsylvania Department of Transportation datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 reached a stage of about 9.5 ft, from information by local resident, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	36	37	47	48	73	161	67	122	63	62	37
2	30	34	41	46	54	72	148	61	98	60	54	31
3	29	33	166	46	54	59	138	60	89	66	53	34
4	30	33	106	51	36	55	129	59	83	73	53	45
5	36	33	83	52	36	54	122	58	147	72	53	49
6	59	33	75	47	37	53	114	59	181	153	50	60
7	42	34	68	46	39	76	109	56	134	80	48	69
8	40	33	63	45	39	81	104	68	123	74	49	49
9	39	32	64	49	e37	73	101	88	114	69	61	53
10	39	34	103	50	e36	61	99	63	106	63	53	50
11	45	38	75	46	e34	95	96	60	101	63	61	85
12	52	35	72	45	e33	76	87	58	96	64	66	50
13	43	36	75	45	e33	75	80	56	92	63	52	46
14	41	35	78	59	e34	72	87	55	90	76	51	44
15	40	34	71	55	e45	76	86	53	87	74	55	44
16	42	33	67	53	87	70	84	64	84	93	64	45
17	81	32	65	e50	65	63	85	57	82	80	67	43
18	109	32	63	e49	49	65	85	57	80	86	66	40
19	63	33	59	e48	52	82	82	54	87	75	75	44
20	52	33	59	e47	51	79	79	51	74	70	56	54
21	48	33	58	e44	48	79	76	48	77	60	53	53
22	48	103	57	e43	47	94	108	48	69	81	55	44
23	46	190	58	55	e47	93	94	47	76	94	63	49
24	44	65	58	67	e47	80	84	45	80	91	62	42
25	44	53	54	48	48	82	82	46	77	91	49	47
26	43	47	53	50	79	120	87	49	74	85	45	219
27	43	43	52	47	68	569	84	49	71	86	45	109
28	41	41	50	43	63	290	78	46	69	80	49	91
29	42	39	70	47	62	222	76	45	63	76	122	66
30	41	37	65	47	---	196	73	49	67	76	55	63
31	41	---	57	* 47	---	183	---	234	---	76	51	---
TOTAL	1423	1327	2122	1514	1408	3418	2918	1910	2793	2413	1798	1755
MEAN	45.9	44.2	68.5	48.8	48.6	110	97.3	61.6	93.1	77.8	58.0	58.5
MAX	109	190	166	67	87	569	161	234	181	153	122	219
MIN	29	32	37	43	33	53	73	45	63	60	45	31
CFSM	.69	.67	1.03	.73	.73	1.66	1.46	.93	1.40	1.17	.87	.88
IN.	.80	.74	1.19	.85	.79	1.91	1.63	1.07	1.56	1.35	1.01	.98

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1992, BY WATER YEAR (WY)

	MEAN	85.7	89.4	108	125	133	144	136	117	101	90.5	68.5	70.1
MAX	250	172	253	385	264	325	359	277	208	208	216	129	181
(WY)	1977	1990	1984	1979	1979	1978	1983	1989	1982	1984	1976	1975	1975
MIN	39.0	38.7	41.4	33.6	48.6	67.5	58.8	60.7	50.2	37.7	35.2	29.7	29.7
(WY)	1982	1982	1982	1981	1992	1981	1985	1985	1985	1991	1981	1991	1991

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1975 - 1992
ANNUAL TOTAL	27749	24799	
ANNUAL MEAN	76.0	67.8	104
HIGHEST ANNUAL MEAN			156
LOWEST ANNUAL MEAN			55.7
HIGHEST DAILY MEAN	342	Jan 17	2140
LOWEST DAILY MEAN	24	Sep 17	23
ANNUAL SEVEN-DAY MINIMUM	27	Sep 12	27
INSTANTANEOUS PEAK FLOW			a5560
INSTANTANEOUS PEAK STAGE			10.16
ANNUAL RUNOFF (CFSM)	1.14	1.02	1.56
ANNUAL RUNOFF (INCHES)	15.52	13.87	21.22
10 PERCENT EXCEEDS	135	98	174
50 PERCENT EXCEEDS	62	59	84
90 PERCENT EXCEEDS	32	37	44

a From rating curve extended above 740 ft³/s, on basis of contracted-opening measurement of peak flow.

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1977 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977. Subsequent to 1986, temperature probe interfaced with data collection platform.

REMARKS.--Records fair. Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 27°C, July 21, 1985, July 22, 1987; minimum 0.0°C, on several days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 24.0°C, July 15; minimum, 1.0°C, Dec. 19, Jan. 1.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

SCHUYLKILL RIVER BASIN

01470853 FURNACE CREEK AT ROBESONIA, PA

LOCATION.--Lat 40°20'24", long 76°08'37", Berks County, Hydrologic Unit 02040202, on left bank 500 ft upstream from Furnace Street in Robesonia.

DRAINAGE AREA.--4.18 mi².

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

REVISED RECORDS.--WDR PA-87-1: 1986 (P).

GAGE.--Water-stage recorder. Elevation of gage is 510 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion above station for municipal supply. Gage moved 760 ft upstream on Mar. 27, 1986 at datum 19.6 feet higher. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.3	2.0	2.6	2.6	2.8	9.5	4.3	9.7	3.1	2.2	1.5
2	1.1	1.3	2.8	2.3	4.5	2.9	8.6	4.2	7.3	3.0	2.1	1.6
3	.92	1.6	13	2.4	2.3	2.9	7.9	3.9	6.2	4.3	2.1	1.9
4	1.2	1.5	5.0	4.5	2.2	2.7	7.4	3.9	5.6	4.2	2.4	1.9
5	.93	1.5	3.0	4.0	2.2	2.6	6.9	4.1	16	4.8	2.1	1.7
6	2.6	1.4	2.6	2.9	2.8	2.7	6.6	4.1	13	6.9	1.9	2.5
7	1.4	1.6	2.3	2.6	2.4	6.1	6.5	3.8	8.9	3.3	1.9	2.7
8	1.2	1.6	2.2	2.5	e2.2	3.9	6.3	8.3	7.8	3.0	2.0	2.0
9	1.4	1.6	2.8	3.5	e2.1	3.2	5.9	7.7	6.8	3.7	2.8	2.4
10	1.3	1.7	7.1	3.2	e2.0	3.5	5.8	5.3	6.1	2.9	2.1	3.0
11	2.9	3.7	3.1	2.7	e2.1	8.4	5.9	4.9	5.6	2.8	2.9	4.1
12	2.6	2.4	2.6	2.5	e2.0	4.4	5.6	4.6	5.3	2.9	2.5	1.9
13	2.0	2.2	3.4	2.4	e1.9	3.9	5.3	4.5	5.0	2.9	2.1	1.7
14	1.8	2.1	3.7	4.4	e2.0	3.8	5.1	4.3	4.7	4.0	2.2	1.7
15	1.3	2.1	3.0	3.1	6.5	3.6	4.9	4.6	4.7	6.1	2.0	1.6
16	3.0	2.0	2.4	2.8	5.4	3.3	4.9	6.3	4.7	4.5	2.5	1.6
17	12	1.8	2.2	e2.6	3.1	3.3	5.1	4.8	4.3	5.6	2.7	1.5
18	6.5	1.8	2.2	e2.5	3.0	3.4	5.1	5.4	4.3	5.2	4.1	1.3
19	2.6	1.8	e2.0	e2.3	3.6	4.7	5.1	4.8	6.3	3.2	4.8	1.4
20	2.0	2.1	e1.9	e2.2	3.2	4.1	4.9	4.1	4.8	2.8	2.4	1.3
21	1.7	2.2	e1.8	e2.0	2.8	3.7	5.0	3.9	4.3	2.6	2.1	1.3
22	1.6	22	e2.0	2.2	2.7	3.7	6.7	3.7	4.1	2.6	1.9	1.7
23	1.7	9.6	2.4	5.3	2.8	3.5	5.1	3.5	3.9	4.5	1.8	2.2
24	1.6	3.0	2.3	5.0	3.1	3.3	4.8	3.5	4.9	3.8	1.7	1.3
25	2.4	2.3	2.1	6.1	3.1	4.3	5.2	3.7	4.1	3.7	1.7	2.3
26	1.6	2.0	1.9	2.9	5.9	19	5.5	4.3	3.7	3.4	1.7	12
27	1.7	1.4	1.9	5.3	3.7	80	5.4	4.0	3.6	3.6	1.7	3.3
28	1.8	1.1	1.8	3.1	3.4	22	4.6	3.4	3.4	2.9	2.1	2.5
29	1.5	2.0	4.7	2.7	3.2	15	4.4	3.3	3.3	2.6	2.6	1.8
30	1.6	1.6	3.2	2.7	---	12	4.4	4.8	3.2	2.5	1.7	1.6
31	1.7	---	2.4	2.9	---	11	---	34	---	2.4	1.6	---
TOTAL	68.75	85.3	95.8	98.2	88.8	253.7	174.4	170.0	175.6	113.8	70.4	69.3
MEAN	2.22	2.84	3.09	3.17	3.06	8.18	5.81	5.48	5.85	3.67	2.27	2.31
MAX	12	22	13	6.1	6.5	80	9.5	34	16	6.9	4.8	12
MIN	.92	1.1	1.8	2.0	1.9	2.6	4.4	3.3	3.2	2.4	1.6	1.3
†	0	.09	0	0	.39	.26	.10	.02	.03	0	0	0
MEAN†	2.22	2.93	3.09	3.17	3.45	8.44	5.91	5.50	5.88	3.67	2.27	2.31
CFSM†	.53	.70	.74	.76	.83	2.02	1.41	1.32	1.41	.88	.54	.55
IN.†	.61	.78	.85	.87	.89	2.33	1.58	1.52	1.57	1.01	.63	.62

† Diversion, equivalent in cubic feet per second, furnished by Womelsdorf-Robeson Joint Water Authority.

‡ Adjusted for diversion.

e Estimated.

SCHUYLKILL RIVER BASIN

01470853 FURNACE CREEK AT ROBESONIA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.92	5.33	6.91	5.81	8.31	9.82	10.7	11.0	5.83	4.39	2.91	2.50
MAX	6.38	10.3	17.3	11.9	14.1	15.9	30.2	24.7	14.8	11.7	8.98	4.85
(WY)	1990	1987	1984	1990	1986	1986	1983	1989	1989	1984	1986	1986
MIN	.94	2.25	2.42	2.34	3.06	5.18	3.32	5.25	2.10	1.36	.85	.63
(WY)	1989	1983	1983	1983	1992	1985	1985	1987	1985	1983	1983	1983

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1983 - 1992
ANNUAL TOTAL	1743.09	1464.05	
ANNUAL MEAN	4.78 ± 5.06	4.00 ± 4.07	6.36 ± 6.94
HIGHEST ANNUAL MEAN			9.71 ±10.4 1984
LOWEST ANNUAL MEAN			3.82 b± 4.07 1985
HIGHEST DAILY MEAN	30 Jan 16	80 Mar 27	134 May 6 1989
LOWEST DAILY MEAN	.64 Aug 6	.92 Oct 3	.11 Sep 11 1983
ANNUAL SEVEN-DAY MINIMUM	.77 Aug 2	1.3 Oct 1	.19 Sep 16 1985
INSTANTANEOUS PEAK FLOW		220 Mar 27	a478 May 6 1989
INSTANTANEOUS PEAK STAGE		2.72 Mar 27	4.16 May 6 1989
ANNUAL RUNOFF (CFSM)	1.14 ± 1.21	.96 ± .97	1.52 ± 1.66
ANNUAL RUNOFF (INCHES)	15.51 ±16.45	13.03 ±13.22	20.66 ±22.54
10 PERCENT EXCEEDS	9.5	6.3	13
50 PERCENT EXCEEDS	3.1	2.9	4.3
90 PERCENT EXCEEDS	1.1	1.6	1.2

‡ Adjusted for diversion.

a From rating curve extended above 70 ft³/s on basis of slope-area measurement of peak flow.

b Occurred in 1992 water year.

SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA

LOCATION.--Lat 40°22'14", long 76°01'32", Berks County, Hydrologic Unit 02040203, on right bank 1.0 mi upstream from Rebers Bridge and Plum Creek, 1.0 mi east of Blue Marsh, 3.0 mi north of Sinking Spring, and 5.5 mi northeast of Reading. Water-quality sampling site at Rebers Bridge 1.0 mi downstream.

DRAINAGE AREA.--175 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

REVISED RECORD.--WDR PA-72-1: 1969-1971 (M).

GAGE.--Water-stage recorder. Datum of gage is 230.06 ft above Western Berks Water Authority datum. Prior to Nov. 25, 1974, water-stage recorder at site 0.3 mi downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since April 1979 by Blue Marsh Lake (01470870) 0.8 mi upstream. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	86	120	132	157	269	565	187	941	93	84	79
2	62	85	120	133	158	220	326	166	892	88	85	79
3	62	85	570	199	116	163	32	166	332	77	63	77
4	62	77	735	250	97	134	27	145	246	77	220	65
5	60	93	426	250	95	116	27	147	298	74	229	55
6	60	130	424	190	97	141	27	153	596	50	194	55
7	112	85	422	125	97	224	27	139	784	50	73	55
8	158	31	421	109	97	249	27	317	778	347	73	97
9	121	32	419	109	97	249	27	466	632	514	73	132
10	62	32	655	e150	98	250	27	221	339	489	219	131
11	91	32	806	e230	97	293	28	139	274	419	195	163
12	128	64	643	e240	97	371	28	126	217	412	120	125
13	127	93	513	e250	97	293	28	137	184	418	134	124
14	127	77	465	e290	155	235	28	169	184	612	108	81
15	86	54	465	e280	137	234	28	170	162	682	97	35
16	65	54	405	e220	203	234	28	e220	121	623	98	34
17	116	54	241	e170	252	221	29	e220	106	711	98	40
18	270	54	169	92	216	210	29	161	106	831	99	40
19	286	54	146	91	166	e230	28	156	128	831	110	40
20	285	90	146	91	150	270	148	137	143	463	124	40
21	163	128	146	e170	150	270	171	99	144	210	92	56
22	82	123	147	e210	151	270	361	83	143	139	60	79
23	102	483	175	e160	151	322	370	83	136	118	58	81
24	102	1170	198	e210	151	323	252	84	132	119	69	81
25	95	543	198	e260	169	251	229	85	144	119	79	239
26	88	164	154	e220	307	324	229	185	115	119	77	361
27	88	120	110	e160	391	1100	258	243	92	201	77	360
28	88	120	111	51	320	1730	265	118	93	269	78	358
29	89	120	111	e75	267	1650	216	79	93	221	79	356
30	89	120	273	e105	---	1090	198	140	93	146	79	354
31	89	---	246	155	---	511	---	338	---	130	79	---
TOTAL	3479	4453	10180	5377	4736	12447	4063	5279	8648	9652	3323	3872
MEAN	112	148	328	173	163	402	135	170	288	311	107	129
MAX	286	1170	806	290	391	1730	565	466	941	831	229	361
MIN	60	31	110	51	95	116	27	79	92	50	58	34
MEAN†	111	146	241	148	158	403	255	192	267	309	111	116
CFSM†	.63	.83	1.38	.86	.90	2.30	1.46	1.10	1.53	1.77	.63	.66
IN.†	.73	.93	1.59	.98	.97	2.66	1.63	1.26	1.70	2.04	.93	.74

† Adjusted for change in contents of Blue Marsh Lake.
e Estimated.

SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	194	200	297	313	352	359	296	328	242	190	116	139
MAX	612	365	876	1151	596	683	1011	1058	606	543	234	379
(WY)	1980	1990	1984	1979	1979	1979	1983	1989	1982	1984	1984	1987
MIN	66.6	62.4	77.2	91.7	131	135	49.8	147	69.9	79.3	55.4	54.0
(WY)	1982	1981	1981	1981	1980	1981	1985	1985	1979	1985	1981	1983

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1979 - 1992		
ANNUAL TOTAL	74230		75509				
ANNUAL MEAN	203		206		252		
HIGHEST ANNUAL MEAN					433		
LOWEST ANNUAL MEAN					127		
HIGHEST DAILY MEAN	1170		1730		3950		
LOWEST DAILY MEAN	31		27		27		
ANNUAL SEVEN-DAY MINIMUM	33		27		27		
INSTANTANEOUS PEAK FLOW			1990		4000		
INSTANTANEOUS PEAK STAGE			5.67		7.56		
ANNUAL RUNOFF (CFSM)	1.16		1.18		1.44		
ANNUAL RUNOFF (INCHES)	15.78		16.05		19.56		
10 PERCENT EXCEEDS	417		421		488		
50 PERCENT EXCEEDS	146		139		163		
90 PERCENT EXCEEDS	53		55		65		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1978, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	180	236	333	333	373	423	363	261	285	233	175	150
MAX	701	464	827	761	790	832	706	423	1244	523	350	536
(WY)	1977	1976	1978	1978	1971	1978	1970	1973	1972	1969	1969	1975
MIN	56.2	58.3	69.9	100	146	163	144	89.2	60.4	45.0	31.9	43.4
(WY)	1967	1966	1966	1966	1969	1969	1966	1965	1965	1966	1966	1966

SUMMARY STATISTICS WATER YEARS 1965 - 1978

ANNUAL TOTAL	
ANNUAL MEAN	283
HIGHEST ANNUAL MEAN	416
LOWEST ANNUAL MEAN	122
HIGHEST DAILY MEAN	11000
LOWEST DAILY MEAN	23
ANNUAL SEVEN-DAY MINIMUM	25
INSTANTANEOUS PEAK FLOW	a16100
INSTANTANEOUS PEAK STAGE	b18.70
ANNUAL RUNOFF (CFSM)	1.62
ANNUAL RUNOFF (INCHES)	22.00
10 PERCENT EXCEEDS	551
50 PERCENT EXCEEDS	178
90 PERCENT EXCEEDS	69

‡ Adjusted for change in contents of Blue Marsh Lake.

a From rating curve extended above 3,000 ft³/s, on basis of runoff comparison with downstream station.

b From floodmarks.

SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1968 to current year.

INSTRUMENTATION.--Temperature recorder since October 1968. Subsequent to water year 1986, temperature probe interfaced with data collection platform.

REMARKS.--Temperature recorder located at gaging station 1.0 mi upstream from former sampling site. Interruptions in daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 34.0°C, Oct. 2, 1968; minimum, 0.0°C, on several days during Dec. 1970, Jan. and Mar. 1971, Feb. 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.5°C, on several days during summer months; minimum, 0.5°C, Jan. 19, 20.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	20.0	18.5	19.0	---	---	---	---	---	---	3.0	2.5	3.0
2	20.0	18.0	18.5	---	---	---	---	---	---	3.5	3.0	3.0
3	19.5	18.0	18.5	---	---	---	8.0	8.0	8.0	3.5	3.5	3.5
4	19.5	17.5	18.5	13.5	11.5	12.5	8.0	7.0	8.0	3.5	3.5	3.5
5	19.0	18.0	18.5	12.5	11.5	12.0	7.0	6.5	7.0	3.5	3.5	3.5
6	18.5	16.5	17.5	12.0	11.5	12.0	7.0	6.5	6.5	3.5	3.5	3.5
7	18.5	16.5	17.5	12.0	10.5	11.5	6.5	6.5	6.5	3.5	3.5	3.5
8	18.5	18.0	18.0	11.0	9.5	10.5	6.5	6.5	6.5	3.5	3.0	3.0
9	18.5	17.0	18.0	10.5	9.0	10.0	7.0	6.5	6.5	3.5	3.5	3.5
10	18.5	17.0	17.5	10.5	9.5	9.5	7.0	6.5	6.5	3.5	3.0	3.5
11	18.0	17.5	17.5	10.5	9.0	9.5	6.5	6.5	6.5	3.5	3.0	3.0
12	17.5	17.0	17.0	10.0	9.0	9.5	6.5	6.5	6.5	3.5	3.0	3.0
13	17.0	16.5	17.0	10.0	9.5	10.0	6.5	6.5	6.5	3.5	3.0	3.5
14	17.0	16.5	16.5	10.0	9.0	9.5	6.5	6.5	6.5	4.0	3.5	3.5
15	17.0	16.5	16.5	10.5	9.0	9.5	6.5	6.0	6.0	3.5	3.0	3.5
16	16.5	15.5	16.0	10.5	8.5	9.5	6.0	5.0	5.5	3.0	2.5	3.0
17	16.0	15.5	16.0	9.0	8.0	8.5	5.0	4.5	5.0	2.5	2.0	2.5
18	16.0	15.5	16.0	9.5	8.0	8.5	4.5	4.0	4.5	2.0	1.0	1.5
19	16.0	15.5	16.0	9.5	8.5	9.0	4.0	3.5	3.5	1.0	.5	1.0
20	15.5	15.0	15.5	9.5	8.5	9.0	3.5	3.5	3.5	1.5	.5	1.0
21	15.0	13.5	14.5	9.5	9.0	9.0	4.0	3.5	3.5	1.5	1.0	1.5
22	14.5	13.0	14.0	9.0	9.0	9.0	3.5	3.5	3.5	2.0	1.5	2.0
23	14.5	14.0	14.0	9.5	9.0	9.0	3.5	3.5	3.5	2.0	2.0	2.0
24	14.5	13.5	14.0	---	---	---	3.5	3.0	3.0	2.0	2.0	2.0
25	14.0	13.0	13.5	---	---	---	3.5	3.0	3.0	2.0	2.0	2.0
26	14.0	13.0	13.5	---	---	---	3.5	3.0	3.0	2.5	2.0	2.0
27	14.0	13.0	13.5	---	---	---	3.0	3.0	3.0	2.5	2.0	2.0
28	13.5	13.0	13.0	---	---	---	3.5	2.5	3.0	3.0	1.5	2.0
29	13.0	12.5	13.0	---	---	---	3.5	3.0	3.0	2.5	2.0	2.0
30	13.5	12.5	13.0	---	---	---	3.0	3.0	3.0	2.5	2.0	2.5
31	---	---	---	---	---	---	3.0	3.0	3.0	2.5	2.5	2.5
MONTH	20.0	12.5	16.0	13.5	8.0	10.0	8.0	2.5	5.0	4.0	0.5	2.5

SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

SCHUYLKILL RIVER BASIN

01471000 TULPEHOCKEN CREEK NEAR READING, PA

LOCATION.--Lat 40°22'08", long 75°58'46", Berks County, Hydrologic Unit 02040203, on right bank 15 ft upstream from covered bridge, 1.0 mi downstream from Cacoosing Creek, 2.5 mi upstream from mouth, and 3.5 mi northwest of square at Reading. Water-quality sampling site at covered bridge 15 ft downstream.

DRAINAGE AREA.--211 mi².

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October, November 1950, published in WSP 1722.

REVISED RECORDS.--WSP 1382: 1951-53, 1954 (M). WSP 2102: 1965 (M). WDR PA-72-1: 1971 (M).

GAGE.--Water-stage recorder. Datum of gage is 216.60 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since April 1979 by Blue Marsh Lake (station 01470870) 3.9 mi upstream. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	110	148	162	179	296	566	217	786	126	128	102
2	54	108	152	169	177	263	390	196	810	122	127	102
3	55	108	599	229	158	212	100	195	342	112	e95	105
4	56	101	753	294	129	176	88	175	266	116	e220	95
5	56	109	471	289	128	159	83	166	340	113	e330	78
6	59	163	459	236	127	170	78	180	568	343	e290	81
7	114	119	452	164	127	275	75	158	713	320	e130	87
8	175	35	446	139	126	296	74	312	702	145	86	117
9	147	36	437	139	125	295	71	476	605	170	93	160
10	68	37	643	166	128	294	70	259	384	163	187	162
11	100	46	753	237	124	348	72	172	325	130	208	201
12	156	72	623	235	124	403	67	157	275	129	141	160
13	150	118	518	295	123	343	64	161	241	125	161	160
14	149	101	479	394	176	284	61	197	240	208	132	125
15	114	65	472	334	180	283	60	197	222	247	130	70
16	61	65	427	226	247	285	60	264	174	211	130	58
17	182	64	282	181	290	271	63	264	152	233	128	57
18	303	64	215	124	260	253	63	188	150	278	136	56
19	312	61	185	120	214	288	63	177	188	270	149	56
20	308	97	184	119	193	312	165	158	200	267	154	57
21	202	158	185	233	190	313	174	121	195	245	121	69
22	101	186	184	292	191	315	359	103	192	183	91	104
23	127	495	208	178	189	353	375	103	182	175	87	106
24	127	1100	231	292	193	358	276	103	183	168	94	103
25	120	553	229	282	205	296	256	105	193	172	105	218
26	109	204	190	281	328	384	260	183	161	165	102	390
27	111	150	137	213	396	1190	277	257	130	226	102	341
28	114	149	136	80	344	1620	283	144	127	291	105	336
29	112	149	153	98	298	1490	242	95	127	257	111	330
30	112	147	282	152	---	1040	226	147	127	191	105	330
31	113	---	282	183	---	532	---	385	---	181	103	---
TOTAL	4022	4970	10915	6536	5669	13397	5061	6015	9300	6082	4281	4416
MEAN	130	166	352	211	195	432	169	194	310	196	138	147
MAX	312	1100	753	394	396	1620	566	476	810	343	330	390
MIN	54	35	136	80	123	159	60	95	127	112	86	56
MEAN†	129	164	265	186	190	433	289	216	289	194	142	134
CFSM†	.61	.78	1.26	.88	.90	2.05	1.37	1.02	1.37	.92	.67	.64
IN.†	.70	.87	1.45	1.02	.97	2.37	1.53	1.18	1.53	1.06	.78	.71

† Adjusted for change in contents of Blue Marsh Lake.

e Estimated.

SCHUYLKILL RIVER BASIN

01471000 TULPEHOCKEN CREEK NEAR READING, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	220	242	349	358	407	423	371	389	288	219	144	163
MAX	624	432	1044	1193	663	823	1191	1226	673	661	322	456
(WY)	1980	1990	1984	1979	1986	1979	1983	1989	1982	1984	1984	1987
MIN	83.5	83.6	93.8	99.8	149	153	64.2	179	108	115	63.1	63.0
(WY)	1982	1981	1981	1981	1980	1981	1985	1981	1979	1985	1981	1983

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1979 - 1992

ANNUAL TOTAL	85502		80664									
ANNUAL MEAN	234	‡235	220	‡220					297	‡299		
HIGHEST ANNUAL MEAN									531	‡531	1984	
LOWEST ANNUAL MEAN									146	‡151	1981	
HIGHEST DAILY MEAN	1100	Nov 24	1620	Mar 28					3950	Apr 18	1983	
LOWEST DAILY MEAN	27	Sep 24	35	Nov 8					27	Sep 24	1991	
ANNUAL SEVEN-DAY MINIMUM	48	Sep 18	60	Sep 15					39	Aug 25	1981	
INSTANTANEOUS PEAK FLOW			1700	Mar 27					4040	Apr 18	1983	
INSTANTANEOUS PEAK STAGE			3.67	Mar 27					5.65	Apr 18	1983	
INSTANTANEOUS LOW FLOW			27	Oct 15					25	Sep 24	1991	
ANNUAL RUNOFF (CFSM)	1.11	‡ 1.11	1.04	‡ 1.04					1.41	‡ 1.42		
ANNUAL RUNOFF (INCHES)	15.07	‡15.11	14.22	‡14.17					19.14	‡19.24		
10 PERCENT EXCEEDS	437		384						565			
50 PERCENT EXCEEDS	182		174						203			
90 PERCENT EXCEEDS	65		73						83			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1978, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	180	264	362	376	437	512	451	322	269	212	181	192
MAX	689	490	829	815	917	914	806	712	1434	645	481	588
(WY)	1977	1973	1978	1978	1971	1978	1970	1953	1972	1969	1955	1975
MIN	55.8	67.5	84.4	124	178	202	170	116	72.8	57.5	41.9	54.8
(WY)	1964	1966	1966	1966	1969	1969	1966	1965	1965	1966	1966	1957

SUMMARY STATISTICS

WATER YEARS 1951 - 1978

ANNUAL TOTAL												
ANNUAL MEAN	312											
HIGHEST ANNUAL MEAN	491					1952						
LOWEST ANNUAL MEAN	144					1966						
HIGHEST DAILY MEAN	12000				Jun 23	1972						
LOWEST DAILY MEAN	33				Sep 1	1966						
ANNUAL SEVEN-DAY MINIMUM	35				Aug 28	1966						
INSTANTANEOUS PEAK FLOW	a17000				Jun 23	1972						
INSTANTANEOUS PEAK STAGE	b15.65				Jun 23	1972						
INSTANTANEOUS LOW FLOW	23				Dec 1	1964						
ANNUAL RUNOFF (CFSM)	1.48											
ANNUAL RUNOFF (INCHES)	20.11											
10 PERCENT EXCEEDS	607											
50 PERCENT EXCEEDS	212											
90 PERCENT EXCEEDS	85											

‡ Adjusted for change in contents of Blue Marsh Lake.

a From rating curve extended above 3,600 ft³/s, on basis of contracted-opening measurement of peak flow.

b From floodmark in gage shelter.

SCHUYLKILL RIVER BASIN

01471510 SCHUYLKILL RIVER AT READING, PA

LOCATION.--Lat 40°20'10", long 75°56'15", Berks County, Hydrologic Unit 02040203, 200 ft downstream from bridge on Penn Avenue at West Reading, 0.8 mi downstream from Tulpehocken Creek.

DRAINAGE AREA.--880 mi².

PERIOD OF RECORD.--May 1914 to September 1915, October 1919 to September 1930 and June 30, 1977 to current year. Monthly discharge only prior to 1977 published in WSP 1302. Diversion by Schuylkill Navigation Canal included during the navigation seasons of 1914-15.

REVISED RECORDS.--WDR PA-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 185.50 ft above Pennsylvania Railroad Datum. May 7, 1914 to Sept. 30, 1930, nonrecording gage. June 30, 1977 to July 5, 1979, water-stage recorder at site 1,500 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Still Creek Reservoir (station 01469200) since February 1933, Blue Marsh Lake (station 01470870) since April 1979 and to some extent by Lake Ontelaunee. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 31.3 ft at site 1,500 ft downstream, present datum, from floodmarks, discharge about 90,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	396	555	923	825	1510	3020	1460	4700	637	858	448
2	266	396	710	744	722	1400	2550	1360	3700	607	843	432
3	260	396	2020	824	710	1250	2000	1270	2650	601	765	442
4	260	356	3200	979	660	1110	1800	1180	2230	686	808	474
5	260	333	2240	1030	634	1020	1630	1150	2800	693	721	478
6	546	355	1840	863	584	972	1460	1130	4670	1190	639	425
7	493	341	1610	753	569	1300	1350	951	4040	1140	489	459
8	401	270	1470	646	e520	1600	1300	1650	3490	644	474	497
9	356	269	1450	728	e490	1450	1180	3520	2990	955	599	567
10	290	279	1950	676	e480	1400	1130	2820	2400	1020	720	608
11	e460	324	1980	730	e480	2210	1130	2280	2100	823	852	e780
12	e650	389	1700	711	e480	2750	1080	1980	1840	784	796	e880
13	e600	386	1690	768	e480	2390	974	1790	1700	731	798	e580
14	e540	368	1730	1110	e480	2060	922	1820	1510	895	880	516
15	e500	311	1630	1480	686	1850	881	1590	1460	1130	561	435
16	e450	297	1500	1140	1040	1660	860	e1820	1280	1210	595	411
17	651	290	1140	925	1110	1510	889	e2200	1150	1180	617	453
18	1480	281	1000	e825	958	1420	939	1870	1100	1350	838	413
19	1220	278	868	e770	887	1560	949	1750	1340	1080	945	372
20	943	293	801	e720	924	1490	1010	1590	1230	978	714	367
21	656	357	866	e700	883	1400	982	1350	1040	904	551	376
22	542	725	839	e700	845	1350	1870	1280	1180	749	467	460
23	469	3660	859	e700	814	1370	2000	1200	1430	914	457	657
24	521	2980	810	1630	810	1330	1930	1160	1060	978	484	516
25	452	1890	750	1280	873	1240	2230	970	1160	985	657	654
26	436	1150	677	1170	1560	1960	2020	1190	850	843	457	2000
27	417	808	580	997	2010	8540	1900	1360	766	1020	463	1870
28	416	649	557	816	1860	7830	1800	1040	763	1260	472	1560
29	437	653	715	792	1720	5600	1650	898	810	1150	749	1350
30	483	625	1200	812	---	4310	1520	967	1000	1180	567	1120
31	398	---	1120	854	---	3460	---	3430	---	1010	535	---
TOTAL	16131	20105	40057	27796	25094	70302	44956	50026	58439	29327	20371	20600
MEAN	520	670	1292	897	865	2268	1499	1614	1948	946	657	687
MAX	1480	3660	3200	1630	2010	8540	3020	3520	4700	1350	945	2000
MIN	260	269	555	646	480	972	860	898	763	601	457	367

e Estimated.

SCHUYLKILL RIVER BASIN

01471510 SCHUYLKILL RIVER AT READING, PA--Continued.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1009	1334	1927	1777	1960	2295	2302	2244	1413	971	707	760
MAX	3390	2681	5334	5682	3358	4361	6472	5493	3411	2907	1423	2705
(WY)	1980	1978	1984	1979	1984	1978	1983	1989	1982	1984	1984	1987
MIN	322	360	278	265	681	824	606	1005	486	395	354	273
(WY)	1981	1981	1981	1981	1980	1985	1985	1985	1991	1991	1981	1983

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1977 - 1992

ANNUAL TOTAL	415396		423204									
ANNUAL MEAN	1138		1156							1561		
HIGHEST ANNUAL MEAN										2559		1984
LOWEST ANNUAL MEAN										805		1985
HIGHEST DAILY MEAN	4890	Jan 17	8540	Mar 27						24700	Jan 25	1979
LOWEST DAILY MEAN	233	Sep 16	260	Oct 3						180	Oct 1	1980
ANNUAL SEVEN-DAY MINIMUM	245	Sep 12	301	Nov 15						224	Dec 24	1980
INSTANTANEOUS PEAK FLOW			11400	Mar 27						a37500	Jan 25	1979
INSTANTANEOUS PEAK STAGE			9.37	Mar 27						b17.36	Jan 25	1979
10 PERCENT EXCEEDS	2310		2000							3190		
50 PERCENT EXCEEDS	839		901							1040		
90 PERCENT EXCEEDS	290		417							394		

a From rating curve extended above 16,000 ft³/s.

b At site 1,500 ft downstream.

SCHUYLKILL RIVER BASIN

01471980 MANATAWNY CREEK NEAR POTTSTOWN, PA

LOCATION.--Lat 40°16'22", long 75°40'49", Berks County, Hydrologic Unit 02040203, on left bank about 180 ft upstream from bridge on Manatawny Street, 0.7 mi downstream from Ironstone Creek, 2.4 mi northwest of Pottstown, 3.1 mi upstream from mouth, and 4.7 mi southwest of Boyertown.

DRAINAGE AREA.--85.5 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 22, 1972 reached a stage of 17.1 ft, from floodmarks, discharge about 9,600 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e28	32	48	79	60	65	122	58	158	49	48	32
2	e28	32	60	54	78	66	113	56	100	46	41	31
3	e28	31	422	54	74	62	104	52	81	45	40	34
4	e27	31	264	64	74	60	98	48	71	62	41	41
5	e27	30	107	72	70	59	91	49	391	55	41	35
6	e37	30	78	57	68	58	83	48	397	89	38	39
7	e30	30	68	52	76	122	81	45	166	57	36	67
8	e26	30	61	49	51	136	79	225	139	47	35	50
9	e26	28	64	52	e47	92	75	383	117	70	44	42
10	e25	30	221	65	e42	90	75	149	101	54	45	39
11	e29	39	111	54	e48	174	93	116	91	45	71	48
12	e40	45	80	50	e40	119	80	100	83	42	114	39
13	e32	40	81	48	e45	93	71	91	78	49	54	31
14	e28	37	116	113	e52	83	68	84	74	89	59	30
15	e28	33	93	103	84	78	66	78	70	79	53	28
16	e39	33	70	70	191	72	66	102	65	121	53	29
17	108	32	60	e63	103	71	73	91	63	100	70	28
18	136	31	e59	e60	91	72	85	82	62	134	83	28
19	54	31	e58	e58	109	108	94	75	98	74	130	28
20	43	30	e57	e57	96	109	77	66	116	57	71	29
21	37	33	e56	e57	80	118	72	62	77	49	55	31
22	36	155	55	85	73	115	92	58	67	45	47	36
23	34	330	58	115	71	116	92	55	63	91	45	55
24	33	92	54	188	73	108	73	53	84	116	42	42
25	31	69	48	131	73	102	71	57	85	89	41	43
26	32	56	e52	92	160	233	78	61	66	95	40	186
27	31	50	e50	e89	115	711	71	71	60	83	37	107
28	31	48	54	e86	85	239	63	57	56	70	36	86
29	31	46	105	82	77	171	60	51	51	55	60	58
30	30	45	123	82	---	145	58	52	50	54	43	46
31	32	---	73	62	---	140	---	337	---	54	36	---
TOTAL	1177	1579	2906	2343	2306	3987	2424	2912	3180	2165	1649	1418
MEAN	38.0	52.6	93.7	75.6	79.5	129	80.8	93.9	106	69.8	53.2	47.3
MAX	136	330	422	188	191	711	122	383	397	134	130	186
MIN	25	28	48	48	40	58	58	45	50	42	35	28
CFSM	.44	.62	1.10	.88	.93	1.50	.95	1.10	1.24	.82	.62	.55
IN.	.51	.69	1.26	1.02	1.00	1.73	1.05	1.27	1.38	.94	.72	.62

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1992, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	78.4	108	141	170	187	181	183	167	108	92.6	62.9	71.1							
MAX	212	187	425	499	356	348	427	390	266	312	138	191							
(WY)	1976	1978	1984	1979	1984	1978	1983	1989	1982	1984	1990	1987							
MIN	34.0	37.9	36.7	28.0	69.0	69.6	53.6	67.4	43.1	36.4	21.6	27.1							
(WY)	1983	1982	1981	1981	1980	1981	1985	1987	1987	1981	1981	1983							

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1974 - 1992
ANNUAL TOTAL	32378	28046	
ANNUAL MEAN	88.7	76.6	129
HIGHEST ANNUAL MEAN			230
LOWEST ANNUAL MEAN			63.4
HIGHEST DAILY MEAN	493	Jan 12	3010
LOWEST DAILY MEAN	21	Sep 12	14
ANNUAL SEVEN-DAY MINIMUM	23	Sep 8	17
INSTANTANEOUS PEAK FLOW			7550
INSTANTANEOUS PEAK STAGE			11.46
INSTANTANEOUS LOW FLOW			13
ANNUAL RUNOFF (CFSM)	1.04		1.50
ANNUAL RUNOFF (INCHES)	14.09		20.43
10 PERCENT EXCEEDS	170		238
50 PERCENT EXCEEDS	62		84
90 PERCENT EXCEEDS	28		33

SCHUYLKILL RIVER BASIN

01472104 SCHUYLKILL RIVER AT VINCENT DAM AT LINFIELD, PA

LOCATION.--Lat 40°12'22", long 75°33'57", Montgomery County, Hydrologic Unit 02040203, on left bank 100 ft upstream from Vincent Dam, and 0.3 mi south of Linfield.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--January 1986 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1986 to September 1990 (discontinued).

WATER TEMPERATURE: September 1989 to current year.

DISSOLVED OXYGEN: January 1986 to September 1990 (discontinued).

INSTRUMENTATION.--Water-quality monitor January 1986 to September 1990. Temperature probe interfaced with data collection platform since October 1990.

REMARKS.--Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 752 microsiemens, Sept. 15, 1989; minimum, 118 microsiemens, Sept. 15, 1987.

WATER TEMPERATURE: Maximum, 31.5°C, July 20-22, 1991; minimum, 1.5°C, Feb. 17, 1991.

DISSOLVED OXYGEN: Maximum, 19.6 mg/L, Mar. 24, 1988; minimum, 0.8 mg/L, July 26, 1986.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

SCHUYLKILL RIVER BASIN

01472104 SCHUYLKILL RIVER AT VINCENT DAM AT LINFIELD, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	6.0	4.0	5.0	---	---	---	14.5	13.0	13.5
2	---	---	---	6.5	5.5	6.0	---	---	---	15.0	13.5	14.0
3	---	---	---	6.5	5.5	6.0	---	---	---	15.5	14.5	15.0
4	---	---	---	6.5	6.0	6.5	---	---	---	15.5	14.0	14.5
5	---	---	---	7.0	6.0	6.5	---	---	---	14.0	13.0	13.5
6	---	---	---	7.0	6.5	7.0	---	---	---	13.5	12.5	13.0
7	---	---	---	7.0	6.5	6.5	---	---	---	13.5	12.5	13.0
8	---	---	---	8.5	7.0	7.5	---	---	---	13.0	12.0	12.5
9	---	---	---	9.5	8.0	9.0	---	---	---	12.0	12.0	12.0
10	---	---	---	9.5	9.0	9.5	---	---	---	12.5	12.0	12.5
11	---	---	---	9.5	8.0	9.5	---	---	---	13.0	12.5	12.5
12	---	---	---	8.0	6.5	7.0	---	---	---	13.5	13.0	13.0
13	---	---	---	7.0	5.5	6.0	---	---	---	14.5	13.5	14.0
14	5.5	4.5	5.0	5.5	5.0	5.5	---	---	---	15.0	14.5	14.5
15	5.5	5.0	5.0	5.5	5.0	5.0	---	---	---	14.5	14.0	14.5
16	6.0	5.5	5.5	5.5	4.5	5.0	---	---	---	14.0	13.0	13.5
17	6.5	6.0	6.0	5.5	4.5	5.0	---	---	---	13.0	12.5	12.5
18	6.5	6.5	6.5	6.5	5.0	5.5	---	---	---	13.0	13.0	13.0
19	7.0	6.5	6.5	5.5	5.0	5.0	---	---	---	13.0	12.5	12.5
20	7.0	5.5	6.5	6.0	5.0	5.5	---	---	---	15.0	12.5	13.5
21	6.0	5.0	5.5	6.5	5.5	6.0	---	---	---	17.0	14.5	15.5
22	6.5	5.0	5.5	6.5	5.5	6.0	14.0	13.0	13.0	16.5	15.5	16.0
23	7.5	5.5	6.5	6.0	5.5	5.5	15.0	13.0	14.0	17.0	16.0	16.5
24	7.5	7.0	7.0	6.5	5.0	6.0	14.5	14.0	14.5	17.0	16.5	17.0
25	7.0	6.0	6.0	7.5	5.0	6.0	14.0	13.5	14.0	17.0	15.5	16.0
26	6.0	5.5	5.5	7.5	7.0	7.0	13.5	13.0	13.0	15.5	14.5	15.0
27	5.5	5.0	5.5	7.5	6.5	7.0	13.0	12.5	12.5	14.5	14.5	14.5
28	6.5	5.5	6.0	7.0	6.0	6.5	13.0	12.0	12.5	14.5	13.5	14.0
29	6.0	5.0	6.0	8.0	7.0	7.0	13.5	12.5	13.0	---	---	---
30	---	---	---	8.5	8.0	8.5	13.5	12.5	13.0	---	---	---
31	---	---	---	8.5	8.5	8.5	---	---	---	16.5	16.0	16.0
MONTH	7.5	4.5	6.0	9.5	4.0	6.5	---	---	---	17.0	12.0	14.1
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	16.0	14.5	15.5	27.0	24.5	25.5	25.0	23.0	24.0	24.0	22.0	23.0
2	17.0	15.0	16.0	27.0	24.5	25.5	25.5	23.0	24.0	23.5	21.5	22.5
3	---	---	---	26.5	22.0	24.0	25.5	23.5	24.5	23.0	22.0	22.5
4	---	---	---	23.5	21.0	22.0	26.0	24.5	25.0	24.0	22.5	23.0
5	---	---	---	25.0	22.0	23.5	25.0	23.0	24.0	24.0	23.0	23.5
6	---	---	---	25.0	23.5	24.0	25.5	22.5	24.0	23.0	21.0	21.5
7	---	---	---	25.0	23.0	24.0	26.0	23.0	24.5	21.5	20.5	21.0
8	---	---	---	24.5	22.5	23.5	25.5	23.0	24.0	23.5	21.0	22.0
9	---	---	---	26.5	23.5	24.5	26.0	23.5	24.5	25.5	22.5	23.5
10	---	---	---	27.0	24.5	26.0	26.5	24.5	25.5	26.0	24.0	25.0
11	---	---	---	27.0	25.0	26.0	26.0	25.0	25.5	25.5	23.5	24.5
12	---	---	---	26.5	25.0	25.5	25.0	24.0	24.5	23.5	21.5	22.0
13	---	---	---	26.5	24.5	25.5	24.5	23.5	24.0	21.5	20.0	20.5
14	---	---	---	28.5	25.5	26.5	23.5	22.5	23.0	21.5	19.0	20.0
15	---	---	---	28.5	26.5	27.5	22.5	20.5	21.5	22.0	19.5	20.5
16	---	---	---	27.0	25.0	26.0	20.5	20.0	20.0	22.5	20.0	21.0
17	---	---	---	---	---	---	20.5	20.0	20.0	23.5	21.5	22.5
18	---	---	---	24.0	23.0	23.5	22.5	20.5	21.0	24.0	22.0	23.0
19	---	---	---	25.5	23.0	24.0	23.0	22.0	22.5	24.0	22.5	23.0
20	---	---	---	26.5	24.0	25.0	23.5	21.0	22.0	22.5	20.5	21.5
21	---	---	---	27.0	25.0	26.0	24.0	21.5	22.5	22.0	20.5	21.0
22	---	---	---	26.0	24.5	25.0	23.5	21.5	22.5	21.5	21.0	21.5
23	---	---	---	24.5	22.5	23.5	24.5	21.5	22.5	21.5	20.5	21.5
24	21.5	20.0	20.5	22.5	20.5	21.0	25.0	22.5	23.5	20.5	18.0	19.0
25	22.5	20.0	21.5	21.0	20.0	20.5	26.0	23.5	24.5	18.5	16.0	16.5
26	23.5	21.0	22.0	21.0	20.5	20.5	27.0	24.5	25.5	16.0	15.5	16.0
27	24.5	22.0	23.0	23.0	21.0	22.0	27.0	25.5	26.5	17.0	16.0	16.5
28	25.5	22.0	23.5	23.5	21.5	22.5	27.0	26.0	26.5	17.5	16.5	17.0
29	26.0	23.0	24.0	24.0	21.0	22.5	26.5	23.5	25.0	18.0	16.5	17.0
30	26.5	24.0	25.0	25.5	23.5	24.5	23.5	21.5	22.5	16.5	14.5	15.0
31	---	---	---	25.5	24.0	24.5	24.5	22.5	23.0	---	---	---
MONTH	---	---	---	28.5	20.0	24.0	27.0	20.0	23.5	26.0	14.5	21.0

SCHUYLKILL RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA

LOCATION.--Lat 40°09'05", long 75°36'06", Chester County, Hydrologic Unit 02040203, on right bank 70 ft downstream from two-span county bridge on French Creek Road, 4.5 mi northwest of Phoenixville, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--59.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 160 ft above sea level, from topographic map. Prior to Nov. 7, 1968, nonrecording gage at site 70 ft upstream at same datum.

Remarks.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	30	41	40	42	88	43	100	38	29	16
2	20	e21	47	37	39	41	79	42	62	37	25	e15
3	20	20	331	37	39	40	65	39	52	37	25	16
4	19	19	185	47	38	41	60	36	47	50	25	e19
5	e27	e17	77	68	36	38	60	35	242	34	e24	17
6	e23	e17	54	47	38	37	56	34	210	32	e23	17
7	19	e18	46	40	37	94	52	33	95	e50	e22	32
8	18	e17	41	36	32	99	51	185	74	31	e21	25
9	17	e16	44	40	e29	64	49	326	64	e59	24	e20
10	17	19	159	50	e27	59	49	113	57	e48	24	e19
11	e20	25	82	42	e29	133	e70	84	54	39	22	e25
12	e28	26	56	37	e26	80	53	71	51	30	e70	e18
13	e24	21	52	35	e28	60	48	67	50	e33	25	e16
14	19	20	72	84	e30	52	44	65	47	e68	e31	e15
15	18	e17	64	84	54	49	42	60	38	31	e28	e14
16	e30	e17	47	50	159	46	42	139	38	50	e30	e14
17	74	e16	41	e42	74	45	54	88	41	79	e58	14
18	76	e16	39	e37	61	45	74	67	41	55	27	13
19	33	e16	e38	e38	69	80	58	65	49	37	22	13
20	26	e15	e37	e38	62	96	52	53	81	32	21	12
21	23	19	36	e38	50	102	48	49	45	29	20	11
22	23	102	36	41	44	82	63	49	38	32	18	13
23	21	217	35	56	42	77	57	48	36	e79	16	26
24	21	63	39	146	47	77	49	45	40	35	16	18
25	21	44	35	67	52	76	50	50	54	33	17	16
26	21	39	e34	49	93	119	70	50	42	32	17	150
27	20	32	33	e48	71	549	57	58	40	e70	18	70
28	20	29	35	47	54	171	48	48	40	30	18	58
29	19	28	66	47	49	118	45	44	39	27	e28	33
30	19	27	72	47	---	98	44	42	39	25	19	24
31	19	---	47	40	---	104	---	180	---	30	17	---
TOTAL	775	973	2010	1556	1449	2814	1677	2308	1906	1292	780	769
MEAN	25.0	32.4	64.8	50.2	50.0	90.8	55.9	74.5	63.5	41.7	25.2	25.6
MAX	76	217	331	146	159	549	88	326	242	79	70	150
MIN	17	15	30	35	26	37	42	33	36	25	16	11
CFSM	.42	.55	1.10	.85	.85	1.54	.95	1.26	1.08	.71	.43	.43
IN.	.49	.61	1.27	.98	.91	1.77	1.06	1.45	1.20	.81	.49	.48
e Estimated.												

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1992, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	46.4	71.6	96.3	108	130	128	130	109	86.0	67.4	41.2	45.4												
MAX	125	166	267	394	266	319	306	250	353	258	110	125												
(WY)	1980	1973	1984	1979	1984	1978	1983	1989	1972	1984	1971	1971												
MIN	17.9	24.6	19.2	13.7	39.7	40.5	35.6	31.9	22.7	21.9	15.2	14.1												
(WY)	1987	1982	1981	1981	1969	1981	1985	1969	1969	1985	1981	1980												

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1969 - 1992
ANNUAL TOTAL	23702	18309	
ANNUAL MEAN	64.9	50.0	88.0
HIGHEST ANNUAL MEAN			155
LOWEST ANNUAL MEAN			36.1
HIGHEST DAILY MEAN	466 Jan 12	549 Mar 27	4530 Jun 22 1972
LOWEST DAILY MEAN	15 Nov 20	11 Sep 21	8.9 Aug 25 1981
ANNUAL SEVEN-DAY MINIMUM	17 Nov 15	13 Sep 16	9.1 Aug 23 1981
INSTANTANEOUS PEAK FLOW			11200 Jun 22 1972
INSTANTANEOUS PEAK STAGE			13.66 Jun 22 1972
INSTANTANEOUS LOW FLOW		11	8.9 Aug 25 1981
ANNUAL RUNOFF (CFSM)	1.10	.85	1.49
ANNUAL RUNOFF (INCHES)	14.92	11.52	20.24
10 PERCENT EXCEEDS	127	81	167
50 PERCENT EXCEEDS	44	40	57
90 PERCENT EXCEEDS	20	18	21

SCHUYLKILL RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1970 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD (MG/L AS CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT 04...	0930	20	152	7.3	21.5	16.5	0.70	10.1	59	12	16
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO- (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (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 SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT 04...	4.6	6.6	0.4	19	1.8	47	13	11	0.20	16	104
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	
OCT 04...	<0.010	1.40	<0.010	<0.20	0.030	<0.010	0.010	<10	72	5	

< Actual value is known to be less than the value shown.

SCHUYLKILL RIVER BASIN

01472198 PERKIOMEN CREEK AT EAST GREENVILLE, PA

Location.--Lat 40°23'38", long 75°30'57", Montgomery County, Hydrologic Unit 02040203, on right bank 100 ft upstream from bridge on Church Road, 0.9 mi upstream of Molasses Creek, and 1.0 mi southwest of East Greenville.

DRAINAGE AREA.--38.0 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 288.50 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	22	28	26	33	55	26	59	19	23	18
2	14	15	27	28	e23	31	50	25	37	19	20	19
3	14	14	276	28	23	29	45	24	29	20	21	21
4	14	14	122	37	22	28	43	24	26	29	21	21
5	14	14	56	37	22	27	40	24	244	21	20	20
6	19	14	45	29	20	26	35	23	135	48	19	21
7	15	14	39	27	21	52	34	22	71	23	18	31
8	13	14	33	25	22	52	33	91	54	20	18	28
9	13	14	34	29	20	39	32	115	45	39	27	23
10	13	16	103	31	18	43	31	54	37	22	21	21
11	15	19	52	27	e18	133	45	43	32	20	274	28
12	21	19	42	25	17	66	35	36	28	20	80	20
13	16	17	47	24	17	51	30	33	27	22	37	19
14	14	15	55	73	21	44	29	29	26	30	33	18
15	14	16	43	51	37	40	28	28	24	35	29	18
16	21	15	33	34	84	34	28	43	23	44	30	19
17	74	15	29	30	43	33	33	34	23	51	43	18
18	43	15	28	27	40	32	41	31	22	81	65	17
19	24	14	24	22	50	44	48	30	44	33	57	17
20	20	15	24	23	44	44	37	26	39	25	36	18
21	17	15	25	23	37	47	35	24	26	22	28	16
22	17	141	25	23	34	46	41	23	25	22	26	17
23	16	146	25	54	32	46	35	22	23	62	25	27
24	16	46	26	96	31	44	31	21	33	42	23	16
25	16	31	23	42	33	51	30	22	27	36	22	18
26	17	26	22	36	80	111	29	24	24	30	21	76
27	17	23	21	31	54	292	28	26	23	46	20	47
28	14	21	21	29	45	102	27	22	21	40	21	37
29	14	21	62	27	40	76	26	20	20	27	23	26
30	14	20	52	27	---	66	26	21	21	26	20	21
31	15	---	34	27	---	64	---	152	---	25	19	---
TOTAL	578	794	1470	1050	974	1826	1060	1138	1268	999	1140	716
MEAN	18.6	26.5	47.4	33.9	33.6	58.9	35.3	36.7	42.3	32.2	36.8	23.9
MAX	74	146	276	96	84	292	55	152	244	81	274	76
MIN	13	14	21	22	17	26	26	20	20	19	18	16
CFSM	.49	.70	1.25	.89	.88	1.55	.93	.97	1.11	.85	.97	.63
IN.	.57	.78	1.44	1.03	.95	1.79	1.04	1.11	1.24	.98	1.12	.70

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1992, BY WATER YEAR (WY)

MEAN	28.0	49.3	60.4	58.1	79.0	74.5	89.1	81.6	53.7	42.6	27.6	35.7
MAX	54.7	83.9	187	103	138	113	224	163	121	163	49.8	113
(WY)	1990	1984	1984	1990	1984	1983	1983	1989	1982	1984	1990	1987
MIN	13.6	16.7	18.1	26.4	33.6	34.5	24.9	36.7	24.7	22.9	14.4	13.4
(WY)	1982	1982	1990	1985	1992	1985	1985	1992	1991	1983	1985	1986

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1982 - 1992	
ANNUAL TOTAL	16024.7		13013			
ANNUAL MEAN	43.9		35.6		56.6	
HIGHEST ANNUAL MEAN					103	
LOWEST ANNUAL MEAN					35.6	
HIGHEST DAILY MEAN	276	Dec 3	292	Mar 27	2360	Sep 27 1985
LOWEST DAILY MEAN	8.3	Sep 13	13	Oct 8	4.2	Aug 21 1985
ANNUAL SEVEN-DAY MINIMUM	9.5	Sep 12	14	Nov 3	4.4	Aug 18 1985
INSTANTANEOUS PEAK FLOW			1140	Aug 11	24900	Jun 25 1984
INSTANTANEOUS PEAK STAGE			3.68	Aug 11	7.07	Jun 25 1984
INSTANTANEOUS LOW FLOW					3.8	Sep 5 1985
ANNUAL RUNOFF (CFSM)	1.16		.94		1.49	
ANNUAL RUNOFF (INCHES)	15.69		12.74		20.24	
10 PERCENT EXCEEDS	89		54		104	
50 PERCENT EXCEEDS	28		27		36	
90 PERCENT EXCEEDS	14		16		16	

SCHUYLKILL RIVER BASIN

01472199 NORTHWEST BRANCH PERKIOMEN CREEK AT HILLEGASS, PA

Location.--Lat 40°22'26", long 75°31'22", Montgomery County, Hydrologic Unit 02040203, on left bank 0.3 mi downstream from bridge on private road, and 0.5 mi north of Hillegass.

DRAINAGE AREA.--23.0 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 290.00 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	7.2	12	17	16	21	35	16	42	11	13	9.5
2	6.9	7.3	16	17	13	21	32	15	25	11	11	9.5
3	6.7	7.1	163	17	14	19	29	14	19	11	11	11
4	6.5	7.4	75	21	14	18	27	14	16	15	11	13
5	6.4	7.1	33	24	13	17	26	14	161	12	11	11
6	8.5	7.0	26	18	12	16	24	13	110	23	9.8	11
7	8.2	7.1	23	16	12	39	23	13	49	13	9.2	21
8	6.5	7.0	20	15	13	39	22	68	36	11	9.0	22
9	6.3	6.9	20	17	11	27	21	82	30	18	12	14
10	6.2	7.1	69	22	9.9	30	21	36	25	12	11	12
11	7.9	9.3	31	17	e9.7	85	30	28	23	11	109	18
12	11	10	25	15	9.2	43	24	24	19	9.9	49	12
13	8.3	8.6	28	14	10	32	21	21	17	12	e24	10
14	7.1	8.4	34	48	12	27	19	19	16	20	e20	9.5
15	7.1	7.8	27	34	26	25	18	17	15	23	e18	9.3
16	8.6	7.8	21	22	65	22	18	26	14	29	e18	9.1
17	36	7.5	18	19	29	21	22	24	14	28	e28	8.9
18	28	7.2	17	17	26	21	27	20	14	37	e43	8.4
19	13	7.2	13	13	34	27	32	17	28	18	e28	8.3
20	9.9	7.3	14	14	30	28	25	15	29	14	e19	9.1
21	8.8	7.7	14	14	25	30	23	14	18	12	13	10
22	8.4	64	14	13	23	28	27	13	15	11	11	11
23	8.1	88	14	33	22	28	24	12	14	32	12	12
24	8.0	26	15	71	22	26	21	12	22	28	12	8.9
25	7.9	17	13	27	23	31	20	12	19	31	13	8.8
26	7.9	14	12	22	63	85	20	14	15	27	13	62
27	7.7	12	12	19	37	207	18	16	14	26	12	32
28	7.2	11	11	18	29	72	17	14	12	19	12	26
29	7.1	11	39	17	26	50	16	12	13	14	13	15
30	7.1	11	34	16	---	42	16	12	11	15	11	12
31	7.1	---	22	17	---	41	---	109	---	14	10	---
TOTAL	291.3	414.0	885	664	648.8	1218	698	736	855	567.9	596.0	434.3
MEAN	9.40	13.8	28.5	21.4	22.4	39.3	23.3	23.7	28.5	18.3	19.2	14.5
MAX	36	88	163	71	65	207	35	109	161	37	109	62
MIN	6.2	6.9	11	13	9.2	16	16	12	11	9.9	9.0	8.3
CFSM	.41	.60	1.24	.93	.97	1.71	1.01	1.03	1.24	.80	.84	.63
IN.	.47	.67	1.43	1.07	1.05	1.97	1.13	1.19	1.38	.92	.96	.70

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1992, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	16.8	31.3	43.5	36.9	49.8	47.9	57.4	52.5	33.7	24.8	15.8
MAX	35.3	58.7	165	64.0	93.8	78.2	146	114	83.7	99.0	33.8
(WY)	1990	1984	1984	1991	1984	1983	1983	1989	1982	1984	1990
MIN	7.85	8.61	10.3	15.7	22.4	23.4	16.4	23.7	12.9	10.0	7.95
(WY)	1983	1982	1990	1985	1992	1985	1985	1992	1985	1986	1983

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1982 - 1992
ANNUAL TOTAL	9681.9	8008.3	
ANNUAL MEAN	26.5	21.9	35.6
HIGHEST ANNUAL MEAN			69.5
LOWEST ANNUAL MEAN			21.1
HIGHEST DAILY MEAN	185	207	1030
LOWEST DAILY MEAN	4.7	6.2	4.4
ANNUAL SEVEN-DAY MINIMUM	4.9	6.9	4.7
INSTANTANEOUS PEAK FLOW		563	2690
INSTANTANEOUS PEAK STAGE		3.85	5.52
INSTANTANEOUS LOW FLOW			4.2
ANNUAL RUNOFF (CFSM)	1.15	.95	1.55
ANNUAL RUNOFF (INCHES)	15.66	12.95	21.01
10 PERCENT EXCEEDS	58	35	69
50 PERCENT EXCEEDS	17	16	23
90 PERCENT EXCEEDS	6.6	8.1	7.8

SCHUYLKILL RIVER BASIN

01472620 EAST BRANCH PERKIOMEN CREEK NEAR DUBLIN, PA

LOCATION.--Lat 40°24'14", long 75°14'05", Bucks County, Hydrologic Unit 02040203, on right bank 40 ft downstream from bridge on Bucks Road, 4.5 mi northeast of Perkasio, and 5.0 mi southeast of Quakertown.

DRAINAGE AREA.--4.05 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 334.12 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Regulation by releases from Bradshaw Reservoir since August 1989. Peak flows are unregulated. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992												
DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	58	60	42	11	12	13	33	35	31	58	56
2	58	58	60	43	11	12	12	41	34	34	58	56
3	58	58	95	43	11	12	12	47	34	34	58	51
4	58	58	40	48	11	12	12	47	26	35	58	45
5	58	58	46	46	11	11	11	47	64	36	58	54
6	58	58	40	44	11	11	11	40	56	43	58	56
7	59	58	44	25	11	16	11	29	35	43	58	56
8	58	58	43	14	10	16	11	35	31	43	58	56
9	58	58	45	15	10	13	11	38	30	44	58	56
10	58	58	64	15	10	21	11	48	28	42	48	56
11	58	58	47	14	10	62	12	35	29	51	43	56
12	58	58	45	13	9.3	19	11	33	31	55	47	56
13	58	59	49	13	10	15	11	32	36	54	56	56
14	58	58	48	27	10	13	11	31	38	51	58	56
15	58	58	32	18	14	12	10	30	35	50	58	56
16	60	58	43	15	20	12	10	34	33	56	58	56
17	68	58	43	14	13	11	11	32	33	58	58	56
18	62	58	42	13	13	12	12	32	33	48	51	56
19	60	58	42	13	16	13	13	32	33	57	56	56
20	60	57	41	12	16	16	11	32	33	58	58	56
21	46	59	42	12	14	17	11	32	34	58	58	56
22	52	83	42	12	13	16	16	32	33	58	58	56
23	58	61	42	18	13	18	27	32	34	58	57	56
24	58	64	42	23	13	16	31	32	34	59	57	56
25	58	62	42	13	14	16	34	32	34	59	56	56
26	58	61	42	12	29	36	34	32	34	58	56	33
27	36	60	41	11	16	38	31	32	34	59	56	54
28	40	60	42	11	14	18	26	32	34	59	56	57
29	58	60	47	11	13	15	26	32	33	58	56	56
30	58	60	47	11	---	13	28	32	33	58	56	57
31	56	---	43	11	---	14	---	40	---	60	56	---
MEAN	56.7	59.7	46.5	20.4	13.0	17.4	16.4	35.1	34.8	50.5	56.0	54.6
MAX	68	83	95	48	29	62	34	48	64	60	58	57
MIN	36	57	32	11	9.3	11	10	29	26	31	43	33
CFSM	14.0	14.7	11.5	5.03	3.21	4.29	4.04	8.67	8.59	12.5	13.8	13.5
IN.	16.15	16.44	13.24	5.81	3.47	4.94	4.51	9.99	9.59	14.39	15.94	15.05
†	36.4	55.8	42.3	18.7	9.8	9.5	14.5	33.7	30.4	48.6	55.1	54.4

† Diversion from Delaware River at Point Pleasant to East Branch Perkiomen Creek, 0.5 mi above gage, equivalent in cubic feet per second.

SCHUYLKILL RIVER BASIN

01472620 EAST BRANCH PERKIOMEN CREEK NEAR DUBLIN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	34.5	28.4	23.7	16.8	11.6	21.0	16.9	33.9	36.8	38.0	47.2	48.8
MAX	57.3	59.7	46.5	22.8	15.0	42.2	26.0	42.4	51.1	54.4	59.3	58.3
(WY)	1991	1992	1992	1990	1990	1990	1991	1991	1990	1991	1990	1991
MIN	.16	12.8	1.96	4.43	6.00	7.42	4.49	18.1	12.5	2.73	15.6	25.7
(WY)	1989	1991	1989	1989	1989	1989	1989	1989	1989	1989	1989	1989

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1989 - 1992

ANNUAL MEAN	41.8	38.5	29.9
HIGHEST ANNUAL MEAN			38.5
LOWEST ANNUAL MEAN			9.34
HIGHEST DAILY MEAN	95 Dec 3	95 Dec 3	418 Sep 20 1989
LOWEST DAILY MEAN	9.8 Jan 26	9.3 Feb 12	.01 Oct 20 1988
ANNUAL SEVEN-DAY MINIMUM	9.9 Feb 24	9.9 Feb 8	.02 Oct 15 1988
INSTANTANEOUS PEAK FLOW		264 Jun 5	2040 Sep 20 1989
INSTANTANEOUS PEAK STAGE		3.15 Jun 5	8.03 Sep 20 1989
ANNUAL RUNOFF (CFSM)	10.3	9.51	7.39
ANNUAL RUNOFF (INCHES)	140.27	129.51	100.39
10 PERCENT EXCEEDS	61	58	60
50 PERCENT EXCEEDS	45	42	25
90 PERCENT EXCEEDS	11	12	1.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1988, BY WATER YEAR (WY) (PRIOR TO REGULATION)

MEAN	1.39	9.48	10.0	5.83	13.0	8.11	8.24	7.37	1.33	5.76	.35	2.71
MAX	2.56	14.7	20.9	9.16	19.1	15.7	17.2	21.0	4.72	20.9	.87	13.0
(WY)	1986	1986	1984	1986	1984	1984	1984	1984	1984	1984	1984	1985
MIN	.14	1.92	3.05	2.61	4.26	2.21	.91	.41	.090	.13	.025	.027
(WY)	1987	1985	1988	1985	1987	1985	1985	1986	1987	1985	1987	1986

SUMMARY STATISTICS

WATER YEARS 1984 - 1988

ANNUAL MEAN	6.09
HIGHEST ANNUAL MEAN	11.7
LOWEST ANNUAL MEAN	3.60
HIGHEST DAILY MEAN	372 Sep 27 1985
LOWEST DAILY MEAN	.00 Jul 20 1985
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 14 1985
INSTANTANEOUS PEAK FLOW	a2270 Jul 7 1984
INSTANTANEOUS PEAK STAGE	8.41 Jul 7 1984
ANNUAL RUNOFF (CFSM)	1.50
ANNUAL RUNOFF (INCHES)	20.42
10 PERCENT EXCEEDS	11
50 PERCENT EXCEEDS	1.0
90 PERCENT EXCEEDS	.05

‡ Adjusted for releases from Bradshaw Reservoir.

a From slope-area measurement.

SCHUYLKILL RIVER BASIN

01472810 EAST BRANCH PERKIOMEN CREEK NEAR SCHWENKSVILLE, PA

LOCATION.--Lat 40°15'31", long 75°25'45", Montgomery County, Hydrologic Unit 02040203, on left bank, 600 ft upstream from Bergey's Mill bridge, 2.0 mi east of Schwenksville.

DRAINAGE AREA.--58.7 mi².

PERIOD OF RECORD.--January 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 150 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Pressure sensor interfaced with DCP. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	65	87	78	38	54	71	43	102	39	80	62
2	67	67	101	71	e36	52	62	45	64	36	72	63
3	66	66	888	72	e35	48	54	58	55	39	69	69
4	65	65	458	84	e34	45	48	57	47	45	68	75
5	66	65	164	103	e34	42	45	58	409	41	73	59
6	72	65	118	83	e30	41	41	57	535	79	67	63
7	67	67	96	75	e31	65	39	43	190	51	67	100
8	67	65	89	45	32	114	38	145	114	48	65	75
9	65	64	88	45	31	72	36	220	81	63	63	72
10	66	64	287	60	e30	69	35	126	65	54	58	65
11	68	75	148	51	e30	569	40	105	56	48	63	84
12	71	70	113	45	e29	188	38	76	48	56	69	68
13	67	67	109	43	e28	115	35	65	45	60	59	65
14	65	65	167	134	32	83	33	58	47	86	66	65
15	83	64	130	131	42	68	32	53	45	72	65	127
16	95	65	100	74	184	57	32	92	42	114	66	65
17	202	64	90	74	85	52	35	e79	42	77	123	66
18	167	63	83	e65	67	49	37	61	42	108	101	65
19	93	64	e78	56	86	75	43	57	46	76	128	65
20	77	63	e72	49	91	106	38	51	56	74	86	64
21	70	64	71	45	73	138	36	49	45	71	74	62
22	56	167	71	41	63	121	42	47	40	77	69	62
23	68	359	66	51	59	112	51	44	42	83	65	68
24	66	134	66	186	60	118	49	43	45	84	65	61
25	66	100	61	98	59	95	55	44	42	109	65	64
26	65	85	60	69	165	150	52	44	39	92	65	145
27	59	81	58	e63	114	539	50	47	39	89	73	128
28	45	84	59	56	80	178	45	44	38	79	68	137
29	56	81	87	54	69	109	42	42	38	74	71	85
30	67	79	121	50	---	84	41	42	38	73	63	77
31	68	---	88	42	---	83	---	115	---	76	62	---
TOTAL	2341	2547	4274	2193	1747	3691	1295	2110	2537	2173	2248	2326
MEAN	75.5	84.9	138	70.7	60.2	119	43.2	68.1	84.6	70.1	72.5	77.5
MAX	202	359	888	186	184	569	71	220	535	114	128	145
MIN	45	63	58	41	28	41	32	42	38	36	58	59
†	-56.3	-55.8	-42.3	-18.7	-9.8	-9.5	-14.5	-33.7	-30.4	-48.6	-55.1	-54.4
MEAN†	19.2	29.1	95.7	52	50.4	110	28.7	34.4	54.2	21.5	17.4	23.1
CFSM†	.33	.50	1.63	.89	.86	1.87	.49	.59	.92	.37	.30	.39
IN.†	.38	.55	1.88	1.02	.92	2.15	.55	.68	1.03	.42	.34	.44

† Diversion from Delaware River at Point Pleasant to East Branch Perkiomen Creek, 19.4 mi above gage, equivalent in cubic feet per second.

‡ Adjusted for diversion.

e Estimated.

SCHUYLKILL RIVER BASIN

01472810 EAST BRANCH PERKIOMEN CREEK NEAR SCHWENKSVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	75.5	84.9	138	70.7	68.5	132	75.9	76.1	76.4	80.2	76.0	74.4
MAX	75.5	84.9	138	70.7	77.0	145	109	84.1	84.6	90.4	79.4	77.5
(WY)	1992	1992	1992	1992	1991	1991	1991	1991	1992	1991	1991	1992
MIN	75.5	84.9	138	70.7	60.2	119	43.2	68.1	68.3	70.1	72.5	71.3
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1991	1992	1992	1991

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	29482	
ANNUAL MEAN	80.6	±44.6
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	888	Dec 3
LOWEST DAILY MEAN	28	Feb 13
ANNUAL SEVEN-DAY MINIMUM	30	Feb 7
INSTANTANEOUS PEAK FLOW	1350	Jun 5
INSTANTANEOUS PEAK STAGE	5.72	Jun 5
ANNUAL RUNOFF (CFSM)	1.37	± .76
ANNUAL RUNOFF (INCHES)	18.68	±10.33
10 PERCENT EXCEEDS	121	
50 PERCENT EXCEEDS	65	
90 PERCENT EXCEEDS	40	

‡ Adjusted for diversion.

SCHUYLKILL RIVER BASIN

01473000 PERKIOMEN CREEK AT GRATERFORD, PA

LOCATION.--Lat 40°13'46", long 75°27'07", Montgomery County, Hydrologic Unit 02040203, on left bank 1,650 ft upstream from highway bridge at Graterford, 0.5 mi upstream from Landis Brook and 2.5 mi north of Collegeville.

DRAINAGE AREA.--279 mi².

PERIOD OF RECORD.--June 1914 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1950, published as "at Graters Ford."

REVISED RECORDS.--WSP 756: Drainage area. WSP 1171: 1935(M). WSP 1302: 1915-16, 1927-29. WSP 1382: 1932-33, 1935, 1937, 1942, 1947, 1948(M), 1949(P), 1950(M), 1951-52(P), WDR PA-91-1:1989-90 (adjusted means and monthly runoff)

GAGE.--Water-stage recorder. Datum of gage is 112.66 ft above sea level. June 1914 to Sept. 6, 1921, nonrecording gage at site 1,650 ft downstream at datum 3.29 ft lower. Sept. 7, 1921, to Sept. 13, 1927, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Green Lane Reservoir (station 01472200) 10.5 mi upstream since December 21, 1956. Diversion to the East Branch Perkiomen from Bradshaw Reservoir since August 1989. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	124	164	237	172	240	360	135	108	92	137	108
2	113	126	192	215	153	217	312	136	264	88	120	105
3	113	126	2660	213	e150	204	270	148	538	90	111	105
4	111	126	1860	227	142	194	237	135	320	95	109	105
5	110	124	612	296	135	187	223	129	1380	101	111	99
6	116	124	393	254	123	175	193	126	2210	185	105	98
7	117	124	315	222	122	262	172	114	732	137	106	99
8	119	125	276	174	116	541	170	413	417	109	103	102
9	119	125	260	161	112	359	162	1560	321	131	103	106
10	119	124	992	226	113	301	158	522	238	135	103	107
11	124	145	565	214	e112	1760	208	384	196	109	99	105
12	135	160	388	180	112	785	207	275	170	105	338	108
13	127	145	343	166	108	463	173	228	151	101	203	104
14	124	131	505	232	106	346	149	201	138	144	161	100
15	132	129	471	528	120	290	140	178	130	140	145	100
16	175	127	348	293	739	244	130	291	121	335	140	100
17	377	126	276	236	445	221	152	219	111	230	204	100
18	508	126	252	234	349	214	179	218	107	362	226	100
19	213	125	231	216	398	292	220	199	121	221	344	98
20	173	124	228	197	415	401	212	156	218	161	247	98
21	154	124	185	200	328	515	186	144	158	133	184	99
22	132	261	182	188	270	488	198	135	123	132	156	97
23	136	1280	176	151	232	448	219	124	111	126	142	97
24	136	356	187	780	260	457	190	113	115	224	133	99
25	127	246	179	396	252	406	187	111	142	214	124	100
26	124	211	164	273	641	738	179	115	121	223	120	100
27	122	183	159	220	544	3130	170	130	109	199	117	101
28	100	172	144	213	361	1070	154	125	101	200	117	206
29	107	164	237	186	315	605	142	113	94	158	113	250
30	123	158	444	174	---	443	135	104	94	135	116	186
31	119	---	309	176	---	423	---	106	---	129	112	---
TOTAL	4620	5741	13697	7678	7445	16419	5787	7087	9159	4944	4649	3382
MEAN	149	191	442	248	257	530	193	229	305	159	150	113
MAX	508	1280	2660	780	739	3130	360	1560	2210	362	344	250
MIN	100	124	144	151	106	175	130	104	94	88	99	97
†	-56.3	-55.8	-42.3	-18.7	-9.8	-9.5	-14.5	-33.7	-30.4	-48.6	-55.1	-54.4
MEAN‡	86.8	144	418	228	249	521	176	197	272	112	93.4	60.1
CFSM‡	.31	.52	1.50	.82	.89	1.87	.63	.71	.97	.40	.33	.22
IN.‡	.36	.58	1.73	.94	.96	2.15	.71	.81	1.09	.46	.39	.24

† Diversion from Delaware River at Point Pleasant to Perkiomen Creek Basin, equivalent in cubic feet per second.

‡ Adjusted for diversion from Delaware River and change in contents of Green Lane Reservoir.

e Estimated.

SCHUYLKILL RIVER BASIN

01473000 PERKIOMEN CREEK AT GRATERFORD, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	179	342	489	533	612	697	620	423	268	202	140	211
MAX	657	1182	1491	2071	1241	1525	1759	1298	1330	1286	493	1163
(WY)	1980	1973	1984	1979	1971	1978	1983	1989	1972	1984	1971	1971
MIN	28.1	43.8	63.3	75.6	156	186	128	84.0	52.9	41.7	37.4	24.8
(WY)	1958	1958	1966	1981	1980	1985	1985	1965	1965	1965	1957	1957

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1957 - 1992	
ANNUAL TOTAL	118232		90608			
ANNUAL MEAN	324		248		392	
HIGHEST ANNUAL MEAN	284		213		767	
LOWEST ANNUAL MEAN					165	
HIGHEST DAILY MEAN	3490	Jan 12	3130	Mar 27	14800	Jul 7 1984
LOWEST DAILY MEAN	94	Sep 20	88	Jul 2	13	Sep 1 1957
ANNUAL SEVEN-DAY MINIMUM	104	Sep 18	93	Jun 28	19	Aug 31 1957
INSTANTANEOUS PEAK FLOW			4710	Jun 5	35800	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.78	Jun 5	17.08	Jun 22 1972
INSTANTANEOUS LOW FLOW			74	Feb 12	13	Sep 1 1957
ANNUAL RUNOFF (CFSM)	1.16	± 1.02	.89	± .76	1.40	
ANNUAL RUNOFF (INCHES)	15.75	±13.82	12.08	±10.37	19.08	
10 PERCENT EXCEEDS	622		419		807	
50 PERCENT EXCEEDS	191		161		168	
90 PERCENT EXCEEDS	113		105		57	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1956, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	192	345	445	504	641	771	513	346	213	274	261	177
MAX	856	1119	1077	1336	1458	2193	1335	1395	976	1190	1378	869
(WY)	1956	1933	1928	1915	1918	1936	1952	1948	1946	1919	1955	1934
MIN	21.2	38.0	69.8	66.5	80.2	247	167	71.7	32.7	32.4	21.0	23.8
(WY)	1942	1032	1923	1925	1934	1915	1946	1941	1921	1954	1930	1932

SUMMARY STATISTICS WATER YEAR 1915 - 1956

ANNUAL TOTAL		
ANNUAL MEAN	389	
HIGHEST ANNUAL MEAN	689	1956
LOWEST ANNUAL MEAN	188	1931
HIGHEST DAILY MEAN	18600	Jul 9 1935
LOWEST DAILY MEAN	3.8	Jun 25 1921
ANNUAL SEVEN-DAY MINIMUM	5.2	Jun 22 1921
INSTANTANEOUS PEAK FLOW	a39900	Jul 9 1935
INSTANTANEOUS PEAK STAGE	18.26	Jul 9 1935
INSTANTANEOUS LOW FLOW	4.7	Oct 5 1941
ANNUAL RUNOFF (CFSM)	1.40	
ANNUAL RUNOFF (INCHES)	18.96	
10 PERCENT EXCEEDS	800	
50 PERCENT EXCEEDS	166	
90 PERCENT EXCEEDS	42	

‡ Adjusted for diversion from Delaware River and change in contents of Green Lane Reservoir.

SCHUYLKILL RIVER BASIN

01473120 SKIPPACK CREEK NEAR COLLEGEVILLE, PA

LOCATION.--Lat 40°09'52", long 75°26'01", Montgomery County, Hydrologic Unit 02040203, on right bank 60 ft downstream from two-span highway bridge, 1.5 mi upstream from mouth, and 2.0 mi southeast of Collegeville.

DRAINAGE AREA.--53.7 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 99.03 ft above sea level. Prior to June 15, 1967, nonrecording gage at site 60 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.2	24	30	26	38	67	23	59	9.0	13	e5.1
2	11	9.3	63	28	23	36	59	21	33	8.7	8.3	4.9
3	10	9.2	1360	28	24	34	52	19	26	9.1	6.5	5.1
4	10	8.3	397	35	21	31	46	17	22	20	6.4	17
5	9.5	8.3	118	40	20	29	41	16	518	12	7.3	8.4
6	9.1	8.5	81	32	18	28	36	15	450	49	6.4	6.8
7	10	8.5	63	29	18	61	35	14	226	14	5.2	17
8	9.0	8.7	53	26	e17	81	33	494	110	10	4.9	14
9	8.8	8.3	51	30	e15	52	30	303	75	15	4.8	9.3
10	8.7	7.7	262	43	e14	53	29	116	53	11	4.5	8.3
11	8.8	11	94	33	e15	588	34	79	41	9.1	5.3	12
12	17	14	70	28	e13	151	30	59	34	8.0	16	9.4
13	11	10	66	28	13	94	25	50	28	7.3	7.6	7.1
14	8.6	9.4	88	136	15	73	25	41	24	18	8.2	6.4
15	30	8.8	70	83	22	61	24	33	21	14	8.6	6.3
16	46	8.8	53	e40	148	51	23	157	19	58	8.8	6.2
17	225	8.3	44	e37	55	46	30	71	17	21	63	5.7
18	88	7.4	40	e31	47	43	52	53	16	19	33	5.4
19	36	7.7	33	e30	58	139	31	42	23	12	21	5.5
20	23	7.9	e31	e31	56	183	27	34	46	9.1	13	5.9
21	19	8.2	29	e32	45	148	26	30	20	9.0	9.7	4.4
22	17	293	27	e34	39	97	42	26	16	9.4	8.3	5.1
23	15	247	26	42	37	101	34	24	15	10	7.4	12
24	13	60	26	146	38	95	28	21	19	14	6.4	8.1
25	12	39	22	55	38	75	28	25	19	13	6.4	6.8
26	11	30	18	44	107	142	29	22	14	15	6.2	135
27	10	24	19	42	70	597	27	25	14	11	e6.3	51
28	9.4	22	17	41	55	150	26	19	11	10	e6.5	44
29	9.6	19	50	32	49	101	24	17	9.6	7.8	e9.4	17
30	9.9	18	58	29	---	80	24	15	9.6	7.5	e7.0	12
31	9.6	---	37	30	---	84	---	125	---	11	e5.8	---
TOTAL	727.0	939.5	3390	1325	1116	3542	1017	2006	1988.2	451.0	331.2	461.2
MEAN	23.5	31.3	109	42.7	38.5	114	33.9	64.7	66.3	14.5	10.7	15.4
MAX	225	293	1360	146	148	597	67	494	518	58	63	135
MIN	8.6	7.4	17	26	13	28	23	14	9.6	7.3	4.5	4.4
CFSM	.44	.58	2.04	.80	.72	2.13	.63	1.21	1.23	.27	.20	.29
IN.	.50	.65	2.35	.92	.77	2.45	.70	1.39	1.38	.31	.23	.32

e Estimated.

SCHUYLKILL RIVER BASIN

01473120 SKIPPAK CREEK NEAR COLLEGEVILLE, PA

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	34.5	74.4	104	114	112	126	102	76.2	53.9	48.0	32.9	42.8
MAX	154	236	315	390	274	270	316	230	189	345	175	314
(WY)	1980	1973	1974	1979	1979	1977	1983	1984	1982	1975	1971	1971
MIN	2.99	12.8	9.59	9.25	19.3	22.1	17.6	15.1	6.59	3.11	.70	1.76
(WY)	1969	1975	1981	1981	1980	1985	1985	1986	1969	1966	1966	1968

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1966 - 1992	
ANNUAL TOTAL	22386.7		17294.1		77.1	
ANNUAL MEAN	61.3		47.3		131	
HIGHEST ANNUAL MEAN					32.5	
LOWEST ANNUAL MEAN					6600	
HIGHEST DAILY MEAN	1360	Dec 3	1360	Dec 3		Sep 13 1971
LOWEST DAILY MEAN	4.0	Sep 23	4.4	Sep 21	.20	Sep 9 1966
ANNUAL SEVEN-DAY MINIMUM	4.8	Sep 13	5.5	Sep 16	.29	Sep 7 1966
INSTANTANEOUS PEAK FLOW			2470	May 8	a40400	Sep 13 1971
INSTANTANEOUS PEAK STAGE			7.00	May 8	b22.50	Sep 13 1971
INSTANTANEOUS LOW FLOW			2.7	Sep 22	.10	Sep 12 1966
ANNUAL RUNOFF (CFSM)	1.14		.88		1.43	
ANNUAL RUNOFF (INCHES)	15.51		11.98		19.50	
10 PERCENT EXCEEDS	132		88		137	
50 PERCENT EXCEEDS	27		24		27	
90 PERCENT EXCEEDS	7.6		7.7		6.0	

a From rating curve extended above 8,400 ft³/s, on basis of slope-area measurement of peak flow.

b From floodmark.

SCHUYLKILL RIVER BASIN

01473169 VALLEY CREEK AT PENNSYLVANIA TURNPIKE BRIDGE NEAR VALLEY FORGE, PA.

LOCATION.--Lat 40°04'45", long 75°27'40", Chester County, Hydrologic Unit 02040202, on right bank, 100 ft upstream from Pennsylvania turnpike bridge, 0.9 mi downstream from confluence with Little Valley Creek, near Valley Forge.

DRAINAGE AREA.--20.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 108.62 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	18	18	18	18	24	19	24	18	18	11
2	13	21	34	18	17	17	23	19	19	16	13	11
3	17	21	99	18	17	17	22	19	19	26	12	14
4	17	21	36	23	17	16	22	18	19	23	13	14
5	15	18	24	20	16	17	22	18	77	16	12	11
6	17	20	23	19	17	16	21	18	27	15	12	20
7	15	21	22	18	17	36	21	18	22	15	12	24
8	15	20	21	18	17	21	21	92	21	14	12	16
9	15	21	24	21	e16	18	21	35	20	16	12	14
10	15	21	44	19	15	26	21	24	19	15	11	14
11	16	25	23	18	16	55	22	22	19	16	18	19
12	15	18	22	18	17	24	21	20	18	14	13	13
13	16	19	22	18	17	21	19	20	17	14	12	13
14	15	17	22	41	17	20	19	20	17	17	15	13
15	19	17	19	19	35	20	19	20	17	19	16	12
16	17	16	18	17	32	19	20	36	16	15	15	12
17	57	18	18	16	20	19	31	22	16	16	73	12
18	20	16	18	16	20	19	25	20	16	20	20	12
19	16	15	18	e15	19	47	21	20	68	14	14	13
20	12	15	18	15	19	26	18	19	22	13	12	12
21	11	17	18	15	17	23	18	19	18	13	12	12
22	11	86	18	15	16	22	30	18	17	12	11	15
23	10	39	18	30	19	24	20	18	18	19	11	20
24	9.8	21	18	32	20	21	20	18	17	14	11	12
25	11	19	18	20	19	20	24	19	19	15	11	26
26	16	18	18	19	29	49	28	19	18	14	11	98
27	15	18	18	19	19	68	21	19	16	14	11	27
28	16	18	16	19	19	27	20	18	16	13	11	19
29	17	16	29	18	18	25	20	17	15	13	13	16
30	18	14	19	18	---	24	19	18	15	12	11	15
31	19	---	19	18	---	28	---	60	---	23	11	---
TOTAL	510.8	644	752	608	555	803	653	742	662	494	459	540
MEAN	16.5	21.5	24.3	19.6	19.1	25.9	21.8	23.9	22.1	15.9	14.8	18.0
MAX	57	86	99	41	35	68	31	92	77	26	73	98
MIN	9.8	14	16	15	15	16	18	17	15	12	11	11
CFSM	.79	1.03	1.17	.94	.92	1.25	1.05	1.15	1.06	.77	.71	.87
IN.	.91	1.15	1.34	1.09	.99	1.44	1.17	1.33	1.18	.88	.82	.97

e estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1992, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	21.2	29.0	29.4	29.1	33.6	37.0	43.0	41.0	30.7	29.1
MAX	34.7	48.8	60.8	40.6	53.5	65.5	98.8	77.5	49.9	46.4
(WY)	1990	1987	1984	1990	1984	1983	1983	1984	1984	1984
MIN	15.0	19.5	18.9	16.8	19.1	17.9	18.1	23.9	16.9	15.9
(WY)	1987	1991	1989	1985	1992	1985	1985	1992	1985	1992

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1983 - 1992
ANNUAL TOTAL	9685.8	7422.8	
ANNUAL MEAN	26.5	20.3	31.1
HIGHEST ANNUAL MEAN			47.0
LOWEST ANNUAL MEAN			20.3
HIGHEST DAILY MEAN	309	Jul 13	684
LOWEST DAILY MEAN	9.8	Oct 24	9.8
ANNUAL SEVEN-DAY MINIMUM	12	Oct 19	11
INSTANTANEOUS PEAK FLOW			1580
INSTANTANEOUS PEAK STAGE			9.02
ANNUAL RUNOFF (CFSM)	1.28		1.50
ANNUAL RUNOFF (INCHES)	17.32		20.34
10 PERCENT EXCEEDS	34		52
50 PERCENT EXCEEDS	21		24
90 PERCENT EXCEEDS	16		16

SCHUYLKILL RIVER BASIN

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA

LOCATION.--Lat 40°00'54", long 75°12'24", Philadelphia County, Hydrologic Unit 02040203, on left bank 100 ft upstream from dam at Ridge Ave., 750 ft upstream from mouth, and 1,000 ft northwest of Gustine Lake in Philadelphia.

DRAINAGE AREA.--64.0 mi².

PERIOD OF RECORD.--June 1897 to September 1903, January 1905 to July 1906, October 1965 to current year. Records for 1971-74 published in WDR PA-81-1. Prior to October 1965 published as "near Philadelphia".

REVISED RECORDS.--WSP 1302: 1905: WDR PA-89-1: 1988.

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 26.41 ft above sea level. Prior to October 1965, water-stage recorder at about same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	34	39	41	51	48	76	47	104	44	68	22
2	28	34	66	38	51	49	72	46	58	42	42	24
3	26	34	613	37	49	48	68	46	50	71	38	24
4	25	33	299	41	46	47	64	45	46	99	33	28
5	26	32	75	41	45	46	61	46	650	44	30	27
6	27	31	58	35	46	47	58	44	366	40	29	26
7	27	30	52	35	46	107	58	43	125	40	28	31
8	25	30	49	33	e45	100	56	249	79	39	27	30
9	25	30	57	38	e43	60	57	308	69	49	27	22
10	30	32	185	41	42	64	56	88	61	57	26	26
11	34	61	69	35	43	337	62	67	54	52	45	63
12	37	45	55	33	42	95	60	55	50	38	36	31
13	32	41	58	33	42	68	54	51	48	36	28	27
14	29	38	66	75	46	59	55	49	47	40	49	25
15	65	34	55	74	80	55	52	47	46	50	37	23
16	61	34	50	48	183	51	56	173	45	80	35	20
17	324	35	50	46	64	50	82	72	44	64	34	21
18	92	33	51	45	55	51	113	53	43	93	66	19
19	48	33	50	42	58	178	58	51	462	40	37	24
20	43	36	49	43	54	120	52	48	200	36	27	20
21	39	32	50	44	50	116	51	49	63	35	23	19
22	36	194	50	42	47	76	82	48	51	33	23	23
23	34	168	49	77	47	85	65	43	50	72	25	54
24	32	43	50	218	52	82	57	44	50	44	24	24
25	37	34	48	68	51	68	56	58	55	38	21	34
26	37	31	46	54	130	94	54	49	49	39	21	351
27	38	31	45	50	72	351	50	52	47	39	22	61
28	34	32	46	48	55	107	48	44	44	38	24	65
29	33	30	111	48	52	82	48	43	42	36	33	36
30	38	33	83	48	---	74	47	42	44	35	25	32
31	33	---	47	49	---	97	---	315	---	211	22	---
TOTAL	1426	1338	2671	1600	1687	2912	1828	2415	3142	1674	1005	1232
MEAN	46.0	44.6	86.2	51.6	58.2	93.9	60.9	77.9	105	54.0	32.4	41.1
MAX	324	194	613	218	183	351	113	315	650	211	68	351
MIN	25	30	39	33	42	46	47	42	42	33	21	19
CFSM	.72	.70	1.35	.81	.91	1.47	.95	1.22	1.64	.84	.51	.64
IN.	.83	.78	1.55	.93	.98	1.69	1.06	1.40	1.83	.97	.58	.72

e Estimated.

SCHUYLKILL RIVER BASIN

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	63.9	84.4	109	115	124	141	139	121	92.3	83.6	75.6	75.0
MAX	176	265	275	378	266	275	410	229	244	230	171	245
(WY)	1980	1973	1984	1979	1979	1983	1983	1984	1989	1975	1973	1971
MIN	23.1	17.7	22.7	24.3	37.0	40.7	41.3	50.8	32.0	24.3	19.8	23.0
(WY)	1966	1966	1966	1981	1969	1985	1985	1986	1986	1966	1966	1968

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1966 - 1992

ANNUAL TOTAL	32788		22930									
ANNUAL MEAN	89.8		62.7							102		
HIGHEST ANNUAL MEAN										160		1973
LOWEST ANNUAL MEAN										50.6		1966
HIGHEST DAILY MEAN	1140	Jan 12	650	Jun 5					3320		Sep 27	1985
LOWEST DAILY MEAN	25	Oct 4	19	Sep 18					9.7		Sep 13	1966
ANNUAL SEVEN-DAY MINIMUM	26	Oct 3	21	Sep 15					12		Aug 27	1966
INSTANTANEOUS PEAK FLOW			1750	Jun 5					6870		Jun 29	1973
INSTANTANEOUS PEAK STAGE			4.42	Jun 5					7.92		Jun 29	1973
INSTANTANEOUS LOW FLOW			15	Sep 18					2.0		Jul 18	1905a
ANNUAL RUNOFF (CFSM)	1.40		.98						1.59			
ANNUAL RUNOFF (INCHES)	19.06		13.33						21.62			
10 PERCENT EXCEEDS	164		92						174			
50 PERCENT EXCEEDS	54		47						60			
90 PERCENT EXCEEDS	32		27						28			

a Also July 19. Minimum observed outside computed statistical period.

SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA
(National stream-quality accounting network station)

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia County, Hydrologic Unit 02040203, on right bank 150 ft upstream from Fairmount Dam, 1,500 ft upstream from bridge on Spring Garden Street in Philadelphia, and 8.7 mi upstream from mouth. Water-quality sampling site 1.6 mi upstream.

DRAINAGE AREA.--1,893 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 214, 261, 301, 381 have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5.74 ft above sea level. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956, to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft upstream from Fairmount Dam at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Still Creek Reservoir (station 01469200) since February 1933, Blue Marsh Lake (station 01470870) since April 1979, Green Lane Reservoir (station 01472200) since December 1956 and to some extent by Lake Ontelaunee. Records of discharge do not include diversion above station by city of Philadelphia for municipal water supply. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4, 1869, reached a stage of 17.0 ft, discharge, 135,000 ft³/s, from rating extended above 46,000 ft³/s. Flood of Mar. 1, 1902, reached a stage of 14.8 ft, discharge, 98,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	576	621	1100	1580	1260	2270	4740	1880	6900	1230	1580	713
2	559	621	1270	1430	1170	1960	4090	1740	5760	944	1220	643
3	543	622	6390	1210	1140	1760	3360	1630	4260	866	1110	620
4	499	639	8590	1310	1080	1590	2870	1550	3170	1280	1070	668
5	476	607	4970	1600	1010	1440	2590	1490	4720	1060	1020	664
6	559	589	3370	1620	964	1330	2320	1420	10100	1250	998	699
7	670	616	2770	1370	890	1630	2050	1380	7400	1590	882	839
8	809	620	2380	1190	915	2880	1890	2360	5550	1450	692	942
9	695	582	2230	1160	926	2560	1800	8010	4620	1030	711	788
10	655	568	4040	1240	865	2100	1640	5720	3770	1180	803	820
11	600	676	3840	1230	817	4770	1690	4140	3080	1340	965	977
12	596	732	3020	1190	794	4710	1740	3260	2600	1080	1600	1110
13	756	726	2510	1160	812	3880	1620	2780	2220	1040	1340	1160
14	767	696	2800	1440	794	3290	1450	2480	1950	1060	1150	867
15	892	652	2900	2700	977	2810	1360	2370	1790	1310	1150	756
16	873	627	2410	2250	2670	2500	1330	3180	1600	1870	1060	677
17	1640	581	2100	1530	2410	2190	1410	3560	1430	2070	1280	620
18	2700	614	1700	1410	1910	2010	1750	3030	1300	2340	1350	569
19	1990	568	1480	1160	1730	2660	1530	2560	2330	2190	1400	625
20	1530	568	1280	1030	1780	2980	1600	2310	2510	1600	1660	587
21	1250	568	1280	1160	1580	3090	1470	2020	1760	1350	1090	597
22	1060	1210	1320	1200	1390	2730	1630	1710	1370	1240	898	588
23	868	4810	1310	1550	1330	2660	2550	1540	1350	1390	762	802
24	783	5060	1290	2910	1360	2650	2460	1440	1500	1650	748	798
25	743	3590	1240	2840	1360	2390	2380	1490	1420	1540	680	823
26	701	2340	1200	2000	2050	2610	2900	1390	1430	1540	804	2960
27	673	1560	1070	1680	3240	10800	2590	1620	1170	1470	721	3500
28	692	1180	977	1500	2870	13700	2310	1730	1040	1420	642	3060
29	642	1110	1230	1310	2520	9380	2120	1350	e1000	1570	701	2200
30	633	1080	1940	1260	---	7120	1960	1190	1070	1460	904	1730
31	680	---	1960	1230	---	5690	---	2610	---	2070	922	---
TOTAL	27110	35033	75967	47450	42614	114140	65200	74940	90170	44480	31913	32402
MEAN	875	1168	2451	1531	1469	3682	2173	2417	3006	1435	1029	1080
MAX	2700	5060	8590	2910	3240	13700	4740	8010	10100	2340	1660	3500
MIN	476	568	977	1030	794	1330	1330	1190	1000	866	642	569
MED	695	633	1960	1370	1260	2660	1920	1880	2080	1390	998	793
CFSM	.46	.62	1.29	.81	.78	1.95	1.15	1.28	1.59	.76	.54	.57
IN.	.53	.69	1.49	.93	.84	2.24	1.28	1.47	1.77	.87	.63	.64

e Estimated.

SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued
(National stream-quality accounting network station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1316	2265	3054	3254	3641	4671	4169	3160	2136	1641	1389	1397
MAX	4771	6272	9569	11400	8136	13320	11620	9943	11640	6434	7980	4863
(WY)	1956	1973	1984	1979	1939	1936	1983	1989	1972	1984	1933	1960
MIN	89.4	223	444	340	647	1552	1237	693	261	116	140	117
(WY)	1942	1932	1981	1981	1934	1981	1985	1965	1965	1966	1966	1932

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1932 - 1992	
ANNUAL TOTAL	775857		681419			
ANNUAL MEAN	2126		1862			
HIGHEST ANNUAL MEAN					2669	
LOWEST ANNUAL MEAN					4791	
HIGHEST DAILY MEAN					1014	
LOWEST DAILY MEAN					93400	
ANNUAL SEVEN-DAY MINIMUM					24	
INSTANTANEOUS PEAK FLOW					103000	
INSTANTANEOUS PEAK STAGE					14.65	
ANNUAL RUNOFF (CFSM)					1.41	
ANNUAL RUNOFF (INCHES)					19.16	
10 PERCENT EXCEEDS					5770	
50 PERCENT EXCEEDS					1640	
90 PERCENT EXCEEDS					407	

SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to November 1980, January 1986 to May 1990 (discontinued).

pH: January 1968 to November 1980 (discontinued).

WATER TEMPERATURE: October 1945 to November 1980 (discontinued).

DISSOLVED OXYGEN: January 1966 to November 1980, January 1986 to May 1990 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 972 microsiemens, June 25, 1965; minimum, 92 microsiemens, Feb. 26, 1979.

pH: Maximum, 10.1, Aug. 12, 1969; minimum, 5.7, Dec. 21, 1973.

WATER TEMPERATURE: Maximum, 32.0°C, Aug. 5, 10, 1980; minimum, 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 18.3 mg/L, Jan. 11, 1978; minimum, 0.2 mg/L July 8, 1988.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	STREP-TOCOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
DEC 11...	1100	3930	320	7.2	8.0	747	0.60	12.1	K190	K320
MAR 30...	1000	7110	220	7.4	7.0	737	1.2	10.9	K370	K260
JUN 23...	1000	1460	400	7.4	21.5	740	18	10.3	<50	230
SEP 29...	1120	2370	365	7.6	18.0	740	0.50	11.7	2200	K230

DATE	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	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 AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO3) (00450)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO3) (00447)	ALKA-LINITY TOT WH TOT IT FIELD (MG/L AS CaCO3) (00419)
DEC 11...	120	31	10	19	0.8	25	3.7	81	0	66
MAR 30...	83	22	6.9	11	0.5	22	2.2	59	0	49
JUN 23...	130	34	12	23	0.9	26	5.3	76	0	62
SEP 29...	120	29	11	23	0.9	29	4.1	79	0	65

DATE	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 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 DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
DEC 11...	31	27	0.20	8.1	211	184	2240	0.29	3.06	0.040
MAR 30...	38	20	<0.10	6.4	141	150	2710	0.19	3.17	0.030
JUN 23...	64	34	0.20	5.9	240	231	947	0.33	3.06	0.040
SEP 29...	59	28	0.20	6.8	212	210	1360	0.29	2.07	0.030

< Actual value is known to be less than the value shown.

K Results based on non-ideal colony counts.

SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)
DEC 11...	3.10	0.140	0.150	0.45	0.60	0.170	0.160	0.130	30	32
MAR 30...	3.20	0.120	0.110	0.39	0.50	0.070	0.030	0.040	50	24
JUN 23...	3.10	0.170	0.210	1.1	1.3	0.200	0.180	0.160	20	38
SEP 29...	2.10	0.160	0.160	0.64	0.80	0.280	0.300	0.260	40	28

DATE	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LITHIUM DIS- SOLVED (MG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (MG/L AS MO) (01060)	NICKEL, DIS- SOLVED (MG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (MG/L AS SE) (01145)	SILVER, DIS- SOLVED (MG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (MG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (MG/L AS V) (01085)
DEC 11...	<3	47	6	54	<10	4	<1	<1.0	150	<6
MAR 30...	<3	52	4	130	<10	4	<1	<1.0	100	<6
JUN 23...	<3	56	8	200	<10	4	<1	<1.0	180	<6
SEP 29...	<3	81	5	38	<10	11	<1	<1.0	150	<6

< Actual value is known to be less than the value shown.

SCHUYLKILL RIVER BASIN

01474505 SCHUYLKILL RIVER ABOVE PASSYUNK AVENUE AT PHILADELPHIA, PA

LOCATION.--Lat 39°55'18", long 75°12'16", Philadelphia County, Hydrologic Unit 02040203, on west face of Philadelphia Fire Department dock, in the embayment off the main channel of the Schuylkill River, on left bank, 1,200 ft upstream from Passyunk Avenue at Philadelphia.

DRAINAGE AREA.--1,900 mi².

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

GAGE.--Water stage recorder. Datum of gage is sea level (from U.S. Army Corps of Engineers benchmark).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.03 ft, Oct. 25, 1980; minimum, -5.88 ft, Dec. 27, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 6.54 ft, Oct. 31; minimum, -4.59 ft, Jan. 16.

Summaries of tide elevations during current year are as follows:

	Maximum elevation	High tide date	Minimum elevation	Low tide date	Mean high tide	Mean water level	Mean low tide
Oct.	6.54	31	- 2.84	7	4.53	1.42	- 1.94
Nov.	5.58	1	- 3.45	26	3.99	1.08	- 2.23
Dec.	5.41	3	- 4.01	16	3.95	.94	- 2.44
Jan.	6.41	4	- 4.59	16	4.18	1.08	- 2.40
Feb.	5.23	4	- 4.05	29	4.07	1.11	- 2.28
Mar.	5.73	11	- 3.09	12	4.12	1.20	- 2.19
Apr.	5.18	30	- 2.89	35	4.56	1.50	- 1.87
May	5.73	6	- 2.23	4	4.84	1.63	- 1.81
June	6.11	6	- 2.59	22	5.12	1.81	- 1.71
July	5.71	3	- 2.75	28	4.96	1.64	- 2.01
Aug.	5.52	29	- 2.94	1	4.57	1.34	- 2.24
Sept.	5.92	26	- 3.01	23	4.47	1.31	- 2.19

SCHUYLKILL RIVER BASIN

LAKES AND RESERVOIRS IN SCHUYLKILL RIVER BASIN

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30", Schuylkill County, Hydrologic Unit 02040106, a dam on Still Creek, 1.0 mi upstream from mouth and 2.3 mi north of Hometown, Pa. DRAINAGE AREA, 7.19 mi². PERIOD OF RECORD, January 1933 to current year. Nonrecording gage. Datum of gage is sea level (levels by Panther Valley Water Co.).

REMARKS.--Reservoir formed by earthfill dam, with ungated concrete spillway at elevation of 1,182.00 ft. Storage began in February 1933. Capacity at elevation of 1,182.00 ft is 8,290 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam.

COOPERATION.--Records furnished by the borough of Tamaqua.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,570 acre-ft, Oct. 15, 1955, at elevation of 1,182.92 ft, but may have been greater during 1950 or 1951 water years; minimum contents (after first filling), 588 acre-ft, Dec. 8, 1944, at elevation of 1,136.70 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,286 acre-ft, many days May - July, at elevation of 1182.0 ft; minimum contents, 5,763 acre-ft, Feb. 15, at elevation of 1,173 ft.

01470870 BLUE MARSH LAKE.--Lat 40°22'45", long 76°01'59", Berks County, Hydrologic Unit 02040203, at dam on Tulpehocken Creek, 0.8 mi upstream from gaging station on Tulpehocken Creek, 1.0 mi northeast of Blue Marsh, 1.9 mi upstream from Reber's Bridge, and 5.1 mi southeast of Bernville. DRAINAGE AREA, 175 mi². PERIOD OF RECORD, April 1979 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake formed by earthfill dam, with concrete ungated spillway at elevation of 307.00 ft. Storage began April 23, 1979. Capacity at elevation of 307.00 ft is 50,000 acre-ft. Dead storage is 3,000 acre-ft. Lake is used for flood control, water supply, and recreation. Figures herein represent total contents.

COOPERATION.--Records furnished by U. S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 39,480 acre-ft, Apr. 17, 1983, at elevation of 301.65 ft; minimum contents (after first filling), 15,770 acre-ft, Mar. 21, 1986, at elevation of 283.00 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 29,940 acre-ft, Mar. 2, at elevation of 295.57 ft; minimum contents, 15,530 acre-ft, Jan. 27, at elevation of 282.74 ft.

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, Hydrologic Unit 02040203, at dam on Perkiomen Creek, 0.4 mi west of Green Lane and 2.1 mi upstream from Unami Creek. DRAINAGE AREA, 70.9 mi². PERIOD OF RECORD, December 1956 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by Philadelphia Suburban Water Co.).

REMARKS.--Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation of 286.00 ft. Storage began December 21, 1956. Capacity at elevation of 286.00 ft is 13,430 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam.

COOPERATION.--Records furnished by Philadelphia Suburban Water Co.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,030 acre-ft, June 23, 1972, at elevation of 290.05 ft; minimum contents (after first filling), 1,270 acre-ft, Aug. 25, 1957, at elevation of 251.60 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 13,900 acre-ft, Mar. 27, at elevation of 286.54 ft; minimum contents, 11,100 acre-ft, Nov. 21, at elevation of 283.09 ft.

SCHUYLKILL RIVER BASIN

LAKES AND RESERVOIRS IN SCHUYLKILL RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)
01469200 Still Creek Reservoir				01470870 Blue Marsh Lake		
Sept. 30	1,176.5	6,730	--	290.06	22,970	--
Oct. 31	1,174.5	6,180	- 9.0	290.01	22,910	- 1.0
Nov. 30	1,173.6	5,930	- 4.2	289.93	22,820	- 1.5
Dec. 31	1,173.6	5,930	0	284.83	17,460	- 87.1
CAL YR 1991	--	--	+ 0.6	--	--	- 0.5
Jan. 31	1,173.3	5,850	- 1.4	283.20	15,940	- 24.7
Feb. 29	1,173.3	5,850	0	282.87	15,650	- 5.0
Mar. 31	1,178.5	7,280	+ 23.4	282.95	15,720	+ 1.1
Apr. 30	1,180.8	7,930	+ 10.9	289.98	22,870	+ 12.0
May 31	1,182.0	8,290	+ 5.8	291.11	24,190	+ 21.5
June 30	1,182.0	8,290	0	290.03	22,930	- 21.2
July 31	1,181.9	8,260	- 0.5	289.90	22,780	- 2.4
Aug. 31	1,180.8	7,930	- 5.3	290.13	23,050	+ 4.4
Sept. 30	1,180.3	7,790	- 2.4	289.46	22,280	- 12.9
WTR YR 1992	--	--	- 2.2	--	--	+ 0.9
01472200 Green Lane Reservoir						
Sept. 30	284.50	12,370	--			
Oct. 31	284.04	11,720	- 5.9			
Nov. 30	284.68	12,280	+ 8.6			
Dec. 31	286.00	13,360	+ 18.5			
CAL YR 1991	--	--	- 0.6			
Jan. 31	285.93	13,870	- 1.0			
Feb. 29	286.04	13,420	+ 1.7			
Mar. 31	286.06	13,480	+ 0.2			
Apr. 30	285.92	13,360	- 2.0			
May 31	286.04	13,470	+ 1.8			
June 30	285.86	13,310	- 2.7			
July 31	285.94	13,380	+ 1.1			
Aug. 31	285.84	13,290	- 1.5			
Sept. 30	284.94	13,380	+ 1.5			
WTR YR 1992	--	--	+ 1.7			

DELAWARE RIVER BASIN

01474703 DELAWARE RIVER AT FORT MIFFLIN AT PHILADELPHIA, PA

LOCATION.--Lat 39°52'45", long 75°12'11", Philadelphia County, Hydrologic Unit 02040202, on right bank at outer end of L-shaped pier at Fort Mifflin, 0.4 mi downstream from mouth of Schuylkill River, at Philadelphia.

DRAINAGE AREA.--10,000 mi², approximately.

PERIOD OF RECORD.--July 1970 to June 1976, February 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1970 to December 1971, February 1981 to current year.

WATER TEMPERATURE: June 1972 to September 1976, February 1981 to current year.

INSTRUMENTATION.--Water-quality monitor July 1970 to June 1976. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Interruptions in the daily record were due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,230 microsiemens, Oct. 27, 1981; minimum, 90 microsiemens, Apr. 11, 17, 19, 29, 1983, Apr. 29, 1984.

WATER TEMPERATURE: Maximum, 31.0°C, Aug. 4-6, 13, 1975; minimum, 0.5°C, Feb. 5, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,060 microsiemens, Nov. 22; minimum, 154 microsiemens, June 9

WATER TEMPERATURE: Maximum, 27.5°C, July 21; minimum, 1.0°C, Jan. 24.

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
OCTOBER				NOVEMBER			DECEMBER			JANUARY			
1	395	355	372	480	378	416	351	275	312	351	268	293	
2	403	364	384	473	388	413	332	270	304	322	270	289	
3	414	370	390	441	383	404	356	266	302	329	263	284	
4	417	381	395	451	390	411	388	195	312	324	266	284	
5	422	385	399	446	395	411	266	197	234	368	266	299	
6	425	382	398	493	405	426	258	190	223	336	273	297	
7	417	373	391	522	402	441	256	207	222	358	270	298	
8	420	380	395	506	419	446	258	205	223	341	266	287	
9	424	378	397	576	426	468	300	202	228	312	263	278	
10	416	371	395	757	448	528	327	214	255	322	270	287	
11	423	371	397	778	489	574	329	224	262	329	270	292	
12	426	382	397	573	458	496	307	207	257	327	270	285	
13	424	377	397	606	459	502	305	231	259	322	263	280	
14	430	383	398	568	466	499	312	227	253	339	253	274	
15	419	388	401	586	454	509	327	219	266	407	275	327	
16	437	385	404	574	481	511	356	236	280	419	275	327	
17	446	393	411	638	477	521	310	231	257	333	285	300	
18	468	380	413	712	480	549	344	241	275	362	275	307	
19	415	370	394	724	497	544	354	241	277	367	272	296	
20	409	356	383	778	497	553	310	239	260	312	261	277	
21	395	356	378	840	512	570	310	234	256	312	261	274	
22	393	351	372	1060	513	594	310	246	262	302	256	274	
23	378	346	367	783	515	591	300	249	262	314	288	293	
24	379	347	367	629	503	569	314	251	270	429	295	343	
25	377	356	370	526	422	469	297	249	268	406	282	323	
26	381	359	371	425	361	387	300	251	265	357	262	305	
27	379	355	370	416	348	369	332	251	272	352	266	303	
28	383	355	370	406	338	358	305	256	273	356	258	297	
29	421	367	387	393	319	340	307	256	272	339	281	300	
30	464	372	399	368	310	324	358	258	292	341	268	300	
31	579	378	425	---	Feb. 5, 1981	---	---	354	268	294	335	282	299
MONTH	579	346	390	1060	310	473	388	190	266	429	253	296	

DELAWARE RIVER BASIN

01474703 DELAWARE RIVER AT FORT MIFFLIN AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	377	283	316	378	297	328	260	227	247	300	200	226
2	362	285	310	359	292	323	279	240	256	300	207	233
3	340	286	305	381	315	341	278	234	250	302	192	229
4	348	296	311	372	320	339	278	224	241	273	190	223
5	379	300	322	382	331	344	288	212	244	283	192	222
6	333	292	309	360	331	340	295	207	243	280	200	228
7	340	301	314	380	321	338	285	212	232	312	205	231
8	364	289	316	393	311	345	285	202	235	307	207	236
9	375	307	327	419	310	334	273	212	232	360	204	279
10	375	288	308	404	306	329	295	214	239	303	202	238
11	339	287	303	390	299	337	297	217	239	251	175	203
12	351	294	313	363	279	317	280	209	236	221	178	193
13	322	289	302	353	270	301	290	217	248	237	168	195
14	425	303	338	318	255	282	285	224	244	241	176	200
15	349	294	313	326	246	275	314	224	249	277	163	204
16	444	294	336	320	237	268	354	227	257	252	186	214
17	441	315	352	304	248	261	346	229	267	260	193	220
18	388	305	337	310	241	253	341	237	277	268	201	228
19	407	310	339	292	236	262	350	242	281	288	213	243
20	419	314	351	325	243	271	345	242	272	290	221	248
21	390	314	341	327	239	274	341	232	256	299	215	251
22	361	305	328	323	240	263	346	234	272	311	231	256
23	354	300	317	422	245	307	380	232	288	294	232	252
24	356	305	319	422	261	308	384	241	291	298	236	254
25	375	305	321	345	250	282	353	228	273	289	242	260
26	407	310	339	324	243	277	351	226	277	305	252	266
27	427	319	356	392	230	324	324	192	246	308	257	275
28	432	295	350	368	266	297	312	208	239	322	259	282
29	424	312	369	276	228	251	314	207	243	344	263	293
30	---	---	---	261	225	241	312	186	231	339	265	284
31	---	---	---	252	230	242	---	---	---	360	252	286
MONTH	444	283	326	422	225	299	384	186	253	360	163	240
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	368	234	306	352	235	264	---	---	---	363	290	301
2	332	218	274	343	240	268	---	---	---	326	289	298
3	257	212	236	302	246	259	---	---	---	318	287	299
4	259	207	222	346	245	274	330	280	294	332	291	303
5	255	194	217	338	249	269	341	261	281	337	291	302
6	268	177	225	326	248	272	333	254	278	334	297	308
7	268	168	211	323	250	274	335	265	279	346	299	312
8	261	160	211	321	252	277	327	263	278	382	302	321
9	254	154	201	323	254	278	318	262	278	372	306	325
10	236	166	199	329	253	283	321	262	279	340	311	322
11	238	177	199	358	253	291	321	273	286	406	308	342
12	240	169	203	344	258	287	396	280	310	394	315	336
13	240	180	204	329	263	287	388	287	313	420	315	346
14	250	180	203	339	268	289	345	281	305	408	318	339
15	230	180	201	402	268	305	360	286	311	394	318	335
16	260	180	210	397	278	319	395	297	326	379	315	331
17	260	180	210	366	283	315	435	306	335	369	320	330
18	260	190	211	348	289	310	435	293	338	362	323	335
19	340	190	226	345	283	309	393	282	309	399	326	341
20	310	200	240	346	289	305	383	275	311	354	317	336
21	280	210	232	337	284	301	334	269	286	371	327	340
22	300	210	236	348	289	304	329	271	284	372	333	346
23	300	195	221	355	288	302	318	273	285	410	336	358
24	295	205	232	341	278	297	317	273	283	400	349	362
25	292	207	235	357	282	299	304	273	286	411	352	371
26	307	210	239	353	282	298	301	227	269	466	361	397
27	283	216	239	335	279	295	317	278	288	424	344	380
28	295	218	241	337	279	295	311	281	290	401	332	362
29	270	223	238	315	204	284	360	284	305	365	333	350
30	279	231	245	324	272	287	329	280	293	358	333	349
31	---	---	---	---	---	---	363	283	300	---	---	---
MONTH	368	154	226	402	204	290	435	227	296	466	287	336

DELAWARE RIVER BASIN

01474703 DELAWARE RIVER AT FORT MIFFLIN AT PHILADELPHIA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

DELAWARE RIVER BASIN

01474703 DELAWARE RIVER AT FORT MIFFLIN AT PHILADELPHIA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

DARBY CREEK BASIN

01475300 DARBY CREEK AT WATERLOO MILLS NEAR DEVON, PA

LOCATION.--Lat 40°01'21", long 75°25'20", Chester County, Hydrologic Unit 02040202, on left bank 125 ft upstream from bridge on Waterloo Road, 2 mi south of Devon, and 2.5 mi northwest of Newtown Square.

DRAINAGE AREA.--5.1 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 310 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.4	6.2	3.8	4.8	4.9	9.9	7.1	12	e3.0	4.9	2.7
2	2.7	4.7	14	3.8	4.6	5.1	9.4	7.1	8.6	4.5	3.1	2.8
3	2.7	5.0	40	3.8	4.6	4.7	9.1	7.0	7.0	9.3	2.8	3.6
4	2.7	5.2	28	5.5	4.6	4.6	8.6	6.7	6.0	8.5	4.7	3.6
5	2.6	5.1	19	4.8	4.5	4.6	8.3	6.7	e38	4.7	3.8	3.0
6	3.3	5.3	18	4.1	4.3	4.6	8.1	6.7	e17	e5.4	3.2	4.0
7	2.7	5.4	17	3.8	4.2	12	7.9	6.5	e9.0	4.1	2.9	6.6
8	2.7	5.1	18	3.6	4.4	7.5	7.8	e30	7.4	3.6	2.9	3.6
9	2.6	5.1	12	4.9	4.4	5.8	7.8	16	6.9	4.2	2.9	3.3
10	2.6	5.3	22	4.4	4.0	8.6	7.8	12	e6.0	4.1	2.8	3.3
11	3.6	6.8	13	3.9	4.0	20	7.8	10	e5.2	4.2	29	5.4
12	3.6	4.8	15	3.8	4.2	7.4	8.0	e9.0	e5.2	3.6	5.8	3.0
13	2.9	4.8	17	3.8	4.1	6.5	8.1	e8.1	e4.8	3.5	3.8	2.9
14	2.7	3.9	19	9.7	4.4	5.9	8.1	e7.4	4.6	4.7	5.9	2.8
15	8.5	3.6	18	4.7	12	5.1	8.1	6.7	4.6	6.1	5.5	2.8
16	4.1	3.6	8.3	4.0	13	5.1	8.1	13	4.4	4.4	5.5	2.8
17	21	3.6	5.5	3.8	6.3	5.1	12	8.1	4.4	11	17	2.7
18	5.0	3.4	5.4	3.8	6.2	5.2	10	e7.1	4.1	11	11	2.7
19	3.4	3.4	5.0	3.6	6.1	18	8.0	e6.3	e22	4.2	5.0	2.7
20	3.1	3.4	4.8	3.4	5.5	11	7.8	e5.5	e8.4	3.9	4.2	2.6
21	3.0	3.5	5.0	3.4	5.1	8.5	7.7	e4.8	4.8	3.4	4.0	2.6
22	3.0	21	5.2	3.5	4.8	11	11	e4.2	e4.1	3.1	3.8	3.7
23	3.0	11	5.1	13	4.7	18	8.0	e4.0	e3.8	5.2	3.7	4.5
24	3.0	5.4	5.0	15	5.4	7.8	7.9	e3.4	e4.2	3.9	3.6	2.7
25	3.2	4.7	4.8	6.3	5.3	8.8	8.9	e4.2	e4.4	3.7	3.3	9.4
26	3.1	4.6	4.6	5.8	13	21	11	e4.4	4.7	3.6	3.1	25
27	3.3	4.3	4.6	5.3	6.4	42	8.3	e5.1	e3.8	3.7	3.0	9.8
28	3.9	4.3	4.6	5.0	5.6	12	8.0	e5.1	e3.2	3.2	4.1	5.5
29	4.0	4.2	11	4.8	5.3	9.9	8.0	e5.1	e2.6	2.9	3.9	4.2
30	4.1	4.2	5.2	4.8	---	9.3	7.3	5.1	e2.3	2.8	2.9	3.8
31	4.3	---	4.0	4.8	---	13	---	e26	---	6.3	2.8	---
TOTAL	123.1	159.1	364.3	158.7	165.8	313.0	256.8	258.4	223.5	149.8	164.9	138.1
MEAN	3.97	5.30	11.8	5.12	5.72	10.1	8.56	8.34	7.45	4.83	5.32	4.60
MAX	21	21	40	15	13	42	12	30	38	11	29	25
MIN	2.6	3.4	4.0	3.4	4.0	4.6	7.3	3.4	2.3	2.8	2.8	2.6
CFSM	.77	1.03	2.28	.99	1.11	1.96	1.66	1.62	1.45	.94	1.03	.89
IN.	.89	1.15	2.63	1.15	1.20	2.26	1.85	1.87	1.61	1.08	1.19	1.00

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1992, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	5.28	8.03	9.39	10.5	10.6	12.1	12.2	10.8	9.07	7.10	5.32	5.90									
MAX	15.9	22.2	18.9	30.2	27.4	28.5	26.4	18.8	20.4	16.6	8.70	26.4									
(WY)	1980	1973	1974	1979	1979	1978	1983	1984	1982	1975	1978	1979									
MIN	2.34	2.90	1.92	1.71	5.52	4.15	3.67	4.90	2.50	2.67	2.12	1.62									
(WY)	1986	1981	1981	1981	1980	1985	1985	1986	1985	1985	1980	1980									

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1972 - 1992
ANNUAL TOTAL	2942.8	2475.5	
ANNUAL MEAN	8.06	6.76	8.79
HIGHEST ANNUAL MEAN			14.3
LOWEST ANNUAL MEAN			4.53
HIGHEST DAILY MEAN	170 Jul 13	42 Mar 27	268 Jun 22 1972
LOWEST DAILY MEAN	1.4 Jun 30	2.3 Jun 30	.83 Nov 8 1980
ANNUAL SEVEN-DAY MINIMUM	1.8 Jun 24	2.7 Sep 15	1.0 Nov 6 1980
INSTANTANEOUS PEAK FLOW		259 Aug 11	1800 Sep 6 1979
INSTANTANEOUS PEAK STAGE		3.55 Aug 11	6.71 Sep 6 1979
INSTANTANEOUS LOW FLOW			.21 Sep 4 1991
ANNUAL RUNOFF (CFSM)	1.57	1.31	1.71
ANNUAL RUNOFF (INCHES)	21.26	17.88	23.18
10 PERCENT EXCEEDS	14	12	15
50 PERCENT EXCEEDS	5.4	4.8	5.9
90 PERCENT EXCEEDS	2.8	3.0	2.4

DARBY CREEK BASIN

01475300 DARBY CREEK AT WATERLOO MILLS NEAR DEVON, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1970 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
OCT 29...	1200	4.3	280	7.1	12.5	12.5	1.2	10.1	100	29	24	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3) (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 SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT 29...	10	13	0.6	21	2.5	72	22	27	0.10	14	162	
DATE		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
OCT 29...	<0.010	1.30	<0.010	<0.20	0.20	0.030	0.010	<0.010	<10	36	8	

< Actual value is known to be less than the value shown.

CRUM CREEK BASIN

01475850 CRUM CREEK NEAR NEWTOWN SQUARE, PA

LOCATION.--Lat 39°58'35", long 75°26'13", Delaware County, Hydrologic Unit 02040202, at Castle Rock bridge on State Highway 3, 0.6 mi upstream from Preston Run, 0.8 mi upstream from Geist Reservoir and 2.0 mi west of Newtown Square.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1932, 1949, 1970-1977, and annual maximum 1977-1981. October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 225.75 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	19	18	13	16	12	23	12	26	9.5	19	5.1
2	5.2	19	27	14	14	14	21	12	15	14	5.0	5.2
3	5.1	19	132	13	14	12	19	10	12	14	3.9	7.0
4	4.9	18	52	18	14	12	19	9.4	11	26	4.3	12
5	5.1	18	22	18	14	11	18	9.4	92	11	6.7	7.7
6	9.2	18	18	14	13	11	16	9.2	35	12	3.1	8.7
7	6.8	19	16	13	13	38	16	8.7	21	8.0	2.5	19
8	6.7	19	15	12	14	28	16	91	18	5.8	2.2	11
9	6.7	18	18	15	12	18	15	51	17	8.0	2.6	8.2
10	6.5	19	56	16	10	19	15	26	14	7.8	2.0	7.5
11	8.9	24	22	14	12	83	16	21	12	7.7	66	17
12	13	19	18	12	11	28	15	19	12	4.8	20	7.4
13	7.0	18	18	12	12	23	14	17	11	7.0	10	5.8
14	7.2	16	21	34	13	21	14	16	10	7.5	17	5.8
15	17	17	17	21	28	19	14	15	9.7	4.9	14	5.7
16	14	16	15	13	53	18	14	26	9.0	9.5	17	5.1
17	46	15	14	13	20	18	18	19	8.3	5.4	35	5.3
18	20	15	14	11	19	18	23	17	8.2	36	32	5.4
19	11	15	12	8.8	19	53	17	15	68	9.2	16	4.9
20	8.2	15	11	10	17	37	15	14	24	10	12	4.6
21	8.3	16	14	10	14	30	15	13	14	5.1	10	4.7
22	9.5	64	14	9.8	13	24	24	12	12	4.1	9.1	6.6
23	9.0	47	14	29	13	26	17	11	11	13	7.9	15
24	8.6	20	14	55	14	25	15	11	12	10	7.4	5.7
25	8.4	16	13	22	15	23	18	13	13	8.6	6.7	12
26	8.9	14	12	19	38	43	31	13	14	7.8	7.0	79
27	8.9	13	13	17	21	101	18	14	11	9.0	6.4	26
28	13	13	12	17	16	30	16	12	9.0	5.9	7.3	19
29	15	13	32	17	14	24	14	11	7.3	4.6	9.6	11
30	17	12	22	17	---	22	13	11	6.9	3.8	6.4	8.2
31	19	---	15	17	---	30	---	60	---	16	5.4	---
TOTAL	339.1	584	711	524.6	496	871	519	598.7	543.4	306.0	373.5	345.6
MEAN	10.9	19.5	22.9	16.9	17.1	28.1	17.3	19.3	18.1	9.87	12.0	11.5
MAX	46	64	132	55	53	101	31	91	92	36	66	79
MIN	4.9	12	11	8.8	10	11	13	8.7	6.9	3.8	2.0	4.6
CFSM	.69	1.23	1.45	1.07	1.08	1.78	1.09	1.22	1.15	.62	.76	.73
IN.	.80	1.37	1.67	1.24	1.17	2.05	1.22	1.41	1.28	.72	.88	.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1992, BY WATER YEAR (WY)

MEAN	12.5	20.5	21.9	23.7	27.5	28.5	31.9	27.5	20.9	16.4	13.1	12.0
MAX	27.5	37.3	55.6	37.0	42.7	63.7	76.8	58.9	43.8	36.2	18.6	22.1
(WY)	1990	1987	1984	1990	1984	1983	1983	1984	1982	1989	1991	1989
MIN	8.57	7.98	10.3	7.45	17.1	11.7	9.45	13.8	5.85	6.99	6.64	6.42
(WY)	1982	1982	1990	1985	1992	1985	1985	1985	1985	1985	1986	1986

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1982 - 1992
ANNUAL TOTAL	7532.06	6211.9	21.3
ANNUAL MEAN	20.6	17.0	34.7
HIGHEST ANNUAL MEAN			12.3
LOWEST ANNUAL MEAN			535
HIGHEST DAILY MEAN	416 Jul 13	132 Dec 3	Apr 5 1984
LOWEST DAILY MEAN	.64 Aug 8	2.0 Aug 10	.64 Aug 8 1991
ANNUAL SEVEN-DAY MINIMUM	2.4 Aug 2	3.3 Aug 4	2.4 Aug 2 1991
INSTANTANEOUS PEAK FLOW		386 Aug 11	a350 Jul 13 1991
INSTANTANEOUS PEAK STAGE		4.86 Aug 11	7.79 Jul 13 1991
ANNUAL RUNOFF (CFSM)	1.31	1.07	1.35
ANNUAL RUNOFF (INCHES)	17.73	14.63	18.34
10 PERCENT EXCEEDS	36	27	36
50 PERCENT EXCEEDS	16	14	15
90 PERCENT EXCEEDS	4.8	6.4	6.2

a From rating curve extended above 830 ft³/s.

RIDLEY CREEK BASIN

01476480 RIDLEY CREEK AT MEDIA, PA

LOCATION.--Lat 39°54'58", long 75°24'13", Delaware County, Hydrologic Unit 02040202, on right bank 400 ft downstream from bridge on Route 1 (Baltimore Pike) at Media.

DRAINAGE AREA.--30.5 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	14	24	24	22	25	37	23	e62	21	55	e9.5
2	17	15	43	24	23	25	34	23	e38	21	19	9.5
3	16	14	204	24	21	25	31	21	e28	27	16	11
4	16	12	98	27	21	23	29	e19	e26	51	14	14
5	15	13	37	29	21	19	27	e19	e220	27	15	12
6	15	14	31	24	21	19	27	19	e102	24	14	12
7	13	15	28	23	20	55	27	18	e40	22	13	31
8	12	12	27	22	21	48	26	140	e36	20	13	19
9	13	10	33	26	19	28	24	111	e33	22	14	13
10	14	11	95	26	17	33	25	37	e27	22	13	14
11	16	19	38	22	20	141	26	33	e23	32	97	25
12	19	18	31	21	18	44	25	28	e23	20	68	13
13	13	17	32	22	20	32	24	28	21	17	28	11
14	11	17	34	49	20	28	25	27	21	17	33	9.3
15	28	16	25	37	45	27	24	36	20	18	25	8.1
16	20	16	24	23	96	25	24	67	18	15	26	7.8
17	64	14	26	24	36	24	27	e47	16	16	74	7.3
18	35	14	25	22	33	26	30	e40	17	49	67	7.2
19	17	15	21	20	33	82	29	36	118	26	27	7.9
20	14	15	22	21	30	54	25	33	62	52	22	6.8
21	14	14	24	20	27	40	24	e32	33	21	20	7.6
22	17	92	23	20	25	33	37	e30	29	18	16	11
23	15	100	24	43	25	37	34	29	28	41	14	15
24	16	30	24	92	26	35	26	28	34	28	12	8.2
25	16	23	21	34	27	31	32	e32	38	25	e12	17
26	16	20	20	28	61	59	52	e34	30	22	e12	143
27	17	19	20	25	37	165	32	e36	27	24	e11	52
28	15	19	21	26	30	50	29	e31	25	20	e13	51
29	10	19	50	25	27	39	27	e29	22	17	e20	29
30	12	18	37	26	---	36	24	e29	21	17	e12	25
31	15	---	25	24	---	47	---	150	---	113	e10	---
TOTAL	548	645	1187	873	842	1355	863	1265	1238	865	805	607.2
MEAN	17.7	21.5	38.3	28.2	29.0	43.7	28.8	40.8	41.3	27.9	26.0	20.2
MAX	64	100	204	92	96	165	52	150	220	113	97	143
MIN	10	10	20	20	17	19	24	18	16	15	10	6.8

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1992, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1987	1988	1989	1990	1991	1992
MEAN	21.2	37.4	39.7	50.9	45.0	47.9	46.7	52.2	42.4	43.5	29.5	24.5
MAX	49.3	62.4	84.0	82.7	74.3	60.3	67.4	87.8	68.7	89.6	46.3	51.5
(WY)	1990	1987	1987	1990	1988	1987	1987	1989	1989	1989	1989	1989
MIN	9.11	21.4	19.5	28.2	29.0	32.3	28.8	32.1	17.3	27.9	15.2	16.1
(WY)	1987	1991	1989	1992	1992	1988	1992	1991	1988	1992	1987	1988

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1987 - 1992
ANNUAL TOTAL	14256.6	11093.2	
ANNUAL MEAN	39.1	30.3	40.1
HIGHEST ANNUAL MEAN			50.4
LOWEST ANNUAL MEAN			30.3
HIGHEST DAILY MEAN	629 Jul 13	220 Jun 5	693 Jul 5 1989
LOWEST DAILY MEAN	9.6 Sep 13	6.8 Sep 20	5.7 Oct 7 1986
ANNUAL SEVEN-DAY MINIMUM	11 Sep 7	7.5 Sep 15	6.3 Oct 6 1986
INSTANTANEOUS PEAK FLOW		593 Jul 31	1940 Jul 5 1989
INSTANTANEOUS PEAK STAGE		5.37 Jul 31	7.78 Jul 5 1989
10 PERCENT EXCEEDS	73	50	71
50 PERCENT EXCEEDS	28	24	29
90 PERCENT EXCEEDS	14	13	12

CHESTER CREEK BASIN

01477000 CHESTER CREEK NEAR CHESTER, PA

LOCATION.--Lat 39°52'08", long 75°24'31", Delaware County, Hydrologic Unit 02040202, on right bank 30 ft downstream from bridge on Dutton Mill Road and 3.0 mi northwest of Chester.

DRAINAGE AREA.--61.1 mi².

PERIOD OF RECORD.--August 1931 to current year. Monthly discharges only for some periods, published in WSP 1302.

REVISED RECORD.--WDR PA-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 23.41 ft above Penn Central Railroad datum. Prior to June 27, 1966, water-stage recorder at site 50 ft upstream and June 28, 1966, to Oct. 4, 1967, nonrecording gage 150 ft upstream, all at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	36	45	45	43	49	78	59	91	39	119	28
2	31	37	85	47	41	49	71	58	63	43	47	25
3	30	35	415	46	41	52	68	55	54	48	39	27
4	31	36	184	49	41	51	65	52	50	90	37	36
5	30	35	77	53	41	51	65	52	423	45	37	28
6	32	36	61	47	40	52	63	52	e153	40	33	29
7	34	35	54	46	41	127	63	49	e74	39	31	75
8	31	35	50	44	41	107	63	315	e63	36	30	41
9	29	40	61	63	40	71	61	199	60	37	31	34
10	29	42	191	55	40	73	60	95	53	40	30	32
11	31	54	78	47	e46	288	61	80	49	71	115	73
12	46	44	61	44	e42	101	61	73	49	38	101	33
13	34	41	59	44	39	77	59	74	46	40	40	28
14	33	40	65	87	43	68	58	67	43	50	63	29
15	61	37	60	77	100	64	57	63	41	54	51	29
16	48	36	51	53	193	61	56	94	40	51	52	29
17	129	36	47	e42	73	59	64	75	40	44	144	28
18	74	36	46	e41	69	60	66	63	40	80	110	28
19	45	36	45	e40	71	163	77	56	240	40	53	28
20	40	36	49	e40	62	110	63	53	120	166	42	27
21	36	37	45	41	55	80	63	53	58	45	38	26
22	34	178	45	42	51	71	92	50	49	36	34	27
23	33	172	44	76	50	84	94	48	46	90	33	58
24	34	59	44	168	50	78	67	46	54	56	34	e44
25	33	46	42	67	53	68	77	48	77	43	33	41
26	33	40	41	56	120	114	139	52	52	40	31	321
27	34	37	41	52	72	314	80	55	44	40	30	98
28	34	36	41	51	59	104	72	47	41	36	35	87
29	36	36	101	49	53	83	67	44	39	32	37	e52
30	36	35	73	48	---	77	61	46	39	31	29	e41
31	35	---	51	45	---	98	---	252	---	178	28	---
TOTAL	1228	1439	2352	1705	1710	2904	2091	2425	2291	1718	1567	1482
MEAN	39.6	48.0	75.9	55.0	59.0	93.7	69.7	78.2	76.4	55.4	50.5	49.4
MAX	129	178	415	168	193	314	139	315	423	178	144	321
MIN	29	35	41	40	39	49	56	44	39	31	28	25
CFSM	.65	.79	1.24	.90	.97	1.53	1.14	1.28	1.25	.91	.83	.81
IN.	.75	.88	1.43	1.04	1.04	1.77	1.27	1.48	1.39	1.05	.95	.90

e Estimated.

CHESTER CREEK BASIN

01477000 CHESTER CREEK NEAR CHESTER, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	53.6	77.1	86.4	101	114	130	126	102	77.7	69.6	62.9	64.3
MAX	234	233	232	326	326	297	413	224	176	254	217	543
(WY)	1980	1951	1984	1979	1979	1980	1980	1983	1982	1975	1955	1971
MIN	13.7	18.2	24.3	23.4	41.4	53.1	41.9	34.8	28.3	17.4	13.7	10.4
(WY)	1942	1932	1932	1981	1932	1981	1963	1942	1966	1932	1966	1932

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1932 - 1992	
ANNUAL TOTAL	28802		22912		88.5	
ANNUAL MEAN	78.9		62.6		168	
HIGHEST ANNUAL MEAN					39.3	
LOWEST ANNUAL MEAN					6510	
HIGHEST DAILY MEAN	822	Jan 12	423	Jun 5		Sep 13 1971
LOWEST DAILY MEAN	28	Aug 7	25	Sep 2	6.5	Sep 25 1941
ANNUAL SEVEN-DAY MINIMUM	29	Sep 7	28	Sep 16	8.3	Sep 9 1932
INSTANTANEOUS PEAK FLOW			1030	May 8	a21000	Sep 13 1971
INSTANTANEOUS PEAK STAGE			5.38	May 8	b24.59	Sep 13 1971
INSTANTANEOUS LOW FLOW			22	Sep 2	.30	Aug 7 1934
ANNUAL RUNOFF (CFSM)	1.29		1.02		1.45	
ANNUAL RUNOFF (INCHES)	17.54		13.95		19.68	
10 PERCENT EXCEEDS	132		99		150	
50 PERCENT EXCEEDS	59		49		60	
90 PERCENT EXCEEDS	33		33		27	

a From rating curve extended above 2,400 ft³/s, on basis of contracted-opening measurement at gage height, 13.57 ft, and slope-area measurement of peak flow.

b From floodmark.

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA

LOCATION.--Lat 39°50'33", long 75°21'28", Delaware County, Hydrologic Unit 02040202, in the pumping house of Scott Paper Company at Chester.

DRAINAGE AREA.--10,300 mi².

PERIOD OF RECORD.--December 1961 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to current year.

pH: January 1968 to current year.

WATER TEMPERATURE: December 1961 to current year.

DISSOLVED OXYGEN: December 1961 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1961. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Prior to April 1981, sampling site was located at auxiliary tidal-gaging station at the end of Reynolds Aluminum Company pier, 0.5 mi downstream from Chester Creek in Chester (latitude 39°50'12", longitude 75°22'00"). Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 5,900 microsiemens, Oct. 7, 1965; minimum, 103 microsiemens, June 2, 1984, Apr. 9, 1987.

pH: Maximum, 8.7, Sept. 13, 14, 1971 and Oct. 16, 1979; minimum, 5.5, Dec. 10, 11, 1969.

WATER TEMPERATURE: Maximum, 33.0°C, July 21, 1977; minimum, 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 16.2 mg/l, Nov. 20, 1990; minimum, 0.0 mg/L, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 4,120 microsiemens, Nov. 22; minimum, 162 microsiemens, June 9, 10.

pH: Maximum, 7.6, Feb. 29; minimum, 6.5, June 10-13, 20-22.

WATER TEMPERATURE: Maximum, 27.5°C, July 14, 15, 20-22; minimum, 4.5°C, Jan 1, 17.

DISSOLVED OXYGEN: Maximum, 11.8 mg/l, Dec. 20; minimum, 3.5 mg/L, Aug. 20.

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1070	506	679	2510	952	1540	563	378	465	279	262	270
2	960	511	686	2310	935	1430	520	371	439	277	266	272
3	1060	512	700	1950	801	1180	521	314	405	281	269	274
4	1120	532	725	1760	787	1190	440	309	341	372	272	289
5	1180	529	757	1970	781	1230	326	280	306	328	275	296
6	1180	518	771	2480	875	1390	311	249	288	311	276	291
7	975	515	718	2600	951	1500	291	243	269	306	278	291
8	1180	531	768	2680	982	1560	277	230	253	306	278	291
9	1190	546	786	3090	1060	1780	257	226	245	297	264	288
10	1260	567	812	4080	1360	2390	248	224	237	303	278	292
11	1360	568	851	3950	1500	2550	239	224	233	299	277	288
12	1360	590	856	3160	1060	1860	240	228	234	298	277	288
13	1280	603	861	3070	1260	1940	247	233	240	300	277	288
14	1340	600	862	3170	1170	1900	253	237	243	312	276	292
15	1400	625	898	3550	1190	1970	---	---	---	300	278	288
16	1250	599	851	3060	1220	1940	---	---	---	303	279	292
17	1160	625	817	3390	1230	2020	259	245	251	306	289	299
18	992	574	742	3790	1360	2240	259	246	251	---	---	---
19	894	548	694	3870	1420	2210	253	247	250	---	---	---
20	783	516	626	3270	1400	1810	258	249	253	---	---	---
21	855	508	644	3900	1480	2290	265	249	256	---	---	---
22	818	489	617	4120	1560	2370	273	251	260	---	---	---
23	802	480	601	3740	1540	2350	265	255	259	---	---	---
24	928	460	619	3260	1070	2010	268	256	260	---	---	---
25	1100	465	646	1590	623	1040	264	257	260	---	---	---
26	1080	466	669	894	511	671	265	257	261	---	---	---
27	1180	488	712	808	475	611	269	255	261	---	---	---
28	1400	507	787	734	455	575	272	259	264	---	---	---
29	2220	550	1080	635	412	502	275	262	266	---	---	---
30	2830	684	1340	587	390	485	272	260	266	---	---	---
31	3430	939	1870	---	---	---	277	262	268	---	---	---
MONTH	3430	460	808	4120	390	1618	563	224	279	372	262	288

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	334	322	326	267	235	245	242	219	232
2	---	---	---	334	325	329	245	233	237	238	214	228
3	---	---	---	336	324	330	249	232	240	231	213	220
4	---	---	---	337	329	333	259	235	247	222	210	214
5	---	---	---	341	326	333	257	240	246	220	211	215
6	---	---	---	337	328	332	249	237	243	220	209	216
7	---	---	---	337	323	331	253	239	245	222	209	214
8	---	---	---	335	318	328	258	239	245	221	204	213
9	---	---	---	329	316	324	254	235	246	211	199	207
10	---	---	---	332	317	326	256	240	247	235	205	216
11	---	---	---	331	305	318	252	240	245	236	216	227
12	---	---	---	320	309	311	259	242	249	234	222	229
13	---	---	---	318	300	308	268	243	253	235	227	231
14	---	---	---	310	290	301	273	265	268	234	227	230
15	---	---	---	300	276	290	277	271	274	247	229	237
16	---	---	---	288	265	280	---	---	---	244	233	238
17	---	---	---	282	262	275	275	266	271	240	233	238
18	390	347	360	281	267	275	287	263	274	246	230	237
19	388	333	355	290	265	277	285	259	269	245	233	239
20	389	329	353	280	264	275	263	251	257	250	235	241
21	368	325	345	280	261	270	261	251	256	252	234	244
22	357	330	345	272	257	267	259	248	252	251	238	244
23	357	331	345	278	257	267	254	244	247	250	239	245
24	353	330	344	283	262	268	250	240	245	251	239	245
25	364	326	345	280	264	270	247	239	243	252	241	247
26	368	328	346	280	266	270	250	243	247	259	245	252
27	355	327	339	276	261	270	250	243	247	262	253	258
28	342	319	333	293	263	277	247	239	242	264	251	256
29	348	327	336	293	265	280	247	233	243	260	250	255
30	---	---	---	272	252	264	246	234	240	262	253	257
31	---	---	---	260	243	250	---	---	---	263	242	254
MONTH	390	319	345	341	243	295	287	232	250	264	199	235
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	260	244	251	255	229	238	319	270	290	561	338	409
2	267	252	258	257	233	243	304	283	294	623	339	434
3	266	248	259	252	233	240	307	287	298	656	357	466
4	262	242	256	258	237	248	308	290	300	620	353	453
5	254	223	244	259	242	250	307	288	298	747	351	472
6	241	220	228	264	246	254	307	288	299	719	361	482
7	224	199	212	265	244	254	311	289	301	681	362	478
8	199	168	185	282	249	261	328	289	304	660	363	474
9	177	162	169	281	252	267	329	291	308	634	373	476
10	176	162	169	277	252	265	336	290	308	614	378	479
11	176	164	170	277	265	271	341	291	314	579	365	454
12	179	165	173	287	272	279	336	288	306	578	361	458
13	180	168	174	291	278	283	334	290	310	626	375	474
14	181	168	175	296	284	290	342	292	316	620	378	478
15	184	173	179	308	290	296	361	295	323	602	382	480
16	198	175	184	314	294	303	368	293	325	592	393	480
17	192	180	185	336	302	314	344	294	319	577	390	479
18	199	180	191	332	306	316	330	295	314	635	394	491
19	206	189	198	319	303	313	325	294	311	621	396	491
20	202	190	197	322	300	312	321	294	308	819	393	519
21	203	193	197	317	304	310	317	293	308	797	405	547
22	215	195	202	315	302	311	317	293	307	877	409	559
23	217	198	207	318	301	311	327	294	310	825	407	517
24	218	201	210	318	301	310	339	296	315	1190	404	575
25	217	205	212	314	293	306	344	302	320	1190	446	723
26	222	207	214	317	293	305	421	303	326	1230	422	666
27	222	209	216	319	292	305	439	309	353	723	401	517
28	237	212	227	320	295	307	487	319	383	620	399	486
29	242	225	233	321	295	310	512	319	384	565	393	467
30	252	231	239	325	296	310	508	323	394	531	393	458
31	---	---	---	333	261	303	522	325	403	---	---	---
MONTH	267	162	207	336	229	287	522	270	321	1230	338	498

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	6.9	6.8	6.9	7.2	7.0	7.1	7.0	7.0	7.0	6.9	6.9	6.9
2	6.9	6.8	6.9	7.2	7.0	7.1	7.0	6.9	7.0	6.9	6.9	6.9
3	6.9	6.8	6.9	7.1	6.9	7.0	7.0	6.9	7.0	7.0	6.9	6.9
4	6.9	6.8	6.9	7.1	7.0	7.0	7.0	6.9	7.0	7.1	6.9	7.0
5	6.9	6.7	6.8	7.1	7.0	7.1	7.0	7.0	7.0	7.0	7.0	7.0
6	6.9	6.8	6.9	7.2	7.0	7.1	7.1	6.9	7.0	7.0	7.0	7.0
7	6.9	6.8	6.9	7.2	7.0	7.1	7.0	6.9	7.0	7.0	7.0	7.0
8	7.0	6.8	6.9	7.2	7.0	7.1	7.0	6.8	6.9	7.0	7.0	7.0
9	7.0	6.8	6.9	7.2	7.1	7.1	6.9	6.8	6.9	7.0	7.0	7.0
10	7.0	6.9	6.9	7.3	7.1	7.2	6.8	6.8	6.8	7.0	6.9	7.0
11	7.0	6.8	6.9	7.4	7.2	7.3	6.8	6.8	6.8	7.0	6.9	7.0
12	7.0	6.8	6.9	7.3	7.1	7.2	6.8	6.8	6.8	7.0	7.0	7.0
13	7.0	6.9	6.9	7.3	7.2	7.2	6.8	6.8	6.8	7.0	6.9	7.0
14	7.0	6.9	6.9	7.3	7.1	7.2	6.9	6.8	6.8	7.0	6.9	7.0
15	7.0	6.9	6.9	7.3	7.1	7.2	6.9	6.9	6.9	7.1	7.0	7.0
16	7.0	6.8	6.9	7.3	7.1	7.2	---	---	---	7.1	7.1	7.1
17	7.0	6.9	7.0	7.3	7.1	7.2	7.0	6.9	7.0	7.1	7.1	7.1
18	7.0	6.9	6.9	7.3	7.2	7.2	7.0	6.9	7.0	---	---	---
19	7.0	6.9	6.9	7.3	7.1	7.2	7.0	7.0	7.0	---	---	---
20	7.0	6.8	6.9	7.3	7.0	7.1	7.0	7.0	7.0	---	---	---
21	7.0	6.8	6.9	7.3	7.1	7.2	7.0	7.0	7.0	---	---	---
22	7.0	6.8	6.9	7.3	7.1	7.2	7.0	7.0	7.0	---	---	---
23	7.0	6.8	6.9	7.2	7.0	7.1	7.0	6.9	7.0	---	---	---
24	7.0	6.8	6.9	7.2	7.0	7.1	7.0	6.9	7.0	---	---	---
25	7.0	6.8	6.9	7.1	7.0	7.1	7.0	7.0	7.0	---	---	---
26	6.9	6.7	6.8	7.1	7.0	7.1	7.0	7.0	7.0	---	---	---
27	6.9	6.7	6.8	7.1	7.0	7.0	7.0	6.9	7.0	---	---	---
28	7.0	6.8	6.9	7.1	7.0	7.0	7.0	6.9	6.9	---	---	---
29	7.1	6.8	7.0	7.1	7.0	7.0	7.0	6.9	6.9	---	---	---
30	7.2	6.9	7.0	7.1	7.0	7.0	6.9	6.9	6.9	---	---	---
31	7.2	7.0	7.1	---	---	---	7.0	6.9	6.9	---	---	---
MONTH	7.2	6.7	6.9	7.4	6.9	7.1	7.1	6.8	6.9	7.1	6.9	7.0
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	7.3	7.2	7.2	7.1	7.1	7.1	6.9	6.8	6.9
2	---	---	---	7.3	7.2	7.2	7.1	7.1	7.1	6.9	6.8	6.9
3	---	---	---	7.2	7.2	7.2	7.2	7.1	7.2	6.9	6.8	6.8
4	---	---	---	7.2	7.2	7.2	7.2	7.1	7.1	6.9	6.8	6.8
5	---	---	---	7.2	7.2	7.2	7.1	7.1	7.1	6.9	6.8	6.8
6	---	---	---	7.2	7.1	7.2	7.1	7.1	7.1	6.9	6.8	6.8
7	---	---	---	7.2	7.2	7.2	7.1	7.0	7.0	6.9	6.7	6.8
8	---	---	---	7.2	7.1	7.2	7.0	7.0	7.0	7.0	6.8	6.9
9	---	---	---	7.2	7.1	7.1	7.0	6.9	7.0	6.9	6.9	6.9
10	---	---	---	7.1	7.1	7.1	7.0	6.9	6.9	6.9	6.8	6.9
11	---	---	---	7.2	7.1	7.1	6.9	6.9	6.9	6.9	6.8	6.9
12	---	---	---	7.3	7.2	7.2	6.9	6.9	6.9	6.9	6.8	6.8
13	---	---	---	7.3	7.2	7.3	7.0	6.9	6.9	6.8	6.8	6.8
14	---	---	---	7.3	7.2	7.3	6.9	6.8	6.8	6.8	6.7	6.8
15	---	---	---	7.2	7.2	7.2	7.1	6.9	7.0	6.8	6.7	6.8
16	---	---	---	7.2	7.2	7.2	7.0	6.8	6.9	6.8	6.7	6.8
17	---	---	---	7.2	7.2	7.2	7.0	6.9	6.9	6.7	6.7	6.7
18	7.2	7.1	7.1	7.2	7.2	7.2	7.1	6.9	7.0	6.7	6.7	6.7
19	7.2	7.1	7.1	7.2	7.1	7.2	7.1	6.9	6.9	6.7	6.7	6.7
20	7.2	7.1	7.1	7.2	7.1	7.2	6.9	6.9	6.9	6.8	6.7	6.7
21	7.1	7.1	7.1	7.1	7.1	7.1	6.9	6.9	6.9	6.9	6.7	6.8
22	7.1	7.1	7.1	7.1	7.1	7.1	6.9	6.9	6.9	7.0	6.8	6.9
23	7.1	7.1	7.1	7.1	7.1	7.1	6.9	6.9	6.9	7.1	6.9	7.0
24	7.2	7.1	7.1	7.1	7.1	7.1	6.9	6.9	6.9	7.1	6.9	7.0
25	7.2	7.1	7.2	7.1	7.1	7.1	6.9	6.9	6.9	7.0	6.9	7.0
26	7.2	7.1	7.2	7.1	7.0	7.1	6.9	6.9	6.9	7.0	6.9	7.0
27	7.2	7.1	7.1	7.1	7.1	7.1	6.9	6.9	6.9	6.9	6.9	6.9
28	7.2	7.1	7.2	7.2	7.1	7.1	6.9	6.9	6.9	7.0	6.8	6.9
29	7.6	7.2	7.2	7.2	7.2	7.2	6.9	6.9	6.9	7.0	6.8	6.9
30	---	---	---	7.2	7.1	7.1	6.9	6.8	6.9	7.0	6.8	6.9
31	---	---	---	7.1	7.1	7.1	---	---	---	6.9	6.9	6.9
MONTH	7.6	7.1	7.1	7.3	7.0	7.2	7.2	6.8	7.0	7.1	6.7	6.9

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	6.9	6.7	6.8	6.9	6.8	6.8	6.8	6.7	6.7	6.9	6.8	6.8
2	6.9	6.8	6.8	6.9	6.8	6.8	6.8	6.7	6.8	6.9	6.8	6.8
3	7.0	6.8	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.8	6.9
4	7.0	6.8	6.9	6.8	6.7	6.8	6.8	6.8	6.8	6.9	6.8	6.9
5	6.9	6.8	6.9	6.8	6.7	6.7	6.9	6.8	6.8	6.9	6.8	6.8
6	6.8	6.8	6.8	6.8	6.7	6.8	6.9	6.8	6.8	6.9	6.8	6.9
7	6.8	6.7	6.8	6.8	6.7	6.7	6.9	6.8	6.8	6.9	6.8	6.9
8	6.8	6.7	6.7	6.9	6.7	6.8	6.9	6.8	6.9	6.9	6.8	6.8
9	6.7	6.6	6.6	6.9	6.8	6.8	6.9	6.8	6.9	6.9	6.7	6.8
10	6.6	6.5	6.6	6.8	6.7	6.8	6.9	6.8	6.8	6.9	6.7	6.8
11	6.6	6.5	6.6	6.8	6.7	6.7	6.9	6.8	6.8	6.9	6.7	6.8
12	6.6	6.5	6.6	6.8	6.7	6.7	6.9	6.8	6.8	6.9	6.7	6.8
13	6.7	6.5	6.6	6.8	6.7	6.7	6.8	6.7	6.8	6.9	6.8	6.8
14	6.8	6.6	6.7	6.8	6.7	6.7	6.8	6.8	6.8	6.9	6.8	6.8
15	6.8	6.6	6.7	6.8	6.7	6.8	6.9	6.8	6.8	6.9	6.8	6.9
16	6.9	6.6	6.7	6.8	6.7	6.8	6.9	6.8	6.8	6.9	6.8	6.9
17	6.8	6.7	6.8	6.8	6.7	6.8	6.8	6.7	6.8	6.9	6.8	6.9
18	6.8	6.7	6.7	6.8	6.7	6.7	6.8	6.7	6.8	6.9	6.8	6.9
19	6.8	6.6	6.7	6.7	6.7	6.7	6.8	6.7	6.7	6.9	6.8	6.9
20	6.6	6.5	6.5	6.7	6.7	6.7	6.8	6.7	6.7	7.0	6.8	6.9
21	6.6	6.5	6.5	6.7	6.7	6.7	6.8	6.7	6.7	7.0	6.8	6.9
22	6.7	6.5	6.6	6.8	6.7	6.7	6.8	6.7	6.7	7.0	6.8	6.9
23	6.8	6.6	6.7	6.8	6.8	6.8	6.8	6.7	6.7	7.0	6.8	6.9
24	6.9	6.7	6.8	6.8	6.7	6.8	6.8	6.7	6.7	7.2	6.9	7.0
25	7.0	6.8	6.9	6.8	6.7	6.8	6.8	6.7	6.7	7.2	7.0	7.1
26	7.0	6.7	6.9	6.8	6.7	6.8	6.7	6.7	6.7	7.2	7.0	7.1
27	7.0	6.8	6.9	6.8	6.7	6.7	6.8	6.7	6.7	7.1	6.9	7.0
28	7.0	6.7	6.9	6.8	6.6	6.7	6.8	6.6	6.7	7.1	6.9	7.0
29	7.0	6.8	6.9	6.8	6.7	6.8	6.8	6.8	6.8	7.0	6.9	7.0
30	6.9	6.8	6.9	6.8	6.7	6.8	6.9	6.8	6.8	7.1	7.0	7.0
31	---	---	---	6.8	6.7	6.7	6.9	6.8	6.8	---	---	---
MONTH	7.0	6.5	6.7	6.9	6.6	6.8	6.9	6.6	6.8	7.2	6.7	6.9

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	21.5	21.0	21.0	15.5	15.5	15.5	12.0	11.0	11.5	5.5	4.5	5.0
2	22.0	21.0	21.5	15.5	15.5	15.5	12.0	11.0	11.5	5.5	5.0	5.5
3	22.0	21.5	21.5	15.5	15.0	15.5	11.5	11.0	11.0	6.0	5.5	5.5
4	22.0	21.0	21.5	15.0	14.5	14.5	11.5	10.0	11.0	6.0	5.5	6.0
5	22.5	21.5	22.0	14.5	13.5	14.0	11.0	9.5	10.0	6.5	6.0	6.0
6	22.0	21.0	21.5	14.0	13.5	14.0	9.5	9.0	9.5	6.0	6.0	6.0
7	21.0	20.0	20.5	13.5	13.0	13.5	9.5	8.5	9.0	6.0	5.5	6.0
8	20.5	19.5	20.0	13.5	13.0	13.0	9.5	9.0	9.0	6.0	5.5	5.5
9	20.0	19.0	19.5	13.0	12.0	12.5	9.5	9.0	9.5	6.0	5.5	5.5
10	20.0	19.0	19.5	12.5	11.5	12.0	9.5	9.0	9.5	6.0	5.5	5.5
11	20.0	19.0	19.5	12.0	11.5	11.5	9.0	8.5	9.0	6.0	5.5	5.5
12	19.5	19.0	19.0	11.5	11.5	11.5	9.0	8.5	8.5	6.0	5.5	5.5
13	19.0	18.5	19.0	11.5	11.0	11.5	9.0	8.5	9.0	6.5	5.5	6.0
14	19.0	18.0	18.5	11.5	11.0	11.5	9.5	8.5	9.0	7.0	6.0	6.5
15	18.5	18.0	18.5	11.5	11.0	11.5	8.5	8.0	8.5	6.0	5.5	5.5
16	18.5	18.0	18.0	12.0	11.5	11.5	---	---	---	5.5	5.0	5.0
17	18.0	16.5	17.5	11.5	11.0	11.5	7.5	7.0	7.5	5.0	4.5	4.5
18	17.5	16.5	17.0	11.5	11.0	11.0	7.5	7.0	7.0	---	---	---
19	17.5	17.0	17.0	11.5	11.0	11.5	7.0	6.5	6.5	---	---	---
20	17.0	16.5	17.0	12.0	11.0	11.5	6.5	6.0	6.5	---	---	---
21	17.0	16.0	16.5	12.5	11.5	12.0	6.5	6.0	6.0	---	---	---
22	17.0	16.0	16.5	13.5	12.0	12.5	6.0	5.5	6.0	---	---	---
23	17.0	16.0	16.5	13.0	12.0	12.5	6.0	5.5	6.0	---	---	---
24	17.0	16.5	17.0	13.0	12.0	12.5	6.0	5.5	6.0	---	---	---
25	17.0	17.0	17.0	13.0	11.5	12.0	5.5	5.0	5.5	---	---	---
26	17.5	17.0	17.0	13.0	11.0	11.5	5.5	5.0	5.0	---	---	---
27	17.5	17.0	17.0	11.0	10.5	11.0	5.5	5.0	5.0	---	---	---
28	17.5	17.0	17.0	11.0	10.5	10.5	5.5	5.0	5.0	---	---	---
29	17.0	16.0	16.5	11.5	10.5	11.0	6.0	5.0	5.5	---	---	---
30	16.5	16.0	16.0	11.5	10.5	11.0	6.0	5.5	5.5	---	---	---
31	16.0	15.5	15.5	---	---	---	5.5	5.0	5.5	---	---	---
MONTH	22.5	15.5	18.5	15.5	10.5	12.4	12.0	5.0	7.5	7.0	4.5	5.5

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	6.5	5.5	6.0	9.0	8.0	8.5	15.5	14.5	15.0
2	---	---	---	7.0	6.0	6.5	8.5	8.0	8.5	16.5	15.0	15.5
3	---	---	---	7.0	6.0	6.5	8.5	8.0	8.5	16.5	15.5	16.0
4	---	---	---	7.0	6.5	7.0	9.0	8.0	8.5	16.5	16.0	16.0
5	---	---	---	7.5	6.5	7.0	9.0	8.0	8.5	16.0	15.5	16.0
6	---	---	---	8.0	7.0	7.5	9.5	8.5	9.0	16.0	15.5	15.5
7	---	---	---	8.5	7.0	7.5	10.0	8.5	9.5	15.5	15.0	15.5
8	---	---	---	9.0	7.5	8.0	10.0	9.0	9.5	15.0	14.0	14.5
9	---	---	---	9.5	8.0	8.5	10.5	9.5	10.0	15.0	14.0	14.5
10	---	---	---	9.5	8.5	9.0	10.5	9.5	10.0	15.5	15.0	15.0
11	---	---	---	9.5	8.0	9.0	11.0	10.0	10.5	16.5	15.0	15.5
12	---	---	---	8.5	8.0	8.0	11.5	10.5	11.0	17.0	15.5	16.0
13	---	---	---	8.0	7.5	8.0	12.0	10.0	11.0	17.5	16.0	16.5
14	---	---	---	8.0	7.5	7.5	12.0	11.5	11.5	18.0	16.5	17.0
15	---	---	---	7.5	7.0	7.5	12.0	11.5	11.5	17.5	17.0	17.0
16	---	---	---	7.5	7.0	7.0	12.0	11.0	11.5	17.0	17.0	17.0
17	---	---	---	7.5	7.0	7.0	12.0	11.5	11.5	17.5	17.0	17.0
18	5.5	5.0	5.0	8.0	7.0	7.5	11.5	11.5	11.5	18.0	17.0	17.5
19	5.5	5.0	5.5	7.5	7.0	7.5	11.5	11.0	11.5	18.5	17.5	18.0
20	6.0	5.0	5.5	8.0	7.0	7.5	12.0	11.0	11.5	18.5	17.5	18.0
21	6.0	5.0	5.5	7.5	7.0	7.5	13.0	11.5	12.5	19.0	17.5	18.5
22	6.0	5.0	5.5	7.5	7.0	7.0	14.0	12.5	13.0	19.5	18.5	19.0
23	6.5	5.5	6.0	7.5	7.0	7.0	14.0	13.0	13.5	20.0	19.0	19.5
24	6.5	5.5	6.0	7.5	7.0	7.0	14.5	13.5	14.0	21.0	19.5	20.0
25	6.0	5.5	6.0	8.0	7.0	7.5	14.5	14.0	14.0	19.5	19.0	19.5
26	6.0	5.5	6.0	8.0	7.5	7.5	14.0	14.0	14.0	19.5	19.0	19.0
27	6.0	5.5	6.0	8.0	7.5	8.0	14.5	13.5	14.0	19.0	18.5	19.0
28	6.5	6.0	6.0	7.5	7.0	7.5	15.0	14.0	14.0	19.5	18.0	19.0
29	10.0	6.0	6.5	8.0	7.0	7.5	15.5	14.0	14.5	20.0	18.5	19.0
30	---	---	---	8.0	7.5	8.0	15.0	14.0	14.5	19.5	19.0	19.0
31	---	---	---	8.5	7.5	8.0	---	---	---	19.0	18.5	19.0
MONTH	10.0	5.0	5.8	9.5	5.5	7.5	15.5	8.0	11.4	21.0	14.0	17.2
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	19.0	18.5	19.0	26.0	24.5	25.0	25.5	24.5	25.0	24.5	24.0	24.5
2	20.0	19.0	19.5	26.0	25.0	25.5	25.5	25.0	25.0	24.5	24.0	24.0
3	20.5	19.5	20.0	25.0	24.0	24.5	25.5	25.0	25.5	24.5	24.0	24.0
4	21.0	20.0	20.5	25.5	24.0	24.5	25.5	25.0	25.5	24.5	24.0	24.0
5	20.5	20.0	20.0	26.0	24.0	25.0	25.5	25.0	25.5	24.5	24.0	24.0
6	20.5	20.0	20.0	26.0	24.5	25.0	25.5	25.0	25.5	24.0	23.5	23.5
7	20.5	20.0	20.0	26.0	24.5	25.0	26.0	25.0	25.5	23.5	23.0	23.5
8	21.0	20.0	20.5	27.0	24.5	25.5	25.5	25.0	25.5	24.0	23.5	23.5
9	21.0	20.0	20.5	27.0	24.5	25.5	26.0	25.0	25.5	24.5	24.0	24.0
10	21.5	20.5	21.0	26.0	25.0	25.5	26.5	25.5	26.0	25.0	24.0	24.5
11	22.0	20.5	21.0	26.5	25.5	25.5	26.5	25.5	26.0	24.5	24.0	24.5
12	22.5	21.0	21.5	26.0	25.5	26.0	26.0	25.5	26.0	24.0	23.5	24.0
13	22.5	21.5	22.0	27.0	25.5	26.0	26.0	25.5	25.5	24.0	23.0	23.5
14	23.0	22.0	22.5	27.5	26.0	26.5	25.5	25.0	25.0	24.0	23.0	23.5
15	23.5	22.0	22.5	27.5	26.0	26.5	25.0	24.0	24.5	24.0	23.0	23.5
16	23.5	22.5	23.0	27.0	26.5	26.5	24.0	23.5	24.0	24.0	23.5	23.5
17	23.5	22.5	23.0	27.0	26.5	26.5	24.0	23.5	23.5	24.0	23.5	23.5
18	23.5	22.5	23.0	26.5	26.5	26.5	24.0	23.5	24.0	24.0	23.5	24.0
19	23.5	22.5	23.0	27.0	26.5	26.5	24.5	24.0	24.0	24.0	23.5	23.5
20	23.0	22.5	23.0	27.5	26.5	27.0	24.5	24.0	24.0	23.5	23.0	23.5
21	23.0	22.5	23.0	27.5	26.5	27.0	24.5	24.0	24.0	23.5	23.0	23.0
22	22.5	22.0	22.0	27.5	26.5	27.0	24.5	24.0	24.5	24.0	23.0	23.5
23	22.5	22.0	22.0	26.5	26.0	26.5	25.0	24.0	24.5	23.5	22.5	23.0
24	22.5	22.0	22.5	26.0	25.5	25.5	25.0	24.5	24.5	22.5	21.5	22.0
25	23.0	22.0	22.5	25.5	25.0	25.0	25.5	24.5	25.0	22.0	20.5	21.0
26	23.5	22.5	23.0	25.0	25.0	25.0	26.0	25.0	25.5	21.0	20.0	20.5
27	24.0	23.0	23.5	25.5	25.0	25.0	26.0	25.0	25.5	20.5	20.0	20.5
28	24.5	23.0	23.5	25.5	25.0	25.5	26.0	25.5	26.0	20.5	20.5	20.5
29	25.5	23.5	24.0	26.0	25.0	25.5	25.5	25.0	25.5	20.5	19.5	20.0
30	25.5	24.0	25.0	26.0	25.5	25.5	25.0	24.5	25.0	20.0	19.0	19.5
31	---	---	---	25.5	25.0	25.5	25.0	24.5	24.5	---	---	---
MONTH	25.5	18.5	21.9	27.5	24.0	25.7	26.5	23.5	25.0	25.0	19.0	23.0

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	6.1	5.4	5.9	7.7	7.2	7.5	8.5	8.3	8.4	11.0	10.7	10.8
2	6.3	5.8	6.1	7.6	7.0	7.4	8.4	8.1	8.2	10.9	10.5	10.7
3	6.2	5.9	6.1	7.5	6.9	7.3	8.5	8.4	8.5	10.8	10.5	10.6
4	6.2	5.8	6.0	7.4	7.1	7.3	9.7	8.4	8.6	10.9	10.6	10.8
5	6.1	5.5	5.9	7.7	7.1	7.4	9.5	8.7	9.0	10.9	10.6	10.8
6	6.0	5.7	5.9	7.8	7.4	7.6	9.4	8.9	9.1	10.9	10.6	10.7
7	6.1	5.6	5.8	8.0	7.4	7.7	9.3	9.0	9.1	11.0	10.6	10.8
8	6.3	5.7	6.0	8.0	7.5	7.8	9.3	8.9	9.1	11.0	10.7	10.9
9	6.6	6.0	6.3	8.4	7.6	8.0	9.2	8.8	9.0	10.9	10.5	10.7
10	6.7	6.1	6.5	8.9	8.0	8.5	9.2	8.9	9.0	10.8	10.5	10.6
11	6.5	6.3	6.5	9.1	8.5	8.9	9.3	8.9	9.0	10.8	10.5	10.7
12	6.5	6.0	6.3	9.1	8.4	8.9	9.4	9.0	9.2	10.9	10.5	10.7
13	6.4	6.0	6.3	9.1	8.6	8.9	9.4	9.0	9.2	10.8	10.4	10.6
14	6.5	6.2	6.4	9.1	8.6	8.9	9.4	9.1	9.3	10.8	10.3	10.5
15	6.7	6.3	6.5	9.0	8.5	8.9	---	---	---	11.2	10.8	11.1
16	6.6	6.3	6.4	8.9	8.3	8.8	---	---	---	11.5	11.0	11.2
17	7.1	6.2	6.7	9.0	8.4	8.8	11.2	10.7	11.0	11.5	11.0	11.3
18	7.1	6.6	6.8	9.1	8.6	8.9	11.3	10.6	11.0	---	---	---
19	7.0	6.5	6.8	9.1	8.5	8.9	11.5	11.1	11.4	---	---	---
20	6.9	6.2	6.6	9.0	8.5	8.8	11.8	10.1	11.2	---	---	---
21	6.9	6.3	6.6	9.0	8.3	8.7	11.4	10.8	11.2	---	---	---
22	7.0	6.4	6.7	8.8	8.2	8.5	11.5	11.0	11.2	---	---	---
23	7.0	6.2	6.6	8.7	8.1	8.4	11.3	10.8	11.0	---	---	---
24	6.9	6.2	6.5	8.5	8.0	8.3	11.2	10.6	11.0	---	---	---
25	6.8	5.8	6.4	9.3	8.1	8.3	11.3	10.9	11.1	---	---	---
26	6.6	5.8	6.2	9.3	7.9	8.3	11.3	10.9	11.1	---	---	---
27	6.5	5.8	6.2	8.5	8.3	8.4	11.3	10.9	11.1	---	---	---
28	6.7	5.8	6.3	8.5	8.3	8.4	11.1	10.8	11.0	---	---	---
29	7.2	6.3	6.7	8.5	8.0	8.3	11.0	10.5	10.7	---	---	---
30	7.5	6.5	7.0	8.5	8.2	8.4	10.9	10.5	10.7	---	---	---
31	7.8	7.0	7.4	---	---	---	11.1	10.7	10.9	---	---	---
MONTH	7.8	5.4	6.4	9.3	6.9	8.3	11.8	8.1	10.0	11.5	10.3	10.8
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	10.9	10.6	10.7	10.3	10.0	10.1	7.9	7.5	7.7
2	---	---	---	10.7	10.6	10.7	10.1	10.0	10.1	8.0	7.5	7.7
3	---	---	---	10.7	10.5	10.6	10.1	10.0	10.0	7.9	7.3	7.7
4	---	---	---	10.5	10.4	10.5	10.0	9.7	9.9	7.8	7.3	7.6
5	---	---	---	10.4	10.3	10.3	9.9	9.6	9.7	7.8	7.3	7.6
6	---	---	---	10.4	10.2	10.3	9.8	9.6	9.7	8.0	7.5	7.8
7	---	---	---	10.4	10.1	10.3	9.7	9.5	9.5	8.0	7.6	7.8
8	---	---	---	10.1	10.0	10.0	9.6	9.3	9.4	7.8	7.5	7.7
9	---	---	---	10.1	9.7	9.9	9.5	9.1	9.3	7.5	7.2	7.4
10	---	---	---	9.8	9.6	9.7	9.3	9.0	9.1	7.2	6.8	7.0
11	---	---	---	9.8	9.5	9.7	9.4	8.7	8.9	7.2	6.7	6.9
12	---	---	---	9.8	9.5	9.7	9.0	8.4	8.7	7.4	6.8	7.1
13	---	---	---	9.9	9.6	9.7	9.5	8.3	8.7	7.2	6.8	7.0
14	---	---	---	10.0	9.7	9.8	9.4	8.3	8.7	7.3	6.7	6.9
15	---	---	---	10.0	9.6	9.8	9.1	8.4	8.7	7.1	6.6	6.9
16	---	---	---	10.1	9.8	9.9	8.9	8.0	8.4	6.8	6.4	6.6
17	---	---	---	10.1	9.8	9.9	8.4	7.9	8.2	7.1	6.7	6.9
18	11.4	11.2	11.3	9.9	9.8	9.9	8.4	7.5	7.9	6.5	6.2	6.4
19	11.3	11.1	11.2	10.1	10.0	10.0	9.5	8.1	8.4	7.1	6.2	6.6
20	11.2	11.0	11.0	9.9	9.7	9.8	8.3	8.1	8.2	7.4	6.6	6.9
21	11.0	10.9	11.0	10.0	9.7	9.8	8.3	8.1	8.2	7.5	6.8	7.1
22	11.1	10.9	10.9	9.9	9.7	9.8	8.2	7.8	8.0	8.3	7.0	7.7
23	11.0	10.7	10.8	10.0	9.7	9.8	7.8	7.6	7.8	9.0	7.8	8.4
24	11.0	10.8	10.8	10.0	9.7	9.9	7.7	7.5	7.6	9.2	8.3	8.7
25	11.0	10.8	10.8	10.2	9.9	10.0	7.7	7.5	7.5	8.3	7.8	8.0
26	11.0	10.7	10.8	10.2	9.9	10.0	7.6	7.3	7.5	8.0	7.4	7.7
27	10.8	10.6	10.7	10.2	9.8	10.0	7.7	7.3	7.5	7.9	7.1	7.4
28	11.1	10.6	10.7	10.4	10.0	10.2	7.8	7.4	7.5	8.3	7.1	7.4
29	11.1	9.7	10.6	11.0	10.2	10.3	7.8	7.4	7.5	8.7	7.1	7.7
30	---	---	---	10.3	10.1	10.2	7.9	7.4	7.6	7.9	7.0	7.5
31	---	---	---	10.4	10.1	10.2	---	---	---	7.5	7.0	7.3
MONTH	11.4	9.7	10.9	11.0	9.5	10.0	10.3	7.3	8.6	9.2	6.2	7.4

DELAWARE RIVER BASIN

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	7.3	6.7	7.0	7.3	6.7	7.0	5.2	4.5	4.8	5.3	4.6	4.9
2	7.7	6.5	6.9	7.3	6.3	6.8	5.3	4.5	4.9	5.1	4.5	4.8
3	8.0	6.5	7.1	6.9	6.4	6.5	5.4	4.7	5.0	5.3	4.7	5.0
4	7.5	6.8	7.1	6.9	6.1	6.3	5.5	4.7	5.0	5.3	4.8	5.1
5	7.2	6.7	6.9	6.7	5.9	6.3	5.6	4.7	5.0	5.2	4.9	5.0
6	6.9	6.3	6.7	6.7	5.9	6.2	5.8	4.6	5.1	5.4	5.2	5.3
7	7.0	6.5	6.7	6.7	5.7	6.2	6.0	4.6	5.1	5.3	5.0	5.2
8	7.0	6.5	6.7	6.8	5.7	6.3	6.0	4.8	5.2	5.2	4.7	5.1
9	6.8	6.2	6.5	6.9	5.8	6.2	5.8	4.7	5.1	5.1	4.6	4.9
10	6.8	5.8	6.3	6.7	5.9	6.1	5.4	4.4	4.9	5.4	4.6	5.1
11	6.9	5.7	6.3	6.3	5.7	5.9	5.1	4.4	4.7	5.2	4.9	5.1
12	7.2	5.7	6.5	5.8	5.4	5.6	5.1	4.4	4.7	5.4	4.8	5.1
13	7.5	6.1	6.8	5.8	5.2	5.4	4.8	4.2	4.4	5.5	5.0	5.2
14	8.0	6.4	7.2	5.6	5.1	5.3	4.9	4.2	4.5	5.5	5.1	5.3
15	8.2	6.7	7.4	5.4	5.0	5.1	4.7	4.2	4.5	5.6	5.1	5.3
16	8.4	6.9	7.6	5.1	4.8	4.9	4.6	4.3	4.5	5.6	5.2	5.4
17	8.2	7.2	7.6	4.9	4.6	4.8	4.5	4.0	4.2	5.6	5.3	5.4
18	7.6	7.0	7.3	4.6	4.4	4.5	4.2	3.6	4.0	5.6	5.2	5.4
19	7.4	6.0	6.5	4.5	4.1	4.3	4.1	3.6	3.8	5.6	5.5	5.6
20	6.0	5.5	5.7	4.6	4.1	4.3	4.0	3.5	3.8	5.7	5.3	5.5
21	5.6	5.1	5.4	4.7	4.2	4.4	4.1	3.7	3.9	5.8	5.5	5.6
22	6.2	5.1	5.7	4.9	4.3	4.6	4.4	3.7	4.0	5.9	5.4	5.6
23	7.1	5.5	6.3	4.9	4.5	4.7	4.6	3.6	4.1	5.9	5.3	5.7
24	7.3	6.2	6.7	4.8	4.5	4.7	4.9	3.7	4.2	6.5	5.5	6.1
25	7.8	6.4	7.0	5.2	4.5	4.9	5.0	4.0	4.4	6.8	6.3	6.5
26	8.7	6.6	7.5	5.1	4.6	4.9	4.7	4.0	4.2	7.0	6.6	6.9
27	8.4	7.3	7.7	5.1	4.5	4.8	4.6	4.0	4.2	6.8	6.1	6.5
28	8.5	7.0	7.6	5.2	4.0	4.7	5.1	3.8	4.4	6.5	5.7	6.2
29	8.3	7.1	7.5	5.6	4.4	4.9	5.2	4.5	4.7	6.2	5.7	6.0
30	7.8	7.0	7.3	5.6	4.8	5.1	5.4	4.4	4.8	6.2	5.9	6.1
31	---	---	---	5.2	4.8	5.0	5.4	4.8	5.1	---	---	---
MONTH	8.7	5.1	6.8	7.3	4.0	5.4	6.0	3.5	4.6	7.0	4.5	5.5

CHRISTINA RIVER BASIN

01479820 RED CLAY CREEK NEAR KENNETT SQUARE, PA

LOCATION.--Lat 39°49'00", long 75°41'31", Chester County, Hydrologic Unit 02040205, on left bank 3.0 mi south of the intersection of Route 1 and Route 82 (at Kennett Square) on Route 82 (Creek Road).

DRAINAGE AREA.--28.3 mi².

PERIOD OF RECORD.--January 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	20	17	21	24	28	22	27	e15	17	13
2	14	15	44	18	20	25	26	21	22	e16	12	13
3	14	15	149	19	20	25	25	20	20	e17	12	16
4	14	15	55	22	21	25	25	20	19	e30	13	15
5	14	15	24	21	21	25	24	20	88	e17	12	13
6	15	15	21	19	20	23	24	20	39	e14	12	25
7	14	15	19	18	20	73	24	19	36	e14	12	25
8	14	15	18	18	21	37	23	168	22	e13	12	16
9	14	15	23	21	20	28	23	69	20	e13	12	14
10	14	15	79	21	19	39	23	40	19	e15	12	17
11	17	20	26	19	20	95	22	29	18	e23	13	32
12	16	17	22	18	21	34	22	26	18	e14	15	14
13	14	17	22	18	21	29	21	24	17	e15	13	13
14	14	16	22	37	23	27	21	23	16	e18	16	13
15	14	15	21	25	46	26	21	22	16	e20	16	13
16	17	15	20	21	63	25	22	29	16	e19	16	13
17	44	14	20	20	30	25	23	24	15	14	76	13
18	20	15	19	19	31	25	22	23	15	16	35	13
19	15	15	18	17	32	61	24	23	79	13	17	12
20	15	15	18	18	28	39	23	20	28	13	15	12
21	15	15	19	18	26	31	22	20	19	12	14	12
22	17	79	19	18	25	28	30	20	18	12	14	13
23	16	52	19	36	24	33	25	19	17	21	13	17
24	15	23	19	55	24	31	23	19	18	15	13	13
25	15	19	18	24	25	28	31	20	21	24	13	18
26	15	19	18	22	51	53	52	21	17	14	13	100
27	15	18	19	20	30	172	28	21	15	14	23	27
28	15	17	18	21	27	36	25	19	14	13	15	22
29	16	17	39	21	26	29	23	18	e14	12	16	17
30	15	17	24	20	---	28	22	19	e14	12	13	16
31	15	---	19	21	---	33	---	85	---	18	13	---
TOTAL	496	585	891	682	776	1212	747	943	717	496	518	570
MEAN	16.0	19.5	28.7	22.0	26.8	39.1	24.9	30.4	23.9	16.0	16.7	19.0
MAX	44	79	149	55	63	172	52	168	88	30	76	100
MIN	14	14	18	17	19	23	21	18	14	12	12	12
CFSM	.56	.69	1.01	.78	.94	1.38	.88	1.07	.84	.56	.59	.67
IN.	.65	.77	1.17	.90	1.02	1.59	.98	1.24	.94	.65	.68	.75

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1992, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992
MEAN	28.7	33.8	32.6	45.8	41.9
MAX	55.3	44.8	54.7	66.9	68.0
(WY)	1990	1989	1991	1990	1989
MIN	16.0	19.5	20.0	22.0	26.8
(WY)	1992	1992	1989	1992	1990

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1988 - 1992
ANNUAL TOTAL	11267.7	8633	
ANNUAL MEAN	30.9	23.6	37.0
HIGHEST ANNUAL MEAN			47.3
LOWEST ANNUAL MEAN			23.6
HIGHEST DAILY MEAN	378 Jan 12	172 Mar 27	922 Jul 5 1989
LOWEST DAILY MEAN	5.1 Aug 6	12 Jul 21	5.1 Aug 6 1991
ANNUAL SEVEN-DAY MINIMUM	6.4 Aug 2	12 Aug 2	6.4 Aug 2 1991
INSTANTANEOUS PEAK FLOW		513 May 8	2730 Jul 5 1989
INSTANTANEOUS PEAK STAGE		5.34 May 8	7.96 Jul 5 1989
ANNUAL RUNOFF (CFSM)	1.09	.83	1.31
ANNUAL RUNOFF (INCHES)	14.80	11.34	17.75
10 PERCENT EXCEEDS	53	33	57
50 PERCENT EXCEEDS	23	19	28
90 PERCENT EXCEEDS	11	13	14

CHRISTINA RIVER BASIN

01480300 WEST BRANCH BRANDYWINE CREEK NEAR HONEY BROOK, PA

LOCATION.--Lat 40°04'22", long 75°51'40", Chester County, Hydrologic Unit 02040205, at right upstream end of bridge on Legislative Route 15185, at Birdell, 0.4 mi downstream from Two Log Run, and 3.0 mi southeast of Honey Brook.

DRAINAGE AREA.--18.7 mi².

PERIOD OF RECORD.--June 1960 to current year.

REVISED RECORDS.--WDR PA-73-1: 1972(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 591.20 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992											
DAY	DAILY MEAN VALUES										
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	7.8	8.5	11	12	12	11	20	13	26	9.7	8.0
2	7.7	8.1	22	13	10	12	19	12	18	9.4	7.4
3	7.5	8.0	164	13	11	12	16	12	15	12	7.4
4	7.4	8.2	52	18	e10	12	16	11	14	16	7.9
5	7.0	8.2	20	19	e9.8	11	15	12	62	9.8	8.3
6	7.7	8.2	17	14	10	11	14	11	44	9.4	7.3
7	7.7	8.2	15	13	10	49	14	11	22	9.2	6.9
8	7.6	8.0	14	12	9.9	25	14	84	18	8.7	6.6
9	7.4	7.7	16	15	e8.8	17	13	81	16	9.2	6.9
10	7.6	7.8	77	17	e8.0	17	14	25	15	9.2	7.2
11	8.0	11	30	14	9.6	48	14	19	14	11	43
12	8.5	9.5	22	12	9.3	21	13	16	13	9.0	23
13	8.2	9.1	19	12	9.2	15	12	14	12	9.3	9.5
14	8.7	8.8	22	50	9.7	13	12	14	11	11	9.2
15	8.7	8.3	20	24	20	13	12	13	11	8.9	8.6
16	8.8	8.0	15	14	40	12	12	36	11	8.9	9.1
17	43	7.6	13	e12	18	12	15	19	9.9	12	11
18	21	7.7	13	e10	17	12	20	21	9.4	19	12
19	11	8.0	e10	e9.2	20	21	16	24	16	9.6	10
20	9.3	8.0	11	11	18	26	15	15	100	8.9	9.5
21	9.1	8.1	11	11	15	24	15	13	15	8.4	8.9
22	9.0	47	12	11	13	18	26	13	13	9.2	8.3
23	8.8	52	13	20	13	19	17	12	12	9.8	8.1
24	8.7	15	13	36	15	19	15	11	21	9.7	8.1
25	8.8	12	11	15	16	18	15	12	28	9.1	8.1
26	8.3	11	11	13	36	38	26	13	13	9.1	8.1
27	8.4	10	11	13	19	205	22	16	11	9.8	8.1
28	8.6	9.8	11	12	15	37	17	13	10	9.1	10
29	8.3	9.9	23	12	13	24	15	11	10	8.3	15
30	8.4	9.2	20	13	---	21	14	11	9.8	7.8	7.7
31	8.4	---	14	13	---	23	---	66	---	8.0	7.6
TOTAL	305.4	350.9	733	483.2	425.3	816	478	654	600.1	308.5	316.8
MEAN	9.85	11.7	23.6	15.6	14.7	26.3	15.9	21.1	20.0	9.95	10.2
MAX	43	52	164	50	40	205	26	84	100	19	43
MIN	7.0	7.6	10	9.2	8.0	11	12	11	9.4	7.8	6.6
CFSM	.53	.63	1.26	.83	.78	1.41	.85	1.13	1.07	.53	.55
IN.	.61	.70	1.46	.96	.85	1.62	.95	1.30	1.19	.61	.63

e Estimated.

CHRISTINA RIVER BASIN

01480300 WEST BRANCH BRANDYWINE CREEK NEAR HONEY BROOK, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	15.6	24.0	27.9	32.9	38.8	37.7	32.0	26.8	23.6	22.1	12.9	16.7
MAX	50.9	58.6	84.3	131	85.1	90.2	83.8	74.6	134	106	25.8	63.1
(WY)	1977	1973	1984	1979	1979	1978	1983	1989	1972	1984	1990	1960
MIN	5.74	7.35	8.23	7.03	14.3	15.3	11.7	8.84	6.46	3.79	3.31	3.62
(WY)	1965	1982	1981	1981	1969	1981	1963	1963	1963	1963	1963	1964

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1960 - 1992	
ANNUAL TOTAL	6412.2		5821.2			
ANNUAL MEAN	17.6		15.9		25.7	
HIGHEST ANNUAL MEAN					46.31	
LOWEST ANNUAL MEAN					12.8	
HIGHEST DAILY MEAN	164	Dec 3	205	Mar 27	2520	Jun 22
LOWEST DAILY MEAN	6.0	Sep 13	6.6	Aug 8	1.7	Aug 19
ANNUAL SEVEN-DAY MINIMUM	6.2	Sep 8	7.0	Sep 15	2.1	Sep 7
INSTANTANEOUS PEAK FLOW			400	Mar 27	a8140	Jun 22
INSTANTANEOUS PEAK STAGE			5.80	Mar 27	11.41	Jun 22
INSTANTANEOUS LOW FLOW			5.2	Dec 19	1.7	Aug 15-19
ANNUAL RUNOFF (CFSM)	.94		.85		1.38	
ANNUAL RUNOFF (INCHES)	12.76		11.58		18.70	
10 PERCENT EXCEEDS	30		24		39	
50 PERCENT EXCEEDS	12		12		15	
90 PERCENT EXCEEDS	7.2		7.7		6.8	

a From rating curve extended above 1,900 ft³/s, on basis of slope-area measurement of peak flow.

b Also July 1, 1984.

CHRISTINA RIVER BASIN

01480500 WEST BRANCH BRANDYWINE CREEK AT COATESVILLE, PA

LOCATION.--Lat 39°59'08", long 75°49'40", Chester County, Hydrologic Unit 02040205, on right bank at city limits of Coatesville, 1,200 ft upstream from bridge on old Lincoln Highway, and 0.6 mi downstream from Rock Run.

DRAINAGE AREA.--45.8 mi².

PERIOD OF RECORD.--October 1943 to December 1951, January 1970 to current year.

GAGE.--Water-stage recorder and V-notch sharp crested weir. Elevation of gage is 305 ft above sea level, from topographic map. Sept. 10, 1943, to Dec. 31, 1951, nonrecording gage at site 1,100 ft downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion above station from Rock Run Reservoir, capacity, 320 Mgal, 2.6 mi upstream for municipal supply of city of Coatesville. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	19	22	24	25	48	33	73	24	33	13
2	13	12	34	22	19	25	43	31	46	22	18	12
3	13	12	283	24	21	25	40	28	37	28	16	12
4	12	12	123	28	20	24	38	26	33	48	16	13
5	12	12	40	37	19	24	36	26	158	28	16	13
6	12	12	32	27	19	23	34	26	134	24	15	16
7	12	12	27	24	19	96	34	25	55	23	14	26
8	12	12	24	22	19	71	33	261	45	21	13	17
9	12	12	28	25	17	40	33	279	38	23	14	16
10	12	12	143	32	e15	37	32	78	35	20	13	15
11	12	15	46	27	19	103	36	54	33	24	34	18
12	13	16	34	23	17	53	33	45	29	19	81	15
13	13	14	33	22	17	37	29	41	27	20	23	13
14	13	14	46	79	20	33	29	38	26	24	21	12
15	13	13	38	55	33	30	28	35	25	22	20	12
16	13	13	28	27	95	27	28	76	24	19	23	12
17	50	12	24	22	40	27	35	53	23	20	23	12
18	62	12	24	e19	35	29	45	45	22	38	27	12
19	21	13	19	17	42	47	36	54	42	23	22	12
20	15	13	22	20	39	55	34	38	179	19	18	12
21	13	13	23	21	32	60	34	34	44	17	16	11
22	13	81	22	20	28	44	54	30	33	16	15	12
23	13	126	22	31	27	44	41	28	31	23	14	16
24	13	33	24	79	29	45	35	28	31	23	14	13
25	13	23	21	31	33	43	39	31	61	21	14	16
26	13	20	20	28	66	82	91	33	34	19	13	148
27	12	18	20	24	45	482	59	39	29	21	13	50
28	11	17	19	25	34	105	44	32	25	20	15	51
29	12	16	38	25	29	60	38	27	23	17	30	24
30	12	16	41	25	---	50	35	29	24	16	16	19
31	12	---	27	25	---	58	---	224	---	36	13	---
TOTAL	485	618	1344	908	872	1904	1174	1827	1419	718	633	643
MEAN	15.6	20.6	43.4	29.3	30.1	61.4	39.1	58.9	47.3	23.2	20.4	21.4
MAX	62	126	283	79	95	482	91	279	179	48	81	148
MIN	11	12	19	17	15	23	28	25	22	16	13	11
†	5.4	5.4	5.6	6.1	6.5	6.1	6.0	6.0	5.1	4.5	4.8	5.0
MEAN†	21.0	26.0	49.0	35.4	36.6	67.5	45.1	64.9	52.4	27.7	25.2	26.4
CFSM†	.46	.57	1.07	.77	.80	1.47	.98	1.42	1.14	.60	.55	.58
IN†	.53	.63	1.23	.89	.86	1.70	1.10	1.63	1.28	.70	.63	.64

† Diversion, equivalent in cubic feet per second, furnished by city of Coatesville.

‡ Adjusted for diversion from Rock Run Reservoir,

e Estimated.

CHRISTINA RIVER BASIN

01480500 WEST BRANCH BRANDYWINE CREEK AT COATESVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1951, 1970 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	36.5	56.9	68.1	78.4	90.1	86.5	83.1	76.1	63.5	54.1	34.0	37.8
MAX	118	114	152	262	179	199	197	159	236	176	82.9	136
(WY)	1980	1973	1984	1979	1971	1978	1983	1989	1972	1984	1971	1979
MIN	11.8	14.9	18.9	15.5	30.1	33.3	28.9	33.5	19.8	14.5	10.6	10.1
(WY)	1987	1982	1981	1981	1992	1985	1985	1977	1986	1944	1944	1986

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1944 - 1951 1970 - 1992	
ANNUAL TOTAL	14403.0		12545			
ANNUAL MEAN	39.5	±43.5	34.3	±39.8	63.8	± 67.9
HIGHEST ANNUAL MEAN					98.6	±103 1979
LOWEST ANNUAL MEAN					28.1	± 33.1 1981
HIGHEST DAILY MEAN	283	Dec 3	482	Mar 27	3400	Jun 22 1972
LOWEST DAILY MEAN	9.2	Sep 13	11	Oct 28	4.6	Sep 10 1944
ANNUAL SEVEN-DAY MINIMUM	9.8	Sep 7	12	Oct 27	6.3	Sep 5 1944
INSTANTANEOUS PEAK FLOW			792	Mar 27	a8100	Jun 29 1973
INSTANTANEOUS PEAK STAGE			5.47	Mar 27	10.08	Jun 29 1973
ANNUAL RUNOFF (CFSM)	.86	± .95	.75	± .87	1.39	± 1.48
ANNUAL RUNOFF (INCHES)	11.70	±12.89	10.19	±11.79	18.92	±20.18
10 PERCENT EXCEEDS	77		54		110	
50 PERCENT EXCEEDS	26		24		44	
90 PERCENT EXCEEDS	12		13		16	

‡ Adjusted for diversion from Rock Run Reservoir, furnished by city of Coatesville.

a From rating curve extended above 2,200 ft³/s, on basis of slope-area measurement at gage height 9.92 ft.

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA

LOCATION.--Lat 39°57'42", long 75°48'06", Chester County, Hydrologic Unit 02040205, on left bank at bridge on Legislative Route 15068 at Modena, and 300 ft upstream from Dennis Run.

DRAINAGE AREA.--55.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1970 to current year.

REVISED RECORDS.--WDR PA-74-1: 1971-72(P), 1973. WDR PA-75-1: 1974(m).

GAGE.--Water-stage recorder. Elevation of gage is 265 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Rock Run Reservoir, capacity, 320 Mgal, 5.6 mi upstream and by Lukens Steel Company. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	19	32	30	32	35	68	38	107	32	50	20
2	21	22	60	31	27	35	60	37	65	31	26	19
3	21	21	335	31	30	34	52	35	51	44	23	22
4	19	21	164	37	28	34	49	32	44	65	23	20
5	20	19	60	49	29	32	48	34	203	36	22	21
6	22	21	41	35	26	32	41	31	175	33	23	35
7	21	19	39	34	29	129	40	e32	79	32	20	36
8	18	21	33	29	27	103	40	328	59	29	20	31
9	19	21	49	34	27	58	41	330	51	34	20	26
10	19	22	172	42	22	55	38	105	47	29	20	31
11	22	24	68	35	28	129	46	77	45	33	48	31
12	19	27	45	31	25	75	39	67	40	27	85	23
13	21	27	45	30	24	50	36	56	37	29	29	20
14	21	23	57	97	28	40	36	52	36	37	30	19
15	19	24	55	77	53	38	33	49	37	32	30	19
16	23	21	39	37	127	34	33	106	34	26	32	19
17	79	22	32	29	57	36	43	73	33	33	30	21
18	78	20	32	e25	52	36	53	62	32	44	36	19
19	31	22	29	e23	55	76	47	73	68	40	30	20
20	24	23	28	27	52	74	40	53	224	31	26	20
21	20	22	33	29	42	84	42	45	57	24	24	17
22	22	120	33	27	41	60	73	41	42	24	23	25
23	22	169	31	51	36	58	55	41	41	35	22	24
24	19	50	34	106	37	58	45	38	55	31	21	20
25	22	32	29	40	45	54	62	44	75	30	21	38
26	22	31	30	40	89	112	122	44	45	26	24	201
27	19	27	27	31	62	535	83	49	38	27	29	80
28	20	28	29	34	46	136	e61	45	34	26	35	68
29	22	27	60	33	40	91	44	37	32	24	40	34
30	20	25	57	35	---	74	43	44	32	22	24	27
31	21	---	39	33	---	89	---	247	---	100	23	---
TOTAL	767	970	1817	1222	1216	2486	1513	2345	1918	1066	909	1006
MEAN	24.7	32.3	58.6	39.4	41.9	80.2	50.4	75.6	63.9	34.4	29.3	33.5
MAX	79	169	335	106	127	535	122	330	224	100	85	201
MIN	18	19	27	23	22	32	33	31	32	22	20	17
†	5.4	5.4	5.6	6.1	6.5	6.1	6.0	6.0	5.1	4.5	4.8	5.0
MEAN†	30.1	37.7	64.2	45.5	48.4	86.3	56.4	81.6	69	38.9	34.1	38.5
CFSM†	.55	.69	1.17	.83	.88	1.57	1.02	1.48	1.25	.71	.62	.70
IN.†	.63	.76	1.35	.95	.95	1.81	1.14	1.71	1.40	.82	.71	.78

† Diversion, equivalent in cubic feet per second, from Rock Run Reservoir.

‡ Adjusted for diversion from Rock Run Reservoir, furnished by the city of Coatesville.

e Estimated.

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	54.8	74.0	91.2	103	114	111	113	101	89.9	78.6	50.3	55.6
MAX	147	139	207	330	235	250	241	213	302	236	123	186
(WY)	1980	1973	1984	1979	1971	1978	1983	1989	1972	1984	1971	1979
MIN	22.0	28.7	25.6	20.1	41.9	43.0	39.9	52.2	32.6	30.8	25.6	21.4
(WY)	1987	1982	1981	1981	1992	1985	1985	1985	1985	1986	1981	1981

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1970 - 1992	
ANNUAL TOTAL	21644		17235			
ANNUAL MEAN	59.3	±63.3	47.1	±52.6	86.4	±88.0
HIGHEST ANNUAL MEAN					130	±13.0 1979
LOWEST ANNUAL MEAN					37.6	±37.7 1981
HIGHEST DAILY MEAN	421	Jan 12	535	Mar 27	4010	Jun 22 1972
LOWEST DAILY MEAN	17	Sep 3	17	Sep 21	9.8	Sep 13 1981
ANNUAL SEVEN-DAY MINIMUM	18	Sep 7	19	Sep 15	15	Sep 9 1981
INSTANTANEOUS PEAK FLOW			887	Mar 27	a9600	Jun 29 1973
INSTANTANEOUS PEAK STAGE			5.05	Mar 27	12.47	Jun 29 1973
INSTANTANEOUS LOW FLOW			4.9	Nov 5, Sep 19	1.8	Aug 29 1974
ANNUAL RUNOFF (CFSM)	1.08	± 1.15	.86	± .96	1.57	± 1.60
ANNUAL RUNOFF (INCHES)	14.64	±15.63	11.66	±12.98	21.34	±21.73
10 PERCENT EXCEEDS	116		77		143	
50 PERCENT EXCEEDS	39		34		59	
90 PERCENT EXCEEDS	21		21		28	

‡ Adjusted for diversion from Rock Run Reservoir, furnished by the city of Coatesville.

a From rating curve extended above 920 ft³/s, on basis of slope-area measurement at gage height 11.48 ft.

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1969 to October 1978, August 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1971 to October 1978, August 1981 to current year.

pH: May 1971 to October 1978, August 1981 to current year.

WATER TEMPERATURE: May 1971 to October 1978, August 1981 to current year.

DISSOLVED OXYGEN: May 1971 to October 1978, August 1981 to current year.

INSTRUMENTATION.--Water-quality monitor May 1971 to October 1978, August 1981 to current year. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Subsequent to water year 1981, station not operated during winter. Other interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 858 microsiemens, Jan. 10, 1977; minimum, 72 microsiemens, Nov. 16, 1985.

pH: Maximum, 10.0, Dec. 21, 1971, minimum, 5.9, July 14, 1991.

WATER TEMPERATURE: Maximum, 33.5°C, July 19, 1977; minimum, 0.0°C on many days during winter.

DISSOLVED OXYGEN: Maximum, 19.5 mg/L, Sept. 2, 1990; minimum, 0.6 mg/L, Nov. 1, 3, 1974.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	GAGE HEIGHT (FEET) (00065)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 1991								
03...	1310	344	12.6	2.84	8.4	21	18.0	K1500
17...	0625	345	9.5	2.83	7.1	20	12.0	K780
24...	0620	357	9.5	2.78	6.9	15	12.5	K1000
30...	1140	350	13.8	2.80	7.4	17	10.5	K690
NOV								
14...	0610	354	10.6	2.87	6.6	25	7.0	3200
18...	1230	328	14.3	2.84	7.5	21	6.5	400
MAR 1992								
11...	0600	264	10.5	3.23	6.4	113	11.0	3300
19...	0935	345	12.3	3.09	6.7	66	4.0	510
24...	1100	285	16.3	3.08	8.2	64	4.5	600
APR								
02...	0620	280	10.5	3.07	7.0	61	6.5	2600
08...	0610	291	10.8	2.99	7.1	43	11.0	3800
16...	0600	331	9.9	2.94	6.7	35	11.0	5200
23...	0605	261	9.3	3.06	6.8	59	14.0	3800
MAY								
07...	0900	--	--	--	--	--	--	K1900
14...	0600	321	--	3.04	7.5	52	16.5	3400
21...	0935	292	10.5	2.88	7.2	23	14.0	3000
27...	0600	284	8.9	3.02	6.7	47	12.0	2200
JUN								
02...	0945	258	10.0	3.09	7.4	64	16.0	5600
08...	1000	280	9.5	3.07	7.5	59	19.0	K1300
25...	0550	267	9.5	3.24	7.2	113	17.0	3700
30...	0600	360	7.3	2.80	7.2	15	20.5	2200
JUL								
09...	1340	343	11.9	2.92	8.5	29	24.0	4100
15...	0615	306	6.9	2.91	6.8	27	24.0	K6900
20...	0800	299	7.7	2.89	7.0	25	21.0	K7100
30...	0700	380	7.9	2.85	6.8	20	21.0	K1500
AUG								
05...	0725	343	8.2	2.85	7.4	20	19.0	4600
18...	0800	324	8.2	2.92	6.4	29	19.0	K1500
27...	1145	381	13.5	2.87	8.4	22	23.5	K1300
SEP								
02...	0600	403	6.9	2.79	7.1	15	18.5	2000
10...	0610	368	8.3	2.62	6.8	6.8	21.5	--
16...	0720	403	7.3	2.83	6.8	18	17.0	K1200
24...	0610	351	8.3	2.84	6.8	19	15.0	5000

K Results based on non-ideal colony counts.

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	427	360	369	399	318	363	340	291	315	---	---	---
2	363	341	353	394	334	353	---	---	---	---	---	---
3	399	344	360	395	322	346	---	---	---	---	---	---
4	368	330	357	379	330	355	---	---	---	---	---	---
5	382	346	361	378	330	356	---	---	---	---	---	---
6	396	334	358	395	327	359	---	---	---	---	---	---
7	380	339	356	393	321	350	---	---	---	---	---	---
8	445	329	372	432	331	376	---	---	---	---	---	---
9	445	345	370	373	334	353	---	---	---	---	---	---
10	412	346	360	371	342	361	---	---	---	---	---	---
11	398	311	363	387	322	347	---	---	---	---	---	---
12	366	311	343	382	315	343	---	---	---	---	---	---
13	355	332	345	398	331	356	---	---	---	---	---	---
14	387	331	356	427	323	363	---	---	---	---	---	---
15	387	332	359	427	341	374	---	---	---	---	---	---
16	378	300	341	403	337	359	---	---	---	---	---	---
17	360	132	275	361	338	352	---	---	---	---	---	---
18	329	202	261	399	327	355	---	---	---	---	---	---
19	364	289	305	374	331	354	---	---	---	---	---	---
20	348	310	325	360	338	352	---	---	---	---	---	---
21	388	333	352	388	334	350	---	---	---	---	---	---
22	384	332	360	357	177	251	---	---	---	---	---	---
23	418	333	360	284	189	246	---	---	---	---	---	---
24	440	334	369	309	283	292	---	---	---	---	---	---
25	384	345	367	351	294	316	---	---	---	---	---	---
26	409	348	364	348	306	329	---	---	---	---	---	---
27	373	349	362	355	298	325	---	---	---	---	---	---
28	407	350	373	338	302	319	---	---	---	---	---	---
29	429	347	376	337	311	324	---	---	---	---	---	---
30	407	335	365	349	312	327	---	---	---	---	---	---
31	430	334	370	---	---	---	---	---	---	---	---	---
MONTH	445	132	352	432	177	340	---	---	---	---	---	---
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	333	300	318	297	265	278	329	284	296
2	---	---	---	334	320	327	330	278	293	316	284	297
3	---	---	---	327	311	317	305	287	297	327	288	306
4	---	---	---	333	312	321	314	288	300	322	294	310
5	---	---	---	329	308	318	315	291	306	327	299	312
6	---	---	---	337	313	324	320	293	310	322	298	312
7	---	---	---	339	193	264	323	292	309	---	---	---
8	---	---	---	265	220	245	335	290	303	---	---	---
9	---	---	---	295	258	274	335	289	304	---	---	---
10	---	---	---	318	256	284	330	279	297	---	---	---
11	---	---	---	278	230	249	317	278	290	302	269	279
12	---	---	---	---	---	---	316	273	284	308	291	301
13	---	---	---	---	---	---	332	306	316	324	308	317
14	---	---	---	---	---	---	326	295	313	341	320	327
15	---	---	---	---	---	---	322	299	311	362	329	339
16	---	---	---	335	313	326	349	304	323	329	216	269
17	---	---	---	345	309	329	327	282	304	287	262	276
18	---	---	---	360	306	321	310	260	283	304	270	289
19	---	---	---	406	312	344	298	277	288	293	235	269
20	---	---	---	320	287	297	319	271	285	314	290	299
21	---	---	---	317	269	296	313	273	289	363	291	318
22	---	---	---	373	297	317	293	219	258	363	298	321
23	---	---	---	406	330	368	304	248	272	341	297	314
24	---	---	---	331	278	301	326	280	294	341	299	320
25	---	---	---	316	291	304	310	171	271	346	302	320
26	---	---	---	377	224	319	237	207	220	330	297	314
27	312	287	296	---	---	---	261	223	245	315	274	294
28	336	296	312	---	---	---	---	---	---	325	293	305
29	325	296	312	---	---	---	328	272	284	349	303	319
30	---	---	---	277	251	260	306	277	292	337	278	321
31	---	---	---	274	254	262	---	---	---	304	128	195
MONTH	---	---	---	406	193	304	349	171	290	363	128	301

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	380	358	365	336	198	279	395	357	375
2	343	295	305	366	340	350	366	333	353	403	342	373
3	349	313	329	372	155	333	377	317	350	425	288	380
4	359	319	335	323	222	271	385	333	364	375	288	353
5	360	159	252	360	323	338	376	296	331	375	353	365
6	268	193	229	364	331	350	374	328	356	389	188	332
7	279	268	274	361	309	327	394	341	371	323	291	302
8	298	280	287	339	313	327	405	333	384	372	323	350
9	324	289	306	345	307	329	400	346	383	383	268	338
10	333	306	318	359	330	344	398	354	380	396	212	375
11	329	293	310	364	322	341	400	379	388	359	200	326
12	335	308	322	380	303	328	---	---	---	385	345	364
13	370	329	354	394	325	356	---	---	---	396	343	380
14	388	323	360	406	204	333	---	---	---	399	331	382
15	381	300	325	384	302	328	---	---	---	397	364	385
16	335	293	313	400	322	348	---	---	---	410	366	392
17	351	328	336	394	261	337	---	---	---	387	364	375
18	367	345	354	358	260	312	---	---	---	393	343	370
19	369	210	303	332	179	308	386	329	348	402	347	374
20	251	158	188	360	204	315	407	371	390	413	369	383
21	275	210	250	369	335	350	385	354	378	435	339	380
22	333	275	298	380	343	364	---	---	---	438	258	398
23	335	297	310	388	255	328	---	---	---	367	258	332
24	347	133	296	356	335	343	---	---	---	372	329	353
25	301	239	276	364	325	344	---	---	---	368	134	338
26	323	280	296	355	328	340	---	---	---	240	134	200
27	352	323	336	352	328	341	388	292	347	311	199	264
28	385	337	353	349	310	331	394	168	352	328	235	277
29	393	357	373	371	341	356	319	209	291	366	328	348
30	389	342	367	387	351	374	384	307	338	384	359	368
31	---	---	---	392	108	321	381	349	365	---	---	---
MONTH	393	133	309	406	108	337	407	168	355	438	134	351

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	8.3	7.3	7.8	8.6	7.2	7.8	7.0	6.8	6.9	---	---	---
2	8.5	7.2	7.9	8.4	7.2	7.8	7.0	6.7	6.8	---	---	---
3	8.7	7.2	8.0	8.4	7.3	7.9	---	---	---	---	---	---
4	9.0	7.3	8.2	8.2	7.2	7.7	---	---	---	---	---	---
5	8.7	7.5	8.2	7.5	6.5	7.1	---	---	---	---	---	---
6	8.4	7.5	7.9	7.4	6.4	6.9	---	---	---	---	---	---
7	8.3	7.4	7.9	7.3	6.5	6.9	---	---	---	---	---	---
8	7.8	6.7	7.3	7.3	6.5	6.9	---	---	---	---	---	---
9	8.1	6.8	7.5	7.5	6.6	7.1	---	---	---	---	---	---
10	8.4	7.1	7.8	7.3	6.6	7.0	---	---	---	---	---	---
11	8.2	7.3	7.7	6.9	6.5	6.7	---	---	---	---	---	---
12	8.3	7.1	7.7	7.9	6.6	7.2	---	---	---	---	---	---
13	8.5	7.3	7.9	7.5	6.7	7.1	---	---	---	---	---	---
14	8.4	7.4	7.9	7.8	6.6	7.2	---	---	---	---	---	---
15	7.6	6.8	7.2	7.7	6.8	7.3	---	---	---	---	---	---
16	8.1	6.9	7.5	8.2	7.0	7.6	---	---	---	---	---	---
17	7.7	6.9	7.1	8.0	7.0	7.5	---	---	---	---	---	---
18	7.4	6.9	7.1	7.9	6.8	7.4	---	---	---	---	---	---
19	7.6	7.1	7.3	8.0	6.8	7.4	---	---	---	---	---	---
20	7.9	7.3	7.4	7.9	6.7	7.2	---	---	---	---	---	---
21	7.4	6.7	7.0	7.7	6.4	7.0	---	---	---	---	---	---
22	7.5	6.6	7.1	7.0	6.6	6.8	---	---	---	---	---	---
23	7.8	6.9	7.3	6.8	6.6	6.7	---	---	---	---	---	---
24	7.9	6.8	7.3	6.9	6.6	6.7	---	---	---	---	---	---
25	8.0	6.8	7.4	7.1	6.5	6.8	---	---	---	---	---	---
26	7.9	6.8	7.3	7.2	6.9	7.0	---	---	---	---	---	---
27	8.3	6.8	7.4	7.2	6.8	7.0	---	---	---	---	---	---
28	8.1	7.0	7.5	7.2	6.9	7.0	---	---	---	---	---	---
29	7.9	6.8	7.4	7.3	6.9	7.0	---	---	---	---	---	---
30	8.0	6.6	7.3	7.2	6.8	7.0	---	---	---	---	---	---
31	8.3	7.2	7.8	---	---	---	---	---	---	---	---	---
MONTH	9.0	6.6	7.6	8.6	6.4	7.2	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	8.4	6.8	7.5	7.8	6.9	7.3	---	---	---
2	---	---	---	8.7	6.9	7.7	8.0	7.0	7.4	9.3	7.9	8.5
3	---	---	---	8.6	6.9	7.6	7.9	6.8	7.3	9.1	7.1	8.2
4	---	---	---	8.5	6.8	7.5	8.4	6.9	7.6	8.6	7.0	7.8
5	---	---	---	8.6	6.8	7.6	8.2	7.3	7.7	8.2	6.7	7.5
6	---	---	---	8.2	6.8	7.4	8.5	7.1	7.7	8.2	6.6	7.5
7	---	---	---	7.1	6.8	6.9	8.8	7.0	7.9	---	---	---
8	---	---	---	7.6	6.8	7.1	8.9	7.0	7.9	7.2	6.4	6.7
9	---	---	---	8.5	6.5	7.4	8.6	7.0	7.8	7.1	6.5	6.8
10	---	---	---	8.2	6.4	6.9	8.9	6.9	7.8	8.0	7.1	7.4
11	---	---	---	6.8	6.4	6.7	8.8	7.0	7.8	8.2	7.5	7.8
12	---	---	---	---	---	---	8.6	6.9	7.8	8.3	7.4	7.8
13	---	---	---	---	---	---	8.2	6.6	7.5	8.8	7.4	8.0
14	---	---	---	---	---	---	8.4	6.3	7.4	8.9	7.5	8.1
15	---	---	---	---	---	---	8.6	6.5	7.6	8.6	7.3	7.9
16	---	---	---	7.7	6.6	7.1	7.9	6.4	7.1	7.6	7.1	7.3
17	---	---	---	7.9	6.5	7.1	8.3	6.2	7.2	7.6	7.3	7.4
18	---	---	---	8.2	6.9	7.5	8.0	6.6	7.2	8.2	7.3	7.6
19	---	---	---	7.5	6.7	7.0	7.8	6.3	7.0	8.1	7.3	7.7
20	---	---	---	8.3	6.7	7.5	8.0	6.3	7.1	7.8	7.1	7.5
21	---	---	---	8.2	6.9	7.4	8.3	6.6	7.3	8.1	7.0	7.5
22	---	---	---	8.2	6.8	7.3	8.4	6.7	7.3	8.5	7.2	7.8
23	---	---	---	8.7	6.9	7.8	8.6	6.8	7.6	8.6	7.2	7.9
24	---	---	---	8.9	7.2	8.0	8.4	6.7	7.4	8.8	7.3	8.0
25	---	---	---	9.0	7.2	8.1	8.5	6.6	7.3	8.1	7.1	7.5
26	---	---	---	9.0	7.2	7.8	7.1	6.4	6.7	7.7	6.7	7.3
27	8.3	7.1	7.6	7.3	7.1	7.2	7.6	6.4	7.0	8.3	6.6	7.4
28	8.4	7.0	7.5	---	---	---	---	---	---	8.4	7.2	7.7
29	8.5	6.9	7.6	---	---	---	---	---	---	8.5	7.1	7.7
30	---	---	---	7.4	7.0	7.1	---	---	---	7.6	6.9	7.3
31	---	---	---	7.5	6.9	7.2	---	---	---	7.1	6.7	6.9
MONTH	---	---	---	9.0	6.4	7.4	8.9	6.2	7.4	9.3	6.4	7.6
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	9.0	7.2	8.1	7.9	6.9	7.3	8.3	6.9	7.8
2	7.9	7.2	7.6	8.7	7.2	8.0	8.1	7.1	7.6	8.3	6.9	7.8
3	8.1	7.1	7.5	8.0	6.8	7.2	8.6	7.2	8.0	8.4	6.8	7.6
4	8.2	7.2	7.6	8.5	6.8	7.5	9.0	7.4	8.3	8.6	6.9	7.7
5	7.4	7.1	7.2	8.8	7.2	8.0	9.0	7.4	8.3	8.2	7.0	7.6
6	7.2	7.0	7.1	8.5	7.2	7.8	9.0	7.3	8.3	7.7	6.9	7.2
7	7.2	7.0	7.1	8.6	7.1	7.9	9.2	7.4	8.5	7.8	6.8	7.2
8	8.3	7.3	7.7	8.6	7.1	7.9	8.8	7.1	8.1	8.3	6.9	7.5
9	8.2	7.2	7.6	8.7	7.0	7.8	9.1	7.1	8.2	8.2	6.7	7.5
10	8.2	7.2	7.7	8.6	7.0	7.8	9.1	7.2	8.3	8.6	6.8	7.6
11	8.3	7.2	7.7	8.6	7.1	7.8	8.5	6.9	7.9	8.2	6.9	7.5
12	8.6	7.2	7.9	8.0	6.9	7.3	---	---	---	8.2	6.8	7.6
13	8.3	7.3	7.8	8.4	6.8	7.6	---	---	---	8.0	6.7	7.4
14	8.6	7.1	7.9	8.2	6.7	7.4	---	---	---	8.1	6.7	7.5
15	8.8	7.0	8.0	8.7	6.8	7.7	---	---	---	8.2	6.6	7.5
16	8.8	7.1	8.1	8.8	7.2	7.9	---	---	---	8.8	6.7	7.8
17	9.0	8.0	8.4	8.4	7.1	7.6	---	---	---	8.5	6.8	7.8
18	8.9	7.2	8.1	8.1	7.2	7.5	---	---	---	8.6	6.7	7.8
19	7.7	7.2	7.4	8.6	7.0	7.6	8.0	7.0	7.5	8.5	6.8	7.8
20	7.7	7.2	7.3	8.4	6.9	7.6	8.2	6.8	7.5	8.0	6.6	7.5
21	7.8	7.3	7.5	8.7	6.9	7.8	8.1	6.9	7.6	8.0	6.4	7.4
22	8.1	7.3	7.6	8.5	6.9	7.8	---	---	---	8.3	6.8	7.5
23	7.9	7.3	7.6	7.9	6.9	7.2	---	---	---	8.0	6.6	7.3
24	8.1	7.1	7.5	7.5	6.9	7.1	---	---	---	7.9	6.7	7.3
25	7.7	7.2	7.4	7.8	6.9	7.2	---	---	---	7.5	6.5	6.9
26	7.8	7.1	7.4	7.6	6.7	7.1	---	---	---	7.4	6.6	7.0
27	8.3	7.1	7.7	8.2	6.7	7.4	8.7	7.2	8.3	7.2	7.0	7.1
28	8.3	7.1	7.8	8.4	7.0	7.7	8.8	7.1	7.9	7.5	7.1	7.2
29	8.5	7.1	7.8	8.2	6.7	7.6	8.1	7.2	7.6	7.5	7.0	7.2
30	8.8	7.1	8.0	8.7	6.8	7.8	8.0	6.9	7.5	7.3	6.7	7.0
31	---	---	---	8.4	6.9	7.5	8.4	6.8	7.7	---	---	---
MONTH	9.0	7.0	7.7	9.0	6.7	7.6	9.2	6.8	7.9	8.8	6.4	7.5

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	25.5	21.5	23.5	24.0	20.0	21.5	22.5	18.5	21.0
2	19.0	16.0	17.0	25.0	21.0	23.0	23.5	19.0	21.5	21.0	18.5	20.0
3	21.0	15.5	18.0	22.5	18.5	20.0	24.0	19.5	22.0	22.0	19.5	20.5
4	21.0	16.5	18.5	22.5	18.0	20.0	23.5	20.5	22.0	23.5	20.0	22.0
5	18.5	16.5	17.5	24.5	19.0	21.5	22.5	19.0	21.0	22.0	21.0	21.5
6	19.0	16.0	17.5	23.5	20.5	22.0	23.5	18.5	21.0	21.0	19.5	20.0
7	---	---	---	24.0	19.5	21.5	24.0	18.5	21.5	20.5	19.0	19.5
8	23.0	19.0	20.5	23.5	19.0	21.5	22.0	19.0	20.5	23.5	20.0	21.5
9	22.5	19.5	21.0	25.5	21.0	23.0	25.0	20.5	22.5	24.5	20.5	22.5
10	22.5	18.0	20.0	26.5	21.5	24.0	25.0	21.5	23.5	24.5	21.5	23.0
11	22.5	17.0	20.0	27.0	22.5	24.5	23.5	21.5	23.0	23.5	20.5	22.0
12	23.5	17.5	20.5	24.0	22.0	23.0	---	---	---	21.0	17.5	19.5
13	23.5	18.0	20.5	26.0	22.0	24.0	---	---	---	20.0	16.0	18.0
14	23.5	18.5	21.0	28.0	23.0	25.5	---	---	---	20.0	16.0	18.0
15	24.0	19.0	21.5	27.5	24.0	25.5	---	---	---	21.0	16.0	18.5
16	23.0	19.0	21.5	25.5	22.5	24.0	---	---	---	21.5	17.0	19.0
17	23.0	18.0	20.5	24.0	22.0	23.0	---	---	---	22.0	17.5	20.0
18	22.0	18.5	20.0	24.0	22.0	23.0	---	---	---	22.5	18.5	20.5
19	20.5	19.0	19.5	25.0	20.5	22.5	23.0	19.5	21.0	22.0	19.5	20.5
20	20.0	18.0	19.0	26.0	21.0	23.5	22.5	18.5	20.5	20.5	17.0	19.0
21	20.5	17.0	18.5	26.0	21.5	24.0	22.0	17.5	19.5	20.0	17.5	19.0
22	18.5	15.5	17.0	24.5	21.5	22.0	---	---	---	22.5	19.5	20.5
23	20.0	14.5	17.0	21.5	20.0	20.5	---	---	---	21.5	17.0	19.5
24	20.0	17.0	18.0	20.5	18.5	19.5	---	---	---	18.0	14.0	16.0
25	21.5	17.0	19.0	20.0	18.0	19.0	---	---	---	15.5	13.5	14.0
26	22.0	18.0	20.0	20.0	19.0	19.5	---	---	---	15.0	14.0	14.5
27	23.5	19.5	21.0	22.5	19.0	20.5	25.0	23.0	24.0	18.0	15.0	16.0
28	24.0	19.0	21.5	23.5	19.5	21.5	25.5	22.0	23.5	17.5	16.0	16.5
29	24.5	18.5	21.5	25.0	19.0	22.0	23.5	20.0	22.0	17.5	15.0	16.5
30	24.5	20.5	22.5	24.5	21.0	22.5	22.5	17.5	20.0	15.0	13.0	14.0
31	---	---	---	24.0	21.5	22.5	23.0	19.5	21.5	---	---	---
MONTH	24.5	14.5	19.6	28.0	18.0	22.3	25.5	17.5	21.7	24.5	13.0	19.1

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	13.0	9.2	10.5	14.3	8.9	10.6	9.6	7.9	9.0	---	---	---
2	13.2	8.6	10.4	12.5	8.4	10.0	9.8	8.4	9.1	---	---	---
3	13.5	8.2	10.0	13.6	8.5	10.6	---	---	---	---	---	---
4	15.0	8.0	10.3	13.6	9.1	11.2	---	---	---	---	---	---
5	12.7	7.8	9.6	14.4	10.6	12.3	---	---	---	---	---	---
6	11.4	7.7	9.2	14.3	11.0	12.3	---	---	---	---	---	---
7	12.9	8.7	10.5	14.0	10.9	12.1	---	---	---	---	---	---
8	14.1	9.3	11.0	13.8	10.5	11.8	---	---	---	---	---	---
9	13.6	9.4	11.0	14.2	10.9	12.3	---	---	---	---	---	---
10	13.7	9.1	10.8	13.4	10.5	11.8	---	---	---	---	---	---
11	12.0	8.6	9.7	12.6	10.0	10.9	---	---	---	---	---	---
12	12.8	8.5	10.5	13.6	10.6	11.8	---	---	---	---	---	---
13	13.2	9.2	10.8	13.5	10.5	11.7	---	---	---	---	---	---
14	13.5	9.5	11.2	14.7	10.5	11.9	---	---	---	---	---	---
15	12.6	9.6	10.8	13.8	10.2	11.4	---	---	---	---	---	---
16	13.2	9.4	10.8	13.6	9.8	11.1	---	---	---	---	---	---
17	11.7	9.5	10.6	14.0	9.9	11.7	---	---	---	---	---	---
18	11.7	10.2	11.1	14.5	10.8	12.5	---	---	---	---	---	---
19	11.7	9.9	10.6	14.9	10.7	12.4	---	---	---	---	---	---
20	12.3	9.9	10.9	14.4	9.6	11.6	---	---	---	---	---	---
21	12.8	10.4	11.4	12.3	8.8	10.4	---	---	---	---	---	---
22	12.8	10.1	11.2	9.7	8.6	9.2	---	---	---	---	---	---
23	12.8	9.7	10.9	9.9	9.5	9.7	---	---	---	---	---	---
24	12.9	9.4	10.6	10.0	9.3	9.7	---	---	---	---	---	---
25	13.2	9.0	10.4	11.9	9.9	11.0	---	---	---	---	---	---
26	12.3	8.7	10.0	12.6	11.0	11.7	---	---	---	---	---	---
27	13.2	8.5	10.1	12.9	11.5	12.0	---	---	---	---	---	---
28	13.8	7.9	10.6	12.5	10.8	11.7	---	---	---	---	---	---
29	14.1	9.2	11.2	11.9	9.8	10.9	---	---	---	---	---	---
30	14.3	10.0	11.5	11.5	8.8	10.2	---	---	---	---	---	---
31	13.9	9.3	11.1	---	---	---	---	---	---	---	---	---
MONTH	15.0	7.7	10.6	14.9	8.4	11.3	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	15.5	10.9	12.9	10.8	9.2	10.1	15.0	8.8	11.6
2	---	---	---	16.5	10.2	12.5	11.8	10.0	11.1	14.9	7.3	10.7
3	---	---	---	14.8	9.9	11.9	12.6	10.9	11.9	13.6	6.9	9.8
4	---	---	---	14.7	10.1	11.9	13.5	11.5	12.6	12.9	7.0	9.8
5	---	---	---	15.1	10.2	12.2	14.3	11.8	13.1	13.1	8.4	10.5
6	---	---	---	13.5	9.8	11.2	15.1	11.3	13.0	13.6	8.5	11.6
7	---	---	---	11.1	10.0	10.4	15.8	11.0	12.9	---	---	---
8	---	---	---	11.7	10.0	11.0	17.0	10.7	13.0	---	---	---
9	---	---	---	12.4	10.0	11.1	15.6	10.4	12.6	---	---	---
10	---	---	---	13.3	9.9	11.2	18.2	10.5	13.5	---	---	---
11	---	---	---	12.3	10.1	11.5	15.6	9.8	12.1	---	---	---
12	---	---	---	---	---	---	16.5	10.2	12.8	---	---	---
13	---	---	---	---	---	---	17.3	10.5	13.6	---	---	---
14	---	---	---	---	---	---	18.2	10.4	13.5	---	---	---
15	---	---	---	---	---	---	17.4	9.6	13.2	---	---	---
16	---	---	---	14.2	11.5	12.8	13.9	9.8	11.6	11.0	9.8	10.2
17	---	---	---	14.6	11.0	12.8	16.2	9.1	12.5	---	---	---
18	---	---	---	15.7	11.0	12.8	13.9	9.4	11.3	10.7	8.8	9.5
19	---	---	---	13.1	11.6	12.4	14.3	10.5	11.9	10.7	8.6	9.7
20	---	---	---	14.7	12.0	13.4	14.9	9.9	12.1	11.2	8.6	9.8
21	---	---	---	14.8	12.1	13.4	13.7	8.0	10.8	11.3	8.1	9.8
22	---	---	---	15.4	12.1	13.5	12.2	8.5	10.0	11.4	8.0	9.6
23	---	---	---	15.6	12.7	14.1	13.8	8.3	10.8	11.1	7.6	9.1
24	---	---	---	16.5	12.0	14.5	13.6	8.0	10.1	10.4	7.4	8.6
25	---	---	---	17.1	11.3	14.1	13.7	8.1	10.7	10.3	7.7	8.9
26	---	---	---	15.0	11.2	12.5	11.9	9.6	10.9	10.4	8.5	9.3
27	14.3	11.4	12.8	---	---	---	---	---	---	10.4	8.4	9.3
28	14.6	10.2	12.3	---	---	---	---	---	---	10.5	8.1	9.3
29	15.0	8.2	12.3	---	---	---	---	---	---	11.0	7.4	9.2
30	---	---	---	9.6	8.8	9.2	15.1	9.3	11.7	11.1	7.4	9.6
31	---	---	---	9.9	8.8	9.4	---	---	---	9.8	8.8	9.5
MONTH	---	---	---	17.1	8.8	12.2	18.2	8.0	12.0	15.0	6.9	9.8
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	12.5	7.3	9.3	10.3	8.5	9.4	14.9	7.3	10.7
2	10.2	8.4	9.8	12.8	7.2	9.4	11.4	6.5	9.5	15.0	6.9	10.6
3	10.5	8.4	9.5	10.5	7.0	8.7	12.7	8.3	10.0	13.0	6.5	9.7
4	10.5	8.2	9.3	10.2	7.9	9.2	14.2	7.9	10.1	14.7	7.5	10.4
5	9.3	8.3	8.9	11.4	7.5	9.2	14.0	7.9	10.7	11.7	7.8	9.3
6	9.3	8.3	9.0	11.6	7.3	8.8	15.1	8.1	10.9	11.2	7.6	9.3
7	---	---	---	11.9	7.5	9.3	15.8	7.5	11.2	11.7	9.1	10.2
8	9.7	8.0	9.2	13.8	7.6	9.5	16.0	7.6	11.1	13.3	9.1	10.6
9	10.0	7.9	8.8	11.9	7.1	9.1	16.2	7.5	10.9	13.6	7.9	10.4
10	10.4	7.9	9.0	12.0	7.0	8.8	15.4	6.7	10.5	13.9	8.2	10.2
11	10.7	7.9	9.2	11.5	6.7	8.7	15.6	6.6	11.4	11.3	7.7	9.0
12	11.6	7.9	9.4	11.3	7.2	8.9	---	---	---	11.8	7.7	9.2
13	12.3	7.7	9.7	11.7	7.2	9.1	---	---	---	13.5	7.4	9.6
14	12.0	8.1	9.8	10.5	6.9	8.4	---	---	---	14.2	7.5	9.9
15	12.3	7.9	9.8	11.3	6.5	8.3	---	---	---	14.8	7.3	10.0
16	13.4	7.7	10.5	11.8	5.9	8.8	---	---	---	14.7	7.3	10.3
17	13.5	8.0	10.9	10.9	7.0	8.2	---	---	---	14.5	7.0	10.2
18	12.3	7.2	9.9	9.3	7.0	8.0	---	---	---	16.3	7.0	10.2
19	9.1	7.7	8.4	11.3	7.0	8.8	10.1	7.0	8.3	15.7	6.8	10.2
20	9.1	8.5	9.0	10.9	7.0	8.6	10.9	7.1	8.6	---	---	---
21	10.0	8.8	9.3	12.5	6.3	9.1	11.9	7.3	9.2	14.1	7.4	11.9
22	10.8	8.8	9.8	11.9	7.1	9.2	---	---	---	12.7	6.5	8.6
23	11.5	9.0	10.1	10.2	7.8	8.6	---	---	---	12.2	6.4	8.8
24	11.1	8.7	9.6	9.9	7.9	8.7	---	---	---	13.7	8.1	10.0
25	10.6	8.5	9.6	12.1	8.6	10.0	---	---	---	---	---	---
26	10.8	8.5	9.5	11.5	8.3	9.6	---	---	---	9.9	9.4	9.8
27	11.2	8.3	9.4	11.8	8.4	9.7	15.2	6.5	11.6	9.4	8.6	9.1
28	11.6	7.9	9.5	13.9	8.3	10.2	12.7	6.5	8.7	10.0	8.6	9.3
29	11.8	7.6	9.3	14.9	8.0	10.5	11.2	7.1	9.1	10.6	8.6	9.4
30	11.8	7.3	9.2	14.0	7.7	10.4	13.3	8.5	10.4	11.5	8.9	9.9
31	---	---	---	13.6	7.4	9.5	14.4	8.1	10.4	---	---	---
MONTH	13.5	7.2	9.5	14.9	5.9	9.1	16.2	6.5	10.1	16.3	6.4	9.9

CHRISTINA RIVER BASIN

01480675 MARSH CREEK NEAR GLENMOORE, PA

LOCATION.--Lat 40°05'52", long 75°44'31", Chester County, Hydrologic Unit 02040205, on left bank, 200 ft north of Pennsylvania Turnpike, 1.2 mi downstream from Lyons Run, 1.8 mi upstream from Black Horse Creek, and 3.0 mi northeast of Glenmoore.

DRAINAGE AREA.--8.57 mi².

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

REVISED RECORDS.--WDR PA-74-1: 1967(M), 1971-72(P).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 450 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.0	5.4	4.5	6.3	5.3	12	6.5	35	4.1	3.0	e1.4
2	2.2	2.1	11	4.9	4.3	5.9	11	6.7	12	3.7	2.4	1.9
3	2.1	2.3	50	6.7	4.2	5.9	8.9	6.1	8.3	5.0	2.3	2.1
4	2.0	2.2	45	12	4.1	5.5	8.4	5.3	6.8	8.6	2.4	2.3
5	2.0	2.0	13	15	4.0	5.4	8.2	5.1	31	6.4	2.5	2.1
6	2.3	1.9	7.8	9.5	3.7	5.4	7.4	5.1	55	4.4	2.3	2.7
7	2.3	2.0	6.7	7.0	3.7	13	7.2	4.9	19	3.5	e1.9	4.4
8	2.0	2.1	6.4	5.7	4.2	18	7.4	31	11	3.2	1.8	3.7
9	1.9	2.0	7.9	6.6	3.6	10	6.9	81	8.7	3.7	1.9	2.8
10	2.0	2.1	23	8.7	2.9	8.5	7.3	25	7.4	3.3	1.8	2.4
11	2.1	3.7	16	7.3	3.1	19	7.9	12	6.2	3.4	3.5	3.1
12	2.6	4.2	8.5	5.7	e3.0	14	7.9	9.2	5.8	3.2	4.1	2.6
13	2.5	3.3	7.9	5.4	2.9	8.5	7.0	8.1	5.4	3.2	3.2	2.1
14	2.5	2.8	10	12	3.8	6.7	6.4	7.3	5.1	5.0	3.0	1.8
15	2.2	2.5	9.5	15	9.1	6.1	6.3	6.7	5.0	4.4	3.2	1.7
16	2.4	2.5	6.4	7.7	29	5.3	6.7	26	4.5	4.5	4.6	1.6
17	9.6	2.2	4.9	4.5	e12	5.3	8.6	25	e.10	5.8	5.0	1.6
18	19	2.0	4.8	e3.7	e11	6.1	16	12	e3.9	7.8	5.5	1.6
19	8.6	2.0	3.4	3.0	e14	11	12	11	6.7	5.4	4.2	1.7
20	4.2	2.1	3.0	2.8	11	16	9.6	8.4	17	3.7	2.9	1.6
21	3.0	2.2	3.9	3.1	8.6	17	8.6	7.0	15	2.9	2.3	1.5
22	2.7	13	4.6	3.2	7.4	12	11	6.3	7.3	2.9	2.0	1.7
23	2.4	45	5.0	7.0	7.2	11	11	5.7	5.5	3.9	1.9	3.6
24	1.4	16	5.8	21	8.7	11	8.0	5.4	7.4	4.2	1.8	2.7
25	1.4	6.7	4.8	11	9.9	10	7.9	7.5	11	4.2	1.7	2.7
26	1.4	4.3	4.1	7.5	14	17	13	8.1	8.0	4.1	1.7	21
27	1.4	3.5	3.9	5.3	13	92	12	9.7	5.6	4.5	1.7	20
28	1.4	3.5	3.7	5.0	8.7	38	8.3	7.6	4.7	3.9	1.8	13
29	1.8	3.7	11	5.1	7.8	14	7.3	5.9	4.4	3.1	2.9	7.7
30	2.1	3.5	15	5.2	---	12	6.7	6.1	4.1	2.7	e1.6	4.0
31	2.1	---	8.1	6.0	---	13	---	37	---	2.9	e1.5	---
TOTAL	97.8	149.4	320.5	227.1	225.2	427.9	266.9	408.7	326.90	131.6	82.4	123.1
MEAN	3.15	4.98	10.3	7.33	7.77	13.8	8.90	13.2	10.9	4.25	2.66	4.10
MAX	19	45	50	21	29	92	16	81	55	8.6	5.5	21
MIN	1.4	1.9	3.0	2.8	2.9	5.3	6.3	4.9	1.10	2.7	1.5	1.4
CFSM	.37	.58	1.21	.85	.91	1.61	1.04	1.54	1.27	.50	.31	.48
IN.	.42	.65	1.39	.99	.98	1.86	1.16	1.77	1.42	.57	.36	.53

e Estimated.

CHRISTINA RIVER BASIN

01480675 MARSH CREEK NEAR GLENMOORE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1992, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	7.02	10.9	13.7	13.7	17.3	18.6	18.1	15.6	11.6	9.43	6.02	6.22
MAX	21.2	21.8	43.4	35.9	44.8	38.4	47.4	36.7	42.2	34.0	22.1	21.4
(WY)	1980	1973	1984	1978	1971	1978	1983	1989	1972	1984	1971	1979
MIN	2.33	3.18	2.07	1.19	5.09	6.58	4.84	4.97	2.81	2.28	1.15	.88
(WY)	1982	1982	1981	1981	1980	1981	1985	1969	1986	1987	1966	1980

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1966 - 1992

ANNUAL TOTAL	3356.3	2787.50	
ANNUAL MEAN	9.20	7.62	12.3
HIGHEST ANNUAL MEAN			23.2
LOWEST ANNUAL MEAN			4.99
HIGHEST DAILY MEAN	90	Jul 14	444
LOWEST DAILY MEAN	1.4	Oct 24	.10
ANNUAL SEVEN-DAY MINIMUM	1.6	Oct 24	.41
INSTANTANEOUS PEAK FLOW			946
INSTANTANEOUS PEAK STAGE			4.68
INSTANTANEOUS LOW FLOW			.30
ANNUAL RUNOFF (CFSM)	1.07	.89	1.44
ANNUAL RUNOFF (INCHES)	14.57	12.10	19.56
10 PERCENT EXCEEDS	18	14	24
50 PERCENT EXCEEDS	6.4	5.3	7.7
90 PERCENT EXCEEDS	1.9	2.0	2.2

CHRISTINA RIVER BASIN

01480685 MARSH CREEK NEAR DOWNINGTOWN, PA

LOCATION.--Lat 40°03'19", long 75°43'00", Chester County, Hydrologic Unit 02040205, on left bank 1,000 ft downstream from Marsh Creek Dam, 0.2 mi upstream from mouth, and 3.0 mi north of Downingtown.

DRAINAGE AREA.--20.3 mi².

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 280 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated since November 1973.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	10	9.8	48	15	10	27	23	26	14	8.0	10
2	10	10	10	15	15	10	22	22	26	13	7.7	9.8
3	10	10	17	15	15	10	9.5	21	26	13	7.5	9.9
4	10	10	26	15	15	8.6	9.7	17	25	14	7.5	11
5	10	10	26	15	15	5.6	9.6	14	31	14	7.3	11
6	10	10	24	15	13	5.6	9.2	14	52	13	6.9	11
7	10	10	23	15	9.8	5.8	9.2	12	88	12	7.2	11
8	10	10	22	15	9.8	5.6	11	12	82	11	6.9	11
9	10	10	24	15	9.8	5.6	15	29	75	9.0	6.7	8.1
10	10	10	27	15	9.8	5.6	15	65	56	9.0	6.6	5.8
11	10	10	27	15	9.5	5.7	15	80	11	9.2	6.9	5.9
12	10	10	26	15	9.5	5.6	15	73	11	8.8	7.5	5.8
13	10	10	26	15	9.5	5.6	15	41	11	8.7	7.1	5.8
14	10	10	24	15	9.5	5.6	14	15	11	8.9	7.4	5.8
15	10	10	22	15	9.7	5.6	14	14	12	8.9	7.4	5.0
16	10	10	21	15	9.8	5.6	14	17	14	9.0	7.8	3.8
17	10	10	19	15	9.8	5.6	14	20	13	9.2	8.2	3.2
18	10	10	18	15	9.8	5.6	15	21	12	12	8.7	3.4
19	10	10	16	15	9.8	5.7	15	21	13	12	8.7	3.4
20	10	9.9	30	15	9.8	5.7	15	20	16	11	8.5	3.4
21	10	9.8	64	15	9.8	5.6	15	20	15	10	8.0	5.1
22	10	11	62	15	32	5.6	20	19	14	9.3	7.7	8.2
23	10	10	62	15	62	5.7	27	18	13	9.4	7.1	8.3
24	10	9.9	62	15	62	5.7	27	16	22	9.4	6.8	8.3
25	10	9.8	62	15	46	5.6	27	14	14	9.2	6.6	8.4
26	10	9.8	62	15	11	6.0	27	14	15	9.0	6.3	9.3
27	10	9.8	83	15	11	15	27	14	14	9.2	5.9	11
28	10	9.8	64	15	11	42	26	14	14	8.6	5.8	12
29	10	9.8	64	15	11	74	25	13	14	7.2	5.8	9.7
30	10	9.8	64	15	---	58	24	13	14	7.0	5.5	7.9
31	10	---	64	15	---	28	---	20	---	7.3	7.0	---
TOTAL	309.6	299.4	1150.8	498	479.7	379.9	528.2	726	760	315.3	223.0	232.3
MEAN	9.99	9.98	37.1	16.1	16.5	12.3	17.6	23.4	25.3	10.2	7.19	7.74
MAX	10	11	83	48	62	74	27	80	88	14	8.7	12
MIN	9.6	9.8	9.8	15	9.5	5.6	9.2	12	11	7.0	5.5	3.2
MEAN†	6.89	11.8	23.3	15	17.2	31.9	18.3	24.9	21.6	9.9	5.29	9.74
CFSM‡	.34	.58	1.15	.74	.85	1.57	.90	1.23	1.06	.49	.26	.48
IN.‡	.39	.65	1.32	.85	.91	1.81	1.01	1.41	1.19	.56	.30	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	20.2	22.2	39.2	44.8	33.8	34.5	38.1	35.6	25.7	24.4	14.7	16.4								
MAX	52.5	60.0	87.4	128	72.3	83.7	140	83.4	71.2	81.6	31.4	54.3								
(WY)	1979	1989	1984	1979	1984	1978	1983	1989	1982	1984	1989	1979								
MIN	3.39	3.50	3.01	7.30	.86	.83	.84	.72	4.06	5.18	6.42	6.47								
(WY)	1981	1979	1974	1981	1989	1974	1974	1974	1976	1983	1981	1981								

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1973 - 1992
ANNUAL TOTAL	8091.4	5902.2	
ANNUAL MEAN	22.2	#20.5	29.0
HIGHEST ANNUAL MEAN			52.9
LOWEST ANNUAL MEAN			11.6a
HIGHEST DAILY MEAN	298	Jan 15	462
LOWEST DAILY MEAN	4.5	Jan 28	.31
ANNUAL SEVEN-DAY MINIMUM	5.0	Aug 13	.40
INSTANTANEOUS PEAK FLOW			b560
INSTANTANEOUS PEAK STAGE			3.70
ANNUAL RUNOFF (CFSM)	1.09	† 1.01	1.43
ANNUAL RUNOFF (INCHES)	14.83	†13.70	19.38
10 PERCENT EXCEEDS	55		63
50 PERCENT EXCEEDS	13		16
90 PERCENT EXCEEDS	9.6		5.0

† Adjusted for change in contents in Marsh Creek Reservoir.

a Adjusted mean occurred 1981.

b From rating curve extended above 200 ft³/s.

CHRISTINA RIVER BASIN

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTOWN, PA

LOCATION.--Lat 40°02'05", long 75°42'32", Chester County, Hydrologic Unit 02040205, on right bank 20 ft downstream from bridge on Dowlin Forge Road, 200 ft east of State Highway 282, 0.4 mi downstream from Shamona Creek, 1.5 mi downstream from Marsh Creek, 2.0 mi upstream from Beaver Creek, and 2.2 mi north of Downingtown.

DRAINAGE AREA.--60.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948-57, October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above sea level, from topographic map. Prior to July 30, 1966, norecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) 1.9 mi upstream. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	31	70	41	39	74	54	87	44	36	27
2	21	27	49	41	38	39	66	52	68	42	27	25
3	20	27	297	41	38	38	51	51	61	44	26	26
4	19	27	143	51	37	36	49	45	57	59	26	28
5	19	26	73	56	37	31	48	41	212	45	26	28
6	21	26	61	46	34	31	44	40	166	42	24	31
7	23	26	55	43	29	81	43	37	142	40	23	44
8	21	26	51	40	29	67	45	249	124	36	22	33
9	20	26	54	42	27	47	48	275	111	35	22	29
10	20	27	145	50	e26	45	49	136	88	34	21	24
11	22	33	73	44	e25	100	50	136	43	36	33	32
12	25	32	62	41	25	57	49	117	43	33	49	24
13	25	29	59	39	29	45	48	84	41	33	30	20
14	25	28	69	86	30	40	46	53	40	37	32	19
15	24	27	62	65	50	37	45	50	41	35	31	17
16	26	26	53	46	108	35	45	108	41	34	35	14
17	66	25	49	41	53	33	50	74	40	38	36	12
18	54	25	47	e38	47	35	67	67	39	61	38	11
19	32	24	39	36	53	58	57	66	56	40	33	13
20	28	24	52	36	49	64	53	57	97	35	30	13
21	27	24	90	37	42	66	53	53	56	33	27	13
22	27	107	87	37	57	53	72	50	49	31	25	22
23	27	140	87	52	87	52	68	48	45	37	23	32
24	26	48	88	102	90	52	62	45	60	37	22	25
25	26	37	87	54	83	51	64	45	75	34	21	30
26	26	32	86	47	75	108	96	46	53	33	20	131
27	26	29	103	45	56	451	70	52	49	34	19	63
28	26	28	77	44	48	133	63	44	46	32	19	56
29	28	27	105	42	44	137	58	41	45	28	32	33
30	27	26	97	42	---	111	55	41	44	26	22	25
31	27	---	85	42	---	84	---	201	---	32	21	---
TOTAL	826	1036	2516	1496	1387	2256	1688	2458	2119	1160	851	900
MEAN	26.6	34.5	81.2	48.3	47.8	72.8	56.3	79.3	70.6	37.4	27.5	30.0
MAX	66	140	297	102	108	451	96	275	212	61	49	131
MIN	19	24	31	36	25	31	43	37	39	26	19	11
MEAN†	23.5	36.3	67.4	47.2	48.5	92.4	57	80.8	66.9	37.1	25.6	32
CFSM†	.39	.60	1.11	.78	.80	1.52	.94	1.33	1.10	.61	.42	.53
IN.†	.45	.67	1.28	.90	.86	1.76	1.05	1.54	1.23	.71	.49	.59

† Adjusted for change in contents in Marsh Creek Reservoir.

e Estimated.

CHRISTINA RIVER BASIN

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTOWN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	58.9	73.6	105	123	115	120	121	111	76.0	74.3	45.1	54.8
MAX	150	148	217	361	242	286	365	246	181	257	90.9	191
(WY)	1980	1989	1978	1979	1979	1978	1983	1989	1982	1984	1989	1979
MIN	23.2	25.2	23.5	17.5	47.8	35.7	28.9	49.2	29.6	22.9	18.8	17.1
(WY)	1981	1982	1981	1981	1992	1985	1985	1976	1985	1977	1981	1980

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1974 - 1992

ANNUAL TOTAL	23842		18693									
ANNUAL MEAN	65.3	±6.5	51.1	±51.2					89.6	± 89.6		
HIGHEST ANNUAL MEAN									150	±154	1984	
LOWEST ANNUAL MEAN									39.3	± 40.1	1981	
HIGHEST DAILY MEAN	387	Jan 15	451	Mar 27					2020	Jan 26	1978	
LOWEST DAILY MEAN	14	Aug 14	11	Sep 18					11	Sep 18	1992	
ANNUAL SEVEN-DAY MINIMUM	17	Aug 31	13	Sep 15					13	Sep 15	1992	
INSTANTANEOUS PEAK FLOW			870	Mar 27					4750	Jan 25	1979	
INSTANTANEOUS PEAK STAGE			4.38	Mar 27					8.95	Jan 25	1979	
INSTANTANEOUS LOW FLOW			7.3	Feb 12, Sep 17					7.3	Feb 12	1992c	
ANNUAL RUNOFF (CFSM)	1.08	± 1.05	.84	± .85					1.48	± 1.48		
ANNUAL RUNOFF (INCHES)	14.64	±14.23	11.47	±11.48					20.10			
10 PERCENT EXCEEDS	133		87						166			
50 PERCENT EXCEEDS	51		41						60			
90 PERCENT EXCEEDS	22		24						26			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	44.3	76.4	92.0	81.4	139	129	123	98.8	99.8	63.1	56.5	45.2
MAX	120	168	245	168	286	195	238	144	306	128	147	148
(WY)	1972	1973	1973	1973	1971	1972	1973	1973	1972	1972	1971	1971
MIN	24.8	27.6	32.0	33.3	51.6	70.0	64.3	43.2	30.3	18.3	15.3	20.1
(WY)	1970	1966	1966	1969	1969	1969	1969	1969	1966	1966	1966	1970

SUMMARY STATISTICS

WATER YEARS 1966 - 1973

ANNUAL TOTAL												
ANNUAL MEAN	87.0											
HIGHEST ANNUAL MEAN	139				1973							
LOWEST ANNUAL MEAN	51.6				1969							
HIGHEST DAILY MEAN	3220				Jun 22	1972						
LOWEST DAILY MEAN	7.2				Sep 12	1966						
ANNUAL SEVEN-DAY MINIMUM	8.0				Sep 7	1966						
INSTANTANEOUS PEAK FLOW	a8070				Jun 22	1972						
INSTANTANEOUS PEAK STAGE	b12.06				Jun 22	1972						
INSTANTANEOUS LOW FLOW	7.2				Sep 2,3,11-13,1966							
ANNUAL RUNOFF (CFSM)	1.44											
ANNUAL RUNOFF (INCHES)	19.51											
10 PERCENT EXCEEDS	163											
90 PERCENT EXCEEDS	56											
90 PERCENT EXCEEDS	23											

† Adjusted for change in contents in Marsh Creek Reservoir.

a From rating curve extended above 5,000 ft³/s.

b From floodmark.

c Also Sept 17, 1992.

CHRISTINA RIVER BASIN

01480700 EAST BRANCH BRANDYWINE CREEK NEAR DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1970 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB TOT FLD (MG/L AS CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 05...	0930	31	193	7.4	2.5	6.0	1.5	12.6	68	20	18	5.6
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CACO3) (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 SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
NOV 05...		8.8	0.5	21	2.2	48	17	20	<0.10	12	119	1.28
DATE		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
NOV 05...		0.020	1.30	0.120	0.30	0.40	<0.010	<0.010	<0.010	<10	370	350

< Actual value is known to be less than value shown.

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA

LOCATION.--Lat 39°58'07", long 75°40'25", Chester County, Hydrologic Unit 02040205, on left bank at downstream side of Sugars Bridge (State Highway 322), 2,000 ft upstream from Valley Creek, 1.5 mi north of Marshallton, and 3.3 mi southeast of Downingtown.

DRAINAGE AREA.--89.9 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR PA-75-1: 1972(P), 1973, 1974.

GAGE.--Water-stage recorder. Elevation of gage is 195 ft above sea level, from topographic map. Feb. 1 to Apr. 10, June 25 to Nov. 17, 1972, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) about 7.5 mi upstream. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	41	57	102	68	63	120	86	142	65	76	39
2	42	41	81	69	63	63	109	85	107	64	47	38
3	42	40	580	68	64	63	90	82	95	78	43	44
4	42	40	261	81	61	62	86	77	89	98	44	42
5	41	39	113	89	61	56	83	73	397	67	43	39
6	42	38	95	73	58	55	79	71	276	62	41	47
7	42	39	87	68	54	128	78	69	191	60	40	65
8	40	39	82	66	55	109	78	506	162	56	40	44
9	40	38	88	70	52	77	80	495	145	63	40	39
10	40	39	247	78	50	77	80	192	125	57	38	39
11	42	48	111	71	e48	162	84	189	73	61	55	55
12	43	45	94	66	e47	94	82	162	70	51	74	37
13	43	42	90	65	52	77	79	131	67	52	47	34
14	43	41	100	129	58	71	76	91	66	54	51	33
15	41	39	91	104	88	67	75	86	64	57	49	32
16	43	40	79	75	184	62	75	164	64	49	53	31
17	114	39	73	62	87	62	84	e118	62	58	55	30
18	88	39	72	e60	75	64	103	104	62	82	59	28
19	47	38	e60	58	83	115	89	103	96	60	48	29
20	44	38	68	59	80	104	86	91	145	56	46	29
21	41	38	111	61	72	107	85	86	81	49	43	28
22	43	220	108	61	78	88	115	83	71	46	42	37
23	42	284	108	88	114	89	102	79	68	60	41	47
24	42	80	110	162	115	87	94	76	87	56	39	35
25	42	65	106	84	112	84	106	77	110	53	39	46
26	42	57	104	77	111	178	168	78	78	50	38	308
27	42	49	132	68	86	813	110	84	73	52	37	103
28	41	50	104	72	74	198	99	75	68	48	37	92
29	41	49	160	70	70	e205	92	72	66	45	45	58
30	40	47	138	68	---	e175	88	72	65	43	38	47
31	41	---	116	69	---	139	---	375	---	114	36	---
TOTAL	1418	1742	3826	2393	2220	3794	2775	4132	3265	1866	1424	1575
MEAN	45.7	58.1	123	77.2	76.6	122	92.5	133	109	60.2	45.9	52.5
MAX	114	284	580	162	184	813	168	506	397	114	76	308
MIN	40	38	57	58	47	55	75	69	62	43	36	28
MEAN†	42.6	59.9	109	76.1	77.8	142	93.2	134	105	59.9	44	54.5
CSFM†	.47	.67	1.21	.85	.86	1.58	1.04	1.50	1.17	.67	.49	.61
IN.†	.55	.74	1.40	.98	.93	1.82	1.16	1.73	1.31	.77	.56	.68

† Adjusted for change in contents in Marsh Creek Reservoir.

e Estimated

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	89.6	113	161	185	184	190	196	182	128	123	76.2	91.2
MAX	224	214	449	527	409	444	594	410	315	421	132	292
(WY)	1980	1989	1984	1979	1979	1978	1983	1989	1982	1984	1989	1979
MIN	41.2	43.6	40.8	30.9	74.6	61.6	53.1	81.9	47.0	41.1	38.2	29.5
(WY)	1987	1974	1981	1981	1980	1985	1985	1976	1985	1977	1980	1980

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1974 - 1992	
ANNUAL TOTAL	39631		30430			
ANNUAL MEAN	109#107		83.1 #83.1		143	#146
HIGHEST ANNUAL MEAN					257	#261 1984
LOWEST ANNUAL MEAN					59.7	# 60.5 1981
HIGHEST DAILY MEAN	811 Jan 12		813 Mar 27		3040	Jan 26 1978
LOWEST DAILY MEAN	35 Sep 10		28 Sep 18		25	Sep 17 1980
ANNUAL SEVEN-DAY MINIMUM	38 Sep 1		30 Sep 15		26	Sep 16 1980
INSTANTANEOUS PEAK FLOW			1410 Mar 27		ab8160	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.97 Mar 27		ab13.40	Jun 22 1972
INSTANTANEOUS LOW FLOW			24 Sep 21		22	Sep 25 1980
ANNUAL RUNOFF (CFSM)	1.21 # 1.19		.92 # .92		1.59	#1.63
ANNUAL RUNOFF (INCHES)	16.40 #16.16		12.59 #12.60		21.61	#22.14
10 PERCENT EXCEEDS	198		126		270	
50 PERCENT EXCEEDS	84		68		96	
90 PERCENT EXCEEDS	40		39		41	

Adjusted for change in contents in Marsh Creek Reservoir.

a From floodmark, from rating curve extended above 3,600 ft³/s, on basis of slope-area measurement of peak flow.

b Period of record (February 1972-1992).

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1972 to current year.

pH: February 1972 to current year.

WATER TEMPERATURE: February 1972 to current year.

DISSOLVED OXYGEN: February 1972 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1972. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Interruptions in the daily record were due to instrument malfunctions. Subsequent to water year 1981, station not operated during winter.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 652 microsiemens, Feb. 6, 1977; 67 microsiemens, July 1, 1984.

pH: Maximum, 9.9, May 13, June 5, 1973; minimum, 5.4, Oct. 24, 26, 1973.

WATER TEMPERATURE: Maximum, 33.0°C, July 18, 1977; minimum, 0.0°C, on many days during winter of most years.

DISSOLVED OXYGEN: Maximum, 19.4 mg/L, Mar. 18, 1989; minimum, 0.8 mg/L, July 23, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	GAGE HEIGHT (FEET) (00065)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 1991								
03...	1340	357	10.0	2.13	7.9	43	17.5	320
17...	0650	--	--	2.03	--	41	--	K72
24...	0645	339	8.3	2.10	7.4	39	12.0	340
30...	1110	--	--	2.12	--	40	--	K99
NOV								
14...	0635	331	9.4	2.12	7.2	39	7.5	K150
18...	1300	--	--	2.04	--	41	--	<10
MAR 1992								
11...	0640	237	9.3	2.84	7.2	179	10.0	<10
19...	0955	275	12.5	2.54	7.3	112	4.0	<10
24...	1115	297	15.0	2.42	7.5	91	4.5	<10
APR								
02...	0645	397	10.9	2.53	7.4	110	6.0	K90
08...	0630	283	10.0	2.32	7.4	76	9.0	440
16...	0630	285	9.1	2.31	7.3	74	10.5	K81
23...	0625	248	8.6	2.50	7.2	105	13.0	210
MAY								
07...	0840	281	11.9	2.26	7.6	67	11.5	K110
14...	0615	263	8.7	2.42	7.3	91	15.5	230
21...	0920	259	10.0	2.38	7.4	85	13.5	250
27...	0620	269	9.7	2.38	7.3	85	12.5	K910
JUN								
02...	1015	245	10.2	2.52	7.4	108	14.5	K1100
08...	1015	218	9.8	2.79	7.2	164	16.5	K770
25...	0610	218	8.7	2.67	7.3	130	16.5	2800
30...	0620	292	7.6	2.29	7.3	64	20.0	K920
JUL								
09...	1315	298	12.1	2.28	8.2	62	22.0	K840
15...	0630	326	6.0	2.26	7.1	59	23.5	K550
20...	0855	265	8.0	2.21	7.3	52	20.5	K450
29...	0720	298	7.3	2.11	7.3	43	18.5	460
AUG								
05...	0745	297	7.7	2.09	7.3	41	18.0	450
27...	0800	359	6.6	2.01	7.2	35	21.5	210
SEP								
02...	0620	362	6.9	2.01	7.3	35	18.0	K190
10...	0630	391	6.4	2.05	7.3	38	21.0	--
16...	0800	383	8.9	1.91	7.4	28	16.5	220
24...	0630	339	7.6	2.00	7.3	35	14.5	360

< Actual value is known to be less than the value shown.

K Results based on non-ideal colony counts.

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	369	328	347	370	313	350	---	---	---	---	---	---
2	356	316	339	368	317	349	---	---	---	---	---	---
3	368	341	358	367	313	344	---	---	---	---	---	---
4	371	340	360	356	314	341	---	---	---	---	---	---
5	385	337	361	358	315	345	---	---	---	---	---	---
6	373	333	358	365	321	349	---	---	---	---	---	---
7	368	334	355	358	319	346	---	---	---	---	---	---
8	382	332	355	363	320	349	---	---	---	---	---	---
9	366	340	353	370	314	346	---	---	---	---	---	---
10	358	319	343	360	306	336	---	---	---	---	---	---
11	359	325	342	344	299	321	---	---	---	---	---	---
12	353	303	328	336	296	319	---	---	---	---	---	---
13	352	302	329	340	309	330	---	---	---	---	---	---
14	347	309	334	346	314	333	---	---	---	---	---	---
15	343	300	327	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	299	194	265	---	---	---	---	---	---	---	---	---
18	293	218	250	---	---	---	---	---	---	---	---	---
19	344	280	307	357	317	332	---	---	---	---	---	---
20	345	296	324	361	316	340	---	---	---	---	---	---
21	353	302	330	364	293	330	---	---	---	---	---	---
22	357	311	335	---	---	---	---	---	---	---	---	---
23	352	316	334	---	---	---	---	---	---	---	---	---
24	347	319	336	---	---	---	---	---	---	---	---	---
25	351	321	338	---	---	---	---	---	---	---	---	---
26	356	320	338	---	---	---	---	---	---	---	---	---
27	355	317	326	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	366	320	349	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	369	329	354	---	---	---	---	---	---	---	---	---
MONTH	385	194	335	370	293	339	---	---	---	---	---	---
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	322	278	301	388	245	270	278	257	269
2	---	---	---	318	281	303	399	257	311	287	259	275
3	---	---	---	---	---	---	462	277	346	283	253	274
4	---	---	---	---	---	---	478	272	369	291	264	280
5	---	---	---	---	---	---	463	267	350	299	269	289
6	---	---	---	---	---	---	443	288	327	305	262	290
7	---	---	---	---	---	---	301	282	292	305	279	294
8	---	---	---	---	---	---	298	274	285	302	117	225
9	---	---	---	---	---	---	290	267	280	200	120	157
10	---	---	---	307	273	292	290	269	280	222	200	210
11	---	---	---	382	235	263	289	262	279	229	211	221
12	---	---	---	385	245	293	295	275	285	237	221	229
13	---	---	---	---	---	---	298	276	288	269	225	239
14	---	---	---	---	---	---	302	280	291	281	256	271
15	---	---	---	---	---	---	299	277	288	289	266	278
16	---	---	---	325	286	302	301	278	291	286	201	242
17	---	---	---	320	290	308	293	262	280	---	---	---
18	---	---	---	326	291	313	274	246	262	266	242	256
19	---	---	---	308	275	291	274	245	262	268	242	257
20	---	---	---	304	276	294	273	249	262	278	253	266
21	---	---	---	289	243	271	276	250	266	283	258	271
22	---	---	---	289	248	271	276	238	252	292	262	278
23	---	---	---	395	288	333	261	247	253	292	259	278
24	---	---	---	406	292	312	271	250	259	294	265	281
25	---	---	---	403	269	297	269	215	253	297	266	283
26	---	---	---	310	201	284	237	201	218	296	270	286
27	290	263	271	201	129	158	257	222	241	292	263	279
28	305	269	290	---	---	---	275	245	257	306	275	292
29	307	271	292	---	---	---	271	250	261	314	282	299
30	---	---	---	298	234	252	274	253	267	317	280	299
31	---	---	---	365	241	257	---	---	---	298	153	210
MONTH	---	---	---	406	129	284	478	201	281	317	117	263

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	249	190	224	308	267	291	291	168	242	384	314	349
2	268	242	256	300	276	291	313	267	290	364	320	347
3	282	254	267	310	209	287	318	280	306	364	283	341
4	290	263	277	270	215	245	331	281	309	337	283	315
5	281	156	215	294	256	275	331	286	311	---	---	---
6	219	161	193	302	273	290	327	285	313	---	---	---
7	224	205	214	309	279	298	337	295	323	---	---	---
8	231	213	224	314	287	305	347	292	327	335	291	310
9	238	220	229	319	285	303	340	286	320	342	275	307
10	244	222	232	320	289	309	348	298	325	396	337	381
11	296	244	279	320	274	295	349	293	323	356	242	295
12	295	268	286	327	293	312	---	---	---	372	311	339
13	307	270	291	329	296	318	---	---	---	389	332	363
14	307	271	291	333	255	295	---	---	---	399	344	375
15	308	275	296	344	252	319	---	---	---	399	348	380
16	302	283	293	342	262	296	---	---	---	397	349	382
17	304	275	293	338	276	322	---	---	---	404	358	390
18	303	278	295	---	---	---	---	---	---	425	370	406
19	304	226	269	---	---	---	---	---	---	415	360	399
20	246	189	217	330	265	297	---	---	---	414	353	390
21	280	233	252	310	273	295	---	---	---	413	203	377
22	282	252	271	315	278	299	351	306	329	413	331	380
23	291	262	280	319	255	283	355	306	339	336	262	299
24	289	230	265	304	262	284	355	306	338	360	317	341
25	258	215	232	317	264	289	360	314	343	363	270	340
26	---	---	---	312	265	290	373	324	352	270	152	185
27	---	---	---	330	268	294	375	327	356	280	218	243
28	---	---	---	312	271	295	379	332	358	286	224	248
29	301	284	291	319	278	303	361	298	326	314	271	294
30	302	277	291	322	282	309	366	304	331	331	288	314
31	---	---	---	321	166	274	372	331	359	---	---	---
MONTH	308	156	260	344	166	295	379	168	325	425	152	337

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	8.0	7.5	7.7	8.0	7.2	7.5	---	---	---	---	---	---
2	8.1	7.4	7.7	7.7	7.2	7.4	---	---	---	---	---	---
3	8.0	7.5	7.6	7.9	7.1	7.4	---	---	---	---	---	---
4	8.2	7.4	7.7	7.9	7.1	7.4	---	---	---	---	---	---
5	7.9	7.4	7.6	7.9	7.2	7.4	---	---	---	---	---	---
6	7.6	7.4	7.5	7.9	7.2	7.5	---	---	---	---	---	---
7	7.8	7.4	7.6	8.0	7.3	7.5	---	---	---	---	---	---
8	7.8	7.5	7.6	8.0	7.2	7.5	---	---	---	---	---	---
9	7.7	7.4	7.5	8.3	7.3	7.6	---	---	---	---	---	---
10	7.7	7.4	7.5	8.0	7.3	7.5	---	---	---	---	---	---
11	7.6	7.4	7.5	7.6	7.2	7.4	---	---	---	---	---	---
12	7.6	7.4	7.5	8.1	7.3	7.5	---	---	---	---	---	---
13	7.7	7.4	7.5	8.0	7.2	7.5	---	---	---	---	---	---
14	7.7	7.4	7.5	8.2	7.2	7.5	---	---	---	---	---	---
15	7.6	7.4	7.5	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	7.5	7.2	7.4	---	---	---	---	---	---	---	---	---
18	7.6	7.2	7.4	---	---	---	---	---	---	---	---	---
19	7.6	7.4	7.5	7.9	7.3	7.5	---	---	---	---	---	---
20	7.7	7.5	7.6	7.9	7.2	7.4	---	---	---	---	---	---
21	7.7	7.5	7.6	7.9	7.1	7.4	---	---	---	---	---	---
22	7.6	7.4	7.5	---	---	---	---	---	---	---	---	---
23	7.7	7.4	7.5	---	---	---	---	---	---	---	---	---
24	7.8	7.4	7.5	---	---	---	---	---	---	---	---	---
25	7.9	7.3	7.5	---	---	---	---	---	---	---	---	---
26	7.6	7.3	7.4	---	---	---	---	---	---	---	---	---
27	7.6	7.2	7.4	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	7.9	7.3	7.6	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	8.2	7.3	7.6	---	---	---	---	---	---	---	---	---
MONTH	8.2	7.2	7.5	8.3	7.1	7.5	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	15.5	12.5	14.0	13.5	11.0	12.5	---	---	---	---	---	---
2	18.0	14.0	15.5	14.5	12.5	13.5	---	---	---	---	---	---
3	18.5	15.5	16.5	12.5	10.0	11.5	---	---	---	---	---	---
4	19.0	15.5	17.0	10.0	8.0	9.0	---	---	---	---	---	---
5	18.5	16.0	17.5	9.0	6.5	7.5	---	---	---	---	---	---
6	18.0	14.5	16.5	9.0	5.5	7.0	---	---	---	---	---	---
7	15.0	12.0	13.5	9.0	6.0	7.5	---	---	---	---	---	---
8	14.5	10.0	12.0	8.5	7.0	7.5	---	---	---	---	---	---
9	14.5	10.5	12.0	8.0	6.5	7.5	---	---	---	---	---	---
10	15.0	11.0	13.0	8.0	6.5	7.5	---	---	---	---	---	---
11	14.0	13.0	13.5	9.0	7.5	8.0	---	---	---	---	---	---
12	13.5	11.5	12.5	9.0	7.0	8.0	---	---	---	---	---	---
13	13.5	11.5	12.5	10.0	8.0	9.0	---	---	---	---	---	---
14	13.0	10.0	11.5	10.5	7.5	9.0	---	---	---	---	---	---
15	13.0	10.5	12.0	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	11.5	10.5	11.0	---	---	---	---	---	---	---	---	---
18	13.5	10.0	11.5	---	---	---	---	---	---	---	---	---
19	14.5	11.5	13.0	10.0	7.5	8.5	---	---	---	---	---	---
20	12.5	10.0	11.5	12.0	8.0	10.0	---	---	---	---	---	---
21	11.5	8.5	10.0	13.0	11.5	12.0	---	---	---	---	---	---
22	13.0	8.5	10.5	---	---	---	---	---	---	---	---	---
23	14.0	10.5	12.0	---	---	---	---	---	---	---	---	---
24	15.0	12.0	13.5	---	---	---	---	---	---	---	---	---
25	15.5	13.5	14.0	---	---	---	---	---	---	---	---	---
26	15.5	14.0	14.5	---	---	---	---	---	---	---	---	---
27	15.5	14.5	15.0	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	13.0	9.5	11.5	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	13.0	9.5	11.0	---	---	---	---	---	---	---	---	---
MONTH	19.0	8.5	13.2	14.5	5.5	9.1	---	---	---	---	---	---
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	7.0	2.5	4.5	9.0	6.0	8.0	16.0	12.0	14.0
2	---	---	---	8.0	5.0	6.5	8.0	6.0	7.0	18.5	13.5	16.0
3	---	---	---	---	---	---	8.5	4.5	6.5	19.0	15.5	17.5
4	---	---	---	---	---	---	9.0	5.0	7.0	17.0	13.0	14.5
5	---	---	---	7.5	5.5	6.0	10.0	5.5	7.5	13.0	11.5	12.0
6	---	---	---	7.5	6.5	7.0	11.5	6.5	9.0	15.0	10.0	12.5
7	---	---	---	7.0	6.5	6.5	12.0	8.0	10.0	13.0	11.5	12.0
8	---	---	---	10.0	7.0	8.5	13.5	9.0	11.0	12.0	10.0	11.0
9	---	---	---	11.5	8.5	10.0	11.0	9.0	10.0	13.5	10.5	12.0
10	---	---	---	10.0	8.5	9.5	13.5	8.5	11.0	14.5	12.0	13.0
11	---	---	---	10.0	5.5	8.5	12.5	11.0	12.0	16.0	12.0	14.0
12	---	---	---	6.5	3.5	5.0	12.0	10.0	11.0	16.5	12.0	14.5
13	---	---	---	---	---	---	12.0	7.5	10.0	16.5	13.5	15.0
14	---	---	---	---	---	---	13.5	8.5	10.5	19.0	15.0	17.0
15	---	---	---	---	---	---	13.5	9.0	11.0	17.0	15.0	16.0
16	---	---	---	6.5	2.5	4.0	11.0	9.5	10.0	15.0	14.0	14.0
17	---	---	---	6.5	2.5	4.5	12.5	9.0	10.5	---	---	---
18	---	---	---	7.5	4.5	6.0	12.5	10.0	11.0	16.5	14.5	15.5
19	---	---	---	4.5	4.0	4.0	10.0	9.0	9.5	18.5	14.5	16.5
20	---	---	---	6.5	3.0	5.0	11.0	8.5	9.5	18.0	13.5	16.0
21	---	---	---	6.5	3.5	5.0	14.5	10.5	12.0	18.5	13.5	16.0
22	---	---	---	5.0	3.5	4.0	15.5	12.5	14.0	19.5	14.5	17.0
23	---	---	---	6.5	3.0	4.5	17.0	12.5	14.5	20.5	16.0	18.0
24	---	---	---	7.5	3.0	5.0	15.5	13.0	14.0	19.5	16.5	18.0
25	---	---	---	8.5	4.0	6.5	15.0	12.0	13.5	16.5	13.5	14.5
26	---	---	---	8.0	7.0	7.5	13.0	11.0	11.5	13.5	13.0	13.5
27	6.0	4.5	5.0	11.0	7.0	8.5	13.5	10.5	11.5	15.0	12.0	13.5
28	7.5	5.0	6.0	---	---	---	12.5	10.0	11.5	16.5	12.0	14.0
29	7.0	4.0	5.5	---	---	---	14.5	10.5	12.5	17.0	13.0	15.0
30	---	---	---	7.5	7.0	7.0	14.0	11.0	12.5	15.0	13.5	14.0
31	---	---	---	10.5	7.0	8.5	---	---	---	14.5	13.5	14.0
MONTH	---	---	---	11.5	2.5	6.3	17.0	4.5	10.6	20.5	10.0	14.7

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	15.5	13.5	14.5	23.5	20.5	22.0	22.5	19.0	20.5	22.0	18.0	20.0
2	16.5	14.5	15.5	23.5	20.0	21.5	22.0	18.0	20.0	20.5	18.0	19.0
3	18.5	14.5	16.5	21.5	18.0	19.5	22.0	18.5	20.0	21.0	19.5	20.0
4	18.5	15.5	17.0	22.0	18.0	19.5	22.5	19.5	20.5	22.5	19.5	21.0
5	17.5	15.5	16.5	25.5	18.5	21.5	22.0	18.0	19.5	---	---	---
6	18.0	15.5	16.5	24.0	20.0	22.0	22.5	17.5	19.5	---	---	---
7	18.5	15.5	17.0	24.5	18.5	21.5	23.0	17.5	20.0	---	---	---
8	18.5	16.0	17.5	24.5	18.0	21.5	20.5	18.0	19.5	22.0	19.5	20.5
9	18.5	16.5	17.5	27.0	20.5	23.5	23.5	19.5	21.0	23.0	19.5	21.0
10	18.5	15.0	17.0	28.0	21.5	24.5	24.0	20.0	22.0	23.5	21.0	22.0
11	20.0	15.5	17.5	26.5	22.0	24.0	23.0	20.5	22.0	22.5	19.5	21.0
12	21.0	16.5	18.5	23.0	21.5	22.0	---	---	---	20.5	17.0	18.5
13	21.0	17.0	19.0	25.0	21.5	23.0	---	---	---	19.5	15.5	17.5
14	21.0	17.0	19.0	27.0	22.0	24.0	---	---	---	20.0	15.5	17.5
15	22.0	18.0	19.5	26.5	23.0	24.5	---	---	---	20.5	16.0	18.0
16	21.0	18.0	19.5	24.0	22.0	23.0	---	---	---	21.0	16.5	18.5
17	21.5	17.5	19.0	23.5	21.5	22.5	---	---	---	21.5	17.5	19.0
18	20.0	17.0	18.5	---	---	---	---	---	---	21.5	18.0	19.5
19	19.0	17.5	18.0	---	---	---	---	---	---	20.5	18.5	20.0
20	19.0	17.0	18.0	24.5	20.5	23.0	---	---	---	20.0	17.0	18.0
21	19.0	16.5	17.5	25.0	21.0	23.0	---	---	---	22.0	17.0	19.0
22	17.5	15.5	16.5	23.0	21.0	22.0	21.5	17.0	19.0	22.0	19.0	20.0
23	19.5	14.5	17.0	21.0	20.0	20.0	22.5	18.0	20.0	20.5	16.5	18.5
24	18.5	17.0	18.0	20.0	18.5	19.5	23.0	19.0	20.5	17.0	14.0	15.5
25	19.5	16.5	18.0	20.0	18.0	19.0	23.0	19.5	21.0	14.5	14.0	14.5
26	---	---	---	19.5	18.5	19.0	25.0	21.0	22.5	15.0	14.0	14.5
27	---	---	---	21.0	19.0	20.0	25.0	21.5	23.0	17.0	15.0	15.5
28	---	---	---	22.0	18.5	20.5	24.5	21.5	23.0	17.0	15.5	16.5
29	22.5	19.0	20.5	23.5	18.0	20.5	22.5	19.5	21.0	17.5	14.5	16.0
30	23.0	20.0	21.5	23.0	19.5	21.0	22.0	17.0	19.5	14.5	12.5	13.5
31	---	---	---	22.5	20.5	21.0	23.0	19.0	20.5	---	---	---
MONTH	23.0	13.5	17.8	28.0	18.0	21.7	25.0	17.0	20.7	23.5	12.5	18.3

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	11.1	8.5	9.5	12.7	8.0	9.6	---	---	---	---	---	---
2	11.2	7.6	9.1	11.0	7.7	8.8	---	---	---	---	---	---
3	10.8	7.3	8.4	12.4	7.9	9.6	---	---	---	---	---	---
4	11.3	7.3	8.6	13.2	8.7	10.4	---	---	---	---	---	---
5	9.6	7.1	7.9	13.7	9.6	11.1	---	---	---	---	---	---
6	8.4	6.7	7.5	13.8	9.9	11.5	---	---	---	---	---	---
7	10.6	8.0	9.2	14.5	10.2	11.7	---	---	---	---	---	---
8	10.7	8.7	9.4	14.5	10.0	11.4	---	---	---	---	---	---
9	10.5	8.6	9.3	15.2	10.1	11.9	---	---	---	---	---	---
10	10.0	7.9	8.9	14.0	9.8	11.3	---	---	---	---	---	---
11	8.6	7.6	8.0	12.1	9.4	10.4	---	---	---	---	---	---
12	9.6	7.6	8.4	14.6	9.8	11.5	---	---	---	---	---	---
13	10.2	9.3	9.9	14.0	9.5	11.0	---	---	---	---	---	---
14	11.4	9.3	10.1	14.8	9.3	11.1	---	---	---	---	---	---
15	10.5	9.1	9.7	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	10.5	9.9	10.1	---	---	---	---	---	---	---	---	---
18	11.8	10.4	11.0	---	---	---	---	---	---	---	---	---
19	11.5	10.9	11.2	13.7	9.7	12.4	---	---	---	---	---	---
20	11.8	11.1	11.6	14.1	8.5	10.7	---	---	---	---	---	---
21	12.2	9.4	11.4	12.3	8.0	9.5	---	---	---	---	---	---
22	11.1	8.9	9.9	---	---	---	---	---	---	---	---	---
23	11.0	8.5	9.5	---	---	---	---	---	---	---	---	---
24	11.0	8.2	9.1	---	---	---	---	---	---	---	---	---
25	11.0	7.9	8.9	---	---	---	---	---	---	---	---	---
26	10.0	7.7	8.5	---	---	---	---	---	---	---	---	---
27	10.2	7.6	9.1	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	12.1	8.1	10.2	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	13.4	8.5	10.3	---	---	---	---	---	---	---	---	---
MONTH	13.4	6.7	9.5	15.2	7.7	10.8	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	14.8	11.3	12.9	11.8	10.0	10.9	15.4	8.5	11.6
2	---	---	---	14.8	10.9	12.6	12.2	10.3	11.3	16.1	7.3	11.1
3	---	---	---	---	---	---	12.7	10.8	11.7	14.9	7.0	10.1
4	---	---	---	---	---	---	12.7	10.8	11.7	13.6	7.3	10.4
5	---	---	---	14.4	10.8	12.6	12.9	10.8	11.7	14.5	9.1	11.6
6	---	---	---	12.7	10.3	11.3	13.2	10.2	11.6	16.6	10.1	12.8
7	---	---	---	11.3	10.5	10.9	13.6	9.8	11.4	16.9	9.8	12.9
8	---	---	---	12.0	9.6	10.9	14.1	9.7	11.6	12.1	9.5	11.2
9	---	---	---	12.2	9.4	10.5	14.9	9.8	12.1	11.6	10.8	11.0
10	---	---	---	11.8	9.2	10.1	16.2	10.5	13.0	12.1	10.2	11.1
11	---	---	---	11.5	9.2	10.4	14.8	10.1	11.6	11.9	9.8	10.8
12	---	---	---	13.5	11.1	12.3	13.4	9.4	11.0	11.7	9.3	10.5
13	---	---	---	---	---	---	14.2	9.1	11.5	11.5	8.8	10.2
14	---	---	---	---	---	---	14.8	9.3	11.6	12.1	8.4	9.9
15	---	---	---	---	---	---	15.4	9.1	11.8	12.0	8.3	9.9
16	---	---	---	14.4	12.1	13.5	12.6	9.0	10.6	10.7	8.8	9.8
17	---	---	---	14.5	11.6	13.0	15.8	8.7	11.9	---	---	---
18	---	---	---	14.5	11.5	13.1	13.4	8.7	10.9	11.8	8.9	10.0
19	---	---	---	13.4	11.9	12.6	14.0	10.3	11.7	12.4	8.5	10.2
20	---	---	---	14.8	12.2	13.5	14.7	9.9	11.8	12.8	8.5	10.3
21	---	---	---	14.9	12.2	13.5	14.5	8.5	11.0	13.2	8.3	10.4
22	---	---	---	14.9	12.3	13.5	13.0	8.3	9.9	13.3	7.8	10.0
23	---	---	---	15.2	12.5	13.8	14.2	8.0	10.6	13.0	7.6	9.6
24	---	---	---	15.6	12.4	13.9	13.1	7.9	9.9	12.9	7.5	9.4
25	---	---	---	15.8	11.9	13.8	13.6	8.3	10.4	12.2	8.1	9.9
26	---	---	---	14.6	11.6	12.7	12.0	8.5	10.3	12.1	9.3	10.5
27	13.5	10.8	12.6	11.8	8.0	9.4	13.8	9.4	11.3	12.8	9.5	10.9
28	13.6	10.5	11.8	---	---	---	14.5	9.6	11.7	13.1	9.4	11.0
29	13.9	10.3	12.0	---	---	---	15.2	9.2	11.9	13.5	9.2	10.9
30	---	---	---	11.5	10.4	11.3	15.6	8.9	11.5	12.1	9.1	10.4
31	---	---	---	11.3	10.0	10.7	---	---	---	10.1	9.5	9.9
MONTH	---	---	---	15.8	8.0	12.2	16.2	7.9	11.3	16.9	7.0	10.6
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	10.8	9.3	10.1	12.6	7.2	9.1	9.8	6.7	7.9	13.4	6.4	8.9
2	11.0	9.0	9.9	12.9	7.2	9.3	11.2	7.2	8.7	13.6	6.8	9.0
3	11.3	8.4	9.8	9.8	7.2	8.4	12.3	7.2	9.1	11.0	6.7	8.2
4	11.0	8.3	9.4	10.4	6.2	8.8	13.0	7.0	9.1	11.4	6.5	8.4
5	9.1	8.3	8.7	11.7	7.3	9.1	13.9	7.1	9.7	---	---	---
6	9.5	8.6	9.1	11.7	7.2	8.7	15.1	7.3	10.0	---	---	---
7	10.3	8.6	9.5	12.6	7.6	9.4	15.7	7.2	10.1	---	---	---
8	10.3	8.8	9.5	13.1	7.5	9.4	14.7	7.1	10.0	10.6	6.9	8.7
9	10.6	8.8	9.5	13.0	7.1	9.3	16.4	6.8	10.3	10.6	6.6	8.1
10	10.8	8.7	9.7	13.6	6.9	9.1	15.9	6.3	10.0	10.6	6.4	7.7
11	11.5	8.4	9.7	12.5	6.6	8.8	15.1	6.1	10.4	10.0	6.2	7.6
12	11.9	8.3	9.7	11.3	6.4	8.4	---	---	---	11.1	6.9	8.4
13	12.2	8.1	9.6	13.0	6.4	9.0	---	---	---	12.4	7.3	9.0
14	12.8	7.9	9.8	13.2	5.9	8.5	---	---	---	12.3	7.2	8.9
15	13.1	7.7	9.7	13.5	5.8	8.1	---	---	---	12.8	7.0	9.0
16	13.4	7.7	9.7	13.6	5.9	8.8	---	---	---	13.9	6.6	9.5
17	12.2	7.5	9.3	12.5	6.2	9.2	---	---	---	13.9	6.3	9.4
18	11.5	7.4	9.1	---	---	---	---	---	---	13.8	6.4	10.5
19	8.5	7.2	7.9	---	---	---	---	---	---	13.2	7.0	9.8
20	9.5	6.2	8.4	11.2	6.9	8.8	---	---	---	13.9	6.9	9.8
21	9.7	7.5	8.6	12.1	6.7	8.8	---	---	---	13.5	7.5	9.7
22	11.2	8.3	9.6	11.6	6.7	8.8	13.8	6.6	9.6	12.7	6.4	8.6
23	12.1	8.3	9.8	10.2	7.3	8.4	14.6	6.3	9.2	10.9	6.1	7.9
24	11.0	8.2	9.1	9.8	7.9	8.7	15.4	6.4	9.5	11.7	7.3	8.9
25	10.8	8.4	9.8	11.5	7.8	9.4	15.2	6.4	9.7	10.4	7.7	9.1
26	---	---	---	10.0	7.5	8.6	15.5	6.2	9.4	9.2	8.2	8.9
27	---	---	---	10.9	7.2	8.7	14.8	6.1	9.4	9.0	8.2	8.7
28	---	---	---	11.5	7.1	8.7	13.5	6.2	8.8	9.5	8.2	8.7
29	12.6	7.7	10.9	12.3	6.7	8.9	12.0	6.4	8.6	9.6	8.2	8.7
30	12.8	7.4	9.4	12.8	6.6	8.8	13.5	6.7	9.0	10.2	8.4	9.2
31	---	---	---	12.5	6.3	8.0	13.6	6.3	8.8	---	---	---
MONTH	13.4	6.2	9.5	13.6	5.8	8.8	16.4	6.1	9.4	13.9	6.1	8.9

CHRISTINA RIVER BASIN

01480887 VALLEY CREEK AT RAVINE ROAD NEAR DOWNINGTOWN, PA

LOCATION.--Lat 39°59'55", long 75°39'52", Chester County, Hydrologic Unit 02040205, on left bank, 20 ft downstream from bridge on Ravine Road, 2.5 mi upstream from mouth, and 2.5 mi east of Downingtown.

DRAINAGE AREA.--14.5 mi².

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Some diversion of flow by quarry upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	3.5	8.4	6.9	5.5	e6.3	e19	9.1	11	5.3	12	2.1
2	4.2	2.5	20	6.3	5.4	e6.2	e17	8.7	8.0	4.9	5.8	2.1
3	4.1	2.2	83	5.7	5.3	e6.1	14	8.1	7.1	18	4.1	6.4
4	3.9	2.7	24	9.8	5.6	e6.0	13	e7.9	7.1	13	4.1	6.0
5	4.6	4.4	12	7.9	6.3	e5.7	13	e7.8	70	6.4	3.8	2.4
6	6.6	3.9	9.5	6.1	6.3	e5.7	11	e7.7	21	4.6	2.6	8.4
7	4.3	3.7	9.3	5.4	5.3	e14	11	e7.6	13	4.2	2.0	15
8	4.2	2.9	8.7	6.6	4.8	e12	10	e90	11	4.0	3.4	5.8
9	4.4	2.1	10	7.6	4.6	e8.6	9.6	e80	9.2	6.1	3.4	3.8
10	4.5	2.8	31	5.7	4.8	e8.0	9.6	e28	8.3	4.3	2.6	2.9
11	5.7	7.7	10	4.6	5.7	e19	e10	e27	7.9	7.0	9.4	8.8
12	7.1	4.2	8.6	4.4	5.8	e10	e9.9	e22	7.1	4.7	5.5	5.0
13	5.7	4.1	9.3	5.1	6.5	e7.4	e9.8	e17	7.1	3.2	3.5	5.0
14	4.6	2.7	10	20	6.8	e6.3	e9.4	e11	7.1	4.4	5.3	3.1
15	4.5	1.9	8.6	10	23	e5.9	e9.2	e10	5.7	3.0	6.5	1.8
16	6.0	1.5	8.4	8.5	22	e5.7	e8.9	21	5.2	2.7	6.8	1.7
17	29	1.5	7.9	7.5	9.8	e5.8	15	11	4.5	3.6	18	2.3
18	7.4	1.8	7.6	6.1	10	e5.9	12	8.8	4.7	11	8.4	2.4
19	3.9	2.4	7.0	5.6	e11	e11	9.4	8.0	19	5.0	4.8	4.0
20	3.2	2.1	6.4	5.9	e10	e9.0	8.8	7.5	12	3.8	3.3	5.0
21	3.7	2.3	5.2	5.5	e9.5	e9.0	9.5	8.6	7.3	2.9	2.7	2.9
22	4.3	48	5.0	5.6	e9.0	e7.6	17	8.3	5.6	2.3	3.6	2.8
23	4.0	19	5.0	19	e8.6	e7.4	10	8.6	5.5	6.0	3.2	11
24	4.0	7.8	4.8	18	e9.0	e7.2	10	8.8	7.2	2.8	2.0	3.9
25	3.1	5.9	4.4	7.7	e12	e7.0	14	9.2	7.9	3.7	2.0	10
26	2.6	6.1	4.4	7.1	e9.0	e20	22	7.7	6.0	3.6	2.7	84
27	2.5	5.8	4.3	6.8	e8.0	e200	11	7.5	5.6	3.4	3.5	18
28	3.6	5.9	4.2	7.5	e7.3	e30	10	6.4	5.2	3.2	3.1	8.9
29	5.3	5.7	14	8.0	e7.0	e30	10	6.0	4.1	4.7	4.9	6.4
30	5.5	5.8	8.8	6.3	---	e26	9.8	8.0	3.9	5.1	3.9	5.8
31	4.5	---	7.3	5.7	---	e22	---	43	---	21	2.6	---
TOTAL	165.2	172.9	367.1	242.9	243.9	530.8	352.9	520.3	304.3	177.9	149.5	247.7
MEAN	5.33	5.76	11.8	7.84	8.41	17.1	11.8	16.8	10.1	5.74	4.82	8.26
MAX	29	48	83	20	23	200	22	90	70	21	18	84
MIN	2.5	1.5	4.2	4.4	4.6	5.7	8.8	6.0	3.9	2.3	2.0	1.7
CFSM	.37	.40	.82	.54	.58	1.18	.81	1.16	.70	.40	.33	.57
IN.	.42	.44	.94	.62	.63	1.36	.91	1.33	.78	.46	.38	.64

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1992, BY WATER YEAR (WY)

	1990	1991	1992	1990	1991	1992	1990	1991	1992	1990	1991	1992
MEAN	10.6	9.44	12.6	19.3	12.2	16.2	16.4	19.0	15.7	8.90	10.2	7.65
MAX	19.5	14.8	18.0	25.1	17.2	20.2	19.9	27.0	24.8	10.6	13.7	8.26
(WY)	1990	1990	1991	1991	1990	1991	1991	1990	1990	1991	1990	1992
MIN	5.33	5.76	8.09	7.84	8.41	11.2	11.8	13.3	10.1	5.74	4.82	7.19
(WY)	1992	1992	1990	1992	1992	1990	1992	1991	1992	1992	1992	1991

SUMMARY STATISTICS

	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1990 - 1992
ANNUAL TOTAL	4709.0	3475.4	
ANNUAL MEAN	12.9	9.50	13.2
HIGHEST ANNUAL MEAN			16.4
LOWEST ANNUAL MEAN			9.50
HIGHEST DAILY MEAN	168	200	247
LOWEST DAILY MEAN	1.5	1.5	1.5
ANNUAL SEVEN-DAY MINIMUM	1.9	1.9	1.9
INSTANTANEOUS PEAK FLOW		271	764
INSTANTANEOUS PEAK STAGE		5.51	6.88
ANNUAL RUNOFF (CFSM)	.89	.65	.91
ANNUAL RUNOFF (INCHES)	12.08	8.92	12.37
10 PERCENT EXCEEDS	22	17	22
50 PERCENT EXCEEDS	8.8	6.4	9.2
90 PERCENT EXCEEDS	3.1	2.9	4.0

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA

LOCATION.--Lat 39°52'11", long 75°35'37", Delaware County, Hydrologic Unit 02040205, on left bank 27 ft upstream from Penn Central Railroad bridge at Chadds Ford, 150 ft upstream from Harvey Run, and 1,200 ft downstream from highway bridge on U.S. Highway 1.

DRAINAGE AREA.--287 mi², includes that of Harvey Run.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to December 1953, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1917-18 (M), 1919-20, 1922-31 (M), 1932-33, 1934 (M), 1936, 1938 (P), 1939 (M), 1942, 1944-46 (M).

GAGE.--Water-stage recorder. Datum of gage is 150.45 ft above sea level. Prior to May 21, 1927, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) about 17 mi upstream. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	115	157	227	184	195	384	249	561	198	526	113
2	128	115	204	198	163	192	e348	242	312	203	180	108
3	127	115	1310	183	173	184	e295	231	271	195	152	111
4	124	115	952	197	168	183	285	220	245	352	146	141
5	120	112	356	234	167	183	272	209	741	224	144	120
6	121	106	265	207	161	180	258	208	926	199	133	128
7	126	110	239	185	158	353	252	204	584	183	129	247
8	119	111	221	177	166	483	245	760	429	175	124	174
9	112	109	223	180	155	269	241	1650	366	183	125	145
10	116	109	702	211	140	e254	245	568	329	175	123	130
11	118	130	387	198	158	583	252	477	259	192	174	194
12	138	141	261	186	150	389	246	404	238	166	299	146
13	137	135	244	176	142	270	234	361	225	163	172	124
14	126	128	272	287	161	240	224	286	221	173	171	115
15	122	118	264	416	197	231	222	260	220	169	161	109
16	128	118	227	231	565	215	226	406	217	158	180	104
17	256	116	209	177	283	208	239	391	213	155	343	101
18	403	115	204	200	234	213	295	304	206	288	239	98
19	180	113	179	162	251	394	281	319	495	193	186	98
20	140	114	182	178	253	389	252	266	612	383	161	98
21	130	115	222	178	224	353	244	248	349	151	145	94
22	122	359	232	172	204	291	332	238	250	136	134	97
23	121	991	226	207	239	305	323	225	230	178	132	162
24	121	275	232	534	247	297	264	225	256	177	125	116
25	119	201	220	265	e254	271	280	231	358	162	120	112
26	121	174	211	231	338	324	578	232	260	153	121	994
27	120	163	230	188	306	2150	380	256	228	150	118	361
28	117	150	207	205	233	739	309	231	216	146	132	344
29	115	152	319	193	213	535	274	215	203	129	164	201
30	115	147	363	184	---	460	256	209	195	121	143	159
31	115	---	257	188	---	438	---	874	---	159	122	---
TOTAL	4283	5072	9777	6755	6287	11771	8536	11199	10215	5789	5324	5244
MEAN	138	169	315	218	217	380	285	361	340	187	172	175
MAX	403	991	1310	534	565	2150	578	1650	926	383	526	994
MIN	112	106	157	162	140	180	222	204	195	121	118	94
CFSM	.48	.59	1.10	.76	.76	1.32	.99	1.26	1.19	.65	.60	.61
IN.	.56	.66	1.27	.88	.81	1.53	1.11	1.45	1.32	.75	.69	.68
MEAN†	135	171	301	217	218	400	286	362	336	187	170	177
CFSM†	.47	.60	1.05	.76	.76	1.39	1.00	1.26	1.17	.65	.59	.62
IN.†	.54	.66	1.21	.87	.82	1.61	1.11	1.45	1.31	.75	.68	.69

† Adjusted for change in contents of Marsh Creek Reservoir.

e Estimated.

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1992, BY WATER YEAR (WY) (SINCE REGULATION)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	266	323	442	542	556	565	584	548	411	378	246	269
MAX	832	693	1125	1664	1308	1227	1509	1097	833	1153	456	905
(WY)	1980	1980	1984	1979	1979	1978	1983	1989	1975	1975	1978	1979
MIN	115	136	130	106	217	195	200	262	154	149	126	93.2
(WY)	1987	1982	1981	1981	1992	1981	1985	1985	1985	1977	1980	1980

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1974 - 1992

ANNUAL TOTAL	116080		90252									
ANNUAL MEAN	318	‡316	247	‡247					427	‡428		
HIGHEST ANNUAL MEAN									714	‡718	1984	
LOWEST ANNUAL MEAN									199	‡200	1981	
HIGHEST DAILY MEAN	2030	Jan 21	2150	Mar 27					10600	Jan 26	1978	
LOWEST DAILY MEAN	92	Sep 13	94	Sep 21					84	Sep 13	1980	
ANNUAL SEVEN-DAY MINIMUM	102	Sep 7	99	Sep 16					88	Sep 8	1980	
INSTANTANEOUS PEAK FLOW			3210	Mar 27					16400	Jan 29	1979	
INSTANTANEOUS PEAK STAGE			6.73	Mar 27					14.35	Jan 29	1979	
INSTANTANEOUS LOW FLOW			94	Sep 20,21,22					8.4	Sep 13	1980	
ANNUAL RUNOFF (CFSM)	1.11	‡ 1.10		.56	‡.86				1.49	‡ 1.49		
ANNUAL RUNOFF (INCHES)	15.05	‡14.97		11.69	‡11.69				20.21	‡20.25		
10 PERCENT EXCEEDS	624		388						787			
50 PERCENT EXCEEDS	240		204						304			
90 PERCENT EXCEEDS	116		118						132			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1953, 1963 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	219	301	348	444	570	605	530	435	364	309	278	230
MAX	666	625	827	1020	1130	1366	1043	946	1144	802	1089	1050
(WY)	1972	1972	1973	1936	1971	1920	1973	1952	1972	1919	1933	1971
MIN	67.7	98.3	114	145	214	247	226	175	149	91.1	82.1	59.4
(WY)	1964	1942	1966	1966	1934	1931	1963	1926	1963	1963	1930	1932

SUMMARY STATISTICS

WATER YEARS 1911 - 1953
1963 - 1973

ANNUAL TOTAL												
ANNUAL MEAN	385			1928								
HIGHEST ANNUAL MEAN	625			1932								
LOWEST ANNUAL MEAN	218			Aug 24	1933							
HIGHEST DAILY MEAN	9590			Sep 12	1966							
LOWEST DAILY MEAN	42			Sep 7	1966							
ANNUAL SEVEN-DAY MINIMUM	45			Jun 22	1972							
INSTANTANEOUS PEAK FLOW	a23800			Jun 22	1972							
INSTANTANEOUS PEAK STAGE	16.56			Oct 2	1942							
INSTANTANEOUS LOW FLOW	4.9											
ANNUAL RUNOFF (CFSM)	1.34											
ANNUAL RUNOFF (INSHES)	18.23											
10 PERCENT EXCEEDS	700											
50 PERCENT EXCEEDS	274											
90 PERCENT EXCEEDS	118											

‡ Adjusted for change in contents of Marsh Creek Reservoir.

a From rating curve extended above 9,000 ft³/s, on basis of area-velocity study.

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1963 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to current year.

pH: October 1965 to September 1966, December 1971 to current year.

WATER TEMPERATURE: October 1964 to current year.

DISSOLVED OXYGEN: October 1971 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1963 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1971. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Subsequent to water year 1981, station not operated during winter. Other interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 556 microsiemens, June 16, 1991; minimum, 42 microsiemens, Nov. 26, 1979.

pH: Maximum, 9.8, Apr. 9, 1975; minimum, 6.1, Feb. 22, 1976.

WATER TEMPERATURE: Maximum, 31.0°C, July 18, 19, 1977, Aug. 15, 1988; minimum, 0.0°C on many

days during winter.

DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Dec. 5, 1976; minimum, 3.0 mg/L, June 21, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	GAGE HEIGHT (FEET) (00065)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 1991								
01...	1445	323	10.6	1.36	7.4	124	16.5	260
07...	1440	318	10.9	1.35	7.5	121	16.5	250
14...	1450	308	12.7	1.34	7.9	118	13.5	K81
21...	1500	300	11.8	1.38	7.1	121	12.0	K1800
28...	1445	312	11.5	1.35	7.5	111	17.0	K80
NOV								
04...	1500	320	13.7	1.34	8.0	108	10.0	K70
12...	1400	297	11.9	1.35	8.0	111	8.0	K90
18...	1500	301	14.5	1.35	8.5	111	7.5	K45
25...	1500	321	10.6	1.55	7.0	187	10.0	--
MAR 1992								
03...	1500	281	13.9	1.54	8.5	184	8.0	K9
09...	1454	250	12.3	1.70	7.8	243	12.5	K81
18...	0845	274	12.7	1.61	7.5	209	4.5	K36
24...	0900	326	12.3	1.84	7.5	304	4.0	K63
APR								
01...	1515	265	12.2	2.02	7.4	381	10.0	K54
06...	1510	271	14.7	1.70	8.5	239	10.5	--
13...	1455	267	14.6	1.66	8.8	228	13.0	K36
21...	1430	265	12.1	1.69	8.0	239	15.0	K99
29...	1420	262	12.4	1.78	8.0	277	14.5	K36
MAY								
04...	1150	273	9.4	1.65	7.6	224	19.0	K45
11...	1455	227	10.6	2.16	7.4	460	16.0	K690
19...	1515	251	10.0	1.88	7.5	323	19.5	290
26...	1150	271	9.7	1.68	7.3	236	15.5	K190
JUN								
02...	1440	226	12.4	1.83	7.3	299	18.0	4200
09...	1500	241	8.4	1.97	7.4	366	22.0	--
16...	1420	285	10.4	1.63	8.5	217	24.0	320
23...	1500	263	10.2	1.68	7.7	232	19.5	380
JUL								
02...	1205	284	8.2	1.61	7.5	198	23.5	570
07...	1445	280	9.3	1.59	7.5	187	24.0	K130
14...	1105	284	7.3	1.61	7.3	187	26.5	300
20...	1134	194	8.2	1.75	6.9	243	23.0	K11000
27...	1525	283	8.9	1.52	7.5	153	22.5	360
AUG								
05...	1530	287	10.0	1.42	8.0	142	24.0	K130
19...	1510	278	8.6	1.50	7.5	169	23.0	--
24...	1510	309	10.3	1.36	8.1	124	24.0	K120
SEP								
01...	1430	325	10.1	1.32	7.8	111	23.0	K64
09...	1350	287	8.3	1.45	7.4	153	24.0	K140
14...	1454	318	9.7	1.36	7.5	124	20.5	K140
21...	1450	342	9.9	1.27	7.6	97	20.0	K130
29...	1455	262	9.0	1.56	7.3	191	18.0	K650

K Results based on non-ideal colony counts.

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	305	292	297	282	275	279	268	264	266	---	---	---
2	298	292	295	287	276	282	273	262	265	---	---	---
3	306	293	296	284	275	280	285	263	277	---	---	---
4	306	298	301	---	---	---	---	---	---	---	---	---
5	312	301	305	287	276	281	---	---	---	---	---	---
6	309	297	303	290	278	284	---	---	---	---	---	---
7	311	302	304	301	278	286	---	---	---	---	---	---
8	309	294	300	289	280	285	---	---	---	---	---	---
9	314	300	305	285	277	280	---	---	---	---	---	---
10	324	291	305	300	260	272	---	---	---	---	---	---
11	296	281	288	---	---	---	---	---	---	---	---	---
12	306	292	297	---	---	---	---	---	---	---	---	---
13	320	288	301	---	---	---	---	---	---	---	---	---
14	---	---	---	254	242	249	---	---	---	---	---	---
15	---	---	---	263	250	255	---	---	---	---	---	---
16	---	---	---	266	254	260	---	---	---	---	---	---
17	---	---	---	266	254	260	---	---	---	---	---	---
18	---	---	---	260	250	255	---	---	---	---	---	---
19	---	---	---	265	254	260	---	---	---	---	---	---
20	---	---	---	267	257	261	---	---	---	---	---	---
21	---	---	---	266	260	263	---	---	---	---	---	---
22	---	---	---	266	261	264	---	---	---	---	---	---
23	267	260	263	269	258	263	---	---	---	---	---	---
24	---	---	218	257	244	252	---	---	---	---	---	---
25	232	202	217	247	240	244	---	---	---	---	---	---
26	254	233	245	257	243	250	---	---	---	---	---	---
27	262	253	258	267	253	258	---	---	---	---	---	---
28	---	---	---	269	260	265	---	---	---	---	---	---
29	---	---	---	270	263	267	---	---	---	---	---	---
30	---	---	---	269	265	267	---	---	---	---	---	---
31	284	276	279	---	---	---	---	---	---	---	---	---
MONTH	324	202	283	301	240	266	---	---	---	---	---	---
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	260	249	254	224	218	221	252	245	248
2	---	---	---	268	248	253	229	224	227	252	246	249
3	---	---	---	267	235	252	229	225	227	258	249	253
4	---	---	---	---	---	---	238	229	233	255	245	251
5	---	---	---	220	202	207	242	238	240	---	---	---
6	---	---	---	240	222	233	243	231	239	260	220	242
7	---	---	---	242	224	234	241	232	236	224	218	221
8	---	---	---	237	224	231	240	231	235	239	223	232
9	---	---	---	247	240	244	240	232	237	---	---	---
10	---	---	---	256	243	248	245	240	242	251	246	249
11	---	---	---	251	244	249	245	240	243	257	248	250
12	---	---	---	253	245	249	247	237	243	262	252	257
13	---	---	---	258	249	253	251	241	246	261	249	255
14	---	---	---	256	242	249	236	218	229	253	245	250
15	---	---	---	347	244	286	224	217	220	258	246	251
16	---	---	---	277	247	265	224	210	215	261	249	254
17	---	---	---	251	245	247	233	216	226	267	251	256
18	---	---	---	261	231	241	236	232	234	272	256	262
19	---	---	---	---	---	---	238	233	235	271	251	261
20	---	---	---	234	219	228	243	237	241	274	260	266
21	---	---	---	241	236	238	245	179	223	281	262	269
22	---	---	---	247	241	245	198	168	180	---	---	---
23	---	---	---	251	186	226	224	197	211	291	263	278
24	---	---	---	205	178	187	232	214	226	---	---	---
25	---	---	---	223	206	215	223	208	214	---	---	---
26	256	249	251	231	224	227	239	217	227	---	---	---
27	258	248	253	233	230	232	239	235	237	---	---	---
28	258	251	254	231	226	228	242	236	239	---	---	---
29	---	---	---	232	229	231	245	239	242	---	---	---
30	---	---	---	231	218	226	248	240	243	300	277	284
31	---	---	---	219	215	217	---	---	---	299	269	285
MONTH	---	---	---	347	178	238	251	168	230	300	218	256

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	204	160	180	290	281	286	283	181	207	335	299	315
2	232	204	221	289	279	284	256	202	231	327	314	321
3	247	232	241	301	280	284	273	256	261	339	317	324
4	261	247	254	282	244	264	287	273	281	350	318	330
5	262	185	236	257	245	252	293	281	286	333	308	315
6	201	176	185	278	254	267	290	285	287	342	290	316
7	218	198	209	286	277	280	295	288	291	296	274	286
8	234	218	231	287	282	285	302	288	294	276	271	273
9	241	233	239	293	281	286	305	292	297	297	276	285
10	246	238	243	293	284	289	321	293	303	375	296	304
11	260	243	249	291	284	287	318	230	301	322	298	310
12	270	260	266	293	279	283	283	230	272	308	286	293
13	271	265	268	296	292	294	270	238	247	296	272	281
14	277	264	271	295	283	289	280	257	269	319	296	313
15	279	270	275	313	283	288	279	268	274	328	317	324
16	---	---	---	297	282	286	287	277	281	344	324	328
17	274	266	271	299	282	289	290	205	242	332	324	328
18	281	265	272	295	215	257	273	239	260	330	322	326
19	291	177	250	278	252	265	281	273	278	339	326	330
20	248	178	225	273	207	241	287	277	281	342	334	339
21	224	206	215	271	262	266	299	287	295	349	333	339
22	250	224	239	279	263	268	308	299	301	402	339	349
23	263	249	256	302	271	278	314	305	309	352	334	345
24	273	253	265	278	263	270	316	306	312	334	314	320
25	260	237	251	276	264	270	317	307	312	344	285	327
26	255	229	244	284	271	275	323	307	312	296	171	219
27	---	---	---	284	277	281	321	315	320	234	182	212
28	---	---	---	289	280	283	335	317	323	255	234	248
29	---	---	---	289	280	284	329	298	317	267	241	256
30	288	266	276	289	280	285	312	274	298	308	267	287
31	---	---	---	304	272	288	299	274	286	---	---	---
MONTH	291	160	244	313	207	278	335	181	285	402	171	305

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	7.6	7.4	7.4	7.9	7.4	7.6	7.1	7.0	7.0	---	---	---
2	7.7	7.4	7.5	8.0	7.4	7.6	7.2	7.0	7.0	---	---	---
3	7.7	7.3	7.5	8.1	7.4	7.6	7.2	6.9	7.0	---	---	---
4	7.8	7.3	7.5	8.3	7.4	7.6	7.0	7.0	7.0	---	---	---
5	7.7	7.2	7.4	8.2	7.4	7.7	---	---	---	---	---	---
6	7.4	7.3	7.4	8.4	7.5	7.8	---	---	---	---	---	---
7	7.6	7.3	7.4	8.3	7.5	7.8	---	---	---	---	---	---
8	7.8	7.4	7.6	8.2	7.5	7.7	---	---	---	---	---	---
9	7.9	7.5	7.6	8.2	7.4	7.6	---	---	---	---	---	---
10	8.0	7.4	7.6	8.0	7.4	7.6	---	---	---	---	---	---
11	7.6	7.4	7.5	7.9	7.5	7.7	---	---	---	---	---	---
12	7.8	7.3	7.5	8.2	7.5	7.7	---	---	---	---	---	---
13	7.9	7.4	7.6	8.3	7.5	7.8	---	---	---	---	---	---
14	8.0	7.5	7.7	8.4	7.5	7.8	---	---	---	---	---	---
15	7.7	7.4	7.6	8.4	7.5	7.8	---	---	---	---	---	---
16	7.9	7.4	7.5	8.3	7.4	7.7	---	---	---	---	---	---
17	7.6	7.2	7.4	8.5	7.5	7.9	---	---	---	---	---	---
18	7.3	7.1	7.2	8.6	7.6	8.0	---	---	---	---	---	---
19	7.3	7.1	7.1	8.6	7.6	8.0	---	---	---	---	---	---
20	7.3	7.1	7.2	8.6	7.5	7.9	---	---	---	---	---	---
21	7.3	7.1	7.2	8.2	7.4	7.7	---	---	---	---	---	---
22	7.4	7.2	7.3	7.4	7.0	7.2	---	---	---	---	---	---
23	7.5	7.3	7.3	7.0	6.5	6.8	---	---	---	---	---	---
24	7.5	7.3	7.3	6.8	6.7	6.8	---	---	---	---	---	---
25	7.6	7.2	7.4	7.0	6.7	6.9	---	---	---	---	---	---
26	7.5	7.2	7.3	7.1	7.0	7.1	---	---	---	---	---	---
27	7.6	7.2	7.3	7.2	7.1	7.2	---	---	---	---	---	---
28	7.6	7.2	7.3	7.2	7.1	7.1	---	---	---	---	---	---
29	7.7	7.3	7.4	7.1	7.0	7.1	---	---	---	---	---	---
30	7.9	7.4	7.6	7.1	7.0	7.1	---	---	---	---	---	---
31	8.1	7.5	7.6	---	---	---	---	---	---	---	---	---
MONTH	8.1	7.1	7.4	8.6	6.5	7.5	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	17.5	16.0	16.5	26.5	24.0	25.0	25.0	22.5	23.5	23.0	21.0	22.0
2	19.0	17.0	18.0	25.5	24.0	24.5	24.5	22.0	23.5	21.5	20.0	21.0
3	20.5	17.5	19.0	24.5	21.0	22.5	25.0	22.5	23.5	22.0	20.5	21.0
4	21.5	19.5	20.5	22.5	20.0	21.0	25.5	23.5	24.5	24.0	21.5	22.5
5	20.5	18.5	19.5	24.0	21.0	22.5	25.0	22.5	23.5	23.5	22.5	23.0
6	20.0	18.0	18.5	24.5	23.0	23.5	25.0	21.5	23.5	22.5	21.5	22.0
7	22.0	19.0	20.5	24.5	22.0	23.5	25.5	22.0	24.0	21.5	20.5	21.0
8	23.0	21.0	22.0	24.5	21.5	23.0	24.0	22.5	23.5	23.5	21.5	22.5
9	23.0	21.5	22.0	25.5	22.5	24.0	25.5	23.0	24.0	25.0	22.5	23.5
10	22.0	20.0	21.0	27.0	24.0	25.5	27.5	24.5	25.5	26.0	24.0	24.5
11	22.5	20.0	21.0	27.5	25.0	26.5	27.0	24.5	25.5	25.0	23.5	24.5
12	23.0	20.5	21.5	27.0	25.0	25.5	25.0	23.5	24.5	24.0	21.0	22.5
13	23.5	21.0	22.0	27.0	24.5	25.5	24.5	23.0	23.5	21.5	19.0	20.5
14	23.5	21.0	22.5	28.0	25.5	26.5	23.0	22.0	22.5	20.5	18.5	19.5
15	24.5	21.5	23.0	28.5	26.5	27.5	22.5	20.5	21.5	21.0	18.0	19.5
16	---	---	---	27.5	25.5	26.5	20.5	20.0	20.0	21.5	18.5	20.0
17	23.5	15.5	19.0	26.0	24.5	25.0	20.5	20.0	20.0	22.5	19.5	21.0
18	23.0	21.0	22.0	25.0	24.0	24.5	22.0	20.5	21.0	23.0	20.5	21.5
19	22.0	20.5	21.0	25.5	23.0	24.0	23.5	21.5	22.5	22.5	21.5	22.0
20	21.5	20.0	20.5	25.0	22.5	23.5	24.0	21.5	23.0	22.0	19.5	20.5
21	21.5	19.5	20.5	27.0	24.0	25.5	23.5	20.5	22.5	20.5	19.5	20.0
22	20.5	18.5	19.0	26.5	24.5	25.5	22.5	20.5	22.0	22.5	20.0	21.0
23	19.5	17.0	18.5	24.5	23.0	23.5	23.5	20.5	22.0	22.0	20.0	21.5
24	20.5	19.0	19.5	23.0	21.0	22.0	24.0	21.5	22.5	20.0	17.0	18.5
25	21.5	19.0	20.0	22.0	20.5	21.0	24.0	21.5	23.0	17.5	15.5	16.0
26	22.5	20.5	21.5	22.5	21.5	22.0	26.0	23.0	24.5	16.0	15.5	15.5
27	22.5	22.0	22.0	23.5	22.0	22.5	26.5	24.0	25.5	17.5	16.0	16.5
28	---	---	---	24.0	21.5	23.0	26.5	24.5	25.5	18.0	17.5	17.5
29	---	---	---	25.0	21.5	23.5	25.5	23.0	24.0	18.0	17.0	17.5
30	25.5	15.5	20.0	25.5	23.0	24.5	23.5	20.5	22.0	17.0	14.5	15.5
31	---	---	---	26.5	24.0	25.0	24.0	21.0	22.5	---	---	---
MONTH	25.5	15.5	20.4	28.5	20.0	24.1	27.5	20.0	23.2	26.0	14.5	20.5

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	11.1	9.4	10.1	12.7	10.3	11.2	10.0	8.8	9.4	---	---	---
2	10.8	9.2	9.7	12.9	9.8	10.8	9.2	8.4	8.7	---	---	---
3	10.6	8.7	9.4	13.5	9.7	11.1	9.6	9.1	9.4	---	---	---
4	11.3	8.6	9.6	14.3	10.8	11.9	9.6	9.4	9.6	---	---	---
5	11.0	8.6	9.5	14.6	11.2	12.5	---	---	---	---	---	---
6	9.6	8.4	9.0	14.9	12.0	13.1	---	---	---	---	---	---
7	11.2	8.8	9.7	14.7	12.2	13.0	---	---	---	---	---	---
8	12.0	9.6	10.5	14.1	11.6	12.5	---	---	---	---	---	---
9	12.5	10.0	10.9	14.2	11.1	12.2	---	---	---	---	---	---
10	12.6	10.1	11.0	13.2	10.9	11.7	---	---	---	---	---	---
11	11.1	9.6	10.3	11.6	10.2	10.8	---	---	---	---	---	---
12	12.1	9.4	10.5	12.4	9.6	10.7	---	---	---	---	---	---
13	12.3	9.9	11.0	12.4	10.1	10.9	---	---	---	---	---	---
14	13.0	10.5	11.4	12.9	10.2	11.2	---	---	---	---	---	---
15	11.6	10.3	10.9	13.1	10.5	11.3	---	---	---	---	---	---
16	12.4	9.8	10.7	12.9	10.2	11.2	---	---	---	---	---	---
17	10.6	9.9	10.3	13.6	10.4	11.6	---	---	---	---	---	---
18	11.0	10.3	10.6	14.7	11.4	12.6	---	---	---	---	---	---
19	11.2	10.0	10.4	14.9	11.7	12.8	---	---	---	---	---	---
20	11.4	9.9	10.4	14.7	11.3	12.5	---	---	---	---	---	---
21	12.3	10.5	11.2	12.7	10.3	11.3	---	---	---	---	---	---
22	12.6	11.1	11.6	10.3	9.1	9.5	---	---	---	---	---	---
23	12.7	10.8	11.5	9.3	8.3	9.0	---	---	---	---	---	---
24	12.6	10.5	11.2	9.3	8.8	9.0	---	---	---	---	---	---
25	12.3	10.0	10.7	11.6	9.3	10.2	---	---	---	---	---	---
26	11.7	9.6	10.3	11.8	10.5	11.2	---	---	---	---	---	---
27	11.9	9.3	10.2	12.6	11.5	12.0	---	---	---	---	---	---
28	12.0	9.1	10.0	12.7	11.6	12.0	---	---	---	---	---	---
29	12.3	9.2	10.3	12.1	10.8	11.4	---	---	---	---	---	---
30	13.3	10.5	11.5	11.6	9.9	10.6	---	---	---	---	---	---
31	13.6	10.8	11.7	---	---	---	---	---	---	---	---	---
MONTH	13.6	8.4	10.5	14.9	8.3	11.4	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	---	---	---	15.3	12.8	14.0	13.0	10.8	12.1	13.8	9.2	11.3
2	---	---	---	15.5	12.6	13.9	13.7	12.4	13.2	13.6	8.8	11.0
3	---	---	---	14.4	12.0	13.1	14.1	13.0	13.6	12.9	7.9	10.2
4	---	---	---	14.5	11.4	12.7	14.1	12.6	13.3	11.1	8.1	9.5
5	---	---	---	14.9	11.7	13.1	14.1	12.6	13.3	12.6	8.9	10.6
6	---	---	---	13.5	11.6	12.5	15.0	12.5	13.5	14.2	10.1	12.0
7	---	---	---	11.9	10.7	11.2	15.0	10.5	12.5	14.0	10.1	12.0
8	---	---	---	11.7	10.3	10.9	14.7	10.2	12.3	12.0	10.1	10.7
9	---	---	---	12.3	9.8	10.9	13.9	9.8	11.9	10.5	9.8	10.2
10	---	---	---	11.8	9.6	10.5	15.5	10.4	12.7	10.3	9.7	9.9
11	---	---	---	10.9	9.1	10.1	14.3	9.7	11.7	10.9	9.4	10.1
12	---	---	---	13.1	10.7	11.9	14.8	9.9	12.1	11.0	8.8	9.7
13	---	---	---	13.9	11.7	12.7	15.1	10.8	12.8	10.5	8.3	9.3
14	---	---	---	14.1	12.1	13.0	15.4	10.5	12.7	11.0	8.0	9.3
15	---	---	---	14.5	12.0	13.1	15.3	10.1	12.6	10.2	7.8	8.9
16	---	---	---	14.8	12.3	13.4	12.5	9.6	10.7	9.5	8.5	9.0
17	---	---	---	14.8	12.4	13.4	14.4	10.0	11.8	---	---	---
18	---	---	---	14.6	12.0	13.2	12.0	9.6	10.7	---	---	---
19	---	---	---	12.6	11.4	12.0	12.3	10.2	11.2	---	---	---
20	---	---	---	14.2	11.9	12.9	13.4	10.8	11.9	---	---	---
21	---	---	---	14.4	11.7	13.0	12.4	10.1	11.3	---	---	---
22	---	---	---	14.4	11.8	13.0	10.6	8.4	9.4	---	---	---
23	---	---	---	15.1	12.0	13.4	11.6	8.4	9.8	---	---	---
24	---	---	---	14.8	11.8	13.1	11.2	8.4	9.7	---	---	---
25	---	---	---	15.0	11.3	13.0	12.0	8.8	10.3	---	---	---
26	13.7	11.9	12.7	13.3	10.7	11.8	11.1	9.6	10.3	10.2	9.7	9.9
27	14.5	12.1	13.1	10.9	8.4	10.0	13.0	10.6	11.6	11.3	9.8	10.5
28	14.6	12.1	13.2	11.3	10.6	11.0	13.6	10.7	12.1	11.7	10.2	10.9
29	14.7	11.7	13.2	12.1	11.1	11.5	13.8	10.8	11.9	12.1	10.3	11.2
30	---	---	---	11.9	10.8	11.3	13.2	9.1	11.0	11.8	10.6	11.2
31	---	---	---	12.3	10.9	11.5	---	---	---	11.7	10.9	11.4
MONTH	---	---	---	15.5	8.4	12.3	15.5	8.4	11.8	14.2	7.8	10.4
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	12.0	11.7	11.8	10.0	7.0	8.3	8.3	7.4	7.6	10.3	7.7	8.7
2	12.6	11.4	12.0	9.7	6.8	8.1	9.3	7.5	8.2	9.8	7.6	8.4
3	12.4	10.6	11.4	7.9	6.7	7.3	9.9	7.8	8.7	9.3	7.5	8.1
4	11.7	9.8	10.7	9.1	7.5	8.2	10.0	7.8	8.7	9.4	7.3	8.1
5	10.1	9.2	9.7	9.5	7.5	8.4	10.6	7.9	9.1	8.2	7.0	7.4
6	10.0	9.1	9.8	9.3	7.3	8.0	11.5	8.4	9.7	8.0	7.0	7.5
7	9.4	8.6	9.0	9.7	7.6	8.3	11.9	8.4	9.8	8.5	7.7	8.1
8	9.2	8.0	8.6	9.6	7.3	8.2	11.2	8.3	9.6	8.9	7.6	8.1
9	8.8	7.6	8.0	9.2	7.0	8.0	11.4	8.0	9.4	8.7	6.9	7.7
10	9.0	7.6	8.2	9.3	6.7	7.8	11.4	7.6	9.2	8.1	6.6	7.2
11	9.3	7.7	8.4	8.7	6.5	7.5	11.1	7.0	8.4	8.1	6.7	7.2
12	9.5	7.7	8.5	8.0	6.5	7.2	8.9	6.9	7.8	9.1	7.2	7.9
13	9.8	7.7	8.6	8.7	6.7	7.6	8.6	7.0	7.7	9.9	7.7	8.5
14	10.2	7.7	8.9	7.9	6.4	7.1	8.6	7.4	8.0	10.0	7.8	8.7
15	10.5	7.7	9.3	7.9	5.8	6.7	8.3	7.5	7.8	10.1	7.8	8.6
16	---	---	---	8.4	6.2	7.1	8.6	6.8	8.0	10.4	7.8	8.8
17	11.8	9.1	10.0	8.6	6.9	7.5	8.1	7.7	8.0	10.6	7.8	8.8
18	11.7	8.0	9.8	8.0	7.3	7.6	8.3	7.6	7.9	10.5	7.7	8.7
19	9.5	7.6	8.1	9.1	7.6	8.2	8.7	7.3	7.8	9.9	7.3	8.3
20	8.9	7.6	8.2	10.3	8.0	9.1	8.8	7.3	7.9	10.7	7.7	8.7
21	9.4	8.2	8.7	10.5	8.0	9.4	9.6	7.6	8.4	9.9	7.7	8.6
22	10.2	8.2	9.1	9.5	7.7	8.5	9.9	7.9	8.7	9.8	7.2	8.2
23	10.5	8.7	9.4	9.4	8.3	8.7	10.5	8.1	9.0	9.1	6.8	7.9
24	9.6	7.8	8.6	9.4	8.7	9.0	10.7	7.7	8.7	10.3	7.5	8.6
25	9.8	7.7	8.5	10.4	9.2	9.7	10.4	7.5	8.5	9.9	8.4	9.0
26	9.8	7.4	8.5	10.1	9.2	9.7	10.6	7.4	8.5	9.2	8.7	9.1
27	---	---	---	10.2	7.9	9.1	10.3	7.1	8.2	9.1	8.7	9.0
28	---	---	---	9.1	7.5	8.3	9.6	7.0	7.9	8.9	8.5	8.7
29	---	---	---	9.6	7.7	8.5	9.0	6.9	7.8	9.4	8.4	8.7
30	10.2	8.1	9.5	9.7	7.5	8.5	10.3	7.8	8.7	9.6	8.4	8.9
31	---	---	---	9.9	7.3	8.3	10.4	7.9	8.8	---	---	---
MONTH	12.6	7.4	9.3	10.5	5.8	8.2	11.9	6.8	8.5	10.7	6.6	8.3

CHRISTINA RIVER BASIN

RESERVOIR IN CHRISTINA RIVER BASIN

01480684 MARSH CREEK RESERVOIR.--Lat 40°03'24", long 75°43'06", Chester County, Hydrologic Unit 02040205, on right bank at dam on Marsh Creek, 0.3 mi upstream from mouth and 3.2 mi north of Downingtown. DRAINAGE AREA, 20.1 mi². PERIOD OF RECORD, November 1973 to current year. GAGE, water-stage recorder. Datum of gage is above sea level (levels by Pennsylvania Department of Environmental Resources).

REMARKS.--Reservoir formed by earthfill dam with concrete spillway at elevation of 359.5 ft. Storage began November 1973. Total capacity 22,190 acre-ft at elevation of 373 ft. Reservoir is used for water supply, flood control, and recreation. Figures given herein represent contents above lowest gate sill at elevation of 289.5 ft. COOPERATION.--Records furnished by Pennsylvania Department of Environmental Resources.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 16,380 acre-ft Jan. 25, 1979, at elevation of 363.49 ft; minimum contents (after first filling), 10,410 acre-ft Mar. 3, 1976, at elevation of 351.75 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 14,889 acre-ft, June 6, at elevation of 360.78 ft; minimum contents, 13,160 acre-ft, Feb. 11-14, at elevation of 357.50 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in ft ³ /s)
01480684 Marsh Creek Reservoir			
Sept. 30	359.60	14,240	--
Oct. 31	359.25	14,450	- 3.1
Nov. 30	359.45	14,150	+ 1.8
Dec. 31	357.80	13,310	- 13.8
CAL YR 1991	--	--	- 1.7
Jan. 31	357.67	13,240	- 1.1
Feb. 29	357.75	13,280	+ 0.7
Mar. 31	360.05	14,490	+ 19.6
Apr. 30	360.13	14,530	+ 0.7
May 31	360.30	14,620	+ 1.5
June 30	359.90	14,400	- 3.7
July 31	359.87	14,390	- 0.3
Aug. 31	359.66	14,270	- 1.9
Sept. 30	359.88	14,394	+ 2.0
WTR YR 1992	--	--	+ 0.2

DELAWARE RIVER BASIN

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE

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

DRAINAGE AREA.--11,200 mi² approximately.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to current year.

pH: February 1970 to current year.

WATER TEMPERATURE: February 1970 to current year.

DISSOLVED OXYGEN: February 1970 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1970. Subsequent to 1986, interfaced with data collection platform.

REMARKS.--Interruptions in the daily record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 35,600 microsiemens, Nov. 15, 1978, minimum, 100 microsiemens, on several days in 1969, 1970, 1974, and 1979.

pH: Maximum, 8.9, Mar. 4, 1980; minimum, 5.4, Dec. 31, 1972.

WATER TEMPERATURE: Maximum 32.5°C, July 23, 1987; minimum, 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Dec. 16, 19, 1976; minimum, 0.3 mg/L, Sept. 16, 17, 1971.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 30,000 microsiemens, Nov. 11; minimum, 2,020 microsiemens, June 22.

pH: Maximum, 8.1, Mar. 5-8, Apr. 13; minimum, 7.0, on many days during year.

WATER TEMPERATURE: Maximum, 29.5°C, July 21; minimum, 1.0°C, Feb. 12.

DISSOLVED OXYGEN: Maximum, 14.6 mg/L, Feb. 21; minimum, 4.6 mg/L, July 10, Aug. 15.

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	---	---	---	26300	17300	21500	17800	10800	13400	16900	7970	12200
2	---	---	---	24000	18200	20700	18700	10700	13600	17100	8220	12100
3	17100	9730	12000	21500	16800	19000	20600	10900	15400	19300	9240	13300
4	16700	9690	12100	21800	16300	18600	17500	8660	13100	23000	12800	16300
5	17100	9910	12200	23100	16400	18500	13000	7050	9150	21100	11700	16200
6	17100	9910	12200	22900	16300	19000	12900	6020	8500	19900	12000	14900
7	16200	9750	12100	23400	16600	19100	14800	6080	8790	17100	11200	13500
8	17600	9780	12500	23400	16800	19200	14000	5700	8470	16200	10200	12200
9	16400	9860	12300	25000	18200	21000	15000	3770	9110	17400	10300	13100
10	17100	9810	12600	28700	21100	24300	14600	5500	9560	17700	10400	13700
11	17800	10400	13000	30000	19600	24600	14800	5220	9710	17300	9600	12400
12	16900	10100	12800	25700	19300	21800	13300	5220	8330	16500	9230	12500
13	16900	10200	12800	27100	19300	22600	13900	5140	9080	16600	9250	12300
14	17100	10400	13000	27200	19300	23200	13500	4750	9100	18500	9520	14100
15	17900	11100	13600	25700	17800	21800	6980	3340	4940	12600	7240	9140
16	18400	11000	13600	25000	18300	21300	9770	2290	5140	14800	5330	8780
17	19600	12100	15500	25900	17900	21700	---	---	---	14800	6270	9380
18	21000	11300	16000	27500	19000	22600	---	---	---	14400	5440	8240
19	20700	11400	16300	25200	18700	21800	---	---	---	13800	4320	7320
20	21400	12200	16400	25500	18400	21300	---	---	---	18000	5670	9940
21	22000	12500	17200	24400	17100	20100	---	---	---	18100	6180	10200
22	20700	13000	16600	24800	17400	20000	---	---	---	16500	7170	10900
23	20300	13400	16000	23800	17100	20100	---	---	---	18400	7690	12300
24	21000	12800	16200	25700	16200	19900	---	---	---	17900	6730	11400
25	21300	13300	16200	20400	14500	17400	---	---	---	10200	4850	6300
26	20600	12700	16000	18500	13000	15100	5700	7540	9290	13400	4910	8390
27	20600	13000	16100	20000	12500	14800	13700	7410	10100	15500	4440	9710
28	21100	13200	16400	18600	12500	14900	14200	7190	10000	15200	6020	9890
29	23700	14700	18500	16300	11500	13300	15100	7240	10500	16800	6710	11600
30	24600	15400	20000	18300	11200	14300	16100	8080	11500	17000	6850	11200
31	27300	17900	22400	---	---	---	19000	8880	13100	18100	7850	12500
MONTH	27300	9690	14900	30000	11200	19800	20600	2290	9990	23000	4320	11500

DELAWARE RIVER BASIN

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

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	17700	8100	12200	18400	6850	12500	12300	3630	7310	9220	3430	5120
2	18600	8480	12700	16700	6930	10600	12500	4230	6890	10500	3120	5070
3	21500	10300	15400	17400	8640	12400	10200	3180	5630	---	---	---
4	21500	11000	15600	16300	7960	12100	12000	3210	5660	---	---	---
5	17000	8610	12600	15000	8460	11400	12000	3180	5840	---	---	---
6	20600	9070	13500	13900	8330	10400	11000	3240	5710	---	---	---
7	21300	10900	15700	15900	8930	12300	12100	3230	6600	---	---	---
8	21600	11800	17400	15700	8210	11500	12400	4260	7090	---	---	---
9	18000	10800	14200	13800	7640	10300	12200	4250	6770	---	---	---
10	14400	9220	11100	15100	8030	10900	11800	3880	6520	---	---	---
11	16700	8780	12400	15600	6230	10100	11000	4190	6600	10300	2910	4930
12	14500	8310	11400	9480	4580	6680	11300	4190	6760	9310	3090	5450
13	17100	9230	12900	8110	3200	4850	12200	4210	6480	9310	2800	4940
14	19000	10000	13600	12100	2810	6120	10100	4450	6750	9250	2780	4510
15	19500	10400	13800	11600	2780	5490	10900	4380	6340	9250	2770	4340
16	19800	10600	14400	12400	2690	6120	11400	4220	6370	9290	2730	4370
17	17500	9710	12300	13100	3080	6660	10900	4380	6610	8920	2960	4080
18	18200	9270	12700	10700	3270	5980	11800	4700	6880	9060	2640	4490
19	18000	9630	13300	12200	3900	6680	12500	4870	7350	7940	2570	4090
20	17000	9430	12600	13700	4750	8790	11000	4450	6700	8620	2560	4730
21	15900	9160	11800	12300	4560	7580	9900	4430	6140	7930	2650	4460
22	14000	8950	11000	11900	5020	7650	8800	4000	5490	8040	2590	4400
23	16000	8510	11300	12300	4990	7780	7120	3800	4780	---	---	---
24	15000	9140	11700	12000	4570	7380	7930	3560	4670	---	---	---
25	17100	9540	13000	11000	4430	6730	9710	3390	5420	---	---	---
26	17200	10200	13100	10200	4420	6880	10200	3500	6730	---	---	---
27	16600	9010	12200	12500	5380	8630	9280	3510	5850	---	---	---
28	16600	8400	11600	10700	3220	6110	11000	3350	5730	---	---	---
29	14300	7460	10800	8690	2510	4950	11900	3050	6250	---	---	---
30	---	---	---	11400	2910	6810	11900	3900	5990	---	---	---
31	---	---	---	12200	3620	7660	---	---	---	---	---	---
MONTH	21600	7460	13000	18400	2510	8390	12500	3050	6260	10500	2560	4640
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	13500	5670	7990	13100	6410	8770	14700	7310	8920
2	---	---	---	12500	5750	8490	13500	6160	9000	14900	7620	10100
3	---	---	---	13900	6310	9220	13200	6180	8930	14500	7980	10300
4	---	---	---	12900	6130	8560	12000	6220	8740	13600	7000	9190
5	---	---	---	12500	6010	8610	12000	5970	7990	15000	7380	9950
6	---	---	---	11600	6120	8280	12600	5670	7790	14800	8390	10900
7	---	---	---	12400	6060	8070	13300	5640	8080	14700	8320	10600
8	---	---	---	12900	6070	8350	14100	6160	8710	14300	8270	10500
9	---	---	---	12600	6320	8510	13100	6150	8890	14400	8100	10500
10	---	---	---	13100	5910	7980	14100	5840	8530	14400	8540	10500
11	---	---	---	12800	5820	7850	14100	6240	8800	13700	7900	9790
12	---	---	---	13200	5490	8030	13500	5690	8100	13700	7610	10300
13	---	---	---	13200	5990	8410	13100	5870	8610	14600	8470	10900
14	---	---	---	12500	5620	8430	13100	7040	9550	13800	8490	10700
15	---	---	---	14200	6230	9020	14600	8130	11000	13400	8330	10400
16	---	---	---	13400	6250	8770	14200	7750	11100	14100	8210	10400
17	---	---	---	14300	6470	9290	---	---	---	14300	8010	10300
18	---	---	---	13400	6240	8960	---	---	---	15600	7920	10600
19	5820	2410	3320	13100	6420	8770	---	---	---	13800	7260	9910
20	5040	2190	3000	11800	6250	8430	14100	7060	9730	16800	7370	10500
21	7350	2170	3560	11400	6090	8240	14100	6920	9640	15700	8090	11200
22	8810	2020	4370	13700	5720	8310	14100	6970	9440	16400	8620	11300
23	9780	3010	6560	12300	6830	9140	15000	6940	10000	16000	8090	10400
24	11500	4310	7810	13900	6480	9160	15700	7030	10400	18500	8640	12500
25	12000	4050	7700	14300	6600	9290	16100	7500	10300	18900	11500	15000
26	13500	4070	8030	15800	6460	9450	17200	7860	10700	20000	9790	15600
27	13600	4770	8170	15500	6500	9010	17200	8500	11500	18100	10300	13900
28	14000	5170	7910	15500	6170	9070	17000	8910	12300	17600	10100	12900
29	14000	5670	8420	14500	6350	9350	16200	8290	11500	16100	9780	12300
30	14200	5890	8340	15100	6650	9350	15400	8240	11100	16500	9640	12200
31	---	---	---	14500	6740	9870	---	---	---	---	---	---
MONTH	14200	2020	6430	15800	5490	8720	17200	5640	9600	20000	7000	11100

DELAWARE RIVER BASIN

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	---	---	---	7.6	7.6	7.6	7.6	7.5	7.5	7.9	7.7	7.8
2	---	---	---	7.6	7.5	7.6	7.6	7.5	7.5	7.9	7.7	7.8
3	7.8	7.7	7.7	7.6	7.5	7.6	7.6	7.5	7.5	7.9	7.6	7.7
4	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.8	7.7	7.7
5	7.7	7.5	7.6	7.6	7.5	7.6	7.6	7.5	7.6	7.8	7.7	7.7
6	7.7	7.5	7.6	7.6	7.5	7.6	7.6	7.5	7.5	7.8	7.7	7.7
7	7.6	7.5	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.7	7.6	7.7
8	7.6	7.5	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.7	7.6	7.7
9	7.6	7.5	7.5	7.7	7.6	7.7	7.6	7.5	7.5	7.7	7.6	7.7
10	7.6	7.5	7.5	7.8	7.7	7.7	7.6	7.5	7.5	7.7	7.6	7.7
11	7.6	7.5	7.5	7.7	7.7	7.7	7.6	7.4	7.5	7.7	7.6	7.6
12	7.6	7.5	7.5	7.7	7.7	7.7	7.6	7.4	7.5	7.8	7.6	7.7
13	7.6	7.5	7.5	7.8	7.7	7.7	7.6	7.4	7.5	7.7	7.6	7.6
14	7.6	7.5	7.6	7.8	7.7	7.7	7.6	7.4	7.5	7.8	7.6	7.7
15	7.6	7.5	7.6	7.8	7.7	7.7	7.5	7.5	7.5	7.7	7.6	7.6
16	7.7	7.5	7.6	7.7	7.7	7.7	7.6	7.5	7.5	7.7	7.6	7.7
17	7.7	7.6	7.7	7.8	7.7	7.7	7.7	7.5	7.7	7.8	7.6	7.7
18	7.8	7.7	7.7	7.8	7.7	7.7	---	---	---	7.8	7.6	7.7
19	7.7	7.6	7.7	7.8	7.7	7.7	---	---	---	7.8	7.6	7.7
20	7.8	7.7	7.7	7.7	7.7	7.7	---	---	---	7.7	7.5	7.7
21	7.8	7.6	7.7	7.7	7.7	7.7	---	---	---	7.8	7.6	7.7
22	7.7	7.5	7.6	7.7	7.6	7.7	---	---	---	7.7	7.6	7.7
23	7.6	7.5	7.6	7.7	7.6	7.7	---	---	---	7.7	7.6	7.7
24	7.6	7.5	7.5	7.7	7.4	7.6	---	---	---	7.7	7.6	7.7
25	7.5	7.5	7.5	7.6	7.5	7.5	---	---	---	7.6	7.6	7.6
26	7.5	7.5	7.5	7.6	7.5	7.5	7.8	7.6	7.7	7.7	7.6	7.6
27	7.5	7.4	7.5	7.6	7.5	7.6	7.8	7.7	7.7	7.8	7.6	7.7
28	7.5	7.4	7.5	7.6	7.5	7.6	7.9	7.7	7.8	7.7	7.6	7.7
29	7.6	7.5	7.6	7.6	7.5	7.5	7.9	7.7	7.8	7.8	7.6	7.7
30	7.6	7.5	7.6	7.6	7.5	7.6	7.8	7.7	7.8	7.8	7.6	7.7
31	7.7	7.6	7.6	---	---	---	7.9	7.7	7.8	7.8	7.6	7.7
MONTH	7.8	7.4	7.6	7.8	7.4	7.6	7.9	7.4	7.6	7.9	7.5	7.7
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	7.8	7.6	7.7	8.0	7.7	7.8	7.9	7.5	7.6	7.4	7.0	7.1
2	7.8	7.6	7.7	7.9	7.7	7.8	7.8	7.5	7.6	7.5	7.0	7.1
3	7.8	7.7	7.8	7.9	7.7	7.8	7.8	7.4	7.5	---	---	---
4	7.9	7.7	7.8	7.9	7.7	7.8	7.9	7.4	7.5	---	---	---
5	7.8	7.7	7.7	8.1	7.7	7.9	7.9	7.4	7.5	---	---	---
6	7.8	7.4	7.6	8.1	7.9	8.0	7.8	7.4	7.6	---	---	---
7	7.6	7.4	7.5	8.1	7.9	8.0	8.0	7.4	7.6	---	---	---
8	7.7	7.6	7.6	8.1	7.8	7.9	8.0	7.4	7.6	---	---	---
9	7.6	7.5	7.6	7.9	7.8	7.8	8.0	7.4	7.6	---	---	---
10	7.7	7.6	7.6	8.0	7.8	7.9	7.9	7.4	7.5	---	---	---
11	7.7	7.6	7.6	8.0	7.7	7.8	7.9	7.4	7.5	7.5	7.0	7.1
12	7.7	7.6	7.7	7.8	7.7	7.7	7.8	7.4	7.5	7.4	7.2	7.3
13	7.8	7.6	7.7	7.8	7.7	7.7	8.1	7.4	7.5	7.4	7.2	7.3
14	7.8	7.6	7.7	8.0	7.7	7.8	7.9	7.3	7.5	7.4	7.2	7.2
15	7.8	7.6	7.7	8.0	7.6	7.7	7.9	7.3	7.5	7.3	7.1	7.2
16	7.8	7.6	7.7	8.0	7.6	7.7	7.9	7.3	7.5	7.3	7.1	7.2
17	7.7	7.6	7.6	8.0	7.5	7.7	7.8	7.3	7.5	7.3	7.1	7.2
18	7.7	7.6	7.6	7.9	7.6	7.7	7.8	7.3	7.4	7.3	7.1	7.2
19	7.7	7.6	7.6	8.0	7.6	7.7	7.8	7.3	7.5	7.2	7.1	7.1
20	7.7	7.6	7.6	8.0	7.6	7.8	7.7	7.3	7.4	7.3	7.1	7.2
21	7.7	7.5	7.5	8.0	7.6	7.7	7.6	7.3	7.4	7.3	7.1	7.2
22	7.6	7.4	7.5	7.9	7.6	7.7	7.6	7.3	7.3	7.3	7.1	7.2
23	7.7	7.5	7.6	7.9	7.6	7.7	7.4	7.2	7.3	---	---	---
24	7.7	7.6	7.6	8.0	7.6	7.7	7.4	7.1	7.2	---	---	---
25	7.8	7.5	7.7	7.9	7.6	7.7	7.5	7.1	7.2	---	---	---
26	7.8	7.6	7.7	7.8	7.5	7.7	7.5	7.2	7.3	---	---	---
27	7.8	7.6	7.7	7.9	7.6	7.8	7.4	7.1	7.2	---	---	---
28	7.9	7.6	7.7	7.9	7.5	7.6	7.6	7.0	7.2	---	---	---
29	7.9	7.7	7.7	7.8	7.5	7.6	7.7	7.0	7.2	---	---	---
30	---	---	---	8.0	7.5	7.7	7.7	7.1	7.2	---	---	---
31	---	---	---	7.9	7.5	7.7	---	---	---	---	---	---
MONTH	7.9	7.4	7.6	8.1	7.5	7.8	8.1	7.0	7.4	---	---	---

DELAWARE RIVER BASIN

01492800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	7.1	7.0	7.0	7.4	7.3	7.4	7.5	7.4	7.5
2	---	---	---	7.2	7.0	7.1	7.4	7.3	7.4	7.5	7.5	7.5
3	---	---	---	7.3	7.2	7.2	7.5	7.3	7.4	7.5	7.5	7.5
4	---	---	---	7.2	7.1	7.2	7.4	7.3	7.4	7.5	7.4	7.4
5	---	---	---	7.2	7.1	7.2	7.4	7.3	7.4	7.5	7.4	7.4
6	---	---	---	7.2	7.1	7.1	7.4	7.3	7.3	7.5	7.5	7.5
7	---	---	---	7.2	7.1	7.1	7.5	7.3	7.4	7.5	7.4	7.5
8	---	---	---	7.2	7.1	7.1	7.5	7.3	7.4	7.5	7.4	7.5
9	---	---	---	7.2	7.1	7.2	7.4	7.3	7.4	7.5	7.4	7.5
10	---	---	---	7.2	7.1	7.1	7.4	7.3	7.4	7.5	7.4	7.5
11	---	---	---	7.2	7.1	7.2	7.4	7.3	7.4	7.5	7.3	7.4
12	---	---	---	7.2	7.1	7.1	7.5	7.3	7.4	7.5	7.4	7.5
13	---	---	---	7.2	7.1	7.1	7.4	7.3	7.4	7.5	7.4	7.5
14	---	---	---	7.3	7.1	7.2	7.4	7.3	7.4	7.5	7.4	7.5
15	---	---	---	7.4	7.2	7.3	7.5	7.4	7.4	7.5	7.4	7.5
16	---	---	---	7.5	7.3	7.3	7.5	7.4	7.5	7.5	7.4	7.4
17	---	---	---	7.5	7.3	7.4	---	---	---	7.5	7.4	7.4
18	7.2	7.1	7.1	7.4	7.3	7.3	---	---	---	7.4	7.4	7.4
19	7.2	7.1	7.1	7.4	7.3	7.3	---	---	---	7.4	7.4	7.4
20	7.1	7.0	7.0	7.5	7.3	7.3	7.5	7.4	7.4	7.5	7.4	7.5
21	7.1	7.0	7.1	7.6	7.2	7.3	7.5	7.4	7.4	7.5	7.4	7.5
22	7.3	7.0	7.2	7.5	7.3	7.3	7.5	7.3	7.4	7.5	7.4	7.5
23	7.5	7.2	7.3	7.4	7.3	7.3	7.5	7.3	7.4	7.6	7.5	7.5
24	7.4	7.2	7.3	7.4	7.3	7.3	7.5	7.4	7.4	7.7	7.6	7.7
25	7.4	7.2	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.7	7.7	7.7
26	7.3	7.1	7.2	7.4	7.3	7.3	7.4	7.3	7.4	7.7	7.6	7.7
27	7.3	7.1	7.2	7.4	7.3	7.3	7.4	7.3	7.4	7.6	7.5	7.6
28	7.2	7.1	7.2	7.4	7.3	7.3	7.5	7.3	7.4	7.6	7.5	7.5
29	7.2	7.0	7.1	7.4	7.3	7.3	7.5	7.4	7.4	7.6	7.5	7.5
30	7.1	7.0	7.0	7.4	7.3	7.3	7.5	7.4	7.4	7.6	7.6	7.6
31	---	---	---	7.4	7.3	7.3	---	---	---	---	---	---
MONTH	---	---	---	7.5	7.0	7.0	7.5	7.3	7.4	7.7	7.3	7.5

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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

DELAWARE RIVER BASIN

01492800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	3.5	2.5	3.0	6.0	4.0	5.0	9.0	8.0	8.5	17.0	15.0	16.0
2	3.0	1.5	2.5	6.5	5.5	5.5	9.0	8.0	8.5	18.0	15.5	16.5
3	3.5	2.5	3.0	6.0	5.5	5.5	9.0	7.5	8.5	---	---	---
4	3.5	2.5	3.0	6.5	5.5	6.0	9.5	8.0	8.5	---	---	---
5	3.0	2.5	2.5	6.5	6.0	6.0	10.0	8.5	9.0	---	---	---
6	3.0	2.0	2.5	6.5	6.0	6.5	10.0	8.5	9.0	---	---	---
7	3.0	2.0	2.5	7.0	6.5	6.5	10.5	9.0	9.5	---	---	---
8	3.0	2.5	3.0	8.0	7.0	7.5	11.0	9.5	10.5	---	---	---
9	3.0	2.5	2.5	8.5	7.5	8.0	11.5	10.0	10.5	---	---	---
10	2.5	1.5	2.0	8.5	7.5	8.0	12.5	10.5	11.0	---	---	---
11	3.5	1.5	3.0	8.5	7.0	8.0	13.0	11.0	11.5	15.5	14.5	15.0
12	3.0	1.0	2.0	8.0	7.0	7.5	13.0	11.5	12.0	16.0	14.0	14.5
13	2.5	1.5	2.0	8.0	7.0	7.5	13.0	11.0	11.5	16.5	14.5	15.5
14	4.5	2.0	3.0	7.5	7.0	7.0	13.5	11.0	12.0	17.0	15.0	16.0
15	3.5	2.5	3.0	7.5	6.5	7.0	13.5	12.0	12.5	16.5	16.0	16.0
16	5.0	3.0	4.0	7.5	6.0	6.5	12.5	12.0	12.0	16.0	16.0	16.0
17	5.0	3.0	4.0	7.5	6.0	6.5	14.0	12.0	13.0	16.5	16.0	16.0
18	4.5	3.0	4.0	7.5	6.5	7.0	13.0	12.0	12.5	17.0	16.0	16.5
19	5.5	3.5	4.5	6.5	6.5	6.5	12.5	12.0	12.5	17.0	16.0	16.5
20	5.5	3.5	4.5	7.0	6.5	6.5	13.0	12.0	12.5	17.5	16.0	16.5
21	5.0	3.5	4.0	7.0	6.5	6.5	14.0	12.5	13.5	18.0	16.0	17.0
22	4.0	3.0	3.5	6.5	6.0	6.5	15.0	13.5	14.0	19.0	17.0	18.0
23	5.0	4.0	4.5	6.5	6.0	6.5	16.0	14.0	15.0	---	---	---
24	4.5	4.5	4.5	7.0	6.0	6.5	16.5	14.5	15.5	---	---	---
25	5.0	4.5	4.5	7.5	6.0	6.5	16.5	14.5	15.5	---	---	---
26	5.0	4.5	5.0	7.5	6.5	7.0	16.0	14.5	15.0	---	---	---
27	5.5	4.5	5.0	8.0	7.0	7.0	16.0	15.0	15.0	---	---	---
28	6.0	5.0	5.5	8.0	7.0	7.5	15.5	14.5	15.0	---	---	---
29	5.5	5.0	5.0	8.5	7.0	7.5	16.5	14.5	15.0	---	---	---
30	---	---	---	7.5	7.0	7.5	15.5	14.5	15.0	---	---	---
31	---	---	---	9.0	7.0	8.0	---	---	---	---	---	---
MONTH	6.0	1.0	3.5	9.0	4.0	7.0	16.5	7.5	12.0	19.0	14.0	16.0
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	26.0	24.5	25.0	27.5	26.5	27.0	26.5	25.5	26.0
2	---	---	---	26.0	25.0	25.0	27.5	26.5	27.0	26.0	25.0	25.5
3	---	---	---	25.0	24.0	24.5	27.0	26.5	27.0	25.5	25.0	25.5
4	---	---	---	25.0	24.0	24.5	27.5	26.5	27.0	26.5	25.0	25.5
5	---	---	---	25.5	24.5	25.0	27.0	26.5	26.5	25.5	25.0	25.0
6	---	---	---	25.5	25.0	25.0	27.5	26.0	26.5	25.0	24.5	24.5
7	---	---	---	26.0	24.5	25.0	27.0	26.0	26.5	24.5	24.0	24.5
8	---	---	---	26.0	25.0	25.5	26.5	26.0	26.0	25.5	24.0	24.5
9	---	---	---	26.0	25.0	25.5	27.0	25.5	26.0	25.5	24.5	25.0
10	---	---	---	27.0	25.5	26.0	27.0	26.0	26.0	25.5	24.5	25.0
11	---	---	---	27.0	25.5	26.0	27.0	26.0	26.0	25.0	24.5	24.5
12	---	---	---	26.5	26.0	26.0	27.0	26.0	26.0	24.5	23.0	24.0
13	---	---	---	27.0	26.0	26.5	26.0	25.5	26.0	24.5	23.5	24.0
14	---	---	---	27.0	26.0	26.5	25.5	25.0	25.5	24.5	23.0	23.5
15	---	---	---	27.5	26.5	27.0	25.0	24.0	24.5	24.5	23.5	24.0
16	---	---	---	27.5	26.5	27.0	24.5	24.0	24.0	24.5	23.5	24.0
17	---	---	---	28.0	26.5	27.0	---	---	---	24.5	23.5	24.0
18	23.0	22.5	23.0	28.0	27.0	27.5	---	---	---	24.5	24.0	24.5
19	23.5	22.5	23.0	28.0	27.0	27.5	---	---	---	24.5	23.5	24.0
20	24.0	23.0	23.0	29.0	27.5	28.0	25.5	24.5	24.5	24.5	23.0	23.5
21	23.5	22.5	23.0	29.5	28.0	28.5	25.5	24.0	24.5	24.0	23.0	23.5
22	22.5	22.0	22.5	28.5	27.5	28.0	25.5	24.5	25.0	24.5	23.5	24.0
23	23.0	21.5	22.0	28.0	27.5	27.5	26.0	25.0	25.0	24.0	22.0	23.0
24	23.5	22.0	22.5	27.5	26.5	27.0	26.0	25.0	25.5	22.0	21.0	21.5
25	24.5	22.5	23.0	27.5	26.5	27.0	26.5	25.0	25.5	21.5	20.5	20.5
26	24.0	23.0	23.5	27.0	27.0	27.0	27.0	25.5	26.0	20.5	20.0	20.5
27	24.5	23.0	23.5	27.5	27.0	27.0	27.5	26.0	26.5	20.5	20.0	20.5
28	25.5	23.0	24.0	27.5	27.0	27.0	27.0	26.5	26.5	20.5	20.0	20.5
29	25.0	23.5	24.0	28.0	26.5	27.0	26.5	25.5	26.0	20.5	19.5	20.0
30	25.5	24.0	24.5	28.0	27.0	27.5	26.0	25.0	25.5	19.5	18.5	19.0
31	---	---	---	28.0	27.0	27.5	---	---	---	---	---	---
MONTH	25.5	21.5	23.0	29.5	24.0	26.5	27.5	24.0	26.0	26.5	18.5	23.5

DELAWARE RIVER BASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN OCTOBER	MEAN	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	MIN JANUARY	MEAN
1	---	---	---	9.0	8.5	8.7	10.2	9.9	10.0	11.6	11.1	11.4
2	---	---	---	8.9	8.7	8.8	10.1	9.8	9.9	11.5	11.1	11.3
3	8.6	8.0	8.2	8.8	8.5	8.7	10.1	9.7	9.9	11.9	11.2	11.5
4	8.3	7.7	8.0	8.9	8.6	8.7	10.1	9.6	9.9	12.2	11.5	11.9
5	8.1	7.6	7.9	9.0	8.7	8.8	10.5	9.9	10.2	12.1	11.6	11.9
6	7.9	7.5	7.7	9.0	8.7	8.9	10.5	9.9	10.2	11.9	11.5	11.8
7	7.9	7.4	7.6	9.3	8.7	9.0	10.5	9.9	10.2	12.1	11.7	11.9
8	8.0	7.4	7.7	9.3	9.0	9.1	10.4	10.0	10.2	12.0	11.8	11.9
9	8.0	7.5	7.8	9.6	9.1	9.4	11.8	10.0	10.8	12.1	11.7	11.9
10	8.1	7.6	7.8	9.9	9.3	9.7	11.1	10.7	10.9	12.2	11.8	12.0
11	7.9	7.6	7.7	9.9	9.4	9.7	10.9	10.5	10.7	12.1	11.7	11.9
12	7.8	7.4	7.6	10.1	9.7	10.0	10.6	10.1	10.4	12.0	11.6	11.9
13	7.8	7.3	7.5	10.2	9.9	10.1	10.5	10.1	10.3	12.1	11.8	11.9
14	8.0	7.4	7.8	10.1	9.9	10.0	10.4	9.9	10.2	12.2	11.7	11.9
15	8.0	7.5	7.8	10.0	9.8	9.9	10.7	10.1	10.4	12.2	11.7	11.9
16	7.9	7.5	7.7	10.0	9.7	9.9	11.1	10.2	10.6	12.1	11.4	11.7
17	8.3	7.4	7.8	9.9	9.7	9.8	---	---	---	12.0	11.5	11.7
18	8.3	7.8	8.0	9.9	9.7	9.8	---	---	---	12.1	11.7	12.0
19	8.0	7.6	7.8	9.8	9.5	9.7	---	---	---	12.7	11.9	12.3
20	9.0	7.6	7.9	9.6	9.4	9.5	---	---	---	12.8	12.1	12.4
21	8.0	7.5	7.8	10.1	9.4	9.7	---	---	---	12.8	12.2	12.5
22	7.7	7.3	7.6	10.0	9.9	10.0	---	---	---	12.9	12.0	12.4
23	7.6	7.2	7.4	10.0	9.7	9.8	---	---	---	12.6	12.1	12.3
24	8.5	6.0	7.2	9.9	9.5	9.6	---	---	---	12.5	11.9	12.3
25	8.6	8.1	8.3	9.8	9.5	9.7	---	---	---	12.5	12.1	12.3
26	8.5	8.2	8.3	10.0	9.6	9.8	---	---	---	12.8	12.2	12.5
27	8.3	7.8	8.0	10.0	9.7	9.8	11.2	10.9	11.1	12.8	12.2	12.6
28	8.7	7.7	8.1	10.1	9.7	9.9	11.3	10.9	11.1	13.0	12.0	12.6
29	8.6	8.2	8.5	10.2	9.9	10.0	11.5	10.9	11.2	13.2	12.4	12.8
30	8.7	8.2	8.5	10.2	9.9	10.0	11.8	11.2	11.5	13.2	12.5	12.8
31	8.8	8.4	8.6	---	---	---	11.8	11.3	11.6	13.5	12.4	12.8
MONTH	9.0	6.0	7.9	10.2	8.5	9.5	11.8	9.6	10.5	13.5	11.1	12.1
DAY	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	12.9	12.1	12.5	12.0	11.5	11.7	11.2	10.1	10.7	9.2	8.2	8.6
2	13.5	12.1	12.7	11.9	11.4	11.7	11.0	9.7	10.3	9.1	8.0	8.4
3	13.9	12.6	13.2	11.7	11.2	11.5	11.0	9.5	10.1	---	---	---
4	13.9	12.9	13.3	11.8	10.9	11.4	11.0	9.3	10.1	---	---	---
5	13.6	12.2	12.8	11.7	11.1	11.4	---	---	---	---	---	---
6	13.6	11.9	12.5	11.7	10.6	11.1	10.7	9.0	10.1	---	---	---
7	12.9	11.9	12.5	10.9	10.3	10.6	11.2	9.9	10.4	---	---	---
8	13.4	12.6	12.9	10.6	10.1	10.3	11.4	9.9	10.6	---	---	---
9	13.1	12.1	12.6	10.5	9.9	10.2	11.4	9.9	10.5	---	---	---
10	13.2	12.0	12.6	10.3	9.6	10.0	11.2	9.7	10.4	---	---	---
11	13.4	12.0	12.7	10.2	9.7	10.0	11.2	9.6	10.4	---	---	---
12	12.5	11.7	12.1	10.4	9.6	10.1	11.1	9.5	10.2	8.7	8.1	8.4
13	12.5	11.7	12.2	10.4	10.0	10.1	11.3	9.6	10.2	8.7	8.1	8.4
14	12.9	11.5	12.1	10.6	10.2	10.4	10.6	9.7	10.2	8.7	8.0	8.4
15	12.7	11.2	11.9	10.7	10.3	10.5	10.6	9.2	9.8	8.3	7.9	8.2
16	12.6	10.6	11.7	11.1	10.3	10.6	10.8	8.7	9.5	8.2	7.6	7.9
17	12.9	10.4	11.9	11.3	10.5	10.8	10.1	8.7	9.4	---	---	---
18	13.6	11.0	12.4	11.3	10.6	10.8	10.0	8.5	9.2	8.1	7.4	7.8
19	14.3	12.0	13.2	10.9	10.4	10.6	9.8	8.1	8.9	8.0	7.3	7.6
20	14.5	12.3	13.5	11.3	10.7	11.0	9.2	7.9	8.6	7.9	7.4	7.7
21	14.6	12.5	13.4	11.4	10.6	10.9	9.2	7.7	8.5	8.0	7.2	7.6
22	13.4	13.0	13.2	11.1	10.7	10.9	8.9	7.8	8.2	8.2	7.2	7.7
23	13.3	12.4	13.0	11.3	10.7	11.0	8.5	7.6	8.1	---	---	---
24	12.5	12.1	12.3	11.4	11.0	11.2	8.4	7.8	8.2	---	---	---
25	12.4	11.7	12.0	11.6	11.0	11.2	8.7	7.6	8.2	---	---	---
26	12.7	11.6	12.1	11.2	10.8	11.0	8.9	7.7	8.3	---	---	---
27	12.5	12.0	12.3	11.4	10.8	11.1	9.5	7.6	8.8	---	---	---
28	12.4	11.8	12.1	11.3	10.6	11.1	9.7	8.5	9.0	---	---	---
29	12.1	11.6	11.9	11.4	10.6	11.0	9.6	8.3	8.9	---	---	---
30	---	---	---	11.3	10.7	11.0	9.3	8.2	8.8	---	---	---
31	---	---	---	11.4	10.3	10.8	---	---	---	---	---	---
MONTH	14.6	10.4	12.5	12.0	9.6	10.8	11.4	7.6	9.5	---	---	---

DELAWARE RIVER BASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	---	---	---	6.5	5.6	6.2	6.6	5.9	6.3	---	---	---
2	---	---	---	6.4	5.7	6.1	6.9	6.0	6.4	---	---	---
3	---	---	---	6.5	5.6	6.2	7.2	6.4	6.7	---	---	---
4	---	---	---	6.3	5.6	6.1	7.3	5.7	6.4	---	---	---
5	---	---	---	6.2	5.8	6.0	6.5	5.6	6.0	---	---	---
6	---	---	---	6.1	5.6	5.8	6.5	5.6	6.0	---	---	---
7	---	---	---	6.2	5.5	5.8	6.7	5.7	6.1	---	---	---
8	---	---	---	6.4	5.8	6.1	6.9	5.8	6.4	---	---	---
9	---	---	---	6.6	5.1	6.1	6.5	5.6	6.1	---	---	---
10	---	---	---	6.4	4.6	6.0	6.5	5.8	6.2	---	---	---
11	---	---	---	6.3	5.8	6.1	6.7	6.1	6.4	---	---	---
12	---	---	---	6.5	5.8	6.1	6.5	5.8	6.1	---	---	---
13	---	---	---	6.5	5.9	6.2	6.1	5.4	5.7	---	---	---
14	---	---	---	6.6	6.1	6.3	5.5	4.7	5.0	---	---	---
15	---	---	---	6.8	6.3	6.6	5.1	4.6	4.9	---	---	---
16	---	---	---	7.2	6.3	6.7	---	---	---	---	---	---
17	---	---	---	7.1	6.4	6.7	---	---	---	---	---	---
18	---	---	---	6.9	6.2	6.5	---	---	---	---	---	---
19	7.0	6.3	6.7	6.8	6.1	6.5	---	---	---	7.3	6.9	7.1
20	6.8	6.4	6.6	6.9	6.1	6.4	7.1	6.5	6.9	7.3	6.6	7.0
21	6.8	6.4	6.6	7.6	6.1	6.5	7.4	6.6	7.0	6.8	6.4	6.5
22	7.1	6.3	6.7	6.9	5.9	6.5	7.2	6.2	6.9	6.6	6.1	6.3
23	7.2	6.4	6.9	6.6	5.8	6.3	7.4	6.2	6.7	6.6	6.1	6.3
24	6.9	6.4	6.6	6.5	5.7	6.2	6.8	5.8	6.3	7.2	6.4	6.8
25	6.9	5.5	6.5	6.6	5.8	6.1	7.0	5.9	6.6	7.1	6.8	7.0
26	7.0	6.1	6.6	6.4	5.7	6.0	6.4	5.8	6.1	7.4	6.9	7.1
27	7.0	6.4	6.7	6.4	5.6	6.0	6.3	5.4	5.8	7.1	6.8	7.0
28	7.0	6.3	6.7	6.5	5.6	6.1	6.0	5.2	5.6	7.2	6.7	7.0
29	6.8	6.2	6.5	6.7	5.7	6.1	5.9	5.2	5.6	7.7	6.7	7.1
30	6.6	5.9	6.3	6.5	5.5	6.1	---	---	---	7.9	7.4	7.6
31	---	---	---	6.7	5.6	6.2	---	---	---	---	---	---
MONTH	7.2	5.5	6.6	7.6	4.6	6.2	7.4	4.6	6.2	---	---	---

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1992

Station Name and number	Location and drainage area	Period of Record	Water Year 1992 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
<u>DELAWARE RIVER BASIN</u>								
LACKAWAXEN RIVER BASIN								
Dyberry Creek above Reservoir near Honesdale Pa. (01429300)	Lat 41°39'26", long 75°17'12", Wayne County, on right bank 955 ft downstream from bridge on West Branch Dyberry Creek at Tanners Falls, 0.2 mi downstream from confluence of the east and west branches of Dyberry Creek, and 6 mi north of Dyberry. Datum of gage is 1,023.43 ft above sea level Drainage area is 45.8 mi ² .	1975-92	6- 1-92	8.26	1,070	9-27-85	11.75	5,140
VANDERMARK CREEK BASIN								
Vandermark Creek at Milford, Pa. (01438300)	Lat 41°19'35", long 74°47'50", Pike County, at stone bridge on Broad Street in Milford, 0.4 mi above mouth. Datum of gage is 490.50 ft above sea sea level. Drainage area is 5.36 mi ² .	1962-92	11-22-91a	2.22	88	9-25-75	3.65	372
BRODHEAD CREEK BASIN								
Mill Creek at Mountainhome, Pa. (01440300)	Lat 41°09'50", long 75°16'00", Monroe County, at stone-arch bridge on macadam road 0.5 mi east of Mountainhome, and 1.5 mi above mouth. Drainage area is 5.84 mi ² .	1961-92	5-31-92	7.04	317	7-28-69	12.65	1,650

a May not be peak for water year.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

Annual maximum discharge at crest-stage partial-record stations during water year 1992--Continued

Station Name and number	Location and drainage area	Period of Record	Water Year 1992 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
<u>DELAWARE RIVER BASIN</u>								
LEHIGH RIVER BASIN								
Lehigh River at Allentown, Pa. (01451192)	Lat 40°36'23", long 75°27'17", Lehigh County, on upstream side of bridge on Hamilton Street at Allentown, 200 ft downstream from lock and dam, and 0.7 mi upstream from Little Lehigh Creek. Drainage area is 1,033 mi ² .	1977-81b 1982-92	11-23-91a	39.55	9,300	9- 9-87	46.89	43,200
SCHUYLKILL RIVER BASIN								
Schuylkill River at Pottsville, Pa. (01467500)	Lat 40°40'53", long 76°11'25", Schuylkill County, at bridge on State Highway 61 at Pottsville, and 1.7 mi downstream from Mill Creek. Drainage area is 53.4 mi ² .	1975-92	3-27-92	5.54	901	4-16-83	9.52	3,650
West Branch Schuylkill River near Cressona Pa. (01467948)	Lat 40°38'30", long 76°11'43", Schuylkill County, at bridge on Gordon-Nagle Trail, 0.75 mi upstream from Panther Creek, and 1.0 mi north of Cressona. Drainage area is 52.5 mi ² .	1975-92	3-27-92	4.61	825	9-26-75	6.74	2,940
Little Schuylkill River at Port Clinton, Pa. (01470190)	Lat 40°35'24", long 76°01'43", Schuylkill County, 0.65 mi upstream from Rattling Run and 0.7 mi north of Port Clinton. Drainage area is 132 mi ² .	1975-92	11-22-91a	5.39	1,350	1-24-79	9.86	7,710
Schuylkill River at Temple, Pa. (01470766)	Lat 40°24'52", long 75°56'23", Berks County, at concrete bridge on State Highway Route 383, 0.7 mi downstream from mouth of Maiden Creek, 0.6 mi west of Temple. Drainage area is 641 mi ² .	1978-92	3-27-92	12.75	13,600	4-16-83	20.36	29,700
Schuylkill River at Birdsboro, Pa. (01471660)	Lat 40°16'04", long 75°48'40", Berks County, on railroad bridge, on right bank 1,000 ft upstream from bridge on Route 82 crossing Schuylkill River in Birdsboro. Drainage area is 976 mi ² .	1981-92	3-27-92	151.12	13,200	4-16-83	158.72	30,700
Schuylkill River at Phoenixville, Pa. (01472162)	Lat 40°08'11", long 75°30'41", Chester County, on the downstream end of the left bank wingwall of Reading Railroad bridge across the mouth of French Creek at Phoenixville. Drainage area is 1,280 mi ² .	1971-92	6- 8-92a	82.47	15,800	6-23-72	100.58	79,100
Schuylkill River at Port Kennedy, Pa. (01473193)	Lat 40°06'29", long 75°25'16", Montgomery County, on bridge at left bank 200 ft upstream from bridge at Betzwood, and 4.0 mi downstream from Perkiomen Creek at Port Kennedy. Drainage area is 1,691 mi ² .	1977-92	No peak recorded			1-25-79	75.64	65,500

a May not be peak for water year.

b Operated as low-flow partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

Annual maximum discharge at crest-stage partial-record stations during water year 1992--Continued

Station Name and number	Location and drainage area	Period of Record	Water Year 1992 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
DELAWARE RIVER BASIN								
SCHUYLKILL RIVER BASIN-Continued								
Stony Creek at Norristown, Pa. (01473470)	Lat 40°07'38", long 75°20'43", Montgomery County, on right bank at culvert on Steiger Street in Norristown, 0.1 mi downstream from dam, 0.7 mi downstream from unnamed tributary, and 1.1 mi upstream from mouth. Drainage area is 20.4 mi ² .	1975-92	5- 8-92a	5.71	2,850	6-18-90	10.14	15,800
Schuylkill River at Norristown, Pa. (01473500)	Lat 40°06'40", long 75°20'50", Montgomery County, on right bank at Conrail bridge pier, 600 ft upstream from bridge on Dekalb Street in Norristown. Drainage area is 1,760 mi ² .	1981-92	3-28-92	55.46	14,600	4-16-83	63.34	44,800
CHRISTINA RIVER BASIN								
Middle Branch White Clay Creek near Landenberg, Pa. (01478200)	Lat 39°46'54", long 75°48'03", Chester County, at bridge on L.R. 15017, 1.4 mi above mouth, and 1.7 mi west of Landenberg. Drainage area is 12.7 mi ² .	1960-92	3-27-92c			6-22-72	12.29	3,860
Sucker Run near Coatesville, Pa. (01480610)	Lat 39°58'20", long 75°51'03", Chester County, at concrete bridge on South Park Avenue at State Highway 372, 1.6 mi above mouth, and 2 mi west of Coatesville. Drainage area is 2.57 mi ² .	1964-92	3-27-92	4.72	103	7-21-79	8.49	1,500

a May not be peak for water year.

c Gage height undetermined. Gage inoperative during water year.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1992

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date Discharge (ft ³ /s)
LACKAWAXEN RIVER BASIN					
01431600 Wallenpaupack Creek	Lackawaxen River	Lat 41°20'09", long 75°20'26" Wayne County, at bridge on dirt road, 2.6 mi south of intersection of Route 84 and 191, near East Sterling, Pa.	33.4	1978-81 1989-91	3-31-92 271
01432110 Lackawaxen River	Delaware River	Lat 41°28'33", long 75°02'12", Pike County, at mouth downstream from bridge at SR0590, at Rowland, Pa.	588	1989-91	5-20-92 392 6-1-92 5900 6-23-92 1870
NESHAMINY CREEK BASIN					
01465460 Iron Works Creek	Mill Creek	Lat 40°11'54", long 75°37'10" Montgomery County, at lower Holland Road bridge 300 ft east of Bustleton Pike and 1.3 mi south of Richboro.	3.69	1981b 1982-86 1991	11-14-91 0.68 4-17-92 2.74
CHRISTINA RIVER BASIN					
01478230 White Clay Creek	Christina River	Lat 39°45'02", long 75°46'19" Chester County, at bridge on Sharpless Road, 1.2 mi south of Landenberg, Pa.	60.0	1989-92	11-20-91 10.7 1-29-92 20.2 3-16-92 17.1 5-26-92 17.4 8-27-92 9.10
01494990 Big Elk Creek near Lewisville	Elk River	Lat 39°43'50", long 75°50'55", Chester County, at bridge on Lewisville Road, 9.2 mi north of Elkton, Md.	41.0	1990-91	10-1-91 14.2 11-21-91 17.7 12-13-91 31.0 1-27-92 30.5 3-16-92 28.0 5-26-92 33.1 7-15-92 17.9 8-26-92 13.0

b Operated as a low-flow partial-record station.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD (MG/L AS CACO3) (00902)
01472080 PIGEON CREEK NEAR PARKER FORD, PA (LAT 40 12 03N LONG 075 37 10W)										
OCT 1991 08...	0830	3.6	171	7.2	7.5	10.0	1.2	10.8	58	32
01472109 STONY RUN NEAR SPRING CITY, PA (LAT 40 10 11N LONG 075 34 45W)										
OCT 1991 08...	1045	0.17	247	7.1	17.5	10.0	3.3	9.8	85	37
01472138 FRENCH CREEK NEAR COVENTRYVILLE, PA (LAT 40 10 14N LONG 075 41 50W)										
OCT 1991 09...	0930	6.8	146	7.1	11.5	10.0	2.5	10.6	54	17
01472140 SOUTH BRANCH FRENCH CREEK AT COVENTRYVILLE, PA (LAT 40 09 18N LONG 075 42 52W)										
OCT 1991 09...	1130	4.5	203	7.2	18.5	10.5	0.50	12.4	71	32
01472154 FRENCH CREEK NEAR PUGHTOWN, PA (LAT 40 09 17N LONG 075 38 25W)										
OCT 1991 15...	0900	15	168	7.0	12.5	10.0	1.0	10.4	60	24
014721612 FRENCH CREEK AT RAILROAD BRIDGE AT PHOENIXVILLE, PA (LAT 40 08 10N LONG 075 30 41W)										
OCT 1991 21...	0915	27	212	7.2	5.5	7.5	2.3	12.1	78	18
01472170 PICKERING CREEK NEAR EAGLE, PA (LAT 40 04 43N LONG 075 39 14W)										
OCT 1991 03...	1215	0.78	227	7.5	22.5	17.0	2.7	10.6	81	36
01472174 PICKERING CREEK NEAR CHESTER SPRINGS, PA (LAT 40 05 22N LONG 075 37 50W)										
OCT 1991 03...	0900	1.9	211	7.1	19.5	16.0	1.4	9.1	78	24
014721854 PICKERING CREEK AT MERLIN, PA (LAT 40 06 25N LONG 075 35 34W)										
OCT 1991 02...	1145	7.2	217	8.2	23.0	15.5	0.70	12.0	80	22
014721884 PICKERING CREEK AT CHARLESTOWN ROAD BRIDGE AT CHARLESTOWN, PA (LAT 40 05 57N LONG 075 33 20W)										
OCT 1991 02...	0830	8.1	218	7.6	17.5	14.5	1.0	9.6	80	17
01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)										
OCT 1991 07...	0845	10	245	7.0	11.5	12.5	0.70	10.6	86	28
01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)										
OCT 1991 28...	0915	--	570	7.6	18.5	13.0	0.60	10.8	240	59
01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)										
OCT 1991 28...	1200	8.2	562	8.1	15.5	14.0	2.0	11.0	250	27

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	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 AD- SORP- TION (MG/L AS K) (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CACO3) (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)
01472080 PIGEON CREEK NEAR PARKER FORD, PA (LAT 40 12 03N LONG 075 37 10W)										
OCT 1991 08...	15	5.0	7.7	0.4	22	1.8	26	17	9.9	0.10
01472109 STONY RUN NEAR SPRING CITY, PA (LAT 40 10 11N LONG 075 34 45W)										
OCT 1991 08...	22	7.4	11	0.5	21	3.4	48	22	18	<0.10
01472138 FRENCH CREEK NEAR COVENTRYVILLE, PA (LAT 40 10 14N LONG 075 41 50W)										
OCT 1991 09...	14	4.6	5.5	0.3	18	1.4	37	11	8.1	0.10
01472140 SOUTH BRANCH FRENCH CREEK AT COVENTRYVILLE, PA (LAT 40 09 18N LONG 075 42 52W)										
OCT 1991 09...	19	5.8	7.4	0.4	18	2.2	39	14	15	0.20
01472154 FRENCH CREEK NEAR PUGHTOWN, PA (LAT 40 09 17N LONG 075 38 25W)										
OCT 1991 15...	16	4.9	6.5	0.4	18	2.0	36	12	11	0.20
014721612 FRENCH CREEK AT RAILROAD BRIDGE AT PHOENIXVILLE, PA (LAT 40 08 10N LONG 075 30 41W)										
OCT 1991 21...	21	6.2	9.5	0.5	20	2.7	60	23	16	0.10
01472170 PICKERING CREEK NEAR EAGLE, PA (LAT 40 04 43N LONG 075 39 14W)										
OCT 1991 03...	22	6.4	7.8	0.4	17	1.8	45	13	25	0.20
01472174 PICKERING CREEK NEAR CHESTER SPRINGS, PA (LAT 40 05 22N LONG 075 37 50W)										
OCT 1991 03...	22	5.5	7.1	0.4	16	1.9	54	14	17	0.20
014721854 PICKERING CREEK AT MERLIN, PA (LAT 40 06 25N LONG 075 35 34W)										
OCT 1991 02...	22	6.2	7.7	0.4	17	1.8	58	15	20	0.20
014721884 PICKERING CREEK AT CHARLESTOWN ROAD BRIDGE AT CHARLESTOWN, PA (LAT 40 05 57N LONG 075 33 20W)										
OCT 1991 02...	22	6.2	8.0	0.4	17	1.8	63	16	22	0.20
01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)										
OCT 1991 07...	23	7.0	8.7	0.4	17	2.5	58	18	19	<0.10
01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)										
OCT 1991 28...	64	20	26	0.7	19	2.4	183	35	49	0.10
01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)										
OCT 1991 28...	49	32	26	0.7	18	3.6	227	30	41	0.10

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
01472080	PIGEON CREEK NEAR PARKER FORD, PA (LAT 40 12 03N LONG 075 37 10W)									
OCT 1991 08...	17	98	--	<0.010	2.00	<0.010	0.10	<0.20	0.060	0.040
01472109	STONY RUN NEAR SPRING CITY, PA (LAT 40 10 11N LONG 075 34 45W)									
OCT 1991 08...	18	146	--	<0.010	3.40	<0.010	0.30	0.20	0.100	0.050
01472138	FRENCH CREEK NEAR COVENTRYVILLE, PA (LAT 40 10 14N LONG 075 41 50W)									
OCT 1991 09...	16	86	--	<0.010	0.630	<0.010	--	<0.20	0.030	<0.010
01472140	SOUTH BRANCH FRENCH CREEK AT COVENTRYVILLE, PA (LAT 40 09 18N LONG 075 42 52W)									
OCT 1991 09...	19	120	--	<0.010	3.20	<0.010	--	<0.20	0.030	<0.010
01472154	FRENCH CREEK NEAR PUGHTOWN, PA (LAT 40 09 17N LONG 075 38 25W)									
OCT 1991 15...	17	98	--	<0.010	1.40	0.030	<0.20	<0.20	0.070	0.020
014721612	FRENCH CREEK AT RAILROAD BRIDGE AT PHOENIXVILLE, PA (LAT 40 08 10N LONG 075 30 41W)									
OCT 1991 21...	15	135	--	<0.010	1.20	0.030	0.20	0.30	0.040	0.020
01472170	PICKERING CREEK NEAR EAGLE, PA (LAT 40 04 43N LONG 075 39 14W)									
OCT 1991 03...	20	131	--	<0.010	1.80	<0.010	0.10	<0.20	0.030	<0.010
01472174	PICKERING CREEK NEAR CHESTER SPRINGS, PA (LAT 40 05 22N LONG 075 37 50W)									
OCT 1991 03...	17	125	--	<0.010	1.80	<0.010	--	<0.20	0.030	<0.010
014721854	PICKERING CREEK AT MERLIN, PA (LAT 40 06 25N LONG 075 35 34W)									
OCT 1991 02...	17	131	--	<0.010	1.40	<0.010	--	<0.20	0.020	<0.010
014721884	PICKERING CREEK AT CHARLESTOWN ROAD BRIDGE AT CHARLESTOWN, PA (LAT 40 05 57N LONG 075 33 20W)									
OCT 1991 02...	18	138	--	<0.010	1.40	<0.010	--	<0.20	0.030	<0.010
01472190	PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)									
OCT 1991 07...	17	135	--	<0.010	1.10	<0.010	--	<0.20	0.020	<0.010
01473167	LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)									
OCT 1991 28...	7.4	322	--	<0.010	1.90	0.020	<0.20	<0.20	<0.010	<0.010
01473168	VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)									
OCT 1991 28...	7.2	334	--	<0.010	1.90	0.020	<0.20	<0.20	0.030	<0.010

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)
01472080 PIGEON CREEK NEAR PARKER FORD, PA (LAT 40 12 03N LONG 075 37 10W)										
OCT 1991 08...	0.040	<10	--	--	--	--	--	--	--	51
01472109 STONY RUN NEAR SPRING CITY, PA (LAT 40 10 11N LONG 075 34 45W)										
OCT 1991 08...	0.060	10	--	--	--	--	--	--	--	33
01472138 FRENCH CREEK NEAR COVENTRYVILLE, PA (LAT 40 10 14N LONG 075 41 50W)										
OCT 1991 09...	0.010	20	--	--	--	--	--	--	--	94
01472140 SOUTH BRANCH FRENCH CREEK AT COVENTRYVILLE, PA (LAT 40 09 18N LONG 075 42 52W)										
OCT 1991 09...	<0.010	<10	--	--	--	--	--	--	--	69
01472154 FRENCH CREEK NEAR PUGHTOWN, PA (LAT 40 09 17N LONG 075 38 25W)										
OCT 1991 15...	<0.010	20	--	--	--	--	--	--	--	94
014721612 FRENCH CREEK AT RAILROAD BRIDGE AT PHOENIXVILLE, PA (LAT 40 08 10N LONG 075 30 41W)										
OCT 1991 21...	0.010	<10	2	44	<0.5	<1.0	<5	<3	<10	93
01472170 PICKERING CREEK NEAR EAGLE, PA (LAT 40 04 43N LONG 075 39 14W)										
OCT 1991 03...	<0.010	<10	--	--	--	--	--	--	--	150
01472174 PICKERING CREEK NEAR CHESTER SPRINGS, PA (LAT 40 05 22N LONG 075 37 50W)										
OCT 1991 03...	<0.010	<10	--	--	--	--	--	--	--	85
014721854 PICKERING CREEK AT MERLIN, PA (LAT 40 06 25N LONG 075 35 34W)										
OCT 1991 02...	0.010	<10	--	--	--	--	--	--	--	180
014721884 PICKERING CREEK AT CHARLESTOWN ROAD BRIDGE AT CHARLESTOWN, PA (LAT 40 05 57N LONG 075 33 20W)										
OCT 1991 02...	<0.010	<10	--	--	--	--	--	--	--	68
01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)										
OCT 1991 07...	<0.010	<10	--	--	--	--	--	--	--	49
01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)										
OCT 1991 28...	<0.010	10	1	25	<0.5	<1.0	<5	<3	<10	6
01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)										
OCT 1991 28...	0.020	<10	<1	27	<0.5	<1.0	<5	<3	<10	13

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
01472080 PIGEON CREEK NEAR PARKER FORD, PA (LAT 40 12 03N LONG 075 37 10W)										
OCT 1991 08...	--	17	--	--	--	--	--	--	--	--
01472109 STONY RUN NEAR SPRING CITY, PA (LAT 40 10 11N LONG 075 34 45W)										
OCT 1991 08...	--	28	--	--	--	--	--	--	--	--
01472138 FRENCH CREEK NEAR COVENTRYVILLE, PA (LAT 40 10 14N LONG 075 41 50W)										
OCT 1991 09...	--	17	--	--	--	--	--	--	--	--
01472140 SOUTH BRANCH FRENCH CREEK AT COVENTRYVILLE, PA (LAT 40 09 18N LONG 075 42 52W)										
OCT 1991 09...	--	11	--	--	--	--	--	--	--	--
01472154 FRENCH CREEK NEAR PUGHTOWN, PA (LAT 40 09 17N LONG 075 38 25W)										
OCT 1991 15...	--	14	--	--	--	--	--	--	--	--
014721612 FRENCH CREEK AT RAILROAD BRIDGE AT PHOENIXVILLE, PA (LAT 40 08 10N LONG 075 30 41W)										
OCT 1991 21...	<10	32	<10	100	<6	<4	--	<10	<1.0	4
01472170 PICKERING CREEK NEAR EAGLE, PA (LAT 40 04 43N LONG 075 39 14W)										
OCT 1991 03...	--	28	--	--	--	--	--	--	--	--
01472174 PICKERING CREEK NEAR CHESTER SPRINGS, PA (LAT 40 05 22N LONG 075 37 50W)										
OCT 1991 03...	--	15	--	--	--	--	--	--	--	--
014721854 PICKERING CREEK AT MERLIN, PA (LAT 40 06 25N LONG 075 35 34W)										
OCT 1991 02...	--	14	--	--	--	--	--	--	--	--
014721884 PICKERING CREEK AT CHARLESTOWN ROAD BRIDGE AT CHARLESTOWN, PA (LAT 40 05 57N LONG 075 33 20W)										
OCT 1991 02...	--	18	--	--	--	--	--	--	--	--
01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)										
OCT 1991 07...	--	7	--	--	--	--	--	--	--	--
01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)										
OCT 1991 28...	10	5	<10	140	<6	7	<0.1	<10	<1.0	5
01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)										
OCT 1991 28...	<10	10	<10	56	<6	37	<0.1	<10	<1.0	4

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD (MG/L AS CACO3) (00902)
01475840 CRUM CREEK AT WHITEHORSE, PA (LAT 39 59 54N LONG 075 27 38W)										
OCT 1991 29...	0915	4.4	182	7.3	7.5	10.0	1.4	10.7	68	1
01476430 RIDLEY CREEK AT GOSHENVILLE, PA (LAT 39 59 28N LONG 075 32 40W)										
NOV 1991 06...	0915	2.3	237	7.4	2.5	5.0	0.70	13.2	86	17
01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 52N LONG 075 31 02W)										
NOV 1991 06...	1215	4.9	252	7.4	5.0	6.0	1.3	13.5	70	6
01476790 EAST BRANCH CHESTER CREEK AT GREEN HILL, PA (LAT 39 59 49N LONG 075 35 40W)										
OCT 1991 21...	1249	0.40	321	7.2	16.5	11.5	0.40	10.6	100	23
01476830 EAST BRANCH CHESTER CREEK AT MILLTOWN, PA (LAT 39 58 21N LONG 075 32 57W)										
OCT 1991 21...	1430	2.5	298	7.4	12.5	11.0	2.9	11.7	110	30
01476835 EAST BRANCH CHESTER CREEK AT WESTTOWN SCHOOL AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)										
OCT 1991 22...	1130	4.5	321	7.4	15.5	10.0	2.0	10.4	110	45
01476840 TRIBUTARY GOOSE CREEK TO EAST BRANCH CHESTER CREEK NEAR WEST CHESTER, PA (LAT 39 56 04N LONG 075 33 31W)										
NOV 1991 04...	0945	10	680	7.5	5.5	11.0	2.5	10.8	160	49
01476848 EAST BRANCH CHESTER CREEK BELOW GOOSE CREEK NEAR WEST CHESTER, PA (LAT 39 55 45N LONG 075 32 00W)										
OCT 1991 22...	0900	12	465	7.5	16.5	9.5	1.4	10.3	130	55
01478120 EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)										
NOV 1991 14...	0900	5.1	330	7.6	10.0	6.5	1.0	12.2	150	53
01478190 EAST BRANCH WHITE CLAY CREEK AT WICKERTON, PA (LAT 39 47 44N LONG 075 49 27W)										
NOV 1991 13...	0930	3.7	235	7.4	7.5	6.5	1.6	12.1	82	47
01478220 WEST BRANCH WHITE CLAY CREEK NEAR CHESTERTOWN, PA (LAT 39 45 56N LONG 075 47 47W)										
NOV 1991 13...	1145	3.9	184	7.3	9.0	7.0	1.4	12.9	58	34
01479680 WEST BRANCH RED CLAY CREEK AT KENNETT SQUARE, PA (LAT 39 50 13N LONG 075 43 33W)										
NOV 1991 07...	1015	4.5	338	7.4	9.0	6.0	1.4	13.3	150	0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	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 AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT WH TOT FET FIELD (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)
01475840	CRUM CREEK AT WHITEHORSE, PA (LAT 39 59 54N LONG 075 27 38W)									
OCT 1991 29...	14	7.9	7.0	0.4	18	2.3	67	11	18	0.20
01476430	RIDLEY CREEK AT GOSHENVILLE, PA (LAT 39 59 28N LONG 075 32 40W)									
NOV 1991 06...	18	10	14	0.7	26	2.0	69	18	29	0.10
01476435	RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 52N LONG 075 31 02W)									
NOV 1991 06...	20	4.9	9.8	0.5	23	1.5	64	16	25	0.10
01476790	EAST BRANCH CHESTER CREEK AT GREEN HILL, PA (LAT 39 59 49N LONG 075 35 40W)									
OCT 1991 21...	22	12	18	0.8	27	1.6	81	16	42	0.10
01476830	EAST BRANCH CHESTER CREEK AT MILLTOWN, PA (LAT 39 58 21N LONG 075 32 57W)									
OCT 1991 21...	27	11	9.3	0.4	14	5.2	83	34	18	0.10
01476835	EAST BRANCH CHESTER CREEK AT WESTTOWN SCHOOL AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)									
OCT 1991 22...	25	11	14	0.6	21	3.4	63	23	33	0.10
01476840	TRIBUTARY GOOSE CREEK TO EAST BRANCH CHESTER CREEK NEAR WEST CHESTER, PA (LAT 39 56 04N LONG 075 33 31W)									
NOV 1991 04...	42	14	63	2	44	9.6	114	50	94	0.40
01476848	EAST BRANCH CHESTER CREEK BELOW GOOSE CREEK NEAR WEST CHESTER, PA (LAT 39 55 45N LONG 075 32 00W)									
OCT 1991 22...	32	12	35	1	36	6.4	75	36	52	0.20
01478120	EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)									
NOV 1991 14...	35	15	7.0	0.2	9	2.9	96	29	17	0.10
01478190	EAST BRANCH WHITE CLAY CREEK AT WICKERTON, PA (LAT 39 47 44N LONG 075 49 27W)									
NOV 1991 13...	19	8.4	9.7	0.5	19	4.8	35	19	18	0.10
01478220	WEST BRANCH WHITE CLAY CREEK NEAR CHESTERVILLE, PA (LAT 39 45 56N LONG 075 47 47W)									
NOV 1991 13...	14	5.6	7.9	0.5	21	5.7	24	18	18	<0.10
01479680	WEST BRANCH RED CLAY CREEK AT KENNETT SQUARE, PA (LAT 39 50 13N LONG 075 43 33W)									
NOV 1991 07...	34	15	8.3	0.3	11	3.3	166	31	18	0.10

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
01475840 CRUM CREEK AT WHITEHORSE, PA (LAT 39 59 54N LONG 075 27 38W)										
OCT 1991 29...	16	120	--	<0.010	0.830	0.020	<0.20	0.20	0.010	<0.010
01476430 RIDLEY CREEK AT GOSHENVILLE, PA (LAT 39 59 28N LONG 075 32 40W)										
NOV 1991 06...	10	154	--	<0.010	2.50	0.010	<0.20	<0.20	0.060	0.050
01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 52N LONG 075 31 02W)										
NOV 1991 06...	26	159	--	<0.010	3.70	0.020	<0.20	0.20	0.340	0.360
01476790 EAST BRANCH CHESTER CREEK AT GREEN HILL, PA (LAT 39 59 49N LONG 075 35 40W)										
OCT 1991 21...	7.2	187	--	<0.010	4.30	0.020	<0.20	<0.20	<0.010	<0.010
01476830 EAST BRANCH CHESTER CREEK AT MILLTOWN, PA (LAT 39 58 21N LONG 075 32 57W)										
OCT 1991 21...	15	181	2.48	0.020	2.50	0.020	<0.20	<0.20	0.020	<0.010
01476835 EAST BRANCH CHESTER CREEK AT WESTTOWN SCHOOL AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)										
OCT 1991 22...	14	175	2.89	0.010	2.90	0.030	0.20	0.50	0.340	0.260
01476840 TRIBUTARY GOOSE CREEK TO EAST BRANCH CHESTER CREEK NEAR WEST CHESTER, PA (LAT 39 56 04N LONG 075 33 31W)										
NOV 1991 04...	17	387	5.46	0.040	5.50	0.050	0.90	1.1	3.10	3.00
01476848 EAST BRANCH CHESTER CREEK BELOW GOOSE CREEK NEAR WEST CHESTER, PA (LAT 39 55 45N LONG 075 32 00W)										
OCT 1991 22...	17	279	8.88	0.020	8.90	0.040	0.50	0.60	1.50	1.40
01478120 EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)										
NOV 1991 14...	14	200	--	<0.010	5.00	0.010	0.20	0.30	0.020	0.010
01478190 EAST BRANCH WHITE CLAY CREEK AT WICKERTON, PA (LAT 39 47 44N LONG 075 49 27W)										
NOV 1991 13...	15	140	--	<0.010	5.60	0.020	0.40	0.40	0.220	0.190
01478220 WEST BRANCH WHITE CLAY CREEK NEAR CHESTERTOWN, PA (LAT 39 45 56N LONG 075 47 47W)										
NOV 1991 13...	13	112	--	<0.010	3.50	0.040	0.40	0.60	0.030	0.010
01479680 WEST BRANCH RED CLAY CREEK AT KENNETT SQUARE, PA (LAT 39 50 13N LONG 075 43 33W)										
NOV 1991 07...	15	249	--	<0.010	5.60	0.030	0.20	<0.20	0.040	0.030

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (MG/L AS BE) (01010)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR) (01030)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)
01475840 CRUM CREEK AT WHITEHORSE, PA (LAT 39 59 54N LONG 075 27 38W)										
OCT 1991 29...	0.020	10	--	--	--	--	--	--	--	83
01476430 RIDLEY CREEK AT GOSHENVILLE, PA (LAT 39 59 28N LONG 075 32 40W)										
NOV 1991 06...	0.050	<10	--	--	--	--	--	--	--	54
01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 52N LONG 075 31 02W)										
NOV 1991 06...	0.290	<10	--	--	--	--	--	--	--	30
01476790 EAST BRANCH CHESTER CREEK AT GREEN HILL, PA (LAT 39 59 49N LONG 075 35 40W)										
OCT 1991 21...	0.020	<10	--	--	--	--	--	--	--	10
01476830 EAST BRANCH CHESTER CREEK AT MILLTOWN, PA (LAT 39 58 21N LONG 075 32 57W)										
OCT 1991 21...	0.030	<10	--	--	--	--	--	--	--	71
01476835 EAST BRANCH CHESTER CREEK AT WESTTOWN SCHOOL AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)										
OCT 1991 22...	0.230	20	<1	47	<0.5	<1.0	<5	<3	<10	87
01476840 TRIBUTARY GOOSE CREEK TO EAST BRANCH CHESTER CREEK NEAR WEST CHESTER, PA (LAT 39 56 04N LONG 075 33 31W)										
NOV 1991 04...	1.10	<10	<1	39	<0.5	<1.0	<5	<3	20	39
01476848 EAST BRANCH CHESTER CREEK BELOW GOOSE CREEK NEAR WEST CHESTER, PA (LAT 39 55 45N LONG 075 32 00W)										
OCT 1991 22...	1.20	<10	<1	49	<0.5	1.0	<5	<3	10	54
01478120 EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)										
NOV 1991 14...	0.020	<10	--	--	--	--	--	--	--	16
01478190 EAST BRANCH WHITE CLAY CREEK AT WICKERTON, PA (LAT 39 47 44N LONG 075 49 27W)										
NOV 1991 13...	0.180	<10	--	--	--	--	--	--	--	42
01478220 WEST BRANCH WHITE CLAY CREEK NEAR CHESTERTOWN, PA (LAT 39 45 56N LONG 075 47 47W)										
NOV 1991 13...	<0.010	<10	--	--	--	--	--	--	--	58
01479680 WEST BRANCH RED CLAY CREEK AT KENNETT SQUARE, PA (LAT 39 50 13N LONG 075 43 33W)										
NOV 1991 07...	0.030	<10	<1	40	<0.5	<1.0	<5	<3	<10	26

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
01475840 CRUM CREEK AT WHITEHORSE, PA (LAT 39 59 54N LONG 075 27 38W)										
OCT 1991 29...	--	6	--	--	--	--	--	--	--	--
01476430 RIDLEY CREEK AT GOSHENVILLE, PA (LAT 39 59 28N LONG 075 32 40W)										
NOV 1991 06...	--	16	--	--	--	--	--	--	--	--
01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 52N LONG 075 31 02W)										
NOV 1991 06...	--	32	--	--	--	--	--	--	--	--
01476790 EAST BRANCH CHESTER CREEK AT GREEN HILL, PA (LAT 39 59 49N LONG 075 35 40W)										
OCT 1991 21...	--	170	--	--	--	--	--	--	--	--
01476830 EAST BRANCH CHESTER CREEK AT MILLTOWN, PA (LAT 39 58 21N LONG 075 32 57W)										
OCT 1991 21...	--	37	--	--	--	--	--	--	--	--
01476835 EAST BRANCH CHESTER CREEK AT WESTTOWN SCHOOL AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)										
OCT 1991 22...	<10	46	<10	130	<6	7	<0.1	<10	<1.0	9
01476840 TRIBUTARY GOOSE CREEK TO EAST BRANCH CHESTER CREEK NEAR WEST CHESTER, PA (LAT 39 56 04N LONG 075 33 31W)										
NOV 1991 04...	<10	18	<10	170	<6	38	0.2	10	<1.0	30
01476848 EAST BRANCH CHESTER CREEK BELOW GOOSE CREEK NEAR WEST CHESTER, PA (LAT 39 55 45N LONG 075 32 00W)										
OCT 1991 22...	10	25	<10	150	<6	21	<0.1	<10	2.0	12
01478120 EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)										
NOV 1991 14...	--	11	--	--	--	--	--	--	--	--
01478190 EAST BRANCH WHITE CLAY CREEK AT WICKERTON, PA (LAT 39 47 44N LONG 075 49 27W)										
NOV 1991 13...	--	15	--	--	--	--	--	--	--	--
01478220 WEST BRANCH WHITE CLAY CREEK NEAR CHESTERTVILLE, PA (LAT 39 45 56N LONG 075 47 47W)										
NOV 1991 13...	--	12	--	--	--	--	--	--	--	--
01479680 WEST BRANCH RED CLAY CREEK AT KENNETT SQUARE, PA (LAT 39 50 13N LONG 075 43 33W)										
NOV 1991 07...	<10	22	<10	96	<6	5	<0.1	<10	1.0	<3

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD (MG/L AS CACO3) (00902)
01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINT, PA (LAT 39 49 11N LONG 075 41 29W)										
NOV 1991 07...	1245	3.6	321	7.7	9.0	5.5	0.50	16.0	140	59
01480434 WEST BRANCH BRANDYWINE CREEK AT ROCK RUN, PA (LAT 39 59 36N LONG 075 49 41W)										
NOV 1991 18...	1300	14	220	7.4	7.5	5.0	0.60	15.2	80	31
01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)										
OCT 1991 31...	0845	8.2	239	7.8	14.0	8.5	0.60	11.1	83	42
01480632 DOE RUN AT SPRINGDELL, PA (LAT 39 54 25N LONG 075 49 42W)										
OCT 1991 31...	1045	4.9	142	7.0	15.5	10.0	5.7	11.4	50	7
01480640 WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 34N LONG 075 39 47W)										
OCT 1991 30...	0930	50	270	6.8	12.5	8.0	0.30	12.1	96	27
01480648 EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA (LAT 40 05 41N LONG 075 51 14W)										
NOV 1991 01...	0945	1.9	208	7.2	15.0	11.5	1.6	10.9	78	4
01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)										
NOV 1991 01...	1200	7.0	199	7.5	17.0	11.5	0.60	12.1	71	0
01480656 INDIAN RUN NEAR SPRINGTON, PA (LAT 40 04 33N LONG 075 46 52W)										
NOV 1991 05...	1200	1.7	191	7.5	4.0	6.0	0.50	13.5	82	7
01480903 VALLEY CREEK AT MULLSTEINS MEADOWS NEAR DOWNINGTOWN, PA (LAT 39 58 31N LONG 075 39 48W)										
NOV 1991 18...	0945	4.5	349	7.5	6.0	3.5	1.1	15.0	150	60
01480950 EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 35N LONG 075 38 54W)										
OCT 1991 30...	1245	51	350	8.3	17.5	10.5	0.50	16.4	120	45
01481030 BRANDYWINE CREEK NEAR CHADDS FORD, PA (LAT 39 51 15N LONG 075 35 58W)										
NOV 1991 15...	1000	127	299	7.4	12.0	7.5	0.70	12.4	100	38
01494900 EAST BRANCH BIG ELK CREEK AT ELKVIEW, PA (LAT 39 48 45N LONG 075 54 04W)										
OCT 1991 25...	1200	3.7	182	7.2	19.0	13.5	1.0	10.3	57	13
01494950 WEST BRANCH BIG ELK CREEK NEAR OXFORD, PA (LAT 39 46 45N LONG 075 55 27W)										
OCT 1991 25...	0915	5.0	208	7.3	14.5	13.5	0.70	10.8	64	31

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	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 AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY- WAT WH TOT FET FIELD (MG/L AS CACO3) (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)
01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINT, PA (LAT 39 49 11N LONG 075 41 29W)										
NOV 1991 07...	33	13	11	0.4	15	3.8	77	42	23	0.10
01480434 WEST BRANCH BRANDYWINE CREEK AT ROCK RUN, PA (LAT 39 59 36N LONG 075 49 41W)										
NOV 1991 18...	20	7.4	9.0	0.4	19	2.6	49	22	21	<0.10
01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)										
OCT 1991 31...	21	7.3	9.2	0.4	19	3.0	41	21	21	0.10
01480632 DOE RUN AT SPRINGDELL, PA (LAT 39 54 25N LONG 075 49 42W)										
OCT 1991 31...	12	4.8	5.0	0.3	17	2.1	43	9.5	12	<0.10
01480640 WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 34N LONG 075 39 47W)										
OCT 1991 30...	24	8.7	13	0.6	22	3.9	69	24	24	0.20
01480648 EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA (LAT 40 05 41N LONG 075 51 14W)										
NOV 1991 01...	20	6.7	7.8	0.4	17	2.9	74	15	15	<0.10
01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)										
NOV 1991 01...	19	5.8	8.0	0.4	19	2.4	96	15	14	<0.10
01480656 INDIAN RUN NEAR SPRINGTON, PA (LAT 40 04 33N LONG 075 46 52W)										
NOV 1991 05...	17	9.5	15	0.7	28	2.3	75	9.4	14	<0.10
01480903 VALLEY CREEK AT MULLSTEINS MEADOWS NEAR DOWNINGTOWN, PA (LAT 39 58 31N LONG 075 39 48W)										
NOV 1991 18...	38	14	13	0.5	15	1.8	93	32	27	0.10
01480950 EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 35N LONG 075 38 54W)										
OCT 1991 30...	30	11	22	0.9	28	4.5	75	30	33	0.20
01481030 BRANDYWINE CREEK NEAR CHADDS FORD, PA (LAT 39 51 15N LONG 075 35 58W)										
NOV 1991 15...	26	9.4	16	0.7	24	3.6	66	25	26	0.20
01494900 EAST BRANCH BIG ELK CREEK AT ELKVIEW, PA (LAT 39 48 45N LONG 075 54 04W)										
OCT 1991 25...	13	5.9	7.5	0.4	21	4.3	44	11	18	<0.10
01494950 WEST BRANCH BIG ELK CREEK NEAR OXFORD, PA (LAT 39 46 45N LONG 075 55 27W)										
OCT 1991 25...	14	6.9	13	0.7	30	3.3	33	10	23	0.10

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINT, PA (LAT 39 49 11N LONG 075 41 29W)										
NOV 1991 07...	15	204	--	<0.010	3.70	0.020	0.30	0.30	0.020	0.030
01480434 WEST BRANCH BRANDYWINE CREEK AT ROCK RUN, PA (LAT 39 59 36N LONG 075 49 41W)										
NOV 1991 18...	12	137	--	<0.010	3.00	0.020	<0.20	<0.20	<0.010	<0.010
01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)										
OCT 1991 31...	7.8	134	--	<0.010	4.20	0.020	<0.20	<0.20	0.060	0.050
01480632 DOE RUN AT SPRINGDELL, PA (LAT 39 54 25N LONG 075 49 42W)										
OCT 1991 31...	10	98	--	<0.010	3.80	0.010	<0.20	0.20	<0.010	<0.010
01480640 WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 34N LONG 075 39 47W)										
OCT 1991 30...	8.8	161	--	<0.010	2.80	<0.010	<0.20	0.30	0.120	0.110
01480648 EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA (LAT 40 05 41N LONG 075 51 14W)										
NOV 1991 01...	16	144	3.68	0.021	3.70	0.021	0.30	0.50	0.041	0.021
01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)										
NOV 1991 01...	17	153	--	<0.010	3.20	0.021	0.30	<0.20	0.021	<0.010
01480656 INDIAN RUN NEAR SPRINGTON, PA (LAT 40 04 33N LONG 075 46 52W)										
NOV 1991 05...	14	141	--	<0.010	3.40	0.010	<0.20	0.20	0.060	0.060
01480903 VALLEY CREEK AT MULLSTEINS MEADOWS NEAR DOWNINGTOWN, PA (LAT 39 58 31N LONG 075 39 48W)										
NOV 1991 18...	4.1	196	--	<0.010	2.30	0.010	<0.20	<0.20	<0.010	<0.010
01480950 EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 35N LONG 075 38 54W)										
OCT 1991 30...	9.8	201	3.19	0.010	3.20	0.010	0.30	0.40	0.350	0.330
01481030 BRANDYWINE CREEK NEAR CHADDS FORD, PA (LAT 39 51 15N LONG 075 35 58W)										
NOV 1991 15...	8.5	169	--	<0.010	3.20	0.010	0.20	0.30	0.150	0.130
01494900 EAST BRANCH BIG ELK CREEK AT ELKVIEW, PA (LAT 39 48 45N LONG 075 54 04W)										
OCT 1991 25...	11	125	5.98	0.020	6.00	0.020	0.20	0.40	0.430	0.420
01494950 WEST BRANCH BIG ELK CREEK NEAR OXFORD, PA (LAT 39 46 45N LONG 075 55 27W)										
OCT 1991 25...	9.6	124	5.39	0.010	5.40	<0.010	0.20	0.30	0.170	0.170

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (MG/L AS BE) (01010)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR) (01030)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)
01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINT, PA (LAT 39 49 11N LONG 075 41 29W)										
NOV 1991 07...	0.010	<10	<1	52	<0.5	<1.0	<5	<3	<10	26
01480434 WEST BRANCH BRANDYWINE CREEK AT ROCK RUN, PA (LAT 39 59 36N LONG 075 49 41W)										
NOV 1991 18...	<0.010	10	--	--	--	--	--	--	--	56
01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)										
OCT 1991 31...	0.040	10	--	--	--	--	--	--	--	67
01480632 DOE RUN AT SPRINGDELL, PA (LAT 39 54 25N LONG 075 49 42W)										
OCT 1991 31...	<0.010	20	--	--	--	--	--	--	--	51
01480640 WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 34N LONG 075 39 47W)										
OCT 1991 30...	0.090	<10	<1	26	<0.5	1.0	<5	<3	<10	75
01480648 EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA (LAT 40 05 41N LONG 075 51 14W)										
NOV 1991 01...	<0.010	<10	--	--	--	--	--	--	--	54
01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)										
NOV 1991 01...	0.030	20	--	--	--	--	--	--	--	65
01480656 INDIAN RUN NEAR SPRINGTON, PA (LAT 40 04 33N LONG 075 46 52W)										
NOV 1991 05...	0.040	<10	--	--	--	--	--	--	--	47
01480903 VALLEY CREEK AT MULLSTEINS MEADOWS NEAR DOWNINGTOWN, PA (LAT 39 58 31N LONG 075 39 48W)										
NOV 1991 18...	<0.010	<10	--	--	--	--	--	--	--	15
01480950 EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 35N LONG 075 38 54W)										
OCT 1991 30...	0.270	50	<1	30	<0.5	<1.0	<5	<3	<10	130
01481030 BRANDYWINE CREEK NEAR CHADDS FORD, PA (LAT 39 51 15N LONG 075 35 58W)										
NOV 1991 15...	0.120	10	--	--	--	--	--	--	--	45
01494900 EAST BRANCH BIG ELK CREEK AT ELKVIEW, PA (LAT 39 48 45N LONG 075 54 04W)										
OCT 1991 25...	0.370	<10	<1	24	<0.5	<1.0	<5	<3	<10	40
01494950 WEST BRANCH BIG ELK CREEK NEAR OXFORD, PA (LAT 39 46 45N LONG 075 55 27W)										
OCT 1991 25...	0.140	<10	<1	32	<0.5	<1.0	<5	<3	<10	34

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINT, PA (LAT 39 49 11N LONG 075 41 29W)										
NOV 1991 07...	<10	9	<10	130	<6	5	<0.1	<10	<1.0	13
01480434 WEST BRANCH BRANDYWINE CREEK AT ROCK RUN, PA (LAT 39 59 36N LONG 075 49 41W)										
NOV 1991 18...	--	14	--	--	--	--	--	--	--	--
01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)										
OCT 1991 31...	--	25	--	--	--	--	--	--	--	--
01480632 DOE RUN AT SPRINGDELL, PA (LAT 39 54 25N LONG 075 49 42W)										
OCT 1991 31...	--	12	--	--	--	--	--	--	--	--
01480640 WEST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 34N LONG 075 39 47W)										
OCT 1991 30...	<10	28	<10	97	<6	5	<0.1	<10	<1.0	12
01480648 EAST BRANCH BRANDYWINE CREEK NEAR CUPOLA, PA (LAT 40 05 41N LONG 075 51 14W)										
NOV 1991 01...	--	26	--	--	--	--	--	--	--	--
01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)										
NOV 1991 01...	--	13	--	--	--	--	--	--	--	--
01480656 INDIAN RUN NEAR SPRINGTON, PA (LAT 40 04 33N LONG 075 46 52W)										
NOV 1991 05...	--	17	--	--	--	--	--	--	--	--
01480903 VALLEY CREEK AT MULLSTEINS MEADOWS NEAR DOWNINGTOWN, PA (LAT 39 58 31N LONG 075 39 48W)										
NOV 1991 18...	--	4	--	--	--	8	--	--	--	--
01480950 EAST BRANCH BRANDYWINE CREEK AT WAWASET, PA (LAT 39 55 35N LONG 075 38 54W)										
OCT 1991 30...	<10	23	<10	120	<6	7	<0.1	<10	<1.0	8
01481030 BRANDYWINE CREEK NEAR CHADDS FORD, PA (LAT 39 51 15N LONG 075 35 58W)										
NOV 1991 15...	--	18	--	--	--	--	--	--	--	--
01494900 EAST BRANCH BIG ELK CREEK AT ELKVIEW, PA (LAT 39 48 45N LONG 075 54 04W)										
OCT 1991 25...	<10	15	<10	84	<6	4	<0.1	<10	<1.0	10
01494950 WEST BRANCH BIG ELK CREEK NEAR OXFORD, PA (LAT 39 46 45N LONG 075 55 27W)										
OCT 1991 25...	<10	15	<10	110	<6	5	<0.1	<10	<1.0	6

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ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
395854075394600 BROAD RUN AT VALLEY CREEK ROAD NEAR EXTON, PA (LAT 39 58 54N LONG 075 39 46W)										
OCT 1991 05...	1315	2.8	270	7.3	26.5	17.0	10.3	94	23	8.9
395908075384700 BROAD RUN AT COPELAND SCHOOL ROAD NEAR WEST CHESTER, PA (LAT 39 59 08N LONG 075 38 47W)										
OCT 1991 05...	1500	1.7	290	7.3	24.0	19.0	11.0	110	27	9.8
395940075375800 BROAD RUN AT GROVE ROAD NEAR WEST CHESTER, PA (LAT 39 59 40N LONG 075 37 58W)										
OCT 1991 05...	1700	0.49	269	7.2	24.5	19.0	10.0	110	26	10
400106075372400 UNNAMED TRIBUTARY TO VALLEY CREEK AT ROUTE 100 NEAR EXTON, PA (LAT 40 01 06N LONG 075 37 24W)										
OCT 1991 03...	1700	0.47	352	7.3	23.0	18.0	8.8	120	27	13
400114075383100 UNNAMED TRIBUTARY TO VALLEY CREEK AT WHITFORD ROAD NEAR EXTON, PA (LAT 40 01 14N LONG 075 38 31W)										
OCT 1991 04...	1600	0.28	383	7.5	27.0	19.0	10.1	160	43	12
400115075374600 UNNAMED TRIBUTARY TO VALLEY CREEK NEAR GRANT ROAD AT EXTON, PA (LAT 40 01 15N LONG 075 37 46W)										
OCT 1991 04...	1720	0.29	336	7.3	23.0	17.0	8.8	120	28	12
400205075370700 UNNAMED TRIBUTARY TO VALLEY CREEK AT BROOKVIEW STREET NEAR EXTON, PA (LAT 40 02 05N LONG 075 37 07W)										
OCT 1991 07...	1525	0.06	387	7.6	13.0	13.0	10.3	210	41	25
400217075365700 UNNAMED TRIBUTARY TO VALLEY CREEK AT SHIP AND SWEDES FORD ROADS AT EXTON, PA (LAT 40 02 17N LONG 075 36 57W)										
OCT 1991 07...	1720	0.08	385	7.6	--	12.5	10.5	210	41	27

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00991)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CAC03) (00410)	SULFATE DIS- SOLVED (MG/L AS S04) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00340)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
	395854075394600	BROAD RUN AT VALLEY CREEK ROAD NEAR EXTON, PA (LAT 39 58 54N LONG 075 39 46W)								
OCT 1991 05...	14	0.6	24	1.5	75	21	25	0.10	8.7	162
	395908075384700	BROAD RUN AT COPELAND SCHOOL ROAD NEAR WEST CHESTER, PA (LAT 39 59 08N LONG 075 38 47W)								
OCT 1991 05...	16	0.7	24	1.4	79	22	28	0.10	8.6	177
	395940075375800	BROAD RUN AT GROVE ROAD NEAR WEST CHESTER, PA (LAT 39 59 40N LONG 075 37 58W)								
OCT 1991 05...	12	0.5	20	1.2	66	17	28	0.20	7.6	155
	400106075372400	UNNAMED TRIBUTARY TO VALLEY CREEK AT ROUTE 100 NEAR EXTON, PA (LAT 40 01 06N LONG 075 37 24W)								
OCT 1991 03...	24	0.9	30	1.8	85	19	39	0.10	6.5	201
	400114075383100	UNNAMED TRIBUTARY TO VALLEY CREEK AT WHITFORD ROAD NEAR EXTON, PA (LAT 40 01 14N LONG 075 38 31W)								
OCT 1991 04...	18	0.6	20	1.7	103	21	32	0.10	6.8	207
	400115075374600	UNNAMED TRIBUTARY TO VALLEY CREEK NEAR GRANT ROAD AT EXTON, PA (LAT 40 01 15N LONG 075 37 46W)								
OCT 1991 04...	22	0.9	28	1.9	100	18	37	0.10	6.7	202
	400205075370700	UNNAMED TRIBUTARY TO VALLEY CREEK AT BROOKVIEW STREET NEAR EXTON, PA (LAT 40 02 05N LONG 075 37 07W)								
OCT 1991 07...	3.9	0.1	4	2.5	171	16	10	0.20	8.5	236
	400217075365700	UNNAMED TRIBUTARY TO VALLEY CREEK AT SHIP AND SWEDES FORD ROADS AT EXTON, PA (LAT 40 02 17N LONG 075 36 57W)								
OCT 1991 07...	4.1	0.1	4	2.2	199	15	9.7	0.10	8.6	254

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	STRON- TIUM, DIS- SOLVED (MG/L AS SR) (01000)	LITHIUM DIS- SOLVED (MG/L AS LI) (01130)
395854075394600 BROAD RUN AT VALLEY CREEK ROAD NEAR EXTON, PA (LAT 39 58 54N LONG 075 39 46W)										
OCT 1991 05...	--	<0.010	3.30	0.070	<0.20	0.010	12	5	130	<10
395908075384700 BROAD RUN AT COPELAND SCHOOL ROAD NEAR WEST CHESTER, PA (LAT 39 59 08N LONG 075 38 47W)										
OCT 1991 05...	--	<0.010	3.70	0.040	<0.20	0.010	15	8	120	<10
395940075375800 BROAD RUN AT GROVE ROAD NEAR WEST CHESTER, PA (LAT 39 59 40N LONG 075 37 58W)										
OCT 1991 05...	--	<0.010	3.10	0.030	<0.20	<0.010	37	18	100	<10
400106075372400 UNNAMED TRIBUTARY TO VALLEY CREEK AT ROUTE 100 NEAR EXTON, PA (LAT 40 01 06N LONG 075 37 24W)										
OCT 1991 03...	--	<0.010	4.30	0.030	<0.20	0.020	21	3	70	<10
400114075383100 UNNAMED TRIBUTARY TO VALLEY CREEK AT WHITFORD ROAD NEAR EXTON, PA (LAT 40 01 14N LONG 075 38 31W)										
OCT 1991 04...	--	<0.010	2.40	0.040	<0.20	<0.010	11	7	110	40
400115075374600 UNNAMED TRIBUTARY TO VALLEY CREEK NEAR GRANT ROAD AT EXTON, PA (LAT 40 01 15N LONG 075 37 46W)										
OCT 1991 04...	--	<0.010	3.70	0.040	<0.20	<0.010	9	5	100	<10
400205075370700 UNNAMED TRIBUTARY TO VALLEY CREEK AT BROOKVIEW STREET NEAR EXTON, PA (LAT 40 02 05N LONG 075 37 07W)										
OCT 1991 07...	5.99	0.010	6.00	0.030	<0.20	0.040	10	4	20	<10
400217075365700 UNNAMED TRIBUTARY TO VALLEY CREEK AT SHIP AND SWEDES FORD ROADS AT EXTON, PA (LAT 40 02 17N LONG 075 36 57W)										
OCT 1991 07...	--	<0.010	6.00	0.060	<0.20	0.030	7	12	30	<10

< Actual value is known to be less than the value shown.

GROUND-WATER-LEVEL STATION RECORDS

Remarks Codes

The following remark codes may appear with the data tables in this sections:

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

Dissolved Trace-Element Concentrations

NOTE.--Historical and current dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultra clean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

In March 1989 a bias was discovered in the turbidimetric method for sulfate analysis for those samples analyzed by the U.S. Geological Survey National Water-Quality Laboratory indicating that concentrations below 75 mg/L have a median positive bias of 2 mg/L above the true concentration for the period between 1982 and 1989. Sulfate concentrations in this report have not been corrected for this bias.

BUCKS COUNTY

402615075530501. Local number, BE 623.

LOCATION.---Lat 40°26'15", long 75°53'05", Hydrologic Unit 02040203, at Wesner Road, Blandon.

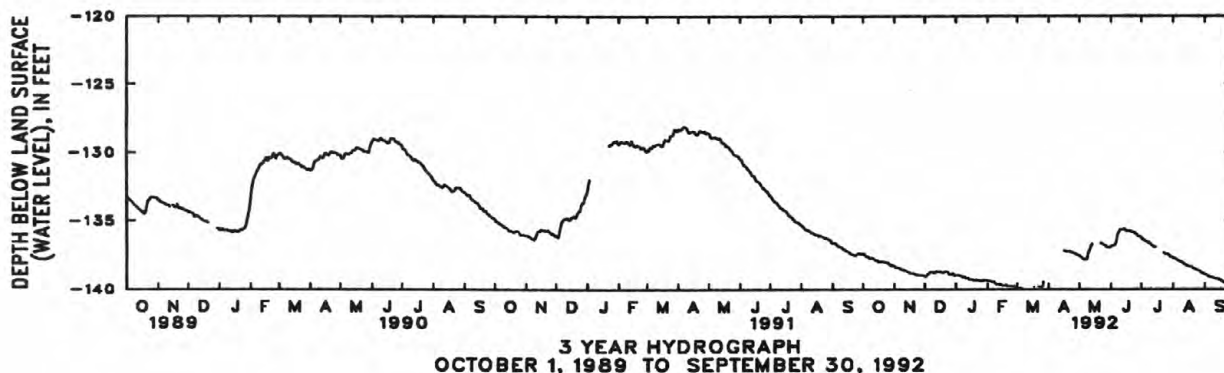
Owner: Maiden Creek Township Water Authority.

AQUIFER.---Dolomite of Leithsville Formation of Early and Middle Cambrian age.**WELL CHARACTERISTICS.**---Drilled unused artesian well, diameter 8 in., depth 385 ft, casing information not available.**INSTRUMENTATION.**---Data collection platform.**DATUM.**---Elevation of land-surface datum is 430 ft above sea level. Measuring point: Top of plywood shelf, 1.71 ft above land-surface datum. Prior to Apr. 30, 1981, top of casing, 1.30 ft above land-surface datum.**REMARKS.**---Interruptions in daily record due to float hangup and instrument malfunction.**PERIOD OF RECORD.**---January 1975 to current year.**EXTREMES FOR PERIOD OF RECORD.**---Highest water level, 113.55 ft below land-surface datum, June 6, 1984; lowest, 140.82 ft below surface datum, Dec. 23, 1981.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137.39	138.27	139.04	138.99	139.40	139.92	---	137.58	136.88	136.28	137.76	138.93
2	137.45	138.39	139.08	138.95	139.40	139.90	---	137.56	136.83	136.38	137.76	138.96
3	137.53	138.41	139.02	138.95	139.40	139.90	---	137.66	136.81	136.40	137.76	139.00
4	137.59	138.41	138.88	138.97	139.40	139.90	---	137.71	136.80	136.46	137.86	139.08
5	137.58	138.43	138.88	139.01	139.48	139.90	---	137.81	136.80	136.48	137.90	139.12
6	137.64	138.46	138.76	139.03	139.46	---	---	137.87	136.58	136.54	137.94	139.12
7	137.72	138.51	138.75	139.11	139.44	---	---	137.87	136.18	136.60	137.98	139.12
8	137.76	138.57	138.76	139.15	139.55	---	---	137.86	135.90	136.60	137.98	139.16
9	137.72	138.59	138.74	139.09	139.63	---	---	137.76	135.80	136.66	138.02	139.16
10	137.70	138.55	138.80	139.13	139.63	139.88	---	137.30	135.66	136.70	138.06	139.22
11	137.76	138.65	138.78	139.21	139.63	---	---	137.15	135.65	136.80	138.12	139.24
12	137.84	138.67	138.72	139.21	139.65	---	---	136.96	135.65	136.84	138.20	139.26
13	137.92	138.67	138.66	139.17	139.64	---	---	136.82	135.62	136.90	138.20	139.26
14	137.92	138.73	138.76	139.30	139.67	---	---	136.68	135.60	136.90	138.28	139.28
15	137.92	138.73	138.74	139.31	139.67	---	---	---	135.68	136.92	138.30	139.30
16	137.98	138.83	138.74	139.31	139.73	---	137.17	---	135.72	---	138.32	139.32
17	137.98	138.85	138.70	139.27	139.73	139.83	137.20	---	135.74	---	138.34	139.42
18	137.98	138.83	138.78	139.35	139.73	139.84	137.24	---	135.74	---	138.36	139.41
19	137.98	138.85	138.80	139.35	139.67	---	137.25	---	135.73	---	138.38	139.52
20	137.98	138.85	138.76	139.34	139.77	---	137.25	---	135.76	---	138.44	139.53
21	137.98	138.91	138.70	139.32	139.79	---	137.23	---	135.78	---	138.50	139.53
22	138.00	138.91	138.70	139.36	139.79	139.82	137.27	136.67	135.84	137.34	138.52	139.58
23	138.06	138.95	138.72	139.34	139.78	139.82	137.29	136.60	135.84	137.36	138.56	139.65
24	138.06	138.90	138.80	139.42	139.80	---	137.28	136.72	135.86	137.44	138.58	139.67
25	138.06	138.93	138.90	139.42	139.80	---	137.35	136.74	135.94	137.44	138.62	139.66
26	138.09	138.97	138.90	139.41	139.80	139.82	137.37	136.76	135.96	137.42	138.66	139.66
27	138.13	138.97	138.92	139.39	139.80	139.44	137.40	136.82	136.07	137.46	138.68	139.64
28	138.25	138.95	138.92	139.34	139.80	---	137.46	136.90	136.14	137.52	138.79	139.61
29	138.27	138.97	138.84	139.34	139.92	---	137.46	136.94	136.13	137.64	138.84	139.60
30	138.24	139.00	139.01	139.33	---	---	137.52	136.96	136.15	137.64	138.84	139.58
31	138.26	---	139.01	139.34	---	---	---	136.96	---	137.66	138.88	---
MEAN	137.87	138.70	138.78	139.19	139.63	---	137.29	137.14	136.00	136.94	138.28	139.34
MAX	138.27	139.00	139.08	139.42	139.92	---	137.52	137.87	136.88	137.66	138.88	139.67
MIN	137.37	138.26	138.50	138.89	139.32	---	137.14	136.59	135.60	136.15	137.66	138.88

WTR YR 1992 MEAN 138.24 HIGH 135.60 JUN 13,14,15 LOW 139.92 FEB 29, MAR 1

Gap indicates missing record.

3 YEAR HYDROGRAPH
OCTOBER 1, 1989 TO SEPTEMBER 30, 1992

402643075150501. Local number, BK 929.

LOCATION.--Lat 40°26'43", long 75°15'05", Hydrologic Unit 02040105, at Nockamixon State Park.

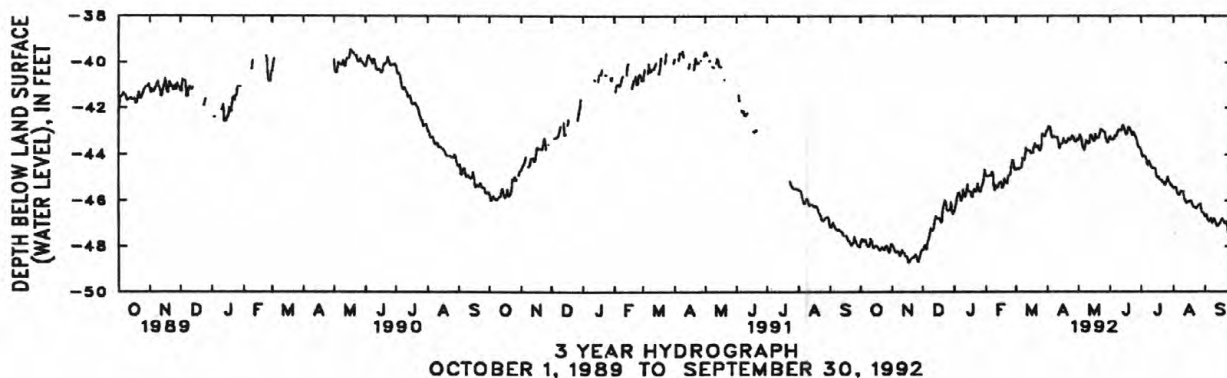
Owner: U.S. Geological Survey.

AQUIFER.--Shale of Brunswick Formation of Late Triassic age.**WELL CHARACTERISTICS.**--Drilled observation artesian well, diameter 6 in., depth 116 ft, cased to 27 ft, open hole.**INSTRUMENTATION.**--Digital recorder.**DATUM.**--Elevation of land-surface datum is 490 ft above sea level. Measuring point: Top of plywood shelf, 3.00 ft above land-surface datum. Prior to Mar. 17, 1980, to top of casing, 1.05 ft above land-surface datum. Prior to June 1970, land surface datum was approximately 16 feet lower.**PERIOD OF RECORD.**--November 1967 to current year.**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 39.13 ft below land-surface datum, March 28, 1991; lowest, 59.75 ft below land-surface datum, Nov. 26, 1968.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.86	47.89	48.13	46.47	44.86	44.65	43.00	43.39	43.21	43.78	45.42	46.65
2	47.69	48.00	48.13	46.31	44.93	44.66	42.82	43.32	43.32	44.01	45.46	46.69
3	47.65	48.13	47.93	46.08	44.93	44.58	42.81	43.15	43.37	44.09	45.39	46.58
4	47.79	48.22	47.97	45.81	44.91	44.62	42.85	43.28	43.34	44.03	45.41	46.84
5	47.78	48.26	48.13	45.66	44.88	44.58	43.15	43.53	43.31	44.06	45.62	46.90
6	47.69	48.21	47.77	45.64	44.91	44.57	43.28	43.74	43.18	44.15	45.72	46.86
7	47.90	48.19	47.68	45.85	44.74	44.54	43.22	43.80	43.22	44.40	45.75	46.74
8	47.99	48.36	47.45	45.99	44.78	44.13	43.23	43.69	43.11	44.46	45.69	46.97
9	48.01	48.39	47.19	45.87	45.43	44.24	43.26	43.37	43.00	44.28	45.56	46.90
10	47.92	48.28	47.31	45.49	45.54	44.18	43.27	43.42	42.93	44.40	45.60	46.75
11	47.66	48.12	47.30	45.77	45.31	43.72	43.25	43.53	42.95	44.51	45.59	46.87
12	47.78	48.29	47.20	45.83	45.45	43.82	43.47	43.49	42.97	44.59	45.91	47.04
13	48.01	48.28	46.87	45.63	45.40	43.84	43.75	43.15	42.82	44.57	45.96	47.12
14	48.07	48.42	46.64	45.29	45.22	43.84	43.57	43.15	42.73	44.58	46.09	47.09
15	48.00	48.40	46.75	45.61	45.22	43.83	43.54	43.30	42.91	44.60	46.07	47.01
16	47.98	48.48	46.79	45.59	45.16	43.96	43.51	43.41	43.09	44.93	46.01	46.94
17	47.98	48.71	46.75	45.59	45.44	43.87	43.30	43.41	43.15	44.98	46.04	46.81
18	48.06	48.65	46.76	45.79	45.38	43.94	43.43	43.12	43.06	44.95	45.98	46.77
19	48.12	48.56	46.95	45.81	45.00	43.63	43.50	43.30	42.83	45.05	46.01	46.85
20	48.18	48.53	46.87	45.61	45.11	43.53	43.47	43.28	42.85	45.07	46.15	46.96
21	48.13	48.47	46.40	45.48	45.23	43.68	43.39	43.28	42.98	45.09	46.27	46.98
22	48.02	48.47	46.19	45.62	45.23	43.68	43.30	43.09	43.12	45.20	46.25	46.89
23	48.11	48.44	45.96	45.53	44.90	43.59	43.39	42.93	43.16	45.18	46.33	47.27
24	48.14	48.33	46.08	45.25	44.88	43.81	43.32	42.92	43.04	45.31	46.32	47.40
25	48.06	48.43	46.41	45.49	44.87	43.82	43.18	43.01	43.18	45.26	46.24	47.34
26	47.99	48.63	46.43	45.61	44.44	43.65	43.21	43.01	43.27	45.12	46.19	47.75
27	47.98	48.65	46.42	45.61	44.22	43.10	43.30	43.05	43.36	44.95	46.16	47.68
28	48.18	48.43	46.40	45.37	44.28	43.18	43.45	43.27	43.54	45.16	46.12	47.35
29	48.26	48.23	46.02	45.27	44.64	43.21	43.46	43.40	43.69	45.19	46.47	47.32
30	48.13	48.20	46.45	45.02	---	43.21	43.33	43.49	43.72	45.32	46.50	47.32
31	47.89	---	46.58	44.64	---	42.99	---	43.33	---	45.32	46.54	---
MEAN	47.88	48.27	46.82	45.49	44.85	43.77	43.21	43.22	43.08	44.65	45.89	46.93
MAX	48.26	48.71	48.13	46.47	45.54	44.66	43.75	43.80	43.72	45.32	46.54	47.75
MIN	47.45	47.81	45.61	44.50	43.80	42.71	42.67	42.74	42.63	43.65	45.17	46.45

WTR YR 1992 MEAN 45.34 HIGH 42.63 JUN 14 LOW 48.71 NOV 17

Gap indicates missing record.



401157075032001. Local number, BK 1020

LOCATION.--Lat 40°11'55", long 75°03'07", Hydrologic Unit 02040201, at Naval Air Development Center, in Warminster Township.

Owner: United States Navy.

AQUIFER.--Sandstone and shale of Stockton Formation of Late Triassic age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 400 ft, cased to 57 ft, open hole.

INSTRUMENTATION.--Data collection platform.

DATUM.--Elevation of land-surface datum is 370 ft above sea level. Measuring point: Top of plywood shelf, 1.92 ft above land-surface datum.

REMARKS.--Interruptions in daily record due to DCP downlink interference and float problems. Operated by Bucks County Planning Commission Sept. 1975 to March 1988.

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

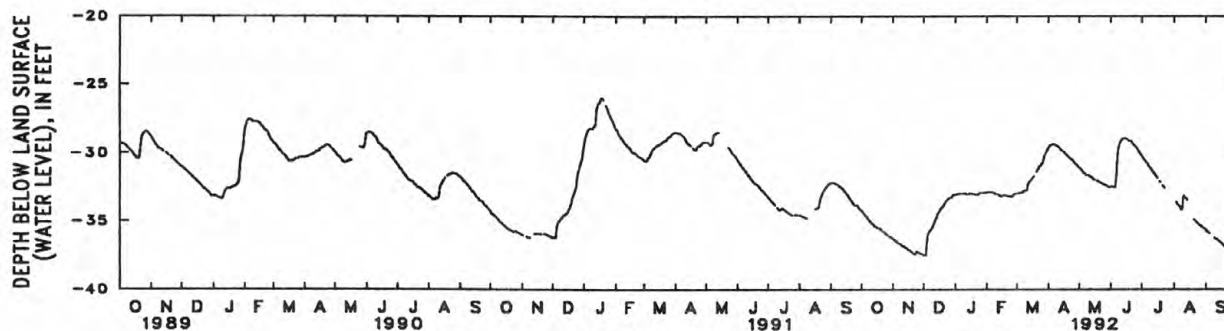
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.98 ft below land-surface datum, May 13, 14, 1989: lowest, 41.36 ft below land-surface datum, September 26, 1985.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.24	36.29	37.48	33.07	32.87	32.98	29.62	31.09	32.44	30.23	---	35.70
2	34.34	36.37	37.48	33.05	32.87	32.98	29.52	31.13	32.44	30.34	---	35.74
3	34.42	36.41	37.46	33.03	32.87	32.97	29.45	31.21	32.47	30.47	33.60	35.82
4	34.52	36.47	36.56	33.02	32.87	32.95	29.43	31.31	32.51	30.55	33.70	35.90
5	34.60	36.57	36.00	32.98	32.87	32.94	29.38	31.41	32.51	30.66	33.82	---
6	34.70	36.57	35.83	32.98	32.91	32.91	29.38	31.51	31.68	30.76	33.92	---
7	34.80	36.62	35.72	32.98	32.91	32.89	29.40	31.58	30.22	30.91	33.98	---
8	34.90	36.68	35.62	33.00	32.93	32.80	29.45	31.63	29.70	30.99	34.16	---
9	34.98	36.73	35.50	33.00	33.01	32.78	29.48	31.61	29.40	31.09	34.16	36.22
10	35.06	36.79	35.38	32.98	33.03	32.76	29.55	31.63	29.21	31.19	33.14	36.28
11	35.14	36.83	35.16	33.00	33.05	32.67	29.60	31.69	29.07	31.33	33.22	36.30
12	35.22	36.87	35.00	33.02	33.07	32.28	29.69	31.73	29.02	31.43	33.30	36.36
13	35.30	36.91	34.83	33.02	33.11	32.16	29.77	31.79	28.98	31.53	33.38	36.43
14	35.38	36.97	34.66	33.02	33.17	32.04	29.83	31.87	28.94	31.63	33.46	36.49
15	35.42	37.03	34.51	32.98	33.19	31.97	29.89	31.93	28.94	31.75	---	36.56
16	35.48	37.09	34.36	33.00	33.16	31.87	29.97	31.97	29.00	31.87	---	36.62
17	35.52	37.13	34.24	33.00	33.11	31.77	30.05	---	29.04	---	---	36.70
18	35.49	37.19	34.07	33.04	33.13	31.69	30.11	32.01	29.10	32.07	---	36.76
19	35.56	37.27	33.99	33.04	33.13	---	30.19	32.05	29.14	32.17	---	36.84
20	35.62	37.31	33.89	33.04	33.15	31.40	30.27	32.09	29.12	---	34.88	36.90
21	35.69	37.39	33.76	33.06	33.17	31.26	30.33	32.15	29.20	32.37	34.92	36.96
22	35.76	37.41	33.64	33.10	33.17	31.17	30.39	32.17	29.32	32.49	35.00	37.04
23	35.81	37.33	33.53	33.10	33.17	31.02	30.45	32.21	29.40	32.57	35.08	37.12
24	35.89	37.21	33.43	33.01	33.19	30.93	30.51	32.27	29.48	---	35.16	37.20
25	35.93	37.26	33.37	32.94	33.19	30.82	30.60	32.29	29.59	---	35.23	37.24
26	35.99	37.30	33.35	32.96	33.19	30.73	30.69	32.33	29.68	---	35.30	37.24
27	36.05	37.34	33.28	32.96	33.06	30.52	30.77	32.35	29.80	---	35.34	37.02
28	36.11	37.38	33.25	32.96	33.04	30.22	30.83	32.43	29.92	---	35.46	37.00
29	36.15	37.40	33.19	32.95	32.98	30.04	30.91	32.45	30.02	---	35.48	37.02
30	36.19	37.45	33.07	32.93	---	29.91	31.01	32.51	30.12	---	35.54	37.08
31	36.25	---	33.07	32.88	---	29.75	---	32.52	---	---	35.58	---
MEAN	35.33	36.79	34.60	32.99	33.04	31.72	29.98	31.87	29.90	31.30	34.39	36.60
MAX	36.25	37.45	37.48	33.10	33.19	32.98	31.01	32.52	32.51	32.57	35.58	37.24
MIN	34.18	36.25	33.05	32.87	32.87	29.64	29.38	31.01	28.92	30.12	33.02	35.58

WTR YR 1992 MEAN 33.21 HIGH 28.92 JUN 14-15 LOW 37.48 DEC 1-25

Gap indicates missing record.



3 YEAR HYDROGRAPH
OCTOBER 1, 1989 TO SEPTEMBER 30, 1992

CARBON COUNTY

410123075425401. Local number, CB 104.

LOCATION.--Lat 41°01'23", long 75°42'54", Hydrologic Unit 02040106, at Hickory Run State Park.

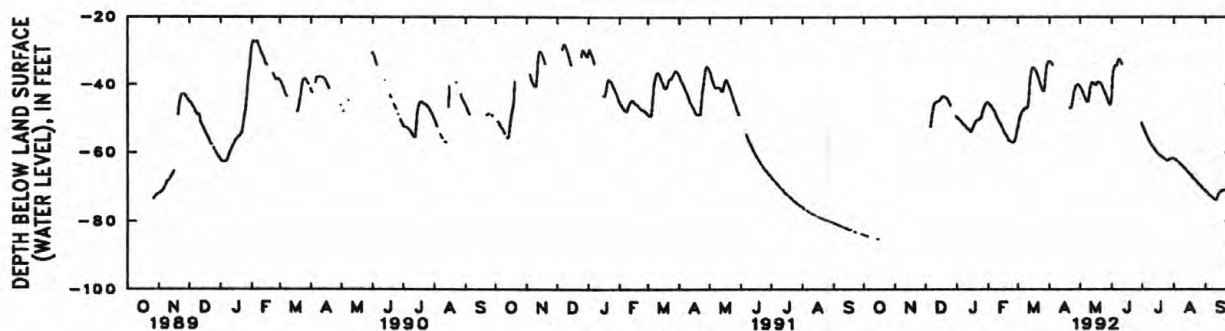
Owner: U.S. Geological Survey.

AQUIFER.--Shale of Lower Member of Mauch Chunk Formation of Late Mississippian age.**WELL CHARACTERISTICS.**--Drilled observation artesian well, diameter 6 in., depth 125 ft, cased to 20 ft, open hole.**INSTRUMENTATION.**--Data collection platform.**DATUM.**--Elevation of land-surface datum is 1,305 ft above sea level. Measuring point: Top of plywood shelf, 3.12 ft above land-surface datum. Prior to May 28, 1980, top of casing, 3.00 ft above land-surface datum.**REMARKS.**--Interruptions in daily record due to float hanging up on casing and instrument malfunction.**PERIOD OF RECORD.**--September 1969 to current year.**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 18.44 ft below land-surface datum, Apr. 17, 1983; lowest, 90.58 ft below land-surface datum, Jan. 31, 1981.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.90	---	---	49.57	45.53	52.34	33.03	40.55	43.58	52.02	61.89	71.37
2	83.99	---	---	49.91	45.80	50.80	33.10	40.97	38.35	52.73	62.01	71.61
3	84.10	---	---	50.18	46.15	49.52	33.48	41.64	35.67	53.39	62.19	71.93
4	84.18	---	---	50.46	46.36	48.62	34.05	42.30	34.63	54.08	62.48	72.25
5	84.23	---	---	50.76	46.99	47.97	---	43.12	34.37	54.72	62.76	72.52
6	---	---	52.30	51.12	47.35	47.54	---	43.90	34.33	55.51	63.06	72.78
7	---	---	49.75	51.53	47.83	47.29	---	44.52	33.37	56.21	63.33	73.03
8	---	---	47.63	51.86	48.55	46.95	---	44.99	32.45	56.71	63.59	73.28
9	---	---	46.25	52.02	49.46	46.94	---	45.00	32.46	57.36	63.91	73.54
10	84.68	---	45.47	52.36	49.89	46.80	---	43.17	33.04	57.73	64.18	73.78
11	---	---	45.25	52.89	50.57	46.24	---	41.19	33.85	58.22	64.51	73.78
12	84.88	---	45.07	53.14	51.19	43.05	---	40.01	---	58.55	64.87	73.16
13	---	---	44.85	53.36	51.54	38.62	---	39.33	---	59.07	65.14	72.40
14	85.04	---	44.77	53.73	52.40	36.25	---	39.35	---	59.47	65.51	71.86
15	85.11	---	44.64	53.81	52.68	35.10	---	39.76	---	59.92	65.82	71.44
16	---	---	44.17	53.21	53.69	34.84	---	40.06	---	60.30	66.18	71.26
17	---	---	43.79	52.51	54.30	35.04	---	40.06	---	60.55	66.48	71.06
18	---	---	43.34	51.69	54.71	35.38	---	39.46	---	60.85	66.82	70.94
19	---	---	43.56	51.20	55.26	36.05	---	39.16	---	61.05	67.18	70.86
20	---	---	43.61	50.66	55.82	36.92	---	39.20	---	61.21	67.53	70.91
21	---	---	43.79	50.35	56.36	37.89	46.79	39.49	---	61.44	67.87	70.96
22	---	---	44.01	50.37	56.51	38.54	46.90	39.91	---	61.68	68.22	71.13
23	---	---	44.40	50.34	56.81	39.67	46.57	40.41	---	61.96	68.56	71.34
24	---	---	45.04	49.91	57.04	40.71	44.54	41.20	---	62.23	68.86	71.49
25	---	---	45.81	49.65	57.07	41.49	42.48	41.96	---	62.33	69.17	71.60
26	---	---	46.23	48.31	56.95	41.85	41.38	42.65	---	62.32	69.49	71.77
27	---	---	---	47.33	56.65	41.70	40.57	43.47	---	62.11	69.77	71.91
28	---	---	---	46.33	55.31	38.45	40.14	44.35	---	61.99	70.13	71.97
29	---	---	---	45.79	53.43	35.12	39.97	45.11	---	61.85	70.45	72.11
30	---	---	---	45.43	---	33.71	40.21	45.74	51.31	61.74	70.72	72.19
31	---	---	49.17	45.17	---	33.07	---	45.92	---	61.73	71.07	---
MEAN	---	---	45.30	50.26	51.87	40.91	---	41.54	---	58.88	66.10	71.90
MAX	---	---	52.30	53.81	57.07	52.34	---	45.92	---	62.33	71.07	73.78
MIN	---	---	43.21	45.13	45.17	33.03	---	39.07	---	51.32	61.72	70.84

WTR YR 1992 MEAN 53.12 HIGH 32.18 JUN 8-9 LOW OBSERVED 85.11 OCT 15

Gap indicates missing record.

3 YEAR HYDROGRAPH
OCTOBER 1, 1989 TO SEPTEMBER 30, 1992

395450075485401. Local number, CH 10.

LOCATION.--Lat 39°54'50", long 75°48'54", Hydrologic Unit 02040205, near intersection of Routes 82 and 841, at Doe Run.

Owner: Robert J. Kieberg, Jr.

AQUIFER.--Cockeysville Marble of Paleozoic age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 34 ft, casing information not available.

INSTRUMENTATION.--Data collection platform.

DATUM.--Elevation of land-surface datum is 300 ft above sea level. Measuring point: Top of plywood shelf, 5.23 ft above land-surface datum. Prior to June 24, 1981, top of casing, 1.00 ft above land-surface datum.

REMARKS.--Interruptions in daily record due to instrument malfunction.

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

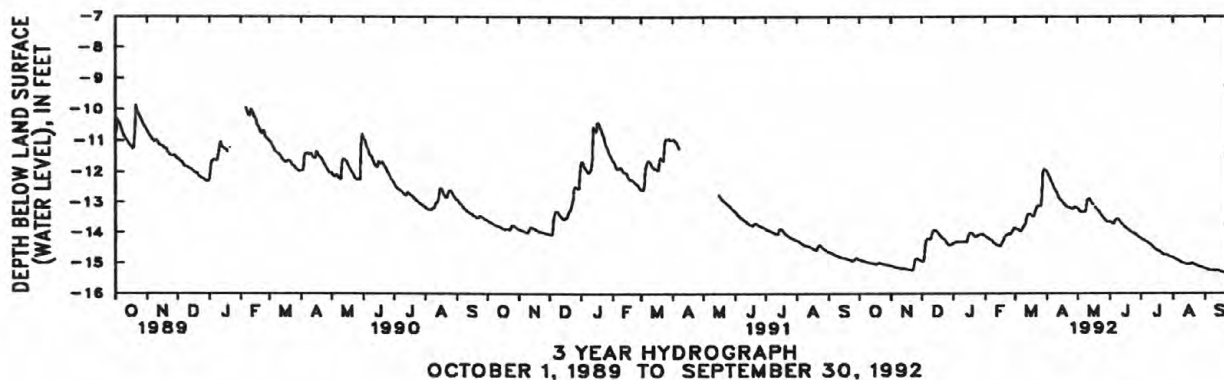
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.19 ft below land-surface datum, July 20, 1989; lowest, 16.22 ft below land-surface datum, Nov. 3, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.89	15.10	14.94	14.36	14.12	13.86	12.00	13.22	13.63	14.19	14.82	15.19
2	14.90	15.10	14.95	14.34	14.15	13.88	12.06	13.24	13.65	14.22	14.85	15.20
3	14.92	15.11	14.92	14.32	14.17	13.89	12.14	13.30	13.67	14.24	14.86	15.22
4	14.93	15.13	14.56	14.32	14.18	13.91	12.21	13.32	13.70	14.25	14.88	15.23
5	14.94	15.14	14.32	14.30	14.22	13.93	12.31	13.32	13.71	14.27	14.90	15.24
6	14.94	15.14	14.23	14.30	14.24	13.95	12.38	13.32	13.61	14.30	14.92	15.25
7	14.96	15.16	14.20	14.30	14.25	13.95	12.43	13.32	13.56	14.32	14.94	15.25
8	14.98	15.16	14.21	14.30	14.28	13.89	12.55	13.33	13.55	14.34	14.96	15.25
9	14.98	15.17	14.22	14.30	14.34	13.82	12.61	13.26	13.55	14.36	14.98	15.25
10	14.99	15.17	14.22	14.30	14.36	13.77	12.66	12.95	13.59	14.39	15.00	15.26
11	15.00	15.18	14.06	14.30	14.37	13.70	12.73	12.91	13.64	14.41	15.01	15.26
12	15.00	15.19	13.96	14.31	14.41	13.54	12.82	12.89	13.69	14.44	15.03	15.24
13	15.00	15.19	13.92	14.32	14.42	13.44	12.88	12.92	13.72	14.49	15.03	15.25
14	15.02	15.20	13.92	14.32	14.44	13.38	12.92	12.98	13.75	14.51	15.04	15.26
15	15.02	15.20	13.93	14.20	14.44	13.38	12.95	13.05	13.80	14.54	15.04	15.28
16	15.04	15.20	13.98	14.08	14.44	13.41	12.99	13.09	13.83	14.57	15.04	15.29
17	15.04	15.21	14.00	14.02	14.36	13.42	13.03	---	13.86	14.60	15.04	15.30
18	15.04	15.22	14.06	14.01	14.30	13.47	13.07	13.16	13.89	14.60	15.04	15.31
19	15.00	15.23	14.10	14.03	14.22	13.47	13.11	13.21	13.91	14.62	15.02	15.32
20	15.00	15.23	14.14	14.06	14.14	13.38	13.14	13.25	13.95	14.64	15.02	15.33
21	15.00	15.24	14.16	14.10	14.10	13.27	13.16	13.28	13.97	14.66	15.04	15.34
22	15.02	15.24	14.19	14.13	14.08	13.19	13.18	13.33	14.01	14.70	15.06	15.35
23	15.03	15.15	14.22	14.14	14.06	13.12	13.18	13.38	14.02	14.72	15.07	15.36
24	15.04	14.96	14.26	14.12	14.04	13.13	13.19	13.43	14.02	14.73	15.10	15.36
25	15.04	14.88	14.32	14.10	14.05	13.12	13.22	13.47	14.05	14.73	15.11	15.38
26	15.05	14.86	14.36	14.08	14.05	13.12	13.22	13.52	14.06	14.73	15.13	15.38
27	15.05	14.86	14.40	14.08	13.98	12.89	13.20	13.56	14.09	14.75	15.14	15.23
28	15.06	14.88	14.42	14.06	13.92	12.07	13.16	13.59	14.12	14.77	15.14	15.12
29	15.08	14.90	14.42	14.06	13.86	11.93	13.17	13.63	14.14	14.79	15.14	15.07
30	15.08	14.92	14.39	14.08	---	11.95	13.19	13.65	14.17	14.81	15.16	15.05
31	15.09	---	14.36	14.09	---	11.97	---	13.65	---	14.81	15.18	---
MEAN	15.00	15.10	14.24	14.18	14.19	13.29	12.81	13.26	13.82	14.52	15.02	15.25
MAX	15.09	15.24	14.95	14.36	14.44	13.95	13.22	13.65	14.17	14.81	15.18	15.38
MIN	14.88	14.86	13.92	13.99	13.84	11.93	11.96	12.89	13.53	14.17	14.81	15.05

WTR YR 1992 MEAN 14.23 HIGH 11.93 MAR 28-30 LOW 15.38 SEP 25,26

Gap indicates missing record.



395040075341801. Local number, DE 3.

LOCATION.--Lat 39°50'40", long 75°34'18", Hydrologic Unit 02040205, at Birmingham Township.

Owner: Mrs. Hope W. Ebert.

AQUIFER.--Oligoclase-mica schist of Wissahickon Formation (age uncertain, Early Paleozoic to Precambrian).

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 42 in., depth 18.4 ft, (formerly reported as 22 ft), cased with stone.

INSTRUMENTATION.--Daily observer readings with chalked steel tape.

DATUM.--Elevation of land-surface datum is 280 ft above sea level. Measuring point: Top of concrete base, 1.80 ft above land-surface datum.

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

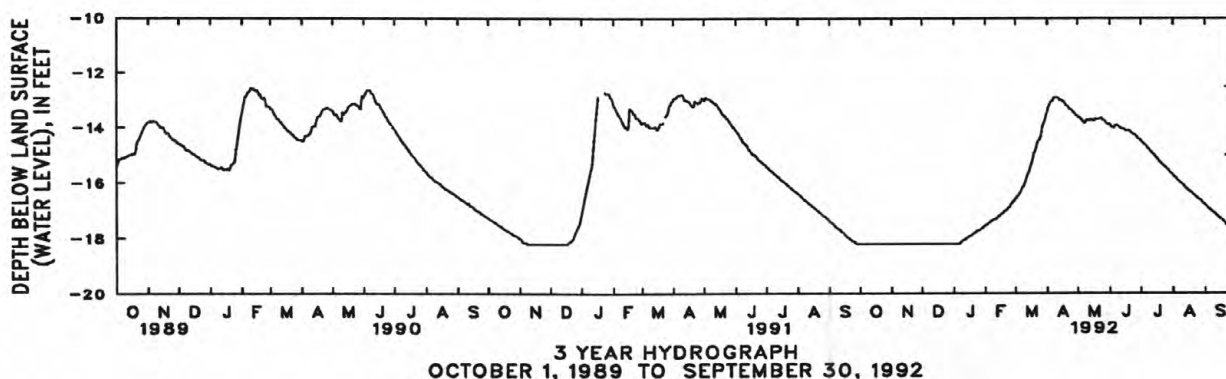
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.90 ft below land-surface datum, Aug. 22, 1955; lowest measured, dry many times since 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.20	18.20	18.20	18.20	17.53	16.55	13.40	13.60	13.87	14.47	15.70	16.78
2	18.20	18.20	18.20	18.20	17.51	16.53	13.27	13.62	13.93	14.52	15.75	16.82
3	18.20	18.20	18.20	18.20	17.48	16.48	13.17	13.63	13.97	14.56	15.78	16.85
4	18.20	18.20	18.20	18.20	17.45	16.43	13.08	13.68	13.99	14.59	15.81	16.89
5	18.20	18.20	18.20	18.20	17.42	16.37	13.03	13.72	14.00	14.63	15.87	16.92
6	18.20	18.20	18.20	18.20	17.40	16.31	13.01	13.79	13.91	14.66	15.91	16.96
7	18.20	18.20	18.20	18.17	17.36	16.23	12.95	13.83	13.91	14.72	15.94	16.99
8	18.20	18.20	18.20	18.14	17.34	16.14	12.89	13.81	13.90	14.77	15.98	17.02
9	18.20	18.20	18.20	18.11	17.32	16.11	12.90	13.72	13.93	14.77	16.00	17.05
10	18.20	18.20	18.20	18.08	17.32	16.02	12.89	13.72	13.97	14.84	16.03	17.08
11	18.20	18.20	18.20	18.06	17.29	15.87	12.89	13.73	14.00	14.88	16.07	17.11
12	18.20	18.20	18.20	18.04	17.26	15.77	12.90	13.73	14.03	14.93	16.12	17.16
13	18.20	18.20	18.20	18.00	17.23	15.67	12.99	13.69	14.03	14.94	16.17	17.19
14	18.20	18.20	18.20	17.98	17.18	15.58	12.97	13.68	14.04	15.00	16.19	17.22
15	18.20	18.20	18.20	17.94	17.17	15.46	13.00	13.73	14.05	15.04	16.24	17.26
16	18.20	18.20	18.20	17.93	17.11	15.37	13.03	13.71	14.10	15.09	16.27	17.28
17	18.20	18.20	18.20	17.91	17.11	15.28	13.02	13.73	14.11	15.13	16.29	17.31
18	18.20	18.20	18.20	17.89	17.07	15.12	13.10	13.66	14.11	15.17	16.31	17.34
19	18.20	18.20	18.20	17.86	17.02	14.94	13.16	13.69	14.09	15.21	16.34	17.37
20	18.20	18.20	18.20	17.83	17.00	14.85	13.19	13.69	14.10	15.25	16.38	17.42
21	18.20	18.20	18.20	17.80	16.97	14.76	13.22	13.68	14.15	15.29	16.42	17.45
22	18.20	18.20	18.20	17.78	16.96	14.60	13.26	13.67	14.18	15.35	16.44	17.48
23	18.20	18.20	18.20	17.76	16.90	14.48	13.32	13.65	14.22	15.37	16.49	17.51
24	18.20	18.20	18.20	17.71	16.87	14.44	13.34	13.64	14.22	15.42	16.52	17.54
25	18.20	18.20	18.20	17.72	16.82	14.37	13.35	13.71	14.24	15.42	16.55	17.59
26	18.20	18.20	18.20	17.70	16.75	14.25	13.42	13.72	14.29	15.48	16.58	17.59
27	18.20	18.20	18.20	17.68	16.72	14.01	13.43	13.74	14.32	15.50	16.60	17.64
28	18.20	18.20	18.20	17.64	16.65	13.90	13.48	13.79	14.37	15.55	16.63	17.64
29	18.20	18.20	18.20	17.62	16.62	13.80	13.53	13.85	14.40	15.60	16.65	17.66
30	18.20	18.20	18.20	17.58	---	13.67	13.55	13.88	14.43	15.64	16.73	17.69
31	18.20	---	18.20	17.55	---	13.51	---	13.84	---	15.65	16.74	---
MEAN	>18.20	>18.20	>18.20	17.93	17.13	15.25	13.16	13.72	14.10	15.08	16.24	17.26
MAX	>18.20	>18.20	>18.20	>18.20	17.53	16.55	13.55	13.88	14.43	15.65	16.74	17.69
MIN	18.20	18.20	18.20	17.55	16.62	13.51	12.89	13.60	13.87	14.47	15.70	16.78

WTR YR 1992 MEAN 16.21 HIGH 12.89 APR 11 LOW >18.20 OCT 1 THRU JAN 1

Gap indicates missing record.



395512075293701, Local number, DE 723.

LOCATION.--Lat 39°55'12", long 75°29'37", Hydrologic Unit 02040203, at Glen Mills School, in Thornbury Township.
Owner: Glen Mills School.

AQUIFER.--Felsic Hornblende bearing Gneiss of Precambian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 300 ft, casing information not available.

INSTRUMENTATION.--Digital recorder.

DATUM.--Elevation of land-surface datum is 280 ft above sea level. Measuring point: Top of plywood shelf, 2.66 ft above land-surface datum. Prior to May 11, 1984, top of plywood shelf, 1.20 ft above land-surface datum.

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

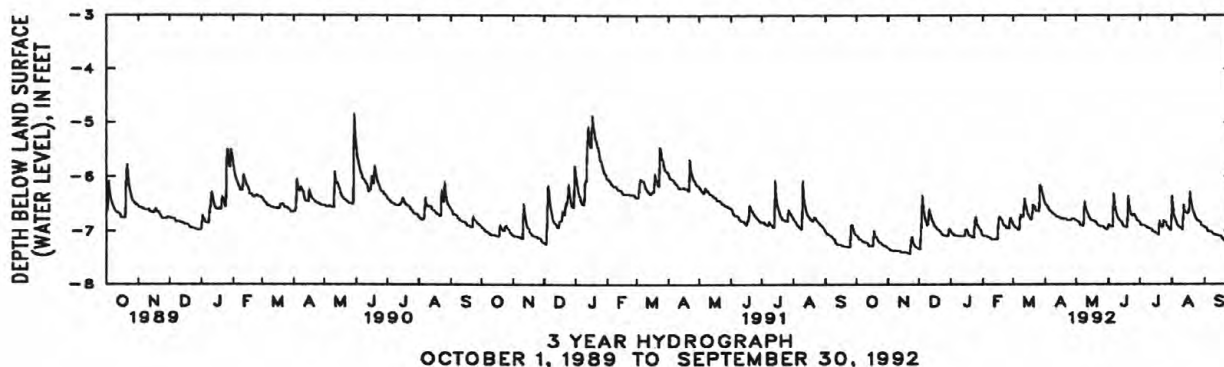
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.78 ft below land-surface datum, April 25, 1983; lowest, 9.95 ft below land-surface datum, Aug. 3, 1983.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.08	7.31	7.33	7.01	7.08	6.88	6.50	6.80	6.87	6.83	6.36	6.93
2	7.09	7.34	7.34	7.04	7.09	6.90	6.52	6.81	6.89	6.89	6.57	6.94
3	7.12	7.35	6.94	7.06	7.09	6.93	6.54	6.82	6.92	6.89	6.72	6.94
4	7.15	7.36	6.34	7.08	7.09	6.94	6.58	6.83	6.92	6.89	6.77	7.00
5	7.15	7.36	6.52	7.08	7.10	6.95	6.61	6.89	6.92	6.89	6.82	7.01
6	7.15	7.37	6.67	7.08	7.12	6.98	6.63	6.89	6.31	6.90	6.88	7.01
7	7.19	7.37	6.77	7.09	7.12	6.98	6.64	6.90	6.52	6.92	6.91	7.01
8	7.19	7.36	6.83	7.09	7.13	6.70	6.68	6.90	6.61	6.93	6.92	7.02
9	7.20	7.37	6.90	7.09	7.15	6.71	6.68	6.45	6.69	6.94	6.94	7.05
10	7.20	7.37	6.81	7.09	7.15	6.74	6.70	6.57	6.75	6.95	6.96	7.06
11	7.21	7.37	6.59	7.10	7.15	6.70	6.71	6.64	6.78	6.96	6.98	7.07
12	7.22	7.37	6.68	7.10	7.15	6.39	6.73	6.68	6.81	6.96	6.51	7.07
13	7.27	7.39	6.75	7.10	7.15	6.51	6.74	6.72	6.82	6.99	6.64	7.08
14	7.27	7.39	6.81	7.10	7.15	6.58	6.74	6.76	6.83	7.01	6.65	7.08
15	7.27	7.39	6.83	6.98	7.15	6.67	6.75	6.79	6.90	7.02	6.67	7.09
16	7.27	7.40	6.90	6.96	6.78	6.72	6.77	6.80	6.92	7.04	6.67	7.09
17	7.27	7.40	6.91	7.01	6.73	6.75	6.76	6.81	6.92	7.04	6.63	7.10
18	6.99	7.40	6.95	7.08	6.77	6.78	6.77	6.81	6.93	7.06	6.28	7.14
19	7.08	7.41	6.97	7.08	6.79	6.78	6.77	6.82	6.93	7.07	6.43	7.14
20	7.10	7.41	6.97	7.09	6.83	6.51	6.77	6.83	6.36	6.80	6.54	7.18
21	7.12	7.42	7.00	7.10	6.89	6.54	6.77	6.87	6.54	6.90	6.63	7.19
22	7.16	7.42	7.01	7.12	6.89	6.55	6.79	6.89	6.67	6.93	6.68	7.20
23	7.20	7.17	7.05	7.12	6.92	6.63	6.79	6.90	6.70	6.93	6.73	7.21
24	7.21	7.10	7.07	6.82	6.95	6.63	6.79	6.91	6.71	6.80	6.77	7.21
25	7.21	7.19	7.08	6.73	6.95	6.63	6.79	6.92	6.68	6.82	6.79	7.21
26	7.24	7.26	7.08	6.87	6.95	6.63	6.79	6.92	6.71	6.83	6.81	6.78
27	7.26	7.28	7.09	6.90	6.76	6.16	6.78	6.92	6.74	6.90	6.82	6.50
28	7.27	7.30	7.09	6.94	6.77	6.18	6.77	6.94	6.77	6.92	6.83	6.60
29	7.27	7.31	7.09	6.97	6.84	6.29	6.77	6.96	6.81	6.95	6.89	6.74
30	7.28	7.32	6.95	6.99	---	6.36	6.79	6.97	6.81	6.98	6.90	6.81
31	7.31	---	6.97	7.06	---	6.44	---	6.97	---	6.99	6.91	---
MEAN	7.18	7.33	6.86	7.01	6.97	6.60	6.71	6.81	6.70	6.90	6.68	6.98
MAX	7.31	7.42	7.34	7.12	7.15	6.98	6.79	6.97	6.93	7.07	6.98	7.21
MIN	6.96	7.07	6.09	6.63	6.60	5.98	6.45	6.42	5.91	6.00	6.00	6.16

WTR YR 1992 MEAN 6.89 HIGH 5.91 JUN 19 LOW 7.42 NOV 21,22

Gap indicates missing record.



402207076180801. Local number, LB 372.

LOCATION.--Lat 40°22'07", long 76°18'08", Hydrologic Unit 02040203, at Myerstown.

Owner: Kohl Brothers, Inc.

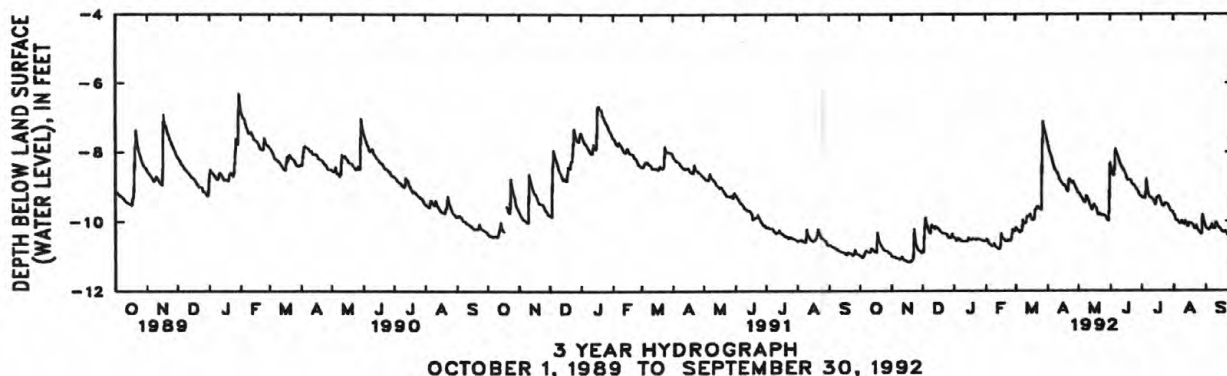
AQUIFER.--Dolomite of Ontelaunee Formation of Middle Ordovician age.**WELL CHARACTERISTICS.**--Drilled unused artesian well, diameter 6 in., depth 80 ft, casing information not available, open hole.**INSTRUMENTATION.**--Data collection platform.**DATUM.**--Elevation of land-surface datum is 444 ft above sea level. Measuring point: Top of plywood shelf, 2.70 ft above land-surface datum. Prior to Apr. 22, 1981, measuring point was 3.50 ft above land-surface datum.**PERIOD OF RECORD.**--July 1973 to current year.**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 4.02 ft below land-surface datum, Jan. 27, 1976; lowest, 11.32 ft below land-surface datum, Jan. 23, 30, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.98	10.98	10.88	10.46	10.54	10.16	7.69	9.18	8.30	9.28	9.79	10.14
2	10.98	10.99	10.88	10.46	10.50	10.20	7.83	9.18	8.48	9.32	9.82	10.20
3	11.01	11.00	10.24	10.53	10.56	10.24	7.96	9.24	8.60	9.32	9.94	10.22
4	11.01	11.00	9.88	10.53	10.62	10.26	8.05	9.30	8.68	9.28	9.97	10.24
5	10.96	11.03	10.04	10.47	10.64	10.32	8.16	9.34	8.68	9.34	9.96	10.20
6	10.87	11.03	10.12	10.49	10.68	10.28	8.28	9.40	7.90	8.78	10.02	10.15
7	10.80	11.05	10.22	10.51	10.68	10.26	8.36	9.46	8.00	9.05	10.06	10.06
8	10.84	11.06	10.32	10.55	10.69	9.95	8.48	9.46	8.08	9.20	10.05	10.21
9	10.86	11.07	10.32	10.55	10.60	10.04	8.52	9.26	8.18	9.28	9.97	10.12
10	10.88	11.05	10.07	10.55	10.68	10.06	8.58	9.32	8.26	9.32	10.04	10.20
11	10.88	11.00	10.12	10.55	10.72	10.02	8.60	9.40	8.36	9.34	10.08	10.01
12	10.74	11.05	10.14	10.55	10.75	9.85	8.68	9.50	8.44	9.36	9.97	10.07
13	10.78	11.08	10.20	10.56	10.77	9.86	8.80	9.56	8.48	9.40	10.02	10.12
14	10.80	11.10	10.12	10.56	10.78	9.86	8.83	9.66	8.50	9.46	10.09	10.16
15	10.85	11.12	10.14	10.46	10.74	9.78	8.88	9.61	8.57	9.52	10.12	10.20
16	10.82	11.14	10.18	10.50	10.32	9.89	8.92	9.50	8.64	9.30	10.02	10.24
17	10.87	11.14	10.19	10.51	10.46	9.94	8.96	9.54	8.75	9.32	10.06	10.28
18	10.30	11.15	10.25	10.51	10.50	9.95	8.96	9.60	8.80	9.27	10.06	10.30
19	10.48	11.16	10.28	10.50	10.52	9.94	9.00	9.65	8.80	9.32	10.06	10.30
20	10.55	11.12	10.31	10.49	10.56	9.65	9.10	9.78	8.80	9.44	10.10	10.26
21	10.64	11.12	10.33	10.50	10.56	9.64	9.14	9.81	8.83	9.52	10.18	10.31
22	10.69	11.04	10.33	10.51	10.56	9.58	8.82	9.76	8.90	9.56	10.20	10.38
23	10.74	10.20	10.33	10.51	10.52	9.56	8.77	9.80	8.94	9.54	10.10	10.38
24	10.78	10.48	10.35	10.49	10.54	9.62	8.86	9.82	8.95	9.46	10.18	10.40
25	10.81	10.65	10.36	10.50	10.56	9.64	8.90	9.80	9.00	9.48	10.26	10.42
26	10.82	10.73	10.42	10.50	10.46	9.67	8.84	9.82	9.04	9.48	10.30	10.03
27	10.83	10.80	10.46	10.52	10.22	8.08	8.89	9.84	9.08	9.52	10.36	9.70
28	10.84	10.82	10.46	10.53	10.26	7.13	8.97	9.88	9.12	9.61	10.34	9.86
29	10.88	10.84	10.46	10.54	10.28	7.32	9.05	9.95	9.20	9.69	9.79	9.98
30	10.89	10.89	10.34	10.55	---	7.44	9.10	9.98	9.26	9.70	9.92	10.04
31	10.91	---	10.42	10.56	---	7.57	---	9.64	---	9.71	10.06	---
MEAN	10.74	10.91	10.25	10.50	10.52	9.44	8.62	9.50	8.60	9.35	10.02	10.13
MAX	11.01	11.16	10.88	10.56	10.78	10.32	9.14	9.98	9.26	9.71	10.36	10.42
MIN	9.87	9.62	9.60	10.40	10.16	6.64	7.57	7.68	7.80	8.41	9.46	9.40

WTR YR 1992 MEAN 9.88 HIGH 6.64 MAR 27 LOW 11.16 NOV 19

Gap indicates missing record.



403429075392401. Local number, LE 644.

LOCATION.--Lat 40°34'29", long 75°39'24", Hydrologic Unit 02040106, at Haafsville.

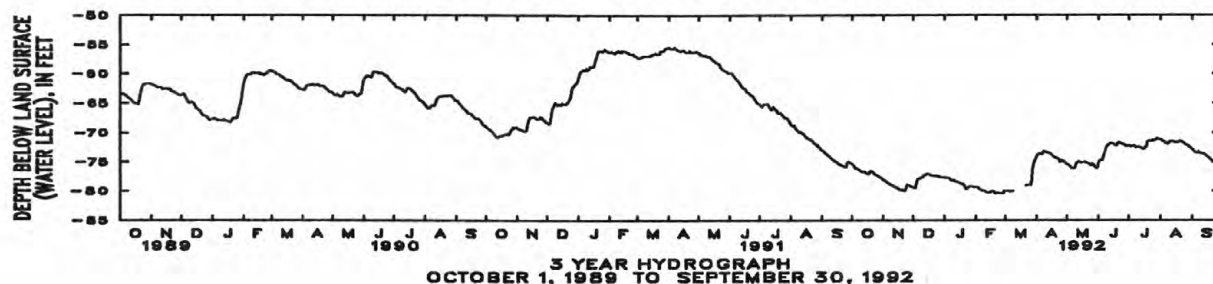
Owner: Charles J. Haaf.

AQUIFER.--Beekmantown Group of middle Ordovician age.**WELL CHARACTERISTICS.**--Drilled observation artesian well, diameter 10 in., depth 184 ft, cased to 63 ft, open hole.**INSTRUMENTATION.**--Data collection platform.**DATUM.**--Elevation of land-surface datum is 470 ft above sea level. Measuring point: Top of plywood shelf, 2.65 ft above land-surface datum. Prior to Mar. 18, 1981, top of casing, 1.45 ft above land-surface datum.**REMARKS.**--Water-quality records for 1973-75 are available in files of district office. Interruptions in daily record due to instrument malfunction.**PERIOD OF RECORD.**--January 1971 to current year.**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 36.65 ft below land-surface datum, June 27, 1972; lowest, 93.42 ft below land-surface datum, Feb. 6, 1971.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.41	78.08	79.33	77.68	79.34	79.97	74.02	75.40	75.17	72.18	71.19	72.89
2	75.61	78.23	79.44	77.74	79.33	79.96	73.81	75.47	74.84	72.29	71.23	72.95
3	75.81	78.26	79.41	77.79	79.47	79.97	73.67	75.62	74.70	72.39	71.37	73.14
4	76.05	78.40	78.52	77.80	79.51	79.99	73.61	75.74	74.65	72.28	71.48	73.40
5	76.18	78.55	78.10	77.80	79.78	80.04	73.71	75.94	74.66	72.24	71.54	73.50
6	76.17	78.67	77.87	77.89	79.84	80.09	73.71	76.14	74.02	72.21	71.71	73.50
7	76.30	78.78	77.87	78.09	79.90	80.09	73.44	76.18	73.39	72.43	71.85	73.24
8	76.43	78.91	77.83	78.23	79.97	80.02	73.26	76.15	72.84	72.56	71.92	73.38
9	76.53	78.98	77.67	78.23	79.99	79.96	73.31	75.97	72.37	72.50	71.85	73.50
10	76.64	79.00	77.67	78.16	80.00	---	73.33	75.34	72.15	72.39	71.45	73.62
11	76.72	79.11	77.39	78.26	80.20	---	73.34	75.12	71.97	72.41	71.49	73.60
12	76.71	79.26	77.31	78.42	80.31	---	73.48	75.04	71.88	72.52	71.42	73.64
13	76.73	79.31	77.18	78.45	80.31	---	73.55	74.98	71.80	72.67	71.45	73.67
14	76.82	79.42	77.08	78.50	80.32	---	73.54	75.10	71.80	72.69	71.52	73.83
15	76.92	79.49	77.07	78.51	80.31	---	73.69	75.18	71.84	72.82	71.61	73.98
16	77.04	79.65	77.14	78.59	80.13	---	73.93	75.13	71.93	72.72	71.68	74.15
17	77.11	79.76	77.14	78.75	80.06	---	74.07	---	72.06	72.54	71.68	74.28
18	76.84	79.82	77.29	78.81	80.04	---	74.22	74.98	72.18	72.38	71.65	74.37
19	76.62	79.81	77.38	78.81	80.16	---	74.29	75.04	72.14	71.66	71.42	74.59
20	76.59	79.78	77.39	78.92	80.36	---	74.35	75.18	71.78	71.41	71.38	74.66
21	76.68	79.92	77.43	79.16	80.38	79.08	74.44	75.24	71.69	71.34	71.43	74.79
22	76.86	79.92	77.43	79.68	80.34	79.08	74.45	75.29	71.73	71.39	71.60	74.91
23	77.09	79.81	77.40	79.66	80.34	79.02	74.54	75.38	71.82	71.43	71.66	74.98
24	77.21	79.06	77.45	79.44	80.38	79.03	75.13	75.55	71.92	71.27	71.78	75.18
25	77.30	78.94	77.49	79.27	80.43	79.03	74.74	75.55	71.91	71.36	71.99	75.31
26	77.45	79.00	77.51	79.22	80.43	79.03	74.74	75.30	72.00	71.35	72.10	75.28
27	77.47	79.08	77.54	79.22	80.44	78.33	74.79	75.46	72.13	71.21	72.12	74.87
28	77.61	79.22	77.65	79.21	80.43	76.32	74.92	75.70	72.30	71.07	72.23	74.76
29	77.69	79.21	77.64	79.29	79.97	75.42	75.10	75.94	72.28	71.02	72.44	74.92
30	77.75	79.26	77.65	79.30	---	74.80	75.27	76.10	72.23	71.06	72.44	75.05
31	77.95	---	77.68	79.35	---	74.34	---	75.98	---	71.12	72.62	---
MEAN	76.70	79.07	77.61	78.58	80.03	78.54	73.99	75.42	72.51	71.89	71.65	74.04
MAX	77.95	79.92	79.44	79.68	80.44	80.09	75.27	76.18	75.17	72.82	72.62	75.31
MIN	75.28	77.95	76.97	77.43	79.30	74.02	73.19	74.86	71.66	70.91	71.09	72.62

WTR YR 1992 MEAN 75.74 HIGH 70.51 JUL 29,30 LOW 80.44 FEB 2

Gap indicates missing record.



411223075234901. Local number, MO 190.

LOCATION.--Lat 41°12'23", long 75°23'49", Hydrologic Unit 02040106, at Tobyhanna State Park.

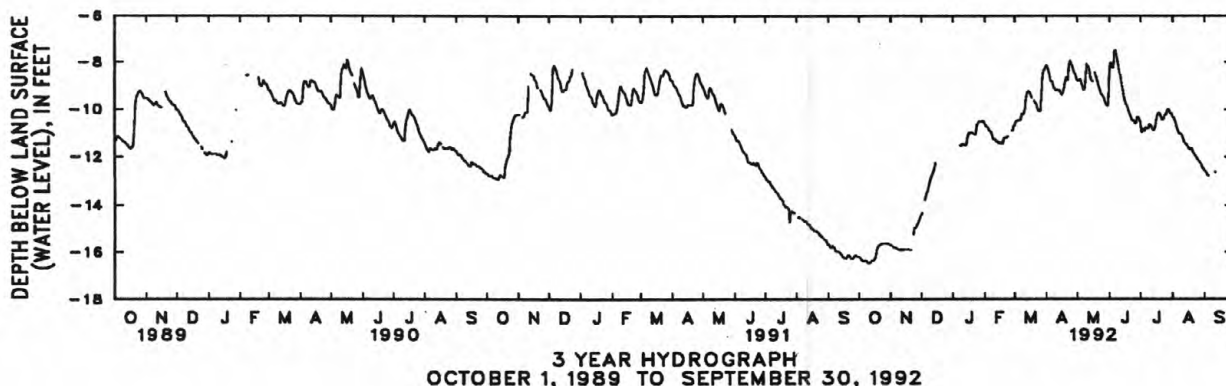
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Catskill Formation of Late Devonian age.**WELL CHARACTERISTICS.**--Drilled observation artesian well, diameter 6 in., depth 98 ft, cased to 59 ft, open hole.**INSTRUMENTATION.**--Data collection platform.**DATUM.**--Elevation of land-surface datum is 1,990 ft above sea level. Measuring point: Top of plywood shelf, 2.96 ft above land-surface datum. Prior to Mar. 28, 1980, top of plywood cover, 2.57 ft above land-surface datum.**REMARKS.**--Interruptions in daily record due to instrument malfunction.**PERIOD OF RECORD.**--October 1967 to current year.**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 6.83 ft below land-surface datum, Apr. 5, 1984; lowest, 16.87 ft below land-surface datum, Oct. 24, 25, 1980.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.21	15.69	14.41	---	10.64	10.68	8.13	8.79	8.55	10.55	10.33	12.56
2	16.26	15.73	14.33	---	10.70	10.54	8.22	8.79	8.06	10.96	10.35	12.61
3	16.32	15.78	---	---	10.76	10.50	8.39	8.78	8.03	10.83	10.43	12.65
4	16.35	15.80	13.81	---	10.76	10.48	8.55	8.71	8.23	10.89	10.55	12.76
5	16.37	15.82	13.69	---	10.90	10.48	8.78	8.89	8.23	10.91	10.72	12.77
6	16.37	15.83	13.52	---	10.90	10.45	8.85	9.03	7.50	10.78	10.87	---
7	16.34	15.85	13.41	---	10.95	10.45	8.85	9.17	7.49	10.80	11.00	---
8	16.37	15.89	13.23	11.53	11.05	10.20	9.07	9.17	7.69	10.82	11.03	---
9	16.41	15.90	13.04	11.53	11.25	10.19	9.13	8.80	7.94	10.79	11.03	---
10	16.46	15.90	12.90	11.47	11.26	10.17	9.20	8.06	8.23	10.63	11.08	---
11	16.46	15.90	12.81	11.47	11.26	9.93	9.20	8.16	8.47	10.69	11.22	12.64
12	16.42	15.90	12.69	11.51	11.35	9.56	9.16	8.23	8.67	10.76	11.37	12.62
13	16.36	15.90	12.56	11.51	11.35	9.33	9.21	8.40	8.89	10.87	11.41	---
14	16.36	15.89	12.40	11.48	11.42	9.23	9.19	8.68	9.15	10.87	11.46	---
15	16.34	15.89	12.25	11.25	11.42	9.24	9.32	8.81	9.45	10.81	11.52	---
16	16.30	15.89	---	11.05	11.40	9.33	9.39	8.81	9.61	10.57	11.58	---
17	16.21	15.89	---	11.00	11.43	9.41	9.33	---	9.78	10.30	11.66	---
18	15.94	15.89	---	11.00	11.43	9.54	9.14	8.42	9.85	10.16	11.66	---
19	15.80	15.90	---	11.00	11.32	---	8.89	8.57	9.93	10.14	11.63	---
20	15.74	15.91	---	10.99	11.22	9.63	8.68	8.73	10.12	10.19	11.68	---
21	15.70	15.91	---	11.02	11.21	9.75	8.63	8.89	10.22	10.33	11.81	---
22	15.66	---	---	11.07	11.21	9.75	8.76	9.08	10.36	10.45	11.87	---
23	15.65	15.27	---	11.07	11.15	9.93	8.13	9.17	10.47	10.45	11.96	---
24	15.65	14.96	---	10.70	11.15	10.05	7.95	9.34	10.47	10.31	12.00	---
25	15.64	14.96	---	10.62	---	10.07	8.04	9.40	10.49	10.22	12.08	---
26	15.63	14.92	---	10.54	---	10.04	8.16	9.47	10.62	10.19	12.14	---
27	15.63	14.82	---	10.54	10.91	9.46	8.29	9.55	10.58	10.03	12.20	---
28	15.63	14.70	---	10.52	10.91	8.66	8.46	9.69	10.33	9.99	12.24	---
29	15.64	14.59	---	10.52	10.70	8.37	8.51	9.80	10.33	10.05	12.29	---
30	15.64	14.49	---	10.51	---	8.33	8.68	9.86	10.43	10.17	12.43	---
31	15.69	---	---	10.49	---	8.21	---	9.82	---	10.17	12.48	---
MEAN	16.03	15.56	---	10.98	11.08	9.66	8.67	8.00	7.32	9.95	10.17	---
MAX	16.46	15.91	---	11.53	11.43	10.68	9.39	9.86	10.62	10.96	12.48	---
MIN	15.63	14.41	---	10.46	10.49	8.13	7.91	8.00	7.32	9.95	10.17	---

WTR YR 1992 MEAN 11.19 HIGH 7.32 JUN 6,7 LOW 16.46 OCT 10,11

Gap indicates missing record.



400808075210401. Local number, MG 225.

LOCATION.--Lat 40°08'08", long 75°21'04", Hydrologic Unit 02040203, at Willow and Locust Street, Norristown.
 Owner: Norristown State Hospital.

AQUIFER.--Sandstone of Stockton Formation of Late Triassic age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 300 ft, casing information not available.

INSTRUMENTATION.--Data collection platform.

DATUM.--Elevation of land-surface datum is 165 ft above sea level. Measuring point: Top of plywood shelf, 2.35 ft above land-surface datum. Prior to Mar. 17, 1981, top of casing, 0.75 ft above land-surface datum.

REMARKS.--Interruptions in daily record due to instrument malfunction.

PERIOD OF RECORD.--September 1956 to current year.

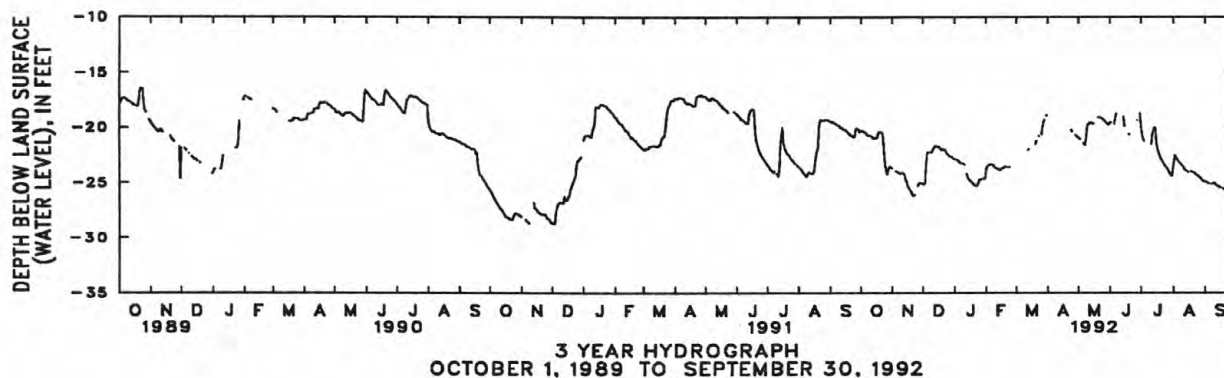
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.00 ft below land-surface datum, May 31, 1984; lowest, 60.25 ft below land-surface datum, Nov. 5, 6, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.31	23.71	25.09	22.85	23.84	---	---	20.89	19.51	19.82	23.59	24.90
2	20.29	---	25.11	22.89	23.55	---	---	20.93	19.56	20.58	22.98	24.92
3	20.31	---	24.93	22.90	23.44	---	---	21.04	---	20.94	22.50	24.93
4	20.40	23.96	23.28	22.94	23.39	---	---	---	---	21.20	22.72	25.01
5	20.42	23.98	22.48	23.01	23.37	---	---	---	19.68	---	22.90	25.08
6	20.52	24.04	22.25	23.09	23.37	---	---	21.32	19.03	---	23.03	---
7	20.62	24.09	22.23	23.21	23.34	---	---	21.54	18.67	---	23.14	25.10
8	20.69	24.16	22.21	23.25	23.41	---	---	21.52	---	---	23.24	25.09
9	20.72	24.16	22.21	23.26	23.60	---	---	20.57	---	---	23.35	25.01
10	20.72	24.11	22.22	23.27	23.63	---	---	19.79	---	---	23.46	25.01
11	20.73	24.09	21.98	23.39	23.63	---	---	19.67	18.80	21.51	23.55	25.14
12	20.82	24.19	21.82	---	23.76	---	---	19.59	---	20.53	23.77	25.22
13	20.93	24.34	21.70	24.18	23.73	22.02	---	19.52	---	20.25	23.84	25.28
14	20.95	24.67	21.62	24.51	23.86	21.95	---	19.58	18.97	20.02	23.95	25.33
15	20.96	24.90	21.68	24.64	23.85	---	---	19.65	19.85	20.03	23.98	25.38
16	20.90	25.21	21.75	24.77	23.72	---	---	19.62	---	21.46	24.04	25.42
17	20.91	25.46	21.72	24.81	23.67	---	---	---	---	21.95	---	---
18	20.53	25.61	21.87	24.99	23.63	---	---	19.13	---	22.28	23.99	25.49
19	20.40	25.79	21.99	25.04	23.54	---	---	---	20.61	22.52	23.96	25.56
20	20.41	25.92	21.97	25.11	23.55	21.51	---	19.10	20.57	22.73	24.03	25.63
21	20.41	26.15	21.98	25.22	23.57	21.17	---	19.09	---	22.96	24.09	25.69
22	20.44	26.16	22.00	25.30	23.59	---	---	19.08	---	23.15	24.16	25.71
23	21.08	26.07	22.06	25.30	23.55	20.78	---	19.08	---	23.28	24.24	25.78
24	22.54	---	22.23	25.06	23.60	20.77	20.20	19.17	---	23.43	24.31	25.86
25	23.37	---	22.40	24.79	---	---	20.37	19.26	20.02	23.55	24.35	25.88
26	23.93	25.32	22.45	24.69	---	20.59	---	19.31	---	23.66	24.44	25.75
27	24.24	25.05	22.59	24.67	24.06	20.17	---	19.40	19.32	23.83	24.51	25.47
28	23.81	24.96	22.63	24.64	---	19.56	20.66	19.53	---	24.02	24.59	25.29
29	23.54	25.00	22.61	24.63	---	19.26	20.72	19.64	---	24.17	24.73	25.19
30	23.54	25.05	22.76	24.61	---	---	20.80	19.71	18.69	24.33	24.80	25.19
31	23.64	---	22.82	24.57	---	18.90	---	19.69	---	24.38	24.87	---
MEAN	21.27	24.76	22.36	24.09	23.53	---	---	19.80	---	22.08	23.77	25.28
MAX	24.24	26.16	25.11	25.30	24.06	---	---	21.54	---	24.38	24.87	25.88
MIN	20.23	23.62	21.53	22.77	23.21	---	---	19.03	---	18.49	22.31	23.37

WTR YR 1992 MEAN 22.68 HIGH 18.49 JUL 1 LOW 26.16 NOV 22

Gap indicates missing record.



MONTGOMERY COUNTY

401310075181702. Local number, MG 884

LOCATION.--Lat 40°13'10", long 75°18'17", Hydrologic Unit 02040203, at Upper Gwyned Township, near West Point.
Owner: Merck, Sharp, and Dohme, Inc.

AQUIFER.--Shale of Brunswick Formation of Late Triassic age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in. to 10 in., depth 600 ft, casing information not available.

INSTRUMENTATION.--Data collection platform.

DATUM.--Elevation of land-surface datum is 351 ft above sea level. Measuring point: Top of plywood shelf, 2.55 ft above land-surface datum. Prior to May 1, 1981, top of casing, 1.30 ft above land-surface datum.

REMARKS.--Well originally drilled to 300 ft. Water-level data for August 1956 to December 1965 published in U.S. Geological Survey Water-Supply Papers under local number MG-127. Well deepened to 600 ft in December 1965 and assigned local number MG-884. Interruptions in daily record due to instrument malfunction.

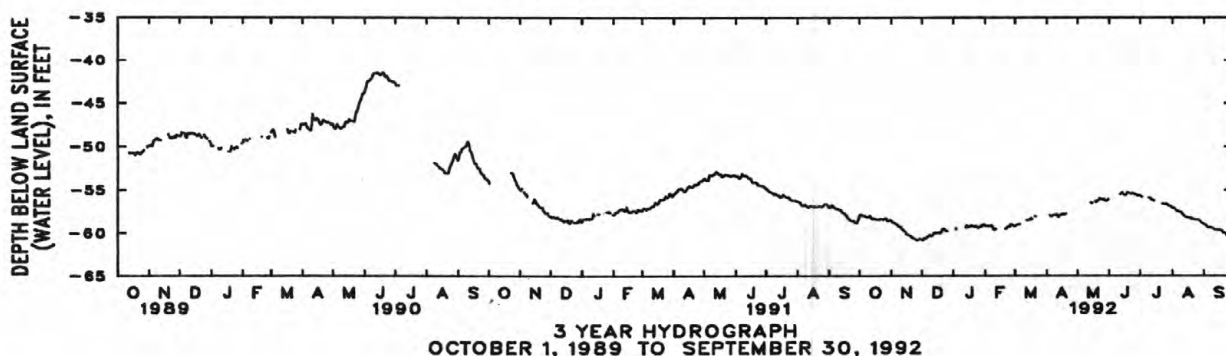
PERIOD OF RECORD.--March 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.03 ft below land-surface datum, Apr. 29, 1987; lowest, 93.17 ft below land-surface datum, Oct. 20, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.92	58.46	60.71	---	59.10	59.19	---	---	---	55.63	57.07	58.94
2	57.81	58.69	60.79	---	59.14	59.10	---	---	---	55.78	57.10	59.00
3	57.87	58.76	60.59	59.53	59.13	58.99	---	---	---	55.81	57.03	59.04
4	57.99	58.80	60.55	59.38	59.11	58.96	57.87	---	---	---	57.22	59.20
5	57.93	58.86	60.65	---	59.20	58.93	58.06	---	---	---	57.36	59.29
6	57.95	58.91	60.43	---	---	58.93	58.07	---	---	---	57.44	59.28
7	58.10	59.01	60.41	---	59.07	---	57.93	---	---	---	57.45	59.30
8	58.15	59.21	60.32	59.59	59.25	---	57.92	---	---	---	57.47	59.32
9	58.15	59.25	60.18	---	59.51	---	57.92	---	---	55.88	57.52	59.38
10	58.08	59.17	60.31	59.31	59.59	---	57.85	---	---	55.86	57.59	59.42
11	57.93	59.42	60.29	---	59.42	---	57.79	---	55.50	56.02	57.74	59.56
12	58.15	59.54	60.18	---	59.54	58.48	58.01	---	55.47	56.08	57.96	59.61
13	58.31	59.61	59.95	59.32	---	58.47	58.12	---	55.36	56.18	58.00	59.62
14	58.34	59.79	59.92	59.05	---	58.45	57.89	56.39	55.30	56.19	58.11	59.60
15	58.24	59.81	59.97	59.29	---	58.38	57.85	56.48	55.50	56.23	58.12	59.64
16	58.35	60.09	59.95	59.21	---	58.44	57.81	56.47	55.59	---	58.16	59.62
17	58.35	60.19	59.89	59.21	59.59	58.28	57.73	---	55.55	---	58.19	59.65
18	58.43	60.17	59.89	59.12	---	58.33	57.81	56.25	55.47	---	58.15	59.66
19	58.40	60.27	59.99	59.13	---	---	57.79	56.37	55.25	---	58.21	59.88
20	58.43	60.30	59.86	59.13	59.42	58.03	57.75	56.31	55.33	---	58.29	59.94
21	58.36	60.46	59.55	59.17	59.45	58.01	---	56.21	55.40	---	58.37	59.96
22	58.30	60.49	59.55	59.27	59.45	58.01	---	56.07	55.44	56.56	58.36	60.03
23	58.36	60.63	59.41	59.15	59.20	---	---	55.95	55.45	56.54	58.42	60.32
24	58.38	60.63	59.61	59.28	59.23	---	---	56.04	55.32	56.67	58.42	60.36
25	58.32	60.71	59.77	59.35	59.22	---	---	56.09	55.44	56.62	58.40	60.30
26	58.29	60.81	59.77	59.33	58.93	---	---	56.08	55.48	56.56	58.44	60.29
27	58.27	60.81	---	59.32	58.96	---	---	56.07	55.51	56.58	58.46	60.30
28	58.53	60.69	---	59.15	58.98	---	---	56.19	55.61	56.75	58.54	60.35
29	58.56	60.68	---	59.11	59.19	---	---	56.25	55.62	56.78	58.78	60.41
30	58.46	60.68	---	59.01	---	---	---	56.21	55.59	56.87	58.78	60.41
31	58.44	---	---	58.95	---	---	---	56.05	---	56.87	58.86	---
MEAN	58.16	59.77	60.01	59.13	59.17	58.49	57.80	56.15	55.40	56.27	57.95	59.68
MAX	58.56	60.81	60.79	59.59	59.59	59.19	58.12	56.48	55.62	56.87	58.86	60.41
MIN	57.57	58.43	59.29	58.46	58.63	57.54	57.53	55.83	55.13	55.25	56.83	58.86
WTR YR 1992	MEAN	58.35	HIGH	55.13	JUN 19	LOW	60.81	NOV 26,27				

Gap indicates missing record.



403511075210001. Local number, NP 83.

LOCATION.--Lat 40°35'11", long 75°21'00", Hydrologic Unit 02040106, at Bethlehem.

Owner: Lehigh University.

AQUIFER.--Dolomite of Leithsville Formation of Early and Middle Cambrian area.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 106 ft.

INSTRUMENTATION.--Digital recorder.

DATUM.--Elevation of land-surface datum is 288 ft above sea level. Measuring point: Top of casing, 4.55 ft above land-surface datum.

PERIOD OF RECORD.--November 1988 to current year.

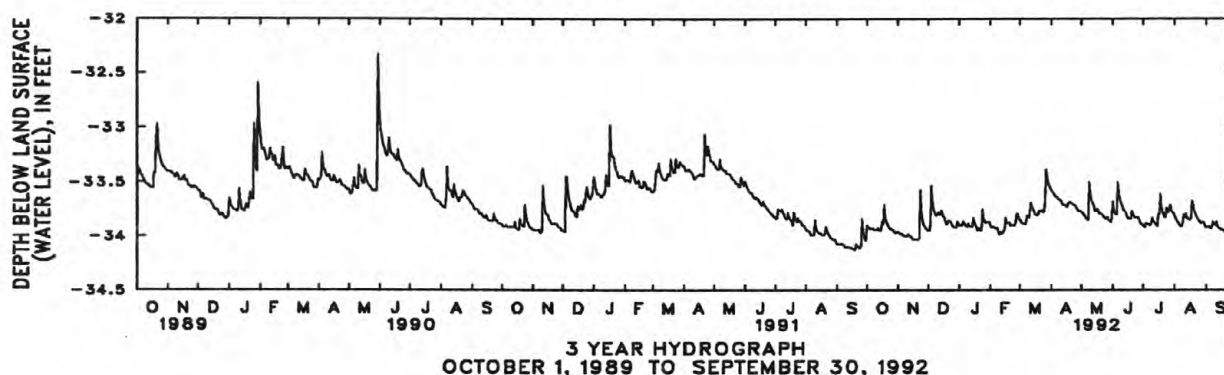
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.43 ft below land-surface datum, May 30, 1989; lowest, 34.13 ft below land-surface datum, Sept. 19, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.90	33.96	33.95	33.90	33.90	33.85	33.57	33.78	33.68	33.90	33.82	33.92
2	33.91	33.97	33.95	33.90	33.92	33.86	33.59	33.78	33.74	33.91	33.84	33.92
3	33.92	33.98	33.89	33.90	33.92	33.88	33.60	33.80	33.78	33.92	33.85	33.92
4	33.93	33.98	33.53	33.89	33.91	33.88	33.61	33.81	33.80	33.88	33.87	33.91
5	33.93	33.98	33.66	33.86	33.92	33.88	33.63	33.83	33.80	33.89	33.88	33.92
6	33.93	33.99	33.74	33.88	33.93	33.89	33.64	33.84	33.50	33.89	33.90	33.93
7	33.93	34.00	33.77	33.90	33.92	33.89	33.64	33.85	33.61	33.89	33.91	33.90
8	33.94	34.00	33.80	33.91	33.93	33.81	33.66	33.85	33.65	33.90	33.91	33.87
9	33.94	34.00	33.81	33.91	33.97	33.83	33.66	33.50	33.69	33.89	33.88	33.89
10	33.94	34.00	33.80	33.88	33.99	33.83	33.67	33.61	33.71	33.83	33.80	33.90
11	33.94	33.98	33.78	33.91	33.96	33.75	33.68	33.67	33.74	33.87	33.83	33.87
12	33.92	33.99	33.80	33.91	33.98	33.69	33.70	33.69	33.76	33.87	33.79	33.90
13	33.95	34.00	33.80	33.91	33.97	33.73	33.71	33.71	33.77	33.89	33.83	33.92
14	33.95	34.01	33.76	33.91	33.95	33.75	33.71	33.74	33.78	33.89	33.84	33.93
15	33.95	34.02	33.78	33.83	33.95	33.77	33.72	33.77	33.82	33.91	33.85	33.93
16	33.87	34.03	33.82	33.88	33.83	33.80	33.73	33.77	33.83	33.79	33.85	33.94
17	33.89	34.03	33.82	33.89	33.88	33.80	33.72	33.75	33.84	33.80	33.84	33.94
18	33.71	34.03	33.86	33.92	33.88	33.81	33.70	33.77	33.84	33.61	33.67	33.95
19	33.81	34.03	33.89	33.95	33.87	33.80	33.69	33.79	33.84	33.72	33.70	33.95
20	33.86	34.03	33.88	33.92	33.88	33.77	33.69	33.79	33.77	33.78	33.76	33.97
21	33.88	34.03	33.86	33.93	33.90	33.77	33.70	33.80	33.80	33.80	33.79	33.97
22	33.90	34.02	33.86	33.95	33.90	33.77	33.70	33.81	33.82	33.83	33.81	33.97
23	33.92	33.57	33.86	33.95	33.90	33.76	33.71	33.82	33.83	33.83	33.83	33.95
24	33.93	33.76	33.88	33.75	33.90	33.78	33.71	33.83	33.83	33.74	33.85	33.97
25	33.93	33.83	33.90	33.84	33.90	33.77	33.72	33.84	33.83	33.77	33.86	33.97
26	33.94	33.89	33.91	33.85	33.87	33.68	33.74	33.84	33.83	33.78	33.87	33.93
27	33.94	33.90	33.92	33.88	33.79	33.38	33.75	33.83	33.85	33.73	33.88	33.83
28	33.96	33.92	33.92	33.87	33.80	33.43	33.77	33.85	33.87	33.71	33.88	33.84
29	33.97	33.93	33.92	33.87	33.84	33.51	33.77	33.86	33.89	33.77	33.87	33.89
30	33.97	33.94	33.86	33.87	---	33.53	33.77	33.87	33.89	33.78	33.88	33.91
31	33.96	---	33.88	33.87	---	33.55	---	33.84	---	33.79	33.90	---
MEAN	33.90	33.93	33.80	33.87	33.89	33.72	33.68	33.76	33.75	33.78	33.82	33.90
MAX	33.97	34.03	33.95	33.95	33.99	33.89	33.77	33.87	33.89	33.92	33.91	33.97
MIN	33.33	32.95	33.08	33.57	33.70	33.00	33.55	33.14	33.18	33.38	33.59	33.73

WTR YR 1992 MEAN 33.82 HIGH 32.95 NOV 23 LOW 34.03 NOV 16 THRU 21

Gap Indicates missing record.



395342075102101. Local number, PH 12.

LOCATION.--Lat 39°53'42", long 75°10'21", Hydrologic Unit 02040202, at Barracks and East Fourth Streets, Philadelphia. Owner: U.S. Naval Base.

AQUIFER.--Middle Sand Unit of Potomac-Raritan-Magothy aquifer system of Late Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 104 ft, cased to 94 ft, screened 94-104 ft.

INSTRUMENTATION.--Digital recorder.

DATUM.--Elevation of land-surface datum is 8.64 ft above sea level. Measuring point: Top of casing, 1.80 ft above land-surface datum.

REMARKS.--Mean daily fluctuation caused by tidal loading, 0.20 ft.

PERIOD OF RECORD.--January 1952 to current year.

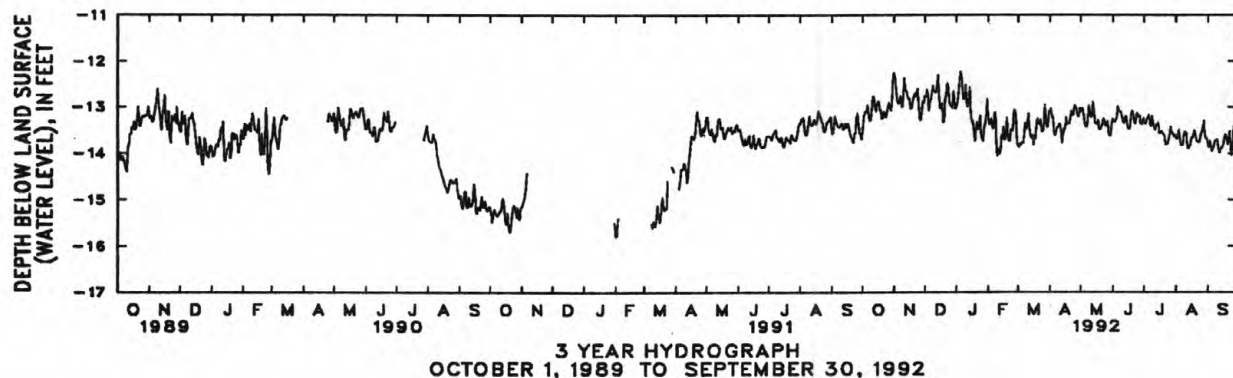
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.98 ft below land-surface datum, Jan. 14, 1992; lowest, 39.60 ft below land-surface datum, July 20, 1955.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.51	12.25	12.76	12.99	13.20	13.84	13.08	13.10	13.24	13.24	13.67	13.82
2	13.24	12.37	12.79	12.91	13.37	13.87	13.03	13.03	13.30	13.35	13.69	13.87
3	13.09	12.67	12.62	12.70	13.34	13.80	13.22	13.03	13.31	13.36	13.61	13.72
4	13.11	12.83	12.72	12.38	13.23	13.81	13.21	13.20	13.27	13.26	13.49	13.83
5	13.10	12.93	13.08	12.23	13.42	13.76	13.54	13.35	13.22	13.23	13.70	13.95
6	12.95	12.86	12.88	12.32	13.46	13.77	13.61	13.42	12.98	13.16	13.83	13.89
7	13.15	12.76	12.84	12.63	13.14	13.63	13.52	13.42	13.09	13.36	13.83	13.80
8	13.29	12.94	12.69	12.83	13.11	13.33	13.43	13.28	13.09	13.41	13.77	13.72
9	13.26	13.00	12.53	12.76	13.90	13.47	13.43	12.97	13.11	13.19	13.55	13.73
10	13.09	12.77	12.67	12.51	14.05	13.37	13.38	13.07	13.22	13.32	13.53	13.69
11	12.78	12.37	12.67	12.91	13.90	13.14	13.36	13.22	13.30	13.43	13.55	13.85
12	12.76	12.64	12.69	12.99	14.01	13.42	13.48	13.13	13.34	13.49	13.88	13.99
13	12.97	12.66	12.52	12.86	13.92	13.59	13.77	12.89	13.23	13.38	13.90	13.95
14	13.09	12.75	12.30	12.56	13.59	13.67	13.57	13.09	13.19	13.40	13.85	13.89
15	12.95	12.83	12.70	13.09	13.66	13.60	13.48	13.33	13.33	13.33	13.82	13.87
16	12.88	12.81	13.03	13.32	13.41	13.81	13.44	13.36	13.46	13.56	13.66	13.80
17	12.88	13.03	13.02	13.29	13.70	13.61	13.22	13.36	13.46	13.55	13.67	13.65
18	13.08	13.02	12.91	13.50	13.59	13.69	13.36	13.27	13.41	13.51	13.58	13.59
19	13.05	12.87	13.32	13.74	13.22	13.32	13.35	13.47	13.14	13.54	13.50	13.63
20	13.24	12.81	13.27	13.46	13.54	13.24	13.34	13.47	13.08	13.59	13.61	13.80
21	13.23	12.71	12.84	13.32	13.72	13.37	13.20	13.42	13.18	13.61	13.73	13.72
22	13.09	12.77	12.72	13.48	13.72	13.36	13.08	13.35	13.33	13.82	13.75	13.51
23	13.16	12.68	12.47	13.31	13.48	13.26	13.17	13.24	13.36	13.76	13.76	13.89
24	13.21	12.60	12.56	13.18	13.50	13.51	13.16	13.26	13.15	13.80	13.73	14.04
25	13.09	12.91	12.89	13.62	13.51	13.53	12.96	13.40	13.13	13.70	13.60	13.85
26	12.99	13.24	12.95	13.67	13.08	13.37	12.99	13.36	13.22	13.59	13.52	13.44
27	12.90	13.28	12.96	13.73	13.06	12.94	13.03	13.30	13.18	13.41	13.44	13.38
28	13.02	13.08	13.02	13.43	13.22	13.19	13.18	13.52	13.35	13.58	13.29	13.51
29	13.07	12.88	12.66	13.35	13.77	13.42	13.20	13.62	13.37	13.56	13.59	13.71
30	12.87	12.92	12.90	13.13	---	13.42	13.03	13.61	13.28	13.63	13.68	13.71
31	12.32	---	13.04	12.82	---	13.09	---	13.37	---	13.60	13.67	---
MEAN	12.95	12.70	12.65	12.90	13.34	13.34	13.19	13.19	13.16	13.39	13.57	13.67
MAX	13.51	13.28	13.32	13.74	14.05	13.87	13.77	13.62	13.46	13.82	13.90	14.04
MIN	12.20	12.12	12.08	11.98	12.79	12.47	12.83	12.76	12.85	13.03	13.04	13.24

WTR YR 1992 MEAN 13.17 HIGH 11.98 JAN 14 LOW 14.05 FEB 10

Gap indicates missing record.



410940074583401. Local number, PI 200.

LOCATION.--Lat 41°09'40", long 74°58'34", Hydrologic Unit 02040104, at Pocono Mountain Lake Estates.
 Owner: Pocono Mountain Lake Estates.

AQUIFER.--Sandstone and siltstone of Towamensing Member of Catskill Formation of Late Devonian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 799 ft, cased to 86 ft, open hole.

INSTRUMENTATION.--Digital recorder.

DATUM.--Elevation of land-surface datum is 1,180 ft above sea level. Measuring point: Top of plywood shelf, 3.27 ft above land-surface datum. Prior to October 1983, published as 1.40 ft above land-surface datum.

REMARKS.--Interruptions in daily record due to float hanging up on casing.

PERIOD OF RECORD.--July 1981 to current year.

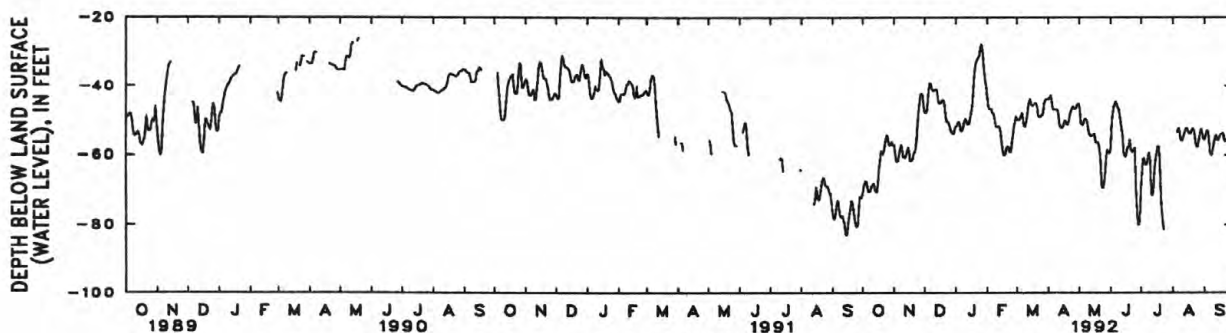
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft below land-surface datum, Apr. 18, 1983; lowest, 83.04 ft below land-surface datum, Sept. 15, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.67	57.18	47.69	51.88	42.90	49.51	44.01	45.12	58.43	69.14	---	55.45
2	68.73	59.31	47.85	51.53	45.78	49.87	43.45	47.19	52.94	64.19	---	54.07
3	68.11	61.66	47.47	50.61	46.70	49.93	42.61	50.87	48.50	61.18	---	53.29
4	67.47	61.88	44.59	50.45	46.79	49.73	43.72	51.36	46.20	60.82	---	52.99
5	67.51	61.73	41.04	51.38	46.66	48.60	46.06	51.34	45.58	62.57	53.45	55.13
6	69.83	59.89	39.11	53.03	47.96	47.87	46.98	50.10	44.63	62.77	52.73	59.08
7	70.33	58.16	39.19	53.12	48.09	49.11	47.00	49.49	45.17	61.94	52.32	59.95
8	70.34	57.17	40.95	52.27	48.96	51.66	46.87	49.59	46.23	60.40	54.41	59.98
9	69.60	58.21	41.30	50.68	51.18	51.76	46.98	50.20	46.80	59.41	55.83	58.45
10	68.82	60.31	41.33	49.56	51.94	50.90	47.18	52.29	48.53	61.56	55.93	56.66
11	68.34	60.73	41.06	49.67	51.95	48.96	48.64	53.81	50.91	71.14	55.04	54.96
12	68.04	60.73	40.95	51.03	51.70	46.52	51.06	54.43	52.52	71.40	53.80	54.42
13	69.84	59.91	40.96	51.20	51.98	44.66	52.08	54.52	54.58	69.39	53.05	55.48
14	70.54	59.04	42.58	51.03	53.46	43.82	52.12	54.48	59.20	64.90	52.33	55.67
15	70.54	57.98	44.77	49.81	55.59	45.35	52.10	54.47	60.31	61.71	52.33	55.21
16	68.10	59.21	45.08	48.03	58.10	45.71	51.18	54.02	60.38	59.45	53.65	54.40
17	64.47	61.55	45.08	46.29	59.97	45.71	49.99	55.46	58.77	57.66	53.87	54.10
18	61.74	61.69	44.27	41.44	60.08	45.17	50.39	56.37	58.01	57.82	53.82	53.92
19	58.78	61.35	44.10	37.19	59.40	44.92	51.25	56.43	57.56	60.32	53.10	54.05
20	59.57	60.14	44.38	34.66	58.16	45.14	51.30	56.45	55.54	68.02	52.67	55.47
21	59.67	59.29	45.49	33.16	57.69	46.39	49.95	58.01	58.48	75.16	52.58	56.05
22	58.70	58.58	48.99	32.24	57.81	48.50	48.55	60.38	59.05	79.43	54.11	55.87
23	56.56	55.47	50.35	31.85	59.20	49.01	47.60	65.03	59.06	81.29	56.54	55.23
24	55.16	51.08	50.39	31.19	59.23	49.02	46.74	69.20	58.58	---	57.55	55.04
25	54.29	47.89	50.63	29.13	57.57	48.74	45.96	69.23	58.05	---	57.55	54.36
26	55.36	44.91	51.58	27.78	55.21	48.35	46.51	68.03	69.81	---	56.39	55.57
27	57.15	42.52	52.89	28.41	52.45	47.70	46.68	64.38	76.56	---	54.65	57.75
28	57.32	42.19	53.62	32.66	50.63	44.94	46.46	60.66	79.97	---	53.02	58.18
29	56.90	42.98	53.79	36.38	48.85	43.95	45.70	58.52	79.95	---	52.66	58.04
30	56.15	45.47	53.80	39.00	---	44.01	45.15	59.32	75.98	---	54.90	56.95
31	57.22	---	52.79	40.48	---	43.97	---	59.46	---	---	55.50	---
MEAN	62.94	55.31	45.35	42.26	52.14	46.75	47.25	55.23	56.12	63.66	53.58	55.24
MAX	70.67	61.88	53.80	53.12	60.08	51.76	52.12	69.23	79.97	81.29	57.55	59.98
MIN	53.38	41.00	37.81	27.17	40.54	42.68	42.06	44.83	43.14	56.06	51.40	52.29

WTR YR 1992 MEAN 52.74 HIGH 27.17 JAN 27 LOW 81.29 JUL 23

Gap indicates missing record.



3 YEAR HYDROGRAPH
 OCTOBER 1, 1989 TO SEPTEMBER 30, 1992

404708076070701. Local number, SC 296.

LOCATION.--Lat 40°47'08", long 76°07'07", Hydrologic Unit 02040203, at Locust Lake State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Mauch Chunk Formation of Early Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 242 ft, cased to 40 ft, open hole.

INSTRUMENTATION.--Data collection platform.

DATUM.--Elevation of land-surface datum is 1,290 ft above sea level. Measuring point: Top of plywood shelf, 2.78 ft above land-surface datum. Prior to June 26, 1980, top of casing, 2.30 ft above land-surface datum.

REMARKS.--Interruptions in daily record due to instrument malfunction and down link interference.

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

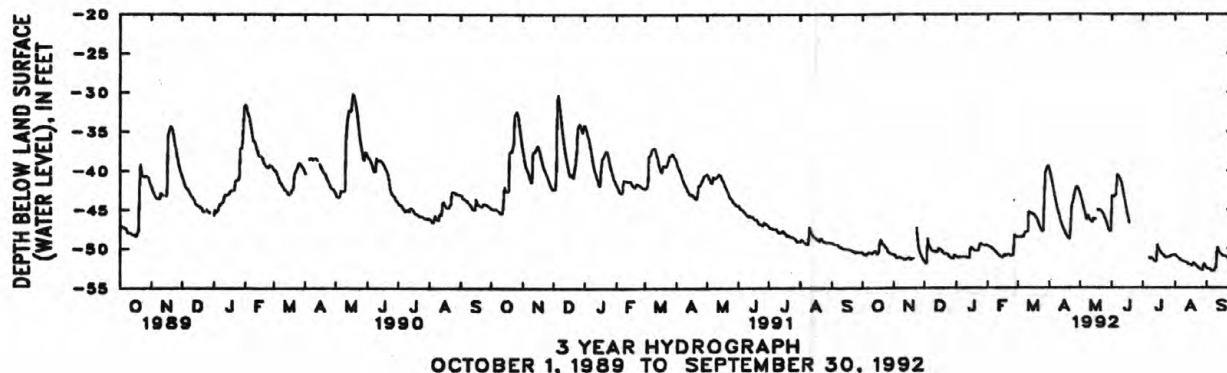
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.27 ft below land-surface datum, May 18, 1989; lowest, 55.86 ft below land-surface datum, Nov. 14, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.50	50.78	51.60	50.96	49.58	48.54	39.71	42.87	43.19	---	50.81	52.53
2	50.66	50.77	51.86	51.08	49.63	48.53	40.25	43.31	43.36	---	50.89	52.61
3	50.69	51.10	51.79	51.17	49.74	48.55	40.88	43.83	43.35	---	51.03	52.63
4	50.72	51.14	48.62	51.17	49.78	48.55	41.56	44.38	43.13	---	51.15	52.64
5	50.67	51.13	49.24	51.05	49.90	48.50	42.31	44.99	43.08	---	51.30	52.77
6	50.64	51.10	49.67	51.01	50.01	48.44	43.00	45.56	40.50	---	51.38	52.87
7	50.51	51.09	49.88	51.07	50.13	48.42	43.57	46.05	40.57	51.15	51.49	52.86
8	50.50	51.13	50.16	51.07	50.30	48.06	44.23	46.27	40.79	51.30	51.59	52.88
9	50.58	51.25	50.34	51.05	50.45	47.86	44.79	45.72	41.01	51.26	51.59	52.64
10	50.58	51.25	50.34	51.03	50.59	47.86	45.36	46.10	41.37	51.15	51.67	52.40
11	50.61	51.37	50.27	51.09	50.71	47.65	45.76	46.35	41.98	51.43	51.75	49.84
12	50.41	51.37	50.36	51.15	50.80	45.18	46.30	46.50	42.61	51.54	51.77	50.02
13	50.33	51.34	50.36	51.19	50.92	45.27	46.76	46.59	43.33	51.68	51.88	50.39
14	50.36	51.25	50.27	51.14	51.09	45.35	47.14	46.10	44.04	51.65	52.01	50.63
15	50.64	51.19	49.98	49.93	51.11	45.50	47.45	46.24	44.76	49.49	52.00	50.77
16	50.64	51.09	50.01	49.83	51.08	45.58	47.77	46.11	45.55	49.94	52.06	50.84
17	50.47	51.41	50.12	49.91	50.74	45.59	48.06	---	46.15	50.21	52.18	50.94
18	49.01	51.36	50.22	50.17	50.87	45.76	48.27	45.01	46.69	50.44	52.18	50.95
19	48.80	51.23	50.48	50.21	50.86	45.96	48.54	45.08	---	50.59	51.83	50.96
20	49.14	51.26	50.61	50.21	50.74	46.20	48.67	44.99	---	50.70	51.95	51.07
21	49.39	---	50.63	50.21	50.75	46.52	48.74	45.11	---	50.84	52.13	51.18
22	49.44	---	50.62	50.21	50.76	46.79	46.86	45.23	---	51.00	52.25	51.23
23	49.70	47.29	50.63	50.21	50.88	47.19	44.20	45.37	---	51.11	52.43	51.20
24	49.82	48.72	50.74	49.48	50.89	47.57	44.00	45.63	---	51.12	52.48	51.43
25	49.95	49.55	50.97	49.30	50.88	47.76	43.29	45.98	---	51.11	52.55	51.55
26	50.39	50.16	51.07	49.48	50.70	47.67	42.61	46.36	---	51.02	52.70	51.51
27	50.40	50.64	51.16	49.52	48.20	44.11	42.23	46.70	---	51.03	52.75	48.95
28	50.60	50.93	51.23	49.54	48.38	40.27	42.06	47.09	---	50.94	52.77	49.37
29	50.61	51.25	51.26	49.56	48.54	39.89	42.19	47.48	---	50.89	51.97	49.62
30	50.63	51.45	50.85	49.55	---	39.37	42.46	47.78	---	50.85	52.06	49.77
31	50.68	---	50.85	49.53	---	39.29	---	47.74	---	50.84	52.37	---
MEAN	50.16	50.71	50.38	50.32	50.19	45.80	44.36	45.47	42.83	50.75	51.82	51.13
MAX	50.72	51.45	51.86	51.19	51.11	48.55	48.74	47.78	46.69	51.68	52.77	52.88
MIN	48.23	46.13	48.26	49.18	47.92	39.23	39.29	40.36	40.32	48.68	50.75	48.64

WTR YR 1992 MEAN 48.83 HIGH 39.23 MAR 31 LOW 52.88 SEP 8

Gap indicates missing record.



414333075153201. Local number, WN 64.

LOCATION.--Lat 41°43'33", long 75°15'32", Hydrologic Unit 02040103, at State Game Land Number 159.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Glacial Outwash of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 52 ft, cased to 52 ft, open end.

INSTRUMENTATION.--Data collection platform.

DATUM.--Elevation of land-surface datum is 1,350 ft above sea level. Measuring point: Top of plywood shelf, 2.63 ft above land-surface datum. Prior to Apr. 30, 1980, top of plywood cover, 2.57 ft above land-surface datum.

REMARKS.--Interruptions in daily record due to downlink interference or instrument malfunctions.

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

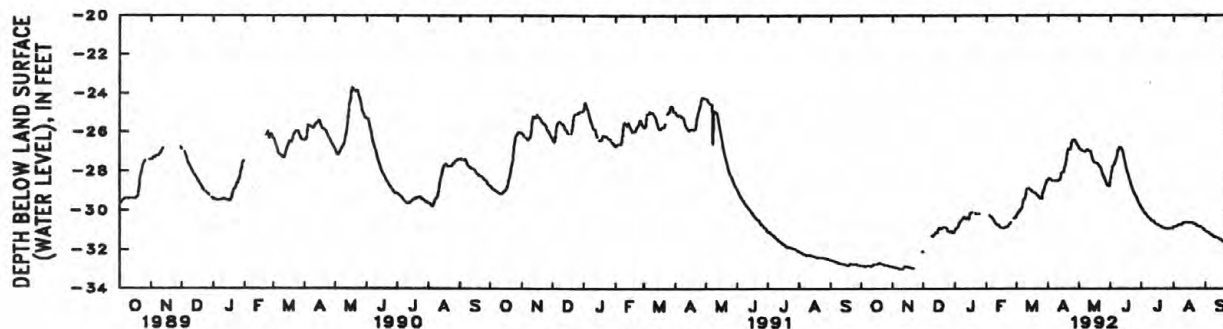
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.88 ft below land-surface datum, Nov. 17, 1972; lowest, 32.98 ft below land-surface datum, Nov 9, 10, 11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.82	32.86	32.10	31.00	---	30.25	28.44	26.79	28.41	29.87	30.83	31.05
2	32.82	32.88	---	30.90	---	30.15	28.37	26.87	28.07	29.95	30.81	31.06
3	32.82	32.90	---	30.88	---	30.07	28.39	26.93	27.79	30.03	30.80	31.08
4	32.84	32.92	---	30.84	30.22	30.05	28.41	26.93	27.69	30.11	30.80	31.12
5	32.84	32.92	---	30.71	30.30	29.95	28.48	26.99	27.59	30.15	30.76	31.16
6	32.86	32.94	---	30.58	30.32	29.91	28.48	27.01	27.43	30.23	30.74	31.20
7	32.80	32.96	---	30.51	30.40	29.76	28.48	27.03	27.23	30.29	30.74	31.22
8	32.82	32.96	---	30.47	30.48	29.44	28.50	26.99	27.01	30.35	30.74	31.26
9	32.82	32.98	31.27	30.38	30.60	29.44	28.50	26.89	26.87	30.41	30.74	31.30
10	32.84	32.98	31.29	30.33	30.64	29.28	28.50	26.93	26.79	30.45	30.64	31.34
11	32.84	32.98	31.21	30.41	30.70	28.92	28.48	26.97	26.81	30.51	30.60	31.34
12	32.79	32.88	31.21	30.43	30.72	28.88	28.44	26.97	26.91	30.51	30.62	31.36
13	32.76	32.86	31.11	30.35	30.72	28.88	28.44	27.03	27.01	30.55	30.62	31.38
14	32.76	32.86	31.09	30.41	30.84	28.88	28.12	27.27	27.25	30.63	30.62	31.42
15	32.76	32.86	31.09	30.45	30.84	28.96	28.06	27.45	27.53	30.67	30.62	31.44
16	32.76	32.88	30.93	30.17	30.88	28.98	28.06	27.55	27.79	30.71	30.62	31.48
17	32.72	32.90	30.87	30.07	30.88	29.04	27.87	27.57	27.99	30.73	30.61	31.52
18	32.70	32.90	30.90	30.11	30.88	29.08	27.70	27.57	28.13	30.75	30.61	31.56
19	32.68	32.92	30.90	---	30.84	29.07	27.32	27.61	28.31	30.77	30.61	31.57
20	32.70	32.94	30.88	---	30.82	29.13	26.96	27.65	28.49	30.83	30.65	31.61
21	32.72	32.94	30.84	30.13	30.84	29.21	26.86	27.73	28.71	30.85	30.67	31.63
22	32.74	32.94	30.84	30.16	30.80	29.21	26.92	27.79	28.85	30.89	30.67	31.65
23	32.76	---	30.86	30.14	30.68	29.29	26.86	27.87	28.99	30.89	30.73	31.67
24	32.78	---	30.90	30.16	30.66	29.37	26.56	28.09	29.09	30.91	30.77	31.69
25	32.78	---	31.04	30.16	30.59	29.37	26.42	28.23	29.25	30.93	30.79	31.69
26	32.80	---	31.04	---	---	29.37	26.38	28.33	29.31	30.93	30.81	31.69
27	32.80	---	31.08	---	30.39	29.06	26.40	28.47	29.43	30.91	30.81	31.65
28	32.82	32.09	31.08	30.00	30.39	28.97	26.50	28.59	29.57	30.91	30.83	31.63
29	32.84	---	31.04	---	30.35	28.74	26.59	28.71	29.67	30.93	30.89	31.65
30	32.84	32.06	31.10	---	---	28.61	26.71	28.77	29.75	30.92	30.91	31.67
31	32.86	---	31.10	---	---	28.45	---	28.77	---	30.90	30.99	---
MEAN	32.78	32.83	31.03	30.35	30.60	29.22	27.62	27.51	28.04	30.58	30.72	31.42
MAX	32.86	32.98	32.10	31.00	30.88	30.25	28.50	28.77	29.75	30.93	30.99	31.69
MIN	32.68	32.01	30.69	29.88	30.12	28.43	26.30	26.71	26.73	29.75	30.60	30.99

WTR YR 1992 MEAN 30.16 HIGH 26.30 APR 26 LOW 32.98 NOV 9,10,11

Gap indicates missing record.

3 YEAR HYDROGRAPH
OCTOBER 1, 1989 TO SEPTEMBER 30, 1992

WELLHEAD-PROTECTION PROJECT STATIONS

The data published for the following 5 wells were collected as part of the Wellhead Protection project in cooperation with the Pennsylvania Department of Environmental Resources. The project evaluated methods of delineating wellhead-protection areas in different hydrogeologic environments. Additional data collected for this project were published in Volume 2 of the 1991 edition of this report.

MONTGOMERY COUNTY

401506075163501. LOCAL NUMBER, MG 618

LOCATION.--Lat 40°15'16", long 75°16'27", Hydrologic Unit 02040201, at corner of Montgomery and Walnut Streets in Lansdale.

Owner: Glenn Rigley.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled private well, diameter 6 in., depth 343 ft, cased to 47 ft, open hole.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Datum of land surface is 364.77 ft above sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--June to November 1991 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 64.53 ft below land-surface datum, June 23, 1991; lowest, 74.32 ft below land-surface datum, Nov. 7, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), FEBRUARY 1991 TO JANUARY 1992

DAY	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1					---	65.67	68.46	---	69.77	73.74		
2					---	66.22	68.45	---	69.74	73.29		
3					---	66.49	67.78	---	69.98	73.11		
4					---	65.83	67.74	---	71.17	73.48		
5					---	65.88	68.55	---	71.05	73.57		
6					---	65.83	68.72	---	70.74	73.72		
7					---	65.59	69.09	---	71.58	74.32		
8					---	66.09	69.20	---	72.02	73.88		
9					---	66.67	69.15	---	72.18	73.31		
10					---	66.51	68.52	---	72.16	72.96		
11					---	66.56	68.93	---	72.93	73.10		
12					---	66.49	69.25	---	71.95	73.90		
13					---	65.85	68.93	---	71.71	74.17		
14					---	65.87	68.80	---	72.60	73.93		
15					---	66.44	68.70	---	72.87	73.80		
16					---	66.59	68.72	---	73.02	73.32		
17					---	66.58	67.91	---	73.04	73.10		
18					---	66.71	67.46	---	73.46	73.41		
19					---	66.81	67.16	---	72.57	73.79		
20					65.08	66.48	---	---	72.31	73.79		
21					65.02	66.18	---	---	72.59	73.73		
22					64.60	66.49	---	---	73.73	73.72		
23					64.53	66.59	---	---	73.71	72.91		
24					65.08	66.93	---	---	73.70	72.57		
25					65.28	67.49	---	---	73.80	73.07		
26					65.57	67.90	---	---	72.95	73.75		
27					66.00	67.58	---	70.91	72.50	73.99		
28					65.65	67.17	---	70.32	73.30	73.34		
29					65.19	67.87	---	70.09	73.43	---		
30					65.02	68.00	---	69.89	73.75	---		
31					---	68.19	---	---	73.72	---		
MEAN					65.18	66.63	68.50	70.30	72.39	73.53		
MAX					66.00	68.19	69.25	70.91	73.80	74.32		
MIN					64.53	65.59	67.16	69.89	69.74	72.57		

EXTREMES FOR PERIOD: HIGHEST 64.53, JUNE 23; LOWEST 74.32, NOVEMBER 7.

WELLHEAD-PROTECTION PROJECT STATIONS

MONTGOMERY COUNTY

401504075161501. LOCAL NUMBER, MG 1124

LOCATION.--Lat 40°15'04", long 75°16'15", Hydrologic Unit 02040201, on North Penn Hospital property in Lansdale.

Owner: North Penn Water Authority.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 385 ft, cased to 25 ft, open hole.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Datum of land surface is 339.15 ft above sea level. Measuring point: Top of casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD.--February to November 1991 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.54 ft below land-surface datum, May 12, 1991; lowest, 35.27 ft below land-surface datum, Oct. 4, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), FEBRUARY 1991 TO JANUARY 1992
MAXIMUM VALUES

DAY	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1	---	12.91	3.44	2.57	9.37	32.00	24.41	26.33	---	30.13		
2	---	12.17	3.78	2.92	9.70	29.84	24.36	26.54	---	29.96		
3	---	11.62	3.86	3.25	9.80	29.20	24.51	26.57	---	29.95		
4	---	11.00	3.74	3.60	10.25	28.67	24.80	26.60	35.27	29.53		
5	8.81	10.43	3.73	3.80	10.67	28.19	25.28	26.74	34.86	29.41		
6	8.85	9.71	3.76	3.85	11.12	27.80	25.62	26.87	34.54	29.40		
7	8.81	8.39	3.90	3.52	11.30	27.41	25.97	27.15	34.41	29.28		
8	8.51	8.08	4.04	3.38	11.99	27.13	26.23	27.42	34.33	29.03		
9	8.08	7.55	4.17	3.10	12.88	26.86	26.33	27.67	34.29	28.91		
10	7.94	6.99	4.44	2.95	13.53	26.80	26.30	27.88	33.96	28.91		
11	7.96	6.59	4.70	2.61	17.80	26.89	26.27	28.30	33.75	29.20		
12	7.95	6.39	4.82	2.54	21.13	26.98	26.23	28.62	33.66	29.34		
13	7.79	6.10	4.77	2.88	22.00	26.99	26.39	28.90	33.54	29.63		
14	7.09	5.80	4.58	3.52	19.93	26.75	26.61	29.25	33.38	29.96		
15	7.49	5.89	4.49	3.80	21.90	26.51	26.72	29.47	33.14	30.14		
16	7.90	5.87	4.00	4.01	24.92	26.25	27.47	29.74	33.08	30.42		
17	8.18	5.59	4.00	4.14	27.10	25.99	27.90	30.14	32.85	30.69		
18	8.18	5.09	4.20	4.44	28.73	25.97	27.90	30.45	32.63	30.96		
19	8.14	4.25	4.26	4.64	29.19	26.13	27.91	30.72	32.23	30.98		
20	---	4.26	4.23	4.83	26.55	26.23	27.77	30.79	32.02	30.68		
21	---	4.24	4.05	5.03	25.02	26.37	---	31.11	31.70	30.44		
22	---	4.03	3.40	5.38	24.28	26.41	28.09	31.27	31.40	29.99		
23	---	4.03	3.32	5.80	23.84	26.22	27.20	31.57	31.27	29.69		
24	---	3.32	3.16	6.09	23.57	26.00	26.88	31.64	31.17	29.47		
25	---	3.30	2.99	6.87	23.33	25.81	26.62	31.60	30.95	29.11		
26	16.24	3.30	3.02	7.39	23.37	25.76	26.33	31.40	30.79	28.89		
27	14.44	3.01	2.99	7.80	23.48	25.59	26.12	32.07	30.65	28.77		
28	13.56	2.64	2.79	8.06	26.59	25.28	25.96	31.88	30.72	28.71		
29	---	2.62	2.79	8.14	29.58	24.98	25.84	31.79	30.72	---		
30	---	3.78	2.69	8.78	31.75	24.72	25.73	32.28	30.50	---		
31	---	3.80	---	8.92	---	24.50	25.98	---	30.22	---		
MEAN	9.22	6.22	3.80	4.79	20.16	26.78	26.32	29.43	32.57	29.70		
MAX	16.24	12.91	4.82	8.92	31.75	32.00	28.09	32.28	35.27	30.98		
MIN	7.09	2.62	2.69	2.54	9.37	24.50	24.36	26.33	30.22	28.71		

EXTREMES FOR PERIOD: HIGHEST 2.54, MAY 12; LOWEST 35.27, OCTOBER 4.

WELLHEAD-PROTECTION PROJECT STATIONS

MONTGOMERY COUNTY

401510075160601. LOCAL NUMBER, MG 1125

LOCATION.--Lat 40°15'10", long 75°16'06", Hydrologic Unit 02040201, on North Penn Hospital property in Lansdale.

Owner: North Penn Water Authority.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WATER-LEVEL RECORDS

WELL CHARACTERISTICS.--Drilled public-supply well, diameter 10 in., depth 400 ft, cased to 60 ft, open hole.

INSTRUMENTATION.--Electronic data logger with 10-minute recording interval.

DATUM.--Datum of land surface is 331.03 ft above sea level. Measuring point: Top of casing, 0.6 ft above land-surface datum.

REMARKS.--Active public supply well.

PERIOD OF RECORD.--July 1991 to January 1992 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.04 ft below land-surface datum, Jan. 17, 1992; lowest, 75.39 ft below land-surface datum, Aug. 17, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), FEBRUARY 1991 TO JANUARY 1992
MAXIMUM VALUES

DAY	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1						33.29	18.51	21.39	---	23.55	22.30	10.09
2						29.26	18.64	21.75	---	23.43	21.86	9.88
3						27.05	18.88	21.82	---	23.43	21.46	9.68
4						25.59	19.21	21.76	21.61	23.39	19.25	9.45
5						24.79	19.88	21.57	---	23.33	18.69	9.37
6						23.90	20.54	21.70	---	23.23	17.93	9.34
7						23.31	21.05	22.13	---	23.17	17.22	9.46
8						22.67	21.53	22.57	---	23.19	16.62	9.60
9						22.23	21.70	23.00	---	23.17	16.06	9.43
10						22.32	21.12	23.30	---	23.02	15.32	8.82
11						22.58	20.51	23.81	15.46	22.73	14.36	8.85
12						22.72	20.64	24.21	18.20	22.24	13.59	8.85
13						22.70	21.01	24.57	18.64	22.32	13.00	8.82
14						21.59	21.46	24.94	18.58	22.84	12.35	8.24
15						20.91	21.44	25.15	18.16	23.17	11.45	7.71
16						20.60	75.08	25.51	18.20	23.66	11.09	7.17
17						20.62	75.39	25.95	19.59	24.00	10.89	7.04
18						20.90	68.91	26.30	18.94	24.34	10.97	7.31
19						21.28	62.22	26.43	19.63	24.79	11.17	7.53
20						21.37	22.95	26.23	20.56	25.18	11.03	7.54
21						21.62	21.74	26.35	20.92	25.48	10.47	7.50
22						21.55	21.31	26.66	21.07	25.48	10.25	7.51
23						20.98	21.04	26.97	21.62	24.11	10.35	---
24						20.36	20.81	27.21	22.13	23.40	10.84	---
25						20.00	20.74	27.18	22.51	22.69	10.85	---
26						20.09	20.69	---	22.76	22.46	10.87	---
27						19.64	20.73	---	22.93	22.27	11.27	---
28						19.01	20.64	---	23.72	22.14	11.25	---
29						18.84	20.59	---	23.84	22.14	11.07	---
30						18.55	20.50	---	23.80	22.25	10.71	---
31						18.45	20.89	---	23.60	---	10.64	---
MEAN						22.22	27.11	24.34	20.75	23.35	13.72	8.60
MAX						33.29	75.39	27.21	23.84	25.48	22.30	10.09
MIN						18.45	18.51	21.39	15.46	22.14	10.25	7.04

EXTREMES FOR PERIOD: HIGHEST 7.04, JANUARY 17, LOWEST 75.39, AUGUST 17.

WELLHEAD-PROTECTION PROJECT STATIONS

MONTGOMERY COUNTY

401510075160601. LOCAL NUMBER, MG 1125--Continued

WATER-QUALITY RECORDS

REMARKS.--Water-quality samples were collected after purging the well.

PERIOD OF RECORD.--May 1991 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SAMPLE DEPTH, COLLECT (FEET) (00003)	AGENCY ANA- LYZING SAMPLE CODE (00028)	SPE- CIFIC CON- DUCT- ANCE LAB (mS/CM) (90095)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	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 AD- SORP- TION RATIO (00931)
------	------	--	--	---	---	--	--	---	---	---	--

MAY

14...	1115	3	280	80020	390	8.0	170	40	17	11	0.4
16...	1315	3	3	80020	406	8.1	180	43	18	11	0.4

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
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MAY

14...	51	19	0.20	0.050	18	--	<0.010	0.093	0.030	0.47	0.50
16...	37	22	<0.10	0.050	18	0.370	0.020	0.390	0.030	0.27	0.30

DATE	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	TRITIUM TOTAL (PCI/L) (07000)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L) (75985)
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MAY

14...	0.59	0.030	0.020	0.06	34	24	0.8	47	3.0
16...	0.69	0.020	0.010	0.03	20	7	0.4	59	4.0

< Actual value is known to be less than the value shown.

WELLHEAD-PROTECTION PROJECT STATIONS

MONTGOMERY COUNTY

401516075155901. LOCAL NUMBER, MG 1126

LOCATION.--Lat 40°15'16", long 75°15'59", Hydrologic Unit 02040201, on North Penn Hospital property in Lansdale.
Owner: North Penn Water Authority.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 310 ft, cased to 19 ft, open hole.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Datum of land surface is 327.38 ft above sea level. Measuring point: Top of casing, 0.9 ft above land-surface datum.

PERIOD OF RECORD.--February to October 1991 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.21 ft below land-surface datum, April 24, 1991; lowest, 29.46 ft below land-surface datum, Oct. 4, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), FEBRUARY 1991 TO JANUARY 1992
MAXIMUM VALUES

DAY	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1	---	8.85	2.31	2.33	6.23	27.18	16.67	19.89	---			
2	---	---	2.83	2.74	6.51	25.16	17.01	20.32	---			
3	---	---	2.84	2.94	6.69	23.90	17.41	20.41	---			
4	---	---	2.83	3.22	6.90	22.54	17.80	20.16	29.46			
5	6.10	---	2.80	3.27	7.10	22.54	18.53	19.18	29.16			
6	6.09	---	2.94	3.13	7.31	21.01	19.28	18.58	28.86			
7	5.81	---	3.03	2.30	7.58	21.12	19.86	20.10	28.66			
8	5.63	---	3.17	2.27	8.25	19.84	20.41	21.00	28.56			
9	5.43	---	3.31	2.28	9.02	19.96	20.60	21.58	28.40			
10	5.51	---	3.38	2.30	9.87	20.49	18.22	22.00	28.17			
11	5.56	---	3.42	2.40	10.39	20.91	17.14	22.60	27.90			
12	5.54	---	3.48	2.63	10.90	21.19	18.30	23.04	26.73			
13	5.42	---	3.33	2.88	11.42	21.27	19.23	23.44	25.38			
14	4.92	---	3.15	3.30	14.63	18.52	19.93	23.84	25.86			
15	5.30	---	2.95	3.40	18.05	16.78	19.43	24.12	25.93			
16	5.66	---	2.73	3.50	20.05	17.62	18.63	24.52	23.98			
17	5.88	---	2.79	3.53	22.65	18.42	20.28	24.99	22.45			
18	5.90	---	2.91	3.62	23.73	19.00	21.35	25.29	21.20			
19	5.85	---	2.91	3.71	22.60	19.57	21.33	25.43	20.50			
20	---	3.11	2.84	3.86	19.05	19.74	20.20	24.73	20.11			
21	---	3.12	2.57	3.97	18.24	20.10	---	25.24	21.32			
22	---	3.14	2.23	4.24	18.43	19.70	16.54	25.60	22.04			
23	---	3.12	2.27	4.55	18.43	17.69	16.63	25.98	22.50			
24	---	2.60	2.21	4.73	17.48	16.84	17.47	26.17	22.66			
25	---	2.71	2.33	5.24	18.00	17.43	18.24	25.40	22.70			
26	11.82	2.72	2.48	5.65	18.36	17.92	18.55	21.91	22.69			
27	10.14	2.52	2.34	5.92	18.72	16.42	18.67	21.42	22.64			
28	9.32	2.50	2.38	5.81	22.00	15.88	18.70	20.84	22.75			
29	---	2.47	2.34	5.84	25.43	16.22	18.72	22.60	---			
30	---	2.47	2.29	6.00	27.59	15.61	18.75	23.75	---			
31	---	2.48	---	6.18	---	16.22	19.23	---	---			
MEAN	6.44	3.22	2.78	3.80	15.05	19.57	18.77	22.80	24.82			
MAX	11.82	8.85	3.48	6.18	27.59	27.18	21.35	26.17	29.46			
MIN	4.92	2.47	2.21	2.27	6.23	15.61	16.54	18.58	20.11			

EXTREMES FOR PERIOD: HIGHEST 2.21, APRIL 24; LOWEST 29.46, OCTOBER 4.

WELLHEAD-PROTECTION PROJECT STATIONS

MONTGOMERY COUNTY

401506075160001. LOCAL NUMBER, MG 1270

LOCATION.--Lat 40°15'06", long 75°16'00", Hydrologic Unit 02040201, on North Penn Hospital property at corner of Medical Campus Drive and Line Street in Lansdale.

Owner: North Penn Water Authority.

AQUIFER.--Shale of Brunswick Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 320 ft, cased to 19 ft, open hole.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Datum of land surface is 340.50 ft above sea level. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--June to November 1991 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.68 ft below land-surface datum, Aug. 2, 1991; lowest, 40.94 ft below land-surface datum, Oct. 4, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), FEBRUARY 1991 TO JANUARY 1992
MAXIMUM VALUES

DAY	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1					---	38.25	28.70	31.00	---	33.79		
2					---	36.20	28.68	31.36	---	33.58		
3					---	35.35	29.11	31.48	---	33.51		
4					---	34.51	29.50	31.59	40.94	33.38		
5					---	33.74	30.23	31.72	40.55	33.24		
6					---	33.29	30.73	31.83	40.07	33.09		
7					---	32.62	31.17	32.18	39.80	32.96		
8					---	32.31	31.59	32.49	39.58	32.89		
9					---	32.18	---	32.83	39.42	32.83		
10					---	32.11	31.53	33.10	39.01	32.64		
11					---	32.24	31.40	33.58	38.71	32.38		
12					---	32.31	31.32	33.92	38.56	32.49		
13					---	32.29	31.49	34.19	38.41	32.94		
14					---	32.09	31.90	34.46	37.96	33.35		
15					---	31.65	32.09	34.72	37.76	33.56		
16					---	31.39	32.69	35.10	37.76	33.94		
17					33.50	31.07	33.22	35.58	37.62	34.19		
18					34.80	30.99	33.31	35.90	37.27	34.52		
19					35.23	31.33	33.50	36.08	36.83	34.91		
20					32.29	31.42	33.46	36.04	36.44	35.30		
21					30.75	31.64	33.07	36.27	36.01	35.47		
22					29.82	31.55	32.61	36.50	35.66	35.33		
23					29.49	31.21	32.25	36.78	35.43	34.81		
24					29.15	30.87	31.80	36.99	35.34	34.23		
25					28.97	30.57	31.28	37.01	34.94	33.68		
26					29.02	30.43	30.85	36.85	34.75	33.49		
27					29.17	30.14	30.65	37.17	34.59	32.98		
28					32.95	29.70	30.34	36.41	34.70	32.71		
29					35.99	29.38	30.15	36.36	34.64	---		
30					38.21	29.06	30.20	36.76	34.32	---		
31					---	28.82	30.56	---	33.98	---		
MEAN					32.10	31.96	31.31	34.54	37.18	33.65		
MAX					38.21	38.25	33.50	37.17	40.94	35.47		
MIN					28.97	28.82	28.68	31.00	33.98	32.38		

EXTREMES FOR PERIOD: HIGHEST 28.68, AUGUST 2; LOWEST 40.94, OCTOBER 4.

ACCESS TO WATSTORE DATA	15	CONTROL STRUCTURE, DEFINITION OF	17
ACCURACY OF THE RECORDS	10	COOKS CREEK AT DURHAM FURNANCE	137
ACRE-FOOT, DEFINITION OF	16	COOPERATION	1
ADENOSINE TRIPHOSPHATE, DEFINITION OF	16	COVENTRYVILLE, FRENCH CREEK NEAR	292
ALDENVILLE, WEST BRANCH LACKAWAXEN RIVER, NEAR	41	SOUTH BRANCH AT	292
ALGAE, DEFINITION OF	16	CRESSONA, WEST BRANCH SCHUYLKILL RIVER NEAR	289
ALGAL GROWTH POTENTIAL, DEFINITION OF	16	CREST-STAGE PARTIAL-RECORD STATIONS	288
ALLETOWN, JORDAN CREEK AT	120	CRUM CREEK AT WHITEHORSE	297
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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

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

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